

EMASS and Semtech Collaborate on Low-Power Edge AI

Integration brings LoRaWAN® connected intelligence to battery-powered industrial IoT

LOS ANGELES (Dec. 9, 2025) – EMASS, a Nanoveu subsidiary specializing in next-generation semiconductor technology, today announced a strategic collaboration with Semtech to bring low-power edge AI solutions integrated with LoRaWAN® connectivity to market. EMASS's ECS-DoT AI-enabled system-on-chips (SoCs) integrate Semtech's LoRa® transceivers, enabling long-range, battery-efficient intelligence for industrial, IoT, and other connected applications. The integration enables systems to process data locally, reduce network load, and deliver actionable insights in real time, even in power-constrained environments.

"Combining ECS-DoT's on-device AI with Semtech's LoRaWAN connectivity enables autonomous sensing in environments where traditional solutions can't operate—from remote industrial sites to battery-powered security devices," said Mark Goranson, CEO of EMASS. "By processing data locally and transmitting only meaningful events, this integration extends battery life and enables real-time decision-making at the edge."

"LoRa transceivers extend the reach of always-on edge AI sensors to environments where traditional connectivity solutions can't operate or scale effectively," said Shahar Feldman, Semtech's senior director of wireless ICs product marketing. "By working with EMASS, we're delivering practical solutions that give engineers the tools to deploy autonomous sensing at scale—whether monitoring remote industrial assets or enabling next-generation security systems."

As part of the collaboration, EMASS and Semtech are showcasing reference designs at CES 2026, demonstrating real-world applications of the integrated technology:

- **Predictive Maintenance Demo:** ECS-DoT edge AI, paired with Semtech's LR1121 LoRa transceiver, analyzes vibration and environmental sensor data on-device and transmits equipment health indicators over LoRaWAN to a centralized dashboard, demonstrating ultra-efficient, scalable monitoring for industrial environments.
- **Security Detection Demo:** ECS-DoT performs real-time audio classification and, together with Semtech's LR1121, transmits alerts over LoRaWAN for critical acoustic events, such as glass breaks and gunshots, delivering fast, reliable detection for next-generation security devices.

Attendees can view these demonstrations at CES in select locations, including the Semtech Suite (Murano 3201A, Venetian), the LoRa Alliance Booth (North Hall, Stand 10349), and EMASS's Venetian Suite.

To arrange a meeting with EMASS at CES, contact Scott Smyser: scott@nanoveu.com. To learn more about the ECS-DoT, visit <https://nanoveu.com/emass/products>.

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About EMASS

EMASS – a subsidiary of Nanoveu Ltd (ASX: NVU) – is an advanced semiconductor company specializing in ultra-low-power AI system-on-chip (SoC) solutions for edge computing. The company's flagship ECS-DoT chip delivers high-performance AI processing for vision, audio, and sensor data directly on-device, maximizing energy efficiency through its RISC-V architecture and non-volatile memory technologies. This always-on intelligence solution is optimized for power- and space-constrained applications including drones, wearables, healthcare devices and industrial IoT systems. For more information, visit nanoveu.com/emass.

About Nanoveu

Nanoveu is a listed company advancing human-machine experiences at the edge through a portfolio that spans ultra-low-power AI and glasses-free 3D technologies. Its subsidiary EMASS designs advanced system-on-chip (SoC) solutions that deliver efficient, scalable on-device AI for smart devices, IoT applications and 3D content transformation – enhancing Nanoveu's reach across rapidly growing AI, edge computing and 3D content markets. EyeFly3D™ is Nanoveu's end-to-end platform for glasses-free 3D, uniting proprietary screen technology with sophisticated content processing software and, now, EMASS's ultra-low-power SoC to bring immersive 3D to a wide range of devices and industries. The Company also develops and markets an advanced range of self-disinfecting and hydrophobic films and coatings under the Nanoshield™ brand, designed for applications including large-scale CSP and photovoltaic solar installations. Together, Nanoveu's businesses deliver practical innovation that makes devices smarter, environments safer and experiences more immersive.

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