

# BrightWay Vision Chooses TowerJazz for the production of its Gated Sensor for Automotive Imaging Applications

June 22, 2015

# Rapidly growing vehicle cameras market expected to reach over US \$1B in 2020, expanding at a CAGR of 11.3% from 2014 to 2020

MIGDAL HAEMEK and HAIFA, Israel, June 22, 2015 (GLOBE NEWSWIRE) -- TowerJazz, the global specialty foundry leader, today announced that BrightWay Vision, a provider of groundbreaking vision technology for vehicles, has chosen its TS18IS CMOS image sensor (CIS) technology to manufacture image sensors for its patented automotive cameras, specifically forward looking cameras in vehicles, to allow visibility in all weather conditions. BrightWay Vision has developed BrightEye<sup>TM</sup>, an Advanced Driver Assistance Systems (ADAS) camera for day and night-time forward facing driver assistance functions based on patented gated imaging technology.

According to a new market report published by Transparency Market Research entitled, "Vehicle Cameras Market - Global Industry Analysis, Size, Share, Growth, Trends and Forecast 2014 - 2020," the market was valued at US\$ 595.3 million in 2013 and is expected to reach US\$1.2 billion by 2020, expanding at a CAGR of 11.3% from 2014 to 2020.

TowerJazz and BrightWay Vision jointly developed a unique gated pixel, something that until now has never been produced on silicon as it requires extremely fast charge transfer on the pixel. This sensor, based fully on a CMOS process, provides superior performance over competing solutions based on infrared vision technology, and is much more cost effective. A "gated" sensor allows collecting light that is reflected back from objects at a specific distance from the vehicle, thus eliminating the noise level that is usually associated with ambient light. This sensor also allows the system to accurately measure the distance of certain objects from the vehicle and alert the driver accordingly.

BrightEye offers all the benefits of a rich, natural and intuitive image, even during harsh weather, with real-time sophisticated computer-vision features, such as Lane Departure Warning, Forward Collision Warning, Pedestrian Detection, and other automatic capabilities. BrightEye can function as a stand-alone day and night-time driving solution, or as an integrated solution with existing Advanced Driver Assistance Systems (ADAS) technologies.

"We are absolutely thrilled with the performance of our sensor using TowerJazz's leading edge CIS technology," said Dr. Ofer David, CEO of BrightWay Vision. "The tight cooperation on the development between our R&D team and the excellent pixel development team of TowerJazz, allowed us to produce a very high performing sensor that is now being evaluated by leading car manufacturers."

"Our distinctive technology and deep knowledge and experience in global shutter pixels allowed us to develop a unique pixel that cannot be found elsewhere and can provide a gated image in a high frame rate with extremely good pixel properties," said Dr. Avi Strum, VP and GM of the CIS Business Unit at TowerJazz. "We have very high confidence in BrightWay's capabilities and ability to drive this breakthrough solution into the automotive market."

TowerJazz's advanced and proven CMOS image sensor technology is intended to meet the established growing demand for optical sensors used in automotive, consumer, industrial, and medical applications. TowerJazz's lengthy experience in the imaging field, combined with its own technology developed in-house, enables best-in-class customized designs. TowerJazz's skilled experts support the customization of pixels per project and specific customer needs and its superior performance (dark current, low noise and dynamic range) enables a rich offering for various digital imaging applications.

TowerJazz and BrightWay Vision will be exhibiting and showcasing its CMOS image sensor technology at the IS Automotive Conference on June 23-25, 2015.

#### Availability

Prototype systems with the image sensor have shipped to OEMs and Tier 1 suppliers.

# **About BrightWay Vision**

BrightWay Vision Ltd. develops new, groundbreaking vision technology for vehicles, which provides the driver with a safer and easier driving experience. This technology, combined with active safety systems, reduces the risk of car accidents and saves lives. The Company is currently developing an advanced day and night-time system for forward-facing driver assistance functions, based on an active gated-imaging technology named BrightEye. TMBrightWay Vision Ltd. was founded as a spinoff from Elbit Systems Ltd., an international high technology company engaged in a wide range of defense, homeland security and commercial programs throughout the world.one of the world's leading defense electronics firms (NASDAQ and TASE: ESLT). For more information, please visit: <a href="http://www.brightwavvision.com">http://www.brightwavvision.com</a>.

## **About TowerJazz**

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM) and its fully owned U.S. subsidiary Jazz Semiconductor, Inc. operate collectively under the brand name TowerJazz, the global specialty foundry leader. TowerJazz manufactures integrated circuits, offering a broad range of customizable process technologies including: SiGe, BiCMOS, mixed-signal/CMOS, RF CMOS, CMOS image sensor, integrated power management (BCD and 700V), and MEMS. TowerJazz also provides a world-class design enablement platform 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. For more information, please visit <a href="https://www.toweriazz.com">www.toweriazz.com</a>.

To provide multi-fab sourcing and extended capacity for its customers, TowerJazz operates two manufacturing facilities in Israel (150mm and 200mm), one in the U.S. (200mm) and three additional facilities in Japan (two 200mm and one 300mm) through **TowerJazz Panasonic Semiconductor Co.** 

**(TPSCo)**, established with Panasonic Corporation of which TowerJazz has the majority holding. Through TPSCo, TowerJazz provides leading edge 45nm CMOS, 65nm RF CMOS and 65nm 1.12um pixel technologies, including the most advanced image sensor technologies. For more information, please visit <a href="https://www.tpsemico.com">www.tpsemico.com</a>.

## 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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Press Release (PDF): http://hugin.info/167229/R/1930187/693715.pdf

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