



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

DIVISION OF
CORPORATION FINANCE

September 11, 2014

Via E-mail

Dror Israel
Chief Financial Officer
EZchip Semiconductor Ltd.
1 Hatamar Street
PO Box 527
Yokneam 2069206, Israel

**Re: EZchip Semiconductor Ltd.
Form 20-F for the Fiscal Year Ended December 31, 2013
Filed March 27, 2014
File No. 000-20860**

Dear Mr. Israel:

We have reviewed your filing and have the following comment. 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 20-F for the Fiscal Year Ended December 31, 2013

Item 4. Information on the Company

B. Business Overview

Manufacturing, page 22

1. Please tell us, with a view toward future disclosure, whether you have an agreement with Taiwan Semiconductor Manufacturing Company Limited and/or IBM for the manufacture of your products, and if so, what consideration you have given to including a discussion of the key terms of those agreements. If you have agreements, written or oral, with Taiwan Semiconductor Manufacturing Company Limited and/or IBM, please advise why they have not been filed as exhibits to the Form 20-F and provide your analysis as to

whether you are substantially dependent on such agreement. Refer to Item 4 of the Instructions as to Exhibits of Form 20-F.

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.

Please contact Ji Kim, Attorney-Adviser, at (202) 551-3579 or, in her absence, me at (202) 551-3462 with any other questions. If you thereafter require further assistance, you may contact Barbara C. Jacobs, Assistant Director, at (202) 551-3730.

Sincerely,

/s/ Mark P. Shuman

Mark P. Shuman
Branch Chief – Legal

cc: Via E-mail
Steven Glusband, Esq.
Carter Ledyard & Milburn LLP