CHIPMOS TECHNOLOGIES BERMUDA LTD
Form 20-F
June 04, 2010
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As filed with the Securities and Exchange Commission on June 4, 2010

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 20-F

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

OR

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

For the fiscal year ended December 31, 2009

OR

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

For the transition period from to

OR

¨ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report

Commission file number 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)

Shou-Kang Chen

Chief Financial Officer

ChipMOS TECHNOLOGIES (Bermuda) LTD.

No. 1, R&D Road 1, Hsinchu Science Park

Hsinchu, Taiwan

Republic of China

Telephone: (886) 3 563 3988

Facsimile: (886) 3 563 3998

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

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
Common Shares, par value US$0.01 each	The NASDAQ Capital Market

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

None

(Title of Class)

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

None

(Title of Class)

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

As of December 31, 2009, 83,971,012 Common Shares, par value US$0.01 each, were outstanding.

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

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

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

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

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

Large Accelerated Filer ¨ Accelerated Filer x Non-Accelerated Filer ¨

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

US GAAP ¨

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

If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17. ¨ Item 18. x

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

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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 on Form 20-F 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 anticipate , believe , estimate , expect , intend , may , plan , project , will or other similar words that express an indication of actions c actions that may or are expected to occur in the future. These statements appear in a number of places throughout this Annual Report on Form 20-F and include statements regarding our intentions, beliefs or current expectations concerning, among other things, our results of operations, financial condition, liquidity, prospects, growth, strategies and the industries in which we operate.

By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. Forward-looking statements are not guarantees of future performance and our actual results of operations, financial condition and liquidity, and the development of the industries in which we operate may differ materially from those made in or suggested by the forward-looking statements contained in this Annual Report on Form 20-F. Important factors that could cause those differences include, but are not limited to:

- our ability to successfully overcome the current economic conditions and the financial market crisis;
- the volatility of the semiconductor industry and the market for end-user applications for semiconductor products;
- overcapacity in the semiconductor testing and assembly markets;
- the increased competition from other companies and our ability to retain and increase our market share;
- our ability to successfully develop new technologies and remain a technological leader;
- our ability to maintain control over capacity expansion and facility modifications;
- our ability to generate growth or profitable growth;
- our ability to hire and retain qualified personnel;
- our ability to acquire required equipment and supplies to meet customer demand;
- our ability to raise debt or equity financing as required to meet certain existing obligations;
- the pending criminal indictment of our chairman and chief executive officer;

our reliance on the business and financial condition of certain major customers;

the success of any of our future acquisitions, investments or joint ventures;

the outcome of any pending litigation;

the outbreak of contagious disease and occurrence of earthquakes, typhoons and other natural disasters, as well as industrial accidents;

the political stability of the regions to which we conduct operations; and

general local and global economic and financial conditions.

Forward-looking statements include, but are not limited to, statements regarding our strategy and future plans, future business condition and financial results, our capital expenditure plans, our capacity expansion plans, our expansion plans in Mainland China, technological upgrades, investment in research and development, future market demand, future regulatory or other developments in our industry. Please see Item 3. Key Information Risk Factors for a further discussion of certain factors that may cause actual results to differ materially from those indicated by our forward-looking statements.

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PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

Selected Financial Data

The following tables set forth our selected consolidated financial data. The selected consolidated balance sheet data as of December 31, 2008 and 2009 and our consolidated statement of operations and cash flows data for 2007, 2008 and 2009 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 on Form 20-F. These audited consolidated financial statements have been audited by Moore Stephens. The selected consolidated balance sheet data as of December 31, 2005, 2006 and 2007 and the consolidated statement of operations and cash flows data for the years ended December 31, 2005 and 2006 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 26 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.

	Year ended December 31,					
	2005 NT$	2006 NT$	2007 NT$	2008 NT$	2009 NT$	2009 US$
	(in millions, except per share data)					
Consolidated Statement of Operations Data:						
ROC GAAP:						
Net revenue:						
Related parties[(1)]	$ 4,603.5	$ 5,654.4	$ 6,915.9	$ 3,122.9	$ 668.9	$ 20.9
Others	10,610.5	14,720.8	16,681.7	13,887.3	11,481.4	359.4
Total net revenue	15,214.0	20,375.2	23,597.6	17,010.2	12,150.3	380.3
Cost of revenue	11,262.6	14,253.4	17,444.1	16,969.9	15,661.5	490.2
Gross profit (loss)	3,951.4	6,121.8	6,153.5	40.3	(3,511.2)	(109.9)
Operating expenses:						
Research and development	274.4	274.8	322.3	435.6	375.3	11.7
General and administrative	793.3	813.0	1,070.5	885.6	657.8	20.6
Sales and marketing	232.9	107.4	98.3	2,362.7	561.2	17.6

Total operating expenses	1,300.6	1,195.2	1,491.1	3,683.9	1,594.3	49.9
Income (loss) from operations	2,650.8	4,926.6	4,662.4	(3,643.6)	(5,105.5)	(159.8)
Other income (expenses), net	(506.5)	(223.2)	(669.2)	(3,286.8)	116.7	3.7
Income (loss) before income tax, noncontrolling interests and interest in bonuses paid by subsidiaries[2] [3]	2,144.3	4,703.4	3,993.2	(6,930.4)	(4,988.8)	(156.1)
Income tax benefit (expense)	(112.0)	(636.5)	(768.2)	(120.8)	420.7	13.1
Income (loss) before noncontrolling interests and interest in bonuses paid by subsidiaries[2] [3]	2,032.3	4,066.9	3,225.0	(7,051.2)	(4,568.1)	(143.0)
Net (income) loss attributable to noncontrolling interests	(977.0)	(1,799.4)	(720.0)	143.3	149.4	4.7
Interest in bonuses paid by subsidiaries[3]	(127.1)	(149.5)	(285.8)	(362.4)		
Cumulative effect of changes in accounting principles		3.3				
Net income (loss) attributable to ChipMOS	$ 928.2	$ 2,121.3	$ 2,219.2	$ (7,270.3)	$ (4,418.7)	$ (138.3)
Earnings (loss) per share:						
Basic	$ 13.74	$ 30.84	$ 27.63	$ (86.66)	$ (55.84)	$ (1.75)
Diluted	$ 11.82	$ 25.00	$ 24.24	$ (86.66)	$ (57.54)	$ (1.80)
Weighted-average number of shares outstanding:						
Basic	67.5	68.8	80.3	83.9	79.1	79.1
Diluted	82.6	88.3	108.2	83.9	89.0	89.0

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	Year ended December 31,					
	2005 NT$	2006 NT$	2007 NT$	2008 NT$	2009 NT$	2009 US$
	(in millions, except per share data)					
US GAAP:[4]						
Net income (loss) attributable to ChipMOS	$ 805.4	$ 1,253.1	$ 2,901.7	$ (7,177.7)	$ (4,550.3)	$ (142.4)
Earnings (loss) per share:						
Basic	$ 11.92	$ 18.22	$ 36.13	$ (85.56)	$ (57.50)	$ (1.80)
Diluted	$ 11.21	$ 17.52	$ 21.07	$ (85.56)	$ (59.15)	$ (1.85)
Weighted-average number of shares outstanding:						
Basic	67.5	68.8	80.3	83.9	79.1	79.1
Diluted	82.6	71.5	108.2	83.9	83.0	83.0

(1) Related parties include Mosel Vitelic Inc., or Mosel, Siliconware Precision Industries Co. Ltd., or Siliconware Precision, ProMOS Technologies Inc., or ProMOS and DenMOS Technology Inc., or DenMOS. See Note 20 of the notes to the consolidated financial statements contained in this Annual Report on Form 20-F. On November 21, 2005, Chantek was merged into ChipMOS Taiwan, with ChipMOS Taiwan as the surviving company. See Item 4. Information on the Company Our Structure and History ChipMOS TECHNOLOGIES INC .

(2) Under ROC GAAP, minority interests are also renamed noncontrolling interests to align with the guidance in Financial Accounting Standards Board Accounting Standards Codification or FASB ASC 810-10-65-1.

(3) Refers to bonuses to directors, supervisors and employees paid by subsidiaries.

(4) Reflects the US GAAP adjustments as described in Note 26 of the notes to the consolidated financial statements contained in this Annual Report on Form 20-F.

	As of December 31,					
	2005 NT$	2006 NT$	2007 NT$	2008 NT$	2009 NT$	2009 US$
	(in millions)					
Consolidated Balance Sheet Data:						
ROC GAAP:						
Current assets:						
Cash and cash equivalents	$ 4,607.0	$ 5,895.9	$ 5,133.6	$ 6,651.9	$ 3,884.8	$ 121.6
Restricted cash and cash equivalents	169.3	65.1	87.0	59.5	243.8	7.6
Financial assets at fair value through profit and loss	186.1	1,929.1	555.6	102.1	119.0	3.7
Held-to-maturity financial assets				250.0		
Investment with no active market				100.0	100.0	3.1
Notes receivable						
related parties				195.0		
third parties	30.6	31.1	28.0	14.2	27.9	0.9
Accounts receivable						
related parties	1,418.4	1,839.1	1,498.8	0.4	0.2	
third parties	2,525.9	3,190.5	3,795.9	1,296.5	2,441.8	76.4
Other receivables						
related parties	4.3	14.0	11.9	30.0		
third parties	161.9	31.8	31.2	172.2	130.1	4.1
Inventories	627.5	945.8	1,043.6	1,001.5	862.1	27.0

Prepaid expenses and other current assets	76.7	155.8	334.5	265.2	265.1	8.3
Total current assets	10,046.9	14,232.6	12,605.2	10,494.3	8,431.2	263.9
Long-term investments	404.1	366.7	358.0	437.8	220.0	6.9
Property, plant and equipment, net	20,420.1	30,494.3	30,020.4	23,654.9	20,769.0	650.0
Intangible assets net	170.8	172.4	180.4	107.8	102.8	3.2
Other assets	716.1	745.9	2,152.1	746.8	833.2	26.1
Total assets	31,758.0	46,011.9	45,316.1	35,441.6	30,356.2	950.1
Current liabilities:						
Short-term bank loans	467.8	1,055.3	1,249.2	2,745.4	2,363.3	74.0
Current portion of long-term loans	2,300.9	2,335.3	3,686.2	4,603.7	1,553.9	48.6
Convertible notes	2,769.3		3,014.9	1,541.6		
Derivative liabilities			96.0			
Notes payable	3.9					
Accounts payable	728.7	803.0	976.1	477.9	738.0	23.1
Other payables						
related parties	1.2					
third parties	404.9	549.6	604.1	628.0	696.1	21.8
Current portion of capital leases payable					821.2	25.7
Accrued expenses and other current liabilities	474.1	713.6	886.7	469.4	525.7	16.5
Total current liabilities	7,857.5	6,747.5	11,374.2	10,721.6	6,921.5	216.6
Long-term liabilities	4,433.9	15,900.5	11,323.7	9,832.6	13,377.6	418.7
Other liabilities	374.7	479.0	370.1	344.6	104.9	3.3
Total liabilities	12,666.1	23,127.0	23,068.0	20,898.8	20,404.0	638.6
Total equity (including noncontrolling interests)[1]	$ 19,091.9	$ 22,884.9	$ 22,248.1	$ 14,542.8	$ 9,952.2	$ 311.5

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	As of December 31,					
	2005 NT$	2006 NT$	2007 NT$	2008 NT$	2009 NT$	2009 US$
	(in millions)					
US GAAP[2]:						
Current assets:						
Cash and cash equivalents	$ 4,607.0	$ 5,895.9	$ 5,133.6	$ 6,651.9	$ 3,884.8	$ 121.6
Restricted cash and cash equivalents	169.3	65.1	87.0	59.5	243.8	7.6
Financial assets at fair value through profit and loss	189.2	1,929.1	555.6	102.1	119.0	3.7
Held-to-maturity financial assets				250.0		
Available-for-sale financial assets				100.0	100.0	3.1
Notes receivable						
related parties				195.0		
third parties	30.6	31.1	28.0	14.2	27.9	0.9
Accounts receivable						
related parties	1,418.4	1,839.1	1,498.8	0.4	0.2	
third parties	2,525.9	3,190.5	3,795.9	1,296.5	2,441.8	76.4
Other receivables						
related parties	4.3	14.0	11.9	30.0		
third parties	161.9	31.8	31.2	172.2	130.1	4.1
Inventories	627.7	946.1	1,044.3	966.1	863.1	27.0
Prepaid expenses and other current assets	76.7	155.8	334.5	265.2	265.1	8.3
Total current assets	10,050.2	14,232.9	12,603.4	10,452.6	8,426.0	263.7
Long-term investments	387.1	366.7	358.0	437.8	220.0	6.9
Property, plant and equipment, net	20,340.9	30,377.7	29,861.6	23,427.2	20,474.4	640.8
Intangible assets net	170.8	172.4	180.4	107.8	102.8	3.2
Other assets	704.6	826.4	2,262.6	731.6	893.2	28.0
Total assets	31,653.6	45,976.1	45,266.0	35,157.0	30,116.4	942.6
Current liabilities:						
Short-term bank loans	467.8	1,055.3	1,249.2	2,745.4	2,363.3	74.0
Current portion of long-term loans	2,300.9	2,335.3	3,686.2	4,603.7	1,553.9	48.6
Convertible notes	2,531.1		3,056.4	1,453.0		
Derivative liabilities	160.9		85.4			
Notes payable	3.9					
Accounts payable	728.7	803.0	976.1	477.9	738.0	23.1
Other payables						
related parties	1.2					
third parties	404.9	549.6	604.1	628.0	696.1	21.8
Current portion of capital leases payable					821.2	25.7

Accrued expenses and other current liabilities	743.1	1,173.1	1,321.0	469.4	525.7	16.5
Total current liabilities	8,049.3	7,207.0	11,839.3	10,632.9	6,921.5	216.6
Long-term liabilities	4,433.9	16,836.2	11,179.3	9,832.6	13,377.6	418.7
Other liabilities	345.0	502.2	596.5	537.3	383.7	12.0
Total liabilities	12,828.2	24,545.4	23,615.1	21,002.8	20,682.8	647.3
Total equity (including noncontrolling interests)	$ 18,825.4	$ 21,430.7	$ 21,650.9	$ 14,154.2	$ 9,433.6	$ 295.3

(1) Under ROC GAAP, minority interests are also renamed noncontrolling interests to align with the guidance in Financial Accounting Standards Board Accounting Standards Codification or FASB ASC 810-10-65-1.
(2) Reflects the US GAAP adjustments as described in Note 26 of the notes to the consolidated financial statements contained in this Annual Report on Form 20-F.

	Year ended December 31,					
	2005 NT$	2006 NT$	2007 NT$	2008 NT$	2009 NT$	2009 US$
			(in millions)			
Consolidated Statement of Cash Flows Data:						
ROC GAAP:						
Capital expenditures	$ 7,677.2	$ 15,717.8	$ 6,093.8	$ 2,188.4	$ 3,479.7	$ 108.9
Depreciation and amortization	4,339.1	5,558.8	6,834.8	7,174.5	6,524.6	204.2
Net cash provided by (used in):						
Operating activities	8,822.6	7,316.4	10,882.9	5,164.2	781.0	24.4
Investing activities	(7,622.5)	(14,988.2)	(12,212.1)	(2,296.9)	(1,042.5)	(32.6)
Financing activities	(1,519.9)	8,947.9	528.1	(1,395.3)	(2,503.8)	(78.3)
Effect of exchange rate changes on cash	77.7	12.8	38.8	46.3	(1.8)	(0.1)
Net increase (decrease) in cash	$ (242.1)	$ 1,288.9	$ (762.3)	$ 1,518.3	$ (2,767.1)	$ (86.6)

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Exchange Rates

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 on Form 20-F 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, 2009, which was NT$31.95 to US$1.00. We make no representation that the NT dollar or US dollar amounts referred to in this Annual Report on Form 20-F 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 May 14, 2010, the noon buying rate was NT$31.78 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
2005	32.13	33.77	30.65	32.80
2006	32.51	33.31	31.28	32.59
2007	32.85	33.41	32.26	32.43
2008	31.52	33.58	29.99	32.76
2009	33.02	35.21	31.95	31.95
October	32.29	32.61	32.04	32.61
November	32.32	32.58	32.12	32.20
December	32.25	32.38	31.95	31.95
2010				
January	31.87	32.04	31.65	31.94
February	32.06	32.14	31.98	32.12
March	31.83	32.04	31.70	31.73
April	31.48	31.74	31.30	31.31
May (through May 28, 2010)	31.83	32.33	31.40	32.00

Sources: Federal Reserve Bank of New York.

Risk Factors

Risks Relating to Economic Conditions and the Financial Markets

The global credit and financial markets crisis could materially and adversely affect our business and results of operations.

In 2008, 2009 and continuing into 2010, global credit and financial markets have experienced severe disruptions. These include diminished liquidity and limited availability of credit, reduced consumer confidence, reduced economic growth, increased unemployment rates and uncertainty about economic stability. Limited availability of credit in financial markets may lead consumers and businesses to postpone spending. This in turn may cause our customers to cancel, decrease or delay their existing and future orders with us. Financial difficulties experienced by our customers or suppliers as a result of these conditions could lead to production delays and delays or defaults in payment of accounts receivable. Continuing credit markets disruption restricts our access to capital and limits our ability to fund operations or to refinance maturing obligations as they become due through additional borrowing or other sources of financing. We are not able to predict the duration or extent of the current global credit and financial markets crisis. These conditions increase the difficulty of accurately forecasting and planning our business activities. If these conditions and uncertainties continue or if credit and financial markets and confidence in economic conditions further

deteriorate, our business and results of operations could be materially and adversely affected.

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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, delay 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. In 2009, the semiconductor industry, especially the assembly and testing services for DRAM products sector, continued to experience the significant downturn that began in fourth quarter of 2008, and which has adversely affected our business. As a result of the industry downturn, our net revenue for 2009 decreased 29% from 2008 levels. We incurred a net loss of NT$4,419 million (US$138 million) in 2009, a decrease from a net loss of NT$7,270 million in 2008. This industry downturn started to recover from the second quarter of 2009, and we cannot give any assurances that there will not be any downturn in the future 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, communications equipment, consumer electronic products and display applications. 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. The weak demand for LCD and other flat-panel display products that began in 2007 adversely affected our operating results in 2007, 2008 and 2009. Any significant decrease in demand for end-user applications of semiconductors will 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. See also 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 . 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.

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. A substantial portion of our net revenue is indirectly generated from providing semiconductor assembly and testing services to these IDMs and fabless companies. 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.

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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. 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 market prices for these products could significantly reduce our net revenue and net income.

A significant portion 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 78%, 75% and 66% of our net revenue in 2007, 2008 and 2009, 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 in the semiconductor industry. The continuing oversupply of DRAM products in 2008 and the weak demand in the DRAM market in 2009 resulted in significant reductions in the price of DRAM products, which in turn drove down the average prices for our testing and assembly services for DRAM products in these periods. We cannot assure you that there will not be further downturns in DRAM prices in the future.

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

Our testing and assembly services for LCD and other flat-panel display driver semiconductors generated net revenue of NT$3,996 million, NT$2,805 million and NT$2,626 million (US$82 million) in 2007, 2008 and 2009, respectively. We invested NT$714 million, NT$157 million and NT$37 million (US$1 million) in 2007, 2008 and 2009, 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. Our gross margin for testing and assembly services for LCD and other flat-panel display driver semiconductors was negative 21% in 2009 and negative 18% in 2008 primarily as a result of the weak demand for LCD and other flat-panel display products, which in turn decreased our capacity utilization rates and average selling prices. If demand for LCD and other flat-panel display products does not increase, our capacity utilization rates may not increase, resulting 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, and hereby further 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 .

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. As of December 31, 2009, we had approximately NT$13,378 million (US$419 million) and NT$4,738 million (US$148 million) in long- and short-term indebtedness, respectively, outstanding. Both the long- and short-term indebtedness amounts include capital lease obligations. Of our long-term debt, we had NT$11,239 million (US$352 million) of bank loans, with an interest rate between 1.065% and 4.69%; US$42 million of convertible notes with an interest rate of 3.375%, 8% or 10%; and capital lease obligations of NT$1,454 million (US$46 million), with an interest rate between 3.9567% to 3.9609%. In addition, ThaiLin, ChipMOS Taiwan s 42.9% owned subsidiary, holds US$19 million in aggregate principal amount of the convertible notes.

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

- we may have to 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.

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ChipMOS Bermuda and ChipMOS Taiwan were not able to meet their financial covenants under a US$75 million Facility Agreement dated July 18, 2008 (the USD Facility Agreement) among ChipMOS Bermuda and the banks named therein, and the related Guarantee Agreement dated July 18, 2008 (the Guarantee Agreement) among ChipMOS Taiwan, ChipMOS Bermuda and the banks named therein. In addition, ChipMOS Taiwan filed a bail-out application with the competent government authorities, and negotiated with its bank creditors for an extension of its debt repayment and other types of settlement and with its equipment lessor and the lessor s creditor to restructure its leasing arrangement. ChipMOS Taiwan has obtained such extension or settlement whereby ChipMOS Taiwan has provided additional collaterals. ChipMOS Bermuda also negotiated with its bondholders to extend its debt repayments and other types of settlement, and has obtained such extension or settlement (the Settlement Agreement). ChipMOS Bermuda sent a waiver request to the lending banks in April 2009 with respect to the effect of the foregoing arrangements on the USD Facility Agreement and the Guarantee Agreement. In February 2010, the agent of the USD Facility Agreement and the Guarantee Agreement, Standard Chartered Bank (Hong Kong) Limited, confirmed to ChipMOS Bermuda that the majority lenders approved the waiver, subject to certain conditions and a waiver fee of 0.1% on the loan outstanding amount as of July 2, 2009.

On February 26, 2010, ChipMOS Bermuda and Siliconware Precision Industries Co., Ltd. (Siliconware Precision) entered into a Share Purchase Agreement, whereby ChipMOS Bermuda agreed to sell 15.8% of ChipMOS Taiwan s outstanding shares to Siliconware Precision. ChipMOS Bermuda sought the lending banks approval to (1) reduce its share holding percentage in ChipMOS Taiwan, (2) repay the debts prior to maturity by March 2011 and (3) waive the break cost. As of the date of this Annual Report on Form 20-F, ChipMOS Bermuda has received approval from the lending banks for the aforementioned waiver request under the USD Facility Agreement. Upon the completion of the Share Purchase Agreement, together with ChipMOS Bermuda s currently available funds, ChipMOS Bermuda may have sufficient funds to repay the debts under the USD Facility Agreement prior to the maturity date.

For additional information on our indebtedness, see Item 5. Operating and Financial Review and Prospects Liquidity and 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;
- 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 common shares, and the market value of your investment, may fall.

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The ongoing criminal proceeding of and adverse publicity associated with Mr. Shih-Jye Cheng, our Chairman and Chief Executive Officer, and Mr. Hung-Chiu Hu, our former director, could have a material adverse effect on our business and cause our stock price to decline.

Mr. Shih-Jye Cheng, our chairman and chief executive officer, was indicted by the Taipei District Prosecutor s Office, or the prosecutor, in December 2005. Based upon information released by the prosecutor, the indictment alleges that Mr. Shih-Jye Cheng, as instructed by Mr. Hung-Chiu Hu, purchased repurchase notes on January 6, January 13, and January 28, 2004 from Founder Associates Limited, a British Virgin Islands company affiliated with Mega Securities Co., Ltd. (formerly known as Barits International Securities Co., Ltd.), with an aggregate principal amount of approximately US$29 million, by using corporate funds from ChipMOS Taiwan and ThaiLin. The indictment further alleges that these repurchase notes were used as a cover to misuse the corporate funds of Mosel, and its affiliated entities, including ChipMOS Taiwan and ThaiLin, in violation of ROC law. In addition, the indictment alleges that Mr. Hu and others were engaged in the insider trading of the securities of Mosel in violation of ROC law, but none of the current officers at ChipMOS Taiwan or ThaiLin was indicted in this regard.

On January 5, 2006, our board established a special committee to evaluate the circumstances surrounding the indictment of Mr. Cheng. As of March 31, 2010, the special committee was comprised of two independent directors, Messrs. Yeong-Her Wang and Pierre Laflamme. The special committee engaged K&L Gates LLP (formerly Kirkpatrick & Lockhart Preston Gates Ellis LLP) as its independent international legal counsel, Baker & McKenzie as its independent ROC legal counsel, and Ernst & Young (formerly Diwan, Ernst & Young) as its financial advisor to assist in its investigation.

The special committee s investigation focused on (1) the probability that Mr. Shih-Jye Cheng would be convicted on the charges described in the indictment, (2) whether the indictment resulted in any pecuniary or other damage to us, (3) whether there were any internal control weaknesses related to the investments in repurchase notes within ChipMOS Bermuda and its subsidiaries and (4) whether ChipMOS Bermuda is required by applicable laws or the NASDAQ Global Select Market listing requirements to take any action in connection with the indictment. The special committee did not attempt to independently determine whether Mr. Cheng had engaged in any wrongdoing in connection with the investments in repurchase notes, irrespective of whether such wrongdoing would lead to a conviction on the charges under the indictment.

On June 28, 2006, the special committee issued its report, including its findings and recommendations. Based upon the results of its investigation, it found that (1) Mr. Shih-Jye Cheng has declared himself not guilty of the charges described in the indictment, (2) Baker & McKenzie, after reviewing the indictment and the prosecutor s exhibits, has found that the evidence produced by the prosecutor seems to be inadequate and that there is a low probability of the charges in the indictment being founded, (3) the financial advisor to the special committee has found that we suffered no loss (not taking into account exchange rate factors) and that all monies (capital and interest) were remitted back to our subsidiaries involved, (4) we have suffered no identifiable harm to our reputation or business and (5) Mr. Cheng has not been impaired by the indictment to perform as our chairman and chief executive officer. The special committee recommended that our board maintain Mr. Cheng as our chairman and chief executive officer with full responsibilities and our board unanimously (with Mr. Cheng having recused himself) resolved to accept and adopt the special committee s recommendation with regard to Mr. Cheng. Our board of directors also resolved to continue the role of the special committee for the duration of the ongoing criminal proceeding involving Mr. Cheng to actively monitor any developments of the criminal investigation and take or recommend any appropriate action in light of such developments.

On October 1, 2007, the Taipei District Court found Mr. Shih-Jye Cheng not guilty, and on October 22, 2007, the prosecutor appealed the Taipei District Court decision at the Taiwan High Court. The Taiwan High Court held three pre-trial hearings in 2008, and three pre-trial hearings and three trial hearings in 2009. Due to the rotation of the judges in the meantime, a new bench was formed at the beginning of 2010 to try this case. As of March 31, 2010, no trial schedule has been set since the new bench took over this case.

Theoretically, as a result of prosecutor s appeal, Mr. Cheng may still be convicted of one or more charges in the indictment. In addition, new evidence that leads to additional criminal charges and/or an adverse judgment against Mr. Cheng may be produced during the ongoing criminal investigation, and the special committee may make recommendations to our board in respect of Mr. Cheng s positions with us or our subsidiaries. However, up to the present, no new evidence or charge has been presented or collected by the prosecutor or the Court. Therefore, we are reasonably confident that the non-guilty judgment for Mr. Cheng will be maintained by the Taiwan High Court. If Mr. Cheng is convicted, or in light of any new developments, the special committee may recommend or our board of directors may otherwise decide that it is in the Company s best interests that Mr. Cheng no longer serves in all or some of his current capacities with us or our subsidiaries, or if Mr. Cheng resigns as a result of a final adverse judgment rendered against him by the court, or otherwise, the public perception of us may be seriously harmed and we would lose some or all of the services of Mr. Cheng. In addition, if Mr. Cheng is convicted and sentenced to imprisonment, the ROC Financial Supervisory Commission may subject ChipMOS Taiwan or ThaiLin to certain restrictions on financing activities if Mr. Cheng continues to serve as the chairman or president of ChipMOS Taiwan or ThaiLin. Mr. Cheng is very important to our current on-going business operations and our relationships with our customers and financing sources, and our loss of his services due to and any adverse publicity from the trial or conviction of Mr. Cheng or other key personnel could materially and adversely affect our business, reputation and prospects and therefore cause our stock price to decline.

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

We depend on a small group of customers for a substantial portion of our business. In 2009, our five largest customers, collectively accounted for 51% of our net revenue. As part of our strategy, we have been focusing on sales to key customers through long-term service agreements. Beginning in 2008, we also resumed a focus on our business with smaller customers and customers who do not place orders on a regular basis. We expect that we will continue to depend on a relatively limited number of customers for a significant portion of our net revenue, even as we increase the volume of our business with smaller customers and customers who do not place orders on a regular basis. 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.

ProMOS is an affiliate of Mosel, which, as of March 31, 2010, indirectly owned approximately 12.3% of our outstanding common shares. In March 2008, ProMOS defaulted on its payment obligations under the long-term service agreement. In November 2008, we entered into a revised subcontracting contract with ProMOS by requiring ProMOS to provide wafers with a value of 80% of the subcontracting fee as collateral. Effective March 2009, we started to request prepayments from ProMOS. In May 2009, a further revised subcontracting contract was entered into by and between us and ProMOS under which ProMOS provided us with wafer as a pledge for its payment obligations and Work-In-Process, or WIP and existing finished goods would serve as lien material. Part of ProMOS receivables had been recovered through sales of the pledged wafer and lien material back to ProMOS with a discount to market price, and the remaining outstanding accounts receivables have been secured by equipment mortgage under the same contract arrangement. See Item 4. Information on the Company Customers .

In January 2009, Spansion has defaulted on its payment obligations under the long-term service agreement and we have subsequently terminated the long-term service agreement with Spansion on February 19, 2009. On March 1, 2009, Spansion has filed for a voluntary petition for reorganization under Chapter 11 of the U.S. Bankruptcy Code. On January 25, 2010, ChipMOS Taiwan entered into a Transfer of Claim Agreement to sell to Citigroup Financial Products Inc. (Citigroup) the general unsecured claim reflected in the proof of claim against Spansion filed by ChipMOS Taiwan in U.S. Bankruptcy Court. In February 2010, we received payment of approximately US$33 million from an escrow agent for the sale of accounts receivable for testing and assembly services provided to Spansion in the amount of approximately US$66 million to US$70 million, which was based on the Transfer of Claim Agreement. See Item 4. Information on the Company Customers .

Since semiconductor companies generally rely on service providers with whom they have established relationships to meet their testing and assembly needs for their applications and 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. We cannot assure you that receivable collection difficulties experienced by us will not occur in the future. If any of our key customers reduces or cancels its orders or terminates existing contractual arrangements, and if we are unable to attract new customers and establish new contractual arrangements with existing or new customers, our net revenue could be reduced and our business and results of operations may be materially adversely affected.

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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 logic/mixed-signal semiconductor testing services, our fixed costs represented 75%, 79% and 88% of our total cost of revenue in 2007, 2008 and 2009, respectively. For memory and logic/mixed-signal semiconductor assembly services, our fixed costs represented 24%, 30% and 31% of our total cost of revenue in 2007, 2008 and 2009, respectively. For LCD and other flat-panel display driver semiconductor testing and assembly services, our fixed costs represented 54%, 57% and 56% of our total cost of revenue in 2007, 2008 and 2009, 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 can significantly affect our gross margins as unit costs generally decrease as the fixed costs are allocated over a larger number of units. In the past, our capacity utilization rates have fluctuated significantly as a result of the fluctuations in the market demand for semiconductors. If we fail to increase or maintain our capacity utilization rates, our earnings and profitability may be adversely affected. In addition, we have entered into various long-term assembly and testing services agreements with certain of our customers that may require us to incur significant capital expenditures. If we are unable to achieve high capacity utilization rates for the equipment purchased pursuant to these agreements, our gross margins may be materially and 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.

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.

As our industry is highly cyclical and rapidly changing, our capital requirements are difficult to plan. To remain competitive, we may need capital to fund the expansion of our facilities as well as to fund our equipment purchases and research and development activities. To meet our liquidity, capital spending and other capital needs, we have taken and plan to take certain measures to generate additional working capital and to save cash. See Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources .

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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.

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. We are, from time to time, involved in litigation in respect of intellectual property rights. Any litigation, whether as plaintiff or defendant, is costly and diverts our resources. If we fail to obtain necessary licenses on commercially reasonable terms or if litigation, regardless of the outcome, relating to patent infringement or other intellectual property matters occurs, our costs could be substantially increased to impact our margins. Any such litigation could also prevent us from testing and assembling particular products or using particular technologies, which could reduce our opportunities to generate revenue. For more information on litigation in respect of intellectual property rights, see Item 8. Financial Information Legal Proceedings .

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 TCP/COF, 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 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.

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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. 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. Under our long-term service agreement we have entered into with Spansion in September 2005, we have committed to acquire certain wafer sorting testers and probers. Spansion has defaulted on its payment obligations under the long-term service agreement and we have subsequently terminated the long-term service agreement with Spansion on February 19, 2009. Currently, we do not have any other long-term service agreements that require our commitment to acquire additional testing and assembly equipment or facilities, however we can not assure you that such commitment will not be made in the future. See Item 4. Information on the Company Customers .

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.

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, our Bermuda counsel, 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 price of our common shares may be adversely impacted if we or our independent public registered accounting firm is unable to conclude that our internal control over our financial reporting is effective as required by Section 404 of the Sarbanes-Oxley Act of 2002.

We are subject to the SEC s reporting obligations, and beginning in our Annual Report on Form 20-F for the year ended December 31, 2006, we have been required by the SEC, as directed by Section 404 of the Sarbanes-Oxley Act of 2002, to include a report of management on our internal control over financial reporting in our Annual Report on Form 20-F that contains an assessment by management of the effectiveness of our internal control over financial reporting. Beginning in fiscal year 2007, our independent public registered accounting firm has audited the effectiveness of our internal control over financial reporting. Although our management concluded that our internal controls are effective in this Annual Report on Form 20-F, and our independent public registered accounting firm has rendered its opinion that we maintained, in all material respects, effective internal control over financial reporting as of December 31, 2009, based on criteria set forth in Internal Control Integrated Framework issued by the Treadway Commission (COSO), our management may not conclude that our internal controls are effective in the future. Moreover, even if our management concludes that our internal controls over our financial reporting are 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, it may decline to attest to our management s assessment or may issue an adverse opinion in the future. 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 and gold bumping processes. 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.

We may not be successful in our acquisitions, investments, joint ventures and dispositions, and may therefore be unable to implement fully our business strategy.

As part of our growth strategy, we may make acquisitions and investments in companies and businesses, establish joint ventures or make dispositions of our interests. For example, on November 21, 2005, we merged Chantek into ChipMOS Taiwan, and on December 1, 2005, we merged ChipMOS Logic TECHNOLOGIES INC., or ChipMOS Logic, into ThaiLin Semiconductor Corp., or ThaiLin. In November 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 transferred to First Semiconductor Technology Inc. in April 2005 for approximately US$2 million. In September 2007, we acquired all outstanding common shares of ChipMOS Taiwan through a share exchange transaction with ChipMOS Taiwan. In February 2010, we agreed to sell approximately 15.8% of ChipMOS Taiwan s outstanding shares to Siliconware Precision. The success of our acquisitions, investments, joint ventures and dispositions depends on a number of factors, including:

our ability to identify suitable investment, acquisition, joint venture or disposition opportunities;

our ability to reach an agreement for an acquisition, investment, joint venture or disposition opportunity on terms that are satisfactory to us or at all;

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

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

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

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

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. As of March 31, 2010, 11.4% of the workforce at our facilities 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.

Risk Relating to Our Relationship with Mosel

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 common 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. ChipMOS Taiwan purchased NT$242 million worth of Mosel shares in 2002. Lee and Li, our ROC special counsel, has advised us that these purchases do not violate relevant ROC law that prohibits 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 indirect interest (calculated as the product of (i) Mosel s percentage interest in ChipMOS Bermuda and (ii) ChipMOS Bermuda s percentage interest in ChipMOS Taiwan) in ChipMOS Taiwan was less than 50% and ChipMOS Bermuda is incorporated outside of Taiwan. In 2005, ChipMOS Taiwan disposed of NT$84 million of Mosel shares, and in August 2006, ChipMOS Taiwan further disposed of the remaining Mosel shares for approximately NT$30 million. ChipMOS Taiwan no longer owns any Mosel shares. Lee and Li has advised that under relevant ROC law, there is no similar restriction or limitation on a subsidiary s disposal of its parent s equity shares, if the previous acquisitions of such shares complied with relevant ROC law. 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 common shares to decline.

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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 or Siliconware Precision violating ROC laws governing investments in Mainland China by ROC companies or persons. Any sanctions on Mosel or Siliconware Precision as a result of any violation of ROC laws may cause Mosel or Siliconware Precision to decrease its ownership in us significantly or cause Mosel or Siliconware Precision to take other actions that may not be in the best interest of our other shareholders.

Previously, ROC laws and regulations generally prohibited investment by ROC entities in Mainland China in most aspects of the semiconductor testing and assembly industry. In February 2010, these restrictions have been relaxed. ROC entities now may make investment in Mainland China in the semiconductor testing and assembly industry if they have obtained approval from the Investment Commission of the ROC Ministry of Economic Affairs, or the Investment Commission. The Investment Commission will undertake a special approval process if the investment amount exceeds US$50,000,000. 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 in an existing company or enterprise in Mainland China (other than shares of publicly traded companies, acquisition of which is prohibited under current policy of the Investment Commission); or
- establishing or expanding a branch office in Mainland China.

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 demand 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 pledge agreement in respect of the entire equity interest in Modern Mind and ChipMOS Shanghai. We have also entered into other contractual arrangements with regard to ChipMOS Shanghai. For more information, see Item 4. Information on the Company Our Structure and History MODERN MIND TECHNOLOGY LIMITED and ChipMOS TECHNOLOGIES (Shanghai) LTD.

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 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 such non-ROC company, any investment by such non-ROC company in the PRC will constitute an investment by the controlling ROC company 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 governing investments in Mainland China) by ChipMOS Bermuda in ChipMOS Shanghai may be deemed to be an investment in Mainland China by Mosel and/or Siliconware Precision, if Mosel and/or Siliconware Precision 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 and/or Siliconware Precision 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/or Siliconware Precision and require approval of the

Investment Commission, and be subject to the prohibitions described in the first paragraph of this risk factor analysis. As a result, so long as Mosel and/or Siliconware Precision 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 and/or Siliconware Precision under these regulations. As a result, any significant ownership of our common shares by Mosel and/or Siliconware Precision could materially and adversely restrict our ability and flexibility in structuring our investment in Mainland China and thereby affect our business prospects.

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If Mosel or Siliconware Precision was found to be in violation of the applicable ROC laws and regulations governing investments in Mainland China, Mosel or Siliconware Precision 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$25,000,000. In such case, Mosel or Siliconware Precision may 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 or Siliconware Precision to cease having controlling power over our management and operations. If Mosel or Siliconware Precision fails to comply with the order of the Investment Commission, the ROC government can impose on the chairman of Mosel or Siliconware Precision 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 or Siliconware Precision in response to any orders by the Investment Commission will be in the best interest of our other shareholders. 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.

ROC laws and regulations limit or 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 any such limitation or 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 previously prohibited any transfer of semiconductor testing and assembly technologies to any person or entity located in Mainland China, except for transfers involving certain low-end semiconductor testing and assembly technologies, such as conventional wire bond assembly technology, if certain requirements are met. The ROC Ministry of Economic Affairs has the ultimate administrative authority in interpreting such laws and regulations. In February 2010, these restrictions have been relaxed, so that ROC entities may transfer semiconductor testing and assembly technologies to any person or entity located in Mainland China after they have obtained approval from the Investment Commission. Under a technology transfer agreement, dated August 1, 2002, ChipMOS Bermuda licensed to ChipMOS Shanghai certain testing and assembly-related technologies that were then controlled by ChipMOS Bermuda, which included technologies that were licensed to ChipMOS Bermuda by ChipMOS Taiwan. ChipMOS Bermuda also provided ChipMOS Taiwan with technical support and consulting services under this agreement. 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 as of that date to ChipMOS Bermuda, including those previously licensed to ChipMOS Bermuda. On April 12, 2007, ChipMOS Bermuda entered into an assignment agreement with ChipMOS Taiwan, pursuant to which ChipMOS Taiwan assigned and transferred fifty percent of the title to ownership of and interest in all of the technologies and intellectual property it owned as of that date 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 as described above are in compliance with all applicable ROC laws and regulations. However, substantial uncertainties remain regarding the interpretation and application of those laws and regulations. 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 thousand 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 demand 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. These contractual arrangements, however, may not be as effective in providing control over our Mainland China operations as would direct ownership in 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 or Siliconware Precision violating ROC laws governing investments in Mainland China by ROC companies or persons. Any sanctions on Mosel or Siliconware Precision as a result of any violation of ROC laws may cause Mosel or Siliconware Precision to decrease its ownership in us significantly or cause Mosel or Siliconware Precision to take other actions that may not be in the best interest of our other shareholders .

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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.

Certain of our operations are conducted through companies that we do not fully own. For example, certain current consolidated operations are conducted through ThaiLin, ChipMOS Taiwan s 42.9% owned subsidiary as of March 31, 2010, 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 that we desire may be limited.

Any future outbreak of health epidemics and outbreaks of contagious diseases, including avian influenza, Severe Acute Respiratory Syndrome or H1N1 influenza may materially affect our operations and business.

An outbreak of a contagious disease such as avian influenza, Severe Acute Respiratory Syndrome (SARS), or more recently, the New Influenza A (H1N1) or more commonly known as the swine flu, for which there is inadequate treatment or no known cure or vaccine, may potentially result in a quarantine of infected employees and related persons, and adversely affect our operations at one or more of our facilities or the operations of our customers or suppliers. We cannot predict the impact that any future outbreak of these or other diseases could have on our business and results of operations.

We face substantial political risk associated with doing business in Taiwan, particularly due to recent domestic political events and the strained relations between the Republic of China and the People s Republic of China, that could negatively affect our business and the market price of our common shares.

Our principal executive offices and most of our testing and assembly facilities are located in Taiwan. As a result, our business, financial condition and results of operations and the market price of our common shares may be affected by changes in ROC governmental policies, as well as social instability and diplomatic and social developments in or affecting Taiwan which are beyond our control. For example, 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 strengthened in recent years between the ROC and the PRC, relations have often been strained. In March 2005, the PRC government enacted the 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 related to the interaction 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 natural 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 the Shanghai Qingpu Industrial Zone, and all of our assembly services through our facilities in the Southern Taiwan Science Park in Taiwan and the Shanghai Qingpu Industrial Zone. 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 and typhoons. 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 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.

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In January and February 2008, certain parts of Mainland China, particularly in the southern, central and eastern regions, experienced reportedly the most severe winter weather in the country in recent decades, which resulted in significant and extensive damages to factories, power lines, homes, automobiles, crops and other properties, blackouts, transportation and communications disruptions and other losses in the affected areas. In addition, in May 2008, certain semiconductor companies with facilities in eastern Mainland China experienced production disruption reportedly due to power stoppages caused by the failure of certain electricity supply system in the area where the plants are located. We cannot assure you that our facilities in the Shanghai Qingpu Industrial Zone will not be adversely affected by future snowstorms, power shortages, earthquakes or other similar events.

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 and Mainland China. 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, snowstorm, other natural disaster or other disruptive event in Taiwan or Mainland China could severely disrupt the normal operation of business and have a material adverse effect on our financial condition and results of operations.

Risks Relating to Our Corporate 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, repay or repurchase outstanding indebtedness and otherwise fund and conduct our business.

We are a holding company, and our most significant asset is our majority 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 and 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. Moreover, a ROC-incorporated company is only able to declare dividends at its annual general meeting of shareholders, which cannot occur until after completion of its annual financial statements. Any limitation on dividend payments by our subsidiaries could materially adversely affect our ability to grow, fund investments, make acquisitions, pay dividends, repay or repurchase outstanding indebtedness, and otherwise fund and conduct our business.

Siliconware Precision and Mosel, our two largest shareholders, have significant influence over our company and may 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.

Siliconware Precision and Mosel directly and indirectly owned approximately 13.3% and 12.3% of our common shares as of March 31, 2010, respectively. As the two largest shareholders that own more than 10% of our common shares respectively, Siliconware Precision and Mosel have significant influence over all matters submitted to our shareholders for approval and other corporate actions, such as:

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election of directors;

timing and manner of dividend distributions;

approval of contracts between us and Siliconware Precision or Mosel or their respective affiliates, which could involve conflicts of interest; and

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

Siliconware Precision and 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.

In addition, one of our directors, Mr. Hsing-Ti Tuan, also acts as a director of ProMOS, a subsidiary of Mosel. As a result, conflicts of interest between Mr. Tuan s duty to us and ProMOS and/or Mosel 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 or Siliconware Precision violating ROC laws governing investments in Mainland China by ROC companies or persons. Any sanctions on Mosel or Siliconware Precision as a result of any violation of ROC laws may cause Mosel or Siliconware Precision to decrease its ownership in us significantly or cause Mosel or Siliconware Precision 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, Mr. Tuan will act in our interests, or that conflicts of interest will be resolved in our favor.

Moreover, because Siliconware Precision and Mosel have potential 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.

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 its shareholders, ChipMOS Bermuda and Siliconware Precision, 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.

Certain provisions in our constitutive documents and in our severance agreements with our executive officers make the acquisition of us by another company more difficult and costly 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 the total voting rights of all shareholders having the right to vote at such general meeting called to consider such extraordinary transaction. These provisions in our constitutive documents may increase the difficulty faced by a party which seeks to acquire control of our board or to approve an extraordinary transaction.

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In 2007, we entered into change in control severance agreements with certain executive officers pursuant to which we agreed to pay certain severance payments if a change in control event (as defined in the change in control severance agreements) occurs and the employment of such executive officer is terminated by our company other than for cause or by such executive officer for good reasons within two years following the occurrence of the change in control event. These changes in control agreements may increase the cost of a party seeking to effect a change in control of our company.

Future sales, pledge 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, the perception that future sales may occur, or the pledge of a substantial portion of our common shares could depress the prevailing market price of our shares. As of March 31, 2010, we had approximately 91 million shares outstanding, including approximately 55 million shares of which are freely tradable within the United States without restriction or further registration under the Securities Act. Siliconware Precision, Mosel, ThaiLin and DLS Capital Management, LLC, our four largest shareholders, owned 12,174,998, 11,194,644, 6,493,998 and 5,229,367 common shares as of March 31, 2010, respectively, representing in the aggregate of approximately 38.4% of our outstanding common shares. See Item 7. Major Shareholders and Related Party Transactions Major Shareholders . As of March 31, 2010, we had US$2 million in aggregate principal amount of the 2006 Notes outstanding and US$35 million in aggregate principal amount of the 2009 Notes outstanding (including US$19 million in aggregate principal amount held by ThaiLin, ChipMOS Taiwan s 42.9% owned subsidiary), and US$5 million in aggregate principal amount of the 2010 Notes outstanding. The 2006 Notes are convertible into our common shares at the conversion price of US$6.85 per share, and US$14 million in aggregate principal amount of the 2009 Notes, US$21 million in aggregate principal amount of the 2009 Notes and US$5 million in aggregate principal amount of the 2010 Notes are convertible into our common shares at the conversion price of US$1.50 per share, US$1.25 per share and US$1.25 per share, respectively, in each case the conversion price may be subject to certain adjustments.

Mosel in the past decided to sell a significant portion of our common shares in order to raise funds. In June 2006, Mosel sold 6,956,522 common shares through its wholly-owned subsidiary, Giant Haven, under a shelf registration statement which has since expired. In addition, in March 2007, we issued 12,174,998 common shares pursuant to a share purchase and subscription agreement with ChipMOS Taiwan and Siliconware Precision, and we entered into a registration rights agreement in March 2007 with Siliconware Precision, pursuant to which we granted to Siliconware Precision certain rights to require us to register these common shares for sale under the Securities Act. In July 2007, Mosel sold 8,121,266 common shares through Giant Haven to ProMOS and Powertech Technology, and we then granted Giant Haven, ProMOS and Powertech Technology certain rights to require us to register these common shares for sale under the Securities Act. For a shareholder that is not our affiliate these shares may be resold pursuant to Rule 144 after lapse of the applicable holding period. In 2008, ProMOS failed to meet its payment obligations to ThaiLin. Subsequently in March 2009, ThaiLin acquired 4,060,633 common shares from ProMOS pursuant to its enforcement of the collateral under a Stock Pledge Agreement between ThaiLin and ProMOS dated December 3, 2008. Furthermore, each of Siliconware Precision, Mosel and ThaiLin may be able to sell, in any three-month period, that number of those ChipMOS common shares that each of Siliconware Precision, Mosel and ThaiLin owns, as the case may be, up to the greater of (i) one percent of our outstanding common shares or (ii) the average weekly trading volume of our common shares as reported on the NASDAQ Capital Market during the four calendar weeks prior to filing a notice under Rule 144(h) for any such sales pursuant to Rule 144(e) under the Securities Act.

On September 14, 2007, ChipMOS Bermuda issued 604,124 common shares pursuant to a share exchange transaction with ChipMOS Taiwan, under which ChipMOS Bermuda exchanged one common share for every 8.4 ChipMOS Taiwan shares then outstanding. Following the completion of the share exchange transaction, ChipMOS Taiwan became our wholly-owned subsidiary. In February 2010, we agreed to sell approximately 15.8% of ChipMOS Taiwan s outstanding shares to Siliconware Precision. Upon completion of that share purchase transaction by March 2011, we will own approximately 84.2% of ChipMOS Taiwan s outstanding shares. We plan to issue, from time to time, additional shares in connection with employee compensation and to finance possible future capital expenditures, investments or acquisitions. See Item 6. Directors, Senior Management and Employees Share Option Plan and Share Appreciation Rights 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. The issuance of additional shares may have a dilutive effect on other shareholders and may cause the price of our common shares to decrease.

In addition, the indictment relating to Mr. Hung-Chiu Hu alleges that embezzled funds were used in investments by PacMOS, which, as of March 31, 2010, owned 3.5% 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.

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Our outstanding convertible notes will likely dilute the ownership interest of existing shareholders.

As of March 31, 2010, we had approximately US$42 million of convertible notes outstanding. US$40 million in aggregate principal amount of the notes are PIK notes, or payment in kind notes, that allow us to pay interest in cash or our common shares, or a combination thereof. These PIK notes have a maturity date in 2014 and 2015, with an interest rate of 8% or 10%, and a conversion price of either US$1.25 or US$1.50 per share, subject to anti-dilution adjustments upon the occurrence of certain events. See Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources Convertible Notes for more detailed description of our outstanding convertible notes.

Generally, the conversion of convertible notes will dilute the ownership interest of existing shareholders and could adversely affect the market price of our common shares. Even if convertible notes are not converted, their existence may encourage the short selling of the common shares by the holders of the convertible notes as well as other market participants, depressing the price of our common shares.

The PIK notes that we have issued present a dilution risk. When we elect to pay interest in our common shares, as we have done previously in respect of our PIK notes, the number of common shares that we issue is determined on the basis of the prevailing market price of our common shares. If our share price decreases, we will have to issue a greater number of common shares to pay the interest due on our PIK notes, which in turn could further depress the price of our common shares. In addition, the terms of our PIK notes require us to pay an additional amount upon conversion equal to a make-whole amount relating to the principal amount of the notes being converted. The make-whole amount is the amount of interest that would have accrued from the applicable conversion date, change of control repurchase date or redemption date, as the case may be, until the stated maturity, discounted to present value using the published yield on U.S. treasury notes plus 50 basis points; provided that the additional 50 basis points is not added if the applicable treasury note rate is greater than two percent (2%). As with interest payments under the PIK notes, the make-whole amount is payable in cash or common shares or a combination thereof. Given the difference between the high rate of interest payable on our PIK notes and the existing low yield of U.S. treasuries, the make-whole amount payable in PIK notes, if converted at this time would be significant, and if we paid such make-whole amount using our common shares, this would significantly dilute the ownership interest of existing shareholders and could adversely affect the market price of our common shares.

The issuance by us of additional convertible notes, and in particular, PIK notes, could further dilute the ownership interest of existing shareholders.

If the trading price of our common shares declines, we may face a limited public market for our common shares and reduced availability of future debt or equity financing.

Companies listed on the NASDAQ Stock Market (NASDAQ) are subject to delisting for, among other things, failure to maintain a minimum closing bid price of $1.00 per share for 30 consecutive business days. Though we are in compliance with the NASDAQ Listing Rules as of the date of this filing, we were not in compliance with the minimum bid price requirement from September 15, 2009 until May 5, 2010, when we regained compliance. During this time, we applied for, and NASDAQ approved, the transfer of our listing from NASDAQ Global Select Market to NASDAQ Capital Market. If the bid price of our common stock falls below $1.00 per share for 30 consecutive business days again in the future, we may be subject to delisting. If our common shares are delisted from the NASDAQ Capital Market, our common shares would likely trade in the over-the-counter market, which could make selling our common shares more difficult. Smaller quantities of shares would likely be bought and sold, transactions could be delayed, and security analysts coverage of us may be reduced. In addition, in the event our common shares are delisted, broker-dealers have certain regulatory burdens imposed upon them, which may discourage broker-dealers from effecting transactions in our common shares. These factors could limit our common shares liquidity and result in lower prices and larger spreads in the bid and ask prices for our common shares.

Future declines in our share price could also significantly impair our ability to raise additional necessary capital through equity or debt financing, and could significantly increase ownership dilution to shareholders caused by our issuing equity in financing or other transactions. A general permission under the Exchange Control Act 1972 and the Exchange Control Regulation 1973 (and other relevant legislations and regulations) has been given by the Bermuda Monetary Authority (the BMA) for the issue and transfer of our common shares, notes and other securities to and between non-residents of Bermuda for exchange control purposes, provided that our common shares remain listed on an appointed stock exchange (which includes listing on the NASDAQ Capital Market). There can be no assurance that the BMA will give the same or a similar consent in the event our common shares are no longer listed on the NASDAQ Capital Market or another appointed stock exchange. In the absence of such a general consent, specific consents of the BMA would be required for all issues and transfers of our shares, notes and other securities, unless such issues and/or transfers fall under certain exemptions as provided by the BMA.

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Item 4. Information on the Company

Overview of the Company

We believe that we are one of the leading independent providers of semiconductor testing and assembly services. Specifically, we believe that we are one of the leading independent providers of testing and assembly services for LCD and other flat-panel display driver semiconductors in Taiwan and for advanced memory and logic/mixed-signal products in Taiwan and Mainland China. 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 testing and assembly services. 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.

Our Structure and History

We are a holding company, incorporated in August 2000 under the Companies Act 1981 of Bermuda (as amended) (the Bermuda Companies Act), under the name ChipMOS TECHNOLOGIES (Bermuda) LTD. Our principal place of business is located at No. 1, R&D Road 1, Hsinchu Science Park, Hsinchu, Taiwan, Republic of China and our phone number is (886) 3 563 3988. We provide most of our services in Taiwan through our subsidiary, ChipMOS TECHNOLOGIES INC., or ChipMOS Taiwan, in which we hold a majority ownership interest, 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 March 31, 2010, Siliconware Precision Industries Co., Ltd., or Siliconware Precision, owned approximately 13.3% of our common shares, and Mosel Vitelic Inc., or Mosel, indirectly owned approximately 12.3% of our common shares.

The following chart illustrates our corporate structure and our equity interest in each of our principal subsidiaries and affiliates as of March 31, 2010.[(1)]

(1) Under ROC Financial Accounting Standards and the regulations of the Taiwan Securities and Futures Bureau, 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%. From 2005, we consolidated the financial results of ChipMOS Taiwan, ChipMOS Japan (which was liquidated in October 2009), ChipMOS USA, ChipMOS TECHNOLOGIES (H.K.) Limited, or ChipMOS Hong Kong, Modern Mind and its wholly-owned subsidiary, ChipMOS Shanghai, ChipMOS Logic (which was merged into ThaiLin in December 2005), Chantek (which was merged into ChipMOS Taiwan in November 2005) and First Semiconductor Technology, Inc. (in which ChipMOS Taiwan acquired a 67.8% equity interest on November 1, 2004 and transferred back this interest to First Semiconductor Technology, Inc. on April 29, 2005).

(2) As of March 31, 2010, 3,899,999 shares of ChipMOS Hong Kong 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 March 27, 2007, we completed a share purchase and subscription transaction with ChipMOS Taiwan and Siliconware Precision, under which we and ChipMOS Taiwan purchased all of Siliconware Precision s equity interest in ChipMOS Taiwan, and Siliconware Precision subscribed to 12,174,998 of our newly issued common shares through a private placement. Following such transaction, on September 14, 2007, we completed a share exchange transaction with ChipMOS Taiwan pursuant to which we exchanged one common share for every 8.4 ChipMOS Taiwan shares. Following the completion of the share exchange transaction, ChipMOS Taiwan became our wholly-owned subsidiary. In February 2010, we agreed to sell approximately 15.8% of ChipMOS Taiwan s outstanding shares to Siliconware Precision. Upon completion of that share purchase transaction by March 2011, we will own approximately 84.2% of ChipMOS Taiwan s outstanding shares.

(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.

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Below is a description of our principal consolidated subsidiaries:

ChipMOS TECHNOLOGIES INC. 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 as well as gold bumping and memory module manufacturing. 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.

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 merger agreement, as amended on September 2, 2005, shareholders of Chantek (other than ChipMOS Taiwan) were entitled to elect to receive cash or ChipMOS Taiwan shares in exchange for their Chantek shares at the ratio of 3.6 to 1. As a result, ChipMOS Taiwan paid NT$81 million in cash and issued 6 million (which represented approximately 0.7% of ChipMOS Taiwan s outstanding shares immediately after the completion of the transaction) shares to Chantek shareholders pursuant to the merger agreement. The transaction closed on November 21, 2005.

On March 27, 2007, we completed a share purchase and subscription transaction with ChipMOS Taiwan and Siliconware Precision, under which we and ChipMOS Taiwan purchased all of Siliconware Precision s equity interest in ChipMOS Taiwan, and Siliconware Precision subscribed to 12,174,998 of our newly issued common shares through a private placement. As of March 31, 2007, we held 99.1% of the outstanding common shares of ChipMOS Taiwan.

On September 14, 2007, we completed a share exchange transaction with ChipMOS Taiwan pursuant to which we exchanged one common share for every 8.4 ChipMOS Taiwan shares. In connection with the share exchange transaction, ChipMOS Bermuda and ChipMOS Taiwan paid in the aggregate NT$53 million in cash to purchase fractional shares and shares held by dissenting shareholders, and ChipMOS Bermuda issued 604,124 new common shares. Following the completion of the share exchange transaction, ChipMOS Taiwan became our wholly-owned subsidiary. In February 2010, we agreed to sell approximately 15.8% of ChipMOS Taiwan s outstanding shares to Siliconware Precision. Upon completion of that share purchase transaction by March 2011, we will own approximately 84.2% of ChipMOS Taiwan s outstanding shares.

ChipMOS TECHNOLOGIES (H.K.) Limited ChipMOS Hong Kong (formerly ChipMOS Far East Limited) was incorporated in Hong Kong in November 2002. It is engaged in semiconductor testing and assembly services and trading of spare parts and tools. Effective May 31, 2005, the name of ChipMOS Far East Limited was changed to ChipMOS TECHNOLOGIES (H.K.) Limited. As of March 31, 2010, we held 100% of the outstanding common shares of ChipMOS Hong Kong.

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 and semiconductor assembly and testing. 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$50 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. As of March 31, 2010, the aggregate amount of total loans we extended to Modern Mind was US$130.3 million. 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 pledge agreement in respect of 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 an additional ten-year period 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.

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For risks associated with our investment in Mainland China and these contractual arrangements, 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 or Siliconware Precision violating ROC laws governing investments in Mainland China by ROC companies or persons. Any sanctions on Mosel or Siliconware Precision as a result of any violation of ROC laws may cause Mosel or Siliconware Precision to decrease its ownership in us significantly or cause Mosel or Siliconware Precision 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 .

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. 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.

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.

On August 15, 2005, ThaiLin entered into a merger agreement with ChipMOS Logic, whereby ChipMOS Logic agreed to be merged into ThaiLin, with ThaiLin as surviving entity. Under the merger agreement, shareholders of ChipMOS Logic received one common share of ThaiLin in exchange for 2.8 common shares of ChipMOS Logic. As a result, ThaiLin issued approximately 43 million shares (which represented approximately 14.4% of ThaiLin s outstanding shares immediately after the completion of the transaction) to ChipMOS Logic shareholders. The transaction closed on December 1, 2005.

On March 4, 2008, ChipMOS Taiwan made a loan in an amount of NT$145 million that bears interest at a rate of 4.69% per annum to Taiwan Kolin Co. Ltd., or Kolin, a major shareholder of ThaiLin, ChipMOS Taiwan s 42.9% owned subsidiary. NT$15 million of this loan was repaid in 2008. The loan is secured by a pledge by Kolin of 11 million common shares of ThaiLin. See Item 7. Major Shareholders and Related Party Transactions Related Party Transactions ThaiLin Semiconductor Corp.

As of March 31, 2010, ChipMOS Taiwan held (excluding the ThaiLin common shares pledged to us in connection with the loan to Kolin) a 42.9% interest in ThaiLin. Mr. Shih-Jye 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, six of the nine directors of ThaiLin are appointed by ChipMOS Taiwan.

As of March 31, 2010, ThaiLin held 6,493,998 of our outstanding shares, corresponding to 7.1% of all of our outstanding shares. See Item 7. Major Shareholders and Related Party Transactions Related Party Transactions ThaiLin Semiconductor Corp.

CHANTEK ELECTRONIC CO., LTD. Chantek was incorporated in Taiwan in May 1989 and was listed on the GreTai Securities Market in Taiwan until November 16, 2005. It provided 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.

On November 21, 2005, Chantek was 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.

On December 1, 2005, ChipMOS Logic was merged into ThaiLin, with ThaiLin as the surviving entity. For additional information regarding the merger agreement, see ThaiLin Semiconductor Corp. above.

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First Semiconductor Technology, Inc. First Semiconductor Technology, Inc. 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, Inc. 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.

Industry Background

We provide a broad range of back-end testing services, including engineering testing, wafer probing and final testing of memory and logic/mixed-signal semiconductors. We also offer a broad selection of leadframe-based and organic substrate-based package assembly services for memory and logic/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 gold bumping, testing and assembly services for LCD and other flat-panel display driver semiconductors by employing TCP, COF and COG technologies.

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 2009, 42.5% of our net revenue was derived from testing services for memory and logic/mixed-signal semiconductors, 35.9% from assembly services for memory and logic/mixed-signal semiconductors, and 21.6% from LCD and other flat-panel display driver semiconductor testing and assembly services.

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. Beginning in the fourth quarter of 2008, the semiconductor industry commenced another downturn that increased in unprecedented severity into the first quarter of 2009. The overall semiconductor industry commenced to recover from the downturn in the second quarter of 2009 and the positive recovery trend continues in 2010.

Selected Key Semiconductor Markets

After such time as a recovery occurs in end-user demand for new and improved electronic products and applications that is sufficient to reverse reduced demand trends that began in 2007 and are still continuing, various sectors of the semiconductor industry are in turn expected to benefit from a resumption in growth. These sectors include the memory semiconductor market, and the LCD and other flat-panel display driver semiconductor market.

Memory Semiconductor Market

The potential for memory market growth is linked to anticipated memory content increases in consumer electronics and PC applications (after such time as a recovery occurs in end-user demand for these) 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. Potential growth in the DRAM market is expected to be driven by continued growth in both the commodity and niche DRAM market, as well as growth opportunities in mobile DRAM as memory requirements significantly increase for mobile applications. Flash memory market potential growth is expected to be driven by increasing memory requirements for cellular handsets, digital cameras, digital audio /video, and other mobile applications.

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. The end-user demand for LCD and other flat-panel display driver semiconductor experienced a downturn in 2007 and 2008. The LCD driver market started to recover in the second quarter of 2009 and the positive recovery trend continues in 2010.

Logic/Mixed-Signal Semiconductor Market

The communications market is one of the main drivers of potential growth in the semiconductor industry. Logic/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. Logic/mixed-signal semiconductors, such as LCD controllers and DVD controllers, are also used in consumer electronic products.

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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 on to the memory device.

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.

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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 by lowering time-to-market pressure faced by semiconductor companies. 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.

Mainland China has emerged 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 increased 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 or have relocated 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. In line with this trend, we have in recent years expanded our operations in Mainland China.

Our Strategy

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

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

We intend to continue our focus on developing and providing advanced testing and assembly services for potential growth segments of the semiconductor industry, such as memory, logic/mixed-signal and LCD and other flat-panel display driver semiconductors. In 2009, our revenue from testing and assembly of semiconductors for these segments accounted for all 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 benefit from the expected resumption of 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 progressively provide more advanced testing and assembly services to customers is critical to our business. In addition, advanced semiconductor testing and assembly services typically have the potential to 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 COFs. We have also introduced fine-pitch 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;
- developing advanced assembly technologies for high-speed memory devices;
- developing fine-pitch bumping, chip probing and bonding technologies for LCD drivers;
- improving manufacturing yields for new assembly technologies;
- 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; and
- implementing of radio frequency identification (RFID) logistics management system for the wafer probing process.

In 2009, we spent approximately 3.1% 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 March 31, 2010, our research and development team comprised 263 persons.

Build on Our Strong Presence in Taiwan and Expand Our Operations Outside Taiwan.

We intend to build on our strong presence in key centers of semiconductor and electronics manufacturing to 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.

As with our operations in Taiwan, we intend to similarly benefit from our operations in Mainland China. We intend to invest in and expand our operations in Mainland China, increasing our testing and assembly services for memory semiconductors.

Depending on customers demands, market conditions and other relevant considerations, we may from time to time look into other opportunities to expand our operations outside Taiwan.

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.

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Through ChipMOS Taiwan, ThaiLin and ChipMOS Shanghai, we are able to offer vertically integrated services for a broad range of products, including memory, logic/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 potential 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 Key Customers as well as Business with Smaller 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 continue focus on increasing sales to key customers through long-term capacity agreements. The customers with which we currently have long-term agreements include a reputable mixed-signal customer based in the US. See Customers below for a more detailed discussion of these long-term agreements.

Recent global market and economic conditions have been unprecedented and challenging with tight credit conditions and recession in most major economies continuing into 2010. Beginning in 2008, we also resumed our focus on our business with smaller customers or customers who do not place orders on a regular basis. We believe that the dual focused strategy would assist us to be better prepared for the current economic volatility and ensure maximum utilization rate of our capacity and help us to develop closer relationships with all types of our customers.

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,		
	2007	2008	2009
Testing			
Memory testing revenue	46.1%	48.4%	38.2%
Logic/mixed-signal testing revenue	2.7	3.3	4.3
Total testing revenue	48.8	51.7	42.5
Assembly			
Memory assembly revenue	32.1	27.0	27.5
Logic/mixed-signal assembly revenue	2.2	4.8	8.4
Total assembly revenue	34.3	31.8	35.9
LCD and other flat-panel display driver semiconductor testing and assembly revenue	16.9	16.5	21.6
Total net revenue	100.0%	100.0%	100.0%

Memory and Logic/Mixed-Signal Semiconductors

Testing

We provide testing services for memory and logic/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 512 devices simultaneously. The memory semiconductors we test are used primarily in desktop computers, notebook computers and handheld consumer electronic devices and wireless communication devices.

Logic/Mixed-Signal. We conduct tests on a wide variety of logic/mixed-signal semiconductors, with lead counts ranging from the single digits to over 1024 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.

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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 customers 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.

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 a 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.

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Assembly

Our assembly services generally involve the following steps:

Wafer Lapping	The wafers are ground to their required thickness.
Die Saw	Wafers are cut into individual dies, or chips, in preparation for the die-attach process.
Die Attach	Each individual die is attached to the leadframe or substrate.
Wire Bonding	Using gold wires, the I/O pads on the die are connected to the package inner leads.
Molding	The die and wires are encapsulated to provide physical support and protection.
Marking	Each individual package is marked to provide product identification.
Dejunking and Trimming	Mold flash is removed from between the lead shoulders through dejunking, and the dambar is cut during the trimming process.
Electrical Plating	A solderable coating is added to the package leads to prevent oxidization and to keep solder wettability of the package leads.
Ball Mount and Reflow	Each electrode pad of the substrate is first printed with flux, after which solder balls are mounted, heated and attached to the electrode pad of the substrate through a reflow oven.
Forming/Singulation	Forming involves the proper configuration of the device packages leads, and singulation separates the packages from each other.

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:

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To address the market 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.

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
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
Plastic Dual-in-line Package (PDIP)	16-56	Package with insertion leads on longer sides used in consumer electronics products	Electronic games, monitors, copiers, printers, audio and video products, personal computers
Thin Small Outline Package I (TSOP I)	28-56	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, SDRAM and DDR DRAM	Disk drives, recordable optical disk drives, audio and video products, consumer electronics, communication products
Quad Flat Package (QFP)	44-208	Flat structure with 4-sided peripheral leads designed for SRAM, graphic processors, personal computer chipsets and mixed-signal devices	Wireless communication products, notebook computers, personal computers, consumer electronics
Quad Flat No Lead (QFN)	8-132	Thermal enhanced quad flat no lead package providing small footprint (chip scale), light weight with good thermal and electrical performance	Wireless communication products, notebook computers, PDAs, consumer electronics
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)	44-128	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)	8	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)	24-86	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

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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 pitch between the individual terminals. The ball grid array configuration enables high-pin 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.

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

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

Package	Connections	Description	End-User Applications
Mini BGA	36-361	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	54-84	Our patented design for DRAM products that require high performance and chip scale package (CSP)	Notebook computers, cellular handsets, global positioning systems, personal digital assistants, wireless systems
Very Thin Fine-Pitch BGA	48-176	Similar structure of Mini BGA package with thinner and finer ball pitch that is designed for use in a wide variety of applications requiring small size, high reliability and low unit cost	Handheld devices, notebook computers, disk drives, wireless and mobile communication products
Land Grid Array (LGA)	44-52	Thinner and lighter assembly designed essential to standard BGA without solder balls, suitable for applications that require high electrical performance	Disk drives, memory controllers, wireless, mobile communication products
Multi-Chip BGA	48-137	Designed for assembly of two or more memory chips (to increase memory density) or combinations of 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 BGA	48-137		

Designed for assembly of two or more memory chips or logic and memory chips in one CSP, reducing the space required for memory chips	Cellular handsets, digital cameras, personal digital assistants, wireless systems, notebook computers, global positioning systems

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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.

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.

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 TCPs. 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 750 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 TCPs. 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 after inner lead bonding. The back face of the chip is left un-sealed for thermal connection to the printed circuit board.

The following diagram presents the basic components of a TCP:

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.

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

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:

Wafer Lapping	Wafers are ground to their required thickness.
Die Saw	Wafers are cut into individual dies, or chips, in preparation for the pick and place process.
Pick and Place	Each individual die is picked and placed into a chip tray.
Inspection and Packing	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.

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 logic/mixed-signal communications products; and
- our reputation for high quality and reliable customer-focused services.

The number of our customers as of March 31, in each of 2008, 2009 and 2010, respectively, was 90, 90 and 100. Our top 15 customers in terms of revenue in 2009 were (in alphabetical order):

Elite Semiconductor Memory Technology Inc.

Etron Technology, Inc.

Himax Technologies, Inc.

ILI TECHNOLOGY CORP.

Integrated Circuit Solution Inc.

Macronix International Co., Ltd.

Micron Semiconductor Asia Pte. Ltd.

Novatek Microelectronics Corp., Ltd.

Powertech Technology Inc.

ProMOS Technologies Inc.

Raydium Semiconductor Corporation

SILEGO Technology Inc.

Spansion LLC

Standard Microsystems Corp.

Zentel Electronics Corp.

In 2007, our largest customer was ProMOS, our second-largest customer was Spansion and our third-largest customer was Powerchip, accounting for approximately 29%, 16% and 10% of our net revenue, respectively. In 2008, our largest customer was Spansion, our second-largest customer was ProMOS, and our third-largest customer was Novatek, accounting for approximately 23%, 18% and 9% of our net revenue, respectively. In 2009, our largest customer was Spansion, our second-largest customer was Novatek; and our third-largest customer was

Micron Semiconductor Asia Pte. Ltd., accounting for approximately 15%, 12% and 10% of our net revenue, respectively.

The majority of our customers purchase our services through purchase orders and provide us three-month non-binding rolling forecasts on a monthly basis. The price for our services is typically agreed upon at the time when a purchase order is placed.

In 2006 and 2007, we strategically entered into or extended certain long-term agreements with some of our key customers, including a reputable logic/mixed-signal customer based in the US, under which we reserved capacity for the customers primarily and the customer committed to place orders in the amount of the reserved capacity (which is subject in certain cases to reduction by the customer).

Pursuant to the long-term service agreement we have entered into with ProMOS in July 2007, ProMOS agreed to provide us with six month rolling forecast on testing and assembly service orders to be placed to us, and ProMOS guarantees that such orders will represent no less than certain percentage of ProMOS total production volume of these products (excluding OEM products). In January 2008, at the request of ProMOS, we agreed to permit ProMOS to defer payment of aggregate service fees of NT$450 million to February 15, 2009. The deferred service fees, bore an interest at a rate of 4.69% per annum, were recorded as long-term accounts receivables as of December 31, 2007, and were paid in full by ProMOS in March and April 2008. In March 2008, ProMOS failed to place orders in the amount of the reserved capacity and failed to meet its payment obligations under the long-term service agreement. In November 2008, we entered into a revised subcontracting contract with ProMOS by requiring ProMOS to provide wafers with a value of 80% of the subcontracting fee as collateral. In May 2009, a further revised subcontracting contract was entered into by and between us and ProMOS under which ProMOS provided us with wafer as pledge and Work-In-Process, or WIP and existing finished goods as lien material. Part of ProMOS receivables will be recovered through sales of the pledged wafer and lien material back to ProMOS with a discount to market price, and the remaining outstanding accounts receivables will be secured by equipment mortgage under the same contract arrangement. Effective March 2009, we started to request prepayment from ProMOS. As of December 31, 2009, ProMOS owed the Company NT$464 million (US$15 million). We reserved an allowance in the full amount of the foregoing doubtful receivables as of December 31, 2009. See Note 20 to our consolidated financial statements contained in this Annual Report on Form 20-F.

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Pursuant to the long-term service agreement we have entered into with Spansion in September 2005, Spansion agreed to provide us with six month rolling forecast on testing and assembly service orders to be placed to us. In January 2009, Spansion defaulted on its payment obligations under the long-term service agreement and we subsequently terminated the long-term service agreement with Spansion on February 19, 2009. Our service fee receivable from Spansion in connection with its default amounted to NT$1,539 million. Currently all of the service fees payable to us by Spansion are via cash on delivery. On March 1, 2009, Spansion filed for a voluntary petition for reorganization under Chapter 11 of the U.S. Bankruptcy Code. Subsequent to such filing, on March 16, 2009, ChipMOS Taiwan was elected as the co-chairman of the Unsecured Creditor Committee to represent unsecured creditors in Spansion s efforts to reorganize its debts under Chapter 11 petition. In early January, 2010, ChipMOS Taiwan resigned as a member of the Unsecured Creditor Committee.

On January 25, 2010, ChipMOS Taiwan entered into a definitive Transfer of Claim Agreement to sell to Citigroup the general unsecured claim reflected in the proof of claim against Spansion Inc., Spansion Technology LLC, Spansion LLC, Spansion International Inc. and Cerium Laboratories LLC (collectively, Spansion) filed by ChipMOS Taiwan in U.S. Bankruptcy Court. The claim that is the subject of the Transfer of Claim Agreement includes accounts receivable for testing and assembly services provided to Spansion in the amount of approximately US$66 million to US$70 million (the Undisputed Claim). ChipMOS Taiwan received the purchase price for the Undisputed Claim of approximately US$33 million in February 2010 from Citigroup. The Transfer of Claim Agreement also includes the sale of breach of contract and liquidated damages rights against Spansion in the amount of approximately US$234 million (the Damages Claim). The purchase price for the Damages Claim is expected to be an amount that will be determined based on a purchase rate of 50.2% multiplied by the portion of the Damages Claim that is allowed by a final adjudication of the U.S. Bankruptcy Court. The purchase price for the Damages Claim is payable to ChipMOS Taiwan to the extent that the Court allows this claim. In furtherance of the Transfer of Claim Agreement, the Company also has entered into an agreement to subscribe for, purchase and transfer to Citigroup rights offering shares to be issued by Spansion according to the Second Amended Joint Plan of Reorganization filed in U.S. Bankruptcy Court. This agreement provides that Citigroup will pay to the Company the amount of the rights offering shares purchase price. Citigroup deposited the amount required to acquire the rights offering shares and the Company is awaiting distribution of these shares.

On April 22, 2010, the Company announced that Spansion LLC and ChipMOS Taiwan entered into a two-year wafer sort services agreement, utilizing the V5400 test platform, making ChipMOS Taiwan the exclusive wafer sort subcontractor of Spansion, except for any sort equipment operated by Spansion LLC or currently located at Spansion Japan Limited. The wafer sort services agreement became effective upon the effective date of Spansion s confirmed plan of reorganization. The U.S. Bankruptcy Court confirmed Spansion s Second Amended Plan of Reorganization on April 16, 2010. The effective date of Spansion s plan of reorganization is May 10, 2010. The wafer sort services agreement became effective on May 10, 2010.

Beginning in 2008, we also resumed a focus on our business with smaller customers and customers who do not place orders on a regular basis.

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,		
	2007	2008	2009
Taiwan	72%	60%	60%
United States	21	34	33
Korea	3	3	3
Japan	1	1	1
Hong Kong SAR	1	(1)	(1)
Others	2	2	3
Total	100%	100%	100%

(1) Less than 1%.

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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, Mainland China and the United States. Our sales and marketing strategy is to focus on memory semiconductors in Taiwan, Japan, Korea and the United States, logic/mixed-signal semiconductors in Taiwan, Japan and the United States, LCD and other flat-panel display driver semiconductors in Japan, Taiwan, Hong Kong and Mainland China, and module manufacturing in Taiwan and Mainland China. As of March 31, 2010, our sales and marketing efforts were primarily carried out by teams of sales professionals, application engineers and technicians, totaling 35 staff members. 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.

We have appointed a non-exclusive sales agent for promoting our services for memory semiconductors in the United States, Japan and Korea. 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 1.5% to 2.5% of our revenue from services for memory semiconductors in the United States, Japan and Korea. In 2007, 2008 and 2009, we paid approximately NT$25 million, NT$12 million and NT$9 million (US$282 thousand), respectively, in commissions to our sales agent.

Research and Development

We believe that research and development is critical to our future success. In 2007, 2008 and 2009, we spent approximately NT$322 million, or 1%, NT$436 million, or 3% and NT$375 million (US$12 million), or 3%, respectively, of our net revenue on research and development. We intend to sustain these efforts.

Our research and development efforts have focused primarily on improving the efficiency, production yields and technologies of our testing and assembly services. From time to time, we jointly develop new technologies with universities and research institutions. For testing, our research and development efforts focus particularly on thin wafer probing, non-clean sockets, non-clean probing, fine-pitch MEMS probes, and testing of MEMS wafers/ devices. Our projects include:

Developing thin wafer probing technology to study the yield effect after processing;

Developing non-clean probing and sockets to increase productivity and yield;

Developing fine-pitch MEMS probes for advanced testing of MENS and COF products; and

Developing high-speed probing.

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

In the assembly areas, our research and development efforts focus on:

- Copper wire bonding and low-cost wire bonding alternatives;
- Wafer-level chip scale packaging and low-cost flip-chip integrated solution;
- Low cost, fine pitch bumping solutions;
- High performance, fine pitch and miniaturization of packages;
- Multi-chip assembly and modules;
- Stacked-die chip scale package;
- 3D IC packaging related technologies: thin wafer handling /testing/dicing;
- Compression molding; and
- Developing environmentally friendly assembly services.

Our projects include developing multi-chip packages, flip-chip technologies, environmentally friendly products, 12-inch wafer technologies, fine-pitch wire bonding technologies, 25-micron wafer thinning technology, and advanced packages. These are aimed to meet advanced needs for DDR III, COF modules, fine-pitch LCD driver bumping, mixed-signal assembly and advanced probe card technologies. We work closely with our customers to optimize 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 March 31, 2010, we employed 263 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 tools. Shadow Moiré and Micro Moiré characterization capabilities were established in the Advanced Packaging Lab. Electrical measurement instruments and simulation software Agilent ADS, EMPro, and Ansoft Q3D were set up in Electrical Measurement and Simulation Lab. These added capabilities allow us to support various advanced development work. The implementation of computer simulation, as compared with physical testing methods, is expected to substantially shorten the development cycle and provides predictable performance of our packages.

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 March 31, 2010, we employed 409 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. In addition, our facilities in Hsinchu and Tainan have been ISO 9002 certified. With respect to our quality management system, on November 26, 2003, ChipMOS Taiwan obtained ISO/TS 16949:2002 quality system certification. In 2006, the Chupei site obtained ISO/TS16949 quality system certification. ThaiLin and ChipMOS Shanghai also obtained ISO/TS 16949:2002 quality system certification on September 6, 2005 and January 28, 2006, respectively.

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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, and a QS 9000 certification is required by certain semiconductor manufacturers as a threshold indicator of a company s quality control standards. An ISO 9002 certification is required by many countries for sales of industrial products. ISO/TS 16949:2002 certification system seeks to integrate quality management standards into the operation of a company, and emphasizes the supervision and measurement of process and performance.

In addition to the quality management system, 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 2003, ChipMOS passed SONY Green Partner (Tier 2) certification through its ProMOS channel, and in 2009, ChipMOS obtained SONY Green Partner (Tier 1) certification due to its direct business relationship with SONY. ChipMOS Shanghai also obtained SONY Green Partner (Tier 2) certification through its ISSI channel in 2008. Our laboratories have also been awarded Chinese National Laboratory accreditation under the categories of reliability test, electricity and temperature calibration.

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 U.S. federal 209E class 100, 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:

- Joint Electron Device Engineering Council (JEDEC) standardized temperature cycling, thermal shock and pressure cook reliability tests;
- high and low temperature storage life tests, temperature and humidity bias and highly accelerated temperature/humidity stress test (HAST); and
- high resolution scanning acoustic tomography, scanning electronic microscope and X-Ray microscopy for physical failure analysis, curve tracer and semi-probe station for electrical failure analysis.

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, in 2009, we achieved monthly assembly yields of an average of 99.98% for our memory and logic/mixed-signal assembly packages, 99.91% for our COF packages and 99.79% for our COG packages. 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.

Raw Materials

Semiconductor testing requires minimal raw materials. Substantially all of the raw materials used in our memory and logic/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 15%, 17% and 21% of our net revenue in 2007, 2008 and 2009, 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, since the commencement of economic downturn in second quarter of 2008, due to the volatility of the semiconductor market, several of our principal suppliers have also ceased to stock inventories to be reserved to meet its customers production requirements. Instead, our suppliers now require longer lead time for delivery of our supply orders. Despite shortages in the supply of materials, the prices of raw materials have decreased compared to prior to the economic downturn. 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/COF process and for modules are obtained from a limited number of Japanese suppliers.

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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., Chipbond Technology Corporation, King Yuan Electronics Co., Ltd., Powertech Technology Inc., Siliconware Precision, STATS ChipPAC Ltd. and United Test and Assembly Center 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;
- 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 thus enabling us to operate at a more cost-effective structure compared to the IDMs; and

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

Intellectual Property

As of March 31, 2010, we held 456 patents in Taiwan, one patent in the United Kingdom, one patent in France, one patent in Germany, 68 patents in the United States and 123 patents in the People s Republic of China relating to various semiconductor testing and assembly technologies. These patents will expire at various dates through to December 2028. As of March 31, 2010, we also had a total of 83 pending patent applications in the United States, 193 in Taiwan, and 140 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, Singapore, Hong Kong, Korea, Japan and 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 and Item 8. Financial Information Legal Proceedings .

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On June 3, 2006, ChipMOS Taiwan entered into a license agreement with Sharp Corporation, or Sharp, pursuant to which we acquired a perpetual license to use TCP testing and assembly technology for a lump sum royalty payment of 10 million Japanese yen (approximately US$87 thousand), which we paid in July 2006. This license agreement superseded the previous license agreement with Sharp entered into in February 2000 pursuant to which Sharp licensed to us TCP-related technology and intellectual property rights for five years starting from February 10, 2000 for a royalty fee based on the service fees paid to us by our customers. Our royalty obligations under the February 2000 license agreement were fully paid.

On April 12, 2007, ChipMOS Bermuda entered into an assignment agreement with ChipMOS Taiwan, pursuant to which ChipMOS Taiwan assigned and transferred fifty percent of the title to, ownership of and interest in all of the technologies and intellectual property it owned as of that date to ChipMOS Bermuda for a purchase price of US$6.4 million, which was paid in full in June 2007.

Government Regulations

As discussed above under Intellectual Property , governmental regulation of our intellectual property may materially affect our business. The failure to protect our property rights would deprive us of our ability to stay competitive in the semi-conductor industry. Our intellectual property rights are protected by the relevant patent and intellectual property agencies of the European Community, United States, the People s Republic of China, Singapore, Hong Kong, Korea, Japan and Taiwan.

Environmental Matters

Semiconductor testing does not generate significant pollutants. The semiconductor assembly process generates stationary acid and alkali pollution, principally at the plating stages. 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 and during the gold bumping process. 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 and gold bumping facilities. Since 2001, we have adopted certain environmentally-friendly production management systems, and have implemented certain measures intended to bring our assembly process in compliance with the Restriction of Hazardous Substances Directive 2002/95/EC issued by the European Union. 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 and Mainland China have been certified as meeting the ISO 14001 environmental standards of the International Organization for Standardization, and all of our facilities in Taiwan have been further certified as meeting the OHSAS18001 standards, of 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. In 2005, ChipMOS Shanghai completed a similar lead-free process control program. In 2003 and 2008, ChipMOS Taiwan and ChipMOS Shanghai obtained Green Partner certification from Sony Corporation of Japan, respectively. The Green Partner program requires external suppliers to meet SONY s Green Partner requirements. Standardizing on green, environmentally friendly products, production facilities and management systems, which has become an industry trend, and to many companies, a key criteria in selection of their service providers.

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, lightning and earthquakes. The maximum coverage of property insurance for ChipMOS Taiwan and ThaiLin is approximately NT$53,786 million and NT$7,610 million, respectively. ChipMOS Shanghai also maintains property insurance policies for a maximum coverage of approximately RMB753 million.

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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.

Facilities

We provide testing services through our four facilities in Taiwan and one facility in Shanghai, with one facility at each of the following locations: Chupei, 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 Chupei facility and possess the land use right to the land on which our Shanghai Qingpu Industrial Zone facility is located until 2052, and, we lease two parcels of land for our Hsinchu Science Park testing facility with lease expiration in year 2017 and 2026, respectively, and Southern Taiwan Science Park facility with lease expiration in year 2017.

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 and moved into the new facility in August 2005, with the grand opening of the new facility in November 2005. Modern Mind currently offers testing and assembly services of memory semiconductors. In connection with the Shanghai operations, Modern Mind has invested US$130 million in ChipMOS Shanghai for the facility and related equipment.

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.

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 March 31, 2010.

Location of Facility	Primary Use	Floor Area (m^2)	Principal Equipment
Chupei, Hsinchu	Wafer Testing/Gold Bumping	25,954	4 steppers
			11 sputters
			268 testers
Hsinchu Industrial Park, Taiwan	Testing	27,124	138 testers
			60 burn-in ovens
Hsinchu Science Park, Taiwan	Testing/Module	40,294	136 testers
			92 burn-in ovens
Southern Taiwan Science Park,	Assembly/Testing	109,676	453 wire bonders

Taiwan			127 inner-lead bonders 193 testers
Shanghai Qingpu Industrial Zone, Mainland China	Assembly/Testing	66,817	34 testers 158 wire bonders 19 burn-in ovens

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Equipment

Testing of Memory and Logic/Mixed-Signal Semiconductors

Testing equipment is the most capital-intensive component of the memory and logic/mixed-signal semiconductors 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 March 31, 2010, we operated 769 testers for testing memory and logic/mixed-signal semiconductors. 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, Verigy Ltd. and Credence Systems Corporation.

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.

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 time from order to delivery in excess of six months.

Assembly of Memory and Logic/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. and Kulicke & Soffa Industries Inc. As of March 31, 2010, we operated 611 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.

Gold Bumping, 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 March 31, 2010, we operated 4 steppers and 11 sputters for gold bumping, 127 inner-lead bonders for assembly and 193 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.

Item 4A. Unresolved Staff Comments

Not applicable.

Item 5. Operating and Financial Review and Prospects

This discussion and analysis should be read in conjunction with our consolidated financial statements and related notes contained in this Annual Report on Form 20-F.

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Overview

We provide a broad range of back-end testing services, including wafer probing and final testing of memory and logic/mixed-signal semiconductors. We also offer a broad selection of leadframe-based and organic substrate-based package assembly services for memory and logic/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 gold bumping, testing and assembly services for LCD and other flat-panel display driver semiconductors by employing TCP, COF and COG technologies. In 2009, our consolidated net revenue was NT$12,150 million (US$380 million) and our net loss was NT$4,419 million (US$138 million).

We are a holding company, incorporated in Bermuda on August 1, 2000. We provide most of our services through our subsidiary, ChipMOS Taiwan, and its subsidiaries and investees. 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. Following the completion of the share exchange transaction between our company and ChipMOS Taiwan on September 14, 2007, ChipMOS Taiwan became a wholly-owned subsidiary of our company. In February 2010, we agreed to sell approximately 15.8% of ChipMOS Taiwan s outstanding shares to Siliconware Precision. Upon completion of that share purchase transaction by March 2011, we will own approximately 84.2% of ChipMOS Taiwan s outstanding shares. In Taiwan, we conduct testing operations in our facilities at the Hsinchu Science Park and the Hsinchu Industrial Park, gold bumping and wafer testing in our facility at Chupei, 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, 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. Due to the global credit and financial market crisis, we have experienced decrease in our capacity utilization rates for our testing and assembly equipment during 2009 and therefore decrease in our gross margins.

The current generation of advanced testers typically cost between US$2 million and US$5 million each, while wire bonders used in assembly typically cost approximately US$65 thousand each and inner-lead bonders for TCP and COF assembly cost approximately US$300 thousand each and COG chip sorters cost approximately US$140 thousand 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 adversely 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 recovery in early 2003. The significant decrease in market demand for semiconductors that began in 2000 adversely affected our results of operations for 2001 and 2002. Beginning in the fourth quarter of 2008, the semiconductor industry commenced another significant downturn which continued and increased in severity towards the first quarter of 2009. The significant decrease in market demand for semiconductors during such period adversely affected our results of operations for 2009. During periods of decreased demand for assembled semiconductors, some of our customers may forego, delay or simplify final testing of certain types of semiconductors, such as DRAM, which may further decrease demand and average selling prices for our services and intensify 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 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 attain high capacity utilization rates;
- concentrate on testing of potentially high-demand, high-growth semiconductors;
- develop new assembly technologies; and
- implement new technologies and platforms to shift into potentially 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 and portable electronic products, display applications and communications equipment. The markets for these products are intensely competitive, and a significant decrease in demand puts pricing pressure on our testing and assembly services and negatively affects our earnings. The oversupply of DRAM products in the second half of 2007 and the weak demand in the DRAM market in 2008 and in the first quarter of 2009 resulted in significant reductions in the price of DRAM products, which in turn drove down the average selling prices for our testing and assembly services for DRAM products in the second half of 2007, 2008 and the first quarter of 2009.

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 over the 2007 to 2009 period. We intend to continue focusing on testing and assembling more semiconductors that have the potential to 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 ability to attain profitability.

Recent Acquisitions

On February 13, 2007, we entered into a share purchase and subscription agreement with ChipMOS Taiwan and Siliconware Precision under which we and ChipMOS Taiwan agreed to purchase all of Siliconware Precision s equity interest in ChipMOS Taiwan, and Siliconware Precision agreed to subscribe for 12,174,998 of our newly issued common shares through a private placement. The transaction closed on March 27, 2007, and as of March 31, 2007, we held 99.1% of the outstanding common shares of ChipMOS Taiwan. On April 12, 2007, we entered into a share exchange agreement with ChipMOS Taiwan pursuant to which we agreed to exchange one common share for every 8.4 ChipMOS Taiwan shares outstanding. The transaction closed on September 14, 2007, and we issued 604,124 common shares to the holders of the ChipMOS Taiwan common shares in exchange for their ChipMOS Taiwan shares, and we and ChipMOS Taiwan paid NT$53 million in cash to purchase fractional shares and shares held by dissenting shareholders. Following the completion of the share exchange transaction on September 14, 2007, ChipMOS Taiwan became our wholly-owned subsidiary. In February 2010, we agreed to sell approximately 15.8% of ChipMOS Taiwan s outstanding shares to Siliconware Precision. Upon completion of that share purchase transaction by March 2011, we will own approximately 84.2% of ChipMOS Taiwan s outstanding shares. See Item 4. Information on the Company Our Structure and History for description of our earlier merger events.

Net Revenue

We conduct our business according to the following main business segments: (1) testing services for memory and logic/mixed-signal semiconductors; (2) assembly services for memory and logic/mixed-signal semiconductors; and (3) LCD and other flat-panel display driver semiconductor testing and assembly services. The following table sets forth, for the periods indicated, our consolidated net revenue for each segment.

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	Year ended December 31,			
	2007 NT$	2008 NT$	2009 NT$	2009 US$
	(in millions)			
Testing				
Memory	$ 10,856.2	$ 8,226.9	$ 4,646.5	$ 145.5
Logic/mixed-signal	646.2	560.1	524.7	16.4
Total testing	11,502.4	8,787.0	5,171.2	161.9
Assembly				
Memory	7,576.0	4,591.1	3,335.7	104.4
Logic/mixed-signal	523.6	826.6	1,017.2	31.8
Total assembly	8,099.6	5,417.7	4,352.9	136.2
LCD and other flat-panel display driver semiconductor testing and assembly	3,995.6	2,805.5	2,626.2	82.2
Total	$ 23,597.6	$ 17,010.2	$ 12,150.3	$ 380.3

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 and assembly services for memory semiconductors, logic/mixed-signal semiconductors and testing and assembly services for LCD and other flat-panel display driver semiconductors.

Most of our customers 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. We have strategically entered into long-term capacity agreements with some of our customers. Under certain of those long-term agreements, we have agreed to reserve capacity for our customers and our customers have agreed to place orders in the amount of the reserved capacity (which is subject in certain cases to reduction by the customers). As part of our strategy, we intend to enter into additional long-term capacity agreements in the future if this approach continues to represent a potential growth opportunity for our business. Depending on customer demands, market conditions and other considerations, we may explore opportunities to expand our operations outside Taiwan and Mainland China in connection with possible future long-term capacity agreements.

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 potentially higher-margin segments. These efforts require significant up front investment in advance of incremental revenue, which could impact our margins.

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.

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We offer volume discounts to all customers who purchase large quantities of our services and special discounts to customers who use our vertically integrated services. On a case by case basis, we also may offer special payment terms, including longer payment cycles, to key customers during downturns in the market so as to retain business from such key customers.

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 risks of ownership are transferred to customers, generally upon shipment of the products. We submit invoices at the time of shipment or delivery and generally require customers to pay within 60 days after the last day of the month during which the invoice was sent, except that we require Spansion and ProMOS, our largest and second largest customers, to pay by cash upon delivery.

In January 2008, at the request of ProMOS, we agreed to permit ProMOS to defer payment of aggregate service fees of NT$450 million to February 15, 2009. The deferred service fees, bore interest at a rate of 4.69% per annum, were recorded as long-term accounts receivable as of December 31, 2007, and were paid in full by ProMOS in March and April 2008. We also experienced collection problems for our receivables in connection with NT$578 million and NT$464 million (US$15 million) of receivables from ProMOS in 2008 and 2009, respectively. Full amount of allowance of the foregoing doubtful receivables was reserved as of December 31, 2008 and 2009. Currently all of the services fees payable to us by ProMOS are prepaid in advance. See Item 4. Information on the Company Customers .

We also experienced collection problems for our services in connection with NT$1,539 million and NT$2,232 million (US$70 million) of receivables from Spansion in 2008 and 2009, respectively. Full amount of allowance of the foregoing doubtful receivables was reserved as of December 31, 2008 and 2009. Currently all of the service fees payable to us by Spansion are via cash on delivery. See Item 4. Information on the Company Customers .

We have not experienced other significant collection problems for our services.

Related Party Revenues

In 2007, 2008 and 2009, 29%, 18% and 6%, 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 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

The majority of our net revenue is generated from customers headquartered in Taiwan, which represented 72%, 60% and 60% of our net revenue in 2007, 2008 and 2009, respectively. We also generate net revenue from customers in the United States, Korea, Japan 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.

See Note 24 to our consolidated financial statements contained in this Annual Report on Form 20-F and Item 11. Quantitative and Qualitative Disclosure about Market Risk Market Risks Foreign Currency Exchange Rate 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 primarily include expensable equipments, sub-contracting 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 March 31, 2010, we had 769 testers, 171 burn-in ovens, 611 wire bonders, 127 inner-lead bonders, 4 steppers and 11 sputters. 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 TSOP, BGA, and some other package assembly technologies. Our average capacity utilization rate for testing of memory and logic/mixed-signal semiconductors was 78% in 2007, 65% in 2008 and 45% in 2009. Our average capacity utilization rate for assembly of memory and

logic/mixed-signal semiconductors was 86% in 2007, 63% in 2008 and 64% in 2009. In addition, our average capacity utilization rate for LCD and other flat-panel display driver semiconductor testing and assembly was 71% in 2007, 52% in 2008 and 50% in 2009.

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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 denominated 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,			
	2007 NT$	2008 NT$	2009 NT$	2009 US$
		(in millions)		
Gross profit (loss):				
Testing				
Memory	$ 4,200.6	$ 746.6	$ (2,275.9)	$ (71.2)
Logic/mixed-signal	174.4	114.0	84.7	2.6
Total testing	4,375.0	860.6	(2,191.2)	(68.6)
Assembly				
Memory	1,452.5	(245.5)	(745.2)	(23.3)
Logic/mixed-signal	19.7	(78.4)	(13.2)	(0.4)
Total assembly	1,472.2	(323.9)	(758.4)	(23.7)
LCD and other flat-panel display driver semiconductor testing and assembly	306.3	(496.4)	(561.6)	(17.6)
Total	$ 6,153.5	$ 40.3	$ (3,511.2)	$ (109.9)
Gross profit (loss) margin:				
Testing				
Memory	38.7%	9.1%	(49.0)%	(49.0)%
Logic/mixed-signal	27.0	20.4	16.1	16.1
Total testing	38.0	9.8	(42.4)	(42.4)
Assembly				
Memory	19.2	(5.3)	(22.3)	(22.3)
Logic/mixed-signal	3.8	(9.5)	(1.3)	(1.3)
Total assembly	18.2	(6.0)	(17.4)	(17.4)
LCD and other flat-panel display driver semiconductor testing and assembly	7.7	(17.7)	(21.4)	(21.4)
Overall	26.1%	0.2%	(28.9)%	(28.9)%

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 that research and development expenses will increase in the future as we continue to explore new technologies and service offerings. We also expect to hire additional employees in our research and development

department.

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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, salary expenses for sales and marketing personnel, sales commission, professional service fees, bad debt provision and service support expenses.

General and Administrative

General and administrative expenses consist of salaries and related expenses for executive, finance and accounting, and management information systems personnel, professional service fees, and other corporate expenses. They also include stock-based compensation that is expensed using the intrinsic value-based method and fair value method. See Item 6. Directors, Senior Management and Employees Share Option Plan and Share Appreciation Rights Plan for more information concerning our share option plan. 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 interest income, foreign exchange gains, warehouse space rental revenue, gains on sale of investments, gains on disposal of property, plant and equipment, fair value gains on financial assets, gain on disposal of land use right and gains on embedded derivative. In 2008, our other income included certain interest income paid by Kolin under a loan repayable to ChipMOS Taiwan that bears interest at a rate of 4.69% per annum. NT$15 million of this loan was repaid in 2008. The loan is secured by a pledge by Kolin of 11 million common shares of ThaiLin. See Item 7. Major Shareholders and Related Party Transactions Related Party Transactions ThaiLin Semiconductor Corp. Our other expenses principally consist of interest expense, investment losses recognized by equity method, fair value loss on financial assets, financing costs, impairment losses, losses on disposal of property, plant and equipment, loss on embedded derivative, loss on redemption of convertible notes and foreign exchange losses.

Noncontrolling Interests and Interest in Bonuses Paid by Subsidiaries

Noncontrolling interests represent the portion of our income that is attributable to the shareholding in our consolidated subsidiaries that we do not own. In 2007, our noncontrolling interests were attributable to the noncontrolling interests owned by Siliconware Precision and other investors in ChipMOS Taiwan prior to the completion of the share exchange transaction between ChipMOS Bermuda and ChipMOS Taiwan on September 14, 2007, and the public shareholders interest in ThaiLin. In February 2010, we agreed to sell approximately 15.8% of ChipMOS Taiwan s outstanding shares to Siliconware Precision. Upon completion of that share purchase transaction by March 2011, we will own approximately 84.2% of ChipMOS Taiwan s outstanding shares.

Interest in bonuses paid by subsidiaries represents our portion of ChipMOS Taiwan s and ThaiLin s distributable earnings that are appropriated as bonuses to employees and remuneration to directors and supervisors of ChipMOS Taiwan and ThaiLin, as required by ROC regulations and ChipMOS Taiwan s and ThaiLin s articles of incorporation. ChipMOS Taiwan and ThaiLin paid bonuses to directors, supervisors and employees of NT$391 million and NT$82 million, respectively, in 2007, and NT$387 million and NT$58 million, respectively, in 2008. ChipMOS Taiwan and ThaiLin did not pay any bonuses to directors, supervisors and employees in 2009. Please see US GAAP Reconciliation for a discussion of the significant impact such bonuses had on our net income under US GAAP.

Net Income

Our net income was NT$2,219 million in 2007 and net loss was NT$7,270 million in 2008 and NT$4,419 million (US$138 million) in 2009, respectively. 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 .

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Results of Operations

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

	Year ended December 31,		
	2007	2008	2009
ROC GAAP:			
Net revenue	100.0%	100.0%	100.0%
Cost of revenue	73.9	99.8	128.9
Gross profit (loss) margin	26.1	0.2	(28.9)
Operating expenses:			
Research and development	1.4	2.5	3.1
Sales and marketing	0.4	13.9	5.4
General and administrative	4.5	5.2	4.6
Total operating expenses	6.3	21.6	13.1
Income (loss) from operations	19.8	(21.4)	(42.0)
Other income (expenses), net	(2.8)	(19.3)	1.0
Income (loss) before income tax, noncontrolling interests and interest in bonuses paid by subsidiaries[(1)]	17.0	(40.7)	(41.0)
Income tax benefit (expense)	(3.3)	(0.7)	3.4
Income benefit (loss) before noncontrolling interests and interest in bonuses paid by subsidiaries	13.7	(41.4)	(37.6)
Net (income) loss attributable to noncontrolling interests	(3.1)	0.8	1.2
Interest in bonuses paid by subsidiaries[(1)]	(1.2)	(2.1)	
Net income (loss) attributable to ChipMOS	9.4%	(42.7)%	(36.4)%

(1) Refers to bonuses to directors, supervisors and employees.

Year Ended December 31, 2009 Compared to Year Ended December 31, 2008

Net Revenue. Our net revenue decreased by NT$4,860 million, or 29%, to NT$12,150 million (US$380 million) in 2009 from NT$17,010 million in 2008.

Net revenue from testing services for memory and logic/mixed-signal semiconductors decreased by NT$3,616 million, or 41%, to NT$5,171 million (US$162 million) in 2009 from NT$8,787 million in 2008, mainly due to a decrease in net revenue from testing services for memory semiconductors. Net revenue from testing services for memory semiconductors decreased by NT$3,581 million, or 44%, to NT$4,646 million

(US$146 million) in 2009 from NT$8,227 million in 2008, principally due to decreased capacity utilization rates and lower average selling price for DRAM products. Revenue for testing services for logic/mixed-signal semiconductors decreased by NT$35 million, or 6%, to NT$525 million (US$16 million) in 2009 from NT$560 million in 2008, principally due to decreased capacity utilization rates. For each period of time selected, we derived the capacity utilization rate for our testing operations by dividing the total number of hours of actual use of our facilities testing equipment units by the maximum number of hours that these equipment units were capable of being used. The testing capacity utilization rate generally increases in correlation to increases in the total volume of our customer orders, and generally decreases in correlation to decreases in the total volume of our customer orders.

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Net revenue from assembly services for memory and logic/mixed-signal semiconductors, which includes revenue from assembly services for memory and logic/mixed-signal semiconductors and revenue from our memory module manufacturing business, decreased by NT$1,065 million, or 20%, to NT$4,353 million (US$136 million) in 2009 from NT$5,418 million in 2008. This decrease was primarily the result of a decrease in net revenue from assembly services for memory semiconductors. Net revenue from

assembly services for memory semiconductors decreased by NT$1,255 million, or 27%, to NT$3,336 million (US$104 million) in 2009 from NT$4,591 million in 2008, primarily as a result of a decreased capacity utilization rate and lower average price for DDR II SDRAM products. Net revenue from assembly services for logic/mixed-signal semiconductors increased by NT$190 million, or 23%, to NT$1,017 million (US$32 million) in 2009 from NT$827 million in 2008, principally as a result of higher customer demand. For each period of time selected, we derived the capacity utilization rate for our assembly operations by dividing the total number of units actually produced by our assembly facilities by the maximum number of units that these facilities are capable of producing. The assembly capacity utilization rate generally increases in correlation to increases in the total volume of our customer orders, and generally decreases in correlation to decreases in the total volume of our customer orders.

Net revenue from LCD and other flat-panel display driver semiconductor testing and assembly services decreased by NT$179 million, or 6%, to NT$2,626 million (US$82 million) in 2009 from NT$2,805 million in 2008. This decrease was principally as a result of the weak demand for LCD and other flat-panel display products in 2009, which in turn led to decreased capacity utilization rates as well as decreased average selling prices for services.

Cost of Revenue and Gross Margin. Cost of revenue decreased by NT$1,309 million, or 8%, to NT$15,661 million (US$490 million) in 2009 from NT$16,970 million in 2008, primarily due to the decrease of depreciation expenses of NT$531 million (US$17 million), salary and fringes expenses of NT$238 million (US$7 million) and direct material and direct labor expenses of NT$329 million (US$10 million) and NT$522 million (US$16 million), respectively. Direct material expenses decreased principally as a result of a decline in the capacity utilization rate. Our gross revenue is generally the product of the total volume of our customer orders multiplied by the average selling price per assembly or testing deliverable unit, as the case may be. As a result, in a period where the average selling prices do not fluctuate significantly, increases or decreases in our capacity utilization rates generally correlate to increases or decreases in our gross revenue. Periods with significant increases in the average selling prices reduce the negative impact on our gross revenue from any decreases in our capacity utilization rates. Similarly, periods with significant decreases in the average selling prices reduce the positive impact on our gross revenue from any increases in our capacity utilization rates.

The Company has significant fixed costs in operating our assembly and testing facilities. For this reason, decreases in our cost of goods sold during a period generally occur at a slower rate than decreases, during the same period, in our gross revenue due to lower capacity utilization rates, lower average selling prices, or both. Also, as a result, our gross margin and profitability generally decreases in correlation to decreases in our capacity utilization rates, decreases in our average selling prices, or both. Similarly, our gross margin and profitability generally increases in correlation to increases in our capacity utilization rates, increases in our average selling prices, or both. Due to the cyclical nature of the semiconductor industry, customer orders may change significantly, causing fluctuation in our capacity utilization rate and average selling price.

Our gross profit decreased to negative NT$3,511 million (US$110 million) in 2009 from NT$40 million in 2008. Our gross margin was negative 29% in 2009, compared to 0.2% in 2008.

Our gross margin for testing services for memory and logic/mixed-signal semiconductors decreased to negative 42% in 2009 from 10% in 2008, primarily due to a lower capacity utilization rate, which decreased to 45% in 2009 from 65% in 2008.

Our gross margin for assembly services for memory and logic/mixed-signal semiconductors decreased to negative 17% in 2009 from negative 6% in 2008, primarily due to pricing pressures that resulted from decreases in the pricing of end products.

Our gross margin for LCD and other flat-panel display driver semiconductor testing and assembly services decreased to negative 21% in 2009 from negative 18% in 2008, primarily as a result of a decrease in the capacity utilization rate from 52% in 2008 to 50% in 2009 as well as a decreased average selling price for our services.

Research and Development Expenses. Research and development expenses decreased by NT$61 million, or 14%, to NT$375 million (US$12 million) in 2009 from NT$436 million in 2008. This decrease was primarily due to lower salary expenses associated with a decrease in research and development personnel, and the decrease of professional services fees and expensable equipment expenses.

General and Administrative Expenses. General and administrative expenses decreased by NT$228 million, or 26%, to NT$658 million (US$21 million) in 2009 from NT$886 million in 2008, primarily due to the decrease of depreciation expenses.

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Sales and Marketing Expenses. Sales and marketing expenses decreased by NT$1,802 million, or 76%, to NT$561 million (US$18 million) in 2009 from NT$2,363 million in 2008, primarily due to a decrease of NT$1,790 million (US$56 million) in allowance for doubtful receivables. The decrease was primarily due to full allowance already made on outstanding receivables from Spansion and ProMOS in 2008.

Other Income (Expenses), Net. Other expenses, net decreased by NT$3,404 million, or 104%, to other income of NT$117 million (US$4 million) in 2009 from other expenses of NT$3,287 million in 2008. This decrease was primarily due to the impairment loss on property, plant and equipment of NT$26 million (US$814 thousand) recognized in 2009, compared to an impairment loss on goodwill of NT$917 million and impairment loss on property, plant and equipment of NT$1,599 million recognized in 2008.

Income (Loss) Before Income Tax, Noncontrolling Interests and Interest in Bonuses to Directors, Supervisors and Employees Paid by Subsidiaries. As a result of the foregoing, loss before income tax, noncontrolling interests and interests in bonuses to directors, supervisors and employees paid by subsidiaries decreased by 28% to a loss of NT$4,989 million (US$156 million) in 2009 from NT$6,930 million in 2008.

Income Tax Benefit (Expense). We had an income tax benefit of NT$421 million (US$13 million) in 2009 compared to income tax expenses of NT$121 million for 2008, primarily due to an increase of loss carried forward in 2009.

Net (Income) Loss Attributable to Noncontrolling Interests. The net loss of ThaiLin attributable to noncontrolling interests amounted to NT$149 million (US$5 million) in 2009, compared a net loss of NT$143 million in 2008.

Interest in Bonuses paid by Subsidiaries. Interest in bonuses paid by subsidiaries decreased by 100% to nil in 2009 from NT$362 million in 2008.

Net Income (Loss) Attributable to ChipMOS. As a result of the foregoing, the net loss attributable to ChipMOS was NT$4,419 million (US$138 million) in 2009, compared to a net loss of NT$7,270 million in 2008.

Year Ended December 31, 2008 Compared to Year Ended December 31, 2007

Net Revenue. Our net revenue decreased by NT$6,588 million, or 28%, to NT$17,010 million in 2008 from NT$23,598 million in 2007.

Net revenue from testing services for memory and logic/mixed-signal semiconductors decreased by NT$2,715 million, or 24%, to NT$8,787 million in 2008 from NT$11,502 million in 2007, mainly due to a decrease in net revenue from testing services for memory semiconductors. Net revenue from testing services for memory semiconductors decreased by NT$2,629 million, or 24%, to NT$8,227 million in 2008 from NT$10,856 million in 2007, principally due to decreased capacity utilization rates and lower average selling price for DRAM products. Revenue for testing services for logic/mixed-signal semiconductors decreased by NT$86 million, or 13%, to NT$560 million in 2008 from NT$646 million in 2007, principally due to decreased capacity utilization rates.

Net revenue from assembly services for memory and logic/mixed-signal semiconductors, which includes from assembly services for memory and logic/mixed-signal semiconductors and revenue from our memory module manufacturing business, decreased by NT$2,682 million, or 33%, to NT$5,418 million in 2008 from NT$8,100 million in 2007. This decrease was primarily the result of a decrease in net revenue from assembly services for memory semiconductors. Net revenue from assembly services for memory semiconductors decreased by NT$2,985 million, or 39%, to NT$4,591 million in 2008 from NT$7,576 million in 2007, primarily as a result of decreased capacity utilization rate and lower average price for DDR II SDRAM products. Net revenue from assembly services for logic/mixed-signal semiconductors increased by NT$303 million, or 58%, to NT$827 million in 2008 from NT$524 million in 2007, principally as resulted from higher customer demand.

Net revenue from LCD and other flat-panel display driver semiconductor testing and assembly services decreased by NT$1,191 million, or 30%, to NT$2,805 million in 2008 from NT$3,996 million in 2007. This decrease was principally as a result of the weak demand for LCD and other flat-panel display products in 2008, which in turn led to decrease capacity utilization rates as well as decreased average selling prices for services.

Cost of Revenue and Gross Margin. Cost of revenue decreased by NT$474 million, or 3%, to NT$16,970 million in 2008 from NT$17,444 million in 2007, primarily due to the net effect of increase in leasing expense of NT$878 million and a decrease of expensable equipment of NT$224 million, direct material and direct labor by NT$603 million and NT$332 million, respectively. Leasing expense increased due to the increase of leased machinery. Direct material decreased principally as a result of decline of capacity utilization rate.

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Our gross profit decreased to NT$40 million in 2008 from NT$6,154 million in 2007. Our gross margin was 0.2% in 2008, compared to 26% in 2007.

Our gross margin for testing services for memory and logic/mixed-signal semiconductors decreased to 10% in 2008 from 38% in 2007, primarily due to lower capacity utilization rate, which decreased to 65% in 2008 from 78% in 2007.

Our gross margin for assembly services for memory and logic/mixed-signal semiconductors decreased to negative 6% in 2008 from 18% in 2007 primarily due to a pricing pressure resulted from the decreasing pricing of end products.

Our gross margin for LCD and other flat-panel display driver semiconductor testing and assembly services decreased significantly to negative 18% in 2008 from 8% in 2007, primarily as a result of a decrease in capacity utilization rate from 71% in 2007 to 52% in 2008 as well as decreased average selling price for our services.

Research and Development Expenses. Research and development expenses increased by NT$114 million, or 35%, to NT$436 million in 2008 from NT$322 million in 2007. This increase was primarily due to higher salary expenses associated with an increase in research and development personnel. We currently expect our research and development expenses will increase in the future to our focus on research and development projects relating to advanced applications, such as thin wafer probing technology, non-clean probing and sockets, fine-pitch MEMS probes, high-speed probing, copper wire bonding and low-cost wire bonding alternatives, wafer-level chip scale packaging and low-cost flip-chip integrated solution, low cost, fine-pitch bumping, MCP, stacked-die chip scale package, 3D IC packaging, compression molding, etc.

General and Administrative Expenses. General and administrative expenses decreased by NT$184 million, or 17%, to NT$886 million in 2008 from NT$1,070 million in 2007, primarily due to decreased salary and fringes for the cost saving program.

Sales and Marketing Expenses. Sales and marketing expenses increased by NT$2,265 million, or 2,311%, to NT$2,363 million in 2008 from NT$98 million in 2007, primarily due to an increase of NT$2,282 million in bad debt. The increase in bad debt was primarily due to the full allowance made on outstanding receivables from Spansion and ProMOS.

Other Income (Expenses), Net. Other expenses, net increased by NT$2,618 million, or 391%, to NT$3,287 million in 2008 from NT$669 million in 2007. This increase was primarily due to the impairment loss on goodwill of NT$917 million and impairment loss on property, plant and equipment of NT$1,599 million recognized in 2008. The significant increase in impairment loss in 2008 was primarily due to a decreased estimated future cash inflow from the use of the related property, plant and equipment and resulted in the recoverable amount of the property, plant and equipment being lower than its carrying amount.

Income (Loss) Before Income Tax, Noncontrolling Interests and Interest in Bonuses to Directors, Supervisors and Employees Paid by Subsidiaries. As a result of the foregoing, income before income tax, noncontrolling interests and interests in bonuses to directors, supervisors and employees paid by subsidiaries decreased by 274% to a loss of NT$6,930 million in 2008 from an income of NT$3,993 million in 2007.

Income Tax Benefit (Expense). Income tax expenses decreased by NT$647 million, or 84%, to NT$121 million in 2008 from NT$768 million in 2007, primarily due to a significant increase in loss before income tax in 2008.

Net (Income) Loss Attributable to Noncontrolling Interests. In 2008, the net loss of ThaiLin attributable to noncontrolling interests amounted to NT$143 million, compared to net income of ChipMOS Taiwan and ThaiLin attributable to noncontrolling interests of NT$720 million in 2007.

Interest in Bonuses paid by Subsidiaries. Interest in bonuses paid by subsidiaries increased by 27% to NT$362 million in 2008 from NT$286 million in 2007 primarily as a result of ChipMOS Taiwan becoming a wholly-owned subsidiary in September 2007.

Net Income (Loss) Attributable to ChipMOS. As a result of the foregoing, the net loss attributable to ChipMOS was NT$7,270 million in 2008, compared to a net income of NT$2,219 million in 2007.

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.

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Under ROC GAAP, the significant accounting policies are set forth in Note 2 of the notes to the consolidated financial statements contained in this Annual Report on Form 20-F. 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 except as described below under Convertible Notes and Share-Based Compensation .

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, 2009, we provided NT$2,757 million (US$86 million) for the first type of reserve and NT$66 million (US$2 million) for the second type of reserve. See Item 4. Information on the Company Customers .

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, 2009, we provided NT$114 million (US$4 million) for the allowance of sales returns.

The allowance we set aside for doubtful receivables and sales returns was NT$260 million as of December 31, 2007, NT$2,433 million as of December 31, 2008, and NT$2,937 million (US$92 million) as of December 31, 2009. The allowances as of December 31, 2007, 2008 and 2009 represented 5%, 62% and 53%, respectively, of our accounts receivable and other receivables as of those dates. The allowance in 2007, 2008 and 2009 reflected a reduction of NT$5 million, NT$2,292 million and NT$1,065 million (US$33 million), respectively, in accounts receivable and other receivables that were charged to sales and 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$409 thousand (US$13 thousand) for 2009.

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

Inventory Valuation

Inventories are stated at the lower of standard cost (adjusted to the approximate weighted average cost on the balance sheet date) or net realizable value. Inventory write-down is made on an item-by-item basis, except where it may be appropriate to group similar or related items. Net realizable value is the estimated selling price of inventories less all estimated costs of completion and necessary selling costs. Prior to January 1, 2009, inventories were stated at the lower of cost or market value. Any write-down was made on a total-inventory basis. Market value represented replacement cost for raw materials and net realizable value for finished goods and work in progress.

In 2007, 2008 and 2009, we reserved NT$8 million, NT$99 million and NT$199 million (US$6 million) of inventory valuation allowance, primarily due to the market price of tested and assembled DRAM and SDRAM inventory was below cost. In addition, we reserved NT$56 million in 2007, NT$3 million in 2008 and NT$1 million (US$31 thousand) in 2009 for identified slow-moving inventories.

As of December 31, 2009, we recorded NT$200 million (US$6 million) of inventory valuation allowances. If the prevailing market price of our testing and assembly services had been 10% lower, we would have been required to recognize a valuation allowance of approximately NT$80 million (US$2 million) in 2009 and would have decreased our inventory value by 9.2% and increased our net loss by 1.8%, respectively.

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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 more likely than not that deferred tax assets will not be realized. We record an income tax expense or benefit in our statement of operations when there is a net change in our total deferred tax assets and liabilities in a period. The ultimate realization of the deferred tax assets depends upon the generation of future taxable income during the periods in which the net operating losses and temporary differences become deductible or the investment tax credits may be utilized. Specifically, our valuation allowances are impacted by our expected future revenue growth and profitability, tax holidays, alternative minimum tax, and the amount of tax credits that can be utilized within the statutory period. In determining the amount of valuation allowance for deferred tax assets as of December 31, 2009, we considered past performance, the general outlook of the semiconductor industry, future taxable income and prudent and feasible tax planning strategies.

Because the determination of the amount of valuation allowance is based, in part, on our forecast of future profitability, it is inherently uncertain and subjective. Changes in market conditions and our assumptions may cause the actual future profitability to differ materially from our current expectation, which may require us to increase or decrease the amount of valuation allowance that we have recorded. Because our expectation for future profitability is generally less during periods of reduced revenue, we will be more likely to provide significant valuation allowances with respect to deferred tax assets during those periods of already reduced income.

As of December 31, 2007, 2008 and 2009, the ending balance for valuation allowances were NT$834 million, and NT$1,823 million and NT$2,400 million (US$75 million), respectively.

Impairment Loss of Long-Lived Assets

Under ROC GAAP, we record impairment losses on long-lived assets used in operations if events and circumstances indicate that the assets might be impaired and the recoverable amounts of the assets of the cash-generating unit are less than the carrying amounts of those items. Assumptions about the recoverable amounts 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.

In determining whether any impairment charges were necessary for the property, plant and equipment and other assets as of December 31, 2009, we 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, 2009, we estimated that our discounted future cash flows are smaller than our other property, plant and equipment. This indicated that these long-lived assets may be impaired. If our current estimates of future cash flows decreases, those cash flows would be less than the reported amount of long-lived assets, and we would be required to recognize additional impairment loss, which would significantly increase our net loss before taxes.

Under US GAAP, an impairment loss is recognized when the carrying amount of an asset or a group of assets is not recoverable from the expected future cash flows and the impairment loss is measured as the difference between the fair value and the carrying amount of the asset or group of assets. The impairment loss is recorded in earnings and cannot be reversed subsequently. Long-lived assets (excluding goodwill) held and used by the Company are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable.

Based on the assessment of our management, in 2009, we recognized NT$26 million (US$814 thousand) of impairment loss for long-lived assets under ROC GAAP and US GAAP, respectively.

While we believe that our estimates of future cash flows are reasonable, different assumptions regarding such cash flows could materially affect our evaluations.

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Goodwill

Goodwill is recorded when the purchase price paid for an acquisition exceeds the estimated fair value of the acquired net identified tangible and intangible assets. Under US GAAP, and effective on January 1, 2005 under ROC GAAP, we assess the impairment of goodwill on an annual basis, or more frequently whenever triggering events or changes in circumstances indicate that goodwill may be impaired and its carrying value may not be recoverable. Moreover, effective on January 1, 2006, goodwill is no longer amortizable under ROC GAAP. Factors we consider important which could trigger an impairment review include, without limitation, the following:

- a significant decline in our stock price for a sustained period; and
- a significant decline in our market capitalization relative to net book value.

Application of the goodwill impairment test is highly subjective and requires significant judgment, including the identification of cash generating units, assigning assets and liabilities to the relevant cash generating units, assigning goodwill to the relevant cash generating units, and determining the fair value of the relevant cash generating units. Under ROC GAAP, the fair value of the cash generating units is compared to the associated carrying value including goodwill, while under US GAAP, the fair value of the reporting units is compared to the associated carrying value including goodwill.

Under ROC GAAP, goodwill recorded from the acquisition of ChipMOS Taiwan and ThaiLin is evaluated for impairment on an annual basis. Based on our most recent evaluation, the fair value calculated by using the discounted future cash flows was lower than

the associated carrying value. According to management s analysis incorporating the declining market capitalization in 2008, as well as the significant market deterioration and economic uncertainties impacting expected future demand management concluded that the entire goodwill balance of NT$917 million was impaired, we recognized a non-cash impairment charge of approximately NT$917 million for the year ended December 31, 2008 to write-off the entire carrying value of goodwill.

Under US GAAP, the measurement of impairment of goodwill consists of two steps. In the first step, the fair value of the reporting unit is compared to its carrying value, including goodwill. In connection with the preparation of the financial statements for the year ended December 31, 2008, management made a determination of the fair value of the two reporting units. Fair value is determined using a combination of an income approach, which estimates fair value based upon future revenue, expenses and cash flows discounted to their present value, and a market approach, which estimates fair value using market multiples to various financial measures compared to a set of comparable public companies listed on Taiwan Stock Exchange. Management concluded the estimated fair values of the reporting units were less than their net book value. Accordingly, the guidance in US Statement of Financial Accounting Standards (SFAS) No. 142 requires a second step to determine the implied fair value of the Company s goodwill, and to compare it to the carrying value of the Company s goodwill is adopted. Second step includes valuing all of the tangible and intangible assets and liabilities of the reporting unit as if it had been acquired in a business combination, including valuing all of its intangible assets even if they were not currently recorded to determine the implied fair value of goodwill. Based on management s analysis incorporating the declining market capitalization in 2008, as well as the significant market deterioration and economic uncertainties impacting expected future demand, management concluded that the entire goodwill balance of NT$969 million was impaired.

Convertible Notes

Under US GAAP, we are required to account for the conversion option in the 2006 Notes and the 2009 Notes as derivative liabilities in accordance with SFAS No. 133 Accounting For Derivative Instruments And Hedging Activities and Emerging Interpretation Task Force (EITF) Issue No. 00-19 Accounting For Derivative Financial Instruments Indexed To And Potentially Settled In A Company s Own Stock, which is now codified as FASB ASC 815. The discount attributable to the issuance date aggregate fair value of the conversion option, totaling NT$1,380 million (US$43 million), is amortized using the effective interest method over the terms of the 2006 Notes and the 2009 Notes.

The change in fair value on revaluation of the embedded derivative liabilities represents the difference between the fair value of the embedded derivative liabilities at the beginning of the reporting period and their fair value at the end of the reporting period. We are required to record the change in fair value as a loss or gain on embedded derivative liabilities in determining net income under US GAAP. As of December 31, 2009, the fair value of the embedded derivative liabilities amounted to NT$130 million (US$4 million) which resulted in a gain on embedded derivative liabilities of NT$51 million (US$2 million). These gains and losses were taken into account when determining our net income under US GAAP for the year ended December 31, 2009.

The fair values of embedded derivatives are determined using option pricing models, which require us to make various assumptions, including among others, the expected volatility of our stock over the life of the option, market interest rates, credit spread and the expected life of the option. In determining these input assumptions, we consider historical trends and other relevant factors which may change from period to period. Because the option pricing models are sensitive to change in the input assumptions, different determinations of the required inputs may result in different fair value estimates of the options.

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Under ROC GAAP, we are required to bifurcate and separately account for embedded derivatives contained in our convertible notes issued after 2005 in accordance with SFAS No. 34 Financial Instruments: Recognition and Measurement . For more information, see Notes 14, 26j and 27i to our consolidated financial statements contained in this Annual Report on Form 20-F.

Share-Based Compensation

Under US GAAP, we are required to account for our employee share option plans under the fair-value-based method and to recognize share-based compensation arrangements as expenses in the consolidated statements of operations, in accordance with SFAS No. 123(R) Share-Based Payments , which is now codified as FASB ASC 715. The determination of the fair value of our share options on the date of grant under the Black Scholes Option Pricing Model is affected by the price of our common shares and assumptions of a number of variables, including the risk-free interest rate, the expected life of the options, the estimated fair value of our common shares and the expected price volatility of our common shares over the term of the options. In 2009, the share-based compensation expense amounted to NT$55 million (US$2 million), which was taken into account when determining our net income and shareholders equity under US GAAP for the year ended December 31, 2009.

Prior to adopting FASB ASC 715 in 2006, share-based compensation arrangements were accounted for under Accounting Principles Board Opinion No. 25, which utilized an intrinsic value approach in recognizing compensation expense. Under ROC GAAP and prior to January 1, 2008, we accounted for our share-based compensation arrangements under the intrinsic value method. Commencing January 1, 2008, we adopted ROC SFAS No. 39 Share-based Payment . After the adoption of SFAS No. 39, our share-based compensation has been measured at the fair value of the options at grant date using an option valuation model. For more information, see Notes 2, 26k and 27h to our consolidated financial statements contained in this Annual Report on Form 20-F.

Senior Management s Discussion with the Audit Committee

Our management has discussed 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.

Impact of Foreign Currency Fluctuations and Governmental or Political Factors

For a discussion of the impact of foreign currency fluctuations and governmental economics, fiscal, monetary or political policies or factors that may directly or indirect impact us, see Item 3. Key Information Risks Factors Risks Relating to Our Business Fluctuations in exchange rate could result in foreign exchange losses and Item 3. Key Information Risks Factors Risks Relating to Countries in Which We Conduct Operations .

Liquidity and Capital Resources

Since our inception, we have funded our operations and growth primarily through the issuance of equity, a mixture of short- and long-term loans and cash flow from operations. As of December 31, 2009, our primary sources of liquidity were cash and cash equivalents (excluding restricted cash and cash equivalents) of NT$3,885 million (US$122 million), short-term loans of NT$2,020 million (US$63 million) available to us in undrawn facilities, which have expired or will expire before 2010, and long-term loans of NT$528 million (US$17 million) available to us in undrawn facilities, which have expired or will expire before December 2015. To meet our liquidity, capital spending and other capital needs, we have taken certain steps discussed below.

ChipMOS Taiwan requested and received from its bank creditors loan repayment extensions and modifications of certain terms on its loans due from 2009 to 2013. Key extended repayment terms and conditions include: agreement by ChipMOS Taiwan to set aside NT$50 million per month with Bank of Taiwan for repayment of bank loans; agreement by all the banks that have loans due from ChipMOS Taiwan in 2009 to 2013, to not unilaterally foreclose and seize any machinery, property or deposits of ChipMOS Taiwan; and agreement by these banks to waive any penalties that might have to be imposed on the Company in case of breach under the original loan agreements. This loan repayment schedule is further discussed under Note 15 to our consolidated financial statements contained in this Annual Report on Form 20-F.

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Our bank creditors provided us with a waiver in February 2010 relating to any potential covenant breaches under a syndicated loan facility agreement with Standard Chartered Bank (Hong Kong) Limited as agent. We have provided written notice to the indenture trustee for our outstanding convertible notes due 2011 and 2014, respectively, about the nature of these negotiations with our bank creditors that led to our receipt of the waiver. Under the indenture for these notes, an event of default would occur if our repayment obligations under the facility accelerate, if the indenture trustee or holders of at least 25% in aggregate principal amount of these notes deliver notice of this potential default and if this default is not cured within 30 days after notice. Although there can be no assurances that as a result of the loan repayment schedule extension and waiver we will eventually attain profitable operations or will have sufficient liquidity to finance our ongoing obligations and operations, we believe that they significantly improve our cash position and reduce our net current liabilities. See Item 3. Key Information Risk Factors Risks Relating to Economic Conditions and the Financial Markets The global credit and financial markets crisis could materially and adversely affect our business and results of operations for additional information.

Liquidity

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,			
	2007 NT$	2008 NT$	2009 NT$	2009 US$
		(in millions)		
Net cash provided by (used in):				
Operating activities	$ 10,882.9	$ 5,164.2	$ 781.0	$ 24.4
Investing activities	(12,212.1)	(2,296.9)	(1,042.5)	(32.6)
Financing activities	528.1	(1,395.3)	(2,503.8)	(78.3)
Effect of exchange rate changes on cash	38.8	46.3	(1.8)	(0.1)
Net increase (decrease) in cash	$ (762.3)	$ 1,518.3	$ (2,767.1)	$ (86.6)

Net Cash Provided by Operating Activities

Net cash provided by operating activities totaled NT$781 million (US$24 million) in 2009, compared to NT$5,164 million in 2008. The decrease in net cash provided by operating activities was primarily due to allowance for doubtful receivables, which decreased to NT$1,065 million (US$34 million) in 2009 from NT$2,292 million in 2008 and an increase in accounts receivables of NT$1,241 million (US$39 million) in 2009, compared to a decrease of accounts receivable of NT$1,175 million in 2008. The decrease in net cash provided by operating activities was also attributable to a decrease in impairment loss on property, plant and equipment to NT$26 million (US$814 thousand) in 2009 from NT$1,599 million in 2008. The decrease in impairment loss on property, plant and equipment was primarily the result of the recovery of the semiconductor industry compared with 2008.

Net cash provided by operating activities totaled NT$5,164 million in 2008, compared to NT$10,883 million in 2007. The decrease in net cash provided by operating activities was primarily due to a net loss of NT$7,270 million in 2008, compared to net income of NT$2,219 million in 2007. Allowance for doubtful receivables increased to NT$2,292 million in 2008 from NT$130 million in 2007. This increase was primarily due to the deteriorating financial condition of key customers as a result of the downturn in general economic conditions in 2008. The decrease in net cash provided by operating activities was also partially offset by an increase in impairment loss on property, plant and equipment of NT$1,599 million in 2008, compared to nil in 2007. The increase in impairment loss on property, plant and equipment was primarily the result of the decline in revenue from testing and assembly semiconductors which caused a decrease in cash inflows from the use of the related machinery and resulted in the recoverable amount of certain equipment being lower than the carrying value.

Net Cash Used in Investing Activities

Net cash used in investing activities totaled NT$1,043 million (US$33 million) in 2009, compared to NT$2,297 million in 2008. The decrease in net cash used in investing activities was primarily the result of a decrease in capital expenditures budget for 2009 prepared in 2008 in view of the global economic downturn**.** Capital expenditures were NT$1,245 million (US$39 million) in 2009, compared to NT$2,391 million in 2008.

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Net cash used in investing activities totaled NT$2,297 million in 2008, compared to NT$12,212 million in 2007. The decrease in net cash used in investing activities was primarily the result of a decrease in capital expenditures. Capital expenditures were NT$2,391 million in 2008, compared to NT$6,633 million in 2007. We incurred significantly higher capital expenditures in 2007 primarily due to the capacity expansion for our agreement with Spansion. Cash payments incurred in connection with acquisitions of subsidiaries, which were nil in 2008, compared to NT$5,305 million in 2007, related primarily to our acquisition of Siliconware Precision s shares of ChipMOS Taiwan in March 2007 and our exchange transaction with ChipMOS Taiwan on September 14, 2007.

Net Cash Used in and Provided by Financing Activities

Net cash used in financing activities totaled NT$2,504 million (US$78 million) in 2009, compared to NT$1,395 million in 2008. The increase in net cash used in financing activities was primarily the result of the net payments of bank loans of NT$382 million (US$12 million) in 2009, compared to the net proceeds of NT$1,496 million in 2008 and net payments of long-term loans of NT$1,573 million (US$49 million) in 2009, compared to net proceeds of NT$1,386 million in 2008. This was partially offset by net payments of convertible notes of NT$517 million (US$16 million) in 2009, compared to net payments of NT$3,498 million in 2008.

Net cash used in financing activities totaled NT$1,395 million in 2008, compared to net cash provided by financing activities NT$528 million in 2007. The increase in net cash used in financing activities was primarily the result of a decrease in convertible notes. Payments on convertible notes were NT$3,498 million in 2008, compared to NT$244 million in 2007, primarily due to the buy back of convertible notes in 2008. The increase in net cash used in financing activities was also partially offset by an increase in proceeds from bank loan of NT$1,788 million in 2008, compared to NT$396 million in 2007.

Capital Resources

Capital expenditures in 2007 were funded by NT$10,883 million in cash flows from operating activities and NT$528 million in cash flows from financing activities, mainly comprising new bank borrowings. Capital expenditures in 2008 were funded by NT$5,164 million in cash flows from operating activities. Capital expenditures in 2009 were funded by NT$781 million (US$24 million) in cash flow from operating activities.

Steps taken with respect to generating additional working capital and to saving cash are further discussed under Liquidity and Capital Resources.

Loans

As of December 31, 2009, we had long-term loans of NT$12,793 million (US$400 million) (including current portions of such long-term loans of NT$1,554 million (US$49 million)). All of our outstanding long-term loans as of December 31, 2009 were drawndown under various bank loans and syndicated loan facilities. As of December 31, 2009, NT$8,278 million (US$259 million) of our long-term loans were collateralized by equipment, and NT$1,535 million (US$48 million) were collateralized by land and buildings. Of our long-term loans, in the aggregate:

- NT$10,529 million (US$330 million) were floating rate loans with a rate between 1.065% and 3.41% as of December 31, 2009 repayable quarterly, semi-annually or totally until December 2015;
- NT$119 million (US$4 million) were fixed rate loans with a rate of 4.69% as of December 31, 2009 repayable quarterly until November 2011; and
- US$67 million (NT$2,145 million) were floating rate loans with a rate of 1.26219% as of December 31, 2009 repayable quarterly, or totally until August 2011.

As of December 31, 2009, we had entered into the following syndicated loan facilities:

- On March 21, 2003, we obtained a syndicated loan facility in the amount of NT$1,000 million. This loan facility is separated into two parts with its respective term of seven years and five years. This loan facility is secured by ThaiLin s facilities and the testing

equipment at Chupei. As of December 31, 2009, this loan facility was fully drawn.

On July 27, 2004, we obtained a syndicated loan facility in the amount of NT$1,000 million for a term of five years. This loan facility is secured by our facilities at the Southern Taiwan Science Park and our testing and assembly equipment located within our facilities at Chupei, the Hsinchu Science Park and the Southern Taiwan Science Park. As of December 31, 2009, this loan facility was fully drawn.

On June 7, 2005, we obtained a syndicated loan facility in the amount of NT$1,000 million for a term of four years. This loan facility is secured by our facilities at the Hsinchu Science Park. As of December 31, 2009, this loan facility was fully drawn.

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In January 2006, we obtained a syndicated loan facility from banks in Taiwan in the amount of NT$6,000 million for a term of five years. This loan facility is secured by our facilities at the Hsinchu Science Park and our testing and assembly equipment located within our facilities at Chupei, the Hsinchu Science Park and the Southern Taiwan Science Park. As of December 31, 2009, this loan facility was fully drawn.

In February 2006, we obtained a syndicated loan facility from banks in Taiwan in the amount of NT$3,000 million for a term of six years. This loan facility is secured by ThaiLin s facilities at Chupei. The last withdraw date was August 2009, and the facility adjusted to NT$1,500 million. As of December 31, 2009, this loan facility was fully drawn.

In June 2007, we obtained a syndicated loan facility from banks in Taiwan in the amount of NT$6,000 million for a term of five years. This loan facility is secured by our facilities at the Southern Taiwan Science Park and equipment located within our facilities at Chupei, the Hsinchu Science Park and the Southern Taiwan Science Park. As of December 31, 2009, NT$2,100 million (US$66 million) was drawn under this loan facility.

In July 2008, we obtained a syndicated loan facility from banks in Taiwan in the amount of US$74.5 million (NT$2,380 million) for a term of three years. This loan facility is guaranteed by ChipMOS Taiwan. As of December 31, 2009, this loan facility was fully drawn.

Certain of our loan agreements and indentures contain covenants that, if violated, could result in the obligations under these agreements becoming due prior to the originally scheduled maturity dates. These covenants include financial covenants that require us to:

maintain a current assets to current liabilities ratio above 1:2 and 1:1;

maintain total indebtedness to shareholders equity (excluding goodwill and other intangible assets) ratio below 1.5:1;

maintain total indebtedness to shareholders equity ratio below 1.2:1; and

maintain the earnings before interest, taxes, depreciation and amortization to gross interest expense ratio above 2:1 and 2.5:1.

As of December 31, 2009, ThaiLin was waived from compliance of the times interest earned ratio requirement for 2009, and ChipMOS Taiwan was waived from compliance of the financial ratio requirements for 2008 and 2009. Pursuant to a bank creditors meetings and the approval notice from Standard Chartered Bank on February 9, 2010, ChipMOS Bermuda, as borrower, and ChipMOS Taiwan, as guarantor, were waived from compliance of the financial ratio requirements as of December 31, 2008 and December 31, 2009.

In addition, a substantial portion of our short-term and long-term borrowings may be subject to repayment upon a material deterioration of our financial condition, results of operations or our ability to perform under the loan agreements.

Set forth below are the maturities of our long-term bank loans outstanding as of December 31, 2009:

	As of December 31, 2009	
	NT$	US$
	(in millions)	
During 2010	$ 1,554	$ 49
During 2011	5,803	181

During 2012	3,224	101
During 2013	1,867	58
During 2014 and onwards	345	11
	$ 12,793	$ 400

As of December 31, 2009, certain of our land and buildings and machinery with an aggregate net book value of NT$5,901 million (US$185 million) and NT$9,334 million (US$292 million), respectively, were pledged as collateral in connection with our long-term borrowings. Approximately 73% of our net property, plant and equipment in terms of book value was pledged as collateral for our long-term loans.

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Our unused credit lines for short-term loans, as of December 31, 2009, totaled NT$2,020 million (US$63 million), which have expired or will expire before 2010. As of December 31, 2009, we had available undrawn long-term credit facilities totaling NT$528 million (US$17 million).

As of December 31, 2009, we had credit loans for imports of machinery in the total amount of NT$15 million (US$469 thous