

TOWER SEMICONDUCTOR LTD

Form 6-K

August 13, 2010

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of August 2010 No. 2

TOWER SEMICONDUCTOR LTD.
(Translation of registrant's name into English)

Ramat Gavriel Industrial Park
P.O. Box 619, Migdal Haemek, Israel 23105
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F S Form 40-F E

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes E No S

On August 13, 2010, the Registrant issued unaudited condensed interim consolidated financial statements as of June 30, 2010 and for the six months and three months periods then ended. Attached hereto are the following exhibits:

Exhibit 99.1 Registrant's unaudited condensed interim consolidated financial statements as of June 30, 2010 and for the six months and three months periods then ended.

Exhibit 99.2 Management's Discussion and Analysis of Financial Condition and Results of Operations

This Form 6-K, including all exhibits hereto, is hereby incorporated by reference into all effective registration statements filed by us under the Securities Act of 1933.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

TOWER SEMICONDUCTOR LTD.

Date: August 13, 2010

By: /s/ Nati Somekh Gilboa
Name: Nati Somekh Gilboa
Title: Corporate Secretary