

Waldman Eyal
Form SC 13G
January 29, 2010

**SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

SCHEDULE 13G

Under the Securities Exchange Act of 1934

MELLANOX TECHNOLOGIES, LTD.

(Name of Issuer)

Ordinary Shares, Nominal Value NIS 0.0175 per share

(Title of Class of Securities)

M51363113

(CUSIP Number)

December 31, 2009

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)
- Rule 13d-1(c)
- Rule 13d-1(d)

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be filed for the purpose of Section 18 of the Securities Exchange Act of 1934 (Act) or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No.: M51363113

SCHEDULE 13G

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1 NAME OF REPORTING PERSONS
I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY)

Eyal Waldman

2 CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP
(a)
(b)

3 SEC USE ONLY

4 CITIZENSHIP OR PLACE OF ORGANIZATION
Israel

5 SOLE VOTING POWER
NUMBER OF 2,030,780 (1)

6 SHARED VOTING POWER
SHARES BENEFICIALLY OWNED BY -0-

7 SOLE DISPOSITIVE POWER
EACH REPORTING PERSON 2,030,780 (1)

8 SHARED DISPOSITIVE POWER
WITH: -0-

9 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
2,030,780 (1)

CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES

10

PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)

11

6.188%(1)

TYPE OF REPORTING PERSON

12

IN

(1) As of December 31, 2009, Eyal Waldman beneficially owned 2,030,780 of the Issuer's Ordinary Shares, nominal value NIS 0.0175 per share, representing approximately 6.188% of the Issuer's Ordinary Shares issued and outstanding as of December 31, 2009. The 2,030,780 shares that Mr. Waldman beneficially owns includes: (i) 1,899,769 shares, over which Mr. Waldman has sole voting and dispositive power, owned by Waldo 2 Holdings, a general partnership formed pursuant to the laws of Israel, of which Mr. Waldman is a general partner; and (ii) 131,011 shares issuable upon exercise of options held by Mr. Waldman that are currently exercisable or will become exercisable within 60 days after December 31, 2009. A portion of the 131,011 shares subject to the options, if exercised within 60 days of December 31, 2009, will be subject to a right of repurchase held by the Issuer should Mr. Waldman's services to the Issuer terminate prior to the vesting of such shares.

Item 1(a). Name of Issuer: Mellanox Technologies, Ltd.

Item 1(b). Address of Issuer's Principal Executive Offices:

Hermon Building, Yokneam, Israel 20692

Item 2(a). Name of Person Filing: Eyal Waldman

Item 2(b). Address of Principal Business Office:

Hermon Building, Yokneam, Israel 20692

Item 2(c). Citizenship: Israel

Item 2(d). Title of Class of Securities:

Ordinary Shares, Nominal Value NIS 0.0175 per share

Item 2(e). CUSIP Number: M51363113

Item 3. If this statement is filed pursuant to Rule 13d-1(b), or 13d-2(b) or (c), check whether the person filing is a:

- (a) Broker or dealer registered under Section 15 of the Exchange Act.
 - (b) Bank as defined in Section 3(a)(6) of the Exchange Act.
 - (c) Insurance company as defined in Section 3(a)(19) of the Exchange Act.
 - (d) Investment company registered under Section 8 of the Investment Company Act.
 - (e) An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E);
 - (f) An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
 - (g) A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
 - (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act;
 - (i) A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act;
 - (j) Group, in accordance with Rule 13d-1(b)(1)(ii)(J).
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Item 4. Ownership: As of December 31, 2009, Eyal Waldman beneficially owned:

- (a) Amount beneficially owned: **2,030,780 Ordinary Shares (1)**
- (b) Percent of class: **6.188% (1)**
- (c) Number of shares as to which such person has:
 - (i) sole power to vote or to direct the vote: **2,030,780 (1)**
 - (ii) shared power to vote or to direct the vote: **-0-**
 - (iii) sole power to dispose or to direct the disposition of: **2,030,780 (1)**
 - (iv) shared power to dispose or to direct the disposition of: **-0-**

Item 5. Ownership of Five Percent or Less of a Class:

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following: o

Item 6. Ownership of More than Five Percent on Behalf of Another Person:

Not Applicable

Item 7. Identification and Classification of the Subsidiary which Acquired the Security Being Reported on by the Parent Holding Company or Control Person:

Not Applicable

Item 8. Identification and Classification of Members of the Group:

Not Applicable

Item 9. Notice of Dissolution of Group:

Not Applicable

Item 10. Certification:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Dated: January 27, 2010

EYAL WALDMAN

By: /s/ Eyal Waldman
Reporting Person