

Mail Stop 6010

August 1, 2006

Mr. Paul Yeh  
Associate Vice President – Finance Center  
Macronix International Co., Ltd.  
No. 16 Li-Hsin Road  
Science Park  
Hsinchu, Taiwan, Republic of China

**RE:   Macronix International Co., Ltd.**  
**Form 20-F for the fiscal year ended December 31, 2005**  
**File No. 000-27884**

Dear Mr. Yeh,

We have reviewed your letter filed on July 6, 2006 and have the following comments. Where indicated, we think you should revise your future documents 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 20-F for the year ended December 31, 2005

Item 15. Controls and Procedures, page 97

1. We note that management identified a control weakness and therefore concluded that the Company's disclosure controls and procedures were not effective. Please tell us and revise future filings to disclose all specific steps that management has taken to remediate the material weakness and why management believes such errors will not reoccur.
2. We see the disclosures herein that "Our management has concluded that our disclosure controls and procedures were not *sufficiently* effective as of December 31, 2005 and as of the date of this annual report." Please tell us why your use of the word "sufficiently" in the stated conclusion was necessary. Also, confirm your use of the word was not intended to qualify your stated conclusions regarding the ineffectiveness of your disclosure controls and procedures. Finally, please consider whether the use of the word "sufficiently" in your disclosure controls and procedures effectiveness conclusions is appropriate in your future filings.

Financial Statements, page F-1

26. Segment Information, page F-66

3. We note from your response to prior comment 4 that you operate in one segment. We also note the extended discussion of two strategic business units, beginning on page 20, which brings into question whether your Microelectronics and Memory Solution Group and the Integrated Solution Group meet the definition of separate operating segments under U.S. GAAP. Please address the following:
  - Tell us how you evaluated each of these business units to determine whether they met the criteria for an operating segment outlined in paragraph 10 of SFAS 131. Discuss the factors that support your conclusion.
  - To the extent that you aggregated operating segments, please explain to us how they met the aggregation criteria outlined in paragraph 17 of SFAS 131. Please describe the similar economic characteristics that they each exhibited and address how they met each of the additional five criteria outlined in that paragraph.

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As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter 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 responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require. 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.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to 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.

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 our review of your filing or in response to our comments on your filing.

You may contact Eric Atallah, Staff Accountant at (202) 551-3663 or me at (202) 551-3603 regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Angela Crane, Branch Chief, at (202) 551-3554 with any other questions.

Sincerely,

Jay Webb  
Reviewing Accountant