

ASX RELEASE

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EMASS Collaborates with Bosch Sensortec to Deliver Edge AI Asset Tracking Solution

Collaboration showcases ECS-DoT's event-driven edge AI architecture for next generation battery-powered industrial and logistics applications.

Highlights

- EMASS, Nanoveu's wholly owned subsidiary, has collaborated with Bosch Sensortec, a wholly owned subsidiary of Robert Bosch GmbH and one of the world's leading MEMS sensor suppliers, to develop an intelligent asset-tracking reference design built on the ECS-DoT ultra-low-power edge AI SoC.
- The reference design processes sensor data locally and transmits only meaningful events rather than continuous raw data, significantly reducing power consumption and wireless data transmission for battery-powered tracking devices.
- Bosch Sensortec's motion, environmental, pressure, magnetic and gas sensing technologies have been successfully integrated with the ECS-DoT Edge AI SoC to deliver context-aware asset tracking, including in GPS-denied environments, for logistics, cold-chain monitoring, industrial IoT, high-value asset protection and other battery-powered tracking applications.
- The reference design is now available for evaluation by customers, adding to EMASS's growing range of ECS-DoT reference platforms for edge AI applications.

Nanoveu Limited (ASX: NVU, OTCQB: NNVUF) (Nanoveu or the Company), a technology innovator across advanced semiconductor, visualisation and materials science applications, is pleased to announce that its wholly owned subsidiary, Embedded A.I. Systems Pte. Ltd. ("EMASS"), has collaborated with Bosch Sensortec to develop an intelligent asset-tracking reference design that combines advanced sensing with EMASS's ultra-low-power ECS-DoT edge AI platform.

The jointly developed reference design demonstrates how battery-powered asset-tracking systems can analyse sensor data on the device and transmit only meaningful events rather than continuous streams of raw sensor information. By combining Bosch Sensortec's advanced sensing solutions with ECS-DoT's event-driven edge AI and sensor fusion capabilities, the platform delivers richer contextual awareness while significantly reducing power consumption and wireless communications.

The reference design enables customers to track not only the location of assets, including in GPS-denied environments, but also their handling and environmental conditions during transit, broadening the range of applications from cold-chain logistics and industrial IoT to high-value and sensitive cargo.

Expanding the EMASS Partner Ecosystem

EMASS continues to expand its ecosystem of industry-leading technology partners to accelerate customer adoption of its ECS-DoT edge AI SoC across high-growth markets. By collaborating with leaders in sensing, connectivity and embedded systems, EMASS is creating reference platforms that enable customers to rapidly evaluate and deploy next-generation edge AI solutions.

Bosch Sensortec GmbH, a fully owned subsidiary of Robert Bosch GmbH, develops and markets a wide portfolio of microelectromechanical systems (MEMS) sensors and solutions tailored for smartphones, tablets, wearables and hearables, AR/VR devices, drones, robots, smart home and IoT (Internet of Things) applications.

Since its foundation in 2005, Bosch Sensortec has emerged as the MEMS technology leader in the markets it addresses. Bosch has been both a pioneer and one of the leading providers in the MEMS sensor segment since 1995 and has, to date, sold more than 26 billion MEMS sensors.

Its motion, environmental, pressure and magnetic sensing technologies have become foundational building blocks of the connected-device ecosystem, making Bosch Sensortec the ideal fit for EMASS's ultra-low-power edge AI platform.

"We're excited to collaborate with EMASS on this intelligent asset-tracking reference design," said Marcellino Gemelli, Director, Global Business Development at Bosch Sensortec. "By combining Bosch Sensortec's advanced sensing technologies with the EMASS ECS-DoT edge computing platform, we're demonstrating how context-aware sensor orchestration and edge AI can deliver richer insights while minimizing power consumption. By intelligently activating sensing, processing, and connectivity resources only when needed, the solution transforms raw sensor data into actionable events, enabling smarter, more sustainable, and highly configurable asset-tracking solutions across a wide range of logistics and industrial applications."

Demonstrating Event-Driven Edge AI

Traditional asset-tracking devices typically collect and transmit large volumes of sensor data regardless of whether meaningful changes have occurred. This approach increases power consumption and limits battery life.

The reference design combines the EMASS ECS-DoT platform with five Bosch Sensortec sensors to continuously evaluate an asset's movement, location, handling and condition. ECS-DoT fuses data from multiple sensing modalities and executes sophisticated edge AI models locally, transforming raw sensor inputs into meaningful contextual events before wireless transmission. The event-driven architecture enables continuous sensing and AI inference at ultra-low power, activating higher-power resources such as wireless communications and GPS, only when meaningful events are detected.

Designed as a configurable reference platform, the architecture can be adapted across multiple asset-tracking applications, including warehouse logistics, industrial IoT, cold-chain monitoring and high-value asset protection.

Supporting the ECS-DoT Commercial Roadmap

The collaboration further demonstrates the versatility of EMASS's ECS-DoT platform as a foundation for next-generation edge AI systems that combine intelligent sensing, ultra-low-power processing and low-power wireless connectivity. By working alongside industry leaders like Bosch Sensortec, EMASS continues to expand the range of reference platforms available to customers evaluating ECS-DoT for commercial edge AI applications.

"Developers have long faced a tradeoff between intelligence and battery life in asset-tracking systems," said Mark Goranson, Nanoveu's CEO of Semiconductor Technologies. "Our collaboration with Bosch Sensortec demonstrates that those compromises are no longer necessary. By processing information where it's created and transmitting only meaningful events, this reference design gives developers a blueprint for building a new generation of smarter, longer-lasting tracking devices."

The reference design is available for evaluation by customers developing next-generation asset-tracking solutions. To learn more about the EMASS ECS-DoT platform, visit nanoveu.com/emass/products.

This announcement has been authorised for release by the Board of Directors.

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About Nanoveu Limited

Further details on the Company can be found at <https://nanoveu.com/>.

EMASS is a fabless semiconductor company specialising in ultra-low-power, AI-enabled system-on-chip (SoC) solutions for always-on sensing and intelligent processing at the edge. Its ECS-DoT architecture enables real-time AI inference at milliwatt-level power, supporting next-generation applications across drones, wearables, hearables, smart devices, industrial IoT, robotics and autonomous systems.

Spinoff is a Singapore-based aerial robotics company that designs and builds proprietary drone platforms. Its two current platforms are ALICE, a tethered aerial system engineered for high-payload, extended-duration operations with resistance to GPS and radio-frequency jamming and spoofing, and METRON, a camera-based 3D measurement system delivering millimetre-level precision with AI-driven deviation detection. Both platforms have been validated in commercial deployments with Tier-1 Singaporean customers. Spinoff Robotics provides airframe and sensing capabilities complementing its ECS-DoT edge-AI silicon for major drone market applications.

EyeFly3D™ is a comprehensive platform solution for delivering glasses-free 3D experiences across a range of devices and industries. At its core, EyeFly3D™ combines advanced screen technology, sophisticated software for content processing, and the potential for integration with ultra-low-power SoC hardware.

Nanoshield™ includes protective and functional coating technologies designed for use across a range of applications, including solar and other industrial surfaces.

Forward Looking Statements This announcement contains ‘forward-looking information’ that is based on the Company’s expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company’s business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as ‘outlook’, ‘ambition’, ‘anticipate’, ‘project’, ‘target’, ‘potential’, ‘likely’, ‘believe’, ‘estimate’, ‘expect’, ‘intend’, ‘may’, ‘mission’, ‘would’, ‘could’, ‘should’, ‘scheduled’, ‘will’, ‘plan’, ‘forecast’, ‘evolve’ and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company’s actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company’s actual results, level of activity, performance, or achievements to be materially different from those expressed or implied by such forward looking information.