
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 6-K

**REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16
OF THE SECURITIES EXCHANGE ACT OF 1934**

For the month of March 2026 No.7

Commission File Number 0-24790

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 of Form 20-F or Form 40-F.

Form 20-F Form 40-F

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 25, 2026

By: /s/ Nati Somekh

Name: Nati Somekh

Title: Corporate Secretary

Tower Semiconductor Announces Plans to Expand 300mm Capacity in Japan to Support Strong Customer Demand

Planned expansion supports the TPSCo announced transition while strengthening Tower's differentiated optical and photonics platforms and enabling growth across these high-value technology offerings

Migdal Haemek, Israel, March 25, 2026 - Tower Semiconductor (NASDAQ/TASE: TSEM), the leading foundry for high-value analog semiconductor solutions, today announced a strategic restructuring of its Japan operations, which are currently organized under TPSCo (a Japanese company held 51% by Tower and 49% by Nuvoton Technology Corporation Japan (NTCJ), a fully owned subsidiary of Nuvoton Technology Corporation (TSEC: 4919)), under which Tower will take full ownership of the 300mm facility (Fab 7) to be organized under a fully owned Japanese subsidiary of Tower, while NTCJ will take full ownership of the 200mm facility (Fab 5).

As part of this strategic restructuring, the companies will enter into mutual long-term supply agreements, ensuring continued support for existing customers of both companies. Accordingly, Tower customers currently served through Fab 5 (200mm) and Nuvoton customers served through Fab 7 (300mm) will experience no disruption to supply or operations.

The transaction is targeted to close on April 1, 2027, subject to the satisfaction of customary closing conditions, and receipt of applicable regulatory approvals.

TPSCo, previously a 51%-owned subsidiary of Tower, has demonstrated strong operational and R&D capabilities and has been fully integrated into Tower's global operations and business units.

Under the new structure, Tower's new wholly owned subsidiary in Japan will own all Fab 7 (300mm) manufacturing production tools, operations, employees, and business activities, further strengthening Tower's global strategic footprint. As part of the agreement, Tower has an option to purchase the existing Fab 7 building and land.

Contingent upon subsidy approval from Japan's Ministry of Economy, Trade and Industry (METI), following the formal application, Tower will purchase the adjacent land under pre-agreed terms between Tower and NTCJ to support the expansion of its 300mm capacity and capabilities. Tower targets the combined capacity across the existing facility and the intended adjacent expansion to result in four times the current Uozu 300mm capacity once completed.

Given that the company's photonics technologies are already qualified and shipping in volume from F7 Uozu, Tower believes this intended capacity investment to full volume shipments will be substantially accelerated. The first increases in photonics shipments are expected to occur immediately upon each new tool to arrive in the expanded fab footprint. This expansion is targeted to occur in a fab that is presently strongly cash from operations positive and is targeted to stay so during the entire build-out period. This contrasts sharply with greenfield or acquisition-based capacity expansions, which typically require years for process development, customer qualification, and financial stabilization while ramping from zero revenue against high fixed costs.

"TPSCo has been built upon decades of strong operational expertise and collaboration," said Russell Ellwanger, Chief Executive Officer of Tower Semiconductor. "We appreciate the legacy and partnership developed with Panasonic and Nuvoton, and we are pleased to evolve our relationship with Nuvoton from joint ownership to long-term strategic supplier and customer partnerships that support the growth strategies of both companies."

Ellwanger added, "This step enables Tower to further strengthen our differentiated optical and photonics technology platforms through a large and profitable expansion of our 300mm operational capabilities. We are excited to work closely with Japan's Ministry of Economy, Trade and Industry in advancing photonics innovation and building a long-term growth engine for our company and customers, whilst strengthening Japan's semiconductor capabilities and ecosystem."

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 its customers in growing markets such as consumer, industrial, automotive, mobile, infrastructure, medical and aerospace and defense. Tower Semiconductor focuses on creating a 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 SiPho, SiGe, BiCMOS, mixed-signal/CMOS, RF CMOS, CMOS image sensor, non-imaging sensors, displays, integrated power management (BCD and 700V), 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 currently owns one operating facility in Israel (200mm), two in the U.S. (200mm), and two in Japan (200mm and 300mm) which it owns through its 51% holdings in TPSCo and shares a 300mm facility in Agrate, Italy with STMicroelectronics. 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 disclaims any obligation to update, the information contained in this release.

Contacts

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