TowerJazz and Newsight Imaging Announce Advanced CMOS Image Sensor Chips for LiDAR used in ADAS and Autonomous Vehicles

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Customized for high volume markets of automotive visual safety solutions as well as drones and autonomous home appliance robots

MIGDAL HAEMEK and NESS ZIONA, Israel, May 9, 2018– TowerJazz, the global specialty foundry leader, and Newsight Imaging, today announced production of Newsight's advanced CMOS image sensor (CIS) chips and camera modules, customized for very high volume LiDAR and machine vision markets, combining sensors, digital algorithms and pixel array on the same chip. Newsight's CIS chips are used in ADAS (advanced driver assistance systems) and autonomous vehicles as well as in drones and robotics.

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, and market growth is expected to be exponential once L4/L5 autonomous vehicles become mainstream. IHS estimates the automotive LiDAR semiconductor market will reach $1.8 billion by 2026, with 37% CAGR (2018-2026). By utilizing TowerJazz's advanced 180nm technology, featuring a wide range of customizable pixel architectures and technologies, Newsight is well-positioned to address the vast opportunities in the automotive market as well as in the security, defense, medical, industrial, and consumer markets.

Newsight's innovative image sensor chips are ideal for high volume, competitive applications requiring cost effectiveness, low power consumption, high performance, and analog and digital integration. The NSI3000 sensor family, currently in mass production at TowerJazz's Migdal Haemek, Israel facility, offers extremely high sensitivity pixels, enabling the replacement of expensive CCD (charge-coupled device) sensors in many applications and is designed for programmable high frame rate speeds, allowing better analysis and reaction to events.

In addition, Newsight's innovative NSI5000, currently in development with TowerJazz at its fab in Israel, is an integrated LiDAR solution for long-range applications and includes a top DSP (digital signal processor) controller which enables complex calculations for depth and machine vision. NSI5000 is used in cutting-edge 3D pulsed based LiDARs for automotive applications and is based on Newsight's eTOF (enhanced time-of-flight), which bridges the gap between short-distance iTOF (indirect time-of-flight) and the long distance automotive requirement, by extending the dynamic range while retaining high accuracy.

"We chose TowerJazz for its advanced pixel technology, specially customized for our CMOS image sensor chips addressing very high volume markets. Together with our technology, we were able to demonstrate a 4X better sensitivity to our customers. TowerJazz's CIS offering is proven in the industry and we are pleased to manufacture locally in Israel with a leader in the global analog foundry space," said Eli Assoolin, Chief Executive Officer, Newsight Imaging.

"With our high-end pixel offering, tailored to specific product and application needs, we are able to provide advanced technology used for high dynamic range CMOS sensors and solutions for the growing LiDAR and automotive markets. We are very happy to work closely with Newsight Imaging to provide market leading solutions and achieve quick time to market. They have shown to be an extremely fast-moving customer and we have a lot of confidence in their success," said Dr. Avi Strum, TowerJazz Sr. Vice President and GM, CMOS Image Sensor Business Unit.

For more information on TowerJazz's CIS offering, please visit: http://www.towerjazz.com/cmos-image-sensor.html.

TowerJazz will be exhibiting at AutoSens on May 14-17, 2018 in Detroit, USA in booth #14. In addition, TowerJazz and Newsight will be presenting at the conference:

- Dr. Amol Kalburge, head of the automotive program at TowerJazz will present the ***"Role of Specialty Analog Foundry in Enabling Advanced Driver Assistance Systems (ADAS) and Autonomous Driving"*** on May 17, 2018 from 9:50am - 10:15am.
- Nadav Haas, Product Manager, Newsight Imaging will present ***"Enhanced Time-Of-Flight – a CMOS full solution for automotive LIDAR"*** on May 16, 2018 from 2:30pm - 2:55pm.

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.

About Newsight Imaging
Newsight Imaging Ltd. (www.nstimg.com) develops advanced CMOS image sensor chips, providing 3D solutions for high volume markets. The chip's sensor is manufactured using CMOS technology with ultra-high sensitivity pixels, replacing more expensive CCD sensors and other camera modules in LiDAR applications for robotics, automotive (ADAS and Car safety) and drones as well as in other markets, such as mobile depth cameras, AR/VR, Industry 4.0 and barcode scanners.

Newsight's NSI3000 family is already in the market with high volume customers and a big pipeline of evaluations. Newsight's patent-pending eTOF™ (Enhanced Time-of-Flight) Technology bridges the gap between short-distance iTOF and the long-distance requirement of the automotive industry by extending the dynamic range while retaining high accuracy. For more information, visit www.nstimg.com, or follow Newsight Imaging on LinkedIn.

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/2191522/848426.pdf

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