Mail Stop 6010
April 5, 2006

Via U.S. Mail and Facsimile to (650) 961-1092

Donald Witmer
Chief Financial Officer
Netlogic Microsystems, Inc.
1875 Charleston Road
Mountain View, CA 94043

Re: Netlogic Microsystems, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2005
Filed February 28, 2006
Form 8-K filed January 25, 2006
File No. 000-50838

Dear Mr. Witmer:

We have reviewed your filing and have the following comments.
We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other
portions of your documents. In our comments, we 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 10-K for the Fiscal Year Ended December 31, 2005

Item 7. Management`s Discussion and Analysis of Financial Condition
and Results of Operations, page 38

Results of Operations, page 42

1. We note that you entered into a master purchase agreement with Cisco on November 7, 2005. We also note that in 2005, 2004, and 2003, Cisco, including its contract manufacturers, accounted for 74%,
73% and 34% of your total revenue, respectively, per page 14. As such, the significant terms of this agreement may have a material impact upon the company due to the significance of your sales to Cisco. Under the agreement you increased the terms of your standard
product warranty from one year to include three years and, in the case of epidemic failures, for five years and included certain indemnification obligations. We also note that you have an obligation to use your best efforts to meet Cisco`s stated cost reduction targets and to provide to Cisco all price decreases that you achieve. If there is a reasonable likelihood that your reported
financial information is not indicative of your future financial condition or future operating performance appropriate disclosure in
MD&A should be considered and may be required. You should consider

the extent of variability in earnings and cash flow, and provide disclosure where necessary for investors to ascertain the likelihood that past performance is indicative of future performance. You also should consider whether the economic characteristics of any of your business arrangements materially impact your results of operations or liquidity in a structured or unusual fashion, where disclosure would be necessary to understand the amounts depicted in the financial statements. See Item 303 of Regulation S-K and related interpretations including Release 33-8350.

2. We note that your product revenue increased 75.1% between 2005 and 2004 and 366.4% between 2004 and 2003. You attribute the increase to "growth" in sales due to an increase in unit shipments of more than 138% between 2005 and 2004 and 600% between 2004 and 2003. Per Item 303(A)(3)(ii), you should "provide a narrative discussion of the extent to which such increases are attributable to increases in prices or to increases in the volume or amount of goods or services being sold or to the introduction of new products or services." Under SAB Topic 13.B, "[c]hanges in revenue should not be evaluated solely in terms of volume and price changes, but should also include an analysis of the reasons and factors contributing to the increase or decrease." Per Release 33-8350, "[a] thorough analysis often will involve discussing both the intermediate effects of those matters and the reasons underlying those intermediate effects." And under FRC 501.04, you should include a discussion and quantification of the contribution of two or more factors identified as the causes for material changes "where identification and quantification of the extent of contribution of each of two or more factors is necessary to an understanding of a material change, or where there are material increases or decreases in net sales or revenue." As such, your MD&A should not only identify and quantify to the extent practicable the increase in sales prices and volume, but also should analyze those and any other significant reasons underlying the increases (including underlying offsetting decreases) when the reasons are also material and determinable.

Item 8. Financial Statements and Supplementary Data, page 51

Consolidated Statements of Operations, page 55

3. We note the presentation of stock-based compensation as a separate line item in this statement. Note that the expense related to share-based payment arrangements should be classified in the same line or lines as cash compensation paid to employees. Please revise future filings to properly reflect stock-based compensation as research and development and selling, general and administrative expenses, as appropriate. As indicated in SAB Topic 14-F, you may present the

related compensation charges in a parenthetical note to the
appropriate income statement line items. That guidance also
indicates that you may present the information in the notes to the
financial statements or within MD&A. Alternatively, please tell
us
how your current presentation complies with SAB Topic 14-F or
other
applicable literature.

Note 1 - The Company and Summary of Significant Accounting
Polices,
page 58

Revenue Recognition, page 58

4. Please refer to your discussion in the last paragraph on page
20
and respond to the following comments:

* We note that you do not recognize revenue from distributors
until
"the distributor sells product to end customers." We note no
discussion of this aspect of your policy in your revenue
recognition
footnote. Please tell us and revise future filings to clarify
your
obligations under distributor arrangements and your related
revenue
recognition policy.
* Please tell us the significant terms of your agreements with
distributors (including the Cypress distributor). Discuss payment
terms, rights of return, exchange or other significant matters.
Please also tell us about any repurchase arrangement you have with
distributors. Tell us the point at which your obligation to
accept
returns from the Cypress distributor has "substantially expired."
Refer to paragraph 6 of SFAS 48.
* Please tell us why you defer recognition of revenue until the
distributor sells the product to the end customer. Include a
discussion of the factors that cause you to defer recognition at
the
point of shipment and the factors that cause you to believe that
the
appropriate point to recognize revenue is upon sale to the end
customer.
* Please tell us how you account for the return obligations
related
to the Cypress distributor given that the distributor has "sole
authority" to accept returns from end customers. Cite the
accounting
literature upon which you relied and how you applied that
literature
to your facts and circumstances. Please specifically address
paragraphs 6(f) and 8 of SFAS 48 and Question 1 of SAB Topic
13.A.4
(b).
* To the extent practicable, quantify the expected impact of sales
through the Cypress distributor on your current and future
operations.

5. We note from page 39 that you recognize revenue at the time of
shipment to your international stocking sales representatives.
Please tell us about the nature of your relationship with ISSRs.
Discuss how you determine whether the ISSR may be acting as a
sales
representative and therefore receive a commission on the sale of
your
products as discussed on page 13. Discuss how you determine the
appropriate point at which title has transferred for sales to the
ISSR when they are and when they are not acting as a sales
representative. Discuss how you record revenues and related costs
in

each case and why.

Risks and Uncertainties and Concentration of Credit Risk, page 59

6. We note that you have indemnified Cisco for certain costs. Please revise to provide all of the disclosures required by FIN 45. Please also tell us and disclose whether the terms of your November 2005 master purchase agreement include sales made to Cisco`s contract manufacturers. Please tell us how you are accounting for the indemnification and tell us why. Cite the accounting literature upon which you relied and how you applied that literature to your facts and circumstances.

Form 8-K filed January 25, 2006

7. We note that you present non-GAAP measures in the form of pro forma statements of operations. This format may be confusing to investors as it reflects non-GAAP measures which have not been otherwise described to investors. In fact, it appears that management does not use all of these non-GAAP measures. To eliminate investor confusion, please disclose only those non-GAAP measures used by management that you wish to highlight for investors, with the appropriate disclosures and reconciliations for each measure.

8. In addition, we note that you refer to your non-GAAP information as "pro forma" results. The pro forma terminology has very specific meaning in accounting literature, as indicated by Article 11 of Regulation S-X. In future filings please do not use titles or descriptions for your non-GAAP financial measures that are the same as, or confusingly similar to, titles or descriptions used for GAAP financial measures.

9. Under Regulation G and Item 10(e)(1)(i) of Regulation S-K, you must accompany each non-GAAP financial measure with the following:

* A presentation, with equal or greater prominence, of the most directly comparable financial measure or measures calculated and presented in accordance with Generally Accepted Accounting Principles (GAAP);
* A reconciliation (by schedule or other clearly understandable method), which shall be quantitative for historical non-GAAP measures presented, and quantitative, to the extent available without unreasonable efforts, for forward-looking information, of the differences between the non-GAAP financial measure disclosed or released with the most directly comparable financial measure or measures calculated and presented in accordance with GAAP;
* A statement disclosing the reasons why the registrant`s management believes that presentation of the non-GAAP financial measure provides useful information to investors regarding the registrant`s financial condition and results of operations; and
* To the extent material, a statement disclosing the additional purposes, if any, for which the registrant`s management uses the non-GAAP financial measure.

This applies to every amount that you present as a non-GAAP measure
including shares and per share amounts. When you present a statement
of non-GAAP measures, please note that each measure in the statement
represents a non-GAAP measure for which you should provide the required disclosures. The reconciliation should both identify and quantify each reconciling adjustment included in the non-GAAP measure. The statement of reasons should address each of the adjusting items included in the non-GAAP measure to the extent necessary to explain the reasons why management believes the measure
is useful. The discussion of your reasons for providing the measure
should be specific and not broad or overly vague. You should include
the required disclosures for each non-GAAP measure you present, including your non-GAAP measures for the third quarter of 2005. Please revise future filings to comply and provide us with a sample
of your proposed disclosure.

10. While there is no per se prohibition against removing a recurring
item, you must meet the burden of demonstrating the usefulness of any
measure that excludes recurring items, especially if the non-GAAP financial measure is used to evaluate performance. Whether a non-GAAP financial measure that eliminates a recurring item or items from
the most directly comparable GAAP financial measure is acceptable depends on all of the facts and circumstances. However, if there is
a past pattern of the charges, no articulated demonstration that such
charges will not continue and no other unusual reason that a company
can substantiate to identify the special nature of the charge, it would be difficult for a company to meet the burden of disclosing why
such a non-GAAP financial measure is useful to investors. In such circumstances, Item 10(e) of Regulation S-K would not permit the use
of the non-GAAP financial measure and similar considerations may apply under Item 12 of Form 8-K. In addition, inclusion of such a measure may be misleading absent the following disclosure, which should be specific to each measure and not a broad overall, vague disclosure:

* the manner in which management uses the non-GAAP measure to conduct
or evaluate its business;
* the economic substance behind management`s decision to use such a
measure;
* 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;
* the manner in which management compensates for these limitations when using the non-GAAP financial measure; and
* the substantive reasons why management believes the non-GAAP financial measure provides useful information to investors.

Refer to Question 8 of the FAQ Regarding the Use of Non-GAAP Financial Measures dated June 13, 2003

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. 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 filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 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.

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 filing;

* 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 Kevin Kuhar, Staff Accountant, at (202) 551-3662 or me at (202) 551-3604 if you have questions regarding these comments on the financial statements and related matters. In this regard, do not hesitate to contact Angela Crane, Branch Chief, at (202) 551-3554.

Sincerely,

Kate Tillan
Assistant Chief Accountant

Donald Witmer
Netlogic Microsystems, Inc.