

FLASH REPORT

Archer Materials

ASX: AXE

Strategic agreement with
global quantum leader IonQ

27 JULY 2026

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Managing Director, Ruthless Ventures

Commissioned research. Ruthless Insights has been
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FLASH REPORT

Archer Materials Ltd (AXE)

Strategic agreement with global quantum leader IonQ

Share Price \$0.22

ASX AXE

Investment Summary

- AXE, Australia's only ASX-listed pure-play quantum tech company, has entered a Strategic Partnership with IonQ Inc. (NYSE:IONQ). With a market cap of US\$21bn IonQ customers include Lockheed Martin, AWS and NVIDIA.
- The agreement gives AXE and its customers access to IonQ's world leading quantum compute (QC) power, quantum simulator and specialist engineering support for next-gen application development, and directly supports progress across AXE's quantum programs. The agreement spans an initial 3-year term for total payments to IonQ of US\$1.5m. The two companies will jointly evaluate the deployment of an IonQ quantum computer in Australia, strengthening the nation's sovereign quantum capability.
- Access to world leading compute power is a highly strategic asset for AXE. QC access is a primary constraint in developing next-gen quantum algorithms and hardware. IonQ's full-stack quantum solutions hold the current world record for two-qubit gate fidelity of 99.99% and have demonstrated 20 times improvement in computational performance over classical approaches.
- Multiple potential revenue streams associated with the IonQ agreement include quantum cloud access, development of proprietary applications and IP, and monetisation of future local infrastructure.
- AXE has also completed a \$7.0m placement followed by an SPP Offer to raise up to \$3m. These funds will be used to execute the IonQ agreement, advance AXE's internal quantum programs such as QML and 12CQ qubit chip development, support biochip development and general working capital.
- The Q4 cash flow report confirms closing net cash of A\$8.4m. With the addition of the placement and SPP (before costs), AXE has ~A\$18.4m in available cash, representing ~10 quarters of funding based on the 4Q FY2026 operating cash flow of -A\$1.9m.

Earnings Estimates (A\$)		FY22	FY23	FY24	FY25
Sales	\$m			2.1	2.1
Growth	%				-3.8%
EBITDA	\$m			-5.6	-7.5
EBIT	\$m			-5.7	-7.7
Margin	%				-375.4%
PBT	\$m			-4.8	-7.0
Adj NPAT	\$m			-4.8	-7.0
Growth	%				45.2%
Rep NPAT	\$m			-4.8	-7.0
Adj EPS	cps			-1.9	-2.7
EPS grwth	%				45.2%
PE	x			-13.5	-9.3
DPS	cps			0.0	0.0
Payout	%			0.0%	0.0%

Source: Company data

Paul Sanger

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Company Data

ASX code	AXE
ASX price	\$0.22
Shares on issue	280.3m
Market capitalisation	\$71.5m
Cash on hand	~\$8.4m ¹
12-month price range	\$0.255 – \$0.424
ASX turnover (3m avg. daily vol.)	0.35m

¹ Cash = Latest reported balance 4Q FY26.

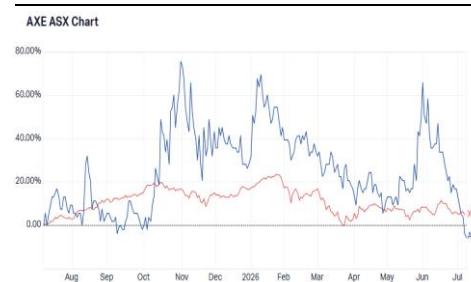
Key Personnel

Dr. Simon Ruffell	CEO
Greg English	Executive Chair
Jake van der Hoek	Company Secretary / CFO

Major Shareholders (Aug 2025)

BNP Paribas Noms Pty Ltd	3.84%
Citicorp Nominees Pty Ltd	3.16%
GDE Exploration (SA) Pty Ltd	2.93%
BNP Paribas Nominees Pty Ltd <Clearstream>	1.43%
Inverton Pty Ltd <Alice McCleary Super A/C>	1.37%

Price Chart (ASX: AXE)



Source: Market Index

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Investment Summary

Investment Thesis

Archer Materials (ASX: AXE) is a leading Australian quantum technology company developing advanced semiconductor devices and software across quantum computing (¹²CQ), sensing, quantum machine learning (QML), and medical diagnostics (Biochip). The key elements of the investment thesis for AXE are as follows:

- **Quantum first-mover** – AXE is uniquely positioned in the market as the only ASX-listed quantum technology company. The agreement with US giant IonQ is expected to strengthen its position within the global quantum ecosystem and create a pathway to bring world-class quantum computing capability to Australia. AXE's longer-term strategy is to move from developing quantum hardware and compute access into a full quantum solutions provider, solving high-value problems across key Australian sectors and leveraging its deep quantum expertise, established network and ongoing R&D.
- **Large emerging market** – Quantum technology is moving from decades of research and development into real-world commercial deployment. Demand is accelerating across defence, financial services and pharmaceuticals, sectors where classical computing is reaching practical limits. The global quantum technology market, led by quantum computing, is forecast to grow from US\$2bn today to US\$129bn by 2040, representing a ~65 times increase and positioning quantum among the fastest-growing technology categories globally over the next two decades.
- **Strategic IP** – AXE has a growing IP portfolio of more than 40 international patents in key quantum jurisdictions including the US, Europe, China, and Japan. Its portfolio spans both hardware and software applications, providing diversified commercialisation paths. AXE's hardware includes quantum and sensing technology such as carbon-based qubits and biosensors for medtech applications. On the software side, AXE is building and protecting a growing IP portfolio of quantum algorithms, including quantum machine learning models.
- **International network** – AXE cultivates a network of international partners and collaborators to accelerate technology development (e.g. EPFL, IMEC, Paragraf, HyliD, CSIRO). This strategy creates opportunities for co-development and joint venture revenue, and to share R&D costs. The recently announced strategic agreement with IonQ provides access to the IonQ Quantum Cloud and could support the development of a cost-effective, rapidly deployable sovereign quantum computing capability in Australia.
- **Multiple commercialisation paths** – AXE is approaching several important commercialisation milestones across its tech portfolio. The Company is targeting multiple sources of long-term recurring revenue spanning hardware, software and licencing, with IonQ partnership potentially accelerating opportunities. Revenue streams include commercial applications such as the Biochip, quantum access, quantum software applications, subscriptions and managed services, participation in or ownership of deployed infrastructure, and ongoing support and compute-management services.
- **Capital light model** – The company is a fabless manufacturer that employs a capital light model, prioritising in-house R&D and relying on tier-1 foundry and development partners to scale products. The IonQ partnership could evolve towards AXE becoming an owner-operator of sovereign quantum capability in Australia in a cost-effective way.
- **Deep technical leadership** – AXE has a long-standing deep-tech background, supported by in-house technical expertise across quantum hardware, software and applications, as well as a network of global scientific advisors. This highly strategic capability positions the Company as a credible partner for Australian enterprises seeking quantum-as-a-service solutions, quantum readiness support and assistance with post-quantum cryptography migration.
- **Funded near term** – AXE has completed a \$7.0m placement to institutional and sophisticated investors (~25.9m new shares at \$0.27 per share), alongside an SPP Offer to raise up to \$3.0m on the same terms. Proceeds will fund execution of the IonQ agreement, advancement of the QML and ¹²CQ (graphene qubit) programs, ongoing Biochip and advanced materials development, and general working capital, positioning AXE to progress each core program to its next stage.

Milestones

Key events and data points to track the company's progress over coming periods include:

- Completion of SPP raise and conclusion of EGM in mid-August to complete Tranche 2 placement and attaching option issue.
- FY26 result due in August 2026.
- Demonstration of the world's first functioning graphene spin qubit (¹²QC), produced entirely on industry standard semiconductor manufacturing equipment by Q3 CY2026.
- Transition ¹²QC prototypes from R&D demonstration to wafer scale, foundry-compatible manufacturing.

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Quantum computing

Quantum computing is a fundamentally new approach to processing information based on the principles of quantum mechanics. Where a conventional computer uses binary bits that are either a 0 or a 1, a quantum computer uses quantum bits, or "qubits," which can represent 0, 1, or both at the same time - which means a quantum processor can explore many possibilities simultaneously instead of sequentially.

This makes quantum computers uniquely suited to problems beyond the reach of even the most powerful supercomputers, such as molecular simulation for drug discovery, complex optimisation, and cybersecurity. Rather than replacing conventional computers, they work alongside them on a specific class of high-value problems.

Quantum compute power

Quantum compute power is the processing capability a quantum computer can bring to a problem. Because qubits represent many states at once and work in combination, this power can scale dramatically as more high-quality qubits are added, far faster than adding chips to a traditional computer.

Critically, it depends not just on the number of qubits but on their quality; how stable and reliable they are before errors occur. This combination of scale and reliability determines whether a quantum computer can solve commercially valuable problems, and it is the capability providers deliver to customers, much as cloud providers deliver conventional computing today.

Qubit

A qubit, or quantum bit, is the basic unit of information in a quantum computer; the quantum equivalent of the conventional "bit." Unlike a bit, which is either a 0 or a 1, a qubit can be a 0, a 1, or a blend of both, and multiple qubits link together so their combined power grows rapidly as more are added.

- Delivery of full QML fraud detection prototype by the end of 2026 after model validation on live quantum hardware.
- Delivery of a beta prototype biosensor device by year-end, suitable for clinical trials.
- Starting customer engagement and data centre evaluation per IonQ agreement stage 1.
- Commencing development towards sovereign quantum compute capability per IonQ agreement stage 2.
- Landing further partnership and M&A opportunities to expand AXE's global quantum network.

Bringing quantum computing to Australia

Archer Materials (AXE) has entered into a strategic Quantum Compute Agreement with global quantum pioneer IonQ Inc. (NYSE: IONQ). The agreement provides AXE and its customers access to the IonQ Quantum Cloud, the world's most advanced computational system to enhance strategic development in defence, AI resources, pharmaceuticals, and scientific research. Both Archer and its customers will receive dedicated hours of compute time for next-generation application development.

Under the agreement, AXE will use the IonQ Quantum Cloud platform to build on its proprietary quantum applications via software and algorithm development. An example of such an application is the company's Quantum Machine Learning (QML) fraud detection program.

AXE will also work with IonQ and potential customers to develop additional quantum applications. An IonQ specialist engineering team will support AXE to advance its quantum computing applications, including algorithm selection, evaluation and planning for future quantum systems.

The need for quantum computing

Quantum computing is rapidly moving from an experimental technology towards practical commercial deployment, and is increasingly viewed as strategically critical infrastructure. AXE believes there is an urgent and growing demand for quantum computing services in Australia, which currently lags its global peers in quantum readiness and post quantum cryptography (PQC) migration; especially in areas where confidentiality and data sovereignty are paramount (e.g. banking or defence). Key drivers include:

- National competitiveness – Quantum is a frontier technology expected to reshape productivity across finance, logistics, energy, materials and health.
- Geopolitics – Western intelligence partners treat quantum as decisive for cryptography, secure communications and defence. This is driving rising sovereign demand.
- AI-driven compute demand – Exponential growth in AI is straining classical compute and energy limits, accelerating the need for quantum computing capacity.
- Strategic national infrastructure – Sovereign quantum capability is increasingly viewed as critical national infrastructure, not a research curiosity.
- Commercialisation gap – while Australia has world-class research and education programs, it lags peers in industrial translation, and enterprise readiness ahead of commercial-scale quantum capability.

The IonQ agreement gives AXE an opportunity to broaden its quantum offering, develop new use cases, and deliver advanced quantum computing services to

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Australian customers preparing for quantum readiness. Over time, the partnership could support sovereign quantum capability in Australia.

Sovereign quantum capability

Beyond Quantum Cloud access, AXE and IonQ intend to explore establishing a cost effective, utility-scale sovereign quantum computing capability in Australia. This would allow both parties to capitalise on the domestic quantum market estimated to reach \$6bn by 2045¹.

During the initial phase, the parties will engage corporate, government, research and education customers to sell access to advanced quantum computing capability via the IonQ Quantum Cloud. The objective is to build a customer base and sales pipeline to grow quantum adoption in Australia and prepare for post-quantum cyber security.

In parallel, the parties will assess the suitability of Australian data centre infrastructure for the potential local deployment of an IonQ quantum computer. Any deployment would remain subject to the outcome of this assessment.

A sovereign quantum computing capability could support national priorities across AI, cybersecurity, defence, mining and resources, logistics, financial services, healthcare, advanced manufacturing and scientific research.

Australia has a globally recognised quantum research base and a national strategy to develop the sector. AXE believes locally deployed quantum infrastructure will become an important component of Australia's future technology ecosystem. IonQ's modular solutions provide a comparatively cost-effective and rapidly deployable pathway to bringing commercial-scale quantum computing capability onshore. This would give Australian companies, researchers and government agencies access to advanced quantum computing while building local skills, applications and commercial use cases.

Under the agreement, AXE is expected to build specialist sales and technical capabilities to commercialise quantum computing as a utility service in Australia. Over time, this positions AXE as the natural owner-operator of an IonQ system in Australia.

Key terms

The agreement has an initial term of three years and can be renewed by mutual agreement between AXE and IonQ. During the term, AXE will pay IonQ US\$0.25m on signing the agreement and then US\$0.25m every 6 months thereafter (total of US\$1.5m).

IonQ will provide AXE with access to IonQ's Quantum Cloud on an IonQ Forte-class system and once available, the IonQ Tempo-class system or subsequent systems. IonQ will also give AXE access to IonQ's quantum simulator and expert advisory and consulting services.

IonQ – global quantum leader

IonQ (market cap US\$21bn) is a global leader in quantum computing systems, quantum networking, sensing, security, cloud-based quantum access and enterprise solutions. The company delivers commercial quantum solutions to customers including Air Force Research Lab, Hyundai, Airbus, AstraZeneca, and Lockheed Martin, demonstrating strong commercial validation.

It has established strategic partnerships with leading global organisations including Amazon Web Services, Ansys, Google Cloud and NVIDIA. In 2025, it demonstrated more than 20x improvement in computational performance relative to previous quantum solutions.

IonQ's newest generation of quantum computers, the IonQ Tempo, is the latest in a line of cutting-edge systems helping customers and partners achieve step-change performance results and accelerate innovation in drug discovery, materials science, financial services, logistics, cybersecurity, and defence.

The company's quantum computing services are available through all major cloud providers. Strategically, IonQ plans to make quantum platforms more accessible and to build increasing use cases for the technology.

¹ Australian Government National Quantum Strategy; CSIRO / 2024 State of Australian Quantum report.

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Revenue streams

There are multiple potential revenue streams associated with the IonQ agreement. These include guaranteed cloud access, development of proprietary applications and IP, and monetisation of future local infrastructure.

Fig. 1 – IonQ revenue stream opportunities



Source: AXE company data

Capital raising

Placement

Following the strategic agreement with IonQ, AXE has also announced a \$7.0m capital raising in the form of a non-underwritten placement of ~25.9m new shares at an issue price of \$0.27 per share. It has received binding commitments from institutional and sophisticated investors for the full amount. The placement is comprised of two tranches, as follows:

- Tranche 1 - \$6.86m raising via issue of ~25.4m new shares pursuant to the company's placement capacity under ASX Listing Rule 7.1.
- Tranche 2 - \$0.14m raising via issue of ~0.52m new shares to certain investors (including Directors and management) subject to shareholder approval, in respect of Director participation, at an EGM expected mid-August.

The issue price of \$0.27 per share represents a 12.9% discount to the last closing price of \$0.31 on 30 June, and a 13.6% discount to the 5-day VWAP of \$0.312 per share. New shares will rank pari passu with existing shares.

Share purchase plan (SPP)

In addition to the placement, the company is also undertaking a non-underwritten share purchase plan (SPP) to raise up to \$3.0m on the same terms.

The SPP will be offered to eligible existing shareholders, being those with a registered address in Australia and NZ on the record date of 2 July. The closing date for the SPP is 3 August 2026. Eligible shareholders will be entitled to apply for up to \$30,000 worth of new shares, subject to any scale back.

Free attaching options

Participants in the placement and the SPP will receive the opportunity to subscribe for 1 free unquoted attaching option for every 1 new share allocated in the placement and SPP. These attaching options have an exercise price of \$0.35 each and expire on 30 June 2029. The issue of the attaching options is conditional on shareholder approval at the EGM scheduled for mid-August.

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Use of funds

The funds raised pursuant to the placement and the SPP (after expenses) will be used for the following purposes:

- Quantum programs including IonQ project development and customer acquisition, Quantum Machine Learning (QML) development, and ¹²CQ qubit development.
- Continued expenditure on development of the company's biochip and advanced materials technologies.
- General working capital expenses.

This now positions AXE to execute the strategic agreement with IonQ and advance the company's other projects to the next stage simultaneously. With funding secured, AXE can accelerate its internal programs, several of which are at key inflection points, as well as commence key customer acquisition for its IonQ quantum utility service.

Current cash position

The June quarterly cash flow report confirms a closing cash balance of \$8.4m at the end of the period. The company has no debt. Based on the reported operating cash flow of -\$1.9m in 4Q FY2026, AXE has sufficient funding in place for approximately the next 4.5 quarters.

Note that the \$7.0m placement and SPP of up to \$3.0m discussed above are both post year-end events, and therefore not included in the closing cash balance of \$8.4m. With the addition of these amounts (before costs), we estimate AXE has approximately \$18.4m in available cash, representing ~10 quarters of funding based on the 4Q FY2026 operating cash flow.

AXE also has additional potential future funding available from the exercise of the options attached to shares issued in the placement and SPP.

Company Background

Archer Materials Ltd (ASX: AXE) is a quantum technology company that operates within the semiconductor industry. The company is developing advanced semiconductor devices, including chips relevant to quantum computing, sensing, and medical diagnostics. AXE leverages global partnerships with world class R&D institutions, manufacturing partners, and industry leaders to develop these technologies for potential use across multiple industries. The company has filed over 40 patents globally in key quantum and semiconductor manufacturing jurisdictions.

Business model

AXE is pursuing multiple revenue pathways to commercialise its technology, including direct-to-market sales of hardware and IP (e.g. Biochip and Sensors), mass-market licensing of key IP (e.g. graphene-based ¹²CQ quantum chip, and Quantum Machine Learning (QML) technologies), and direct-to-market sales of quantum compute time through its strategic partnership with IonQ. The Company is largely pre-revenue, relying on government grants, R&D tax incentives, and capital raisings to fund operations, with continued technology development contingent on timely access to incremental funding as required.

The company's strategy of seeking development partners (e.g. IMEC, CSIRO, Paragraf) also provides joint venture and co-development fees, and R&D cost-sharing.

Its target customers include large OEM firms, and semiconductor fabs, government agencies, and defence primes, with revenue likely to involve upfront licence payments to access the technology as well as ongoing royalties. The biochip, sensor and QML technologies are considered short-medium term opportunities, and the ¹²CQ chip a medium-long term opportunity.

Key Products / Technology Platforms**Quantum computing – The ¹²CQ project**

AXE is developing the ¹²CQ quantum computing chip, a carbon-based quantum processor designed to perform calculations beyond the capabilities of classical computing. The Company's objective is to demonstrate the world's first functioning carbon/graphene-based qubit that can be manufactured using standard semiconductor manufacturing lines and operate without the cryogenic cooling required by competing quantum architectures. This has the potential to position AXE at the leading edge of quantum device innovation.

The immediate technical milestone is the demonstration of a working single qubit, including reliable control and readout. This is a critical step towards establishing the performance, stability and scalability of the underlying technology. The company has made steady progress through design, fabrication and testing, while also beginning to assess how the architecture could be scaled from individual devices to wafer-level manufacturing.

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AXE has completed full wafer manufacturing runs of key components of its qubit designs with external manufacturing partners. These activities are intended to improve process consistency, support future device testing and advance the chip towards a foundry-ready design based on existing industry standards.

Manufacturability is likely to be an important determinant of commercial viability in quantum computing. Technologies that depend on specialised or entirely new fabrication infrastructure face higher costs and longer development timelines. Archer's approach is intended to reduce these barriers by designing its quantum devices for production in existing semiconductor foundries. Successful execution could provide a more scalable pathway from prototype development to commercial manufacture, although significant technical milestones remain before this can be demonstrated.

The technologies developed through the ¹²CQ program may also have applications beyond quantum computing including quantum sensing, photonics, AI infrastructure and cloud technologies. These adjacent applications provide longer-term optionality across the fastest growing areas in global technology.

The company continues discussions with new and existing industry partners to support future manufacturing pathways.

Quantum machine learning (QML)

AXE partnered with CSIRO in 1H FY26 to develop quantum machine learning (QML) models for fraud detection. This project highlights the Company's strategy to commercialise near-term quantum applications that offer global impact. The initial outputs of the QML project produced prototype fraud detection models and performance benchmarks using simulated financial datasets.

AXE and CSIRO have successfully demonstrated proof of concept quantum neural network (QNN) to identify fraudulent transactions, using quantum computing's natural advantages to process large complex datasets at high speed. In a recent simulation using a public dataset of >280,000 transaction records, the QNN model identified 118 of 148 fraudulent transactions with only one false positive. This provides validation of the technology and a strong foundation for the next development phase.

Work to date has also shown that the quantum software can operate on conventional computing hardware. AXE is targeting delivering a further noise-optimised QML demonstration by the end of 2026.

The rapid acceleration of digitalisation and AI is dramatically expanding the surface area of financial crime, rendering classical fraud detection inadequate against the speed, scale and sophistication of modern threats. Global fraud losses and financial crime are estimated to cost the worldwide economy between US\$442B and US\$1.1T annually, while cyber-enabled fraud alone is projected to cost US\$10.5T globally. This is driving urgent demand for next-generation detection capabilities across banking institutions, enterprises and government agencies.

Medical diagnostics – Biochip

AXE is developing a miniaturised chip-based biosensor for real-time, point-of-care diagnostics. The initial target application is the measurement of blood potassium levels to detect hypo- and hyperkalemia in patients with chronic kidney disease (CKD) and cardiovascular disease. The goal is to create a portable, lab-quality device that can support point-of-care and at-home monitoring.

AXE has reported a series of technological, manufacturing and partnership milestones to advance the Biochip towards clinical testing and commercialisation. These include:

- **Partnership agreements** – Collaboration with various research partners to enable strict accuracy thresholds for potassium detection and is expected to facilitate the launch of clinical trials in 2026.
 - **Paragraf Limited** – AXE entered a six-month contract with UK-based graphene electronics company Paragraf to improve the performance of its gFET sensors for blood potassium testing. The program is focused on sensor accuracy, fabrication consistency, and device qualification. AXE reported that on-chip device uniformity improved from 85% to 98.5% reducing variability from 15% to just 1.5%. This improvement is important for testing with human blood samples and for developing a reproducible prototype cartridge suitable for at-home diagnostics.
 - **Hylid Diagnostics Inc.** – AXE entered a strategic partnership with Canadian diagnostics company Hylid to co-develop a portable integrated potassium testing cartridge. With a focus on lab-quality at-home diagnostics, Hylid will contribute haemolysis sensor technology and regulatory guidance, particularly for the North American and European markets.
 - **Interuniversity Microelectronics Centre (IMEC)** – AXE is working with Belgium-based IMEC to accelerate Biochip development and assess silicon as an alternative sensing platform to graphene. Silicon is more widely used in semiconductor manufacturing and could offer a more scalable path to commercialisation if it achieves comparable sensitivity. Developing both graphene and silicon-based platforms is intended to reduce technical and manufacturing risk.
- **US Patent** – To defend the IP underpinning the Biochip platform, AXE has secured a US patent covering elements of its biosensing platform, including graphene-based compositions used for molecular detection. The patent strengthens the Company's IP position in the US, the most important target market for its CKD diagnostic plans.
- **CMOS integration** – AXE started a multi-project wafer fabrication run with foundry partner VTT Technical Research Centre of Finland Ltd (VTT) to integrate its gFET biosensors with complementary metal-oxide semiconductor (CMOS) readout circuitry.

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This integration is designed to enable sensor data to be controlled and processed using standard chip-based electronics. Successful integration is anticipated to improve speed, reliability, and suitability for use in a handheld diagnostic device.

- **Miniaturisation** – The Company reduced the size of its gFET chip design from 10 x 10mm to 1.5 x 1.5mm, achieving a 97% reduction in chip size. The smaller design is expected to materially improve manufacturing efficiency, increasing theoretical output from approximately 45 chips to as many as 1,375 chips per four-inch wafer, reducing unit costs and potentially supporting future high-volume production. The chips were fabricated by commercial foundry partner Applied Nanolayers and assembled by AOI Electronics, AXE's outsourced semiconductor assembly and test (OSAT) partner.
- **Clinical trial** – AXE is working with IMEC and other Contract Development and Manufacturing Organisations (CDMOs) to develop its potassium ion sensors and produce a handheld prototype for pilot clinical trial. The biochip prototype is targeted for completion in 2026, with clinical trials expected to follow in 2027.

The biochip platform is designed to be inherently adaptable. By modifying its surface chemistry and sensor configuration, the technology may be capable of detecting additional ions without requiring a complete redesign of the underlying sensing architecture. This flexibility enables potential applications across multiple sectors, including mental health medication monitoring (lithium), electrolyte panels (sodium, chloride, calcium), renal and cardiac disease management, and emergency medicine diagnostics.

Strategy

AXE is developing advanced semiconductor devices and intellectual property for quantum computing, quantum sensing, quantum machine learning and medical diagnostics. The company's strategy is to build technologies that are not only scientifically differentiated but also manufacturable, scalable, and integrated into existing semiconductor and technology supply chains in the largest growth sectors globally.

The company is currently advancing towards wafer-scale manufacturing of its qubit technology, marking another key step in its progress from laboratory-based development to scalable semiconductor production.

Quantum technology is attracting increasing strategic attention from governments, major technology companies, semiconductor manufacturers and investors. The US Government has committed significant funding to quantum technology companies and quantum foundry infrastructure, a growing signal that quantum is transitioning from a research-phase technology into a strategically critical industry.

Collaboration is the centre of AXE's strategy to commercialise its cutting-edge devices. The company has deepened ties with key partners including leading academic institutions and foundries around the globe, strengthening every link in the value chain. Additional collaborators and technical partners are key to accelerating its technology roadmap.

The company is well-placed, having developed a focused strategy around pioneering technologies with significant long-term potential. The growing intellectual property portfolio reflects years of targeted research and development, and progress is steadily moving closer to viable commercial outcomes.

AXE is also actively assessing opportunities to broaden and strengthen its technology portfolio through strategic intellectual property, technology and acquisition opportunities that align with its semiconductor and quantum strategy, and/or have potential to accelerate its technology roadmap or provide nearer-term commercial pathways.

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