
**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 February 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 February 17, 2026, the Registrant and Scintil Photonics Announce Availability of World's First Heterogeneously Integrated DWDM Lasers for AI Infrastructure

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: February 17, 2026

By: /s/ Nati Somekh

Name: Nati Somekh

Title: Corporate Secretary

Tower Semiconductor and Scintil Photonics Announce Availability of World's First Heterogeneously Integrated DWDM Lasers for AI Infrastructure

Combined with Tower's multi-site global footprint, Scintil's unique SHIP™ platform is ready to take on the challenging requirements of the next generation Hyperscale AI Infrastructure

MIGDAL HAEMEK, Israel, and GRENOBLE, France, February 17, 2026 - [Tower Semiconductor](#) (NASDAQ/TASE: TSEM), the leading foundry for high-value analog semiconductor solutions, and Scintil Photonics, the technology leader in Heterogeneous Integrated Photonics for next-generation AI infrastructure, today announced availability of the world's first heterogeneously integrated Dense Wavelength Division Multiplexing (DWDM) laser sources for AI infrastructure using Scintil's SHIP™ (Scintil Heterogeneous Integrated Photonics) technology. SHIP™ leverages Tower's high-volume silicon photonics platform and combines it with heterogeneous integration of monolithic laser sources, capable of meeting the most demanding DWDM technical requirements for AI.

DWDM lasers are an essential component of Co-Packaged Optics (CPO) based next generation of AI infrastructure that aims to deliver ever-growing bandwidth density, ultra-low tail latency, and lower energy per bit, while improving GPU utilization and hyperscaler ROI needed in the agentic AI era.

"The scale-up networking opportunity is about to increase significantly as these server interconnects move to multirack CPO. Scale-up networking will consume an increasing portion of AI Networking's \$200B 2030 market as the market moves towards optical architectures, reducing the constraints on beachhead and copper bandwidth limitations per GPU/XPU," said Alan Weckel, Founder and Technology Analyst at 650 Group, LLC. "Manufacturing and foundry to vendor alignment is the key to unlocking the CPO market to ensure the reliability and volumes that Hyperscalers need to hit their AI goals."

Scintil's SHIP™ technology has been validated on Tower's silicon photonics platform. LEAF Light™ is the industry's first DWDM-optimized, intelligent integrated laser source fabricated with SHIP™. Tower Semiconductor's multi-site silicon photonics manufacturing footprint provides resilient capacity and supply continuity aligned with hyperscale deployment needs. This positions the partnership for high-volume hyperscale deployment with the capacity flexibility and supply continuity required at scale. The collaboration supports customer evaluations for DWDM CPO programs, establishing a defined path from qualification to volume manufacturing.

"Next-generation AI infrastructure demands optical interconnects that deliver more bandwidth per fiber at lower power per bit," said **Matt Crowley, Chief Executive Officer of Scintil Photonics**. "DWDM co-packaged optics meets that bar. LEAF Light™ brings the DWDM laser source technology; Tower's SiPho platform brings the manufacturing scale. With SHIP™ now validated on Tower's production lines, customers have a path from evaluation to millions of units per month."

"We deeply value our long-term partnership with Scintil, and are excited to bring this revolutionary monolithic DWDM laser technology to market to enable next generations of scale-up architectures," said **Dr. Ed Preisler, VP and GM of RF Business Unit at Tower Semiconductor**. "Scintil's technology complements our PH18M platform already in mass production for optical transceivers at our facilities worldwide."

As AI data center growth accelerates, hyperscalers need networking solutions that reduce power, improve utilization, and scale with the next generation of models. DWDM CPO, with higher bandwidth density, lower energy per bit, and ultra-low tail latency, are where the industry is heading. LEAF Light™ is the first production-ready DWDM laser source that uses heterogeneous integration to monolithically integrate active lasers and established silicon photonics on a single chip.

Additional information and OFC:

For more detailed information on this and Scintil manufacturing roadmap, please visit Scintil at the [OFC 2026 Conference](#) in Los Angeles, March 17–19, **booth# 5537**.

To learn more about Tower's advanced silicon photonics (SiPho) platform and RF & HPA technology offerings, visit **Tower's booth #2221** at the upcoming [OFC 2026 conference](#), March 17-19, 2025. Additional information is also available on the company's website: [here](#).

Representatives from both companies will be available for meetings during the event.

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 disclaim any obligation to update, the information contained in this release.

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

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

About Scintil Photonics

Scintil Photonics is the global leader in DWDM laser sources for AI. Using its SHIP™ (Scintil Heterogeneous Integrated Photonics) technology, Scintil developed LEAF Light™, the world’s first single-chip DWDM laser source for high-density optical connectivity in scale-up networks. LEAF Light™ enables hyperscalers to meet the power, tail latency, utilization, and bandwidth demands of large-scale GPU clusters, leveraging next-generation co-packaged optics (CPO). Headquartered in Grenoble, France, with operations across North America, Scintil is built to support global needs for advanced AI infrastructure.

www.scintil-photonics.com

Scintil Media Contact: Isaac Lopez | OmniScale Media (For Scintil Photonics) | 360-576-5475 |

isaac@omniscalemedia.com or For press inquiries in France or Europe, please contact cassandre@scintil-photonics.com.
