FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month October 2018 No. 4

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 \boxtimes Form 40-F \square
omi	Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the mission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.
	Yes □ No ⊠

On October 15, 2018, the Registrant Announces, They Increases ITAR Portfolio, Adds 65nm Technology in Support of Growing Aerospace and Defense Customer Demand

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.

Date: October 15, 2018

TOWER SEMICONDUCTOR LTD.

By: /s/ Nati Somekh

Name: Nati Somekh Title: Corporate Secretary



NEWS ANNOUNCEMENT FOR IMMEDIATE RELEASE

TowerJazz Increases ITAR Portfolio, Adds 65nm Technology in Support of Growing Aerospace and Defense Customer Demand

NEWPORT BEACH, Calif., October 15, 2018 – <u>TowerJazz</u>, the global specialty foundry leader, today announced the Company is increasing its technology portfolio that is compliant with ITAR (International Traffic in Arms Regulations) by adding 65nm technology access for next-generation ROICs (Readout Integrated Circuits), enabling essential military and space applications critical to national defense. ROICs are used for reading infrared and ultraviolet detectors in military surveillance and other applications ranging from x-ray astronomy to security and industrial inspection.

Initial products serving the US aerospace and defense community have taped-out in this new 65nm offering and additional products are in design. Through proper licensing TowerJazz can provide access for aerospace and defense customers to an increasing technology portfolio including high dynamic range image sensors (CIS and CCD), integrated power devices (BCD, SOI, and LDMOS) and high frequency silicon RFCMOS.

"We are excited to announce this new advanced capability to our customers. Adding 65nm, and soon, 45nm technology for ITAR products enables our aerospace and defense customers' additional avenues to continue to create advanced products to serve this very critical market," said Mike Scott, Director, TowerJazz USA Aerospace & Defense.

Further details will be discussed at TowerJazz's U.S. Technical Global Symposium (TGS) to be held on November 7, 2018 at the Hilton Santa Clara, CA. To view the agenda and/or register for the event, please visit: http://www.towerjazz.com/events/TGS/2018/TGSUS.html/.

About TowerJazz

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM) and its subsidiaries operate collectively under the brand name TowerJazz, the global specialty foundry leader. TowerJazz manufactures next-generation integrated circuits (ICs) in growing markets such as consumer, industrial, automotive, medical and aerospace and defense. TowerJazz's advanced technology is comprised of a broad range of customizable process platforms such as: SiGe, BiCMOS, mixed-signal/CMOS, RF CMOS, CMOS image sensor, integrated power management (BCD and 700V), and MEMS. TowerJazz 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 that need to expand capacity. To provide multi-fab sourcing and extended capacity for its customers, TowerJazz 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). For more information, please visit www.towerjazz.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 TowerJazz'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 and Jazz's most recent filings on Forms 10-K and 10-Q, as were filed with the SEC, respectively. Tower and Jazz do not intend to update, and expressly disclaim any obligation to update, the information contained in this release.

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