

Beyond the Chip: The Drone Stack

Nanoveu Ltd

Nanoveu Ltd (ASX: NVU) has entered into a binding agreement to acquire Spinoff Robotics Pte Ltd, a Singapore-based deep-tech spinout from the Singapore University of Technology and Design (SUTD), in a deal paid entirely in NVU shares. The acquisition brings two proprietary drone platforms already in commercial use: **ALICE**, a tethered drone that draws continuous power from a ground station for uninterrupted flight, and **METRON**, a high precision 3D camera system for inspection and surveillance. Both platforms have been validated with Singaporean tier one customers including Gardens by the Bay, the Land Transport Authority and the Home Team Science and Technology Agency. Alongside the products, Nanoveu acquires Spinoff's in house team and the engineering capability to design and build drones from the ground up. With this step, Nanoveu now owns every layer of its drone platform, from the chip to the aircraft itself. For a company whose ECS DoT chip had until now sat as a payload inside someone else's drone, that is a meaningful shift.

The transaction arrives at a moment of considerable operational momentum. During Q1 CY26, EMASS completed tape out of its 16nm ECS DoT system on chip at TSMC, while Nanoveu ended the quarter with a cash balance of approximately A\$6.7m. The Company also secured an exclusive evaluation licence over four NTU Singapore inventions covering GPS-free localisation and formation control, IP that now finds a natural deployment surface in the Spinoff platforms.

The commercial logic is straightforward. **Rather than supplying an edge AI chip as a payload to third party drones, Nanoveu can now engineer ECS DoT into its own airframes from the outset**, with sensor placement, power envelope and control loop latency designed around its own silicon. Target verticals span defence, hyperscaler and critical infrastructure surveillance, airport perimeter and FOD detection, battlefield and tactical operations, and inspection of nuclear and human inaccessible facilities.

Consideration comprises 3m NVU shares at completion (twelve months escrow), 4m vendor performance rights tied to revenue, IP integration and share price milestones, and 2m incentive performance rights for Spinoff co-founder Dr Chee How Tan, who joins as senior technical lead. The transaction contemplates total dilution of up to 9m shares on a fully diluted basis, must complete by 31 August 2026, and is cash neutral at closing.

We remain constructive on Nanoveu's strategic positioning and the rationale of the Spinoff Robotics transaction. We maintain our Spec BUY recommendation, while our valuation and price target are placed under review (UR) given the recency of the announcement and pending deal completion. We will revisit our estimates and provide an updated valuation framework in due course.

Key Near-Term Catalysts

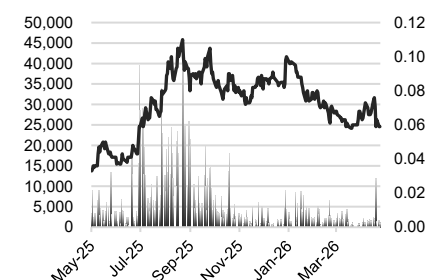
Completion of Spinoff Robotics acquisition	August 2026
Live flight drone trials with US specialist partner	Imminent
16nm ECS DoT silicon validation post fabrication	CY26-CY27

Recommendation	Spec BUY
Price Target	UR
Share Price	\$0.063

Company Profile

Market Cap	\$68m
Enterprise Value	\$62m
SOI	1,081m
Free Float	~59%
Cash	\$6.7m
52-Week Range	\$0.031-\$0.13

Price Performance (PTM)



Company Overview

Nanoveu Limited develops advanced semiconductor and nanotechnology solutions with a strategic focus on ultra-low-power Edge AI, enabling real-time processing directly on-device while significantly reducing energy consumption and latency. Growth is driven by its EMASS platform, a proprietary system-on-chip architecture designed for integration into wearables, IoT devices and smart sensors, positioning the company for scalable OEM adoption across the rapidly expanding Edge AI ecosystem.

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NVU Coverage

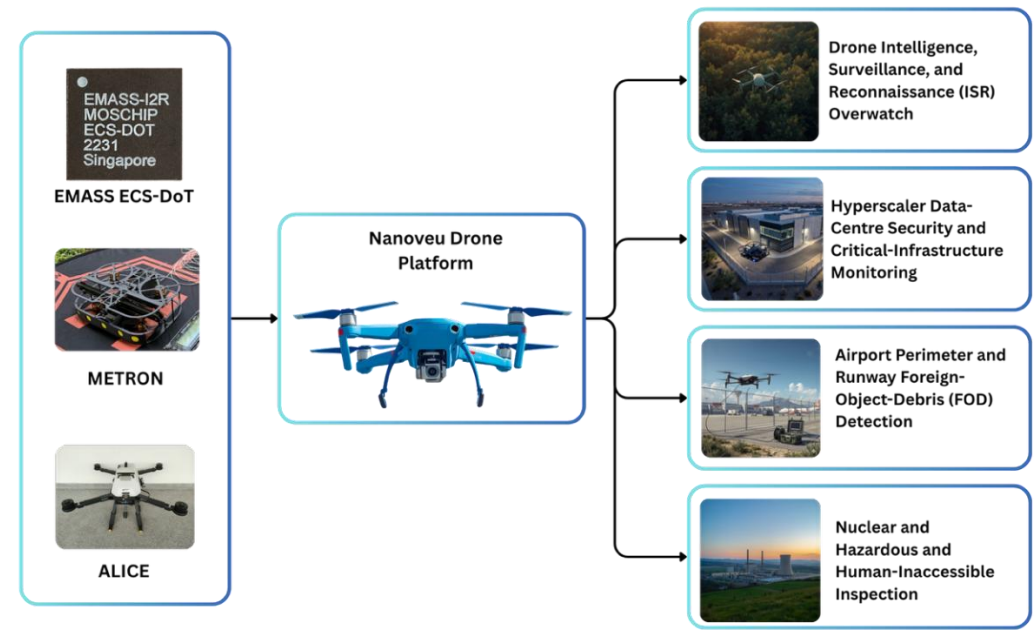
Update 2 Sept 2025 [Link](#)
Initiation 12 Aug 2025 [Link](#)

Investment Summary

Nanoveu’s proposed acquisition of Spinoff Robotics represents a strategically significant expansion of the Company’s edge-AI and drone capabilities, transforming Nanoveu from a semiconductor-focused business into a vertically integrated drone autonomy platform. Through the transaction, Nanoveu gains ownership of key layers of the drone stack, spanning ECS-DoT edge-AI silicon, proprietary airframes, tethered power systems, sensing and on-device AI analytics.

Central to the acquisition are Spinoff’s two proprietary platforms: **ALICE**, a tethered drone system designed for persistent aerial surveillance and operation in GPS- and RF-contested environments, and **METRON**, a sub-millimetre photogrammetry and AI deviation-detection platform capable of high-precision infrastructure monitoring and anomaly detection. Both systems have already been commercially validated with Singapore government-linked customers including Gardens by the Bay, the Land Transport Authority and the Home Team Science and Technology Agency.

Figure 1: Full-Stack Drone Vertical Integration



Source: NVU announcement, 15/05/2026

Strategically, the acquisition allows Nanoveu to integrate its ECS-DoT ultra-low-power AI chip directly into drones designed in-house, rather than supplying silicon into third-party platforms. Management believes this creates a structural advantage by optimising sensor placement, flight control, latency and power consumption around Nanoveu’s own architecture. The combined platform is being positioned toward high-value applications including defence ISR surveillance, airport runway and foreign-object-debris detection, hyperscale data-centre security and hazardous or nuclear infrastructure inspection.

The acquisition also builds on earlier drone-related initiatives undertaken by the Company, including GPS-free localisation and formation-control IP licensed from NTU Singapore, as well as prior ECS-DoT drone endurance simulation results which demonstrated material flight-time improvements under hardware-in-the-loop testing. These capabilities are currently undergoing live validation with a US-based specialist drone technology partner.

Operationally, Nanoveu continues advancing its semiconductor roadmap, with the 16nm ECS-DoT chip now taped out and in fabrication at TSMC, while the existing 22nm platform progresses through customer design-ins across wearables, industrial sensing and smart infrastructure markets. The Company ended Q1 CY26 with \$6.7m cash, with

the Spinoff acquisition structured as a fully scrip-funded transaction and therefore cash neutral on completion.

Alongside the transaction, Nanoveu outlined several near-term workstreams to advance its drone edge-AI program. Live drone trials with its US partner are progressing, with novel outcomes to be protected through near-term IP filings. ECS-DoT-based development will target next-generation drone functions including multi-chip configurations, GPS-free navigation, counter-drone detection and AI-driven flight optimisation. The Company also plans direct engagement with drone OEMs and system integrators and retains the option to design bespoke airframes around ECS-DoT where commercially attractive. Drones remain one of several priority ECS-DoT markets alongside wearables, healthcare and industrial IoT.

Overall, we view the Spinoff acquisition as a meaningful strategic inflection point for Nanoveu. Beyond adding validated drone products, the transaction brings in-house aerial robotics expertise and establishes a foundation for the Company to develop fully integrated, mission-specific autonomous drone platforms targeting defence, surveillance and industrial inspection markets.

Valuation Update

Our valuation and price target have been placed under review (UR) pending further analysis of the Spinoff Robotics acquisition. Given the recent announcement and the scope of the transaction, we consider it prudent to defer any valuation adjustment at this stage. We expect to update our view in due course.

Risks

Despite Nanoveu's attractive long-term exposure to edge AI, autonomous systems and ultra-low-power semiconductor technologies, the proposed Spinoff Robotics acquisition materially expands the Company's operational and commercial complexity. As Nanoveu transitions toward a more integrated autonomous systems and defence-focused platform model, several key risks should be considered.

Execution, Integration and Commercialisation Risk

The Company must successfully integrate Spinoff's engineering capabilities, align multiple technology platforms and convert technical validation into scalable commercial deployment. Delays in integration, customer conversion or commercial rollout could impact growth expectations and revenue timing.

Business Model and Revenue Risk

The transaction may shift Nanoveu away from a predominantly semiconductor-focused model toward a broader autonomous systems and platform-based commercial structure. While strategically attractive, this increases uncertainty around future revenue composition, scalability, margin profile and recurring revenue visibility.

Technology and Product Risk

Nanoveu's investment proposition remains dependent on the performance and competitiveness of ECS-DoT, ALICE and METRON. Failure to achieve targeted performance benchmarks or increasing competition across edge AI and autonomous systems could limit customer adoption.

Defence and Regulatory Risk

Expansion into defence, surveillance and critical infrastructure markets introduces procurement, geopolitical and regulatory risks. Defence sales cycles are typically long and subject to government priorities, while AI, drone and semiconductor technologies may face increasing export control and regulatory oversight.

Funding and Dilution Risk

Nanoveu remains reliant on external capital to fund ongoing R&D and commercial expansion. Although the Spinoff acquisition is structured as a scrip-funded transaction,

additional capital raisings may still be required and could result in further shareholder dilution.

Customer Adoption and Revenue Conversion Risk

Commercial traction remains at an early stage. While ALICE and METRON have demonstrated validation with Singapore government-linked customers, broader deployment across defence, infrastructure and industrial markets remains uncertain and subject to lengthy procurement cycles.

Working Capital and Scaling Risk

As operations scale, working capital requirements are expected to increase alongside higher R&D, integration and commercialisation expenditure. Any mismatch between investment requirements and operating cash flows could place pressure on liquidity.

Key Personnel Risk

The Company remains dependent on a relatively small group of highly specialised technical and engineering personnel. The loss of key staff or difficulties integrating the Spinoff team could negatively impact execution and product development timelines.

Valuation and Market Risk

Nanoveu's valuation remains highly sensitive to execution outcomes, commercial adoption and broader market sentiment toward AI, defence technology and emerging growth equities. Given the evolving business model and limited visibility around long-term revenue scaling, the stock may continue to experience elevated volatility.

Evolution Capital Ratings System

Recommendation Structure

- **Buy:** The stock is expected to generate a total return of >10% over a 12-month horizon. For stocks classified as 'Speculative', a total return of >30% is expected.
- **Hold:** The stock is expected to generate a total return between -10% and +10% over a 12-month horizon.
- **Sell:** The stock is expected to generate a total return of <-10% over a 12-month horizon.

Risk Qualifier

- **Speculative ('Spec'):** This qualifier is applied to stocks that bear significantly above-average risk. These can be pre-cash flow companies with nil or prospective operations, companies with only forecast cash flows, and/or those with a stressed balance sheet. Investments in these stocks may carry a high level of capital risk and the potential for material loss.

Other Ratings

- **Under Review (UR):** The rating and price target have been temporarily suppressed due to market events or other short-term reasons to allow the analyst to more fully consider their view.
- **Suspended (S):** Coverage of the stock has been suspended due to market events or other reasons that make coverage impracticable. The previous rating and price target should no longer be relied upon.
- **Not Covered (NC):** Evolution Capital does not cover this company and provides no investment view.

Expected total return represents the upside or downside differential between the current share price and the price target, plus the expected next 12-month dividend yield for the company. Price targets are based on a 12-month time frame.

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