

CHIPMOS TECHNOLOGIES BERMUDA LTD  
Form 20-F  
April 26, 2013  
Table of Contents

As filed with the Securities and Exchange Commission on April 26, 2013

**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, 2012

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, 2012, 28,891,441 Common Shares, par value US\$0.04 each, were outstanding (not including 4,474,211 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.**

<u>CAUTIONARY STATEMENT FOR PURPOSES OF SAFE HARBOR PROVISIONS</u>	1
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>	23
Item 4A. <u>Unresolved Staff Comments</u>	50
Item 5. <u>Operating and Financial Review and Prospects</u>	51
Item 6. <u>Directors, Senior Management and Employees</u>	72
Item 7. <u>Major Shareholders and Related Party Transactions</u>	80
Item 8. <u>Financial Information</u>	84
Item 9. <u>The Offer and Listing</u>	85
Item 10. <u>Additional Information</u>	86
Item 11. <u>Quantitative and Qualitative Disclosure about Market Risk</u>	95
Item 12. <u>Description of Securities Other Than Equity Securities</u>	95
Item 13. <u>Defaults, Dividend Arrearages and Delinquencies</u>	96
Item 14. <u>Material Modifications to the Rights of Security Holders and Use of Proceeds</u>	96
Item 15. <u>Controls and Procedures</u>	96
Item 16A. <u>Audit Committee Financial Expert</u>	97
Item 16B. <u>Code of Ethics</u>	97
Item 16C. <u>Principal Accountant Fees and Services</u>	97
Item 16D. <u>Exemptions from the Listing Standards for Audit Committees</u>	97
Item 16E. <u>Purchases of Equity Securities by the Issuer and Affiliated Purchasers</u>	97
Item 16F. <u>Change in Registrant's Certifying Accountant</u>	98
Item 16G. <u>Corporate Governance</u>	98
Item 17. <u>Financial Statements</u>	100
Item 18. <u>Financial Statements</u>	100
Item 19. <u>Exhibits</u>	100

**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, 2011 and 2012 and our consolidated statement of operations and cash flows data for 2010, 2011 and 2012 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, 2008, 2009 and 2010 and the consolidated statement of operations and cash flows data for the years ended December 31, 2008 and 2009 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 24 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,					
	2008	2009	2010	2011	2012	2012
	NT\$	NT\$	NT\$	NT\$	NT\$	US\$
(in millions, except per share data)						
<b>Consolidated Statement of Operations Data:</b>						
<b>ROC GAAP:</b>						
Net revenue:						
Related parties <sup>(1)</sup>	\$ 3,122.9	\$ 668.9	\$ 2,033.3	\$ 379.0	\$	\$
Others	13,887.3	11,481.4	15,176.4	17,831.9	19,220.5	661.6
Total net revenue	17,010.2	12,150.3	17,209.7	18,210.9	19,220.5	661.6
Cost of revenue	16,969.9	15,661.5	16,564.0	16,549.2	16,638.5	572.8
Gross profit (loss)	40.3	(3,511.2)	645.7	1,661.7	2,582.0	88.8
Operating expenses:						
Research and development	435.6	375.3	412.7	409.8	492.8	17.0
General and administrative	885.6	657.8	677.6	651.9	625.6	21.5
Sales and marketing	2,362.7	561.2	64.4	66.5	78.4	2.7
Total operating expenses	3,683.9	1,594.3	1,154.7	1,128.2	1,196.8	41.2
Income (Loss) from operations	(3,643.6)	(5,105.5)	(509.0)	533.5	1,385.2	47.6
Other income (expenses), net	(3,286.8)	116.7	2,320.6	(455.8)	(464.4)	(16.0)
Income (Loss) before income tax, noncontrolling interests and interest in bonuses paid by subsidiaries <sup>(2)</sup>	(6,930.4)	(4,988.8)	1,811.6	77.7	920.8	31.6
Income tax benefit (expense)	(120.8)	420.7	99.3	(45.5)	(131.5)	(4.5)
Income (Loss) before noncontrolling interests and interest in bonuses paid by subsidiaries <sup>(2)</sup>	(7,051.2)	(4,568.1)	1,910.9	32.2	789.3	27.1
Net (income) loss attributable to noncontrolling interests	143.3	149.4	(266.2)	(47.4)	(67.5)	(2.3)
Interest in bonuses paid by subsidiaries <sup>(2)</sup>	(362.4)					
Net income (loss) attributable to ChipMOS	\$ (7,270.3)	\$ (4,418.7)	\$ 1,644.7	\$ (15.2)	\$ 721.8	\$ 24.8
Earnings (Loss) per share <sup>(4)</sup> :						
Basic	\$ (346.63)	\$ (223.35)	\$ 68.61	\$ (0.57)	\$ 26.27	\$ 0.90
Diluted	\$ (346.63)	\$ (230.15)	\$ 67.38	\$ (0.57)	\$ 25.50	\$ 0.88
Weighted-average number of shares outstanding <sup>(4)</sup> :						
Basic	21.0	19.8	24.0	26.6	27.5	27.5
Diluted	21.0	22.3	26.8	26.6	28.3	28.3



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

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

Net income (loss) attributable to ChipMOS	\$ (7,177.7)	\$ (4,550.3)	\$ 1,616.9	\$ 46.1	\$ 750.6	\$ 25.8
Earnings (Loss) per share <sup>(4)</sup> :						
Basic	\$ (342.24)	\$ (230.00)	\$ 67.45	\$ 1.73	\$ 27.32	\$ 0.94
Diluted	\$ (342.24)	\$ (236.60)	\$ 66.35	\$ 1.71	\$ 26.52	\$ 0.91
Weighted-average number of shares outstanding <sup>(4)</sup> :						
Basic	21.0	19.8	24.0	26.6	27.5	27.5
Diluted	21.0	20.8	26.8	26.9	28.3	28.3

- (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 are 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 18 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 24 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**

	2008	2009	As of December 31,		2012	2012
	NT\$	NT\$	2010	2011	NT\$	US\$
			NT\$	NT\$		
			(in millions)			
<b>Consolidated Balance Sheet Data:</b>						
<b>ROC GAAP:</b>						
Current assets:						
Cash and cash equivalents	\$ 6,651.9	\$ 3,884.8	\$ 7,143.3	\$ 7,357.9	\$ 9,319.0	\$ 320.8
Restricted cash and cash equivalents	59.5	243.8	546.8	285.1	174.5	6.0
Financial assets at fair value through profit and loss	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	14.2	27.9	14.0	5.7	5.0	0.2
Accounts receivable						
related parties <sup>(1)</sup>	0.4	0.2	258.0			
third parties	1,296.5	2,441.8	2,816.0	3,666.5	3,992.2	137.4
Other receivables						
related parties <sup>(1)</sup>	30.0		66.4			
third parties	172.2	130.1	182.0	73.2	149.9	5.2
Inventories	1,001.5	862.1	1,279.8	1,533.9	1,687.9	58.1
Deferred income tax, net	355.8	356.4	278.7	76.6	77.8	2.7
Prepaid expenses and other current assets	265.2	265.1	202.3	92.3	131.8	4.5
Total current assets	10,494.3	8,431.2	12,790.3	13,091.2	15,538.1	534.9
Long-term investments	437.8	220.0	10.5	39.1	11.6	0.4
Property, plant and equipment net	23,654.9	20,769.0	17,273.0	13,896.1	12,108.0	416.8
Intangible assets net	107.8	102.8	94.2	100.5	178.9	6.2
Other assets	746.8	833.2	1,147.0	1,154.2	912.8	31.4
Total assets	35,441.6	30,356.2	31,315.0	28,281.1	28,749.4	989.7
Current liabilities:						
Short-term bank loans	2,745.4	2,363.3	1,494.7	546.9	366.5	12.6
Current portion of long-term loans	4,603.7	1,553.9	4,925.7	684.0	2,227.8	76.7
Convertible notes	1,541.6		65.8			
Accounts payable	477.9	738.0	690.1	1,130.8	890.1	30.6
Payables to contractors and equipment suppliers	251.6	201.2	790.6	415.4	484.6	16.7
Other payables	628.0	696.1	896.7	1,081.5	1,008.4	34.7
Current portion of capital leases payable		821.2	822.0			
Accrued expenses and other current liabilities	469.4	525.7	990.9	830.9	767.0	26.4
Total current liabilities	10,721.6	6,921.5	10,697.5	4,712.2	5,775.6	198.8
Long-term liabilities	9,934.9	13,475.2	6,566.4	8,579.6	6,829.3	235.2
Other liabilities	242.3	7.3	7.7	6.0	175.4	6.0
Total liabilities	20,898.8	20,404.0	17,271.6	13,297.8	12,780.3	440.0
Total equity (including noncontrolling interests)	\$ 14,542.8	\$ 9,952.2	\$ 14,043.4	\$ 14,983.3	\$ 15,969.1	\$ 549.7

- (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 are 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 18 of the notes to the consolidated financial statements contained in this Annual Report on Form 20-F.

**Table of Contents**

	2008	2009	As of December 31,		2012	2012
	NT\$	NT\$	2010	2011	NT\$	US\$
			NT\$	NT\$		
			(in millions)			
<b>US GAAP<sup>(1)</sup> :</b>						
Current assets:						
Cash and cash equivalents	\$ 6,651.9	\$ 3,884.8	\$ 7,143.3	\$ 7,357.9	\$ 9,319.0	\$ 320.8
Restricted cash and cash equivalents	59.5	243.8	546.8	285.1	174.5	6.0
Financial assets at fair value through profit and loss	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	14.2	27.9	14.0	5.7	5.0	0.2
Accounts receivable						
related parties <sup>(2)</sup>	0.4	0.2	258.0			
third parties	1,296.5	2,441.8	2,816.0	3,666.5	3,992.2	137.4
Other receivables						
related parties <sup>(2)</sup>	30.0		66.4			
third parties	172.2	130.1	182.0	73.2	149.9	5.2
Inventories	966.1	863.1	1,280.9	1,534.9	1,688.8	58.1
Deferred income tax, net	349.5	350.2	272.5	70.4	77.8	2.7
Prepaid expenses and other current assets	265.2	265.1	202.3	92.3	131.8	4.5
Total current assets	10,452.6	8,426.0	12,785.2	13,086.0	15,539.0	534.9
Long-term investments	437.8	220.0	10.5	39.1	11.6	0.4
Property, plant and equipment net	23,427.2	20,474.4	16,924.1	13,501.0	11,652.9	401.1
Intangible assets net	107.8	102.8	94.2	100.5	94.3	3.2
Other assets	731.6	893.2	1,221.1	1,237.6	977.7	33.7
Total assets	35,157.0	30,116.4	31,035.1	27,964.2	28,275.5	973.3
Current liabilities:						
Short-term bank loans	2,745.4	2,363.3	1,494.7	546.9	366.5	12.6
Current portion of long-term loans	4,603.7	1,553.9	4,925.7	684.0	2,227.8	76.7
Convertible notes	1,453.0		65.8			
Accounts payable	477.9	738.0	690.1	1,130.8	890.1	30.6
Payables to contractors and equipment suppliers	251.6	201.2	790.6	415.4	484.6	16.7
Other payables	628.0	696.1	896.7	1,081.5	1,008.4	34.7
Current portion of capital leases payable		821.2	822.0			
Accrued expenses and other current liabilities	469.4	525.7	990.9	830.9	767.0	26.4
Total current liabilities	10,632.9	6,921.5	10,697.5	4,712.2	5,775.6	198.8
Long-term liabilities	9,934.9	13,475.2	6,566.4	8,579.6	6,829.3	235.2
Other liabilities	435.0	286.1	398.6	383.5	480.3	16.5
Total liabilities	21,002.8	20,682.8	17,662.5	13,675.3	13,085.2	450.5
Total equity (including noncontrolling interests)	\$ 14,154.2	\$ 9,433.6	\$ 13,372.6	\$ 14,288.9	\$ 15,190.3	\$ 522.8

- (1) Reflects the US GAAP adjustments as described in Note 24 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 are 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 18 of the notes to the consolidated financial statements contained in this Annual Report on Form 20-F.

**Table of Contents**

	2008 NT\$	2009 NT\$	Year ended December 31,		2012 NT\$	2012 US\$
			2010 NT\$	2011 NT\$		
(in millions)						
<b>Consolidated Statement of Cash Flows Data:</b>						
<b>ROC GAAP:</b>						
Capital expenditures	\$ 2,188.4	\$ 3,479.7	\$ 4,237.3	\$ 2,319.3	\$ 2,776.6	\$ 95.6
Depreciation and amortization	7,174.5	6,524.6	6,281.6	5,677.6	4,631.9	159.4
Net cash provided by (used in):						
Operating activities	5,164.2	781.0	8,688.9	5,898.0	4,735.3	163.0
Investing activities	(2,296.9)	(1,042.5)	(2,454.2)	(3,250.7)	(2,594.9)	(89.3)
Financing activities	(1,395.3)	(2,503.8)	(2,959.5)	(2,464.6)	(162.7)	(5.6)
Effect of exchange rate changes on cash	46.3	(1.8)	(16.8)	31.9	(16.6)	(0.6)
Net increase (decrease) in cash	\$ 1,518.3	\$ (2,767.1)	\$ 3,258.4	\$ 214.6	\$ 1,961.1	\$ 67.5
<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 31, 2012, which was NT\$29.05 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 19, 2013, the noon buying rate was NT\$29.77 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
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
2012	29.56	30.28	28.96	29.05
October	29.24	29.31	29.15	29.20
November	29.11	29.26	28.96	29.07
December	29.04	29.10	29.00	29.05
2013				
January	29.10	29.54	28.93	29.54
February	29.63	29.73	29.52	29.67
March	29.74	29.88	29.63	29.81
April (through 19, 2013)	29.91	30.06	29.77	29.77

Sources: Federal Reserve Bank of New York.

---

## **Table of Contents**

### **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.*

Disruptions in global credit and financial markets may occur that cause diminished liquidity and limited availability of credit, reduced consumer confidence, reduced economic growth, increased unemployment rates and uncertainty about economic stability. Limited availability of credit in financial markets may lead consumers and businesses to postpone spending. This in turn may cause our customers to cancel, decrease or delay their existing and future orders with us. Financial difficulties experienced by our customers or suppliers as a result of these conditions could lead to production delays and delays or defaults in payment of accounts receivable. Continuing credit markets disruption restricts our access to capital and limits our ability to fund operations or to refinance maturing obligations as they become due through additional borrowing or other sources of financing. We are not able to predict the duration or extent of disruptions in global credit and financial markets that occurred in since 2009 and through 2012. 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.

#### **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. Our net revenue for 2012 increased 6% from 2011 levels and generated a net income of NT\$722 million (US\$25 million) in 2012. 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 continued through 2012. 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.

## **Table of Contents**

### ***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.

## **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 62%, 57% and 55% of our net revenue in 2010, 2011 and 2012, 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 the period from 2009 to 2012 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.

---

**Table of Contents**

***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\$3,199 million, NT\$3,986 million and NT\$4,356 million (US\$150 million) in 2010, 2011 and 2012, respectively. We invested NT\$1,659 million, NT\$1,188 million and NT\$977 million (US\$34 million) in 2010, 2011 and 2012, 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 2012 compared to the market demand in 2011. 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, 2012, we had approximately NT\$6,740 million (US\$232 million) and NT\$2,594 million (US\$89 million) outstanding long-term and short-term indebtedness, respectively. Our long-term indebtedness as of December 31, 2012, represented bank loans with an interest rate between 1.73% and 3.9117%. As of December 31, 2012, NT\$2,229 million (US\$77 million) of our short-term indebtedness and NT\$6,740 million (US\$232 million) of our long-term indebtedness was secured by collateral comprised of assets owned by ChipMOS TECHNOLOGIES INC., or ChipMOS Taiwan, ThaiLin Semiconductor Corp., or ThaiLin and ChipMOS TECHNOLOGIES (Shanghai) LTD., or ChipMOS Shanghai.

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

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

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

our 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.

For additional information on our indebtedness, see [Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources](#) .

## **Table of Contents**

*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 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.

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.

## **Table of Contents**

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. A new bench was formed to try this case at the beginning of 2010 due to judge rotation. Seven trial hearings have since been conducted by the new bench, with two trial hearings in 2011, four trial hearings in 2012 and one trial hearing in 2013. The next trial hearing is scheduled to take place on May 22, 2013.

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 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 2012, our top five customers, collectively accounted for 55% 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.

## Table of Contents

In the past, our top customers have defaulted on their payment obligations under certain long-term service agreements. For example, ProMOS has defaulted in its payment obligations to us in March 2008. Between the period of November 2008 to May 2009, we revised our contract terms and conditions with ProMOS to include provision of collateral, prepayments and pledges of wafer, Work-In-Process, or WIP, existing finished goods as lien material and secured equipment mortgage for ProMOS payment obligations. ProMOS made timely payments in 2012. See Item 4. Information on the Company Customers for more information.

In January 2009, Spansion defaulted in its payment obligation to us and subsequently filed for a voluntary petition for reorganization under Chapter 11 of the U.S. Bankruptcy Code in March 2009. As a result, 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. 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 for more information.

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 73%, 68% and 56% of our total cost of revenue in 2010, 2011 and 2012, respectively. For memory and logic/mixed-signal semiconductor assembly services, our fixed costs represented 24%, 23% and 19% of our total cost of revenue in 2010, 2011 and 2012, respectively. For LCD and other flat-panel display driver semiconductor testing and assembly services, our fixed costs represented 55%, 52% and 34% of our total cost of revenue in 2010, 2011 and 2012, respectively. For bumping services, our fixed costs represented 27%, 23% and 20% of our total cost of revenue in 2010, 2011 and 2012, 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.

## **Table of Contents**

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

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

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

contaminants in the manufacturing environment;

human error;

equipment malfunction;

defective raw materials; or

defective plating services.

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

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

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

## Table of Contents

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 infringing technologies, which may not be available on commercially reasonable terms, if at all.

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

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

Our operations require us to obtain sufficient quantities of raw materials at acceptable prices in a timely and cost-effective manner. We source most of our raw materials, including critical materials like leadframes, organic substrates, epoxy, gold wire and molding compound for assembly, and tapes for TCP/COF, from a limited group of suppliers. We purchase all of our materials on a purchase order basis and have no long-term contracts with any of our suppliers. From time to time, suppliers have extended lead times, increased the price or limited the supply of required materials to us because of market shortages. Consequently, we may, from time to time, experience difficulty in obtaining sufficient quantities of raw materials on a timely basis. In addition, from time to time, we may reject materials that do not meet our specifications, resulting in declines in output or yield. Although we typically maintain at least two suppliers for each key raw material, we cannot assure you that we will be able to obtain sufficient quantities of raw materials and other supplies of an acceptable quality in the future. It usually takes from three to six months to switch from one supplier to another, depending on the complexity of the raw material. If we are unable to obtain raw materials and other necessary inputs in a timely and cost-effective manner, we may need to delay our production and delivery schedules, which may result in the loss of business and growth opportunities and could reduce our profitability.

## **Table of Contents**

***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.

***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.

## **Table of Contents**

***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, 2012, 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, 2013, 7.8% 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.

**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.

## **Table of Contents**

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.

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.



---

## **Table of Contents**

***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, 2013, ThaiLin, ChipMOS Taiwan's 42.9% owned subsidiary as of March 31, 2013, and ChipMOS Shanghai, ThaiLin's wholly-owned subsidiary as of March 31, 2013. We also conduct other activities through our affiliated entities. See also ChipMOS Taiwan's ability to maintain its trading status on Taiwan's Emerging Stock Board and to eventually list on the Taiwan Stock Exchange is dependent on factors outside of the Company or ChipMOS Taiwan's control and satisfaction of stock exchange requirements. ChipMOS Taiwan may not be able to overcome such factors that disrupt its trading status on the Emerging Stock Board or satisfy other eligibility requirements for the proposed listing transaction and Item 7. Major Shareholders and Related Party Transactions Related Party Transactions .

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, swine flu or Severe Acute Respiratory Syndrome, may materially affect our operations and business.***

Influenza viruses circulating in animals pose threats to human health. Humans can become ill when infected with viruses from animal sources, such as avian influenza virus subtypes H5N1, H9N2 and H7N9 and swine influenza virus subtypes H1N1 and H3N2. An outbreak of a contagious disease such as New Influenza A or more commonly known as the bird flu and swine flu, Severe Acute Respiratory Syndrome (SARS), or more recently, avian influenza with virus subtype H7N9, 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.

***The business and operations of our business associates and our own business operations are vulnerable to disruptions that may be caused by natural disasters and other events.***

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 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.

Certain regions we operate in are particularly susceptible to earthquakes and associated natural disasters. For example, in late 1999, Taiwan suffered severe earthquakes which caused significant property damages and loss of life, particularly in the central part of Taiwan. The earthquakes damaged production facilities and adversely affected the operations of many companies involved in the semiconductor and other

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

industries. We experienced an aggregate of NT\$8 million in damages to our machinery and equipment, facilities, inventory and five days of delay in production schedule as a result of the event. In March 2011, Sendai of Japan registered an earthquake of 9.0 Mw (moment magnitude scale) off the coast of Japan (the Sendai Earthquake ). The Sendai Earthquake was recorded as most powerful earthquake to hit Japan and the fourth most powerful earthquake in the world. The earthquake triggered tsunami warnings and evacuations along Japan's Pacific coast and in at least 20 countries, including Taiwan and Mainland China. In April 2013, an earthquake registering a magnitude of approximately 6.6- 7.0 Mw with epicenter located in Lushan County, Ya an, Sichuan (the Lushan Earthquake ). Sichuan provincial government released information on April 21, 2013 confirming 186 deaths and up to 21 persons missing and 12,100 injured victim reports. As of the date of this Annual Report on Form 20-F, the official statistics related to the damages caused by the Lushan Earthquake was not yet available.

## **Table of Contents**

In January and February 2008, certain parts of Mainland China, particularly in the southern, central and eastern regions, experienced reportedly the most severe winter 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 outages 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 outages, earthquakes or other similar events.

Natural disasters and other events like aforementioned events cause severe property damages to townships, infrastructures and death and injuries to Civilians. In Sendai Earthquake, 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 events that take place overseas like the Sendai Earthquake, including radiation emission from the damaged nuclear power plants or subsequent future earthquakes that may take place.

The production facilities of many of our suppliers immediately after 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 halted 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 our 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 Sendai Earthquake may materially adversely affect our operations and business.***

The 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 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, 2013, ThaiLin, ChipMOS Taiwan's 42.9% owned subsidiary, directly owned 13.4% of our common shares. He & Fang 2005 Revocable Living Trust owned 8.4% of our common shares according to the 13G/A filed by He Zhengxu with SEC on January 22, 2013. 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 relevant stock exchanges requirements or other regulatory approval requirements. If ChipMOS Taiwan is unable to receive the equity financing it requires, its ability to grow and fund its operations, and as a result our ability to grow and conduct our business, may be materially adversely affected.***

Even though trading on the Emerging Stock Board of Gre Tai Securities Market of ChipMOS Taiwan's shares under stock code 8150 commenced on April 19, 2013, ChipMOS Taiwan will continue to depend on its shareholders, ChipMOS Bermuda and Siliconware Precision, to meet its equity financing requirements prior to consummation of its plan of listing on the TSE. See ChipMOS Taiwan's ability to maintain its trading status on Taiwan's Emerging Stock Board and to eventually list on the Taiwan Stock Exchange is dependent on factors outside of the Company or ChipMOS Taiwan's control and satisfaction of stock exchange requirements. ChipMOS Taiwan may not be able to overcome such factors that disrupt its trading status on the Emerging Stock Board or satisfy other eligibility requirements for the proposed listing transaction and Item 7. Major Shareholders and Related Party Transactions Related Party Transactions. Any capital contribution by us to ChipMOS Taiwan may require the approval of the relevant stock exchange or other 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, and as a result ChipMOS Bermuda's ability to grow and conduct our business, may be materially adversely affected.

---

## **Table of Contents**

***ChipMOS Taiwan's ability to maintain its trading status on Taiwan's Emerging Stock Board and to eventually list on the Taiwan Stock Exchange is dependent on factors outside of the Company or ChipMOS Taiwan's control and satisfaction of stock exchange requirements. ChipMOS Taiwan may not be able to overcome such factors that disrupt its trading status on the Emerging Stock Board or satisfy other eligibility requirements for the proposed listing transaction.***

On March 14, 2013, the Board of Directors of ChipMOS Bermuda approved a plan for listing ChipMOS Taiwan on Taiwan's Emerging Stock Board in the second quarter of 2013 and listing ChipMOS Taiwan on the Taiwan Stock Exchange (TSE) in the second quarter of 2014. The Company subsequently engaged underwriters to provide assistance to the Company and to ChipMOS Taiwan necessary for ChipMOS Taiwan to become eligible to list on TSE. The trading of shares of ChipMOS Taiwan on Taiwan's Emerging Stock Board of Gre Tai Securities Market under stock code 8150 commenced on April 19, 2013.

Whether requirements can be satisfied for ChipMOS Taiwan's continued trading on Taiwan's Emerging Stock Board or listing on the TSE depends in part on market conditions and other factors not within the control of the Company or ChipMOS Taiwan. Further, in addition to other TSE listing requirements, the Company will be required to reduce its ownership in ChipMOS Taiwan to 70% or less by sale to third party investors upon or prior to the completion of the TSE listing. The Company or ChipMOS Taiwan may not be able to find investors willing to purchase ChipMOS Taiwan shares in such a possible sale transaction. Entry into any definitive agreements with respect to such a possible sale transaction will be conditional upon, among others, whether the Company is able to find third party investors willing to purchase ChipMOS Taiwan shares, satisfaction of other requirements for trading or listing on the TSE and the development of ChipMOS Taiwan's application to be listed on the TSE. For these reasons there can be no assurance that ChipMOS Taiwan's shares will continue to trade on Taiwan's Emerging Stock Board or that ChipMOS Taiwan will be listed on the TSE.

### **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, 2013, we had approximately 33 million common shares issued and outstanding. As of March 31, 2013, ThaiLin, He & Fang 2005 Revocable Living Trust, DLS Capital Management, LLC, Siliconware Precision, and, Chilton Investment Company, LLC our five largest shareholders, owned 4,474,211, 2,788,123, 2,421,949, 2,243,749 and 1,781,416 common shares respectively, representing in the aggregate of approximately 41.1% of our outstanding common shares. See Item

7. Major Shareholders and Related Party Transactions    Major Shareholders .

## Table of Contents

Mosel in the past decided to sell a significant portion of our common shares in order to raise funds. In June 2006, Mosel sold 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 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 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 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 November 2012, ThaiLin sold 2,000,000 common shares and Siliconware Precision sold 800,000 common shares pursuant to a secondary offering (the Secondary Offering ). From April 2012 to March 2013, Mosel sold 1,047,311 common shares through its wholly-owned subsidiary, Giant Haven, under Rule 144.

On September 14, 2007, ChipMOS Bermuda issued 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. On April 16, 2013, as part of ChipMOS Taiwan s listing plan on the TSE, we completed the sale of 6.5 million outstanding ChipMOS Taiwan shares or 0.8% of the total number of ChipMOS Taiwan s outstanding shares, at the price of NT\$15.0 per share to ChipMOS Taiwan s underwriters for the TSE listing plan and to certain others, including non-US employees of ChipMOS Taiwan. As of the date of this Annual Report on Form 20-F, we continue to own approximately 703 million ChipMOS Taiwan shares, representing 83.4% of ChipMOS Taiwan s outstanding shares. See Item 3. Key Information Risk Factors ChipMOS Taiwan s ability to maintain its trading status on Taiwan s Emerging Stock Board and to eventually list on the Taiwan Stock Exchange is dependent on factors outside of the Company or ChipMOS Taiwan s control and satisfaction of stock exchange requirements. ChipMOS Taiwan may not be able to overcome such factors that disrupt its trading status on the Emerging Stock Board or satisfy other eligibility requirements for the proposed listing transaction. for additional information on ChipMOS Taiwan s listing plan. 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 Technologies Holdings Limited, or PacMOS, which, as of March 31, 2013, 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 paragraphs are adjusted for the 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.

## **Table of Contents**

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.

### **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, 2013, ThaiLin, a 42.9% owned subsidiary of ChipMOS Taiwan, owned 13.4% of our common shares, He & Fang 2005 Revocable Living Trust, owned 8.4% of our common shares, DLS Capital Management, LLC, owned 7.3% of our common shares, Siliconware Precision, owned 6.7% of our common shares and 15.8% of ChipMOS Taiwan's outstanding shares, and Chilton Investment Company, LLC, owned 5.3% of our common shares.

---

**Table of Contents**

The following chart illustrates our corporate structure and our equity interest in each of our principal subsidiaries and affiliates as of March 31, 2013.

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 Inc., or ChipMOS Japan (which was liquidated in October 2009), ChipMOS USA Inc., or 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 3,043,749 shares (adjusted to reflect the 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. On April 16, 2013, as part of ChipMOS Taiwan's listing plan on the TSE, we completed the sale of 6.5 million outstanding ChipMOS Taiwan shares or 0.8% of the total number of ChipMOS Taiwan's outstanding shares, at the price of NT\$15.0 per share to ChipMOS Taiwan's underwriters for the TSE listing plan and to certain others, including non-US employees of ChipMOS Taiwan. As of the date of this Annual Report on Form 20-F, we own approximately 703 million ChipMOS Taiwan shares, representing 83.4% of ChipMOS Taiwan's outstanding shares. See Item 3. Key Information Risk Factors ChipMOS Taiwan's ability to maintain its trading status on Taiwan's Emerging Stock Board and to eventually list on the Taiwan Stock Exchange is dependent on factors outside of the Company or ChipMOS Taiwan's control and satisfaction of stock exchange requirements. ChipMOS Taiwan may not be able to overcome such factors that disrupt its trading status on the Emerging Stock Board or satisfy other eligibility requirements for the proposed listing transaction. For additional information on ChipMOS Taiwan's listing plan.

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

**Table of Contents**

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 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 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 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. On April 16, 2013, as part of ChipMOS Taiwan's listing plan on the TSE, we completed the sale of 6.5 million outstanding ChipMOS Taiwan shares or 0.8% of the total number of ChipMOS Taiwan's outstanding shares, at the price of NT\$15.0 per share to ChipMOS Taiwan's underwriters for the TSE listing plan and to certain others, including non-US employees of ChipMOS Taiwan. As of the date of this Annual Report on Form 20-F, we own approximately 703 million ChipMOS Taiwan shares, representing 83.4% of ChipMOS Taiwan's outstanding shares. See Item 3. Key Information Risk Factors ChipMOS Taiwan's ability to maintain trading status of ChipMOS Taiwan on Taiwan's Emerging Stock Board and to eventually list ChipMOS Taiwan on the Taiwan Stock Exchange is dependent on factors outside of Company or ChipMOS Taiwan's control and satisfaction of stock exchange requirements. ChipMOS Taiwan may not be able to overcome such factors that disrupt its trading status on the Emerging Stock Board or satisfy other eligibility requirements for the proposed listing transaction. For additional information on ChipMOS Taiwan's listing plan. See Item 3. Key Information Risk Factors Risks Relating to Our Corporate Structure ChipMOS Taiwan's ability to maintain its trading status on Taiwan's Emerging Stock Board and to eventually list on the Taiwan Stock Exchange is dependent on factors outside of the Company or ChipMOS Taiwan's control and satisfaction of stock exchange requirements. ChipMOS Taiwan may not be able to overcome such factors that disrupt its trading status on the Emerging Stock Board or satisfy other eligibility requirements for the proposed listing transaction.

The share numbers disclosed in the foregoing paragraph are adjusted to reflect the 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. As of the date of this Annual Report on Form 20-F, the loan has been fully repaid and the subject pledge has been released accordingly. See Item 7. Major Shareholders and Related Party Transactions Related Party Transactions ThaiLin Semiconductor Corp.

As of March 31, 2013, 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, 2013, ThaiLin held 4,474,211 of our outstanding shares, corresponding to 13.4% 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 packages or fine-pitch BGA. 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 2012, 28.9% of our net revenue was derived from testing services for memory and logic/mixed-signal semiconductors, 33.2% from assembly services for memory and logic/mixed-signal semiconductors, 22.7% from LCD and other flat-panel display driver semiconductor testing and assembly services and 15.2% 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. 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 through 2012.

### *Selected Key Semiconductor Markets*

While a recovery trend in end-user demand for new and improved electronic products and applications continues, 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.

## **Table of Contents**

### *Memory Semiconductor Market*

The potential for memory market growth is linked to anticipated memory content increases in consumer electronics and PC applications (after such time as a recovery occurs in end-user demand for these) due to increasing operating system requirements, increasing use of graphics in gaming and other applications, continued growth of broadband content and a transition to 64-bit PC architecture. The memory market is dominated by two segments DRAM and flash memory. Potential growth in the DRAM market is expected to be driven by continued growth in both the commodity and niche DRAM market, as well as growth opportunities in mobile DRAM as memory requirements significantly increase for mobile applications. Flash memory market potential growth is expected to be driven by increasing memory requirements for cellular handsets, digital cameras, digital audio/video, and other mobile applications.

### *LCD and Other Flat-Panel Display Driver Semiconductor Market*

Flat-panel displays are used in applications such as PC monitors, notebook computers, television sets, cellular handsets and digital cameras. The end-user demand for LCD and other flat-panel display driver semiconductor experienced a downturn in 2007 and 2008. The LCD driver market started to recover in the second quarter of 2009 and the positive recovery trend continued through 2012.

### *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:

**Table of Contents**

<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 substrate. 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 onto the memory device.

*Outsourcing Trends in Semiconductor Manufacturing*

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

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

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.

## **Table of Contents**

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

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

### *Semiconductor Testing and Assembly Services Industry*

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

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

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

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

## **Our Strategy**

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

### *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.*

Critical to our business growth is the continuation to expand our capabilities in testing and assembly to provide better service to our customers. We typically focus on advanced technologies that consist greater potentials to generate higher margins. For example, we conducted new product introductions and on an on-going basis continue to expand our capabilities in fine-pitch wafer bumping, multi-chip package (MCP) and high speed testing and assembly of fine-pitch COFs. We have also introduced low cost metal composite bump (MCB) products based on our proprietary Cu plating technology to service flat-panel display market and expand offerings to other business regions. We continue to maintain

close working relationships with local and overseas research institutions and universities to keep abreast with leading edge technologies and broaden the scope of applications.

## **Table of Contents**

In 2013 we expect to focus our research and development efforts in the following areas:

development of advanced assembly technologies in WLCSP, MEMS and flip chip products for memory devices and mixed signal products;

expand fine-pitch Au and Cu bumping technology for 300mm products;

expand fine-pitch test capabilities for advanced LCD drivers;

carry out in-process improvement to improve manufacturing yields and shorten turnaround time;

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

continue to focus on delivering environmentally friendly assembly services by eliminating the lead and halogen elements from the materials.

In 2012, we spent approximately 2.6% 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, 2013, our research and development team comprised 312 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. Firstly, our proximity to other semiconductor companies is attractive to customers who wish to outsource various stages of the semiconductor manufacturing process. Secondly, 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. Thirdly, we have access to an educated labor pool and a large number of engineers who are able to work closely with our customers and other providers of semiconductor manufacturing services.

As with our operations in Taiwan, we intend to similarly benefit from our operations in Mainland China. We intend to invest in and expand our operations in Mainland China, increasing our testing and assembly services for memory 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 include 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 since 2008 continuing into 2012. 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 will 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 deemed it appropriate to present revenue data related to bumping as a separate segment. The bumping segment revenue presented in this table has been recast from LCD and other flat-panel display driver semiconductor testing and assembly revenue for the year ended December 31, 2010.

	Year ended December 31,		
	2010	2011	2012
<b>Testing</b>			
Memory testing revenue	32.4%	30.0%	26.3%
Logic/mixed-signal testing revenue	3.5	2.4	2.6
Total testing revenue	35.9	32.4	28.9
<b>Assembly</b>			
Memory assembly revenue	29.7	27.4	28.7
Logic/mixed-signal assembly revenue	6.7	5.5	4.5
Total assembly revenue	36.4	32.9	33.2
LCD and other flat-panel display driver semiconductor testing and assembly revenue	18.6	21.9	22.7
Bumping	9.1	12.8	15.2
<b>Total net revenue</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>



## **Table of Contents**

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

#### ***Testing***

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

*Memory.* We provide testing services for a variety of memory semiconductors, such as SRAM, DRAM and flash memory. To speed up the time-consuming process of memory product testing, we provide multi-site testing, which can test up to 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.

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.

**Table of Contents**

*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.

***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 organic 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.

## **Table of Contents**

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

The differentiating characteristics of these packages include:

the size of the package;

the number of electrical connections which the package can support;

the electrical performance and requirements of the package; and

the heat dissipation requirements of the package.

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

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

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

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

To 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.

**Table of Contents**

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**

Wafer Level CSP

Wafer-level CSP (WL CSP) is the technology of packaging an integrated circuit at wafer level. WL CSP is essentially a true chip scale package (CSP) technology, since the resulting package is practically of the same size as the die. WL CSP has the ability to enable true integration of wafer fab, packaging, test, and burn-in at wafer level in order to streamline the manufacturing process undergone by a device from silicon start to customer shipment.

Most other kinds of packaging does wafer dicing first, and then puts the individual die in a plastic package and attaches the solder bumps. WL CSP involves the RDL, wafer solder bumping, while still in the wafer, and then wafer dicing. Benefits of WL CSP compare to general CSP package assembly include:

- ultimate smaller package size;
- smaller footprint on a printed circuit board;
- very short circuit connection; and
- cost effective packaging solution for small ICs.

<b>Package</b>	<b>Connections</b>	<b>Description</b>	<b>End-User Applications</b>
WL CSP	8-30	Very small package size (identical to die size), suitable for the low pin count and require the small package size application.	Memory, ASICs, MEMS devices, controllers, for mobile phone, tablet, ultra book computer product.
FC CSP			

Flip chip chip scale package (FC CSP) construction utilizes the flip chip bumping (with solder bump or Cu pillar bump) interconnection technology to replace the standard wirebond interconnect. It allows for a smaller form factor due to wire loop reduction and area array bumping. FC CSP includes the substrate or leadframe type solution making an attractive option for advanced CSP application when electrical performance is a critical factor.

Excellent electrical performance, very low interconnect parasitics and inductance compare to wirebond type.

High electrical current endurance (Cu pillar bump), ideal for high power solution.

Smaller package form factor by reducing the wire loop height and wire span compared to conventional wirebond package.





**Table of Contents**

<b>Package</b>	<b>Connections</b>	<b>Description</b>	<b>End-User Applications</b>
FC CSP	8-100	Superior electrical performance, smaller form factor.	Power device, RF, Logic/Analog device, wireless or portable application.

***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.

***Tape Carrier Package (TCP) 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.

For the limitation of inner lead pitch (>43um) with this kind of package, the volume of TCP nowadays has been trending down to ~1% of total demand.

The following diagram presents the basic components of a TCP:

**Table of Contents**

***Chip-on-Film (COF) 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.

COF package has been using for large-size and high-resolution panel display nowadays, referring to the trend of the last several years, the avg. inner lead pitch of COF package went down to 25um with about 40% of market share.

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 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. within 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.

---

## **Table of Contents**

### ***Chip-on-Glass (COG) 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.

### ***Bumping***

We also offer 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 eight or twelve-inches 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. In addition to the gold bumping, we also offer the WLCSP, Cu RDL and Copper pillar service which can be applied for flip chip and QFN package. The product scope includes but is not limited to flash and power device.

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.

### ***Other Services***

#### ***Drop Shipment***

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

#### ***Software Development, Conversion and Optimization Program***

We work closely with our customers to provide sophisticated software engineering services, including test program development, conversion and optimization, and related hardware design. Generally, testing requires customized testing software and related hardware to be developed for each particular product. Software is often initially provided by the customer and then converted by us at our facilities for use on one or more of our testing machines and contains varying functionality depending on the specified testing procedures. Once a conversion test program has been

developed, we perform correlation and trial tests on the semiconductors.

## **Table of Contents**

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 2011, 2012 and 2013, respectively, was 87, 85 and 90. Our top 15 customers in terms of revenue in 2012 were (in alphabetical order):

ADATA Technology Co., Ltd.

Elite Semiconductor Memory Technology, Inc.

Fitipower Integrated Technology Inc.

Himax Technologies, Inc.

ILI TECHNOLOGY CORP.

Integrated Circuit Solution Inc.

LAPIS Semiconductor Co., Ltd.

Macronix International Co., Ltd.

Micron Technology, Inc., or Micron

Novatek Microelectronics Corp., or Novatek

ProMOS Technologies Inc.

Raydium Semiconductor Corp.

Spansion LLC

Winbond Electronics Corp., or Winbond

Zentel Electronics Corp.

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

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 accounting for approximately 21%, 11% and 7% of our net revenue, respectively. In 2012, our largest customer was Novatek, our second-largest customer was Micron and our third-largest customer was Winbond accounting for approximately 21%, 14% and 8% 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 18 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 and was extended for another two-year period expiring in April 2014.

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,		
	2010	2011	2012
Taiwan	74%	73%	71%
Singapore	(1)	6	14
United States	22	15	7
Japan	1	2	3
Hong Kong SAR	(1)	1	2
Korea	3	2	2
Others	(1)	1	1
Total	100%	100%	100%

Note:

(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.

## **Table of Contents**

### **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, 2013, our sales and marketing efforts were primarily carried out by teams of sales professionals, application engineers and technicians, totaling 38 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.

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 2010, 2011 and 2012, we paid approximately NT\$9 million, NT\$3 million and NT\$5 million (US\$172 thousand), respectively, in commissions to our sales agent.

### **Research and Development**

To maintain our competitive edge for continued business growth, we continue our focus of our investment in new technology research and development. In 2010, 2011 and 2012, we spent approximately NT\$413 million, or 2%, NT\$410 million, or 2% and NT\$493 million (US\$17 million), or 3%, respectively, of our net revenue on research and development. We intend to sustain these efforts.

Our research and development efforts have been focused primarily on new technology instruction, improving efficiency and production yields of our testing and assembly services. From time to time, we jointly develop new technologies with local and international research institutions and universities. In testing area, our research and development efforts focused particularly on high speed probing, fine pitch probing capability and wafer level burn-in technology. Our projects include:

Grew wafer level BIST testing capability;

Developed one touchdown full contact testing capability for 200mm and 300mm wafers ;

Ramped up high frequency testing capability for LCDD;

Built up fine pitch testing capability for 12um bump pitch products; and

Developing centralized server test control system.

In bumping and assembly areas, our research and development efforts were directed to

Low-cost alloy wire bonding alternatives for Cu wirebond;

Au height reduction, as part of cost reduction drive, 10um bump height COF package was released for production;

Wafer-level chip scale packaging and Cu RDL processes;

Flip-chip QFN for power IC applications;

Cu pillar bumping and assembly;

MEMS packages for mobile devices;

Multi-chip assembly and modules for SSD and eMMC applications;

## **Table of Contents**

Stacked-die chip scale package;

Thin wafer lapping and dicing;

Advanced thin core/core-free substrate for thin packages; and

Qualified thermally enhanced COF and MCB (metal composite bump) COF and released for manufacturing.

For new product and product enhancement work in 2013, our work concentrates on three key development programs: WLCSP, MEMS and flip chip technology. In the bumping area, we completed customer qualification of 300mm wafer Au bumping process in 2012 and started volume production in Q4, 2012. Development of Cu plating enables the entry of WLCSP, RDL and flip chip market. Backend service of WLCSP was ramped up to mass production successfully. Full turnkey service has begun in 2013. Development of flip chip QFN packaging has been completed in 2012 and mass production is scheduled to be operational by end of the first quarter of 2013. In 2012, we also initiated both 200mm and 300mm Cu pillar bumping engineering work. In 2013, related packaging technologies are being developed for mixed-signal and memory products.

In 2012, in-process engineering advancement allowed us to extend our wirebond technology to service MEMS products. To further achieve cost reduction, alloy wire and 0.6 mil Au wirebond processes were also developed. In 2013, we will continue to work on improvements of wafer thinning and polishing operations facilitate the expansion of multi-chip NAND packages offerings. Capability of handling miniature molded packages has been extended to 1x1 mm range and various improvements will also be made in production equipment to enhance throughput for efficiency.

As of March 31, 2013, we employed 312 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 capable for materials and electrical characterizations to support production and new product development. Computer simulation is used to validate both mechanical and electrical models in comparison to measurement results. Enhancement of Shadow Moiré and Micro Moiré equipment was carried out to support MCP and flip chip package warpage characterization. In Advanced Packaging Lab, rheology measurement capability was established, aimed at expanding capability for material selection and inspection to support flip chip introduction and various resin characterizations. A new analytical laboratory has been equipped in our bumping line providing timely support to manufacturing operations.

## **Quality Control**

We believe that our reputation for high quality and reliable services have 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, 2013, we employed 385 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.

## **Table of Contents**

In addition to the quality management system, we also earned the 1998 QC Group Award from The Chinese Society of Quality, which is equivalent to the similar award from the American Society of Quality. In 2003, ChipMOS passed SONY Green Partner (Tier 2) certification through its ProMOS channel, and in 2009, ChipMOS obtained SONY Green Partner (Tier 1) certification due to its direct business relationship with SONY. ChipMOS Shanghai also obtained SONY Green Partner (Tier 2) certification through its ISSI channel in 2008. Our laboratories have also been awarded Chinese National Laboratory accreditation under the categories of reliability test, electricity and temperature calibration.

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

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

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

high and low temperature storage life tests, temperature 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.

As a result of our ongoing focus on quality, in 2012, we achieved monthly assembly yields of an average of 99.95% for our memory and logic/mixed-signal assembly packages, 99.96% for our COF packages and 99.92% 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 22%, 22% and 25% of our net revenue in 2010, 2011 and 2012, 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 the quoted prices prior to the second quarter of 2008. Our principal raw material supplies have not been impacted by the 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.



**Table of Contents**

**Competition**

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

engineering capability of software development;

quality of service;

flexibility;

capacity;

production cycle time; and

price.

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

production yield;

production cycle time;

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

quality of service;

capacity;

location; and

price.

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



firstly, 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;

secondly, 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, 2013, we held 457 patents in Taiwan, 137 patents in the United States, 222 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 2031. As of March 31, 2013, we also had a total of 28 pending patent applications in the United States, 80 in Taiwan, and 55 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 .

## **Table of Contents**

### **Government Regulations**

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

### **Environmental Matters**

Semiconductor testing does not generate significant pollutants. The semiconductor assembly process generates stationary acid and alkali pollution, principally at the plating stages. Liquid waste is produced when silicon wafers are ground thinner and diced into chips with the aid of diamond saws and cooled with running water and during the gold bumping process. In addition, excess material on 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 2012, 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, 2011 and 2012. 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.

**Table of Contents****Insurance**

We maintain insurance policies on our buildings, equipment and inventories. These insurance policies cover property damages due to all risks, including but not limited to, fire, lightning and earthquakes. The maximum coverage of property insurance for ChipMOS Taiwan and ThaiLin is approximately NT\$53,676 million and NT\$7,164 million, respectively. ChipMOS Shanghai also maintains property insurance policies for a maximum coverage of approximately RMB885 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.

**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 two parcels of land for our Southern Taiwan Science Park facility with lease expiration in year 2017 and 2032.

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, 2013.

Location of Facility	Primary Use	Floor Area (m <sup>2</sup> )	Principal Equipment
Chupei, Hsinchu	Testing/Gold Bumping	38,122	6 steppers 16 sputters 275 testers
Hsinchu Industrial Park, Taiwan	Testing	27,123	95 testers 33 burn-in ovens
Hsinchu Science Park, Taiwan	Testing	31,168	149 testers 93 burn-in ovens
Southern Taiwan Science Park, Taiwan	Assembly/Testing	146,180	497 wire bonders 143 inner-lead bonders 348 testers

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

Shanghai Qingpu Industrial Zone,	Assembly/Testing	66,817	41 testers
Mainland China			164 wire bonders
			23 burn-in ovens

## **Table of Contents**

### **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, 2013, we operated 560 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.

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

#### **Assembly of Memory and Logic/Mixed-Signal Semiconductors**

The number of wire bonders at a given facility is commonly used as a measure of the assembly capacity of the facility. Typically, wire bonders may be used, with minor modifications, for the assembly of different products. We purchase wire bonders principally from Shinkawa Co., Ltd. and Kulicke & Soffa Industries Inc. As of March 31, 2013, we operated 661 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, 2013, we operated 6 steppers and 16 sputters for gold bumping, 143 inner-lead bonders for assembly and 348 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.

**Table of Contents****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 2012, our consolidated net revenue was NT\$19,221 million (US\$662 million) and our net income was NT\$722 million (US\$25 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. On April 16, 2013, as part of ChipMOS Taiwan's listing plan on the TSE, we completed the sale of 6.5 million outstanding ChipMOS Taiwan shares or 0.8% of the total number of ChipMOS Taiwan's outstanding shares, at the price of NT\$15.0 per share to ChipMOS Taiwan's underwriters for the TSE listing plan and to certain others, including non-US employees of ChipMOS Taiwan. As of the date of this Annual Report on Form 20-F, we own approximately 703 million ChipMOS Taiwan shares, representing 83.4% of ChipMOS Taiwan's outstanding shares. See Item 3. Key Information Risk Factors ChipMOS Taiwan's ability to maintain its trading status on Taiwan's Emerging Stock Board and to eventually list on the Taiwan Stock Exchange is dependent on factors outside of Company or ChipMOS Taiwan's control and satisfaction of stock exchange requirements. ChipMOS Taiwan may not be able to overcome such factors that disrupt its trading status on the Emerging Stock Board or satisfy other eligibility requirements for the proposed listing transaction. For additional information on ChipMOS Taiwan's listing plan. For the year ended December 31, 2012 and March 31, 2013 we owned approximately 710 million ChipMOS Taiwan shares, representing 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 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.

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\$360 thousand each and COG chip sorters cost approximately US\$220 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.

## **Table of Contents**

*Highly Cyclical Nature of the Semiconductor Industry.* 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 each year since 2010, continuing in 2012. 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 utilization 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.

*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 since 2010 until 2012. 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 2012.

*Change in Product Mix.* Declines in average selling prices since 2009 have been partially offset 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 2012 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

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

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, 2013, 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.



**Table of Contents****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.

	Year ended December 31,			
	2010 NT\$	2011 NT\$	2012 NT\$	2012 US\$
(in millions)				
<b>Testing</b>				
Memory	\$ 5,577.4	\$ 5,455.1	\$ 5,055.1	\$ 174.0
Logic/mixed-signal	592.3	444.0	508.1	17.5
Total testing	6,169.7	5,899.1	5,563.2	191.5
<b>Assembly</b>				
Memory	5,112.6	4,982.2	5,523.8	190.1
Logic/mixed-signal	1,146.2	1,006.8	856.8	29.5
Total assembly	6,258.8	5,989.0	6,380.6	219.6
LCD and other flat-panel display driver semiconductor testing and assembly	3,199.0	3,985.8	4,356.3	150.0
Bumping	1,582.2	2,337.0	2,920.4	100.5
<b>Total</b>	<b>\$ 17,209.7</b>	<b>\$ 18,210.9</b>	<b>\$ 19,220.5</b>	<b>\$ 661.6</b>

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 continue entry into additional long-term capacity agreements as well as 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. Depending on customer demands, market conditions and other considerations, we remain to be focused on expansion of 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.

---

**Table of Contents**

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

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 were 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 amounts 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 was the subject of the Transfer of Claim Agreement included 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.

---

## **Table of Contents**

### *Related Party Revenues*

In 2010, 2011 and 2012, 12%, 2% and nil, 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 74%, 73% and 71% of our net revenue in 2010, 2011 and 2012, 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 22 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, 2013, we had 908 testers, 149 burn-in ovens, 661 wire bonders, 143 inner-lead bonders, 6 steppers and 16 sputters. We use inner-lead bonders for the assembly of LCD and other flat-panel display driver semiconductors using TCP or COF technology, and wire bonders for TSOP, BGA, and some other package assembly technologies.

Our 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 60% in 2010, 62% in 2011 and 69% in 2012. Our average capacity utilization rate for assembly of memory and logic/mixed-signal semiconductors was 85% in 2010, 79% in 2011 and 78% in 2012. Our average capacity utilization rate for LCD and other flat-panel display driver semiconductor testing and assembly was 77% in 2010, 80% in 2011 and 79% in 2012. In addition, our average capacity utilization rate for bumping was 77% in 2010, 88% in 2011 and 81% in 2012.

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.

**Table of Contents**

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.

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

	Year ended December 31,			
	2010 NT\$	2011 NT\$	2012 NT\$	2012 US\$
	(in millions)			
<b>Gross profit (loss):</b>				
Testing				
Memory	\$ (362.4)	\$ 352.1	\$ 596.2	\$ 20.5
Logic/mixed-signal	114.5	24.9	86.0	3.0
Total testing	(247.9)	377.0	682.2	23.5
Assembly				
Memory	(36.0)	(20.3)	135.2	4.7
Logic/mixed-signal	240.9	303.2	283.5	9.7
Total assembly	204.9	282.9	418.7	14.4
LCD and other flat-panel display driver semiconductor testing and assembly	703.8	887.3	1,263.9	43.5
Bumping	(15.1)	114.5	217.2	7.4
Total	\$ 645.7	\$ 1,661.7	\$ 2,582.0	\$ 88.8
<b>Gross profit (loss) margin:</b>				
Testing				
Memory	(6.5)%	6.5%	11.8%	11.8%
Logic/mixed-signal	19.3	5.6	16.9	16.9
Total testing	(4.0)	6.4	12.3	12.3
Assembly				
Memory	(0.7)	(0.4)	2.5	2.5
Logic/mixed-signal	21.0	30.1	33.1	33.1
Total assembly	3.3	4.7	6.6	6.6
LCD and other flat-panel display driver semiconductor testing and assembly	22.0	22.3	29.0	29.0
Bumping	(1.0)	4.9	7.4	7.4
Overall	3.8%	9.1%	13.4%	13.4%
<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.



**Table of Contents***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.

**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 and fair value gains on financial assets. 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 was originally secured by a pledge by Kolin of 11 million common shares of ThaiLin. As of the date of this Annual Report on Form 20-F, the loan has been fully repaid and the subject pledge has been released accordingly. 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 were 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**

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 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' interests in ThaiLin. The sale of 15.8% of ChipMOS Taiwan's outstanding shares to Siliconware Precision was completed in January 2011. On April 16, 2013, we sold 6.5 million shares or 0.8% of the total number of ChipMOS Taiwan's outstanding shares, at the price of NT\$15.0 per share to ChipMOS Taiwan's underwriters, Yuanta Securities Company Limited and Capital Securities Corp., and to certain others, including non-US employees of ChipMOS Taiwan. After deducting tax expense payable to ROC authority for the aforementioned sale, the proceeds to ChipMOS Bermuda were approximately NT\$97.2 million (US\$3.3 million). Immediately after the completion of this sale as of April 16, 2013, the Company holds approximately 703 million ChipMOS Taiwan shares, representing 83.4% of the total number of ChipMOS Taiwan's outstanding shares. 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

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

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, the interest of ChipMOS Bermuda in Modern Mind and also ChipMOS Shanghai decreased to 36.1% from 100%. In 2012, our non-controlling interests were attributable to the non-controlling interests owned by Siliconware Precision in ChipMOS Taiwan and the public shareholders' interests in ThaiLin and ChipMOS Shanghai. As of the date of this Annual Report on Form 20-F, we own approximately 703 million ChipMOS Taiwan shares, representing 83.4% of ChipMOS Taiwan's outstanding shares. For the year ended December 31, 2012 and March 31, 2013 we owned approximately 710 million ChipMOS Taiwan shares, representing 84.2% of ChipMOS Taiwan's outstanding shares.



**Table of Contents****Net Income (Loss)**

Our net income was NT\$1,645 million in 2010, net loss was NT\$15 million in 2011, and net income was NT\$722 million (US\$25 million) in 2012, 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 .

**Results of Operations**

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

	Year ended December 31,		
	2010	2011	2012
<b>ROC GAAP:</b>			
Net revenue	100.0%	100.0%	100.0%
Cost of revenue	96.2	90.9	86.6
Gross profit margin	3.8	9.1	13.4
<b>Operating expenses:</b>			
Research and development	2.4	2.3	2.6
General and administrative	3.9	3.6	3.2
Sales and marketing	0.4	0.3	0.4
Total operating expenses	6.7	6.2	6.2
Income (Loss) from operations	(2.9)	2.9	7.2
Other income (expenses), net	13.5	(2.5)	(2.4)
Income before income tax and noncontrolling interests	10.6	0.4	4.8
Income tax benefit (expense)	0.5	(0.2)	(0.7)
Income before noncontrolling interests	11.1	0.2	4.1
Net loss attributable to noncontrolling interests	(1.5)	(0.3)	(0.3)
Net income (loss) attributable to ChipMOS	9.6%	(0.1)%	3.8%

Year Ended December 31, 2012 Compared to Year Ended December 31, 2011

**Net Revenue.** Our net revenue increased by NT\$1,010 million, or 6%, to NT\$19,221 million (US\$662 million) in 2012 from NT\$18,211 million in 2011.

Net revenue from testing services for memory and logic/mixed-signal semiconductors decreased by NT\$336 million, or 6%, to NT\$5,563 million (US\$191 million) in 2012 from NT\$5,899 million in 2011. Net revenue from testing services for memory semiconductors decreased by NT\$400 million, or 7%, to NT\$5,055 million (US\$174 million) in 2012 from NT\$5,455 million in 2011, principally due to lower customer demand and decreased average selling price for DRAM products. Net revenue for testing services for logic/mixed-signal semiconductors increased by NT\$64 million, or 14%, to NT\$508 million (US\$17 million) in 2012 from NT\$444 million in 2011, principally due to increased capacity utilization rates.

Net revenue from assembly services for memory and logic/mixed-signal semiconductors increased by NT\$392 million, or 7%, to NT\$6,381 million (US\$220 million) in 2012 from NT\$5,989 million in 2011. Net revenue from assembly services for memory semiconductors increased by NT\$542 million, or 11%, to NT\$5,524 million (US\$190 million) in 2012 from NT\$4,982 million in 2011, primarily as a result of increased average selling price. Net revenue from assembly services for logic/mixed-signal semiconductors decreased by NT\$150 million, or 15%, to

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

NT\$857 million (US\$30 million) in 2012 from NT\$1,007 million in 2011, principally due to decreased capacity utilization and average selling price.

---

**Table of Contents**

Net revenue from LCD and other flat-panel display driver semiconductor testing and assembly services increased by NT\$370 million, or 9%, to NT\$4,356 million (US\$150 million) in 2012 from NT\$3,986 million in 2011. This increase was principally as a result of an increase in customer demand and average selling price for LCD and other flat-panel display products in 2012.

Net revenue from bumping services increased by NT\$584 million, or 25%, to NT\$2,921 million (US\$101 million) in 2012 from NT\$2,337 million in 2011. This increase was principally as a result of an increase in customer demand and average selling price for bumping services in 2012.

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\$90 million, or 1%, to NT\$16,639 million (US\$573 million) in 2012 from NT\$16,549 million in 2011, primarily due to the increases in direct materials, direct labor and fringes expense of NT\$857 million (US\$30 million), NT\$133 million (US\$5 million) and NT\$125 million (US\$4 million), respectively, and partially offset by a decrease of depreciation expenses of NT\$990 million (US\$34 million).

Our gross profit increased to NT\$2,582 million (US\$89 million) in 2012 from NT\$1,662 million in 2011. Our gross margin was 13% in 2012, compared to 9% in 2011.

Our gross margin for testing services for memory and logic/mixed-signal semiconductors increased to 12% in 2012 from 6% in 2011, primarily due to a higher capacity utilization rate, which increased to 69% in 2012 from 62% in 2011.

Our gross margin for assembly services for memory and logic/mixed-signal semiconductors increased to 7% in 2012 from 5% in 2011, primarily due to the increased average selling price and 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 29% in 2012 from 23% in 2011, primarily due to the increased average selling price and sales of higher margin LCD and other flat-panel display driver semiconductor testing and assembly services.

Our gross margin for bumping services increased to 7% in 2012 from 5% in 2011, primarily due to the increased average selling price and sales of higher margin bumping services.

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 increased by NT\$83 million, or 20%, to NT\$493 million (US\$17 million) in 2012 from NT\$410 million in 2011. This increase was primarily due to the increase of salary expense, fringes expense and utilities expense.

**General and Administrative Expenses.** General and administrative expenses decreased by NT\$26 million, or 4%, to NT\$626 million (US\$22 million) in 2012 from NT\$652 million in 2011, primarily due to the decrease of professional service fees and partially offset by the increase of fringes expense and amortization expense.

**Sales and Marketing Expenses.** Sales and marketing expenses increased by NT\$12 million, or 18%, to NT\$78 million (US\$3 million) in 2012 from NT\$66 million in 2011, primarily due to an increase of fringes expense, miscellaneous tax and duty expense, freight-out expense and commissions expense.

**Other Income (Expenses), Net.** Other expenses, net, changed by NT\$9 million, or 2%, to other expenses, net, of NT\$465 million (US\$16 million) in 2012 from other expenses, net, of NT\$456 million in 2011. This change was primarily due to the increase of foreign exchange loss by NT\$378 million (US\$13 million) and partially offset by the decrease of interest expense by NT\$82 million (US\$3 million), financing expense by NT\$99 million (US\$3 million) and impairment loss on other assets by NT\$160 million (US\$6 million).

**Table of Contents**

**Income (Loss) Before Income Tax and Noncontrolling Interests.** As a result of the foregoing, income before income tax and noncontrolling interests increased by 1,081% to NT\$921 million (US\$32 million) in 2012 from NT\$78 million in 2011.

**Tax Benefit (Expense).** We had an income tax expense of NT\$131 million (US\$5 million) in 2012 compared to income tax expense of NT\$46 million for 2011, primarily due to the increase of income before income tax and noncontrolling interests.

**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\$68 million (US\$2 million) in 2012, compared to NT\$47 million in 2011.

**Net Income (Loss) Attributable to ChipMOS.** As a result of the foregoing, the net income attributable to ChipMOS was NT\$722 million (US\$25 million) in 2012, compared to a net loss attributable to ChipMOS of NT\$15 million in 2011.

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 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 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 in 2011 from NT\$5,577 million in 2010, principally due to decreased average selling price for DRAM products. Net revenue from testing services for logic/mixed-signal semiconductors decreased by NT\$149 million, or 25%, to NT\$444 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 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 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 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 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.

Net revenue from bumping services increased by NT\$755 million, or 48%, to NT\$2,337 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.

**Cost of Revenue and Gross Margin.** Cost of revenue decreased by NT\$15 million, or 0.1%, to NT\$16,549 million in 2011 from NT\$16,564 million in 2010, primarily due to decreases of depreciation expenses of NT\$629 million and partially offset by an increase in direct materials, direct labor, inventory supplies and inventory valuation allowance of NT\$173 million, NT\$114 million, NT\$104 million and NT\$214 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 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.



---

## **Table of Contents**

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 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 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 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 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, decrease of interest expense by NT\$374 million and decrease of impairment loss on other assets by NT\$223 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 in 2011 from NT\$1,812 million in 2010.

**Income Tax Benefit (Expense).** We had an income tax expense of NT\$46 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 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 in 2011, compared to a net income attributable to ChipMOS of NT\$1,645 million in 2010.

## **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**.

---

**Table of Contents**

***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, 2012, we provided NT\$65 million (US\$2 million) for the first type of reserve and NT\$57 thousand (US\$2 thousand) for the second type of reserve. See Item 4. Information on the Company Customers .

Our determination of the allowances for sales returns as of the end of any quarter is based upon calculating an average historical return rate, usually based on the previous three quarters, and multiplying this by the revenue of that quarter. As of December 31, 2012, we provided NT\$123 million (US\$4 million) for the allowance of sales returns.

The allowance we set aside for doubtful receivables and sales returns was NT\$262 million as of December 31, 2010, NT\$186 million as of December 31, 2011 and NT\$188 million (US\$6 million) as of December 31, 2012. The allowances as of December 31, 2010, 2011 and 2012 represented 7%, 5% and 4%, respectively, of our accounts receivable and other receivables as of those dates. The allowance in 2010, 2011 and 2012 reflected a reduction of NT\$74 million, NT\$2 million and NT\$57 thousand (US\$2 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\$28 thousand (US\$1 thousand) for 2012.

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 2010, 2011 and 2012, we reserved NT\$37 million, NT\$85 million and NT\$20 million (US\$1 million) of inventory valuation allowance, primarily because the market price of tested and assembled DRAM and SDRAM inventory was below cost. In addition, we reserved NT\$28 million in 2010, NT\$36 million in 2011 and NT\$38 million (US\$1 million) in 2012 for identified slow-moving inventories.

As of December 31, 2012, we recorded NT\$58 million (US\$2 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\$86 million (US\$3 million) in 2012 and would have decreased our inventory value by 5% and decreased our net income by 12%, respectively.

---

**Table of Contents*****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, 2012, 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, 2010, 2011 and 2012, the ending balances for valuation allowances were NT\$1,171 million, NT\$825 million and NT\$586 million (US\$20 million), respectively.

***Impairment Loss of Long-Lived Assets***

Under ROC GAAP, we record impairment losses on long-lived assets used in operations if events and circumstances indicate that the assets might be impaired and the recoverable amounts of the assets of the cash-generating unit are less than the carrying amounts of those items. Assumptions about the recoverable amounts of the long-lived assets require significant judgment on our expected cash flow. Our cash flow estimates are based on historical results adjusted to reflect our best estimate of future market and operating conditions. The net carrying value of assets not recoverable is reduced to fair value. Our management periodically reviews the carrying value of our long-lived assets and this review is based upon our projections of anticipated future cash flows.

In determining whether any impairment charges were necessary for the property, plant and equipment and other assets for the year ended December 31, 2012, 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 for the year ended December 31, 2012, 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 2012, we recognized NT\$27 million (US\$929 thousand) and NT\$8 million (US\$275 thousand) of impairment loss for long-term investments and 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.



## **Table of Contents**

### ***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. 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 12 and 24h to our consolidated financial statements contained in this Annual Report on Form 20-F.

### ***Share-Based Compensation***

Under US GAAP, we are required to account for our employee share option plans under the fair-value-based method and to recognize share-based compensation arrangements as expense 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 2012, the share-based compensation expense amounted to NT\$46 million (US\$2 million), which was taken into account when determining our net income and shareholders' equity under US GAAP for the year ended December 31, 2012.

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, 24i and 25f to our consolidated financial statements contained in this Annual Report on Form 20-F.

### ***Senior Management's Discussion with the Audit Committee***

Our management has discussed the critical accounting policies described above with the audit committee of our board of directors and the audit committee has reviewed our disclosure relating to the critical accounting policies in this section.

### ***Impact of Foreign Currency Fluctuations and Governmental or Political Factors***

For a discussion of the impact of foreign currency fluctuations and governmental economics, fiscal, monetary or political policies or factors that may directly or indirect impact us, see Item 3. Key Information Risks Factors Risks Relating to Our Business Fluctuations in exchange 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, 2012, our primary sources of liquidity were cash and cash equivalents (excluding restricted cash and cash equivalents) of NT\$9,319 million (US\$321 million), short-term loans of NT\$1,466 million (US\$50 million) available to us in

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

undrawn facilities, which have expired or will expire from January 2013 to November 2013, and long-term loans of US\$2 million (NT\$58 million) available to us in undrawn facilities, which will expire in March 2014. To meet our liquidity, capital spending and other capital needs, we have taken certain steps discussed below.

**Table of Contents**

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 13 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 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.

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.

	2010 NT\$	Year ended December 31,		
		2011 NT\$	2012 NT\$	2012 US\$
	(in millions)			
Net cash provided by (used in):				
Operating activities	\$ 8,688.9	\$ 5,898.0	\$ 4,735.3	\$ 163.0
Investing activities	(2,454.2)	(3,250.7)	(2,594.9)	(89.3)
Financing activities	(2,959.5)	(2,464.6)	(162.7)	(5.6)
Effect of exchange rate changes on cash	(16.8)	31.9	(16.6)	(0.6)
Net increase in cash	\$ 3,258.4	\$ 214.6	\$ 1,961.1	\$ 67.5

**Table of Contents*****Net Cash Provided by Operating Activities***

Net cash provided by operating activities totaled NT\$4,735 million (US\$163 million) in 2012, compared to NT\$5,898 million in 2011. Net cash provided by operating activities was positively impacted by a net income of NT\$722 million (US\$25 million) with depreciation expenses of NT\$4,572 million (US\$157 million) in 2012 compared to a net loss of NT\$15 million with depreciation expenses of NT\$5,514 million in 2011. The decrease in net cash provided by operating activities was primarily due to a decrease of accounts payable of NT\$233 million (US\$8 million) in 2012 compared to an increase of accounts payable of NT\$433 million in 2011 and a decrease of other payable of NT\$72 million (US\$2 million) in 2012 compared to an increase of other payable of NT\$161 million in 2011.

Net cash provided by operating activities totaled NT\$5,898 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 in 2011, compared to net income of NT\$1,645 million in 2010, an increase of accounts receivables of NT\$693 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 in 2011 compared to NT\$6,133 million in 2010, a decrease of accrued expenses and other liabilities of NT\$219 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 in 2011 compared to NT\$2,718 million in 2010.

***Net Cash Used in Investing Activities***

Net cash used in investing activities totaled NT\$2,595 million (US\$89 million) in 2012, compared to NT\$3,251 million in 2011. The decrease in net cash used in investing activities was primarily attributable to the decrease in capital expenditures which was NT\$2,706 million (US\$93 million) in 2012, compared to NT\$4,151 million in 2011. The decrease in net cash used in investing activities also was partially offset by the decrease in proceeds from sales of property, plant and equipment which was NT\$38 million (US\$1 million) in 2012, compared to NT\$315 million in 2011. In 2011, there were also proceeds from sales of ChipMOS Taiwan's outstanding shares to Siliconware Precision of NT\$487 million.

Net cash used in investing activities totaled NT\$3,251 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 in 2011 from NT\$1,133 million in 2010.

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

Net cash used in financing activities totaled NT\$163 million (US\$6 million) in 2012, compared to NT\$2,465 million in 2011. The decrease in net cash used in financing activities was primarily the result of the net payments of long-term loans of NT\$198 million (US\$7 million) in 2012, compared to NT\$1,398 million in 2011 and net payments of short-term loans of NT\$180 million (US\$6 million) in 2012, compared to NT\$948 million in 2011 and the increase in proceeds from sale of treasury stock of NT\$528 million (US\$18 million) in 2012.

Net cash used in financing activities totaled NT\$2,465 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 in 2011, compared to NT\$2,227 million in 2010 and net payments of short-term loans of NT\$948 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.

***Capital Resources***

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 in cash flows from operating activities. Capital expenditures in 2012 were funded by NT\$4,735 million (US\$163 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](#).

## Table of Contents

### *Loans*

As of December 31, 2012, we had long-term loans of NT\$8,968 million (US\$309 million) (including current portions of such long-term loans of NT\$2,228 million (US\$77 million)). As of December 31, 2012, unused credit value of our long-term loans was approximately US\$2 million (NT\$58 million). As of December 31, 2012, NT\$4,866 million (US\$168 million) of our long-term loans were collateralized by equipment, and NT\$4,102 million (US\$141 million) were collateralized by land and buildings and land use right. Of our long-term loans, in the aggregate:

NT\$8,968 million (US\$309 million) were floating rate loans with a rate between 1.73% and 3.9117% as of December 31, 2012, repayable quarterly or semi-annually until November 2014 to March 2018.

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.

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. This loan facility was fully repaid in February 2012.

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.

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\$290 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.

On March 7, 2012, we obtained a bank loan facility from a bank in Shanghai in the amount of US\$9 million for a term of three years. This loan facility is secured by existing land use right, buildings and equipment owned by ChipMOS Shanghai.

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 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 1.4:1; 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 obtained waiver 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 2012, ThaiLin was not required to maintain any financial ratio of which syndicated loans were repaid in September 2012. 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 and 2012. 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. ChipMOS Shanghai was not required to maintain any financial ratio during 2012.

**Table of Contents**

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, 2012:

	As of	
	December 31, 2012	
	NT\$	US\$
	(in millions)	
During 2013	\$ 2,228	\$ 77
During 2014	2,862	99
During 2015	1,836	63
During 2016	1,917	66
During 2017 and onwards	125	4
	\$ 8,968	\$ 309

As of December 31, 2012, certain of our land and buildings and land use right and machinery with an aggregate net book value of NT\$5,665 million (US\$195 million) and NT\$2,119 million (US\$73 million), respectively, were pledged as collateral in connection with our long-term borrowings. Approximately 64% of our net property, plant and equipment in terms of book value were pledged as collateral for our long-term loans.

Our unused credit lines for short-term loans, as of December 31, 2012, totaled NT\$1,466 million (US\$50 million), which have expired or will expire from January 2013 to November 2013. As of December 31, 2012, our unused long-term credit facilities totaled US\$2 million (NT\$58 million).

As of December 31, 2012, we had unsecured short-term credit loans for importing raw materials in the total amount of NT\$366 million (US\$13 million), which were due between January 2013 and March 2013, and secured loans for import of machinery in the total amount of NT\$705 thousand (US\$24 thousand), which were due in January 2013.

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 2013. 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. 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 .

**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 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.





**Table of Contents**

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\$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 );

US\$3 million of 10% Senior Convertible Bonds due 2014 with a conversion price of 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

US\$21 million of 8% Senior Convertible Bonds due 2014 with conversion price of 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 reflect adjusted figures denoting, where applicable, 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

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

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.

**Table of Contents**

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, 2012, 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:

	Year ended as of December 31,			
	2010 NT\$	2011 NT\$	2012 NT\$	2012 US\$
	(in millions)			
Net income (loss) attributable to ChipMOS in accordance with:				
ROC GAAP	\$ 1,644.7	\$ (15.2)	\$ 721.8	\$ 24.8
US GAAP	1,616.9	46.1	750.6	25.8
Total assets in accordance with:				
ROC GAAP	31,315.0	28,281.1	28,749.4	989.7
US GAAP	31,035.1	27,964.2	28,275.5	973.3
Total equity (including noncontrolling interests) in accordance with:				
ROC GAAP	14,043.4	14,983.3	15,969.1	549.7
US GAAP	\$ 13,372.6	\$ 14,288.9	\$ 15,190.3	\$ 522.8

Note 24 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 24i and 25f 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. For more information, see Note 24h to our consolidated financial statements contained in this Annual Report on Form 20-F.

## Table of Contents

### 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 2010, 2011 and 2012, tax credits resulted in tax savings for ChipMOS Taiwan of nil, approximately NT\$164 million and NT\$33 million (US\$1 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.

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 2010, 2011 and 2012, tax credits resulted in tax savings for ThaiLin of approximately NT\$9 million, NT\$15 million and NT\$21 million (US\$1 million), 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 2012.

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, 2012, or the periods indicated:

Contractual Obligations	Total NT\$	Payments Due by Period			
		Less than 1 year NT\$	2-3 years NT\$	4-5 years NT\$	More than 5 years NT\$
Long-term debts <sup>(1)</sup>	\$ 9,400.8	\$ 2,430.2	\$ 4,907.0	\$ 2,038.5	\$ 25.1
Short-term loans <sup>(1)</sup>	367.7	367.7			
Operating leases	259.1	30.3	60.5	54.7	113.6
Capital commitments	918.5	918.5			
<b>Total contractual cash obligations</b>	<b>\$ 10,946.1</b>	<b>\$ 3,746.7</b>	<b>\$ 4,967.5</b>	<b>\$ 2,093.2</b>	<b>\$ 138.7</b>

Notes:

- (1) Includes interest payments. Assumes level of relevant interest rates remains at December 31, 2012, level throughout all relevant periods.

**Table of Contents**

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, 2013. The business address for our directors and executive officers is No. 1, R&D Road 1, Hsinchu Science Park, Hsinchu, Taiwan, and Republic of China.

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	2015
Yeong-Her Wang	56	Independent Director	2015
Shou-Kang Chen	51	Chief Financial Officer and Director	2015
John Yee Woon Seto	68	Independent Director	2013
Chao-Jung Tsai	58	Director	2013
Rong Hsu	62	Independent Director	2013
Carl Lei	49	Acting President of ChipMOS Shanghai	
Lafair Cho	50	President of ThaiLin	
Li-Chun Li	56	Chief Operating Officer	
Steve Cheng	50	President of ChipMOS USA	
Vincent Hsu	44	Vice President, LCDD Production Group	
Michael Lee	47	Vice President, Chupei Production Group	
Ivan Hsu	47	Vice President, Memory Production Group	
Jesse Huang	46	Vice President, Assembly Production Group	
David W. Wang	63	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.



**Table of Contents**

*Antonio R. Alvarez* has served as one of our directors from July 2005. Mr. Alvarez is the chief operating officer of Aptina Imaging. Prior to that he was the chief operating officer of Advance Analogic Technology from October 2011 until its acquisition by Skyworks in January 2012 and president and chief executive officer of Leadis Technology Inc. from November 2005 to January 2009. 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. Mr. Alvarez also serves on the Board of MEMC Corporation since 2012.

*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 the 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.

*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 between 2007 and 2012. 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. He has been the independent director of Darfon Electronic Corp. and Giga Solution Tech Co. since 2006 and 2007, respectively. 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 Vitelec Corporation U.S.A. He served as the executive vice president of the business group of Mosel Vitelec Inc. from 1995 to 2005. He was a director of Mosel Vitelec 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



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

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.

## **Table of Contents**

*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-Vitellic (U.S.A.) and ProMOS Technologies Inc. from 2003 to 2009, and vice president of product development in Mosel-Vitellic (U.S.A.) and Mosel-Vitellic (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.

*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 and 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.

**Table of Contents****Board Practice and Terms of Directorship**

Our board of directors consists of three classes of directors. The first 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 second 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. The third class, consisting of Hsing-Ti Tuan, Yeong-Her Wang and Shou-Kang Chen, is up for re-election at the annual general meeting in 2015 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**

The following table sets forth certain information as of March 31, 2013 with respect to our common shares owned by our directors and executive officers.

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%	152,809	2.55-21,488	2013/8/31-2017/8/31
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:

\* Indicate actual numbers held and/or including options exercisable or vested within 60 days after March 31, 2013, would beneficially own less than 1% of our ordinary shares.

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

**Table of Contents****Compensation Committee**

The aggregate compensation paid in 2012 to our directors and our executive officers, including cash and accrued pension payable upon retirement, was approximately NT\$100 million (US\$3 million). In 2012, we granted options to purchase 143,500 of our common shares 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, 2013, 2014, 2015 and 2016, except for certain options granted on August 31, 2012 that vested on August 31, 2013.

Number of common shares issuable upon exercise of options	Expiration date	Exercise price (US\$)	Considerations paid for options granted
106,000	August 31, 2018	11.1435	None
37,500	August 31, 2022	11.1435	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, all of whom are independent directors according to NASDAQ Marketplace Rules requirements. 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, August 27, 2009 and August 31, 2012, 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;

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

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

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;

## **Table of Contents**

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, 2013, the special committee was solely comprised of 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.

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 .

**Table of Contents****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 December 31,			As of
	2010	2011	2012	March 31, 2013
General operations	3,224	3,193	3,069	3,048
Quality control	381	384	400	385
Engineering	1,360	1,377	1,345	1,343
Research and development	269	276	313	312
Sales, administration and finance	213	229	176	170
Others	361	335	383	371
<b>Total</b>	<b>5,808</b>	<b>5,794</b>	<b>5,686</b>	<b>5,629</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 December 31,			As of
	2010	2011	2012	March 31, 2013
ThaiLin (Hsinchu Industrial Park)	668	596	544	534
ChipMOS Taiwan Hsinchu Production Group	1,658	1,664	1,564	1,576
ChipMOS Taiwan Southern Taiwan Production Group	2,886	2,997	2,962	2,918
Shanghai	591	531	609	594
Japan and the United States	5	6	7	7
<b>Total</b>	<b>5,808</b>	<b>5,794</b>	<b>5,686</b>	<b>5,629</b>

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.

**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 1,450,000 to 2,250,000. In August 2006, we adopted a second broad-based share option plan, which has 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.



**Table of Contents**

In 2010, we granted 160,660 share options, with an exercise price, at the time of grant, ranging from US\$2.448 to US\$5.474 per share. In 2010, 212,049 share options were forfeited, 353,800 share options were expired and 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. In 2012, we granted 204,316 share options, with an exercise price, at the time of grant, ranging from US\$11.1095 to US\$11.1435 per share. In 2012, 103,426 share options were forfeited, 289,268 share options were expired and 668,246 share options were exercised. As of December 31, 2012, we had 1,705,548 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 500,000 and 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 2010, 18,625 SARs were granted, with an exercise price, at the time of grant, ranging from US\$2.448 to US\$3.06. In 2010, 89,300 SARs were forfeited and 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. In 2012, 43,660 SARs were granted, with an exercise price, at the time of grant, ranging from US\$11.1095 to US\$11.1435. In 2012, 67,375 SARs were forfeited, 154,106 SARs were expired and 231,270 SARs were exercised. As of December 31, 2012, we had 640,848 SARs outstanding, with an exercise price, at the time of grant, ranging from US\$0.748 to US\$25.908.

Where applicable, the share numbers and exercise price of our share option plan and share appreciation rights plan disclosed in the foregoing paragraph, are adjusted to reflect the effect of the Company's 1-for-every-4 reverse stock split effective on January 21, 2011.

**Table of Contents****Item 7. Major Shareholders and Related Party Transactions**  
**Major Shareholders**

The following table and information set out certain information as of March 31, 2013 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>	4,474,211	13.4
He & Fang 2005 Revocable Living Trust <sup>(2)</sup>	2,788,123	8.4
DLS Capital Management, LLC <sup>(3)</sup>	2,421,949	7.3
Siliconware Precision Industries Co., Ltd. <sup>(4)</sup>	2,243,749	6.7
Chilton Investment Company, LLC <sup>(5)</sup>	1,781,416	5.3
Directors and executive officers, as a group <sup>(6)</sup>	633,446	1.9

## Notes:

- (1) From December 2008 to August 2009, ThaiLin acquired 506,364 shares pursuant to the Rule 10b5-1/10b-18 securities purchase program, under which purchases commenced on December 28, 2008; 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; 401,352 shares and 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. In November 2012, ThaiLin sold 2,000,000 shares pursuant to the Secondary Offering.
  - (2) According to the Schedule 13G/A filed by He Zhengxu with the SEC on January 22, 2013.
  - (3) According to the Schedule 13G filed by DLS Capital Management, LLC with the SEC on January 24, 2013.
  - (4) 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 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. In November 2012, Siliconware Precision sold 800,000 shares pursuant to the Secondary Offering.
  - (5) According to the Schedule 13G filed by Chilton Investment Company, LLC with the SEC on February 14, 2013.
  - (6) Excludes exercisable/vested options of our common shares and 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, are adjusted to reflect the effect of the Company's 1-for-every-4 reverse stock split effective on January 21, 2011.

As of March 31, 2013, approximately 75% 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***ChipMOS TECHNOLOGIES INC.*

On April 16, 2013, as part of ChipMOS Taiwan's listing plan on the TSE, we completed the sale of 6.5 million outstanding ChipMOS Taiwan shares or 0.8% of the total number of ChipMOS Taiwan's outstanding shares, at the price of NT\$15.0 per share to ChipMOS Taiwan's underwriters for the TSE listing plan, Yuanta Securities Company Limited and Capital Securities Corp., and to certain others, including non-US employees of ChipMOS Taiwan. After deducting tax expense payable to ROC authority for the aforementioned sale, the proceeds to ChipMOS Bermuda were approximately NT\$97.2 million (US\$3.3 million). As of the date of this Annual Report on Form 20-F, after taking into account the aforementioned sale, we continue to own approximately 703 million ChipMOS Taiwan shares representing 83.4% of ChipMOS Taiwan's outstanding shares. See Item 3. Key Information Risk Factors ChipMOS Taiwan's ability to maintain its trading status on Taiwan's Emerging Stock Board and to eventually list on the Taiwan Stock Exchange is dependent on factors outside of the Company or ChipMOS Taiwan's control and satisfaction of stock exchange requirements. ChipMOS Taiwan may not be able to overcome such factors that disrupt its trading status on

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

the Emerging Stock Board or satisfy other eligibility requirements for the proposed listing transaction. for additional information on ChipMOS Taiwan s listing plan.

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

As of March 31, 2013, Siliconware Precision owned 6.7% 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 3,043,749 (adjusted to reflect the 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 the date of this Annual Report on Form 20-F, we own 83.4% 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. 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.

---

**Table of Contents**

*Mosel Vitelic Inc.*

As of March 31, 2013, Mosel indirectly owned 4.9% 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 2010, 2011 and 2012, we paid NT\$148 thousand, NT\$25 thousand and nil 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 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, to register its common shares for the sale of our common shares under the Securities Act. In March 2009, ThaiLin acquired 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.

The share numbers disclosed in the foregoing paragraph are adjusted to reflect the effect of the Company's 1-for-every-4 reverse stock split effective on January 21, 2011.

*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 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 became effective 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.

**Table of Contents***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 was originally 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 loan has been fully repaid and the subject pledge has been released accordingly.

In November 2012, ThaiLin sold 2,000,000 shares under the Secondary Offering. As of March 31, 2013, ThaiLin held 4,474,211 of our outstanding shares, corresponding to 13.4% of all of our outstanding shares. ThaiLin's current holding includes 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, 506,364 shares or 1.5% of our outstanding shares accumulated from the Rule 10b5-1/10b-18 securities purchase program launched in December 2008, and 467,059 shares or 1.4% of our outstanding shares acquired pursuant to the interest shares payment and 2,485,630 shares or 7.5% of our outstanding shares acquired pursuant to the conversion of 2009 Notes in March 2011.

The share numbers disclosed in the foregoing paragraph are adjusted to reflect the effect of the Company's 1-for-every-4 reverse stock split effective on January 21, 2011.

*ProMOS Technologies Inc.*

As of March 31, 2013, 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.



**Table of Contents**

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 18 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-60.

**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 currently scheduled for April 2014. On July 19, 2012, Tessera filed a stipulation with the California court dismissing its breach of contract claim against the companies. Accordingly, this litigation is now limited to only Tessera's patent infringement allegations against the companies. A court-ordered mediation between the parties was held on December 13, 2012 but was unsuccessful. 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 July 29, 2010, the Court found that the Agreement constituted a Total Sales Royalty agreement, however, Freescale's motion was partly denied for patent misuse issue. A mediation was held between the parties on October 28, 2010 but was unsuccessful. The fact discovery and expert discovery process regarding patent misuse issue closed in middle June 2011. An Order granting Freescale's motion for partial summary judgment and denying ChipMOS' cross-motion for partial judgment was given on September 8, 2011. An Order granting in part and denying in part ChipMOS' Motion for Reconsideration was given on March 30, 2012. The Court reinstated ChipMOS' claims for patent misuse and its affirmative defenses for patent exhaustion, mutual mistake and license. Freescale refiled its motions to strike ChipMOS' jury demand and for summary judgment on ChipMOS' affirmative defenses of exhaustion, mutual mistake and license. The Court has granted those motions on January 24, 2013 and later denied ChipMOS' motion for reconsideration of those rulings in April 2013. The date for next jury trial is scheduled to take place in September 2013. The Company's counsel has not formed any opinion as to the outcome of the case.



**Table of Contents**

Other than the matters described above, we were not involved in any material litigation in 2012 and are not currently involved in any material litigation.

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**

Company paid an annual cash dividend of US\$0.14 per common share for a total cash cost of US\$4.0 million on December 18, 2012 to all common shareholders of record on relevant record date. The payment of future dividends is subject to the Board's continuing determination that the payment of dividends are in the best interests of the Company's shareholders and are in compliance with all laws and agreements of the Company applicable to the declaration and distribution.

**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, 2013, there were 33,369,590 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
2008	16.40	0.74	9.32
2009	3.97	0.80	2.45
2010	7.68	2.40	4.80
2011	9.81	4.48	6.94
First Quarter	8.80	6.24	7.33
Second Quarter	9.81	7.71	8.70
Third Quarter	9.02	5.16	6.53
Fourth Quarter	6.00	4.48	5.20
2012			
First Quarter	19.04	5.47	10.93
Second Quarter	18.48	9.61	12.68
Third Quarter	15.85	8.79	12.41
November	11.88	9.74	10.67
December	11.60	9.99	10.71
Fourth Quarter	16.03	9.74	11.59
2013			
January	12.42	10.66	11.45
February	11.99	10.57	11.25

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

March	13.32	10.32	11.18
First Quarter	13.32	10.32	11.29
April (through April 23, 2013)	15.36	12.36	13.71

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.

## **Table of Contents**

### **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.

#### **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, 2013, 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 meetings. 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.

## **Table of Contents**

### *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.

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 or 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.





---

## **Table of Contents**

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.

### **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 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.

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 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.

On October 26, 2012, Company entered Underwriting Agreement with ThaiLin, Siliconware Precision, Cowen and Company, LLC and Craig-Hallum Capital Group LLC for the Secondary Offering of up to 2.8 million Company's Common Shares.

Please see also *Item 7. Major Shareholders and Related Party Transactions* for further summary information regarding the contracts listed under *Item 10. Additional Information - Material Contracts* that are with certain of our related parties.



## **Table of Contents**

### **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 Undertakings 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 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.

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;

## **Table of Contents**

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.

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 from qualified foreign corporations are taxed at the rate of either 0 percent, 15 percent or 20 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. A foreign corporation is a qualified foreign corporation if the stock with respect to which it pays dividends 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 tax 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 and certain other rules will apply. See *Passive Foreign Investment Company (PFIC)*, below. 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.

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

Certain U.S. Holders that are individuals, estates or trusts will be required to pay an additional 3.8 percent Medicare contribution tax on net investment income, including interest, dividends, and capital gain. U.S. Holders should consult their tax advisors as to the application of this additional tax.

---

## **Table of Contents**

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);

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.

Long-term capital gains recognized by individuals and certain other non-corporate taxpayers, are taxed at the rate of 0, 15 or 20 percent, depending upon the particular taxpayer's U.S. federal income tax bracket. Certain U.S. Holders that are individuals, estates or trusts will be required to pay an additional 3.8 percent Medicare contribution tax on net investment income, including interest, dividends, and capital gain. U.S. Holders should consult their tax advisors as to the application of this additional tax.

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

We believe that our common shares should not be treated as stock of a 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 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, you would be treated as if you had realized such gain ratably over your holding period for the common shares. The amounts allocated to the taxable year of the sale or other disposition and to any year before we became a PFIC would be taxed as ordinary income. The amount allocated to each other taxable year would be subject to tax at the highest rate in effect for such year, 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. Further, any

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

distribution in respect of our common shares in excess of 125 percent of the average annual distributions on our common shares received by you during the preceding three years or your holding period, whichever is shorter, would be allocated ratably over your holding period for the common shares and subject to taxation as described for sales or other dispositions above.



## **Table of Contents**

### ***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 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

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.

### **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.

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

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.

**Table of Contents**

**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, 2012, we had aggregate debts outstanding of NT\$9,334 million (US\$321 million), which was incurred for capital expenditure and general operating expenses. Of our outstanding debts as of December 31, 2012, 100% 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 2.653% as of December 31, 2012. 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\$93 million (US\$3 million) based on our outstanding floating rate indebtedness as of December 31, 2012.

As of December 31, 2011 and 2012, 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, is the Japanese yen and the US dollar. As of December 31, 2012, 58.9% of our financial assets and 9.4% 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\$348 million (US\$12 million) based on our outstanding assets and liabilities denominated in foreign currencies as of December 31, 2012. As of December 31, 2010, 2011 and 2012, we had no outstanding forward exchange or foreign currency option contracts.

See Note 22 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, 2012.

*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, 2013**

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, 2012, 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, 2012 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, 2012 and has issued an attestation report on the Company's internal control over financial reporting as of December 31, 2012. 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 2012, 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.



**Table of Contents****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.

**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, 2011 and 2012.

	2011 NT\$	2012 NT\$
	(In thousands)	
Audit Fees	\$ 9,686	\$ 9,151
Audit Related Fees		
Tax Fees		
All Other Fees		2,382
<b>Total</b>	<b>\$ 9,686</b>	<b>\$ 11,533</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 2011 and 2012, 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).

*Tax Fees.* This category includes aggregate fees for respective years for services relating to tax compliance, advice and planning.

*All Other Fees.* This category includes aggregate fees for respective years for services other than the services included in the above. For 2012, this category primarily include the fees for services received relating to Company's transaction with respect to the Registration Statement on Form F-3 declared effective in September 2012.

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 August 26, 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, 2011 to purchase through a broker our common shares, with a maximum purchase amount of US\$10 million (*Repurchase Program I*). Repurchase Program I was terminated on August 20, 2012. On August 10, 2012, 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 August 20, 2012 to purchase through a broker our common shares, with a maximum purchase amount of US\$10 million (*Repurchase Program II*). Repurchase Program II was completed on October 16, 2012.

The table sets forth certain information about the purchase of our common shares by the Issuer's purchase programs for the year ended as of December 31, 2012.

**Table of Contents****Purchases of Equity Securities by the Issuer**

Period		Total Number of Shares Purchased	Average Price Paid Per Share (US\$)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (US\$ Million)
January	February, 2012 (Repurchase Program I)	47,100	7.69	47,100	None
September	October, 2012 (Repurchase Program II)	653,610	15.30	653,610	None
Total		700,710		700,710	None

**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.

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.

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):

NASDAQ Listing Rule	Corporate Governance Practice To Be Followed by Domestic Companies	Our Corporate Governance Practice
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.



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

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. All compensation committee members are independent directors. All directors who approve executive officer compensation and director nominations are independent directors.
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.

The Bermuda Companies Act and our bye-laws provide for certain requirements for the annual shareholder meeting, including the following:

(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;

**Table of Contents**

<b>NASDAQ Listing Rule</b>	<b>Corporate Governance Practice To Be Followed by Domestic Companies</b>	<b>Our Corporate Governance Practice</b>
		<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.	<p>We follow governance practices under Bermuda law. The Bermuda Companies Act and our bye-laws provide for certain circumstances which require shareholders approval, including but not limited to the following:</p> <p>(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;</p> <p>(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</p> <p>(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.</p>
5640	Shareholder voting rights requirements.	We follow the same NASDAQ listing rule governance practice as followed by domestic companies.

**Table of Contents**

**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-60.

**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	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>
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>

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

- 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>

**Table of Contents**

<b>Exhibits</b>	<b>Description</b>
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	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>
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>

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

4.41 Supplemental assignment agreement, dated May 14, 2004, between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ChipMOS TECHNOLOGIES INC.<sup>(4)</sup>

101

**Table of Contents**

<b>Exhibits</b>	<b>Description</b>
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	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>
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	

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

Assignment and Assumption Agreement, effective on April 22, 2011 between ChipMOS TECHNOLOGIES (Bermuda) LTD. and ThaiLin Semiconductor Corp.<sup>(12)</sup>



**Table of Contents**

Exhibits	Description
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. <sup>(13)</sup>
4.66	Underwriting Agreement, dated October 26, 2012, between the Company, ThaiLin, Siliconware Precision, Cowen and Company, LLC and Craig-Hallum Capital Group LLC. <sup>(14)</sup>
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.
- (13) Incorporated by reference to our Annual Report on Form 20-F (File No. 0-31106), filed on April 26, 2012.
- (14) Incorporated by reference to our Interim Report on Form 6-K (File No. 0-31106), filed on October 26, 2012.

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, 2013.

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, 2011 and 2012, 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, 2012, all expressed in New Taiwan dollars. We have also audited the Company s internal control over financial reporting as of December 31, 2012, 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, 2011 and 2012, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012, 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, 2012, 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, 2012, and the determination of equity and financial position at December 31, 2011 and 2012, to the extent summarized in Note 24.

/s/ Moore Stephens

*Certified Public Accountants*

*Hong Kong*

March 14, 2013

F-3

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

December 31, 2011 and 2012 (Notes 1 and 16)

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

	2011 NT\$	December 31, 2012 NT\$	US\$ (Note 3)
<b>ASSETS</b>			
<b>CURRENT ASSETS</b>			
Cash and cash equivalents	7,357,902	9,319,022	320,792
Restricted cash and cash equivalents (Note 19)	285,133	174,486	6,006
Notes receivable (Note 2)	5,710	4,959	171
Accounts receivable - net of allowance for doubtful receivables and sales return allowances of NT\$121,143 in 2011 and NT\$122,994 in 2012 (Notes 2 and 4)	3,666,507	3,992,219	137,426
Other receivables - net of allowance for doubtful receivables and sales return allowances of NT\$64,783 in 2011 and NT\$64,783 in 2012 (Notes 2 and 4)	73,179	149,824	5,157
Inventories - net (Notes 2 and 5)	1,533,866	1,687,889	58,103
Deferred income tax - net (Notes 2 and 17)	76,559	77,825	2,679
Prepaid expenses and other current assets	92,335	131,819	4,538
<b>Total Current Assets</b>	<b>13,091,191</b>	<b>15,538,043</b>	<b>534,872</b>
<b>LONG-TERM INVESTMENTS (Notes 2 and 6)</b>			
Financial assets carried at cost	39,121	11,635	401
<b>PROPERTY, PLANT AND EQUIPMENT - NET (Notes 2 and 19)</b>			
<b>Cost</b>			
Land	452,738	452,738	15,585
Buildings and auxiliary equipment	9,095,376	9,335,221	321,350
Machinery and equipment	38,698,624	39,793,434	1,369,826
Furniture and fixtures	1,401,278	1,511,873	52,044
Transportation equipment	36,819	39,803	1,370
Tools	3,056,053	3,308,607	113,894
Leasehold improvements	2,310	2,216	76
<b>Total cost</b>	<b>52,743,198</b>	<b>54,443,892</b>	<b>1,874,145</b>
Accumulated depreciation (Note 7)	(37,910,331)	(41,632,218)	(1,433,123)
Accumulated impairment (Note 7)	(1,417,109)	(1,377,439)	(47,416)
Construction in progress and advance payments	480,290	673,742	23,192
<b>Net Property, Plant and Equipment</b>	<b>13,896,048</b>	<b>12,107,977</b>	<b>416,798</b>
<b>INTANGIBLE ASSETS - NET (Notes 2 and 8)</b>	<b>100,498</b>	<b>178,890</b>	<b>6,158</b>
<b>OTHER ASSETS</b>			
	248,429	221,115	7,612

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

Employee dormitory buildings - net of accumulated depreciation of NT\$180,731 in 2011 and NT\$200,135 in 2012 (Note 2)

Refundable deposits	21,364	21,070	725
Prepaid pension (Notes 2 and 15)	33,541		
Deferred income tax net (Notes 2 and 17)	600,351	503,582	17,335
Others (Note 2)	250,522	167,081	5,751
<b>Total Other Assets</b>	<b>1,154,207</b>	<b>912,848</b>	<b>31,423</b>
<b>TOTAL ASSETS</b>	<b>28,281,065</b>	<b>28,749,393</b>	<b>989,652</b>

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

F-4

**Table of Contents****ChipMOS TECHNOLOGIES (Bermuda) LTD. AND SUBSIDIARIES****CONSOLIDATED BALANCE SHEETS (Continued)****December 31, 2011 and 2012 (Notes 1 and 16)****(In Thousands of New Taiwan and U.S. Dollars, Except Par Value)**

	2011 NT\$	December 31, 2012 NT\$	US\$ (Note 3)
<b>LIABILITIES AND EQUITY</b>			
<b>CURRENT LIABILITIES</b>			
Bank loans (Notes 9 and 19)	546,916	366,481	12,616
Current portion of long-term loans (Notes 13 and 19)	684,028	2,227,800	76,688
Deferred credit	2,383	2,291	79
Accounts payable	1,130,730	890,077	30,639
Other payables (Note 10)	1,081,530	1,008,409	34,713
Income tax payable (Note 2)	20,283	28,880	994
Payables to contractors and equipment suppliers	415,391	484,659	16,684
Accrued expenses and other current liabilities (Note 11)	830,903	766,994	26,403
<b>Total Current Liabilities</b>	<b>4,712,164</b>	<b>5,775,591</b>	<b>198,816</b>
<b>LONG-TERM LIABILITIES</b>			
Long-term deferred revenue	95,304	89,350	3,076
Long-term loans (Notes 13 and 19)	8,484,300	6,739,927	232,011
<b>Total Long-Term Liabilities</b>	<b>8,579,604</b>	<b>6,829,277</b>	<b>235,087</b>
<b>OTHER LIABILITIES</b>			
Accrued pension cost (Notes 2 and 15)	4,250	172,969	5,954
Guarantee deposits	1,777	2,478	85
<b>Total Other Liabilities</b>	<b>6,027</b>	<b>175,447</b>	<b>6,039</b>
<b>Total Liabilities</b>	<b>13,297,795</b>	<b>12,780,315</b>	<b>439,942</b>
<b>COMMITMENTS AND CONTINGENCIES (Note 20)</b>			
<b>EQUITY (Notes 2 and 16)</b>			
Capital stock NT\$1.169 (US\$0.04) par value			
Authorized 62,500 thousand common shares and 18,750 thousand preferred shares			
Issued 33,366 thousand common shares (2011: 33,398 thousand common shares)			
Outstanding 28,891 thousand common shares (2011: 26,924 thousand common shares)	39,041	39,013	1,343
Capital surplus	15,201,353	11,583,898	398,757
Retained earnings (accumulated losses)	(3,787,431)	531,794	18,306
Unrealized pension cost		(42,642)	(1,468)
Cumulative translation adjustments	433,902	416,896	14,351
Treasury stock	(924,781)	(635,741)	(21,884)



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

Total Shareholders' Equity	10,962,084	11,893,218	409,405
Noncontrolling interests	4,021,186	4,075,860	140,305
Total Equity	14,983,270	15,969,078	549,710
<b>TOTAL LIABILITIES AND EQUITY</b>	<b>28,281,065</b>	<b>28,749,393</b>	<b>989,652</b>

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

F-5

**Table of Contents****ChipMOS TECHNOLOGIES (Bermuda) LTD. AND SUBSIDIARIES****CONSOLIDATED STATEMENTS OF OPERATIONS****For the Years Ended December 31, 2010, 2011 and 2012 (Notes 1 and 16)****(In Thousands of New Taiwan and U.S. Dollars, Except Earnings Per Share)**

	2010 NT\$	Year Ended December 31, 2011 NT\$	2012 NT\$	US\$ (Note 3)
<b>NET REVENUE (Notes 2, 18 and 23)</b>				
Related parties	2,033,342	379,009		
Third parties	15,176,391	17,831,928	19,220,560	661,637
<b>Total Net Revenues</b>	<b>17,209,733</b>	<b>18,210,937</b>	<b>19,220,560</b>	<b>661,637</b>
<b>COST OF REVENUE (Notes 23)</b>				
Related parties	2,408,321	446,609		
Third parties	14,155,682	16,102,605	16,638,515	572,754
<b>Total Cost of Revenue</b>	<b>16,564,003</b>	<b>16,549,214</b>	<b>16,638,515</b>	<b>572,754</b>
<b>GROSS PROFIT (LOSS)</b>	<b>645,730</b>	<b>1,661,723</b>	<b>2,582,045</b>	<b>88,883</b>
<b>OPERATING EXPENSES (Note 18)</b>				
Research and development (Note 2)	412,753	409,754	492,774	16,963
General and administrative	677,618	651,922	625,640	21,537
Sales and marketing (Notes 2 and 4)	64,382	66,538	78,385	2,698
<b>Total Operating Expenses</b>	<b>1,154,753</b>	<b>1,128,214</b>	<b>1,196,799</b>	<b>41,198</b>
<b>INCOME (LOSS) FROM OPERATIONS</b>	<b>(509,023)</b>	<b>533,509</b>	<b>1,385,246</b>	<b>47,685</b>
<b>NON-OPERATING INCOME</b>				
Foreign exchange gain - net (Note 2)		129,721		
Rental	12,648	9,605	7,136	246
Interest	15,861	23,772	31,822	1,095
Cash dividend from financial assets	9,194			
Fair value gain on financial assets	3,918			
Gain on disposal of property, plant and equipment (Note 2)	104,310	39,061	21,657	746
Gain on disposal of financial assets	15,819	1,254	4,262	147
Gain on partial disposal of a subsidiary	31,372			
Gain on disposal of scrapped materials and tooling	66,167	47,446	57,659	1,985
Gain on disposal of patent		10,616	8,979	309
Claim received (Note 4)	2,118,490			
Recovery of allowance for doubtful receivables (Notes 4 and 18)	2,716,880			
Other	117,324	31,874	39,654	1,365

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

Total Non-Operating Income	5,211,983	293,349	171,169	5,893
----------------------------	-----------	---------	---------	-------

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, 2010, 2011 and 2012 (Notes 1 and 16)****(In Thousands of New Taiwan and U.S. Dollars, Except Earnings Per Share)**

	Year Ended December 31,			
	2010 NT\$	2011 NT\$	2012 NT\$	US\$ (Note 3)
<b>NON-OPERATING EXPENSES</b>				
Interest	683,486	309,286	227,765	7,840
Financing cost	39,613	99,436	800	28
Foreign exchange loss - net (Note 2)	292,567		248,288	8,547
Loss on disposal of property, plant and equipment (Note 2)	83,593	7,389	7,319	252
Impairment loss on long-term investments (Note 6)	9,429		27,486	946
Impairment loss on other assets	391,646	168,154	8,383	289
Loss on embedded derivative	260,654	57,188		
Loss on partial disposal of a subsidiary		74,923		
Loss on sale of receivables (Note 4)	1,067,791			
Other	62,615	32,743	115,529	3,977
Total Non-Operating Expenses	2,891,394	749,119	635,570	21,879
<b>INCOME BEFORE INCOME TAX AND NONCONTROLLING INTERESTS</b>	<b>1,811,566</b>	<b>77,739</b>	<b>920,845</b>	<b>31,699</b>
INCOME TAX BENEFIT (EXPENSE) (Notes 2 and 17)	99,360	(45,506)	(131,497)	(4,527)
<b>INCOME BEFORE NONCONTROLLING INTERESTS</b>	<b>1,910,926</b>	<b>32,233</b>	<b>789,348</b>	<b>27,172</b>
<b>NET INCOME ATTRIBUTABLE TO NONCONTROLLING INTERESTS</b>	<b>(266,194)</b>	<b>(47,394)</b>	<b>(67,510)</b>	<b>(2,324)</b>
<b>NET INCOME (LOSS) ATTRIBUTABLE TO ChipMOS</b>	<b>1,644,732</b>	<b>(15,161)</b>	<b>721,838</b>	<b>24,848</b>
<b>EARNINGS (LOSS) PER SHARE - BASIC</b>	<b>68.61</b>	<b>(0.57)</b>	<b>26.27</b>	<b>0.90</b>
<b>WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING - BASIC</b>	<b>23,971</b>	<b>26,590</b>	<b>27,477</b>	<b>27,477</b>
<b>EARNINGS (LOSS) PER SHARE - DILUTED (Note 2)</b>	<b>67.38</b>	<b>(0.57)</b>	<b>25.50</b>	<b>0.88</b>
<b>WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING - DILUTED (Note 2)</b>	<b>26,806</b>	<b>26,590</b>	<b>28,305</b>	<b>28,305</b>

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, 2010, 2011 and 2012 (Notes 1 and 16)****(In Thousands of New Taiwan Dollars, Except Number of Shares)**

	CAPITAL STOCK		CAPITAL SURPLUS	DEFERRED COMPENSATION	RETAINED EARNINGS ACCUMULATED LOSSES	UNREALIZED PENSION COST	CUMULATIVE TRANSLATION ADJUSTMENTS (Note 2)	TREASURY STOCK	NON-CONTROLLING INTERESTS	TOTAL EQUITY
	Shares (Thousands)	Amount NT\$	NT\$	NT\$	NT\$	NT\$	NT\$	NT\$	NT\$	NT\$
Balance, January 1, 2010	19,471	27,557	12,860,097	(8,692)	(5,417,002)		404,517	(81,715)	2,167,455	9,952,217
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)
Balance, December 31, 2010	25,715	36,008	14,040,716	(1,577)	(3,772,270)		326,051	(128,614)	3,543,145	14,043,459
Exercise of stock option	96	111	15,871							15,982
Issue of option warrants			47,402	1,577						48,979
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

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

Balance, December 31, 2011	26,924	39,041	15,201,353	(3,787,431)		433,902	(924,781)	4,021,186	14,983,270
Exercise of stock option	668	792	122,077						122,869
Issue of option warrants			65,795						65,795
Net profit for 2012				721,838				67,510	789,348
Cash dividend of US\$0.14 (NT\$4.067) per share				(117,521)					(117,521)
Disposal of the Company's shares by a subsidiary	2,000		244,188				284,108		528,296
Adjustment of equity method for long-term investments			(27,811)	(1,781)			4,932		(24,660)
Changes in noncontrolling interests								(12,836)	(12,836)
Unrealized pension cost					(42,642)				(42,642)
Transfer of capital surplus to retained earnings			(3,787,431)	3,787,431					
Repurchase of shares	(701)	(820)	(234,273)	(70,742)					(305,835)
Translation adjustments						(17,006)			(17,006)
Balance, December 31, 2012	28,891	39,013	11,583,898	531,794	(42,642)	416,896	(635,741)	4,075,860	15,969,078

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, 2010, 2011 and 2012 (Notes 1 and 16)****(In Thousands of New Taiwan and U.S. Dollars)**

	Year Ended December 31,			
	2010	2011	2012	US\$
	NT\$	NT\$	NT\$	(Note 3)
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>				
Net income (loss) attributable to ChipMOS	1,644,732	(15,161)	721,838	24,848
Adjustments to reconcile net income (loss) to net cash provided by operating activities				
Depreciation	6,132,868	5,513,554	4,571,608	157,370
Amortization of intangible and other assets	148,761	164,050	60,271	2,075
Amortization of discount of convertible notes	11,762	1,298		
Interest payment from conversion of CN	276,891	39,780		
Allowance for doubtful receivables	73,882	1,566	4,307	148
Recovery of allowance for doubtful receivables	(2,718,171)	(69,205)	(2,452)	(84)
Deferred compensation	43,872	48,979	65,795	2,265
Gain on disposal of property, plant and equipment - net	(20,717)	(31,672)	(14,338)	(494)
Gain on disposal of financial assets	(15,819)	(1,254)	(4,262)	(147)
Loss (gain) on partial disposal of a subsidiary	(31,372)	74,923		
Loss on embedded derivative	260,654	57,188		
Impairment loss on long-term investments	9,429		27,486	946
Impairment loss on other assets	391,646	168,154	8,383	289
Fair value gain on financial assets	(3,918)			
Accrued pension cost	(7,044)	(6,131)	66,994	2,306
Deferred income tax - net	(126,966)	19,732	95,503	3,288
Noncontrolling interests	266,194	47,394	67,510	2,324
<b>Changes in operating assets and liabilities</b>				
Financial assets at fair value through profit and loss	124,813	4,253	4,262	147
Notes receivable	13,950	8,270	751	26
Accounts receivable	1,563,610	(693,101)	(335,851)	(11,561)
Other receivables	383,356	119,243	(85,283)	(2,936)
Inventories	(423,180)	(58,712)	(158,523)	(5,457)
Prepaid expenses and other current assets	60,565	132,673	(40,624)	(1,398)
Other assets	61	(2,002)	28,351	976
Accounts payable	(43,357)	433,196	(233,238)	(8,029)
Other payables	202,253	160,974	(71,701)	(2,468)
Income tax payable	(858)	1,483	8,597	296
Accrued expenses and other liabilities	473,312	(219,175)	(47,802)	(1,647)
Deferred credit	(2,304)	(2,257)	(2,324)	(80)
<b>Net Cash Provided by Operating Activities</b>	<b>8,688,905</b>	<b>5,898,040</b>	<b>4,735,258</b>	<b>163,003</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>				
Decrease (increase) in restricted cash and cash equivalents	(303,637)	262,313	110,410	3,801
Proceeds from sales of property, plant and equipment	899,076	314,502	37,884	1,304
Proceeds from sales of long-term investment	10,953			
Proceeds from redemption of held-to-maturity financial assets and financial assets with no active market	300,000			
Proceeds from sales of employee dormitory buildings and other assets		6,814	4,063	140
Proceeds from partial disposal of a subsidiary	1,133,049	486,859		
Acquisitions of:				
Long-term investment		(28,584)		
Property, plant and equipment	(4,467,696)	(4,150,898)	(2,706,326)	(93,161)
Deferred assets	(17,913)	(139,692)	(39,500)	(1,360)

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

Employee dormitory building and other assets	(11,102)	(962)	(1,743)	(60)
Decrease (increase) in refundable deposits	3,102	(1,070)	296	10
Net Cash Used in Investing Activities	(2,454,168)	(3,250,718)	(2,594,916)	(89,326)

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, 2010, 2011 and 2012 (Notes 1 and 16)****(In Thousands of New Taiwan and U.S. Dollars)**

	Year Ended December 31,			US\$ (Note 3)
	2010 NT\$	2011 NT\$	2012 NT\$	
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>				
Payments on:				
Bank loans	(868,668)	(947,734)	(180,424)	(6,211)
Long-term loans	(2,227,389)	(1,397,543)	(197,792)	(6,809)
Cash dividend			(117,521)	(4,045)
Repurchase of shares			(305,835)	(10,528)
Reverse stock split		(239)		
Proceeds from:				
Treasury stock			528,296	18,186
Convertible notes	131,085			
Issuance of capital stock	1,450	15,982	122,869	4,230
Changes in noncontrolling interests	3,710	(132,806)	(12,836)	(442)
Increase (decrease) in guarantee deposits	323	(2,212)	556	19
Net Cash used in Financing Activities	(2,959,489)	(2,464,552)	(162,687)	(5,600)
<b>EFFECT OF EXCHANGE RATE CHANGES ON CASH</b>	(16,811)	31,867	(16,535)	(569)
Net increase in cash and cash equivalents	3,258,437	214,637	1,961,120	67,508
Cash and cash equivalents, beginning of the year	3,884,828	7,143,265	7,357,902	253,284
Cash and cash equivalents, end of the year	7,143,265	7,357,902	9,319,022	320,792
<b>SUPPLEMENTAL INFORMATION</b>				
Income tax paid	27,651	24,931	28,846	993
Interest paid	383,581	289,693	228,486	7,865
<b>NON-CASH FINANCING ACTIVITIES</b>				
Current portion of long-term loans	4,925,739	684,028	2,227,800	76,688
Interest payment for CN in shares	296,180	42,371		
<b>PARTIAL CASH PAID FOR INVESTING ACTIVITIES</b>				
Cash paid for acquisition of property, plant and equipment				
Total acquisitions	4,237,278	2,319,283	2,776,648	95,582
Decrease (increase) in payables to contractors and equipment suppliers	230,418	1,831,615	(70,322)	(2,421)
	4,467,696	4,150,898	2,706,326	93,161

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.

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 this reverse stock split, but rather shareholders who were entitled to fractional shares received cash in aggregate of NT\$239 thousand in lieu of receiving fractional shares.

As of December 31, 2012, ChipMOS Bermuda was 13.41% (2011: 19.38%) owned by ThaiLin Semiconductor Corp. (ThaiLin).

As of December 31, 2012, ChipMOS Bermuda owned 84.22% (2011: 84.22%) of the outstanding common shares of ChipMOS TECHNOLOGIES INC. (ChipMOS Taiwan).

**Table of Contents**

## 1. ORGANIZATION AND BUSINESS (continued)

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, 2012, SPIL held a 15.78% (2011:15.78%) interest in ChipMOS Taiwan and ChipMOS Bermuda held an 84.22% (2011:84.22%) interest in ChipMOS Taiwan.

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, 2012, ChipMOS Taiwan held a 42.87% (2011: 42.87%) equity interest in ThaiLin.

ChipMOS U.S.A., Inc. (ChipMOS USA) was incorporated in the United States of America in October 1999. It engages in sales and customer services and all the expenses incurred from these activities are charged to current income. ChipMOS USA began generating revenue in 2001. As of December 31, 2012, ChipMOS Taiwan owned 100% of the outstanding shares of ChipMOS USA.

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 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.

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. Prior to October 3, 2011, ChipMOS Bermuda consolidated 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 had a parent-subsidiary relationship with Modern Mind by means other than record ownership of voting stock. This relationship was based on ChipMOS Bermuda's power to direct or cause the direction of the management and policies of Modern Mind and ChipMOS Shanghai.



**Table of Contents**

1. ORGANIZATION AND BUSINESS (continued)

The parent-subsidary relationship with and management and policies direction of Modern Mind and ChipMOS Shanghai was 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 was fully and unconditionally guaranteed by Jesper and secured by a security interest in all outstanding equity interests in Modern Mind and ChipMOS Shanghai. Jesper had 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 was deemed to have a controlling interest in Modern Mind.

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.

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. Modern Mind and its wholly-owned subsidiary, ChipMOS Shanghai, became wholly-owned subsidiaries of ThaiLin.

Since October 3, 2011 ChipMOS Bermuda's interest in ChipMOS Shanghai was reduced 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 2010, 2011 and 2012, the financial results of ChipMOS Taiwan and its subsidiaries, ThaiLin, ChipMOS USA, and Modern Mind and its wholly-owned subsidiary, ChipMOS Shanghai and ChipMOS HK up to liquidation in July 2011.

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, 2011 and 2012, the Company had credit risk exposure of uninsured cash in banks of NT\$7,643,035 thousand and NT\$9,493,508 thousand (US\$326,798 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 two customers that had balances greater than ten percent of total notes and accounts receivable as of December 31, 2011 and 2012, respectively:

	December 31, 2011	2012
--	----------------------	------

<u>Third party</u>		
--------------------	--	--

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

Micron Technology, Inc. group (Micron)	18%	7%
Novatek Microelectronics Corp. (Novatek)	13%	18%
Winbond Electronics Corp. (Winbond)	6%	11%

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

F-13

## Table of Contents

### 2. SIGNIFICANT ACCOUNTING POLICIES (continued)

#### 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.

#### 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



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

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.

F-14

## 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.

## 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 the remaining service years of employees.

If additional accrued pension cost based on actuarial calculation is not in excess of the sum of the unamortized balance of prior service costs and unrecognized net transition obligation, deferred pension cost will be debited. Otherwise, the excess amount should be debited to unrecognized pension cost as a deduction in stockholders' equity.

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.

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

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.

F-16

**Table of Contents**

## 2. SIGNIFICANT ACCOUNTING POLICIES (continued)

Income tax

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.

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:

	2010	December 31, 2011 (in thousands)	2012
Basic number of shares	23,971	26,590	27,477
Add: stock options	288		828
convertible notes	2,547		
Diluted number of shares	26,806	26,590	28,305

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

	Year ended December 31,			
2010	2011	2012		
NT\$	NT\$	NT\$	US\$	

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

	(in thousands)			
Net income (loss) attributable to ChipMOS	1,644,732	(15,161)	721,838	24,848
Add: interest expense and other income/expenses (net of tax)	161,381			
Income (loss) attributable to ChipMOS adjusted for the effects of assumed exercise of options and conversion of notes	1,806,113	(15,161)	721,838	24,848

F-17

## 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 and 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 and treasury stock transactions and to retained earnings for any remaining amount.

#### Operating Segments

The Company presents segment information in accordance with 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. The chief operating decision maker is identified as the Chairman of the Company.

**Table of Contents****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 31, 2012, which was NT\$29.05 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.

**4. ALLOWANCE FOR DOUBTFUL RECEIVABLES AND SALES RETURN ALLOWANCES**

The changes in the allowances are summarized as follows:

	Year Ended December 31,			
	2010 NT\$	2011 NT\$	2012 NT\$	US\$
Balance, beginning of year	2,936,930	262,094	185,926	6,400
Additions	73,882	1,566	4,307	148
Reversal	(2,718,181)	(69,205)	(2,452)	(84)
Write off	(30,537)	(8,529)	(4)	
Balance, end of year	262,094	185,926	187,777	6,464

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**

## 5. INVENTORIES - NET

	2011 NT\$	December 31,	
		2012 NT\$	US\$
(in thousands)			
Finished goods	107,137	75,410	2,596
Work in progress	218,871	196,362	6,760
Raw materials	1,328,441	1,473,977	50,739
	1,654,449	1,745,749	60,095
Less - allowance for losses	(120,583)	(57,860)	(1,992)
	1,533,866	1,687,889	58,103

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

	2010 NT\$	Year Ended December 31,		
		2011 NT\$	2012 NT\$	US\$
(in thousands)				
Balance, beginning of year	200,064	64,734	120,583	4,151
Additions	3,107	58,917	3,455	119
Reversals	(138,437)	(3,068)	(66,178)	(2,278)
Balance, end of year	64,734	120,583	57,860	1,992

## 6. LONG-TERM INVESTMENTS

	2011 Carrying Value NT\$	% of Ownership (in thousands, except percentage interests)	December 31,		% of Ownership
			2012 Carrying Value NT\$	US\$	
Cost method:					
DigiMedia Technologies Co., Ltd. (DigiMedia Cayman)	198,666	11			
Validity Sensors Inc.	19,956	(1)	19,956	687	(1)
CONNECTEC JAPAN Corporation (CTJ)	28,584	(2)	28,584	984	14
Tashee Golf & Country Club	10		10		
Less: Accumulated impairment	(208,095)		(36,915)	(1,270)	
	39,121		11,635	401	

(1) Less than 1%

(2) Preferred shares

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

Digimedia Cayman was fully impaired since December 31, 2008 and the investment was derecognized in December 2012 as DigiMedia Cayman was de-registered.

During 2010 and 2012, impairment loss of NT\$9,429 and NT\$7,486 thousand were recognized, respectively, 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). In August 2012, ChipMOS Taiwan converted 50 thousand preferred shares into 56 thousand ordinary shares and held a 14% interest in CTJ. During 2012, impairment loss of NT\$20,000 thousand was recognized in respect of investment in CTJ.

F-20

**Table of Contents**

## 7. PROPERTY, PLANT AND EQUIPMENT NET

Accumulated depreciation consists of the following:

	2011 NT\$	December 31, 2012 NT\$ (in thousands)	US\$
Buildings and auxiliary equipment	3,265,533	3,595,760	123,778
Machinery and equipment	31,120,212	34,239,962	1,178,657
Furniture and fixtures	971,501	1,040,835	35,829
Transportation equipment	23,058	27,864	959
Tools	2,528,129	2,725,709	93,828
Leasehold improvements	1,898	2,088	72
	37,910,331	41,632,218	1,433,123

Accumulated impairment consists of the following:

	2011 NT\$	December 31, 2012 NT\$ (in thousands)	US\$
Buildings and auxiliary equipment	616,477	593,632	20,435
Machinery and equipment	430,395	429,116	14,772
Furniture and fixtures	224,332	214,462	7,382
Transportation equipment	1,092	1,051	36
Tools	144,813	139,178	4,791
Leasehold improvements			
	1,417,109	1,377,439	47,416

As of December 31, 2012, certain of the above buildings and machinery were mortgaged as collateral for long-term loans (Notes 13 and 19).

## 8. INTANGIBLE ASSETS NET

	2011 NT\$	December 31, 2012 NT\$ (in thousands)	US\$
Land use rights			
Cost	121,934	117,245	4,036
Accumulated amortization	(21,436)	(22,991)	(791)
Carrying value	100,498	94,254	3,245
Deferred pension cost		84,636	2,913
Total	100,498	178,890	6,158

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

The amortization charge of land use rights for 2012 amounted to NT\$2,415 thousand (2011: NT\$2,346 thousand, 2010: NT\$2,399 thousand). The weighted average amortization period is 50 years (2011: 50 years). The estimated aggregate amortization charge for the five years ending December 31, 2013, 2014, 2015, 2016 and 2017 amounts to approximately NT\$2,420 thousand each year. The land use rights were pledged as collateral for a credit facility (Note 19).

The weighted average amortization period of deferred pension cost is 13 years. The estimated aggregate amortization charge for the five years ending December 31, 2013, 2014, 2015, 2016 and 2017 amounts to approximately NT\$6,494 thousand each year.

F-21

**Table of Contents**

## 9. BANK LOANS

	2011 NT\$	December 31, 2012 NT\$ (in thousands)	US\$
<b>Unsecured loans:</b>			
Loans for import:			
JPY195,310 thousand, repayable by January 2012, annual interest at 1.79281%	76,288		
JPY141,600 thousand, repayable by February 2012, annual interest at 1.78541%	55,309		
JPY551,656 thousand, repayable by January 2013, annual interest at 1.31% - 1.40%		185,577	6,388
JPY286,629 thousand, repayable by February 2013, annual interest at 1.40%		96,422	3,320
JPY249,038 thousand, repayable by March 2013, annual interest at 0.9514%		83,777	2,884
Loans for working capital:			
NT\$300,000 thousand, repayable by January 2012, annual interest at 1.5% - 1.976744%	300,000		
<b>Secured loans:</b>			
Loans for import:			
JPY44,631 thousand, repayable by February 2012, annual interest at 2.2611%	17,433		
JPY250,605 thousand, repayable by March 2012, annual interest at 2.2611%	97,886		
Loans for import of machinery:			
US\$ 24 thousand, repayable by January 2013, annual interest rate (3.91% as of December 31, 2012)		705	24
	546,916	366,481	12,616

Unused credit lines of short-term bank loans, as of December 31, 2012, totaled approximately NT\$1,465,619 thousand (US\$50,452 thousand), which will expire from January 2013 to November 2013.

The weighted average interest rate for bank loans was 0.9475% per annum in 2012 (2011: 1.4326% per annum).

Certain short-term loans were secured by time deposits, buildings and land use rights (Note 19).

## 10. OTHER PAYABLES THIRD PARTIES

	2011 NT\$	December 31, 2012 NT\$ (in thousands)	US\$
Miscellaneous factory expenses	357,753	328,315	11,302
Others	723,777	680,094	23,411
	1,081,530	1,008,409	34,713

**Table of Contents**

## 11. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

	2011 NT\$	December 31, 2012 NT\$ (in thousands)	US\$
Accrued bonus	431,361	481,214	16,565
Others	399,542	285,780	9,838
	830,903	766,994	26,403

## 12. CONVERTIBLE NOTES AND DERIVATIVE LIABILITIES

Convertible notes due 2011 (CN due 2011)

On September 29, 2006, ChipMOS Bermuda issued US\$100,000 thousand (NT\$2,905,000 thousand) CN due 2011. The CN due 2011 bore 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 and 2008, ChipMOS Bermuda repurchased US\$1,000 thousand (NT\$29,050 thousand) and US\$18,075 thousand (NT\$525,079 thousand) of CN due 2011, respectively.

The noteholders of CN due 2011 had 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\$2,285,218 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\$65,653 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 convertible notes due 2009 in an aggregate principal amount of US\$45,000 thousand for US\$15,300 thousand (NT\$444,465 thousand) in cash and US\$15,750 thousand (NT\$457,538 thousand) in new convertible notes of ChipMOS Bermuda due October 21, 2014. The CN due 2014 bore interest at 10% per annum (10%CN due 2014).

On December 29, 2009, ChipMOS Bermuda issued US\$5,120 thousand (NT\$148,736 thousand) CN due 2014 which bore interest at 8% per annum (8%CN due 2014). The terms of 8%CN due 2014 were the same as 10%CN due 2014 except the conversion price, coupon rate and the maturity date. The conversion price 8%CN due 2014 was US\$5.00 per share and the coupon rate is 8%. The maturity date was December 29, 2014.

During 2010, a 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\$199,632 thousand).

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

During 2010, noteholders of 8%CN due 2014 converted US\$2,000 thousand (NT\$58,100 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\$20,393 thousand).

During 2011, noteholders of 8%CN due 2014 converted US\$2,120 thousand (NT\$61,586 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\$29,050 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\$8,308 thousand).

F-23

**Table of Contents**

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

Convertible notes due 2015 (CN due 2015)

On March 8 and 16, 2010, ChipMOS Bermuda issued US\$1,500 thousand (NT\$43,575 thousand) and US\$3,000 thousand (NT\$87,150 thousand) CN due 2015, respectively, which bore interest at 8% per annum. The terms of CN due 2015 were the same as CN due 2014 except for the conversion price, coupon rate and maturity date. The conversion price of CN due 2015 was US\$5.0 per share and the coupon rate was 8%. The maturity dates were March 8, 2015 and March 16, 2015, respectively.

In May 2010, noteholders of CN due 2015 converted US\$3,000 thousand (NT\$87,150 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\$32,914 thousand).

On April 19, 2011, ChipMOS Bermuda executed Company Conversion of 8%CN due 2015 of US\$1,500 thousand (NT\$43,575 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\$13,131 thousand).

Since April 2011, there were no outstanding convertible notes.

## 13. LONG-TERM LOANS

	2011 NT\$	December 31, 2012 NT\$ (in thousands)	US\$
Syndicated bank loans collateralized by equipment, repayable quarterly from May 2007 to February 2012, interest at floating rate (2.315% as of December 31, 2011)	95,828		
Bank loans collateralized by buildings, repayable quarterly from April 2011 to January 2015, interest at floating rate (1.92% as of December 31, 2011)	162,500		
Syndicated bank loans collateralized by equipment, repayable semi-annually from January 2012 to July 2015, interest at floating rate (3.0421% and 2.7789% as of December 31, 2011 and 2012, respectively)	5,382,000	4,843,800	166,740
Syndicated bank loans collateralized by land and buildings, repayable semi-annually from January 2014 to July 2016, interest at floating rate (3.0421% and 2.7789% as of December 31, 2011 and 2012, respectively)	3,028,000	3,028,000	104,234
Bank loans collateralized by buildings, repayable quarterly from June 2013 to March 2018, interest at floating rate (1.92% as of December 31, 2011 and 2012)	500,000	500,000	17,212
Bank loans collateralized by buildings, repayable quarterly from February to November 2014, interest at floating rate (1.73% as of December 31, 2012)		400,000	13,769
Bank loans collateralized by buildings and land use right, repayable quarterly from June 2014 to March 2015, interest at floating rate (3.91% as of December 31, 2012)		174,241	5,998
Bank loans collateralized by equipment, repayable quarterly from July 2014 to April 2015, interest at floating rate (3.91% as of December 31, 2012)		21,686	746
	9,168,328	8,967,727	308,699
Less - current portion	(684,028)	(2,227,800)	(76,688)
	8,484,300	6,739,927	232,011

Unused credit lines of long-term bank loans as of December 31, 2012 totaled approximately US\$2,453 thousand (NT\$71,267 thousand).





**Table of Contents**

## 13. LONG-TERM LOANS (continued)

Under syndicated bank loans facility agreements, ChipMOS Taiwan and ThaiLin are required to maintain certain financial ratios. ChipMOS Taiwan was in compliance with the financial ratio requirements as of December 31, 2011 and 2012. ThaiLin was in compliance with the financial ratio requirements as of December 31, 2011. ThaiLin is not required to maintain any financial ratio as of December 31, 2012 as the syndicated bank loans were repaid during 2012.

As of December 31, 2012, certain land and buildings and machinery and land use right were mortgaged as collateral for the long-term loans (Note 19).

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 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.

On March 7, 2012, ChipMOS Shanghai obtained a bank loan facility of US\$9,200 thousand for a term of 3 years. US\$6,000 thousand of which can be drawn for materials and expenses payment, and US\$3,200 thousand of which can be drawn for machine purchasing.

Future minimum principal payments under the long-term loans as of December 31, 2012 are as follows:

	Amount	
	NT\$	US\$
	(in thousands)	
2013	2,227,800	76,688
2014	2,861,724	98,510
2015	1,836,403	63,215
2016	1,916,800	65,983
After 2016	125,000	4,303
	8,967,727	308,699

## 14. CAPITAL LEASES PAYABLE

ChipMOS Taiwan originally leased some equipment under operating leases. As part of the plan to remediate the financial difficulty at that time, 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.

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

In July 2011, ChipMOS Taiwan repaid the outstanding capital leases utilizing the new syndicated loan of NT\$8,410,000 thousand (Note 13).

F-25

**Table of Contents**

## 15. 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 statement of operations as incurred.

Certain pension information is as follows:

## a. Net pension cost

	Year Ended December 31,			US\$
	2010 NT\$	2011 NT\$	2012 NT\$	
		(in thousands)		
Service cost	1,325	1,189	839	29
Interest cost	12,292	11,833	13,092	451
Projected return on plan assets	(5,140)	(7,090)	(6,846)	(236)
Amortization	53	53	53	2
Curtailed loss	8,149	12,055	23,407	806
Net periodic benefit cost			23,157	797
Cost of settlement			36,009	1,239
	16,679	18,040	89,711	3,088

**Table of Contents**

## 15. PENSION PLAN (continued)

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

	2010 NT\$	Year Ended December 31,		US\$
		2011 NT\$	2012 NT\$	
		(in thousands)		
Actuarial present value of benefit obligations				
Vested benefit obligation	486	14,020	151,118	5,202
Nonvested benefit obligation	304,253	334,180	334,397	11,511
Accumulated benefit obligation	304,739	348,200	485,515	16,713
Additional benefits based on future salaries	359,728	297,355	287,414	9,894
Projected benefit obligation	664,467	645,555	772,929	26,607
Plan assets at fair value	(343,823)	(371,452)	(313,160)	(10,780)
Projected benefit obligation in excess of plan assets	320,644	274,103	459,769	15,827
Unrecognized net transition obligation	(398)	(345)	(262)	(9)
Unrecognized prior service cost	4,205	3,999	(84,425)	(2,906)
Unrecognized net gain	(347,611)	(307,048)	(337,380)	(11,614)
Additional pension liability			135,267	4,656
Accrued (prepaid) pension	(23,160)	(29,291)	172,969	5,954

## c. Actuarial assumptions

	2010	2011	2012
Discount rate used in determining present values	1.88%	1.88%	1.63%
Future salary increase rate	4.25%	3.50%	3.00%
Expected rate of return on plan assets	2.00%	2.00%	1.88%

## d. Changes in pension fund

	2010 NT\$	Year Ended December 31,		US\$
		2011 NT\$	2012 NT\$	
		(in thousands)		
Company contributions	23,844	24,172	22,717	782
Payment of benefits		649	84,255	2,900

## 16. 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

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

purchase of treasury stock) can be transferred to capital as stock dividends when no deficit remains and shareholders approve such distribution.

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 25% of the aggregate par value of the outstanding capital stock of ChipMOS Taiwan and ThaiLin, and up to 25% thereof can be distributed as stock dividends or cash dividends after approval in shareholders' meeting.

**Table of Contents**

## 16. 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, 2012.

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	Number Exercisable on or after
2006	19.244	60,750	22.64	11.6027	13,500	13,500	11,250	11,250	11,250
	~ 22.882		~ 26.92		August 2006	August ~ December 2007	August ~ December 2008	August ~ December 2009	August ~ December 2010
2007	14.552	290,586	17.12	11.6027	13,500	69,232	69,216	69,362	69,276
	~ 25.908		~ 30.48		August 2007	January ~ December 2008	January ~ December 2009	January ~ December 2010	January ~ December 2011
2008	0.748	223,950	0.88	11.6027	12,500	36,398	36,512	38,720	99,820
	~ 11.9		~ 14.00		August ~ November 2008	January ~ December 2009	January ~ December 2010	January ~ December 2011	January ~ December 2012
2009	0.8528	209,569	1.0032	11.6027	20,506	23,291	24,418	52,251	89,103
	~ 2.55		~ 3.00		August ~ November 2009	January ~ November 2010	January ~ November 2011	January ~ November 2012	January ~ November 2013
2010	2.448	141,121	2.88	11.6027	18,750	27,557	27,663	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	581,896	5.4	11.6027	37,500	94,121	150,097	150,090	150,088
	~6.222		~7.32		August	March~	March~	March~	March~
					2011	September	September	September	September
2012	11.1095	197,676	13.07	11.6027		2012	2013	2014	2015
	~11.1435		~13.11			77,544	40,044	40,044	40,044
						February~	February~	February~	February~
						August	August	August	August
						2013	2014	2015	2016

1,705,548

NT\$486,142 thousand (US\$16,735 thousand) of compensation expense has been recognized with NT\$65,992 thousand (US\$2,272 thousand) (2011: NT\$49,055 thousand) being accounted for through the statement of operations. The Company issued 204,316 (2011: 692,624) stock options in 2012 to its employees. In 2012, 103,426 (2011: 148,403) stock options were forfeited, 289,268 (2011: nil) stock options were expired and 668,246 (2011: 96,103) stock options were exercised, leaving 1,705,548 (2011: 2,562,172) stock options outstanding at December 31, 2012.



**Table of Contents**

## 16. 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, 2012.

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
2007	14.552	59,625	17.12	11.6027	14,943	14,943	14,870	14,869
	~ 25.908		~ 30.48		January ~	January ~	January ~	January ~
					December 2008	December 2009	December 2010	December 2011
2008	0.748	27,048	0.88	11.6027	4,593	4,667	4,873	12,915
	~ 11.9		~ 14.00		January ~	January ~	January ~	January ~
					December 2009	December 2010	December 2011	December 2012
2009	0.884	103,248	1.04	11.6027	4,792	5,954	32,843	59,659
	~ 2.55		~ 3.00		January ~	January ~	January ~	January ~
					August 2010	August 2011	August 2012	August 2013
2010	2.448	8,325	2.88	11.6027	376	1,583	3,189	3,177
	~ 3.06		~ 3.6		March ~	March ~	March ~	March ~
					August 2011	August 2012	August 2013	August 2014
2011	5.151	401,142	6.06	11.6027	66,491	111,566	111,546	111,539
	~6.222		~ 7.32		March ~	March ~	March ~	March ~
					August 2012	August 2013	August 2014	August 2015
2012	11.1095	41,460	13.07	11.6027	10,366	10,366	10,364	10,364

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

~11.1435	~13.11	February ~	February ~	February ~	February ~
		August	August	August	August
		2013	2014	2015	2016

640,848

During the year, 43,660 (2011:525,885) rights were granted, 67,375 (2011: 70,621) rights were forfeited, 154,106 (2011: nil) rights were expired and 231,270 (2011: 32,832) rights were exercised. As of December 31, 2012, there were 640,848 (2011:1,049,939) share appreciation rights outstanding.

The Company recognized compensation expense of NT\$115,773 thousand (US\$3,985 thousand) (2011: NT\$3,009 thousand) in respect of share appreciation rights at fair value.

**Table of Contents**

## 17. INCOME TAX EXPENSE / (BENEFIT)

- 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:

	2010 NT\$	Year Ended December 31,		US\$
		2011 NT\$	2012 NT\$	
		(in thousands)		
Tax on pretax income (loss) at 0%				
Tax on pretax income (loss) at applicable statutory rates	538,998	82,840	221,244	7,616
Tax effect:				
Losses carried forward	(61,646)	(113,727)	(133,497)	(4,595)
Permanent differences	(183,426)	(37,848)	(43,556)	(1,499)
Temporary differences	(256,756)	112,875	12,799	440
Income tax expense - current before tax credits	37,170	44,140	56,990	1,962

The ROC statutory rates for 2010, 2011 and 2012 were 17%.

The PRC statutory rates for 2010, 2011 and 2012 were 25%.

- b. Income tax expense consists of:

	2010 NT\$	Year Ended December 31,		US\$
		2011 NT\$	2012 NT\$	
		(in thousands)		
Income tax expense - current before tax credits	37,170	44,140	56,990	1,962
Additional 10% on the unappropriated earnings		164,073	32,570	1,121
Income tax credits	(9,445)	(179,823)	(53,568)	(1,844)
Income tax for the current year	27,725	28,390	35,992	1,239
Net change in deferred income tax assets (liabilities) for the year				
Tax credits	515,421	302,966	77,616	2,672
Temporary differences	289,610	(104,406)	(11,704)	(403)
Losses (recognized) utilized	82,057	218,845	253,976	8,743
Valuation allowances	(1,124,766)	(397,672)	(224,384)	(7,724)
Deferred tax effect of change in tax rate	80,935			
Adjustment of prior years taxes	29,658	(2,617)	1	
Income tax expense (benefit)	(99,360)	45,506	131,497	4,527

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.

**Table of Contents**

## 17. INCOME TAX EXPENSE (BENEFIT) (continued)

- c. Deferred income tax assets and liabilities are summarized as follows:

	2011 NT\$	December 31, 2012 NT\$ (in thousands)	US\$
Net current deferred income tax assets:			
Unrealized foreign exchange losses	2,085	(103)	(4)
Tax credits	76,280	26,753	921
Losses carried forward	122,931	136,351	4,694
Loss of market price decline and obsolete and slow-moving inventories	19,413	8,183	282
Unrealized loss on sale allowances	20,167	20,899	719
Allowance for doubtful receivables	11,013	11,013	379
Others	132,520	133,895	4,610
	384,409	336,991	11,601
Less: Valuation allowances	(307,850)	(259,166)	(8,922)
	76,559	77,825	2,679
Net non-current deferred income tax assets:			
Losses carried forward	877,269	593,013	20,413
Tax credits	70,421	42,332	1,457
Depreciation differences	(57,903)	(43,724)	(1,505)
Unrealized impairment loss on idle property, plant and equipment	10,497	10,505	362
Others	216,738	228,028	7,850
	1,117,022	830,154	28,577
Less: Valuation allowances	(516,671)	(326,572)	(11,242)
	600,351	503,582	17,335

The deferred income tax components measured at respective applicable statutory rates as of December 31, 2011 and 2012 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, 2012 are as follows:

Year of expiry	R & D expenditures NT\$	Machinery and equipment NT\$ (in thousands)	Losses carried forward NT\$
2013	15,333	11,420	136,351
2014		34,027	98,908
2015		8,305	49,091
2016			41,718
2017			54,620

2019

348,676

	15,333	53,752	729,364
--	--------	--------	---------

The deferred tax assets relate to investment tax credits on research and development expenditure and purchases of machinery and equipment which will expire from 2013 to 2015. 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, 2011 and 2012.

The losses carried forward of ChipMOS Shanghai will expire after five years.

**Table of Contents**

## 17. 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, 2011 and 2012 consist of:

	2011 NT\$	December 31, 2012 NT\$ (in thousands)	US\$
Before 1998			
1998 and thereafter	1,925,365	3,214,358	110,649
	1,925,365	3,214,358	110,649

The income tax returns of ChipMOS Taiwan and ThaiLin through 2010 have been assessed by the tax authorities.

## 18. 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:

	2010 NT\$	Year Ended December 31,		US\$
		2011 NT\$	2012 NT\$	
		(in thousands)		
<u>During the year</u>				

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

Revenue		
ProMOS	2,033,342	379,009
	2,033,342	379,009
Other expenses		
MVI	148	25
SPIL	766	
	914	25
Other revenue		
ProMOS	412	98

F-32

**Table of Contents****18. RELATED PARTY TRANSACTIONS (continued)**

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.

On December 29, 2009, a director of the Company purchased US\$1,000 thousand (NT\$29,050 thousand) 8%CN due 2014 (Note 12). 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\$8,308 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.

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.

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. The transaction was early completed 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.

**19. 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:

	December 31,		
2011	2012		
NT\$	NT\$	US\$	
	(in thousands)		



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

Restricted cash and cash equivalent	285,133	174,486	6,006
Land	452,738	452,738	15,585
Buildings	5,474,164	5,118,313	176,190
Machinery and equipments	5,150,540	2,119,435	72,958
Land use right	100,498	94,254	3,245
	11,463,073	7,959,226	273,984

F-33

**Table of Contents**

## 20. SIGNIFICANT COMMITMENTS AND CONTINGENCIES

- a. As of December 31, 2012, ChipMOS Taiwan leased parcels of land from the Hsinchu and Southern Taiwan Science Park under several agreements expiring on various dates from 2017 to 2032, with renewal options.

The future minimum lease payments under the above-mentioned leases as of December 31, 2012 are as follows:

Year	Amount	
	NT\$	US\$
	(in thousands)	
2013	27,370	942
2014	27,370	942
2015	27,370	942
2016	27,370	942
Thereafter	140,955	4,852
Total minimum lease payments	250,435	8,620

- b. As of December 31, 2012, ChipMOS USA leased its office under an agreement expiring in 2015. The future minimum lease payments as of December 31, 2012 are as follow:

Year	Amount	
	NT\$	US\$
	(in thousands)	
2013	2,935	101
2014	2,845	98
2015	2,930	101
Total minimum lease payments	8,710	300

- c. As of December 31, 2012, ChipMOS Taiwan had capital commitments in relation to purchase of plant and machinery in the amount of NT\$786,804 thousand (US\$27,084 thousand).
- d. As of December 31, 2012, ThaiLin had capital commitments in relation to purchase of plant and machinery in the amount of NT\$101,396 thousand (US\$3,490 thousand).
- e. As of December 31, 2012, ChipMOS Shanghai had capital commitments in relation to purchase of plant and machinery in the amount of NT\$30,268 thousand (US\$1,042 thousand).

---

**Table of Contents**

## 20. SIGNIFICANT COMMITMENTS AND CONTINGENCIES (continued)

- 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 judgment 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. 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 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. An Order granting Freescale's motion for partial summary judgment and denying ChipMOS Taiwan's cross-motion for partial judgment was given on September 8, 2011. An Order granting in part and denying in part ChipMOS Taiwan's Motion for Reconsideration was given on March 30, 2012. The Court reinstated ChipMOS Taiwan's claims for patent misuse and its affirmative defenses for patent exhausted, mutual mistake and license. Freescale refiled its motions to strike ChipMOS Taiwan's jury demand and for summary judgment on ChipMOS Taiwan's affirmative defenses of exhaustion, mutual mistake and license. The Court has granted those motions on January 24, 2013 and ChipMOS Taiwan is in the process filing a motion for reconsideration of those rulings. No hearing date has been set for the motion for reconsideration. 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.

**Table of Contents**

20. 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. It is currently scheduled for jury trial in April 2014. On July 19, 2012, Tessera filed a stipulation with the court dismissing its breach of contract claim against the Companies. Accordingly, this litigation is now limited to only Tessera's patent infringement allegations against the Companies. A court-ordered mediation was held on December 13, 2012 but was unsuccessful. 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.

21. POST BALANCE SHEET EVENTS

On March 14, 2013, the Board of Directors of the Company approved the plans for listing ChipMOS Taiwan on Taiwan's emerging stock board in the second quarter of 2013. The Board also approved a share repurchase program for repurchase of shares by the Company of up to US\$7.5 million. The Company intends to adopt a plan to effect the repurchase program commencing in the second quarter of 2013.

---

**Table of Contents**

**22. DERIVATIVE FINANCIAL INSTRUMENTS**

ChipMOS Taiwan has entered into forward exchange contracts and foreign currency options for the years ended December 31, 2010, 2011 and 2012 to hedge its exchange rate risk on foreign-currency assets or liabilities and anticipated transactions. No derivative financial instrument was used during 2011 and 2012. Information on the derivative transactions is as follows:

a. Forward exchange contracts

As of December 31, 2011 and 2012, 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, 2012 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 New Taiwan 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, 2012, 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\$93,342 thousand (US\$ 3,213 thousand).

**Table of Contents**

## 22. DERIVATIVE FINANCIAL INSTRUMENTS (continued)

c. The estimated fair values of the Company's financial instruments are as follows:

	2011		December 31,		2012
	Carrying		Carrying		
	Value	Fair Value	Value	Fair Value	US\$
	NT\$	NT\$	NT\$	NT\$	
	(in thousands)				
<b>Assets</b>					
Cash and cash equivalents	7,357,902	7,357,902	9,319,022	9,319,022	320,792
Restricted cash and cash equivalents	285,133	285,133	174,486	174,486	6,006
Notes receivable	5,710	5,710	4,959	4,959	171
Accounts receivable	3,666,507	3,666,507	3,992,219	3,992,219	137,426
Other receivables	73,179	73,179	149,824	149,824	5,157
Long-term investments	39,121	39,121	11,635	11,635	401
Refundable deposits	21,364	21,364	21,070	21,070	725
<b>Liabilities</b>					
Bank loans	546,916	546,916	366,481	366,481	12,616
Accounts payable	1,130,730	1,130,730	890,077	890,077	30,639
Other payables	1,081,530	1,081,530	1,008,409	1,008,409	34,713
Payables to contractors and equipment suppliers	415,391	415,391	484,659	484,659	16,684
Long-term loans (including current portion)	9,168,328	9,168,328	8,967,727	8,967,727	308,699
Guarantee deposits	1,777	1,777	2,478	2,478	85

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) Long-term investments – market value for listed companies and net equity value for the others.
- 3) Refundable deposits and guarantee deposits – future values.
- 4) Long-term liabilities – based on forecasted cash flows discounted at current interest rates of similar long-term liabilities. 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.

**Table of Contents**

## 22. DERIVATIVE FINANCIAL INSTRUMENTS (continued)

- d. The following table details the Company's exposure to foreign currency risk arising from recognized assets or liabilities denominated in a currency other than the functional currency of the entity to which they relate:

	Foreign Currency	2011 Exchange Rate	Year Ended December 31,		2012 Exchange Rate	NT\$
			NT\$	Foreign Currency		
(in thousands)						
<b>Financial Assets</b>						
U.S. Dollar	187,902	30.275	5,688,423	247,704	29.04	7,193,472
Japanese Yen	586,033	0.3906	228,895	2,555,647	0.3364	859,732
<b>Financial Liabilities</b>						
U.S. Dollar	15,808	30.275	478,273	20,283	29.04	589,027
Japanese Yen	1,626,183	0.3906	635,157	1,510,406	0.3364	508,124

## 23. 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/Chairman, 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. Financial segment information is as follows:

The Company uses income (loss) from operations as the measurement for segment profit (loss) and the basis of performance assessment. There was no material inconsistency between the accounting policies of the operating segment and the accounting policies described in Note 2.

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

	2010						Consolidated Totals NT\$
	Testing NT\$	Assembly NT\$	LCD NT\$	Bumping NT\$	Others NT\$	Elimination NT\$	
(in thousands)							
Revenue from external customers	6,169,705	6,258,815	3,199,009	1,582,204			17,209,733
Revenue among intersegments	4,960	8,754			34,779	(48,493)	
Gross profit (loss)	(265,547)	185,536	698,781	(15,135)	34,779	7,316	645,730
Income (loss) from operations	(763,062)	(193,072)	493,425	(87,666)	(157,105)	198,457	(509,023)
Depreciation and amortization	3,815,236	1,039,452	1,105,752	328,981	174,574	(182,366)	6,281,629
Expenditure for segment assets	1,393,629	512,469	1,658,501	724,863	20	(52,204)	4,237,278
Segment assets	8,707,185	3,872,788	2,962,564	1,854,575	1,341	(125,485)	17,272,968

**Table of Contents**

## 23. SEGMENT AND GEOGRAPHIC INFORMATION (continued)

	2011						Consolidated Totals NT\$
	Testing NT\$	Assembly NT\$	LCD NT\$	Bumping NT\$	Others NT\$	Elimination NT\$	
	(in thousands)						
Revenue from external customers	5,899,083	5,989,067	3,985,834	2,336,953			18,210,937
Revenue among intersegments	2,298				37,449	(39,747)	
Gross profit (loss)	337,085	199,979	882,596	114,556	37,449	90,058	1,661,723
Income (loss) from operations	(96,688)	(104,048)	656,202	30,398	(149,893)	197,538	533,509
Depreciation and amortization	3,154,158	903,180	1,273,059	361,562	166,778	(181,133)	5,677,604
Expenditure for segment assets	463,602	254,368	1,188,021	412,919	373		2,319,283
Segment assets	6,080,012	2,961,591	3,254,807	1,730,487	1,134	(131,983)	13,896,048

	2012						Consolidated Totals	
	Testing NT\$	Assembly NT\$	LCD NT\$	Bumping NT\$	Others NT\$	Elimination NT\$	NT\$	US\$
	(in thousands)							
Revenue from external customers	5,563,238	6,380,612	4,356,271	2,920,439			19,220,560	661,637
Revenue among intersegments	14,070	42,407			45,263	(101,740)		
Gross profit (loss)	607,352	396,899	1,259,130	217,204	45,263	56,197	2,582,045	88,883
Income (loss) from operations	209,755	48,877	1,008,915	98,579	(149,679)	168,799	1,385,246	47,685
Depreciation and amortization	2,456,034	811,930	1,092,038	372,652	54,361	(155,136)	4,631,879	159,445
Expenditure for segment assets	508,622	414,755	977,456	903,210	38	(27,433)	2,776,648	95,582
Segment assets	4,043,681	2,314,644	3,480,615	2,408,237	547	(139,747)	12,107,977	416,798

Non-operating income (expenses) were not allocated to the reportable segments when assessing segment performance and were not disclosed here.



**Table of Contents**

## 23. SEGMENT AND GEOGRAPHIC INFORMATION (continued)

## b. Net revenue:

<u>Area</u>	Year Ended December 31,			
	2010 NT\$	2011 NT\$	2012 NT\$	US\$
	(in thousands)			
ROC	12,684,431	13,338,554	13,631,585	469,246
U.S.	3,780,058	2,762,662	1,400,707	48,217
Singapore	63,352	1,015,659	2,779,346	95,675
Korea	430,746	314,774	310,419	10,685
Japan	120,673	351,048	491,092	16,905
Others	130,473	428,240	607,411	20,909
	17,209,733	18,210,937	19,220,560	661,637

## c. Net sales to customers representing at least 10% of net total sales:

<u>Customer</u>	2010		Year Ended December 31, 2011		2012		Amount US\$
	Amount NT\$	%	Amount NT\$	%	Amount NT\$	%	
	(in thousands)						
ProMOS	2,033,342	12	1,005,728	6	320,887	2	11,046
Novatek	3,166,799	18	3,829,112	21	3,941,108	21	135,666
Micron	1,477,440	9	1,925,586	11	2,713,780	14	93,418

## 24. 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-41

---

**Table of Contents**

24. 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 indicates the carrying value of these assets may not be recoverable. In view of the sustained losses incurred by ChipMOS Shanghai, the Company reviewed its property, plant and equipment and land use rights for potential impairment as at December 31, 2011 and 2012.

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 2010, 2011 and 2012.

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**

24. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES (continued)

h. Convertible notes

Under ROC GAAP, there is no requirement to account for the fair value of a conversion feature embedded in the convertible notes 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.

As of December 31, 2011 and 2012, there were no outstanding convertible notes (See Note 12).

i. 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.

j. 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 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. Furthermore, the accounting treatment of settlements are different under ROC GAAP and U.S. GAAP. Under ROC GAAP, settlement gains or losses are equal to the changes of underfunded status plus a pro rata portion of the unrecognized prior service cost, unrecognized net gains (losses), and unrecognized transition obligations/assets, before the settlement/curtailment event multiplied by the percentage reduction in projected benefit obligation (PBO). Under U.S. GAAP, settlement gain (loss) is the total unrecognized net gain or losses including any gain or loss that arose from the measurement at the settlement date and unrecognized transition assets before settlement multiplied by the percentage reduction in PBO.

**Table of Contents****24. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES (continued)****k. 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 2012, the Company assessed that certain royalty payments are more likely than not to be disallowed by relevant tax authorities and the income tax payable was decreased by NT\$2,930 thousand (US\$101 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, 2012. 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.

**l. 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.

**m. 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 other operating expenses.

F-44

**Table of Contents**

## 24. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES (continued)

## n. 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.

	2010 NT\$	Year Ended December 31,		US\$
		2011 NT\$	2012 NT\$	
		(in thousands)		
<b>Net income attributable to ChipMOS</b>				
Net income (loss) based on ROC GAAP	1,644,732	(15,161)	721,838	24,848
Adjustments:				
Amortization of deferred charge	(446)	(334)		
Amortization of start-up costs	35			
Pension expenses	(22,075)	(17,904)	113,295	3,900
Gain on disposal of property, plant and equipment		3,972		
Depreciation of property, plant and equipment and employee dormitory building	(56,125)	(52,002)	(61,816)	(2,128)
Transfer of building and facilities from MVI	159	158	140	5
Effect of U.S. GAAP adjustments on income taxes	13,260	11,182	(11,969)	(412)
Adjustment for uncertain tax positions	3,001	(5,205)	2,930	101
Stock-based compensation	13,252	23,036	18,452	635
Loss on partial disposal of a subsidiary while retaining control		74,923		
Noncontrolling interests	21,109	23,420	(32,278)	(1,111)
Net increase (decrease) in net income	(27,830)	61,246	28,754	990
Net income based on U.S. GAAP	1,616,902	46,085	750,592	25,838
Earnings per share - basic	67.45	1.73	27.32	0.94
Earnings per share - diluted	66.35	1.71	26.52	0.91
Number of weighted average shares outstanding - basic	23,971	26,590	27,477	27,477
Number of weighted average shares outstanding - diluted	26,806	26,962	28,305	28,305



**Table of Contents**

## 24. 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 per share:

	2010	December 31,	
		2011	2012
		(in thousands)	
Basic number of shares	23,971	26,590	27,477
Add: Stock options	288	372	828
Convertible notes	2,547		
Diluted number of shares	26,806	26,962	28,305

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

	Year Ended December 31,			
	2010	2011	2012	
	NT\$	NT\$	NT\$	US\$
	(in thousands)			
Net income based on U.S. GAAP	1,616,902	46,085	750,592	25,838
Add: Amortization of discount on convertible notes	9,909			
Interest expense (net of tax)	(18,423)			
Loss on embedded derivative	181,436			
Amortization of deferred charge on convertible notes	446			
Foreign exchange gain	(11,541)			
Income attributable to ChipMOS adjusted for the effects of assumed exercise of options and conversion of notes	1,778,729	46,085	750,592	25,838

	Year Ended December 31,			
	2010	2011	2012	
	NT\$	NT\$	NT\$	US\$
	(in thousands)			
<b>Equity</b>				
Equity based on ROC GAAP	14,043,459	14,983,270	15,969,078	549,710
<b>Adjustments:</b>				
Technology transfer in payment of capital stock				
Original cost	(750,000)	(750,000)	(750,000)	(25,818)
Accumulated amortization of technology transfer in payment of capital stocks	750,000	750,000	750,000	25,818
Depreciation of property, plant and equipment and employee dormitory building	(339,993)	(391,995)	(453,811)	(15,622)
Transfer of building and facilities from MVI				
Original cost	(173,174)	(173,174)	(173,174)	(5,962)
Depreciation and gain on disposal of building and facilities from MVI	170,677	170,835	170,974	5,886
Net effect on inventories	(3)	(3)	(2)	
Pension expenses	(390,980)	(372,273)	(386,004)	(13,288)
Gain on disposal of property, plant and equipment		3,972	3,972	137
Interest capitalization	118,757	118,757	118,757	4,088
Amortization of interest capitalization	(143,781)	(143,781)	(143,781)	(4,949)
Effect of U.S. GAAP adjustments on income taxes	88,547	99,729	87,760	3,021

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

Adjustment for uncertain tax positions	(1,246)	(6,451)	(3,521)	(121)
Equity component of convertible notes	(466,151)			
Loss on redemption of convertible notes	(129,299)			
Amortization of deferred charge	(39,268)			
Amortization of discount on convertible notes	(607,569)			
Gain on embedded derivative liabilities	1,242,621			
Net decrease in equity	(670,862)	(694,384)	(778,830)	(26,810)
Equity based on U.S. GAAP	13,372,597	14,288,886	15,190,248	522,900

F-46

**Table of Contents**

## 24. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES (continued)

	2010 NT\$	Year Ended December 31,		US\$
		2011 NT\$ (in thousands)	2012 NT\$	
<b>Changes in equity based on U.S. GAAP</b>				
Balance, beginning of the year	9,433,656	13,372,597	14,288,886	491,872
Repurchase of shares			(305,835)	(10,528)
Interest payment for convertible notes	29,216	5,408		
Convertible notes conversion	1,078,008	305,569		
Issuance of option warrants	43,872	48,979	65,795	2,265
Exercise of stock option	1,450	15,982	122,869	4,230
Stock-based compensation	(13,252)	(23,036)	(18,452)	(635)
Cumulative translation adjustments	(78,466)	107,851	(17,006)	(585)
Net income for the year	1,616,902	46,085	750,592	25,838
Loss on partial disposal of a subsidiary while retaining control		(74,923)		
Reverse stock split		(239)		
Adjustment of equity method for long-term investments	(3,260)	(6,619)	(24,660)	(849)
Disposal of the Company's shares by a subsidiary			528,296	18,186
Cash dividend			(117,521)	(4,045)
Unrecognized pension expenses	(53,698)	43,619	(137,106)	(4,719)
Noncontrolling interests	1,318,169	447,613	54,390	1,870
Balance, end of the year	13,372,597	14,288,886	15,190,248	522,900

A reconciliation of the significant balance sheet accounts to the approximate amounts determined under U.S. GAAP is as follows:

	2011 NT\$	December 31,	
		2012 NT\$ (in thousands)	US\$
<b>Current assets</b>			
As reported	13,091,191	15,538,043	534,872
U.S. GAAP adjustments			
Effect of inventory adjustments:			
Depreciation of property, plant and equipment	1,005	933	32
Transfer of building and facilities from MVI	(3)	(2)	
Adjustments for uncertain tax position	(6,207)		
As adjusted	13,085,986	15,538,974	534,904
<b>Property, plant and equipment - net</b>			
As reported	13,896,048	12,107,977	416,798
U.S. GAAP adjustments			
Depreciation of property, plant and equipment	(367,710)	(427,823)	(14,727)
Transfer of building and facilities from MVI	(2,339)	(2,200)	(76)
Interest capitalization	(25,024)	(25,024)	(861)
As adjusted	13,500,975	11,652,930	401,134

Intangible assets

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

As reported	100,498	178,890	6,158
U.S. GAAP adjustments			
Deferred pension cost		(84,636)	(2,914)
As adjusted	100,498	94,254	3,244
<u>Other assets</u>			
As reported	1,154,207	912,848	31,423
U.S. GAAP adjustments			
Depreciation of employee dormitory building	(21,318)	(22,949)	(790)
Effect of U.S. GAAP adjustment on income tax	99,729	87,760	3,021
Adjustments for uncertain tax position	4,961		
As adjusted	1,237,579	977,659	33,654

F-47

**Table of Contents**

## 24. SUMMARY OF SIGNIFICANT DIFFERENCES BETWEEN ACCOUNTING PRINCIPLES FOLLOWED BY THE COMPANY AND ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN THE UNITED STATES (continued)

	2011 NT\$	December 31, 2012 NT\$ (in thousands)	US\$
<b>Other liabilities</b>			
As reported	101,331	175,447	6,039
U.S. GAAP adjustments			
Pension	372,273	301,368	10,375
Adjustment for uncertain tax position	5,205	3,521	121
As adjusted	478,809	480,336	16,535

As a result of the adjustments presented above, the approximate amounts of total assets under U.S. GAAP were NT\$27,964,159 thousand and NT\$28,275,452 thousand (US\$973,337 thousand) as of December 31, 2011, and 2012, respectively.

The following U.S. GAAP condensed statements of operations for the years ended December 31, 2010, 2011 and 2012 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.

	2010 NT\$	Year Ended December 31, 2011 NT\$		2012 NT\$	US\$
		(in thousands)			
Net revenue	17,209,733	18,210,937	19,220,560	661,637	
Cost of revenue	(16,634,902)	(16,612,519)	(16,613,181)	(571,882)	
Gross profit	574,831	1,598,418	2,607,379	89,755	
Other operating income	5,039,578	120,595	120,630	4,152	
Operating expenses	(2,670,660)	(1,307,533)	(1,275,974)	(43,923)	
Income from operations	2,943,749	411,480	1,452,035	49,984	
Non-operating income (expenses) - net	(1,197,383)	(301,892)	(461,119)	(15,873)	
Income before income tax and noncontrolling interests	1,746,366	109,588	990,916	34,111	
Net income attributable to ChipMOS	1,616,902	46,085	750,592	25,838	

**Table of Contents**

## 25. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP

## a. Income tax expense

Income (loss) before income tax and noncontrolling interests consists of the following:

	2010 NT\$	Year Ended December 31,		US\$
		2011 NT\$	2012 NT\$	
		(in thousands)		
Bermuda	(951,545)	356,956	(107,354)	(3,695)
ROC	2,242,375	285,515	1,170,260	40,284
Others	455,536	(532,883)	(71,990)	(2,478)
	1,746,366	109,588	990,916	34,111

Income tax expense (benefit) consists of:

	2010 NT\$	Year Ended December 31,		US\$
		2011 NT\$	2012 NT\$	
		(in thousands)		
Income tax for the current year				
Bermuda	6,585	6,360	6,468	223
ROC	19,366	21,527	29,027	999
Others	1,774	503	497	17
	27,725	28,390	35,992	1,239
Deferred income tax				
ROC	(143,227)	13,756	104,543	3,599
Others	(29,777)			
	(173,004)	13,756	104,543	3,599
Adjustment of prior years income taxes	29,658	(2,617)	1	
Income tax expense (benefit)	(115,621)	39,529	140,536	4,838

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:

	2010 NT\$	Year Ended December 31,		US\$
		2011 NT\$	2012 NT\$	
		(in thousands)		
Tax on pretax income (loss) at 0%				
Tax on pretax income (loss) at applicable statutory rates	525,738	76,863	230,283	7,927
Additional 10% on the unappropriated earnings		164,073	32,570	1,121
Tax effects of:				
Permanent differences				

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

Non-taxable loss on sales of investment	5,089			
Non-deductible investment losses	(135,961)	(10,982)	(12,296)	(423)
Non-deductible expense	(53,479)	(26,976)	(31,331)	(1,079)
Other	925	110	71	2
Temporary differences	32,854	8,469	1,095	38
Tax credits - utilized	(9,445)	(179,823)	(53,568)	(1,844)
- deferred	515,421	302,966	77,616	2,672
Valuation allowance	(1,127,767)	(397,672)	(224,384)	(7,724)
Losses carried forward	(61,646)	(113,727)	(133,497)	(4,595)
Losses carried forward - deferred	82,057	218,845	253,976	8,743
Deferred tax effect of change in tax rate	80,935			
Adjustment of prior year's income tax	29,658	(2,617)	1	
Income tax expense (benefit)	(115,621)	39,529	140,536	4,838

F-49

**Table of Contents**

## 25. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP (continued)

## a. Income tax expense (continued)

The components of net deferred income tax assets were as follows:

	2011 NT\$	December 31, 2012 NT\$ (in thousands)	US\$
<b>Deferred income tax assets</b>			
<b>Current</b>			
Unrealized foreign exchange loss	2,085	(103)	(4)
Tax credits	76,280	26,753	921
Losses carried forward	122,931	136,351	4,694
Loss of market price decline and obsolete and slow-moving inventories	19,413	8,183	282
Unrealized loss on sale allowances	20,167	20,899	719
Allowance for doubtful receivables	11,013	11,013	379
Others	129,474	133,895	4,609
	381,363	336,991	11,600
Valuation allowance	(311,011)	(259,166)	(8,921)
	70,352	77,825	2,679
<b>Non-current</b>			
Tax credits	70,421	42,332	1,457
Losses carried forward	877,269	593,013	20,413
Impairment loss	10,497	10,505	362
Building	611	587	20
Pension	14,086	(5,174)	(178)
Start-up costs	2	2	
Depreciation differences	26,371	148,451	5,110
Others	217,496	131,395	4,524
	1,216,753	921,111	31,708
Valuation allowances	(511,712)	(329,769)	(11,352)
	705,041	591,342	20,356



**Table of Contents**

## 25. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP (continued)

## b. 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\$
	2010 NT\$	2011 NT\$	2012 NT\$	
	(in thousands)			
<b>Components of net periodic benefit cost</b>				
Service cost	1,325	1,189	839	29
Interest cost	12,292	11,833	13,092	451
Project return on plan assets	(5,140)	(7,090)	(6,846)	(236)
<b>Net amortization and deferral:</b>				
Unrecognized net transition obligation	53	53	53	2
Curtailment loss	8,355	12,261	10,706	369
Net prior service cost	(206)	(206)	12,701	437
Net periodic benefit cost			23,157	797
Cost settlements			36,009	1,239
<b>Net periodic benefit cost</b>	<b>16,679</b>	<b>18,040</b>	<b>89,711</b>	<b>3,088</b>
<b>Recognized in other comprehensive income:</b>				
Unrecognized net transition obligation	136	136	182	6
Net prior service cost	620	323	115,210	3,966
Unrecognized actuarial loss (gain)	52,942	(44,078)	21,714	747
<b>Total recognized in other comprehensive income</b>	<b>53,698</b>	<b>(43,619)</b>	<b>137,106</b>	<b>4,719</b>
<b>Total recognized in total benefit cost and other comprehensive income</b>	<b>70,377</b>	<b>(25,579)</b>	<b>226,817</b>	<b>7,807</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\$116 thousand (US\$4 thousand) and NT\$8,727 thousand (US\$300 thousand), respectively.

	Year Ended December 31,			US\$
	2010 NT\$	2011 NT\$	2012 NT\$	
	(in thousands)			
<b>Changes in benefit obligation</b>				
Benefit obligation at beginning of year	546,385	664,467	645,554	22,222
Service cost	1,325	1,189	839	29
Interest cost	12,292	11,833	13,009	448
Plan amendments			154,899	5,332
Actuarial loss (gain)	104,465	(31,935)	(26,432)	(910)
<b>Benefit obligation at end of year</b>	<b>664,467</b>	<b>645,554</b>	<b>787,869</b>	<b>27,121</b>

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

Changes in plan assets				
Fair value of plan assets at beginning of year	314,992	343,823	371,452	12,787
Actual return on plan assets	4,415	3,732	3,260	112
Employer contribution	24,416	23,897	22,717	782
Plan amendments			(83,898)	(2,888)
	343,823	371,452	313,531	10,793
Funds status	(320,644)	(274,102)	(474,338)	(16,328)
Unrecognized actuarial loss	(47,175)	(68,878)		
Net amount recognized (recognized as accrued pension cost)	(367,819)	(342,980)	(474,338)	(16,328)

F-51

**Table of Contents**

## 25. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP (continued)

## b. Pension plans (continued)

Amounts recognized in accumulated other comprehensive income, net of noncontrolling interests, consist of:

	2011 NT\$	2012 NT\$ (in thousands)	US\$
Unrecognized net transition obligation (asset)	(2,047)	(1,623)	(56)
Net prior service cost	(3,258)	144,508	4,974
Unrecognized loss	295,773	325,241	11,196
Gross amount recognized	290,468	468,126	16,114
Noncontrolling interests	(54,804)	(95,356)	(3,282)
Total recognized in total benefit cost and other comprehensive income	235,664	372,770	12,832

	2010	2011	2012
Actuarial assumptions			
Discount rate	1.75%	1.75%	1.50%
Rate of compensation increase	4.25%	4.00%	4.00%
Expected return on plan assets	2.00%	2.00%	2.00%

The accumulated benefit obligation for all defined benefit pension plans was NT\$335,176 thousand and NT\$484,714 thousand (US\$16,686 thousand) at December 31, 2011 and 2012, 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 deposited 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\$371,452 thousand and NT\$313,531 thousand (US\$10,793 thousand) at December 31, 2011 and 2012, respectively. As of December 31, 2011 and 2012, these assets were allocated among asset categories as follows:

Asset category	2011	2012	Current maximum allocation policy
Equity securities	41%	39%	40%
Bonds	27%	27%	
Notes	8%	10%	
Government loans	1%	1%	
Cash	23%	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\$23,443 thousand (US\$807 thousand) to their pension plans during 2013.

The Company has no other post-retirement or post-employment benefit plans.

F-52

**Table of Contents**

## 25. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP (continued)

## c. Statements of cash flows

SFAS No. 17, Statement of Cash Flows has been applied. Its objectives and principles are similar to those set out in FASB ASC 230, Statement of Cash Flows. The principal differences between the standards relate to classification. Summarized cash flow data by operating, investing and financing activities are as follows:

	2010 NT\$	Year Ended December 31,		US\$
		2011 NT\$	2012 NT\$	
		(in thousands)		
Net cash inflow (outflow) from:				
Operating activities	8,504,005	6,179,594	4,391,698	151,177
Investing activities	(2,454,168)	(3,250,718)	(2,594,916)	(89,326)
Financing activities	(2,959,489)	(2,464,552)	(162,687)	(5,600)
	3,090,348	464,324	1,634,095	56,251
Effect of changes in foreign exchange rate	(16,811)	31,867	(16,535)	(569)
Cash and cash equivalents at the beginning of year	3,676,328	6,749,865	7,246,056	249,434
Cash and cash equivalents at the end of year	6,749,865	7,246,056	8,863,616	305,116

## d. Statements of comprehensive income

	2010 NT\$	Year Ended December 31,		US\$
		2011 NT\$	2012 NT\$	
		(in thousands)		
Net income based on U.S. GAAP	1,616,902	46,085	750,592	25,838
Other comprehensive income (loss):				
Translation adjustment	(78,466)	107,851	(17,006)	(585)
Unrecognized pension costs	(53,698)	43,619	(137,106)	(4,719)
Comprehensive income	1,484,738	197,555	596,480	20,534

## e. Statements of accumulated other comprehensive income (loss)

	Unrecognized Pension Costs NT\$	Translation Adjustment NT\$ (in thousands)	Accumulated Other Comprehensive Income NT\$

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

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
Addition in 2012	(137,106)	(17,006)	(154,112)
December 31, 2012	(372,770)	416,896	44,126

F-53

**Table of Contents**

## 25. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP (continued)

## f. 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%
2012	0.37% ~ 0.84%	3.50 ~ 5.50 years	141.96% ~ 189.03%	1.33%

The following table presents the stock option activity for the year ended December 31, 2011 and 2012.

	Number of Options	Weighted Average Exercise Price US\$	Aggregate Intrinsic Value US\$ (in thousands)
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	
Outstanding at December 31, 2011	2,562,172	9.47	
Granted	204,316	11.14	
Forfeited	(103,426)	10.27	
Exercised	(668,246)	6.21	
Expired	(289,268)	20.58	

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

Outstanding at December 31, 2012	1,705,548	9.02	7,791
Exercisable at December 31, 2011	1,448,892	12.77	
Exercisable at December 31, 2012	901,343	11.51	3,463
Vested and expected to vest in 2011	2,506,508	13.58	
Vested and expected to vest in 2012	1,665,338	13.16	7,575

F-54



**Table of Contents**

## 25. ADDITIONAL DISCLOSURES REQUIRED BY U.S. GAAP (continued)

## f. 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\$11.6027 on December 31, 2012 (December 31, 2011: US\$5.16) 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, 2012. The total intrinsic value of options exercised during the year ended December 31, 2012 was NT\$16,389 thousand (US\$564 thousand) (2011: NT\$3,036 thousand). The total fair value of options vested and forfeited during the year ended December 31, 2012 was NT\$86,612 thousand (US\$2,981 thousand) (2011: NT\$121,368 thousand). The number of options vested during the year ended December 31, 2012 was 409,965 (2011: 348,384). The weighted average remaining contractual term of the outstanding options at December 31, 2012 was 3.7 (2011: 3.6) years.

Total unrecognized compensation cost related to stock options is expected to be recognized over a weighted average period of 3.7 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, 2012 and changes during the year then ended:

	Number of Options	Weighted Average Fair Value US\$
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
Granted	204,316	12.24
Vested	(409,965)	4.54
Forfeited	(103,426)	10.83
Unvested options outstanding at December 31, 2012	804,205	6.81

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.

---

**Table of Contents**

26. ADOPTION OF INTERNATIONAL FINANCIAL REPORTING STANDARDS FOR THE YEAR ENDING DECEMBER 31, 2013

The Company is required by FASB ASC 250-10-s99-5 to make certain disclosures about the effect that newly issued accounting standards will have on the consolidated financial statements adopted for future periods.

- a. According to the Rule No. 0990004943 issued by the Financial Supervisory Commission (FSC) on February 2, 2010, companies with shares listed on the Taiwan Stock Exchange (TWSE) or traded on the GreTai Securities Market or Emerging Stock Market should prepare its consolidated financial statements in accordance with the Guidelines Governing the Preparation of Financial Reports by Securities Issuers, the International Financial Reporting Standards (IFRSs), International Accounting Standards (IASs), interpretations as well as related guidance translated by Accounting Research and Development Foundation (ARDF) and issued by the FSC for the year ending December 31, 2013. Therefore, the Company followed its listed subsidiary, ThaiLin and will prepare its consolidated financial statement for the year ending December 31, 2013 in accordance with IFRSs.
  
- b. IFRS 1, First-time Adoption of International Financial Reporting Standards, establishes the procedures for the Company's first consolidated financial statements prepared in accordance with IFRSs. According to IFRS 1, the Company is required to determine the accounting policies under IFRSs and retrospectively apply those accounting policies in its opening balance sheet at the date of transition to IFRSs (January 1, 2012 ; the transition date) ; except for optional exemptions and mandatory exceptions to such retrospective application provided under IFRS 1. The main optional exemptions the Company adopted are summarized as follows :
  - 1) The Company elected not to apply IFRS 3, Business Combinations, retrospectively to business combinations occurred before January 1, 2012.
  - 2) The Company elected to take the optional exemption from applying IFRS 2, Share-based Payment, retrospectively for the shared-based payment transactions granted and vested before January 1, 2012.
  - 3) The Company elected not to apply IAS 19, Employee benefits, retrospectively to employee benefits and recognize all cumulative actuarial gains and losses in retained earnings as of January 1, 2012.
  - 4) The Company elected to take the optional exemption from applying IAS 32, Financial instruments: Disclosures, retrospectively for the convertible notes transactions settled before January 1, 2012.
  - 5) The Company elected not to apply IAS 39, Financial instruments: Recognition and Measurement, retrospectively for the transactions occurred before January 1, 2012.
  - 6) The Company elected not to apply IAS 23, Borrowing Cost, retrospectively for the transactions occurred before January 1, 2012.

**Table of Contents**26. ADOPTION OF INTERNATIONAL FINANCIAL REPORTING STANDARDS FOR THE YEAR ENDING DECEMBER 31, 2013  
(continued)

c. As of December 31, 2012, based on the Company's assessment, the significant differences between the Company's current accounting policies under ROC GAAP and the ones under IFRSs are stated as follows:

## 1) Reconciliation of consolidated balance sheet as of January 1, 2012

ROC GAAP Item	Amount	Effect of Transition to IFRSs	Amount	IFRSs Item	Note
<b>Current assets</b>					
Cash and cash equivalents	7,357,902		7,357,902	Cash and cash equivalents	
Notes and accounts receivable - net of allowance for doubtful receivables and sales return	3,672,217		3,672,217	Notes and accounts receivable - net of allowance for doubtful receivables and sales return	
Other receivables - net of allowance for doubtful receivables	73,179		73,179	Other receivables - net of allowance for doubtful receivables	
Inventories - net	1,533,866		1,533,866	Inventories - net	
Deferred income tax - current	76,559	(76,559)			c)
Restricted cash and cash equivalents	285,133		285,133	Restricted cash and cash equivalents	
Prepaid expenses and other current assets	92,335	10,743	103,078	Prepaid expenses and other current assets	b), d)
<b>Total current Assets</b>	<b>13,091,191</b>	<b>(65,816)</b>	<b>13,025,375</b>	<b>Total current Assets</b>	
<b>Long-term investments</b>					
Financial assets carried at cost	39,121		39,121	Financial assets carried at cost	
<b>Total long-term investments</b>	<b>39,121</b>		<b>39,121</b>	<b>Total long-term investments</b>	
<b>Property, plant and equipment - net</b>	<b>13,896,048</b>	<b>468,146</b>	<b>14,364,194</b>	<b>Property, plant and equipment</b>	<b>d), e)</b>
<b>Intangible assets - net</b>	<b>100,498</b>	<b>(100,498)</b>			<b>b)</b>
<b>Other assets</b>					
Refundable deposits	21,364		21,364	Refundable deposits	
Deferred charges	130,157	(130,157)			d)
Deferred income tax - non current	600,351	123,924	724,275	Deferred income tax - non current	a), c)
Others	402,335	(281,775)	120,560	Others	a), b), d), e)
<b>Total other assets</b>	<b>1,154,207</b>	<b>(288,008)</b>	<b>866,199</b>	<b>Total other assets</b>	
<b>Total assets</b>	<b>28,281,065</b>	<b>13,824</b>	<b>28,294,889</b>	<b>Total assets</b>	
<b>Current liabilities</b>					
Bank loans	546,916		546,916	Bank loans	
Accounts payable	1,130,730		1,130,730	Accounts payable	
Income tax payable	20,283		20,283	Income tax payable	
Other payables	1,081,530		1,081,530	Other payables	
Payables to contractors and equipment suppliers	415,391		415,391	Payables to contractors and equipment suppliers	
Deferred credit	2,383		2,383	Deferred credit	
Current portion of long-term loans	684,028		684,028	Current portion of long-term loans	

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

Accrued expenses and other current liabilities	830,903		830,903	Accrued expenses and other current liabilities	
<b>Total current liabilities</b>	<b>4,712,164</b>		<b>4,712,164</b>	<b>Total current liabilities</b>	
Long-term liabilities					
Long-term loans	8,484,300		8,484,300	Long-term loans	
Long-term deferred revenue	95,304		95,304	Long-term deferred revenue	
<b>Total long-term liabilities</b>	<b>8,579,604</b>		<b>8,579,604</b>	<b>Total long-term liabilities</b>	
Other liabilities					
Accrued pension cost	4,250	278,619	282,869	Accrued pension cost	a)
Guarantee deposits	1,777		1,777	Guarantee deposits	
<b>Total other liabilities</b>	<b>6,027</b>	<b>278,619</b>	<b>284,646</b>	<b>Total other liabilities</b>	
<b>Total Liabilities</b>	<b>13,297,795</b>	<b>278,619</b>	<b>13,576,414</b>	<b>Total Liabilities</b>	
Equity					
Capital stock	39,041		39,041	Capital stock	
Capital surplus	15,201,353	(77,440)	15,123,913	Capital surplus	f)
Accumulated losses	(3,787,431)	(130,562)	(3,917,993)	Accumulated losses	a), f)
Cumulative translation adjustments	433,902		433,902	Foreign currency translation reserve	
Treasury stock	(924,781)		(924,781)	Treasury stock	
<b>Total Shareholders' Equity</b>	<b>10,962,084</b>	<b>(208,002)</b>	<b>10,754,082</b>	<b>Equity attributable to shareholders of the parent</b>	
Noncontrolling interests	4,021,186	(56,793)	3,964,393	Noncontrolling interests	a)
<b>Total equity</b>	<b>14,983,270</b>	<b>(264,795)</b>	<b>14,718,475</b>	<b>Total equity</b>	
<b>Total liabilities and equity</b>	<b>28,281,065</b>	<b>13,824</b>	<b>28,294,889</b>	<b>Total liabilities and equity</b>	

F-57

**Table of Contents**

26. ADOPTION OF INTERNATIONAL FINANCIAL REPORTING STANDARDS FOR THE YEAR ENDING DECEMBER 31, 2013  
(continued)

- a) The Company arranged an actuarial valuation in accordance with IAS 19 Employee Benefits . As of January 1, 2012, accrued pension cost was adjusted for an increase of NT\$278,619 thousand, prepaid pension cost was adjusted for a decrease of NT\$33,541 thousand, deferred income tax assets was adjusted for an increase of NT\$47,365 thousand, retained earnings was adjusted for a decrease of NT\$208,002 thousand and noncontrolling interests was adjusted for a decrease of NT\$56,793 thousand.
- b) Land use rights of NT\$100,498 thousand was reclassified to prepaid expense and other current assets of NT\$2,476 thousand and other assets of NT\$98,022 thousand.
- c) Deferred income tax-current of NT\$76,559 thousand was reclassified to deferred income tax-noncurrent.
- d) Deferred charges of NT\$130,157 thousand was reclassified to prepaid expense and other current assets of NT\$8,267 thousand, fixed assets of NT\$108,352 thousand, and other assets of NT\$13,538 thousand.
- e) Employee dormitory buildings of NT\$248,429 thousand and idle assets of NT\$111,365 thousand were reclassified to fixed assets.
- f) Capital surplus of long-term investments of NT\$77,440 thousand was reclassified to retained earnings.

**Table of Contents**26. ADOPTION OF INTERNATIONAL FINANCIAL REPORTING STANDARDS FOR THE YEAR ENDING DECEMBER 31, 2013  
(continued)

## 2) Reconciliation of consolidated balance sheet as of December 31, 2012

ROC GAAP Item	Amount	Effect of Transition to IFRSs	Amount	IFRSs Item	Note
<b>Current assets</b>					
Cash and cash equivalents	9,319,022		9,319,022	Cash and cash equivalents	
Notes and accounts receivable - net of allowance for doubtful receivables and sales return	3,997,178		3,997,178	Notes and accounts receivable - net of allowance for doubtful receivables and sales return	
Other receivables - net of allowance for doubtful receivables	149,824		149,824	Other receivables - net of allowance for doubtful receivables	
Inventories - net	1,687,889		1,687,889	Inventories - net	
Deferred income tax - current	77,825	(77,825)			c)
Restricted cash and cash equivalents	174,486		174,486	Restricted cash and cash equivalents	
Prepaid expenses and other current assets	131,819	3,117	134,936	Prepaid expenses and other current assets	b), d)
<b>Total current Assets</b>	<b>15,538,043</b>	<b>(74,708)</b>	<b>15,463,335</b>	<b>Total current Assets</b>	
<b>Long-term investments</b>					
Financial assets carried at cost	11,635		11,635	Financial assets carried at cost	
<b>Total long-term investments</b>	<b>11,635</b>		<b>11,635</b>	<b>Total long-term investments</b>	
<b>Property, plant and equipment - net</b>	<b>12,107,977</b>	<b>367,306</b>	<b>12,475,283</b>	<b>Property, plant and equipment</b>	<b>d), e)</b>
<b>Intangible assets - net</b>	<b>178,890</b>	<b>(178,890)</b>			<b>a), b)</b>
<b>Other assets</b>					
Refundable deposits	21,070		21,070	Refundable deposits	
Deferred charges	96,919	(96,919)			d)
Deferred income tax - non current	503,582	130,426	634,008	Deferred income tax non current	a), c)
Others	291,277	(179,250)	112,027	Others	b), e)
<b>Total other assets</b>	<b>912,848</b>	<b>(145,743)</b>	<b>767,105</b>	<b>Total other assets</b>	
<b>Total assets</b>	<b>28,749,393</b>	<b>(32,035)</b>	<b>28,717,358</b>	<b>Total assets</b>	
<b>Current liabilities</b>					
Bank loans	366,481		366,481	Bank loans	
Accounts payable	890,077		890,077	Accounts payable	
Income tax payable	28,880		28,880	Income tax payable	
Other payables	1,008,409		1,008,409	Other payables	
Payables to contractors and equipment suppliers	484,659		484,659	Payables to contractors and equipment suppliers	
Deferred credit	2,291		2,291	Deferred credit	
Current portion of long-term loans	2,227,800		2,227,800	Current portion of long-term loans	
Accrued expenses and other current liabilities	766,994		766,994	Accrued expenses and other current liabilities	
<b>Total current liabilities</b>	<b>5,775,591</b>		<b>5,775,591</b>	<b>Total current liabilities</b>	

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

Long-term liabilities				
Long-term loans	6,739,927		6,739,927	Long-term loans
Long-term deferred revenue	89,350		89,350	Long-term deferred revenue
<b>Total long-term liabilities</b>	<b>6,829,277</b>		<b>6,829,277</b>	<b>Total long-term liabilities</b>
Other liabilities				
Accrued pension cost	172,969	207,692	380,661	Accrued pension cost a)
Guarantee deposits	2,478		2,478	Guarantee deposits
<b>Total other liabilities</b>	<b>175,447</b>	<b>207,692</b>	<b>383,139</b>	<b>Total other liabilities</b>
<b>Total Liabilities</b>	<b>12,780,315</b>	<b>207,692</b>	<b>12,988,007</b>	<b>Total Liabilities</b>
Equity				
Capital stock	39,013		39,013	Capital stock
Capital surplus	11,583,898	(77,440)	11,506,458	Capital surplus f)
Retained earnings	531,794	(152,615)	379,179	Retained earnings a), f)
Unrealized pension cost	(42,642)	42,642		a)
Cumulative translation adjustments	416,896		416,896	Foreign currency translation reserve
Treasury stock	(635,741)		(635,741)	Treasury stock
<b>Total Shareholders' Equity</b>	<b>11,893,218</b>	<b>(187,413)</b>	<b>11,705,805</b>	<b>Equity attributable to shareholders of the parent</b>
<b>Noncontrolling interests</b>	<b>4,075,860</b>	<b>(52,314)</b>	<b>4,023,546</b>	<b>Noncontrolling interests a)</b>
<b>Total equity</b>	<b>15,969,078</b>	<b>(239,727)</b>	<b>15,729,351</b>	<b>Total equity</b>
<b>Total liabilities and equity</b>	<b>28,749,393</b>	<b>(32,035)</b>	<b>28,717,358</b>	<b>Total liabilities and equity</b>

F-59

**Table of Contents**26. ADOPTION OF INTERNATIONAL FINANCIAL REPORTING STANDARDS FOR THE YEAR ENDING DECEMBER 31, 2013  
(continued)

- a) The Company arranged an actuarial valuation in accordance with IAS 19 Employee Benefits. As of December 31, 2012, deferred pension cost was adjusted for a decrease of NT\$84,636 thousand, accrued pension cost was adjusted for an increase of NT\$207,692 thousand, deferred income tax assets was adjusted for an increase of NT\$52,601 thousand, retained earnings was adjusted for a decrease of NT\$230,055 thousand, unrealized pension cost was adjusted for a decrease of NT\$42,642 thousand and noncontrolling interests was adjusted for a decrease of NT\$52,314 thousand.
- b) Land use rights of NT\$94,254 thousand was reclassified to prepaid expense and other current assets of NT\$2,381 thousand and other assets of NT\$91,873 thousand.
- c) Deferred income tax-current of NT\$77,825 thousand was reclassified to deferred income tax-noncurrent.
- d) Deferred charges of NT\$96,919 thousand was reclassified to prepaid expense and other current assets of NT\$736 thousand and fixed assets of NT\$96,183 thousand.
- e) Employee dormitory buildings of NT\$221,115 thousand and idle assets of NT\$50,008 thousand were reclassified to fixed assets.
- f) The capital surplus of long-term investments of NT\$77,440 thousand was reclassified to retained earnings.

## 3) Reconciliation of consolidated statement of comprehensive income for the year ended December 31, 2012

Item	ROC GAAP	Effect of Transition to IFRSs	IFRSs	Note
	Amount		Amount	
Net revenues	19,220,560		19,220,560	
Cost of revenue	16,638,515	26,324	16,664,839	a), b)
Gross profit	2,582,045	(26,324)	2,555,721	
Operating expenses	1,196,799	1,992	1,198,791	a), b)
Income from operations	1,385,246	(28,316)	1,356,930	
Net non-operating loss	(464,401)	82,486	(381,915)	a)
Income before income tax and noncontrolling interests	920,845	54,170	975,015	
Income tax expense	(131,497)	(9,209)	(140,706)	b)
Income before noncontrolling interests	789,348	44,961	834,309	
Net income attributable to noncontrolling interests	(67,510)	(7,607)	(75,117)	b)
Net income attributable to ChipMOS	721,838	37,354	759,192	



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

- a) Since the reclassification of other assets to fixed assets, the depreciation recognized in nonoperating expense of NT\$82,486 thousand was reclassified to cost of revenue of NT\$80,069 thousand and operating expense of NT\$2,417 thousand.
  
- b) The Company arranged an actuarial valuation in accordance with IAS 19 Employee Benefits for the year ended December 31, 2012, pension cost recognized in cost of revenue was adjusted for a decrease of NT\$53,745 thousand, pension cost recognized in operating expense was adjusted for a decrease of NT\$425 thousand, income tax expense was adjusted for an increase of NT\$9,209 thousand, and noncontrolling interests was adjusted for an increase of NT\$7,607 thousand.

F-60