
FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month August 2020 No. 1

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 August 3, 2020, the Registrant Announced a New RF Switch Technology
with Breakthrough Performance**

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: August 3, 2020

By: /s/ Nati Somekh

Name: Nati Somekh

Title: Corporate Secretary



Where **Analog** and **Value** Meet

NEWS ANNOUNCEMENT

FOR IMMEDIATE RELEASE

Tower Semiconductor Announces a New RF Switch Technology with Breakthrough Performance

Enables cutting-edge solutions for 5G and high performance RF switch markets with record Figure of Merit performance: Ron x Coff less than 10 femtoseconds

The new technology will be presented at IMS 2020, with MPWs available in 2021

MIGDAL HAEMEK, Israel, August 03, 2020 –Tower Semiconductor (NASDAQ/TASE: TSEM), the leader in high-value analog semiconductor foundry solutions, today announces a new radio frequency (RF) switch technology with record figure of merit targeting the 5G and high-performance RF switch markets. This new switch technology enables more efficient, novel RF system architectures in applications including mobile, base-station and mmWave communications. Tower Semiconductor is engaged with multiple customers and partners to bring this technology to market for next-generation products.

This new switch technology demonstrates a record RF device figure of merit: Ron x Coff < 10 femtoseconds vs. 70-100 femtoseconds in use today for the most advanced applications. The switch performs over an extremely wide range of frequencies spanning MHz to all frequency bands discussed for 5G, and further into the mmWave. This results in extremely low insertion loss and very small device size.

The switch is also nonvolatile so consumes no energy when in the on-state or off-state, making it attractive for IoT, and other power and battery sensitive product applications. Finally, Tower has demonstrated the versatility of this patented technology by integrating it with some of its other process platforms such as SiGe BiCMOS and Power CMOS.

Tower Semiconductor will be offering multi-project wafer runs (MPWs) in 2021 for select customers.

The new RF switch will be presented at IMS 2020 (International Microwave Symposium) with results from electrical devices, process integration and circuits fabricated at Tower Semiconductor. Presentations are part of the Tu1G: Innovative RF Switches and Applications session (Tu1G-2 and Tu1G-5).

The Live Stream event will take place Aug. 4 – 6, 2020. For more details about the presentations, please visit IMS 2020 event website [here](#).
For more information about Tower Semiconductor's RF & HPA process technology offerings, please [click here](#).
For more information about Tower Semiconductor's process technology offerings, please [click here](#).

About Tower Semiconductor

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), the leading foundry of high value analog semiconductor solutions, provides technology and manufacturing platforms for integrated circuits (ICs) in growing markets such as consumer, industrial, automotive, mobile, infrastructure, medical and aerospace and defense. Tower Semiconductor's 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, 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 Transfer Optimization and development Process Services (TOPS) to IDMs and fabless companies. To provide multi-fab sourcing and extended capacity for its customers, Tower Semiconductor operates two manufacturing facilities in Israel (150mm and 200mm), two in the U.S. (200mm) and three facilities in Japan (two 200mm and one 300mm) through TPSCo. For more information, please visit www.towersemi.com.

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

Tower Semiconductor Investor Relations Contact: Noit Levi | +972-4-604-7066 | noit.levi@towersemi.com
