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ASX: NVU

EMASS Releases ECS-Studio Development Suite 1.0 for ECS-DoT

New software suite takes engineers from a trained AI model to running ECS-DoT-22 hardware in one workspace, supporting faster customer evaluation and design-in

Highlights

- **ECS-Studio released**: EMASS has released ECS-Studio 1.0, the software development suite for ECS-DoT-22, to registered developers through the EMASS developer portal. ECS-Studio contains the integrated development environment (IDE) and AI compiler that the Company announced on 12 November 2026 it expected to release during November.
- **Customers can now convert their own AI models on ECS-DoT-22:** ECS-Studio 1.0 converts models built with standard AI frameworks (TensorFlow Lite, PyTorch or ONNX) to run on the chip. Until now, customer models had to be converted by EMASS engineers.
- **Broadens engagement beyond established sales channels**: the evaluation board is available worldwide from DigiKey (announced 10 November 2026) and ECS-Studio is available to registered developers via the developer portal. Engineers outside EMASS' direct sales, sales representatives and distribution networks in North America, Europe and Asia can now obtain ECS-DoT-22 and begin working with it.
- **Latest benchmark results can be replicated**: ECS-Model Zoo includes the models and scripts behind the results announced on 12 November 2026, in which ECS-DoT-22 used up to 56 times less energy per inference than published competitor results.[1] Customers and third parties can now run the same tests on their own boards.
- **Software work can begin ahead of volume production**: customers can build and test their application software on evaluation boards while ECS-DoT-22 is prepared for full mask production.
- **Three tools available now, a fourth to follow**: ECS-Studio IDE, ECS-Compiler and ECS-Model Zoo are available now. ECS-Profiler, for measuring a model's speed and memory use on the chip, is expected to follow in the coming weeks.

Nanoveu Limited (ASX: NVU, OTCQB: NNVUF) ("Nanoveu" or the "Company"), a technology company specialising in advanced semiconductor, visualisation and materials sciences, is pleased to announce that its wholly owned subsidiary, Embedded A.I. Systems Pte Ltd ("EMASS"), has released ECS-Studio 1.0, the software development suite for ECS-DoT-22, its 22-nanometre ultra-low-power edge-AI system-on-chip ("SoC"). ECS-Studio is available now to registered developers and supports the ECS-DoT-22 evaluation board (part number ECS-DoT-22-EVB).

What Changes for Customers

Before a product team can decide whether a chip suits its application, its engineers must get their own AI model running on it. A model is trained on a computer and must then be converted to fit the much smaller memory of a chip such as ECS-DoT-22 and to use the chip's AI accelerators.

[1] Refer to the Company's ASX announcement of 12 November 2026 for the test conditions, peer results and qualifications that apply to these figures. The results were measured by EMASS and have not been verified by MLCommons Association.

To date, EMASS engineers have carried out that conversion for each developer. Every evaluation drew on EMASS' applications engineering team, and each customer's testing ran to EMASS' schedule as well as its own.



Fig 1: *Launch of EMASS platform allowing for smooth interfacing with the ECS-DoT-22 using the EVB*

ECS-Studio moves that work to the developer. ECS-Studio installs on a Windows, macOS or Linux computer in one step and sets up the software ECS-DoT-22 needs. A developer's engineers can then import a model built in TensorFlow Lite, PyTorch or ONNX, convert it with ECS-Compiler, run it on an ECS-DoT-22 evaluation board and build it into their own application in the same workspace.

Customers can now test ECS-DoT-22 with their own models and sensors on their own timetable, which EMASS expects will shorten customers evaluation times. EMASS' applications engineers, freed from routine model conversion, can support more evaluations at one time.

As at 30 September 2026, EMASS had 33 active customer opportunities for ECS-DoT-22, with eight customers at Design-In stage and a further three testing the chip on evaluation kits.[2] ECS-Studio is now available to all active customer opportunities.

Broadening Customer Engagement

ECS-Studio follows the DigiKey distribution agreement announced on 10 November 2026, under which the ECS-DoT-22 evaluation board can be ordered worldwide. Customer engagement has so far run through EMASS' direct sales team, its manufacturer sales representatives in North America, Europe and China, and its regional distribution partners in Europe and Asia. DigiKey and ECS-Studio complement those channels by giving engineers who are not yet in contact with them a way to obtain the board and the software and begin work. Registration on the developer portal requires standard registration information and provides access to ECS-Studio, the ECS-DoT-22 datasheet and the evaluation board user manual. Registration also helps EMASS identify which companies are working with ECS-DoT-22, so that its sales team can follow up, and provide assistance if needed.

[2] Refer to the Company's ASX announcement of 12 October 2026, "ECS-DoT-22 Pipeline Update, 8 Design-Ins, 33 Opportunities", for pipeline stage definitions. Pipeline figures are as at 30 September 2026. None of the opportunities is a binding supply agreement, purchase order or revenue commitment.

ECS-Model Zoo includes the models and scripts used to produce the benchmark results announced on 12 November 2026. In those tests, measured by EMASS across the four MLPerf Tiny workloads, ECS-DoT-22 used between 17 and 56 times less energy per inference than published results for competing devices, with keyword spotting and anomaly detection each below one microjoule per inference. The models also ran up to nine times faster than the corresponding reference models on the same chip and exceeded reference accuracy on every workload. Any developer or third party with an evaluation board can now run the same tests.

ECS-Studio also provides developers the option to begin their software work ahead of volume production, helping to potentially reduce development lead times. They can develop and test their models and application code on evaluation boards now, while EMASS completes the technical verification that precedes full mask production of ECS-DoT-22. The Company expects this to reduce the software work left for customers when production devices become available.

What ECS-Studio Includes

ECS-Studio comprises four tools. Three are available now, and the fourth, ECS-Profiler, is expected to follow in the coming weeks.

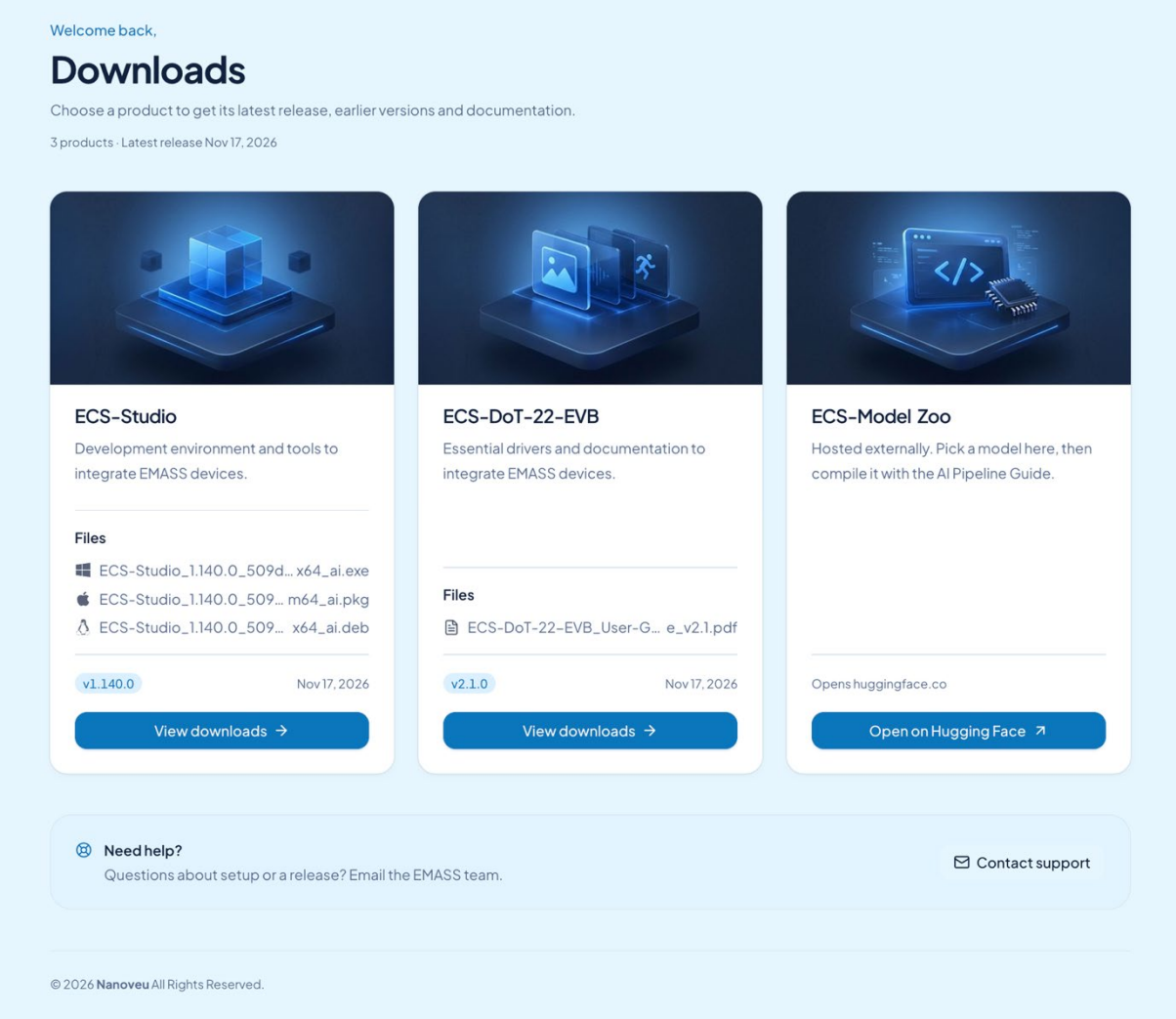


Fig 2: *Inside the EMASS portal where potential customers can download the various toolkits*

Tool	What it does	What it means for customers
ECS-Studio	The workspace engineers use to write, build, load and debug software for ECS-DoT-22. The compilers, software development kit (SDK) and sensor drivers it needs are installed and checked automatically	Engineers can begin development on Windows, macOS or Linux without assembling a toolchain by hand
ECS-Compiler	Converts a trained AI model into a compact form that runs on ECS-DoT-22, reports in advance which parts will run on the chip's AI accelerators and whether the model fits in memory, and produces a software library ready to build into an application	Customers can bring models they have already built, rather than redesigning them for a new chip
ECS-Model Zoo	A library of audio, vision and time-series AI models already converted for ECS-DoT-22, including keyword spotting and the models behind the 12 November 2026 benchmark results	Customers can run a working model straight away and test ECS-DoT-22 on their own bench
ECS-Profiler	Will measure how quickly a model runs on ECS-DoT-22 and how much memory it uses, and display the results	Engineers will be able to compare versions of a model and check performance before committing to a design

Nanoveu's CEO of Semiconductor Technologies, Mark Goranson, said: *"ECS-Studio 1.0 is one of the most important software release EMASS has made. It takes ECS-DoT-22 from a chip our engineers had to set up for each potential customer, to a product a design team can pick up and build with on its own. With last week's benchmark results and the evaluation board on DigiKey, customers now have the performance data, the hardware and the tools together."*

EMASS' Vice President of Sales and Marketing, Scott Smyser, said: *"The first thing a customer's engineers ask is how soon they can run their own model on the chip. Until now that depended on our engineers' availability. With ECS-Studio they can start the day the board arrives, and that applies to the developers already in our pipeline and to design teams our sales network has not yet reached."*

Next Steps

EMASS expects to release ECS-Profiler in the coming weeks as an update to ECS-Studio, to add further models to ECS-Model Zoo and to extend ECS-Studio to further ECS-DoT products as they are released.

ECS-Studio is provided to developers to support adoption of ECS-DoT-22, and the Company does not expect the release itself to have a material effect on near-term revenue. EMASS' priorities are to progress the customers at Design-In stage towards design wins and to prepare ECS-DoT-22 for full mask production.

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

-ENDS-

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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 Drone and sensing capabilities complementing the Company's ECS-DoT edge-AI silicon across defence, critical-infrastructure security and industrial inspection 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 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. The pipeline is a management measure of commercial activity and is not a forecast of revenue. 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. Readers should not place undue reliance on forward-looking statements. The Company does not undertake to update or revise any forward-looking statement.