



DIVISION OF
CORPORATION FINANCE

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

October 6, 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 letter, dated September 17, 2014 in connection with the above-referenced filing and have the following comment. In our 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. We note your response to prior comment 1. However, you have not explained what consideration you have given to including a discussion of the key terms of your manufacturing agreements. Please advise. Furthermore, confirm that, in future filings, you will incorporate the previously-filed manufacturing agreements by reference. In this regard, we note that your agreements with IBM and eSilicon Corporation were not filed with this Form 20-F. Refer to the Instructions as to Exhibits of Form 20-F.

Dror Israel
EZchip Semiconductor Ltd.
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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