

TOWER SEMICONDUCTOR LTD

Form 6-K

September 04, 2012

---

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month of September 2012 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  Form 40-F

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  No

---

On September 3, 2012, the registrant announces its CEO, Mr. Russell Ellwanger, presented at the Tel Aviv Stock Exchange for the Israeli Capital Market. Presentation included.

---

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: September 3, 2012

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

#1 Specialty Foundry  
and Growing  
TASE Conference | September 2012  
Russell Ellwanger, CEO

---

Safe Harbor and Disclaimers

This presentation contains forward-looking statements within the meaning of the “safe harbor” provisions of the Private Securities Litigation Reform Act of 1995. These statements are based on management’s current expectations and beliefs and are subject to a number of risks,

uncertainties and assumptions that could cause actual results to differ materially from those described in the forward-looking statements.

All statements other than statements of historical fact are statements that could be deemed forward-looking statements. For example, statements of expected synergies from Tower’s merger with Jazz or TowerJazz Japan, customer benefits, costs savings, financial guidance, industry ranking, execution of integration plans and management and organizational structure are all forward-looking statements. The potential risks and uncertainties include, among others, that expected customer benefits, synergies and costs savings will not be achieved or that the companies are unable to successfully execute their integration strategies, as well as other risks applicable to the companies’

business described in the reports filed by Tower and Jazz with the Securities and Exchange Commission (the “SEC”) and, in the case of Tower,

the Israel Securities Authority. These filings identify and address other important factors that could cause the companies’ respective financial and operational results to differ materially from those contained in the forward-looking statements set forth in this document. Accordingly,

no assurances can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do

so, what impact they will have on the companies’ results of operations or financial condition. Tower is providing this information as of the

date of this presentation and Tower does not undertake any obligation to update any forward-looking statements contained in this

document as a result of new information, future events or otherwise.

A more complete discussion of risks and uncertainties that may affect the accuracy of forward-looking statements included in this

presentation or which may otherwise affect the companies’ business is included under the heading “Risk Factors” in Tower’s most recent filings on Forms 20-F, F-4, F-3 and 6-K, as were filed with the SEC and the Israel Securities Authority and Jazz’s most recent filings on Forms 10

-K and 10-Q, as were filed with the SEC. Actual results may differ materially from those projected or implied by such forward-looking

statements. Tower and Jazz do not intend to update, and expressly disclaim any obligation to update, the information contained therein.

Past, Present, Future

---

PAST

---

5

- \$94M annual revenue
  - \$560M debt due from 2006
    - Less than \$20M cash
    - Negative EBITDA
  - Negative cash flow from operations
    - 1 site
  - 1 customer in Fab2 which was unrelated party
  - Negative CF at full utilization (low capacity)
-



Past

- Low Value Add
  - 2nd/ 3rd Source
  - Q/Q price negotiations
  - No Specialty (mainly digital)
-

Past to Present

- 2008 - major shift from digital 2nd source to analog value add provider
    - fueled by the Jazz merger
-

Present

- 2010 - breaking \$500 million of revenues, became #1 specialty, giving us different brand in the eyes of premier 1st tier customers (such as Samsung).
-

Note

1. Source: IC Insights, Company reports, SemiMD January 2012  
Foundry Revenue Landscape: Consistent superior performance
-

Samsung Selects TowerJazz's "unrivaled" 700V Power Technology Platform for its Next Generation High Voltage Products  
Power Management IC Market Estimated at \$14.6B in 2013 according to iSuppli  
Samsung Electro-Mechanics Vice President Dr. Jae Shin Lee and TowerJazz Chief Executive Officer, Mr. Russell Ellwanger  
MIGDAL HAEMEK, Israel and SEOUL, Korea, September 5, 2011 - TowerJazz, the global specialty foundry leader, and Samsung Electro-Mechanics, today announced they have signed a Memorandum of Understanding (MOU) to develop and volume produce a variety of product families based on TowerJazz's 700V (TS100PM) power management process.

"We chose to work with TowerJazz on our next-generation of high voltage products because of their superior 700V technology which is unrivaled by other foundries. We were looking for a true partner who would be committed to our success and provide excellent support and the required manufacturing capacity," said Samsung Vice President Dr. Jae Shin Lee. "TowerJazz is well-known in Korea, especially in the power management market, and we are looking forward to our collaboration on many high volume products."

---

- Over \$640M revenue run-rate
    - Positive \$170M EBITDA
  - 3 sites with 4 manufacturing facilities
  - 120 customers in volume production, all are unrelated parties
    - 50 customers in Fab2
-

Present

- 2010 - breaking \$500 million of revenues, gave us different brand in the eyes of premier 1st tier customers (such as Samsung).
  - We now supply to the top market leaders in every one of our chosen business segments, e.g. FEM and X-ray
-

Front-End Module

---



Front-End-Module Business Growth

PA

GaAs or SiGe

PA Control

RF CMOS

Switch

GaAs or SOS,

or SOI CMOS

Front End

Module

Transceiver: RF CMOS

3G iPhone

Antenna

FEM:

The heart of every mobile  
communication platform

---

Front-End-Module Business Growth

PA

GaAs or SiGe

PA Control

RF CMOS

Switch

GaAs or SOS, or

SOI CMOS

Front End

Module

Transceiver: RF

CMOS

3G iPhone

Antenna

Skyworks (#1 at ~50% market share)

o TowerJazz chosen as “Foundry Supplier of the Year” 2008, 2009, 2010, and 2011

Innovation Award

TowerJazz Receives Innovation Award from Skyworks Solutions

Recognized for innovations in technology - February 27, 2012

---

Potential FEM Market Growth for TJ  
Increase in served  
market with establish  
customers

---

4/3"  
1"  
35 mm  
APS (3:2)  
2/3"  
1/4"  
1/3"  
1/2"  
1/10"  
48x36  
Consumer  
Prosumer  
Photography  
Professional  
Photography  
Studio & High End Photography  
Large Industrial, Scientific, Space  
Industrial,  
Machine Vision,  
Bar-Code  
"Cameras" application range  
8" wafer size  
Small Medical  
Medical (X-ray)  
6" Wafer Size  
645

---

4/3"  
1"  
35 mm  
APS (3:2)  
2/3"  
1/4"  
1/3"  
1/2"  
1/10"  
48x36  
Consumer  
Prosumer  
Photography  
Professional  
Photography  
Studio & High End Photography  
Large Industrial, Scientific, Space  
Industrial,  
Machine Vision,  
Bar-Code  
"Cameras" application range  
8" wafer size  
Small Medical  
Medical (X-ray)  
6" Wafer Size  
645

---

Dental X-Ray CMOS Sensors

19

- Market Leader for dental x-ray CMOS sensors
    - Sole supplier to 4 of top 5 providers protected with strong IP
      - Non seasonal, high margins, growth market
  - Intra-Oral / Panoramic / Coned Beam CT (CBCT) / Cephallography
    - Global Customer base: US, Europe and Asia
      - Panoramic X-Ray
      - CBCT (dental CT)
-

Present  
of premier 1st tier customers  
(such as Samsung).

- Nishiwaki factory, purchased with a sound business model, provides capacity for large customer growth.
-

Japan Acquisition

- Micron 3 years take-or-pay
  - Already gained business from multiple Japanese IDMs
    - 47 Active Customers from Korea
-



Future

- Continue market growth within FEM, power management, high end image sensor, IDM transfer and JDPs and within specific MEMS opportunities.
-

H1'12 - # of masks entering the factories

---

MEMS

---

MEMS are a major driving innovation across a broad new diverse set of product categories in contrast to rapid commoditization occurring in Digital/CMOS world

P  
P  
P  
P  
P

---

MEMS

- Entered multiple engagements with organic growth potential of \$100M per annum.
  - One recently qualified customer now entering dual site special engagement model.
-

Future

- Continue market growth within FEM, power management, high end image sensor, IDM transfer and JDPs and within specific MEMS opportunities.
  - Entrance into 300mm with the presented India deal or other such initiatives. Awaiting government approval.
  - Continued focus to achieve the \$1B annual revenues.
-

TowerJazz Was Chosen by Vishay Intertechnology for High  
Volume Manufacturing Engagement Through 2018

The Agreement Includes:

- Two Product Families to be Manufactured at TowerJazz's Japanese Factory;
- Additional New Product Families to be Manufactured at both TowerJazz Israeli Factories;
- Super Junction Families Utilizing a Large Jointly Built Epitaxial Growth Center in the Israeli Facility;
- Under the New Engagement, Vishay Will Commit to High Volume Production at Towerjazz's Fabs and TowerJazz Will Secure Capacity to Vishay-Siliconix

MIGDAL HAEMEK, Israel - September 03, 2012 - TowerJazz, the global specialty foundry leader, announced today the expansion of its business relationship with Vishay-Siliconix with a five-year agreement under the terms of which TowerJazz will manufacture two Vishay Siliconix product families at TowerJazz's Japanese facility (Fab 4) as well as multiple Vishay Siliconix product families at TowerJazz's Fabs 1 and 2 in Migdal HaEmek, Israel.

The new collaboration in Japan will enable TowerJazz to have a steady baseline revenue with a long-term, strategic customer at the Japanese fab, in addition to multiple other IDM deals the company is currently engaged in.

---

Summary

- We have been the #1 growth foundry over the past 5 years AND became the #1 specialty foundry by revenue in 2010 and expanded the lead in 2011.
  - We target to continue to lead the specialty market over the next years by
    1. Growing specialized capabilities in sync with our customers immediate to long term needs
    2. Providing an environment enabling impassioned employees
    3. Innovative business initiatives
-



Summary

- A major shareholder, Hevra LeIsrael, has voiced continued belief and support in the company and activities for long term strategic holding.
  - Back to trade in Nasdaq main list with large US funds being interested in the company and increasing position
  - Set for a NDR in NY and Boston by the end of this month set by one of our US covering analyst banks.
-

Thank You