

**ASX Announcement**  
**15 July 2024**

## **ADISYN ANNOUNCES STRATEGIC COLLABORATION WITH 2D GENERATION TO ADVANCE AI AND SEMICONDUCTOR TECHNOLOGY**

### **Highlights:**

- Collaboration with leading semiconductor IP business 2D Generation to generate transformational opportunities in the AI space, leveraging AI1's learnings in data centres and cybersecurity.
- 2D Generation is developing applications to enable the next generation of high-performance, energy-efficient semiconductor solutions for AI and datacentres
- 2D Generation is a founding partner in the EU's Connecting Chips Joint Undertaking
- Research and innovation partners include NVIDIA, IMEC, Valeo, Applied Materials, NXP and Unity.

Adisyn Ltd (**ASX: AI1**) ("**Adisyn**" or the "**Company**") has entered into a binding collaboration agreement ("**Collaboration Agreement**") with 2D Generation Ltd, a prominent international semiconductor IP business incorporated in Israel ("**2D Generation**"). This partnership aims to generate transformational opportunities in the AI space, leveraging Adisyn's expertise in data centre management, managed IT services, and cybersecurity, alongside 2D Generation's industry-leading capabilities in developing next-generation AI semiconductor solutions.

### **Driving AI and Semiconductor Innovation**

The collaboration is poised to advance the development of high-performance, energy-efficient semiconductor solutions crucial for AI and data centres. 2D Generation, renowned globally for its intellectual property innovations in semiconductors that enhance performance enabling generative AI and significant data centre efficiencies, is also a founding partner in the EU's Connecting Chips Joint Undertaking, reflecting its commitment to driving semiconductor advancements.

### **The Objectives of the Collaboration**

**The applications of the jointly developed technologies will align with AI1's dual track strategy of AI enablement and advanced data centre and cyber security solutions.**

The material terms of the binding Collaboration Agreement are as follows:

1. **Innovative AI Chips:** The partnership will focus on creating intellectual property for electronic photonic power and systems on chips (SoC) and their integration into systems in package (SiP) modules.
2. **High-Performance Computing:** Applications will target AI, data centres, high-performance computing, and other digital industries, including cybersecurity.
3. **Environmental Impact:** Addressing the scalability limitations and massive energy demands of semiconductors to reduce societal and environmental costs.
4. Within 60 days the parties will finalise a formal joint action plan regarding the implementation of the collaboration strategy going forward.
5. The parties will mutually fund the costs of developing the joint action plan and the collaboration. Adisyn does not anticipate its contribution to these costs to be material at this stage. Further, Adisyn anticipates that the initial revenues from the Collaboration will be nominal at this stage, as is usually the case at the start of collaborations of this nature.
6. The intellectual property developed from the action plan and the collaboration will be owned solely by 2D Generation with the right of assignment to Adisyn for commercialisation on terms yet to be formalised.
7. The term of the Collaboration Agreement is ongoing until terminated in writing by either party.

Adisyn will keep shareholders updated in respect of the finalisation of the formal joint action plan and any further related agreements.

### 'Moore's Law and Its Challenges

'Moore's Law states that the speed and capability of computers can be expected to double every two years, but it is facing significant challenges as semiconductors approach scalability limits. In addition, the massive energy demands required for data storage and processing are generating substantial costs for society and the environment. The collaboration between Adisyn and 2D Generation aims to develop and refine Adisyn's overall artificial intelligence strategy and priorities, with a strong focus on energy efficient solutions for data centres and cybersecurity.

"The collaboration between Adisyn and 2D Generation marks a pivotal step in advancing AI and semiconductor technology, promising to deliver innovative solutions for data centres and beyond. This collaboration also underscores the critical role of semiconductors in the global economy and their potential for enabling sustainable solutions" said Adisyn Managing Director Blake Burton.

### The Broader AI and Semiconductor Market

The semiconductor industry is at the heart of the ongoing technological revolution, driven by AI advancements. According to a PwC report, the AI market is expected to reach \$15.7 trillion by 2030, with an annual growth rate of 26.4% between 2020 and 2024. This growth underscores the importance of semiconductors in enabling AI technologies.

In 2020, the US invested \$23.2 billion in AI research and development, with China following at \$16.6 billion. The EU has also set an ambitious goal of investing €20 billion annually in AI over the next decade. The global AI chip market is projected to grow from \$10.1 billion in 2020 to \$253 billion by 2030, with a compound annual growth rate of 35%.

### Looking forward

Shane Wee, AI1's Chairman said "our interactions with the 2D Generation team to date have provided a massive insight into the opportunities that cutting edge AI hardware and software offer to the future of datacentres and cybersecurity defence industries. The collaboration has only just begun and 2D Generation's contributions enabled specifically by the knowledge gained from their industry partners particularly through the ConnectingChips initiative are seismic."

Founder and CEO of 2D Generation, Arye Kohavi, agrees stating "semiconductors are reaching a critical juncture where processing power cannot keep up with developments in AI and the corresponding growth in data storage and manipulation requirements. Together with AI1 and our other collaboration partners including IMEC and our ConnectingChips partners Nvidia, Valeo, AT&S among others, we are dedicated to inspiring the next leap in computing."

**-ENDS-**

This announcement has been approved for release by the Board of Adisyn Ltd.

### Further Information:

Blake Burton  
Managing Director, Adisyn  
[investors@adisyn.com.au](mailto:investors@adisyn.com.au)  
1300 331 888

## References

1. PwC. "Sizing the prize - PwC's Global Artificial Intelligence Study: Exploiting the AI Revolution." (<https://www.pwc.com/gx/en/issues/analytics/assets/pwc-ai-analysis-sizing-the-prize-report.pdf>).
2. Grand View Research. "Artificial Intelligence Market Size, Share & Trends Analysis Report By Solution, By Technology, By End Use, By Region, And Segment Forecasts, 2020 - 2027." (<https://www.grandviewresearch.com/industry-analysis/artificial-intelligence-ai-market>).
3. McKinsey & Company. "Global AI Survey: AI proves its worth, but few scale impact." (<https://www.mckinsey.com/business-functions/mckinsey-analytics/our-insights/global-ai-survey-ai-proves-its-worth-but-few-scale-impact>).
4. European Commission. "A European approach to artificial intelligence." ([https://ec.europa.eu/digital-strategy/our-policies/european-approach-artificial-intelligence\\_en](https://ec.europa.eu/digital-strategy/our-policies/european-approach-artificial-intelligence_en)).
5. Allied Market Research. "AI Chip Market by Chip Type, Application, Technology, Industry Vertical, and Region: Global Opportunity Analysis and Industry Forecast, 2021-2030." (<https://www.alliedmarketresearch.com/AI-chip-market>).
6. Semiconductor Industry Association. "2020 State of the U.S. Semiconductor Industry." (<https://www.semiconductors.org/2020-state-of-the-u-s-semiconductor-industry/>).

## About 2D Generation

2D Generation is an Israeli high-tech company specialising in graphene-based solutions for the semiconductor industry. Founded by experienced entrepreneurs and scientists, the company is dedicated to overcoming current technological limitations by developing faster, stronger, and more energy-efficient computer processing solutions. These advancements will support the next generation of AI, data storage, telecommunications, cybersecurity, mobile devices, and more.

## About Adisyn

Adisyn (ASX: AI1) is a provider of managed technology services and solutions, primarily targeting the SME market. The company aims to be the preferred sovereign provider for SMEs in the Australian defence industry supply chain. Adisyn's offerings include a range of solutions tailored to this growing market segment, leveraging internal capabilities and strategic partnerships, particularly in cybersecurity and AI.

## Forward-looking statements:

Statements contained in this release, particularly those regarding possible or assumed future performance, revenue, costs, dividends, production levels or rates, prices, or potential growth of Adisyn Ltd are, or may be, forward-looking statements. Such statements relate to future events and expectations and as such, involve known and unknown risks and uncertainties. These forward-looking statements are not guarantees or predictions of future performance and involve known and

unknown risks, uncertainties, and other factors, many of which are beyond the Company's control, and which may cause actual results to differ materially from those expressed in the statements contained in this release.

The Company cautions shareholders and prospective shareholders not to put undue reliance on forward-looking statements, which reflect the Company's expectations only as of the date of this announcement. The Company disclaims any obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by law.