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ASX RELEASE 19 December 2025

**ASX: NVU** 

#### **Investor Webinar Presentation**

Nanoveu Limited (ASX: NVU, OTCQB: NNVUF) ("Nanoveu" or the "Company"), a technology innovator across advanced semiconductor, visualisation, and materials science, is holding its webinar commencing at 9.00 am (AWST) / 12.00 pm (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 <a href="https://nanoveu.com/">https://nanoveu.com/</a>.

#### Key highlights to be discussed:

- Tape-out of New Integrated Circuit on TSMC's 16nm FinFET;
- Recently announced collaborations with Arrow Electronics (NASDAQ: ARW) and Semtech (NASDAQ: SMTC);
- ECS-DoT Drone Program; and
- Sales network establishment for the ECS-DoT 22nm and upcoming 16nm Edge-Al solutions.

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

**Date:** Friday, 19 December 2025

Time: 9.00 am Australian Western Standard Time (AWST) / 12.00 noon Australian Eastern Standard Time

(AEST)

Invite link: <a href="https://zoom.us/webinar/register/WNgDdjC8h3SJa50TY">https://zoom.us/webinar/register/WNgDdjC8h3SJa50TY</a> o3Xx3A

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

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#### 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, Al-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 Al capabilities, further positioning Nanoveu as a key player in the rapidly growing 3D content, Al 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<sup>TM</sup> 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  $Nanoshield^{TM}$  Marine, which prevents the growth of aquatic organisms on submerged surfaces like ship hulls, and  $Nanoshield^{TM}$  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.







Investor Webinar December 19, 2025





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# **Capital Structure**



### Capital Structure

	ASX Code	NVU	
	OTCQB Code	NNVUF	
	Shares on Issue	981.1m	
\	Options on Issue	228.5m	
	Perf Rights on Issue	138.0m <sup>1</sup>	
	Average Volume	13.6m	
	Market Cap <sup>2</sup>	\$87.3m	
	Previous Close <sup>2</sup>	\$0.089	

<sup>1.</sup> Excludes 5m performance rights to be offered to director subject to shareholder approvals. 2. As at close 9 Dec '25.

www.nanoveu.com



# **Board and Management**



**Dr. David Pevcic**Executive Chairman

- Experienced professional and investor in the resources and technology sector
- Non-Executive Chairman at Battery Age Minerals Ltd (ASX: BM8)
- Non-Executive Chairman at Infini Resources Ltd (ASX: 188)
- Holds a BSc, MBBS, from the University of Western Australia



**Dr. Mohamed Sabry**Non-Executive Director

- CTO, Founder of EMASS
- Associate Professor, NTU Singapore
- Postdoc at Stanford University
- Recipient of Nanyang Education Award
- Ph.D. from EPFL



## Alfred Chong Group CEO and Director

- Founder of Nanoveu, has 30+ years of experience in scaling companies and trade sales
- Former CEO of Atex Media Command (APAC), THISS Technologies, 121View
- Former CMO at 3D International



**Steve Apedaile** 

#### Non-Executive Director

- 30 years of experience in accounting
- Worked at KPMG and Horwath Hong Kong
- Fellow of the ICAEW and Member of the AICD.
- Executive Chairman of Sprintex (ASX:SIX)



#### **Raymond Chen**

#### **CFO** and Director

- Held roles at Iluka Resources, NRW Holdings, Equinox Resources and KPMG
- MBA, University of Cambridge (Judge Business School)
- 15+ years' experience across resources and corporate finance

















#### **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



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







## **EMASS Introduction**

#### **Fabless Semiconductor Innovator in Edge AI Processing**



- Ultra-low-power Edge AI SoCs for always-on intelligence in battery constrained devices
- Flagship ECS-DoT chip up to 20x more energy efficient than peers
- Usable across drones, wearables, IoT devices and other Edge Al applications

#### **Established Global Operations**



- Global operations and R&D centres in USA, Singapore and Egypt
- 100% of EMASS acquired by Nanoveu Limited (ASX:NVU)

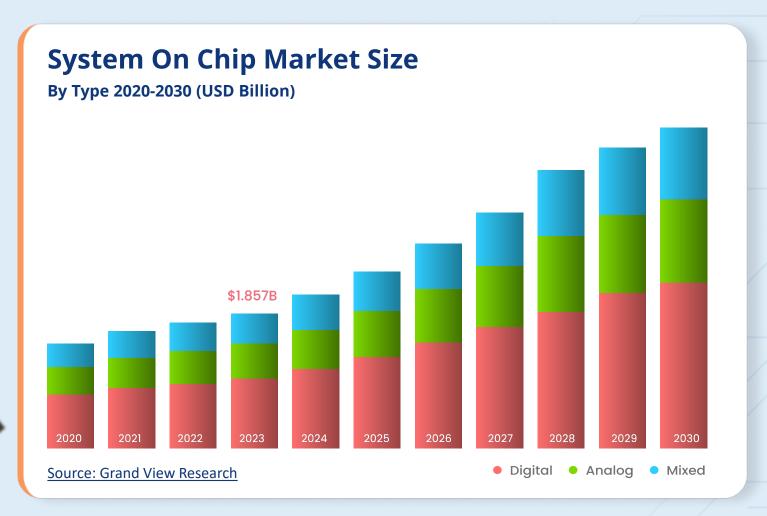
#### **Expert Team Across Disciplines**



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



# **Semiconductor & SoC Market Opportunity**



#### **SoC Market Growth:**

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

\$325.7B **by 2030** 8.5% Global Market CAGR

Driven by AI, 5G, and smart devices.





# **Revolutionising Edge Al**



### **Edge AI Opportunities**



Robust AI models require increased computation power and battery



Current chips are not designed for efficient edge Al use cases



Devices need versatile chips with multi-sensor use-cases



#### **EMASS Solution**



Executes AI inference directly at the sensor under 1 mW power



Provides up to 20x energy efficiency vs leading chips



Enables smaller, lower-cost, and reconfigurable designs across drones, IoT, and wearables





# Introducing the ECS-DoT

**Superior Performance, Low Power, Small Form Factor** 



Up to 12 TOPs/Watt



Compressed Al Model < 2-bits



4 MBytes



22nm technology with 7mm<sup>2</sup>die area



30 GOPs @ 50 MHz, 2mW





# **Redefining What's Possible in Ultra-Low-Power Edge Al**

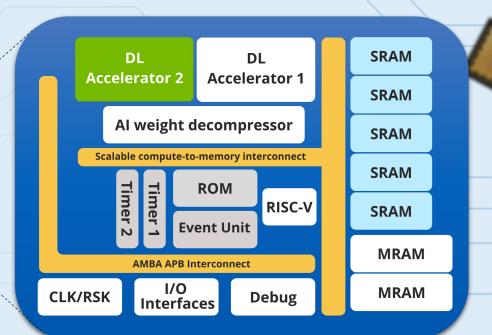


#### **Fully Programmable System on Chip (SoC)**

- Processor
- Al engines
- IPs for compressed Al

#### Local decision-making at the Edge

- Always-on Al Inference
- Sensor fusion
- Support CNNs, ML, Data Processing, etc.

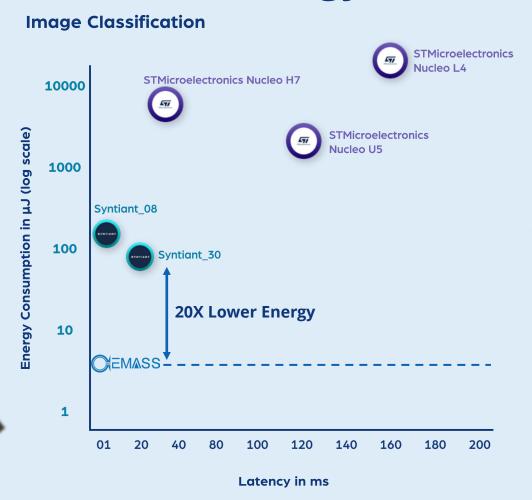


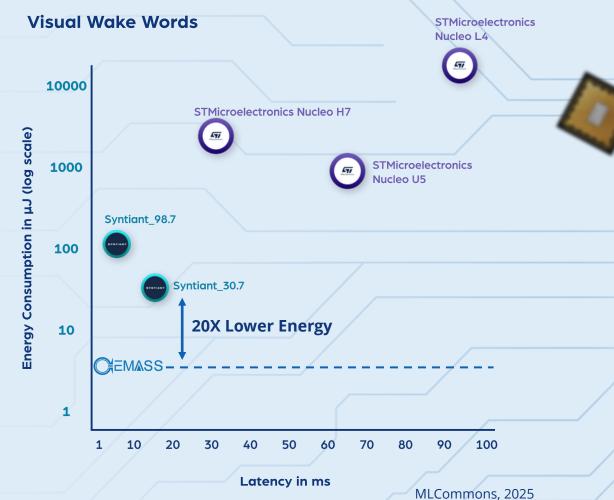
#### **Key Architecture Features**

- <1 to 5 mW power consumption (Avg 2mW always on)</li>
- No External DRAM needed (very fast on-chip SRAM and nonvolatile MRAM/RRAM)
- SW and HW support for highly compressed AI workloads



# **Exceptional AI Computation 20X Lower Energy**

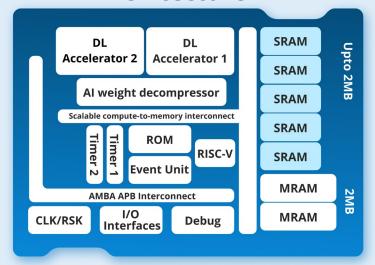




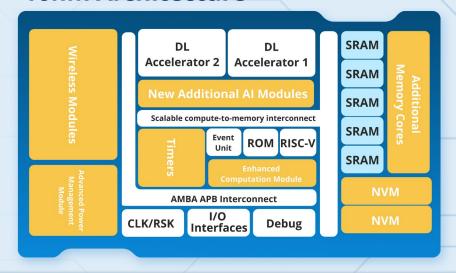


# **Next Generation ECS-DoT 16nm**Strengthening Leadership in Ultra-Low-Power Edge Al

#### 22nm Architecture



#### **16nm Architecture**



#### **Enhancement Highlights**



Fully integrated Low Energy Bluetooth (BLE)



**Expanded on-chip memory** 



New Adaptive Power Management



Integrated Floating-Point Unit (FPU)

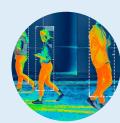


Dedicated AI module for object detection





# **Next Generation ECS-DoT 16nm Enhancement Benefits**



## **Dedicated AI Acceleration Module for Object Detection**

- YOLO (You Only Look Once)-Nano-class architectures;
- MobileNet-SSD style detection heads; and
- FOMO (Faster Objects, More Objects)-style event and object detectors



#### New Adaptive Fine-Grained Power-Management Architecture

- Dynamic clock gating for workload-aware optimization
- Autonomous low-power states
- Microsecond-level sleep/wake



#### **Integrated Floating-Point Unit (FPU)**

- Accelerate DSP
- Enable mixed-precision AI workflows
- Improved developer experience



## **Integrated Bluetooth Low Energy Subsystem (Analog + RF)**

- Eliminates external wireless ICs
- Reduces board area, BOM, and design complexity



#### **Expanded On-chip Memory**

- Support larger/complex neural networks
- Reduce off-chip memory





## **Target Edge Al Sectors**



\$USD 138.5B by 2029

Source: Marketsandmarkets



\$USD 368.4B by 2035

Source: Fact.MR

#### **Al Cameras**

\$USD 22.1B by 2028

Source: Marketsandmarkets



#### **IoT Sensory**

\$USD 168.69B by 2030

Source: Mordor Intelligence



#### **AR Glasses**

\$USD 8.26B by 2030

Source: Grand View Reasearch



#### **Drones**

\$USD 223.66B by 2034

Source: Fact.MR



## **ECS-DoT Achieves Major Drone Performance Gains**

<b>Drone Type</b>	Quadcopter	Hexacopter	Octocopter
Graph	ECS-DoT Quadcopter Performance Improvements  30  25  90  10  10  40% 45% 50% 55% 60% 65% 70% 75% 80% 85%  Distance Per Unit Energy Improvements (in %)	ECS-DoT Hexacopter Performance Imporvements  30  25  20  10  5  0  40%  45%  50%  55%  60%  65%  70%  75%  80%  85%  Distance Per Unit Energy Improvements (in %)	ECS-DoT Octocopter Performance Imporvements  25  20  15  10  35% 40% 45% 50% 55% 60% 65% 70% 75% 80% 85%  Distance Per Unit Energy Improvements (in %)
Use-cases	<ul><li>Consumer</li><li>Enterprise</li></ul>	<ul><li>Agriculture</li><li>Logistics</li><li>Terrain Mapping</li></ul>	<ul><li>Industrial inspection</li><li>Defense</li><li>Professional</li></ul>
Performance Gains	Achieved up <b>to 80% improvement</b> in mission endurance, with a <b>60% average</b> extended flight time over baseline	Delivered up to <b>75% improvement</b> in flight endurance	Delivered consistent flight endurance up to 85% with an average 57% improvement



# Arrow Electronics Collaboration \text{\subset}

#### **Arrow Electronics (NYSE: ARW)**

- Global technology distributor and engineering partner
- 2024 global sales of US\$28 billion

#### **Collaboration with EMASS**

Enhanced SDKs, developer tools, reference designs

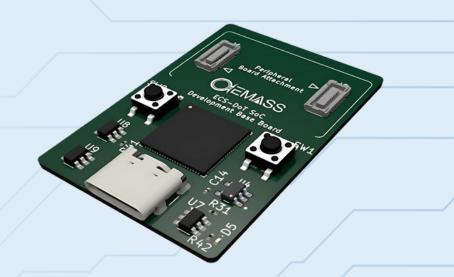
#### **Predictive maintenance first reference design**

Cold asset tracking next design

#### **Comarketing to customers**

• Expand customer reach and engagement







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## **Semtech Collaboration**



#### **Semtech Corporation (Nasdaq: SMTC)**

- Global semiconductor provider
- 2024 global sales of US\$800 million plus

#### **Collaboration with EMASS**

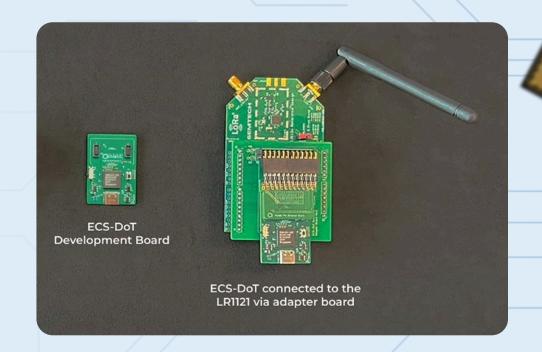
 Combine Semtech's LoRaWAN® wireless transceiver with ECS-DoT

#### Reference designs

- Predictive maintenance
- Security detection

#### **Comarketing to customers**

Expand customer reach and engagement







# **Scaling Commercial Operations**

**USA** 



#### **Continued Customer Engagement**

- Added Field Application Engineers
- Continued growth in applications and engagement

EU



### **Setting up EU Operations**

- New sales director added
- Signing a distributor

Asia



### **Application-Led Engagement**

Signing a distributor



## **Continuing Commercial Momentum**



# **Customer & Partner Engagements**

#### **OEM engagements – eval boards shipped**

- Wearables AR glasses, hearables
- Dash cam
- Predictive maintenance

#### **Partner collaborations – reference designs**

- Inertial sensors
- Image sensors
- Spectral sensors

#### **Custom SoC – long-term customers**

- Tier 1 wearable OEM
- Top 5 sensor provider



# What the Market is Responding To

#### **Ultra-low power AI inference**

- < 10 ms vs. 150-300 ms for competitors
- Up to 20X lower energy consumption vs. competitors

#### **AI Model Portability**

- Supports a wide range of Al Models
- Fast and easy development cycle
- Interoperability

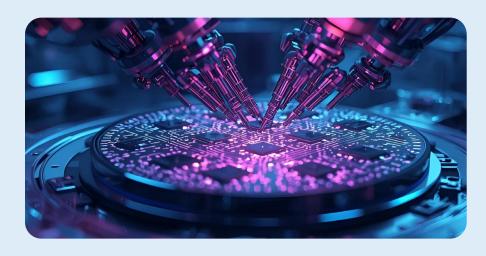
#### **Multi Sensor Integration**

- Seamless integration with a variety of sensor types
- Real-time fusion of audio, motion and environmental data



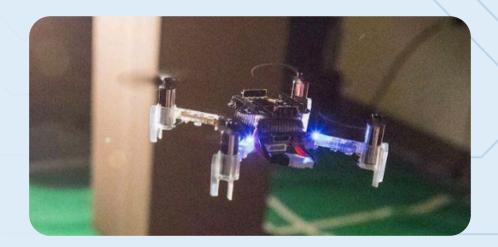


# **Upcoming Technical Catalysts**





- Strengthening leadership in ultra-lowpower Edge Al
- Integration of key chip enhancements
- Designed to further reduce power consumption while supporting larger and more complex AI models



#### **Live-drone trial results**

- Validate performance gains from simulations
- Assess power consumption, latency, and endurance in live flight conditions





# **Upcoming Commercial Catalysts**



#### **CES 2026**

- Multiple demos with ECS-DoT
  - Predictive maintenance
  - Security detection
  - Wrist-worn wearable
  - Cold asset tracking
- Demo combining ECS-DoT with Semtech LoRaWAN®

#### More partner engagements



- Reference designs with ECS-DoT
- Comarketing
- Easier customer adoption

#### **Targeting Sales of ECS-DoT in 2026**



- OEMs with eval boards
- Design-in process started
- More customer demand





## **Thank You**



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