



DIVISION OF
CORPORATION FINANCE

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

August 17, 2010

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

Re: EZchip Semiconductor Ltd.
Form 20-F for Fiscal Year Ended December 31, 2009
Filed March 25, 2010
File No. 000-20860

Dear Mr. Israel:

We have completed our review of your filing and do not have any further comments at this time.

Sincerely,

Mark P. Shuman
Branch Chief – Legal