Tower Semiconductor Partners with LightIC to Expand Silicon Photonics Beyond AI Infrastructure into Physical AI and Automotive

Leveraging Tower's Mature Silicon Photonics Foundry Platform to Enable Scalable FMCW LiDAR

MIGDAL HAEMEK, Israel, and SAN JOSE, CA. – January 05, 2026 – Tower Semiconductor (NASDAQ/TASE: TSEM), a leading foundry of high-value analog semiconductor solutions, and LightIC Technologies ("LightIC"), a developer of silicon photonics–based FMCW LiDAR solutions, today announced a strategic collaboration leveraging Tower's mature silicon photonics platform to support LightIC's Frequency-Modulated Continuous-Wave (FMCW) LiDAR products, including the Lark™ long-range automotive LiDAR and the FR60™ compact LiDAR for robotics and Physical AI applications.

According to the latest research from Yole Group, the global automotive LiDAR market is projected to grow from $859 million in 2024 to $3.6 billion by 2030, representing a compound annual growth rate (CAGR) of 24%. This growth is a key component of the broader LiDAR landscape, which Yole expects to reach $6.3 billion by 2027 as the technology expands into industrial automation, smart infrastructure, and robotics.

The continued scaling of AI data-center networking has accelerated silicon photonics process maturity and manufacturability, expanding its adoption in systems requiring tightly integrated optical functionality. Tower Semiconductor's advanced silicon photonics platform, widely utilized in large-scale AI infrastructure deployments, provides a strategic foundation for extending silicon photonics into sensing-driven Physical AI and automotive applications. LightIC Technologies applies this platform to FMCW LiDAR, integrating the optical functions required for coherent ranging and instantaneous velocity sensing directly onto silicon. As SiPho based FMCW LiDAR technology rapidly matures, it is expected to capture larger share of the global LiDAR market analogous to the rapid growth of silicon photonics-based components in data-center networking.

"We are excited to expand our silicon photonics market beyond that of AI infrastructure into new sensing applications," **said Dr. Ed Preisler, Vice President and General Manager of RF Business Unit at Tower Semiconductor**. "Our joint work with LightIC and its team of experts is a key step in bringing to market velocity-aware sensing for robotics, Physical AI and automotive markets."

The collaboration combines LightIC's silicon photonic design capabilities with Tower's silicon photonics manufacturing platform to enable higher levels of optical integration and improvements in size, weight, power, and cost (SWaP-C), supporting the transition of velocity-aware LiDAR from advanced development into real-world automotive and Physical AI deployment.

"Utilizing Tower's silicon photonics process enables us to integrate complex coherent LiDAR optical functions into silicon on a scalable, manufacturable platform suitable for product qualification and long-

term production," **said Jie Sun, CEO and Co-Founder of LightIC**. "This level of integration is fundamental to delivering commercially viable 4D FMCW LiDAR solutions for automotive and Physical AI applications."

For additional information about Tower Semiconductor's SiPho technology platform, visit here.

For more information about LightIC, please visit www.lightictech.com.

About Tower Semiconductor

Tower Semiconductor Ltd. (NASDAQ/TASE: TSEM), the leading foundry of high-value analog semiconductor solutions, provides technology, development, and process platforms for its customers in growing markets such as consumer, industrial, automotive, mobile, infrastructure, medical and aerospace and defense. Tower Semiconductor focuses on creating a 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, displays, integrated power management (BCD and 700V), photonics, and MEMS. Tower Semiconductor also provides world-class design enablement for a quick and accurate design cycle as well as process transfer services including development, transfer, and optimization, to IDMs and fabless companies. To provide multi-fab sourcing and extended capacity for its customers, Tower Semiconductor owns one operating facility in Israel (200mm), two in the U.S. (200mm), two in Japan (200mm and 300mm) which it owns through its 51% holdings in TPSCo, shares a 300mm facility in Agrate, Italy with STMicroelectronics as well as has access to a 300mm capacity corridor in Intel's New Mexico factory. 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.

About LightIC

Founded in 2019, LightIC Technologies is a global leader in silicon photonics–based FMCW LiDAR, with deep expertise in designing and integrating silicon photonic chips for scalable, high-performance sensing. The company develops highly integrated LiDAR-on-a-chip solutions powering next-generation automotive, robotics, and physical AI applications. LightIC is among the few companies worldwide to have successfully delivered low-SWaP-C FMCW LiDAR systems into real-world deployment.

For more information, please visit: www.lightictech.com

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Tower Semiconductor Company Contact: Orit Shahar | +972-74-7377440 | oritsha@towersemi.com
Tower Semiconductor Investor Relations Contact: Liat Avraham | +972-4-6506154 | liatavra@towersemi.com

LightIC Technologies Company Contacts: bd@lightictech.com