

Mail Stop 6010

October 25, 2007

Dr. Yang Zhao  
MEMSIC, Inc.  
One Tech Drive, Suite 235  
Andover, MA 01810

**Re: MEMSIC, Inc.  
Registration Statement on Form S-1  
Filed September 28, 2007  
File No. 333-146377**

Dear Dr. Zhao:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Prospectus Cover Page

1. Please confirm that any preliminary prospectus you circulate will include all non-Rule 430A information. This includes the price range and related information based on a *bona fide* estimate of the public offering price within that range. Also note that we may have additional comments after you include this information.
2. Please furnish copies of any graphics you intend to use in your prospectus.
3. Please remove the reference to "Sole Book-Runner."

Overview, page 1

4. Please provide us independent, objective support for the statements regarding your leadership and market standing. For example, you state on page 1 of your prospectus that you “are a pioneer in providing accelerometers to China’s fast-growing mobile phone market and are among the leading providers of accelerometers for image projector supplying to several Japanese OEMs,” that your products “have been used by leading international and China-based manufacturers” and that one of your customers includes “a leading European automotive safety systems supplier.” Please also provide us with independent support for your statement that the thermal technology you are using to produce MEMS accelerometers has a “higher shock tolerance, lower failure rate and lower cost relative to alternative mechanical solutions.”
5. You state on page 1 that you have shipped more than 20 million units since 2004, yet you state on page 38 that you have shipped more than 19 million units since that time. Please reconcile these two statements.
6. Please tell us the criteria used to identify Autoliv Electronics. Also, tell us whether there are any other customers that satisfy those criteria.

Industry Overview, page 2

7. Please provide us with copies of the sources of all third-party data included in the prospectus. Please mark the relevant sections of those reports and key them to the disclosure. Please tell us whether:
  - the data is publicly available,
  - the sources of the cited data have consented to your use of their names and data,
  - you commissioned any of the data, or
  - it was prepared for use in this registration statement.

Also, tell us about any other relationship between you and the authors of the data.

Risk Factors, page 10

8. Please note that your risk factors must immediately follow a one-page prospectus cover or your prospectus summary. Although we do not object to the placement of your table of contents, please relocate the disclosure on page ii to a more appropriate section of your document.

We depend and expect to continue to depend on a limited number ..., page 12

9. Please expand this section and page 70 to identify the customers that represent over 10% of your revenues.

Failure of suppliers to deliver on a timely basis ..., page 14

10. Please clarify whether you have written agreements with your two suppliers of ceramic packaging materials and your third party packaging service provider disclosed on page 17. In addition, expand the appropriate section to discuss the material terms of such agreements, such as the duration and cancellation provisions of the agreements. Also, tell us why you have not filed the agreements as exhibits.

Use of Proceeds, page 32

11. Please revise to state the approximate amount intended to be used for each purpose for which the net proceeds from the securities to be offered are intended to be used. Refer to Item 504 of Regulation S-K.

Capitalization, page 34

12. Please revise to remove the caption “cash and cash equivalents” from the capitalization table.
13. Please revise the table to separately show a column for the pro forma effect of the conversion of the preferred shares.

Critical Accounting Policies, page 45

14. We note that on pages 48, 89 and F-23 you refer to using the valuation of an independent third party when determining fair value of your common stock and valuing assets acquired in the business combination. While management may elect to take full responsibility for valuing the equity instruments and assets, if you choose to continue to refer to the expert in any capacity, please revise the filing to name the independent valuation expert and include its consent as an exhibit. Refer to Rule 436 and Item 601(b)(23) of Regulation S-K.

Stock-Based Compensation, page 47

15. Since the valuation of your common stock as of December 31, 2006 was retrospective, we believe the following disclosures would be helpful to an investor since changes in methodologies and assumptions could have a material impact upon your financial statements. Please revise to provide the following disclosures in MD&A:
- The aggregate intrinsic value of all outstanding options based on the midpoint of the estimated IPO price range.
  - A discussion of each significant factor contributing to the difference between the estimated fair value as of the date of grant and the estimated IPO price (or pricing range) for options granted during the twelve months prior to the date of the most recent balance sheet.

Results of Operations, page 52

Six months ended June 30, 2007 compared to the six months ended June 30, 2006

Net Sales, page 52

16. Please revise to quantify the impact of increases in number of units sold and the decline in average selling prices of your products on net sales. Your discussion should also address whether you expect the trend of the declining gross margins to continue. Please also apply to your discussion for the year ended December 31, 2006.
17. Please disclose the reasons for the change in revenues from material customers. Provide similar disclosure in your discussion for the year ended December 31, 2006.

Research and Development, page 53

18. Please revise to quantify the items listed as responsible for the increase in research and development expense and to identify the number of new employees added during the period. Please also apply to your discussion of the increases in sales and marketing and general and administrative expenses. In addition, please apply this comment to your discussion of research and development, sales and marketing and general and administrative expenses for the year ended December 31, 2006.

Sales and Customers, page 70

19. Please expand to discuss the material terms of the agreements with your major customers. Also, file the agreements as exhibits.

Wafer Production, page 72

20. Please expand to discuss the material terms of your agreements with TSMC and your two additional foundry service providers, such as the duration and cancellation provisions of the agreements.
21. Please file the agreement with TSMC as an exhibit. Also, tell us why you have not filed the agreements as exhibits with your two foundry service providers.

Compensation Discussion and Analysis, page 88

22. We direct your attention to the Staff Observations in the Review of Executive Compensation Disclosure, dated October 9, 2007, and available on our website, for specific guidance in the preparation of this discussion. In addition to the specific comments that follow, please consider this report in providing a more fulsome compensation discussion and analysis in your amended filing. We may have further comment.

Elements of Compensation, page 89

23. It appears from your disclosure on pages 88 through 90 that you benchmark compensation of your named executive officers against peer companies in the semiconductor and other advanced technology and information technology-related industries. Please identify these peer companies. We note your statement in the second whole paragraph on page 89 that the annual Compensation & Entrepreneurship Report in Information Technology does not identify the companies sampled, however, your disclosure in this paragraph suggests that this is not the only report from which you derive information relating to compensation levels. If this is the only report you considered, it is unclear how you were able to determine that the data in the report related to companies you deemed your peers.
24. Please clarify the meaning of the phrase “comparable with executive officers in other companies.” Are you targeting total compensation or specific elements of compensation at a specific percentile? For example, is the target level of each element of compensation as well as overall target compensation at the 50<sup>th</sup>, 60<sup>th</sup> or 75<sup>th</sup> percentile of your peer companies?

Discretionary annual bonus, page 89

25. You indicate that bonus levels depend on each executive officer's performance measured against their specific performance objectives, but you have not provided a quantitative discussion of the objectives to be achieved in order for your executive officers to earn their annual bonuses. Please disclose the specific financial and operational targets and individual annual performance objectives used to determine incentive amounts. To the extent you believe disclosure of these targets is not required because it would result in competitive harm such that you may omit this information under Instruction 4 to Item 402(b) of Regulation S-K, please provide on a supplemental basis a detailed explanation for such conclusion. Disclose how difficult it would be for the named executive officers or how likely it will be for you to achieve the undisclosed target levels or other factors. General statements regarding the level of difficulty or ease associated with achieving performance goals are not sufficient. In discussing how difficult it will be for an executive or how likely it will be for you to achieve the target levels or other factors, provide as much detail as necessary without providing information that would result in competitive harm. Please provide insight into the factors considered by the compensation committee prior to the awarding of performance-based compensation such as historical analyses prior to the granting of these awards or correlations between historical bonus practice and the incentive parameters set for the relevant fiscal period.
26. You also indicate that in 2006, the compensation committee established a bonus plan focused on revenue, major account wins and introduction of new products to market with the weight of each element varying depending on the executive officer's responsibilities. Please identify the objectives for each named executive officer and how they were weighted.

Long-term incentives, page 90

27. Please describe with specificity how the compensation committee determined the grants in 2006 and 2007. Include a discussion of how the factors led to decisions about the size of the option grants for the different executive officers.

Grants of plan-based awards in 2006, page 91

28. Your table in this section indicates that the exercise price of the options granted to Ms. Niu was \$0.77. Please reconcile this with footnote (1) to the table on page 92 indicating that the exercise price was \$0.15 per share.

2000 Omnibus Stock Plan, page 92

29. You indicate that as of June 30, 2007, 2,443,750 shares of stock options were outstanding and were available for future grant under the 2000 Stock Plan. Please clarify. Are you saying that options exercisable into 2,443,750 shares of common stock have been issued or that such options are available for future issuance?

2006 Director compensation, page 98

30. Please confirm in your response letter whether the options issued to Messrs. Blethen and Zavracky had fully vested in 2005.

Certain Relationships and Related Party Transactions, page 99

31. Please revise the first paragraph to comply with the definition of “related person” as set forth in Item 404 of Regulation S-K.

Relationship with InveStar and TSMC, page 101

32. Please disclose the amount of wafers purchased from TSMC since January 1, 2004.

Policies and Procedures for Related Party Transactions, page 101

33. Please provide the disclosure required by Regulation S-K Item 404(b) regarding the standards to be applied to your policies and procedures.

Principal and Selling Shareholders, page 102

34. Please tell us whether the selling shareholders are broker-dealers or affiliates of broker-dealers. A selling shareholder who is a broker-dealer must be identified in the prospectus as an underwriter. In addition, a selling shareholder who is an affiliate of a broker-dealer must be identified in the prospectus as an underwriter unless that selling shareholder is able to make the following representations in the prospectus:

- The selling shareholder purchased the shares being registered for resale in the ordinary course of business, and
- At the time of the purchase, the selling shareholder had no agreements or understandings, directly or indirectly, with any person to distribute the securities.

Please revise as appropriate.

35. With respect to the shares to be offered for resale by each selling shareholder that is a legal entity, please disclose the natural person or persons who exercise the sole or shared voting and/or dispositive powers with respect to the shares to be offered by that selling shareholder.

Common Stock, page 106

36. Please disclose the number of holders of your common equity.

Consolidated Financial Statements

37. Please update the financial statements as required by Rule 3-12 of Regulation S-X.

Note 3. Summary of Significant Accounting Policies, page F-10

Note 10. Stock Incentive Plan, page F-22

Determination of Fair Value of Common Stock, page F-22

38. Please provide us with a schedule showing in chronological order, the date of grant, optionee, number of options granted, exercise price and the fair value of the underlying shares of common stock for options issued within the year preceding the contemplated offering. Also include common shares issued during the period.
- Please indicate the compensation recorded for each of these issuances and reconcile to the amounts recorded in the financial statements.
  - Clarify how you considered the issuances of Series D preferred stock at \$2.20 per share in December 2006 and April 2007. We see that the preferred shares are convertible into common stock on a one-for-one basis.
  - Discuss the nature of any significant business events which occurred between the dates the options were granted and the date the registration statement was filed that would contribute to fluctuations in fair value.
  - Provide us with a chronological bridge of management's fair value per share determinations to the current estimated per share offering price. Indicate when discussions were initiated with your underwriter(s) about possible offering price ranges and provide us a history of pricing discussions.
39. Please note that we are deferring any final evaluation of stock compensation until the estimated offering price is specified, and we may have further comments in that regard when you file the amendment containing that information.



Valuation of Stock Options, page F-24

40. Please provide the SFAS 123 pro forma disclosures about stock based compensation for 2005 and 2004 or tell us why those disclosures are not required. Refer to paragraphs 84 and 85 to SFAS 123(R). If you previously used the minimum value method and relied on the paragraph 85 exception, please disclose so.

Note 14. Commitments and Contingencies, page F-31

Licensing Agreement and Marketing Agreements, page F-31

41. We see that you record amounts paid as royalty fees under the license agreement as general and administrative expenses. Please tell us why this amount should not be recorded as cost of sales in the period the underlying products are sold.

Recent Sales of Unregistered Securities, page II-2

42. Please provide the information required by Item 701(d) of Regulation S-K. Also, pursuant to Item 701(b), please also name the purchasers or identify the class of persons to whom the securities were sold.

Undertakings, page II-3

43. Please provide the undertakings required by Item 512(a)(5)(ii) and Item 512(a)(6) of Regulation S-K.

Exhibit 23.1

44. Please include a currently dated and signed consent from your independent auditors prior to requesting effectiveness.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of any amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Act of 1933 and that they have provided all information investors require

for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as a confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Kristin Lochhead at (202) 551-3664 or Brian Cascio, Branch Chief, at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Tom Jones at (202) 551-3602 or me at (202) 551-3444 with any other questions.

Sincerely,

Perry Hindin  
Special Counsel

cc (via fax): Gregory G.H. Miao