



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-3030

March 24, 2011

Kimiko Milheim
Chief Financial Officer
LOGIC Devices Incorporated
1375 Geneva Drive
Sunnyvale, CA 94089

Re: LOGIC Devices Incorporated
Form 10-K for the Fiscal Year Ended September 30, 2010
Filed December 27, 2010
Form 10-Q for the Fiscal Quarter Ended December 31, 2010
File No. 000-17187

Dear Ms. Milheim:

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 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 amending your filing, 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 or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K Fiscal Year Ended September 30, 2010

Summary of Accounting Policies, page 23

Inventories, page 23

1. We note your disclosure under the heading "Working Capital" on page 12 in your Management's Discussion and Analysis. Based on this disclosure it appears that your accounting policy and estimates for your inventory valuation allowance and inventory obsolescence or slow-moving items is a significant accounting policy as described in FASB ASC 235-10-50. In this regard, please revise your financial statements footnote disclosure in future filings to disclose your methods used in estimating your inventory

valuation allowance and write-offs for inventory obsolescence and slow-moving inventory. In this regard, also consider the guidance in FASB ASC 330-10-50-6 and FASB ASC 275-10-50. Additionally, in future filings, please disclose separately the amount of your inventory valuation allowance for each period presented, providing separate disclosure of the nature of the increases and decreases to your inventory valuation allowance from period to period. Please provide us with your proposed revised disclosure.

Note 3 - Capitalized Software Costs, page 26

2. We see that you capitalize test software development costs of \$315,500 as incurred during the application development stage. Please tell us and revise future filings to disclose the nature of these costs. Please explain if this capitalized software is being developed for internal use or for external sale. Additionally, please tell us the accounting literature that you are applying in concluding that these software development cost should be capitalized instead of being expensed. Please explain how you considered FASB ASC 350-40 (SOP 98-1) or FASB ASC 985-20 (SFAS No. 86) in your assessment.

Exhibit 31

3. We note that your annual report contains management's internal control report as required by Item 308 of Regulation S-K. As such, your certifications should include the introductory language in paragraph 4 of the certification that refers to the certifying officers' responsibility for establishing and maintaining internal control over financial reporting for the company as well as the language of paragraph 4(b) of Item 601(b)(31) of Regulation S-K. Please amend your Form 10-K to include corrected certifications that include the required language.

Form 10-Q for the Fiscal Quarter Ended December 31, 2010

Exhibit 31

4. We note that you removed the phrase "(the registrant's fourth fiscal quarter in the case of an annual report)" in paragraph 4(d) of the certifications. In future filings, please revise the certifications to present them in the exact form as set forth in Item 601(b)(31) of Regulation S-K with no modifications.

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.

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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 Kevin Kuhar, Staff Accountant, at (202) 551-3662 or me at (202) 551-3212 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671 with any questions.

Sincerely,

Jeff Jaramillo
Accounting Branch Chief