
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 September 2026 No.3

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 ☐

**On September 23, 2026, the Registrant to Showcase Technology Innovation
and Industry Leadership at its 2026 Technical Global Symposium in the United
States**

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 23, 2026

By: /s/ Nati Somekh

Name: Nati Somekh

Title: Corporate Secretary

Tower Semiconductor to Showcase Technology Innovation and Industry Leadership at its 2026 Technical Global Symposium in the United States

MIGDAL HAEMEK, Israel, - Sept 23, 2026 - Tower Semiconductor (NASDAQ/TASE: TSEM), the leading foundry for high-value analog semiconductor solutions, today announced its 2026 Technical Global Symposium (TGS), to be held on November 17, 2026, in Santa Clara, California, USA. Bringing together customers, partners and industry leaders, the event will explore technologies and market trends driving and shaping the evolution of AI infrastructure, high-performance computing, advanced connectivity, and intelligent sensing. Attendees will have the opportunity to engage directly with Tower's executive leadership, technology experts, and ecosystem partners.

Following the highly successful 2026 Technical Global Symposium in Shenzhen, China, the U.S. event marks Tower's second Technical Global Symposium of the year, underscoring the Company's commitment to deep global customer engagement, industry collaboration and technology leadership across key semiconductor markets.

The event will feature a CEO keynote session highlighting the Company's growth, strategic roadmap, and pivotal role in today's semiconductor landscape, as well as an executive industry panel featuring senior leaders from leading technology companies. Featured panelists include **Oliver Sun**, CTO, Terahop; **Hong Liu**, VP & Fellow, Google AI22; **Julie Sheridan Eng**, CTO, Coherent; and **Andy Bechtolsheim**, Founder and Chief Architect, Arista.

The panel will examine the evolution of next-generation data center architectures and the technologies enabling the rapid expansion of AI-driven infrastructure. Panelists will share perspectives on the opportunities, challenges, and semiconductor innovations required to support future computing and connectivity demands.

Technical sessions led by Company executives will showcase Tower's advanced and differentiated process technologies, including its market-leading, high-volume silicon photonics (SiPho), SiGe, RF and RF SOI, power management, sensors and displays platforms. Participants will gain insights into the latest technology developments, future platform roadmaps and emerging applications shaping key high-growth markets.

For additional information, the agenda, and registration details, please visit the event webpage [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 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, and integrated power management (BCD and 700V). 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 disclaim any obligation to update, the information contained in this release.

###

Tower Semiconductor Company Contact: Orit Shahr | +972-74-7377440 | oritsha@towersemi.com

Tower Semiconductor Investor Relations Contact: Liat Avraham | +972-4-6506154 | liatavra@towersemi.com
