

# Alphawave Semi FY 2024 Results

April 17, 2025

# 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.

# Business Update and Overview

Tony Pialis, Co-Founder & CEO

# Leadership in Connectivity and Compute



Silicon IP



Custom  
Silicon



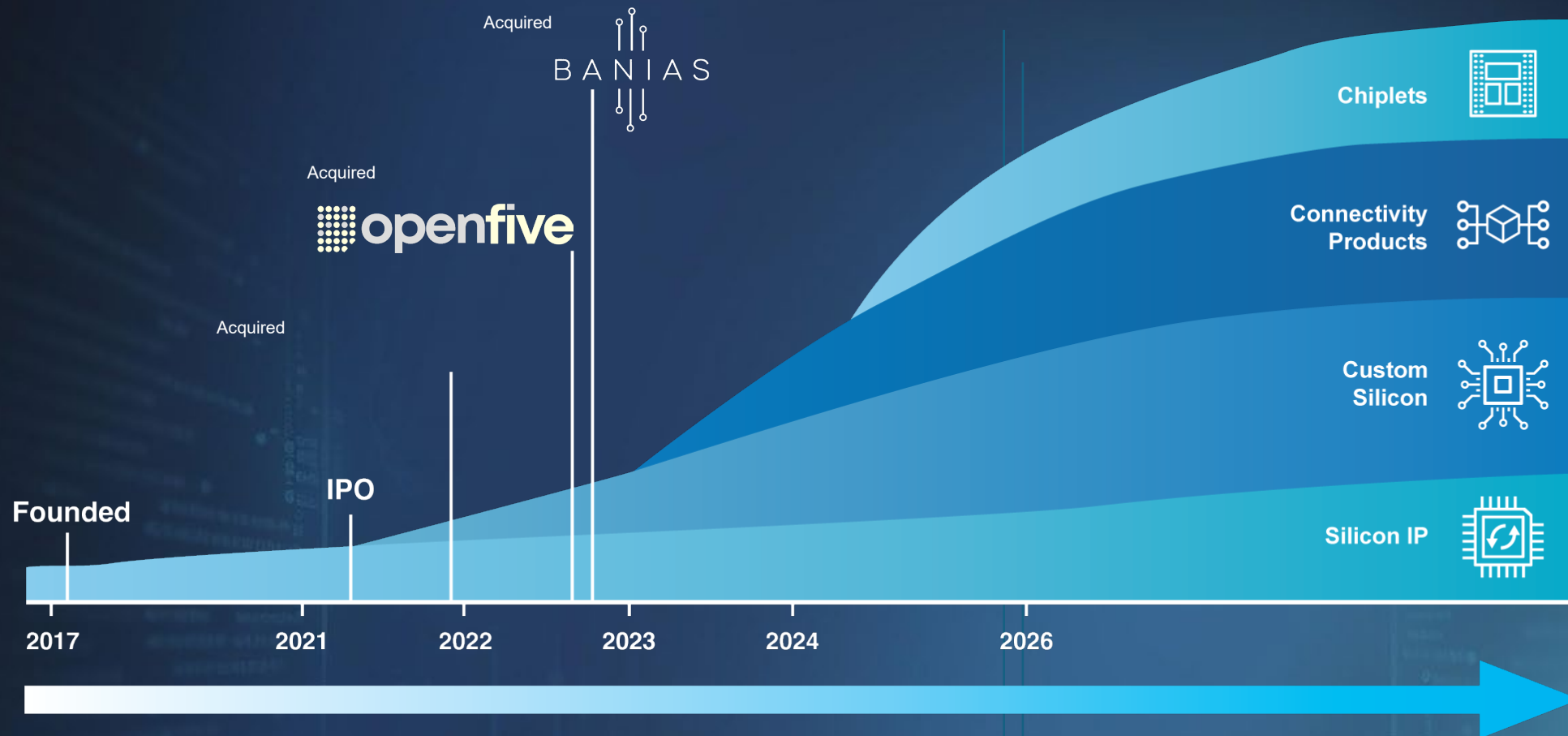
Chiplets



Connectivity  
Products

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

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

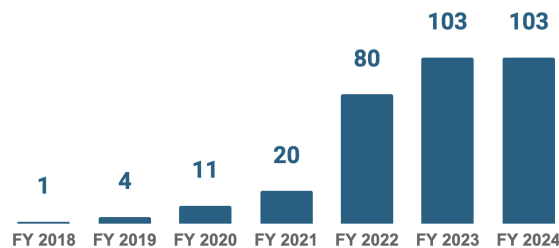


*Alphawave Semi's technology leadership and track record since 2017 underpins our future growth*

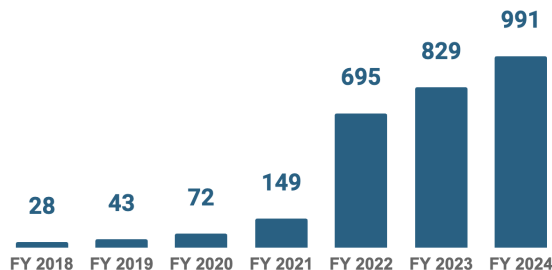
# Strong Growth Since Founded in 2017



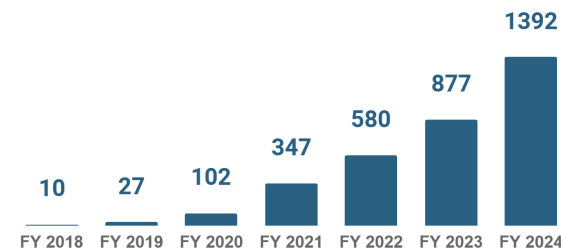
## End Customers<sup>1,2</sup>



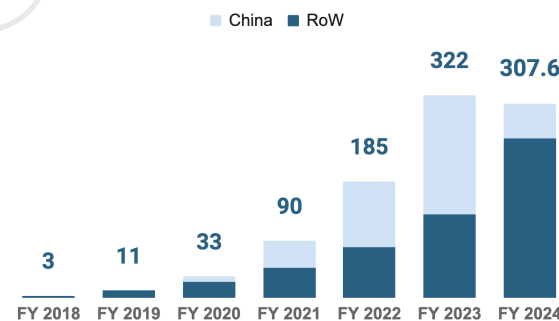
## Employees<sup>2</sup>



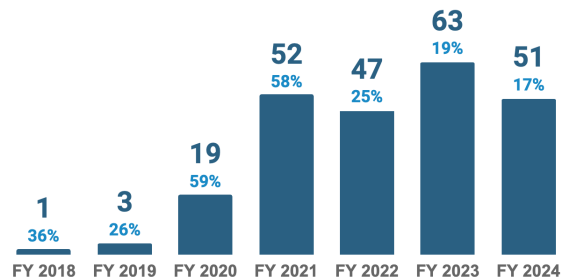
## Cumulative Bookings<sup>2</sup> (US\$m)



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

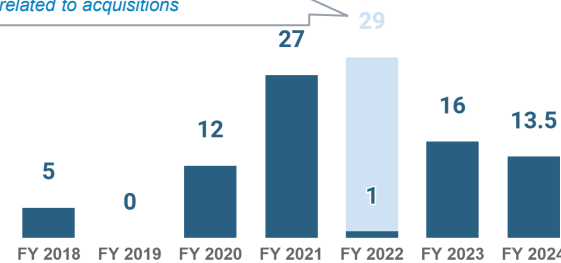


## Adjusted EBITDA<sup>2</sup> (US\$m) & Margin



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

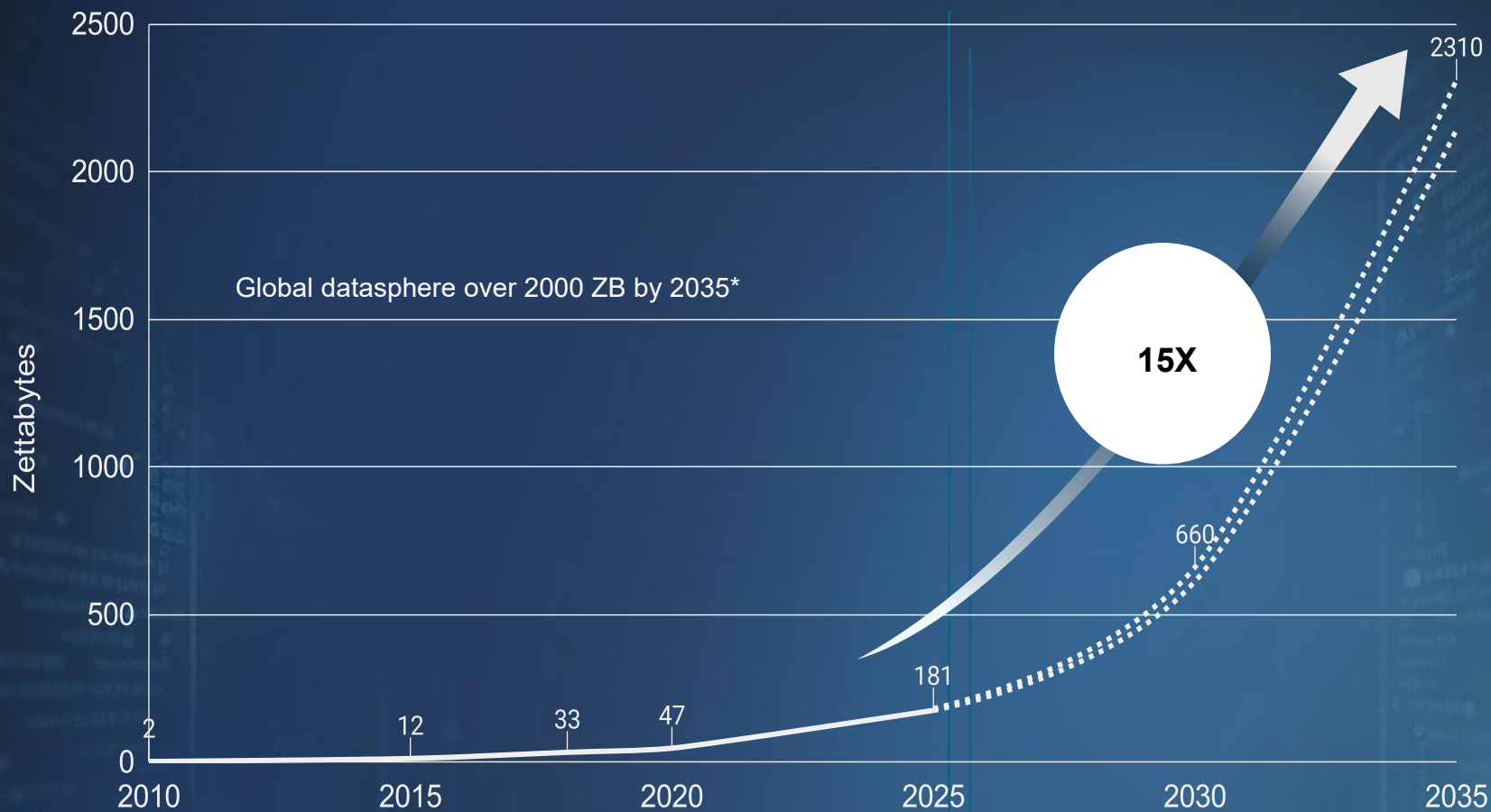
Excludes US\$28m deferred compensation payments related to acquisitions



**Excluding legacy Open Five and Wisewave, revenue was up 82%**

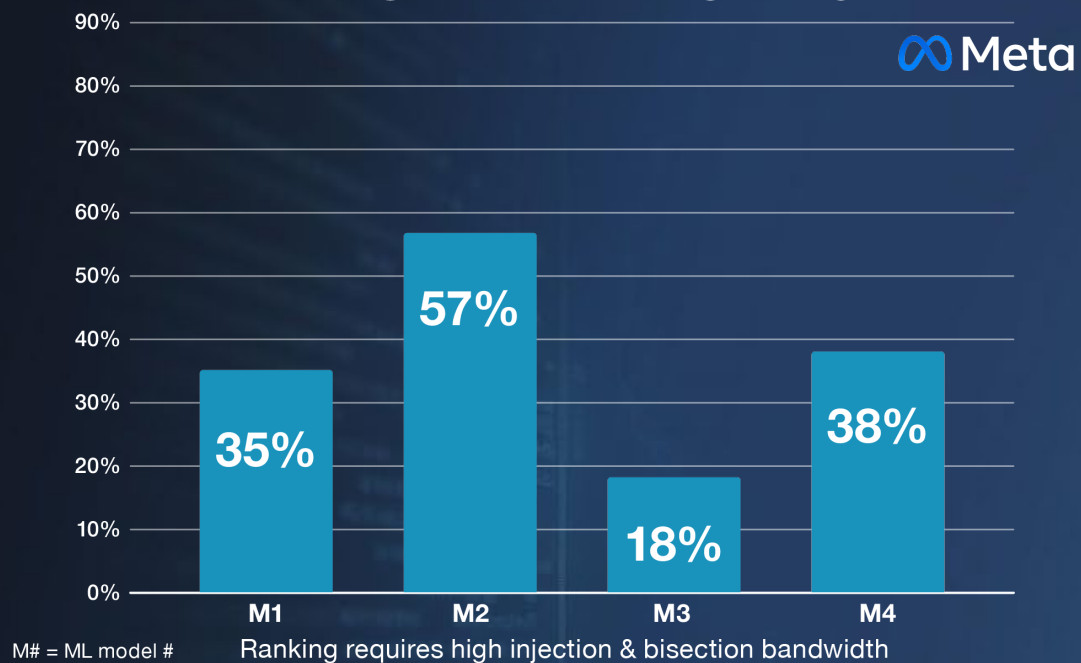
**Excluding China, revenue was up 93%**

# Exponential Growth in Datasphere Pushes AI Infrastructure to the Limits



# And Advances to Catch Up With GPU Scaling

TIME SPENT IN NETWORKING



SCALING OF PEAK HARDWARE FLOPS, AND MEMORY/INTERCONNECT BANDWIDTH

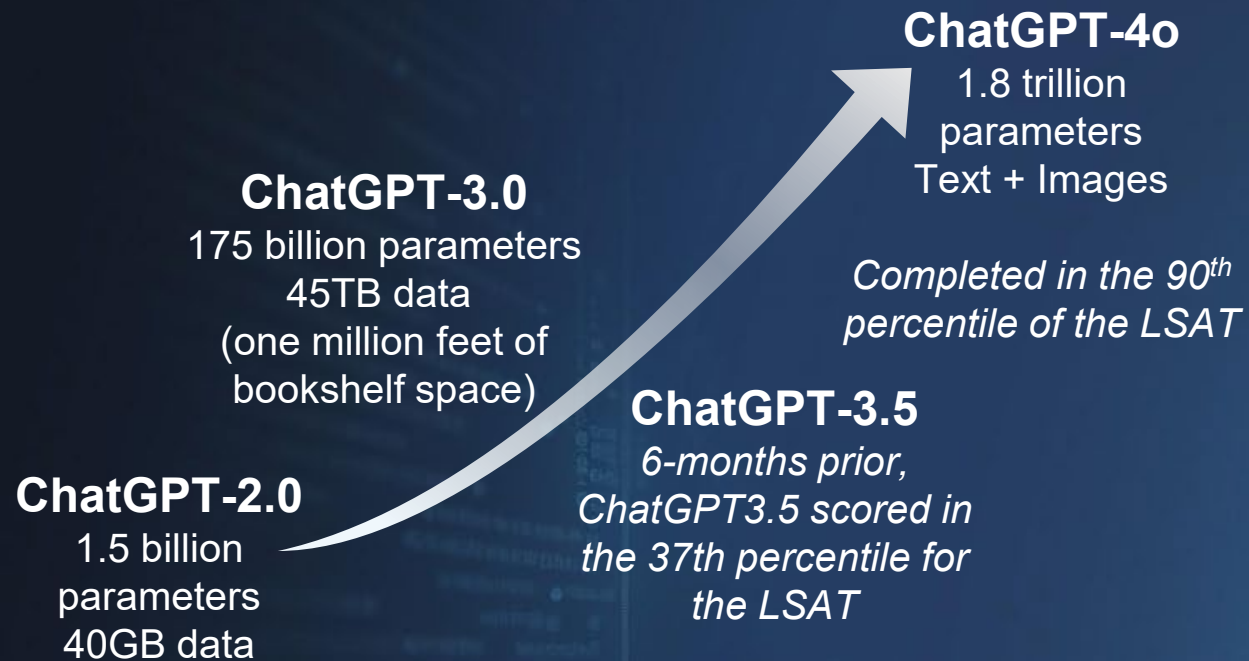


Networking is a key bottleneck for AI and this will increase significantly as the datasphere grows

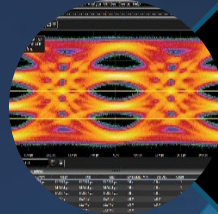
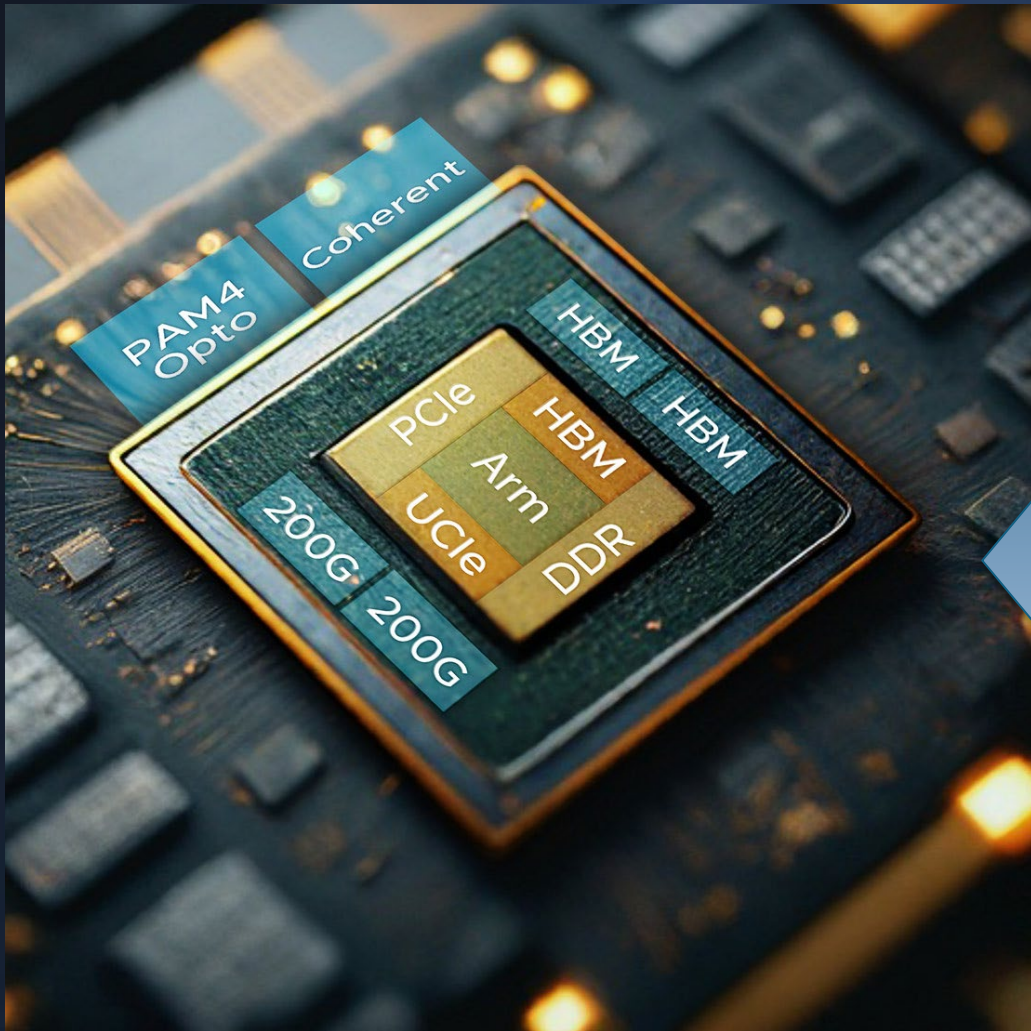




# This Growth and Shift to Hyperscale Campuses Increases Need for Advanced Interconnect

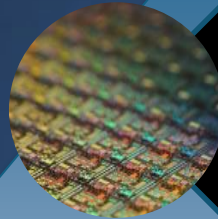


# Alphawave Has The Complete Silicon Solutions Stack



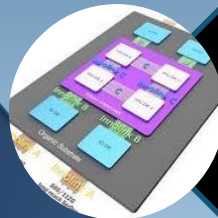
## Silicon IP

- 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

- I/O extender chiplets
- Arm Neoverse compute chiplets
- Memory chiplets



## Connectivity Products

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

# Custom Silicon Platform for AI Data Centres

Proven design methodology enabling customer-specification-to-silicon (CSTS) manufacturing



## Leading Process

- 7 nm - production
- 5 nm - ramping
- 3 nm - taping out
- 2 nm - enablement



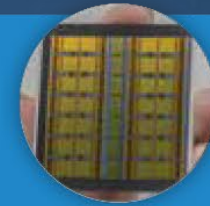
## Proven Silicon IP

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



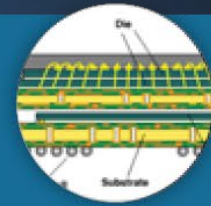
## Ecosystem

- Arm Total Design
- Leading foundries
- Design flows
- Multi-geo OSATs



## Pre-Built Chiplets

- Fast TTM
- Lower risk
- Cost savings



## Adv. Packaging

- 2.5D/3D IC
- SI/PI
- Mechanical/thermals

# Custom Silicon Platforms for AI Data Centres

## Front End Network

- Cloud –Ethernet
- Scale Out –UEc New!

## Back-End Network

- Scale Up –Ethernet, PCIe
- Scale Up –Custom, UAlink New!

## Compute to IO

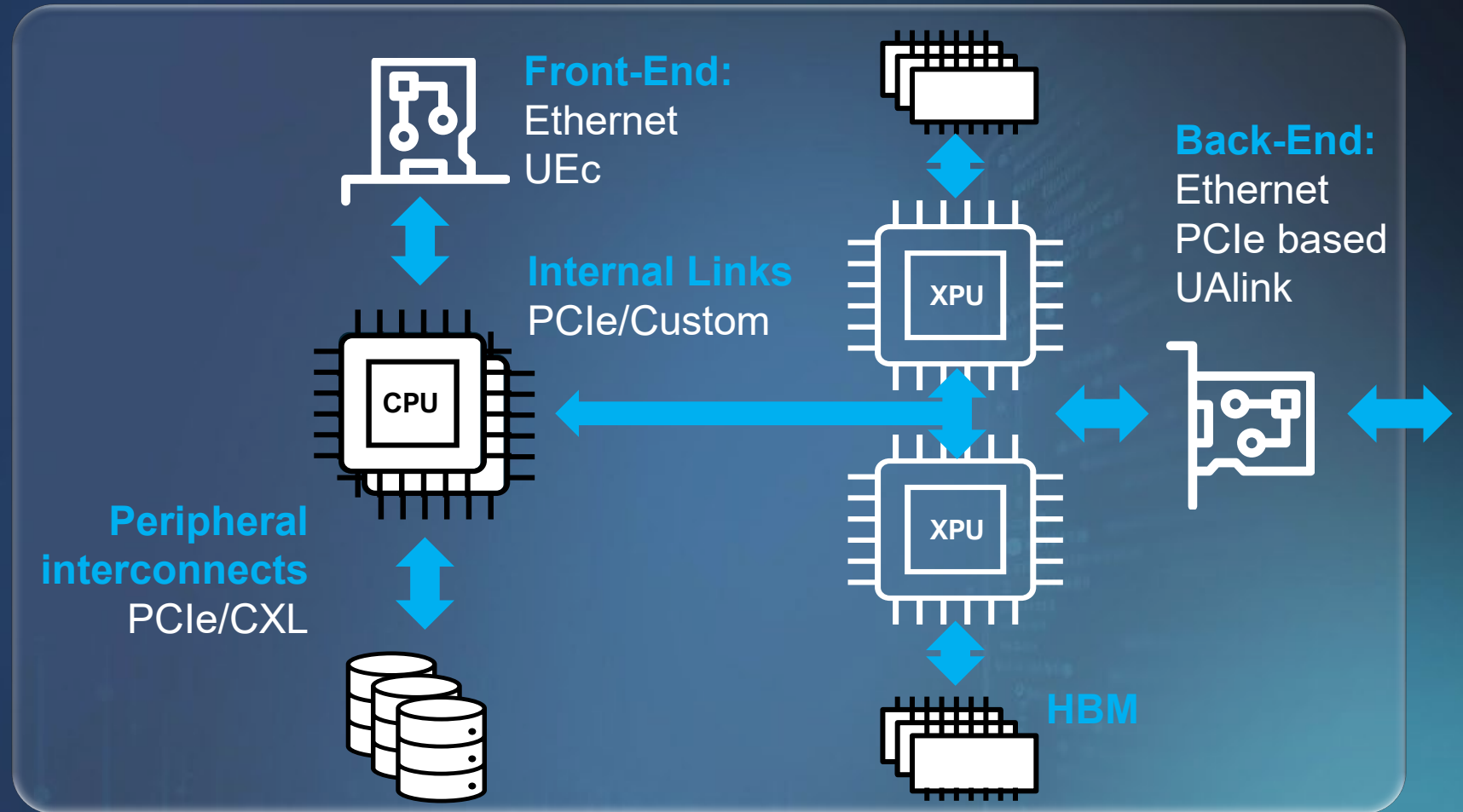
- PCIe or CXL

## Compute to Memory

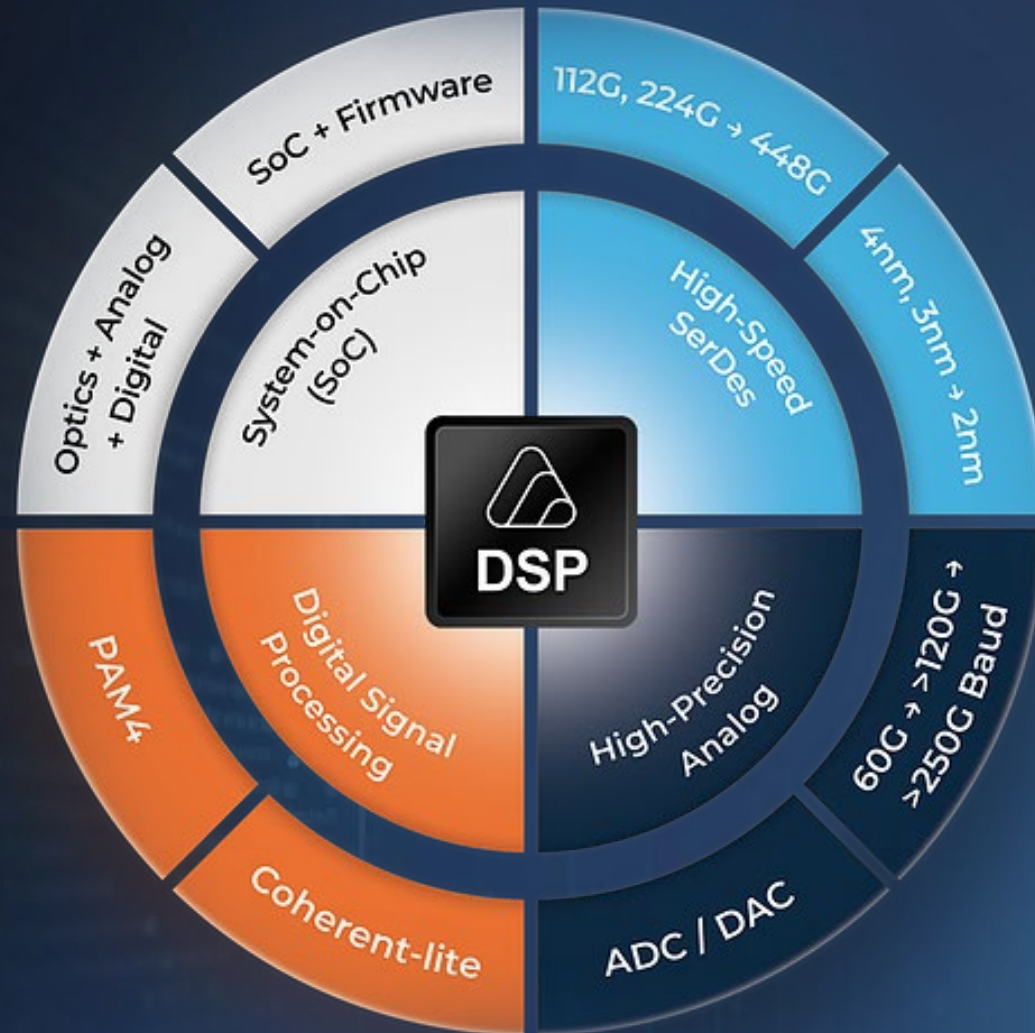
- HBM
- CXL.mem

## Disaggregated Compute

- D2D



# And Connectivity Products Built on World-Leading IP



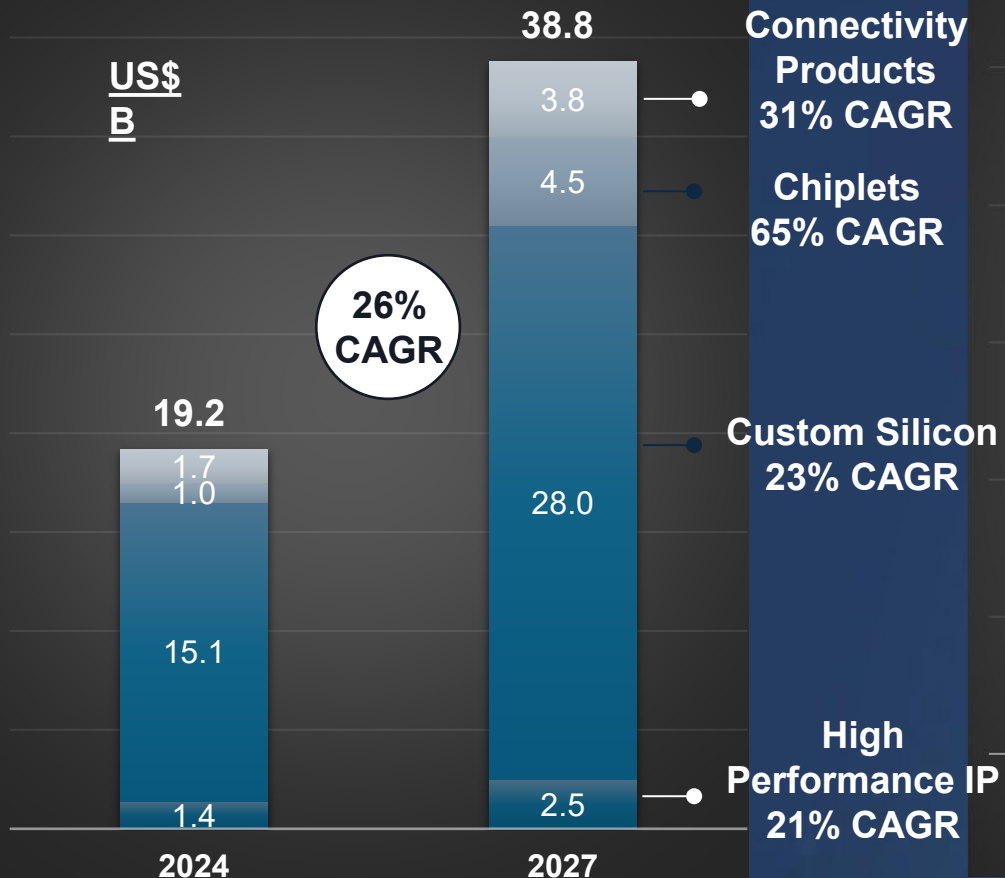
- Launched portfolio PAM4 and Coherent-lite DSP chips
- Targets hyperscale campuses and AI data centers
- Bandwidths of up to 1.6T and transmission up to 20 km

*“This market entry should be highly disruptive and will be beneficial to hyperscalers... Being in a select pool of companies that are currently able to provide both PAM4 and Coherent-lite products, Alphasave is well positioned.”*

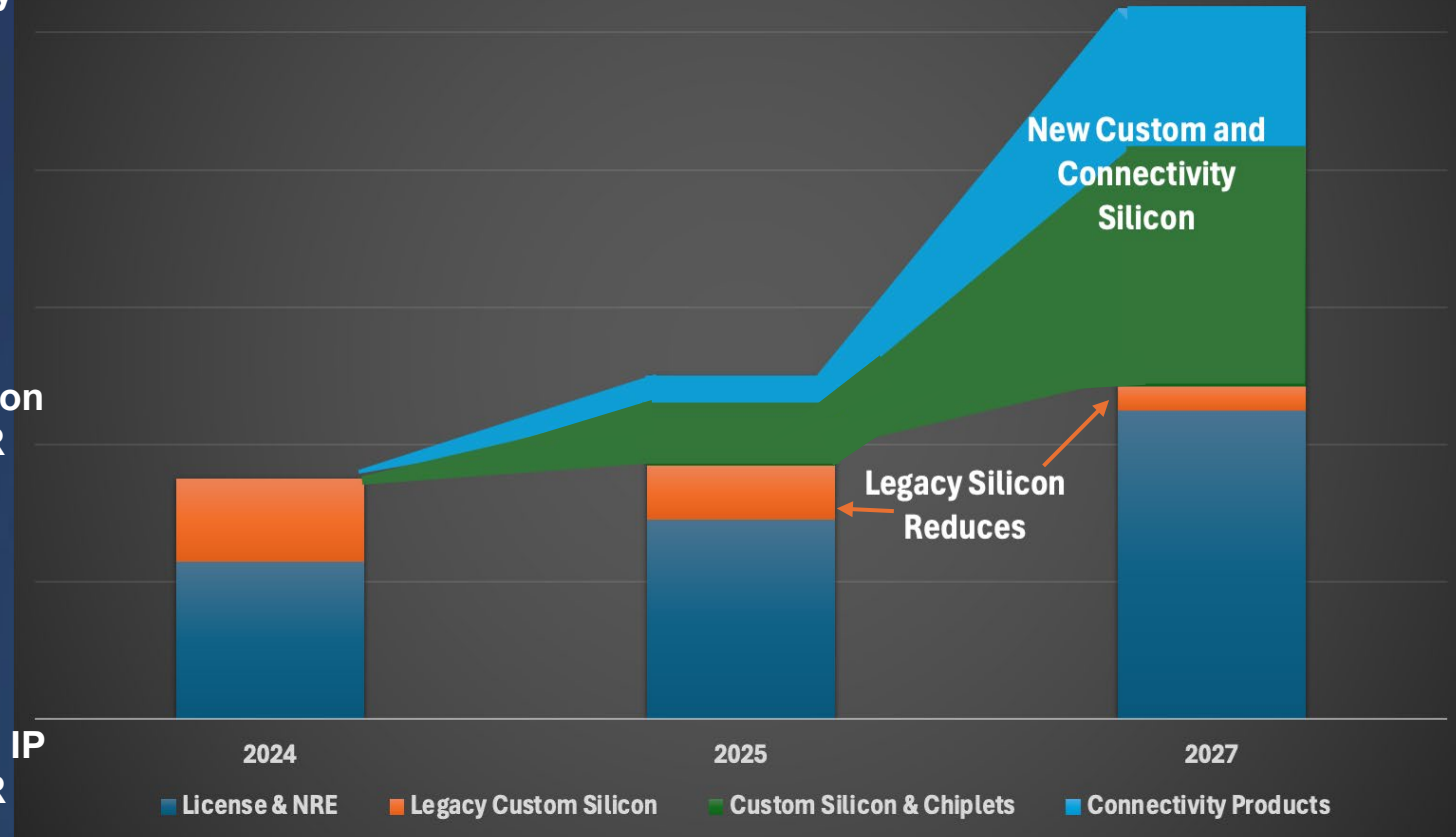
Vladimir Koslov, LightCounting

# Alphawave Accelerates the AI “Industrial Revolution”

## Alphawave TAM

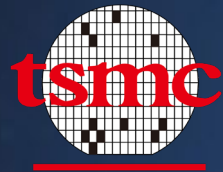


## Alphawave Revenue Forecast



*More than \$500m of silicon revenue potential from existing wins*

# Industry Partnerships Strengthen Platform for Long-Term Growth



# Alphawave Growth in 2025 and Beyond

- Delivering mission-critical connectivity and compute essential to the AI revolution
- Addressing the insatiable demand from hyperscalers and world's leading semiconductor companies through:
  - Silicon IP
  - Custom silicon
  - Chiplets
  - Connectivity products
- Partnering to increase sales force size and reach
- Future growth fueled by disciplined investment in R&D for high-margin products

***Powering the AI Revolution = Path to Billions***



# Financial Review

Rahul Mathur, Chief Operating & Financial Officer

# Leadership in Connectivity and Compute



**Silicon IP**



**Custom  
Silicon**



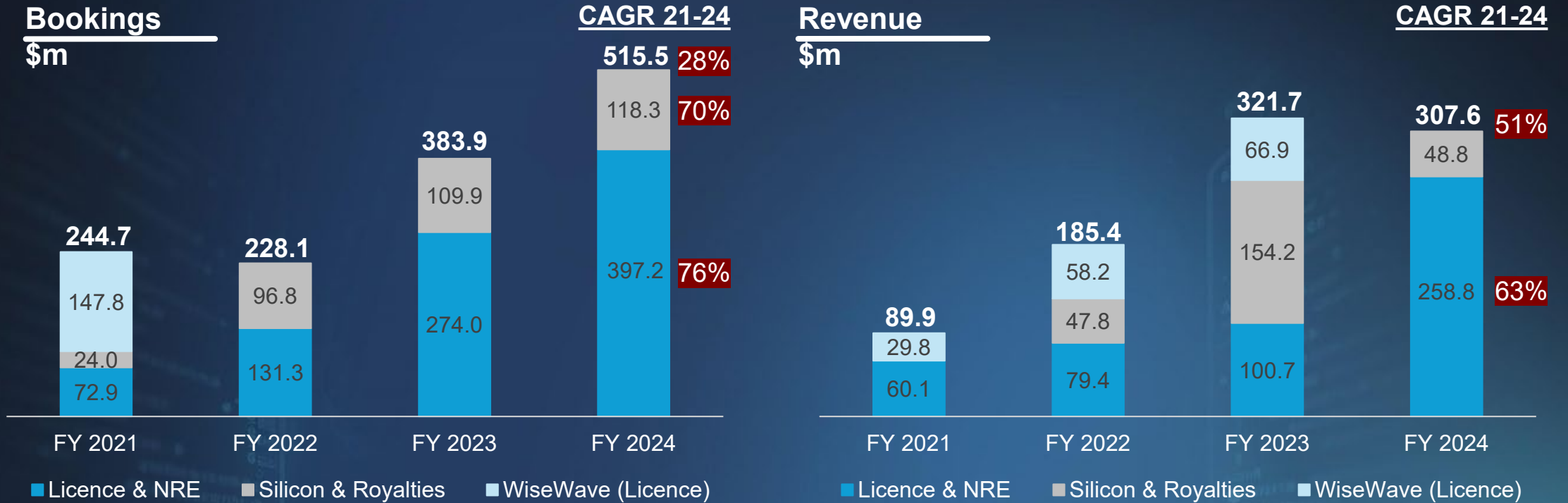
**Chiplets**



**Connectivity  
Products**

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

# We See Strong Growth in our End Markets in all Business Areas



- In 2024 completed transition to core data center business and successfully offset last year of WiseWave revenues
- Bookings trend in all business areas support long-term revenue growth
- Sales outreach to expand significantly in 2025 through Siemens partnership

# Strong FY24 Ending Backlog of \$520M 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

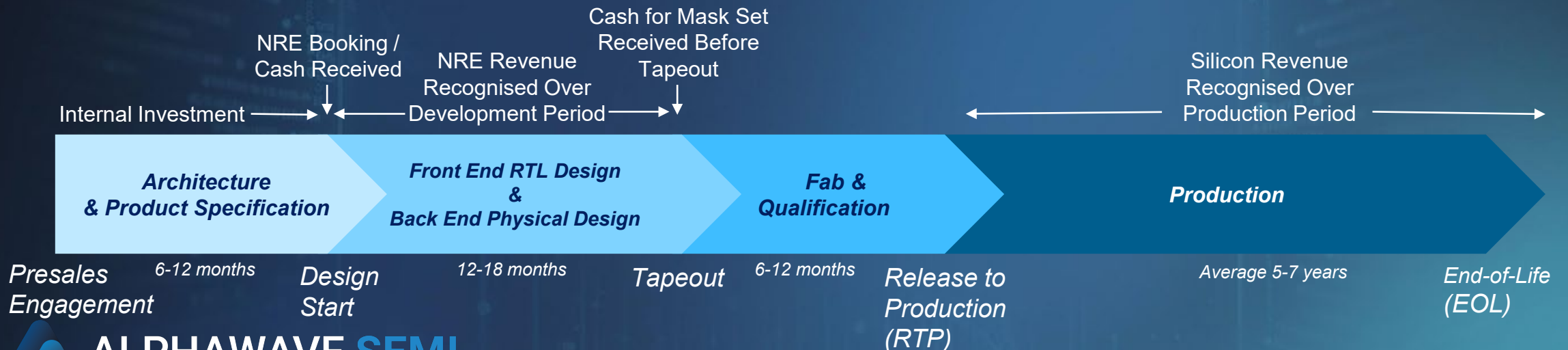
(\$m)	2023	2024
Bookings	\$274.0	\$397.2
Revenue	\$167.3	\$258.8
Ending Backlog	\$294.8	\$391.6

### Silicon & Royalties

#### Revenue recognised on shipment

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

(\$m)	2023	2024
Bookings	\$109.9	\$118.3
Revenue	\$154.2	\$48.8
Ending Backlog	\$60.1	\$128.4



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

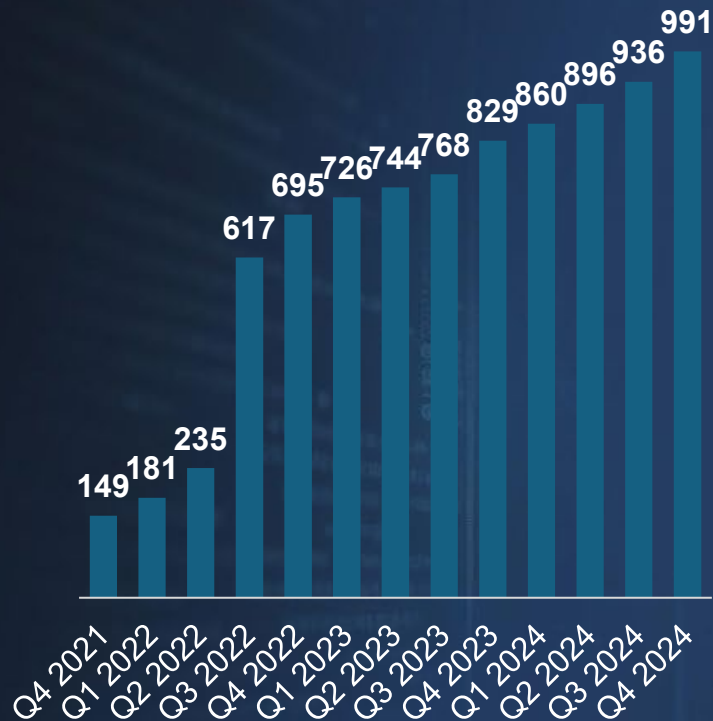
US\$m	FY 2024	FY 2023	Change	Comments
<b>Revenue</b>	<b>307.6</b>	<b>321.7</b>	(4%)	Growth in core data center business replaced legacy WiseWave and Open Five revenue from China; First revenue from Connectivity Products
<b>Gross profit</b>	<b>181.1</b>	<b>165.4</b>	9%	Improvement in gross margin profile related to growth in Licence & NRE business
<b>Gross margin</b>	<b>59%</b>	<b>51%</b>	8 pts	
<b>R&amp;D, S&amp;M, G&amp;A</b>	<b>(164.2)</b>	<b>(131.8)</b>	25%	Continued investment in R&D; building G&A infrastructure to support growth
<b>Adjusted EBITDA</b>	<b>51.1</b>	<b>62.6</b>	(18%)	
<b>Adjusted EBITDA %</b>	<b>17%</b>	<b>19%</b>	(2) pts	Expect margin expansion as revenue grows
<b>Other expenses</b>	<b>(49.7)</b>	<b>(52.9)</b>	(6%)	Primarily share-based compensation; also includes M&A expenses related to historical acquisitions
<b>Depreciation and amortisation</b>	<b>(34.2)</b>	<b>(29.1)</b>	18%	Amortization of intangibles from assets acquired and capitalised R&D; expect increase in 2025 as products reach commercial readiness

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

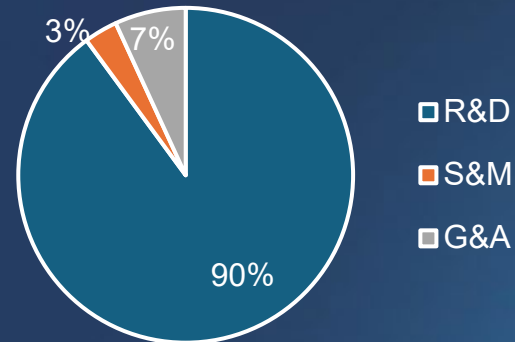
# Investment Into R&D Extends Technology Leadership

## Technology-Led Organisation – 90% Employees in R&D / Engineering

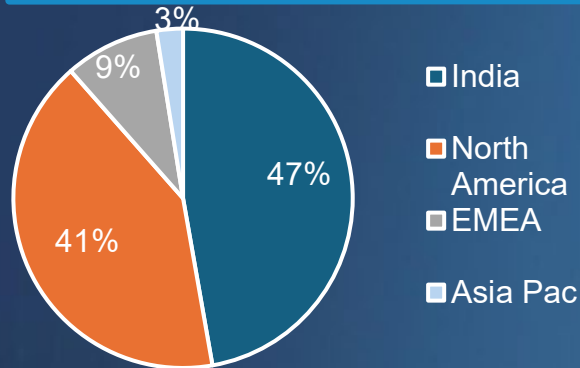
### Number of Employees



### 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 2025
- US\$75.0m development costs capitalised in FY 2024 (FY 2023: US\$54.5m)

### Main Locations



# Management of Balance Sheet and Cash Flow: Finance Priorities

US\$m	FY 2024	FY 2023	Change	Comments
<b>Cash &amp; Cash Equivalents</b>	<b>180.2</b>	<b>101.3</b>	78.9	Actively managing cash; low inventory and receivables balances
<b>Loans and Borrowing</b>	<b>352.0</b>	<b>220.4</b>	131.6	Additional convertible debt of \$150m in FY24 strengthens balance sheet
<b>Net Debt</b>	<b>(171.8)</b>	<b>(119.1)</b>	(52.7)	Perpetually evaluating capital structure
<b>Cash from Operations</b>	<b>13.5</b>	<b>16.0<sup>1</sup></b>	(2.5)	Not dependent on additional non-operating inflows
<b>Working Capital Changes</b>	<b>(19.0)</b>	<b>(51.3)<sup>1</sup></b>	32.3	Expect continued improvement in working capital
<b>Capital Expenditure</b>	<b>30.6</b>	<b>18.6</b>	12.0	Continued investment in product businesses, as expected
<b>R&amp;D Capitalisation</b>	<b>58.7</b>	<b>43.7<sup>1</sup></b>	15.0	Significant investment in future products support long-term growth opportunity

<sup>1</sup> Restated to reflect capitalisation of interest incorrectly included in both interest paid and capitalised development expenditure in the FY23 cash flow statement. Due to rounding, numbers presented in the chart may not add up to the totals provided.

# Alphawave Growth in 2025 and Beyond

- Delivering mission-critical connectivity and compute essential to the AI revolution
- Addressing the insatiable demand from hyperscalers and world's leading semiconductor companies through:
  - Silicon IP
  - Custom silicon
  - Chiplets
  - Connectivity products
- Partnering to increase sales force size and reach
- Future growth fueled by disciplined investment in R&D for high-margin products

***Powering the AI Revolution = Path to Billions***



# Q&A Session

# Thank you

# Non-GAAP Metrics

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

	Year ended 31 December	
	2024	2023
	US\$m	US\$m
<b>Preliminary bookings (including royalties)</b>	515.5	364.4
Adjustment	-	19.5
<b>Bookings</b>	<b>515.5</b>	<b>383.9</b>
Royalties	0.1	-
<b>Bookings (excluding royalties)</b>	<b>515.4</b>	<b>383.9</b>

## Operating profit to EBITDA reconciliation

	Year ended 31 December	
	2024	2023
(US\$'000)	US\$m	US\$m
<b>Operating (loss)/profit</b>	<b>(32,824)</b>	<b>(19,352)</b>
Add backs:		
Depreciation and amortisation	34,187	29,118
<b>EBITDA</b>	<b>1,363</b>	<b>9,766</b>

## Adjusted profit per ordinary share attributable to the shareholders

	Year ended 31 December	
	2024	2023
	US\$	US\$
Adjusted basic earnings per share	2.51	1.69
Adjusted diluted earnings per share	2.51	1.69
Expressed in cents per ordinary share		

## EBITDA to adjusted EBITDA reconciliation

(US\$'000)

### **EBITDA**

Add backs:

Acquisition-related costs	236	831
Retention payments	7,618	8,352
Leadership re-organisation	748	-
Compensation element payable for Precise-ITC (note 30)	6,215	-
Share-based payment	27,896	40,691
Exchange gain	(2,022)	2,983
Impairment of receivable and contract assets related to customers	9,000	-

### **Adjusted EBITDA**

## Profit after tax to adjusted profit after tax reconciliation

(US\$'000)

### **Profit after tax**

Add backs:

Non-recurring M&A-related (income)/costs	236	831
Retention payments	7,618	8,352
Leadership re-organisation	748	-
Compensation element payable for Precise-ITC (note 30)	6,215	-
Amortisation of acquired intangibles	12,657	12,657
Impairment of receivable and contract assets related to customers	9,000	-
Share-based payment	27,896	40,691
Exchange gain	(2,022)	2,983
Tax effect of above adjustments	(1,399)	(2,623)

### **Adjusted profit after tax**

	Year ended 31 December	
	2024	2023
	US\$m	US\$m
<b>EBITDA</b>	<b>1,363</b>	<b>9,766</b>
236	236	831
7,618	7,618	8,352
748	748	-
6,215	6,215	-
27,896	27,896	40,691
(2,022)	(2,022)	2,983
9,000	9,000	-
<b>Adjusted EBITDA</b>	<b>51,054</b>	<b>62,623</b>

	Year ended 31 December	
	2024	2023
	US\$m	US\$m
<b>Profit after tax</b>	<b>(42,519)</b>	<b>(51,002)</b>
236	236	831
7,618	7,618	8,352
748	748	-
6,215	6,215	-
12,657	12,657	12,657
9,000	9,000	-
27,896	27,896	40,691
(2,022)	(2,022)	2,983
(1,399)	(1,399)	(2,623)
<b>Adjusted profit after tax</b>	<b>18,430</b>	<b>11,889</b>

# FY24 Cash Flow Bridge

