Tower Semiconductor and Switch Semiconductor Collaborate to Deliver Best-in-Class Efficiency for Next-Generation AI and Server Power Systems

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The new, patented technology promises power savings in the high-growth Data Center power management market leveraging Tower's advanced 65nm BCD platform

Migdal Haemek, Israel and Richardson, Texas — November 17, 2025 – Tower Semiconductor (NASDAQ/TASE: TSEM), a leading foundry of high-value analog semiconductor solutions, and Switch Semiconductor, a fabless power management company, today announced the SW2001, a high-efficiency, monolithic 12-V Point-of-Load (POL) buck regulator designed on Tower's industry-leading 65nm BCD platform.

The SW2001 targets demanding applications including servers, AI compute systems, cloud storage, and telecom infrastructure. Featuring Switch Semiconductor's patented Novo-Drive™ gate driver technology and LDMOS devices with ultra-low on-resistance and best-in-class figure-of-merit from Tower's 65nm BCD Power Management platform, the SW2001 achieves up to 87% efficiency for 12 V-to-1 V conversion at 20 A load while significantly reducing switch-node overshoot and radiated emissions. Sampling – including evaluation boards – will begin in Q1 2026, with volume production scheduled for later in the year.

According to Mordor Intelligence, the market for monolithic power stages is growing with CAGR of 10% and will reach $3.73 billion by 2030.

Built on Tower Semiconductor's 65nm 300mm BCD platform, featuring ultra-low-R_{on} LDMOS devices and low mask count digital and analog CMOS integration capability, the SW2001 benefits from exceptional power conversion efficiency, scalability, and thermal reliability — ideal for AI accelerators and high-performance server systems.

"Tower's 65nm BCD platform delivers the integration capability, reliability, and industry leading low resistance devices, that enable customers to push the boundaries of power performance," said **Dr. Mete Erturk, Co-GM of the Power Management Business Unit at Tower Semiconductor**. "We are excited to collaborate with Switch Semiconductor as they adopt our process technology to bring next-generation power solutions to market."

"The SW2001 demonstrates how Switch Semi's Novo-Drive technology and Tower's advanced BCD process combine to deliver best-in-class efficiency and power density," **said Ross Teggatz, Founder and CEO of Switch Semiconductor**. "We see this as the beginning of a broader expansion into innovative switching solutions for robotics, intelligent motion, and data center power systems – addressing the growing demands of next-generation computing and automation."

The SW2001 offers high efficiency, EMI reduction, and superior power density in a compact 3 × 4 mm package with a 21-lead pinout that is widely used in industry. This enables designers to upgrade performance without redesigning system layouts. The product is the first in a growing roadmap from Switch Semiconductor, which includes development of monolithic POL converters and standalone Novo-Drive gate drivers aimed at high-performance computing and robotics applications.

For additional information on Tower's Power Management technology platform, please visit here.

For additional information on Switch Semiconductor, please visit here.

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.

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Attachment

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