Tower Semiconductor and InnoLight Partner to Develop Multi-Generation Silicon Photonics Based Optical Transceivers

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400G/800G Transceivers built on Tower's production PH18M Silicon Photonics platform

Partnership to deliver solutions for the growing markets of Artificial Intelligence (AI), Datacenter Interconnects and Next-Gen Telecom

MIGDAL HAEMEK, Israel, and SUZHOU, China, **Sept. 7, 2023** – Tower Semiconductor (NASDAQ/TASE: TSEM), the leader in high-value analog semiconductor foundry solutions, and InnoLight Technology, the leader in data center optics, today announced their collaboration to develop multi-generation high-speed optical transceivers based on Tower's Silicon Photonics process platform (PH18). With production already underway, this strategic partnership is expected to enable cutting-edge solutions to support the growing demands of AI, datacenters, and next-generation telecom networks. According to Yole, a market research firm, the silicon photonic die market is expected to grow at 22% CAGR reaching nearly half-a-billion dollars by 2027.

Dr. Marco Racanelli, Senior Vice President and General Manager of Analog Business Unit at Tower Semiconductor: "We are excited to partner with a leader like InnoLight for the manufacturing of their current and next-generation optical transceiver products. Their significant market presence brings high volumes to our silicon photonics platform turning it into a mainstream solution further establishing our differentiated SiPho platforms as the 'go to' solutions for state-of-the-art optical transceivers in datacenters, AI clusters, as well as for emerging applications such as sensors, automotive LiDAR, and optical computing."

Tower's industry-leading high-volume PH18M SiPho platform offers a rich portfolio of optical components, including ultra-high bandwidth modulators, photodetectors, low-loss waveguides, and light coupling solutions. Combined with a mature design enablement infrastructure, the platform delivers accurate model-to-silicon match that empowers designers to bring disruptive solutions to market on time and with minimal design iterations.

InnoLight has launched multiple 400G and 800G products based on the PH18M SiPho platform. 400G parts are currently in mass production while 800G parts are scheduled to be in volume production in Q4, 2023. InnoLight also developed 400G COSA, which will be used in its 400G DCO coherent transceivers.

Osa Mok, the Chief Marketing Officer of InnoLight, commented on the partnership: "InnoLight has established itself as an industry leader by rapidly developing and delivering high-performance optical transceiver products to the market. Our well-established collaboration with Tower firmly demonstrates that we have found a foundry partner who not only possesses best-in-class silicon photonics technology but is also willing to collaborate closely with us to translate our innovations into silicon. We anticipate a successful journey together."

For additional information about Tower's SiPho technology offerings, please visit here.

For additional information about Tower's RF &HPA technology offerings, please visit here.

For more information about InnoLight technology and product, please visit here.

About Tower Semiconductor

Tower Semiconductor Ltd. (NASDAQ: TSEM, TASE: TSEM), the leading foundry of high value analog semiconductor 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 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 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 two manufacturing facilities in Israel (150mm and 200mm), two in the U.S. (200mm), two in Japan (200mm and 300mm) which it owns through its 51% holdings in TPSCo, and is sharing a 300mm manufacturing facility being established in Italy by STMicroelectronics. For more information, please visit www.towersemi.com.

About InnoLight

InnoLight designs, builds, and markets high-speed optical transceivers that enable rapid bandwidth expansion of next-generation networks. InnoLight has a global operation, it has production bases in Suzhou, Taiwan, and Thailand, and R&D and Sales offices in the United States, Canada, China, Singapore, and Europe. InnoLight's solutions offer superior technical performance, compelling value proposition, and time-to-market advantages that are critical for the sustaining growth of the next generation of Data Center Networks. For additional information, please visit www.innolight.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 disclaims any obligation to update, the information contained in this release.

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Attachment

- Innolight_SiPho_China_PR_Final

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