

# H1 2024 Results

23 September 2024

# Forward-Looking Statement

Certain statements included herein may constitute forward-looking statements within the meaning of the securities laws of certain jurisdictions. Certain such forward-looking statements can be identified by the use of forward-looking terminology such as “believes”, “expects”, “may”, “are expected to”, “intends”, “will”, “will continue”, “should”, “would be”, “seeks”, “anticipates” or similar expressions or the negative thereof or other variations thereof or comparable terminology. These forward-looking statements include all matters that are not historical facts. They include statements regarding Alphawave IP Group Plc’s (“Alphawave IP”) intentions, beliefs or current expectations concerning, amongst other things, its results in relation to operations, financial condition, prospects, growth, strategies and the industry in which it operates. By their nature, forward-looking statements involve risks and uncertainties because they relate to events and depend on circumstances that may or may not occur in the future. Forward-looking statements are not guarantees of future performance and Alphawave IP’s actual results of operations, financial condition, and the development of the industry in which it operates, may differ materially from those made in or suggested by the forward-looking statements contained in this Presentation. In addition, even if Alphawave IP’s results of operations, financial condition, or the development of the industry in which it operates are consistent with the forward-looking statements contained in this Presentation, those results or developments may not be indicative of results or developments in subsequent periods. Important factors that could cause those differences include, but are not limited to customer demand, Alphawave IP’s innovation and R&D and technology capabilities, target market trends, industry trends, customer activities and end-market trends, market acceptance of Group technologies; increased competition; macroeconomic conditions; changes in laws, regulations or regulatory policies; and timing and success of strategic actions. These forward-looking statements speak only as of the date of this Presentation. As such, undue reliance should not be placed on forward-looking statements. Other than in accordance with legal and regulatory obligations, Alphawave IP undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

# On The Call Today



John Lofton Holt  
Founder and Executive Chair



Tony Pialis  
Founder and Chief Executive Officer



Rahul Mathur  
Chief Financial Officer

# Agenda

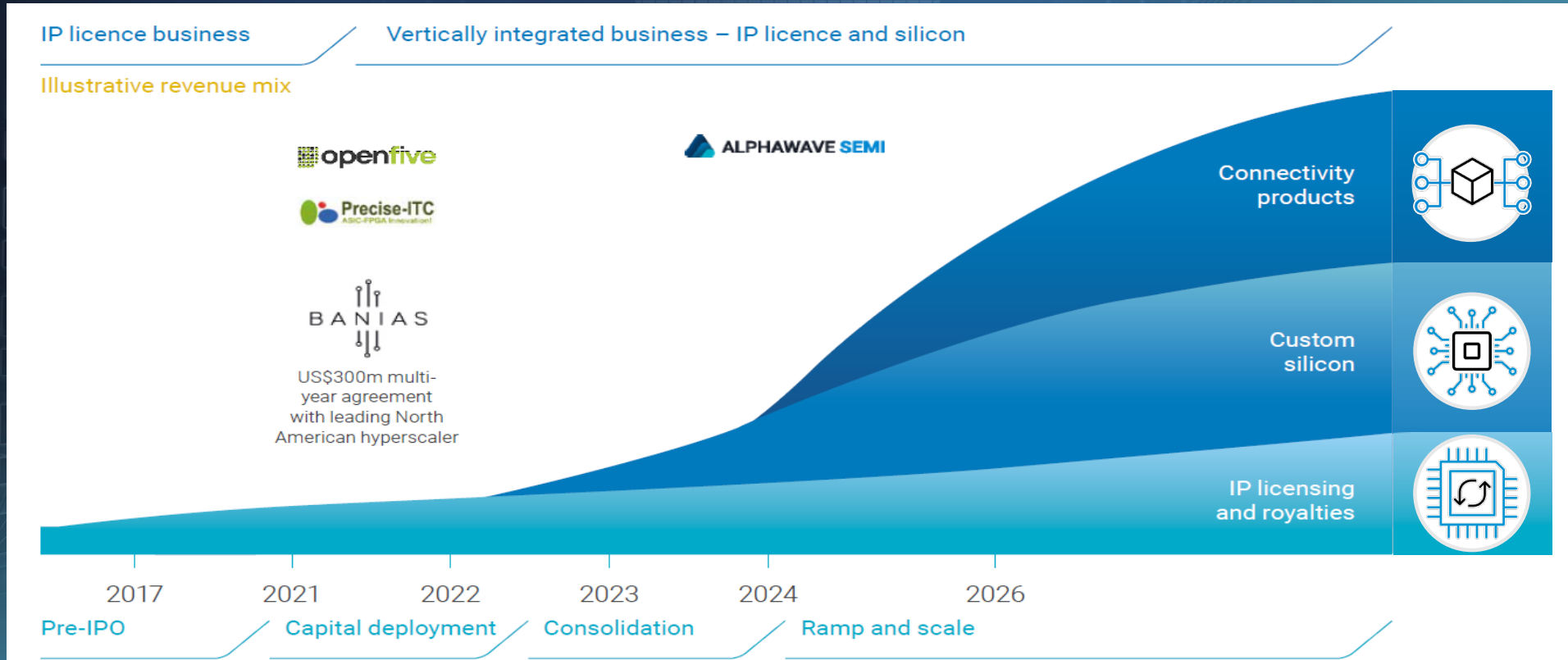
<b>Introduction</b>	John Lofton Holt, Founder and Executive Chair
<b>Business Highlights</b>	Tony Pialis, Founder and CEO
<b>Financial Review and Outlook</b>	Rahul Mathur, Chief Financial Officer
<b>QA Session</b>	





# Introduction

# Delivering on our Vision: Leading Connectivity for AI and the Data Centre

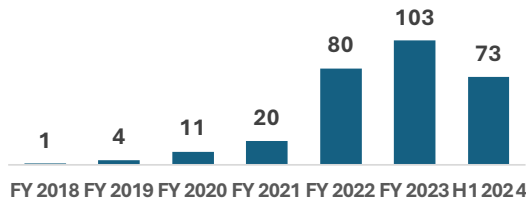


*Alphawave's technology leadership and track record since 2017 underpins our future growth*

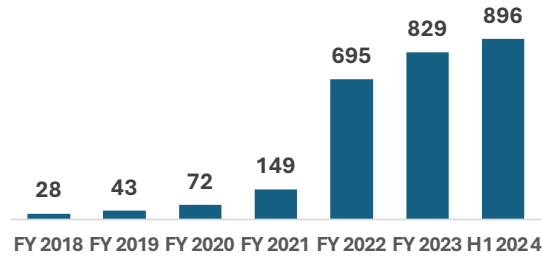
# We Have Delivered Strong Growth Since Founding the Company in 2017



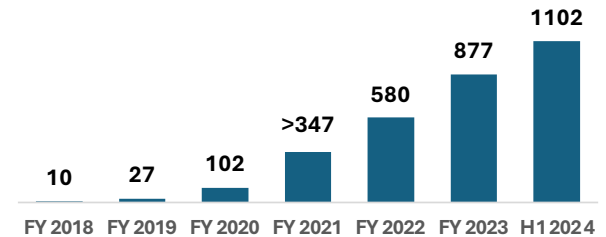
## End Customers<sup>1,2</sup>



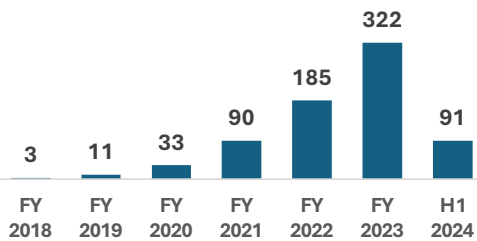
## Employees<sup>2</sup>



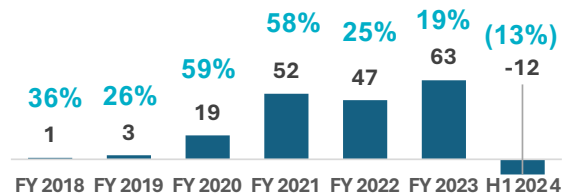
## Cumulative Bookings<sup>2</sup> (US\$m)



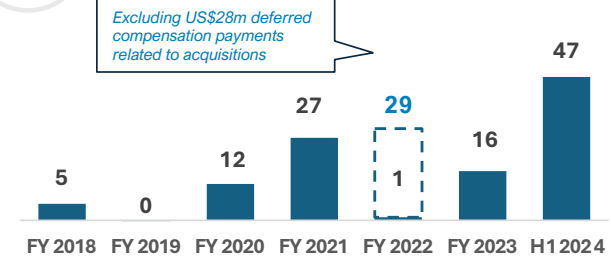
## Revenue (US\$m)<sup>2</sup>



## Adjusted EBITDA<sup>2</sup> (US\$m) & Margin



## Cash generated from Operations<sup>2,3,4</sup> (US\$m)



*First Half 2024 results reflect transition away from legacy low margin business*

1 Revenue generating customers.  
 2 FY 2018 as per IPO prospectus. FY 2023 includes backlog adjustment  
 3 FY 2022 has been restated  
 4 FY 2023 cash generated from operations restated to reflect capitalisation of interest incorrectly included in both interest payable and capitalised development expenditure in the FY 2023 cash flow statement



# Strengthening our Leadership and Governance

## Execution in 2023 & 2024

- **Management Focus:** Expanded and enhanced management team
  - Rahul Mathur: CFO
  - Charlie Roach: CRO + MARCOM
- **Efficiency Focus:** Began implementation of ERP system to drive more efficient integration
- **Governance Focus:** Began Board re-alignment to focus on core markets and capabilities

## Execution in 2024 & Beyond

- **Capital Structure Focus:** Amended debt facility to maximise balance sheet strength while driving opportunities and flexibility
- **WiseWave Equity Sale:** Working to further strengthen balance sheet with WiseWave equity exit
- **Governance Focus:** Expanding diverse Board capabilities in our key markets of AI and the Data Centre



# Business Highlights

# Leadership in Connectivity and Compute



Silicon IP



Custom  
Silicon



Chiplets



Connectivity  
Products

*Ultra-high-speed data connectivity for AI, compute and network architectures*

# H1 2024 Highlights

Bookings

**US\$225m**

H1 2023: US\$187m

Revenue

**US\$91m**

H1 2023: US\$187m

Adjusted EBITDA<sup>1</sup>

**US\$(12m)**

H1 2023: US\$32m

Design Wins

**23**

H1 2023: 16

End-Customers

**73**

FY 2023: 103  
H1 2023: 85

Employees

**896**

FY 2023: 829  
H1 2023: 744

<sup>1</sup> See slide 26 for reconciliation of non-GAAP metrics

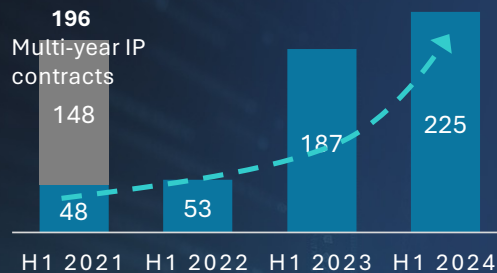


# H1 2024 Bookings up 20% Year-on-Year

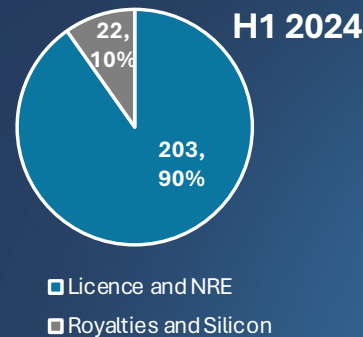
2024 revenue profile impacted by timing of customer programs



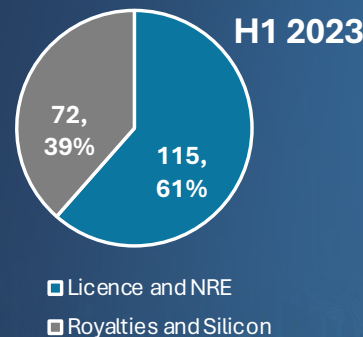
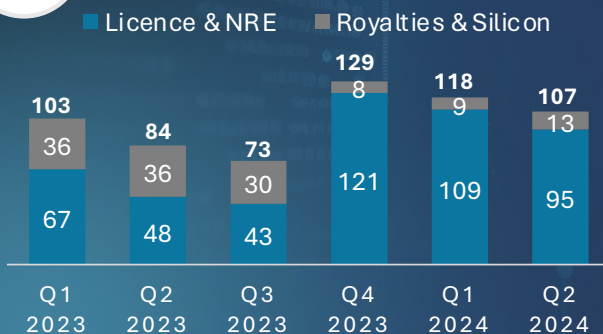
## Bookings (US\$m)



## Split by Business



## By Quarter (US\$m)



### Licence & NRE

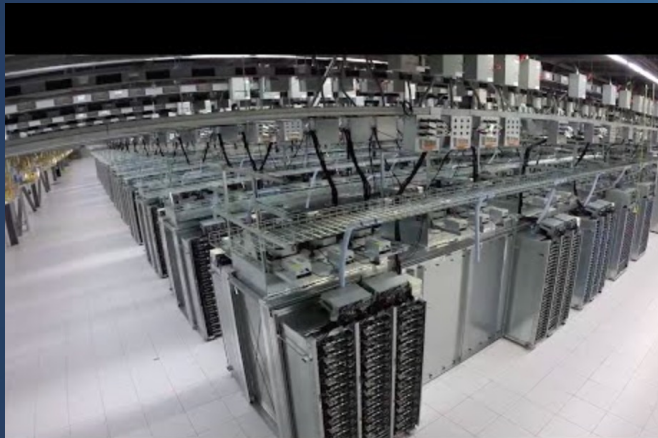
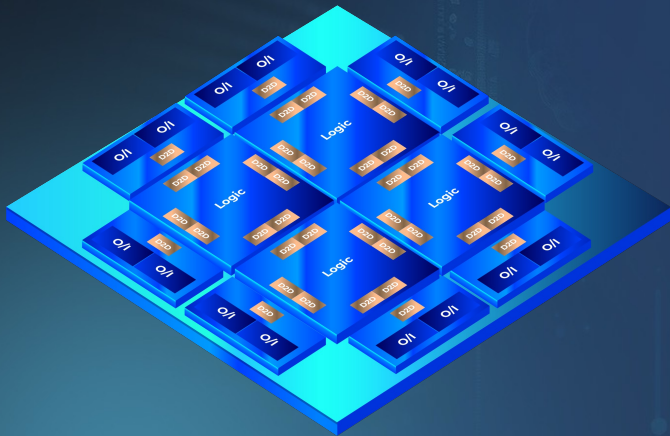
- 92% of IP & NRE Bookings in Advanced Nodes
- Complete portfolio of Connectivity IP in 3/2nm nodes: 112/224G, PCIe7/6, HBM4/3 and UCIe.
- Complete suite of 5nm, 4nm, and 3nm silicon proven connectivity IP for AI/HPC and cloud infrastructure market. Investments ongoing in 2nm and beyond.
- Executed tapeout of our second generation 224Gbps PAM4 DSP Connectivity products.

### Royalties & Silicon

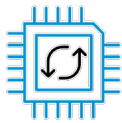
- Now driven by orders from North American customers

# How Alphawave Wins: Technology Leadership

- For Hyperscalers, proven cutting edge connectivity technology wins
  - Connectivity of silicon from millimeters apart, to meters, and kilometers
  - Prefer technology from same company to de-risk mass deployment
  - Alphawave is the only complete connectivity supplier for IP, Custom Silicon, Chiplets and Connectivity products
  - Competition sells IP or silicon



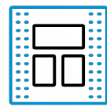
# Four Connected Entry Points for Alhawave



## Silicon IP

High Performance  
Connectivity IP

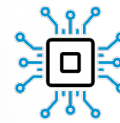
- PCIe/CXL
- Ethernet
- HBM



## Chiplets

UCle™ Enabled

- IO Chiplet
- Memory Chiplet
- Compute Chiplet



## Custom Silicon

- Spec to Silicon Capabilities
- Advanced 2.5D/3D Packaging
- Application Optimised IP Subsystems



## Connectivity Products

IPAM4 and Coherent  
DSPs



Enables selling across the entire product portfolio – Directly or Ecosystem



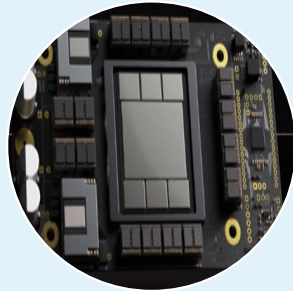
# Creating the Solutions Hyperscalers Specifically Request

Alphawave Is Working with the Entire Hyperscaler Ecosystem



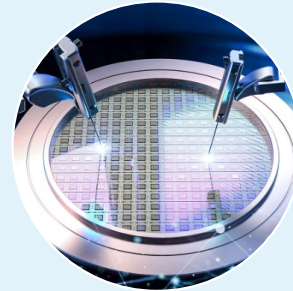
## Module/Cable Vendors

- Copper and optical module vendors



## Data Centre Compute

- AI, speciality processors and connectivity solutions



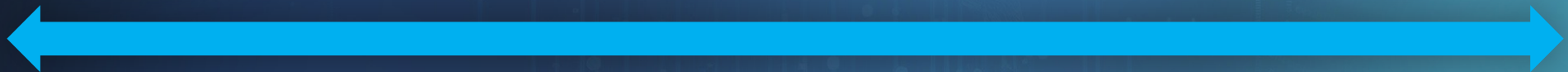
## Silicon Fabs

- TSMC, Samsung and Intel

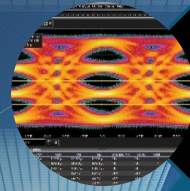
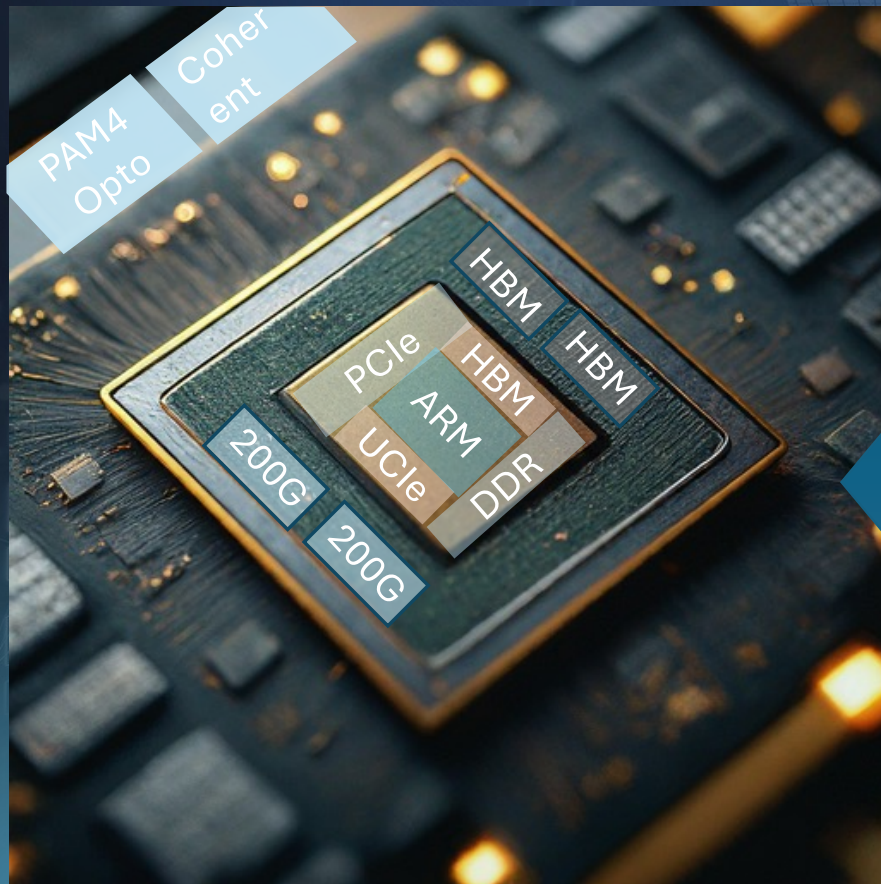


## Compute Architecture

- Compute architecture partners such as Arm

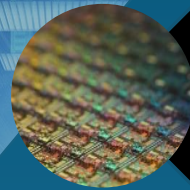


# Alphawave Has The Complete Silicon Solutions Stack



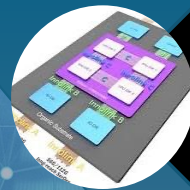
## Silicon IP

- PCIe / CXL
- 224G / 112G Ethernet
- UCle / HBM



## Custom Silicon

- 5nm, 4nm, 3nm and 2nm Nodes
- 2.5D and 3D advanced packaging
- Arm Total Design Partner



## Chiplets

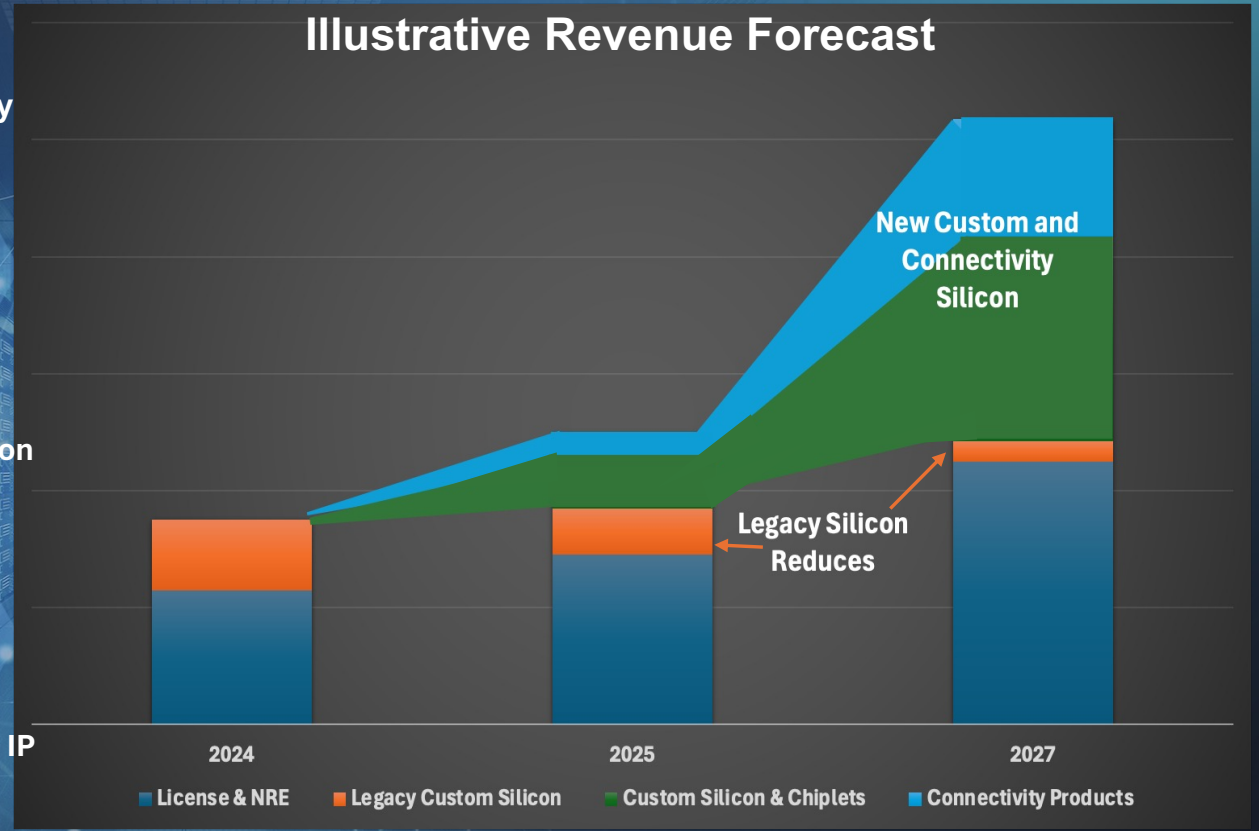
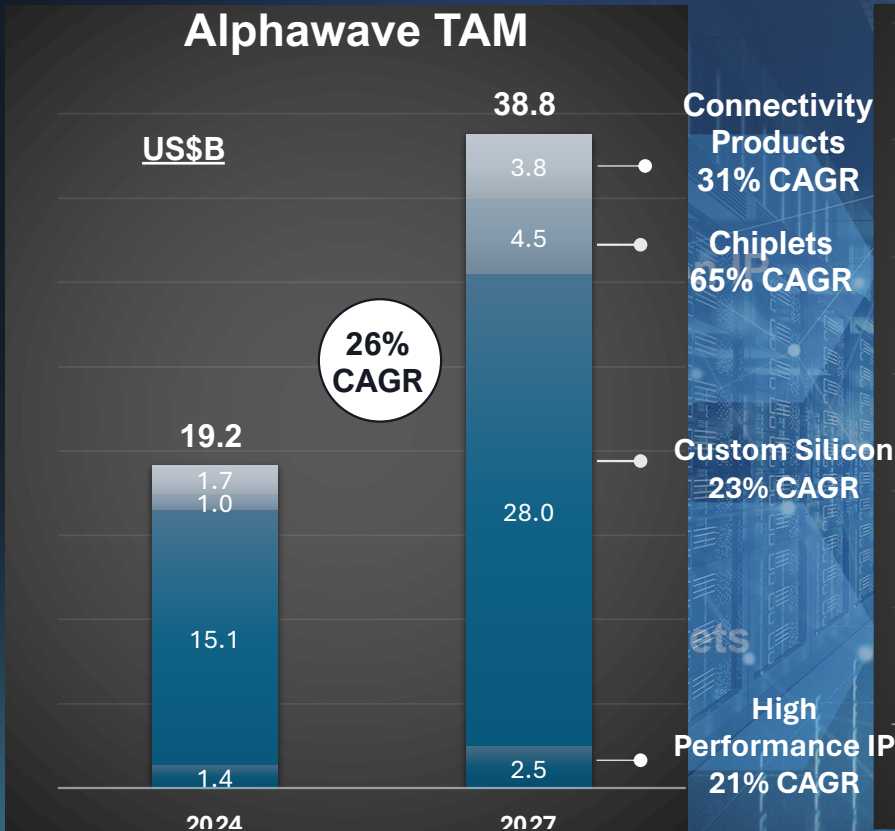
- IO Extender Chiplets
- Arm Neoverse Compute Chiplets
- Memory Chiplets



## Connectivity Products

- PAM4, Coherent DSPs for 800G/1.6T Ethernet
- 112G, 224Gbps in silicon
- Going to 400G

# Alphawave Accelerates the AI “Industrial Revolution”



**More than \$1B of silicon revenue potential from existing wins**



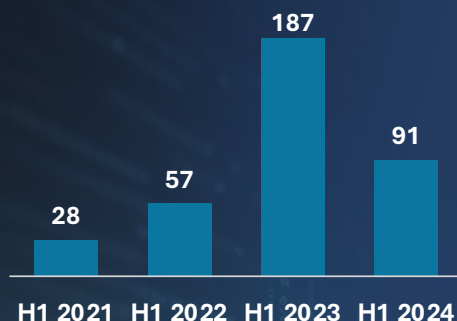
# Financial Review and Outlook

# H1 2024 Revenue Impacted by Timing of Customer Programs

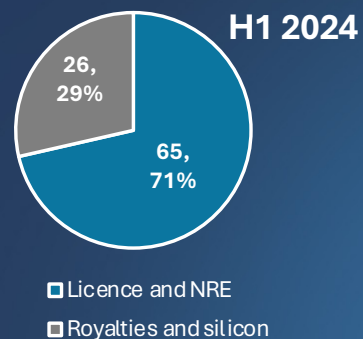
Revenue Outside of China US\$73m up 16% Year-on-Year



## Revenue (US\$m)



## Revenue (US\$m)



### Licence & NRE

- Expect substantial increase in H2 2024 revenue related to tape outs from 2023 design wins

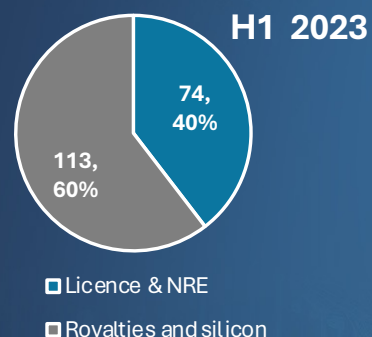
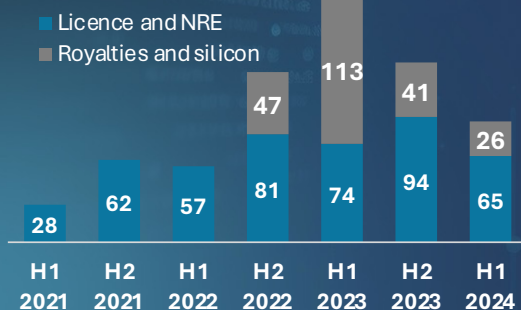
### Royalties & Silicon

- H1 2024 Results reflect transition away from legacy China Custom Silicon business

**H1 2024 Gross margin at 45%** reflects business mix including legacy silicon revenue from OpenFive



## H1/H2 Split by Business (US\$m)



# Strong Backlog of \$486M Supports Long-Term Growth

## Timing of Cash Inflows/Outflows and Revenue Recognition Determined by Business Model

### Licence & NRE<sup>1</sup>

#### Revenue recognised over development period on percentage of completion basis

- Typical pay-per-use IP licence US\$5m-US\$10m

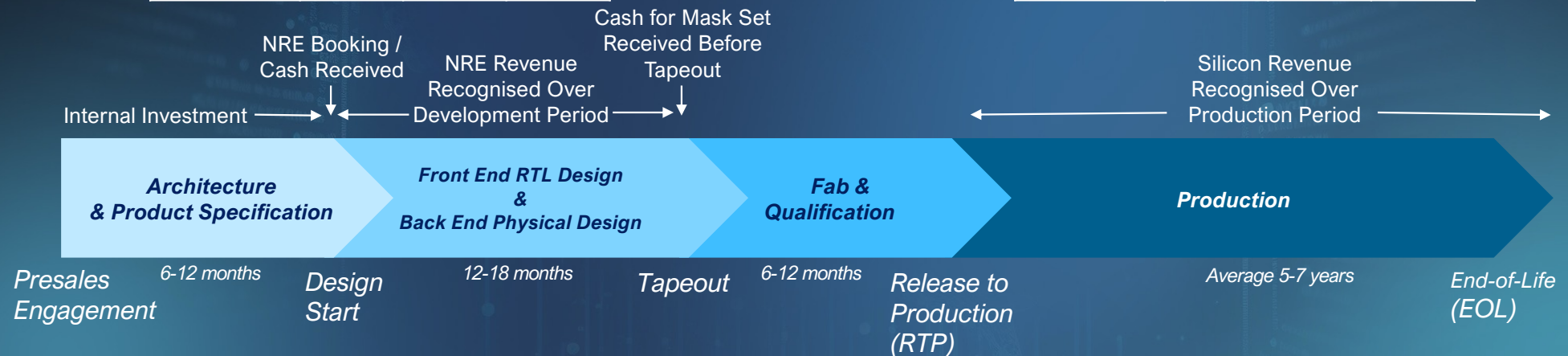
(\$m)	1H24	2023	2022
Bookings	203.5	274.0	131.3
Revenue	64.8	167.3	137.6
Ending Backlog	430.4	294.8	255.1

### Silicon & Royalties

#### Revenue recognised on shipment

- Typical opportunity US\$50m+
- ~\$500m+ long-tail of silicon revenues not included in backlog
- Expect first Connectivity Products revenue in 2024

(\$m)	1H24	2023	2022
Bookings	21.8	109.9	96.8
Revenue	26.2	154.2	47.8
Ending Backlog	56.0	60.1	124.6





# Continued Investment in Profitable Growth Drives Key P&L Metrics

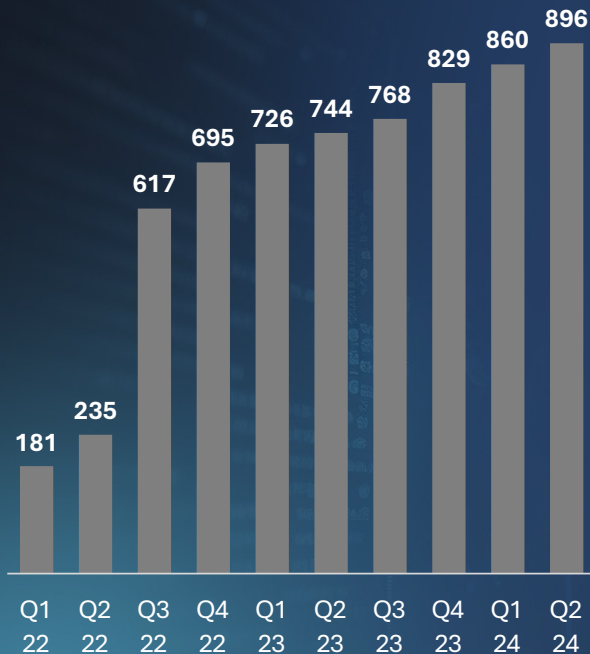
US\$m	H1 2024	H1 2023	Change	Comments
<b>Revenue</b>	<b>91.0</b>	187.2	(51%)	High revenue in H1 2023 from legacy OpenFive backlog. Licence & NRE revenue lower in H1 2024 as revenue associated with WiseWave SLA delivered in 2023.
<b>Gross profit</b>	<b>41.3</b>	82.5	(49%)	Change in business mix from delivery of OpenFive legacy backlog
<b>Gross margin</b>	<b>45%</b>	44%		
<b>R&amp;D, S&amp;M, G&amp;A</b>	<b>70.0</b>	63.4	10%	Ongoing investment in the business to support growth
<b>Adjusted EBITDA</b>	<b>(11.8)</b>	32.4	(133%)	
<b>Adjusted EBITDA %</b>	<b>(13%)</b>	17%		
<b>Other expenses</b>	<b>19.6</b>	21.7	(10%)	Higher share-based payments charge in H1 2023 relating to employees who joined the business through 2022 acquisitions
<b>Depreciation and amortisation</b>	<b>16.9</b>	13.3	27%	Annualised impact from assets acquired and additions

Due to rounding, numbers presented in the chart may not add up to the totals provided.

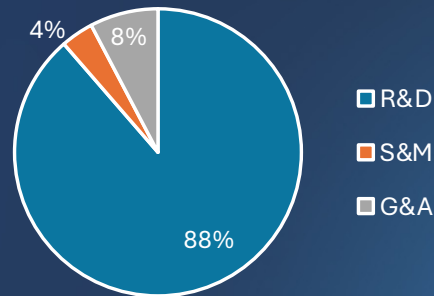
# Investment Into R&D Extends Technology Leadership

## Technology-Led Organisation – 88% Employees in R&D / Engineering

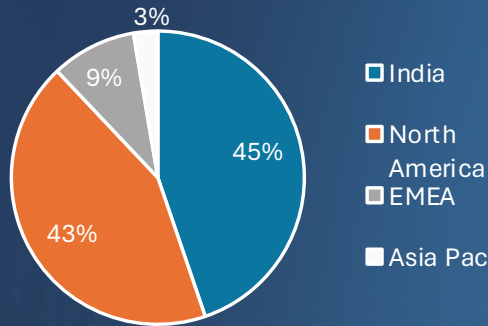
### Number of Employees



### By Function<sup>1</sup>



### By Region<sup>1</sup>



<sup>1</sup> Due to rounding, percentages may not precisely reflect the absolute figures

- Focus on critical hires to support growth opportunities
- Targeting ~10% headcount growth in 2024
- US\$33.8m development costs capitalised in H1 2024 (H1 2023: US\$24.7m)

### Main Locations



# Management of Balance Sheet and Cash Flow: Finance Priorities

US\$m	H1 2024	FY 2023	Change	Comments
Cash & Cash Equivalents	76.3	101.3	(25.0)	Actively managing cash; low inventory and receivables balances
Loans and Borrowing	(217.9)	(220.4)	2.5	Attractive debt facility in place
<b>Net Debt</b>	<b>(141.6)</b>	<b>(119.1)</b>	<b>(22.5)</b>	Perpetually evaluating capital structure

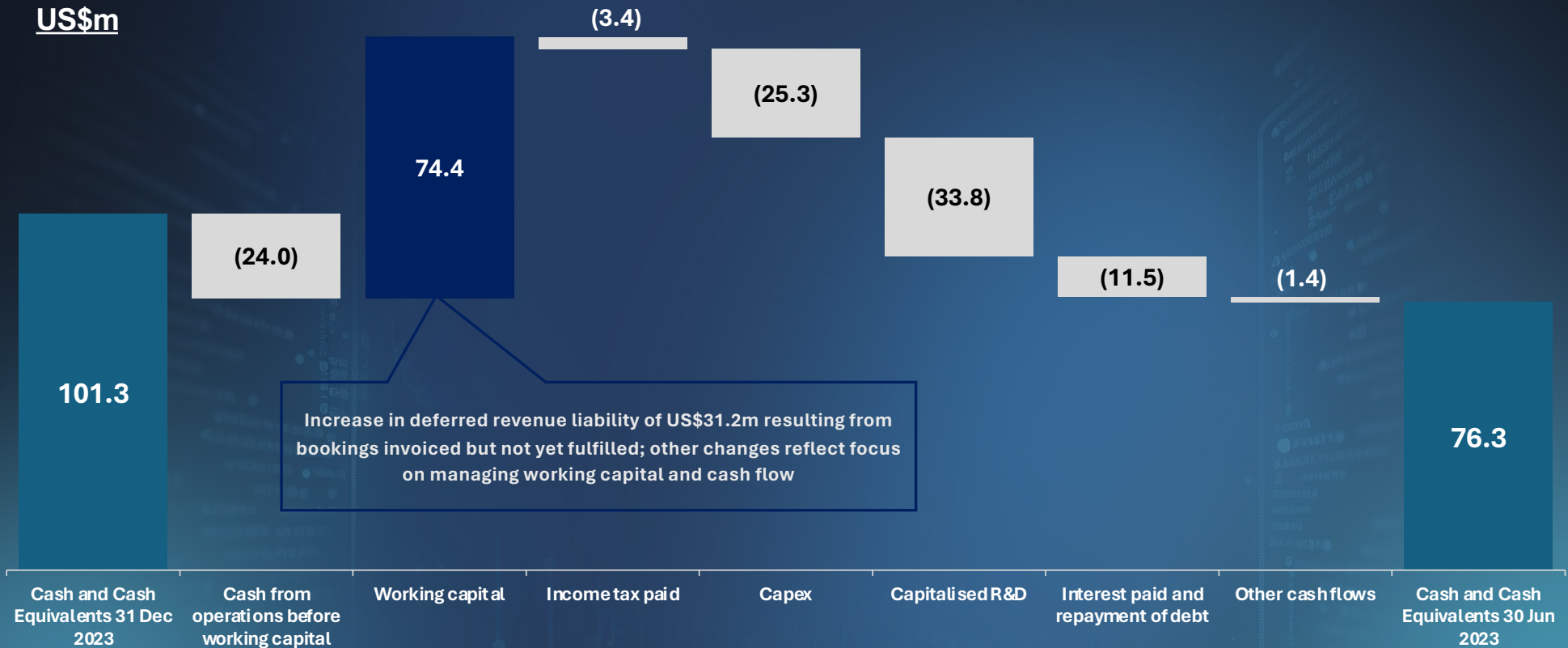
US\$m	H1 2024	H1 2023 <sup>1</sup>	Change	Comments
Net Cash from Operations	47.0	(36.7)	83.7	Not dependent on additional non-operating inflows
Working Capital Changes	74.4	(64.0)	138.4	Expect improvement in FY24 working capital
Capital Expenditures	25.3	14.7	10.6	Increase in FY24 CapEx for facility build outs and mask sets for future products
R&D Capitalisation	33.8	24.7	9.1	Significant investment in future products support long-term growth opportunity

Due to rounding, numbers presented in the chart may not add up to the totals provided.

<sup>1</sup> Working Capital Changes for H1 2023 has been updated to reflect the recategorisation of deferred cash rights in cash flow statement

# H1 2024 Cash Flow Bridge

US\$m



Due to rounding, numbers presented in the chart may not add up to the totals provided.



# Our Mid-Term Model and Guidance: Driven Bottom-Up

<u>US\$</u>	2024	2025
<b>Revenues</b>	\$310-330m	\$450m
<b>Gross margin</b>	c.50%	c.50%
<b>Opex %</b>	c.30%	c.25-30%
<b>Adjusted EBITDA<sup>1</sup></b>	Approx. \$50m	Approx. \$100m
<b>Adjusted EBITDA %</b>	c. 15%	c.20-25%
<b>Capex (exc. Cap R&amp;D)</b>	c. 10%	c. 10%
<b>Cap. R&amp;D</b>	~\$50-60m	~\$50-60m

- 2023-2025 revenue CAGR of ~20%
- Revenue profile in 2024 back-end loaded reflecting timing of tape outs of 2023 design wins
- Investing in capital and R&D expenses for our product businesses
- 2024 Capex increase driven by investment in own products

<sup>1</sup> 2024 assumes mid-point of the guidance range and 20% adjusted EBITDA margin;  
2025 assumes US\$450m revenue and 20-25% adjusted EBITDA margin

# Q&A Session

# Thank you

# Non-GAAP Metrics

See Alternative Performance Measures section of H1 2024 Results Report at <https://www.awaveip.com/en/investors/results-reports-presentations/>

	Six months ended 30 June 2024 US\$m	Six months ended 30 June 2023 US\$m
<b>Preliminary bookings (including royalties)</b>	<b>225.3</b>	<b>187.2</b>
Bookings	225.3	187.2
Royalties	-	-
<b>Bookings (excluding royalties)</b>	<b>225.3</b>	<b>187.2</b>

## Operating profit to EBITDA reconciliation

(US\$'000)	Six months ended 30 June 2024	Six months ended 30 June 2023
<b>Operating (loss)/profit</b>	<b>(48,314)</b>	<b>(2,580)</b>
Add backs:		
Depreciation and amortisation	16,850	13,307
<b>EBITDA</b>	<b>(31,464)</b>	<b>10,727</b>

## EBITDA to adjusted EBITDA reconciliation

(US\$'000)	Six months ended 30 June 2024	Six months ended 30 June 2023
<b>EBITDA</b>	<b>(31,464)</b>	<b>10,727</b>
Add backs:		
Acquisition related costs/(income)	6,459	(263)
Compensation element of Banias	3,788	4,069
Labs deferred cash rights		
Share-based compensation expense	10,743	18,502
Currency translation gain	(1,354)	(592)
<b>Adjusted EBITDA</b>	<b>(11,828)</b>	<b>32,443</b>

## Profit after tax to adjusted profit after tax reconciliation

(US\$'000)	Six months ended 30 June 2024	Restated <sup>1</sup> six months ended 30 June 2023
<b>Profit after tax</b>	<b>(39,961)</b>	<b>(8,894)</b>
Add backs:		
Acquisition-related costs	6,459	(263)
Compensation element of Banias	3,788	4,069
Labs deferred cash rights		
Amortisation of acquired intangibles	6,328	6,328
Share-based compensation expense	10,743	18,502
Currency translation gain	(1,354)	(592)
Tax effect of above adjustments	533	823
<b>Adjusted profit after tax</b>	<b>(13,464)</b>	<b>19,973</b>

## Adjusted profit per ordinary share attributable to the shareholders (expressed in cents per ordinary share)

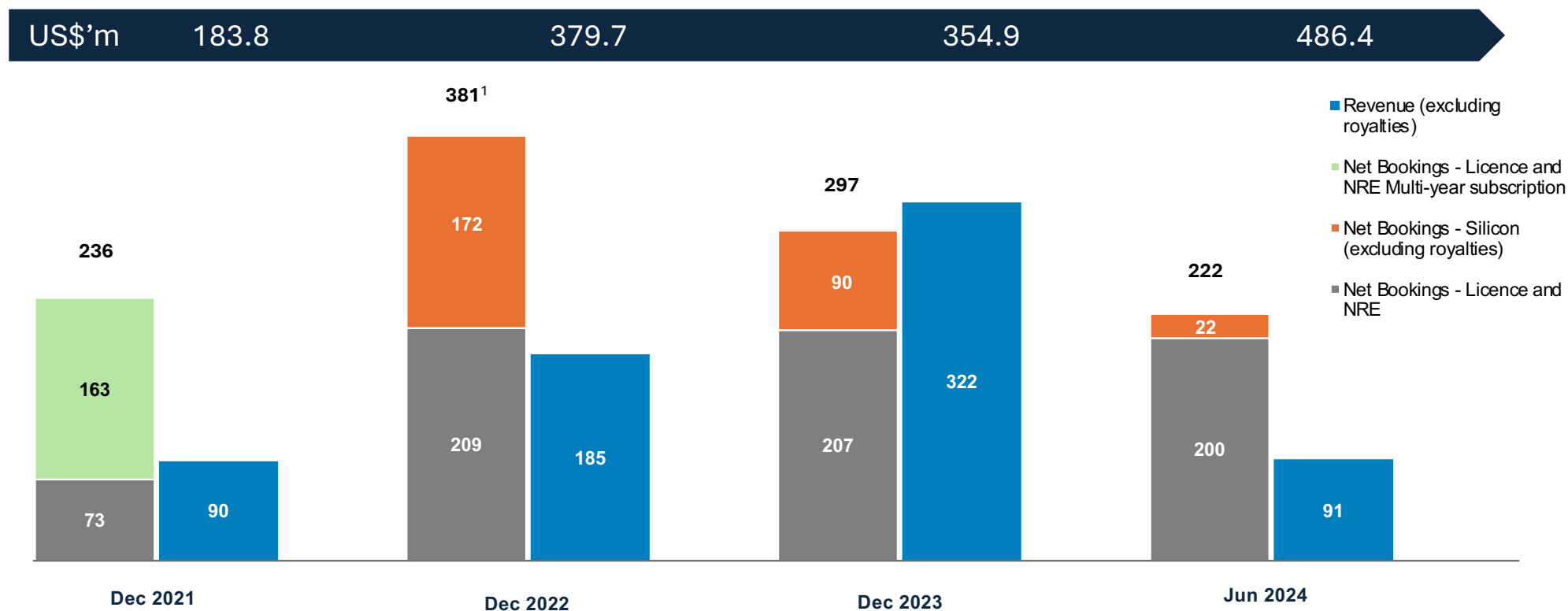
	Note	Six months ended 30 June 2024	Restated <sup>1</sup> six months ended 30 June 2023
Adjusted basic earnings per share	11	(1.85)	2.85
Adjusted diluted earnings per share	11	(1.85)	2.85

1. See note 2 'Interim 2023 restatement' paragraph



# Backlog US\$486m

Large Diverse Backlog Drives Stability and Predictability With 18+ Months of Visibility



<sup>1</sup> Including backlog from OpenFive and Precise-ITC of approximately US\$170m