ChipMOS TECHNOLOGIES (Bermuda) LTD. No. 1, R&D Road 1, Hsinchu Science Park Hsinchu, Taiwan Republic of China

Shou-Kang Chen Chief Financial Officer

July 13, 2009

Via FACSIMILE and EDGAR

Brian Cascio Accounting Branch Chief Division of Corporation Finance Mail Stop 3030 United States Securities and Exchange Commission Washington, D.C. 20549

Re: ChipMOS TECHNOLOGIES (BERMUDA) LTD.
Form 20-F for the fiscal year ended December 31, 2008
Filed June 4, 2009
File No. 000-31106

Dear Mr. Cascio:

We are responding to the Staff of the Division of Corporation Finance (the "Staff")'s letter dated June 30, 2009, regarding the above-referenced filing of ChipMOS TECHNOLOGIES (BERMUDA) LTD. ("ChipMOS Bermuda" or the "Company"). We set forth below our responses to the comments in the letter. For ease of reference, we have included each of the Staff's comments in its entirety in bold preceding our corresponding response.

Form 20-F for the fiscal year ended December 31, 2008

Item 5. Operating and Financial Review and Prospects, page 53

Results of Operations, page 61

1. We reference the discussion of "capacity utilization rate" in explaining the fluctuations in net revenue and cost of revenues for the year ended December 31, 2008. Please tell us and revise future filings to explain how you derive the

capacity utilization rate and how a fluctuation in this rate impacts revenues and cost of sales. Your discussion in future filings should elaborate on the underlying reasons why capacity utilization rate and average selling prices has fluctuated and the impact on your operations.

Response to Comment 1:

The Company derives capacity utilization rate for assembly operations as follows: For any period of time selected, we divide the total number of units actually produced by our assembly facilities during the period by the maximum number of units that these facilities are capable of producing during the period. The quotient is our assembly capacity utilization rate for the selected period.

The Company derives capacity utilization rate for testing operations as follows: For any period of time selected, we divide the total number of hours of actual use of our facilities' testing equipment units during the period by the maximum number of hours during which these equipment units are capable of being used during the period. The quotient is our testing capacity utilization rate for the selected period.

Our assembly and testing capacity utilization rates generally increase in correlation to increases in the total volume of our customer orders. These rates generally decrease in correlation to decreases in the total volume of our customer orders.

Our gross revenue generally is determined as the product of the total volume of our customer orders multiplied by the average selling price per assembly or testing deliverable unit, as the case may be. As a result, in periods during which average selling prices do not fluctuate significantly, increases and decreases in our capacity utilization rates generally correlate to increases and decreases in our gross revenue. In periods during which average selling prices increase significantly, however, higher average selling prices will reduce the negative impact on our gross revenue of any decreases in our capacity utilization rates. Similarly, in periods during which average selling prices decrease significantly, lower average selling prices will reduce the positive impact on our gross revenue of any increases in our capacity utilization rates.

The Company incurs significant fixed costs in operating our assembly and testing facilities. For this reason, any decreases in our cost of goods sold during a particular period of time generally occur at a slower rate than decreases during the same period in our gross revenue due to lower capacity utilization rates, lower average selling prices, or both.

Also as a result, our gross margin and profitability generally decreases in correlation to decreases in our capacity utilization rates, decreases in our average selling prices, or both. Similarly, our gross margin and profitability generally increases in correlation to increases in our capacity utilization rates, increases in our average selling prices, or both. Due to the cyclical nature of semiconductor industry, customer orders may change significantly causing fluctuation in our capacity utilization rate and average selling price.

We will include this discussion in future filings.

Non-GAAP Financial Information Derived from US GAAP Measures, page 78

2. We note the presentation of non-GAAP Adjusted Net Loss and Net Loss per Share (Basic and Diluted). We see that you include adjustments for items that appear to be recurring. Please tell us how your presentation is appropriate under Item 10(e)(1)(ii)(B) of Regulation S-K and question 8 of the Staff's Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures.

Response to Comment 2:

The presentation in Item 5 of non-GAAP Adjusted Net Loss and Net Loss per Share (Basic and Diluted) includes adjustments for the following items that are related to the Company's outstanding convertible notes:

— Change in fair value of embedded derivative liabilities;

and

— Amortization of discount on convertible notes under the line of Non-Operating Income (Expenses), Net

We adjust the items mentioned above as we consider the items infrequent and unusual and the use of non-GAAP measures will demonstrate the true operating performance of company. Although the above items appear to be recurring (we provide non-GAAP measures starting from Q1 2007), we consider the non-GAAP measures provide more useful information for the investors in enabling them to perform additional analysis of past, present and future operating performance and as a supplemental means to evaluate our core operating results. Therefore, our presentation is appropriate under Item 10(e)(1)(ii)(B) of Regulation S-K.

We consider it appropriate under Question 8 of the Staff's Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures as the financial impact of the items will disappear or become immaterial within a near-term finite period. i.e. our convertible notes mature in five years (i.e. in 2009 and 2011).

We have included in our Form 20-F page 78, the disclosure required under Question 8 of the Staff's Frequently Asked Questions Regarding the Use of Non-GAAP Financial Measures:-

(i) the manner in which management uses the non-GAAP measure to conduct or evaluate its business

Included in first and second paragraphs and footnotes 2 and 3 of page 78, we included the manner in which management uses the non-GAAP measure:

- "The two non-cash items excluded are changes in the fair value of the embedded derivative liabilities and amortization of discount on convertible notes. These items are considered by the management to be outside of our core operating results. For example, changes in the fair value of the embedded derivative liabilities relate heavily to the price of our company's common shares, interest rate and volatility, all of which are difficult to predict and outside of the control of our management."
- "For these reasons, our management uses non-GAAP adjusted measures of net income and non-GAAP net income per share, both derived from US GAAP measures to evaluate the performance of our core businesses and to estimate future core performance. In addition, this information facilitates our management's internal comparisons to our historical operating results as well as to the operating results of our competitors."
- "The management of our company believes excluding non-cash special item for the changes in the fair value of the embedded derivative liabilities from its non-GAAP financial measure of net income is useful for itself and investors as such gain does not have any impact on cash available to our company."
- "The management of our company believes excluding non-cash amortization expense of discount on convertible notes from its non-GAAP financial measure of net income is useful for itself and investors as such expense does not have any impact on cash available to our company."

(ii) the economic substance behind management's decision to use such a measure

Included in second paragraph of page 78, we have included the economic substance behind management's decision to use such a measure: "For these reasons, our management uses non-GAAP adjusted measures of net income and non-GAAP net income per share, both derived from US GAAP measures to evaluate the performance of our core businesses and to estimate future core performance. In addition, this information facilitates our management's internal comparisons to our historical operating results as well as to the operating results of our competitors."

(iii) the material limitations associated with use of the non-GAAP financial measure as compared to the use of the most directly comparable GAAP financial measure

Included in third paragraph of page 78, we have included the material limitations associated with the use of the non-GAAP financial measure as compared to the use of the most directly comparable GAAP financial measure: "However, readers are reminded that non-GAAP numbers are merely a supplement to, and not a replacement for, ROC GAAP or US GAAP financial measures. It should be noted as well that our non-GAAP information may be different from the non-GAAP information provided by other companies."

(iv) the manner in which management compensates for these limitations when using the non-GAAP financial measure

Included in third paragraph of page 78, we have included the manner in which management compensates for these limitations when using the non-GAAP financial measure: "They should be read in conjunction with ROC GAAP and US GAAP financial measures."

(v) the substantive reasons why management believes the non-GAAP financial measure provides useful information to investors

Included in third paragraph and footnotes 2 and 3 of page 78, we have included the substantive reasons why management believes the non-GAAP financial measure provides useful information to investors:

• "Our management finds these supplemental non-GAAP measures to be useful, and believes these non-GAAP measures are useful to investors in enabling them to perform additional analyses of past, present and future operating performance and as a supplemental means to evaluate our core operating results."

- "The management of our company believes excluding non-cash special item for the changes in the fair value of the embedded derivative liabilities
 from its non-GAAP financial measure of net income is useful for itself and investors as such gain does not have any impact on cash available to our
 company."
- "The management of our company believes excluding non-cash amortization expense of discount on convertible notes from its non-GAAP financial measure of net income is useful for itself and investors as such expense does not have any impact on cash available to our company."

Item 7. Major Shareholders and Related Party Transactions, page 91

3. We note your disclosure that the shareholding by Mosel Vitelic Inc. excludes shares owned by PacMOS Technologies Holdings Limited that may be beneficially owned by Mosel. Please explain the relationship between PacMOS and Mosel and how you determined that the shares held by PacMOS should be excluded from Mosel's shareholding.

Response to Comment 3:

The Company understands that Mosel is the beneficial owner of approximately 32% of the total number of PacMOS' outstanding shares. We also understand that another PacMOS shareholder in which Mosel holds no beneficial ownership interest is the beneficial owner of approximately 43% of the total number of PacMOS' outstanding shares. We are not aware of any voting or other arrangements among any of PacMOS' shareholders that would result in Mosel or any other PacMOS shareholder having the direct or indirect power to direct the management and policies of PacMOS. Considering these circumstances, we determined that Mosel should not be treated as having a "controlling interest" in PacMOS, and therefore that ChipMOS shares owned by PacMOS (approximately 3.8% of the total number of ChipMOS' outstanding shares) should be excluded from Mosel's shareholding.

Item 18. Financial Statements, page 114

4. We note that your financial statements appear at the end of your filing, after the signature pages. In your future filings, please ensure that you have incorporated your financial statements into Item 18 of your Form 20-F by reference to where the financial statements actually appear.

Response to Comment 4:

In the Company's future filings, we will incorporate our financial statements into Form 20-F Item 18 of our Form 20-F by reference to where the financial statements actually appear.

Note 18. Income Tax Expense (Benefit), page F-33

5. Under (c), we reference the header "net non-current deferred income tax liabilities" which includes a valuation allowance adjustment. Please tell us if you intended to reference net non-current deferred income tax assets. Alternatively, please explain why you have recorded a valuation allowance against deferred tax liabilities.

Response to Comment 5:

The disclosure presented in Note 18 was prepared to comply with accounting principles generally accepted in the Republic of China (ROC GAAP). On the balance sheet, there was no non-current deferred income tax asset as of December 31, 2007 and 2008 as it was shown net of non-current deferred tax liabilities and it was referenced to Notes 2 and 18. The Company has not recorded a valuation allowance against deferred tax liabilities. The valuation allowance of NT\$1,243,186 thousand was made against losses carried forward of NT\$612,329 thousand, tax credits of NT\$666,391 thousand and others of NT\$398,323 thousand. We refer to Note 26c, which was prepared to comply with accounting principles generally accepted in the United States (US GAAP). Note 26c showed non-current deferred tax assets and liabilities separately. A valuation allowance of NT\$1,243,186 thousand was made against non-current deferred tax assets of NT\$1,682,012 thousand.

Note 25. Summary of Significant Differences Between Accounting Principles Followed by the Company and Accounting Principles Generally Accepted in the United States, page F-44

6. We see from the statement of operations on page F-6 that you recognize gain on disposal of plant and equipment and disposal of land use rights as non-operating income under ROC GAAP. Please tell us how you present these gains under U.S. GAAP. Please also tell us the nature of "other" non-operating income and explain how you present these items under U.S. GAAP.

Response to Comment 6:

The Company recognizes gain on disposal of plant and equipment and disposal of land use rights as non-operating income under ROC GAAP and US GAAP. "Other" non-operating income included gain on disposal of scrap material and tooling of approximately NT\$64 million and other miscellaneous income of individually immaterial amounts, and was classified in the same line item under US GAAP.

7. Please tell us the nature of the line item "interest in bonuses paid by subs" on page F-7 and how you present this item under U.S. GAAP. As a related matter, please tell us the nature of the line item "recovery of allowance for doubtful receivables" on page F-9 and how this is presented under U.S. GAAP. Please clarify in future filings, as appropriate.

Response to Comment 7:

The line item "interest in bonuses paid by subsidiaries" represented ChipMOS Bermuda's share of ChipMOS Taiwan and ThaiLin's bonuses paid to employees, directors and supervisors. We refer to the description in Note 17 of legal requirements under ChipMOS Taiwan and ThaiLin's Articles of Incorporation to appropriate a certain percentage of accumulated net income as bonuses to employees, directors and supervisors. We also refer to the information provided in Note 25a indicating that prior to January 1, 2008, under ROC GAAP, these bonuses were recorded as appropriations of accumulated earnings when declared. Under US GAAP, these bonuses were accrued based on the accumulated earnings in the current year and recorded in the respective expenses item based on the cost centers of the staff concerned. There is no such line item "interest in bonuses paid by subsidiaries" under US GAAP. After January 1, 2008, there are no differences between ROC GAAP and US GAAP.

The line item "recovery of allowance for doubtful receivables" represented reversal of allowance for 1) doubtful receivables and 2) sales return. We refer to Note 6 which presented the changes in allowance for doubtful receivables and sales return. Under ROC GAAP and US GAAP, allowance and reversal of allowance for doubtful receivables were recorded in sales and marketing expenses. Allowance and reversal of allowance for sales return were recorded in sales discount and returns. We will clarify in future filings, as appropriate.

Note 26. Additional Disclosures Required by U.S. GAAP, page F-52

(i) Convertible Notes page F-61

8. We see that your convertible debt has conversion options that are accounted for as derivative liabilities under SFAS 133 and EITF 00-19. Please revise future filings to disclose the terms of the conversion option, including the nature of the adjustments that require the option to be recorded as a derivative.

Response to Comment 8:

The terms of the conversion option were disclosed in Note 14. Note 25l described that under SFAS No. 133 and EITF 00-19, the Company is required to bifurcate and separately account for the conversion feature as an embedded derivative. We will revise future filings to disclose the terms of the conversion option, including the nature of the adjustments that require the option to be recorded as a derivative, through reference in Note 14 (or its equivalent) to Notes 25l and 26i (or their equivalents).

Item 19. Exhibits, page 114

- 9. It appears that you have not filed several material agreements as exhibits which you have disclosed under Related Party Transactions on page 92. We note for example:
 - The exclusive services agreement between ChipMOS Hong Kong and ChipMOS Shanghai, dated April 20, 2004;
 - The November 2008 revised subcontracting agreement with ProMOS Technologies Inc.; and
 - The May 2009 revised subcontracting agreement with ProMOS.

Please provide us with your legal analysis for not filing these agreements as exhibits. If an agreement has been amended you must file either the amendment or the complete amended agreement. Refer to Item 19 of Form 20-F.

Response to Comment 9:

For the reasons summarized in the analysis below, the Company determined that the following agreements should not be filed as exhibits under Item 19:

(1) Exclusive Service Agreement dated April 22, 2004, by and between ChipMOS Far East Limited* ("ChipMOS Hong Kong") and ChipMOS TECHNOLOGIES (Shanghai) LTD. ("ChipMOS Shanghai"). This agreement contains terms and conditions for testing, assembly and warehousing and logistics services provided on an exclusive basis by ChipMOS Shanghai for the benefit of ChipMOS Hong Kong and its customers and for related purchases by ChipMOS Hong Kong of equipment used to provide the services. The Company is the sole shareholder of ChipMOS Hong Kong. The Company holds a convertible promissory note that may be converted into a controlling equity interest in ChipMOS Shanghai's sole shareholder. This would in turn result in the Company having an indirect controlling interest in ChipMOS Shanghai on conversion of this note. The services and equipment purchase transactions contemplated by this agreement are unusual in nature and conditions for the parties. Therefore the Company included Item 7 disclosure regarding this agreement according to Item 7(B)(1)'s requirements. Payments under this agreement are not material in amount to the Company and the terms and conditions of this agreement are not otherwise material in significance to the Company. Therefore this agreement is not material to the Company and is not required to be filed as an exhibit under Instruction to Item 19/Instructions To Exhibits 4(a). This agreement also does not fall within the other categories of agreements required to be filed as an exhibit under Instruction to Item 19/Instructions To Exhibits. Consequently the Company determined that this agreement should not be filed as an exhibit under Item 19.

- * Effective May 31, 2005, the name of ChipMOS Far East Limited was changed to ChipMOS TECHNOLOGIES (H.K.) Limited.
- (2) Third Addendum to Subcontracting Agreement dated May 11, 2009, by and between ChipMOS Taiwan and ProMOS Technologies Inc. ("ProMOS"). This agreement contains terms and conditions for the grant by ProMOS to ChipMOS Taiwan of pledge, lien and equipment mortgage security interests in wafers and other collateral as security against ProMOS' obligations to pay accounts receivable in default and for related sales and payments. This agreement replaced and superseded prior agreements providing for security interests and payment procedures related to ProMOS' accounts receivable payment default, including the Addendum to Subcontracting Agreement dated November 13, 2008, by and between ChipMOS Taiwan and ProMOS. The Company is the sole shareholder of ChipMOS Taiwan. ProMOS is an affiliate of Mosel Vitalic Inc., which indirectly owned approximately 13.3% of the Company's outstanding shares as of March 31, 2009. The security interests, collateral, sales and payments transactions contemplated by this agreement are unusual in nature and conditions for ChipMOS Taiwan. The Company therefore included Item 7

disclosure regarding this agreement according to Item 7(B)(1)'s requirements. Payments under this agreement are not material in amount to the Company and the terms and conditions of this agreement are not otherwise material in significance to the Company. Therefore this agreement is not material to the Company and is not required to be filed as an exhibit under Instruction to Item 19/Instructions To Exhibits 4(a). This agreement also does not fall within the other categories of agreements required to be filed as exhibits under Instruction to Item 19/Instructions To Exhibits. For these reasons the Company determined that this agreement also should not be filed as an exhibit under Item 19.

The Company hereby acknowledges that:

- the Company is responsible for the adequacy and accuracy of the disclosure in the filing;
- Staff comments or changes to the disclosure in response to Staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the Company may not assert Staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please do not hesitate to contact me at 886-3-563-3988 or Remsen Kinne of K&L Gates LLP, the Company's legal counsel, at (415) 882-8200 to discuss this letter.

Sincerely,

ChipMOS TECHNOLOGIES (BERMUDA) LTD.

/s/ Shou-Kang Chen Shou-Kang Chen Chief Financial Officer