



DIVISION OF
CORPORATION FINANCE

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

December 30, 2010

James Mackaness
Chief Financial Officer
Iridex Corporation
1212 Terra Bella Avenue
Mountain View, CA 94043-1824

**Re: Iridex Corporation
Form 10-K for the Fiscal Year Ended January 2, 2010
Filed March 31, 2010
Definitive Proxy Statement on Schedule 14A filed on May 7, 2010
File No. 000-27598**

Dear Mr. Mackaness:

We have reviewed your filings 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 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 for the Fiscal Year Ended January 2, 2010

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1. We refer to your disclosure under “Documents Incorporated by Reference” and on page 62 that you sought to incorporate by reference to your definitive proxy statement the information required by Part III of Form 10-K. However, we note that you did not file your definitive proxy statement within 120 days of your fiscal year end. Refer to Instruction G(3) to Form 10-K. Please advise how you have complied with the disclosure requirements of Part III of Form 10-K.

Item 8. Financial Statements and Supplementary Data, page 37

Note 10. Stockholders’ Equity, page 52

Convertible Preferred Stock, page 52

2. We note from your disclosure that the holders of the Series A preferred stock have certain registration rights as further discussed in your disclosure on page 53. We note that during 2009 the holders of the Series A preferred stock and the registrant agreed to amend the Form S-3 registration rights. In consideration for extending the period during which you are not required to file a registration statement, you issued the holders of Series A preferred stock warrants to purchase an aggregate of 20,000 shares of Common Stock at an exercise price of \$0.01 per share. Based on your disclosure, it is not completely clear what you are representing by your statement “The agreement changed the clause requiring the Company to file a Form S-3 registration statement within 90 days of becoming eligible to a right to request the Company file a Form S-3 registration statement any time after June 30, 2009.” In this regard, please address the following:
 - Fully explain to us the terms of the amended registration rights agreement.
 - Specifically, tell us the triggering events and dates, which will require you to file a registration statement, and the grace period for that registration statement to be declared effective by the Securities and Exchange Commission (SEC).
 - Tell us if the amended registration rights agreement requires you to transfer consideration to the counterparty if the registration statement is not filed, declared effective or if effectiveness of the registration statement is not maintained.
 - If applicable, please provide us with the disclosures as outlined in ASC FASB 825-20-50-1 and 50-2, and tell us how you considered ASC FASB 825-20-25, 825 -20-30, and 825-20-35 in your accounting.

Item 9 A(T) Controls and Procedures, page 61

Management's Report on Internal Control over Financial Reporting, page 61

3. We note from page 61 that your management performed an assessment of your internal control over financial reporting as of January 2, 2010. However, you have not disclosed the conclusion of your management on the effectiveness of your internal control over financial reporting as required by Item 308T(a)(3) of Regulation S-K. Please amend your Form 10-K to provide the required management's conclusion that includes a clear and definite statement as to whether your internal control over financial reporting was effective or was not effective as of January 2, 2010.
4. In addition, we note that you include management's conclusion on the effectiveness of your disclosure controls and procedures in this section. Please note that the requirement of Item 308T of Regulation S-K is separate from the requirement of Item 307 of Regulation S-K. Item 307 of Regulation S-K requires you to disclose the conclusion of your principle executive and principle financial officers regarding the effectiveness of your disclosure controls and procedures, while Item 308T of Regulation S-K requires you to provide management's annual report on internal control over financial reporting that includes management's assessment of the effectiveness of the registrant's internal control over financial reporting as of the end of your most recent fiscal year, including a statement as to whether or not internal control over financial reporting is effective. To avoid investor confusion, in your amended Form 10-K, please revise the section to include the disclosure related to management's conclusion on the effectiveness of your disclosure controls and procedures in the sub-section entitled "*Evaluation of Disclosure Controls and Procedures*"

Definitive Proxy Statement on Schedule 14A filed on May 7, 2010

Process for Recommending Candidates for Election to the Board of Directors, page 10

5. We note your disclosure under this section that you "seek independent directors who represent a mix of backgrounds and experiences" and that the Nominating and Governance Committee considers diversity when evaluating and identifying director nominees. Please tell us and revise your future filings to explain in greater detail how the Committee considers diversity in evaluating director nominees and to clarify whether the Committee has a policy with regard to the consideration of diversity in identifying director nominees. If the committee does have such a policy, please tell us and expand your disclosure in future filings to describe how the policy is implemented and how the committee assesses the policy's effectiveness. Refer to Regulation S-K Item 407(c)(2)(vi), as revised by Release No. 33-9089 (Dec. 16, 2009).

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 Kevin Kuhar, Staff Accountant, at (202) 551-3662 or Jeff Jaramillo, Accounting Branch Chief, at (202) 551-3212 if you have questions regarding comments on the financial statements and related matters. Please contact Celia Soehner at (202) 551-3463 or Tim Buchmiller at (202) 551-3635 if you have questions on other comments. In this regard, do not hesitate to contact me at (202) 551-3671 with any other questions.

Sincerely,

Martin James
Senior Assistant Chief Accountant