



DIVISION OF  
CORPORATION FINANCE

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

January 6, 2012

Via facsimile

Mr. Michael Gray  
Chief Financial Officer  
Mellanox Technologies, Ltd..  
Hermon Building  
Yokneam, Israel 20692

**Re: Mellanox Technologies, Ltd.**  
**Form 10-K for the year ended December 31, 2010**  
**Filed March 7, 2011**  
**File No. 001-33299**

Dear Mr. Gray:

We have completed our review of your filings. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filings 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. We urge all persons who are responsible for the accuracy and adequacy of the disclosures in the filings to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Martin James

Martin James  
Senior Assistant Chief Accountant