

---

**FORM 6-K**

**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

For the month of October 2011

No. 1

**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  x

Form 40-F  o

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  o

No  x

---

On October 10, 2011, the registrant announces that TowerJazz Voluntarily Early Redeems Its US Convertible Notes Originally Due December 2011.

---

**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: October 10, 2011

By: /s/ Nati Somekh Gilboa

Name: Nati Somekh Gilboa

Title: Corporate Secretary

---

## **TowerJazz Voluntarily Early Redeems Its US Convertible Notes Originally Due December 2011**

***As a result of this redemption, Jazz Technologies and Jazz Semiconductor  
do not have any notes due before 2015***

**MIGDAL HAEMEK, ISRAEL, and NEWPORT BEACH, CALIFORNIA – October 10, 2011** – TowerJazz, the global specialty foundry leader, today announced that Jazz Technologies Inc. completed a voluntary transaction to early redeem the entire remaining \$35,091,000 principal amount of its outstanding 8.00% notes originally due December 31, 2011. If not redeemed, the notes were convertible into Tower Semiconductor's shares (ticker: TSEM).

The company financed the early redemption through available cash on hand, which enabled to save over \$600,000 of interest. Upon completion of this redemption, (i) none of the 8.00% notes due December 31, 2011 remains outstanding and (ii) Jazz Technologies Inc., the parent company of Jazz Semiconductor, and Jazz Semiconductor, do not have any notes due before 2015.

### **About TowerJazz**

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), the global specialty foundry leader, its fully owned U.S. subsidiary Jazz Semiconductor Ltd., and its fully owned Japanese subsidiary TowerJazz Japan, LTD, operate collectively under the brand name TowerJazz, manufacturing integrated circuits with geometries ranging from 1.0 to 0.13-micron. TowerJazz provides industry leading design enablement tools to allow complex designs to be achieved quickly and more accurately and offers a broad range of customizable process technologies including SiGe, BiCMOS, Mixed-Signal and RFCMOS, CMOS Image Sensor, Power Management (BCD), and Non-Volatile Memory (NVM) as well as MEMS capabilities. To provide multi-fab sourcing, TowerJazz maintains two manufacturing facilities in Israel, one in the U.S., and one in Japan with additional capacity available in China through manufacturing partnerships. For more information, please visit [www.towerjazz.com](http://www.towerjazz.com).

### **Contacts**

TowerJazz Investor Relations  
Noit Levi, +972 4 604 7066  
[Noit.levi@towerazz.com](mailto:Noit.levi@towerazz.com)

CCG Investor Relations  
Ehud Helft / Kenny Green, (646) 201 9246  
[towersemi@ccgisrael.com](mailto:towersemi@ccgisrael.com)

---