
FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month March 2024 No. 5

TOWER SEMICONDUCTOR LTD.

(Translation of registrant's name into English)

Ramat Gavriel Industrial Park

P.O. Box 619, Migdal Haemek, Israel 2310502

(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 March 21, 2024, the Registrant Announces *its Participation at OFC 2024 Highlighting Company's Recent Developments in Silicon Germanium and Silicon Photonics Technologies*

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: March 21, 2024

By: /s/ Nati Somekh

Name: Nati Somekh

Title: Corporate Secretary

Tower Semiconductor to Participate at OFC 2024 Highlighting Company's Recent Developments in Silicon Germanium and Silicon Photonics Technologies

MIGDAL HAEMEK, Israel, March 21, 2024 – Tower Semiconductor (NASDAQ/TASE: TSEM), the leading foundry of high-value analog semiconductor solutions, today announced its participation at upcoming 2024 OFC conference to be held March 26th - 28th in the San Diego Convention Center, California. The company will showcase its advanced Silicon Germanium and Silicon Photonics platforms, as well as recent technology developments providing cutting-edge solutions supporting the growing demands of AI, quantum computing, datacenters, and next-generation telecom networks.

Tower's widely acclaimed SiGe BiCMOS Terabit Platform, with the latest generation of Ft/Fmax of > 325/450 GHz, is architected to meet the demands of low-latency and low power network architectures ranging from AI/ML clusters to hyperscalers. This platform is also well suited for high performance low-power wireless applications such as 5G, mmwave, automotive radar and SatCOM. Complementing this advanced SiGe platform is Tower's industry-leading high-volume PH18M SiPho platform that offers a rich portfolio of optical components, including ultra-high bandwidth modulators, photodetectors, low-loss waveguides, and light coupling solutions. Combined with a mature design enablement infrastructure, the platform delivers accurate model-to-silicon match that empowers designers to bring disruptive solutions to market on time and with minimal design iterations.

To meet with Tower's engineering team during the conference, visit the Company's **booth #4608**.

For additional details and registration, please visit the event webpage [here](#).

For additional information about the Company's RF & HPA platform offering, visit [here](#).

About Tower Semiconductor

Tower Semiconductor Ltd. (NASDAQ/TASE: TSEM), the leading foundry of high value analog semiconductor solutions, provides technology, development, and process platforms for integrated circuits (ICs) in growing markets such as consumer, industrial, automotive, mobile, infrastructure, medical and aerospace and defense. Tower Semiconductor focuses on creating positive and sustainable impact on the world through long term partnerships and its advanced and innovative analog technology offering, comprised of a broad range of customizable process platforms such as SiGe, BiCMOS, mixed-signal/CMOS, RF CMOS, CMOS image sensor, non-imaging sensors, displays, integrated power management (BCD and 700V), photonics, and MEMS. Tower Semiconductor also provides world-class design enablement for a quick and accurate design cycle as well as process transfer services including development, transfer, and optimization, to IDMs and fabless companies. To provide multi-fab sourcing and extended capacity for its customers, Tower Semiconductor owns two facilities in Israel (150mm and 200mm), two in the U.S. (200mm), two in Japan (200mm and 300mm) which it owns through its 51% holdings in TPSCo, a 300mm facility in Agrate, Italy, shared with ST as well as a 300mm capacity corridor in Intel's New Mexico factory. For more information, please visit: www.towersemi.com.

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'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. Tower does not intend to update, and expressly disclaim any obligation to update, the information contained in this release.

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