EMASS Emerges from Stealth to Redefine Edge AI
ECS-DoT 22nm processor delivers always-on, milliWatt-scale local intelligence

LOS ANGELES (Sept. 16, 2025) – EMASS, a Nanoveu subsidiary emerging from stealth with next-generation semiconductor technology, has introduced the ECS-DoT, their edge AI system-on-chip (SoC). The new design enables always-on, milliWatt-scale intelligence for edge devices, eliminating the need for cloud-based computation. With this chip, EMASS is targeting the extreme edge of the network, an area occupied by compact and lightweight connected devices powered by small batteries. Application examples include medical wearables and sensor modules operating adjacent to the sensors they support.

The ECS-DoT is designed with four megabytes of on-board SRAM, enabling AI computations to run efficiently on edge and IoT devices. By processing data locally, the chip dramatically reduces latency and power consumption, opening the door for always-on intelligence in wearables, drones and predictive maintenance-dependent systems.

"We are thrilled to bring EMASS out of stealth and introduce the ECS-DoT to market, redefining what's possible at the edge," said Mark Goranson, CEO of EMASS. "OEMs have told us that power efficiency is the defining factor for edge AI, and ECS-DoT delivers on that promise while enabling always-on, zero-lag intelligence directly on devices."

Compared with leading competitors, ECS-DoT operates up to 93% faster while consuming 90% less energy, all while supporting true multimodal sensor fusion on-device, eliminating the need for cloud processing.

Key ECS-DoT metric comparison:

Metric	EMASS ECS-DoT	Competitor A	Competitor B
Power per Inference	0.1-5 mW	5-100 mW	30-150 mW
Latency (ms)	<10	10-15	10-100
Energy per Inference	1-10 µJ	30-150 µJ	100-2,000 µJ
On-Device Memory	Up to 2MB SRAM + 2MB MRAM/RRAM	Up to 1MB SRAM	2MB SRAM with optional 2MB MRAM
Multimodal Sensor Fusion	Yes, milliwatt-scale	Limited	Limited

Always-On Viable?	Yes	No	No

To contact the EMASS sales team, please email emasssales@nanoveu.com.

For more information, visit the website.

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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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