



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

January 31, 2012

Via E-Mail

Mr. Leonard Borow
President and Chief Executive Officer
Aeroflex Holding Corp
25 South Service Road
Plainview, New York 11803

**Re: Aeroflex Holding Corp
Form 10-K for the Year Ended June 30, 2011
Filed August 31, 2011
Form 8-K
Filed November 9, 2011
File No. 001-34974**

Dear Mr. Borow:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the fiscal year ended June 30, 2011

Item 1. Business, page 2

1. In the last paragraph on page 3 you disclose that Adjusted EBITDA grew at a compound annual growth rate of 18.2%. Tell us how the disclosure of this non-GAAP measure provides the full information content required by S-K Item 10(e). For instance, it is not clear how you have provided a presentation, with equal or greater prominence, of the most directly comparable financial measure calculated and presented in accordance with Generally Accepted Accounting Principles. Please also respond with respect to the

disclosure of Adjusted EBITDA margin presented on pages 9 and 12 and adjusted EBITDA presented on page 11.

Item 6. Selected Financial Data, page 43

2. With respect to your disclosure of EBITDA and adjusted EBITDA on page 46, tell us how your disclosures also consider the guidance from Compliance and Disclosure Interpretation 102.6. Under the cited guidance, the three major categories of the statement of cash flows should be also presented when a non-GAAP liquidity measure is presented in a filing.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 49

For the Year Ended June 30, 2011 Compared to the Year Ended June 30, 2010, page 57

3. Under Income Taxes on page 60, we see from Note 15 that you have a history of pre-tax book losses in the U.S. and that you recognized a significant deferred tax benefit in fiscal 2011 on the pre-tax domestic loss reported in that year. Please tell us, with a view toward disclosure in future filings, the factors you considered in concluding that the tax benefits recorded in fiscal 2011 on domestic losses are recoverable.

Item 8. Financial Statements

Note 15. Income Taxes, page 107

4. In future filings please also disclose the cumulative amount of permanently reinvested undistributed earnings of foreign subsidiaries for which no deferred income taxes have been provided and the related amount of the unrecognized deferred tax liability, if determinable. Refer to FASB ASC 740-30-50-2.

Form 8-K dated November 9, 2011

5. In the second paragraph of the earnings release, please tell us how your disclosures of Non-GAAP operating income and of Adjusted EBITDA fully conform to the requirements of S-K Item 10(e)(i). In that regard, it is unclear how you have provided a presentation, with equal or greater prominence, of the most directly comparable financial measure calculated and presented in accordance with Generally Accepted Accounting Principles.
6. As a related matter, under Business Outlook your expectations for the second quarter and remainder of the year are disclosed primarily in terms of non-GAAP measures. Tell us how your disclosures consider the guidance from S-K Item 10(e)(i). Please also refer to Compliance and Disclosure Interpretation 105.06.

Mr. Leonard Borow
Aeroflex Holding Corp
January 31, 2012
Page 3

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules 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 responding to our comments, please provide a written 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.

You may contact Jeanne Bennett, Staff Accountant, at (202) 551-3606 or Gary Todd, Reviewing Accountant, at (202) 551-3605 if you have questions regarding these comments. In this regard, do not hesitate to contact me at (202) 551-3676.

Sincerely,

/s/Gary Todd for

Brian Cascio
Accounting Branch Chief