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**FORM 6-K**

**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

For the month August 2021 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

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

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**On August 25, 2021, the Registrant Announce Novosense Selects Tower Semiconductor  
for Volume Manufacturing of their Magnetic Sensor for the Automotive On-board Charger  
Market**

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## 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 25, 2021

By: /s/ Nati Somekh

Name: Nati Somekh

Title: Corporate Secretary

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## **Novosense Selects Tower Semiconductor for Volume Manufacturing of their Magnetic Sensor for the Automotive On-board Charger Market**

*Addressing the ~\$1.6 billion magnetic hall sensor IC market; utilizing Tower's best-in-class 180nm Analog Platform*

**MIGDAL HAEMEK, Israel, and SUZHOU, China, - August 25, 2021** – Novosense, a professional supplier of automotive semiconductor solutions in China, and Tower Semiconductor (NASDAQ/TASE: TSEM), the leading foundry of high value analog semiconductor solutions, today announced the development of hall sensor for the automotive market utilizing Tower's best-in-class 180nm analog platform. The new product will be integrated in an On-Board Charging (OBC) unit in plug-in hybrid and battery-operated electric vehicles, a market expected to reach ~30M cars worldwide by 2024. The product is already being verified by selected China vehicle manufacturers.

This is the first generation of wide-body 16-pin hall current sensor automotive grade NSM2011, designed by Novosense. Achieving leading performance advantages compared with other competing products in the market, including low noise and high signal bandwidth of 240kHz, as well as superb precision drift performance at high temperature, which is conducive to its application in automotive OBC systems functioning at outdoor high temperature conditions. The hall sensor market value is expected to reach ~\$1.6B by 2022.

"We chose Tower for the development and manufacturing of our new magnetic sensor due to its well established TS18 technology platform features that best suited our product characteristics including low noise, high reliability and automotive qualifications," said Sheng Yun, Novosense CTO. "By utilizing this technology and cooperating with Tower's team, we were able to efficiently bring to the domestic OEM and Tier1 automotive customers this new offering with its leading performances and advantages and meeting their strict automotive quality control specifications. We look forward to developing multiple additional products following this successful project".

Tower Semiconductor's TS18 platform provides advanced process nodes as well as mature IPs designed for the automotive market requirements and specifications, allowing a fast and professional development cycle including verification cycle of vehicle-specification level IC. The TS18 platform benefits from best-in-class analog performance with its low power high efficiency and low noise performance, highly suitable for the automotive and industrial markets.

"We are excited to announce our partnership with Novosense and the proficient development process of this new product," said Qin Lei, Vice President of China Operations. "Our successful cooperation enabled fast time to market and is the basis for future developments of additional products designed by Novosense such as magnetic current sensors and angle sensors that are set to meet the requirements of new energy vehicles".

For more information about Tower Semiconductor technology platforms, please visit [here](#).

### **About Novosense**

Suzhou Novosense Microelectronics Co., Ltd. (Suzhou Novosense Microelectronics Co., Ltd.) is a high performance and high reliability simulation chip development and design enterprises. Since its establishment in 2013, the company has focused on product development around various application scenarios. Starting from sensor signal conditioning ASIC chips, the company has expanded integrated sensor chips, isolation and interface chips, drive and sampling chips to the front and back end, forming the product layout of signal sensing, system interconnection and power drive. The company has independent intellectual property rights and rich technical reserves in mixed signal processing, high voltage digital isolation, integrated sensor design and other fields. The products have been used as key chips for new energy vehicles, industrial automation and other applications, successfully entered the supply system of first-line customers in many industries and achieved mass production. Please visit: [www.novosns.com](http://www.novosns.com).

### **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 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 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 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](http://www.towersemi.com).

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