



LeddarTech Selects TowerJazz's 0.18um CIS SPAD Technology for its Next Generation Automotive LiDARs

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Integration of CMOS, CIS and SPAD on the same chip saves silicon and cost, while providing high performance for autonomous driving and ADAS customers

MIGDAL HAEMEK, Israel and QUEBEC CITY, Canada, November 6, 2018 - [TowerJazz](#), the global specialty foundry leader, and [LeddarTech](#), an industry leader in the development of the most versatile and easy-to-use automotive LiDAR development platform, today announced TowerJazz's 0.18um CMOS Image Sensor (CIS) SPAD (single-photon avalanche diode) process has been chosen by LeddarTech for its next generation automotive LiDAR solutions, combining CMOS, image sensors and SPAD on the same chip. TowerJazz's process offers best-in-class figures of merit - high PDE, low DCR (even at elevated temperatures), and very low jitter, making it the best embedded SPAD in the world.

TowerJazz's 0.18um CIS SPAD platform offers an integrated solution with superb figures of merit. Its photon detection efficiency (PDE) is similar to, or better than, the leading stand-alone SPADs in the market. The dark count rate (DCR) is less than 100Hz/um² at 60°C and less than 1KHz/um² at 100°C (especially suited for automotive applications), and jitter of less than one nanosecond. This sophisticated platform also saves silicon, and therefore, reduces cost of mass production.

LeddarTech's LiDAR solutions enable active safety systems and semi-autonomous capabilities in vehicles, paving the way toward fully autonomous driving. LiDAR (Light Detection and Ranging), a detection system which works on the principle of radar, but uses light from a laser, is considered a must have for autonomous driving due to its high resolution at long distances. IHS Markit estimates the automotive LiDAR semiconductor market will reach \$1.8 billion by 2026, with 37% CAGR (2018-2026). LeddarTech's SoCs can be produced by Tier-1 vendors in high volumes at very competitive prices to supply OEMs with a LiDAR system tailored to their specific requirements.

TowerJazz is addressing the rapid expansion of automotive semiconductor content needed to meet the requirements of ADAS and autonomous driving through best-in-class technology solutions developed through close partnerships and roadmap alignment with market leaders and world-class global customer service. TowerJazz has qualified each major process flow in at least two geographically distinct production sites to ensure customers with supply and capacity flexibility at all times.

"We chose TowerJazz for their deep technical knowledge, high level of flexibility, customization capabilities and the best embedded technology. Our close interaction with TowerJazz enables us to more quickly bring to market our LiDAR platform, offering a unique value proposition for Tier-1 manufacturers looking to develop a differentiated, compelling automotive LiDAR offering," said Frantz Saintellemy, President and COO of LeddarTech.

"With our advanced CIS SPAD technology, we are able to provide groundbreaking manufacturing solutions for the growing LiDAR and automotive markets. We are pleased to work with LeddarTech, a true innovator in solid state LiDAR technology," said Dr. Avi Strum, TowerJazz Sr. Vice President and GM, CMOS Image Sensor Business Unit.

LeddarTech's President and COO, Mr. Frantz Saintellemy, will be presenting, "Market Forces Driving the Future of Autonomous Driving and ADAS" at TowerJazz's US [Technical Global Symposium](#) (TGS) on November 7, 2018 in San Jose, CA. For additional information on TowerJazz's CIS automotive offering, please visit [here](#).

About LeddarTech

LeddarTech is an industry leader in the development of the most versatile and easy-to-use automotive LiDAR development platform based on the unique Leddar Engine, which consists of a suite of automotive-grade and functional safety certified SoCs working in tandem with Leddar SP software. The company is responsible for several technological innovations in cutting-edge mobility remote-sensing applications. Automotive active safety, autonomous driving, intelligent transportation, inner-city fleet vehicles, and more, are being enhanced using patented LeddarTech technologies. Additional information about LeddarTech is accessible at www.LeddarTech.com, and on LinkedIn, Twitter or YouTube.

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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Attachment

- [Press release \(PDF\).pdf](#)

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