



DIVISION OF
CORPORATION FINANCE

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

August 15, 2012

Via E-mail

Mr. Dror Israel
Chief Financial Officer
EZchip Semiconductor Ltd.
1 Hatamar Street
PO Box 527
Yokneam 20692, Israel

**Re: EZchip Semiconductor Ltd.
Form 20-F for the fiscal year ended December 31, 2011
Filed March 29, 2012
File No. 000-20860**

Dear Mr. Israel:

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 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.

Item 6. Directors, Senior Management and Employees, page 34

1. It appears that you have not identified the chairperson of the Audit Committee although your disclosure on page 38 indicates that an outside director must serve as the chair of the Audit Committee. Please tell us in the response letter who serves as the chair of the Audit Committee and confirm that you will include this disclosure in future filings.

Item 11. Quantitative and Qualitative Disclosures about Market Risk, page 64

2. Please tell us your consideration of providing sensitivity analysis disclosures for your currency exchange rate risk and interest rate risk. Refer to Item 11(a)(1)(ii)(a) of Form 20-F.

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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 Ryan Rohn, Staff Accountant, at (202) 551-3739 if you have questions regarding comments on the financial statements and related matters. If you have any other questions, please contact Jan Woo, Staff Attorney, at (202) 551-3453 or Mark Shuman, Legal Branch Chief, at (202) 551-3462. If you require further assistance, do not hesitate to contact me at (202) 551-3730.

Sincerely,

/s/ Kathleen Collins (for SK)

Stephen Krikorian
Accounting Branch Chief