Acquisition of Banias Labs & Multi-Year Agreement Framework with Leading North American Hyperscaler

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Executing Against our Vision Since the IPO

Leading Global Provider of Connectivity for Digital Infrastructure

**Enhanced Product Portfolio Focused on High-Speed Connectivity**

- Ethernet and Optical Network IP
- AresCORE Chiplet IP OptiCORE 112G PAM4 DSP
- Custom Silicon – Memory and Chiplet Connectivity Risc-V processor IP
- Coherent Optical DSP Technology

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**Headcount**

- Apr 2021: 132
- Dec 2021: 154
- Mar 2022: 251
- Jun 2022: c.630

**Established Foundry Relationships**

- TSMC: 2021 OIP Partner of the Year award for High-Speed SerDes IP. Production availability of new PCIe-CXL solution on TSMC N5 for storage and chiplet market.
Banias Labs and Multi-Year Agreement with Hyperscaler

- Company founded in 2020 focused on the development of optical DSP products with deep expertise in coherent technology

- Israel based team of c.50 people; core technology leaders have worked together over two decades

- Products utilise proprietary technology that enables ultra-high speed communications coupled with physical layer security

- Low power, silicon proven coherent technology

- Non-binding purchasing framework agreement for a potential roadmap delivering over US$300m of Optical products

- Multi-year potential roadmap to develop and sell a portfolio of optical products and DSPs, including PAM4 and coherent DSP technology from Banias Labs

- Anchor customer provides platform to scale Banias’ technology and Alphawave’s DSP and custom silicon expertise
Transaction Overview

Acquisition of Banias Labs, Based in Hod Hasharon, Israel

Financial
- US$240m paid on closing funded of existing cash and additional financing
- Multi-year non-binding purchasing framework agreement with a leading North American hyperscaler for a potential roadmap delivering over US$300m of Optical products.
- New Senior Secured Credit Facilities, five-year US$110m Revolving Credit Facility and five-year US$100m Term Loan

People and Technology
- c.50 people team based in Hod Hasharon, Israel
- Core technology leaders working together since 2001
- Company founded in 2020
- Leading Coherent DSP technology for data infrastructure market

Strategic Rationale

Enhanced Product Portfolio and Competitive Positioning
- Coherent is the technology used when PAM4 can no longer work (i.e. longer distances and higher speeds)
- Coherent optical DSP technology completes product portfolio and strengthens the product roadmap
- Creates a leading connectivity product portfolio for data centers, including PAM4 and coherent DSPs in the most advanced technologies

Market Expansion and Customer Base
- Expands addressable market into silicon Optical DSP
- Deepens commercial partnership with leading North American hyperscaler

Adds Scale and Strengthens Hybrid Business Model
- Business combination and multi-year contract provide a platform to scale Banias’ technology, as well as Alphawave’s IP and custom silicon expertise
- Adds engineering capabilities to expand Alphawave’s DSP capability
Coherent Optics – Increasing Market Adoption

Coherent Optics – The Next Step of Evolution of Optical Solutions for Data Center Connectivity

- Coherent technology can reach much higher speeds and is now established in segments c.40+km
- PAM4 is difficult to scale beyond 200G and reach is limited to well below 2km
- Market for Coherent optics is poised to undergo significant growth as shorter reaches adopt the technology, i.e. intra data centre (IDC)

**Why now?**

- Cost-effective, purpose built coherent technology is competitive with PAM4 solutions on cost and power at 200G and above
- This technology can be deployed in optical and electrical and therefore utilised across the entire product portfolio
- Coherent is the path forward for optical connectivity within data centers beyond 200G PAM4

![Graph showing the comparison between Coherent and PAM4 in terms of speed and reach](image)
Outlook

- Our growing pipeline reflects positive growth trends in data infrastructure markets and the continued investment in next generation connectivity solutions

- Complementary nature of technology contributes to the development of the long-term product roadmap

- **No changes to current stand-alone outlook. Further details on 2023 pro forma outlook and long-term financial model will be communicated at the Capital Markets Day on 13th January**
  - Ramp of new Optical products to start in 2024
  - Profitability to improve from 2023 levels as new products go into production

- Cash-generative business model and new facilities in place to navigate business expansion over the period 2023-2025

\(^1\) Chart not drawn to scale
Transaction Financing

New Financing
- New Senior Secured Credit Facilities, five-year US$110m Revolving Credit Facility and five-year US$100m Term Loan
- 200bps SOFR spread

Pro Forma Debt Position

| Gross debt | US$210m |
| Cash       | c.US$175m |
| Net debt   | c.US$35m |

- Pro Forma net debt/adjusted EBITDA\(^1\) c. x2

\(^1\) Calculated assuming pro forma adjusted EBITDA as defined in covenants and US$100m of cash netting
Key Takeaways

- Strengthens our competitive positioning with a leading connectivity portfolio for data centers, including PAM4 and Coherent DSPs, in the most advanced technologies
- Expands addressable market in custom silicon and Optical DSP
- Multi-year non-binding purchasing framework agreement with leading North American hyperscaler:
  - Roadmap of optical products and DSPs of over US$300m
  - Deepens commercial relationship
- Technology combination and multi-year agreement provide a platform to scale Banias’ technology, as well as Alphawave’s IP and custom silicon expertise
- Cash generative business and new US$210m facilities in place to navigate period of accelerated business expansion
- Alphawave stand-alone outlook remains unchanged
- Product ramp of Optical products to start in 2024 and profitability to improve from 2023 levels as new products go into production – further details on pro forma outlook at the Capital Markets Day on 13th January
Coherent DSP: More Data, Higher Speed, Cost Effective

At 200G and above, Coherent DSP offers a more robust technical solution, at a competitive cost and power consumption for Intra Data Center applications (<2km)

**Intra Data Center (IDC) <2km**
Data travels between dies, chips, servers, storage, and switches up to a maximum distance of 2km within the data center

Direct Detect modulation such as PAM4 DSP for speeds up to 200G

**IDC <2km**

**Campus reach <10km**

**Data Center Interconnect (DCI) <120km**
Data travels between data centers within a campus or across to data centers in different locations

Coherent DSP for longer reaches and for shorter reaches at 200G and above