NEWS ANNOUNCEMENT ***FOR IMMEDIATE RELEASE***

Tower Semiconductor and GMEMS Announce the Ramp to Mass Production of MEMS Microphones Products

Based on Tower's flow in its high volume 200mm CMOS Fab, custom developed for GMEMS products enabling capacity expansion for high volume manufacturing

MIGDAL HAEMEK, Israel, and MILPITAS, California, December 21, 2020 – Tower Semiconductor (NASDAQ/TASE: TSEM), the leader in high-value analog semiconductor foundry solutions, and GMEMS, a supplier of MEMS (Micro-Electro-Mechanical Systems) sensors and products to the telecommunications industry , today announced the ramp to mass production of GMEM's MEMS microphones products on Tower's 0.18um flow, custom developed for GMEMS products. Tailor designed for the rapidly growing demand of the earbuds and cellphone markets, GMEMS's highly advanced microphones offer a substantially smaller solution than competition. Utilizing Tower's advanced facilities and platforms provides high volume manufacturing and capacity assurance, enabling to meet these fast-growing market demands.

According to Yole Development, MEMS microphone market is expected to grow from $1.2B (5.8B units) in 2019 to $1.7B (9.3B units) in 2024 with 6.6% CAGR.

"We are very pleased to have partnered with Tower to enhance the manufacturing capability for our highly demanded microphone products. We chose Tower for its excellent reputation, superior technical capabilities, advanced technology platforms and its capability to manufacture MEMS at large scale due to the compatibility with its CMOS flow," said Dr. Mark Wang, GMEMS CEO. "The joint effort between GMEMS experts and Tower's exceptional R&D team enabled a successful ramp to a stable high volume manufacturing of our products, as well as to set a roadmap for the development of our next-generation microphones".

In addition to a very small die size, Tower's flow offers multiple advantages for the manufacturing of the MEMS microphones including high dynamic range and high SNR (Signal to Noise Ratio), key features when addressing MEMS microphone market demands, especially for mobile devices.

"We are excited about our cooperation with GMEMS, a world leading company in its field, developing outstanding technology solutions and products. Our tight and well-aligned collaboration allowed to effectively ramp GMEMS excellent products to high volume mass production using best in class technology," said Dr. Avi Strum, Senior Vice President and General Manager of Sensors & Displays Business Unit, Tower Semiconductor. "We look forward to accomplishing additional achievements together allowing to realize even greater market potential".

For more information about Tower Semiconductor's MEMS technology platform, please click here.

For more information about Tower Semiconductor's process technology offerings, please click here or inquire at: info@towersemi.com

For more information about GMEMS technology and products, please click here.

About GMEMS

GMEMS is a leading developer and provider of MEMS microphones, voice interface software and other MEMS products. With its core technical team having accumulated more than twenty years of working experience in MEMS acoustic sensor and noise suppression algorithms, GMEMS provides a one-stop solution for its end customers. Over the years, GMEMS has established itself as a leader in providing high performance MEMS microphones and voice processing algorithms for voice interface applications in telecommunication industry.

About Tower Semiconductor

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), the leader in high-value analog semiconductor foundry 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's 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 Transfer Optimization and development Process Services (TOPS) 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.

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 Tower'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. Tower does not intend to update, and expressly disclaim any obligation to update, the information contained in this release.

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