

CHIPMOS TECHNOLOGIES BERMUDA LTD  
Form 20-F  
April 26, 2012  
Table of Contents

As filed with the Securities and Exchange Commission on April 26, 2012

**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

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

For the fiscal year ended December 31, 2011

OR

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

For the transition period from            to

OR

**SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934**  
Date of event requiring this shell company report

Commission file number 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)

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

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

<b>Title of Each Class</b>	<b>Name of Each Exchange on Which Registered</b>
Common Shares, par value US\$0.04 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, 2011, 26,923,905 Common Shares, par value US\$0.04 each, were outstanding (not including 6,474,211 Common Shares held by our subsidiary).

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

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

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

Indicate by check mark 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  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

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.

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

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

**Table of Contents**

**TABLE OF CONTENTS**

**ChipMOS TECHNOLOGIES (Bermuda) LTD.**

	<b>Page</b>
<u>CAUTIONARY STATEMENT FOR PURPOSES OF THE SAFE HARBOR PROVISIONS OF THE PRIVATE SECURITIES LITIGATION REFORM ACT OF 1995</u>	1
<b><u>PART I</u></b>	
Item 1. <u>Identity of Directors, Senior Management and Advisers</u>	1
Item 2. <u>Offer Statistics and Expected Timetable</u>	1
Item 3. <u>Key Information</u>	2
Item 4. <u>Information on the Company</u>	20
Item 4A. <u>Unresolved Staff Comments</u>	43
Item 5. <u>Operating and Financial Review and Prospects</u>	43
Item 6. <u>Directors, Senior Management and Employees</u>	65
Item 7. <u>Major Shareholders and Related Party Transactions</u>	72
Item 8. <u>Financial Information</u>	76
Item 9. <u>The Offer and Listing</u>	77
Item 10. <u>Additional Information</u>	77
Item 11. <u>Quantitative and Qualitative Disclosures about Market Risk</u>	86
Item 12. <u>Description of Securities Other Than Equity Securities</u>	86
<b><u>PART II</u></b>	
Item 13. <u>Defaults, Dividend Arrearages and Delinquencies</u>	87
Item 14. <u>Material Modifications to the Rights of Security Holders and Use of Proceeds</u>	87
Item 15. <u>Controls and Procedures</u>	87
Item 16A. <u>Audit Committee Financial Expert</u>	87
Item 16B. <u>Code of Ethics</u>	87
Item 16C. <u>Principal Accountant Fees and Services</u>	88
Item 16D. <u>Exemptions from the Listing Standards for Audit Committees</u>	88
Item 16E. <u>Purchases of Equity Securities by the Issuer and Affiliated Purchasers</u>	88
Item 16F. <u>Change in Registrant's Certifying Accountant</u>	88
Item 16G. <u>Corporate Governance</u>	88
<b><u>PART III</u></b>	
Item 17. <u>Financial Statements</u>	90
Item 18. <u>Financial Statements</u>	90
Item 19. <u>Exhibits</u>	90

**Table of Contents**

**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 or events 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;

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

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.

### PART I

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

Not applicable.

**Item 2. Offer Statistics and Expected Timetable**

Not applicable.

**Table of Contents****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, 2010 and 2011 and our consolidated statement of operations and cash flows data for 2009, 2010 and 2011 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, 2007, 2008 and 2009 and the consolidated statement of operations and cash flows data for the years ended December 31, 2007 and 2008 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 25 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,					
	2007 NT\$	2008 NT\$	2009 NT\$	2010 NT\$	2011 NT\$	2011 US\$
<b>(in millions, except per share data)</b>						
<b>Consolidated Statement of Operations Data:</b>						
<b>ROC GAAP:</b>						
Net revenue:						
Related parties <sup>(1)</sup>	\$ 6,915.9	\$ 3,122.9	\$ 668.9	\$ 2,033.3	\$ 379.0	\$ 12.5
Others	16,681.7	13,887.3	11,481.4	15,176.4	17,831.9	589.1
Total net revenue	23,597.6	17,010.2	12,150.3	17,209.7	18,210.9	601.6
Cost of revenue	17,444.1	16,969.9	15,661.5	16,564.0	16,549.2	546.7
Gross profit (loss)	6,153.5	40.3	(3,511.2)	645.7	1,661.7	54.9
Operating expenses:						
Research and development	322.3	435.6	375.3	412.7	409.8	13.5
General and administrative	1,070.5	885.6	657.8	677.6	651.9	21.5
Sales and marketing	98.3	2,362.7	561.2	64.4	66.5	2.2
Total operating expenses	1,491.1	3,683.9	1,594.3	1,154.7	1,128.2	37.2
Income (Loss) from operations	4,662.4	(3,643.6)	(5,105.5)	(509.0)	533.5	17.7
Other income (expenses), net	(669.2)	(3,286.8)	116.7	2,320.6	(455.8)	(15.1)
Income (Loss) before income tax, noncontrolling interests and interest in bonuses paid by subsidiaries <sup>(2)</sup>	3,993.2	(6,930.4)	(4,988.8)	1,811.6	77.7	2.6
Income tax benefit (expense)	(768.2)	(120.8)	420.7	99.3	(45.5)	(1.5)
Income (Loss) before noncontrolling interests and interest in bonuses paid by subsidiaries <sup>(2)</sup>	3,225.0	(7,051.2)	(4,568.1)	1,910.9	32.2	1.1
Net (income) loss attributable to noncontrolling interests	(720.0)	143.3	149.4	(266.2)	(47.4)	(1.6)
Interest in bonuses paid by subsidiaries <sup>(2)</sup>	(285.8)	(362.4)				
Net income (loss) attributable to ChipMOS	\$ 2,219.2	\$ (7,270.3)	\$ (4,418.7)	\$ 1,644.7	\$ (15.2)	\$ (0.5)
Earnings (Loss) per share <sup>(4)</sup> :						
Basic	\$ 110.54	\$ (346.63)	\$ (223.35)	\$ 68.61	\$ (0.57)	\$ (0.02)
Diluted	\$ 96.94	\$ (346.63)	\$ (230.15)	\$ 67.38	\$ (0.57)	\$ (0.02)
Weighted-average number of shares outstanding <sup>(4)</sup> :						
Basic	20.1	21.0	19.8	24.0	26.6	26.6
Diluted	27.1	21.0	22.3	26.8	26.6	26.6



## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

### US GAAP:<sup>(3)</sup>

Net income (loss) attributable to ChipMOS	\$ 2,901.7	\$ (7,177.7)	\$ (4,550.3)	\$ 1,616.9	\$ 46.1	\$ 1.5
Earnings (Loss) per share <sup>(4)</sup> :						
Basic	\$ 144.52	\$ (342.24)	\$ (230.00)	\$ 67.45	\$ 1.73	\$ 0.06
Diluted	\$ 84.28	\$ (342.24)	\$ (236.60)	\$ 66.35	\$ 1.71	\$ 0.06
Weighted-average number of shares outstanding <sup>(4)</sup> :						
Basic	20.1	21.0	19.8	24.0	26.6	26.6
Diluted	27.1	21.0	20.8	26.8	26.9	26.9

- (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. Commencing April 1, 2011, Mosel and its direct and indirect subsidiaries are no longer related parties of the Company as collectively, they hold less than 10% interest in ChipMOS Bermuda and is no longer considered as having significant influence on the Company. Commencing April 1, 2011, Siliconware Precision held less than 10% interest in ChipMOS Bermuda and was no longer a major shareholder of the Company. See Note 19 of the notes to the consolidated financial statements contained in this Annual Report on Form 20-F.
- (2) Refers to bonuses to directors, supervisors and employees paid by subsidiaries.
- (3) Reflects the US GAAP adjustments as described in Note 25 of the notes to the consolidated financial statements contained in this Annual Report on Form 20-F.
- (4) The outstanding shares and per share information reflect the reverse stock split of the Company's common stocks with a ratio of 1-for-every-4 shares effective on January 21, 2011.

**Table of Contents**

	2007	2008	As of December 31,		2011	2011
	NT\$	NT\$	2009	2010	NT\$	US\$
			NT\$	NT\$		
	(in millions)					
<b>Consolidated Balance Sheet Data:</b>						
<b>ROC GAAP:</b>						
Current assets:						
Cash and cash equivalents	\$ 5,133.6	\$ 6,651.9	\$ 3,884.8	\$ 7,143.3	\$ 7,357.9	\$ 243.1
Restricted cash and cash equivalents	87.0	59.5	243.8	546.8	285.1	9.4
Financial assets at fair value through profit and loss	555.6	102.1	119.0	3.0		
Held-to-maturity financial assets		250.0				
Investment with no active market		100.0	100.0			
Notes receivable						
related parties <sup>(1)</sup>		195.0				
third parties	28.0	14.2	27.9	14.0	5.7	0.2
Accounts receivable						
related parties <sup>(1)</sup>	1,498.8	0.4	0.2	258.0		
third parties	3,795.9	1,296.5	2,441.8	2,816.0	3,666.5	121.1
Other receivables						
related parties <sup>(1)</sup>	11.9	30.0		66.4		
third parties	31.2	172.2	130.1	182.0	73.2	2.4
Inventories	1,043.6	1,001.5	862.1	1,279.8	1,533.9	50.7
Deferred income tax, net	85.1	355.8	356.4	278.7	76.6	2.5
Prepaid expenses and other current assets	334.5	265.2	265.1	202.3	92.3	3.1
Total current assets	12,605.2	10,494.3	8,431.2	12,790.3	13,091.2	432.5
Long-term investments	358.0	437.8	220.0	10.5	39.1	1.3
Property, plant and equipment net	30,020.4	23,654.9	20,769.0	17,273.0	13,896.1	459.1
Intangible assets net	180.4	107.8	102.8	94.2	100.5	3.3
Other assets	2,152.1	746.8	833.2	1,147.0	1,154.2	38.1
Total assets	45,316.1	35,441.6	30,356.2	31,315.0	28,281.1	934.3
Current liabilities:						
Short-term bank loans	1,249.2	2,745.4	2,363.3	1,494.7	546.9	18.1
Current portion of long-term loans	3,686.2	4,603.7	1,553.9	4,925.7	684.0	22.6
Convertible notes	3,014.9	1,541.6		65.8		
Derivative liabilities	96.0					
Accounts payable	976.1	477.9	738.0	690.1	1,130.8	37.4
Payables to contractors and equipment suppliers	454.1	251.6	201.2	790.6	415.4	13.7
Other payables	604.1	628.0	696.1	896.7	1,081.5	35.7
Current portion of capital leases payable			821.2	822.0		
Accrued expenses and other current liabilities	886.7	469.4	525.7	990.9	830.9	27.4
Total current liabilities	11,374.2	10,721.6	6,921.5	10,697.5	4,712.2	155.7
Long-term liabilities	11,323.7	9,832.6	13,377.6	6,477.0	8,484.3	280.3
Other liabilities	370.1	344.6	104.9	97.1	101.3	3.3
Total liabilities	23,068.0	20,898.8	20,404.0	17,271.6	13,297.8	439.3
Total equity (including noncontrolling interests)	\$ 22,248.1	\$ 14,542.8	\$ 9,952.2	\$ 14,043.4	\$ 14,983.3	\$ 495.0

- (1) Related parties include Mosel, Siliconware Precision, ProMOS and DenMOS. Commencing April 1, 2011, Mosel and its direct and indirect subsidiaries are no longer related parties of the Company as collectively, they hold less than 10% interest in ChipMOS Bermuda and is no longer considered as having significant influence on the Company. Commencing April 1, 2011, Siliconware Precision held less than 10% interest in ChipMOS Bermuda and was no longer a major shareholder of the Company. See Note 19 of the notes to the consolidated financial statements contained in this Annual Report on Form 20-F.

**Table of Contents**

	2007	2008	As of December 31,		2011	2011
	NT\$	NT\$	2009	2010	NT\$	US\$
			NT\$	NT\$		
			(in millions)			
<b>US GAAP<sup>(1)</sup> :</b>						
Current assets:						
Cash and cash equivalents	\$ 5,133.6	\$ 6,651.9	\$ 3,884.8	\$ 7,143.3	\$ 7,357.9	\$ 243.1
Restricted cash and cash equivalents	87.0	59.5	243.8	546.8	285.1	9.4
Financial assets at fair value through profit and loss	555.6	102.1	119.0	3.0		
Held-to-maturity financial assets		250.0				
Available-for-sale financial assets		100.0	100.0			
Notes receivable						
related parties <sup>(2)</sup>		195.0				
third parties	28.0	14.2	27.9	14.0	5.7	0.2
Accounts receivable						
related parties <sup>(2)</sup>	1,498.8	0.4	0.2	258.0		
third parties	3,795.9	1,296.5	2,441.8	2,816.0	3,666.5	121.1
Other receivables						
related parties <sup>(2)</sup>	11.9	30.0		66.4		
third parties	31.2	172.2	130.1	182.0	73.2	2.4
Inventories	1,044.3	966.1	863.1	1,280.9	1,534.9	50.7
Deferred income tax, net	82.6	349.5	350.2	272.5	70.4	2.3
Prepaid expenses and other current assets	334.5	265.2	265.1	202.3	92.3	3.1
Total current assets	12,603.4	10,452.6	8,426.0	12,785.2	13,086.0	432.3
Long-term investments	358.0	437.8	220.0	10.5	39.1	1.3
Property, plant and equipment net	29,861.6	23,427.2	20,474.4	16,924.1	13,501.0	446.0
Intangible assets net	180.4	107.8	102.8	94.2	100.5	3.3
Other assets	2,262.6	731.6	893.2	1,221.1	1,237.6	40.9
Total assets	45,266.0	35,157.0	30,116.4	31,035.1	27,964.2	923.8
Current liabilities:						
Short-term bank loans	1,249.2	2,745.4	2,363.3	1,494.7	546.9	18.1
Current portion of long-term loans	3,686.2	4,603.7	1,553.9	4,925.7	684.0	22.6
Convertible notes	3,056.4	1,453.0		65.8		
Derivative liabilities	85.4					
Accounts payable	976.1	477.9	738.0	690.1	1,130.8	37.4
Payables to contractors and equipment suppliers	454.1	251.6	201.2	790.6	415.4	13.7
Other payables	604.1	628.0	696.1	896.7	1,081.5	35.7
Current portion of capital leases payable			821.2	822.0		
Accrued expenses and other current liabilities	1,321.0	469.4	525.7	990.9	830.9	27.4
Total current liabilities	11,839.3	10,632.9	6,921.5	10,697.5	4,712.2	155.7
Long-term liabilities	11,179.3	9,832.6	13,377.6	6,477.0	8,484.3	280.3
Other liabilities	596.5	537.3	383.7	488.0	478.8	15.8
Total liabilities	23,615.1	21,002.8	20,682.8	17,662.5	13,675.3	451.8
Total equity (including noncontrolling interests)	\$ 21,650.9	\$ 14,154.2	\$ 9,433.6	\$ 13,372.6	\$ 14,288.9	\$ 472.0

- (1) Reflects the US GAAP adjustments as described in Note 25 of the notes to the consolidated financial statements contained in this Annual Report on Form 20-F.
- (2) Related parties include Mosel, Siliconware Precision, ProMOS and DenMOS. Commencing April 1, 2011, Mosel and its direct and indirect subsidiaries are no longer related parties of the Company as collectively, they hold less than 10% interest in ChipMOS Bermuda and is no longer considered as having significant influence on the Company. Commencing April 1, 2011, Siliconware Precision held less than 10% interest in ChipMOS Bermuda and was no longer a major shareholder of the Company. See Note 19 of the notes to the consolidated financial statements contained in this Annual Report on Form 20-F.

**Table of Contents**

	Year ended December 31,					
	2007 NT\$	2008 NT\$	2009 NT\$	2010 NT\$	2011 NT\$	2011 US\$
(in millions)						
<b>Consolidated Statement of Cash Flows Data:</b>						
<b>ROC GAAP:</b>						
Capital expenditures	\$ 6,093.8	\$ 2,188.4	\$ 3,479.7	\$ 4,237.3	\$ 2,319.3	\$ 76.6
Depreciation and amortization	6,834.8	7,174.5	6,524.6	6,281.6	5,677.6	187.6
Net cash provided by (used in):						
Operating activities	10,882.9	5,164.2	781.0	8,688.9	5,898.0	194.8
Investing activities	(12,212.1)	(2,296.9)	(1,042.5)	(2,454.2)	(3,250.7)	(107.4)
Financing activities	528.1	(1,395.3)	(2,503.8)	(2,959.5)	(2,464.6)	(81.4)
Effect of exchange rate changes on cash	38.8	46.3	(1.8)	(16.8)	31.9	1.1
Net increase (decrease) in cash	\$ (762.3)	\$ 1,518.3	\$ (2,767.1)	\$ 3,258.4	\$ 214.6	\$ 7.1
<b>Exchange Rates</b>						

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 30, 2011, which was NT\$30.27 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 April 20, 2011, the noon buying rate was NT\$29.45 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
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
2010	31.50	32.43	29.14	29.14
2011	29.38	30.67	28.50	30.27
October	30.26	30.67	29.86	29.91
November	30.22	30.43	30.02	30.31
December	30.25	30.38	30.10	30.27
2012				
January	29.99	30.28	29.61	29.61
February	29.54	29.59	29.37	29.37
March	29.52	29.61	29.37	29.50
April (through 20, 2012)	29.49	29.55	29.45	29.45

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.*

Since 2009 and through 2011, 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

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

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.

---

## **Table of Contents**

### **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. This industry downturn started to recover from the second quarter of 2009, and our net revenue for 2010 increased 42% from 2009 levels. Our net revenue for 2011 increased 6% from 2010 levels and generated a net loss of NT\$15 million (US\$1 million) in 2011. 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. Weak demand for LCD and other flat-panel display products began in 2007 and has since adversely affected our operating results in 2008, 2009, and 2010. The LCD driver market started to recover in the second quarter of 2009 and the positive recovery trend continues in 2010 and 2011. 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 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.

---

## **Table of Contents**

### **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 66%, 62% and 57% of our net revenue in 2009, 2010 and 2011, 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, 2010 and 2011 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.

*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.*

Our testing and assembly services for LCD and other flat-panel display driver semiconductors generated net revenue of NT\$1,986 million, NT\$3,199 million and NT\$3,986 million (US\$132 million) in 2009, 2010 and 2011, respectively. We invested NT\$37 million, NT\$1,659 million and NT\$1,188 million (US\$39 million) in 2009, 2010 and 2011, 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. The market demand for LCD and other flat-panel display driver semiconductors and related testing and assembly services increased in 2011 compared to the market demand in 2010. Any significant decrease in demand for these products and our related services, however, would significantly impair our capacity utilization rates. That may result in our inability to generate sufficient revenue to cover the significant depreciation expenses for the equipment used in testing and assembling LCD and other flat-panel display driver semiconductors, thereby negatively affecting our profitability. See also . Because of our high fixed costs, if we are unable to achieve relatively high capacity utilization rates, our earnings and profitability may be adversely affected .

*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, 2011, we had approximately NT\$8,484 million (US\$280 million) and NT\$1,231 million (US\$41 million) outstanding long-term and short-term indebtedness, respectively. Our long-term indebtedness as of December 31, 2011, represented bank loans with an interest rate between 1.92% and 3.0421%. As of December 31, 2011, NT\$799 million (US\$26 million) of our short-term indebtedness and NT\$8,484 million (US\$280 million) of our long-term indebtedness was secured by collateral comprised of assets owned by ChipMOS Taiwan and ThaiLin.

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;

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

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 ability to sell assets or seek additional capital may be adversely affected by security interests in our assets granted to our lenders as collateral;

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.



## **Table of Contents**

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.

***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. The special committee engaged K&L Gates LLP (formerly Kirkpatrick & Lockhart Preston Gates Ellis LLP) as its independent international legal

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

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. As of March 31, 2012, the special committee was solely comprised of Mr. Yeong-Her Wang, our independent director.

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.

**Table of Contents**

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 charge of irregular transactions 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 four trial hearings in 2008, six trial hearings in 2009 and six trial hearings in 2010. Due to the rotation of the judges in the meantime, a new bench was formed at the beginning of 2010 to try this case. Two trial hearings have since been conducted by the new bench in 2011. Another trial hearing was scheduled on May 21, 2012.

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.

***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 2011, our top five customers, collectively accounted for 50% of our net revenue. As part of our strategy, we have been focusing on sales to key customers through long-term service agreements. We also 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. 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. Commencing April 1, 2011, Mosel and its direct and indirect subsidiaries are no longer related parties to the Company. In March 2008, ProMOS defaulted on its payment obligations under our 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. NT\$7 million was received by April 2010. The remaining outstanding accounts receivables have been paid under the amended subcontracting contract and settlement with ProMOS. ProMOS paid us NT\$200 million and NT\$24 million in May 2010 and December 2010, respectively and the remaining NT\$202 million was paid in nine monthly installments ended on March 15, 2011. All sums have been received in 2011. We have no other concern regarding the collection with ProMOS in 2011. See Item 4. Information on the Company Customers.



**Table of Contents**

In January 2009, Spansion defaulted on its payment obligations under our long-term service agreement and we subsequently terminated the long-term service agreement with Spansion on February 19, 2009. On March 1, 2009, Spansion 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 definitive Transfer of Claim Agreement to sell to Citigroup Financial Products Inc. ( Citigroup ) the general unsecured claim reflected in the proof of claim against Spansion. In February 2010, we received from Citigroup the purchase price for the Undisputed Claim of NT\$1,118 million against accounts receivable of NT\$2,186 million. We recognized a related loss on sale of receivables of NT\$1,068 million and we reversed the related allowance for doubtful receivables of NT\$2,186 million in 2010. On October 4, 2010, ChipMOS Taiwan entered into a settlement agreement with Spansion LLC for the general unsecured claim on breach of contract and liquidated damages rights reflected in the proof of claim, Claim No. 5, against Spansion Inc., Spansion Technology LLC, Spansion LLC, Spansion International Inc. and Cerium Laboratories LLC filed by ChipMOS Taiwan in the U.S. Bankruptcy Court. In October 2010, the Company received payment of NT\$2,118 million under the Transfer of Claim Agreement to Citigroup. 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.

***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 80%, 73% and 68% of our total cost of revenue in 2009, 2010 and 2011, respectively. For memory and logic/mixed-signal semiconductor assembly services, our fixed costs represented 30%, 24% and 23% of our total cost of revenue in 2009, 2010 and 2011, respectively. For LCD and other flat-panel display driver semiconductor testing and assembly services, our fixed costs represented 64%, 55% and 52% of our total cost of revenue in 2009, 2010 and 2011, respectively. For bumping services, our fixed costs represented 38%, 27% and 23% of our total cost of revenue in 2009, 2010 and 2011, 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.

## **Table of Contents**

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 . We cannot assure you that these plans and measures will be implemented or will provide sufficient sources of capital.

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. We are not able to ascertain what patent applications have been filed in the United States or elsewhere, however, 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.



---

## **Table of Contents**

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.

***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. Previously we have committed to acquire certain wafer sorting testers and probers under our long-term service agreement with Spansion. We terminated that agreement and commitment on February 19, 2009, after Spansion defaulted on its payment obligations. Currently, we do not have any long-term service agreements that require our commitment to acquire additional testing and assembly equipment or facilities, however we cannot 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.



## **Table of Contents**

### ***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.

### ***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, 2011, based on criteria set forth in Internal Control – Integrated Framework issued by Committee of Sponsoring Organization of 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.

## **Table of Contents**

***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, 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 15.8% of ChipMOS Taiwan's outstanding shares to Siliconware Precision and the transaction was completed in January 2011. 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;

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, 2012, 9.3% 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.

***If our security measures are breached and unauthorized access is obtained to our information technology systems, we may lose proprietary data.***

Our security measures may be breached as a result of third-party action, including computer hackers, employees error, malfeasance or otherwise, and result in unauthorized access to our customers' data or our data, including our intellectual property and other confidential business information, or our information technology systems. Because the techniques used to obtain unauthorized access, or to sabotage systems, change frequently, we may be unable to anticipate these techniques or to implement adequate preventative measures. Any security breach could result in disclosure of our trade secrets, confidential customer, supplier or employee data, which could result in legal liability, harm to our reputation and otherwise harm our business.



---

## **Table of Contents**

### **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.

### **Risks Relating to Countries in Which We Conduct Operations**

*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 a fine of between NT\$50 thousand and NT\$25 million and 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 of the ROC Ministry of Economic Affairs, or the ICM. 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 will continue to license such technologies to ChipMOS Shanghai pursuant to a new technology transfer agreement dated October 3, 2011 with effective date on August 1, 2012. ChipMOS Bermuda also provided ChipMOS Shanghai 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.



## **Table of Contents**

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 subject to a fine of between NT\$50 thousand and NT\$25 million and may be ordered by the ICM to terminate or rectify such activity within a specified period of time. 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 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 ChipMOS Taiwan, our 84.2% subsidiary as of March 31, 2012, ThaiLin, ChipMOS Taiwan's 42.9% owned subsidiary as of March 31, 2012, and ChipMOS Shanghai, ThaiLin's wholly-owned subsidiary as of March 31, 2012. 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 New Influenza A (H1N1) or more commonly known as the swine flu, Severe Acute Respiratory Syndrome (SARS), or more recently, avian influenza with subtypes H5N1 and H3N2, 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 further future outbreak of the aforementioned influenza viruses 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.





## Table of Contents

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.

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.

The 2011 Sendai earthquake and tsunami was a 9.0-magnitude (Mw) undersea megathrust earthquake off the coast of Japan that occurred on March 11, 2011 (the 2011 Sendai Earthquake ). The 2011 Sendai Earthquake was recorded as most powerful earthquake to hit Japan and the fourth most powerful earthquake in the world overall. The earthquake triggered tsunami warnings and evacuations along Japan's Pacific coast and in at least 20 countries, including Taiwan and Mainland China. The earthquake and tsunami resulted in deaths, injuries and people missing across the affected Japanese prefectures and caused extensive and severe property damage in Japan, including heavy damage to roads and railways as well as fires in many areas, and dam collapse. Many electrical generators were disabled, and at least three nuclear power plant reactors partially melted down and experienced a chemical explosion extensively damaging surrounding buildings. We cannot assure you that our production facilities, operations and market located in Taiwan and Mainland China will not be adversely affected as result of the 2011 Sendai Earthquake, including as a result of radiation emission from the damaged nuclear power plants or subsequent future earthquakes that may take place.

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 adversely affected by natural disasters or other events occurring in or affecting these geographic areas, 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 by such events, our production schedule could be interrupted or delayed. As a result, a major earthquake, snowstorm, other natural disaster, industrial strike, industrial accident or other disruptive event occurring in or affecting 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.

***Any future outbreak of radiation-related disease as a result of nuclear power plant reactors damage caused by the 2011 Sendai Earthquake may materially adversely affect our operations and business.***

The 2011 Sendai Earthquake raises tremendous concerns about the possible effects of radiation emission from the damaged nuclear power plants. Japanese official authorities are working with experts in assessing the risk and determining the best courses of actions to implement to escape harmful radiation. The potential health effects due to exposure to harmful radiation may be temporary or permanent harmful effects in nature.

Multiple radioactive gases could possibly be emitted in a situation where uranium attains a meltdown state, which is a severe overheating of the core of a nuclear reactor, in which the core melts and radiation and heat are caused to escape. This would occur if the containment system partially or fully fails. The particles that are released with the gases due to the meltdown would be the spewed particles of iodine-131, strontium-90 and cesium-137. These might enter into a human by being swallowed, absorbed through the skin, or inhaled. Depending on the chemical characteristics of each of these and their predilection for certain body tissues, they could cause cancers of such organs as bones, soft tissues near bones, thyroid gland, and the bone marrow (typically known as leukemia).

Acute or very high level radiation exposure can cause a person to become very ill or to die quickly. Ionizing radiation, which is defined as high-energy particles or electromagnetic waves that can break chemical bonds, damage humans by disrupting cellular function, particularly in tissues with rapid growth and turnover of cells. Intense, high level and/or excessive radiation exposure may result in acute radiation syndrome whereby harmful effects to the human body may be evidenced by skin burns, internal organ deterioration, bleeding, vomiting, bone marrow distortion and deaths. If the radiation exposure is less intense and/or more prolonged at a lower level, then the central nervous system, kidneys, thyroid gland, and liver may be affected. Cancer is the most well known effect, and may affect virtually any significantly exposed tissue.

Certain health effects due to exposure to harmful radiation does not have adequate treatment or known cure or vaccine, consequently, 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 probability of any future outbreak of radiation related diseases as a possible result of nuclear power plants damage caused by the 2011 Sendai Earthquake or the extent of the material adverse impact that this could have on our business and results of operations.

---

## **Table of Contents**

### **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.*

The ability of our subsidiaries to pay dividends 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.

*ThaiLin and He & Fang 2005 Revocable Living Trust, our two largest shareholders, may 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.*

As of March 31, 2012, ThaiLin, ChipMOS Taiwan's 42.9% owned subsidiary, directly owned 19.2% of our common shares. He & Fang 2005 Revocable Living Trust owned 10.3% of our common shares according to the 13G/A filed by He Zhengxu with SEC on January 10, 2012. These two largest shareholders, individually or collectively, through their equity interests may have significant influence over matters submitted to our shareholders for approval and other corporate actions, such as:

election of directors;

timing and manner of dividend distributions;

approval of contracts between us and these two largest shareholders or their respective affiliates, which could involve conflicts of interest;

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

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

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

adversely affect the market price of our common shares.

Moreover, because large shareholders 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.

---

## **Table of Contents**

### **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.

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 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, 2012, we had approximately 34 million common shares issued and outstanding. ThaiLin, He & Fang 2005 Revocable Living Trust, Siliconware Precision, Mosel, and DLS Capital Management, LLC, our five largest shareholders, owned 6,474,211, 3,479,751, 3,043,749, 2,698,659 and 2,252,889 common shares as of March 31, 2012, respectively, representing in the aggregate of approximately 53.2% of our outstanding common shares. See Item 7. Major Shareholders and Related Party Transactions - Major Shareholders .

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 (1,739,130) 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 (3,043,749) 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 (2,030,316) 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 (1,015,158) 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. In March 2012, Mosel sold 100,000 common shares through its wholly-owned subsidiary, Giant Haven, under Rule 144.



**Table of Contents**

On September 14, 2007, ChipMOS Bermuda issued 604,124 (151,031) 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 15.8% of ChipMOS Taiwan's outstanding shares to Siliconware Precision. In January 2011, the share purchase transaction was completed and we owned 84.2% of ChipMOS Taiwan's outstanding shares as of December 31, 2011. 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, 2012, owned 3% 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.

The share numbers disclosed in the foregoing notes, contain corresponding adjusted figures in brackets denoting the effect of Company's 1-for-every-4 reverse stock split effective on January 21, 2011.

*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 US\$1.00 per share for 30 consecutive business days. We are in compliance with the NASDAQ Listing Rules as of the date of this Annual Report on Form 20-F. We were not in compliance with the NASDAQ 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 US\$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.

**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.





---

## Table of Contents

### **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 a wholly-owned subsidiary of ThaiLin Semiconductor Corp., or ThaiLin. As of March 31, 2012, ThaiLin, a 42.9% owned subsidiary of ChipMOS Taiwan, owned 19.2% of our common shares, He & Fang 2005 Revocable Living Trust, owned 10.3% of our common shares, Siliconware Precision, owned 9.0% of our common shares and 15.8% of ChipMOS Taiwan's outstanding shares, and Mosel, indirectly owned 8.0% 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, 2012.

#### Notes:

- (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%. 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 (which was dissolved on July 20, 2011), Modern Mind, its wholly-owned subsidiary, ChipMOS Shanghai and ThaiLin.
- (2) 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 (3,043,749 shares as taking into effect of 1-for-every-4 reverse stock split effective on January 21, 2011) 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 15.8% of ChipMOS Taiwan's outstanding shares to Siliconware Precision. The share purchase transaction was completed in January 2011. As of March 31, 2012, we owned 84.2% of ChipMOS Taiwan's outstanding shares.

**Table of Contents**

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 (132,793) common shares in exchange for 5,633,442 ChipMOS Taiwan common shares held by these employees.

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 (3,043,749) 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 (151,031) 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 15.8% of ChipMOS Taiwan's outstanding shares to Siliconware Precision. The share purchase transaction was completed in January 2011. As of March 31, 2012, we owned 84.2% of ChipMOS Taiwan's outstanding shares.

The share numbers disclosed in the foregoing notes, contain corresponding adjusted figures in brackets denoting the effect of Company's 1-for-every-4 reverse stock split effective on January 21, 2011.

**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 on December 31, 2002. In 2003, we acquired from Jesper 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 (the "MMT Notes"). The MMT Notes were 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 MMT Notes were fully and unconditionally guaranteed by Jesper and secured by a pledge agreement in respect of the entire equity interest in Modern Mind and ChipMOS Shanghai. We obtained from Jesper an irrevocable option to acquire at any time the common shares of Modern Mind then owned by Jesper. Under an assignment and assumption agreement signed on April 22, 2011 (the "MMT Assignment Agreement"), ChipMOS agreed to sell the MMT Notes to ThaiLin for a purchase price of approximately US\$40 million subject to certain closing conditions. Post completion of MMT Assignment Agreement transaction, ThaiLin immediately converted the MMT Notes into common shares of Modern Mind and purchased all of the remaining common shares of Modern Mind from Jesper, with ChipMOS Shanghai becoming a wholly-owned subsidiary of ThaiLin. The MMT Assignment Agreement was completed on October 3, 2011.

On July 1, 2010, ChipMOS Bermuda and ChipMOS Shanghai entered into an exclusive services agreement, pursuant to which ChipMOS Shanghai provides services exclusively to ChipMOS Bermuda or customers designated by ChipMOS Bermuda. Under the exclusive services agreement, ChipMOS Bermuda agrees to procure certain equipment required to render those services and consign such equipment for the exclusive use of ChipMOS Shanghai. The exclusive services agreement has a term of ten years and unless otherwise terminated by either party giving at least 30 days prior written notice to the expiration of such ten-year term, will automatically renew for another ten-year term upon its expiry. In addition, under the exclusive services agreement, ChipMOS Bermuda has the discretion to terminate the exclusive services agreement for any reason at any time by giving 30 days' prior written notice to ChipMOS Shanghai.

---

## **Table of Contents**

***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.

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, 2012, 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, four of the nine directors of ThaiLin are appointed by ChipMOS Taiwan. As of March 31, 2012, ThaiLin held 6,474,211 of our outstanding shares, corresponding to 19.2% of all of our outstanding shares. See Item 7. Major Shareholders and Related Party Transactions Related Party Transactions ThaiLin Semiconductor Corp.

***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. ChipMOS Hong Kong was dissolved on July 20, 2011.

## **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 2011, 32.4% of our net revenue was derived from testing services for memory and logic/mixed-signal semiconductors, 32.9% from assembly services for memory and logic/mixed-signal semiconductors, 21.9% from LCD and other flat-panel display driver semiconductor testing and assembly services and 12.8% from bumping services for semiconductors.

### *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 and 2011.

### *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.

**Table of Contents**

*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, though still overall weak, started to recover in the second quarter of 2009 and the positive recovery trend continues in 2010 and 2011.

*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.

*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:

<b>Process</b>	<b>Description</b>
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.

## **Table of Contents**

### *Outsourcing Trends in Semiconductor Manufacturing*

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

The availability of technologically advanced independent semiconductor manufacturing services has also enabled the growth of fabless semiconductor companies that focus exclusively on semiconductor design and marketing and outsource their fabrication, testing and assembly requirements to independent companies.

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

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

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

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

### *Semiconductor Testing and Assembly Services Industry*

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

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

Taiwan is one of the world's leading locations for outsourced semiconductor manufacturing. The semiconductor industry in Taiwan has developed such that the various stages of the semiconductor manufacturing process have been disaggregated, thus allowing for specialization. The disaggregation of the semiconductor manufacturing process in Taiwan permits these semiconductor manufacturing service providers to focus on particular parts of the production process, develop economies of scale, maintain higher capacity utilization rates and remain flexible in responding to customer needs 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

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

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.



## **Table of Contents**

### **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.

#### ***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, LCD and other flat-panel display driver semiconductors and bumping services. 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, multi-chip package (MCP) 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 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; and

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

In 2011, we spent approximately 2.3% 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, 2012, our research and development team comprised 274 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.

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

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 and logic/mixed-signal 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.

**Table of Contents*****Expand Our Offering of Vertically Integrated Services.***

We believe that one of our competitive strengths is our ability to provide vertically integrated services to our customers. Vertically integrated services consist of the integrated testing, assembly and direct shipment of semiconductors to end-users designated by our customers. Providing vertically integrated services enables us to shorten lead times for our customers. As time-to-market and cost increasingly become sources of competitive advantage for our customers, they increasingly value our ability to provide them with comprehensive back-end services.

Through 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 including a reputable memory customer based in the US. See Customers below for a more detailed discussion of these long-term agreements.

Global market and economic conditions have been unprecedented and challenging with tight credit conditions and recession in most major economies continuing into 2011. 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. During 2011, the revenue of the bumping segment exceeded the quantitative threshold for aggregation and the Company deems it appropriate to present revenue data related to bumping as a separate segment. The bumping segment has been recasted from LCD for the years ended December 31, 2009 and 2010.

	Year ended December 31,		
	2009	2010	2011
<b>Testing</b>			
Memory testing revenue	38.2%	32.4%	30.0%
Logic/mixed-signal testing revenue	4.3	3.5	2.4
Total testing revenue	42.5	35.9	32.4
<b>Assembly</b>			
Memory assembly revenue	27.5	29.7	27.4
Logic/mixed-signal assembly revenue	8.4	6.7	5.5
Total assembly revenue	35.9	36.4	32.9
LCD and other flat-panel display driver semiconductor testing and assembly revenue	16.3	18.6	21.9
Bumping	5.3	9.1	12.8
<b>Total net revenue</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

**Memory and Logic/Mixed-Signal Semiconductors*****Testing***

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

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

*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 256 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 800 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.

## **Table of Contents**

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.

---

**Table of Contents**

***Assembly***

Our assembly services generally involve the following steps:

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

**Table of Contents**

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.

<b>Package</b>	<b>Lead-count</b>	<b>Description</b>	<b>End-User Applications</b>
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





**Table of Contents**

*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:

<b>Package</b>	<b>Connections</b>	<b>Description</b>	<b>End-User Applications</b>
Mini BGA	36-400	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	54-90	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)	Notebook computers, digital cameras, personal digital assistants, global positioning

# Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Stacked-Chip BGA	48-137	or combinations of memory and logic chips in one BGA package Designed for assembly of two or more memory chips or logic and memory chips in one CSP, reducing the space required for memory chips	systems, sub-notebooks, board processors, wireless systems Cellular handsets, digital cameras, personal digital assistants, wireless systems, notebook computers, global positioning systems
------------------	--------	--	---

## **Table of Contents**

### ***LCD and Other Flat-Panel Display Driver Semiconductors and Gold Bumping***

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 polyimide 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.

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.



**Table of Contents**

The following diagram presents the basic components of a COF:

The TCP and COF processes involve the following steps:

<i>Chip Probing</i>	Screen out the defect chips which fail to meet the device spec.
<i>Wafer Lapping</i>	Wafers are grounded to their required thickness.
<i>Die Saw</i>	Wafers are cut into individual dies, or chips, in preparation for inner lead bonding.
<i>Inner Lead Bonding</i>	An inner lead bonder machine connects the chip to the printed circuit tape.
<i>Potting</i>	The package is dispensed to a resin.
<i>Potting Cure</i>	The potting cure process matures the resin used during the potting oven with high temperatures.
<i>Marking</i>	A laser marker is used to provide product identification.
<i>Final Testing</i>	To verify device spec. with in electrical testing after assembly process.
<i>Inspection and Packing</i>	Each individual die with tape is visually inspected for defects. The dies are packed within a reel into an aluminum bag after completion of the inspection process.

***Chip-on-Glass Technology***

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

The COG assembly technology involves the following steps:

<i>Chip Probing</i>	To screen out the defect chips which fail to meet the device spec.
<i>Wafer Lapping</i>	Wafers are ground to their required thickness.
<i>Die Saw</i>	Wafers are cut into individual dies, or chips, in preparation for the pick and place process.
<i>Auto Optical Inspection</i>	Process of wafer inspection is detecting defect to separate chips at pick and place station.
<i>Pick and Place</i>	Each individual die is picked and placed into a chip tray.
<i>Inspection and Packing</i>	Each individual die in a tray is visually or auto-inspected for defects. The dies are packed within a tray into 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.



## **Table of Contents**

### ***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.

### ***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 2010, 2011 and 2012, respectively, was 100, 87 and 85. Our top 15 customers in terms of revenue in 2011 were (in alphabetical order):

Elite Semiconductor Memory Technology, Inc.

Eon Silicon Solution Inc.

FIDELIX CO., LTD.

Himax Technologies, Inc.

ILI TECHNOLOGY CORP.

Integrated Circuit Solution Inc.

Integrated Device Technology Inc.

Macronix International Co., Ltd.

Micron Technology, Inc.

Novatek Microelectronics Corp.

ProMOS Technologies Inc.

Raydium Semiconductor Corp.



Spansion LLC

Winbond Electronics Corp.

Zentel Electronics Corp.

In 2009, our largest customer was Spansion, our second-largest customer was Novatek, and our third-largest customer was Micron Technology, Inc. ( Micron ) accounting for approximately 15%, 12% and 10% of our net revenue, respectively. In 2010, our largest customer was Novatek, our second-largest customer was ProMOS; and our third-largest customer was Micron accounting for approximately 18%, 12% and 9% of our net revenue, respectively. In 2011, our largest customer was Novatek, our second-largest customer was Micron and our third-largest customer was Winbond Electronics Corp., accounting for approximately 21%, 11% and 7% 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 memory 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).

**Table of Contents**

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, was 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, other receivables from ProMOS amounted to NT\$409 million and 100% allowance was made by ChipMOS Taiwan. NT\$7 million was received by April 2010. Under the amended subcontracting contract, ProMOS paid ChipMOS Taiwan NT\$200 million in May 2010. The remaining NT\$202 million was paid in nine monthly installments with final installment payment ended on March 15, 2011. As of December 31, 2010, ChipMOS Taiwan received NT\$336 million and the related allowance of NT\$409 million was reversed to other non-operating income. In March 2011, all payments have been received. The collection term was revised to 30 days upon delivery in May 2010, to 45 days upon delivery in October 2010 and to the current term of advance payment prior to delivery from ProMOS in June 2011.

As of December 31, 2009, other receivables from ProMOS amounted to NT\$55 million and 100% allowance was made by ThaiLin. In June 2010, ThaiLin agreed a settlement with ProMOS in the amount of NT\$24 million and it was collected during the same year. The allowance of NT\$24 million was reversed to other non-operating income. Commencing in June 2010, the collection term was revised to become 30 days upon delivery. In January 2011, the collection term was revised to 45 days after delivery and it was further revised to request advance payments from ProMOS in June 2011. See Note 19 to our consolidated financial statements contained in this Annual Report on Form 20-F.

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. 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 NT\$1,118 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. On October 4, 2010, ChipMOS Taiwan entered into a settlement agreement with Spansion LLC for the general unsecured claim on breach of contract and liquidated damages rights reflected in the proof of claim, Claim No. 5, against Spansion Inc., Spansion Technology LLC, Spansion LLC, Spansion International Inc. and Cerium Laboratories LLC filed by ChipMOS Taiwan in the U.S. Bankruptcy Court. In October 2010, the Company has received payment of NT\$2,118 million for the Transfer of Claim Agreement to Citigroup.

**Table of Contents**

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 Spansion's exclusive wafer sort subcontractor, 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,		
	2009	2010	2011
Taiwan	60%	74%	73%
United States	33	22	15
Singapore	2	(1)	6
Korea	3	3	2
Japan	1	1	2
Hong Kong SAR	(1)	(1)	1
Others	1	(1)	1
Total	100%	100%	100%

(1) Less than 1%.

**Qualification and Correlation by Customers**

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

**Sales and Marketing**

We maintain sales and marketing offices in Taiwan, 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. As of March 31, 2012, our sales and marketing efforts were primarily carried out by teams of sales professionals, application engineers and technicians, totaling 37 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 benchmarking 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.

## **Table of Contents**

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 2009, 2010 and 2011, we paid approximately NT\$9 million, NT\$9 million and NT\$3 million (US\$99 thousand), respectively, in commissions to our sales agent.

## **Research and Development**

We believe that research and development is critical to our future success. In 2009, 2010 and 2011, we spent approximately NT\$375 million, or 3%, NT\$413 million, or 2% and NT\$410 million (US\$14 million), or 2%, 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, and non-clean probing. 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; and

Developing high-speed probing.

We are also continuing development of interface designed to provide 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, 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, 2012, we employed 274 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.

## **Table of Contents**

### **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, 2012, we employed 372 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 in September 1997 and December 1998, respectively and recertified with ISO 9001 for substantial revision since 2000. With respect to our quality management system, on November 26, 2003, ChipMOS Taiwan obtained ISO/TS 16949 quality system certification. In 2005, ChipMOS acquired Chantek as Chupei site. In the subsequent year, the Chupei site obtained ISO/TS 16949 quality system certification. ThaiLin and ChipMOS Shanghai also obtained ISO/TS 16949 quality system certification in September 2005 and January 2006, respectively.

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:

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Joint Electron Device Engineering Council (JEDEC) standardized temperature cycling, thermal shock and pressure cook reliability tests;

high and low temperature storage life tests, temperature humidity bias test 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.



---

## **Table of Contents**

As a result of our ongoing focus on quality, in 2011, we achieved monthly assembly yields of an average of 99.98% for our memory and logic/mixed-signal assembly packages, 99.94% for our COF packages and 99.96% 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 21%, 22% and 22% of our net revenue in 2009, 2010 and 2011, 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. Our principal raw material supplies have not been impacted by Japan earthquake and tsunami catastrophe. 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.

### **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.

## **Table of Contents**

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, 2012, we held 446 patents in Taiwan, 121 patents in the United States, 209 patents in the People's Republic of China and 1 patent in the United Kingdom, France and Germany, respectively, relating to various semiconductor testing and assembly technologies. These patents will expire at various dates through to 2030. As of March 31, 2012, we also had a total of 42 pending patent applications in the United States, 126 in Taiwan, and 49 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 .

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.

## **Table of Contents**

### **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 lead-frames 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 facilities at Hsinchu Science Park, Chupei and Southern Taiwan Science Park have won numerous awards including health promotion awards granted by Department of Health of ROC in 2009, Safety & Health Performance Certification Unit from Council of the Labor Affairs of ROC in 2009 and 2010. Our bumping facility has won Civil Defence Excellent Award from Hsinchu City in 2009, 2010 and 2011. We continue to encourage our employees to attend and participate in community environmental campaigns and events to promote and build better environmental friendly practices.

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. In 2009, we further obtained SGS recognition whereby we received the Greenhouse Gas Verification Statement which also further enhances our eligibility under the Green Partner program. 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\$52,545 million and NT\$7,610 million, respectively. ChipMOS Shanghai also maintains property insurance policies for a maximum coverage of approximately RMB864 million.

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.

**Table of Contents****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 2027, respectively, and Southern Taiwan Science Park facility with lease expiration in year 2017.

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, 2012.

Location of Facility	Primary Use	Floor Area (m <sup>2</sup> )	Principal Equipment
Chupei, Hsinchu	Wafer Testing/Gold Bumping	25,294	5 steppers  15 sputters  239 testers
Hsinchu Industrial Park, Taiwan	Testing	39,997	122 testers  31 burn-in ovens
Hsinchu Science Park, Taiwan	Testing	28,633	134 testers  99 burn-in ovens
Southern Taiwan Science Park, Taiwan	Assembly/Testing	109,822	503 wire bonders  150 inner-lead bonders  296 testers
Shanghai Qingpu Industrial Zone, Mainland China	Assembly/Testing	66,817	43 testers  158 wire bonders  21 burn-in ovens

**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, 2012, we operated 834 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 international manufacturer, Advantest 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.

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

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.

---

## **Table of Contents**

### **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, 2012, we operated 503 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., Shinkawa Co., Ltd., Athlete FA Corp., Daitron Electron Crop and GMM Corp. As of March 31, 2012, we operated 5 steppers and 15 sputters for gold bumping, 150 inner-lead bonders for assembly and 296 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.

#### **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 2011, our consolidated net revenue was NT\$18,211 million (US\$602 million) and our net loss was NT\$15 million (US\$1 million).

We are a holding company, incorporated in Bermuda on August 1, 2000. We provide most of our services through our majority-owned subsidiary, ChipMOS Taiwan, and its subsidiaries and investees. ChipMOS Taiwan was 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 ChipMOS Bermuda and ChipMOS Taiwan on September 14, 2007, ChipMOS Taiwan became a wholly-owned subsidiary of ChipMOS Bermuda. In February 2010, we agreed to sell 15.8% of ChipMOS Taiwan's outstanding shares to Siliconware Precision. The share purchase transaction was completed in January 2011. As of March 31, 2012, we owned 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. 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. In April 2011, ChipMOS Bermuda entered into the MMT Assignment Agreement with ThaiLin to sell the MMT Notes to ThaiLin for a purchase price of approximately US\$40 million. The MMT Assignment Agreement is subject to certain closing conditions, including approval of shareholders of ThaiLin and obtaining certain approval from ICM for ThaiLin's investment in China. The transaction was completed on October 3, 2011 and Modern Mind then became the wholly-owned subsidiary of ThaiLin. See Item 4. Information on the Company Overview of the Company for more details.





---

## **Table of Contents**

The following key trends are important to understanding our business:

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

The current generation of advanced testers typically cost between US\$2 million and US\$5 million each, while wire bonders used in assembly typically cost approximately US\$68 thousand each and inner-lead bonders for TCP and COF assembly cost approximately US\$380 thousand each and COG chip sorters cost approximately US\$160 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 in 2009 and in 2010. Market demand for semiconductors significantly decreased across our industry during these periods, which adversely affected average selling prices for our services and our results of operations for 2008, 2009 and 2010. The impact on our results of operations of the decrease in market demand during these periods was partly offset by increases in our 2009 and 2010 net revenue from assembly services for logic/mixed-signal semiconductors due to higher customer demand for these services in 2009 and 2010. The overall outsourced assembly and testing services for memory and logic/mixed-signal semiconductors increased gradually since 2010. 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 related to realizing pricing levels, capacity realization rates and gross margin during these periods.

*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.

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.

## Table of Contents

*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. Despite an increase in the demand for mobile/niche DRAM in 2010, for DRAMs with more advanced features such as that of enhanced graphic capability, increased power efficiency and increased mobility, the average market demand for DRAM remained low. 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 from the second half of 2009 and continue in 2011.

*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, bumping services and 12-inch wafer processing have increased as a percentage of our total net revenue over the 2009 to 2011 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

In March 2007, we completed a share purchase and subscription transaction with ChipMOS Taiwan and Siliconware Precision, under which we became a holder of 99.1% of the outstanding common shares of ChipMOS Taiwan. In April 2007, we and ChipMOS Taiwan further entered into a share exchange transaction and pursuant to which we agreed to exchange one common share for every 8.4 ChipMOS Taiwan shares outstanding. Following the completion of the share exchange transaction in September 2007, ChipMOS Taiwan became our wholly-owned subsidiary. In February 2010, we agreed to sell 15.8% of ChipMOS Taiwan's outstanding shares to Siliconware Precision. The share purchase transaction was completed in January 2011. As of March 31, 2012, we owned 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; (3) LCD and other flat-panel display driver semiconductor testing and assembly services; and (4) bumping services for memory, logic/mixed-signal and LCD and other flat-panel display driver semiconductors. The following table sets forth, for the periods indicated, our consolidated net revenue for each segment.

	2009 NT\$	Year ended December 31,		2011 US\$
		2010 NT\$	2011 NT\$	
(in millions)				
Testing				
Memory	\$ 4,646.5	\$ 5,577.4	\$ 5,455.1	\$ 180.2
Logic/mixed-signal	524.7	592.3	444.0	14.7
Total testing	5,171.2	6,169.7	5,899.1	194.9
Assembly				
Memory	3,335.7	5,112.6	4,982.2	164.6
Logic/mixed-signal	1,017.2	1,146.2	1,006.8	33.2
Total assembly	4,352.9	6,258.8	5,989.0	197.8
LCD and other flat-panel display driver semiconductor testing and assembly	1,986.4	3,199.0	3,985.8	131.7
Bumping	639.8	1,582.2	2,337.0	77.2
Total	\$ 12,150.3	\$ 17,209.7	\$ 18,210.9	\$ 601.6



## **Table of Contents**

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, testing and assembly services for LCD and other flat-panel display driver semiconductors and bumping services.

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 and bumping services 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.

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 completion of testing and assembly services. We also 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. We submit invoices at the time of completion of service or shipment or delivery and generally require all customers to pay within 60 days after the last day of the month during which the invoice was sent. However, for ProMOS, during 2010 the invoice settlement cycle has been changed to 30 or 45 days upon delivery, and commencing in June 2011, the collection term was revised to advance payment prior to delivery.

**Table of Contents**

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 from ProMOS in 2008 and 2009, respectively. The full amount of allowance for these doubtful receivables of NT\$578 million and NT\$464 million were reserved as of December 31, 2008 and 2009, respectively. As of December 31, 2009, other receivables from ProMOS amounted to NT\$409 million and 100% allowance was made by ChipMOS Taiwan. NT\$7 million was received by April 2010. Under the amended subcontracting contract ProMOS paid ChipMOS Taiwan NT\$200 million in May 2010. The remaining NT\$202 million was paid in nine monthly installments with the final payment made on March 15, 2011. As of December 31, 2010, ChipMOS Taiwan received NT\$336 million and the related allowance of NT\$409 million was reversed to other non-operating income. In March 2011, all payments have been received.

As of December 31, 2009, other receivables from ProMOS amounted to NT\$55 million and 100% allowance was made by ThaiLin. In June 2010, ThaiLin agreed a settlement with ProMOS in the amount of NT\$24 million and it was collected during the same year. The allowance of NT\$24 million was reversed to other non-operating income. See Item 4. Information on the Company Customers .

We also experienced collection problems for our services of receivables from Spansion in 2008 and 2009, respectively. The full amount of allowance of these doubtful receivables of NT\$1,539 million and NT\$2,232 million were reserved as of December 31, 2008 and 2009, respectively. On January 25, 2010, we entered into a definitive Transfer of Claim Agreement to sell to Citigroup Financial Products Inc. (Citigroup) the general unsecured claim reflected in the proof of claim against Spansion. The claim that is the subject of the Transfer of Claim Agreement includes accounts receivable for testing and assembly services provided to Spansion (the Undisputed Claim ). In February 2010, we received from Citigroup the purchase price for the Undisputed Claim of NT\$1,118 million against accounts receivable of NT\$2,186 million. A loss on sale of receivables of NT\$1,068 million was recognized and the related allowance for doubtful receivables of NT\$2,186 million was reversed in 2010. See Item 4. Information on the Company Customers .

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

*Related Party Revenues*

In 2009, 2010 and 2011, 5%, 12% and 2%, 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 60%, 74% and 73% of our net revenue in 2009, 2010 and 2011, respectively. We also generate net revenue from customers in the United States, Singapore, 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 23 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 expendable equipments, sub-contracting fees and rental expenses. Our operations, in particular our testing, 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. As of March 31, 2012, we had 834 testers, 151 burn-in ovens, 503 wire bonders, 150 inner-lead bonders, 5 steppers and 15 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.



## **Table of Contents**

Our profitability depends in part not only on absolute pricing levels for our services, but also on our capacity utilization rates. Our average capacity utilization rate for testing of memory and logic/mixed-signal semiconductors was 45% in 2009, 60% in 2010 and 62% in 2011. Our average capacity utilization rate for assembly of memory and logic/mixed-signal semiconductors was 64% in 2009, 85% in 2010 and 79% in 2011. Our average capacity utilization rate for LCD and other flat-panel display driver semiconductor testing and assembly was 52% in 2009, 77% in 2010 and 80% in 2011. In addition, our average capacity utilization rate for bumping was 45% in 2009, 77% in 2010 and 88% in 2011.

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.

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.

Our gross revenue is generally the product of the total volume of our customer orders multiplied by the average selling price per deliverable unit from our assembly or testing services, 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 decrease in correlation to decreases in our capacity utilization rates, decreases in our average selling prices, or both. Similarly, our gross margin and profitability generally increase 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.

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.

**Table of Contents**

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.

	2009 NT\$	Year ended December 31,		2011 US\$
		2010 NT\$	2011 NT\$	
(in millions)				
<b>Gross profit (loss):</b>				
Testing				
Memory	\$ (2,275.9)	\$ (362.4)	\$ 352.1	\$ 11.7
Logic/mixed-signal	84.7	114.5	24.9	0.8
Total testing	(2,191.2)	(247.9)	377.0	12.5
Assembly				
Memory	(745.2)	(36.0)	(20.3)	(0.7)
Logic/mixed-signal	(13.2)	240.9	303.2	10.0
Total assembly	(758.4)	204.9	282.9	9.3
LCD and other flat-panel display driver semiconductor testing and assembly	(185.3)	703.8	887.3	29.3
Bumping	(376.3)	(15.1)	114.5	3.8
Total	\$ (3,511.2)	\$ 645.7	\$ 1,661.7	\$ 54.9
<b>Gross profit (loss) margin:</b>				
Testing				
Memory	(49.0)%	(6.5)%	6.5%	6.5%
Logic/mixed-signal	16.1	19.3	5.6	5.6
Total testing	(42.4)	(4.0)	6.4	6.4
Assembly				
Memory	(22.3)	(0.7)	(0.4)	(0.4)
Logic/mixed-signal	(1.3)	21.0	30.1	30.1
Total assembly	(17.4)	3.3	4.7	4.7
LCD and other flat-panel display driver semiconductor testing and assembly	(9.3)	22.0	22.3	22.3
Bumping	(58.8)	(1.0)	4.9	4.9
Overall	(28.9)%	3.8%	9.1%	9.1%
<b>Operating Expenses</b>				

*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.

*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.

**Table of Contents****Other Income (Expenses), Net**

Our other income principally consists of interest income, sales of claims receivables, foreign exchange gains, warehouse space rental revenue, royalty income, 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 for more information. In January 2010, ChipMOS Taiwan entered into a definitive Transfer of Claim Agreement to sell to Citigroup Financial Products Inc. (Citigroup) the general unsecured claim reflected in the proof of claim against Spansion. As a result of the agreement, ChipMOS Taiwan received from Citigroup the purchase price for the Undisputed Claim of NT\$1,118 million against accounts receivable of NT\$2,186 million. A loss on sale of receivables of NT\$1,068 million was recognized and the related allowance for doubtful receivables of NT\$2,186 million was reversed in 2010. The Transfer of Claim Agreement also includes the sale of breach of contract and liquidated damages rights against Spansion in the amount of NT\$2,118 million, which was received in October 2010.

As of December 31, 2009, other receivables from ProMOS amounted to NT\$409 million and 100% allowance was made by ChipMOS Taiwan. NT\$7 million was received by April 2010. Under an amended subcontracting contract, ProMOS paid ChipMOS Taiwan NT\$200 million in May 2010. The remaining NT\$202 million was subsequently received by March 2011. As of December 31, 2010, ChipMOS Taiwan received NT\$336 million and the related allowance of NT\$409 million was reversed to other non-operating income. In March 2011, all payments have been received.

As of December 31, 2009, other receivables from ProMOS amounted to NT\$55 million and 100% allowance was made by ThaiLin. In June 2010, ThaiLin agreed a settlement with ProMOS in the amount of NT\$24 million, this payment was fully received in the same year. The allowance of NT\$24 million was reversed to other non-operating income.

Our other expenses principally consist of interest expense, fair value loss on financial assets, financing costs, impairment losses, losses on disposal of property, plant and equipment, loss on embedded derivative 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. See Item 4. Information on the Company Our Structure and History for information concerning our consolidated subsidiaries. In 2009, our noncontrolling interests were attributable to the public shareholders' interest in ThaiLin, ChipMOS Taiwan's 42.9% owned subsidiary. In 2010 and 2011, our noncontrolling interests were attributable to the noncontrolling interests owned by Siliconware Precision in ChipMOS Taiwan as a result of the February 2010 share purchase agreement under which we agreed to sell 15.8% of ChipMOS Taiwan's outstanding shares to Siliconware Precision, and the public shareholders' interest in ThaiLin. The sale of 15.8% of ChipMOS Taiwan's outstanding shares to Siliconware Precision was completed in January 2011. Under the MMT Assignment Agreement signed on April 22, 2011, ChipMOS Bermuda agreed to sell the MMT Notes to ThaiLin. The transaction was completed in October 2011 and ThaiLin immediately converted the MMT Notes into common shares of Modern Mind and purchased all of the remaining common shares of Modern Mind from Jesper, with ChipMOS Shanghai becoming a wholly-owned subsidiary of ThaiLin. As a result of the transaction, interest of ChipMOS Bermuda in Modern Mind and also ChipMOS Shanghai decreased to 36.1% from 100%. As of March 31, 2012, we owned 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 did not pay any bonuses to directors, supervisors and employees in 2009 and 2010. In 2011, ChipMOS Taiwan and ThaiLin paid nil and NT\$29 million (US\$958 thousand) to employees, directors and supervisors as bonuses, which was accrued in 2010.

**Net Income (Loss)**

Our net loss was NT\$4,419 million in 2009, net income was NT\$1,645 million in 2010, and net loss was NT\$15 million (US\$1 million) in 2011, 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 .



**Table of Contents****Results of Operations**

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

	Year ended December 31,		
	2009	2010	2011
<b>ROC GAAP:</b>			
Net revenue	100.0%	100.0%	100.0%
Cost of revenue	128.9	96.2	90.9
Gross profit (loss) margin	(28.9)	3.8	9.1
<b>Operating expenses:</b>			
Research and development	3.1	2.4	2.3
General and administrative	4.6	3.9	3.6
Sales and marketing	5.4	0.4	0.3
Total operating expenses	13.1	6.7	6.2
Income (Loss) from operations	(42.0)	(2.9)	2.9
Other income (expenses), net	1.0	13.5	(2.5)
Income (Loss) before income tax and noncontrolling interests	(41.0)	10.6	0.4
Income tax benefit (expense)	3.4	0.5	(0.2)
Income (Loss) before noncontrolling interests	(37.6)	11.1	0.2
Net (income) loss attributable to noncontrolling interests	1.2	(1.5)	(0.3)
Net income (loss) attributable to ChipMOS	(36.4)%	9.6%	(0.1)%

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

**Net Revenue.** Our net revenue increased by NT\$1,001 million, or 6%, to NT\$18,211 million (US\$602 million) in 2011 from NT\$17,210 million in 2010.

Net revenue from testing services for memory and logic/mixed-signal semiconductors decreased by NT\$271 million, or 4%, to NT\$5,899 million (US\$195 million) in 2011 from NT\$6,170 million in 2010. Net revenue from testing services for memory semiconductors decreased by NT\$122 million, or 2%, to NT\$5,455 million (US\$180 million) in 2011 from NT\$5,577 million in 2010, principally due to decreased average selling price for DRAM products. Net revenue for testing services for logic/mixed-signal semiconductors decreased by NT\$149 million, or 25%, to NT\$444 million (US\$15 million) in 2011 from NT\$593 million in 2010, principally due to decreased average selling price.

Net revenue from assembly services for memory and logic/mixed-signal semiconductors decreased by NT\$270 million, or 4%, to NT\$5,989 million (US\$198 million) in 2011 from NT\$6,259 million in 2010. Net revenue from assembly services for memory semiconductors decreased by NT\$131 million, or 3%, to NT\$4,982 million (US\$165 million) in 2011 from NT\$5,113 million in 2010, primarily as a result of decreased capacity utilization rates and average selling price. Net revenue from assembly services for logic/mixed-signal semiconductors decreased by NT\$139 million, or 12%, to NT\$1,007 million (US\$33 million) in 2011 from NT\$1,146 million in 2010, also attributable to decreased capacity utilization rates and average selling price.

Net revenue from LCD and other flat-panel display driver semiconductor testing and assembly services increased by NT\$787 million, or 25%, to NT\$3,986 million (US\$132 million) in 2011 from NT\$3,199 million in 2010. This increase was principally as a result of an increase of capacity and its utilization for LCD and other flat-panel display products in 2011.

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Net revenue from bumping services increased by NT\$755 million, or 48%, to NT\$2,337 million (US\$77 million) in 2011 from NT\$1,582 million in 2010. This increase was principally as a result of an increased capacity utilization rate for bumping services in 2011.

See **Cost of Revenue and Gross Profit (Loss)** for more information concerning our testing and assembly capacity utilization rates and the impact on our gross revenue, gross margin and profitability from any increases or decreases in our capacity utilization rates.

## Table of Contents

**Cost of Revenue and Gross Margin.** Cost of revenue decreased by NT\$15 million, or 0.1%, to NT\$16,549 million (US\$547 million) in 2011 from NT\$16,564 million in 2010, primarily due to decreases of depreciation expenses of NT\$629 million (US\$21 million) and partially offset by an increase in direct materials, direct labor, inventory supplies and inventory valuation allowance of NT\$173 million (US\$6 million), NT\$114 million (US\$4 million), NT\$104 million (US\$3 million) and NT\$214 million (US\$7 million), respectively. Direct materials increased principally as a result of the increase in capacity utilization rate.

Our gross profit increased to NT\$1,662 million (US\$55 million) in 2011 from NT\$646 million in 2010. Our gross margin was 9% in 2011, compared to 4% in 2010.

Our gross margin for testing services for memory and logic/mixed-signal semiconductors increased to 6% in 2011 from negative 4% in 2010, primarily due to a higher capacity utilization rate, which increased to 62% in 2011 from 60% in 2010.

Our gross margin for assembly services for memory and logic/mixed-signal semiconductors increased to 5% in 2011 from 3% in 2010, primarily due to the increased sales of higher margin memory semiconductor assembly services.

Our gross margin for LCD and other flat-panel display driver semiconductor testing and assembly services increased to 23% in 2011 from 22% in 2010, primarily as a result of an increase in the capacity utilization rate from 77% in 2010 to 80% in 2011.

Our gross margin for bumping services increased to 5% in 2011 from negative 1% in 2010, primarily as a result of an increase in the capacity utilization rate from 77% in 2010 to 88% in 2011.

See Cost of Revenue and Gross Profit (Loss) for more information concerning our testing and assembly capacity utilization rates and the impact on our gross revenue, gross margin and profitability from any increases or decreases in our capacity utilization rates.

**Research and Development Expenses.** Research and development expenses decreased by NT\$3 million, or 1%, to NT\$410 million (US\$14 million) in 2011 from NT\$413 million in 2010. This decrease was primarily due to the decrease of amortization expenses and professional services fees.

**General and Administrative Expenses.** General and administrative expenses decreased by NT\$26 million, or 4%, to NT\$652 million (US\$22 million) in 2011 from NT\$678 million in 2010, primarily due to the decrease of amortization expenses and bank charges.

**Sales and Marketing Expenses.** Sales and marketing expenses increased by NT\$2 million, or 3%, to NT\$66 million (US\$2 million) in 2011 from NT\$64 million in 2010, primarily due to an increase of freight-out expenses.

**Other Income (Expenses), Net.** Other income (expenses), net, changed by NT\$2,777 million, or 120%, to other expenses, net, of NT\$456 million (US\$15 million) in 2011 from other income, net, of NT\$2,321 million in 2010. This change was primarily due to the one-off income from the sale of Undisputed Claim against Spansion of NT\$2,118 million, and recovery of allowance for doubtful receivables of NT\$2,717 million in 2010, which were partially offset by the loss on sale of receivables of NT\$1,068 million in 2010. This change was also caused in part by the increase of foreign exchange gain by NT\$422 million (US\$14 million), decrease of interest expense by NT\$374 million (US\$12 million) and decrease of impairment loss on other assets by NT\$223 million (US\$7 million).

**Income (Loss) Before Income Tax and Noncontrolling Interests.** As a result of the foregoing, income before income tax and noncontrolling interests decreased by 96% to NT\$78 million (US\$3 million) in 2011 from NT\$1,812 million in 2010.

**Income Tax Benefit (Expense).** We had an income tax expense of NT\$46 million (US\$2 million) in 2011 compared to income tax benefit of NT\$99 million for 2010, primarily due to the utilization of tax credit in 2011.

**Net (Income) Loss Attributable to Noncontrolling Interests.** The net income less losses of ThaiLin and its wholly-owned subsidiaries, Modern Mind and ChipMOS Shanghai and of ChipMOS Taiwan attributable to noncontrolling interests amounted to NT\$47 million (US\$2 million) in 2011, compared to the net income of ThaiLin and of ChipMOS Taiwan attributable to noncontrolling interests of NT\$266 million in 2010.

**Net Income (Loss) Attributable to ChipMOS.** As a result of the foregoing, the net loss attributable to ChipMOS was NT\$15 million (US\$1 million) in 2011, compared to a net income attributable to ChipMOS of NT\$1,645 million in 2010.



---

**Table of Contents**

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

**Net Revenue.** Our net revenue increased by NT\$5,060 million, or 42%, to NT\$17,210 million in 2010 from NT\$12,150 million in 2009.

Net revenue from testing services for memory and logic/mixed-signal semiconductors increased by NT\$999 million, or 19%, to NT\$6,170 million in 2010 from NT\$5,171 million in 2009, mainly due to an increase in net revenue from testing services for memory semiconductors. Net revenue from testing services for memory semiconductors increased by NT\$931 million, or 20%, to NT\$5,577 million in 2010 from NT\$4,646 million in 2009, principally due to increased capacity utilization rates and higher average selling price for DRAM products. Net revenue for testing services for logic/mixed-signal semiconductors increased by NT\$68 million, or 13%, to NT\$593 million in 2010 from NT\$525 million in 2009, principally due to increased capacity utilization rates.

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, increased by NT\$1,906 million, or 44%, to NT\$6,259 million in 2010 from NT\$4,353 million in 2009. This increase was primarily the result of an increase in net revenue from assembly services for memory semiconductors. Net revenue from assembly services for memory semiconductors increased by NT\$1,777 million, or 53%, to NT\$5,113 million in 2010 from NT\$3,336 million in 2009, primarily as a result of an increased capacity utilization rate for DDR II SDRAM products. Net revenue from assembly services for logic/mixed-signal semiconductors increased by NT\$129 million, or 13%, to NT\$1,146 million in 2010 from NT\$1,017 million in 2009, principally as a result of higher customer demand.

Net revenue from LCD and other flat-panel display driver semiconductor testing and assembly services increased by NT\$1,213 million, or 61%, to NT\$3,199 million in 2010 from NT\$1,986 million in 2009. This increase was principally as a result of an increased capacity utilization rate for LCD and other flat-panel display products in 2010.

Net revenue from bumping services increased by NT\$942 million, or 147%, to NT\$1,582 million in 2010 from NT\$640 million in 2009. This increase was principally as a result of an increased capacity utilization rate for bumping products in 2010.

See **Cost of Revenue and Gross Profit (Loss)** for more information concerning our testing and assembly capacity utilization rates and the impact on our gross revenue, gross margin and profitability from any increases or decreases in our capacity utilization rates.

**Cost of Revenue and Gross Margin.** Cost of revenue increased by NT\$903 million, or 6%, to NT\$16,564 million in 2010 from NT\$15,661 million in 2009, primarily due to increases of the direct materials, direct labor, salary and fringes expenses and expendable equipment of NT\$1,168 million, NT\$531 million, NT\$239 million and NT\$215 million, respectively. These expenses increases are partially offset by the decrease of rental expenses of NT\$1,288 million. Direct materials increased principally as a result of a raise in the capacity utilization rate.

Our gross profit increased to NT\$646 million in 2010 from negative NT\$3,511 million in 2009. Our gross margin was 4% in 2010, compared to negative 29% in 2009.

Our gross margin for testing services for memory and logic/mixed-signal semiconductors increased to negative 4% in 2010 from negative 42% in 2009, primarily due to a higher capacity utilization rate, which increased to 60% in 2010 from 45% in 2009.

Our gross margin for assembly services for memory and logic/mixed-signal semiconductors increased to 3% in 2010 from negative 17% in 2009, primarily due to a higher capacity utilization rate, which increased to 85% in 2010 from 64% in 2009.

Our gross margin for LCD and other flat-panel display driver semiconductor testing and assembly services increased to 22% in 2010 from negative 9% in 2009, primarily as a result of an increase in the capacity utilization rate from 52% in 2009 to 77% in 2010.

Our gross margin for bumping services increased to negative 1% in 2010 from negative 59% in 2009, primarily as a result of an increase in the capacity utilization rate from 45% in 2009 to 77% in 2010.

See **Cost of Revenue and Gross Profit (Loss)** for more information concerning our testing and assembly capacity utilization rates and the impact on our gross revenue, gross margin and profitability from any increases or decreases in our capacity utilization rates.



---

## **Table of Contents**

**Research and Development Expenses.** Research and development expenses increased by NT\$38 million, or 10%, to NT\$413 million in 2010 from NT\$375 million in 2009. This increase was primarily due to the higher personnel expenses and the increase of professional services fees.

**General and Administrative Expenses.** General and administrative expenses increased by NT\$20 million, or 3%, to NT\$678 million in 2010 from NT\$658 million in 2009, primarily due to the higher personnel expenses.

**Sales and Marketing Expenses.** Sales and marketing expenses decreased by NT\$497 million, or 89%, to NT\$64 million in 2010 from NT\$561 million in 2009, primarily due to a decrease of NT\$497 million in bad debt provision.

**Other Income (Expenses), Net.** Other income, net increased by NT\$2,204 million, or 1,884%, to NT\$2,321 million in 2010 from NT\$117 million in 2009. This increase was primarily due to the damage claim received of NT\$2,118 million, recovery of allowance for doubtful receivables of NT\$2,717 million in 2010 and partially offset by the increase of loss on sale of receivables of NT\$1,068 million, impairment loss on other assets of NT\$392 million, and the increase of foreign exchange loss by NT\$307 million, increase of loss on derivative liability by NT\$311 million and increase of interest expense by NT\$244 million.

**Income (Loss) Before Income Tax and Noncontrolling Interests.** As a result of the foregoing, income before income tax and noncontrolling interests increased by 136% to an income of NT\$1,812 million in 2010 from a loss of NT\$4,989 million in 2009.

**Income Tax Benefit (Expense).** We had an income tax benefit of NT\$99 million in 2010 compared to income tax benefit of NT\$421 million for 2009, primarily due to a significant increase in income before income tax in 2010.

**Net (Income) Loss Attributable to Noncontrolling Interests.** The net income of ThaiLin and of ChipMOS Taiwan attributable to noncontrolling interests amounted to NT\$266 million in 2010, compared to the net loss of ThaiLin attributable to noncontrolling interests of NT\$149 million in 2009.

**Net Income (Loss) Attributable to ChipMOS.** As a result of the foregoing, the net income attributable to ChipMOS was NT\$1,645 million in 2010, compared to a net loss attributable to ChipMOS of NT\$4,419 million in 2009.

## **Critical Accounting Policies**

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

Under ROC GAAP, the significant accounting policies are set forth in Note 2 of the notes to the consolidated financial statements 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, 2011, we provided NT\$65 million (US\$2 million) for the first type of reserve and NT\$2 million (US\$66 thousand) for the second type of reserve. See **Item 4. Information on the Company Customers**.



**Table of Contents**

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, 2011, we provided NT\$119 million (US\$4 million) for the allowance of sales returns.

The allowance we set aside for doubtful receivables and sales returns was NT\$2,937 million as of December 31, 2009, NT\$262 million as of December 31, 2010 and NT\$186 million (US\$6 million) as of December 31, 2011. The allowances as of December 31, 2009, 2010 and 2011 represented 53%, 7% and 5%, respectively, of our accounts receivable and other receivables as of those dates. The allowance in 2009, 2010 and 2011 reflected a reduction of NT\$1,065 million, NT\$74 million and NT\$2 million (US\$66 thousand), 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 either upward or downward 10%, our operating income would be affected by NT\$1 million (US\$33 thousand) for 2011.

An increase in our allowance for doubtful receivables and sales returns would increase our sales and marketing expenses, 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 2009, 2010 and 2011, we reserved NT\$199 million, NT\$37 million and NT\$85 million (US\$3 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\$1 million in 2009, NT\$28 million in 2010 and NT\$36 million (US\$1 million) in 2011 for identified slow-moving inventories.

As of December 31, 2011, we recorded NT\$121 million (US\$4 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\$55 million (US\$2 million) in 2011 and would have decreased our inventory value by 4% and increased our net loss by 362%, respectively.

***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, 2011, 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, 2009, 2010 and 2011, the ending balance for valuation allowances were NT\$2,400 million, NT\$1,171 million and NT\$825 million (US\$27 million), respectively.

---

**Table of Contents**

***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, 2011, 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, 2011, we estimated that our discounted future cash flows are not smaller than our property, plant and equipment. Therefore, no impairment loss has been recognized in respect of property, plant and equipment. 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 decrease our net income 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 2011, we recognized NT\$168 million (US\$6 million) of impairment loss for other long-lived assets under ROC GAAP and US GAAP.

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

***Convertible Notes***

Under US GAAP, we are required to account for the conversion features in the Convertible Notes issued in 2006 ( 2006 Notes ), the Convertible Notes issued in 2009 ( 2009 Notes ), the Convertible Notes issued in 2010 ( 2010 Notes ) and the Convertible Notes issued in 2011 ( 2011 Notes ) as derivative liabilities in accordance with Financial Accounting Standards Board Accounting Standards Codification ( FASB ASC ) 815 Derivatives and Hedging .

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, 2011, all the 2006 Notes, the 2009 Notes, the 2010 Notes and the 2011 Notes have been redeemed or converted and there was nil balance of embedded derivative liabilities. During 2011, the changes of the fair value of the embedded derivative liabilities resulted in a loss on embedded derivative liabilities of NT\$57 million (US\$2 million). The loss was taken into account when determining our net income under US GAAP for the year ended December 31, 2011. 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.

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 13 and 25i to our consolidated financial statements contained in this Annual Report on Form 20-F.

---

## **Table of Contents**

### ***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 FASB ASC 718

Compensation Stock Compensation . 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 2011, the share-based compensation expense amounted to NT\$26 million (US\$1 million), which was taken into account when determining our net income and shareholders' equity under US GAAP for the year ended December 31, 2011.

Prior to adopting FASB ASC 718 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 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, 25j and 26h 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 indirectly impact us, see Item 3. Key Information Risks Factors Risks Relating to Our Business Fluctuations in exchange rates 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, 2011, our primary sources of liquidity were cash and cash equivalents (excluding restricted cash and cash equivalents) of NT\$7,358 million (US\$243 million), and short-term loans of NT\$869 million (US\$29 million) available to us in undrawn facilities, which have expired or will expire before November 2012. To meet our liquidity, capital spending and other capital needs, we have taken certain steps discussed below.

In December 2010, ChipMOS Taiwan reached agreement with and received approval from its bank creditors for an extension of its repayment schedule on its short-term loans. This loan repayment schedule is further discussed under Note 14 to our consolidated financial statements contained in this Annual Report on Form 20-F. The following related key extended repayment terms and conditions apply to ChipMOS Taiwan's bank loans due between 2009 to 2013. For repayment of non-revolving short-term loans, ChipMOS Taiwan agreed to repay 20% of the outstanding principal on December 31, 2010, to repay the balance outstanding in eight quarterly installments by the end of 2012, and to set aside NT\$50 million per month with Bank of Taiwan from January 2011 until December 2012 to fund the scheduled estimated principal repayments. ChipMOS Taiwan may maintain its current revolving short-term facilities but is required to increase its collateral to secure up to 60% of the outstanding principal amount by the end of 2011. For repayment of long-term loans, ChipMOS Taiwan agreed to set aside with Bank of Taiwan NT\$300 million per month for 2011, NT\$270 million per month for 2012 and NT\$150 million per month for 2013 to meet the principal repayment schedule. The bank creditors agreed that ChipMOS Taiwan may arrange additional bank loans for purchasing operating materials by using its available assets as collateral. These banks also agreed not to unilaterally foreclose and seize any machinery, property or deposits of ChipMOS Taiwan and agreed to waive any penalties that might have to be imposed on the Company in case of breach under the existing loan agreements.

In July 2011, ChipMOS Taiwan obtained a syndicated loan facility from banks in Taiwan in the amount of NT\$8,410 million (US\$278 million) separated into two parts with its respective term of four years and five years. This loan facility was used to refinance the existing bank debts and equipment leases in July and August 2011.



**Table of Contents**

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. The application by the Company for early repayment of the outstanding loan in four installments was approved in April 2010 without penalty. The syndicated loan facility was fully repaid in January 2011. See Item 3. Key Information Risk Factors Risks Relating to Our Business Our significant amount of indebtedness and interest expense will limit our cash flow and could adversely affect our 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.

	2009 NT\$	Year ended December 31,		2011 US\$
		2010 NT\$	2011 NT\$	
(in millions)				
Net cash provided by (used in):				
Operating activities	\$ 781.0	\$ 8,688.9	\$ 5,898.0	\$ 194.8
Investing activities	(1,042.5)	(2,454.2)	(3,250.7)	(107.4)
Financing activities	(2,503.8)	(2,959.5)	(2,464.6)	(81.4)
Effect of exchange rate changes on cash	(1.8)	(16.8)	31.9	1.1
Net increase (decrease) in cash	\$ (2,767.1)	\$ 3,258.4	\$ 214.6	\$ 7.1

**Net Cash Provided by Operating Activities**

Net cash provided by operating activities totaled NT\$5,898 million (US\$195 million) in 2011, compared to NT\$8,689 million in 2010. The decrease in net cash provided by operating activities was primarily due to a net loss of NT\$15 million (US\$1 million) in 2011, compared to net income of NT\$1,645 million in 2010, an increase of accounts receivables of NT\$693 million (US\$23 million) in 2011 compared to a decrease of accounts receivable of NT\$1,564 million in 2010, the decrease of depreciation expenses, which was NT\$5,514 million (US\$182 million) in 2011 compared to NT\$6,133 million in 2010, a decrease of accrued expenses and other liabilities of NT\$219 million (US\$7 million) in 2011 compared to an increase of accrued expenses and other liabilities of NT\$473 million in 2010. The net cash provided by operating activities was partially offset by the recovery of allowance for doubtful receivables, which was NT\$69 million (US\$2 million) in 2011 compared to NT\$2,718 million in 2010.

Net cash provided by operating activities totaled NT\$8,689 million in 2010, compared to NT\$781 million in 2009. The increase in net cash provided by operating activities was primarily due to a net income of NT\$1,645 million in 2010, compared to net loss of NT\$4,419 million in 2009 and a decrease of accounts receivable of NT\$1,564 million in 2010 compared to an increase of accounts receivable of NT\$1,241 million in 2009. The increase in net cash provided by operating activities was also partially offset by the increase of recovery of allowance for doubtful receivables, which was NT\$2,718 million in 2010 compared to NT\$561 million in 2009.

**Net Cash Used in Investing Activities**

Net cash used in investing activities totaled NT\$3,251 million (US\$107 million) in 2011, compared to NT\$2,454 million in 2010. The increase in net cash used in investing activities was primarily the result of a decrease in the proceeds from sales of ChipMOS Taiwan's outstanding shares to Siliconware Precision which decreased to NT\$487 million (US\$16 million) in 2011 from NT\$1,133 million in 2010.

Net cash used in investing activities totaled NT\$2,454 million in 2010, compared to NT\$1,043 million in 2009. The increase in net cash used in investing activities was primarily the result of an increase in capital expenditures and partially offset by the proceeds from sales of property, plant and equipment which increased to NT\$899 million in 2010 from NT\$19 million in 2009 and the proceeds from the sales of 11.0% of ChipMOS Taiwan's outstanding share to Siliconware Precision of NT\$1,133 million in 2010. Capital expenditures were NT\$4,468 million in 2010, compared to NT\$1,245 million in 2009.





## **Table of Contents**

### ***Net Cash Used in Financing Activities***

Net cash used in financing activities totaled NT\$2,465 million (US\$81 million) in 2011, compared to NT\$2,959 million in 2010. The decrease in net cash used in financing activities was primarily the result of the net payments of long-term loans of NT\$1,398 million (US\$46 million) in 2011, compared to NT\$2,227 million in 2010 and net payments of short-term loans of NT\$948 million (US\$31 million) in 2011, compared to NT\$869 million in 2010. This was partially offset by the net proceeds of convertible notes of NT\$131 million in 2010.

Net cash used in financing activities totaled NT\$2,959 million in 2010, compared to NT\$2,504 million in 2009. The increase in net cash used in financing activities was primarily the result of the net payments of long-term loans of NT\$2,227 million in 2010, compared to NT\$1,573 million in 2009 and the net payments of short-term bank loans of NT\$869 million in 2010, compared to NT\$382 million in 2009. This was partially offset by the net proceeds of convertible notes of NT\$131 million in 2010 compared to the net payments of NT\$517 million in 2009.

### ***Capital Resources***

Capital expenditures in 2009 were funded by NT\$781 million in cash flows from operating activities. Capital expenditures in 2010 were funded by NT\$8,689 million in cash flows from operating activities. Capital expenditures in 2011 were funded by NT\$5,898 million (US\$195 million) in cash flows 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, 2011, we had long-term loans of NT\$9,168 million (US\$303 million) (including current portions of such long-term loans of NT\$684 million (US\$23 million)). As of December 31, 2011, all the credit line of long-term bank loans were fully utilized. As of December 31, 2011, NT\$5,478 million (US\$181 million) of our long-term loans were collateralized by equipment, and NT\$3,690 million (US\$122 million) were collateralized by land and buildings. Of our long-term loans, in the aggregate:

NT\$9,072 million (US\$300 million) were floating rate loans with a rate between 1.92% and 3.0421% as of December 31, 2011, repayable quarterly or semi-annually until January 2015 to March 2018; and

NT\$96 million (US\$3 million) were floating rate loans with a rate of 2.315% as of December 31, 2011, repayable quarterly until February 2012.

As of December 31, 2011, 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. This loan facility was fully repaid in May 2011.

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. This loan facility was fully repaid in August 2011.

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. This loan facility was fully repaid in July 2011.

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

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. This loan facility was fully repaid in July 2011.

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 was adjusted to NT\$1,500 million. As of December 31, 2011, 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. In November 2009, the facility downward adjusted to NT\$2,100 million. This loan facility was fully repaid in August 2011.

**Table of Contents**

In July 2008, we obtained a syndicated loan facility from banks in Taiwan in the amount of US\$74.5 million for a term of three years. This loan facility is guaranteed by ChipMOS Taiwan. This loan facility was fully repaid on January 31, 2011.

On July 14, 2011, we obtained a syndicated loan facility from banks in Taiwan in the amount of NT\$8,410 million (US\$278 million) separated into two parts with its respective term of four years and five years. This loan facility is secured by existing land and buildings and equipment owned by ChipMOS Taiwan. As of December 31, 2011, 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 1.6:1; and

maintain the earnings before interest, taxes, depreciation and amortization to gross interest expense ratio above 1.5:1 and 2:1 and 2.5:1.

In December 2009, ThaiLin was waived from compliance with the earnings to principal and interest ratio requirement for 2009. ThaiLin was in compliance with the financial ratio requirement for 2010 and 2011. In February and November 2009 and November 2010, ChipMOS Taiwan received three separate waiver request approvals from its creditors and was waived from compliance with the financial ratio requirements for 2009 and 2010, respectively. ChipMOS Taiwan was in compliance with the financial ratio requirement for 2011. 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 with the financial ratio requirements as of December 31, 2009.

In December 2010, ChipMOS Taiwan further received approval for its request for repayment extension from over 50% of the creditor banks for its short-term loans and the amount of NT\$1,468 million has been extended on December 31, 2010. The key extension repayment terms include agreement by ChipMOS Taiwan to repay 20% of the outstanding short-term loans on December 31, 2010 and to repay the balance in eight installments by setting aside monthly installments of NT\$50 million with Bank of Taiwan, the largest bank creditor, commencing January 2011 to December 2012.

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, 2011:

	As of December 31, 2011	
	NT\$	US\$
	(in millions)	
During 2012	\$ 684	\$ 23
During 2013	2,278	75
During 2014	2,370	78
During 2015	1,794	59
During 2016 and onwards	2,042	68
	\$ 9,168	\$ 303

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

As of December 31, 2011, certain of our land and buildings and machinery with an aggregate net book value of NT\$5,514 million (US\$182 million) and NT\$5,151 million (US\$170 million), respectively, were pledged as collateral in connection with our long-term borrowings. Approximately 77% of our net property, plant and equipment in terms of book value was pledged as collateral for our long-term loans.

Our unused credit lines for short-term loans, as of December 31, 2011, totaled NT\$869 million (US\$29 million), which have expired or will expire from January 2012 to November 2012. As of December 31, 2011, our long-term credit facilities were fully drawn.

---

## **Table of Contents**

As of December 31, 2011, we had unsecured short-term credit loans for importing raw materials in the total amount of NT\$132 million (US\$4 million), which were due between January 2012 and February 2012, and secured loans for import in the total amount of NT\$115 million (US\$4 million), which were due between February 2012 and March 2012, and an unsecured short-term working capital loan of NT\$300 million (US\$10 million), which was due in January 2012.

On March 7, 2012, ChipMOS Shanghai obtained banking facilities of US\$9 million (NT\$278 million) for a term of three years from a bank. The banking facilities are secured by land use right, building and equipment and US\$0.7 million (NT\$21 million) have been drawdown as of the date of this Annual Report on Form 20-F.

We believe our current cash and cash equivalents, cash flow from operations and available credit facilities will be sufficient to meet our capital spending and other capital needs through the end of 2012. See Item 3. Key Information Risk Factors Risks Relating to Our Business Our significant amount of indebtedness and interest expense will limit our cash flow and could adversely affect our operations. There can be no assurance regarding these matters, however, considering prevailing global economic conditions which continue to have a negative impact on our ability to accurately forecast our revenues, results of operations and cash position.

### ***Capital Lease Obligations***

ChipMOS Taiwan negotiated with its lessors and converted the leases of certain equipment into capital leases in November 2009. As of December 31, 2010, ChipMOS Taiwan had capital lease obligations of NT\$1,454 million to be repaid between 2011 and 2013, with an interest rate between 4.0888% to 4.0973%. The leased equipment and the corresponding capital leases payable are recorded at the lower of the fair value of the leased equipment and the present value of the minimum lease payments of such assets. The capital leases were fully repaid with the proceeds of the new NT\$8,410 million (US\$278 million) long-term loans in July 2011.

### ***Convertible Notes***

As of December 31, 2011, all convertible notes have been fully converted or redeemed and no convertible notes remained outstanding.

On November 3, 2004, ChipMOS Bermuda issued US\$85 million of 1.75 % Convertible Senior Notes due 2009 (the 2004 Notes), with a conversion price of US\$7.85 per share (which was later adjusted to a conversion price of US\$6.28 per share). In December 2004, we repurchased and cancelled approximately US\$1 million of the 2004 Notes. In October 2006, we made an induced conversion offer to the noteholders of the 2004 Notes in which noteholders converted approximately US\$7 million in aggregate principal amount of the 2004 Notes into a combination of common shares and cash. In November 2006, we repurchased approximately US\$6 million in aggregate principal amount of the 2004 Notes pursuant to the noteholders' put option under the indenture. In 2007, ThaiLin, ChipMOS Taiwan's 42.9% owned subsidiary, purchased approximately US\$9 million of the 2004 Notes. During 2008, we repurchased approximately US\$15 million of the 2004 Notes. In October 2009, we completed the closing of two privately negotiated transactions with two investors holding, in aggregate, US\$54 million of the 2004 Notes. In the first transaction, the Company and an institutional investor completed the exchange of US\$45 million in outstanding 2004 Notes for US\$15 million in cash and US\$16 million of the 10% Notes (as defined below) issued pursuant to an indenture with The Bank of New York Mellon as indenture trustee. In the second transaction, the Company and ThaiLin, ChipMOS Taiwan's 42.9% owned subsidiary, completed an exchange of US\$9 million in outstanding 2004 Notes for US\$3 million of the 10% Notes and US\$6 million of the 8% Notes (as defined below) issued by us. The remaining 2004 Notes, approximately US\$2 million, were repaid in full at maturity in 2009.

In September 2006, we issued US\$100 million 3.375% Convertible Senior Notes due 2011 with a conversion price of US\$6.85 (US\$27.4) per share, issued pursuant to an indenture with The Bank of New York Mellon as the indenture trustee (the 2006 Notes). In 2007, we repurchased approximately US\$1 million in aggregate principal amount of the 2006 Notes. In 2008, we repurchased approximately US\$97 million in aggregate principal amount of the 2006 Notes, primarily pursuant to the put option offered under the indenture. On March 31, 2011, the Company has elected to redeem approximately US\$2 million in aggregate principal amount of the 2006 Notes, then outstanding. The effective date of the redemption is May 3, 2011.

In 2009, we issued the following convertible notes (collectively, the 2009 Notes):

US\$16 million of 10% Convertible Senior Notes due 2014 with conversion price of US\$1.5 (US\$6.0) per share, issued in October 2009 pursuant to an indenture with The Bank of New York Mellon as indenture trustee (the 10% Notes);

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

US\$3 million of 10% Senior Convertible Bonds due 2014 with a conversion price of US\$1.5 (US\$6.0) per share, pursuant to notes issued in October 2009 by us directly to ThaiLin, ChipMOS Taiwan's 42.9% owned subsidiary, in exchange of outstanding 2004 Notes (also, the 10% Notes ); and

---

## **Table of Contents**

US\$21 million of 8% Senior Convertible Bonds due 2014 with conversion price of US\$1.25 (US\$5.0) per share, pursuant to notes issued by us directly to the noteholders thereof (the 8% Notes ), of which, US\$16 million were issued to ThaiLin in October 2009. Approximately US\$6 million of which principal amount was issued in exchange for outstanding 2004 Notes and US\$10 million of which principal amount was purchased by ThaiLin at face value.

In December 2009, we entered into purchase agreements with seven other investors (the Purchasers ) for the purchase of 8% Notes at face value in the principal aggregate amount of US\$10 million. The Purchasers included the Chairman and Chief Executive Officer of the Company, Mr. Shih-Jye Cheng, who purchased the 8% Notes in the principal amount of US\$1 million on the same terms and conditions as the other Purchasers. The closing occurred on December 29, 2009 for all Purchasers other than PacMOS and the Chairman of PacMOS, Mr. Chi Hung Yip. The closing for PacMOS and Mr. Chi Hung Yip (in the aggregate amount of US\$5 million) occurred in March 2010.

As of December 31, 2011, all 2009 Notes have been fully converted into our common shares, in various conversion transactions that occurred during the first quarter of 2010 through to second quarter of 2011. The conversion prices of our convertible notes disclosed in the foregoing paragraph contain corresponding adjusted figures in brackets denoting the effect of the Company's 1-for-every-4 reverse stock split effective on January 21, 2011.

In March 2010, we issued US\$5 million of 8% Senior Convertible Bonds due 2015, upon the same commercial terms as the 8% Notes (the 2010 Notes ), all of which have been fully converted into our common shares, in conversion transactions that occurred in May 2010 and April 2011.

The amount converted to our common shares upon conversion of the 2009 Notes and the 2010 Notes included an amount equal to the sum of any make-whole amount and any accrued and unpaid interest, calculated in accordance with the terms and conditions of the 2009 Notes and the 2010 Notes. The make-whole amount was the amount of interest that would have accrued from the applicable conversion date until the stated maturity, discounted to the present value using the published yield on U.S. treasury notes having a comparable remaining tenor on the determination date plus 50 basis points; provided that the additional 50 basis points was not added if the applicable treasury note rate is greater than two percent (2%) of any unpaid interest accrued as of the conversion date. Under the 2009 Notes and 2010 Notes PIK or payment in kind provisions, unpaid interest was payable on a quarterly basis and the Company had the option, subject to the satisfaction of certain conditions, of paying interest in cash or common shares or a combination thereof. When interest was paid in our common shares, the number of common shares was equal to the amount of interest payable in common shares divided by the volume weighted average price of our common shares over a period of 10 consecutive trading days ending on the sixth day prior to the applicable payment date.

See Item 3. Key Information Risk Factors Risks Relating to Economic Conditions and the Financial Markets for additional information. For a discussion of the accounting for the conversion feature of the convertible notes under US GAAP, see Critical Accounting Policies Convertible Notes and US GAAP Reconciliation .

### **Research and development, patents and licenses**

See the discussion under Item 4. Information on the Company Research and Development .

### **Trend Information**

See the discussion under Item 4. Information on the Company Industry Background and Item 4. Information on the Company Competition .

### **Off-Balance Sheet Arrangements**

As of December 31, 2011, we had no off-balance sheet arrangements.

### **US GAAP Reconciliation**

Our consolidated financial statements are prepared in accordance with ROC GAAP, which differs in certain material respects from US GAAP. The following table sets forth a comparison of our net income (loss), total assets and shareholders' equity (including noncontrolling interests) in accordance with ROC GAAP and US GAAP for the periods indicated:

**Table of Contents**

	Year ended as of December 31,			
	2009 NT\$	2010 NT\$	2011 NT\$	2011 US\$
(in millions)				
Net income (loss) attributable to ChipMOS in accordance with:				
ROC GAAP	\$ (4,418.7)	\$ 1,644.7	\$ (15.2)	\$ (0.5)
US GAAP	(4,550.3)	1,616.9	46.1	1.5
Total assets in accordance with:				
ROC GAAP	30,356.2	31,315.0	28,281.1	934.3
US GAAP	30,116.4	31,035.1	27,964.2	923.8
Total equity (including noncontrolling interests) in accordance with:				
ROC GAAP	9,952.2	14,043.4	14,983.3	495.0
US GAAP	\$ 9,433.6	\$ 13,372.6	\$ 14,288.9	\$ 472.0

Note 25 to our consolidated financial statements contained in this Annual Report on Form 20-F describes the principal differences between ROC GAAP and US GAAP as they relate to us, and a reconciliation to US GAAP for certain items, including net income (loss) and shareholders equity. Differences between ROC GAAP and US GAAP which have an effect on our net income (loss) as reported under ROC GAAP relate to, among other things, depreciation policy, treatment of loss on partial disposal of subsidiary while retaining control, pension expenses, share-based compensation and accounting for our convertible notes.

Under FASB ASC 718, share-based compensation transactions are generally required to be accounted for using a fair-value-based method and recognized as expenses in the consolidated statements of operations. The standards became effective for the first interim period beginning after December 15, 2005. For more information, see Critical Accounting Policies Share-Based Compensation and Notes 25j and 26h to our consolidated financial statements contained in this Annual Report on Form 20-F.

Under FASB ASC 815, we are required to bifurcate and separately account for the conversion feature of our convertible notes as embedded derivatives contained in the convertible notes. Under US GAAP, we are required to carry these embedded derivatives on our balance sheet at fair value and changes in fair values of these embedded derivatives are reflected in the consolidated statement of operations. The change in fair value for embedded derivative liabilities for the conversion feature for the year ended December 31, 2011, under US GAAP was NT\$57 million (US\$2 million) and the resulting net income for the year ended December 31, 2011, under US GAAP was approximately NT\$46 million (US\$2 million). For more information, see Note 25i to our consolidated financial statements contained in this Annual Report on Form 20-F.

**Recent Accounting Pronouncements**

See Note 26a to our consolidated financial statements contained in this Annual Report on Form 20-F for a description of the authoritative accounting principles recognized by the Financial Accounting Standards Board ( FASB ), FASB 's issuance of FASB ASC guidance and the extent to which these will impact our consolidated financial statements.

**Non-GAAP Financial Information Derived from US GAAP Measures**

To supplement our consolidated income statement for the year ended December 31, 2011, on a ROC GAAP basis, our management uses a non-GAAP measure of net income, which is net income pursuant to US GAAP adjusted to exclude two non-cash items referred to as special items. The two non-cash items excluded are changes in the fair value of the embedded derivative liabilities and amortization of discount on convertible notes. These items are considered by the management to be outside of our core operating results. For example, changes in the fair value of the embedded derivative liabilities relate heavily to the price of our company 's common shares, interest rate and volatility, all of which are difficult to predict and outside of the control of our management.

For these reasons, our management uses non-GAAP adjusted measures of net income and non-GAAP net income per share, both derived from US GAAP measures to evaluate the performance of our core businesses and to estimate future core performance. In addition, this information facilitates our management 's internal comparisons to our historical operating results as well as to the operating results of our competitors.

Our management finds these supplemental non-GAAP measures to be useful, and believes these non-GAAP measures are useful to investors in enabling them to perform additional analyses of past, present and future operating performance and as a supplemental means to evaluate our core operating results. However, readers are reminded that non-GAAP numbers are merely a supplement to, and not a replacement for, ROC GAAP or US GAAP financial measures. They should be read in conjunction with ROC GAAP and US GAAP financial measures. It should be noted as well that our non-GAAP information may be different from the non-GAAP information provided by other companies.





**Table of Contents**

The following table sets forth, for the year ended December 31, 2011, reconciliation of US GAAP net income to non-GAAP net income:

	Year ended December 31, 2011	
	NT\$ (in millions, except for per share data)	US\$
US GAAP Net Income Attributable to ChipMOS (Basic) <sup>(1)</sup>	\$ 46.1	\$ 1.5
US GAAP Net Income Attributable to ChipMOS (Diluted)	46.1	1.5
Special Items (in Non-Operating Income (Expenses), Net)		
Changes in the fair value of the embedded derivative liabilities <sup>(2)</sup>	57.1	1.9
Amortization of discount on convertible notes <sup>(3)</sup>	1.3	0.0
Total Special Items	58.4	1.9
Non-GAAP Adjusted Net Income Attributable to ChipMOS (Basic)	\$ 104.5	\$ 3.4
Non-GAAP Adjusted Net Income Attributable to ChipMOS (Diluted)	\$ 104.5	\$ 3.4
US GAAP Net Income Per Share (Basic)	\$ 1.73	\$ 0.06
Adjustment for special items	2.20	0.07
Non-GAAP Net Income Per Share (Basic)	\$ 3.93	\$ 0.13
US GAAP Net Income Per Share (Diluted)	\$ 1.71	\$ 0.06
Adjustment for special items	2.17	0.07
Non-GAAP Net Income Per Share (Diluted)	\$ 3.88	\$ 0.13

Notes:

- (1) Reflects the US GAAP adjustments as described in Note 25 of the notes to the consolidated financial statements contained in this Annual Report on Form 20-F.
- (2) The management of our company believes excluding non-cash special item for the changes in the fair value of the embedded derivative liabilities from its non-GAAP financial measure of net income is useful for itself and investors as such loss does not have any impact on cash available to our company.
- (3) The management of our company believes excluding non-cash amortization expense of discount on convertible notes from its non-GAAP financial measure of net income is useful for itself and investors as such expense does not have any impact on cash available to our company.

**Taxation**

ChipMOS Taiwan is entitled to tax incentives generally available to Taiwan companies under the ROC Statute of Upgrading Industries, including tax credits of 30% for certain research and development and employee training expenses (and, if the amount of expenditure exceeds the average amount of expenditure for the preceding two years, 50% of the excess amount may be credited against tax payable) and from 5% to 7% for certain investments in automated equipment and technology. These tax credits must be utilized within five years from the date on which they were earned. In addition, except for the last year of the five-year period, the aggregate tax reduction from these tax credits for any year cannot exceed 50% of that year's income tax liability. In 2009, 2010 and 2011, tax credits resulted in tax savings for ChipMOS Taiwan of nil, nil and approximately NT\$164 million (US\$5 million), respectively.

ThaiLin was granted a ROC income tax exemption for a period of five years on income attributable to the expansion of its production capacity as a result of purchases of new equipment funded by capital increase in 2002, which expired on December 31, 2009.

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

ThaiLin is also entitled to other tax incentives generally available to Taiwan companies under the ROC Statute of Upgrading Industries, including tax credits of 5% to 7% for certain investment in automated equipment and technology. These tax credits must be utilized within five years from the date on which they were earned. In addition, except for the last year of the five-year period, the aggregate tax reduction from these tax credits for any year cannot exceed 50% of such year's income tax liability. In 2009, 2010 and 2011, tax credits resulted in tax savings for ThaiLin of nil, approximately NT\$9 million and NT\$15 million (US\$496 thousand), respectively.

Net income generated by ChipMOS Taiwan and ThaiLin after January 1, 1998, which is not distributed in the year following the year the income was generated, is subject to income tax at the rate of 10%. If that net income is subsequently distributed, the income tax previously paid on that income is credited against the amount of withholding tax payable by shareholders, who are not individuals or entities of the Republic of China (for taxation purposes), in connection with the distribution.

The ROC government enacted the ROC Alternative Minimum Tax Act ( AMT Act ) that became effective on January 1, 2006. The alternative minimum tax ( AMT ) imposed under the AMT Act is a supplemental tax which is payable if the income tax payable pursuant to the ROC Income Tax Act is below the minimum amount prescribed under the AMT Act. The taxable income for calculating the AMT includes most income that is exempted from income tax under various legislations, such as tax holidays and investment tax credits. The AMT rate for business entities is 10%. However, the AMT Act grandfathered certain tax exemptions and tax credits granted prior to the enactment of the AMT. The effects of the AMT on the tax expenses of ChipMOS Taiwan and ThaiLin were reflected in 2011.

**Table of Contents**

In accordance with the relevant tax rules and regulations of the PRC, ChipMOS Shanghai is entitled to an income tax exemption starting from the first profit making year, with a full exemption available for the first two years and a 50% exemption available for three additional years thereafter. As the first profit-making year for ChipMOS Shanghai was 2004, the profits made in the years 2004 and 2005 were fully exempt, and the profits made in the years 2006 through 2008 were subject to a 50% tax exemption. Commencing January 1, 2009, ChipMOS Shanghai is subject to a 25% tax on profits. Any tax losses can only be carried forward for five years.

**Tabular Disclosure of Contractual Obligations and Commercial Commitments**

The following table summarizes our contractual obligations and commitments as of December 31, 2011, or the periods indicated:

Contractual Obligations	Total NT\$	Payments Due by Period			
		Less than 1 year NT\$	2-3 years NT\$ (in millions)	4-5 years NT\$	More than 5 years NT\$
Long-term debts <sup>(1)</sup>	\$ 9,870.1	\$ 942.1	\$ 4,990.8	\$ 3,810.5	\$ 126.7
Short-term loans <sup>(1)</sup>	549.4	549.4			
Operating leases	204.4	26.3	52.3	49.3	76.5
Capital commitments	686.9	686.9			
<b>Total contractual cash obligations</b>	<b>\$ 11,310.8</b>	<b>\$ 2,204.7</b>	<b>\$ 5,043.1</b>	<b>\$ 3,859.8</b>	<b>\$ 203.2</b>

Notes:

(1) Includes interest payments. Assumes level of relevant interest rates remains at December 31, 2011, level throughout all relevant periods. In addition to the commitments set forth in the contractual obligations table above, we have certain outstanding purchase orders relating to the procurement of raw materials for which there are no definite delivery dates or deadlines.

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

Our board of directors currently comprises nine directors who were elected by our shareholders. The number of directors, which must not be less than three nor greater than nine according to our bye-laws, is set by our directors but so long as a quorum of directors remains in office, casual vacancies on the board may be filled by the board. The quorum for a meeting of the directors is set by the board and otherwise is two in number. The chairman of the board is appointed from among the members of the board.

There is no requirement under Bermuda law that a director be a shareholder.

The following table sets out the names of our directors and executive officers, their positions with our company and their ages as of March 31, 2012. The business address for our directors and executive officers is No. 1, R&D Road 1, Hsinchu Science Park, Hsinchu, Taiwan, Republic of China.

**Table of Contents**

Name	Age	Position	Term Expires
Shih-Jye Cheng	54	Chairman and Director/Chief Executive Officer	2014
Antonio R. Alvarez	56	Independent Director	2014
Chin-Shyh Ou	55	Deputy Chairman and Independent Director	2014
Hsing-Ti Tuan	68	Director	2012
Yeong-Her Wang	56	Independent Director	2012
Shou-Kang Chen	51	Chief Financial Officer and Director	2012
John Yee Woon Seto	68	Independent Director	2013
Chao-Jung Tsai	58	Director	2013
Rong Hsu	62	Independent Director	2013
Carl Lei	48	Acting President of ChipMOS Shanghai	
Lafair Cho	50	President of ThaiLin	
Li-Chun Li	55	Chief Operating Officer	
Steve Cheng	50	President of ChipMOS USA	
Vincent Hsu	43	Vice President, LCDD Production Group	
Michael Lee	47	Vice President, Chupei Production Group	
Ivan Hsu	46	Vice President, Memory Production Group	
Jesse Huang	46	Vice President, Assembly Production Group	
David W. Wang	64	Vice President, Research & Strategy Development Center	
I-Fan Chiang	54	Vice President, I.T.M. Center	

*Shih-Jye Cheng* has served as one of our directors and chief executive officer since our inception. He was our deputy chairman from our inception to May 2004 and became our chairman in May 2004. He has also served as a director and president of ChipMOS Taiwan since 1997, the chairman of ChipMOS Taiwan since June 2003, the chairman of ThaiLin since 2002. He was a director of Syntax-Brilliant Corporation from November 2005 to June 2008, the chairman of ChipMOS Shanghai from 2002 to June 2005, the chairman of Chantek from 2002 to November 2005, the chairman of ChipMOS Logic from January 2004 to November 2005, the chairman of Advanced Micro Chip Technology Co., Ltd. from 2003 to April 2004 and a director of Ultima Electronics Corp. from 2000 to June 2003. He was a division head of the back-end operation of Mosel from 1992 to 1997. Mr. Cheng has a master's degree in business administration from Saginaw Valley State University. Mr. Cheng is currently under indictment of the Taipei District Prosecutor's Office for matters relating to the purchase by ChipMOS Taiwan and ThaiLin of certain repurchase notes in 2004. Although Mr. Cheng was found not guilty by the Taipei District Court on October 1, 2007, the prosecutor appealed the Taipei District Court's decision on October 27, 2007. For more information, please see Item 3. Key Information Risk Factors Risks Relating to Our Business 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.

*Antonio R. Alvarez* has served as one of our directors from July 2005. Mr. Alvarez was the chief operating officer of Advance Analogic Technology from October 2011 until its acquisition by Skyworks in January 2012. He was president and chief executive officer of Leadis Technology Inc. from November 2005 to January 2009 and is currently a director. He was senior vice president and general manager of the memory products division of Cypress Semiconductor Corporation from 1998 to July 2005, and senior vice president of research and development from 1991 to 2001. He holds master's and bachelor's degrees in electrical engineering from Georgia Institute of Technology, where he is a member of the advisory board of the Electrical Engineering Department. He is a member of the Institute for Electrical and Electronic Engineers.

*Chin-Shyh Ou* has served as one of our directors since August 2008. He has been the deputy chairman since August 2010. He has served as a director of ChipMOS Taiwan since June 2007. Mr. Ou joined the National Chengchi University as an associate professor in 1993 and a professor in 1997. In 1998, he joined National Chung Cheng University as a professor and the chairman of the Department of Accounting. He led a project to establish an executive MBA program and Graduate Institute of Accounting and Information Technology of National Chung Cheng University in 1999. Mr. Ou earned a master degree in Public Policy and Management from Carnegie Mellon University, and a Ph.D. degree in Business Administration (Accounting) from the University of Minnesota. Mr. Ou holds several professional licenses and qualifications, including U.S. Certified Public Accountant and Certified Internal Auditor.

*Hsing-Ti Tuan* has served as one of our directors since August 2000. Mr. Tuan was the executive vice president of ProMOS Technologies Inc. in charge of R&D from 2005 to 2010. Mr. Tuan was the president of Mosel Vitelec Corp., USA from 1994 to 2009. Mr. Tuan was the acting president of Mosel from November 2004 to December 2005 and previously served as the executive vice president of their research and development division. He was also the vice president of Mosel from 1992 to 1996. Mr. Tuan holds a master's degree in electrical engineering from Utah State University and a bachelor's degree in electrical engineering from National Cheng Kung University in Taiwan.



## **Table of Contents**

*Yeong-Her Wang* has served as one of our directors since July 2004 and a member of the board of directors of ChipMOS Taiwan. He has been a professor in the Department of Electrical Engineering of National Cheng Kung University since 1992. He serves as the vice president of National Applied Research Laboratories since 2007. He was also an associate dean of the College of Engineering between 1999 and 2003, chairman of the Department of Electrical Engineering between 1996 and 1999, associate director of the Department of Electrical Engineering between 1993 and 1996 and director of the Electrical Factory, College of Engineering of National Cheng Kung University between 1995 and 1996. Mr. Wang holds Ph.D., master's and bachelor's degrees from National Cheng Kung University in Taiwan.

*Shou-Kang Chen* has served as one of our directors since June 2005. He has served as our chief financial officer, investor relations officer and head of the finance division of ChipMOS Taiwan since 2002. He was the head of our strategy development department from 2000 to 2001. He was the department head of the quality lab of ChipMOS Taiwan from 1998 to 2000. Mr. Chen holds a bachelor's degree in mining and petroleum engineering and a master of science degree and a Ph.D. degree from the graduate school of mining, metallurgy and material science of National Cheng Kung University in Taiwan.

*John Yee Woon Seto* has served as one of our directors since August 2010. He was a member of ChipMOS's Board of Directors from August 2000 to May 2004. Dr. Seto was a founder and senior vice president of operation and strategic planning of Vitelic Corporation U.S.A. He served as the executive vice president of the business group of Mosel Vitelic Inc. from 1995 to 2005. He was a director of Mosel Vitelic Inc. from 1999 to 2008. He served on the board of directors in a number of companies, such as ProMOS Technologies Inc. and Advanced Analogic Technologies Inc. He has been the president and CEO of International Capture Tech Co LTD since 2006. He holds a Ph.D. in electrical engineering from University of California at Berkeley.

*Chao-Jung Tsai* has served as one of our directors since November 2004. Mr. Tsai was a director of ChipMOS Taiwan from January 2001 to December 2005, as a representative of Siliconware Precision, where he was a director from June 2005 to December 2009 and served as a supervisor from June 2002 to June 2005. He was also a supervisor of Phoenix Precision Technology Co. Ltd. from June 2005 to December 2009. He was previously president of Grand Cathay Securities Co., Ltd. and assistant vice president of China Trust Commercial Bank Co., Ltd. Mr. Tsai received his bachelor's degree in statistics from National Cheng Kung University and master's degree in management of technology from National Chiao Tung University in Taiwan. He holds Taiwan CPA and CFA licenses.

*Rong Hsu* was appointed by our board of directors on October 1, 2008 to fill the vacancy from Mr. Takaki Yamada's resignation. He has served as one of our directors from July 2005 to August 2008. He has been the director of Corp. R&D, Delta Electronics since February 2009. He has been the vice president of Spatial Photonics Inc. since May 2006. He was a founder of eLCOS Microdisplay Technology Group where he was the president from April 2001 to December 2005, senior director of operations at Aurora Systems Co. from 1999 to March 2001, director of manufacturing for micro-display systems and testing at S-Vision Co. from 1996 to 1999, manager of manufacturing at nCHIP Co. from 1991 to 1996, research engineer at Lawrence Livermore National Laboratory from 1988 to 1991 and senior engineer at Intel Corporation from 1982 to 1988. He has a doctorate degree in material engineering from the University of Maryland, a master's degree in material science from Brown University and a bachelor's degree in mechanical engineering from National Taiwan University. He is a founding member and senior advisor of the Chinese American Semiconductor Professional Association.

*Carl Lei* has served as the acting president and vice president of assembly and testing operations of ChipMOS Shanghai since July 2010. Mr. Lei was the deputy director of Backend Operation of ProMOS from 2004 to 2010 and product manager of Mosel from 1998 to 2003. Mr. Lei received his bachelor's degree from Feng Chia University in Taiwan.

*Lafair Cho* has served as ThaiLin's president since December 1, 2003 and a director since December 30, 2002. He was vice president of ThaiLin from February 1, 2003 to November 30, 2003. He has also served as vice president of the memory production group of ChipMOS Taiwan from July 2003 to August 2004 and as a director of ChipMOS Taiwan from October 2003 to June 2007. He served as a deputy assistant vice president of the IC testing division of ChipMOS Taiwan from April 2000 to December 2001 and as an assistant vice president of the IC testing division of ChipMOS Taiwan from January 2002 to January 2003. He served as manager of production material control of Mosel from 1993 to 1997. He holds a master's degree in industrial management from National Cheng Kung University in Taiwan.

*Li-Chun Li* has served as the Chief Operating Officer of ChipMOS Taiwan since January 2010. Prior to joining ChipMOS, he served as vice president of the Product Engineering group in Mosel-Vitelic (U.S.A.) and ProMOS Technologies Inc. from 2003 to 2009, and vice president of product development in Mosel-Vitelic (U.S.A.) and Mosel-Vitelic (Taiwan) from 1992 to 2003. Mr. Li received a bachelor's degree in electrical engineering from the University of California, Berkeley.

*Steve Cheng* has served as the president of ChipMOS U.S.A. since August 2008. Mr. Cheng has served as the director of Finance and Administration in ChipMOS U.S.A. since July 2004. He has been serving in ChipMOS U.S.A. since November 1999. He received a bachelor's degree in business banking and insurance from Feng Chia University in Taiwan.





---

## **Table of Contents**

*Vincent Hsu* has served as ChipMOS Taiwan's vice president of LCD driver production group since March 2012. He was assistant vice president of ChipMOS Taiwan from 2007 to 2012. He received a master's degree in Electrical Engineering from National Sun Yat-sen University in Taiwan.

*Michael Lee* has served as ChipMOS Taiwan's vice president of Chupei production group since November 2011 and vice president for wafer sort business group since June 2004. He was assistant vice president of ChipMOS Taiwan from 2003 to 2004. Mr. Lee received a master's degree from National Chiao Tung University in Taiwan.

*Ivan Hsu* has served as ChipMOS Taiwan's vice president of memory production group since December 2004. He was ChipMOS Taiwan's assistant vice president from 2003 to 2004 and deputy assistant vice president from 2002 to 2003. Mr. Hsu received a bachelor's degree from Feng Chia University in Taiwan.

*Jesse Huang* has served as ChipMOS Taiwan's vice president of assembly production group since April 2007. He was the assistant vice president of assembly engineering division formerly. He received a bachelor's degree in Physics from Soochow University in Taiwan.

*David W. Wang* joined ChipMOS Taiwan as vice president of Research and Strategy Development Center in 2007. Prior to joining ChipMOS, he was the vice president of Fibera, Inc. from 2001 to 2007. Mr. Wang served as Senior Director at Lam Research where his responsibilities included new product introduction, system integration, field escalation and management of regional teams from 1996 to 2001. Mr. Wang also worked for IBM's Microelectronics Division where he as Senior Engineer/ Manager led advanced packaging materials, process development and marketing organizations. Mr. Wang is a member of SEMI Taiwan Packaging and Test Committee and holds 45 US patents. Mr. Wang holds a Ph.D in M.S. from the University of Michigan and Bachelor of Science degree from Fu Jen University.

*I-Fan Chiang* has served as ChipMOS Taiwan's vice president of ITM Center since July 2010. Mr. Chiang was a vice president of Websurf Technologies Taiwan from 2003 to June 2010. Mr. Chiang also served as a vice president of Hitrust Inc. from 2000 to 2003. Mr. Chiang holds a bachelor's degree in Electronic Engineering from Tamkang University in Taiwan.

## **Board Practice and Terms of Directorship**

Our board of directors consists of three classes of directors. The first class, consisting of Hsing-Ti Tuan, Yeong-Her Wang and Shou-Kang Chen, is up for re-election at the annual general meeting in 2012 and then every third annual general meeting thereafter. The second class, consisting of John Yee Woon Seto, Chao-Jung Tsai and Rong Hsu, is up for re-election at the annual general meeting in 2013 and then every third annual general meeting thereafter. The third class, consisting of Shih-Jye Cheng, Antonio R. Alvarez and Chin-Shyh Ou, is up for re-election at the annual general meeting in 2014 and then every third annual general meeting thereafter.

Any director vacates his or her office if he or she:

is prohibited by law from being a director or ceases to be a director by virtue of the Bermuda Companies Act;

resigns from his or her office;

becomes bankrupt under the laws of any country or compounds with his or her creditors;

becomes of unsound mind or a patient for the purpose of any statute or applicable law relating to mental health and the board resolves that his or her office is vacated; or

is removed by a resolution passed by our shareholders at a special general meeting called for that purpose.

## **Share Ownership**

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

The following table sets forth certain information as of March 31, 2012 with respect to our common shares owned by our directors and executive officers.

**Table of Contents**

Name	Number of Common Shares Held	Percentage of Shares Issued and Outstanding	Number of Options Held <sup>(1)</sup>	Exercise Price of Options (US\$)	Expiration Date of Options
Shih-Jye Cheng	545,400	1.6%	86,250	2.55-21.488	2012/8/31-2016/8/31
Antonio R. Alvarez			*	*	*
Chin-Shyh Ou			*	*	*
Hsing-Ti Tuan	*	*	*	*	*
Yeong-Her Wang			*	*	*
Shou-Kang Chen	*	*	*	*	*
John Yee Woon Seto	*	*	*	*	*
Chao-Jung Tsai			*	*	*
Rong Hsu			*	*	*
Carl Lei	*	*	*	*	*
Lafair Cho	*	*	*	*	*
Steve Cheng	*	*	*	*	*
Vicent Hsu			*	*	*
Li-Chun Li			*	*	*
Michael Lee	*	*	*	*	*
Ivan Hsu	*	*	*	*	*
Jesse Huang	*	*	*	*	*
David W. Wang			*	*	*
I-Fan Chiang			*	*	*

Notes:

\* Upon exercise of options currently exercisable or vested within 60 days after March 31, 2012, would beneficially own less than 1% of our ordinary shares.

(1) Each option covers one of our common shares.

**Compensation Committee**

The aggregate compensation paid in 2011 to our directors and our executive officers, including cash and accrued pension payable upon retirement, was approximately NT\$97 million (US\$3 million). In 2011, we granted options to purchase 223,660 of our common shares and 15,080 share appreciation rights (SARs) to our directors and executive officers as set forth in the table below. These options will vest over a period of four years, with an equal proportion vesting on each of August 31, 2012, 2013, 2014 and 2015, except for certain options granted on August 31, 2011 that vested on the date of grant.

Number of common shares issuable upon exercise of options	Expiration date	Exercise price (US\$)	Considerations paid for options granted
181,160	August 31, 2017	5.1510	None
42,500	August 31, 2021	5.1510	None

  

Number of SARs granted	Expiration date	Exercise price (US\$)	Considerations paid for SARs granted
15,080	August 31, 2017	5.1510	None

We do not provide our directors with any benefits upon termination of employment.

Our compensation committee currently consists of Mr. Antonio R. Alvarez, Dr. John Yee Woon Seto and Dr. Rong Hsu. This committee reviews and recommends to our board of directors the compensation of all our directors and officers on at least an annual basis.

**Audit Committee**

Under our audit committee charter adopted on February 28, 2001 and amended on May 14, 2004, December 21, 2004 and August 27, 2009, our audit committee:

is directly responsible for the appointment, compensation, retention and oversight of the work of our external auditors or any other public accounting firm engaged for the purpose of preparing or issuing an audit report or to perform audit, review or attestation services;

oversees our accounting principles and policies, financial reporting and internal control over financial reporting, internal audit controls and procedures, financial statements and independent audits;

## **Table of Contents**

meets with management, our external auditors and, if appropriate, the head of the auditing department to discuss audited financial statements, audit reports or other communications, including, without limitation, any audit problems or difficulties relating to our financial statements, any major issues regarding accounting principles and the adequacy of our internal control over financial reporting;

pre-approves, or adopts appropriate procedures to pre-approve all audit and non-audit services, if any, provided to us by our external auditors;

establishes our internal complaints procedure for the receipt, retention and treatment of complaints received by us regarding accounting, internal accounting controls or auditing matters, and for the confidential, anonymous submission thereof by our employees;

evaluates the independence of and discuss with management the timing and process for implementing the rotation of the audit partners of the outside auditors; and

reviews and approves all our related party transactions.

The audit committee currently consists of Dr. John Yee Woon Seto, Dr. Chin-Shyh Ou and Dr. Yeong-Her Wang, all of whom are independent directors according to NASDAQ Marketplace Rules requirements. Dr. Chin-Shyh Ou serves as a financial expert to the Audit Committee.

## **Nominations Committee**

Under our nominations committee charter adopted on August 26, 2005, our nominations committee:

identifies individuals qualified to become members of the board of directors, selects or recommends nominees to the board of directors and, in the case of a vacancy of a director, recommends to the board of directors an individual to fill such vacancy;

develops and recommends to the board of directors standards to be applied in making determinations as to the absence of material relationships between us and a director;

identifies members of the board of directors qualified to fill vacancies on any committee thereof and recommends the appointment of the identified member(s) to the respective committee;

assists our management in the preparation of the disclosure in our annual proxy statement regarding the operations of the nominations committee; and

performs any other duties or responsibilities expressly delegated to the nominations committee by the board of directors from time to time relating to the nomination of members of the board of directors and any committee thereof.

Dr. Yeong-Her Wang, Dr. Rong Hsu and Dr. Chin-Shyh Ou are currently the members of our nominations committee.

## **Special Committee**

In connection with the indictment of Mr. Shih-Jye Cheng by the Taipei District Prosecutor's Office, our board of directors formed a special committee to evaluate the circumstances surrounding the indictment. As of March 31, 2012, the special committee was solely comprised of

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Mr. Yeong-Her Wang, our Company's independent director. The special committee has engaged K&L Gates LLP (formerly Kirkpatrick & Lockhart Preston Gates Ellis LLP) as its independent international legal counsel and Baker & McKenzie as its independent ROC legal counsel, and Ernst & Young (formerly know as Diwan, Ernst & Young) as its accounting advisor to assist in its evaluation and provide recommendations.

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. 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, have 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 have 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 our 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 maintains 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.

**Table of Contents**

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.

During its engagement by the special committee, Ernst & Young identified certain internal control weaknesses that existed during the relevant period of the special committee's investigation within ChipMOS Taiwan, ThaiLin and ChipMOS Logic (which was merged into ThaiLin on December 1, 2005). These weaknesses were in areas related to segregation of duties and of corporate governance on investment authorizations, insufficiency of training for financial personnel in respect of derivative transactions, and non-compliance with the applicable ROC regulations. These identified internal control weaknesses have either been addressed previously or have been remedied by our company and our subsidiaries.

In light of the identification of these internal control weaknesses, the special committee recommended that the audit committee of the board of directors lead a special task force and report to the board of the directors as to the effectiveness of the implementation of internal control over financial reporting, with an aim to enhance our company's financial personnel's knowledge of derivative transactions. The board of directors unanimously resolved to accept and adopt the special committee's recommendation in this regard.

In August 2006, we engaged Ernst & Young to design certain employee training sessions regarding derivative transactions and the applicable accounting treatment for these transactions.

See Item 3. Key Information Risk Factors Risks Relating to Our Business 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 .

**Employees**

The following table sets forth, as of the dates indicated, the number of our full-time employees serving in the functions indicated:

Function	As of			
	As of December 31,			March 31,
	2009	2010	2011	2012
General operations	3,001	3,224	3,193	3,084
Quality control	380	381	384	372
Engineering	1,299	1,360	1,377	1,362
Research and development	263	269	276	274
Sales, administration and finance	186	213	229	225
Others	370	361	335	331
<b>Total</b>	<b>5,499</b>	<b>5,808</b>	<b>5,794</b>	<b>5,648</b>

The following table sets forth, as of the dates indicated, a breakdown of the number of our full-time employees by geographic location:

Location	As of			
	As of December 31,			March 31,
	2009	2010	2011	2012
ThaiLin (Hsinchu Industrial Park)	695	668	596	554
ChipMOS Taiwan Hsinchu Production Group	1,703	1,658	1,664	1,599
ChipMOS Taiwan Southern Taiwan Production Group	2,479	2,886	2,997	2,895
Shanghai	617	591	531	593
Japan and the United States	5	5	6	7

<b>Total</b>	5,499	5,808	5,794	5,648
--------------	-------	-------	-------	-------

Our employees are not covered by any collective bargaining agreements. We have not experienced any strikes or work stoppages by our employees and believe that our relationship with our employees is good.



**Table of Contents****Share Option Plan and Share Appreciation Rights Plan**

We adopted a broad-based share option plan in 2001, which was amended at a special general meeting on March 19, 2004 to increase the number of shares available for issuance under the share option plan from 5,800,000 (1,450,000) to 9,000,000 (2,250,000). In August 2006, we adopted a second broad-based share option plan, which has 7,000,000 (1,750,000) shares available for issuance. In September 2011, we adopted a third broad-based share option plan, which has 1,000,000 shares available for issuance. Each share option plan provides that our directors, officers, employees and those of our affiliates may, at the discretion of our board of directors or a committee, be granted options to purchase our shares at an exercise price of no less than the par value of our common shares. The board or the committee has complete discretion to determine which eligible individuals are to receive option grants, the number of shares subject to each grant, the exercise price of all options granted, the vesting schedule to be in effect for each option grant and the maximum term for which each granted option is to remain outstanding, up to a maximum term of ten years. Shares available for issuance under these plans are replenished by shares that were subject to forfeited and expired share options.

In 2009, we granted 1,977,577 (494,394) share options, with an exercise price, at the time of grant, ranging from US\$0.2132 to US\$0.6375 (US\$0.8528 to US\$2.55) per share. In 2009, 697,181 (174,295) share options were forfeited, 385,001 (96,250) share options were expired and nil share options were exercised. In 2010, we granted 642,640 (160,660) share options, with an exercise price, at the time of grant, ranging from US\$0.6120 to US\$1.3685 (US\$2.448 to US\$5.474) per share. In 2010, 848,198 (212,049) share options were forfeited, 1,415,200 (353,800) share options were expired and 76,985 (19,246) share options were exercised. In 2011, we granted 692,624 share options, with an exercise price, at the time of grant, ranging from US\$4.59 to US\$6.222 per share. In 2011, 148,403 share options were forfeited, nil share options were expired and 96,103 share options were exercised. As of December 31, 2011, we had 2,562,172 share options outstanding, with an exercise price ranging from US\$0.748 to US\$25.908.

In September 2006 and August 2008, we adopted a share appreciation rights (SARs) plan pursuant to which we may issue up to 2,000,000 (500,000) and 3,000,000 (750,000) cash-settled SARs to our directors, officers, employees and those of our affiliates. Under the share appreciation rights plan, each holder of SARs, issued thereunder will be entitled to receive, on the applicable exercise date, cash in an amount equal to the excess of the market value of our common shares on such date over the exercise price of such rights. Our board of directors or a relevant committee thereof has complete discretion over the administration of the share appreciation rights plan, including determining the recipients of the share appreciation right awards, the number of rights awarded, the exercise date, the exercise price and other relevant terms. Unless earlier terminated by our board of directors or the relevant board committee, the plan will remain effective until September 2016 and August 2018. In 2009, 1,173,060 (293,265) SARs were granted, with an exercise price, at the time of grant, ranging from US\$0.2210 to US\$0.6375 (US\$0.884 to US\$2.55). In 2009, 204,662 (51,165) SARs were forfeited and no SARs were exercised. In 2010, 74,500 (18,625) SARs were granted, with an exercise price, at the time of grant, ranging from US\$0.612 to US\$0.765 (US\$2.448 to US\$3.06). In 2010, 357,200 (89,300) SARs were forfeited and 61,200 (15,300) SARs were exercised. In 2011, 525,885 SARs were granted, with an exercise price, at the time of grant, ranging from US\$5.151 to US\$6.222. In 2011, 70,621 SARs were forfeited and 32,832 SARs were exercised. As of December 31, 2011, we had 1,049,939 SARs outstanding, with an exercise price, at the time of grant, ranging from US\$0.748 to US\$25.908.

The share numbers and exercise price of our share option plan and share appreciation rights plan disclosed in the foregoing paragraph, contain corresponding adjusted figures in brackets denoting the effect of Company's 1-for-every-4 reverse stock split effective on January 21, 2011.

**Item 7. Major Shareholders and Related Party Transactions****Major Shareholders**

The following table and information set out certain information as of March 31, 2012 regarding the ownership of our common shares by (1) each person known to us to be the owner of more than five percent of our common shares and (2) the total amount owned by our directors and executive officers as a group.

Identity of person or group	Number of shares owned	Percentage Owned
ThaiLin Semiconductor Corp. <sup>(1)</sup>	6,474,211	19.2
He & Fang 2005 Revocable Living Trust <sup>(2)</sup>	3,479,751	10.3

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Siliconware Precision Industries Co., Ltd. <sup>(3)</sup>	3,043,749	9.0
Mosel Vitelic Inc. <sup>(4)</sup>	2,698,659	8.0
DLS Capital Management, LLC <sup>(5)</sup>	2,252,889	6.7
Directors and executive officers, as a group <sup>(6)</sup>	599,600	1.8

Notes:

- (1) From December 2008 to August 2009, ThaiLin acquired 2,025,455 (506,364) shares pursuant to the Rule 10b5-1/10b-18 securities purchase program, under which purchases commenced on December 28, 2008; 4,060,633 (1,015,158) shares in March 2009 pursuant to its enforcement of the collateral provided by ProMOS under the Stock Pledge Agreement entered into between ThaiLin and ProMOS dated December 3, 2008; 1,605,410 (401,352) shares and 262,829 (65,707) shares in 2010 and January 2011, respectively, pursuant to the interest shares payment under 2009 Notes held by ThaiLin and 4,485,630 shares (including 790,630 shares as interest payment in connection with the make-whole clause) in March 2011 pursuant to the conversion of 2009 Notes held by ThaiLin.

## **Table of Contents**

- (2) According to the Schedule 13G/A filed by He Zhengxu with the SEC on January 10, 2012.
- (3) Siliconware Precision completed a share purchase and subscription transaction with ChipMOS Taiwan and us on March 27, 2007, pursuant to which we and ChipMOS Taiwan purchased all of Siliconware Precision's equity interest in ChipMOS Taiwan, and Siliconware Precision subscribed for 12,174,998 (3,043,749) of our common shares through a private placement. See Item 4. Information on the Company Our Structure and History ChipMOS TECHNOLOGIES INC.
- (4) Mosel owned 2,612,513 shares indirectly through Giant Haven, and 86,146 shares indirectly through Mou-Fu Investment Ltd. Mosel is a public company listed on the Taiwan Stock Exchange.
- (5) According to the Schedule 13G filed by DLS Capital Management, LLC with the SEC on January 17, 2012.
- (6) Excludes Mosel's beneficial ownership of our common shares which may be considered to be beneficially held by some of our directors or officers. Includes shares held by certain family members of certain directors.

The share numbers disclosed in the foregoing notes, contain corresponding adjusted figures in brackets denoting the effect of Company's 1-for-every-4 reverse stock split effective on January 21, 2011.

As of March 31, 2012, approximately 62% of our common shares were held of record by shareholders located in the United States. All holders of our common shares have the same voting rights with respect to their shares.

## **Related Party Transactions**

### *Siliconware Precision Industries Co., Ltd.*

As of March 31, 2012, Siliconware Precision owned 9.0% of our outstanding common shares and 15.8% of ChipMOS Taiwan's outstanding shares. 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 (3,043,749) shares as taking into effect of 1-for-every-4 reverse stock split effective on January 21, 2011) of our newly issued common shares through a private placement. ChipMOS Taiwan became our wholly-owned subsidiary on September 14, 2007. In February 2010, we agreed to sell 15.8% of ChipMOS Taiwan's outstanding shares to Siliconware Precision. The share purchase transaction was completed in January 2011. As of March 31, 2012, we owned 84.2% of ChipMOS Taiwan's outstanding shares. Siliconware Precision is an independent provider of semiconductor testing and packaging services. Siliconware Precision currently has, and is expected to continue to have from time to time in the future, contractual and other business relationships with us. Sales to Siliconware Precision in 2009 was NT\$195 thousand. No revenue was derived from Siliconware Precision in 2010 and 2011. From April 2011 onwards, Siliconware Precision is not our related party as it owned less than 10% of our outstanding common shares.

### *Mosel Vitelic Inc.*

As of March 31, 2012, Mosel indirectly owned 8.0% of our outstanding common shares. Mosel designs and manufactures semiconductor products, including DRAM, SRAM, flash memory, LCD and other flat-panel display driver semiconductors and power-related semiconductors. Mosel and its affiliates currently have, and are expected to continue to have from time to time in the future, contractual and other business relationships with us. Our relationships include the following:

In 2009, 2010 and 2011, we paid NT\$148 thousand, NT\$148 thousand and NT\$25 thousand (US\$1 thousand) in website fees to Mosel for provision of certain website services.

Commencing April 1, 2011, Mosel and its direct and indirect subsidiaries are no longer related parties to the Company.

### *Registration Rights Agreements with Siliconware Precision, Giant Haven, ProMOS and Powertech Technology Inc.*

In March 2007, we issued 12,174,998 (3,043,749) common shares pursuant to a share purchase and subscription agreement with ChipMOS Taiwan and Siliconware Precision, and we entered into a registration rights agreement, dated March 27, 2007, with Siliconware Precision, pursuant to which Siliconware Precision agreed not to sell or otherwise transfer any of our common shares it acquired in the share purchase and acquisition for a period of nine months after March 27, 2007, and we granted to Siliconware Precision certain rights, including demand registration, piggyback registration and Form F-3 registration rights, to require us to register its common shares for sale under the Securities Act. In addition, we entered into a registration rights agreement, dated August 8, 2007, with Giant Haven, ProMOS and Powertech Technology Inc., pursuant to which we granted to Mosel, ProMOS and Powertech Technology Inc. certain registration rights, including customary demand and piggyback registration rights, common shares for the sale of our common shares under the Securities Act. In March 2009, ThaiLin acquired 4,060,633 (1,015,158) common shares from ProMOS pursuant to its enforcement of the collateral under a Stock Pledge Agreement entered into between ThaiLin and ProMOS dated December 3, 2008.

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

The share numbers disclosed in the foregoing notes, contain corresponding adjusted figures in brackets denoting the effect of Company's 1-for-every-4 reverse stock split effective on January 21, 2011.

---

**Table of Contents**

*DenMOS Technology Inc.*

We do not own any equity interest in DenMOS. As of March 31, 2012, Mosel directly owned 44.1% of common shares of DenMOS. Sales to DenMOS were NT\$1 million in 2009, and nil in 2010 and 2011, respectively.

Commencing April 1, 2011, DenMOS is not our related party as Mosel is no longer our related party.

*SyncMOS Technologies International, Inc.*

We do not own any equity interest in SyncMOS Technologies International, Inc., or SyncMOS. Since January 2012, SynMOS is no longer an investee of Mosel and therefore is no longer considered as our related party. In 2009, 2010 and 2011, we provided storage services to SyncMOS and rental revenue from SyncMOS was NT\$2,208 thousand, NT\$2,208 thousand and nil, respectively.

*ChipMOS TECHNOLOGIES (Shanghai) LTD.*

Since 2002, we have managed our PRC operations, ChipMOS Shanghai, through Modern Mind, our controlled subsidiary. Whilst we did not own any equity interest in Modern Mind, we had controlled Modern Mind through our ownership of the MMT Notes. Under the MMT Assignment Agreement signed on April 22, 2011, ChipMOS has agreed to sell the MMT Notes to ThaiLin for a purchase price of approximately US\$40 million subject to certain closing conditions. The Assignment Agreement transaction completed in October 2011 and ThaiLin immediately converted the MMT Notes into common shares of Modern Mind and purchased all of the remaining common shares of Modern Mind from Jesper, with ChipMOS Shanghai becoming a wholly-owned subsidiary of ThaiLin.

Under a technology transfer agreement dated August 1, 2002 which will be expired on August 1, 2012, we licensed certain technologies and systems, and agreed to provide certain technical support and consulting services to ChipMOS Shanghai relating to those technologies and systems, and ChipMOS Shanghai paid an aggregate of US\$25 million to us in 2002 for the technology and services we provide under this agreement. Under another technology transfer agreement dated October 3, 2011 which will be effective date on August 1, 2012, we licensed certain technologies and systems, and agreed to provide certain technical support and consulting services to ChipMOS Shanghai relating to those technologies and systems, and ChipMOS Shanghai will pay an aggregate of RMB27 million to us by forty installments on the last day of each quarter during the term of this agreement.

On July 1, 2010, ChipMOS Bermuda and ChipMOS Shanghai entered into an exclusive services agreement, pursuant to which ChipMOS Shanghai will provide its services exclusively to ChipMOS Bermuda or customers designated by ChipMOS Bermuda. Under the exclusive services agreement, ChipMOS Bermuda agrees to procure some of the equipment and consign such equipment for use by ChipMOS Shanghai. The exclusive services agreement has a term of ten years and will automatically be renewed for periods of ten years, unless terminated by either party at least 30 days prior to the expiration of such ten-year term. In addition, ChipMOS Bermuda may terminate the exclusive services agreement at any time by giving 30 days prior notice.

*ThaiLin Semiconductor Corp.*

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 Kolin, a major shareholder of ThaiLin. The loan is secured by a pledge by Kolin of 11 million common shares of ThaiLin. On August 22, 2008, Kolin repaid NT\$15 million of the loan. On December 23, 2008, ChipMOS Taiwan notified Kolin to proceed with the transfer of the collateral's ownership, the payment of unpaid loan and interest accrued in the amount of NT\$130 million, and the payment of interest incurred due to loan repayment default under the loan. On January 20, 2009, Kolin informed ChipMOS that it could not fulfill request made by ChipMOS, including the transfer of shares since it is prohibited to do so under an interim restrictive order of disposition. Subsequently, Kolin was granted on March 27, 2009, pursuant to a ruling of Taiwan District Court on (Civil Ruling no.7 and No.9 of 2009), the approval for its reorganization and declaration of creditor's rights application. Therefore, such shares shall still be deemed as the creditor's collateral. ChipMOS made the creditor's rights application on April 21, 2009. On January 31, 2011, a final ruling of Taiwan High Court (Civil Ruling No.186 of 2010) confirmed its approval of the organization plan of Kolin. On March 15, 2012, ChipMOS Taiwan entered into an agreement with Kolin whereby Kolin agreed to dispose of the common shares of ThaiLin that were pledged to ChipMOS Taiwan and use the proceeds to settle the outstanding debt to ChipMOS Taiwan. As of the date of this Annual Report on Form 20-F, the process is still ongoing.

As of March 31, 2012, ThaiLin held 6,474,211 of our outstanding shares, corresponding to 19.2% of all of our outstanding shares. ThaiLin's current holding includes 4,060,633 (1,015,158) shares or 3.0% of our outstanding shares acquired pursuant to ThaiLin's enforcement of the collateral provided by ProMOS under the Stock Pledge Agreement dated December 3, 2008, entered into between ThaiLin and ProMOS, 2,025,455 (506,364) shares or 1.5% of our outstanding shares accumulated from the Rule 10b5-1/10b-18 securities purchase program launched

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

in December 2008, and 1,868,239 (467,059) shares or 1.4% of our outstanding shares acquired pursuant to the interest shares payment and 4,485,630 shares (including 790,630 shares as interest payment in connection with the make-whole clause) or 13.3% of our outstanding shares acquired pursuant to the conversion of 2009 Notes in March 2011.

---

**Table of Contents**

The share numbers disclosed in the foregoing notes, contain corresponding adjusted figures in brackets denoting the effect of Company's 1-for-every-4 reverse stock split effective on January 21, 2011.

*ProMOS Technologies Inc.*

As of March 31, 2012, Mosel directly and indirectly owned 12.0% of ProMOS.

On July 1, 2003, ChipMOS Taiwan entered into a long-term agreement with ProMOS, under which ChipMOS Taiwan reserves a specified amount of capacity for DRAM testing and assembly services to ProMOS and under which ProMOS guarantees to place orders in the amount of the reserved capacity. This agreement was superseded in July 2007 when ChipMOS Taiwan and ProMOS entered into a new long-term agreement with similar terms and conditions, except that under the new agreement, ProMOS will give ChipMOS 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). The price for the services of ChipMOS Taiwan under this agreement will be agreed upon quarterly, subject to certain price adjustments. If ChipMOS Taiwan is unable to test and assemble the agreed number of DRAM, ProMOS may use a third party to cover the shortfall and ChipMOS Taiwan may be liable for, among other damages, any operation loss of ProMOS caused by such delay or any additional costs in using a third party to cover the shortfall. If ProMOS fails to place orders in the amount of the reserved capacity, ChipMOS Taiwan is entitled to damages calculated based on the difference between the value of the reserved capacity and the value of the actual used capacity, provided that the value of the capacity by ChipMOS Taiwan that has been used for other customers shall be deducted. In March 2008, ProMOS failed to place orders in the amount of the reserved capacity. 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, other receivables from ProMOS amounted to NT\$409 million and 100% allowance was made by ChipMOS Taiwan. NT\$7 million was received by April 2010. Under the amended subcontracting contract, ProMOS paid ChipMOS Taiwan NT\$200 million in May 2010. The remaining NT\$202 million was paid in nine monthly installments with final installment payment ending on March 15, 2011. As of December 31, 2010, ChipMOS Taiwan received NT\$336 million and the related allowance of NT\$409 million was reversed to other non-operating income. All payments have been received in March 2011. In May 2010, the collection term provided to ProMOS was revised to 30 days upon delivery and this was further revised to 45 days upon delivery in October 2010. Since June 2011, we request ProMOS to pay in advance prior to delivery.

As of December 31, 2009, other receivables from ProMOS amounted to NT\$55 million and 100% allowance was made by ThaiLin. In June 2010, ThaiLin agreed a settlement with ProMOS in the amount of NT\$24 million and it was collected during the same year. The allowance of NT\$24 million was reversed to other non-operating income. Commencing in June 2010, the collection term was revised to 30 days upon delivery. In January 2011, the collection term was revised to 45 days after delivery. Since June 2011, we request ProMOS to pay in advance prior to delivery. See Note 19 to our consolidated financial statements contained in this Annual Report on Form 20-F.

Commencing April 1, 2011, since Mosel is no longer a related party to us, ProMOS is also not considered our related party.

**Table of Contents****Item 8. Financial Information  
Consolidated Financial Statements and Other Financial Information**

Please see Item 18. Financial Statements and pages F-1 through F-61.

**Legal Proceedings**

In February 2006, ChipMOS Taiwan and ChipMOS USA received notice of a lawsuit filed by Tessera Technologies, Inc., or Tessera. The complaint was initially filed in United States District Court for the Northern District of California (Civil Action No. C05-04063CW), or the California court. In an amended complaint, Tessera added ChipMOS Taiwan and ChipMOS USA, among several other semiconductor companies, as co-defendants. The amended complaint alleges that ChipMOS Taiwan, ChipMOS USA and the other co-defendants infringed certain patents owned by Tessera and that ChipMOS Taiwan is in breach of a license agreement with Tessera, or the Tessera license agreement. Tessera also sought unspecified damages and injunctive relief. ChipMOS Taiwan and ChipMOS USA have responded to the lawsuit by denying Tessera's claims of patent infringement and breach of contract. ChipMOS USA and ChipMOS Taiwan have also raised various counterclaims for declaratory judgment and related affirmative defenses that the Tessera patents are invalid and unenforceable. In May 2007, the California court, with the concurrence of ChipMOS Taiwan and ChipMOS USA, stayed all litigation in the California court as a result of a related investigation by the International Trade Commission, or ITC, initiated by Tessera against certain other co-defendants. In addition, a co-defendant in the Tessera lawsuit requested the United States Patent and Trademark Office to reexamine the patentability of each of Tessera's patents that are at issue in the case in the California court. The requests were granted and, in February 2007, the U.S. Patent and Trademark Office concluded that certain claims of the patents were invalid on the basis of prior art. In April 2008, ChipMOS Bermuda, ChipMOS USA and ChipMOS Taiwan received notice that Tessera requested the ITC to initiate another investigation alleging that the sale for and after importation into the United States as well as importation into the United States of certain small format non-tape based BGA semiconductor packages by ChipMOS Bermuda, ChipMOS Taiwan and ChipMOS USA infringe three of the five Tessera patents at issue in the case pending in the California court. Tessera sought, among other things, an investigation by the ITC and general exclusion orders to prohibit the infringing products from entry into the United States. The ITC initiated the investigation in May 2008. On March 13, 2009, after the close of discovery, Tessera submitted a request to terminate the proceedings at the ITC, which the judge granted on July 17, 2009. No petitions for review were filed. The ITC issued an order to terminate the investigation on August 7, 2009. Due to the completion of a companion investigation against other companies by ITC, the stayed litigations in the Northern District of California resumed in January 2012. The date for jury trial was scheduled for April 2014. Our counsel has not formed an opinion as to the outcome of the case.

In April 1999, Motorola, Inc. ( Motorola ) and ChipMOS Taiwan entered into an immunity agreement (the Agreement ) whereby each party covenanted not to sue each other for the use of certain Ball Grid Array ( BGA ) patents. In December 2004, Motorola spun off its semiconductor division, and thereby formed Freescale Semiconductor, Inc. ( Freescale ), who then assumed Motorola's rights and obligations under the Agreement. On October 16, 2006, Freescale unilaterally terminated the Agreement, alleging that ChipMOS Taiwan breached the Agreement. ChipMOS Taiwan argued that Freescale's unilateral termination of the Agreement has no legal effect, and continues to accrue royalty payments for products it believes are covered by the Agreement. The payments previously returned by Freescale and accrued by ChipMOS Taiwan have been deposited in a separate escrow account. On July 13, 2009, Freescale alleged that ChipMOS Taiwan breached the Agreement by failing to pay royalties on certain BGA packages assembled by ChipMOS Taiwan. ChipMOS Taiwan filed an answer to deny all allegations, and also filed counterclaims against Freescale alleging that Freescale engaged in patent misuse by seeking to obtain royalties on certain of ChipMOS Taiwan's BGA products that were not covered by any Freescale patent included under the Agreement, and for declaratory judgment of patent non-infringement and invalidity. On December 11, 2009, Freescale filed a motion to dismiss the declaratory judgment counterclaims filed by ChipMOS Taiwan and to stay all other patent related claims and issues until its breach of contract claims could be decided. On March 5, 2010, the Court stayed the patent related discovery until the parties could conduct the discovery they felt was needed to address whether the Agreement constituted a Total Sales Royalty agreement. On July 29, 2010, the Court finds that the Agreement constituted a Total Sales Royalty agreement, however, Freescale's motion was partly denied for patent misuse issue. The fact discovery and expert discovery process regarding patent misuse issue closed in middle June 2011. On June 17, 2011, Freescale filed a motion for summary judgment on ChipMOS' patent misuse defense. ChipMOS filed opposition to the above Freescale motion and also the cross-motion for summary judgment. An Order granting Freescale's motion for partial summary judgment and denying ChipMOS' cross-motion for partial judgment was given on September 8, 2011. On September 13, 2011, ChipMOS filed a Motion for Leave for Motion for Reconsideration of both the Court's August 3, 2010 Order and September 8, 2011 Order. An Order granting in part and denying in part ChipMOS' Motion for Reconsideration was issued on March 30, 2012. The above order finds that the Agreement constituted a Total Sales Royalty agreement, however, the patent misuse issue is a triable fact and ChipMOS is entitled to a jury trial. The Company's counsel has not formed any opinion as to the outcome of the case.

Other than the matters described above, we were not involved in any material litigation in 2011 and are not currently involved in any material litigation.





**Table of Contents**

For certain information regarding legal proceedings relating to certain of our current and former directors, see Item 3. Key Information Risk Factors Risks Related to Our Business 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 .

**Dividend Policy**

To date, we have not distributed any dividends. We currently intend to retain future earnings, if any, to finance the expansion of our business and thus do not expect to pay any cash dividends for the foreseeable future. In addition, we have no current plans to pay stock dividends.

**Item 9. The Offer and Listing Listing**

Since March 17, 2010, the NASDAQ Capital Market has been the principal trading market for our common shares, which are not listed or quoted on any other markets in or outside the United States. Our common shares were formerly quoted on the NASDAQ Global Market (formerly the NASDAQ National Market) under the symbol IMOS since June 19, 2001, and our common shares were formerly quoted on the NASDAQ Global Select Market since July 1, 2006. The CUSIP number for our common shares is G2110R114 . Our Shareholders approved a reverse stock split of ChipMOS s common stock in January 2011 with a ratio of 1-for-every-4 shares effective on January 21, 2011. As a result, the number of outstanding shares of ChipMOS common stock is reduced to 27,725,782 shares, from 110,908,341 shares prior to the reverse stock split becoming effective. As of March 31, 2012, there were 33,772,837 common shares issued and outstanding. The table below sets forth for the periods indicated, historical prices for the high, low and average closing prices on the NASDAQ National Market, the NASDAQ Global Select Market or the NASDAQ Capital Market for our common shares.

	NASDAQ Price per share <sup>(1)</sup>		
	High	Low	Average
2007	31.56	16.44	25.70
2008	16.40	0.74	9.32
2009	3.97	0.80	2.45
2010	7.68	2.40	4.80
First Quarter	3.28	2.40	2.86
Second Quarter	7.68	3.02	5.84
Third Quarter	6.00	3.60	4.77
Fourth Quarter	6.36	4.92	5.63
2011			
First Quarter	8.80	6.24	7.33
Second Quarter	9.81	7.71	8.70
Third Quarter	9.02	5.16	6.53
November	6.00	4.92	5.40
December	5.93	4.90	5.32
Fourth Quarter	6.00	4.48	5.20
2012			
January	8.78	5.47	7.24
February	13.07	7.90	9.31
March	19.04	11.38	15.76
First Quarter	19.04	5.47	10.93
April (through April 20, 2012)	18.48	13.21	14.97

Note:

(1) The figures in the table contain historical prices reflecting the effect of our reverse stock split which was approved by our Shareholders on January 21, 2011.

**Item 10. Additional Information**  
**Description of Share Capital**

Our authorized share capital is US\$3,250,000 consists of 62,500,000 common shares of par value US\$0.04 per share, and 18,750,000 preferred shares of par value US\$0.04 per share.

## **Table of Contents**

### **Common Shares**

Each shareholder is entitled to one vote for each common share held on all matters submitted to a vote of shareholders. Cumulative voting for the election of directors is not provided for in our bye-laws, which means that the holders of a majority of the shares voted can elect all of the directors then standing for election. The common shares are not entitled to preemptive rights and are not subject to conversion or redemption. Upon the occurrence of a liquidation, dissolution or winding-up, the holders of common shares would be entitled to share ratably in the distribution of all of our assets remaining available for distribution after satisfaction of all liabilities.

### **Preferred Shares**

Currently there are no specific rights attached to the preferred shares. The specific rights of the preferred shares could include rights, preferences or privileges in priority to our common shares and the establishment of such rights or the delegation to the board of directors to establish such rights will need to be approved by our shareholders. As of March 31, 2012, no preferred shares have been issued by our company.

### **Bermuda Law**

We are an exempted company organized under the Bermuda Companies Act. The rights of our shareholders are governed by Bermuda law and our memorandum of association and bye-laws. The Bermuda Companies Act differs in some material respects from laws generally applicable to United States corporations and their shareholders.

### **Dividends**

Under Bermuda law, a company may pay dividends that are declared from time to time by its board of directors unless there are reasonable grounds for believing that the company is, or would after the payment be, unable to pay its liabilities as they become due or that the realizable value of its assets would thereby be less than the aggregate of its liabilities, issued share capital and share premium accounts. The holders of common shares are entitled to receive dividends out of assets legally available for such purposes at times and in amounts as our board of directors may from time to time determine. Any dividend unclaimed for a period of six years from its date of declaration will be forfeited and will revert to our company.

### **Voting Rights**

Under Bermuda law, except as otherwise provided in the Bermuda Companies Act or our bye-laws, questions brought before a general meeting of shareholders are decided by a majority vote of shareholders present at the meeting. Our bye-laws provide that, subject to the provisions of the Bermuda Companies Act, and except for the resolutions for approving the extraordinary transaction, any question properly proposed for the consideration of the shareholders will be decided by a simple majority of the votes cast, either on a show of hands or on a poll, with each shareholder present (and each person holding proxies for any shareholder) entitled to one vote on a show of hands, or on a poll, one vote for each fully paid-up common share held by the shareholder. In the case of an equality of votes cast, the chairman of the meeting shall have a second or casting vote. Any resolution for any of the following extraordinary transactions will require the approval of shareholders holding at least 70.0% of the total voting rights of all the shareholders having the right to vote at such meeting:

a resolution for the merger, amalgamation or any other consolidation of us with any other company, wherever incorporated;

a resolution for the sale, lease, exchange, transfer or other disposition of all or substantially all of our consolidated assets; or

a resolution for the adoption of any plan or proposal for the liquidation of our company.

### **Rights in Liquidation**

Under Bermuda law, in the event of liquidation or winding-up of a company, after satisfaction in full of all claims of creditors and subject to the preferential rights accorded to any series of preferred shares, the proceeds of the liquidation or winding-up are distributed pro rata in species or in kind among the holders of our common shares in accordance with our bye-laws.



## **Table of Contents**

### **Meetings of Shareholders**

Under Bermuda law, a company is required to convene at least one general shareholders meeting as an Annual General Meeting each calendar year, unless according to the provisions of the Bermuda Companies Act, shareholders elect to dispense with the holding of annual general meeting. Bermuda law provides that a special general meeting may be called by the board of directors and must be called upon the request of shareholders holding not less than 10% of the paid-up capital of the company carrying the right to vote. Bermuda law also requires that shareholders be given at least five days advance notice of a general meeting but the accidental omission to give notice to any person does not invalidate the proceedings at a meeting. Under our bye-laws, we must give each shareholder written notice at least five days prior to the annual general meeting, unless otherwise agreed by all shareholders having the right to vote at that annual general meeting, and written notice at least five days prior to any special general meeting, unless otherwise agreed by a majority of shareholders having a right to vote at that special general meeting, and together holding at least 95% of the paid-up capital of the company carrying the right to vote at that meeting.

Under Bermuda law, the number of shareholders constituting a quorum at any general meeting of shareholders is determined by the bye-laws of the company. Our bye-laws provide that at least two shareholders present in person or by proxy and holding shares representing at least 50% of the total voting rights of all shareholders having the right to vote at the meeting constitute a quorum. Our bye-laws further provide that, in respect of a general meeting adjourned for lack of quorum, at least two shareholders present in person or by proxy holding shares representing 33 1/3% of the total voting rights of all shareholders having the right to vote at the meeting constitute a quorum.

### **Access to Books and Records and Dissemination of Information**

Under Bermuda law, members of the general public have the right to inspect the public documents of a company available at the office of the Registrar of Companies in Bermuda. These documents include a company's certificate of incorporation, its memorandum of association (including its objects and powers), and any alteration to its memorandum of association and documents relating to an increase or reduction of authorized share capital. The shareholders have the additional right to inspect the bye-laws of the company, minutes of general meetings and the company's audited financial statements, which, unless agreed by all shareholders and directors, must be laid before the annual general meeting. The register of shareholders of a company is also open to inspection by shareholders and by members of the general public for not less than two hours each day without charge. Any member of the public may require a copy of the register, or of any part thereof, on the payment of a fee. A company is required to maintain its share register in Bermuda but may, subject to the provisions of Bermuda law, establish a branch register outside Bermuda. We maintain a share register in Hamilton, Bermuda and a branch register in New Jersey, USA. A company is required to keep at its registered office a register of its directors and officers which is open for inspection for not less than two hours each day by members of the public without charge. Bermuda law does not, however, provide a general right for shareholders to inspect or obtain copies of any other corporate records.

### **Election or Removal of Directors**

Under Bermuda law and our bye-laws, directors are elected or appointed at an annual general meeting and serve until re-elected or re-appointed or until their successors are elected or appointed, unless they are earlier removed for cause or resign or otherwise cease to be directors under Bermuda law or our bye-laws.

A director may be removed for cause at a special general meeting of shareholders specifically called for that purpose, provided that the director is served with at least 14 days notice. The director has a right to be heard at that meeting. Any vacancy created by the removal of a director at a special general meeting may be filled at that meeting by the election of another director in his or her place or, in the absence of any election by the shareholders, by the board of directors.

### **Board Actions**

Our bye-laws provide that the quorum necessary for the transaction of business is two individual directors of the board, and that questions arising at a properly convened meeting of the board of directors must be approved by a majority of the votes present and entitled to be cast. In the case of an equality of votes, the chairman of the meeting is entitled to a second or casting vote.

The board of directors may appoint any of our directors to act as our managing director or other senior executive, on such terms and conditions as it may determine, including with respect to remuneration.

## **Table of Contents**

### **Amendment of Memorandum of Association and Bye-Laws**

Bermuda law provides that the memorandum of association of a company may, with the consent of the Minister of Finance of Bermuda (if required), be amended by a resolution passed at a general meeting of shareholders of which due notice has been given. Our bye-laws, other than the bye-law separating our board of directors into three classes, may be amended by the board of directors if the amendment is approved by a majority of votes cast by our directors and by our shareholders by a resolution passed by a majority of votes cast at a general meeting. Any amendment to our bye-law separating a board of directors into three classes must be approved by our board of directors and by shareholders holding shares representing at least 60% of the total voting rights of all our shareholders having the right to vote at such general meeting.

Under Bermuda law, the holders of an aggregate of no less than 20% in par value of a company's issued share capital or any class of issued share capital have the right to apply to the Bermuda Court for an annulment of any amendment of the memorandum of association adopted by shareholders at any general meeting. Where an application is made, the amendment becomes effective only to the extent that it is confirmed by the Bermuda Court. An application for the annulment of an amendment of the memorandum of association must be made within 21 days after the date on which the resolution altering the company's memorandum of association is passed and may be made on behalf of the person entitled to make the application by one or more of their number as they may appoint in writing for the purpose. No application may be made by persons voting in favor of the amendment.

### **Appraisal Rights and Shareholder Suits**

Under Bermuda law, in the event of an amalgamation or a merger of two Bermuda companies, a shareholder who did not vote in favour of the amalgamation or the merger and who is not satisfied that fair value has been paid for such shareholder's shares may apply to the Bermuda Court to appraise the fair value of those shares. The Bermuda Companies Act provides that, subject to the terms of a company's bye-laws, the amalgamation or merger of a Bermuda company with another company requires the amalgamation or merger agreement to be approved by the board of directors and, except where the amalgamation or merger is between a holding company and one or more of its wholly-owned subsidiaries or between two or more wholly-owned subsidiaries, by meetings of the holders of shares of each company and of each class of such shares at a meeting of the shareholders by seventy-five percent of the members present and entitled to vote at that meeting in respect of which the quorum shall be two persons holding or representing at least one-third of the issued shares of each company or class, as the case may be. Under our bye-laws, any resolution proposed for consideration at any general meeting to approve the merger, amalgamation or any other consolidation of our company with any other company, wherever incorporated shall require the approval of our shareholders holding shares representing at least 70% of the total voting rights of all our shareholders, and the quorum to be at least 2 shareholders present in person or by proxy holding shares representing at least 50% of the total voting rights of all our shareholders.

Class actions and derivative actions are generally not available to shareholders under Bermuda law. The Bermuda Court, however, would ordinarily be expected to permit a shareholder to commence an action in the name of a company to remedy a wrong done to the company where the act complained of is alleged to be beyond the corporate power of the company or is illegal or would result in the violation of the company's memorandum of association or bye-laws. Further consideration would be given by the Bermuda Court to acts that are alleged to constitute a fraud against the minority shareholders or, for instance, where an act requires the approval of a greater percentage of the company's shareholders than that which actually approved it.

When the affairs of a company are being conducted in a manner oppressive or prejudicial to the interests of some part of the shareholders, one or more shareholders may apply to the Bermuda Court for an order regulating the company's conduct of affairs in the future or compelling the purchase of the shares by any shareholder, by other shareholders or by the company.

### **Exchange Controls**

The following discussion is based on the advice of Appleby, our Bermuda counsel.

The BMA, has designated us as non-resident for exchange control purposes. The BMA has granted its consent under the Exchange Control Act 1972 and regulations promulgated thereunder for the issue or transfer to non-residents of Bermuda for exchange control purposes of our common shares, subject to the common shares remaining quoted on the NASDAQ Capital Market.

#### *Share Issuance and Transfers by Non-Bermuda and Bermuda Residents*

Under Bermuda law, there are no limitations on the rights of non-Bermuda residents to hold or vote their shares of Bermuda companies. Because we have been designated as a non-resident for Bermuda exchange control purposes, there are no restrictions on our ability to transfer funds in and out of Bermuda or to pay dividends to United States residents who are holders of our common shares other than in respect of local Bermuda

currency.



## **Table of Contents**

Under Bermuda law, we are an exempted company. An exempted company is exempt from the provisions of Bermuda law, which stipulate that at least 60% of the equity must be beneficially owned by Bermuda persons. Persons regarded as residents of Bermuda for exchange control purposes require specific consent under the Exchange Control Act 1972 to acquire securities issued by us. The Exchange Control Act 1972 permits companies to adopt bye-law provisions relating to the transfer of securities. None of Bermuda law, our memorandum of association or our bye-laws imposes limitations on the right of foreign nationals or non-residents of Bermuda to hold our shares or vote such shares.

As an exempted company, we may not participate in certain business transactions, including, among others: (1) the acquisition or holding of land in Bermuda, except (i) land acquired for its business by way of lease or tenancy agreement for a term not exceeding fifty years, or (ii) with the consent of the Minister of Finance granted in his discretion, land by way of lease or tenancy agreement for a term not exceeding twenty-one years in order to provide accommodation or recreational facilities for its officers and employees; (2) the taking of mortgages on land in Bermuda to secure an amount in excess of US\$50,000 without the consent of the Bermuda Minister of Finance; or (3) the carrying on of business of any kind in Bermuda, except in furtherance of our business carried on outside Bermuda or under a license granted by the Bermuda Minister of Finance.

The Bermuda government actively encourages foreign investment in exempted entities like us that are based in Bermuda but do not operate in competition with local business. In addition to having no restrictions on the degree of foreign ownership, we are subject neither to taxes on our income or dividends nor to any foreign exchange controls in Bermuda. In addition, there is no capital gains tax in Bermuda, and profits can be accumulated by us without limitation.

### *Director s Interests*

Under our Bye-Laws, our director may, notwithstanding his office be a party to, or otherwise interested in, any transaction or arrangement with our company or in which our company is otherwise interested. He or she may also be a director or officer of, or employed by, or a party to any transaction or arrangement with, or otherwise interested in, any corporate body promoted by our company in which our company is interested. Therefore, where it is necessary, so long as our director declares the nature of his or her interest at the first opportunity at a meeting of the board or by writing to the directors as required by the Bermuda Companies Act, that director shall not by reason of his or her office be accountable to our company for any benefit he or she derives from any office or employment to which our bye-laws allow him or her to be appointed or from any transaction or arrangement in which our bye-laws allow him or her to be interested, and no such transaction or arrangement shall be liable to be avoided on the ground of any such interest or benefit. A general notice to our directors by a director or officer declaring that he or she is a director or officer or has an interest in a person and is to be regarded as interested in any transaction or arrangement made with that person shall be sufficient declaration of interest in relation to any transaction or arrangement so made.

### *Share Issuance and Transfer*

We have been designated as a non-resident for exchange control purposes by the BMA, whose permission for the issuance and transfer of common shares has been obtained subject to the common shares being quoted on the NASDAQ Capital Market.

The transfer of common shares between persons regarded as non-resident in Bermuda for exchange control purposes and the issuance of shares after the completion of the currently contemplated offering of our common shares to those persons may be effected without specific consent under the Exchange Control Act 1972 of Bermuda and regulations thereunder subject to the common shares remaining quoted on the NASDAQ Capital Market. Issuance and transfer of shares to any person regarded as resident in Bermuda for exchange control purposes require specific prior approval under the Exchange Control Act 1972.

There are no limitations on the rights of persons regarded as non-residents of Bermuda for foreign exchange control purposes who own common shares to hold or vote their common shares. Since we have been designated as a non-resident for Bermuda exchange control purposes, there are no restrictions on our ability to transfer funds in and out of Bermuda or to pay dividends to United States residents or other non-residents of Bermuda who are holders of common shares, other than in respect of local Bermuda currency. Furthermore, it is not our intent to maintain Bermuda dollar deposits and, accordingly, will not pay dividends on the common shares in Bermuda currency.

Share certificates are issued only in the names of corporations or individuals, being the registered holders of shares as represented by such share certificates. Where an applicant for common shares acts in a special capacity, such as an executor or trustee, certificates may, at the request of that applicant, record the capacity in which the applicant is acting. Our recording of any special capacity, however, shall not be construed as obliging us either to investigate, or to incur any responsibility or liability in respect of, the proper administration of any trust or estate. Except as ordered by a court of competent jurisdiction or as required by law, regardless of whether or not we have had notice of a trust, no notice shall be taken of any trust, equitable, contingent, future or partial interest in any share or any interest in any fractional part of a share or any other right in respect of any common shares except an absolute right to the entirety thereof in the registered holder.



---

## **Table of Contents**

### **Transfer Agent and Registrar**

Appleby Management (Bermuda) Ltd. (formerly known as Reid Management Limited) serves as our principal registrar and transfer agent in Bermuda for the common shares. Computershare Shareowner Services, LLC (formerly known as Mellon Investor Services, LLC) serves as our United States transfer agent and registrar for the common shares.

### **Material Contracts**

We have entered into the following contracts within the two years preceding the date of this Annual Report on Form 20-F that are or may be material:

On February 26, 2010, the Company entered into a share purchase agreement (the *Share Purchase Agreement*) with Siliconware Precision to sell to Siliconware Precision our holding of 133 million common shares of ChipMOS Taiwan with a consideration of approximately NT\$1,630 million. The purchase shares represent 15.8% of the total number of ChipMOS Taiwan's outstanding shares. Under the terms and conditions of the Share Purchase Agreement, Siliconware Precision paid the purchase price in four installments to ChipMOS Bermuda, with the final installment scheduled to be paid on or before March 31, 2011. The share purchase transaction was completed in January 2011 and subsequently the Company owned 84.2% of ChipMOS Taiwan's outstanding shares.

On February 26, 2010, ChipMOS Taiwan entered into an equipment purchase agreement (the *Equipment Purchase Agreement*) with Siliconware Precision to purchase its DRAM testers and LCD driver assembly and test equipment with a purchase price of approximately NT\$1,630 million. Under the terms and conditions of the Equipment Purchase Agreement, ChipMOS Taiwan will pay the purchase price in four installments to Siliconware Precision, with the final installment paid on or before March 31, 2011. All of the purchased equipment will be shipped to and installed at ChipMOS plant no later than July 31, 2010. In January 2011, the Company has paid the final installment to Siliconware Precision and completed the Equipment Purchase Agreement transaction.

On April 22, 2011, the Company entered MMT Assignment Agreement with ThaiLin to sell the MMT Notes to ThaiLin for a purchase price of approximately US\$40 million subject to certain closing conditions. The MMT Assignment Agreement was completed in October 2011. Post completion of the MMT Assignment Agreement transaction, ThaiLin immediately converted the MMT Notes into common shares of Modern Mind and purchased all of the remaining common shares of Modern Mind from Jesper, with ChipMOS Shanghai becoming a wholly-owned subsidiary of ThaiLin.

On July 14, 2011, ChipMOS Taiwan obtained a syndicated loan facility from banks in Taiwan in the amount of NT\$8,410 million (US\$278 million) separated into two parts with its respective term of four years and five years. This loan facility was used to refinance the existing bank debts and equipment leases in July and August 2011. As of December 31, 2011, this loan facility was fully drawn.

Please see also Item 7. Major Shareholders and Related Party Transactions for summaries of contracts with certain of our related parties.

### **Bermuda Taxation**

This summary is based on laws, regulations, treaty provisions and interpretations now in effect and available as of the date of this Annual Report on Form 20-F. The laws, regulations, treaty provisions and interpretations, however, may change at any time, and any change could be retroactive to the date of issuance of our common shares. These laws, regulations and treaty provisions are also subject to various interpretations, and the relevant tax authorities or the courts could later disagree with the explanations or conclusions set out below.

At the date hereof, there is no Bermuda income, corporation or profits tax, withholding tax, capital gains tax, capital transfer tax, estate duty or inheritance tax payable by us or our shareholders other than shareholders ordinarily resident in Bermuda. We are not subject to stamp or other similar duty on the issuance, transfer or redemption of our common shares.

We have obtained an assurance from the Minister of Finance of Bermuda under the Exempted Undertaking Tax Protection Act 1966 that, in the event there is enacted in Bermuda any legislation imposing tax computed on profits or income or computed on any capital assets, gain or

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

appreciation or any tax in the nature of estate duty or inheritance tax, such tax shall not be applicable to us or to our operations, or to the common shares, debentures or our other obligations until March 28, 2016, except insofar as such tax applies to persons ordinarily resident in Bermuda and holding such common shares, debentures or our other obligations or any real property or leasehold interests in Bermuda owned by us. No reciprocal income tax treaty affecting us exists between Bermuda and the United States.

## **Table of Contents**

As an exempted company, we are liable to pay in Bermuda an annual government fee calculated on a sliding scale basis by reference to our assessable capital, which is the aggregate of our authorized common share capital and the premium on our issued common shares currently at a rate not exceeding US\$31,120 per annum.

### **United States Federal Income Tax Consequences**

The discussion below is for general information only and is not, and should not be interpreted to be, tax advice to any holder of our common shares. Each holder or a prospective holder of our common shares is urged to consult his, her or its own tax advisor.

#### ***General***

This section is a general summary of the material United States federal income tax consequences to U.S. Holders, as defined below, of the ownership and disposition of our common shares as of the date of this report. This summary is based on the provisions of the Internal Revenue Code of 1986, as amended, or the Code, the applicable Treasury regulations promulgated and proposed thereunder, judicial decisions and current administrative rulings and practice, all of which are subject to change, possibly on a retroactive basis. The summary applies to you only if you hold our common shares as a capital asset within the meaning of Section 1221 of the Code. The United States Internal Revenue Service, or the IRS, may challenge the tax consequences described below, and we have not requested, nor will we request, a ruling from the IRS or an opinion of counsel with respect to the United States federal income tax consequences of acquiring, holding or disposing of our common shares. This summary does not purport to be a comprehensive description of all the tax considerations that may be relevant to the ownership of our common shares. In particular, the discussion below does not cover tax consequences that depend upon your particular tax circumstances nor does it cover any state, local or foreign law, or the possible application of the United States federal estate or gift tax. You are urged to consult your own tax advisors regarding the application of the United States federal income tax laws to your particular situation as well as any state, local, foreign and United States federal estate and gift tax consequences of the ownership and disposition of the common shares. In addition, this summary does not take into account any special United States federal income tax rules that apply to a particular U.S. or Non-U.S. holder of our common shares, including, without limitation, the following:

a dealer in securities or currencies;

a trader in securities that elects to use a market-to-market method of accounting for its securities holdings;

a financial institution or a bank;

an insurance company;

a tax-exempt organization;

a person that holds our common shares in a hedging transaction or as part of a straddle or a conversion transaction;

a person whose functional currency for United States federal income tax purposes is not the U.S. dollar;

a person liable for alternative minimum tax;

a person that owns, or is treated as owning, 10% or more, by voting power or value, of our common shares;

certain former U.S. citizens and residents who have expatriated; or

a person who receives our shares pursuant to the exercise of employee stock options or otherwise as compensation.

***U.S. Holders***

For purposes of the discussion below, you are a U.S. Holder if you are a beneficial owner of our common shares who or which is:

an individual United States citizen or resident alien of the United States (as specifically defined for United States federal income tax purposes);

a corporation, or other entity treated as a corporation for United States federal income tax purposes, created or organized in or under the laws of the United States, any State or the District of Columbia;

an estate whose income is subject to United States federal income tax regardless of its source; or

a trust (x) if a United States court can exercise primary supervision over the trust's administration and one or more United States persons are authorized to control all substantial decisions of the trust or (y) if it was in existence on August 20, 1996, was treated as a United States person prior to that date and has a valid election in effect under applicable Treasury regulations to be treated as a United States person.

---

## **Table of Contents**

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

### **Distributions**

Subject to the passive foreign investment company (PFIC) rules discussed below, for cash dividends, the gross amount of any such distribution (other than in liquidation) that you receive with respect to our common shares generally will be taxed to you as dividend income to the extent such distribution does not exceed our current or accumulated earnings and profits (E&P), as calculated for U.S. federal income tax purposes. Such income will be includable in your gross income as ordinary income on the date of receipt. Dividends received by individuals and certain other non-corporate taxpayers in tax years before January 1, 2013 from qualified foreign corporations are taxed at the rate of either 0 percent or 15 percent, depending upon the particular taxpayer's U.S. federal income tax bracket; provided that the recipient-shareholder has held his or her shares as a beneficial owner for more than 60 days during the 121-day period beginning on the date which is 60 days before the shares ex-dividend date. The special tax rates on qualified dividends will expire on December 31, 2012. Starting 2013, the distinction between ordinary and qualified dividends will disappear, and all dividends will be subject to the ordinary tax rates. Recent legislation will impose, beginning in 2013, a new 3.8 percent Medicare contribution tax on net investment income, including interest, dividends, and capital gain, of U.S. individuals with income exceeding \$200,000 (or \$250,000 if married filing jointly), and of estates and trusts.

A foreign corporation is a qualified foreign corporation if the stock with respect to which it pays dividend is traded on an established securities market in the United States, provided that the foreign corporation is not a PFIC. Our stock is traded on an established securities market in the United States, although we cannot guarantee that our stock will be so traded in the future. We believe that we should not be treated as a PFIC for U.S. federal income purposes. No assurance can be given, however, that the IRS may not disagree and seek to treat us as a PFIC.

If we were a PFIC with respect to a particular U.S. Holder, dividends received from us will be taxed at regular ordinary income tax rates. Holders of our shares should consult their own tax advisers regarding the availability of the reduced dividend tax rate in light of their own particular circumstances.

To the extent any distribution exceeds our E&P, the distribution will first be treated as a tax-free return of capital to the extent of your adjusted tax basis in our common shares and will be applied against and reduce such basis on a dollar-for-dollar basis (thereby increasing the amount of gain and decreasing the amount of loss recognized on a subsequent disposition of such shares). To the extent that such distribution exceeds your adjusted tax basis, the distribution will be taxed as gain recognized on a sale or exchange of our common shares. See *Sale, Exchange or Other Disposition of Our Common Shares*, below. Because we are not a U.S. corporation, no dividends-received deduction will be allowed to corporations with respect to dividends paid by us.

For United States foreign tax credit limitation purposes, dividends received on our common shares will be treated as foreign source income and will generally be passive category income, or in the case of certain holders, general category income. You may be eligible, subject to a number of complex limitations, to claim a foreign tax credit in respect of foreign withholding taxes, if any, imposed on dividends paid on our common shares. The rules governing United States foreign tax credits are complex, and we recommend that you consult your tax advisor regarding the applicability of such rules to you.

### **Sale, Exchange or Other Disposition of Our Common Shares**

Subject to the PFIC rules discussed below, generally, in connection with the sale, exchange or other taxable disposition of our common shares:

you will recognize capital gain or loss equal to the difference (if any) between:

the amount realized on such sale, exchange or other taxable disposition and

your adjusted tax basis in such common shares (your adjusted tax basis in the shares you hold generally will equal your U.S. dollar cost of such shares);

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

such gain or loss will be long-term capital gain or loss if your holding period for our common shares is more than one year at the time of such sale or other disposition;

such gain or loss will generally be treated as United States source for United States foreign tax credit purposes; and

your ability to deduct capital losses is subject to limitations.



---

## **Table of Contents**

Long-term capital gains recognized by individuals and certain other non-corporate taxpayers in tax years before January 1, 2013, are taxed at the rate of 0 or 15 percent, depending upon the particular taxpayer's U.S. federal income tax bracket. The special tax rates on long-term gains will expire on December 31, 2012. Starting 2013, the tax rate on long-term capital gains will be 20 percent (or 10 percent for a taxpayer in the 15 percent tax bracket). Recent legislation will impose, beginning in 2013, a new 3.8 percent Medicare contribution tax on net investment income, including interest, dividends, and capital gain, of U.S. individuals with income exceeding \$200,000 (or \$250,000 if married filing jointly), and of estates and trusts.

### **Passive Foreign Investment Company (PFIC)**

We believe that our common shares should not be treated as stock of a Passive Foreign Investment Company, or PFIC, for United States federal income tax purposes, but this conclusion is a legal and factual determination that is made annually and thus may be subject to change. If we were to be treated as a PFIC, unless a U.S. holder elects to be taxed annually on a mark-to-market basis with respect to the shares, gain realized on the sale or other disposition of your common shares would in general not be treated as capital gain. Instead, if you are a U.S. holder, you would be treated as if you had realized such gain and certain excess distributions ratably over your holding period for the common shares and would not be taxed at the highest tax rate in effect for each such year to which the gain was allocated, together with an interest charge in respect of the tax attributable to each such year. With certain exceptions, your common shares will be treated as stock in a PFIC if we were a PFIC at any time during your holding period in your common shares. Dividends that you receive from us will not be eligible for the special tax rates applicable to qualified dividend income if we are treated as a PFIC with respect to you either in the taxable year of the distribution or the preceding taxable year, but instead will be taxable at rates applicable to ordinary income.

### ***Non-U.S. Holders***

If you are not a U.S. Holder, you are a Non-U.S. Holder.

### **Distributions on Our Common Shares**

You generally will not be subject to U.S. federal income tax, including withholding tax, on distributions made on our common shares unless:

you conduct a trade or business in the United States and

the distributions are effectively connected with the conduct of that trade or business (and, if an applicable income tax treaty so requires as a condition for you to be subject to U.S. federal income tax on a net income basis in respect of income from our common shares, such distributions are attributable to a permanent establishment that you maintain in the United States).

If you meet the two tests above, you generally will be subject to tax in respect of such dividends in the same manner as a U.S. Holder, as described above. In addition, any effectively connected dividends received by a non-U.S. corporation may also, under certain circumstances, be subject to an additional branch profits tax at a 30 percent rate or such lower rate as may be specified by an applicable income tax treaty.

### **Sale, Exchange or Other Disposition of Our Common Shares**

Generally, you will not be subject to U.S. federal income tax, including withholding tax, in respect of gain recognized on a sale or other taxable disposition of our common shares unless:

your gain is effectively connected with a trade or business that you conduct in the United States (and, if an applicable income tax treaty so requires as a condition for you to be subject to U.S. federal income tax on a net income basis in respect of gain from the sale or other disposition of our common shares, such gain is attributable to a permanent establishment maintained by you in the United States), or

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

you are an individual Non-U.S. Holder and are present in the United States for at least 183 days in the taxable year of the sale or other disposition, and certain other conditions exist.

You will be subject to tax in respect of any gain effectively connected with your conduct of a trade or business in the United States generally in the same manner as a U.S. Holder, as described above. Effectively connected gains realized by a non-U.S. corporation may also, under certain circumstances, be subject to an additional branch profits tax at a rate of 30 percent or such lower rate as may be specified by an applicable income tax treaty.

---

## **Table of Contents**

### **Backup Withholding and Information Reporting**

Payments, including dividends and proceeds of sales, in respect of our common shares that are made in the United States or by a United States related financial intermediary will be subject to United States information reporting rules. In addition, such payments may be subject to United States federal backup withholding tax. You will not be subject to backup withholding provided that:

you are a corporation or other exempt recipient, or

you provide your correct United States federal taxpayer identification number and certify, under penalties of perjury, that you are not subject to backup withholding.

Amounts withheld under the backup withholding rules may be credited against your United States federal income tax, and you may obtain a refund of any excess amounts withheld under the backup withholding rules by filing the appropriate claim for refund with the IRS in a timely manner.

### **Documents on Display**

We are subject to the information requirements of the Securities Exchange Act of 1934, as amended. In accordance with these requirements, we file reports and other information with the Securities and Exchange Commission. These materials may be inspected and copied at the Commission's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. The public may obtain information on the operation of the Commission's Public Reference Room by calling the Commission in the United States at 1-800-SEC-0330. The Commission also maintains a web site at <http://www.sec.gov> that contains reports, proxy statements and other information regarding registrants that file electronically with the Commission.

### **Item 11. Quantitative and Qualitative Disclosure about Market Risk**

#### **Market Risks**

Our exposure to financial market risks relates primarily to changes in interest rates and foreign exchange rates. To mitigate these risks, we utilize derivative financial instruments, the application of which is primarily for hedging, and not for speculative, purposes.

#### *Interest Rate Risks*

As of December 31, 2011, we had aggregate debts outstanding of NT\$9,715 million (US\$321 million), which was incurred for capital expenditure and general operating expenses. Of our outstanding debts as of December 31, 2011, 94.4% bear interest at variable rates. The interest rate for the majority of our variable rate debts varies based on a fixed percentage spread over the prime rate established by our lenders. Our variable rate debts had an annual weighted average interest rate of 2.953% as of December 31, 2011. Accordingly, we have cash flows and earnings exposure due to market interest rate changes for our variable rate debts. An increase in interest rates of 1% would increase our annual interest charge by NT\$92 million (US\$3 million) based on our outstanding floating rate indebtedness as of December 31, 2011.

As of December 31, 2010 and 2011, ChipMOS Taiwan had no interest rate swap agreements outstanding.

#### *Foreign Currency Exchange Rate Risks*

Our foreign currency exposure gives rise to market risks associated with exchange rate movements against the NT dollar, the Japanese yen and the US dollar. As of December 31, 2011, 51.7% of our financial assets and 9.0% of our financial liabilities are denominated in the US dollar and Japanese yen, respectively. To minimize foreign currency exchange risk, from time to time we utilize forward exchange contracts and foreign currency options to hedge our exchange rate risk on foreign currency assets or liabilities positions. These hedging transactions help to reduce, but do not eliminate, the impact of foreign currency exchange rate movements. An average appreciation of the NT dollar against all other relevant foreign currencies of 5% would decrease our exchange gain by NT\$240 million (US\$8 million) based on our outstanding assets and liabilities denominated in foreign currencies as of December 31, 2011. As of December 31, 2009, 2010 and 2011, we had no outstanding forward exchange or foreign currency option contracts.

See Note 23 of our audited consolidated financial statements for additional information on these derivative transactions.

**Item 12. Description of Securities Other Than Equity Securities**

Not applicable.

**Table of Contents**

**PART II**

**Item 13. Defaults, Dividend Arrearages and Delinquencies**  
None.

**Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds**  
Not applicable.

**Item 15. Controls and Procedures**

*Disclosure Controls and Procedures.* An evaluation was carried out under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934). Based upon that evaluation, the chief executive officer and chief financial officer concluded that these disclosure controls and procedures were effective as of December 31, 2011.

*Management's Annual Report on Internal Control Over Financial Reporting.* Management's Report on Internal Control Over Financial Reporting is set forth below.

**Management's Report on Internal Control Over Financial Reporting**

**April 26, 2012**

Management of ChipMOS TECHNOLOGIES (Bermuda) LTD. (together with its consolidated subsidiaries, the Company) is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934). The Company's internal control over financial reporting is a process designed under the supervision of the Company's chief executive officer and chief financial officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external reporting purposes in accordance with generally accepted accounting principles in the Republic of China and the required reconciliation to generally accepted accounting principles in the United States.

As of December 31, 2011, the Company's management, with the participation of the Company's chief executive officer and chief financial officer, conducted an assessment of the effectiveness of the Company's internal control over financial reporting using criteria set forth in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on this assessment, the Company's management has concluded that the Company's internal control over financial reporting as of December 31, 2011 was effective.

Moore Stephens, an independent registered public accounting firm, has audited our consolidated financial statements included in the Annual Report of the Company on Form 20-F for the year ended December 31, 2011 and has issued an attestation report on the Company's internal control over financial reporting as of December 31, 2011. The attestation report is set forth in Item 18. Financial Statements.

/s/ Shih-Jye Cheng  
Name: Shih-Jye Cheng  
Title: Chairman and Chief Executive Officer

/s/ Shou-Kang Chen  
Name: Shou-Kang Chen  
Title: Chief Financial Officer

*Changes in Internal Control Over Financial Reporting.* During 2011, no change to our internal control over financial reporting occurred that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**Item 16A. Audit Committee Financial Expert**

Our Board of Directors have determined that Chin-Shyh Ou, one of our independent directors, qualified as audit committee financial expert and meets the independence requirement as defined in Item 16A to Form 20-F.

**Item 16B. Code of Ethics**

We have adopted a Code of Business Conduct and Ethics, which applies to our directors, officers and employees. A copy of our Code of Business Conduct and Ethics is filed as Exhibit 11.1 to this Annual Report on Form 20-F.

**Table of Contents****Item 16C. Principal Accountant Fees and Services**

The table below summarizes the aggregate fees that we paid or accrued for services provided by Moore Stephens for the years ended December 31, 2010 and 2011.

	2010 NT\$	2011 NT\$
	(In thousands)	
Audit Fees	\$ 10,549	\$ 9,686
Audit Related Fees		
Tax Fees		
All Other Fees		
<b>Total</b>	<b>\$ 10,549</b>	<b>\$ 9,686</b>

*Audit Fees.* This category includes the audit of our annual financial statements and services that are normally provided by the independent auditors in connection with statutory and regulatory filings or engagements for those fiscal years. For 2010 and 2011, this category primarily include the audit of our financial statements and our internal control over financial reporting contained in this Annual Report on Form 20-F.

*Audit-Related Fees.* This category includes fees reasonably related to the performance of the audit or review of our financial statements and not included in the category of Audit Fees (described above).

All non-audit services are pre-approved by our Audit Committee on a case-by-case basis. Accordingly, we have not established any pre-approval policies and procedures.

All audit services that Moore Stephens was engaged to carry out after May 6, 2003, the effective date of revised Rule 2-01(c)(7) of Regulation S-X entitled *Audit Committee Administration of the Engagement* on strengthening requirements regarding auditor independence, were pre-approved by the Audit Committee.

**Item 16D. Exemptions from the Listing Standards for Audit Committees**

Not applicable.

**Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

On October 3, 2011, our Board of Directors approved and subsequently implemented a Rule 10b5-1 and 10b-18 share repurchase program in accordance with the Securities Exchange Act 1934, as amended, on November 17, 2012 to purchase through a broker our common shares, with a maximum purchase amount of US\$10 million. As of December 31, 2011, no share was purchased under the share repurchase program.

**Item 16F. Change in Registrant's Certifying Accountant**

Not applicable.

**Item 16G. Corporate Governance**

Our corporate governance practices are governed by applicable Bermuda law, specifically, the Bermuda Companies Act, and our memorandum of association and bye-laws. Also, because our securities are listed on the NASDAQ, we are subject to corporate governance requirements applicable to NASDAQ-listed foreign private issuers under NASDAQ listing rules.

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Under NASDAQ Rule 5615(a)(3), NASDAQ-listed foreign private issuers may, in general, follow their home country corporate governance practices instead of most NASDAQ corporate governance requirements. However, all NASDAQ-listed, foreign private issuers must comply with NASDAQ Rules 5605(c)(2)(A)(ii), 5605(c)(3), 5625 and 5640.



**Table of Contents**

Item 16G requires a foreign private issuer to provide in its annual report filed with the Securities and Exchange Commission a brief, general summary of any significant ways its corporate governance practices differ from those followed by NASDAQ-listed domestic companies. The table below provides this summary information as required by Item 16G and by NASDAQ Rule 5615(a)(3):

<b>NASDAQ Listing Rule</b>	<b>Corporate Governance Practice To Be Followed by Domestic Companies</b>	<b>Our Corporate Governance Practice</b>
5605(b)	Requires a majority independent board and an independent director executive session.	We follow the same NASDAQ listing rule governance practice as followed by domestic companies.
5605(c)(1)	Audit committee charter requirements.	We follow the same NASDAQ listing rule governance practice as followed by domestic companies.
5605(c)(2)(A)(ii)	Audit committee composition and independence requirements.	We follow the same NASDAQ listing rule governance practice as followed by domestic companies.
5605(c)(2)(A)(i), (iii), (iv)	Audit committee financial sophistication requirements.	We follow governance practices under Bermuda law: Bermuda Companies Act does not have such requirement.
5605(c)(3)	Audit committee responsibilities and authority requirements.	We follow the same NASDAQ listing rule governance practice as followed by domestic companies.
5605(d), (e)	Requires independent director oversight of executive officer compensation and director nominations.	We follow governance practices under Bermuda law: Bermuda Companies Act does not have such requirement.
5610	Requires a code of conduct for directors, officers and employees.	We follow the same NASDAQ listing rule governance practice as followed by domestic companies.
5620	Annual shareholder meeting requirements.	We follow governance practices under Bermuda law.
		<p>The Bermuda Companies Act and our bye-laws provide for certain requirements for the annual shareholder meeting, including the following:</p> <p>(a) an annual general meeting at least once in every calendar year unless according to the provisions of Bermuda Companies Act, shareholders elect to dispense with the holding of annual general meetings;</p> <p>(b) the Bermuda Companies Act does not have express provisions requiring proxy solicitation; and</p> <p>(c) under bye-law 49, the quorum for any annual general meeting shall be at least two shareholders present in person or by proxy and holding shares representing at least fifty percent (50%) of the total voting rights of all the shareholders having the right to vote at such meeting and entitled to vote.</p>
5625	Requires an issuer to notify NASDAQ of any material noncompliance with the Rule 5600 series.	We follow the same NASDAQ listing rule governance practice as followed by domestic companies.
5630	Requires oversight of related party transactions.	We follow the same NASDAQ listing rule governance practice as followed by domestic companies.
5635	Circumstances that require shareholder approval.	We follow governance practices under Bermuda law. The Bermuda Companies Act and our bye-laws provide for certain circumstances which require shareholders approval, including the following:

(a) under bye-law 5, subject to the Bermuda Companies Act, all or any of the special rights for the time being attached to any class of shares for the time being issued may from time to time be altered or abrogated with the consent in writing of the holders of not less than 75% of the issued shares of that class or with the sanction of a resolution of our shareholders passed at a separate general meeting of the holders of such shares voting in person or by proxy;

**Table of Contents**

	<b>Corporate Governance Practice To Be Followed by Domestic Companies</b>	<b>Our Corporate Governance Practice</b>
NASDAQ Listing Rule		(b) under bye-law 129, subject to the Bermuda Companies Act and our bye-laws, any resolution proposed for consideration at any general meeting to approve (i) the merger, amalgamation or any other consolidation of us with any other company, wherever incorporated; (ii) any sale, lease, exchange, transfer or other disposition of all or substantially all of our consolidated assets; and (iii) the adoption for any plan or proposal for our liquidation, shall require the approval of our shareholders holding shares representing at least 70% of the total voting rights of all the shareholders having the right to vote at such meeting; and
		(c) under the Bermuda Companies Act, there are provisions setting out the requirements as well as specified shareholders approval for a scheme of arrangement, compulsory acquisition, amalgamation or merger.
5640	Shareholder voting rights requirements.	We follow the same NASDAQ listing rule governance practice as followed by domestic companies.

**PART III**

**Item 17. Financial Statements**

The Company has elected to provide the financial statements and related information specified in Item 18 in lieu of Item 17.

**Item 18. Financial Statements**

The financial statements and related information of the Company are located at pages F-1 to F-61.

**Item 19. Exhibits**

<b>Exhibits</b>	<b>Description</b>
1.1	Memorandum of Association of ChipMOS TECHNOLOGIES (Bermuda) LTD. <sup>(1)</sup>
1.2	Bye-laws of ChipMOS TECHNOLOGIES (Bermuda) LTD. <sup>(10)</sup>
2.1	Certificate of Incorporation of ChipMOS TECHNOLOGIES (Bermuda) LTD., dated August 15, 2000. <sup>(1)</sup>
4.1	Joint Venture Agreement, dated July 14, 1997, between Mosel Vitelic Inc. and Siliconware Precision Industries Co., Ltd. <sup>(1)</sup>
4.2	Asset Sales Agreement, dated June 14, 1999, between Microchip Technology Taiwan and ChipMOS TECHNOLOGIES INC. <sup>(1)</sup>
4.3	Tessera Compliant Chip License Agreement, dated April 20, 1999, between Tessera Inc. and ChipMOS TECHNOLOGIES INC. <sup>(1)</sup>
4.4	License Agreement, dated April 1, 1999, between Fujitsu Ltd. and ChipMOS TECHNOLOGIES INC. <sup>(1)</sup>
4.5	Sales Agreement, dated February 10, 2000, between Sharp Corp. and ChipMOS TECHNOLOGIES INC. <sup>(1)</sup>
4.6	Raw Materials Processing Agreement, dated August 10, 2000, between Mosel Vitelic Inc. and ChipMOS TECHNOLOGIES INC. <sup>(1)</sup>
4.7	Raw Materials Processing Agreement, dated January 1, 2001, between Siliconware Precision Co. Ltd. and ChipMOS TECHNOLOGIES INC. <sup>(1)</sup>
4.8	Integrated Circuit Processing Agreement, dated January 1, 2001, between Siliconware Precision Co. Ltd. and ChipMOS TECHNOLOGIES INC. <sup>(1)</sup>
4.9	

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Integrated Circuit Processing and Warehousing Management Agreement, dated August 10, 2000, between Mosel Vitelic Inc. and ChipMOS TECHNOLOGIES INC.<sup>(1)</sup>

4.10 Land Lease Agreement, dated November 26, 1997, between Science Based Industrial Park Administration and ChipMOS TECHNOLOGIES INC.<sup>(1)</sup>

4.11 Land Lease Agreement, dated November 26, 1997, between Science Based Industrial Park Administration and ChipMOS TECHNOLOGIES INC.<sup>(1)</sup>

**Table of Contents**

<b>Exhibits</b>	<b>Description</b>
4.12	Land Lease Agreement, dated September 1, 1997, between Science Based Industrial Park Administration and ChipMOS TECHNOLOGIES INC. <sup>(1)</sup>
4.13	Purchase Agreement, dated July 31, 1997, between ChipMOS TECHNOLOGIES INC. and Mosel Vitelic Inc. <sup>(1)</sup>
4.14	Form of Share Exchange Covenant Letter from the Company to the Shareholders. <sup>(1)</sup>
4.15	Amendment to the Integrated Circuit Processing and Warehousing Management Agreement, dated August 10, 2000, between Mosel Vitelic Inc. and ChipMOS TECHNOLOGIES INC, dated September 1, 2001. <sup>(2)</sup>
4.16	Purchase Agreement, dated October 15, 2003, between ChipMOS TECHNOLOGIES INC. and DenMOS Technology Inc. <sup>(2)</sup>
4.17	Sale and Purchase Agreement, dated April 25, 2003, between ChipMOS TECHNOLOGIES INC. and Ron How Investment Corp. (English Translation) <sup>(3)</sup>
4.18	Sale and Purchase Agreement, dated April 25, 2003, between ChipMOS TECHNOLOGIES INC. and Yuan Shan Investment Corp. (English Translation) <sup>(3)</sup>
4.19	Sale and Purchase Agreement, dated April 25, 2003, between ChipMOS TECHNOLOGIES INC. and Mosel Vitelic Inc. (English Translation) <sup>(3)</sup>
4.20	Laser Stamping Machine Lease Agreement, dated November 1, 2002, between ChipMOS TECHNOLOGIES INC. and CHANTEK ELECTRONIC CO., LTD. (English Translation) <sup>(3)</sup>
4.21	Automatic Stamping Machine Lease Agreement, dated December 1, 2002, between ChipMOS TECHNOLOGIES INC. and CHANTEK ELECTRONIC CO., LTD. (English Translation) <sup>(3)</sup>
4.22	Raw Materials Processing Agreement, dated January 1, 2003, between ChipMOS TECHNOLOGIES INC. and CHANTEK ELECTRONIC CO., LTD. (English Translation) <sup>(3)</sup>
4.23	Integrated Circuit Processing Agreement, dated January 1, 2003, between ChipMOS TECHNOLOGIES INC. and CHANTEK ELECTRONIC CO., LTD. (English Translation) <sup>(3)</sup>
4.24	Technology Transfer Agreement, dated December 24, 2002, between ChipMOS TECHNOLOGIES INC. and ThaiLin Semiconductor Corp. (English Translation) <sup>(3)</sup>
4.25	Tester Equipment Lease Agreement, dated November 14, 2002, between ChipMOS TECHNOLOGIES INC. and ThaiLin Semiconductor Corp. (English Translation) <sup>(3)</sup>
4.26	Tester Equipment Lease Agreement, dated December 3, 2002, between ChipMOS TECHNOLOGIES INC. and ThaiLin Semiconductor Corp. (English Translation) <sup>(3)</sup>
4.27	Joint Engagement Letter, undated, by and among Ultima Electronics Corp., ChipMOS TECHNOLOGIES INC. and Sun-Fund Securities Ltd. (English Translation) <sup>(3)</sup>
4.28	Lease Agreement, dated June 1, 2002, between ChipMOS TECHNOLOGIES INC. and SyncMOS Technologies, Inc. (English Translation) <sup>(3)</sup>
4.29	Technology Transfer Agreement, dated August 1, 2002, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ChipMOS TECHNOLOGIES (Shanghai) LTD. <sup>(3)</sup>
4.30	Promissory Note from Modern Mind Technology Limited to Jesper Limited, dated November 4, 2002. <sup>(3)</sup>
4.31	Deed of Variation, dated December 2, 2002, between Modern Mind Technology Limited and Jesper Limited. <sup>(3)</sup>
4.32	Deed of Assignment, dated December 27, 2002, between Jesper Limited and ChipMOS TECHNOLOGIES (Bermuda) LTD. <sup>(3)</sup>
4.33	Deed of Assignment, dated June 25, 2003, between Jesper Limited and ChipMOS TECHNOLOGIES INC. <sup>(3)</sup>
4.34	Agreement, dated May 3, 2003, between Jesper Limited and Modern Mind Technology Limited. <sup>(3)</sup>
4.35	Master loan agreement, dated July 12, 2004, among ChipMOS TECHNOLOGIES (Bermuda) LTD., Modern Mind Technology Limited and Jesper Limited. <sup>(5)</sup>
4.36	

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Cooperation Agreement, dated March 27, 2002, between Shanghai Qingpu Industrial Zone Development (Group) Company and ChipMOS TECHNOLOGIES (Bermuda) LTD. (English Translation)<sup>(3)</sup>

4.37 Deed of assignment, dated December 17, 2003, between ChipMOS TECHNOLOGIES INC. and ChipMOS TECHNOLOGIES (Bermuda) LTD.<sup>(4)</sup>

**Table of Contents**

<b>Exhibits</b>	<b>Description</b>
4.38	Supplemental deed of assignment, dated May 14, 2004 between ChipMOS TECHNOLOGIES INC. and ChipMOS TECHNOLOGIES (Bermuda) LTD. <sup>(4)</sup>
4.39	Second supplemental deed of assignment, dated October 11, 2004, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ChipMOS TECHNOLOGIES INC. <sup>(5)</sup>
4.40	Assignment agreement, dated April 7, 2004, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ChipMOS TECHNOLOGIES INC. <sup>(4)</sup>
4.41	Supplemental assignment agreement, dated May 14, 2004, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ChipMOS TECHNOLOGIES INC. <sup>(4)</sup>
4.42	Second supplemental assignment agreement, dated October 11, 2004, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ChipMOS TECHNOLOGIES INC. <sup>(5)</sup>
4.43	Patent license agreement, dated April 7, 2004, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ChipMOS TECHNOLOGIES INC. <sup>(4)</sup>
4.44	Supplemental patent license agreement dated July 8, 2004, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ChipMOS TECHNOLOGIES INC. <sup>(5)</sup>
4.45	Second supplemental patent license agreement dated October 11, 2004, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ChipMOS TECHNOLOGIES INC. <sup>(5)</sup>
4.46	Third supplemental patent license agreement dated December 30, 2004, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ChipMOS TECHNOLOGIES INC. <sup>(5)</sup>
4.47	Assembly and Testing Service Agreement, dated November 27, 2005, between ChipMOS TECHNOLOGIES INC. and Spansion LLC. <sup>(6)</sup>
4.48	Share Purchase and Subscription Agreement, dated February 13, 2007, among ChipMOS TECHNOLOGIES (Bermuda) LTD., ChipMOS TECHNOLOGIES INC. and Siliconware Precision Industries Co., Ltd. <sup>(7)</sup>
4.49	Registration Rights Agreement, dated March 27, 2007, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and Siliconware Precision Industries Co., Ltd. <sup>(7)</sup>
4.50	Share Exchange Agreement, dated as of April 12, 2007, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ChipMOS TECHNOLOGIES INC. <sup>(9)</sup>
4.51	Assignment Agreement, dated April 12, 2007, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ChipMOS TECHNOLOGIES INC. <sup>(8)</sup>
4.52	Form of Change In Control Severance Agreement. <sup>(9)</sup>
4.53	Southern Taiwan Science Park Administration Land Lease Agreement, dated June 1, 2007, between Southern Taiwan Science Park Administration and ChipMOS TECHNOLOGIES INC. (English Translation) <sup>(9)</sup>
4.54	Second Amendment to Assembly and Test Service Agreement, dated July 16, 2007, by and between Spansion LLC and ChipMOS TECHNOLOGIES INC. <sup>(9)</sup>
4.55	Service Agreement for Integrated Circuit Products, dated July 17, 2007, by and between ProMOS Technologies Inc. and ChipMOS TECHNOLOGIES INC. (English Translation) <sup>(9)</sup>
4.56	Registration Rights Agreement, dated August 8, 2007, among ChipMOS TECHNOLOGIES (Bermuda) LTD., Giant Haven Investment Limited, ProMOS Technologies Inc. and Powertech Technology Inc. <sup>(9)</sup>
4.57	Third Amendment to Assembly and Test Services Agreement, dated November 30, 2007, by and between Spansion LLC and ChipMOS TECHNOLOGIES INC. <sup>(9)</sup>
4.58	Science Park Administration Land Lease Agreement, dated December 1, 2007, between Science Park Administration and ChipMOS TECHNOLOGIES INC. (English Translation) <sup>(9)</sup>
4.59	Lease Agreement, dated April 2, 2008, between ChipMOS TECHNOLOGIES INC. and ThaiLin Semiconductor Corp. (English Translation) <sup>(9)</sup>
4.60	

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Master Lease Agreement and Addendums to the Master Lease Agreement, dated November 9, 2009, between ChipMOS TECHNOLOGIES INC. and GE Money Taiwan Limited.<sup>(11)</sup>

4.61 Transfer of Claim Agreement, dated January 25, 2010, between ChipMOS TECHNOLOGIES INC. and Citigroup Financial Products Inc.<sup>(11)</sup>



**Table of Contents**

<b>Exhibits</b>	<b>Description</b>
4.62	Share Purchase Agreement, dated February 26, 2010, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and Siliconware Precision Industries Co., Ltd. <sup>(11)</sup>
4.63	Equipment Purchase Agreement, dated February 26, 2010, between ChipMOS TECHNOLOGIES INC. and Siliconware Precision Industries Co., Ltd. <sup>(11)</sup>
4.64	Assignment and Assumption Agreement, effective on April 22, 2011 between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ThaiLin Semiconductor Corp. <sup>(12)</sup>
4.65	Syndicated Loan Agreement, dated July 14, 2011, between ChipMOS TECHNOLOGIES INC. and Taiwan Cooperative Bank, Bank of Taiwan and Land Bank of Taiwan as the lead Arrangers.
8.1	List of principal subsidiaries of ChipMOS TECHNOLOGIES (Bermuda) LTD.
11.1	Code of Business Conduct and Ethics. <sup>(4)</sup>
12.1	Certification of Chief Executive Officer required by Rule 13a-14(a) under the Exchange Act.
12.2	Certification of Chief Financial Officer required by Rule 13a-14(a) under the Exchange Act.
13.1	Certification of Chief Executive Officer required by Rule 13a-14(b) under the Exchange Act.
13.2	Certification of Chief Financial Officer required by Rule 13a-14(b) under the Exchange Act.
15.1	Consent of independent registered public accounting firm.

(1) Incorporated by reference to our Registration Statement on Form F-1 (File No. 333-13218), filed on February 28, 2001.

(2) Incorporated by reference to our Annual Report on Form 20-F (File No. 0-31106), filed on June 17, 2002.

(3) Incorporated by reference to our Annual Report on Form 20-F (File No. 0-31106), filed on June 30, 2003.

(4) Incorporated by reference to our Annual Report on Form 20-F (File No. 0-31106), filed on June 17, 2004.

(5) Incorporated by reference to our Annual Report on Form 20-F (File No. 0-31106), filed on June 29, 2005.

(6) Incorporated by reference to our Registration Statement on Form F-3 (File No. 333-130230), filed on December 9, 2005.

(7) Incorporated by reference to Schedule 13D filed with the United States Securities and Exchange Commission by Siliconware Precision Industries Co., Ltd. on April 4, 2007.

(8) Incorporated by reference to our Annual Report on Form 20-F (File No. 0-31106), filed on June 8 2007.

(9) Incorporated by reference to our Annual Report on Form 20-F (File No. 0-31106), filed on June 6, 2008.

(10) Incorporated by reference to our Annual Report on Form 20-F (File No. 0-31106), filed on June 4, 2009.

(11) Incorporated by reference to our Annual Report on Form 20-F (File No. 0-31106), filed on June 4, 2010.

(12) Incorporated by reference to our Annual Report on Form 20-F (File No. 0-31106), filed on June 3, 2011.

We have not included as exhibits certain instruments with respect to our debt, the amount of debt authorized under each of which does not exceed 10% of our total assets, and we agree to furnish a copy of any such instrument to the Commission upon request.

**Table of Contents**

**SIGNATURES**

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Registrant certifies that it meets all the requirements for filing on Form 20-F and it has duly caused this Annual Report on Form 20-F to be signed on its behalf by the undersigned, thereunto duly authorized, in Taipei, Taiwan, Republic of China, on April 26, 2012.

ChipMOS TECHNOLOGIES (Bermuda) LTD.

By: **/s/ Shih-Jye Cheng**

**Name: Shih-Jye Cheng**

**Title: Chairman and Chief Executive Officer**

**Table of Contents**

**ChipMOS TECHNOLOGIES (Bermuda) LTD. AND SUBSIDIARIES**

**INDEX TO CONSOLIDATED FINANCIAL STATEMENTS**

<u>Report of Independent Registered Public Accounting Firm</u>	F-2
<u>Consolidated Balance Sheets</u>	F-4
<u>Consolidated Statements of Operations</u>	F-6
<u>Consolidated Statements of Changes in Equity</u>	F-8
<u>Consolidated Statements of Cash Flows</u>	F-9
<u>Notes to Consolidated Financial Statements</u>	F-11

F-1

**Table of Contents**

**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Shareholders

ChipMOS TECHNOLOGIES (Bermuda) LTD.

We have audited the accompanying consolidated balance sheets of ChipMOS TECHNOLOGIES (Bermuda) LTD. and subsidiaries (collectively, the Company ) (see Note 1) as of December 31, 2010 and 2011, and the related consolidated statements of operations, changes in equity, and cash flows for each of the three years in the period ended December 31, 2011, all expressed in New Taiwan dollars. We have also audited the Company s internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company s management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on these consolidated financial statements and an opinion on the Company s internal control over financial reporting based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the Republic of China and the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

**Table of Contents**

**Report of Independent Registered Public Accounting Firm (continued)**

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2010 and 2011, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2011, in conformity with accounting principles generally accepted in the Republic of China. Also, in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2011, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Accounting principles generally accepted in the Republic of China vary in certain significant respects from accounting principles generally accepted in the United States of America. The application of the latter would have affected the determination of net income for each of the three years in the period ended December 31, 2011, and the determination of equity and financial position at December 31, 2010 and 2011, to the extent summarized in Note 25.

/s/ Moore Stephens

*Certified Public Accountants*

*Hong Kong*

March 15, 2012

F-3

**Table of Contents****ChipMOS TECHNOLOGIES (Bermuda) LTD. AND SUBSIDIARIES****CONSOLIDATED BALANCE SHEETS**

December 31, 2010 and 2011 (Notes 1 and 17)

(In Thousands of New Taiwan and U.S. Dollars, Except Par Value)

	2010 NT\$	December 31, 2011 NT\$	US\$ (Note 3)
<b>ASSETS</b>			
<b>CURRENT ASSETS</b>			
Cash and cash equivalents	7,143,265	7,357,902	243,076
Restricted cash and cash equivalents (Note 20)	546,807	285,133	9,420
Financial assets at fair value through profit and loss (Notes 2 and 4)	2,999		
Notes receivable (Note 2)	13,980	5,710	189
Accounts receivable - net of allowance for doubtful receivables and sales return allowances of NT\$197,311 in 2010 and NT\$121,143 in 2011 (Notes 2 and 5)			
Related parties (Note 19)	257,982		
Third parties	2,816,072	3,666,507	121,127
Other receivables - net of allowance for doubtful receivables and sales return allowances of NT\$64,783 in 2010 and NT\$64,783 in 2011 (Notes 2 and 5)			
Related parties (Note 19)	66,378		
Third parties	182,028	73,179	2,417
Inventories - net (Notes 2 and 6)	1,279,804	1,533,866	50,673
Deferred income tax - net (Notes 2 and 18)	278,711	76,559	2,529
Prepaid expenses and other current assets	202,272	92,335	3,050
<b>Total Current Assets</b>	<b>12,790,298</b>	<b>13,091,191</b>	<b>432,481</b>
<b>LONG-TERM INVESTMENTS (Notes 2 and 7)</b>			
Financial assets carried at cost	10,537	39,121	1,292
<b>PROPERTY, PLANT AND EQUIPMENT - NET (Notes 2 and 20)</b>			
<b>Cost</b>			
Land	452,738	452,738	14,957
Buildings and auxiliary equipment	8,721,205	9,095,376	300,475
Machinery and equipment	35,222,825	38,698,624	1,278,448
Furniture and fixtures	1,289,149	1,401,278	46,293
Transportation equipment	36,396	36,819	1,216
Tools	2,970,633	3,056,053	100,960
Leasehold improvements	2,223	2,310	76
Leased equipment (Note 15)	2,149,768		
<b>Total cost</b>	<b>50,844,937</b>	<b>52,743,198</b>	<b>1,742,425</b>
Accumulated depreciation (Note 8)	(33,342,105)	(37,910,331)	(1,252,406)
Accumulated impairment	(1,310,474)	(1,417,109)	(46,816)
Construction in progress and advance payments	1,080,610	480,290	15,867

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Net Property, Plant and Equipment	17,272,968	13,896,048	459,070
INTANGIBLE ASSETS - NET (Notes 2 and 9)	94,265	100,498	3,320
<b>OTHER ASSETS</b>			
Employee dormitory buildings - net of accumulated depreciation of NT\$152,639 in 2010 and NT\$180,731 in 2011 (Note 2)	262,735	248,429	8,207
Refundable deposits	20,295	21,364	706
Prepaid pension (Notes 2 and 16)	26,825	33,541	1,108
Deferred income tax net (Notes 2 and 18)	417,931	600,351	19,833
Others (Note 2)	419,176	250,522	8,277
<b>Total Other Assets</b>	<b>1,146,962</b>	<b>1,154,207</b>	<b>38,131</b>
<b>TOTAL ASSETS</b>	<b>31,315,030</b>	<b>28,281,065</b>	<b>934,294</b>

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

**Table of Contents****ChipMOS TECHNOLOGIES (Bermuda) LTD. AND SUBSIDIARIES****CONSOLIDATED BALANCE SHEETS (Continued)**

December 31, 2010 and 2011 (Notes 1 and 17)

(In Thousands of New Taiwan and U.S. Dollars, Except Par Value)

	2010 NT\$	December 31, 2011 NT\$	US\$
			(Note 3)
<b>LIABILITIES AND EQUITY</b>			
<b>CURRENT LIABILITIES</b>			
Bank loans (Notes 10 and 20)	1,494,651	546,916	18,068
Current portion of long-term loans (Notes 14 and 20)	4,925,739	684,028	22,598
Convertible notes (Note 13)	65,834		
Deferred credit	2,181	2,383	79
Accounts payable	690,060	1,130,730	37,355
Other payables			
Related parties (Note 19)	13		
Third parties (Note 11)	896,706	1,081,530	35,729
Income tax payable (Note 2)	18,799	20,283	670
Payables to contractors and equipment suppliers (Note 19)	790,598	415,391	13,723
Capital leases payable (Notes 15 and 20)	822,047		
Accrued expenses and other current liabilities (Note 12)	990,896	830,903	27,449
<b>Total Current Liabilities</b>	<b>10,697,524</b>	<b>4,712,164</b>	<b>155,671</b>
<b>LONG-TERM LIABILITIES</b>			
Convertible notes (Note 13)	108,304		
Derivative liabilities (Note 13)	96,788		
Capital leases payable (Notes 15 and 20)	631,744		
Long-term loans (Notes 14 and 20)	5,640,132	8,484,300	280,287
<b>Total Long-Term Liabilities</b>	<b>6,476,968</b>	<b>8,484,300</b>	<b>280,287</b>
<b>OTHER LIABILITIES</b>			
Deferred credit	89,425	95,304	3,149
Accrued pension cost (Notes 2 and 16)	3,665	4,250	140
Guarantee deposits	3,989	1,777	59
<b>Total Other Liabilities</b>	<b>97,079</b>	<b>101,331</b>	<b>3,348</b>
<b>Total Liabilities</b>	<b>17,271,571</b>	<b>13,297,795</b>	<b>439,306</b>
<b>COMMITMENTS AND CONTINGENCIES (Note 21)</b>			
<b>EQUITY (Notes 2 and 17) <sup>(1)</sup></b>			
Capital stock NT\$1.169 (US\$0.04) par value			



Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Authorized 62,500 thousand common shares and 18,750 thousand preferred shares			
Issued 33,398 thousand common shares (2010: 27,638 thousand common shares)			
Outstanding 26,924 thousand common shares (2010: 25,715 thousand common shares)	36,008	39,041	1,290
Capital surplus	14,040,716	15,201,353	502,192
Deferred compensation	(1,577)		
Accumulated losses	(3,772,270)	(3,787,431)	(125,122)
Cumulative translation adjustments	326,051	433,902	14,335
Treasury stock	(128,614)	(924,781)	(30,551)
<b>Total Shareholders' Equity</b>	<b>10,500,314</b>	<b>10,962,084</b>	<b>362,144</b>
Noncontrolling interests	3,543,145	4,021,186	132,844
<b>Total Equity</b>	<b>14,043,459</b>	<b>14,983,270</b>	<b>494,988</b>
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>31,315,030</b>	<b>28,281,065</b>	<b>934,294</b>

(1) The outstanding shares and par value reflect the reverse stock split of the Company's common stock with a ratio of 1-for-every-4 shares effective on January 21, 2011.

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

**Table of Contents****ChipMOS TECHNOLOGIES (Bermuda) LTD. AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF OPERATIONS****For the Years Ended December 31, 2009, 2010 and 2011 (Notes 1 and 17)****(In Thousands of New Taiwan and U.S. Dollars, Except Earnings Per Share)**

	2009 NT\$	Year Ended December 31, 2010 NT\$	2011 NT\$	US\$
				(Note 3)
<b>NET REVENUE (Notes 2, 19 and 24)</b>				
Related parties	668,906	2,033,342	379,009	12,521
Third parties	11,481,402	15,176,391	17,831,928	589,096
<b>Total Net Revenues</b>	<b>12,150,308</b>	<b>17,209,733</b>	<b>18,210,937</b>	<b>601,617</b>
<b>COST OF REVENUE (Notes 24)</b>				
Related parties	885,119	2,408,321	446,609	14,754
Third parties	14,776,333	14,155,682	16,102,605	531,966
<b>Total Cost of Revenue</b>	<b>15,661,452</b>	<b>16,564,003</b>	<b>16,549,214</b>	<b>546,720</b>
<b>GROSS PROFIT (LOSS)</b>	<b>(3,511,144)</b>	<b>645,730</b>	<b>1,661,723</b>	<b>54,897</b>
<b>OPERATING EXPENSES (Note 19)</b>				
Research and development (Note 2)	375,283	412,753	409,754	13,537
General and administrative	657,802	677,618	651,922	21,537
Sales and marketing (Notes 2 and 5)	561,231	64,382	66,538	2,198
<b>Total Operating Expenses</b>	<b>1,594,316</b>	<b>1,154,753</b>	<b>1,128,214</b>	<b>37,272</b>
<b>INCOME (LOSS) FROM OPERATIONS</b>	<b>(5,105,460)</b>	<b>(509,023)</b>	<b>533,509</b>	<b>17,625</b>
<b>NON-OPERATING INCOME</b>				
Gain on embedded derivative	50,740			
Foreign exchange gain - net (Note 2)	14,683		129,721	4,286
Rental	12,307	12,648	9,605	317
Interest (Note 19)	37,297	15,861	23,772	785
Cash dividend from financial assets		9,194		
Fair value gain on financial assets	62,674	3,918		
Subsidy income	4,128			
Gain on disposal of property, plant and equipment (Note 2)	10,274	104,310	39,061	1,290
Gain on disposal of financial assets		15,819	1,254	42
Gain on partial disposal of a subsidiary		31,372		
Gain on extinguishment of convertible notes	412,337			
Claim received (Note 5)		2,118,490		
Recovery of allowance for doubtful receivables (Notes 5 and 19)		2,716,880		

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Royalty income			10,616	351
Other	63,751	183,491	79,320	2,620
Total Non-Operating Income	668,191	5,211,983	293,349	9,691

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

F-6

**Table of Contents****ChipMOS TECHNOLOGIES (Bermuda) LTD. AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF OPERATIONS (Continued)****For the Years Ended December 31, 2009, 2010 and 2011 (Notes 1 and 17)****(In Thousands of New Taiwan and U.S. Dollars, Except Earnings Per Share)**

	2009 NT\$	Year Ended December 31, 2010 NT\$	2011 NT\$	US\$
				(Note 3)
<b>NON-OPERATING EXPENSES</b>				
Interest	439,411	683,486	309,286	10,218
Financing cost	37,081	39,613	99,436	3,285
Foreign exchange loss - net (Note 2)		292,567		
Loss on disposal of property, plant and equipment (Note 2)	152	83,593	7,389	244
Impairment loss on long-term investments (Note 7)		9,429		
Impairment loss on property, plant and equipment	25,543			
Impairment loss on other assets		391,646	168,154	5,555
Loss on embedded derivative		260,654	57,188	1,889
Loss on partial disposal of a subsidiary			74,923	2,475
Loss on sale of receivables (Note 5)		1,067,791		
Other	49,262	62,615	32,743	1,082
<b>Total Non-Operating Expenses</b>	<b>551,449</b>	<b>2,891,394</b>	<b>749,119</b>	<b>24,748</b>
<b>INCOME (LOSS) BEFORE INCOME TAX AND NONCONTROLLING INTERESTS</b>	<b>(4,988,718)</b>	<b>1,811,566</b>	<b>77,739</b>	<b>2,568</b>
<b>INCOME TAX BENEFIT (EXPENSE) (Notes 2 and 18)</b>	<b>420,662</b>	<b>99,360</b>	<b>(45,506)</b>	<b>(1,503)</b>
<b>INCOME (LOSS) BEFORE NONCONTROLLING INTERESTS</b>	<b>(4,568,056)</b>	<b>1,910,926</b>	<b>32,233</b>	<b>1,065</b>
<b>NET LOSS (INCOME) ATTRIBUTABLE TO NONCONTROLLING INTERESTS</b>	<b>149,373</b>	<b>(266,194)</b>	<b>(47,394)</b>	<b>(1,566)</b>
<b>NET INCOME (LOSS) ATTRIBUTABLE TO ChipMOS</b>	<b>(4,418,683)</b>	<b>1,644,732</b>	<b>(15,161)</b>	<b>(501)</b>
<b>EARNINGS (LOSS) PER SHARE - BASIC <sup>(1)</sup></b>	<b>(223.35)</b>	<b>68.61</b>	<b>(0.57)</b>	<b>(0.02)</b>
<b>WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING - BASIC<sup>(1)</sup></b>	<b>19,784</b>	<b>23,971</b>	<b>26,590</b>	<b>26,590</b>
<b>EARNINGS (LOSS) PER SHARE - DILUTED (Note 2) <sup>(1)</sup></b>	<b>(230.15)</b>	<b>67.38</b>	<b>(0.57)</b>	<b>(0.02)</b>
<b>WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING - DILUTED (Note 2) <sup>(1)</sup></b>	<b>22,254</b>	<b>26,806</b>	<b>26,590</b>	<b>26,590</b>

(1) The outstanding shares and per share information reflect the reverse stock split of the Company's common stock with a ratio of 1-for-every-4 shares effective on January 21, 2011.

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



**Table of Contents****ChipMOS TECHNOLOGIES (Bermuda) LTD. AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY****For the Years Ended December 31, 2009, 2010 and 2011 (Notes 1 and 17)****(In Thousands of New Taiwan Dollars, Except Number of Shares)**

	CAPITAL STOCK		CAPITAL SURPLUS	DEFERRED COMPENSATION	RETAINED EARNINGS	CUMULATIVE	TREASURY STOCK	NON-	TOTAL
	Shares <sup>(1)</sup>	Amount			(ACCUMULATED)	TRANSLATION		CONTROLLING	
	(Thousands)	NT\$	NT\$	NT\$	LOSSES)	(Note 2)	NT\$	INTERESTS	NT\$
BALANCE, January 1, 2009	20,943	27,557	12,784,081	(26,000)	(998,319)	433,714	(1,779)	2,323,559	14,542,813
Issue of option warrants			73,292	17,308					90,600
Net loss for 2009					(4,418,683)			(149,373)	(4,568,056)
Adjustment of equity method for long-term investments			2,724						2,724
Changes in noncontrolling interests								(6,731)	(6,731)
Stock purchased by a subsidiary	(1,472)						(79,936)		(79,936)
Translation adjustments						(29,197)			(29,197)
<b>BALANCE, DECEMBER 31, 2009</b>	<b>19,471</b>	<b>27,557</b>	<b>12,860,097</b>	<b>(8,692)</b>	<b>(5,417,002)</b>	<b>404,517</b>	<b>(81,715)</b>	<b>2,167,455</b>	<b>9,952,217</b>
Exercise of stock option	19	23	1,427						1,450
Issue of option warrants			36,757	7,115					43,872
Net profit for 2010					1,644,732			266,194	1,910,926
Interest payment for convertible notes( CN )	290	879	75,236				(46,899)		29,216
CN conversion	5,935	7,549	1,070,459						1,078,008
Adjustment of equity method for long-term investments			(3,260)						(3,260)
Changes in noncontrolling interests								3,710	3,710
Partial disposal of a subsidiary								1,105,786	1,105,786
Translation adjustments						(78,466)			(78,466)
<b>BALANCE, DECEMBER 31, 2010</b>	<b>25,715</b>	<b>36,008</b>	<b>14,040,716</b>	<b>(1,577)</b>	<b>(3,772,270)</b>	<b>326,051</b>	<b>(128,614)</b>	<b>3,543,145</b>	<b>14,043,459</b>
Exercise of stock option	96	111	15,871						15,982
Issue of option warrants			47,402	1,577					48,979

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Net loss for 2011				(15,161)			47,394	32,233
Interest payment for CN	27	108	16,828			(11,528)		5,408
CN conversion	1,086	6,619	1,083,589			(784,639)		305,569
Adjustment of equity method for long- term investments			(6,619)					(6,619)
Changes in noncontrolling interests							(132,806)	(132,806)
Partial disposal of a subsidiary							563,453	563,453
Reverse stock split		(3,805)	3,566					(239)
Translation adjustments					107,851			107,851
<b>BALANCE, DECEMBER 31, 2011</b>	<b>26,924</b>	<b>39,041</b>	<b>15,201,353</b>	<b>(3,787,431)</b>	<b>433,902</b>	<b>(924,781)</b>	<b>4,021,186</b>	<b>14,983,270</b>

- (1) The outstanding shares reflect the reverse stock split of the Company's common stock with a ratio of 1-for-every-4 shares effective on January 21, 2011. The accompanying notes are an integral part of the consolidated financial statements.

**Table of Contents****ChipMOS TECHNOLOGIES (Bermuda) LTD. AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF CASH FLOWS****For the Years Ended December 31, 2009, 2010 and 2011 (Notes 1 and 17)****(In Thousands of New Taiwan and U.S. Dollars)**

	2009	Year Ended December 31,		
	NT\$	2010	2011	US\$
		NT\$	NT\$	
				(Note 3)
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>				
Net income (loss) attributable to ChipMOS	(4,418,683)	1,644,732	(15,161)	(501)
Adjustments to reconcile net income (loss) to net cash provided by operating activities				
Depreciation	6,340,321	6,132,868	5,513,554	182,146
Amortization of intangible and other assets	184,275	148,761	164,050	5,420
Amortization of discount of convertible notes	3,737	11,762	1,298	43
Interest payment from conversion of CN		276,891	39,780	1,314
Allowance for doubtful receivables	1,064,771	73,882	1,566	52
Recovery of allowance for doubtful receivables	(560,854)	(2,718,171)	(69,205)	(2,286)
Deferred compensation	90,600	43,872	48,979	1,618
Gain on disposal of property, plant and equipment - net	(10,122)	(20,717)	(31,672)	(1,046)
Gain on extinguishment of convertible notes	(412,337)			
Gain on disposal of financial assets		(15,819)	(1,254)	(42)
Loss (gain) on partial disposal of a subsidiary		(31,372)	74,923	2,475
Loss (gain) on embedded derivative	(50,740)	260,654	57,188	1,889
Impairment loss on long-term investments		9,429		
Impairment loss on property, plant and equipment	25,543			
Impairment loss on other assets		391,646	168,154	5,555
Fair value gain on financial assets	(62,674)	(3,918)		
Accrued pension cost	(8,288)	(7,044)	(6,131)	(203)
Deferred income tax - net	(447,683)	(126,966)	19,732	652
Noncontrolling interests	(149,373)	266,194	47,394	1,566
Changes in operating assets and liabilities				
Financial assets at fair value through profit and loss	102,137	124,813	4,253	141
Notes receivable	181,243	13,950	8,270	273
Accounts receivable	(1,241,354)	1,563,610	(693,101)	(22,897)
Other receivables	(399,651)	383,356	119,243	3,939
Inventories	137,166	(423,180)	(58,712)	(1,940)
Prepaid expenses and other current assets	(238)	60,565	132,673	4,383
Other assets	409	61	(2,002)	(66)
Accounts payable	263,564	(43,357)	433,196	14,311
Other payables	68,422	202,253	160,974	5,318
Income tax payable	18,078	(858)	1,483	49
Accrued expenses and other liabilities	65,162	473,312	(219,175)	(7,241)
Deferred credit	(2,404)	(2,304)	(2,257)	(75)
Net Cash Provided by Operating Activities	781,027	8,688,905	5,898,040	194,847
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>				
Decrease (increase) in restricted cash and cash equivalents	(172,804)	(303,637)	262,313	8,665
Proceeds from sales of property, plant and equipment	19,080	899,076	314,502	10,390
Proceeds from sales of long-term investment		10,953		
Proceeds from liquidation of a long-term investment	105,000			
Proceeds from redemption of held-to-maturity financial assets and financial assets with no active market	350,000	300,000		
Proceeds from sales of employee dormitory buildings and other assets	7,048		6,814	225
Proceeds from partial disposal of a subsidiary		1,133,049	486,859	16,084



## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Acquisitions of:				
Long-term investment			(28,584)	(944)
Property, plant and equipment	(1,244,631)	(4,467,696)	(4,150,898)	(137,129)
Deferred assets	(107,771)	(17,913)	(139,692)	(4,615)
Employee dormitory building and other assets	(82)	(11,102)	(962)	(32)
Decrease (increase) in refundable deposits	1,628	3,102	(1,070)	(35)
<b>Net Cash Used in Investing Activities</b>	<b>(1,042,532)</b>	<b>(2,454,168)</b>	<b>(3,250,718)</b>	<b>(107,391)</b>

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

F-9

**Table of Contents****ChipMOS TECHNOLOGIES (Bermuda) LTD. AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)**

For the Years Ended December 31, 2009, 2010 and 2011 (Notes 1 and 17)

(In Thousands of New Taiwan and U.S. Dollars)

	2009	Year Ended December 31,		
	NT\$	2010	2011	US\$
		NT\$	NT\$	
<b>(Note 3)</b>				
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>				
Payments on:				
Bank loans	(382,071)	(868,668)	(947,734)	(31,309)
Long-term loans	(1,572,518)	(2,227,389)	(1,397,543)	(46,169)
Convertible notes	(681,958)			
Treasury stock	(25,085)			
Reverse stock split			(239)	(8)
Proceeds from:				
Convertible notes	164,710	131,085		
Issuance of capital stock		1,450	15,982	528
Changes in noncontrolling interests	(6,731)	3,710	(132,806)	(4,387)
Increase (decrease) in guarantee deposits	(143)	323	(2,212)	(73)
<b>Net Cash used in Financing Activities</b>	<b>(2,503,796)</b>	<b>(2,959,489)</b>	<b>(2,464,552)</b>	<b>(81,418)</b>
<b>EFFECT OF EXCHANGE RATE CHANGES ON CASH</b>	<b>(1,780)</b>	<b>(16,811)</b>	<b>31,867</b>	<b>1,053</b>
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>(2,767,081)</b>	<b>3,258,437</b>	<b>214,637</b>	<b>7,091</b>
Cash and cash equivalents, beginning of the year	6,651,909	3,884,828	7,143,265	235,985
<b>Cash and cash equivalents, end of the year</b>	<b>3,884,828</b>	<b>7,143,265</b>	<b>7,357,902</b>	<b>243,076</b>
<b>SUPPLEMENTAL INFORMATION</b>				
Income tax paid	10,675	27,651	24,931	824
Interest paid	424,964	383,581	289,693	9,570
<b>NON-CASH FINANCING ACTIVITIES</b>				
Current portion of long-term loans	1,553,949	4,925,739	684,028	22,598
Extinguishment of convertible notes (Note 13)	503,213			
Interest payment for CN in shares		296,180	42,371	1,400
<b>PARTIAL CASH PAID FOR INVESTING ACTIVITIES</b>				
Cash paid for acquisition of property, plant and equipment				
Total acquisitions	3,479,682	4,237,278	2,319,283	76,620
Decrease (increase) in payables to contractors and equipment suppliers	(2,235,051)	230,418	1,831,615	60,509
	1,244,631	4,467,696	4,150,898	137,129

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



**Table of Contents**

**ChipMOS TECHNOLOGIES (Bermuda) LTD. AND SUBSIDIARIES**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**1. ORGANIZATION AND BUSINESS**

ChipMOS TECHNOLOGIES (Bermuda) LTD. (ChipMOS Bermuda) was incorporated under the laws of Bermuda on August 1, 2000, and its common shares have been traded on the NASDAQ Global Select Market since June 2001. In February 2010, ChipMOS Bermuda submitted an application to the NASDAQ Stock Market to transfer its listing to The NASDAQ Capital Market from The NASDAQ Global Select Market. The NASDAQ Stock Market has determined that the Company meets the NASDAQ Capital Market initial listing criteria set forth in Listing Rule 5505. Its common shares have been traded on the NASDAQ Capital Market since March 17, 2010. As of December 31, 2011, ChipMOS Bermuda was 19.38% (2010: 6.96%) owned by ThaiLin Semiconductor Corp. (ThaiLin). As of December 31, 2011, ChipMOS Bermuda owned 84.22% (2010: 88.96%) of the outstanding common shares of ChipMOS TECHNOLOGIES INC. (ChipMOS Taiwan).

ChipMOS Taiwan was incorporated in Taiwan on July 28, 1997 as a joint venture company between Mosel Vitelic Inc. (MVI) and Siliconware Precision Industries Co. Ltd. (SPIL). Its operations consist of testing and assembly of semiconductors. In connection with a corporate restructuring on January 12, 2001, the holders of an aggregate of 583,419 thousand common shares of ChipMOS Taiwan executed a Purchase and Subscription Agreement whereby they transferred their shares of ChipMOS Taiwan to ChipMOS Bermuda in exchange for 14,585 thousand common shares in ChipMOS Bermuda. The selling shareholders, who previously held an aggregate of 70.25% of the entire outstanding common shares of ChipMOS Taiwan, thus became the holders of the entire outstanding common shares of ChipMOS Bermuda. Because 100% of the outstanding common shares of ChipMOS Bermuda were owned by former shareholders of ChipMOS Taiwan, the exchange of shares has been accounted for as a merger as if ChipMOS Bermuda was the acquirer. Equity and operations attributable to ChipMOS Taiwan shareholders not participating in the exchange offer were reflected as noncontrolling interests in the historical financial statements. In March 2007, ChipMOS Bermuda, ChipMOS Taiwan and SPIL completed a share purchase and subscription transaction whereby ChipMOS Bermuda purchased 100% of SPIL's equity interest in ChipMOS Taiwan at US\$0.75 per share. SPIL also subscribed to 3,043,749 newly issued common shares of ChipMOS Bermuda through a private placement of US\$6.28 per share. After the transaction, ChipMOS Taiwan became a 99.14% subsidiary of ChipMOS Bermuda and SPIL owned 14.7% of ChipMOS Bermuda. In September 2007, another share exchange transaction was completed whereby ChipMOS Bermuda offered to exchange one share of ChipMOS Bermuda for 8.4 shares of ChipMOS Taiwan shares. The exchange was completed in September 2007 and ChipMOS Taiwan became a wholly-owned subsidiary of ChipMOS Bermuda. In February 2010, ChipMOS Bermuda entered into a Share Purchase Agreement with SPIL to sell to SPIL the holding of 133,000 thousand common shares of ChipMOS Taiwan for a consideration of NT\$1,630,580 thousand. In January 2011, the transaction was completed. As of December 31, 2011, SPIL held a 15.78% interest in ChipMOS Taiwan and ChipMOS Bermuda held an 84.22% interest in ChipMOS Taiwan.

**Table of Contents**

## 1. ORGANIZATION AND BUSINESS (continued)

ThaiLin was incorporated on May 15, 1996 and is listed on the GreTai Securities Market in Taiwan. ThaiLin is engaged in wafer and semiconductor testing services. On December 31, 2002, ChipMOS Taiwan acquired an equity interest of 41.8% in ThaiLin. On December 1, 2003, ChipMOS Taiwan obtained controlling influence over ThaiLin's decisions on its operations, personnel and financial policies. Therefore, ThaiLin has been consolidated into these financial statements from December 1, 2003 in spite of the fact that ChipMOS Taiwan holds an equity interest of less than 50% in ThaiLin. ChipMOS Bermuda consolidates ThaiLin in reliance on Rule 3A-02(a) under Regulation S-X which requires a company to consolidate an entity, notwithstanding the lack of majority ownership, if such consolidation is necessary to present fairly its financial position and results of operations because of the existence of a parent-subsidiary relationship by means other than record ownership of voting stock. This is consistent with the guidance in Financial Accounting Statement Board Accounting Standard Codification (FASB ASC) 810-10. ChipMOS Bermuda has a parent-subsidiary relationship with ThaiLin by indirect ownership and by means other than record ownership of voting stock. This relationship is based on ChipMOS Bermuda's power to direct or cause the direction of the management and policies of ThaiLin. As of December 31, 2011, ChipMOS Taiwan held a 42.87% (2010: 42.87%) equity interest in ThaiLin.

ChipMOS Japan Inc. (ChipMOS Japan) was incorporated in Japan in June 1999, and ChipMOS USA Inc. (ChipMOS USA) was incorporated in the United States of America in October 1999. These two companies engage in sales and customer services and all the expenses incurred from these activities are charged to current income. ChipMOS Japan began generating revenue in 2000, while ChipMOS USA began generating revenue in 2001. As of December 31, 2011, ChipMOS Taiwan owned 100% of the outstanding shares of ChipMOS USA. ChipMOS Japan was liquidated in October 2009.

MODERN MIND TECHNOLOGY LIMITED (Modern Mind) was incorporated in the British Virgin Islands on January 29, 2002. Modern Mind conducts its operations through ChipMOS TECHNOLOGIES (Shanghai) LTD. (ChipMOS Shanghai). ChipMOS Bermuda acquired a 100% equity interest in Modern Mind on December 12, 2002, and then transferred it to Jesper Limited (Jesper) on December 31, 2002. In December 2002 and 2003, ChipMOS Bermuda acquired from Jesper and ChipMOS Taiwan, respectively, convertible notes issued by Modern Mind (MMT Notes) that are convertible into a controlling equity interest in Modern Mind if the repayment is not made when due. ChipMOS Bermuda consolidates Modern Mind and its wholly-owned subsidiary, ChipMOS Shanghai in reliance on Rule 3A-02(a) under Regulation S-X which requires a company to consolidate an entity, notwithstanding the lack of majority ownership, if such consolidation is necessary to present fairly its financial position and results of operations because of the existence of a parent-subsidiary relationship by means other than record ownership of voting stock. This is consistent with the guidance in FASB ASC 810-10. ChipMOS Bermuda has a parent-subsidiary relationship with Modern Mind by means other than record ownership of voting stock. This relationship is based on ChipMOS Bermuda's power to direct or cause the direction of the management and policies of Modern Mind and ChipMOS Shanghai.

The parent-subsidiary relationship with and management and policies direction of Modern Mind and ChipMOS Shanghai is established through the MMT Notes. ChipMOS Bermuda has agreed to provide loans from time to time to Modern Mind pursuant to MMT Notes that can be converted into Modern Mind common shares at any time. Payment under the MMT Notes is fully and unconditionally guaranteed by Jesper and secured by a security interest in all outstanding equity interests in Modern Mind and ChipMOS Shanghai. Jesper has granted the Company an irrevocable option, exercisable at any time, to acquire all common shares of Modern Mind then owned by Jesper. These MMT Notes would represent, immediately after the conversion, almost 100% of the then outstanding common shares of Modern Mind. Accordingly, ChipMOS Bermuda is deemed to have a controlling interest in Modern Mind.

ChipMOS Shanghai a wholly-owned subsidiary of Modern Mind was established in the People's Republic of China (PRC) on June 7, 2002. ChipMOS Shanghai is engaged in wafer testing, semiconductor assembly and testing, and module and subsystem manufacturing. ChipMOS Shanghai commenced commercial production in 2003.

Under an assignment and assumption agreement signed on April 22, 2011, ChipMOS Bermuda agreed to sell the MMT Notes to ThaiLin for a purchase price of US\$39,950 thousand. On October 3, 2011, the transaction was completed.

**Table of Contents**

## 1. ORGANIZATION AND BUSINESS (continued)

On October 3, 2011, ThaiLin converted the MMT notes into common shares of Modern Mind and purchased all of the remaining common shares of Modern Mind from Jesper Limited. Modern Mind and its wholly-owned subsidiary, ChipMOS Shanghai, became wholly-owned subsidiaries of ThaiLin.

As of December 31, 2011 ChipMOS Bermuda's interest in ChipMOS Shanghai was reduced from 100% to 36.11%.

ChipMOS TECHNOLOGIES (H.K.) Limited (ChipMOS HK) was incorporated in Hong Kong on November 18, 2002. It is engaged in semiconductor testing and assembly services and trading of spare parts and tools. ChipMOS HK is a wholly-owned subsidiary of ChipMOS Bermuda. ChipMOS HK was liquidated in July 2011.

## 2. SIGNIFICANT ACCOUNTING POLICIES

**Basis of presentation**

The consolidated financial statements include the accounts of ChipMOS Bermuda and all subsidiaries in which ChipMOS Bermuda (hereinafter, referred to individually or collectively as the Company) holds a controlling interest or voting interests in excess of 50% in accordance with the requirements of ROC Statement of Financial Accounting Standards (SFAS No. 7). All significant intercompany accounts and transactions have been eliminated.

The Company's consolidated financial statements include for 2009, 2010 and 2011, the financial results of ChipMOS Taiwan and its subsidiaries, ThaiLin, ChipMOS USA, and Modern Mind and its wholly-owned subsidiary, ChipMOS Shanghai, and ChipMOS Japan and ChipMOS HK up to their respective dates of liquidation.

**Concentration of credit risk**

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash, accounts and other receivables.

At December 31, 2010 and 2011, the Company had credit risk exposure of uninsured cash in banks of approximately NT\$7,690,072 thousand and NT\$7,643,035 thousand (US\$252,496 thousand), respectively.

A substantial portion of revenue is earned from a small number of customers on credit and generally without any requirement of collateral.

The Company had one customer and two customers that had balances greater than ten percent of total notes and accounts receivable as of December 31, 2010 and 2011, respectively:

	<b>December 31,</b>	
	<b>2010</b>	<b>2011</b>
<b><u>Third party</u></b>		
Micron Technology, Inc. group ( Micron )	6%	18%
Novatek Microelectronics Corp. (Novatek)	20%	13%

Credit evaluation of each customer is performed and reserves for potential credit losses are maintained.

**Use of estimates**

The preparation of consolidated financial statements requires management to make estimates and judgments that affect the recorded amounts of assets, liabilities, revenue and expenses of the Company. The Company continually evaluates these estimates, including those related to allowances for doubtful amounts, inventories, useful lives of properties, income tax valuation allowances, pension plans and the fair value of financial instruments. The Company bases its estimates on historical experience and other assumptions, which it believes to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions and conditions.

Cash equivalents

Repurchase notes with original maturity dates of three months or less are classified as cash equivalents.

## Table of Contents

### 2. SIGNIFICANT ACCOUNTING POLICIES (continued)

#### Financial assets/liabilities at fair value through profit and loss

Financial assets and liabilities at fair value through profit and loss include investments and liabilities held for trading purposes and those designated as financial assets/liabilities reported at fair value. Transaction costs directly attributable to the acquisition or issuance of these financial assets and liabilities are expensed immediately as incurred. Subsequent to initial recognition, financial assets and liabilities are remeasured at fair value and the changes shall be recognized in earnings.

#### Financial assets carried at cost

Investments for which the Company does not exercise significant influence and that do not have a quoted market price in an active market and whose fair value cannot be reliably measured, such as non-publicly traded stocks and mutual funds, are carried at their original cost. The costs of non-publicly traded stocks and mutual funds are determined using the weighted-average method. If there is objective evidence which indicates that a financial asset is impaired, a loss is recognized. A subsequent reversal of such impairment loss is not allowed.

#### Notes and accounts receivable and other receivables

Notes and accounts receivable arise from the sales of goods or services. Receivables that do not arise from the sales of goods and services are classified as other receivables. Notes and accounts receivable and other receivables are initially recognized at fair value and carried at amortized cost using the effective interest method.

Individual notes and accounts receivable, and other receivables, are assessed individually for indicators of impairment as of each balance sheet date. Certain categories of financial assets, such as receivables, that are assessed not to be impaired individually are subsequently assessed for impairment on a collective basis.

For financial assets carried at amortized cost, an impairment loss is recognized in the consolidated statement of operations when there is objective evidence that the asset is impaired.

If in a subsequent period, the amount of impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment loss was recognized, the previously recognized impairment loss is reversed through the consolidated statement of operations to the extent that the carrying amount of the asset at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

#### Allowances for sales returns and discounts

Allowances for sales returns and discounts are provided based on the sales returns from past experience; such provisions are deducted from sales and the related costs of products are deducted from cost of products sold.

#### Inventories

Inventories are stated at the lower of standard cost (which is adjusted to 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.



## Table of Contents

### 2. SIGNIFICANT ACCOUNTING POLICIES (continued)

#### Property, plant and equipment and employee dormitory buildings

Property, plant and equipment and employee dormitory buildings (presented as part of Other Assets) are stated at cost less accumulated depreciation. Major additions, renewals and improvements are capitalized while maintenance and repairs are expensed as incurred.

The initial estimate of the service lives of property, plant and equipment is as follows: machinery and equipment, 1 to 5 years; buildings and auxiliary equipment, 1 to 54 years; furniture and fixtures, 1 to 5 years; tooling, 1 to 2 years; transportation equipment, 5 years; and leasehold improvements, the shorter of lease term or 1 to 10 years. Salvage value is considered when determining the basis of depreciated assets. If items of property, plant and equipment and employee dormitory buildings are still in good condition and useful at the end of their original service lives, the salvage value is depreciated over any extended useful life.

Upon sale or disposal of items of properties, the related cost and accumulated depreciation are removed from the accounts, and any gain or loss is credited or charged to current income.

#### Leased assets

Assets under capital leases are recorded at the lower of the fair value of the leased assets and the present value of the minimum lease payments of such assets. The leased assets are depreciated over the shorter of lease terms or the estimated useful life of the leased assets.

#### Intangible assets

Intangible assets are recorded at cost except for donation from the government, which is measured at fair value. Subsequent to their initial recognition, the book values are the cost and their incremental value that results from revaluation minus accumulated amortization and impairment loss.

Amortization is computed using the straight-line method. The Company reevaluates the residual value, estimated useful lives, and amortization method at least once every year. Changes in the above factors will be regarded as changes in accounting estimate.

#### Deferred charges

Deferred charges are amortized using the straight-line method over the following periods: technology know-how, 5 years; technology license fees, 5 years; software, 2 to 4 years; bond issuance costs, using the average method.

#### Asset impairment

The Company reviews its long-lived assets, including properties, assets leased to others and deferred charges, to look for any indication that an asset may be impaired as of the balance sheet date. An impairment loss is recognized whenever the recoverable amount of the asset of the cash-generating unit is below the carrying amount of an asset. If there is an indicator that an asset may be impaired, then the Company calculates the recoverable amount of the asset or the cash-generating unit. An asset's recoverable amount is the higher of the value in use of the asset or cash-generating unit to which it belongs and its fair value.

If an asset impairment loss (excluding goodwill) is reversed, the increase in the carrying value resulting from the reversal is credited to current income or debited to accumulated impairment to increase the carrying value of the asset to its recoverable amount. However, loss reversal is limited to the carrying value (net of depreciation or amortization) of the asset as if the impairment had not been recognized.

#### Reverse stock split

On January 21, 2011, the Company's shareholders approved a one-for-four share combination of its common stock which became effective on January 21, 2011. As a result of this reverse stock split, every four shares of the Company's common stock that were issued and outstanding as of January 21, 2011 were automatically combined into one issued and outstanding share with par value change from US\$0.01 to US\$0.04 per share, and the number of authorized but unissued shares of the Company's common stock was proportionally reduced. A proportionate adjustment was also made to the Company's outstanding stock options and convertible notes. No fractional shares were issued in connection with

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

this reverse stock split, but rather shareholders who were entitled to fractional shares received cash in aggregate of NT\$ 239 thousand (US\$8 thousand) in lieu of receiving fractional shares. All references within this document to earnings (loss) per share reflect this reverse stock split. Additionally, the number of common shares and stock options, and the price per common share, stock option and convertible notes, reflect this reverse stock split.

F-15

## Table of Contents

### 2. SIGNIFICANT ACCOUNTING POLICIES (continued)

#### Revenue recognition

The Company recognized revenue upon completion of testing and assembly services. Other criteria that the Company uses to determine when to recognize revenue are: (1) existence of persuasive evidence of the services provided, (2) customers' fixed commitment to use our service, (3) the selling price is fixed or determinable and (4) collectability is reasonably assured.

The Company does not take ownership of: (1) bare semiconductor wafers received from customers that it assembles into finished semiconductors, and (2) assembled semiconductors received from the customers that it tests. The title and risk of loss remains with the customer for those bare semiconductors and/or assembled semiconductors. Accordingly, the customer-supplied semiconductor materials are not included in the consolidated financial statements.

These policies are consistent with provisions in the FASB ASC 605 Revenue Recognition .

The Company does not provide warranties to customers except in cases of defects in the assembly services provided and deficiencies in testing services provided. An appropriate sales allowance is recognized in the period during which the sale is recognized, and is estimated based on historical experience.

#### Government grant

A government grant is recognized at its fair value and credited to the income statement. Where the grant relates to an asset, the fair value is credited to a deferred income account and is recognized as income over the periods necessary to match the related amortization of the asset, on a systematic basis.

#### Research and development costs

Research and development costs consist of expenditure incurred during the course of planned research and investigation aimed at discovery of new knowledge which will be useful for developing new products or production processes, or significantly enhancing existing products or production processes, and the implementation of such through design and testing of product alternatives or construction of prototypes. All expenses incurred in connection with the Company's research and development activities are charged to current income.

#### Pension and retirement costs

Defined benefit pension costs are recorded based on actuarial calculations. Provisions for pension costs are accrued based on actuarially determined amounts which include service cost, interest, amortization of unrecognized net transition obligation and expected return on pension assets. Unrecognized net transition obligation is amortized over 15 years.

Retirement benefit contributions are made to a pension scheme and/or retirement funds, the assets of which are managed by independent investment firms and/or government agencies. Contributions are made based on a percentage of the employees' salaries and bonus, if applicable, and are charged to the statement of operations as incurred.

#### Income tax

The Company has adopted the inter-period income tax allocation method. Deferred income tax assets are recognized for the tax effects of deductible temporary differences, unused tax credits, and operating loss carryforwards and those of taxable temporary differences are recognized as deferred income tax liabilities. A valuation allowance is provided for deferred tax assets that are not certain to be realized. A deferred tax asset or liability is classified as current or non-current based on the classification of the related asset or liability. However, if a deferred asset or liability cannot be related to an asset or liability in the financial statements, then it is classified as current or non-current based on the expected reversal dates of the temporary difference.

Any tax credit arising from the purchase of machinery, equipment and technology, research and development expenditures, personnel training, or investments in important technology-based enterprise is recognized as incurred.

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Adjustments of prior years' tax liabilities are added to or deducted from the current year's tax provision.

Income taxes (10%) on unappropriated earnings generated by ChipMOS Taiwan and ThaiLin are recorded as an expense in the year when the stockholders have effectively resolved that earnings shall be retained.

F-16

**Table of Contents**

## 2. SIGNIFICANT ACCOUNTING POLICIES (continued)

Advertising costs

Advertising costs included in sales and marketing expenses are expensed when incurred.

Foreign-currency transactions

Foreign-currency transactions, except for derivative financial instruments, are recorded in New Taiwan dollars at the rates of exchange in effect when the transactions occur. Gains or losses resulting from the application of different foreign exchange rates when cash in foreign currency is converted into New Taiwan dollars, or when foreign-currency receivables or payables are settled, are credited or charged to income in the year of conversion or settlement. On the balance sheet dates, the balances of foreign-currency assets and liabilities are restated at the prevailing exchange rates and the resulting differences are charged to current income except those foreign currencies-denominated investments in shares of stock where such differences are accounted for as translation adjustments under equity. SFAS No. 14, Accounting for Foreign-Currency Transactions, applies to foreign operations, with the local currency of each foreign subsidiary as its functional currency. The financial statements of foreign subsidiaries are translated into New Taiwan dollars at the following exchange rates: assets and liabilities - current rate; equity - historical rates; income and expenses - weighted average rate during the year. The resulting translation adjustment is recorded as a separate component of equity.

Earnings (Loss) per share

Earnings (loss) per share is calculated by dividing net income (loss) by the weighted average number of shares outstanding in each period, adjusted retroactively for reverse stock split, stock dividends and stock bonuses issued subsequently. Diluted earnings per share reflects the potential dilution of securities by including other potential common stock equivalents, including stock options and warrants, and convertible securities in the weighted average number of common shares outstanding for the year, if dilutive.

The following table reconciles the denominator to calculate basic and diluted earnings (loss) per share:

	2009	December 31, 2010 (in thousands)	2011
Basic number of shares	19,784	23,971	26,590
Add: stock options		288	
convertible notes	2,470	2,547	
Diluted number of shares	22,254	26,806	26,590

The following table reconciles the numerator to calculate basic and diluted earnings per share:

	2009 NT\$	Year ended December 31, 2010		2011 US\$
		NT\$	NT\$	
		(in thousands)		
Net income (loss) attributable to ChipMOS	(4,418,683)	1,644,732	(15,161)	(501)
Add: interest expense and other income/expenses (net of tax)	(703,046)	161,381		
Income (loss) attributable to ChipMOS adjusted for the effects of assumed exercise of options and conversion of notes	(5,121,729)	1,806,113	(15,161)	(501)



## Table of Contents

### 2. SIGNIFICANT ACCOUNTING POLICIES (continued)

#### Stock-based compensation

The Company adopted SFAS No. 39 Share-based Payment to account for employee stock-based compensation. Employee stock-based compensation is measured at the fair value of the options at grant date using an option valuation model. The total stock-based compensation expense resulting from stock options is included in the consolidated statement of operations.

Share appreciation rights have been accounted for using the fair value method. Cash-settled stock appreciation rights have been recognized as a liability.

#### Bonuses to employees, directors and supervisors

The Company recognizes bonus to employees, directors and supervisors according to Interpretation No. 2007-052 issued by the Accounting Research and Development Foundation (No. 2007-052). Bonuses to employees, directors and supervisors were accrued and recorded in the consolidated statements of operations according to the Company's Articles of Incorporation.

#### Convertible notes

Convertible notes issued before January 1, 2006 were accounted for in accordance with SFAS No. 21 Accounting for Convertible Bonds and thus, the related interest premium payable and amortization of discount or premium were recognized.

Convertible notes issued after January 1, 2006 are split into liability and equity components. If a convertible debt instrument has an embedded call or put option feature, the assessment of whether the call or put option is closely related to the host debt contract is made in accordance with SFAS No. 34 Financial Instruments: Recognition and Measurement. If the derivatives embedded in the convertible notes are not closely related to the host debt contract, the put and call option features are carried at fair value with gains and losses in earnings.

When holders of convertible notes exercise their conversion right, the book value of the note is credited to common stock at an amount equal to the par value of the common stock and the excess is credited to capital surplus. No gain or loss is recognized upon conversion of notes.

#### Treasury stock

The Company's stock held by its subsidiaries is treated as treasury stock. Treasury stock is stated at cost and shown as a deduction in equity. When the Company retires treasury stock, the treasury stock account is reduced and the common stock as well as the capital surplus additional paid-in capital are reversed on a pro rata basis. When the book value of the treasury stock exceeds the sum of the par value and additional paid-in capital, the difference is charged to capital surplus treasury stock transactions and to retained earnings for any remaining amount.

#### Operating Segments

On January 1, 2011, the Company adopted the newly issued SFAS No. 41, Operating Segments. The statement requires identification and disclosure of operating segments on the basis of how the Company's chief operating decision maker regularly reviews information in order to allocate resources and assess performance. This statement supersedes SFAS No. 20, Segment Reporting. The Company conformed to the disclosure requirements as of December 31, 2011. This accounting change did not have a significant effect on the Company's financial statements as of December 31, 2011.

### 3. TRANSLATION INTO U.S. DOLLAR AMOUNTS

The Company maintains its accounts and expresses its consolidated financial statements in New Taiwan dollars. For convenience purposes, U.S. dollar amounts presented in the accompanying consolidated financial statements have been translated from New Taiwan dollars to U.S. dollars at the noon buying rate in the City of New York for cable transfers as certified for customs purposes by the Federal Reserve Bank of New York as of December 30, 2011, which was NT\$30.27 to US\$1.00. These convenience translations should not be construed as representations that the New Taiwan dollar amounts have been, or could in the future be, converted into U.S. dollars at this or any other rate of exchange.





**Table of Contents**

## 4. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT AND LOSS

	December 31,	
	2010	2011
	NT\$	NT\$ US\$
	(in thousands)	
Stock	2,999	

## 5. ALLOWANCE FOR DOUBTFUL RECEIVABLES AND SALES RETURN ALLOWANCES

The changes in the allowances are summarized as follows:

	Year Ended December 31,			
	2009	2010	2011	
	NT\$	NT\$	NT\$	US\$
	(in thousands)			
Balance, beginning of year	2,433,013	2,936,930	262,094	8,659
Additions	1,064,771	73,882	1,566	52
Reversal	(560,854)	(2,718,181)	(69,205)	(2,286)
Write off		(30,537)	(8,529)	(283)
Balance, end of year	2,936,930	262,094	185,926	6,142

The allowance/reversal of allowance for doubtful receivables was recorded in sales and marketing expenses and other non-operating income, respectively. The allowance/reversal of allowance for sales return was recorded in sales discount and returns in net revenue.

In 2010, included in the reversal of allowance for doubtful receivables were recovery of doubtful receivables from Spansion LLC (Spansion) of NT\$2,282,085 thousand (NT\$2,186,365 thousand was recovered from the sale of receivable to Citigroup) and ProMOS Technologies Inc. (ProMOS) of NT\$432,999 thousand, respectively.

On January 25, 2010, ChipMOS Taiwan entered into a definitive Transfer of Claim Agreement to sell to Citigroup Financial Products Inc. (Citigroup) the general unsecured claim reflected in the proof of claim against Spansion. The claim that is the subject of the Transfer of Claim Agreement includes accounts receivable for testing and assembly services provided to Spansion (the Undisputed Claim). In February 2010, ChipMOS Taiwan received from Citigroup the purchase price for the Undisputed Claim of NT\$1,118,574 thousand against accounts receivable of NT\$2,186,365 thousand. A loss on sale of receivables of NT\$1,067,791 thousand was recognized and the related allowance for doubtful receivables of NT\$2,186,365 thousand was reversed. The Transfer of Claim Agreement also includes the sale of breach of contract and liquidated damages rights against Spansion in the amount of NT\$2,118,490 thousand, which was received in October 2010.

**Table of Contents**

## 6. INVENTORIES - NET

	2010	December 31,	
	NT\$	2010	2011
		NT\$	US\$
		(in thousands)	
Finished goods	98,521	107,137	3,539
Work in progress	234,478	218,871	7,231
Raw materials	1,011,539	1,328,441	43,886
	1,344,538	1,654,449	54,656
Less - allowance for losses	(64,734)	(120,583)	(3,983)
	1,279,804	1,533,866	50,673

The changes in the inventory valuation allowances are summarized as follows:

	2009	Year Ended December 31,		US\$
	NT\$	2010	2011	
		NT\$	NT\$	
		(in thousands)		
Balance, beginning of year	102,142	200,064	64,734	2,139
Additions	100,150	3,107	58,917	1,946
Reversals	(2,228)	(138,437)	(3,068)	(101)
Balance, end of year	200,064	64,734	120,583	3,984

## 7. LONG-TERM INVESTMENTS

	2010		December 31,		2011
	Carrying	% of	Carrying	% of	
	Value	Ownership	Value	Ownership	
	NT\$	(in thousands, except percentage interests)	NT\$	US\$	
Cost method:					
DigiMedia Technologies Co., Ltd. (DigiMedia Cayman)	198,666	11	198,666	6,563	11
Validity Sensors Inc.	19,956		19,956	660	
CONNECTEC JAPAN Corporation (CTJ)			28,584	944	
Tashee Golf & Country Club	10		10		
Less: Accumulated impairment	(208,095)		(208,095)	(6,875)	
	10,537		39,121	1,292	

Digimedia Cayman was fully impaired since December 31, 2008.

During 2010, impairment loss of NT\$9,429 thousand was recognized in respect of investment in Validity Sensors Inc.

In July 2011, ChipMOS Taiwan acquired 50 thousand preferred shares of CTJ for JPY 80,000 thousand (NT\$28,584 thousand).



**Table of Contents**

## 8. PROPERTY, PLANT AND EQUIPMENT NET

Accumulated depreciation consists of the following:

	2010 NT\$	December 31, 2011 NT\$ (in thousands)	US\$
Buildings and auxiliary equipment	2,756,570	3,265,533	107,880
Machinery and equipment	26,603,781	31,120,212	1,028,088
Furniture and fixtures	881,180	971,501	32,094
Transportation equipment	25,699	23,058	762
Tools	2,452,104	2,528,129	83,519
Leased equipment	621,244		
Leasehold improvements	1,527	1,898	63
	33,342,105	37,910,331	1,252,406

As of December 31, 2011, certain of the above buildings and machinery were mortgaged as collateral for long-term loans (Notes 14 and 20).

## 9. INTANGIBLE ASSETS NET

	2010 NT\$	December 31, 2011 NT\$ (in thousands)	US\$
<u>Land use rights</u>			
Cost	111,621	121,934	4,028
Accumulated amortization	(17,356)	(21,436)	(708)
Carrying value	94,265	100,498	3,320

The amortization charge for 2011 amounted to NT\$2,346 thousand (2010: NT\$2,399 thousand, 2009: NT\$2,491 thousand). The weighted average amortization period is 50 years (2010: 50 years). The estimated aggregate amortization charge for the five years ending December 31, 2012, 2013, 2014, 2015 and 2016 amounts to approximately NT\$2,350 thousand each year. The land use rights were pledged as collateral for a credit facility (Note 20).

**Table of Contents**

## 10. BANK LOANS

	2010 NT\$	December 31, 2011 NT\$ (in thousands)	US\$
<b>Unsecured loans:</b>			
<b>Loans for import of machinery:</b>			
US\$1,458 thousand, repayable by February 2011, annual interest at 1.47992% - 1.55391%	42,457		
JPY16,200 thousand, repayable by April 2011, annual interest at 0%	5,803		
US\$1,350 thousand, repayable by May 2011, annual interest at 0%	39,326		
JPY117,000 thousand, repayable by May 2011, annual interest at 0%	41,909		
US\$2,968 thousand, repayable by June 2011, annual interest at 2.13531% - 2.14588%	86,458		
<b>Loans for import:</b>			
US\$27 thousand, repayable by January 2011, extension of repayment to December 2011, and prepaid in July 2011, annual interest at 2.376%	787		
JPY181,115 thousand, repayable by January 2011, annual interest at 1.2611%	64,875		
JPY114,262 thousand, repayable by February 2011, annual interest at 1.247357%	40,929		
JPY195,310 thousand, repayable by January 2012, annual interest at 1.79281%		76,288	2,520
JPY141,600 thousand, repayable by February 2012, annual interest at 1.78541%		55,309	1,827
<b>Loans for working capital:</b>			
NT\$332,340 thousand, repayable by January 2011, extension of repayment to December 2011, and prepaid in August 2011, annual interest at 2.989% - 3.74%	332,340		
NT\$368,800 thousand, repayable by February 2011, extension of repayment to December 2011, and prepaid in August 2011, annual interest at 2.462% - 2.498%	368,800		
NT\$13,680 thousand, repayable by June 2011, extension of repayment to December 2011, and prepaid in August 2011, annual interest at 3.3%	13,680		
NT\$85,500 thousand, repayable by October 2011, extension of repayment to December 2011, and prepaid in August 2011, annual interest at 2.525%	85,500		
NT\$300,000 thousand, repayable by January 2012, annual interest at 1.5% - 1.976744%		300,000	9,911

**Table of Contents**

## 10. BANK LOANS (continued)

	2010 NT\$	December 31, 2011 NT\$ (in thousands)	US\$
<b>Secured loans:</b>			
Loans for import:			
NT\$95,000 thousand, repayable by February 2011, extension of repayment to December 2011, and prepaid in July 2011, annual interest at 3.125%	95,000		
JPY44,631 thousand, repayable by February 2012, annual interest at 2.2611%		17,433	576
JPY250,605 thousand, repayable by March 2012, annual interest at 2.2611%		97,886	3,234
Loans for working capital :			
NT\$212,040 thousand, repayable by December 2011, extension of repayment to December 2011, and prepaid in July 2011, annual interest at 2.488%	212,040		
NT\$4,747 thousand, repayable by April 2011, extension of repayment to December 2011, and prepaid in July 2011, annual interest at 3.125%	4,747		
NT\$60,000 thousand, repayable by January 2011, annual interest at 1.80% - 1.90%	60,000		
	1,494,651	546,916	18,068

Unused credit lines of short-term bank loans, as of December 31, 2011, totaled approximately NT\$869,147 thousand (US\$28,713 thousand), which will expire from January 2012 to November 2012.

The weighted average interest rate for bank loans was 1.4326% per annum in 2011 (2010: 2.8424% per annum).

Certain short-term loans were secured by time deposits (Note 20).

## 11. OTHER PAYABLES THIRD PARTIES

	2010 NT\$	December 31, 2011 NT\$ (in thousands)	US\$
Miscellaneous factory expenses	243,153	357,753	11,819
Others	653,553	723,777	23,910
	896,706	1,081,530	35,729

## 12. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

	2010 NT\$	December 31, 2011 NT\$ (in thousands)	US\$
--	--------------	--	------

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Accrued bonus	345,103	431,361	14,250
Others	645,793	399,542	13,199
	990,896	830,903	27,449

F-23

**Table of Contents**

## 13. CONVERTIBLE NOTES AND DERIVATIVE LIABILITIES

	December 31,		
	2010	2011	
	NT\$	NT\$	US\$
	(in thousands)		
Convertible notes	174,138		
Less: current portion	(65,834)		
Non-current portion	108,304		
Derivative liabilities - non-current		96,788	

Convertible notes due 2009 (CN due 2009)

On November 3, 2004, ChipMOS Bermuda issued US\$85,000 thousand (NT\$2,572,950 thousand) CN due 2009. The CN due 2009 bore interest at 1.75% per annum. The noteholders may convert any outstanding notes into common shares of ChipMOS Bermuda, initially at the conversion price of US\$7.85, at any time during the period from the 41<sup>st</sup> day after the latest original issuance date of the notes to the close of business on the fifth business day before the stated maturity date, subject to prior repurchase or redemption. The conversion price was subject to certain adjustments. On November 3, 2005, the conversion price was adjusted to US\$6.28 per share from the initial conversion price of US\$7.85 per share, pursuant to the terms of the CN due 2009. The market price of the Company's stock on November 3, 2005 was US\$6.00. There was no fixed discount to the common shares' market price in relation to conversion. On December 20, 2004, ChipMOS Bermuda repurchased US\$699 thousand (NT\$21,159 thousand) of the CN due 2009. No conversion had taken place during 2005, 2007 and 2008.

On October 18, 2006, noteholders of CN due 2009 converted US\$7,000 thousand (NT\$211,890 thousand) in aggregate principal amount into 1,114,649 common shares of ChipMOS Bermuda pursuant to ChipMOS Bermuda's induced conversion offer, dated October 17, 2006. Pursuant to the induced conversion offer, ChipMOS Bermuda paid approximately US\$490 thousand (NT\$14,832 thousand) to the converting noteholders.

The noteholders of CN due 2009 had an option to cause ChipMOS Bermuda to repurchase for cash all or a portion of the notes on November 3, 2006 at a repurchase price equal to 100% of the principal amount of the notes plus any accrued and unpaid interest to, but excluding, the date of repurchase (put option). On November 3, 2006, ChipMOS Bermuda repurchased US\$6,300 thousand (NT\$190,701 thousand) CN due 2009 pursuant to the put option. After November 3, 2006, noteholders may cause ChipMOS Bermuda to repurchase the CN due 2009 only upon the occurrence of certain fundamental changes.

During 2008, ChipMOS Bermuda repurchased US\$15,000 thousand (NT\$454,050 thousand) of CN due 2009.

On October 21, 2009, ChipMOS Bermuda entered into an exchange transaction with a noteholder holding in an aggregate principal amount of US\$45,000 thousand of the CN due 2009 (see CN due 2014 below). The exchange transaction was accounted for as an extinguishment of debt. A gain of NT\$412,337 thousand was recorded as non-operating income in the statement of operations. On November 3, 2009, ChipMOS Bermuda repaid the remaining outstanding CN due 2009 in aggregate principal amount of US\$2,001 thousand (NT\$60,570 thousand) plus accrued and unpaid interest at maturity to the remaining noteholders.

The exercise price and the number of common shares converted of the CN due 2009 have not been adjusted for the reverse stock split as it matured on November 3, 2009.

Convertible notes due 2011 (CN due 2011)

On September 29, 2006, ChipMOS Bermuda issued US\$100,000 thousand (NT\$3,027,000 thousand) CN due 2011. The CN due 2011 bear interest at 3.375% per annum. The noteholders may convert any outstanding notes into common shares of ChipMOS Bermuda, initially at the conversion price of US\$27.40, at any time during the period from the 41<sup>st</sup> day after the latest original issuance date of the notes to the close of business on the fifth business day before the stated maturity date, subject to prior repurchase or redemption. The conversion price will be subject to certain adjustments. No conversion took place during 2006 to 2010. During 2007, ChipMOS Bermuda repurchased US\$1,000 thousand (NT\$30,270 thousand) of CN due 2011.



Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

During 2008, ChipMOS Bermuda repurchased US\$18,075 thousand (NT\$547,130 thousand) of CN due 2011.

F-24

**Table of Contents**

## 13. CONVERTIBLE NOTES AND DERIVATIVE LIABILITIES (continued)

The noteholders of CN due 2011 have an option to cause ChipMOS Bermuda to repurchase for cash all or a portion of the notes on September 29, 2008 at a repurchase price equal to 100% of the principal amount of the notes plus any accrued and unpaid interest to, but excluding, the date of repurchase (put option). On September 29, 2008, ChipMOS Bermuda repurchased aggregate principal US\$78,665 thousand (NT\$2,381,190 thousand) pursuant to the put option offer. After September 29, 2008, noteholders may cause ChipMOS Bermuda to repurchase the CN due 2011 only upon the occurrence of certain fundamental changes.

At any time on or after September 29, 2008, the Company may also at its option redeem the notes for cash at a price equal to 100% of the principal amount of the notes plus accrued and unpaid interest, (a) in whole or in part, if the market price of the Company's common shares has been at least 130% of the conversion price for at least 20 trading days during any 30 consecutive trading day period, or (b) in whole only, if at least 90% of the initial aggregate principal amount of the notes have been converted, repurchased or redeemed (call option).

On May 3, 2011 ChipMOS Bermuda redeemed the notes for cash at 100% of the principle amount at US\$2,260 thousand (NT\$68,410 thousand) plus accrued and unpaid interest at redemption date to the remaining noteholders.

**Convertible notes due 2014 (CN due 2014)**

On October 21, 2009, ChipMOS Bermuda completed an exchange transaction with a noteholder of CN due 2009 in an aggregate principal amount of US\$45,000 thousand for US\$15,300 thousand (NT\$463,131 thousand) in cash and US\$15,750 thousand (NT\$476,753 thousand) in new convertible notes of ChipMOS Bermuda due October 21, 2014. The CN due 2014 bear interest at 10% per annum (10%CN due 2014). In connection with the exchange transaction, the Company recorded a gain of NTS\$412,337 thousand. The gain was recorded in non-operating income in the statement of operations in 2009.

The noteholder may convert any outstanding notes into common shares of ChipMOS Bermuda, initially at the conversion price of US\$6.00 per share, at any time during the period from the 41<sup>st</sup> day after the closing date to the close of business on the tenth business day prior to the stated maturity date, subject to prior repurchase or redemption (Conversion). The conversion price will be subject to certain adjustments. In addition to the common shares issuable upon conversion, an amount equal to the sum of any make-whole amount and any accrued and unpaid interest relating to the portion of the notes being converted is paid to the converting holder. Make-whole amount is the amount of interest that would have accrued with respect to 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 treasury notes of the U.S. Federal Government having a comparable remaining tenor on the determination date plus 50 basis points; provided, however, the additional 50 basis points shall not be added if the applicable treasury note rate is greater than two percent (2%); in each case, the make-whole amount shall be calculated by the Company. At any time after the issuance date, if (i) the closing sale price of the common shares on an eligible market exceeds two hundred percent (200%) of the conversion price then in effect for a period of 20 consecutive trading days ending on the fifth trading day immediately preceding the company conversion notice date, (ii) the average daily trading volume of the common shares trading on an eligible market over such company conversion measuring period equals or exceeds one percent (1%) of the then outstanding common shares and (iii) no equity conditions failure has occurred and is continuing, the Company shall have the right to convert some or all of the outstanding principal amount of the Convertible Instruments as designated in a company conversion notice on the company conversion date. (Company Conversion)

At any time prior to the maturity date, the Company may redeem all or part of the outstanding amount in cash. On the applicable redemption date, the Company shall redeem the outstanding principal amount specified in the redemption notice by paying in cash to the trustee as of the date of the redemption notice an amount equal to (a) the Principal amount being redeemed plus (b) the sum of any make-whole amount and any accrued and unpaid interest (to but excluding the redemption date), if any, in each case relating to the outstanding portion of the CN due 2014 being redeemed. If the Company redeems the CN due 2014 of a holder, the holder may nevertheless exercise its right to convert its CN due 2014 until the close of business on the day that is five business days immediately preceding the redemption date. (Redemption)

Interest on the CN due 2014 is payable at the Company's option on each interest payment date (1) in whole in cash, (2) in whole in common shares or (3) in a combination of cash and common shares; provided, however, that in the case of the payment of common shares, in whole or in part, there shall not have been an equity conditions failure.

In accordance with SFAS No. 34, the notes are recorded as liabilities using the effective interest method. The Company bifurcated the Conversion and Company conversion features from the CN due 2014 and 2015 and recorded the embedded derivatives as derivative liabilities at fair value. The fair value of the derivative liabilities was determined using the Binomial Lattice model. The Redemption feature is clearly and closely related to the notes as the redemption payoff by the Company is the debt plus unpaid and accrued interest and make-whole amount.



**Table of Contents**

13. CONVERTIBLE NOTES AND DERIVATIVE LIABILITIES (continued)

On December 29, 2009, ChipMOS Bermuda issued US\$5,120 thousand (NT\$154,982 thousand) CN due 2014 which bear interest at 8% per annum (8%CN due 2014). The terms of 8%CN due 2014 are the same as 10%CN due 2014 except the conversion price, coupon rate and the maturity date. The conversion price of 8%CN due 2014 is US\$5.00 per share and the coupon rate is 8%. The maturity date is December 29, 2014.

During 2010, the noteholder of 10%CN due 2014 converted all 10%CN due 2014 into 2,625 thousand common shares of the Company. In connection with the make-whole clause, the Company issued 1,956 thousand common shares to the noteholder as interest payment of US\$6,872 thousand (NT\$208,015 thousand).

During 2010, noteholders of 8%CN due 2014 converted US\$2,000 thousand (NT\$60,540 thousand) in aggregate principal amount into 400 thousand common shares of our Company. In connection with the make-whole clause, the Company issued 106 thousand common shares to the noteholders as interest payment of US\$702 thousand (NT\$21,250 thousand).

During 2011, noteholders of 8%CN due 2014 converted US\$2,120 thousand (NT\$64,172 thousand) in aggregate principal amount into 424 thousand common shares of our Company. In connection with the make-whole clause, the Company issued 78 thousand common shares to the noteholders as interest payment of US\$610 thousand (NT\$18,465 thousand).

On April 19, 2011, ChipMOS Bermuda executed Company Conversion of 8%CN due 2014 of US\$1,000 thousand (NT\$30,270 thousand) in aggregate principal amount into 200 thousand common shares of our Company. In connection with the make-whole clause, the Company issued 33 thousand common shares to the noteholders as interest payment of US\$ 286 thousand (NT\$8,657 thousand).

Convertible notes due 2015 (CN due 2015)

On March 8 and 16, 2010, ChipMOS Bermuda issued US\$1,500 thousand (NT\$45,405 thousand) and US\$3,000 thousand (NT\$90,810 thousand) CN due 2015, respectively, which bear interest at 8% per annum. The terms of CN due 2015 are the same as CN due 2014 except for the conversion price, coupon rate and maturity date. The conversion price of CN due 2015 is US\$5.0 per share and the coupon rate is 8%. The maturity date is March 8, 2015 and March 16, 2015, respectively.

In May 2010, noteholders of CN due 2015 converted US\$3,000 thousand (NT\$90,810 thousand) in aggregate principal amount into 600 thousand common shares of our Company. In connection with the make-whole clause, the Company issued 248 thousand common shares to the noteholders as interest payment of US\$1,133 thousand (NT\$34,296 thousand).

On April 19, 2011, ChipMOS Bermuda executed Company Conversion of 8%CN due 2015 of US\$1,500 thousand (NT\$45,405 thousand) in aggregate principal amount into 300 thousand common shares of our Company. In connection with the make-whole clause, the Company issued 51 thousand common shares to the noteholders as interest payment of US\$ 452 thousand (NT\$13,682 thousand).

As of December 31, 2011, there were no outstanding convertible notes.

**Table of Contents**

## 14. LONG-TERM LOANS

	2010	December 31,	
	NT\$	NT\$	US\$
		(in thousands)	
Syndicated bank loans within guarantee provided by ChipMOS Taiwan, repayable annually from August 2009 to August 2011, prepaid in January 2011, interest at floating rate (1.28438% as of December 31, 2010)	642,317		
Syndicated bank loans collateralized by equipment, repayable semi-annually from November 2006 to May 2012, prepaid in August 2011, interest at floating rate (2.97% as of December 31, 2010)	317,287		
Syndicated bank loans collateralized by buildings, repayable in September 2011, prepaid in July 2011, interest at floating rate (2.475% as of December 31, 2010)	450,000		
Syndicated bank loans repayable quarterly from March 2009 to September 2011, prepaid in July 2011, interest at floating rate (2.625% as of December 31, 2010)	337,500		
Bank loans, repayable quarterly from February 2006 to November 2011, prepaid in August 2011, interest at fixed rate of 4.69%	112,500		
Syndicated bank loans collateralized by equipment, repayable semi-annually from April 2008 to April 2013, prepaid in July 2011, interest at floating rate (2.2% as of December 31, 2010)	3,814,190		
Syndicated bank loans collateralized by equipment, repayable semi-annually from June 2010 to December 2013, prepaid in August 2011, interest at floating rate (2.2% as of December 31, 2010)	1,995,000		
Bank loans collateralized by equipment, repayable quarterly from September 2008 to June 2013, prepaid in August 2011, interest at floating rate (3.53% as of December 31, 2010)	225,000		
Bank loans repayable quarterly from December 2008 to September 2013, prepaid in August 2011, interest at floating rate (2.2% as of December 31, 2010)	247,500		
Bank loans collateralized by equipment, repayable quarterly from December 2007 to December 2011, prepaid in August 2011, interest at floating rate (2.2% as of December 31, 2010)	159,750		
Bank loans collateralized by buildings, repayable semi-annually from June 2009 to December 2015, prepaid in August 2011, interest at floating rate (2.2% as of December 31, 2010)	720,000		
Bank loans collateralized by equipment, repayable quarterly from September 2009 to March 2012, prepaid in August 2011, interest at floating rate (2.2% as of December 31, 2010)	263,395		

**Table of Contents**

## 14. LONG-TERM LOANS (continued)

	2010 NT\$	December 31, 2011 NT\$ (in thousands)	US\$
Bank loans, repayable quarterly from March 2010 to December 2014, prepaid in August 2011, interest at floating rate (2.2% as of December 31, 2010)	95,000		
Bank loans collateralized by buildings, repayable semi-annually from January 2010 to July 2012, prepaid in August 2011, interest at floating rate (2.2% as of December 31, 2010)	285,000		
Syndicated bank loans collateralized by equipment, repayable quarterly from May 2007 to February 2012, interest at floating rate (2.182% - 2.311% and 2.315% as of December 31, 2010 and 2011, respectively)	479,139	95,828	3,166
Bank loans collateralized by buildings, repayable quarterly from April 2011 to January 2015, interest at floating rate (1.86% and 1.92% as of December 31, 2010 and 2011, respectively)	200,000	162,500	5,368
Bank loans repayable quarterly from March 2011 to December 2012, prepaid in July 2011, interest at floating rate (3.75% as December 31, 2010)	68,400		
Bank loans repayable quarterly from March 2011 to December 2012, prepaid in July 2011, interest at fixed rate (4.00% as December 31, 2010)	32,983		
Bank loans, repayable quarterly from March 2011 to December 2012, prepaid in August 2011, interest at floating rate (2.458% as December 31, 2010)	68,400		
Bank loans, repayable quarterly from March 2011 to December 2012, prepaid in August 2011, interest at floating rate (2.3256% as December 31, 2010)	39,000		
Bank loans, repayable quarterly from March 2011 to December 2012, prepaid in July 2011, interest at floating rate (1.214% as December 31, 2010)	13,510		
Syndicated bank loans collateralized by equipment, repayable semi-annually from January 2012 to July 2015, interest at floating rate (3.0421% as of December 31, 2011)		5,382,000	177,800
Syndicated bank loans collateralized by land and buildings, repayable semi-annually from January 2014 to July 2016, interest at floating rate (3.0421% as of December 31, 2011)		3,028,000	100,033
Bank loans collateralized by buildings, repayable quarterly from June 2013 to March 2018, interest at floating rate (1.92% as of December 31, 2011)		500,000	16,518
	10,565,871	9,168,328	302,885
Less - current portion	(4,925,739)	(684,028)	(22,598)
	5,640,132	8,484,300	280,287

As of December 31, 2011, credit lines of long-term bank loans totaled approximately NT\$9,168,328 thousand (US\$302,885 thousand) were fully utilized.

Under syndicated bank loans facility agreements, ChipMOS Bermuda, ChipMOS Taiwan and ThaiLin are required to maintain certain financial ratios. ChipMOS Taiwan was waived from compliance of the financial ratio requirements for 2010. ThaiLin was in compliance with the financial ratio requirements as of December 31, 2010. ChipMOS Taiwan and ThaiLin both were in compliance with the financial ratio requirements as of December 31, 2011.

**Table of Contents**

## 14. LONG-TERM LOANS (continued)

As of December 31, 2011, certain land and buildings and machinery were mortgaged as collateral for the long-term loans (Note 20).

On March 4, 2010, a meeting was arranged by ChipMOS Bermuda with Standard Chartered Bank as lead banker of the syndicated loan of US\$74,500 thousand (NT\$2,255,115 thousand). The Company's application for early repayment of the outstanding loan in four installments was approved in April 2010 without penalty. The last installment was repaid in January 2011.

On November 18, 2010 a meeting was hosted by Bank of Taiwan, the largest bank creditor, to discuss ChipMOS Taiwan's request for an extension of repayment for short-term loans of NT\$1,467,571 thousand. Over 50% of the banks agreed by December 27, 2010 and the repayment of short-term loans was extended to December 31, 2012 but with quarterly repayment starting from March 31, 2011. The key extended repayment terms and conditions include: agreement by ChipMOS Taiwan to repay 20% of the outstanding short-term loans on December 31, 2010 and to repay the balance in eight installments by setting aside NT\$50,000 thousand per month with Bank of Taiwan from January 2011 till December 2012.

In the same meeting, ChipMOS Taiwan also agreed to set aside NT\$300,000 thousand per month for 2011, NT\$270,000 thousand per month for 2012 and NT\$150,000 thousand per month for 2013 with Bank of Taiwan for the long-term loan repayment.

On July 14, 2011, ChipMOS Taiwan signed a new syndicated loan facility of NT\$8,410,000 thousand (US\$277,833 thousand) for a term of 5 years. This loan facility is primarily used for refinancing and repaying existing bank debts and equipment leases, which were fully repaid in July and August 2011.

Future minimum principal payments under the long-term loans as of December 31, 2011 are as follows:

	Amount	
	NT\$	US\$
	(in thousands)	
2012	684,028	22,598
2013	2,277,800	75,249
2014	2,370,200	78,302
2015	1,794,500	59,283
After 2015	2,041,800	67,453
	9,168,328	302,885

**Table of Contents**

## 15. CAPITAL LEASES PAYABLE

	December 31,		
	2010	2011	
	NT\$	NT\$	US\$
	(in thousands)		
Capital leases payable	1,453,791		
Less - current portion	(822,047)		
Non-current portion	631,744		

ChipMOS Taiwan originally leased some equipment under operating leases. As part of the plan to remediate the financial difficulty, ChipMOS Taiwan negotiated with the lessors and converted the leases of certain equipment into capital leases in November 2009. The capital leases originally mature from 2012 to 2013 and have buy-out options but they cannot be renewed, terminated or refunded.

The leased equipment and the corresponding capital leases payable were recorded at the lower of the fair value of the leased equipment and the present value of the minimum lease payments of such assets. The capital leases were repayable in quarterly installments and carried interest at floating rates of 4.0888% - 4.0973% as of December 31, 2010.

Under the capital leases, ChipMOS Taiwan was required to maintain certain financial ratios, starting from 2010.

In July 2011, ChipMOS Taiwan repaid the outstanding capital leases utilizing the new syndicated loan of NT\$8,410,000 thousand (Note 14).

## 16. PENSION PLAN

ChipMOS Taiwan and ThaiLin have established defined benefit pension plans for all of their regular employees, which provide benefits based on the length of service and the average monthly salary for the six-month period immediately before retirement.

ChipMOS Taiwan and ThaiLin make monthly contributions, equal to 2% of salaries and wages, to a pension fund that is administered by a pension fund monitoring committee and deposited in the Central Trust of China in the Republic of China.

Taiwan has a new pension scheme law effective July 1, 2005. The new pension scheme is a defined contribution scheme. All new employees who join or joined ChipMOS Taiwan and ThaiLin on or after July 1, 2005 must participate in the new scheme. Existing employees can choose to stay with the old scheme or to join the new scheme. Under the new scheme, ChipMOS Taiwan and ThaiLin are required to contribute 6% of the employees' salaries into the employees' own pension fund accounts managed by the government.

The employees of ChipMOS Shanghai are required to participate in a central pension scheme operated by the local municipal government. Contributions are made based on a percentage of the employees' salaries and bonuses, if applicable, and are charged to the income statement as incurred.

Certain pension information is as follows:

## a. Net pension cost

	Year Ended December 31,			
	2009	2010	2011	
	NT\$	NT\$	NT\$	US\$
	(in thousands)			
Service cost	1,518	1,325	1,189	39
Interest cost	11,340	12,292	11,833	391



Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Projected return on plan assets	(6,857)	(5,140)	(7,090)	(234)
Amortization	53	53	53	2
Curtailement loss	7,362	8,149	12,055	398
	13,416	16,679	18,040	596

F-30

**Table of Contents**

## 16. PENSION PLAN (continued)

## b. Reconciliation of the fund status of the plan and accrued pension cost

	2009 NT\$	Year Ended December 31,		
		2010 NT\$	2011 NT\$	US\$
		(in thousands)		
Actuarial present value of benefit obligations				
Vested benefit obligation	506	486	14,020	463
Nonvested benefit obligation	245,276	304,253	334,180	11,040
Accumulated benefit obligation	245,782	304,739	348,200	11,503
Additional benefits based on future salaries	300,603	359,728	297,355	9,823
Projected benefit obligation	546,385	664,467	645,555	21,326
Plan assets at fair value	(314,992)	(343,823)	(371,452)	(12,271)
Projected benefit obligation in excess of plan assets	231,393	320,644	274,103	9,055
Unrecognized net transition obligation	(451)	(398)	(345)	(11)
Unrecognized prior service cost	4,411	4,205	3,999	132
Unrecognized net gain	(251,471)	(347,611)	(307,048)	(10,144)
Prepaid pension	(16,118)	(23,160)	(29,291)	(968)

## c. Actuarial assumptions

	2009	2010	2011
Discount rate used in determining present values	2.38%	1.88%	1.88%
Future salary increase rate	4.25%	4.25%	3.50%
Expected rate of return on plan assets	1.88%	2.00%	2.00%

## d. Changes in pension fund

	2009 NT\$	Year Ended December 31,		
		2010 NT\$	2011 NT\$	US\$
		(in thousands)		
Company contributions	21,705	23,844	24,172	799
Payment of benefits			649	21

## 17. SHAREHOLDERS EQUITY

Under ROC Company Law, capital surplus can only be used to offset deficits, except that capital surplus generated from (1) donations (donated capital) or (2) the excess of the issue price over the par value of capital stock (including stocks issued for new capital and mergers, and the purchase of treasury stock) can be transferred to capital as stock dividends when no deficit remains and shareholders approve such distribution.

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

ChipMOS Taiwan's Articles of Incorporation provide that the following may be appropriated from the accumulated net income, after deducting any previously accumulated deficit and 10% legal reserve, subject to shareholders' approval: (a) 10% as bonuses to employees, (b) not more than 0.5% as remuneration to directors and supervisors, (c) a special reserve, if deemed necessary, and (d) dividends to shareholders.

ThaiLin's Articles of Incorporation provide that the following may be appropriated from the accumulated net income, after deducting any previously accumulated deficit and 10% legal reserve, subject to shareholders' approval: (a) not more than 0.5% as remuneration to directors and supervisors, (b) not less than 10% as bonuses to employees, and (c) dividends to shareholders but not less than 50% should be distributed as cash dividends to shareholders.

These appropriations and the disposition of the remaining net income, except for bonuses to employees, directors and supervisors, shall be resolved by the shareholders in the following year and given effect in the financial statements of that year.

The aforementioned appropriation for legal reserve shall be made until the reserve equals the aggregate par value of ChipMOS Taiwan's and ThaiLin's outstanding capital stock. The reserve can only be used to offset a deficit, or when its balance has reached 50% of the aggregate par value of the outstanding capital stock of ChipMOS Taiwan and ThaiLin, and up to 50% thereof can be distributed as stock dividends.

**Table of Contents**

## 17. SHAREHOLDERS EQUITY (continued)

Stock Options

The Share Option plan provides that the directors, officers, employees and consultants of ChipMOS Bermuda and its affiliates may be granted options to purchase common shares of ChipMOS Bermuda at specified exercise prices.

The following table summarizes information about stock options outstanding at December 31, 2011.

Year of Grant	Exercise Price US\$	Number Outstanding	Market Price at Grant US\$	Price at Year End US\$	Market Price	Number Exercisable on or after	Number Exercisable on or after	Number Exercisable on or after	Number Exercisable on or after	Number Exercisable on or after
2006	19.244	358,371	22.64	5.16		13,500	88,094	85,704	85,586	85,487
	~ 22.882		~ 26.92			August 2006	August ~ December 2007	August ~ December 2008	August ~ December 2009	August ~ December 2010
2007	14.552	314,622	17.12	5.16		13,500	75,407	75,324	75,241	75,150
	~ 25.908		~ 30.48			August 2007	January ~ December 2008	January ~ December 2009	January ~ December 2010	January ~ December 2011
2008	0.748	675,512	0.88	5.16		17,500	151,766	151,555	179,448	175,243
	~ 11.9		~ 14.00			August ~ November 2008	January ~ December 2009	January ~ December 2010	January ~ December 2011	January ~ December 2012
2009	0.8528	371,741	1.0032	5.16		25,094	61,539	92,104	96,512	96,492
	~ 2.55		~ 3.00			August ~ November 2009	January ~ November 2010	January ~ November 2011	January ~ November 2012	January ~ November 2013
2010	2.448	155,122	2.88	5.16		21,250	33,143	33,578	33,576	33,575
	~ 5.474		~6.44			August 2010	January~ September 2010	January~ August 2011	January~ August 2012	January~ August 2013

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

						2011	2012	2013	2014
2011	4.59	686,804	5.4	5.16	42,500	161,081	161,081	161,073	161,069
	~6.222		~7.32		August	March~	March~	March~	March~
					2011	September	September	September	September
						2012	2013	2014	2015
2,562,172									

NT\$420,150 thousand (US\$13,880 thousand) of compensation expense has been recognized with NT\$49,055 thousand (US\$1,621 thousand) (2010: NT\$43,874 thousand) being accounted for through the statement of operations. The Company issued 692,624 (2010: 160,660) stock options in 2011 to its employees. In 2011, 148,403 (2010: 212,049) stock options were forfeited, nil (2010: 353,800) stock options were expired and 96,103 (2010: 19,246) stock options were exercised, leaving 2,562,172 (2010: 2,114,054) stock options outstanding at December 31, 2011.

**Table of Contents**

## 17. SHAREHOLDERS EQUITY (continued)

Share Appreciation Rights

The share appreciation rights plan provides that the directors, officers and employees of ChipMOS Bermuda and its affiliates may be granted cash-settled share appreciation rights.

The following table summarizes information about share appreciation rights outstanding at December 31, 2011.

Year of Grant	Exercise Price US\$	Number Outstanding	Market Price at Grant US\$	Market Price at Year End US\$	Number Exercisable on Or after	Number Exercisable on or after	Number Exercisable on or after	Number Exercisable on or after
2006	19,244	162,343	22.64	5.16	40,664	40,660	40,524	40,495
	~ 22.882		~ 26.92		August ~ December 2007	August ~ December 2008	August ~ December 2009	August ~ December 2010
2007	14,552	66,375	17.12	5.16	16,635	16,635	16,553	16,552
	~ 25.908		~ 30.48		January ~ December 2008	January ~ December 2009	January ~ December 2010	January ~ December 2011
2008	0.748	95,215	0.88	5.16	22,961	22,959	24,794	24,501
	~ 11.9		~ 14.00		January ~ December 2009	January ~ December 2010	January ~ December 2011	January ~ December 2012
2009	0.884	222,879	1.04	5.16	34,346	60,134	64,217	64,182
	~ 2.55		~ 3.00		January ~ August 2010	January ~ August 2011	January ~ August 2012	January ~ August 2013
2010	2.448	16,717	2.88	5.16	4,631	4,034	4,033	4,019
	~ 3.06		~ 3.6		March ~ August 2011	March ~ August 2012	March ~ August 2013	March ~ August 2014
2011	5.151	486,410	6.06	5.16	121,618	121,614	121,593	121,585
	~6.222		~ 7.32		March ~	March ~	March ~	March ~

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

August	August	August	August
2012	2013	2014	2015

1,049,939

During the year, 525,885 (2010: 18,625) rights were granted, 70,621 (2010: 89,300) rights were forfeited and 32,832 (2010: 15,300) rights were exercised. As of December 31, 2011, there were 1,049,939 (2010: 627,507) share appreciation rights outstanding.

The Company recognized compensation expense of NT\$3,009 thousand (US\$99 thousand) (2010: NT\$27,809 thousand) in respect of share appreciation rights at fair value.

F-33

**Table of Contents**

## 18. INCOME TAX EXPENSE

- a. A reconciliation of income tax expense current before tax credits and income tax expense on income (loss) before income tax at statutory rates is shown below:

	2009 NT\$	Year Ended December 31, 2010 NT\$		2011 NT\$	US\$
		(in thousands)			
Tax on pretax income (loss) at 0%					
Tax on pretax income (loss) at applicable statutory rates	(1,322,415)	538,998	82,840		2,737
Tax effect:					
Losses carried forward	1,088,819	(61,646)	(113,727)		(3,757)
Permanent differences	(105,083)	(183,426)	(37,848)		(1,250)
Temporary differences	346,995	(256,756)	112,875		3,729
Income tax expense - current before tax credits	8,316	37,170	44,140		1,459

The ROC statutory tax rates for 2009, 2010 and 2011 were 25%, 17% and 17%, respectively.

The PRC statutory rates for 2009, 2010 and 2011 were 25%.

- b. Income tax expense consists of:

	2009 NT\$	Year Ended December 31, 2010 NT\$		2011 NT\$	US\$
		(in thousands)			
Income tax expense - current before tax credits	8,316	37,170	44,140		1,459
Additional 10% on the unappropriated earnings			164,073		5,420
Income tax credits		(9,445)	(179,823)		(5,941)
Income tax for the current year	8,316	27,725	28,390		938
Net change in deferred income tax assets (liabilities) for the year					
Tax credits	4,080	515,421	302,966		10,009
Temporary differences	(310,264)	289,610	(104,406)		(3,449)
Losses (recognized) utilized	(1,088,819)	82,057	218,845		7,230
Valuation allowances	804,420	(1,124,766)	(397,672)		(13,138)
Deferred tax effect of change in tax rate	139,526	80,935			
Adjustment of prior years taxes	22,079	29,658	(2,617)		(87)
Income tax expense (benefit)	(420,662)	(99,360)	45,506		1,503

Since the Company is an exempted company incorporated in Bermuda, a tax-free country, tax on pretax income is calculated at the Bermuda statutory rate of 0% for each year.

In accordance with the relevant tax rules and regulations in the PRC, ChipMOS Shanghai enjoys income tax exemptions for the first two profitable years and 50% reductions for the following three years. Tax losses can only be carried forward for five years. ChipMOS Shanghai is subject to PRC income tax at 25% since January 1, 2009.





**Table of Contents**

## 18. INCOME TAX EXPENSE (BENEFIT) (continued)

c. Deferred income tax assets and liabilities are summarized as follows:

	2010 NT\$	December 31, 2011 NT\$ (in thousands)	US\$
<b>Net current deferred income tax assets:</b>			
Unrealized foreign exchange losses	25,248	2,085	69
Tax credits	285,891	76,280	2,520
Loss of market price decline and obsolete and slow-moving inventories	10,430	19,413	641
Unrealized loss on sale allowances	31,932	20,167	666
Allowance for doubtful receivables	11,013	11,013	364
Others	4,768	6,337	209
	369,282	135,295	4,469
Less: Valuation allowances	(90,571)	(58,736)	(1,940)
	278,711	76,559	2,529
<b>Net non-current deferred income tax assets:</b>			
Losses carried forward	1,178,333	1,000,200	33,043
Tax credits	163,777	70,421	2,326
Depreciation differences	(93,342)	41,475	1,370
Unrealized impairment loss on idle property, plant and equipment	13,114	10,497	347
Others	236,306	243,543	8,046
	1,498,188	1,366,136	45,132
Less: Valuation allowances	(1,080,257)	(765,785)	(25,299)
	417,931	600,351	19,833

The deferred income tax components measured at respective applicable statutory rates as of December 31, 2010 and 2011 were 17%, respectively for ChipMOS Taiwan and ThaiLin and 25% for ChipMOS Shanghai.

d. The balance and year of expiry of unused investment tax credits and losses carried forward as of December 31, 2011 are as follows:

Year of expiry	R & D expenditures NT\$	Machinery and equipment NT\$ (in thousands)	Losses carried forward NT\$
2012	37,682	38,598	122,931
2013	15,333	21,061	141,802
2014		34,027	102,862
2015			51,176
2018			43,713
2019			537,716

53,015	93,686	1,000,200
--------	--------	-----------

The deferred tax assets relate to investment tax credits on research and development expenditure and purchases of machinery and equipment which will expire from 2012 to 2014. Under ROC tax regulations, tax credits can be utilized to reduce current income tax obligations only to the extent of 50% of such income tax obligations except in the year when such tax credits will expire, in which case, the entire amount of expiring tax credits may be utilized to reduce the current income tax obligation. The foregoing limitation on the utilization of tax credits, the expiry dates of the tax credits, the level of tax credits expected to be generated from future operations led management to conclude that it is unlikely that these investment tax credits will be fully realized. Losses carried forward can be used to deduct current income tax obligations up to the extent of taxable income and will expire after ten years if not fully utilized by the Company. Accordingly, a valuation allowance on deferred tax assets is recognized as of December 31, 2010 and 2011.

The tax losses of ChipMOS Shanghai will expire after five years.

F-35

**Table of Contents**

## 18. INCOME TAX EXPENSE (BENEFIT) (continued)

- e. According to ROC tax law, ChipMOS Taiwan's and ThaiLin's unappropriated earnings generated in 1998 and thereafter are subject to a tax of 10% in the year when the shareholders resolve that such earnings shall be retained. The retained earnings as of December 31, 2010 and 2011 consist of:

	2010 NT\$	December 31, 2011 NT\$ (in thousands)	US\$
Before 1998			
1998 and thereafter	2,593,408	1,925,365	63,606
	2,593,408	1,925,365	63,606

The income tax returns of ChipMOS Taiwan and ThaiLin through 2009 have been assessed by the tax authorities.

## 19. RELATED PARTY TRANSACTIONS

The Company engages in business transactions with the following related parties:

- a. MVI: A major shareholder. (Note 1)
- b. DenMOS Technology Inc. (DenMOS): An investee of MVI. (Note 1)
- c. ProMOS: An investee of MVI. (Note 1)
- d. SPIL: A major shareholder. (Note 2)

Note 1: Since April 1, 2011, MVI's interest in ChipMOS Bermuda was reduced to below 10%. Accordingly MVI, ProMOS and DenMOS were not considered related parties of the Company. The transactions with these parties were disclosed till the end of March 2011 as related party transactions.

Note 2: In March 2011, SPIL's holding in ChipMOS Bermuda decreased to below 10% and SPIL was no longer regarded a major shareholder of ChipMOS Bermuda. From April 1, 2011 onwards, SPIL was not considered a related party of the Company. The transactions with SPIL were disclosed till the end of March 2011 as related party transactions.

The significant transactions with the aforementioned parties, other than those disclosed in other notes, are summarized as follows:

	2009 NT\$	Year Ended December 31,		US\$
	2010 NT\$	2011 NT\$		
	(in thousands)			
<u>During the year</u>				

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Revenue				
ProMOS	667,800	2,033,342	379,009	12,521
DenMOS	911			
SPIL	195			
	668,906	2,033,342	379,009	12,521
Other expenses				
MVI	148	148	25	1
DenMOS	1			
SPIL		766		
	149	914	25	1
Other revenue				
ProMOS	26,800	412	98	3
Interest income				
ProMOS	1,183			

F-36

**Table of Contents**

## 19. RELATED PARTY TRANSACTIONS (continued)

	December 31,		
	2010	2011	
	NT\$	NT\$	US\$
	(in thousands)		
<b>At the end of year</b>			
Accounts receivable			
ProMOS	259,415		
Less: Allowances for doubtful receivables		(1,433)	
	257,982		
Other receivables			
ProMOS	66,378		
Less: Allowances for doubtful receivables			
	66,378		
Other payables			
MVI		13	
Payables to contractors and equipment suppliers			
SPIL		490,000	

The price of sales to ProMOS was agreed upon quarterly, based on the then fair market price. The collection term for ProMOS was originally 75 days after month end. On November 13, 2008, ChipMOS Taiwan and ProMOS revised the subcontracting contract by requiring ProMOS to provide wafers with a value of 80% of the subcontracting fee as collateral. Effective March 2009, ChipMOS Taiwan started to request prepayments from ProMOS. In May 2010, the collection term was revised to 30 days after delivery and it was further revised to 45 days after delivery in October 2010. In September 2008, ThaiLin revised the collection term for ProMOS from 75 days to 105 days after month end. In April 2009, ThaiLin started to request prepayments from ProMOS. In June 2010, the collection term was revised to 30 days after delivery. In January 2011, the collection term was revised to 45 days after delivery.

Other related parties have normal collection terms of 60 days after month end. The selling price is the same as for other customers.

The payment terms for purchases from related parties are the same as those from other suppliers.

In 2009, ProMOS used 1,015 thousand shares of ChipMOS Bermuda to settle the other receivables of NT\$30,000 thousand and accounts receivable of NT\$24,851 thousand.

On December 29, 2009, a director of the Company purchased US\$1,000 thousand (NT\$30,270 thousand) 8%CN due 2014 (Note 13). On April 19, 2011, the 8%CN due 2014 issued to the director was converted into 200 thousand common shares of the Company. In connection with the make-whole clause, the Company issued 33 thousand common shares to the director as interest payment of US\$286 thousand (NT\$8,657 thousand).

As of December 31, 2009, other receivables from ProMOS amounted to NT\$408,999 thousand and 100% allowance was made by ChipMOS Taiwan. NT\$7,000 thousand was received by April 2010. Under the amended subcontracting contract ProMOS paid ChipMOS Taiwan NT\$200,000 thousand in May 2010. The remaining NT\$201,999 thousand was collected in nine monthly installments ending on March 15, 2011. As of December 31, 2010, ChipMOS Taiwan received NT\$335,999 thousand and the related allowance of NT\$408,999 thousand was reversed to other non operating income. The balance of NT\$66,000 thousand was collected in monthly installments by March 2011.

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

As of December 31, 2009, other receivables from ProMOS amounted to NT\$54,537 thousand and 100% allowance was made by ThaiLin. In June 2010, ThaiLin agreed a settlement with ProMOS in the amount of NT\$24,000 thousand and it was collected during the year. The allowance of NT\$24,000 thousand was reversed to other non-operating income.

F-37

**Table of Contents**

## 19. RELATED PARTY TRANSACTIONS (continued)

In February 2010, ChipMOS Taiwan entered into an Equipment Purchase Agreement with SPIL to purchase SPIL's DRAM test and LCD driver assembly and test operation lines with purchase price of approximately NT\$1,630,580 thousand. Under the terms and conditions of the Equipment Purchase Agreement, ChipMOS Taiwan will pay the purchase price in four installments to SPIL with the final installment scheduled to be paid on or before March 31, 2011. As of December 31, 2010, the unpaid was NT\$ 490,000 thousand and it was paid in January 2011.

At the same time, ChipMOS Bermuda also entered into a Share Purchase Agreement with SPIL to sell to SPIL its holding of 133,000 thousand common shares of ChipMOS Taiwan with a consideration of NT\$1,630,580 thousand. Under the terms and conditions of the Share Purchase Agreement, SPIL will pay the purchase price in four installments to the Company with the final installment scheduled to be paid on or about March 31, 2011. The transaction was early completed in January 2011.

The Company consults its ROC counsel on certain related party transactions and obtains legal opinions, as appropriate, to ensure that such transactions do not violate relevant ROC laws and regulations.

## 20. PLEDGED OR MORTGAGED ASSETS

The Company provided certain assets as collateral mainly for short and long-term bank loans, capital leases and customs duty guarantee, which were as follows:

	2010 NT\$	December 31, 2011 NT\$	US\$
	(in thousands)		
Restricted cash and cash equivalent	546,807	285,133	9,420
Land	452,738	452,738	14,957
Buildings	6,270,155	5,474,164	180,845
Machinery and equipment	6,345,521	5,150,540	170,153
Leased equipment	1,636,115		
Land use right	94,265	100,498	3,320
	15,345,601	11,463,073	378,695

## 21. SIGNIFICANT COMMITMENTS AND CONTINGENCIES

- a. As of December 31, 2011, ChipMOS Taiwan leased parcels of land from the Hsinchu and Tainan Science Park under several agreements expiring on various dates from 2017 to 2027, with renewal options.

The future minimum lease payments under the above-mentioned leases as of December 31, 2011 are as follows:

Year	Amount	
	NT\$	US\$
	(in thousands)	
2012	23,142	765
2013	23,142	765
2014	23,142	765
2015	23,142	765



Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Thereafter	99,581	3,288
Total minimum lease payments	192,149	6,348

F-38

**Table of Contents**

## 21. SIGNIFICANT COMMITMENTS AND CONTINGENCIES (continued)

- b. As of December 31, 2011, ChipMOS USA leased its office under an agreement expiring in 2015. The future minimum lease payments as of December 31, 2011 are as follow:

Year	Amount	
	NT\$	US\$
	(in thousands)	
2012	3,147	104
2013	3,058	101
2014	2,965	98
2015	3,054	101
<b>Total minimum lease payments</b>	<b>12,224</b>	<b>404</b>

- c. As of December 31, 2011, ChipMOS Taiwan had capital commitments in relation to purchase of plant and machinery in the amount of NT\$613,982 thousand (US\$20,284 thousand).
- d. As of December 31, 2011, ThaiLin had capital commitments in relation to purchase of plant and machinery in the amount of NT\$38,535 thousand (US\$1,273 thousand).
- e. As of December 31, 2011, ChipMOS Shanghai had capital commitments in relation to purchase of plant and machinery in the amount of NT\$34,362 thousand (US\$1,135 thousand).
- f. On April 1, 1999, Motorola, Inc. ( Motorola ) and ChipMOS Taiwan entered into an immunity agreement (the Agreement ), that each party covenanted not to sue each other for the use of certain Ball Grid Array ( BGA ) patents pursuant to the Agreement. In December 2004, Motorola spun off its semiconductor division and thereby formed Freescale Semiconductor, Inc. ( Freescale ). Subsequently, Freescale assumed Motorola 's rights and obligations under the Agreement. On October 16, 2006, Freescale unilaterally terminated the Agreement, alleging ChipMOS Taiwan breach of the Agreement. Under the Agreement, ChipMOS Taiwan agreed to pay running royalties for its manufacturing of certain BGA packages covered by Motorola (now Freescale) patents pursuant to the Agreement. As such, ChipMOS Taiwan argued Freescale 's unilateral termination of the Agreement has no legal effect. ChipMOS Taiwan has continued to accrue royalty payments for products it believes are covered by the Agreement. The payments previously returned by Freescale and accrued by ChipMOS Taiwan have been deposited in a separate escrow account. On July 13, 2009, Freescale alleged that ChipMOS Taiwan breached the Agreement by failing to pay royalties on certain BGA packages assembled by ChipMOS Taiwan. Freescale claims that such packages are covered by one or more Freescale patents identified in the Agreement while ChipMOS Taiwan contends that such packages are not covered by any of Freescale 's patents in the Agreement. ChipMOS Taiwan filed an answer to deny all allegations and also filed counterclaims against Freescale alleging Freescale engaged in patent misuse by seeking to obtain royalties on certain of ChipMOS Taiwan 's BGA products that were not covered by any Freescale patent included under the Agreement, and for declaratory judgement of patent non-infringement and invalidity. In response, on December 11, 2009, Freescale filed a motion to dismiss the declaratory judgment counterclaims filed by ChipMOS Taiwan and to stay all other patent related claims and issues until its breach of contract claims could be decided. That motion and the initial case management conference were held on March 5, 2010 and the motions were deemed submitted. A Summary Judgment granting in part and denying in part the motions of both Freescale and ChipMOS Taiwan was given by court on July 29, 2010. The above order finds that the Agreement constituted a Total Sales Royalty agreement, however, Freescale 's motion was partly denied for patent misuse. A mediation was held by both parties on October 28, 2010, but the mediation was unsuccessful. The fact discovery process regarding patent misuse issue closed in late April 2011. The expert discovery process regarding patent misuse issue closed in the middle of June 2011. On June 17, 2011, Freescale filed a motion for summary judgment on ChipMOS Taiwan 's patent misuse defense. ChipMOS Taiwan filed opposition to the above Freescale motion and also the cross-motion for summary judgment. An Order

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

granting Freescale's motion for partial summary judgment and denying ChipMOS Taiwan's cross-motion for partial judgment was given on September 8, 2011. On September 13, 2011, ChipMOS Taiwan filed a Motion for Leave for Motion for Reconsideration. On October 17, 2011, ChipMOS Taiwan filed its opening brief in accordance with the Court Order dated September 22, 2011 granting ChipMOS Taiwan's Motion for Leave for Motion for Reconsideration. Subsequently Freescale filed its response on October 31, 2011 and ChipMOS Taiwan replied on November 7, 2011. No Order has been granted by the Court as of March 15, 2012. The Company's counsel has not formed any opinion as to the outcome of the case. The Company considers that an unfavorable outcome for this matter is remote.

F-39

**Table of Contents**

21. SIGNIFICANT COMMITMENTS AND CONTINGENCIES (continued)

- g. On April 20, 1999, ChipMOS Taiwan entered into a semiconductor packaging technology license agreement with Tessera Technologies, Inc. (Tessera). In February 2006, ChipMOS Taiwan and ChipMOS USA received notice of a patent infringement lawsuit brought by Tessera, alleging infringement of several Tessera patents and breach of an existing license agreement with ChipMOS Taiwan. The fact discovery has been stayed in accordance with a Northern District of California Court order issued on May 24, 2007. On April 21, 2008, Tessera requested that the International Trade Commission (ITC) investigate ChipMOS Bermuda, ChipMOS Taiwan and ChipMOS USA (collectively referred to as the Companies) on the basis of alleged violations of Section 337 of the Tariff Act of 1930. In its request for investigation ( ITC-649 Investigation ), Tessera alleged that the Companies infringed certain patents among which are three that were the subject of the stayed litigation in the Northern District of California. Tessera also requested that the ITC issue an exclusion order to enjoin the importation of accused products into the United States. On September 30, 2008, Judge of Northern District of California Court ( Judge ) granted a motion to extend the hearing date from March 16 to March 24, 2009 and target date from August 28 to November 2, 2009. On February 10, 2009, the Judge ordered the procedural schedule in the ITC-649 Investigation be stayed until the ITC issues its Final Determination in the ITC-605 Investigation. The target date of Initial Determination was also extended from December 7, 2009 to February 8, 2010. On March 13, 2009, after the close of discovery, Tessera submitted a request to terminate the ITC-649 Investigation. On July 17, 2009, the Judge issued an order granting the request to terminate the ITC-649 Investigation. No petitions for review were filed. The ITC had determined not to review the Initial Determination and issued an order to terminate the investigation on August 7, 2009. The ITC's Final Determination for the ITC-605 Investigation issued in May 2009 was appealed to the Court of Appeals for the Federal Circuit ( CAFC ). CAFC confirmed ITC's finding in May 2011. CAFC's above decision was appealed to the United States Supreme Court. The United States Supreme Court denied the above petition for review of the 605 Investigation in December 2011. Due to the denial of the petition for review of the 605 Investigation by the United States Supreme Court, the stayed litigation in the Northern District of California Court resumed. A Case Management Conference was held on January 4, 2012. The schedule of the litigation has been set. The date for jury trial was scheduled in April 2014. The Company's counsel has not formed an opinion as to the outcome of the case. The Company considers that an unfavorable outcome for this matter is remote.

22. POST BALANCE SHEET EVENTS

- a. On November 17, 2011, the Company effected its US\$10 million share repurchase program with Rule 10b5-1 and Rule 10b-18 under the Securities Exchange Act of 1934, as amended. Shares will be repurchased pursuant to a written plan agreed to and entered into between the Company and its broker. The repurchased shares will be retired and cancelled. As of March 14, 2012, the Company had repurchased 47 thousand common shares.
- b. On March 7, 2012, ChipMOS Shanghai obtained banking facilities of US\$9,200 thousand (NT\$278,484 thousand) for a term of three years from a bank. The banking facilities are secured by land use right, building and equipment and it has not been drawdown as of March 15, 2012.

---

**Table of Contents**

23 DERIVATIVE FINANCIAL INSTRUMENTS

ChipMOS Taiwan has entered into forward exchange contracts and foreign currency options for the years ended December 31, 2009, 2010 and 2011 to hedge its exchange rate risk on foreign-currency assets or liabilities and anticipated transactions. No derivative financial instrument was used during 2010 and 2011. Information on the derivative transactions is as follows:

a. Forward exchange contracts

As of December 31, 2010 and 2011, there were no outstanding forward contracts.

b. Financial risk information

- 1) Credit risk. Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (primarily for trade and other receivables). The Company performs ongoing credit evaluation of the debtors' financial condition and maintains an allowance for doubtful receivables based on historical collection, write-off experience and individual examination of available information regarding the customers. The banks with which the Company has entered into the above contracts are reputable and, therefore, the Company is not expected to be exposed to significant credit risks.
- 2) Market risk and hedge strategy. The Company's financial assets at fair value through profit and loss are stated at market value, which is affected by the stock prices in the open stock market. Subject to turmoil in the global financial market, the Company has evaluated its financial instruments and the Company believed the exposure to market risk as of December 31, 2011 was not significant. The Company is exposed to market risks arising from changes in currency exchange rates due to U.S. dollar denominated accounts receivable, Yen denominated accounts payable and U.S. dollar denominated debt. In order to manage these exposures, the Company sometimes enters into forward contracts and option contracts.
- 3) Liquidity risk. Liquidity risk is the risk that the Company will encounter difficulty in raising funds to meet commitments associated with financial instruments. Liquidity risk may result from an inability to sell a financial asset quickly at close to its fair value. Prudent liquidity risk management implies maintaining sufficient cash. The Company monitors and maintains a level of bank balances deemed adequate to finance its operations. The Company employs projected cash flow analysis to manage liquidity risk by forecasting the amount of cash required and monitoring the working capital of the group to ensure that all liabilities due and known funding requirements could be met. In addition, there are unused credit lines for contingency purposes.
- 4) Cash flow interest rate risk. Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company's exposure to the risk of changes in market interest rates relates primarily to the Company's short and long term bank loans with floating interest rates. At December 31, 2011, it is estimated that a general increase or decrease of 1% in interest rates, with all other variables held constant, would increase the Company's annual cash outflow by NT\$97,152 thousand (US\$ 3,210 thousand).

**Table of Contents**

## 23. DERIVATIVE FINANCIAL INSTRUMENTS (continued)

c. The estimated fair values of the Company's financial instruments are as follows:

	2010		December 31,		2011
	Carrying		Carrying		
	Value	Fair Value	Value	Fair Value	US\$
	NT\$	NT\$	NT\$	NT\$	
	(in thousands)				
<b>Assets</b>					
Cash and cash equivalents	7,143,265	7,143,265	7,357,902	7,357,902	243,076
Restricted cash and cash equivalents	546,807	546,807	285,133	285,133	9,420
Financial assets at fair value through profit and loss	2,999	2,999			
Notes receivable	13,980	13,980	5,710	5,710	189
Accounts receivable:					
Related parties	257,982	257,982			
Third parties	2,816,072	2,816,072	3,666,507	3,666,507	121,127
Other receivables:					
Related parties	66,378	66,378			
Third parties	182,028	182,028	73,179	73,179	2,417
Long-term investments	10,537	10,537	39,121	39,121	1,292
Refundable deposits	20,295	20,295	21,364	21,364	706
<b>Liabilities</b>					
Bank loans	1,494,651	1,494,651	546,916	546,916	18,068
Accounts payable:					
Third parties	690,060	690,060	1,130,730	1,130,730	37,355
Other payables:					
Related parties	13	13			
Third parties	896,706	896,706	1,081,530	1,081,530	35,729
Payables to contractors and equipment suppliers	790,598	790,598	415,391	415,391	13,723
Capital leases payable (including current portion)	1,453,791	1,453,791			
Convertible notes (including current portion)	174,138	194,672			
Derivative liabilities	96,788	96,788			
Long-term loans (including current portion)	10,565,871	10,565,871	9,168,328	9,168,328	302,885
Guarantee deposits	3,989	3,989	1,777	1,777	59

Fair values of financial instruments were determined as follows:

- 1) Short-term financial instruments – the carrying values approximate the fair values due to its short-term nature.
- 2) Financial assets at fair value through profit and loss – open market values.
- 3) Long-term investments – market value for listed companies and net equity value for the others.
- 4) Refundable deposits and guarantee deposits – future values.

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

- 5) Long-term liabilities based on forecasted cash flows discounted at current interest rates of similar long-term liabilities. The fair value of convertible notes in 2010 is determined by option pricing models. Other long-term liabilities are their carrying values as they use floating interest rates.

The fair value of non-financial instruments was not included in the fair values disclosed above. Accordingly, the sum of the fair values of the financial instruments listed above does not equal the fair value of the Company.

F-42

**Table of Contents**

## 23. DERIVATIVE FINANCIAL INSTRUMENTS (continued)

- d. The following table details the Company's exposure to foreign currency risk arising from recognised assets or liabilities denominated in a currency other than the functional currency of the entity to which they relate:

	Foreign Currency	2010 Exchange Rate	Year Ended December 31,		2011 Exchange Rate	NT\$
			NT\$	Foreign Currency		
(in thousands)						
<b>Financial Assets</b>						
U.S. Dollar	147,120	29.13	4,284,641	187,902	30.275	5,688,423
Japanese Yen	1,990,578	0.3582	713,015	586,033	0.3906	228,895
<b>Financial Liabilities</b>						
U.S. Dollar	44,687	29.13	1,301,716	15,808	30.275	478,273
Japanese Yen	958,859	0.3582	373,454	1,626,183	0.3906	635,157

## 24. SEGMENT AND GEOGRAPHIC INFORMATION

The Company engages mainly in the research and development, manufacturing, assembly and testing of semiconductors. In accordance with SFAS No. 41 and FASB ASC 280-10-50, the Company's chief operating decision maker has been identified as the Chief Executive Officer, who reviews these segment results by Testing, Assembly, Testing and Assembly for LCD and other Flat-Panel Display Driver Semiconductors and Bumping when making decisions about allocating resources and assessing the performance of the Company. During 2011, the revenue of the bumping segment exceeded the quantitative threshold for aggregation and the Company has presented bumping as a separate segment. The bumping segment has been recasted from LCD for the years ended December 31, 2009 and 2010. Financial segment information required by FASB ASC 280-10-50 is as follows:

- a. Semiconductor testing, assembly, LCD and other flat-panel display driver semiconductors and bumping services.

	2009				Segment Totals NT\$	Corporate & Other Assets NT\$	Consolidated Totals NT\$
	Testing NT\$	Assembly NT\$	LCD NT\$	Bumping NT\$			
(in thousands)							
Revenue from customers	5,171,207	4,352,836	1,986,453	639,812	12,150,308		12,150,308
Cost of revenues	7,362,399	5,111,252	2,171,731	1,016,070	15,661,452		15,661,452
Segment gross loss	(2,191,192)	(758,416)	(185,278)	(376,258)	(3,511,144)		(3,511,144)
Total operating expenses							(1,594,316)
Fair value gain on financial asset							62,674
Gain on extinguishment of convertible notes							412,337
Gain on embedded derivative							50,740
Other non-operating income							142,440
Interest expense							(439,411)
Impairment loss recognized during the year							(25,543)
Other non-operating expense							(86,495)
							(4,988,718)



## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Loss before income tax and  
noncontrolling interests

Segment assets	12,160,688	4,790,237	1,970,447	1,847,620	20,768,992		20,768,992
Long-term investment							219,966
Corporate and other assets							9,367,262
Total assets							30,356,220
Depreciation and amortization	3,779,168	1,206,440	1,172,552	319,063	6,477,223	47,373	6,524,596
Expenditure for segment assets	3,188,750	233,298	36,665	20,969	3,479,682		3,479,682

F-43

**Table of Contents**

## 24. SEGMENT AND GEOGRAPHIC INFORMATION (continued)

	2010				Segment Totals NT\$	Corporate & Other Assets NT\$	Consolidated Totals NT\$
	Testing NT\$	Assembly NT\$	LCD NT\$	Bumping NT\$ (in thousands)			
Revenue from customers	6,169,705	6,258,815	3,199,009	1,582,204	17,209,733		17,209,733
Cost of revenues	6,417,644	6,053,881	2,495,139	1,597,339	16,564,003		16,564,003
Segment gross profit (loss)	(247,939)	204,934	703,870	(15,135)	645,730		645,730
Total operating expenses							(1,154,753)
Fair value gain on financial asset							3,918
Recovery of allowance for doubtful receivables							2,716,880
Claim received							2,118,490
Other non-operating income							372,695
Interest expense							(683,486)
Loss on embedded derivative							(260,654)
Impairment loss recognized during the year							(391,646)
Loss on sale of receivables							(1,067,791)
Other non-operating expense							(487,817)
Income before income tax and noncontrolling interests							1,811,566
Segment assets	8,681,506	3,866,062	2,947,985	1,777,415	17,272,968		17,272,968
Long-term investment							10,537
Corporate and other assets							14,031,525
Total assets							31,315,030
Depreciation and amortization	3,797,698	1,020,979	1,100,664	328,981	6,248,322	33,307	6,281,629
Expenditure for segment assets	1,380,029	512,489	1,658,501	686,259	4,237,278		4,237,278

**Table of Contents**

## 24. SEGMENT AND GEOGRAPHIC INFORMATION (continued)

	2011					Corporate & Other Assets NT\$	Consolidated Totals	
	Testing NT\$	Assembly NT\$	LCD NT\$	Bumping NT\$	Segment Totals NT\$ (in thousands)		NT\$	US\$
Revenue from customers	5,899,082	5,989,068	3,985,834	2,336,953	18,210,937		18,210,937	601,617
Cost of revenues	5,522,131	5,706,157	3,098,529	2,222,397	16,549,214		16,549,214	546,720
Segment gross profit	376,951	282,911	887,305	114,556	1,661,723		1,661,723	54,897
Total operating expenses							(1,128,214)	(37,272)
Gain on disposal of property, plant and equipment							39,061	1,290
Foreign exchange gain							129,721	4,286
Other non-operating income							124,567	4,115
Interest expense							(309,286)	(10,218)
Loss on embedded derivative							(57,188)	(1,889)
Impairment loss recognized during the year							(168,154)	(5,555)
Loss on partial disposal of a subsidiary							(74,923)	(2,475)
Loss on disposal of property, plan and equipment							(7,389)	(244)
Other non-operating expense							(132,179)	(4,367)
Income before income tax and noncontrolling interests							77,739	2,568
Segment assets	6,047,835	2,954,657	3,240,228	1,653,328	13,896,048		13,896,048	459,070
Long-term investment							39,121	1,292
Corporate and other assets							14,345,896	473,932
Total assets							28,281,065	934,294
Depreciation and amortization	3,136,031	885,850	1,268,350	361,562	5,651,793	25,811	5,677,604	187,566
Expenditure for segment assets	463,602	254,741	1,188,021	412,919	2,319,283		2,319,283	76,620

The corporate and other assets consist of the total current assets, intangible assets and other assets.

**Table of Contents**

## 24. SEGMENT AND GEOGRAPHIC INFORMATION (continued)

## b. Net revenue:

<u>Area</u>	Year Ended December 31,			
	2009 NT\$	2010 NT\$	2011 NT\$	US\$
	(in thousands)			
ROC	7,330,964	12,684,431	13,338,554	440,653
U.S.	3,998,989	3,780,058	2,762,662	91,267
Singapore	185,706	63,352	1,015,659	33,554
Korea	352,642	430,746	314,774	10,399
Japan	167,475	120,673	351,048	11,597
Others	114,532	130,473	428,240	14,147
	12,150,308	17,209,733	18,210,937	601,617

## c. Net sales to customers representing at least 10% of net total sales:

<u>Customer</u>	2009		Year Ended December 31, 2010		2011		Amount US\$
	Amount NT\$	%	Amount NT\$	%	Amount NT\$	%	
	(in thousands)						
Spanion	1,867,515	15	1,086,031	6	1,005,832	6	33,229
ProMOS	667,800	5	2,033,342	12	1,005,728	6	33,225
Novatek	1,403,887	12	3,166,799	18	3,829,112	21	126,499
Micron	1,252,507	10	1,477,440	9	1,925,586	11	63,614

## 25. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES

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

## a. Technologies transferred in payment of capital stock

Pursuant to a Joint Venture Agreement entered into between MVI and SPIL on July 28, 1997, MVI and SPIL contributed, as payment for their subscription in the shares of stock of ChipMOS Taiwan, technologies relating to the testing and assembly of semiconductors at an agreed value of NT\$750,000 thousand. Under ROC GAAP, such technology transfers in payment of capital stock are recorded as an intangible asset, and amortized by systematic charges to income over the periods estimated to be benefited. As permitted under ROC GAAP, the Company uses a five-year amortization period. Under U.S. GAAP, the technology contribution cannot be recognized due to the unavailability of a fair value for the technologies. Therefore, the carrying value of the technologies has been adjusted to zero under U.S. GAAP.

## b. Start-up costs

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

ROC GAAP requires start-up costs to be deferred and amortized in a systematic manner over its estimated useful beneficial life. Start-up costs include all costs incurred prior to production readiness. On the other hand, U.S. GAAP primarily requires that start-up costs be expensed as incurred. Some of the expenses were recorded in manufacturing expenses and therefore also affect ending inventory balances under U.S. GAAP.

F-46

---

**Table of Contents**

25. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES (continued)

c. Depreciation of property, plant and equipment and employee dormitory building

Under ROC GAAP, the estimated life of a building can be as long as 55 years based on the ROC Internal Revenue Code. For U.S. GAAP purposes, building lives are estimated to be 25 years. Some of the depreciation expenses were recorded in manufacturing expenses and therefore also affect ending inventory balances under U.S. GAAP.

d. Transfer of building and facilities from MVI

The Company purchased buildings and facilities from MVI in 1997. The costs of assets purchased from MVI were based on MVI's book value of such building and facilities on a specified cut-off date plus an additional payment of NT\$173,174 thousand representing compensation to MVI. This additional payment of NT\$173,174 thousand was capitalized by the Company as allowed under ROC GAAP. Under U.S. GAAP, assets acquired are recorded at amounts that do not exceed their fair values. Also, generally under U.S. GAAP, the transferee should record the assets transferred from related parties with significant influence at the predecessor's basis. Therefore, the transfer of assets from MVI was recorded at MVI's predecessor cost basis and NT\$173,174 thousand was deducted from the capital surplus and building and facilities for the purposes of U.S. GAAP. Some of the related depreciation expenses were recorded in manufacturing expenses and therefore also affect ending inventory balances under U.S. GAAP.

e. Impairment of long-lived assets

Impairment assessments are made by the Company when events and circumstances exist that indicate the carrying value of these assets may not be recoverable. In view of the sustained losses incurred by ChpiMOS Shanghai, the Company reviewed its property, plant and equipment and land use rights for potential impairment as at December 31, 2010 and 2011.

Under U.S. GAAP, impairment losses for assets to be held and used are recorded in current period earnings and create a new cost basis for related assets going forward, and cannot be reversed subsequently. Under U.S. GAAP, in accordance with FASB ASC 360 Property, Plant and Equipment, long-lived assets 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. An impairment loss shall be recognized only if the carrying amount of a long-lived asset (asset group) is not recoverable and exceeds its fair value. The carrying amount of a long-lived asset (asset group) is not recoverable if it exceeds the sum of the undiscounted cash flows expected to result from the use and eventual disposition of the asset (asset group). That assessment shall be based on the carrying amount of the asset (asset group) at the date it is tested for recoverability, whether in use or under development. An impairment loss shall be measured as the amount by which the carrying amount of a long-lived asset (asset group) exceeds its fair value. Fair value is determined by the Company using future cash flows discounted at current rates. There are no differences in impairment loss recognized under ROC GAAP and U.S. GAAP in 2009, 2010 and 2011.

f. Earnings per share (EPS)

In calculating the weighted average number of shares outstanding for EPS purposes under ROC GAAP, employee bonus shares have been treated as outstanding for all periods in a manner similar to a stock split or stock dividend. Under U.S. GAAP, employee bonus shares have been considered separately from the stock dividend or split and have been treated as outstanding from the date of shareholder approval.

g. Interest capitalization

Under ROC GAAP, interest on borrowings during construction conceptually should be capitalized in the assets that are constructed or produced for a company's own use. However, if equity capital is raised during a year, no capitalization interest is recorded for the amount of property acquired up to the equity capital raised in that year. Under U.S. GAAP, FASB ASC 835 Interest, interest is generally capitalized on assets until they are available and ready for use.



---

**Table of Contents**

25. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES (continued)

h. Inventories stated at lower of cost or market

ROC GAAP allows assessment of carrying values of inventories on an aggregate basis. An allowance was made when the aggregate carrying values of inventories were higher than market.

Under U.S. GAAP, the Company's assessed inventories at the lower of cost or market on an item-by-item basis. This resulted in an additional write-off of NT\$36,818 thousand which was charged to the consolidated statement of operations as a component of cost of revenue in 2008.

Under ROC GAAP and effective January 1, 2009, the Company adopted the revised SFAS No. 10. The Company is required to assess inventories at the lower of cost or market on an item-by-item basis. Therefore, there are no difference between ROC GAAP and U.S. GAAP effective January 1, 2009. The adjustment in 2009 relates to reversal of the allowance made under U.S. GAAP in 2008.

i. Convertible notes

Under ROC GAAP, there is no requirement to account for the fair value of a conversion feature embedded in CN due 2009 as it was issued before January 1, 2006. Under U.S. GAAP, the Company accounts for the fair value of the conversion feature of its convertible notes in accordance with FASB ASC 815 Derivatives and Hedging, which requires the Company to bifurcate and separately account for the conversion feature as embedded derivatives contained in the Company's convertible notes. The Company carried these embedded derivatives on its balance sheet at fair value and changes in fair values of these embedded derivatives are reflected in the consolidated statement of operations. Commencing January 1, 2006, ROC GAAP requires the Company to bifurcate and separately account for put and call option features contained in the Company's convertible notes issued after 2005. The Company issued convertible notes (CN due 2011) on September 29, 2006. The Company carried the put and call options of the CN due 2011 on the balance sheet at fair value with changes in fair values reflected in the consolidated statement of operations. The other conversion features are recorded in equity.

Commencing from January 1, 2006, under ROC GAAP, the issue costs of convertible notes are recorded as a reduction of the convertible notes. Under U.S. GAAP the issue costs are capitalized as deferred assets and amortized over the period of the convertible notes.

There is no difference under ROC GAAP and U.S. GAAP in accounting for the CN due 2014 and 2015 (see Note 13).

As of December 31, 2011, there were no outstanding convertible notes (See Note 13).

j. Share-based payments

Under ROC GAAP, the Company followed Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees (APB No. 25), in accounting for its employee stock option plans prior to January 1, 2008. Under APB No. 25, when the exercise price of the Company's stock options is less than the market price of the underlying shares on the date of grant, compensation expense is recognized. Under U.S. GAAP, commencing from January 1, 2006, the Company applies FASB ASC 718 Compensation - Stock Compensation, with respect to options and warrants issued to non-employees. FASB ASC 718 requires the use of option valuation models to measure the fair value of the options and warrants at the measurement date. The total stock-based compensation expense resulting from stock options was included in the consolidated statements of operations. There is no difference between ROC GAAP and U.S. GAAP effective January 1, 2008 upon adoption of SFAS No. 39 for options granted since January 1, 2008.

k. Defined Benefit Pension Plans

Under U.S. GAAP, commencing from January 1, 2006, the Company applies FASB ASC 715 Compensation - Retirement Benefits. FASB ASC 715 requires an employer that sponsors one or more defined benefit pension plans or other postretirement plans to 1) recognize the funded status of a plan, measured as the difference between plan assets at fair value and the benefit obligation, in the balance sheet; 2) recognize in equity as a component of accumulated other comprehensive loss, net of tax, the gains or losses and prior service costs or credits that arise during the period but are not yet recognized as components of net periodic benefit cost; 3) measure defined benefit plan assets and obligations as of the date of the



## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

employer's fiscal year-end balance sheet; and 4) disclose in the notes to the financial statements additional information about the effects on net periodic benefit cost for the next fiscal year that arise from delayed recognition of the gains or losses, prior service costs or credits, and transition asset or obligation. Under ROC GAAP, there is no such requirement for recognition.

F-48

**Table of Contents****25. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES (continued)****l. Income tax expense**

Effective January 1, 2007, the Company adopted FASB ASC 740 Income Taxes. FASB ASC 740 prescribes a more-likely-than-not threshold for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. This interpretation also provides guidance on derecognizing of income tax assets and liabilities, classification of current and deferred income tax assets and liabilities, accounting for interest and penalties associated with tax positions and income tax disclosures.

Uncertain tax positions have been classified as non-current income tax liabilities unless these are expected to be paid in one year. The Company's policy for interest and penalties related to income tax exposure is to recognize interest and penalties as a component of the provision of income taxes in the consolidated statement of operations.

The Company is potentially subject to income tax audits in the ROC and internationally until the applicable statutes of limitations expire. Tax audits by their nature are often complex and can require several years to complete. The following is a summary of tax years, potentially subject to examination, in the significant tax and business jurisdictions in which the Company operates:

<b>Jurisdiction</b>	<b>Tax Years Subject to Examination</b>
Republic of China	5 Years
United States	3 Years
Hong Kong	6 Years
People's Republic of China	Unlimited

In 2011, the Company assessed that certain royalty payments are more likely than not to be disallowed by relevant tax authorities and a provision has been made for this uncertain tax position in the amount of NT\$5,205 thousand (US\$172 thousand).

The Company's subsidiaries are currently under examination by the relevant tax authorities for various tax years. The Company regularly assesses the potential outcome of these examinations in each of the taxing jurisdictions when determining the adequacy of the amount of unrecognized tax benefit recorded. While it is often difficult to predict the final outcome or the timing of resolution of any particular uncertain tax position, the Company believes it has appropriately accrued for uncertain tax benefits. However, audit outcomes and timing of audit settlements and future events that would impact the previously recorded unrecognized tax benefits and the range of anticipated increases or decreases in unrecognized tax benefits are subject to significant uncertainty. It is possible that the ultimate outcome of current or future examinations may exceed current unrecognized tax benefits in amounts that could be material, but cannot be estimated as of December 31, 2011. The effective tax rate and net income in any given future period could therefore be materially impacted.

There are no such provisions under ROC GAAP.

**m. Cash and cash equivalents**

Under ROC GAAP, cash and cash equivalents include time deposits regardless of its maturity date. Under U.S. GAAP, cash equivalents are short-term, highly liquid investments that are readily convertible to cash with original maturities of three months or less. Thus, time deposits with original maturities of more than three months are classified as cash equivalents under ROC GAAP but should be included in other current assets under U.S. GAAP.

**n. Classification of non-operating income (expenses)**

Under ROC GAAP, gains on disposal of property, plant and equipment, land use rights, scrap material and tooling and claim received are recorded as non-operating income; and loss on sale of receivables, impairment losses on property, plant and equipment, other assets, and goodwill are recorded as non-operating expenses as these items represent revenue and expenses not arising from ordinary operating activities. All of these specific non-operating line items are considered operating items under U.S. GAAP.

## Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Under U.S. GAAP, gains on disposal of property, plant and equipment, land use rights, scrap material and tooling and claim received are recorded as other operating income; and loss on sale of receivables, impairment losses on property, plant and equipment, other assets, and goodwill are recorded as operating expenses.

F-49

**Table of Contents**

## 25. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES (continued)

## o. Classification of loss on partial disposal of a subsidiary while retaining control

Under ROC GAAP, loss on partial disposal of a subsidiary while retaining control is recorded as a non-operating expense as this item represents an expense not arising from ordinary operating activities.

Under U.S. GAAP, changes in a parent's ownership interest while the parent retains its controlling financial interest in its subsidiary shall be accounted for as equity transactions. Therefore, no loss shall be recognized in consolidated net income or comprehensive income. Any difference between the fair value of the consideration received or paid and the amount by which the noncontrolling interest is adjusted shall be recognized in equity attributable to the parent.

The following reconciles net income (loss) and equity under ROC GAAP as reported in the accompanying consolidated financial statements to net income and equity amounts determined under U.S. GAAP, giving effect to adjustments for the differences listed above.

	2009 NT\$	Year Ended December 31,		
		2010 NT\$ (in thousands)	2011 NT\$	US\$
<b>Net income (loss) attributable to ChipMOS</b>				
Net income (loss) based on ROC GAAP	(4,418,683)	1,644,732	(15,161)	(501)
<b>Adjustments:</b>				
Amortization of deferred charge	(446)	(446)	(334)	(11)
Amortization of start-up costs	1,597	35		
Pension expenses	(17,358)	(22,075)	(17,904)	(591)
Gain on disposal of property, plant and equipment			3,972	131
Depreciation of property, plant and equipment and employee dormitory building	(56,430)	(56,125)	(52,002)	(1,718)
Transfer of building and facilities from MVI	160	159	158	5
Interest capitalization	(14,064)			
Loss on inventory valuation	36,818			
Effect of U.S. GAAP adjustments on income taxes	12,319	13,260	11,182	369
Adjustment for uncertain tax positions	20,228	3,001	(5,205)	(172)
Stock-based compensation	(40,705)	13,252	23,036	761
Loss on partial disposal of a subsidiary while retaining control			74,923	2,475
Amortization of discount on convertible notes	(88,603)			
Noncontrolling interests	14,880	21,109	23,420	774
Net increase (decrease) in net income	(131,604)	(27,830)	61,246	2,023
Net income (loss) based on U.S. GAAP	(4,550,287)	1,616,902	46,085	1,522
Earnings (loss) per share - basic	(230.00)	67.45	1.73	0.06
Earnings (loss) per share - diluted	(236.60)	66.35	1.71	0.06
Number of weighted average shares outstanding - basic	19,784	23,971	26,590	26,590
Number of weighted average shares outstanding - diluted	20,749	26,806	26,962	26,962



**Table of Contents**

## 25. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES (continued)

The following table reconciles the denominator to calculate basic and diluted earnings (loss) per share:

	<b>2009</b>	<b>December 31, 2010</b>	<b>2011</b>
	<b>(in thousands)</b>		
Basic number of shares	19,784	23,971	26,590
Add: Stock options		288	372
Convertible notes	965	2,547	
Diluted number of shares	20,749	26,806	26,962

The following table reconciles the numerator to calculate basic and diluted earnings (loss) per share:

	<b>2009</b>	<b>2010</b>	<b>2011</b>	
	<b>NT\$</b>	<b>NT\$</b>	<b>NT\$</b>	<b>US\$</b>
	<b>(in thousands)</b>			
Net income (loss) based on U.S. GAAP	(4,550,287)	1,616,902	46,085	1,522
Add: Amortization of discount on convertible notes	3,737	9,909		
Interest expense (net of tax)	(309,298)	(18,423)		
Loss (gains) on embedded derivative	(50,740)	181,436		
Amortization of deferred charge on convertible notes		446		
Foreign exchange gain	(2,658)	(11,541)		
Income (loss) attributable to ChipMOS adjusted for the effects of assumed exercise of options and conversion of notes	(4,909,246)	1,778,729	46,085	1,522

	<b>2009</b>	<b>2010</b>	<b>2011</b>	
	<b>NT\$</b>	<b>NT\$</b>	<b>NT\$</b>	<b>US\$</b>
	<b>(in thousands)</b>			
<b>Equity</b>				
Equity based on ROC GAAP	9,952,217	14,043,459	14,983,270	494,988
<b>Adjustments:</b>				
Technology transfer in payment of capital stock				
Original cost	(750,000)	(750,000)	(750,000)	(24,777)
Accumulated amortization of technology transfer in payment of capital stocks	750,000	750,000	750,000	24,777
Start-up costs				
Original cost	(49,825)			
Accumulated amortization of start-up costs	49,825			
Net effect on inventories	(35)			
Depreciation of property, plant and equipment and employee dormitory building	(283,868)	(339,993)	(391,995)	(12,950)
Transfer of building and facilities from MVI				
Original cost	(173,174)	(173,174)	(173,174)	(5,721)
Depreciation and gain on disposal of building and facilities from MVI	170,519	170,677	170,835	5,644
Net effect on inventories	(4)	(3)	(3)	
Pension expenses	(278,795)	(390,980)	(372,273)	(12,298)

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Gain on disposal of property, plant and equipment			3,972	131
Interest capitalization	118,757	118,757	118,757	3,923
Amortization of interest capitalization	(143,781)	(143,781)	(143,781)	(4,750)
Effect of U.S. GAAP adjustments on income taxes	75,287	88,547	99,729	3,295
Adjustment for uncertain tax positions	(4,247)	(1,246)	(6,451)	(213)
Equity component of convertible notes	(466,151)	(466,151)	(466,151)	(15,400)
Loss on redemption of convertible notes	(129,299)	(129,299)	(129,299)	(4,272)
Amortization of deferred charge	(38,822)	(39,268)	(39,602)	(1,308)
Amortization of discount on convertible notes	(607,569)	(607,569)	(607,569)	(20,072)
Gain on embedded derivative liabilities	1,242,621	1,242,621	1,242,621	41,051
Net decrease in equity	(518,561)	(670,862)	(694,384)	(22,940)
Equity based on U.S. GAAP	9,433,656	13,372,597	14,288,886	472,048

F-51

**Table of Contents**

## 25. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES (continued)

	2009 NT\$	Year Ended December 31,		US\$
		2010 NT\$	2011 NT\$	
(in thousands)				
<b>Changes in equity based on U.S. GAAP</b>				
Balance, beginning of the year	14,154,147	9,433,656	13,372,597	441,778
Stock purchased by a subsidiary	(79,936)			
Interest payment for convertible notes		29,216	5,408	178
Convertible notes conversion		1,078,008	305,569	10,095
Issuance of option warrants	90,600	43,872	48,979	1,618
Exercise of option warrants		1,450	15,982	528
Stock-based compensation	40,705	(13,252)	(23,036)	(761)
Cumulative translation adjustments	(29,197)	(78,466)	107,851	3,563
Net income (loss) for the year	(4,550,287)	1,616,902	46,085	1,522
Loss on partial disposal of a subsidiary while retaining control			(74,923)	(2,475)
Reverse stock split			(239)	(8)
Adjustment of equity method for long-term Investment	2,724	(3,260)	(6,619)	(219)
Unrecognized pension expenses	(20,760)	(53,698)	43,619	1,441
Noncontrolling interests	(174,340)	1,318,169	447,613	14,788
Balance, end of the year	9,433,656	13,372,597	14,288,886	472,048

A reconciliation of the significant balance sheet accounts to the approximate amounts determined under U.S. GAAP is as follows:

	2010 NT\$	December 31,		US\$
		2010 NT\$	2011 NT\$	
(in thousands)				
<b>Current assets</b>				
As reported	12,790,298	13,091,191	432,481	
<b>U.S. GAAP adjustments</b>				
Effect of inventory adjustments:				
Depreciation of property, plant and equipment	1,059	1,005	33	
Transfer of building and facilities from MVI	(3)	(3)		
Adjustments for uncertain tax position	(6,207)	(6,207)	(205)	
As adjusted	12,785,147	13,085,986	432,309	
<b>Property, plant and equipment - net</b>				
As reported	17,272,968	13,896,048	459,070	
<b>U.S. GAAP adjustments</b>				
Depreciation of property, plant and equipment	(321,365)	(367,710)	(12,148)	
Transfer of building and facilities from MVI	(2,497)	(2,339)	(77)	
Interest capitalization	(25,024)	(25,024)	(827)	
As adjusted	16,924,082	13,500,975	446,018	
<b>Other assets</b>				
As reported	1,146,962	1,154,207	38,131	
U.S. GAAP adjustments				



Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Depreciation of employee dormitory building	(19,687)	(21,318)	(704)
Deferred charge	334		
Effect of U.S. GAAP adjustment on income tax	88,547	99,729	3,294
Adjustments for uncertain tax position	4,961	4,961	164
As adjusted	1,221,117	1,237,579	40,885

F-52

**Table of Contents**

## 25. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES (continued)

	2010 NT\$	December 31, 2011 NT\$ (in thousands)	US\$
<b>Other liabilities</b>			
As reported	97,079	101,331	3,348
U.S. GAAP adjustments			
Pension	390,980	372,273	12,298
Adjustment for uncertain tax position		5,205	172
As adjusted	488,059	478,809	15,818

As a result of the adjustments presented above, the approximate amounts of total assets under U.S. GAAP were NT\$31,035,148 thousand and NT\$27,964,159 thousand (US\$923,824 thousand) as of December 31, 2010, and 2011, respectively.

The following U.S. GAAP condensed statements of operations for the years ended December 31, 2009, 2010 and 2011 have been derived from the audited financial statements and reflect the adjustments presented above. Certain accounts have been reclassified to conform to U.S. GAAP.

	2009 NT\$	Year Ended December 31, 2010 NT\$		2011 NT\$	US\$
		(in thousands)			
Net revenue	12,150,308	17,209,733	18,210,937		601,617
Cost of revenue	(15,690,962)	(16,634,902)	(16,612,519)		(548,812)
Gross profit (loss)	(3,540,654)	574,831	1,598,418		52,805
Other operating income	97,265	5,039,578	120,595		3,984
Operating expenses	(1,726,537)	(2,670,660)	(1,307,533)		(43,195)
Income (loss) from operations	(5,169,926)	2,943,749	411,480		13,594
Non-operating income (expenses) - net	2,176	(1,197,383)	(301,892)		(9,974)
Income (loss) before income tax and noncontrolling interests	(5,167,750)	1,746,366	109,588		3,620
Net income (loss) attributable to ChipMOS	(4,550,287)	1,616,902	46,085		1,522

**Table of Contents**

## 26. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP

## a. Recent accounting pronouncements

In May 2011, the FASB issued Accounting Standard Update No. 2011-04 ( ASU 2011-04 ). This update is to clarify the Board's intent about the application of existing fair value measurement and disclosure requirements and change a particular principle or requirement for measuring fair value or for disclosing information about fair value measurements. In addition, to improve consistency in application across jurisdictions some changes in wording are necessary to ensure that U.S. GAAP and IFRS fair value measurement and disclosure requirements are described in same way. This update is effective for fiscal years, and interim periods within those fiscal years, beginning on or after December 15, 2011. The adoption of ASU 2011-04 may impact the Company's disclosure on fair value measurement in its consolidated financial statements in future periods.

In June 2011, the FASB issued Accounting Standard Update ASU 2011-05 to address the reclassification adjustments and the effect of those reclassification adjustments on the face of the financial statements where net income is presented, by component of net income, and on the face of the financial statements where other comprehensive income is presented, by component of other comprehensive income. This update is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2011. The adoption of ASU No. 2011-05 is unlikely to have a material impact on the Company's results and financial position.

In December 2011, the FASB issued Accounting Standard Update ASU 2011-12 to supersede the presentation requirements for reclassification adjustments of items out of accumulated other comprehensive income in Update 2011-05 for all entities. The intent of this Update is to defer changes to the presentation requirements for reclassifications out of accumulated other comprehensive income contained in Update 2011-05 to allow the Board time to reconsider whether changes should be made to the presentation requirements for reclassification adjustments out of accumulated other comprehensive income. This update is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2011. The adoption of ASU No. 2011-12 is unlikely to have a material impact on the Company's results and financial position.

b. FASB ASC 820 Fair Value Measurements and Disclosures establishes a fair value hierarchy that distinguishes between assumptions based on market data (observable inputs) and the Company's assumptions (unobservable inputs). The hierarchy consists of three broad levels as follows:

Level 1 Quoted market prices in active markets for identical assets or liabilities

Level 2 Inputs other than level 1 that are either directly or indirectly observable

Level 3 Unobservable inputs developed using the Company's estimates and assumptions, which reflect those that market participants would use.

The following table sets forth the assets measured at fair value on a recurring basis, by input level, as of December 31, 2010:

	Level 1 NT\$	Level 2 NT\$	Level 3 NT\$	Total NT\$
		(in thousands)		
Financial assets at fair value through profit and loss	2,999			2,999

Financial assets at fair value through profit and loss include investments in stocks and open-ended funds, which are measured using quoted price in active markets and are classified as Level 1.

As of December 31, 2011, the company did not hold any financial instruments recognized at fair value on a recurring basis.

**Table of Contents**

## 26. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP (continued)

## c. Income tax expense

Income (loss) before income tax and noncontrolling interests consists of the following:

	Year Ended December 31,			
	2009 NT\$	2010 NT\$	2011 NT\$	US\$
	(in thousands)			
Bermuda	80,964	(951,545)	356,956	11,792
ROC	(5,170,100)	2,242,375	285,515	9,432
Others	(78,614)	455,536	(532,883)	(17,604)
	(5,167,750)	1,746,366	109,588	3,620

Income tax expense (benefit) consists of:

	Year Ended December 31,			
	2009 NT\$	2010 NT\$	2011 NT\$	US\$
	(in thousands)			
Income tax for the current year				
Bermuda	6,267	6,585	6,360	210
ROC		19,366	21,527	711
Others	2,049	1,774	503	17
	8,316	27,725	28,390	938
Deferred income tax				
ROC	(483,604)	(143,227)	13,756	454
Others	(1)	(29,777)		
	(483,605)	(173,004)	13,756	454
Adjustment of prior years income taxes	22,080	29,658	(2,617)	(86)
Income tax expense (benefit)	(453,209)	(115,621)	39,529	1,306

Reconciliation between the income tax calculated on pre-tax financial statement income based on the statutory tax rate and the income tax expense which conforms to U.S. GAAP is as follows:

	Year Ended December 31,			
	2009 NT\$	2010 NT\$	2011 NT\$	US\$
	(in thousands)			
Tax on pretax income (loss) at 0%				
Tax on pretax income (loss) at applicable statutory rates	(1,334,734)	525,738	76,863	2,539
Additional 10% on the unappropriated earnings			164,073	5,420
Tax effects of:				
Permanent differences				
Non-taxable loss on sales of investment	358	5,089		

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Non-deductible investment losses	(17,167)	(135,961)	(10,982)	(362)
Non-deductible expense	(91,828)	(53,479)	(26,976)	(891)
Other	3,554	925	110	4
Temporary differences	28,026	32,854	8,469	280
Tax credits - utilized		(9,445)	(179,823)	(5,941)
- deferred	4,080	515,421	302,966	10,009
Valuation allowance	703,359	(1,127,767)	(397,672)	(13,138)
Losses carried forward	1,088,819	(61,646)	(113,727)	(3,757)
Losses carried forward - deferred	(981,013)	82,057	218,845	7,230
Deferred tax effect of change in tax rate	139,526	80,935		
Adjustment of prior year's income tax	3,811	29,658	(2,617)	(87)
Income tax expense (benefit)	(453,209)	(115,621)	39,529	1,306

F-55

**Table of Contents**

## 26. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP (continued)

## c. Income tax expense (continued)

The components of net deferred income tax assets were as follows:

	2010 NT\$	December 31, 2011 NT\$ (in thousands)	US\$
<b><u>Deferred income tax assets</u></b>			
Current			
Unrealized foreign exchange loss	25,248	2,085	69
Tax credits	285,891	76,280	2,520
Loss of market price decline and obsolete and slow-moving inventories	10,430	19,413	641
Unrealized loss on sale allowances	31,932	20,167	666
Allowance for doubtful receivables	11,013	11,013	364
Others	1,015	3,293	109
	365,529	132,251	4,369
Valuation allowance	(93,025)	(61,899)	(2,045)
	272,504	70,352	2,324
Non-current			
Tax credits	163,777	70,421	2,326
Losses carried forward	1,178,333	1,000,200	33,043
Impairment loss	13,114	10,497	347
Building	638	611	20
Start-up costs	2	2	
Depreciation differences		125,749	4,154
Others	248,106	258,387	8,536
	1,603,970	1,465,867	48,426
Valuation allowances	(1,075,298)	(760,826)	(25,134)
	528,672	705,041	23,292
<b><u>Deferred income tax liabilities</u></b>			
Non-current			
Depreciation differences	(17,233)		
	511,439	705,041	23,292

**Table of Contents**

## 26. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP (continued)

## d. Pension plans

The impact of the adoption of FASB ASC 715 has been reflected within the consolidated financial statements as follows:

	Year Ended December 31,			US\$
	2009 NT\$	2010 NT\$	2011 NT\$	
	(in thousands)			
<b>Components of net periodic benefit cost</b>				
Service cost	1,518	1,325	1,189	39
Interest cost	11,340	12,292	11,833	391
Project return on plan assets	(6,857)	(5,140)	(7,090)	(234)
<b>Net amortization and deferral:</b>				
Unrecognized net transition obligation	53	53	53	2
Curtailment loss	7,568	8,355	12,261	405
Net prior service cost	(206)	(206)	(206)	(7)
<b>Net periodic benefit cost</b>	<b>13,416</b>	<b>16,679</b>	<b>18,040</b>	<b>596</b>
<b>Recognized in other comprehensive income:</b>				
Unrecognized net transition obligation	133	136	136	4
Net prior service cost	156	620	323	11
Unrecognized actuarial loss (gain)	20,471	52,942	(44,078)	(1,456)
<b>Total recognized in other comprehensive income</b>	<b>20,760</b>	<b>53,698</b>	<b>(43,619)</b>	<b>(1,441)</b>
<b>Total recognized in total benefit cost and other comprehensive income</b>	<b>34,176</b>	<b>70,377</b>	<b>(25,579)</b>	<b>(845)</b>

The estimated net transition assets and actuarial loss for the defined benefit pension plans that will be amortized from accumulated other comprehensive income into benefits cost in 2012 is NT\$115 thousand (US\$4 thousand) and NT\$8,457 thousand (US\$279 thousand), respectively.

	Year Ended December 31,			US\$
	2009 NT\$	2010 NT\$	2011 NT\$	
	(in thousands)			
<b>Changes in benefit obligation</b>				
Benefit obligation at beginning of Year	496,548	546,385	664,467	21,951
Service cost	1,518	1,325	1,189	39
Interest cost	11,340	12,292	11,833	391
Plan amendments				
Actuarial loss (gain)	36,979	104,465	(31,935)	(1,055)
<b>Benefit obligation at end of year</b>	<b>546,385</b>	<b>664,467</b>	<b>645,554</b>	<b>21,326</b>

Changes in plan assets

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Fair value of plan assets at beginning of year	291,532	314,992	343,823	11,359
Actual return on plan assets	1,755	4,415	3,732	123
Employer contribution	21,705	24,416	23,897	789
	314,992	343,823	371,452	12,271
Funds status	(231,393)	(320,644)	(274,102)	(9,055)
Unrecognized actuarial loss	(31,285)	(47,175)	(68,878)	(2,276)
Net amount recognized (recognized as accrued pension cost)	(262,678)	(367,819)	(342,980)	(11,331)

F-57



**Table of Contents**

## 26. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP (continued)

## d. Pension plans (continued)

Amounts recognized in accumulated other comprehensive income, net of noncontrolling interests, consist of:

	2010 NT\$	2011 NT\$ (in thousands)	US\$
Unrecognized net transition obligation (asset)	(2,366)	(2,047)	(67)
Net prior service cost	(3,347)	(3,258)	(108)
Unrecognized loss	332,792	295,773	9,771
Gross amount recognized	327,079	290,468	9,596
Noncontrolling interests	(47,796)	(54,804)	(1,811)
Total recognized in total benefit cost and other comprehensive income	279,283	235,664	7,785

	2009	2010	2011
Actuarial assumptions			
Discount rate	2.25%	1.75%	1.75%
Rate of compensation increase	4.25%	4.25%	4.00%
Expected return on plan assets	1.5%	2.00%	2.00%

The accumulated benefit obligation for all defined benefit pension plans was NT\$304,931 thousand and NT\$335,176 thousand (US\$11,073 thousand) at December 31, 2010 and 2011, respectively.

There were no pension plans with an accumulated benefit obligation in excess of plan assets as of December 31, 2010 and 2011.

The plan assets are all invested in the Bank of Taiwan. The plan benefits are based on employees' years of service and compensation. The plan assets primarily consist of cash, government loans, equity securities, notes and bonds.

The fair value of the plan assets was NT\$343,823 thousand and NT\$371,452 thousand (US\$12,271 thousand) at December 31, 2010 and 2011, respectively. As of December 31, 2010 and 2011, these assets were allocated among asset categories as follows:

Asset category	2010	2011	Current maximum allocation policy
Equity securities	38%	41%	40%
Bonds	18%	27%	
Notes	11%	8%	
Government loans	1%	1%	
Cash	32%	23%	
Total	100%	100%	

Under ROC regulation, government authority will collect the fund as Labor Retirement Fund and determine the assets allocation and investment policy.

ChipMOS Taiwan and ThaiLin anticipate contributing NT\$24,429 thousand to their pension plans during 2012.

The Company has no other post-retirement or post-employment benefit plans.

F-58



Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

December 31, 2009	(225,585)	404,517	178,932
Addition in 2010	(53,698)	(78,466)	(132,164)
December 31, 2010	(279,283)	326,051	46,768
Addition in 2011	43,619	107,851	151,470
December 31, 2011	(235,664)	433,902	198,238

F-59

**Table of Contents**

## 26. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP (continued)

## h. Shareholders' equity

Employee stock-based compensation has been accounted for under FASB ASC 715.

The Company has in place a Share Option Plan (2001 Plan). Under the terms of the plan, the exercise price set on the grant of share options may not be less than the par value of a Company Share on the date of grant of such option. In August 2006, the Company adopted a second Share Option Plan (2006 Plan). The number of shares that may be issued under the two plans is 4,000,000 shares and may consist in whole or part of authorized but unissued shares of the Company which are not reserved for any other purpose. No consideration is payable for the grant of an option. In September 2011, the Company adopted a third Share Option Plan (2011 Plan). The number of shares that may be issued under this plan is 1,000,000 shares and may consist in whole or part of authorized but unissued shares of the Company which are not reserved for any other purpose. No consideration is payable for the grant of an option.

Under the plans, options may be granted to all directors, officers, employees and consultants of the Company and its affiliates. Options are exercisable for a maximum of ten years from the date on which such option is granted and five years from the date on which such option is granted if the holder of the option owns more than 10% of the combined voting power of the Company at the time the option is granted.

In September 2006 and August 2008, the Company adopted share appreciation rights plans. The share appreciation rights plans provide that the directors, officers and employees of the Company and its affiliates may be granted cash-settled share appreciation rights.

The fair value for options granted has been estimated at the date of grant using the Black-Scholes Option Pricing Model with the following weighted average assumptions:

Year of grant	Risk free	Expected life	Expected volatility	Expected
	interest rate			dividend yield
2006	4.62% ~ 4.74%	4.25 years	102.67% ~ 133.21%	0%
2007	3.32% ~ 5.04%	4.25 years	134.71% ~ 171.09%	0%
2008	1.30% ~ 3.42%	4.25 ~ 6 years	97.83% ~ 188.06%	0%
2009	1.32% ~ 2.39%	4.25 ~ 5 years	139.36% ~ 163.82%	0%
2010	0.86% ~ 2.48%	3.25 ~ 7 years	153.18% ~ 213.94%	0%
2011	0.45% ~ 2.11%	3.50 ~ 5 years	170.25% ~ 177.79%	0%

The following table presents the stock option activity for the year ended December 31, 2010 and 2011.

	Number of Options	Weighted Average Exercise Price US\$	Aggregate Intrinsic Value US\$ (in thousands)
Outstanding at December 31, 2009	2,538,489	12.68	
Granted	160,660	3.60	
Forfeited	(212,049)	11.84	
Exercised	(19,246)	2.44	
Expired	(353,800)	20.72	
Outstanding at December 31, 2010	2,114,054	10.80	
Granted	692,624	5.17	
Forfeited	(148,403)	10.99	
Exercised	(96,103)	5.73	

Edgar Filing: CHIPMOS TECHNOLOGIES BERMUDA LTD - Form 20-F

Outstanding at December 31, 2011	2,562,172	9.47	1,351
Exercisable at December 31, 2010	1,196,611	12.84	
Exercisable at December 31, 2011	1,448,892	12.77	658
Vested and expected to vest in 2010	2,068,182	8.28	
Vested and expected to vest in 2011	2,506,508	13.58	1,317

F-60

**Table of Contents**

## 26. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP (continued)

## h. Shareholders' equity (continued)

The aggregate intrinsic value in the table above represents the total intrinsic value (i.e., the difference between the Company's closing stock price of US\$5.16 on December 31, 2011 (December 31, 2010: US\$6.12) and the exercise price, times the number of options) that would have been received by the option holders had all option holders exercised their options on December 31, 2011. The total intrinsic value of options exercised during the year ended December 31, 2011 was NT\$3,036 thousand (US\$100 thousand) (2010: NT\$2,069 thousand). The total fair value of options vested and forfeited during the year ended December 31, 2011 was NT\$121,368 thousand (US\$4,010 thousand) (2010: NT\$194,733 thousand). The number of options vested during the year ended December 31, 2011 was 348,384 (2010: 444,044). The weighted average remaining contractual term of the outstanding options at December 31, 2011 was 3.6 (2010: 3.8) years.

Total unrecognized compensation cost related to stock options is expected to be recognized over a weighted average period of 1.3 years.

The Company's employees have the ability to exercise a stock option (i.e., remit cash consideration to the Company for the exercise price) in exchange for stock during the vesting period of the award.

The following table presents a summary of the number of and weighted average grant date fair values regarding the unvested share options as of December 31, 2011 and changes during the year then ended:

	Number of Options	Weighted Average Fair Value US\$
Unvested options outstanding at December 31, 2009	1,412,876	8.40
Granted	160,660	3.91
Vested	(444,044)	9.18
Forfeited	(212,049)	12.3
Unvested options outstanding at December 31, 2010	917,443	6.66
Granted	692,624	5.57
Vested	(348,384)	6.74
Forfeited	(148,403)	11.2
Unvested options outstanding at December 31, 2011	1,113,280	5.35

The Company's determination of fair value of employee share options on the date of grant using the Black Scholes Option Pricing Model is affected by the Company's stock price as well as assumptions regarding a number of highly complex and subjective variables. These variables include, but are not limited to the Company's expected stock price volatility over the term of the awards. Option pricing models were developed for use in estimating the value of traded options that have no vesting or hedging restrictions and are fully transferable. Because the Company's employee stock options have certain characteristics that are significantly different from traded options, and because changes in the subjective assumptions can materially affect the estimated value, in management's opinion, the existing valuation models may not provide an accurate measure of the fair value of the Company's employee stock options. Although the fair value of employee stock options is determined in accordance with FASB ASC 715 using an option pricing model, that value may not be indicative of the fair value observed in a willing buyer/willing seller market transaction.