FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

For the month April 2020 No. 3

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 April 23, 2020, the Registrant Announced HP Indigo selected Tower Semiconductor for their Next-Generation High Resolution Industrial Presses

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: April 23, 2020

By: /s/ Nati Somekh
Name: Nati Somekh
Title: Corporate Secretary

NEWS ANNOUNCEMENT **FOR IMMEDIATE RELEASE**

HP Indigo selected Tower Semiconductor for their Next-Generation High Resolution Industrial Presses

Utilizing Tower Semiconductor's leading 180nm power management platform providing advanced performance, efficiency, design and footprint optimization

MIGDAL HAEMEK, Israel, April 23rd, 2020 –Tower Semiconductor (NASDAQ/TASE: TSEM), the leader in high-value analog semiconductor foundry solutions, today announced the utilization of Tower Semiconductor's 180nm Power Management platform for HP Indigo's next-generation high-resolution industrial presses. The advanced process, manufactured in Company's 8'' facility in Israel, offers high-end integration of multiple drivers in a single chip, as well as a smaller footprint, enabling the replacement of traditional opto-mechanical laser writing head with a single mix-signal solution. The new HP Indigo analog IC will provide cutting-edge presses resolution, higher than any other available commercial solution.

Tower Semiconductor's 180nm Power Management modular technology platform offers advanced performance, efficiency, design and footprint optimization for a wide range of operating voltages. With its high levels of functional integration including: wide range of memories, high density 1.8V and 5V libraries and advance power LDMOS, this platform is highly suitable for a variety of market and end applications such as: mobile, wearables, industrial and automotive. In addition, its state-of-the-art PDK (TS18PM) enables the option to reuse circuits with different isolation schemes and LDMOS types, allowing an efficient, time and cost saving design cycle supporting fast time to market.

"We are very pleased to be collaborating with HP Indigo, the world leading provider of advanced digital printing solutions, in the development and production of this sophisticated analog IC for its high resolution industrial presses" said Shimon Greenberg, Tower Semiconductor Vice President and General Manager of Mixed-Signal and Power Management Business Unit. "The use of our highly flexible 180nm platform and its competitive advantages is a fine match for HP Indigo's advanced requirements, allowing it to bring to market this new and advantageous solution further expanding its highly reputable printer offerings and business opportunities."

For additional information about Tower Semiconductor's technology, please click here.

About Tower Semiconductor

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), the leader in high-value analog semiconductor foundry 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.

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.

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