Nanoveu Limited
ACN 624 421 085
Level 45, 108 St Georges Terrace
Perth WA, 6000 Australia
+61 8 6244 9095
www.nanoveu.com

ASX RELEASE **9 July 2025**

ASX: NVU

Investor Webinar Presentation

Nanoveu Limited (ASX: NVU) ("Nanoveu" or the "Company"), a technology innovator across advanced semiconductor, visualisation, and materials science, is holding its webinar commencing at 1.00pm (AWST) / 3.00pm (AEST) today.

The presentation materials are attached for the information of investors and can also be accessed via the "Announcements" page of the Company's website https://nanoveu.com/.

Key highlights to be discussed:

- EMASS' ECS-DoT SoC Technology and Major Markets
- 33% Flight Time Gain in First Simulated Drone Trials, Further Work to be Completed in Q3
- Center of Nanoelectronics and Devices Collaboration and Tape-out of New Integrated Circuit on TSMC's 16nm FinFET Process

If you would like to join, please click on the link below to register:

Date: Wednesday, 9 July 2025

Time: 1.00pm Australian Western Standard Time (AWST) / 3.00pm Australian Eastern Standard Times (AEST)

Invite link: https://zoom.us/webinar/register/WN_5RSKDsXRTl2T8SXeRibonA

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

-ENDS-

Nanoveu Media
Alfred Chong, Nanoveu MD and CEO
P: +65 6557 0155
E: info@nanoveu.com

About Nanoveu Limited

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

EMASS is a pioneering technology company specialising in the design and development of advanced systems-on-chip (SoC) solutions. These SoCs enable ultra-low-power, AI-driven processing for smart devices, IoT applications, and 3D content transformation. With its industry-leading technology, EMASS will enhance Nanoveu's portfolio, empowering a wide range of industries with efficient, scalable AI capabilities, further positioning Nanoveu as a key player in the rapidly growing 3D content, AI and edge computing markets.

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 now, with the integration of EMASS's ultra-low-power SoC, powerful hardware.

Nanoshield™ is a self-disinfecting film that uses a patented polymer of embedded Cuprous nanoparticles to provide antiviral and antimicrobial protection for a range of applications, from mobile covers to industrial surfaces. Applications include *Nanoshield™ Marine*, which prevents the growth of aquatic organisms on submerged surfaces like ship hulls, and *Nanoshield™ Solar*, designed to prevent surface debris on solar panels, thereby maintaining optimal power output.

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.

a nanoveu business

Investor Webinar

July 9, 2025

Disclaimer

IMPORTANT INFORMATION These presentation materials and any accompanying verbal presentation (together, the Presentation Materials) have been prepared by Nanoveu Limited (Company, NVU, Nanoveu) as at 9 July 2025 and statements are current only as at that date. Information in the Presentation Materials remains subject to change without notice. The Company has no responsibility or obligation to inform you of any matter arising or coming to its notice, after the date of this document, which may affect any matter referred to in this document. By receiving the Presentation Materials, you acknowledge and represent to the Company that you have read, understood and accepted the terms of this disclaimer. It is the responsibility of all recipients of these Presentation Materials to obtain all necessary approvals to receive these Presentation Materials and receipt of the Presentation Materials will be taken by the Company to constitute a representation and warranty that all relevant approvals have been obtained.

NOT AN OFFER These Presentation Materials are for information purposes only. The Presentation Materials do not comprise a prospectus, product disclosure statement or other offering document under Australian law (and will not be lodged with the Australian Securities and Investments Commission) or any other law. The Presentation Materials also do not constitute or form part of any invitation, offer for sale or subscription or any solicitation for any offer to buy or subscribe for any securities nor shall they or any part of them form the basis of or be relied upon in connection therewith or act as any inducement to enter into any contract or commitment with respect to securities. In particular, these Presentation Materials do not constitute an offer to sell or a solicitation to buy, securities in the United States of America.

NOT INVESTMENT ADVICE The Presentation Materials are not investment or financial product advice (nor tax, accounting or legal advice) and are not intended to be used for the basis of making an investment decision. Recipients should obtain their own advice before making any investment decision. This document does not constitute financial product advice or take into account your investment objectives, taxation situation, financial situation or needs. This document consists purely of factual information and does not involve or imply a recommendation of a statement of opinion in respect of whether to buy, sell or hold a financial product.

SUMMARY INFORMATION The information in this presentation has been prepared by the Company for the purposes of providing an overview of the Company and its products and technology. The Presentation Materials do not purport to be all inclusive or to contain all information about the Company or any of the assets, current or future, of the Company. The Presentation Materials contain summary information about the Company and its activities which is current as at the date of the Presentation Materials. The information in the Presentation Materials is of a general nature and does not purport to contain all the information which a prospective investor may require in evaluating a possible investment in the Company or that would be required in a prospectus or product disclosure statement or other offering document prepared in accordance with the requirements of Australian law or the laws of any other jurisdiction, including the United States of America.

NO LIABILITY The information contained in this document has been prepared in good faith by the Company however no guarantee, representation or warranty expressed or implied is or will be made by any person (including the Company and its affiliates and their directors, officers, employees, associates, advisers and agents) as to the accuracy, reliability, correctness, completeness or adequacy of any statements, estimates, options, conclusions or other information contained in this document. No person other than the Company is responsible for the preparation of this document. To the maximum extent permitted by law, the Company and its affiliates and their directors, officers, employees, associates, advisers and agents each expressly disclaims any and all liability, including, without limitation, any liability arising out of fault or negligence, for any loss arising from the use of or reliance on information contained in this document including representations or warranties or in relation to the accuracy or completeness of the information, statements, opinions, forecasts, reports or other matters, express or implied, contained in, arising out of or derived from, or for omissions from, this document including, without limitation, any financial information, any estimates, forecasts, or projections and any other financial information derived therefrom. Statements in this document are made only as of the date of this document unless otherwise stated and the information in this document remains subject to change without notice. No responsibility or liability is assumed by the Company or any of its affiliates (or their directors, officers, employees, associates, advisers and agents) for updating any information in this document or to inform any recipient of any new or more accurate in

FORWARD LOOKING STATEMENTS Statements contained in this document or made during or in connection with this presentation, including but not limited to those regarding the possible or assumed future production, costs, projected timeframes, performance, dividends, returns, revenue, exchange rates, potential growth of the Company , industry growth, product or price forecasts, or other projections and any estimated company earnings are or may contain or comprise forward looking statements. Forward looking statements can generally be identified by the use of words such as 'project', 'foresee', 'plan', 'expect', 'aim', 'anticipate', 'believe', 'estimate', 'may', 'should', or similar expressions. Forward looking statements including all statements in this presentation regarding the outcomes of studies, projections, guidance on future earnings and estimates are provided as a general guide only and should not be relied upon as an indication or guarantee of future performance. Although the Company believes that the expectations reflected in such forwardlooking statements are reasonable, these statements relate to future events and expectations and as such involve known and unknown risks and significant uncertainties, many of which are outside the control of the Company. Actual values, achievements, results, performance, actions and developments of the Company may differ materially from those projected, expressed or implied by the forward-looking statements in this document. Such forward looking statements speak only as of the date of this document. There can be no assurance that actual outcomes will not differ materially from these statements. To the maximum extent permitted by law, the Company and any of its affiliates and their directors, officers, employees, agents, associates and advisers disclaim any obligations or undertaking to release any updates or revisions to the information in this document to reflect any change in expectations or assumptions do not make any representation or warranty, express or implied, as to the accuracy, reliability or completeness of the information in this document, or likelihood of fulfilment of any forward looking statement or any event or results expressed or implied in any forward looking statement and disclaim all responsibility and liability for these forward looking statements (including without limitation, liability for negligence). Nothing in this document will under any circumstances create an implication that there has been no change in the affairs of the Company since the date of this document. Accordingly, you should not place undue reliance on any forward-looking statement.

ACCEPTANCE By attending a presentation or briefing, or accepting, accessing or reviewing this document you acknowledge, accept and agree to the matters set out above.

AUTHORISATION This document has been authorised for release by the Company's Board of Directors.

EMASS Introduction

Fabless Semiconductor Innovator in Edge AI Processing

- Ultra-low-power Edge AI SoCs for always-on intelligence in battery constrained devices

Established Global Operations

- Founded in 2020, Singapore headquartered
- 100% of EMASS acquired by Nanoveu Limited (ASX:NVU), March 2025
- Technical R&D centers in Singapore and Cairo, Egypt
- Commercial development team based in the United States

Expert Team Across Disciplines

- Deep expertise in AI/ML, neural network acceleration, semiconductor design, sensor fusion, and embedded systems
- Experienced management with semiconductor and AI industry backgrounds

Leadership Team

Mark Goranson

CEO of Semiconductor Technology

- VP of Global Ops, TE Connectivity
- SVP of Fab Ops, ON Semi
- VP of Fab Ops, Freescale
- Early Member of Intel

Dr. Mohamed Sabry

CTO, Founder of EMASS

- Associate Professor, NTU Singapore
- Postdoc, Stanford
- Recipient of Nanyang Education Award
- Ph.D. from EPFL

Scott Smyser

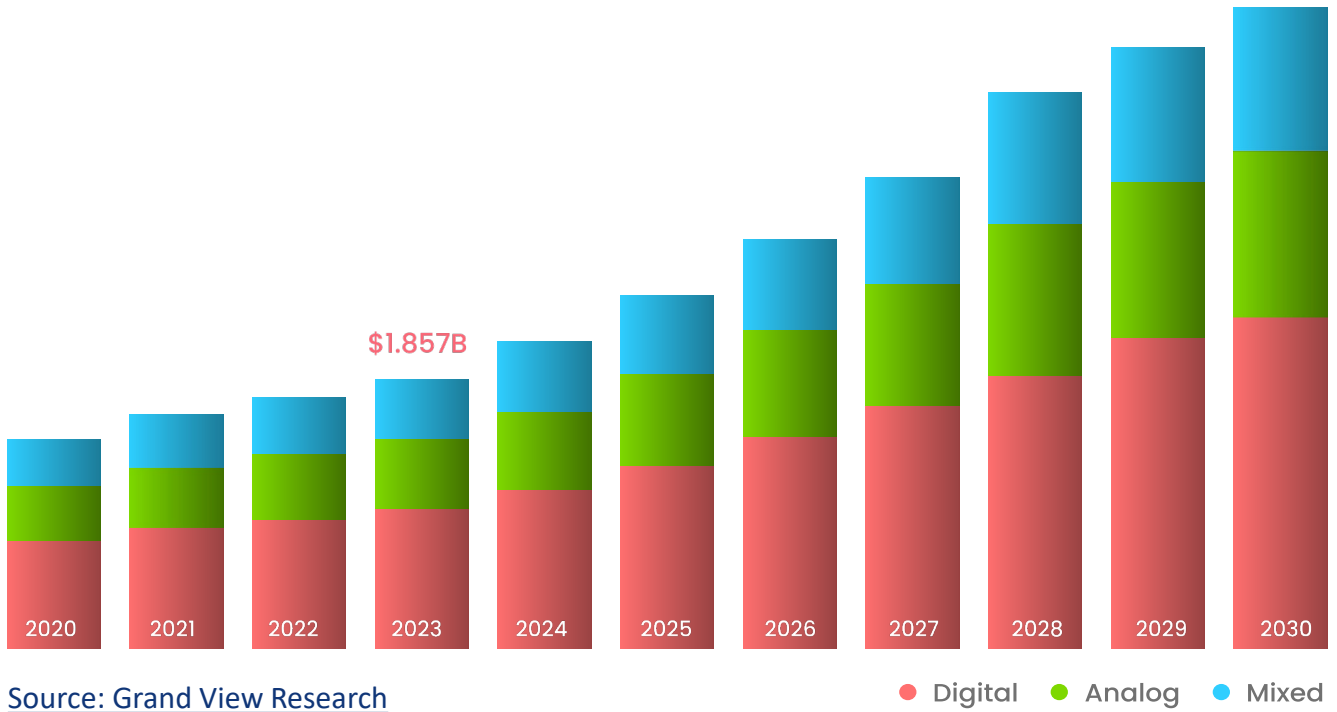
VP, Sales & Marketing

- EVP Marketing & BD, Si-Ware Systems
- VP & GM, VTI Technologies (Murata)
- SVP Sales, Atomica
- SVP Strategic Sales, Rockley Photonics

Semiconductor & SoC Market Opportunity

System On Chip Market Size

By Type 2020-2030 (USD Billion)



Source: Grand View Research

SoC Market Growth:

Applications demanding continuous sensing, context awareness, and real-time decision-making

Set to hit

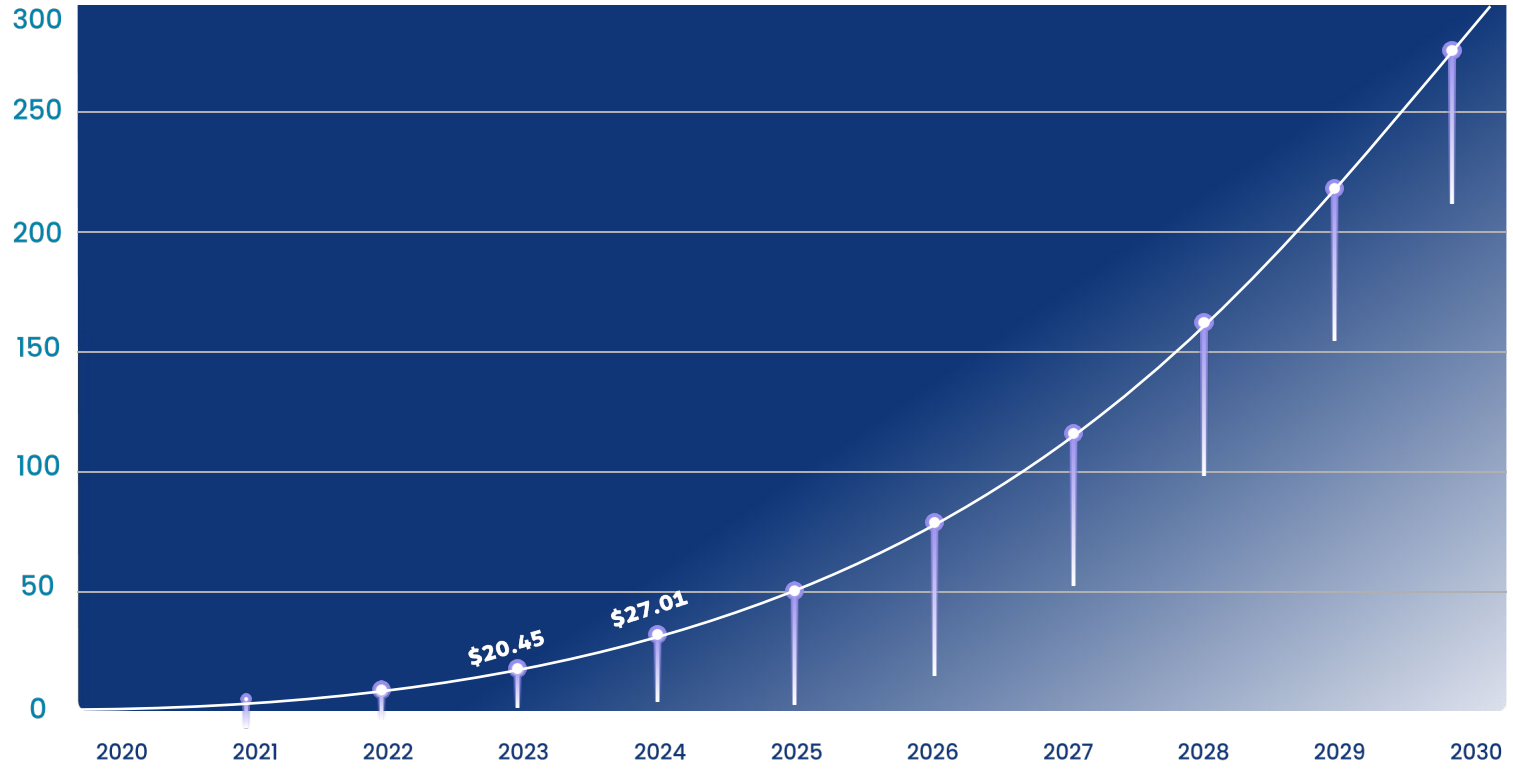
$325.7B by 2030

8.5% Global Market CAGR

Driven by AI, 5G, and smart devices.

Demand for Edge AI is Growing Fast

Edge AI Market Size



Source: Fortune Business Insights

Edge AI Growth:

Billions of connected devices require intelligence at the edge - not in the cloud

Expected To Reach

$269.82B by 2030

33.3% CAGR

As AI moves to on-device processing.

Edge AI Market Opportunity

Core Challenges

High power consumption **drains batteries fast**

Complex system architectures lead to **higher cost and larger size**

Limited flexibility with **single-function solutions**

Our Solution

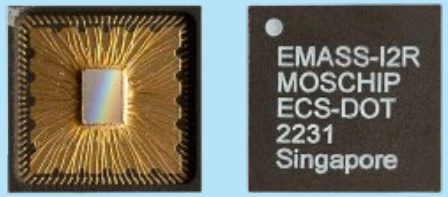
Enable meaningful **AI processing directly at the sensor/edge**

Deliver orders-of-magnitude improvements in **power, size, cost, and integration simplicity**

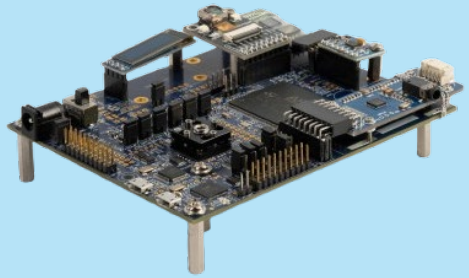
Unlock new categories of devices that were previously impossible or impractical

Atoms to Apps—at the Edge, on Sub-milliwatts

Silicon



Modules



Applications

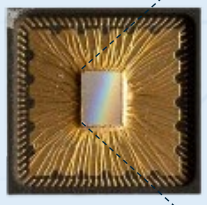
Drones

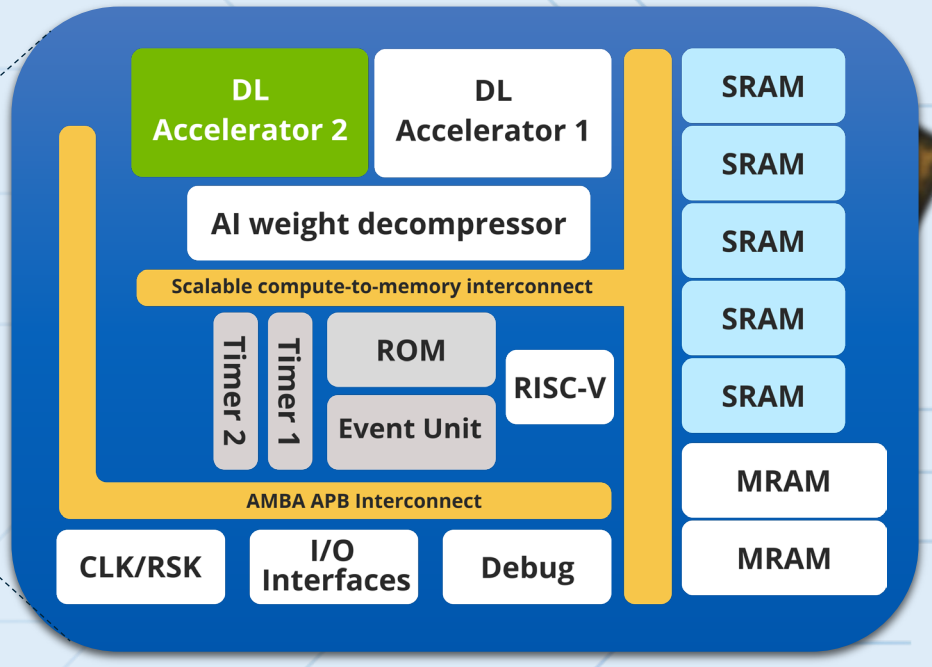
Wearables

ECS-DoT

Redefining What's Possible in Ultra-Low-Power Edge AI

- **Fully Programmable System on Chip**
  - Processor
  - AI engines
  - IPs for compressed AI
- **Local decision-making at the Edge**
  - Always-on AI Inference
  - Sensor Fusion
  - Support CNNs, ML, Data Processing etc.
- **Key Architecture Features**
  - <1 to 5 mW power consumption (Avg 2mW always on)
  - No External DRAM needed (very fast on-chip SRAM and nonvolatile MRAM/RRAM)
  - SW and HW support for highly compressed AI workloads





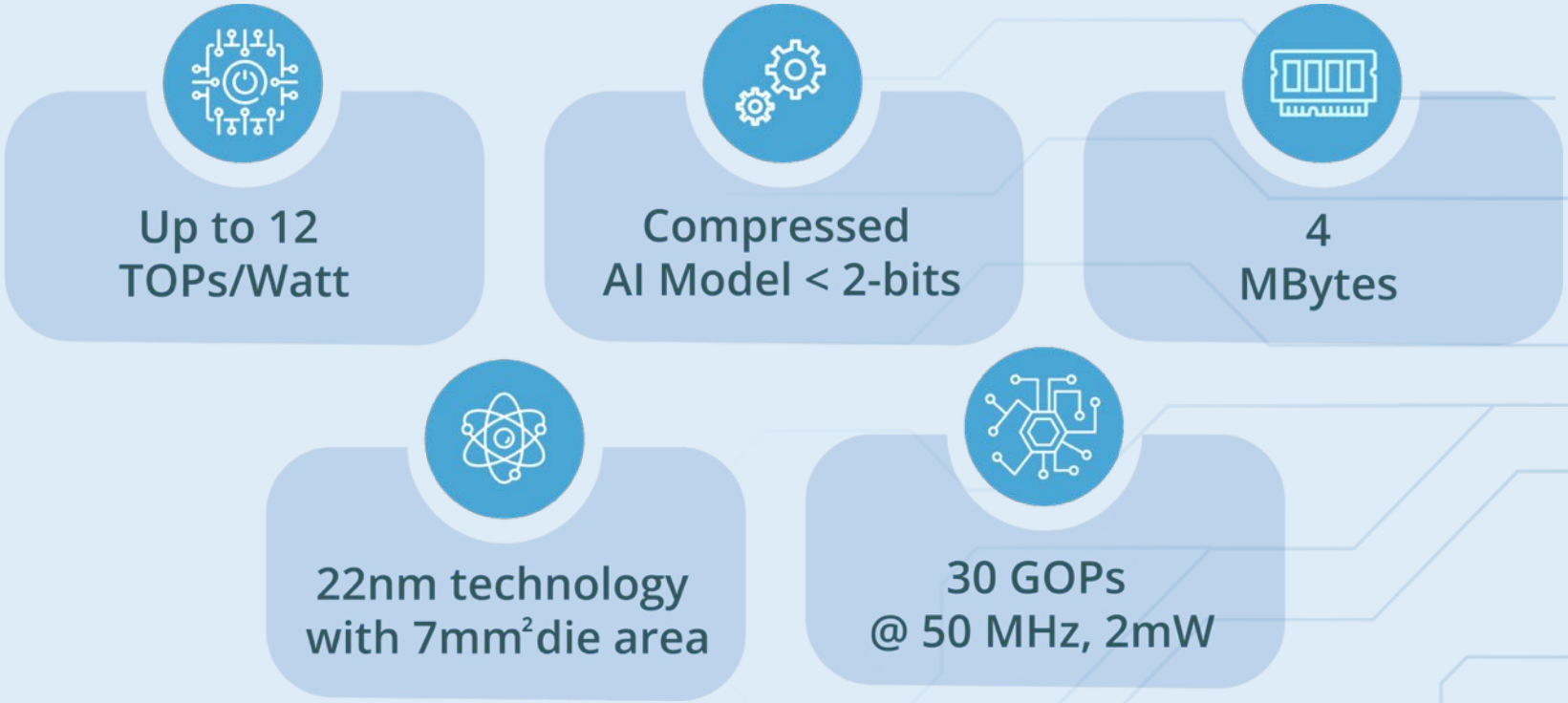
ECS-DoT Differentiation

Full AI capability, true always-on operation

Key Attribute	ECS-DoT	Typical Alternatives
Compute Architecture	RISC-V + Dual Deep Learning Accelerators	General MCU, DSP, or fixed-function NNs
Memory Architecture	Fully on-chip (up to 8MB) — No external DRAM	External DRAM often required
Model Efficiency	Compressed models (~1.3 bits/weight)	Full-precision models, higher memory demand
Power Consumption	~2mW active power	10–50mW or higher
Always-On Performance	Optimized for continuous inference	Not designed for continuous sensing
Integration Complexity	Single-chip, minimal BOM	Complex multi-chip solutions
Supported Workloads	Neural networks + classical + sensor fusion	Often limited to specific NN types
Package Size	5mm x 5mm QFN-40	Often larger footprints
Target Applications	Audio, vision, sensor fusion, IoT, XR, wearables	More narrow or general-purpose

ECS-DoT

Superior Performance, Low Power, Small Form Factor



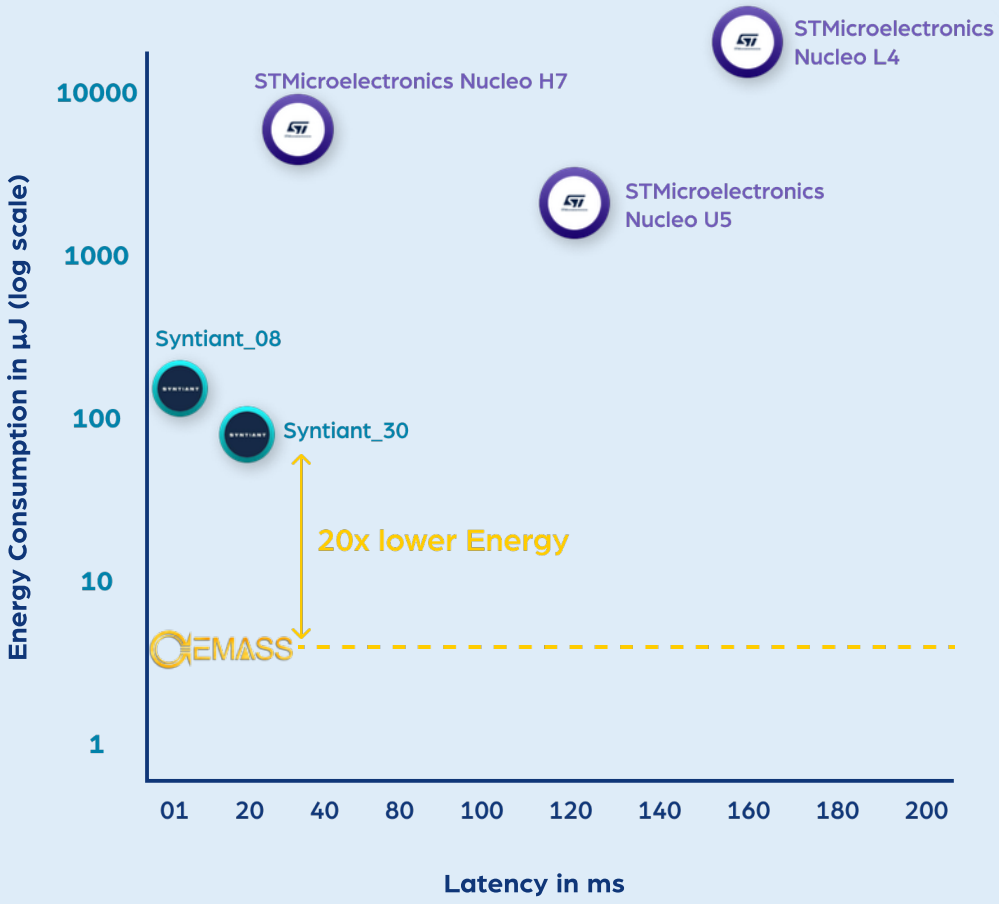
Leading Industry Peers in AI Computation Tasks

Company	Software Optimization	AI Performance per Watt (Avg/Peak)	Power (Avg/Peak)	AI Performance	Max AI Parameters
EMASS	Yes	3/15 TOPs	0.1mW/10mW	30 GOPs	13 million
Syntiant	No	0.1/1 TOPs	7mW/30mW	6.4 GOPs	7 million
Himax	No	40/320 GOPS	2.5mW/20mW	0.8 GOPs	500 thousand
Ambiq	No	240/133 GOPs	1mW/1.8mW	0.24 GOPs	1 million
Maxim	No	1.6/64 GOPs	50mW/2W	3.2 GOPs	3.5 million

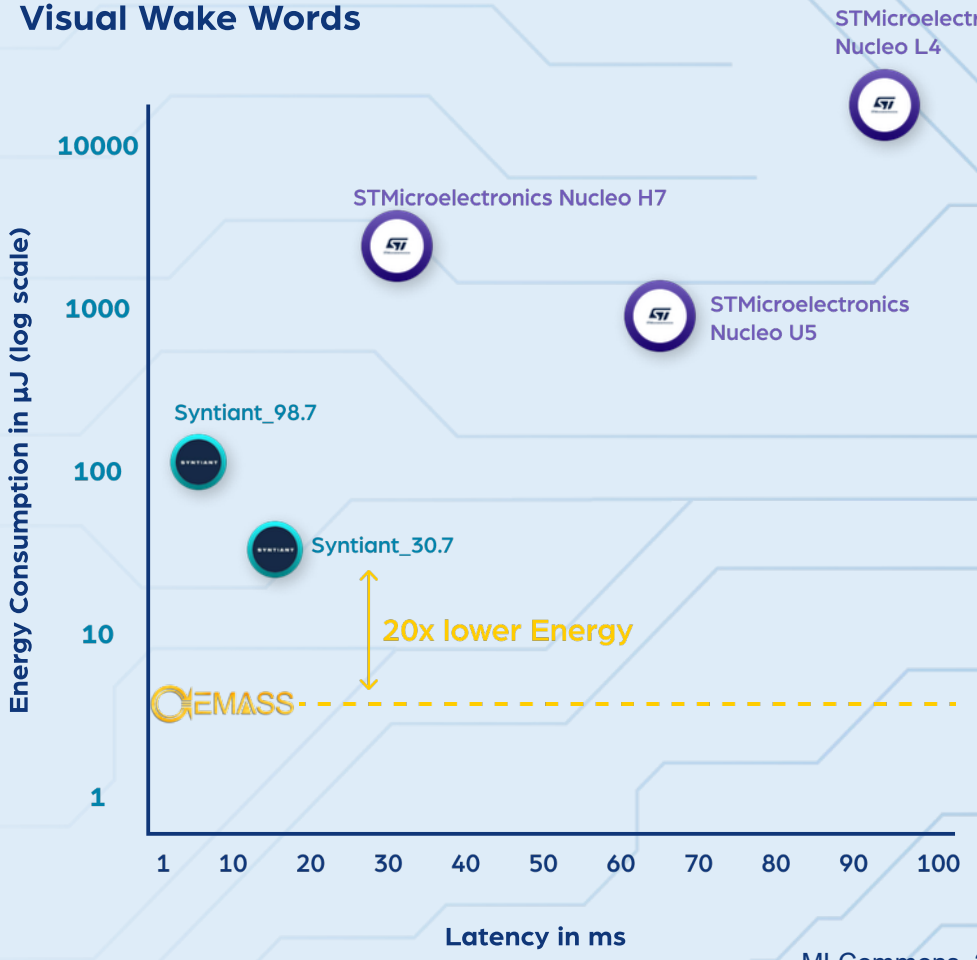
Exceptional AI Computation

20X Lower Energy

Image Classification



Visual Wake Words



MLCommons, 2025

Exceptional AI Computation

At least 20X Lower Energy

EMASS ECS-DoT at 50MHz

- Compared to current best in class chips from Syntiant and STMicroelectronics
- Running at least 2.5x to 3x faster*

Image Classification	
Execution Time	Power Efficiency
0.8x	**20x**
Visual Wake Words	
Execution Time	Power Efficiency
1x	**20x**
Keyword Spotting	
Execution Time	Power Efficiency
1.1x	**10.3x**
Anomaly Detection	
Execution Time	Power Efficiency
1x	**102.4x**

*Based on MLCommons, 2025

Ideal Solution for Battery-Constrained Devices

Continuous activity tracking, gesture detection, and health monitoring

Wearables

IoT Devices

Continuous sensing for voice control, anomaly detection, and environmental monitoring in always-on connected devices

Always-on voice triggers, gesture recognition, head tracking, and contextual awareness

AR Glasses

Hearables

Always-on keyword spotting, ANC, and sound classification

Real-time sensor fusion, object detection, and flight pattern recognition for autonomous navigation and obstacle avoidance

Drones

Smart Remotes

Gesture recognition, wake word detection, and low-latency control for intuitive user interfaces

AI Cameras

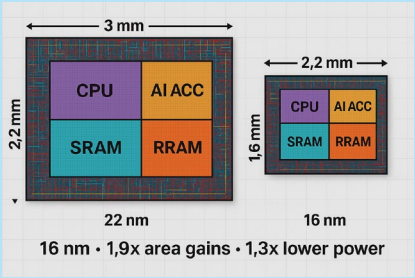
On-device object detection, event recognition, and pre-processing to enable real-time edge video intelligence

Next Generation ECS-DoT

Advanced 16nm Architecture

Built on TSMC's 16nm Fin Field Effect Transistor (FinFET)

- Higher Perf. & Lower Power
- Smaller Die Size
- Production Ready



Integrating Wireless Connectivity

Bluetooth 5.x + Bluetooth Mesh

Wi-fi

Lora for low-power, long-range (optional)

Key architecture enhancements

- Single/Dual-core
- Improved AI performance with dynamic 1-16 bit precision
- Expanded support for AI operators: CNNs, Transformers, NLP, object detection

Building for scalable edge AI deployment

- Edge autonomy: local sensing, AI processing, and wireless communication — all on one chip
- System cost reduction: fewer external components, smaller PCB
- Scalable platform for wearables, smart home, drones, industrial sensing, and more

Strategic R&D Collaboration

Key Partnership

Center of Nanoelectronics and Devices (CND), American University in Cairo

- One of the region's leading research institutions for advanced semiconductor design
- Deep expertise in low-power architecture, AI acceleration, and SoC optimization

Strategic Advisor

Dr. Yehia Ismail, CND Director

- Globally recognized expert in energy-efficient chip design
- Strong ties to TSMC, Stanford, and the global AI hardware community

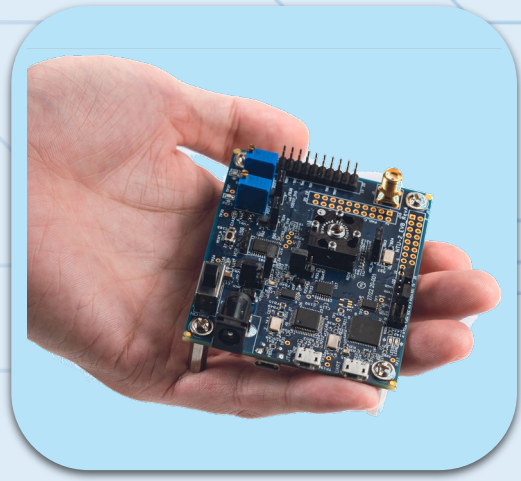
Driving Market Innovation

Center of Nanoelectronics and Devices (CND), American University in Cairo

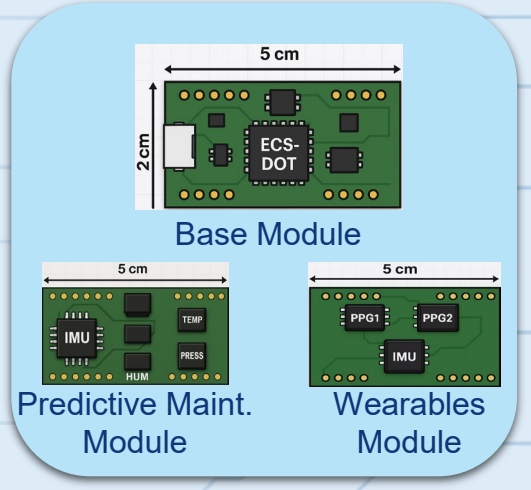
- Access to world-class semiconductor talent and AI researchers
- Expands IP portfolio and strengthens long-term technology independence

ECS-DoT Dev Kit and Modules

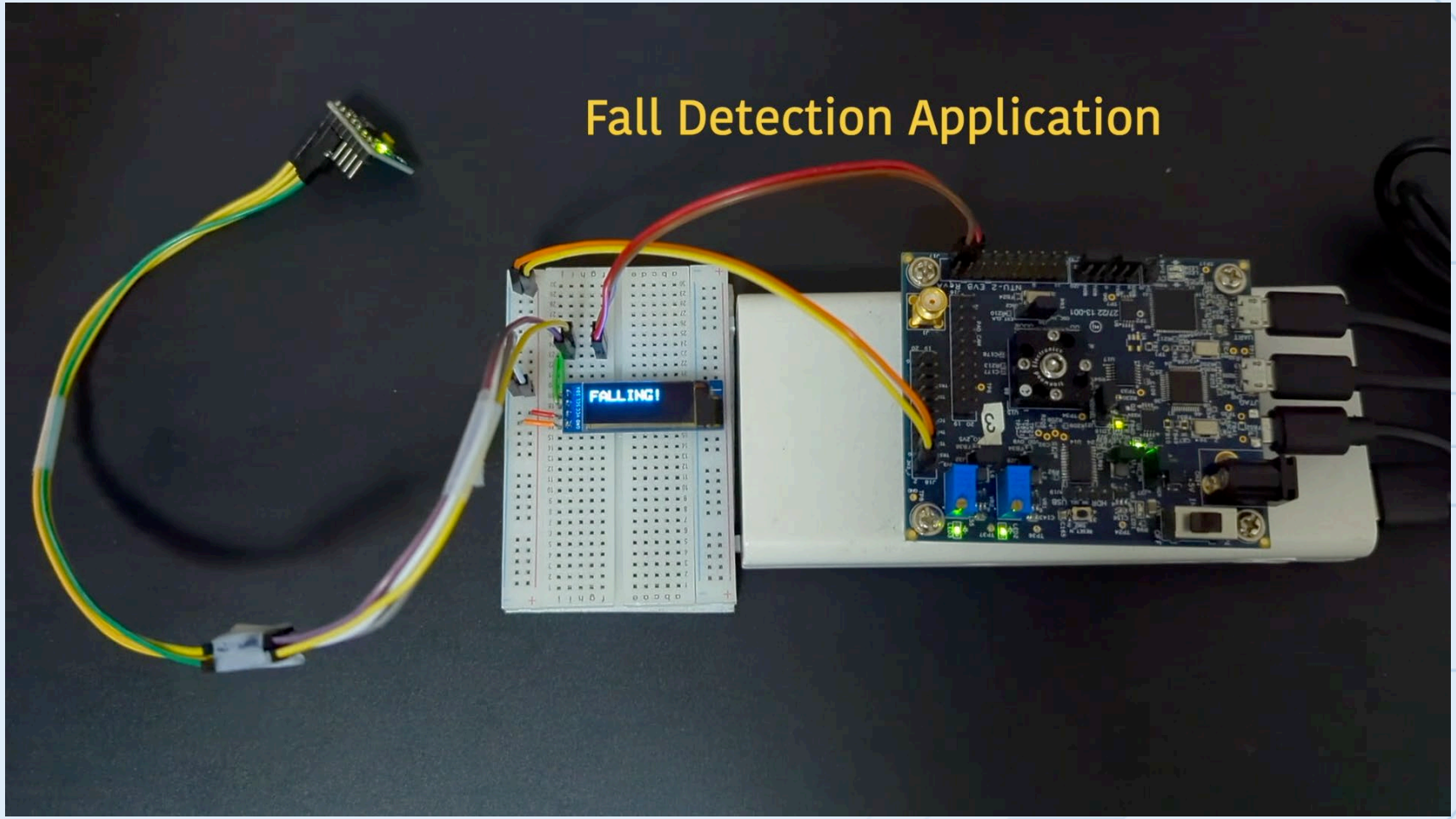
- **Current: Small 8cm x 6.5 cm Eval Board**
  - ECS-DoT chip + dedicated JTAG & UART-USB Interfaces
  - Pins to attach all sensors via standard interfaces (I2C, SPI, etc)



- **Next-Gen: 5 cm x 2 cm Modular board**
  - Base Board with ECS-DoT and debug ports
  - Pins to mount daughter boards, each for use case



Wearables (Fall Detection)

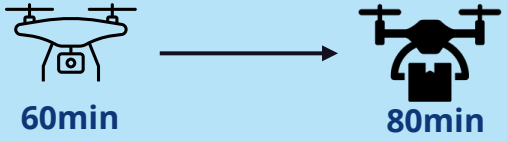


ECS-DoT Unlocks Breakthrough in Drone Flight Efficiency

EMASS a nanoveu business

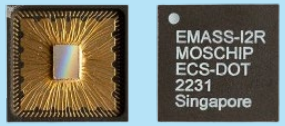
Longer Flight Times

+33% simulated flight time without any hardware changes



AI Ready Platform

Enables **onboard intelligence** for mission-critical use cases.



- Precision Landing
- Predictive Maintenance

Minimal Overhead

AI logic uses minimal battery, **preserving power** for propulsion.

How it works

Real-time control @ 50hz executing full “sense-think-act” loop every 20msZ

Operates in sub-milliwatt power envelope

AI engines include:

- Surrogate power predictor (25% drop in overthrust)
- Reinforcement learning controller (improves distance per Watt by 20%)

Positioning ECS-DoT for Autonomous Drone Markets

Minimal Overhead, Maximum Intelligence

ECS-DoT consumes **<1mW** total AI power, preserving battery

Precision Landing

Autonomous Inspection

Model Refinement

Addressable Market

USD$73B Market (2024)

USD$163B Market (2030)*

Next Steps Toward Market Readiness

Model Refinement

Targeting 40-70% endurance gains

Simulation Expansion

Diverse profiles (payload, wind, battery)

OEM Engagement

Pipeline for integration

Real-world Testing

Phase 2 live flights underway

Platform Expansion

Microdrones, fixed-wing, VTOL

*https://www.grandviewresearch.com/industry-analysis/drone-market-report

Strategic Collaboration on Edge AI Modules

Accelerating ECS-DoT Adoption

Phase 1

Industrial predictive maintenance

- USD$60 Billion Opportunity by 2030[1] (predictive maintenance)
- Integrated into a compact, intelligent module
- Real-time vibration sensing, anomaly detection, and machine diagnostics

[1]https://www.grandviewresearch.com/industry-analysis/predictive-maintenance-market

Phase 2

Wearable module

- USD$186.14 Billion Opportunity by 2030 (wearables)
- Ultra-low-power design for motion sensing, health tracking, and contextual AI
- Tailored for consumer and medical-grade wearable applications

[2]https://www.grandviewresearch.com/industry-analysis/wearable-technology-market

Phase 3

Accelerating real-world adoption

- De-risks integration for OEMs and solution developers
- Expands global reach through partner-led customer engagement
- Drives volume through alignment with industry-specific applications

*Source: SHD Group, March 2025

Building Commercial Momentum

Engaging with Tier 1 OEMs

- Actively engaging with leading wearables and drone manufacturers
- Strong interest driven by ECS-DoT's differentiated architecture and capabilities
- Potential customers see clear advantages over incumbent solutions from Syntiant and Ambiq

Drones

What Market Is Responding To

- Ultra-low active power during AI inference
  → Enables longer runtime, smaller batteries, and sleeker product designs
- Integrated sensor fusion: real-time fusion of audio, motion, and environmental data
  → Delivers richer context and higher accuracy from a single chip
- AI Model Portability: supports deployment of a wide range of models across popular frameworks
  → Accelerates time-to-market by simplifying model migration and reducing development effort

Wearables

a nanoveu business

Thank You

Head Office

Level 45, 108 St Georges Terrace

Perth WA, 6000 Australia

+61 8 6244 9095

www.nanoveu.com

Singapore Office

20 Ayer Rajah Crescent

08-09 Singapore 139964

+65 6557 0155