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**FORM 6-K**

**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

For the month of May 2010 No. 5

**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  £

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  S

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On May 20, 2010, the registrant announces TowerJazz CEO, Russell Ellwanger Named as Finalist in Outstanding CEO Category for TechAmerica High-Tech Innovation Awards.

This Form 6-K is being incorporated by reference into all effective registration statements filed by us under the Securities Act of 1933.

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**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: May 20, 2010

By: /s/ Nati Somekh Gilboa

Name: Nati Somekh Gilboa

Title: Corporate Secretary

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## **TowerJazz CEO, Russell Ellwanger Named as Finalist in Outstanding CEO Category for TechAmerica High-Tech Innovation Awards**

*Honorees to be announced at an annual dinner on June 2<sup>nd</sup>*

**NEWPORT BEACH, CA, May 20, 2010** – TowerJazz, the global specialty foundry leader, today announced its CEO, Russell Ellwanger has been named a finalist in the Outstanding CEO in Technology category for the TechAmerica High-Tech Innovation Awards. Now in its 17<sup>th</sup> year, this premier business event celebrates excellence and achievement in the region's technology industry, and honors local companies, individuals and products that drive innovation in Orange County. This year's winners will be announced at a dinner on June 2, 2010, at the Hyatt Regency in Irvine, Calif.

"I am honored to be a finalist for TechAmerica's Outstanding CEO award and represent the success of our entire team of dedicated employees," said Russell Ellwanger, TowerJazz CEO. "We are pleased to be recognized for the significant results we have achieved this past year, becoming the fastest growing foundry and the only one to realize year over year growth in 2009, accomplished during one of the biggest downturns in the semiconductor industry's history. Due to the breadth and depth of our innovative technologies, we have doubled our customer base and become more diversified, increasing capacity globally by more than 50%. We are thrilled with the many milestones we have reached thus far and look forward to reaching the \$500M revenue target that we set for 2010 with the implied success for our company, customers and shareholders."

"We had a record number of nominations this year, almost 100 and we congratulate Russell Ellwanger, TowerJazz CEO for rising to the finalist ranks," said Bob Brunson, associate director, TechAmerica Orange County. "This region boasts many noteworthy companies, such as TowerJazz that continue to influence technology development throughout the rest of the world, and we're excited to help highlight them."

The awards categories this year include the Harvey Mudd College Green Engineering Award, Innovative Product/Technology In 2009, Outstanding CEO In Technology, Outstanding Company In Medical Technology and Outstanding Technology Company.

In addition to the awards, TechAmerica Orange County will recognize educators and students for their innovative use of science, math, and technology in the classroom and the community in conjunction with Project Tomorrow. The organization is the nation's leading education nonprofit group focused on preparing today's students to be tomorrow's innovators.

For more information, please visit [www.techamerica.org/htaoc](http://www.techamerica.org/htaoc).

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### **About TowerJazz**

Tower Semiconductor Ltd. (NASDAQ: [TSEM](#), TASE: TSEM), the global specialty foundry leader and its fully owned U.S. subsidiary Jazz Semiconductor, 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 world-class customer service, TowerJazz maintains two manufacturing facilities in Israel and one in the U.S. with additional capacity available in China through manufacturing partnerships. For more information, please visit [www.towerjazz.com](http://www.towerjazz.com).

### **About TechAmerica**

TechAmerica is the leading voice for the U.S. technology industry, which is the driving force behind productivity growth and jobs creation in the United States and the foundation of the global innovation economy. Representing approximately 1,500 member companies of all sizes from the public and commercial sectors of the economy, it is the industry's largest advocacy organization and is dedicated to helping members' top and bottom lines. It is also the technology industry's only grassroots-to-global advocacy network, with offices in state capitals around the United States, Washington, D.C., Europe (Brussels) and Asia (Beijing). TechAmerica was formed by the merger of TechAmerica (formerly the American Electronics Association), the Cyber Security Industry Alliance (CSIA), the Information Technology Association of America (ITAA) and the Government Electronics & Information Technology Association (GEIA). Learn more at [www.techamerica.org](http://www.techamerica.org).

### **Safe Harbor Regarding Forward-Looking Statements**

This press release includes forward-looking statements, which are subject to risks and uncertainties. Actual results may vary from those projected or implied by such forward-looking statements. A complete discussion of risks and uncertainties that may affect the accuracy of forward-looking statements included in this press release or which may otherwise affect Tower and/or Jazz's business is included under the heading "Risk Factors" in Tower's most recent filings on Forms 20-F, F-3, F-4 and 6-K, as were filed with the Securities and Exchange Commission (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, respectively. Tower and Jazz do not intend to update, and expressly disclaim any obligation to update, the information contained in this release.

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