

**ASX Announcement**

**2 December 2024**

## **2D Generation Secures Semiconductor Industry Heavy Weight to Guide Development and Commercial Initiatives**

*Leading specialty semiconductor advisory firm engaged to accelerate the development and commercialisation of 2D Generation's next generation technology.*

### **Highlights:**

- 2D Generation has signed a Business Development Agreement with M&T Semiconductor, a leading speciality semiconductor advisory firm
- M&T specialises in managing technological and commercial initiatives in the semiconductor sector
- M&T is incentivised to deliver strategic partnerships with equipment vendors, semiconductor fabricators, fabless chipmakers and end users with the aim of securing licencing transactions and/or a buyout.
- M&T is led by industry leaders Dr. Itzhak Edrei, former President of Tower Semiconductors (the world's 6<sup>th</sup> largest semiconductor pureplay foundry) and Zmira Shterenfeld Lavie, former General Manager at Tower Semiconductor

Adisyn Ltd (**ASX: AI1**) ("**Adisyn**" or the "**Company**") is pleased to announce that 2D Generation Ltd ("**2DG** or **2D Generation**") has entered into a Business Development Agreement with highly specialised leading semiconductor advisory firm, M&T Semiconductor Ltd ("**M&T**").

2D Generation will work with M&T to introduce and facilitate strategic partnerships with equipment vendors, semiconductor fabricators, fabless chipmakers and end users. M&T will prioritise licencing and buyout opportunities. M&T bring over 30 years each of semiconductor experience at Tower Semiconductor, one of the world's leading foundries for high-value semiconductor solutions. The key terms of the agreement are included in an annexure to this announcement.

M&T founders Dr. Itzhak Edrei and Zmira Shterenfeld Lavie have significant experience delivering technological and commercial outcomes in the industry and have developed invaluable connections with many of the key players that 2DG is seeking to engage.

### About Itzhak Edrei

Itzhak is a longstanding business leader in the semiconductor industry, having held several high-level roles at Tower Semiconductor including President, and is currently serving as Tower's President Emeritus. Itzhak established its R&D and Business Units divisions, playing a key role in growing organic and inorganic revenue from \$100M to \$1.3B. This included setting up multiple key business units, signing long-term agreements with customers, and identifying strategic M&A opportunities, which he then successfully concluded.

### About Zmira Shterenfeld Lavie

Zmira has led diverse projects and processes within the semiconductor industry for more than 30 years, amassing significant R&D process development expertise, including technology development and transfers (CMOS, sensors, MEMS, discrete, etc.). As general manager of Tower Semiconductor's TOPS™ (Transfer Optimization and development Process Services) business unit, she took the business unit's annual revenue from zero ~US\$200M.

M&T is incentivised to deliver tangible outcomes and has a track record of doing so.

Dr. Itzhak Edrei says, *“we are extremely excited to be working with 2D Generation. The industry dictates that 2D materials will play a crucial role in semiconductors and 2DG’s solution represents a breakthrough for future chip technology. This is not something the industry wants, it is something the industry needs. We are confident in being able to deliver multiple meaningful partnerships with large semiconductor companies.”*

### Background to 2D Generation’s Solution

2DG has developed a patented solution allowing graphene coating at sub-300 degrees centigrade, an achievement that has never been successfully completed prior to 2DG. This opens the door to the next generation of semiconductors capable of further miniaturisation, lower power consumption, less heat and greater computational power.

2D Generation’s innovative technology centres around the aim of improving the performance and capabilities of the interconnect.

- An interconnect in a semiconductor refers to the conductive pathways that connect different components or regions within an integrated circuit (IC).
- These interconnects are crucial for the functionality of the IC as they facilitate the flow of electrical signals between transistors, capacitors, resistors, and other elements on the chip.
- Interconnects can be made of various materials, typically metals like aluminium or copper, and they can be implemented in different layers within the semiconductor structure.

- As IC's have become more complex, with smaller and more densely packed features, the design and materials used for interconnects have evolved to address issues such as resistance, capacitance, and signal integrity but have reached scalability limitations.

The interconnect field has emerged as a critical technological barrier hindering industry progress. Overcoming this challenge is recognised as the "Holy Grail" within the industry, promising accelerated rates of and continued miniaturisation. Industry giants recognise that the entity with a viable solution stands to gain a substantial competitive advantage.

**Enter 2D Generation. With its groundbreaking innovation enabling in-situ ALD graphene deposition on the interconnect at below 300 degrees Celsius. An achievement that has never been done successfully prior to 2DG. This focus on graphene integration sets 2D Generation apart, presenting a disruptive technology that has the potential to reshape the landscape of semiconductor manufacturing.**

Completion of the Company's acquisition of 2D Generation (ASX: 4 November 2024) is expected to take place following shareholder approval of the necessary resolutions to be sought at the general meeting scheduled for 19 December 2024, subject to satisfaction of certain conditions precedent. Further details regarding the terms of the acquisition are set out in the Company's announcement dated 4 November 2024.

### **Looking Forward**

Chairman and CEO of 2D Generation, Arye Kohavi, says *"we are honoured and very fortunate to be guided by Itzhak and Zmira from M&T, who are very well respected by the industry. M&T brings invaluable experience and gravitas to 2D Generation and can open doors at some of the largest semiconductor companies in the world. We look forward to updating the market on our progress with M&T."*

**-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

## **About 2D Generation**

2D Generation is a 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.

## Annexure

Under the Business Development Agreement:

- (a) 2D Generation will:
  - (i) pay M&T a monthly fee of US\$6,000 (plus VAT) per month for the services provided under Business Development Agreement. This monthly fee is payable until such time that 2D Generation provides notice of termination (which is to be not less than 30 days' notice);
  - (ii) pay M&T a success fee of US\$5,000 for each public relations material that is generated as a result of the services provided under Business Development Agreement; and
- (b) Either party may terminate the Business Development Agreement by providing 30 days' written notice to the other party.

The Business Development Agreement is otherwise on terms and conditions considered standard for an agreement of this nature.