



TowerJazz Announces Release of its Advanced 5V 65nm CMOS and Low Voltage Power Process Addressing LED Lighting, Analog Switch, DC/DC Converter and Load Switch Applications

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Provides key advantages over 0.18um 5V technologies with enhanced R_{dson} and digital density

[TowerJazz](#), the global specialty foundry leader, today announced the release of its advanced 5V 65nm power process providing customers with multiple advantages over 0.18um 5V technologies. The advanced 5V 65nm technology increases TowerJazz's footprint in the 5V power market by offering enhanced R_{dson} efficiency with an attractive die cost advantage over 0.18um 5V processes. This technology is based on TowerJazz's automotive 300mm 65nm process platform manufactured in its Uozu, Japan facility and supports both best in class quality and manufacturing cycle time.

The advanced 5V 65nm contains a rich portfolio of analog features and many different metal combinations to optimize cost/performance for any application. The first products, for several strategic customers, were already prototyped with outstanding performance. The technology is now fully released and supports Multi-layer Masking (MLM) and an MPW option to reduce engineering costs. The first MPW is targeted for November 2017.

TowerJazz's leading 5V 65nm power technology offers high R_{dson} efficiency using tighter design rules for power devices, and a thick copper top metal for large current applications, enabling the 5V transistors using a 65nm design to achieve dense digital capabilities and a dense analog periphery, with a low number of manufacturing masks. The technology offers an average of 30% area reduction for a given 5V power transistor and typically a 35% die size reduction for a mixed-signal chip. An optimization effort to minimize cost and manufacturing layers needed to support 5V enables highly competitive solutions for many different markets such as automotive, industrial and consumer. The advanced 5V 65nm supports high current power applications such as PMIC, DC/DC converters, load switches and point of load ICs using single and dual 3.3um thick copper metal layers.

"Streamlining our feature rich automotive quality 65nm technology allows TowerJazz to provide very attractive 5V power and mixed-signal solutions with the high quality standard set required for servicing the automotive market," said Shimon Greenberg, Vice President and General Manager of Mixed-Signal and Power Management Business Unit, TowerJazz. "This technology is utilized for relatively high current power ICs at 5V which have large growth drivers to advanced analog and mixed-signal ICs."

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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