ALPHAWAVE IP GROUP PLC
Company Number 13073661

Full Year 2021 Results and Q1 2022 Trading Update

Strong maiden FY results with >170% y-o-y revenue growth and continued momentum in Q1

LONDON, United Kingdom and TORONTO, Ontario, Canada 29 April 2022 – Alphawave IP Group plc (LN:AWE, "Alphawave IP", the "Company"), a global leader in high-speed connectivity for the world's technology infrastructure, is pleased to publish its full year 2021 results.

2021 Highlights

Year ended 31 December		2021	2020	Change
Financial				
Revenue	US$m	**89.9**	32.9	173%
Adjusted EBITDA[1]	US$m	**51.8**	19.3	168%
Pre-tax operating cash flow	US$m	**26.5**	11.8	124%
Net cash balance (as at year end)	US$m	**501.0**	14.0	n/m
Non-financial				
Bookings[2]	US$m	**244.7**	75.0	226%
Backlog excluding royalties (as at year end)	US$m	**168.6**	37.3	352%
End-customers (as at year end)	#	**20**	11	82%

1. Adjusted EBITDA excludes IPO-related non-recurring costs, foreign exchange adjustments, share-based payments, M&A transaction expenses and one-time legal fees associated with WiseWave. See note 4 (Alternative Performance Measures).
2. Bookings are a non-IFRS measure representing legally binding and largely non-cancellable commitments by customers to license our technology. Bookings comprise licence fees, non-recurring engineering, support and, in some instances, our estimate of potential future royalties. Our FY 2021 bookings include estimates of potential future royalties of US$24.0m.

- Record 2021 bookings, with over 225% year-on-year growth
  - Expanded direct and indirect sales channel globally, to enable accelerated pipeline conversion
- Record 2021 revenue (US$89.9m) and adjusted EBITDA (US$51.8m), exceeding guidance and median analyst consensus
- Gross margins of 94% and adjusted EBITDA margins of 58%
- Cash on balance sheet of US$0.5bn as at 31 December 2021. IPO proceeds continue to be deployed to drive growth both through organic, as well as inorganic, investments
- Strong Q1 2022 trading with over US$30m in bookings, a 20% quarter-on-quarter sequential increase

2021 strategic highlights

- 20 customers, up from 11 as at end FY 2020, including five of the top eight global semiconductor companies
  - Four global hyperscalers as customers – all major global hyperscalers are now in the pipeline
- Accelerated hiring globally with 82 new hires over the year, taking global headcount to 154, in line with our strategy to scale the business
- Over 80 IPs available today – first customer products now in production. Early royalties expected to start from 2022, ahead of schedule
- First to demonstrate silicon success in 7nm, 6nm, 5nm and 4nm
- First IP provider to have entire high-volume production-ready IP portfolio from 7nm to 4nm at 112Gbps in 2021. Expanding to 200G/400G/800G/1.6T at 3nm and beyond in 2022
- First chiplet design wins with early production expected in 2022
- Acquisition of Precise-ITC and pending acquisition of OpenFive to accelerate technology leadership and scale the business globally
- Board remains confident in the outlook for the Group in 2022

Q1 2022 Trading Update

As expected, Alphawave IP has continued to accelerate sales performance in Q1 2022. Total bookings for the period were US$30.7m, a quarter-on-quarter increase of 20%. This performance was driven by continued expansion in North America with numerous design wins with new and existing customers, as well as an additional chiplet design win. There were also repeat wins with a major Korean customer and WiseWave, with one design win with a customer in China through the VeriSilicon reseller relationship. Of the US$30.7m in bookings, US$5.7m was through VeriSilicon, previously booked as part of the US$54m multi-year reseller transaction signed in Q1 2021, US$19.4m represented new IP licence and related sales, and US$5.6m were management's estimates of future royalties. The Group expects to continue to accelerate the sales performance in the second quarter and expand both within existing customers and new customers, primarily in North America and Korea.

Outlook for 2023 and beyond

Through the OpenFive acquisition, Alphawave IP will accelerate its strategy and deliver its technology in a way that enables it to achieve revenue scale much faster than contemplated at the IPO.

The OpenFive acquisition is expected to close in H2 2022 pending US regulatory approvals. Including the financial contribution from OpenFive, the Company expects to reach revenues of between US$325m and US$360m in 2023. Longer-term, we expect to achieve annual revenue run rates in excess of $500m in 2024 and in excess of $1bn by 2027. Near-term margins will be impacted by OpenFive as we integrate and scale that business, and we anticipate a 2023 adjusted EBITDA margin of 32% to 36% with a steady increase thereafter as we focus and integrate the business and realise the anticipated synergies. Excluding OpenFive, standalone revenues are expected to be in line with the guidance provided at IPO, namely $210m to $240m by 2023, with an adjusted EBITDA margin of 50% to 60%.

Tony Pialis, President and Chief Executive Officer of Alphawave IP stated:

"The technical founders of the business have been leaders in connectivity since the late 1990s, but we have never had a year as successful as 2021. Our business performance was driven by our continued and expanding technology leadership, and delivery of communications solutions to some of the most sophisticated end-customers in the world. We first established technology leadership in 2017 with our 112Gbps solutions in 7nm. In 2021 we expanded that leadership beyond 6nm and 5nm and into 4nm technology. We are now delivering technology to five of the top eight largest semiconductor companies globally and four global hyperscalers. Many of these customers are repeat customers who have licensed multiple products from us."

John Lofton Holt, Executive Chairman of Alphawave IP stated:

"2021 was a historic year for Alphawave IP in many ways. Looking back on the year, we are proud to have delivered record results. But most of all we are pleased to have delivered leading connectivity solutions to some of the largest chipmakers in the world. Our technology leadership is a core part of our value and differentiation and is one of the key pillars of our continued growth and expansion in 2022 and beyond. As we look forward to 2022, we will continue to expand our technology leadership in our IP licensing business while broadening our portfolio of solutions through organic development and through continued acquisition of adjacent technologies. The recently announced acquisitions of OpenFive and Precise-ITC are examples of how we will continue to expand our product offerings in the future. With this growth and expansion, we will continue to be not only the leading provider of connectivity IP, but the global leader in connectivity for the entire high-end semiconductor market."

CEO review

Over 2021, the business grew its end-customer base from 11 to 20, winning some of the largest technology and semiconductor companies in the world. Customers spend hundreds of millions of dollars on their chip developments – Alphawave's IP is a critical element of those designs and is selected at the beginning of their product development journey. Whilst Alphawave IP's leading technology provides a distinct competitive advantage, it is also the Company's proven track record that provides customers the confidence to choose, and choose again, Alphawave IP as a mission-critical technology provider.

Alphawave IP works with some of the largest semiconductor companies and hyperscalers in the world. As a result, we are restricted in what we can disclose given the strategic importance and sensitivity of our customers' chip development roadmaps.

In 2021 and early 2022, Alphawave IP was proud to announce further design wins with Samsung, including a 4nm win with a global hyperscaler, a win with Microchip for their next-generation 1.6Tb/s Ethernet retimer family and additional success with Tektronix in driving their industry-leading PCI Gen 6.0 solutions. Based on the strong pipeline, Alphawave IP expects to continue to win new customers and repeat business from existing customers in 2022.

CFO review

Revenues

Revenues for 2021 reached US$89.9m, 173% growth compared to US$32.9m in 2020 and reflect significant diversification.

- Customers – In 2021, the Company recognised revenues from 20 end-customers (21 excluding the impact of two of our customers merging). This compares to eleven customers in 2020. The top three customers represented 53% of 2021 sales (28% excluding WiseWave) versus 52% in 2020 and one of the top three customers in 2021 was also a top three customer in 2020.
- End-markets – in 2021, the Company generated revenues from customers across key end-markets of data networking (including optical), cloud compute and solid state storage as well as AI and 5G wireless. Revenues from data networking, cloud compute and solid state storage represented over 75% of our 2021 sales.
- Regions – in 2021, revenues were well-balanced between North America and Asia, with 42% of revenues to North America, 48% to China and 10% to APAC excluding China. In 2020, 59% of sales were to North American customers, 25% to China and 16% to APAC excluding China. The increased weighting to China in 2021 reflects first revenue recognition in H2 2021 of the agreements with WiseWave and VeriSilicon. Excluding WiseWave, 63% of FY2021 sales were to North American customers, 22% to China and 15% to APAC excluding China. Revenues from China in the medium and long-term are expected to be less than 30% of total Group revenues
- Subscription licence – in respect of the WiseWave five-year subscription licence agreement, in H2 2021 Alphawave IP invoiced US$24.0m (gross of 10% withholding tax) and recognised US$27.7m, with revenue recognition based on our deliveries of IP to WiseWave. In respect of the three-year exclusive reseller arrangement with VeriSilicon, the Company has been invoicing and collecting on a quarterly basis since February 2021. In FY2021, the Company invoiced US$8.8m and recognised US$8.9m of revenue related to the VeriSilicon reseller agreement.

Substantially all of the revenue in both 2020 and 2021 was generated from one-time licence and licence-related (non-recurring engineering and support) and subscription licence activities. The Company did not recognise any royalty revenue in 2020 or 2021 and given the long design cycles from our customers, do not expect to recognise material royalties until FY2024 at the earliest.

Operating expenses and profitability

In 2021, the Company maintained gross margins at 94%, with cost of sales primarily reflecting sales commissions as well as costs related to the development of test chips. Adjusted EBITDA was US$51.8m (58% margin) compared to adjusted EBITDA of US$19.3m (59% margin) in 2020.

Reflecting the rapid scaling of the business, in 2021, operating expenses totalled US$48.7m, or US$36.1m excluding non-recurring IPO costs, one-time M&A/professional expenses, share-based payment costs and foreign exchange gains. This compares to $14.6m in 2020 ($13.0m excluding share-based payment costs and foreign exchange losses).

Of US$48.7m in operating expenses in 2021, US$29.4m (33% of sales) related to R&D/engineering, US$5.4m (6% of sales) related to general and administrative expenses and US$1.3m (1% of sales) related to sales and marketing expenditure. US$12.6m related to other items comprising non-recurring IPO costs, one-time M&A/professional expenses, share-based payment costs and exchange gains. In 2020, operating expenses totalled US$14.6m, US$1.5m of which reflect foreign exchange gains and share-based payments, and US$8.8m (27% of sales) related to R&D/engineering, US$3.4m (10% of sales) related to general and administrative and US$0.8m (2% of sales) related to sales and marketing.

This increase in operating expenses was primarily due to the increase in our headcount to 154 heads at end 2021 from 72 at end 2020, together with associated software tool costs which scale with R&D/engineering headcount, as well as additional professional costs required as a publicly listed company following our IPO. To capitalise on future growth opportunities, the Company was able to expand headcount significantly ahead of budget and estimates that the incremental expenses from accelerated hiring during 2021 exceeded US$4.0m.

About Alphawave IP Group plc (LN:AWE)

Faced with the exponential growth of data, Alphawave IP's technology services a critical need: enabling data to travel faster, more reliably and with higher performance at lower power. Alphawave IP is a global leader in high-speed connectivity for the world's technology infrastructure. Our IP solutions meet the needs of global tier-one customers in data centres, compute, networking, AI, 5G, autonomous vehicles, and storage. Founded in Toronto, Canada in 2017, by an expert technical team with a proven track record in licensing semiconductor IP, our mission is to focus on the hardest-to-solve connectivity challenges. To find out more about Alphawave IP, visit: awaveip.com

Investor conference call

The Company will host an investor conference call including a Q&A at 16:00 BST on 29 April 2022 and will provide additional details on the 2021 results and forward-looking guidance on the business.

Related Party Disclosures
WiseWave is a related party of Alphawave IP.

Trademarks
All registered trademarks and other trademarks belong to their respective owners.

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The information contained within this announcement is deemed to constitute inside information as stipulated under the UK Market Abuse Regulations. Upon the publication of this announcement, this inside information is now considered to be in the public domain.

Copies of this announcement are available and the Annual Financial Report will be available in due course on Alphawave IP’s website www.awaveip.com and from the Company's registered office at 65 Gresham Street, London, EC2V 7NQ.

Executive Chair's statement

"Looking back on the year, we are proud to have delivered record results."

John Lofton Holt
Executive Chair

2021 was a historic year for Alphawave IP in many ways. Looking back on the year, we are proud to have delivered record results while beating our IPO guidance, our raised guidance since the IPO and median analyst consensus for revenue and adjusted EBITDA. But most of all we are pleased to have delivered leading connectivity solutions to some of the largest chipmakers in the world, in the most advanced technologies. This technology leadership is a core part of our value and differentiation to date and is one of the key pillars of our continued growth and expansion in 2022 and beyond. As we look forward to 2022, we will continue to expand our technology leadership in our IP licensing business while broadening our portfolio of solutions through organic development and through continued acquisition of adjacent technologies. The recently announced acquisitions of OpenFive and Precise-ITC are examples of how we will continue to expand our product offerings in the future. With this growth and expansion, we will continue to be not only a leading provider of connectivity IP, but a global leader in connectivity-focused IP, chiplet and custom silicon solutions for the entire high-end semiconductor market.

Our vision for Alphawave IP
When we founded Alphawave IP in 2017, the founders had a vision to not just build a connectivity IP licensing company, but to build the world's leading semiconductor company focused on connectivity solutions. In 2021 we executed on this vision by expanding our core and product IP offerings with our key manufacturing partners – TSMC and Samsung. In the second half of the year, based on inbound demand from our most advanced customers, we accelerated our chiplet developments and announced early design wins with chiplets in 5nm technology. Looking to 2022, we will continue to accelerate our product offerings through organic development and acquisitions to provide a broader and deeper set of connectivity solutions to our customers. These will include a wide range of electrical and optical solutions, delivered through core, product and chiplet licensing business models, but also through chiplet and custom silicon delivery business models.

Included within the strategic report is a fair review of the Group's performance during the year and of its position at the end of the financial year.

Alphawave IP's IPO on the London Stock Exchange
In May 2021, we were admitted to listing on the London Stock Exchange, raising net proceeds of £347.1m (US$492.1m). Our IPO represented one of the largest semiconductor IPOs in history, the largest IPO of a North American company on the London Stock Exchange and the first UK Main Market semiconductor IPO since 2004. Our IPO strengthened our ability to recruit the best talent and elevated our profile as we continue to win business from some of the largest technology companies globally.

We have begun to deploy our IPO proceeds, as we committed to investors during our IPO process. In the fourth quarter of 2021, we made the first tranche of our investment into WiseWave, a newly formed company established in China to develop and sell silicon products incorporating silicon IP licensed from the Group. We invested US$22.4m in return for a 42.5% equity interest. As outlined in our IPO Prospectus, we moved the VeriSilicon reseller arrangement under WiseWave in order to consolidate the Group's activities in China under a single entity.

In early 2022, we completed the acquisition of Precise-ITC, bringing a team of talented engineers and additional strategic IP for our product portfolio. As recently announced, we have completed a definitive agreement to acquire OpenFive, including a portfolio of over 70 SoC IPs and a custom silicon design team specialised in networking and data centre ICs, as well as over 250 new customers. This transaction is expected to close in the fourth quarter pending regulatory approvals and will significantly increase our capacity and capability across our existing and new product offerings.

Financial performance
I am pleased to deliver our first full set of results as a listed company. Our bookings for the full year were US$244.7m, over 220% growth on FY 2020 (US$75.0m). We delivered revenues of US$89.9m, which represents year-on-year growth of 173%. We also accelerated our hiring plans, growing our headcount from 72 at the end of 2020 to 154 at the end of 2021, significantly ahead of our budgeted headcount for FY 2021. Despite this, and increased investment in our sales, finance, HR, legal teams and increased administrative costs from becoming a listed company, we grew adjusted EBITDA to US$51.8m for the year compared to US$19.3m in FY 2020. Our balance sheet is strong with a closing cash balance of US$501.0m and no borrowings. We will continue to invest to maintain our technology leadership, expand our product portfolio and grow our business globally with a main goal to maximise revenue growth while maintaining very good gross margins and profitability.

People, culture and values
I am exceptionally proud of our global team who have continued to execute for our customers and investors in a completely virtual environment over the last two years. Our team works with the largest companies in the world, who trust us to deliver exceptionally complex technology on time and to specification. In 2021, we more than doubled our headcount from 72 people to 154 and hired a new Head of Human Resources. Given the restrictions placed upon us by the pandemic, many of our employees have never set foot in an Alphawave IP facility. Thanks to the dedication of our employees, this has not hindered our ability to grow the business.

Every Alphawave IP employee participates in our long-term incentive programme to engender a shared sense of ownership. Every hire that we made in FY 2021 was given equity incentivisation through our long-term employee share programme. Further, Michelle Senecal de Fonseca has been appointed as Workforce Engagement Non-Executive Director on our Board, ensuring that the interests and concerns of our employees are represented at our Board.

COVID-19

The COVID-19 environment posed unique challenges to our team and to our customers. Fortunately, we were able to adapt quickly and complete multiple tapeouts in the world's most advanced technologies – 7nm, 6nm, 5nm and 4nm – all in a 100% virtual environment. We also completed our entire IPO process – from start to finish – in a 100% virtual environment. In addition to the impact on our own employees and adapting to new ways of working, the impact on our end-markets and our customers has been dramatic. As remote working became, and remains, the norm for many individuals, the demand for data accelerated, including video conferencing and online collaboration tools, consumption of video content by consumers, social media interaction, remote education and deployment of cloud-based enterprise solutions. For many people, technology was a personal and professional lifeline. In May 2020, the OECD reported that some broadband communication providers experienced up to 60% increase in internet traffic. Our end-customers are the companies that own, operate or provide components into global data infrastructure. With focus on network capacity, resilience and power efficiency, our customers invested heavily in 2021 and are accelerating their investments in 2022 and beyond. For the first time in history, global semiconductor sales topped US$500bn in 2021 and we expect to see this trend continue to accelerate, to the benefit of our business and our shareholders.

Governance and leadership

Ahead of the IPO, we added six independent Non-Executive Directors to our Board, with Jan Frykhammar, former CEO and Chief Financial Officer of Ericsson, serving as our Senior Independent Director. Our Non-Executive Board members are all leaders in their respective industries and have diverse backgrounds across telecommunications, internet and semiconductors. Four of our six independent Directors are female. As a founding member of the Alphawave IP team, started in 2017 with a handful of individuals, I am humbled that such impressive and accomplished individuals have chosen to work with us on our journey as a listed company.

We have also significantly bolstered the senior leadership team, welcoming John Hou as our Corporate General Counsel, Maia Jones as our Head of Human Resources and Tony Chan Carusone as our Chief Technology Officer. In 2022 we will be further expanding our senior leadership team as we continue to scale our global capabilities.

Our first Annual General Meeting (AGM) as a listed company will be held on 6 June 2022. COVID restrictions permitting, we look forward to meeting our shareholders in person and sharing our excitement about what we have achieved at Alphawave IP and what we will achieve in the future.

Outlook for 2023 and beyond

We are excited about the prospects for the business, particularly in an environment where the importance and relevance of semiconductors to the global economy has seen increasing prominence. Through the pending OpenFive acquisition, we have seized an opportunity to accelerate our strategy and deliver our technology in a way that enables us to achieve revenue scale much faster than contemplated at the IPO.

The OpenFive acquisition is expected to close in H2 2022 pending US regulatory approvals. Including the financial contribution from OpenFive, we expect to reach revenues of between US$325m and US$360m in 2023. Longer-term, we expect to achieve annual revenue run rates in excess of US$500m in 2024 and in excess of US$1bn by 2027. Our near-term margins will be impacted by OpenFive as we integrate and scale that business, and we anticipate a 2023 adjusted EBITDA margin of 32% to 36% with a steady increase thereafter as we focus and integrate the business and realise the anticipated synergies. Excluding OpenFive, our standalone revenues are expected to be in line with the guidance provided at IPO, namely US$210m to US$240m, with an adjusted EBITDA margin of 50% to 60%.

Our guidance for the mid term and longer is reflective of our confidence in the core business and the OpenFive business and pipeline.

John Lofton Holt
Executive Chair

29 April 2022

President & Chief Executive Officer's statement

"The technical founders of the business have been leaders in connectivity since the late 1990s, but we have never had a year as successful as 2021."

Tony Pialis
President & Chief Executive Officer

The technical founders of the business have been leaders in connectivity since the late 1990s, but we have never had a year as successful as 2021. Our business performance was driven by our continued and expanding technology leadership, and delivery of communications solutions to some of the most sophisticated end-customers in the world. We first established technology leadership in 2017 with our 112Gb/s solutions in 7nm. In 2021 we expanded that leadership beyond 6nm and 5nm and into 4nm technology. We are now delivering technology to five of the top eight largest semiconductor companies globally and four global hyperscalers. Many of these customers are repeat customers who have licensed multiple products from us.

Our number one focus – our customers
Over 2021, we grew our end-customer base from 11 to 20, winning some of the largest technology and semiconductor companies in the world. Our customers spend hundreds of millions of dollars on their chip developments – our IP is a critical element of those designs and selected at the beginning of their product development journey. Whilst our leading technology provides us with a distinct competitive advantage, it is also our proven track record that provides our customers the confidence to choose, and choose again, Alphawave IP as a mission-critical technology provider.

We work with some of the largest semiconductor companies and hyperscalers in the world. As a result, we are restricted in what we can disclose given the strategic importance and sensitivity of their chip development roadmaps.

In 2021 and early 2022, we were proud to announce further design wins with Samsung, including a 4nm win with a global hyperscaler, our win with Microchip for their next-generation 1.6Tb/s Ethernet retimer family and our success with Tektronix in driving their industry-leading PCI Gen 6.0 solutions. Based on our strong pipeline, we expect to continue to win new customers and repeat business from existing customers in 2022.

Technology
Although only founded in 2017, Alphawave IP has built on the 20-year legacy and achievements of the founding team. Together, they have founded and scaled multiple businesses delivering high-speed connectivity solutions. Our scalable and configurable IP platform, built entirely in-house, has enabled us to rapidly expand our portfolio to over 70 products. In 2021, we were the first IP vendor in the world to deliver 5nm and 4nm solutions and several customers also taped out early silicon integrating our IP. In June 2021, the foremost market research provider for silicon IP, IPNest, confirmed Alphawave IP's leadership position in Very High-Speed SerDes.

We have invested heavily in research and development during the year, scaling significantly ahead of plan and increasing our R&D headcount from 66 to 134. Tony Chan Carusone joined in January 2022 as our Chief Technology Officer. Tony is a pre-eminent figure in the semiconductor industry and for the past 20 years has been Professor of Electrical and Computer Engineering at the University of Toronto, focusing on lowering power consumption of microelectronics for communications traffic. Tony was recently named a Fellow of the IEEE, the world's largest technical professional organisation for the advancement of technology.

Our manufacturing partners
Alphawave IP delivers connectivity technology in the most advanced process technologies in the world from TSMC, Samsung and Intel. Our end-customers then leverage these manufacturing partners to build their semiconductor devices. While the development with Intel is recent and was just announced in 2022, the long heritage of the Alphawave IP founding team working with TSMC and Samsung goes back more than a decade. In 2021, we were awarded TSMC 'Partner of the Year' for the second year in a row. This was a proud moment for our team and reflects the deep relationships that we have with TSMC as a key partner.

Building a global connectivity leader
When we founded Alphawave IP, we set out to build a global connectivity leader – not just an IP company. We achieved profitability within a year by building our core connectivity IP portfolio. More recently, we significantly expanded that portfolio to include product IPs and chiplet IPs. We have now announced further expansion of our capabilities through the acquisitions of OpenFive and Precise-ITC. This enables us to bundle additional technology and capabilities for our customers beyond just core, product and chiplet connectivity IPs by offering customised chiplet silicon devices. In 2022, we expect to further expand our technology leadership into the electrical connectivity space and the optical connectivity space. Through these expansions we strive to be a global connectivity leader for the most advanced semiconductor companies in the world.

Q1 trading update
As expected, Alphawave IP has continued to accelerate sales performance in Q1 2022. Total bookings for the period were US$30.7m, a quarter-on-quarter increase of 20%. This performance was driven by continued expansion in North America with numerous design wins with new and existing customers, as well as an additional chiplet design win. There were also repeat wins with a major Korean customer and WiseWave, several new customer wins in North America and one design win with a new customer in China through the VeriSilicon reseller relationship. Of the US$30.7m in bookings, US$5.7m was through VeriSilicon previously booked as part of the US$54m multi-year reseller transaction signed in Q1 2021, demonstrating further success from the reseller relationship, US$19.4m represented new IP

licence and related sales, and US$5.6m were management's estimates of future royalties. The Group expects to continue to accelerate the sales performance in the second quarter and expand both within existing customers and new customers, primarily in North America and Korea.

Tony Pialis
President & Chief Executive Officer

29 April 2022

ESG

We are proud of our diverse workforce. We are one of the only semiconductor companies with a majority-women independent Board of Directors.

Our aims for 2022
- Report our gender pay gap
- Publish our modern slavery statement
- Introduce best-in-class employee benefits prioritising employee health and wellbeing
- Track and publish our charitable contributions
- Report to TCFD and SASB
- Formalise path to carbon neutrality

We do not want to exist as a top-down organisation. We have appropriate governance between management, the Board and employees which sets the tone for how we engage with our stakeholders. Our compensation structure reflects our shared purpose.

Bold ideas flow from top-down diversity
At Alphawave IP, ensuring diverse representation and the bold ideas it creates is something we take seriously from the top-down. More than half of our independent Board is made up of women, who are leading figures in global technology companies. It is reflective of our diverse workforce, which is over 15% female and where 75% of our global workforce identifies with a minority group.

Gender diversity[1]

Gender	Number	Percentage
Female	23	15%
Male	131	85%

1. Data as at 31 December 2021.

Responsible governance
- Management structure: Our management is inclusive, fair, accessible, and has a well-established controls environment with a clear balance of power between the President & Chief Executive Officer, Executive Chair and the Board of Directors. Our Board of Directors is majority-independent and is led by our Senior Independent Director, who is a globally recognised governance leader in public technology companies.
- Equity structure: We have one class of shares in our Company – ordinary shares. There are no special rights, no ratchets, no liquidation preferences, and no special voting agreements. All shares carry the same rights.
- Executive compensation: Our management team is paid on average at the bottom quartile of public companies in the FTSE 250. For 2021, our President & Chief Executive Officer and Executive Chair have waived participation in any annual bonus or stock-based compensation and have committed to doing so again in FY 2022.
- Employee compensation: All our employees have received either shares, options or restricted stock units in the Company. This is part of our commitment not just to shareholder value but enabling our colleagues to share in the value they create. Employees also receive annual performance-based salary increases and bonuses.
- Gender diversity: We actively seek to encourage gender diversity and four of our six Non-Executive Directors are female. As at the end of FY 2021, of our total workforce, 23 employees are female and 131 male. The semiconductor industry has historically seen under-representation of females, with the Global Semiconductor Alliance and Accenture reporting in 2020 that the majority of semiconductor companies have less than 1% of women in director roles and above. Of our senior managers, classified as those in director roles and above, four are female and 17 are male as at 31 December 2021.

Our low carbon footprint
The fact that we license IP means that we have a low carbon footprint. However, we strongly believe that all companies have an obligation to actively help society decarbonise, and we are proud of the fact that our technology has been built to perform better at lower power.

This has the potential to contribute towards the increased power efficiency of the world's IT infrastructure. Though the transmission of data is a small percentage of the total power consumption in many systems, there are many thousands of devices that can benefit from our power savings

Committed to carbon neutrality
We are committed to achieving carbon neutrality and use Bullfrog Power to purchase power from renewable energy sources that meet or exceed the strictest environmental criteria offset programme.

- We provide silicon IP solutions, delivering software and designs in a virtual environment. We therefore operate in a low environmental impact sector, relative to our customers and partners who may operate data centres or manufacture semiconductors.
- Though our environment impact is low, we are actively reducing our carbon footprint and committing to operate on a carbon neutral basis across our Scope 1 and 2 emissions.
- To deal with electronic equipment at the end of their life cycle, we will use robust product lifecycle management programmes for our computer and IT resources and recycle electronic equipment. This helps to recover precious and rare earth metals.
- Our products enable data to travel at lower power, which has the potential to lower the carbon footprint of the world's IT infrastructure.

Reducing climate risk through transparent disclosure
We care about embedding transparency in our financial disclosures, so that we can be a part of greener financial markets, where climate risk can be more accurately assessed, and investors can make informed decisions. We intend to report using the Sustainability Accounting Standards Board (SASB) framework.

Task Force on Climate-Related Financial Disclosures (TCFD)
The Group recognises the impact of climate change and the role we must play to mitigate the impact on our business and the wider world. Alphawave IP is committed to transparency in its disclosure of climate-related risks and the management of those risks. Given the nature of our business and operations, the climate-related risks that directly impact us are of limited materiality. However, we have considered these and identified opportunities to reduce our impact on and from climate change.

We strongly support the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), which are structured around governance, strategy, risk management and metrics and targets. As we have a standard listing on the LSE, we are not required to apply the TCFD recommended disclosures in FY 2021. We will be required to do so in future years and have elected to do so, but may not be fully compliant, in FY 2021. We have considered the recommendation of the TCFD and provide the following information on our approach to assessing and disclosing climate-related risks and opportunities in accordance with Listing Rule 14.3.27R, except for the following matters:

- disclosure ('strategy c') – we have not performed a quantitative risk assessment or climate-related scenario analysis.

We have structured the report in line with the four themes of Governance, Strategy, Risk management and Metrics and targets.

Governance
The Board has overall accountability for the management of risks and opportunities, and the Board's consideration of significant risks impacting the Group includes assessment of risks associated with climate change. Our Chief Financial Officer is responsible for our risk management framework, including the assessment and management of climate-related risks. During 2022, we intend to hire an individual within the senior executive team with responsibilities to include leading our climate change agenda and managing our policies and practices across sustainability and wider ESG matters. Our Senior Vice President of Operations is responsible for our facilities, our IT resilience and IT end-of-life policies.

We do not manufacture or supply physical products, our premises are limited to leasehold office spaces and during substantially all of 2021, our workforce was working from home due to the Covid-19 pandemic. Therefore, the Group's exposure to climate-related risks is considered to be low and not currently classified as a significant risk. In view of our low exposure and our business model, and as we are still developing our approach to managing climate-related risks, the Board's assessment of climate-related risks is provided on a qualitative basis rather than quantitative scenario testing.

Strategy
We have not identified any short-term climate-related risks that are likely to have a material and direct impact on our operations. We are potentially exposed to medium and longer-term climate-related risks of a global/macro nature that impact society in general, together with risks which may impact our end-customers and the broader semiconductor supply chain. These physical risks are either event-driven, such as extreme weather events, or chronic, being longer-term shifts in climate patterns, such as sustained higher temperatures or rising sea levels. We are also potentially exposed to transitional changes, including changes to government policies, taxes or measures aimed at reducing emissions.

Our exposure is mitigated by the fact that we are a low carbon intensity business, delivery of our technology to customers is through virtual and not physical means, is not dependent on a single region or a physical supply chain and we have proven our ability, throughout the COVID-19 pandemic, to execute remotely and from alternative locations. Therefore, we regard our exposure to direct physical climate-related risks as low. Further, the impact of any transitional changes upon the Group and its operations is considered to be low compared to those businesses that have more direct dependencies on manufacturing, distribution or fossil fuels.

Our end-customers may rely on physical infrastructure and supply chains for the manufacture and delivery of semiconductors either for production use or during the development process, or may have operations, including data centres and networks utilising those semiconductors, that are required for their own businesses or that they make available to customers. In the medium and longer term, physical and transitional climate-related risks may impact the ability of our customers to source and purchase semiconductors or to build

or operate their data centres or networks. We regard these risks as being of a global nature which our customers and partners, some of the largest technology companies in the world, are better placed
to mitigate.

Power consumption is a material consideration for our customers and one where we believe we have a competitive advantage in our technology. Increasing focus on power consumption within data centres and networks, and the need for our customers to select vendors across their supply chains that offer power efficiencies, represents a growing opportunity for the Group.

Risk management
Our process for identifying and assessing risks and opportunities follows our Group-wide risk assessment and management process. These risks, together with mitigations, are discussed by the executive management team and the Board. Given the nature of our business model, the Group's exposure to climate-related risks is considered to be low and not currently classified as a significant risk.

Metrics and targets
The Group is already proactive in putting in place mitigating actions to reduce its environmental impact, such as avoiding unnecessary business travel and purchasing energy from certified renewable sources. We currently purchase renewable energy certificates (RECs), similar to Renewable Energy Guarantees of Origin in the UK, significantly in excess of our power consumption from our offices in Toronto, Canada. These are purchased from Bullfrog Power Inc in Toronto, Canada, who source them from EcoLogo®-certified wind, solar and low-impact hydro-facilities. By purchasing RECs, we reduce our carbon footprint and directly support sustainable energy generators.

We offer our shareholders the ability to receive documentation, including our annual report, in electronic form. Our annual report is printed on recycled paper.

For 2022, we plan to fully offset our Scope 1 and 2 greenhouse gas emissions through the purchase of RECs or carbon offsetting. We plan to make further disclosures structured around the TCFD framework in our 2022 annual report and we will develop the depth of our TCFD disclosure over time.

Alphawave IP has appointed Carbon Footprint Ltd, a carbon and energy management company, to independently assess its greenhouse gas (GHG) emissions in accordance with the UK Government's 'Environmental Reporting Guidelines: Including Streamlined Energy and Carbon Reporting Guidance'.

The GHG emissions have been assessed following the ISO 14064-1:2018 standard using the 2021 emission conversion factors published by Department for Environment, Food and Rural Affairs and the Department for Business, Energy and Industrial Strategy. The assessment follows the location-based approach for assessing Scope 2 emissions from electricity usage. The financial control approach has been used.

The table below summarises the GHG emissions for the 2021 reporting year. This is the first year that Alphawave IP has assessed its emissions and this will set the baseline for future assessments. For FY 2021, the scope includes UK and non-UK operations, including Canada and the US.

Scope 1 includes emissions associated with gas consumption. Scope 2 includes emissions associated with electricity consumption. Scope 3 includes emissions associated with business travel and also includes electricity consumption attributable to our utilisation of servers within our third-party data centre provider. Reported energy consumption and associated carbon emissions includes energy consumption from our leased offices in Toronto.

Activity	**Baseline year 2021**
In metric tonnes CO_2e	
Total Scope 1 emissions (natural gas)	**14.18**
Total Scope 2 emissions (electricity consumption)	**6.33**
Total Scope 3 emissions (transmissions and distribution, non-controlled electricity, homeworkers, well to tank, flights, hire car, taxi and grey fleet travel)	**45.33**
Total gross (Scope 1, 2 & 3) location-based emissions	**65.84**
Intensity ratios	
tCO_2e (gross Scope 1, 2 & 3) per employee	**0.49**
tCO_2e (gross Scope 1, 2 & 3) per US$m revenue	**0.73**
Underlying energy consumption (kWh)	
Total global energy consumed	**285,414**
Total UK energy consumed	**273**
UK-based emissions	**0.1%**
UK-based energy consumption	**0.1%**

As from 1 July 2021, we contracted with Bullfrog Power Inc., in Toronto, Canada, to purchase Renewable Energy Certificates (RECs), sourced from projects that meet or exceed environmental criteria as defined by EcoLogo®. Our purchases of RECs equated to 194.4 MWh, which represents a substantial portion of our total energy consumption and considerably exceeds our energy consumption attributable to our Scope 1 and Scope 2 emissions.

In light of the impact of COVID-19 and the limited ability of our employees to work from our offices or undertake business travel during FY 2021, we were constrained in our ability to implement any significant energy efficiency measures. As travel constraints are now lifting and employees are increasingly returning to our offices, we are keeping under review any opportunities to implement such measures going forward.

Financial review

"Our growth is anchored in the exponential growth of data. We enable data to travel faster, more reliably and at lower power."

Daniel Aharoni
Chief Financial Officer

Contracted order book and backlog
The Group generated bookings of US$244.7m in 2021, an increase of 226% from 2020 (US$75.0m), including US$147.8m of bookings from recurring revenue subscription licences from our joint venture, WiseWave, and our reseller in China, VeriSilicon. Excluding estimates of potential future royalties, our 2021 bookings were US$220.8m, an increase of 325% from 2020 (US$52.0m). Our 2021 bookings do not include the US$105m extension option from WiseWave, which, if triggered, provides WiseWave with access to future generations of our technology, nor any potential royalty contributions from WiseWave or VeriSilicon.

Excluding China, our total bookings for 2021 were US$87.9m, an increase of 47% from 2020 (US$59.8m). Excluding estimates of royalties, we generated 92% year-on-year growth in bookings from North American customers.

Our backlog (contracted bookings over the life of the Group not yet recognised as revenue) as at end-2021 was US$219.5m including royalties (US$168.6m excluding royalties), of which around 50% represents recurring revenue subscription deals with WiseWave and through VeriSilicon.

In 2021, we secured orders from ten new end-customers and repeat business from eight existing customers. We won 16 new licence sales, including our first two chiplet IP deals in Q4 2021. Excluding subscription licence deals which give access to a broad portfolio of our IP at multiple process nodes, nearly 80% of our bookings in 2021 were for process nodes below 7nm.

Revenues
Revenues for 2021 reached US$89.9m, 173% growth compared to US$32.9m in 2020, and reflect significant diversification.

- Customers – in 2021, we recognised revenues from 20 end-customers (21 excluding the impact of two of our customers merging). This compares to eleven customers in 2020. Our top three customers represented 53% of 2021 sales (28% excluding WiseWave) versus 52% in 2020 and one of the top three customers in 2021 was also a top three customer in 2020.
- End-markets – in 2021, we generated revenues from customers across our key end-markets of data networking (including optical), cloud compute and solid state storage as well as AI and 5G wireless. Revenues from data networking, cloud compute and solid state storage represented over 75% of our 2021 sales.
- Regions – in 2021, our revenues were well balanced between North America and Asia, with 42% of revenues to North America, 48% to China and 10% to APAC excluding China. In 2020, 59% of our sales were to North American customers, 25% to China and 16% to APAC excluding China. The increased weighting to China in 2021 reflects first revenue recognition in H2 2021 of the agreements with WiseWave and VeriSilicon. Excluding WiseWave, 63% of FY 2021 sales were to North American customers, 22% to China and 15% to APAC excluding China. As we have previously stated, revenues from China in the medium and long-term are expected to be less than 30% of total Group revenues.
- Subscription licence – in respect of the WiseWave five-year subscription licence agreement, in H2 2021 we invoiced US$24.0m (gross of 10% withholding tax) and recognised US$27.7m, with revenue recognition based on our deliveries of IP to WiseWave. In respect of the three-year exclusive reseller arrangement with VeriSilicon, we have been invoicing and collecting on a quarterly basis since February 2021. In FY 2021, we invoiced US$8.8m and recognised US$8.9m of revenue related to the VeriSilicon reseller agreement.

Substantially all of our revenue in both 2020 and 2021 was generated from one-time licence and licence-related (non-recurring engineering and support) and subscription licence activities. We did not recognise any royalty sales in 2020 or 2021 and given the long design cycles from our customers, do not expect to recognise material royalties until FY 2024 at the earliest.

Operating expenses and profitability
In 2021, we maintained our gross margins at 94%, with cost of sales primarily reflecting sales commissions as well as costs related to the development of test chips. Our adjusted EBITDA[1] was US$51.8m (58% margin) compared to adjusted EBITDA of US$19.3m (59% margin) in 2020.

Reflecting the rapid scaling of the business, in 2021, our operating expenses totalled US$48.7m, or US$36.1m excluding non-recurring IPO costs, one-time M&A/professional expenses, share-based payment costs and foreign exchange gains. This compares to $14.6m in 2020 ($13.0m excluding share-based payment costs and foreign exchange losses).

Of US$48.7m in operating expenses in 2021, US$29.4m (33% of sales) related to R&D/engineering, US$5.4m (6% of sales) related to general and administrative expenses and US$1.3m (1% of sales) related to sales and marketing expenditure. US$12.6m related to other items comprising non-recurring IPO costs, one-time M&A/professional expenses, share-based payment costs and exchange gains. In 2020, operating expenses totalled US$14.6m, US$1.5m of which reflect foreign exchange gains and share-based payments, and US$8.8m (27% of sales) related to R&D/engineering, US$3.4m (10% of sales) related to general and administrative and US$0.8m (2% of sales) related to sales and marketing.

This increase in our operating expenses was primarily due to the increase in our headcount to 154 heads at end 2021 from 72 at end 2020, together with associated software tool costs which scale with our R&D/engineering headcount, as well as additional professional costs required as a publicly listed company following our IPO. To capitalise on our future growth opportunities, we were able to expand headcount significantly ahead of our budget and estimate that the incremental expenses from our accelerated hiring during 2021 exceeded US$4.0m.

Whilst this negatively impacted our full-year margins, our ability to continue to attract and incentivise high calibre engineering talent, reinforced by our IPO, will enable us to expand and accelerate our product development roadmap. We have continued the pace of hiring in 2022 and our total headcount as at end-February 2022 was 184.

The increase in share-based payments, from US$0.6m in 2020 to US$6.1m in 2021, was due to our headcount expansion and significantly higher exercise prices for share-based awards given to employees during the year.

In 2020, as a private Canadian company with limited visibility on the duration, extent and impact of the COVID-19 pandemic on our business, we received US$1.1m in grants from the Canadian Government Canadian Emergency Wage Subsidy (CEWS) to support wages to employees. In early H1 2021, prior to our IPO, we received a further US$55,000. Post-IPO, although entitled to further grants in Canada, we have elected not to receive them. No government assistance has been requested nor taken in the UK.

In 2021, US$2.5m represented depreciation on right-of-use assets, namely our premises and test equipment which we lease (2020: US$0.7m). We saw a significant increase in test equipment leased due to the increase in the number of customer engagements and engineering staff. In addition, we commenced a lease on larger premises in Toronto, Canada, in November 2020, resulting in a full year of depreciation in 2021. In September 2021, we signed a five-year lease for offices in San Jose, California. Based in Silicon Valley and near many of our customers, these offices will serve as our flagship US demonstration labs. Fit-out is ongoing and we expect to occupy the offices in Q2 2022.

The total one-time costs associated with our IPO on the London Stock Exchange were US$30.3m, of which US$20.3m was set off against equity on our balance sheet and US$10.0m was expensed through our income statement.

As at year end, the Group owned 42.5% of WiseWave, a newly formed company established in China in Q4 2021 to develop and sell silicon products incorporating silicon IP licensed from the Group. We equity account for the investment as a joint venture, resulting in a US$12.9m loss. The five-year subscription licence agreement is being capitalised and amortised over the life of the agreement by WiseWave.

Our tax expense for the year was US$13.7m, being 38% of our operating profit of US$36.0m. Substantially all of our revenue was generated from Alphawave IP Inc, based in Canada, which has a corporation tax rate of 26.5%. Our higher tax charge is a result of expenses relating to IPO costs, M&A professional fees, share-based payments and FX gains of US$12.6m which are disallowable for corporation tax purposes.

Our profit after tax for FY 2021, which is stated after share-based payments, exchange gains/losses and one-time costs relating to our IPO, one-time M&A and professional fees and our share of the post-tax loss of WiseWave of US$12.9m, was US$9.4m, compared to US$12.2m in 2020. On an adjusted basis[1], which is stated after our US$12.9m share of the post-tax loss of WiseWave, our equity-accounted joint venture, our profit after tax for FY 2021 was US$22.0m, an increase of 60% compared to US$13.8m in FY 2020.

The exchange loss of US$23.1m is a result of our GBP proceeds at IPO being translated into US$, our presentational currency, at the foreign exchange rate on the date of the IPO, and being re-translated, again for presentational purposes, into US$ at the year end. Over this period the US$ strengthened from 1.4134 to 1.3513, a 4.6% increase.

Balance sheet, liquidity and cash flow

As at end-December 2021, we held US$501.0m in cash and had no borrowings. Our cash increased by US$486.9m between end-December 2020 and end-December 2021, primarily as a result of the net IPO proceeds received, after issuance costs, of US$485.9m. In addition, the Company benefited from a stock stabilisation programme which resulted in a US$22.2m cash receipt.

Between end-December 2020 and end-December 2021, our trade and other receivables increased from US$6.2m to US$13.1m. This increase is mostly due to Group trade receivables increasing from US$5.2m to US$12.1m as a result of increased sales in 2021.

Between end-December 2020 and end-December 2021, our intangible assets increased from US$0.1m to US$1.2m. Our intangible assets comprise IP being developed by a third-party vendor and represents instalments paid towards the development which is carried at cost. No amortisation is recorded as the intangible asset is not yet available for use. The increase in 2021 is due to twelve months' worth of further development in contrast to two months at the end of H2 2020 when the development commenced.

Our accrued revenue, where revenue recognition conditions are met under IFRS 15 but we have not billed or collected any amount, increased to US$31.7m at end-December 2021 from US$10.3m at end-December 2020. This increase is a function of our revenue growth and due to the timing of invoicing milestones on specific contracts. Since our 2021 year end, and as at 31 March 2022, we have billed a further US$15.6m of this accrued revenue balance, as invoicing milestones have now been met.

Our investments in equity-accounted associates of US$9.4m represents the value of our investment in WiseWave, based upon a 42.5% share of WiseWave's net assets as at 31 December 2021.

Between end-December 2020 and end-December 2021, our trade and other payables increased from US$2.2m to US$5.8m. This increase is predominantly due to accruals increasing from US$1.0m to US$4.0m, from accrued advisory fees of US$0.4m, design automation tools of US$1.5m and accrued sales commissions of US$1.6m incurred in FY 2021 but not paid until FY 2022.

Our deferred revenue liability, where we have invoiced or received money for products or services where revenue recognition conditions are not met, increased to US$12.7m at end-December 2021 from US$7.4m at end-December 2020. This increase is a function of our revenue growth and due to invoicing being ahead of revenue recognition on specific contracts.

Flexible spending accounts, which represent non-current deferred income, and which increased to US$6.8m as at end-December 2021 from US$2.3m as at end-December 2020, are contracts with customers who have committed to regular periodic payments to us over the term of the contract. These payments are not in respect of specific licences or other deliverables, but can be used as credit against future deliverables. We have flexible spending accounts with customers with whom we work on multiple projects and who prefer regular periodic billing and payments rather than milestone-based billing. Although we have been invoicing and collecting under these contracts, the revenue recognition conditions may not have been met which enable us to recognise these billings as revenue.

Our pre-tax operating cash flow for 2021 was US$26.5m (which includes one-time payments of approximately US$10.0m relating to our IPO expenses), an increase of 124% compared to US$11.8m of pre-tax operating cash flow in 2020. Our working capital in 2021 increased by US$15.6m, compared to an increase of US$4.7m in FY 2020, primarily due to an increase in accrued revenue and trade and other receivables, offset by an increase in deferred revenue and flexible spending accounts, as detailed above.

After tax, we generated cash from operations of US$18.9m in 2021, compared to US$10.3m in 2020. Our capital expenditure during 2021 totalled US$1.1m (US$0.4m in 2020) as a result of computing equipment purchased for new hires and fit-out costs for our new office space in Toronto. In Q4 2021, we also made the first tranche of our investment into WiseWave totalling US$22.4m for a 42.5% equity interest, with Wise Road Capital contributing US$30.3m. As disclosed in our IPO Prospectus, Alphawave IP has committed to invest up to US$170m into WiseWave. Finally, we recorded an FX loss of US$22.5m predominantly resulting from the translation of our net IPO GBP proceeds into our presentational currency of US$ at different points in time.

Capital allocation and dividends
The Company's capital allocation policy is focused on investing in our future growth and deploying our financial resources to rapidly expand our business, as demonstrated by our recent acquisitions. Given our growth strategy, we do not intend to pay dividends in the short or medium term.

Finally, as further detailed below, the Directors have adopted the going concern basis of accounting.

Daniel Aharoni
Chief Financial Officer

29 April 2022

2. See note 4 (Alternative Performance Measures) of the financial statements for reconciliation of EBITDA to adjusted EBITDA.
3. See note 4 (Alternative Performance Measures) of the financial statements for reconciliation of profit after tax to adjusted profit after tax.

Financial statements

Consolidated statement of comprehensive income for the year ended 31 December 2021

	Note	**Year ended 31 December 2021**	Year ended 31 December 2020
Continuing operations	Note	**US$'000**	US$'000
Revenue	5	**89,931**	32,946
Cost of sales		**(5,199)**	(1,547)
Gross profit		**84,732**	31,399
Research and development/engineering	6	**(29,444)**	(8,816)
Sales and marketing		**(1,275)**	(766)
General and administration		**(5,364)**	(3,428)
Other expenses		**(12,614)**	(1,547)
Operating profit		**36,035**	16,842
Other expenses charged in arriving at operating profit:			
Non-recurring Initial Public Offering costs	11	**(9,961)**	-
M&A costs/professional costs		**(533)**	-
Share-based payment	25	**(6,143)**	(565)
Exchange gain/(loss)		**4,023**	(982)
Other expenses		**(12,614)**	(1,547)
Finance income	10	**312**	198
Finance expense	10	**(320)**	(195)
Share of post-tax loss of equity-accounted joint ventures	17	**(12,939)**	-
Profit before tax		**23,088**	16,845
Tax expense	12	**(13,657)**	(4,640)
Profit for the year		**9,431**	12,205
Other comprehensive (expense)/income			
Exchange (losses)/gains arising on translation of foreign operations		**(23,096)**	1,378
Tax relating to other comprehensive (expense)/income		**-**	-
Other comprehensive (expense)/income for the period, net of tax		**(23,096)**	1,378
Total comprehensive (expense)/income for the year		**(13,665)**	13,583
Profit per ordinary share attributable to the shareholders (expressed in cents per ordinary share)			
Basic earnings per share (US$ cents)	13	1.51	2.27
Diluted earnings per share (US$ cents)	13	1.34	1.94

The accompanying notes below form part of these financial statements.

Consolidated statement of financial position
as at 31 December 2021

	Note	**31 December 2021 US$'000**	31 December 2020 US$'000
Assets			
Current assets			
Trade and other receivables	18	**13,103**	6,224
Accrued revenue	5	**31,719**	10,328
Taxes receivable		**2,605**	2,553
Cash and cash equivalents	32	**500,964**	14,039
Total current assets		**548,391**	33,144
Non-current assets			
Property and equipment	14	**1,626**	412
Intangible assets	15	**1,167**	140
Right-of-use assets	16	**7,672**	6,915
Investments in equity-accounted associates	17	**9,421**	-
Total non-current assets		**19,886**	7,467
Total assets		**568,277**	40,611
Liabilities			
Current liabilities			
Trade and other payables	19	**5,805**	2,207
Lease liabilities	16	**2,160**	1,672
Deferred revenue	5	**12,661**	7,381
Income tax payable		**6,970**	3,550
Flexible spending account	5	**6,819**	2,335
Loans and borrowings	20	**-**	27
Total current liabilities		**34,415**	17,172
Non-current liabilities			
Loans and borrowings	20	**-**	27
Lease liabilities	16	**5,668**	5,129
Deferred income taxes	22	**422**	492
Total non-current liabilities		**6,090**	5,648
Total liabilities		**40,505**	22,820
Net assets		**527,772**	17,791
Issued capital and reserves attributable to owners of the parent			
Share capital	23	**9,399**	1,881
Preference shares	23	**-**	-
Share premium account	24	**-**	-
Share-based payment reserve	25	**4,777**	331
Merger reserve	24	**(793,216)**	-
Foreign exchange reserve	24	**(21,718)**	1,378
Retained earnings	24	**1,328,530**	14,201
Total equity		**527,772**	17,791

The financial statements were approved and authorised for issue by the Board of Directors on 29 April 2022 and were signed on its behalf by:
D Aharoni
Director

The accompanying notes below form part of these financial statements.

Company statement of financial position
as at 31 December 2021

	Note	31 December 2021 US$'000
Assets		
Current assets		
Trade and other receivables	18	**146**
Amounts owed by Group undertakings		**367**
Taxes receivable		**205**
Cash and cash equivalents	32	**463,360**
Total current assets		**464,078**
Non-current assets		
Investments in subsidiaries	17	**22,391**
Amounts owed by Group undertakings		**22,997**
Total non-current assets		**45,388**
Total assets		**509,466**
Liabilities		
Current liabilities		
Trade and other payables	19	**1,013**
Amounts owed to Group undertakings		**150**
Income tax payable		**253**
Total current liabilities		**1,416**
Total liabilities		**1,416**
Net assets		**508,050**
Issued capital and reserves attributable to owners of the parent		
Share capital	23	9,399
Preference shares	24	-
Share premium account	24	-
Share-based payment reserve	25	4,497
Merger reserve	24	(777,751)
Foreign exchange reserve	24	(23,486)
Retained earnings	24	1,295,391
Total equity		508,050

The Company has taken advantage of the exemption allowed under section 408 of the Companies Act 2006 and has not presented its own statement of comprehensive income in these financial statements. The loss of the Company for the period was US$8.5m.

The financial statements on were approved and authorised for issue by the Board of Directors on 29 April 2022 and were signed on its behalf by:

D Aharoni
Director

The accompanying notes below form part of these financial statements.

Consolidated statement of cash flows for the year ended 31 December 2021

	Note	**Year ended 31 December 2021 US$'000**	Year ended 31 December 2020 US$'000
Cash flows from operating activities			
Profit for the year		**9,431**	12,205
Adjusted for:			
Income tax expense	12	**13,731**	4,379
R&D tax credit		**(3,039)**	(1,802)
Depreciation of property and equipment	14	**642**	172
Depreciation of right-of-use asset	16	**2,485**	740
Share of loss in joint venture	17	**12,939**	-
Share-based payment	25	**6,143**	565
Subcontracting expense obtained for common shares		**-**	30
Deferred income taxes	12	**(74)**	261
Finance income	10	**(312)**	(198)
Finance cost	10	**26**	113
Lease interest	10	**294**	82
Foreign exchange (gain)		**(112)**	-
		42,154	16,547
Changes in working capital			
(Increase) in trade and other receivables		**(6,879)**	(3,160)
(Increase) in accrued revenue		**(21,391)**	(9,052)
Increase in trade and other payables		**2,859**	1,841
Increase in deferred revenue and flexible spending account		**9,764**	5,654
		(15,647)	(4,717)
Cash generated from operating activities before tax		**26,507**	11,830
Income tax paid		**(3,383)**	(582)
Withholding taxes paid		**(4,232)**	(935)
Net cash generated from operating activities		**18,892**	10,313

The accompanying notes below form part of these financial statements.

	Note	**Year ended 31 December 2021 US$'000**	Year ended 31 December 2020 US$'000
Cash flows from investing activities			
Purchase of property and equipment	32, 14	**(1,129)**	(368)
Collection of notes receivables		**-**	36
Purchase of intangible assets	15	**(1,038)**	(133)
Interest received	10	**312**	198
Investment in joint venture	17	**(22,360)**	-
Net cash used in investing activities		**(24,215)**	(267)
Cash flows from financing activities			
Issuance of common shares - Initial Public Offering	23	**509,003**	-
Issuance of common shares	23	**1,282**	864
Initial Public Offering share issuance costs	23	**(20,308)**	-
Exercise of options	25	**5,089**	-
Proceeds from Initial Public Offering stabilisation	23	**22,238**	-
Interest paid	10	**(26)**	(113)
Decrease in bank indebtedness		**(54)**	(2,169)
Increase in long-term debt	20	**-**	52
Repayment of principal under lease liabilities	16	**(2,494)**	(1,001)
Net cash generated from/(used in) financing activities		**514,730**	(2,367)
Net increase in cash and cash equivalents		**509,407**	7,679
Cash and cash equivalents at start of year		**14,039**	5,626
Effects of foreign exchange on cash and cash equivalents		**(22,482)**	734
Cash and cash equivalents at end of year	32	**500,964**	14,039

The accompanying notes below form part of these financial statements.

Consolidated statement of changes in equity for the year ended 31 December 2021

	Note	Ordinary share capital US$'000	Preference share capital US$'000	Share premium account US$'000	Share-based payment reserve US$'000	Merger reserve US$'000	Currency translation reserve US$'000	Retained earnings US$'000	Total equity US$'000
Balance at 1 January 2021		**1,881**	**-**	**-**	**331**	**-**	**1,378**	**14,201**	**17,791**
Reorganisation accounting		**(1,881)**	**-**	**-**	**-**	**-**	**-**	**-**	**(1,881)**
		-	**-**	**-**	**331**	**-**	**1,378**	**14,201**	**15,910**
Comprehensive income for the year									
Profit for the year		**-**	**-**	**-**	**-**	**-**	**-**	**9,431**	**9,431**
Other comprehensive expense		**-**	**-**	**-**	**-**	**-**	**(23,096)**	**-**	**(23,096)**

Total comprehensive income/(expense) for the year		**-**	**-**	**-**	**-**	**-**	**(23,096)**	**9,431**	**(13,665)**
Contributions by and distributions to owners									
Issue of shares, primary	23	**124,147**	**71**	**384,856**	**-**	**-**	**-**	**-**	**509,074**
Issue of shares, reorganisation	23	**796,958**	**-**	**-**	**-**	**(793,216)**	**-**	**-**	**3,742**
Issue of shares, other	23	**313**	**-**	**969**	**-**	**-**	**-**	**-**	**1,282**
Exercise of share options	25	**4,064**	**-**	**-**	**(1,060)**	**-**	**-**	**1,060**	**4,064**
Exercise of share options, pre reorganisation		**-**	**-**	**-**	**(637)**	**-**	**-**		**(637)**
Effect of exercise price below nominal value	23	**14,381**	**-**	**(14,381)**	**-**	**-**	**-**	**-**	**-**
Net costs on issuance of shares relating to Initial Public Offering	23	**-**	**-**	**1,930**	**-**	**-**	**-**	**-**	**1,930**
Capital reduction		**(930,464)**		**(373,374)**				**1,303,838**	**-**
Share-based payments	25	**-**	**-**	**-**	**6,143**	**-**	**-**	**-**	**6,143**
Shares redeemed		**-**	**(71)**	**-**	**-**	**-**	**-**	**-**	**(71)**
Total contributions by and distributions to owners		**9,399**	**-**	**-**	**4,446**	**(793,216)**	**-**	**1,304,898**	**525,527**
Balance at 31 December 2021		**9,399**	**-**	**-**	**4,777**	**(793,216)**	**(21,718)**	**1,328,530**	**527,772**
Balance at 1 January 2020		462	-	-	35	-	-	1,996	2,493
Comprehensive income for the year									
Profit for the year		-	-	-	-	-	-	12,205	12,205
Other comprehensive income		-	-	-	-	-	1,378	-	1,378
Total comprehensive income for the year					-	-	1,378	12,205	13,583
Contributions by and distributions to owners									

Issue of shares	1,419	(269)	-	-	1,150
Share-based payments	-	565	-	-	565
Total contributions by and distributions to owners	1,419	296	-	-	1,715
Balance at 31 December 2020	1,881	331	1,378	14,201	17,791

The tax impact of other comprehensive income/expense is US$nil.

The accompanying notes below form part of these financial statements.

Company statement of changes in equity for the period ended 31 December 2021

	Note	Ordinary share capital US$'000	Preference share capital US$'000	Share premium account US$'000	Share-based payment reserve US$'000	Merger reserve US$'000	Currency translation reserve US$'000	Retained earnings US$'000	Total equity US$'000
Balance at 9 December 2020		-	-	-	-	-	-	-	-
Comprehensive expense for the period									
Loss for the period		-	-	-	-	-	-	(8,447)	(8,447)
Other comprehensive expense		-	-	-	-	-	(23,486)	-	(23,486)
Total comprehensive expense for the period		-	-	-	-	-	(23,486)	(8,447)	(31,933)
Contributions by and distributions to owners									
Issue of shares, Primary	23	**124,147**	**71**	**384,856**	**-**	**-**	**-**	**-**	**509,074**
Issue of shares, Secondary	23	**796,958**	**-**	**-**	**-**	**-**	**-**	**-**	**796,958**
Issue of shares, other	23	**313**	**-**	**969**	**-**	**-**	**-**	**-**	**1,282**
Exercise of share options	25	**4,064**	**-**	**-**	**-**	**-**	**-**	**-**	**4,064**
Reorganisation accounting	23	**-**	**-**	**-**	**-**	**(777,751)**	**-**	**-**	**(777,751)**
Effect of exercise price below nominal value	23	**14,381**	**-**	**(14,381)**	**-**	**-**	**-**	**-**	**-**
Net costs on issuance of shares relating to Initial Public Offering		**-**	**-**	**1,930**	**-**	**-**	**-**	**-**	**1,930**
Capital reduction		**(930,464)**		**(373,374)**				**1,303,838**	**-**
Share-based payments	25	**-**	**-**	**-**	**4,497**	**-**	**-**	**-**	**4,497**
Shares redeemed	23	**-**	**(71)**	**-**	**-**	**-**	**-**	**-**	**(71)**
Total contributions by and distributions to owners		**9,399**	**-**	**-**	**4,497**	**(777,751)**	**-**	**1,303,838**	**539,983**
Balance at 31 December 2021		**9,399**	**-**	**-**	**4,497**	**(777,751)**	**(23,486)**	**1,295,391**	**508,050**

The tax impact of other comprehensive income/expense is US$nil.

The accompanying notes below form part of these financial statements.

Notes to the consolidated financial statements for the year ended 31 December 2021

1 General information

Alphawave IP Group plc (the 'Company') is a public limited company whose shares are listed on the main market of the London Stock Exchange and is incorporated and domiciled in England and Wales. The address of its registered office is 6th Floor, 65 Gresham Street, London, United Kingdom, EC2V 7NQ.

The principal activities of the Company and its subsidiaries (the 'Group') are detailed in the Directors' report.

2 Accounting policies

The preliminary announcement does not constitute the Company's statutory accounts for the years ended 31 December 2021 or 2020. Statutory accounts for 2021 will be delivered to the registrar of companies in due course. The auditor has reported on those accounts: their reports were (i) unqualified, (ii) did not include a reference to any matters to which the auditor drew attention by way of emphasis without qualifying their report and (iii) did not contain a statement under section 498 (2) or (3) of the Companies Act 2006.

Basis of preparation

The principal accounting policies adopted in the preparation of the consolidated financial statements are set out below. The policies have been consistently applied to all the years presented, unless otherwise stated.

The Company was incorporated on 9 December 2020. Therefore, the Company results represent the period from incorporation to 31 December 2021.

The consolidated financial statements are presented in US$, which is the Group's presentational currency. Each of the five trading entities in the Group have different functional currencies, with Alphawave IP Inc. being accounted for in CAD$, Alphawave IP Corp., Alphawave IP Limited and Alphawave IP (BVI) Ltd in US$ and the Company in GBP. The currencies used by each entity reflect the functional currency of that entity. However, it was decided to use US$ as the Group's presentational currency as substantially all of the Group's revenues and a significant part of the costs are denominated in US$ and it is typically the presentational currency used across the semiconductor industry.

Amounts are rounded to the nearest thousand, unless otherwise stated.

The consolidated financial statements of the Group (the 'consolidated financial statements') have been prepared in accordance with international accounting standards in accordance with UK-adopted international accounting standards ('UK-adopted IFRS'). The Company has elected to prepare its parent company financial statements in accordance with FRS 101.

In preparing separate financial statements, the Company has taken advantage of certain disclosure exemptions conferred by FRS 101:

- certain disclosures required under IFRS 15 Revenue from Contracts from Customers, including disaggregation of revenue, details of changes in contract assets and liabilities, and details of incomplete performance obligations;
- paragraphs 91 to 99 of IFRS 13 Fair value measurement (disclosure of valuation techniques and inputs used for fair value measurement of assets and liabilities);
- the requirement in paragraph 38 of IAS 1 Presentation of Financial Statements to present comparative information in respect of:
- paragraph 79(a)(iv) of IAS 1;
- paragraph 73(e) of IAS 16 Property, Plant and Equipment;
- the requirements of paragraphs 10(d), 10(f), 16, 38A, 38B, 38C, 38D, 40A, 40B, 40C, 40D, 111 and 134-136 of IAS 1 Presentation of Financial Statements;
- the requirements of IAS 7 Statement of Cash Flows;
- the requirements of paragraphs 30 and 31 of IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors;
- the requirements of paragraphs 17 of IAS 24 Related Party Disclosures to disclose key management personnel compensation and 18A of IAS 24 Related Party Disclosures to disclose amounts incurred by the entity for provision of key management personnel services that are provided by a separate management entity; and
- the requirements in IAS 24 Related Party Disclosures to disclose related party transactions entered into between two or more members of a group, provided that any subsidiary which is a party to the transaction is wholly owned by such a member.

The Company has taken advantage of the exemption allowed under section 408 of the Companies Act 2006 and has not presented its own statement of comprehensive income in these financial statements.

In addition, and in accordance with FRS 101, further disclosure exemptions have been applied because equivalent disclosures are included in the consolidated financial statements:

- the requirements of IFRS 7 Financial Instruments: Disclosures.

Where required, equivalent disclosures are given in the Group financial statements.

The preparation of financial statements in compliance with adopted IFRS requires the use of certain critical accounting estimates. It also requires Group management to exercise judgement in applying the Group's accounting policies. The areas where significant judgements and estimates have been made in preparing the financial statements and their effect are disclosed in note 3.

Basis of measurement

The financial statements have been prepared on the historical cost basis except where the IFRS requires an alternative treatment, including certain financial instruments.

Changes in accounting policies

New standards, interpretations and amendments

There were a number of amendments to existing standards which were effective in the year ended 31 December 2021, none of which were relevant to the Group.

New standards, interpretations and amendments not yet effective

There are a number of standards, amendments to standards, and interpretations which have been issued by the IASB that are effective in future accounting periods that the Group has decided not to adopt early.

The following amendments are effective for the period beginning 1 January 2022:

- Onerous Contracts – Cost of Fulfilling a Contract (Amendments to IAS 37);
- Property, Plant and Equipment: Proceeds before Intended Use (Amendments to IAS 16);
- Annual Improvements to IFRS Standards 2018-2020 (Amendments to IFRS 1, IFRS 9, IFRS 16 and IAS 41); and
- References to Conceptual Framework (Amendments to IFRS 3).

The following amendments are effective for the period beginning 1 January 2023:

- Disclosure of Accounting Policies (Amendments to IAS 1 and IFRS Practice Statement 2);
- Definition of Accounting Estimates (Amendments to IAS 8); and
- Deferred Tax Related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12).

In January 2020, the IASB issued amendments to IAS 1, which clarify the criteria used to determine whether liabilities are classified as current or non-current. These amendments clarify that current or non-current classification is based on whether an entity has a right at the end of the reporting period to defer settlement of the liability for at least twelve months after the reporting period. The amendments also clarify that 'settlement' includes the transfer of cash, goods, services or equity instruments unless the obligation to transfer equity instruments arises from a conversion feature classified as an equity instrument separately from the liability component of a compound financial instrument. The amendments were originally effective for annual reporting periods beginning on or after 1 January 2022. However, in May 2020, the effective date was deferred to annual reporting periods beginning on or after 1 January 2023.

In response to feedback and enquiries from stakeholders, in December 2020, the IFRS Interpretations Committee (IFRIC) issued a Tentative Agenda Decision, analysing the applicability of the amendments to three scenarios. However, given the comments received and concerns raised on some aspects of the amendments, in April 2021, IFRIC decided not to finalise the agenda decision and referred the matter to the IASB. In its June 2021 meeting, the IASB tentatively decided to amend the requirements of IAS 1 with respect to the classification of liabilities subject to conditions and disclosure of information about such conditions and to defer the effective date of the 2020 amendment by at least one year.

The Directors are currently assessing the impact of these new accounting standards and amendments. The Directors do not expect any standards issued by the IASB, but not yet effective, to have a material impact on the Group.

Basis of consolidation

Where the Company has control over an investee, it is classified as a subsidiary. The Company controls an investee if all three of the following elements are present: power over the investee, exposure to variable returns from the investee, and the ability of the investor to use its power to affect those variable returns. Control is reassessed whenever facts and circumstances indicate that there may be a change in any of these elements of control.

The consolidated financial statements present the results of the Company and its subsidiaries (the 'Group') as if they formed a single entity. Intercompany transactions and balances between Group companies are therefore eliminated in full.

Joint ventures are accounted for using the equity method, where the Group's share of post-acquisition profits and losses and other comprehensive income is recognised in the consolidated statement of comprehensive and other comprehensive income (except for losses in excess of the Group's investment in the joint venture unless there is an obligation to make good those losses).

Business combinations

The Company was incorporated on 9 December 2020. On 14 May 2021, a reorganisation of Alphawave IP's corporate structure was completed, which resulted in the Company being the sole owner of Alphawave IP Inc. Pursuant to an agreement between the Company, Alphawave IP Inc. and each of the members of Alphawave IP Inc., the issued and outstanding Alphawave IP Inc. common shares were exchanged for 20 ordinary shares of the Company with a nominal value of GBP1. As such the Company issued 563,859,059 ordinary shares increasing its share capital by this amount. At the time of the exchange, the net assets of Alphawave IP Inc. had a book value of GBP13,589,766 which was posted as an investment in the books of the Company and the difference posted to the merger reserve, in line with merger accounting as described below.

The merger reserve in the consolidated financial statements reflects the difference between the share capital of the shares issued in the Company US$796,958 in exchange for the shares in Alphawave IP Inc. and the share capital of Alphawave IP Inc. US$3,742 (as at the date of the reorganisation).

The Group reconstruction has been accounted for in accordance with the principles of merger accounting, as a common control transaction under IFRS 3.B1. Alphawave IP Inc. was controlled by the same individuals as Alphawave IP Group plc previously, and their rights relative to each other were unchanged. Therefore, the shareholders have a continuing interest in the business, both before and after its transfer. Consequently, these financial statements have been prepared as if Alphawave IP Group plc had always been the holding company.

The Company was admitted to listing on the London Stock Exchange on 18 May 2021

There has been no recognition of acquisitions in the year that have been agreed but not closed out by the year end.

Going concern

As of 31 December 2021, the Group had cash and cash equivalents of US$501m. Considering the Group's financial position as of 31 December 2021 and its principal risks and opportunities, a going concern analysis has been prepared for the twelve-month period from the date of signing the consolidated financial statements (the 'going concern period') utilising realistic scenarios and applying a severe but plausible downside scenario.

The Directors' assessment of the Group's ability to continue to adopt the going concern basis of accounting included:

- obtaining and reviewing management's base case scenario, including the twelve-month period from the date of signing the consolidated financial statements, together with the basis for key trading and financial assumptions;
- obtaining and reviewing management's downside scenarios over the forecast period, including the extreme scenario that the Group fails to win any new orders and executes only against its existing contracted orders with no significant reduction in its operating cost base;
- considering whether the assumptions are consistent with our understanding of the business obtained during the course of the audit and external circumstances arising from the impact of COVID-19, noting that the impact on the business thus far from COVID-19 has not been material. Beginning in March 2020, the governments of Canada and Ontario, as well as foreign governments, instituted emergency measures as a result of the COVID-19 virus. The Group has continued to operate with limited impact on its financial position and cash flows; and
- ensuring that post-year end events have been factored into management's forecasts, including completion of the acquisition of Precise-ITC in January 2022 and assuming completion of the acquisition of OpenFive.

Even under the severe downside scenario, the analysis demonstrates the Group can continue to maintain sufficient liquidity headroom and continue to comply with all financial obligations. Therefore, the Directors believe the Group is adequately resourced to continue in operational existence for at least the twelve-month period from the date of signing the consolidated financial statements. Accordingly, the Directors considered it appropriate to adopt the going concern basis of accounting in preparing the consolidated financial statements.

Basis of organisation

The Group's management has performed its evaluation for reporting its reportable segments, if any, and concluded that the Group's business constitutes only one operating segment as all its products and services are of similar nature and focus on customers from the same industry. Its entire revenues, expenses, assets and liabilities pertain to the one business as a whole. This has been ratified by the chief operating decision-makers (CODMs), Tony Pialis (CEO) and Daniel Aharoni (CFO), who are deemed best placed to evaluate the entity's operating results to assess performance and to allocate resources. Therefore, there was no information to be disclosed for operating segments.

Revenue recognition

Revenue is recognised in accordance with IFRS 15 Revenue From Contracts with Customers, upon transfer of control of promised products or services to customers in an amount that reflects the consideration the Group expects to be entitled to in exchange for those products or services.

The Group enters into contracts with customers to license its intellectual property (IP) products, which consist primarily of software files that customers use to create, integrate and operate functional building blocks within a semiconductor device. Such contracts can include various combinations of IP products and support, some of which are distinct and are accounted for as separate performance obligations.

IP products

The Group's IP products are typically licensed under standard pay-per-use licence agreements and are delivered over the period its customers are developing their semiconductor products, which can span several years. The Group categorises its standard pay-per-use licences into three types: derivative, migration and R&D:

- derivative licences are utilised when the licensed IP is derived from an existing IP already developed for a specific foundry manufacturing node;
- migration licences are utilised when there is a requirement to migrate existing IP products to new foundry manufacturing nodes; and
- R&D licences are utilised for new IP products, depending on the level of complexity, that are being developed.

Due to the complexity of the IP products being delivered and the need for customers to integrate the IP products with other IP building blocks in their chip designs, the Group's IP products are typically delivered in multiple stages, referred to as IP views, all of which require some level of customisation and/or configuration. The delivery of these IP views occurs over the development phase of the customers' chip design.

Although delivery of the licensed IP products is split over multiple deliveries of IP views, each of these deliveries is not considered distinct as each IP view is highly dependent on or interrelated with one or more of the other IP views, as each successive IP view is based on the prior views of that IP product. Therefore, each IP view is not separately identifiable from other IP views of the same IP product and hence they are considered part of the same performance obligation, being the transfer of the IP product and associated deliverables to final specification. Further, where a contract contains multiple IP products and non-recurring engineering (NRE) work, these products and any NRE required to deliver them are considered to be a single performance obligation and not distinct from each other as customers are unable to benefit from the IP products on their own or together with other readily available resources, due to the bespoke nature of the configuration that the Group performs on the IP products as part of the licence arrangements. Support is considered a separate performance obligation from the transfer of the IP product, as customers can benefit from the service with other resources that are readily available to them and the Group's promise to transfer the service is separately identifiable from other performance obligations in the contract.

Each contract to license the Group's IP products includes pricing to be paid by the customer, based on the specific IP products licensed and the amount of any NRE required. Contracts do not typically permit refunds and payment terms often align with delivery of the IP views and final silicon acceptance and are within the contract milestones, and as such, there is no financing element associated with the contractual payment terms. Payment terms are based on completion of milestones throughout the project life for fixed price contracts and payment is generally due within 30 days of receipt of invoice. In one instance we offered credit terms to a customer on which a commercial rate of interest was charged.

Any major modifications to the contract or IP product specification will typically result in a new contract being signed with the customer for the additional work. In assessing whether a contract modification should be accounted for as part of the original contract or as a separate contract, the Group considers the following:

- whether the contract modification is 'accepted', i.e. it creates legally enforceable rights and obligations on the parties to the contract;
- if the contract modification is accepted, whether it adds distinct goods or services that are priced commensurate with stand-alone selling prices; and
- if the contract modification does not add distinct goods or services that are priced commensurate with stand-alone selling prices, whether the remaining goods or services are distinct from those already transferred.

If the contract modification is not accepted, it is accounted for as part of the original contract until such point that it is accepted. If the contract modification is accepted and it adds distinct goods or services that are priced commensurate with stand-alone selling prices, it is accounted for as a separate contract. If the contract modification is accepted and it does not add distinct goods or services that are priced commensurate with stand-alone selling prices, and the remaining goods or services are distinct from those already transferred, it is accounted for as termination of the existing contract and creation of a new contract. If the contract modification is accepted and it does not add distinct goods or services that are priced commensurate with stand-alone selling prices, and the remaining goods or services are not distinct from those already transferred, it is accounted for as part of the original contract.

The contract price is allocated to the support performance obligation based on its relative standalone selling price and the Group uses the residual method to allocate the remaining contract price to the IP product performance obligation. The contract price allocated to the IP products is recognised as the IP products are delivered to the customer.

On partially completed contracts, the Group recognises IP product revenue based on the stage of completion of the IP delivery, which is estimated by comparing the number of hours spent with the total number of hours expected to be spent to complete the IP delivery (i.e. an input-based method). Revenue on such contracts is recognised over time in this way, as, due to the highly bespoke nature of the work carried out by the Group in configuring IP views for a customer, the Group is limited practically from readily directing the asset (the IP product) in its completed state for another use and the Group has an enforceable right to payment for performance completed to date, as per the terms of the contract.

Material hours are typically incurred towards fulfilment of the performance obligation prior to contract signature. These hours are included in our percentage of completion calculations.

Following delivery of final IP product deliverables, a proportion of revenue is held back (the amount dependent on the type of licence and the maturity of the licensed IP products), until silicon acceptance is achieved by the customer. Silicon acceptance is a contractual milestone where the customer confirms or is contractually deemed to confirm that our IP, once integrated into silicon, complies with the contractual specification. The amount of revenue deferred, which is based on judgement, is intended to cover the potential for any additional work required to ensure our delivered IP meets the specifications in the licence agreement.

The cumulative effects of revisions to contract revenues and estimated completion costs are recorded in the accounting period in which the amounts become evident and can be reasonably estimated. These revisions can include such items as the effects of change orders as described above.

Support

Contracts for IP products contain a separate performance obligation to provide support services. Such support services typically cover two areas of support, namely ‘Integration Support’ and ‘Bring-up Support’.

Integration Support consists of assistance with the integration of the licensed IP product into the licensee’s target product (i.e. their semiconductor design). Such assistance includes support to address questions and debug integration issues encountered by the licensee.

Bring-up Support consists of assistance with troubleshooting ‘bring-up’ issues with ensuring the licensed IP product is functional in the licensee’s target product. ‘Bring-up’ is a semiconductor industry term for ensuring a test chip is functional.

Support is considered a separate performance obligation from delivery of the IP products, as customers can benefit from the service with other resources that are readily available to the customer and the Group’s promise to transfer the service is separately identifiable from other performance obligations in the contract.

The support performance obligation is separately priced in customer contracts and revenue is allocated to it based on its relative standalone selling price. Payment milestones are on the anniversaries of the contract effective date and payment is generally due within 30 days of receipt of invoice.

Support revenue is recognised over time, as it is a stand-ready obligation, and the customer simultaneously receives and consumes the benefits provided as they are performed by the Group. As the number of hours required to provide support services is uncertain and there is typically no maximum number of hours stated in the contract, revenue is recognised rateably over the contractual period of support provision.

Reseller

Under the three-year exclusive subscription reseller agreement with VeriSilicon, exclusivity fees are invoiced and collected quarterly. Revenue is recognised on a percentage of completion basis once the IP is licensed by VeriSilicon to a third party, with any invoices credited against exclusivity fees paid. The exclusivity payments represent minimum annual payments from the reseller to Alphawave IP and can be offset against any purchases made for licences to third parties in the calendar year.

Exclusivity payments under this agreement are a form of ‘breakage’, as defined in the accounting standard. Our expectation is that the exclusivity payments will be utilised against purchases of IP products by the reseller, which can occur at any time during the calendar year. We consider that the likelihood of the customer exercising its remaining rights only becomes remote at the end of the period to which the exclusivity payment relates as any unused exclusivity payments cannot be carried forward to future periods. This judgement minimises the risk of a significant reversal of revenue in the period.

Income from joint venture

The subscription licence agreement entered into with WiseWave provides them with right of use to a library of our IP products for a period of five years. The Group does not expect to undertake any activities that impact the IP product after delivery to the customer. Based on engineering schedules, we have estimated the total number of IP products that we expect to provide into the library for the duration of the agreement. This estimate gives rise to a variable price per IP product as the total contract value is assigned to the estimated total number of performance obligations. As we do not usually provide individual licences without NRE to customers it is difficult to determine the standalone selling price of each performance obligation. Given that there is a variable number of products to be provided in the future, on an if-and-when available basis, the revenue attributable to each performance obligation constitutes variable consideration. Therefore, we exercise judgement in applying constraints for revenue recognition in order to minimise the risk of significant reversals of revenue in future periods. Revenue on this agreement is recognised at a point in time when an IP product is added to the library, as this is when we consider control of the IP product is transferred to the customer.

Accrued revenue and deferred revenue

The timing of delivery of products and services to customers may differ from the timing of invoices and the customers' payments. Billed and/or collected amounts for which the products or services are not yet delivered, and recognition conditions are not met as at the reporting date, are recorded as deferred revenue. Where products or services are delivered, and recognition conditions are met, however no amounts have been billed and/or collected, revenue is recognised with a corresponding amount recorded as accrued revenue.

Costs of obtaining long-term contracts and costs of fulfilling contracts

Incremental commissions paid to staff for work in obtaining contracts of periods longer than one year are recorded in capitalised contract costs and amortised based on the stage of completion of the contract, i.e. in the same pattern as revenue is recognised (see above). No judgement is needed to measure the amount of costs of obtaining contracts as the commission paid is based on a percentage of the booking. Under IFRS 15, in order for costs of obtaining contracts (including commissions) to be capitalised, they must be incremental. The Group is satisfied that it is appropriate to capitalise these costs in accordance with IFRS 15 as they would not have been incurred had it not been for the acquisition of new customer contracts.

Strategic, integration and other non-recurring items

The Group incurred costs from certain strategic, integration and other non-recurring items, e.g. Initial Public Offering costs. Management has disclosed these separately to enable a greater understanding of the underlying results of the trading business so that the underlying run rate of the business can be established and compared on a like-for-like basis each year.

Defined contribution schemes

Contributions to defined contribution pension schemes are charged to the consolidated statement of comprehensive income in the year to which they relate.

Government grants

Government grants received for qualifying expenditure are netted against the cost incurred by the Group. Where retention of a government grant is dependent on the Group satisfying certain criteria, it is initially recognised as deferred income. When the criteria for retention have been satisfied, the deferred income balance is released to the consolidated statement of comprehensive income or netted against the asset purchased.

Share-based payments

The Group operates an equity-settled, share-based payment compensation plan, under which the entity receives services from employees as consideration for equity instruments, options and restricted share units (RSUs), of the Group. The fair value of the employee service received in exchange for the grant of the options is recognised as an expense over the vesting period.

Share options and RSUs granted to employees are accounted for under the fair value-based method of accounting using fair value for the underlying equity instrument. Fair values are determined in accordance with the Black-Scholes-Merton option-pricing model (BSM). Management exercises judgement in determining the underlying share price volatility, expected forfeitures and other parameters of the calculations. Share options and RSUs granted to service providers are valued using fair value of services obtained, and if that is not determinable, at the fair value of the underlying equity instrument as per BSM.

Where options and RSUs are exercised, the Company issues new shares and the proceeds received, net of any directly attributable transaction costs, are credited to share capital.

If an option or RSU is cancelled this is accounted for as an acceleration of the vesting period and any amount unrecognised is recognised immediately.

Upon expiry of the options or RSUs, the value that had been ascribed to the expired options or RSUs remains in the share-based payment reserve.

When terms of the options or RSUs are modified at a future date, the fair value of the options or RSUs are adjusted for the new terms using the BSM. Any difference in fair value is adjusted as a change to share-based payment reserve and share-based payment expense.

Research and development

Research costs are expensed as incurred. Development expenditures on an individual project are recognised as an intangible asset when the Group can demonstrate:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- its intention to complete the asset and to use or sell it;
- the ability to use or sell the intangible asset;
- how the asset will generate future economic benefits;
- the availability of resources to complete the asset; and
- the ability to measure reliably the expenditure during development.

As of 31 December 2021 the Group has not capitalised any development costs as technical feasibility has not been reached.

Foreign currency

Transactions entered into by Group entities in a currency other than the currency of the primary economic environment in which they operate (their ‘functional currency’) are recorded at the rates ruling when the transactions occur. Foreign currency monetary assets and liabilities are translated at the rates ruling at the reporting date. Exchange differences arising on the retranslation of unsettled monetary assets and liabilities are recognised immediately in the consolidated statement of comprehensive income.

On consolidation, the results of overseas operations are translated into US$ at rates approximating to those ruling when the transactions took place. All assets and liabilities of overseas operations are translated at the rate ruling at the reporting date. Exchange differences arising on translating the opening net assets at opening rate and the results of overseas operations at actual rate are recognised in other comprehensive income and accumulated in the foreign exchange reserve.

Exchange differences recognised in profit or loss in Group entities' separate financial statements on the translation of long-term monetary items forming part of the Group's net investment in the overseas operation concerned are reclassified to other comprehensive income and accumulated in the foreign exchange reserve on consolidation.

Interest income

Interest income is recorded on accrual basis and is included in finance income in the consolidated statement of comprehensive income.

Interest income from customers is recognised monthly at an agreed annual interest rate over the period of the contract.

Borrowing costs

Interest expense is recognised on the basis of the effective interest method and is included in finance expense in the consolidated statement of comprehensive income.

Taxation

The tax expense for the year comprises current and deferred tax. Tax is recognised in the consolidated statement of comprehensive income, except that a charge attributable to an item of income or expense recognised as other comprehensive income is also recognised directly in other comprehensive income.

The current tax charge is calculated on the basis of tax rates and laws that have been enacted or substantively enacted by the reporting date in the countries where the Group operates and generates taxable income.

Deferred tax assets and liabilities are recognised where the carrying amount of an asset or liability in the consolidated statement of financial position differs from its tax base, except for differences arising on:

- the initial recognition of goodwill;
- the initial recognition of an asset or liability in a transaction which is not a business combination and at the time of the transaction affects neither accounting or taxable profit, and
- investments in subsidiaries and joint arrangements where the Group is able to control the timing of the reversal of the difference and it is probable that the difference will not reverse in the foreseeable future.

Recognition of deferred tax assets is restricted to those instances where it is probable that taxable profit will be available against which the difference can be utilised.

The amount of the asset or liability is determined using tax rates that have been enacted or substantively enacted by the reporting date and are expected to apply when the deferred tax liabilities are settled.

When there is uncertainty concerning the Group's filing position regarding the tax bases of assets or liabilities, the taxability of certain transactions or other tax-related assumptions, then the Group:

- considers whether uncertain tax treatments should be considered separately, or together as a group, based on which approach provides better predictions of the resolution;
- determines if it is probable that the tax authorities will accept the uncertain tax treatment; and
- if it is not probable that the uncertain tax treatment will be accepted, measures the tax uncertainty based on the most likely amount or expected value, depending on whichever method better predicts the resolution of the uncertainty. This measurement is required to be based on the assumption that each of the tax authorities will examine amounts they have a right to examine and have full knowledge of all related information when making those examinations.

Deferred tax assets and liabilities are offset when the Group has a legally enforceable right to offset current tax assets and liabilities and the deferred tax assets and liabilities relate to taxes levied by the same tax authority on either:

- the same taxable Group company; or
- different Group entities which intend either to settle current tax assets and liabilities on a net basis, or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax assets or liabilities are expected to be settled or recovered.

Sales made to customers incorporated in China and Korea are subject to withholding tax. Since invoices are raised by Group entities which operate under the tax authorities in Canada, a country which has a tax treaty with China and Korea, withholding tax amounts are treated as prepaid tax and offset against corporation taxes payable.

Intangible assets

The intangible asset is a purchased licence to use IP. This IP is being developed by a third-party vendor and amounts paid to date represent instalments to initiate the development which is carried at cost.

Expenditure on the developed IP is capitalised if it can be demonstrated that:

- it is technically feasible to develop the IP for it to be sold;
- adequate resources are available to complete the development;
- there is an intention to complete and sell the IP;
- sale of the IP will generate future economic benefits, and
- expenditure on the project can be measured reliably.

The intangible asset is carried at cost less accumulated amortisation and impairment. The intangible asset has a finite useful economic life and will be amortised on a straight-line basis over the term of the licence, which is five years from the date of completion.

Intangible assets are not amortised until the date the asset is available for use. An intangible asset that is under development and not yet available for use is tested for impairment annually by comparing its carrying amount with its recoverable amount. The residual values and useful lives are reviewed by management at each reporting date and those estimates are adjusted if required.

Property and equipment

Property and equipment are carried at cost less accumulated depreciation and impairment losses, if any. Cost includes initial cost and subsequent expenditures that are directly attributable to the related asset when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. All other repair and maintenance costs are charged to consolidated statement of comprehensive income during the year they are incurred.

Depreciation is provided on items of property and equipment so as to write off their carrying value over their expected useful economic lives. It is provided at the following rates:

Computer equipment	- 50% straight line
Furniture and fixtures	- 20% straight line
Leasehold improvements	- 40% straight line

Property and equipment acquired during the year are depreciated from the date the asset is available for use as intended until the date of de-recognition. The residual values and useful lives are reviewed by the management at each reporting date and adjusted if the impact on depreciation is significant. Property and equipment are regularly reviewed to eliminate obsolete items.

An item of property and equipment is de-recognised upon disposal or when no future economic benefits are expected from its use. Any gain or loss arising on de-recognition of the asset is included in the consolidated statement of comprehensive income in the year the asset is de-recognised.

Leases

Identifying leases

The Group accounts for a contract, or a portion of a contract, as a lease when it conveys the right to use an asset for a period of time in exchange for consideration. Leases are those contracts that satisfy the following criteria:

- there is an identified asset;
- the Group obtains substantially all the economic benefits from use of the asset; and
- the Group has the right to direct use of the asset.

The Group considers whether the supplier has substantive substitution rights. If the supplier does have those rights, the contract is not identified as giving rise to a lease.

In determining whether the Group obtains substantially all the economic benefits from use of the asset, the Group considers only the economic benefits that arise from the use of the asset, not those incidental to legal ownership or other potential benefits.

In determining whether the Group has the right to direct use of the asset, the Group considers whether it directs how and for what purpose the asset is used throughout the period of use. If there are no significant decisions to be made because they are pre-determined due to the nature of the asset, the Group considers whether it was involved in the design of the asset in a way that predetermines how and for what purpose the asset will be used throughout the period of use. If the contract or portion of a contract does not satisfy these criteria, the Group applies other applicable IFRSs rather than IFRS 16.

All leases are accounted for by recognising a right-of-use asset and a lease liability except for:

- leases of low-value assets; and
- leases with a term of twelve months or less.

The Group has elected to use the recognition exemptions listed above and thus does not apply the right-of-use asset and lease liability measurement requirements to these items. Leases of low-value assets and short-term leases are expensed on a straight-line basis over the life of the lease.

Lease liabilities are measured at the present value of the contractual payments due to the lessor over the lease term, with the discount rate determined by reference to the rate inherent in the lease unless (as is typically the case) this is not readily determinable, in which case the Group's incremental borrowing rate on commencement of the lease is used. Variable lease payments are only included in the measurement of the lease liability if they depend on an index or rate. In such cases, the initial measurement of the lease liability assumes the variable element will remain unchanged throughout the lease term. Other variable lease payments are expensed in the period to which they relate.

On initial recognition, the carrying value of the lease liability also includes:

- amounts expected to be payable under any residual value guarantee;
- the exercise price of any purchase option granted in favour of the Group if it is reasonably certain to exercise that option;
- any penalties payable for terminating the lease, if the term of the lease has been estimated on the basis of the termination option being exercised.

Right-of-use assets are initially measured at the amount of the lease liability, reduced for any lease incentives received, and increased for:

- lease payments made at or before commencement of the lease;
- initial direct costs incurred; and
- the amount of any provision recognised where the Group is contractually required to dismantle, remove or restore the leased asset (typically leasehold dilapidations).

Subsequent to initial measurement, lease liabilities increase as a result of interest charged at a constant rate on the balance outstanding and are reduced for lease payments made. Right-of-use assets are amortised on a straight-line basis over the remaining term of the lease or over the remaining economic life of the asset if, rarely, this is judged to be shorter than the lease term.

When the Group revises its estimate of the term of any lease (because, for example, it reassesses the probability of a lessee extension or termination option being exercised), it adjusts the carrying amount of the lease liability to reflect the payments to make over the revised term, which are discounted at the same discount rate that applied on lease commencement. The carrying value of lease liabilities is similarly revised when the variable element of future lease payments dependent on a rate or index is revised. In both cases an equivalent adjustment is made to the carrying value of the right-of-use asset, with the revised carrying amount being amortised over the remaining (revised) lease term.

Where a variable lease payment that is dependent on an index or rate is present in the lease, the lease liability and right-of-use asset is remeasured once the rate is known. Any variable lease payments that are not dependent on an index or rate are expensed in the period they are incurred.

When the Group renegotiates the contractual terms of a lease with the lessor, the accounting depends on the nature of the modification:

- if the renegotiation results in one or more additional assets being leased for an amount commensurate with the standalone price for the additional rights-of-use obtained, the modification is accounted for as a separate lease in accordance with the above policy;
- in all other cases where the renegotiation increases the scope of the lease (whether that is an extension to the lease term, or one or more additional assets being leased for an amount that is not commensurate with the standalone price for the additional rights-of-use obtained), the lease liability is remeasured using the discount rate applicable on the modification date, with the right-of-use asset being adjusted by the same amount; and
- if the renegotiation results in a decrease in the scope of the lease, both the carrying amount of the lease liability and right-of-use assets are reduced by the same proportion to reflect the partial or full termination of the lease with any difference recognised in profit or loss. The lease liability is then further adjusted to ensure its carrying amount reflects the amount of the renegotiated payments over the renegotiated term, with the modified lease payments discounted at the rate applicable on the modification date. The right-of-use asset is adjusted by the same amount.

For contracts that both convey a right to the Group to use an identified asset and require services to be provided to the Group by the lessor, the Group has elected to account for the entire contract as a lease, i.e. it does not allocate any amount of the contractual payments to, and account separately for, any services provided by the supplier as part of the contract.

Investments in subsidiaries

Investments in subsidiaries in the Company financial statements are carried at cost less any provision for losses arising on impairment.

Investments in joint ventures

The Group is a party to a joint arrangement when there is a contractual arrangement that confers joint control over the relevant activities of the arrangement to the Group and at least one other party. Joint control is assessed under the same principles as control over subsidiaries.

Joint ventures are initially recognised in the consolidated statement of financial position at cost. Subsequently joint ventures are accounted for using the equity method, where the Group's share of post-acquisition profits and losses and other comprehensive income is recognised in the consolidated statement of comprehensive income (except for losses in excess of the Group's investment in the joint venture unless there is an obligation to make good those losses).

Profits and losses arising on transactions between the Group and its joint ventures are recognised only to the extent of unrelated investors' interests in the joint venture. The Group's share in the joint venture's profits and losses resulting from these transactions is eliminated against the carrying value of the joint venture.

Any premium paid for a joint venture above the fair value of the Group's share of the identifiable assets, liabilities and contingent liabilities acquired is capitalised and included in the carrying amount of the joint venture. Where there is objective evidence that the investment in the joint venture has been impaired the carrying amount of the investment is tested for impairment in the same way as other non-financial assets.

Impairment of non-financial assets

The carrying amounts of the Group’s non-financial assets are reviewed at each reporting date to determine whether there is any indication of impairment. If such indication exists, the recoverable amount of such asset is estimated. An impairment loss is recognised wherever the carrying amount of the asset exceeds its recoverable amount. Impairment losses are recognised in the consolidated statement of comprehensive income. A previously recognised impairment loss is reversed only if there has been a change in the estimates used to determine the asset’s recoverable amount since the last impairment loss was recognised. If that is the case, the carrying amount of the asset is increased to its recoverable amount. That increased amount cannot exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years. Such reversal is recognised in the consolidated statement of comprehensive income.

Investment tax credits

Investment tax credits receivable are amounts recoverable from the Canadian federal and provincial government under the SRED incentive programme. These tax credits are not received in cash, they are netted off against the Group's current tax charge. The amounts that are claimed under the programme represent the amounts submitted by management based on research and development costs paid during the year and include a number of estimates and assumptions made by management in determining the eligible expenditures. Investment tax credits are recorded when there is reasonable assurance that the Group will realise the investment tax credits receivable and are netted against the related expenditure. Recorded investment tax credits are subject to review and approval by tax authorities and, therefore, amounts eventually netted off against the Group's current tax charge may be different from the amounts recorded.

Short-term employee benefits

A liability is recognised for benefits accruing to employees in respect of wages and salaries, annual leave and sick leave in the period the related service is rendered at the undiscounted amount of the benefits expected to be paid in exchange for that service.

Cash and cash equivalents

Cash and cash equivalents include cash and liquid investments with a term to maturity of 90 days or less at the reporting date.

Financial instruments

Financial assets and financial liabilities are recognised in the Group's consolidated statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value. Except for financial assets and financial liabilities measured at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issuance of financial assets and financial liabilities are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, upon initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in profit or loss.

Financial assets

All recognised financial assets are measured subsequently in their entirety at either amortised cost or fair value, depending on the classification of the financial assets. The classification and measurement of financial assets after initial recognition at fair value depends on the business model for managing the financial asset and the contractual terms of the cash flows. Financial assets are classified in one of the three categories:

a) Amortised cost

Financial assets that are debt instruments and are held within a business model whose objective is to collect the contractual cash flows, and that have contractual cash flows that are solely payments of principal and interest (SPPI) on the principal outstanding, are measured at amortised cost at each subsequent reporting period. The Group classifies accounts receivable and notes receivable as financial assets that are subsequently measured at amortised cost.

b) Fair value through other comprehensive income

The Group and Company does not have any financial assets classified as being at fair value through other comprehensive income.

c) Fair value through profit or loss

The Group and Company does not have any financial assets classified as being at fair value through profit or loss.

Impairment of financial assets

The Group recognises a loss allowance for expected credit losses (ECL) on accounts receivable that are measured at amortised cost. The Group applies the simplified approach for accounts receivable and recognises the lifetime ECL for these assets. The ECL on accounts receivable is estimated using a provision matrix based on the Group's historical credit loss experience, adjusted for factors that are specific to the customers, and general current and forecasted economic conditions at the reporting date, including time value of money where appropriate.

For all other financial assets measured at amortised cost or fair value through other comprehensive income, the Group recognises lifetime ECL only when there has been a significant increase in credit risk since initial recognition. If the credit risk on such financial instruments has not increased significantly since initial recognition, the Group measures the loss allowance on those financial instruments at an amount equal to twelve month ECL.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of a financial asset. In contrast, twelve month ECL represents the portion of lifetime ECL that is expected to result from default events on a financial asset that are possible within twelve months after the reporting date.

In assessing whether the credit risk on a financial asset has increased significantly since initial recognition, the Group compares the risk of default occurring on the financial asset at the reporting date with the risk of default occurring at the initial recognition. The Group considers both quantitative and qualitative factors that are supportable, including historical experience and forward-looking information that is available without undue cost or effort.

Irrespective of the above assessment, the Group presumes that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise. Despite the foregoing, the Group presumes that the credit risk on a financial asset has not increased significantly since initial recognition if the financial asset is determined to have low credit risk at the reporting date.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying a significant increase in credit risk before the amount becomes past due.

Definition of default

For internal credit risk management purposes, the Group considers a financial asset not recoverable if the customer balance owing is 180 days past due and information obtained from the customer and other external factors indicate that the customer is unlikely to pay its creditors in full.

Credit-impaired financial assets

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired include observable data about the following events:

a) significant financial difficulty of the issuer or the counterparty;
b) a breach of contract, such as a default or past due event;
c) the lender(s) of the debtor, for economic or contractual reasons relating to the debtor's financial difficulty, having granted to the debtor a concession(s) that the lender(s) would not otherwise consider;
d) it is becoming probable that the debtor will enter bankruptcy or other financial reorganisation; and
e) the disappearance of an active market for that financial asset because of financial difficulties.

Write-off policy

The Group writes off and derecognises a financial asset when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery.

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

On derecognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss. In addition, on derecognition of an investment in a debt instrument classified at fair value through other comprehensive income, the cumulative gain or loss previously accumulated in the investments revaluation reserve is reclassified to profit or loss. In contrast, on derecognition of an investment in an equity instrument which the Group has designated on initial recognition to measure at fair value through other comprehensive income, the cumulative gain or loss previously accumulated in the investments revaluation reserve is not reclassified to profit or loss, but is transferred to retained earnings.

Financial liabilities

All financial liabilities are measured subsequently at amortised cost using the effective interest method or at fair value through profit or loss.

Financial liabilities are classified as at fair value through profit or loss when the financial liability is:

a) contingent consideration of an acquirer in a business combination;
b) held for trading; or
c) it is designated as at fair value through profit or loss.

A financial liability is classified as held for trading if it has been acquired principally for the purpose of repurchasing it in the near term or on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking, or it is a derivative financial liability.

A financial liability other than a financial liability held for trading or contingent consideration of an acquirer in a business combination may be designated as at fair value through profit or loss upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise or the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis.

Financial liabilities classified or designated at fair value through profit or loss are measured at fair value, with any gains or losses arising on changes in fair value recognised in profit or loss. However, for financial liabilities that are designated as fair value through profit or loss, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of the issuer is recognised in other comprehensive loss, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive loss would create or enlarge an accounting mismatch in profit or loss. The remaining amount of change in the fair value of a liability is recognised in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognised in other comprehensive loss are not subsequently reclassified to profit or loss; instead, they are transferred to retained earnings upon derecognition of the financial liability.

The Group classifies accounts payable, accrued liabilities and lease liabilities at amortised cost.

Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

Share capital

Ordinary shares are classified as equity. Equity instruments are measured at the fair value of the cash or other resources received or receivable, net of the direct costs of issuing the equity instruments. If payment is deferred and the time value of money is material, the initial measurement is on a present value basis.

Stabilisation programme

As part of the Underwriting Agreement for the IPO transaction, the Company agreed to an over-allotment and stock stabilisation programme with the founder shareholders and the IPO syndicate banks. The stabilisation programme was put into effect and given the aftermarket performance of the shares immediately post-IPO, resulted in proceeds to the Company of US$22.2m (£15.7m). As these proceeds were not part of the normal operation of the business and related to the IPO transaction, they were posted to the share premium account to set against IPO issuance costs.

3 Significant accounting estimates and judgements

In the application of the Group's and Company's accounting policies, the Directors are required to make judgements (other than those involving estimations) that have a significant impact on the amounts recognised and to make estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Critical judgements in applying the Group's accounting policies

Revenue recognition

Management exercises judgement in determining the separate performance obligations present in contracts with customers. As described in note 2, the Group considers the multiple deliveries of IP views of a single IP product to be part of a single performance obligation, as each IP view is highly dependent on or interrelated with one or more of the other IP views, as each successive IP view is based on the prior views of that IP. As such, customers are unable to benefit from IP views on their own or together with other readily available resources. Additionally, if a contract contains multiple IP products, the deliverables are considered part of a single performance obligation, as customers are unable to benefit from the IP products on their own or together with other readily available resources, due to the bespoke nature of the configuration that the Group performs on the IP products as part of the licence arrangements.

As described in note 2, IP products are delivered in various stages, referred to as IP views. At each IP view delivery, management exercises its judgement as to what percentage of the contract price allocated to the IP product should be recognised as revenue. At Preliminary IP view delivery (the first IP view delivered to customers), revenue is typically recognised at 30% (for licences categorised as derivative), 25% (for licences categorised as migration) or 10% (for licences categorised as R&D) of the price allocated to the IP product.

Delivery of Preliminary IP views may occur very shortly after a licence agreement is signed by a customer and hence significant research and development or engineering hours may not have been expended up to that point from contract signing up to that point

There are hours incurred prior to the signing of contracts that relate to the fulfilment of the performance obligations that are subsequently agreed to in such contracts. Judgement is made with respect to the pre-contract hours that are excluded or included in the calculation of the revenue to be recognised such that any included hours directly relate to the fulfilment of any contractual performance obligations. Such pre-contract hours are taken into account in our calculation of percentage of completion and amounted to approximately 23,000 hours in 2021. Had we included all of these hours in our percentage of completion calculation, we would have recognised an additional US$1.5m of revenue.

At Final IP view delivery (the last IP view delivered to the customer ahead of test chip manufacture), an amount of revenue is held back for any post-delivery work that may be required to ensure the customer 'taped out' silicon meets the specifications detailed in the contract. The percentage held back is 10% for licences categorised as derivative, 25% for licences categorised as migration or 34% for licences categorised as R&D. This revenue is held back until the earlier of 'customer silicon acceptance' (customer silicon meets specifications) or a time specified in the contract. Any post-Final IP view delivery work related to silicon 'Bring up' and 'Integration' is covered by the support contract and is a separate performance obligation.

Both the recognition of a proportion of the contract value at Preliminary IP view delivery using pre-contract hours and the hold back of revenue until customer silicon acceptance require significant judgement from management. Such judgement is based on deep knowledge and understanding of the development effort required in delivering IP products to customers and the potential for any further work required to ensure successful silicon production by customers. This judgement may not be representative of the work to be completed in all cases. As the Group completes more IP deliveries to customers, it will establish a broader data set on which to base its judgements.

In FY 2021, if revenue had been recognised based purely on percentage of completion at Preliminary IP view delivery excluding all hours incurred prior to contract signature instead of the judgement described above, our revenue would have been US$5.6m lower. Conversely, if we had recognised all revenue in contracts at delivery of Final IP views rather than hold back a percentage of revenue for customer silicon acceptance, on the assumption that all post-Final IP view acceptance work is covered by support, our revenue would have been US$13.2m higher.

Revenue under the subscription licence agreement with WiseWave is recognised at the point in time at which control of the goods is transferred to WiseWave. The Group considers control to have transferred to WiseWave when each IP product and update to those IP products is uploaded to the library that they have access to under the agreement. At the point of upload of IP products and updates to IP products to the library, WiseWave has the ability to direct the use of, and obtain substantially all of the remaining benefits from, those IP products and updates to IP products, by utilising the products in their semiconductor designs from which they can then generate cash inflows.

As outlined in our IPO Prospectus, we assigned the VeriSilicon reseller arrangement to WiseWave in order to consolidate the Group's activities in China under a single entity and this was implemented in Q4 2021. WiseWave are entitled to retain payments from that contract totalling $13.6m reflecting work that they will be expected to perform in future periods to fulfil that contract. As WiseWave are currently building their technical capabilities and are not yet able to fully perform this work, this sum has been accounted for as a reduction in the value of the subscription licence agreement with WiseWave, subject to future adjustment as and when WiseWave begin performance. As outlined in our IPO prospectus, these arrangements were contemplated at the time of entering into the VeriSilicon reseller contract and establishing WiseWave and have been taken into account in the disclosed aggregate booking of $147.8m for these transactions. As a result of the assignment of the VeriSilicon reseller arrangement, there is no significant change anticipated to the overall net financial impact on the Group.

Research and development costs

Judgement is exercised in determining whether costs incurred should be capitalised in line with IAS 38. The judgement includes whether it is technically feasible to complete the relevant assets on which costs are incurred so that they will be available for use or sale.

Common control transaction

The reorganisation which occurred just prior to the IPO has been accounted for as a common control transaction on the basis that control of the organisation immediately prior to and immediately following the reorganisation was substantially the same. In line with

IFRS 3.B1, we had the choice of book value or fair value to determine the investment value of Alphawave IP Inc. We chose book value as a more readily available valuation method, resulting in the creation of the merger reserve.

Joint ventures

As at year end, the Group owned 42.5% of WiseWave, a newly formed company established in China in Q4 2021 to develop and sell silicon products incorporating silicon IP licensed from the Group. We equity account for the investment as a joint venture, resulting in a US$0.6 loss for 2021.

Judgement is used in determining the extent of the control the Group has over WiseWave. The Group is satisfied WiseWave should be treated as a joint venture under IFRS 11 as opposed to being treated as an associate. For all joint arrangements structured in separate vehicles the Group must assess the substance of the joint arrangement in determining whether it is classified as a joint venture or joint operation. This assessment requires the Group to consider whether it has rights to the joint arrangement's net assets (in which case it is classified as a joint venture), or rights to and obligations for specific assets, liabilities, expenses and revenues (in which case it is classified as a joint operation). Factors the Group must consider include:

- structure;
- legal form;
- contractual agreement; and
- other facts and circumstances.

Upon consideration of these factors, the Group has determined that all of its joint arrangements structured through separate vehicles give it rights to the net assets and are therefore classified as joint ventures.

Joint venture revenue

The Group's proportion of revenue recognised from sales to WiseWave under the subscription licence agreement has been eliminated in the 'Loss from joint venture' line in the consolidated statement of comprehensive income to the extent that the revenue is not realised based on WiseWave's utility and in line with IAS 28. The Group exercised judgement in eliminating the revenue in this way. Had the Group eliminated our share of the gains from sales to the joint venture against the revenue line, our revenues would have reduced by US $12.3m to US $77.6m.

Initial Public Offering related costs

In accordance with IAS 32, the Group has only recognised costs within equity that are related to the transaction of issuing new shares, being US$20.3m posted to the share premium account. All other costs, totalling US$10.0m, relating to the Initial Public Offering, including costs relating to existing shares and listing-related costs, have been recognised within other expenses in the consolidated statement of comprehensive income.

To calculate this, issuance costs were split between new shares and existing shares. Where costs covered both new and existing shares, an apportionment was made based on the proportion of new shares being issued to existing shares. A judgement was made that this was a fair reflection of the costs associated with new and existing shares.

Impairment of financial assets

As described in note 2, the Group recognises a loss allowance for expected credit losses (ECL) on accounts receivable and applies the simplified approach, recognising the lifetime ECL for these assets. The Group uses a provision matrix based on the Group's historical credit loss experience to inform the level of ECL allowance and exercises significant judgement in assessing the factors that are specific to the customers and the general current and forecasted economic conditions that are used to adjust the ECL.

As at 31 December 2021, the Group's ECL allowance for accounts receivable was not material and therefore not recognised (31 December 2020: also not material). This level of ECL allowance reflects the Group's historical credit loss experience and its assessment of each of the customers making up its accounts receivable balance at each reporting date and the prevailing and predicted macroeconomic conditions that may impact on those customers' ability to pay their outstanding invoices. One of the Group's customers has payment of a US$0.5m invoice tied to securing additional funding. In respect of this customer, management has assessed the likelihood of the funding round being successful, the likely timing of such funding round and the customer's ability and willingness to pay their outstanding invoice following the funding round. The Group's conclusions at each reporting date were that all customers with amounts due to the Group had or would have both the ability and willingness to pay their outstanding invoices and hence the Group was satisfied that no adjustment to the ECL allowance was required.

Paragraph 5.5.11 of IFRS 9 presumes that there have been significant increases in credit risk since initial recognition when financial assets are more than 30 days past due. In FY 2021, if the Group had provided the full amount of accounts receivable that was more than 30 days past due in the ECL allowance, accounts receivable would have been US$2.6m lower and operating profit would have been US$2.6m lower (FY 2020: accounts receivable would have been US$0.5m lower and operating profit would have been US$0.5m lower).

As at the Last Practicable Date (28 April 2022), US$0.3m of accounts receivable that were more than 30 days past due at 31 December 2021 remains outstanding. As at the Last Practicable Date, US$1.7m of accounts receivable relating to the accrued revenue balance as at 31 December 2021 is more than 30 days past due and following the same process as described above and in note 2, management has concluded that no adjustment to the ECL allowance is required.

The Group's accrued revenue balance at the end of 2021 was US$31.7m (2020: US$10.3m). As at the Last Practicable Date, US$15.6m of accrued revenue has been invoiced. Of this invoiced amount, US$2.7m has been collected and US$ 12.9m is just over 30 days past due. Following the same process for assessing ECL for trade receivables as described above and in note 2, management has concluded that there has been no significant increase in credit risk in relation to accrued revenue since initial recognition and hence no adjustment to the ECL is required.

Key sources of estimation uncertainty in the consolidated financial statements

The key assumptions concerning the future, and other key sources of estimation uncertainty at the consolidated statement of financial position date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are discussed below.

Revenue recognition

Revenue recognition for IP products licensed under our standard pay-per-use contracts is based upon cost to completion using the input method, as this best reflects the transfer of control of the licensed IP products to the customer, with percentage of completion based on management judgements and estimates approximating the work required to meet contract deliverables. These judgements and estimates vary depending on the contract type, the maturity of the IP being licensed, customer requirements and involvement, customer specifications, whether the contract deliverables are in their early or later stages and whether the IP has already been silicon-proven. If different estimates of the work required to meet contract deliverables had been made, our revenue may have been different from that shown in the consolidated statement of comprehensive income and the accrued revenue and deferred revenue balances shown in the consolidated statement of financial position may also have been different. Refer to note 5 for further information regarding the sensitivity of accrued revenue and deferred revenue to the estimation uncertainty of work required to meet contract deliverables.

For the subscription licence agreement with WiseWave, the Group uses point-in-time revenue recognition. The agreement includes multiple performance obligations for delivery of distinct IPs and periodic updates to those IPs. Revenue is recognised based on delivery of each distinct IP as a proportion of management's estimate of the total number of IPs to be delivered during the five-year term of the agreement. If different assumptions were made about the total number of IPs to be delivered during the contract term and the amount of contract price allocated to each IP, the revenue recorded against this contract in the consolidated statement of comprehensive income and the accrued revenue and deferred revenue balances shown in the consolidated statement of financial position may be different from that shown.

4 Alternative Performance Measures (APMs)

The Group uses certain financial measures that are not defined or recognised under IFRS. The Directors believe that these non-GAAP measures supplement GAAP measures to help in providing a further understanding of the results of the Group and are used as key performance indicators within the business to aid in evaluating its current business performance. The measures can also aid in comparability with other companies who use similar metrics. However, as the measures are not defined by IFRS, other companies may calculate them differently or may use such measures for different purposes to the Group.

Bookings

The Group monitors and discloses bookings and backlog as key performance indicators of future revenues. Bookings are a non-IFRS measure and represent legally binding and largely non-cancellable commitments by customers to license our technology. Our bookings comprise licence fees, non-recurring engineering, support and in some instances, our estimate of potential future royalties. Our royalties are estimated based on contractually committed royalty prepayments or, in limited instances, on sensitised volume estimates provided by customers. Our bookings for FY 2021, including royalties, totalled US$244.7m (2020: US$75.0m), and excluding royalties, US$220.8m (2020: US$52.0m).

Backlog represents bookings over the life of the Group that have not yet been recognised as revenues and which we expect to be recognised in future periods. Backlog as at the end of 2021 is calculated based on our backlog as at the end of 2020, plus new bookings, less revenues recognised during the period.

	US$m
Backlog (end of FY 2020)	37.3
Add: New bookings excluding royalties (FY 2021)	220.8
Less: Revenues recognised in FY 2021[1]	(89.4)
Backlog (end of FY 2021)	168.6

1. Difference from reported revenue due to foreign exchange differences.

Earnings before interest, taxation, depreciation and amortisation (EBITDA)

EBITDA provides a supplemental measure of earnings that facilitates review of operating performance on a period-to-period basis by excluding items that are not indicative of the Group's underlying operating performance and is a key profit measure used by the Board to assess the underlying financial performance of the Group. EBITDA is stated before the following items and for the following reasons:

- interest is excluded from the calculation of EBITDA because the expense and income bears no relation to the Group's underlying operational performance;
- charges for the depreciation of property and equipment, acquired intangibles and right-of-use assets are excluded from the calculation of EBITDA, as removing these non-monetary items allows management to better project the Group's long-term profitability; and
- tax is excluded from the calculation of EBITDA because the expense bears no relation to the Group's underlying operational performance.

Operating profit to EBITDA reconciliation

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000
Operating profit	**36,035**	16,842
Add backs:		
Depreciation of tangible fixed assets and right-of-use assets	**3,127**	912
EBITDA	**39,162**	17,754

Two further measures are adjusted EBITDA and adjusted profit after tax, defined in the tables below. These further allow for a more accurate assessment of underlying business performance by making exclusions of items which do not form part of the Group's normal underlying operations.

EBITDA to adjusted EBITDA reconciliation

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000
EBITDA	**39,162**	17,754
Add backs:		
Non-recurring Initial Public Offering costs	**9,961**	-
M&A/professional costs	**533**	-
Share-based payment	**6,143**	565
Exchange (gain)/loss	**(4,023)**	982
Adjusted EBITDA	**51,776**	19,301

M&A/professional costs are one-off legal and professional costs incurred as a result of the Group's execution of agreements for the formation and commercial arrangements relating to the Group's joint venture, WiseWave, as well as professional fees related to the acquisition of Precise-ITC, announced in Q4 2021. Whilst still included in operating expenses and not included in non-recurring Initial Public Offering costs, these expenses were deemed to be one-off and added back to adjusted EBITDA. We believe that excluding the effect of share-based payments from adjusted EBITDA assists management and investors in making period-to-period comparisons in the Group's operating performance because the amount of such expenses in any specific period may not directly correlate to the underlying performance of our business operations. Additionally, these expenses can vary significantly between periods as a result of the timing of grants of new share-based awards, including grants in connection with acquisitions. The exchange gain in 2021 has been removed from EBITDA as it relates to an unrealised gain relating to cash held and therefore does not form part of the Company's operating performance.

Profit for the year to adjusted profit after tax reconciliation

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000
Profit for the year	**9,431**	12,205
Add backs:		
Non-recurring Initial Public Offering costs	**9,961**	-
M&A/professional costs	**533**	-
Share-based payment	**6,143**	565
Exchange (gain)/loss	**(4,023)**	982
Adjusted profit for the year	**22,045**	13,752

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

	Note	Year ended 31 December 2021	Year ended 31 December 2020
Adjusted basic earnings per share (US$ cents)	13	**3.52**	2.56
Adjusted diluted earnings per share (US$ cents)	13	**3.14**	2.18

5 Revenue

Disaggregation of revenue

The Group has disaggregated revenue into various categories in the following tables which is intended to depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000
Revenue by type		
Products	**46,971**	30,160
Support	**4,253**	2,786
Reseller	**8,861**	-
Income from joint venture	**29,846**	-
	89,931	32,946

Whilst this part of the note shows revenue by type, due to materiality, we have separately itemised the revenue from our reseller and joint venture, both based in China. The income from our joint venture in China, WiseWave, predominantly relates to a five-year subscription licence agreement where we have recognised US$27.7m based on our deliveries of IP to WiseWave. The remaining US$2.1m revenue from WiseWave relates to a separate agreement signed in Q4 2021 to deliver chiplet IP.

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000
Revenue by region		
North America	**37,642**	19,380
China	**43,063**	8,396
APAC (ex-China)	**9,226**	5,170
	89,931	32,946

Customer revenue concentration

For 2021, revenue of US$29.8m from a single customer (WiseWave) was greater than 10% of the Group's total revenues.

For 2020, revenues from several customers were individually greater than 10% of the Group's total revenues, as shown in the table below:

	Year ended 31 December 2020 US$'000
Customer - Asia Pacific	6,733
Customer - North America	5,261
Customer - Asia Pacific	5,073
Customer - North America	4,432
Customer - North America	3,548

Sensitivity analysis

Product revenue

Revenue recognition for product revenue is determined using the input method on a percentage of completion basis. The percentage of completion is calculated as a function of total hours estimated to fulfil the contract. The table below illustrates the sensitivity the percentage of completion estimate has on revenue recognition and the associated balance sheet balances, assuming a 10% increase and a 10% decrease to all percentages of completion applied to product revenue in 2021 and 2020:

Year ended 31 December 2021	***As reported*** **US$'000**	***+10%*** **US$'000**	***-10%*** **US$'000**
Product revenue	**46,971**	**51,668**	**42,274**
Accrued revenue	**31,719**	**34,509**	**28,929**
Deferred revenue	**12,661**	**11,599**	**13,723**

Year ended 31 December 2020	*As reported US$'000*	*+10% US$'000*	*-10% US$'000*
Product revenue	30,160	33,176	27,144
Accrued revenue	10,328	11,361	9,296
Deferred revenue	7,381	6,749	8,013

Product revenue in the above analysis makes up part of the overall revenue of US $89.9m in the 2021 consolidated statement of comprehensive income (2020: US$32.9m), as described in the disaggregation of revenue section of this note 5. The accrued revenue and deferred revenue balances are those shown in the consolidated statement of financial position and they include all types of revenue mentioned above in the disaggregation of revenue section of this note 5. However, the sensitivity of the accrued and deferred revenue balances only pertains to the product revenue within these balances.

WiseWave - subscription licence agreement

Revenue recognition for the WiseWave subscription licence agreement is determined with reference to the estimated total number of IP uploads to be delivered to WiseWave during the term of the agreement and the number of uploads made to WiseWave each period. The table below illustrates the sensitivity of revenue recognition and the associated balance sheet balances to a change in the estimated total number of IP products to be delivered and assumes a 10% increase and a 10% decrease in the total number of uploads, but the same number of uploads made during 2021. There are no 2020 comparatives as the subscription licence agreement was signed during 2021.

Year ended 31 December 2020	As reported US$'000	+10% US$'000	-10% US$'000
WiseWave SLA revenue	27,700	25,229	30,714

WiseWave SLA accrued revenue	3,700	1,229	6,714

Accrued and deferred revenue movements

Below is a reconciliation of the movement in accrued revenue during the period:

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000
At 1 January	**10,328**	775
Revenue accrued in the period	**30,482**	20,566
Accrued revenue invoiced in the period	**(8,959)**	(11,516)
Foreign exchange difference	**(132)**	503
At 31 December	**31,719**	10,328

Below is a reconciliation of the movement in deferred revenue during the period:

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000
At 1 January 2021	**7,381**	3,685
Revenue recognised in the period	**(6,450)**	(3,685)
Revenue deferred in the period	**11,554**	6,000
Cumulative catch-up adjustments	**8**	1,123
Foreign exchange difference	**168**	258
At 31 December	**12,661**	7,381

The cumulative catch-up adjustment represents a change in estimate of the total number of hours expected to complete a project.

The deferred revenue balance is all expected to be satisfied within twelve months of the consolidated statement of financial position date.

The flexible spending account has increased to US$6.8m as at 31 December 2021 from US$2.3m as at 31 December 2020. This represents mainly current deferred income, and these are contracts with customers who have committed to regular periodic payments to us over the term of the contract. These payments are not in respect of specific licences or other deliverables, but they can be used as credit against future deliverables.

The balances related to costs to obtain contracts from customers are as follows:

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000
Capitalised contract costs	**609**	233

The costs to obtain contracts from customers include commissions. Amortisation of US$3.0m (2020: US$1.5m) and impairment of US$nil (2020: US$nil) was charged to the consolidated statement of comprehensive income in the period.

6 Research and development/engineering

The Group incurred research and development costs that have been expensed in the consolidated statement of comprehensive income. The amounts are expensed through research and development/engineering and are as follows:

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000
Research and development/engineering	**29,444**	8,816

7 Employee benefit costs

The aggregate employee benefit expenses were as follows:

	Group Year ended 31 December 2021 US$'000	Group Year ended 31 December 2020 US$'000	**Company Period ended 31 December 2021 US$'000**
Wages, salaries and benefits	**19,216**	7,957	**328**
Defined contribution pension costs	**253**	133	**10**
Social security costs	**1,447**	106	**41**
Share-based payment expense	**6,143**	565	**342**
Investment tax credit	**(3,039)**	(1,802)	**-**
Government grants	**(56)**	(1,063)	**-**
Total	**23,964**	5,896	**721**

The average number of employees during the period, analysed by category, was as follows:

	Group 2021	Group 2020	**Company 2021**
Research and development/engineering	**110**	60	**-**
General and administration	**10**	3	**3**
Sales and marketing	**4**	3	**-**
Total	**124**	66	**3**

The number of employees at the period end, analysed by category, was as follows:

	Group 2021	Group 2020	**Company 2021**
Research and development/engineering	**134**	66	**-**
General and administration	**15**	4	**5**
Sales and marketing	**5**	2	**-**
Total	**154**	72	**5**

8 Directors' and key management personnel remuneration

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, including the Directors of the Company, the co-founders and the Chief Financial Officer of the Company.

	Year ended	Year ended

	31 December 2021 US$'000	31 December 2020 US$'000
Remuneration (including benefits in kind)	**2,235**	536
Defined contribution pension costs	**4**	7
Share-based payment expense	**252**	30
	2,491	573

One Director exercised options during the period. Details are as follows:

	Year ended 31 December 2021	Year ended 31 December 2020
Number of options, in thousands, exercised by Directors and key management	**4,000**	1,199
Gains made on exercise of options by Directors and key management US$'000	**5,636**	5,864

2020 does not reflect the 20:1 share split which occurred in May 2021.

Details of the highest paid Director's remuneration are as follows:

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000
Remuneration (including benefits in kind)	**740**	149
Defined contribution pension costs	**4**	2
	744	151
Number of options, in thousands, exercised by Director	**4,000**	-

The number of options at 31 December 2021 has been adjusted for the 20 for 1 share exchange that happened immediately prior to the Initial Public Offering in May 2021.

Shortly following the Company's incorporation, 50,000 preference shares of nominal value of £1 each were issued to John Lofton Holt, a Company Director. The preference shares were issued as fully paid up in consideration for an undertaking from Mr Holt to pay to the Company a sum of £50,000. The preference shares were redeemed by the Company on 6 December 2021 and the undertaking to pay was thereby cancelled.

A loan of CAD$1,280,000 was made to Daniel Aharoni, a Director of the Company, for the exercise of share options in Alphawave IP Inc. prior to the IPO date. The loan was repaid on the sale of shares in the Company at the IPO and following the exchange of Alphawave IP Inc. shares into Company shares prior to the IPO date. The loan was interest free.

9 Auditor's remuneration

The Group paid the following amount to its auditor in respect of the audit of the Group's financial statements and for other non-audit services provided to the Group.

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000

Audit of the financial statements	**725**	71
Taxation compliance services	**-**	7
Other tax advisory services	**-**	26
Corporate finance services	**-**	45
Audit-related assurance services	**155**	-
Other assurance services	**1,135**	-
	2,015	149

Other assurance services relate to financial services provided for our Admission to list on the London Stock Exchange. In 2020 the Group had a different firm of auditors.

10 Finance income and expense

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000
Finance income		
Interest income from customer	**202**	198
Bank interest	**110**	-
	312	198
Finance expense		
Bank charges	**(26)**	(113)
Lease interest	**(294)**	(82)
	(320)	(195)
Net finance (expense)/income	**(8)**	3

11 Non-recurring Initial Public Offering costs

In accordance with the Group's policy for non-recurring items, the following charges were included in this category for the period:

One-off costs relating to Project Aurora, the project name for the Group's Initial Public Offering on the London Stock Exchange, that were not able to be offset against share premium under IAS 32 totalled US$10.0m (2020: US$nil). Over half of these total fees related to LSE Admission fees and legal costs associated with the Initial Public Offering. Per IAS 32, costs that relate to the stock market listing or are otherwise not incremental and not directly attributable to issuing new shares should be recorded in the consolidated statement of comprehensive income.

12 Tax expense

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000
Current taxation		
UK corporation tax	**257**	-
UK corporation tax adjustment to prior periods	**125**	-
Overseas tax	**13,349**	4,379

Total current tax	**13,731**	4,379
Deferred tax		
Origination and reversal of temporary differences	**(74)**	261
Total deferred tax	**(74)**	261
Taxation on profit	**13,657**	4,640

The reasons for the difference between the actual tax charge for the year and the standard rate of corporation tax applied to profits for the year are as follows:

	Year ended 31 December 2021 US$'000	Year ended 31 December 2020 US$'000
Profit before tax	**23,088**	16,845
Income tax expense at the UK corporation tax rate of 19%	**4,387**	3,201
Effects of:		
Stock based compensation	**1,036**	150
Expenses not deductible for tax purposes	**1,902**	3
Share issue costs	**-**	(3)
Research and development tax credits and incentives	**72**	33
Under accrual of prior year provision	**125**	-
Different tax rates applied in overseas jurisdictions	**3,677**	1,256
Share of joint venture's loss	**2,458**	-
Total tax charge for year	**13,657**	4,640

Changes in tax rates and factors affecting the future tax charge

An increase in the future main UK corporation tax rate to 25% from 1 April 2023, from the previously enacted 19%, was announced at the Budget on 3 March 2021, and substantively enacted on 24 May 2021. The deferred tax balance at the year end has been calculated based on the rate as at that date.

There have been no legislative changes announced in 2021 in relation to Canadian or US tax rates which will affect the Group.

13 Earnings per share

Basic earnings per share is calculated by dividing net income from operations by the weighted average number of common shares outstanding during the period.

Diluted earnings per share is calculated by adjusting the weighted average number of common shares outstanding during the period to assume conversion of all potential dilutive share options and restricted share units to common shares.

(US$ thousands except number of shares)	**Year ended 31 December 2021**	Year ended 31 December 2020
Numerator:		
Profit for the year	**9,431**	12,205

Denominator:		
In issue at 1 January	**27,927,252**	25,816,419
Effect of 20 for 1 share exchange	**558,545,040**	516,328,380
Effect of pre-IPO option conversion	**3,986,807**	21,669,167
Effect of primary share issue at IPO	**54,776,719**	-
Effect of exercise of options at IPO	**8,138,237**	-
Effect of share issue post IPO	**137,957**	-
Weighted average number of common shares outstanding for basic earnings per share	**625,584,760**	537,997,547
Adjustment for share options and RSUs	**76,905,071**	91,831,919
Weighted average number of common shares outstanding for diluted earnings per share	**702,489,831**	629,829,466
Basic earnings per share (US$ cents)	**1.51**	2.27
Diluted earnings per share (US$ cents)	**1.34**	1.94

The number of shares at 31 December 2020 has been adjusted for the 20 for 1 share exchange that happened immediately prior to the Initial Public Offering in May 2021, in order to give comparative figures. The earnings per share values have also been adjusted to reflect this.

14 Property and equipment

Group	Computer equipment US$'000	Furniture and fixtures US$'000	Leasehold improvements US$'000	Total US$'000
Cost				
Balance at 1 January 2020	236	53	23	312
Additions	255	3	111	369
Foreign exchange	17	1	6	24
Balance at 31 December 2020	508	57	140	705
Additions	1,595	5	268	1,868
Foreign exchange	(15)	-	(4)	(19)
Balance at 31 December 2021	**2,088**	**62**	**404**	**2,554**
Accumulated depreciation				
Balance at 1 January 2020	88	16	8	112
Depreciation charge for the year	136	8	28	172
Foreign exchange	8	-	1	9
Balance at 31 December 2020	232	24	37	293
Depreciation charge for the year	540	7	95	642
Foreign exchange	(6)	-	(1)	(7)
Balance at 31 December 2021	**766**	**31**	**131**	**928**

Net book value				
At 31 December 2019	148	37	15	200
At 31 December 2020	276	33	103	412
At 31 December 2021	**1,322**	**31**	**273**	**1,626**

Company

The Company has no property, plant and equipment.

15 Intangible assets

Group	2021 US$'000
Cost	
Balance at 1 January 2020	-
Additions	133
Foreign exchange	7
Balance at 1 January 2021	140
Additions	**1,038**
Foreign exchange	**(11)**
Balance at 31 December 2021	**1,167**
Net book value	
At 31 December 2019	-
At 31 December 2020	140
At 31 December 2021	**1,167**

The intangible asset is a licence to use IP. This IP is being developed by a third-party vendor and amounts paid to date represent instalments to initiate the development which is carried at cost. No amortisation is recorded as the intangible asset is not yet available for use. The carrying amount was tested for impairment at 31 December 2021 which concluded that no adjustments are necessary. There are no further contractual commitments for the acquisition of intangible assets.

Company

The Company has no intangible assets.

16 Right-of-use assets and lease liabilities

Right-of-use assets

Group	Buildings US$'000	Equipment US$'000	Total US$'000
Cost			
Balance at 1 January 2020	1,009	656	1,665
Additions	4,826	1,620	6,446

Disposal	-	(635)	(635)
Foreign exchange	280	65	345
Balance at 31 December 2020	6,115	1,706	7,821
Additions	**2,321**	**898**	**3,219**
Disposal	**-**	**(22)**	**(22)**
Foreign exchange	**24**	**(3)**	**21**
Balance at 31 December 2021	**8,460**	**2,579**	**11,039**
Accumulated depreciation			
Balance at 1 January 2020	371	410	781
Depreciation charge for the year	323	417	740
Disposal	-	(635)	(635)
Foreign exchange	24	(4)	20
Balance at 31 December 2020	718	188	906
Depreciation charge for the year	**1,144**	**1,341**	**2,485**
Foreign exchange	**(10)**	**(14)**	**(24)**
Balance at 31 December 2021	**1,852**	**1,515**	**3,367**
Net book value			
At 31 December 2019	638	246	884
At 31 December 2020	5,397	1,518	6,915
At 31 December 2021	**6,608**	**1,064**	**7,672**

Nature of leasing activities (in the capacity as lessee)

The Group has leases for corporate offices, development facilities and certain equipment. These leases have remaining lease terms ranging from four months to 8.5 years, some of which include options to extend the leases for up to ten years or to terminate the lease with notice periods of 90 days to six months or at predetermined dates as specified within the lease contract. The Group has classified the assets related to these leases as right-of-use assets and the liabilities associated with the future lease payments under these leases as lease liabilities. The weighted average incremental borrowing rate applied to these lease liabilities at initial recognition during the year was 3.95% per annum.

At 31 December 2021, the carrying amounts of lease liabilities are not reduced by the amount of payments that would be avoided from exercising break clauses because at that date it was considered reasonably certain that the Group would not exercise its right to break the lease. Total lease payments of US$0.1m (2020: US$nil) are potentially avoidable were the Group to exercise break clauses at 31 December 2021.

The use of extension and termination options gives the Group added flexibility in the event it has identified more suitable premises in terms of cost and/or location or determined that it is advantageous to remain in a location beyond the original lease term. An option is only exercised when consistent with the Group's strategy and the economic benefits of exercising the option exceed the expected overall cost.

Amounts not included in the measurement of lease liabilities are as follows:

	Year ended 31 December 2021	Year ended 31 December 2020

Group	US$'000	US$'000
Short-term lease expense	**-**	-
Low-value lease expense	**-**	-
Expense relating to variable lease payments not included in the measurement of lease liabilities	**42**	36
	42	36

Lease liabilities

Group	Total US$'000
At 1 January 2020	957
Additions	6,445
Interest expense	83
Lease payments	(1,001)
Foreign exchange	317
At 31 December 2020	6,801
Additions	**3,219**
Disposals	**(32)**
Interest expense	**294**
Lease payments	**(2,494)**
Foreign exchange	**40**
At 31 December 2021	**7,828**

Lease liabilities are due as follows:

	Group 31 December 2021 US$'000	Group 31 December 2020 US$'000
Not later than one year	**2,160**	1,672
Between one and five years	**5,525**	4,032
Over five years	**143**	1,097
	7,828	6,801

The total cash outflow for leases is as follows:

Group	**Year ended 31 December 2021 US$'000**	Year ended 31 December 2020 US$'000
Total cash outflow	**2,494**	1,001

The Group does not face a significant liquidity risk with regard to its lease liabilities.

Company

The Company has no leases.

17 Investments

Group subsidiaries

All subsidiaries have been included in the consolidated financial statements using the equity method. Details of the Group's subsidiaries as at 31 December 2021 are as follows:

Name of subsidiary	Principal activity	Country of incorporation and principal place of business	Class of share	Proportion of ownership interest and voting rights held by the Group
Alphawave IP Inc.	Developing and licensing high performance connectivity intellectual property for the semiconductor industry	Canada	Ordinary	100%
Alphawave IP Corp.	Sales and sale support to licence intellectual property for the semiconductor industry	United States	Ordinary	100%
Alphawave IP (BVI) Ltd	To facilitate IP licensing to WiseWave Technology Co., LTD	British Virgin Islands	Ordinary	100%
Alphawave Call Inc.	Holding company incorporated to facilitate the exchangeable share structure	Canada	Ordinary	100%
Alphawave Exchange Inc.	Holding company incorporated to facilitate the exchangeable share structure	Canada	Ordinary and Exchangeable	100%
Alphawave IP Limited	To facilitate the investment into WiseWave Technology Co., LTD	China	Ordinary	100%

All of the above subsidiaries, with the exception of Alphawave IP (BVI) Ltd, Alphawave Call. Inc., and Alphawave IP Limited, are indirectly held subsidiaries.

The registered office of Alphawave IP Corp. is 1730 N 1st St, Suite 650, San Jose, CA, 95112.

The registered office of Alphawave IP (BVI) Ltd is Trinity Chambers, PO Box 4301, Road Town, Tortola, British Virgin Islands.

The registered office of Alphawave IP Limited is 21 Avendia da Praia Grande, No 409, Edificio China Law, 21 andar, em Macau.

The registered office of all other subsidiaries is 70 University Ave, 10th Floor, Toronto, Ontario, Canada M5J 2M4.

Summary of the Company investments

Company	Subsidiaries US$'000
Cost	
On incorporation	-
Addition	18,236
Share-based payment capital contribution	4,155
At 31 December 2021	**22,391**
Carrying amount	
At 31 December 2021	**22,391**

As noted in note 23, the Company was incorporated and acquired control of Alphawave IP Inc. via a 20 shares in the Company for one share in Alphawave IP Inc. exchange.

Investment in joint ventures

The following entities have been included in the consolidated financial statements using the equity method:

Name of joint venture	Principal activity	Country of incorporation and principal place of business	Class of share	Proportion of ownership interest and voting rights held by the Group
WiseWave Technology Co., LTD	A semiconductor device company focused on the mainland Chinese market	China	Ordinary	42.5%

The registered office of WiseWave Technology Co., LTD is Room 105, No. 6, Baohua Road, Hengqin New District, Zhuhai, China.

Group	Joint venture US$'000
Cost and net book value	
At 1 January 2021	-
Additions	22,360
Share of loss	(12,939)
At 31 December 2021	**9,421**

Additions in the year of US$22.4m represents our first investment, out of a total committed investment of up to US$170.0m, into WiseWave Technology Co., LTD. The investment was made in Q4 2021 out of a total funding round of US$52.6m, with the majority of the funds contributed by Wise Road Capital.

Summarised financial information for joint venture:

	Year ended 31 December 2021 US$'000
Current assets	**32,114**
Property and equipment	**12**
Intangible assets	**29,018**
Current liabilities	**9,707**
Non-current liabilities	**-**
Included in the above amounts are:	
Cash and cash equivalents	**30,664**
Current financial liabilities (excluding trade payables)	**-**
Non-current financial liabilities (excluding trade payables)	**-**
Net assets (100%)	**51,437**
Group share of net assets (42.5%)	**21,861**
Period ended 31 December:	
Revenues	**-**
Loss from continuing operations	**(1,522)**
Other comprehensive income	**-**
Included in the above amounts are:	
Depreciation and amortisation	**(925)**
Interest expense	**(73)**
Total comprehensive expense (100%)	**(1,522)**
Group share of total comprehensive expense (42.5%)	**(647)**

The above summary financial information has been aligned with the accounting policies of the Group. The recognition of intangible assets and related amortisation has been adjusted for the purposes of aligning the Group recognition policies.

Share of post-tax loss of equity-accounted joint ventures:

	Year ended 31 December 2021 US$'000
Share of loss	**647**
Elimination of gains from sales to the joint venture	**12,292**
Total	**12,939**

Revenues of US$29.8m were made from provision of IP to WiseWave. To the extent that WiseWave has not yet utilised the IP, the proportion of the Group's revenues has been eliminated and will be released over the term of the subscription licence of five years.

18 Trade and other receivables

	Group 2021 US$'000	Group 2020 US$'000	**Company 2021 US$'000**
Trade receivables from contracts with customers	**12,074**	5,214	**-**
Less: expected credit loss provision	**-**	-	**-**
Trade receivables at amortised cost - net	**12,074**	5,214	**-**
Other receivables	**158**	428	**-**
Total financial assets other than cash and cash equivalents carried at amortised cost	**12,232**	5,642	**-**
Prepayments	**262**	349	**146**
Capitalised contract costs	**609**	233	**-**
Total current trade and other receivables	**13,103**	6,224	**146**

Group

The carrying value of trade and other receivables approximates to fair value.

The Group applies the IFRS 9 simplified approach to measuring expected credit losses (ECL) using a lifetime ECL provision for trade and other receivables. The expected loss rates are based on the Group's historical credit losses. The historic loss rates are then adjusted for current and forward-looking information on macroeconomic factors affecting the Group's customers.

The Group's exposure to credit and market risks, including impairments and allowances for credit losses, relating to trade and other receivables is disclosed in note 26.

All trade and other receivables have been reviewed under the ECL impairment model. As at 31 December 2021, the Group's ECL provision was immaterial and therefore not recognised (31 December 2020: also immaterial).

Included in other receivables is an amount of US$nil (2020: US$428,000) of notes receivable from employees. The notes receivable from employees had no stated terms of repayment, were due on demand and bore interest at 1% per annum. In the event of default, the notes were to be enforced under applicable laws.

19 Trade and other payables

Trade and other payables: Current

	Group 31 December 2021 US$'000	Group 31 December 2020 US$'000	**Company 31 December 2021 US$'000**
Trade payables	**1,317**	1,091	**366**
Other payables	**-**	3	**-**
Accrued expenses	**4,038**	979	**637**
Employee-related liabilities	**450**	134	**10**
Social security and other taxes	**-**	-	**-**
Total trade and other payables	**5,805**	2,207	**1,013**

The carrying value of trade and other payables classified as financial liabilities measured at amortised cost approximates fair value.

Amounts owed to Group undertakings are interest free and repayable on demand.

20 Loans and borrowings

	Group 31 December 2021 US$'000	Group 31 December 2020 US$'000	**Company 31 December 2021 US$'000**
Non-current			
Bank loans secured	**-**	27	**-**
Current			
Bank loans secured	**-**	27	**-**
Total borrowings	**-**	54	**-**

Bank loans were long-term debt under the Paycheck Protection Program (PPP) in the United States of America. The debt bore interest at 1% per annum and was fully repaid in the year.

21 Employee benefits liabilities

Liabilities for employee benefits comprise:

	Group 31 December 2021 US$'000	Group 31 December 2020 US$'000	**Company 31 December 2021 US$'000**
Accrual for annual leave	**450**	134	**10**

22 Deferred tax

Deferred tax is calculated in full on temporary differences under the liability method using a tax rate of 25%. The increase in the main rate of UK corporation tax to 25% was substantively enacted on 24 May 2021. This new rate has been applied to deferred tax balances which are expected to reverse after 1 April 2023, the date on which that new rate becomes effective.

The movement on the deferred tax account is as shown below:

	Group US$'000	Company US$'000
2021		
At 1 January 2021	**492**	**-**
Credit to profit or loss	**(74)**	**-**
Foreign exchange	**4**	**-**
At 31 December 2021	**422**	**-**
2020		
At 1 January 2020	218	-
Charge to profit or loss	261	-
Foreign exchange	13	-
At 31 December 2020	492	-

The deferred taxation liability is made up as follows:

	Group 31 December 2021 US$'000	Group 31 December 2020 US$'000	**Company 31 December 2021 US$'000**
Accelerated capital allowances	**74**	17	**-**
Leases	**(41)**	31	**-**
Other temporary differences	**389**	444	**-**
Total	**422**	492	**-**

23 Share capital

Authorised share capital	**Number of shares**	**US$'000**
Ordinary shares of £0.01 each	**664,965,934**	**9,399**

Issued and fully paid	Number of shares	US$'000
Redeemable preference shares of £1 each		
Balance as at 31 December 2020	-	-
Primary share issue at Initial Public Offering	50,000	71
	50,000	71
Shares redeemed	(50,000)	(71)

Balance as at 31 December 2021	-	-

Issued and fully paid	Number of shares	US$'000
Ordinary shares of £0.01 each		
Balance as at 31 December 2020 in Alphawave IP Inc.	27,927,252	-
Exercise of options pre Initial Public Offering	265,701	-
Sub-total	**28,192,953**	**-**
20 for 1 share exchange	563,859,060	796,958
Shares issued to option holders on exercise	13,049,861	18,445
	576,908,921	815,403
Primary share issue at Initial Public Offering	87,835,796	124,147
Further issue of shares	221,217	313
	664,965,934	939,863
Capital reduction	-	(930,464)
Balance as at 31 December 2021	**664,965,934**	**9,399**

On 14 May 2021, the Company acquired the entire issued share capital of Alphawave IP Inc. in return for 563,859,060 ordinary shares issued by the Company with a nominal value of £1. This was based on 20 shares in the Company for each share in Alphawave IP Inc.

The Company issued 87,835,796 shares, as a primary offering, with a nominal value of £1 as part of its listing on the London Stock Exchange at a price of US$5.79 (£4.10), resulting in gross proceeds to the Company of US$509.0m (£360.1m) accounted for as share capital of US$124.1m (£87.8m) and share premium of US$384.9m (£272.3m).

Net proceeds after bank syndication fees were US$492.1m (£347.1m) with further costs relating to the issuance of shares resulting in total costs of US$20.3m (£14.5m), chargeable to the share premium account. However, the Company received US$22.2m (£15.7m) as proceeds of a stock stabilisation programme which were set off against these Initial Public Offering costs, resulting in the net proceeds of US$1.9m being posted to the share premium account. The Company had further costs of US$10.0m (£7.2m) relating to the IPO but not relating directly to the issuance of new shares. These have been charged to the statement of comprehensive income as non-recurring costs.

As part of the transaction there was a secondary offering where certain employees, Directors and founders sold a total of 120,859,856 shares, including the 13,049,861 options converted to shares and described below, at £4.10 per share.

In addition, all options held over Alphawave IP Inc. stock became, by way of an amendment to option agreements, options in Company shares, on the basis of 20 options in the Company for one option in Alphawave IP Inc., each with an exercise price of 1/20th of the original exercise price at the grant date.

On the Initial Public Offering date and as part of the secondary offering, 13,049,861 options were exercised into newly issued ordinary shares in the Company. The options exercised all had exercise prices below the £1 nominal value as a result of them maintaining their original exercise prices when they were granted as options in the shares of Alphawave IP Inc. This resulted in exercise proceeds of US$4.1m (£2.8m) with the shortfall in share capital of US$14.4m (£10.2m) being transferred from the share premium account to the ordinary share capital account.

Finally, at IPO a further 221,217 ordinary shares were issued and purchased by our Non-Executive Directors at the market price of £4.10.

The reorganisation of the Company's corporate structure described above has been accounted for as a common control transaction. A merger reserve has been established which reflects the difference between the share capital issued to acquire the shares in Alphawave IP Inc. and the share capital of Alphawave IP Inc. acquired at the transaction date of 14 May 2021.

On 19 November 2021, the Company performed a capital reduction, reducing share capital to 1% of the previous share capital, and also completed a cancellation of share premium, approved by the High Court of Justice Business and Property Courts of England and Wales Companies Court.

On 6 December 2021 the preference shares were redeemed.

Rights and restrictions

Each ordinary share carries the right to one vote on a poll. The right to vote is determined by reference to the register of members at a time specified in the Notice of Meeting. All dividends shall be declared and paid according to the amounts paid up on the share. The shares do not carry any rights with respect to capital to participate in a distribution (including on winding up) other than those that exist as a matter of law. The shares are not redeemable.

24 Reserves

The following describes the nature and purpose of each reserve within equity:

Reserve	Description and purpose
Share capital	Amount subscribed for share capital at nominal value.
Share premium	The premium arising on issue of equity shares, net of issue expenses.
Share-based payment reserve	The share-based payment reserve is used to recognise the grant date fair value of shares issued to employees.
Merger reserve	The difference between the share capital issued to acquire the shares in Alphawave IP Inc. and the share capital of Alphawave IP Inc. acquired at the transaction date of 14 May 2021.
Foreign exchange reserve	Gains or losses arising on retranslating the net assets of overseas operations.
Retained earnings	All other net gains and losses and transactions with owners not recognised elsewhere.

25 Share-based payment

The Company operates two equity-settled share-based incentive schemes for employees - an option scheme, which was utilised prior to the IPO, and a restricted share unit (RSU) scheme used both pre and post-IPO. The terms of any options and RSUs granted under the schemes are specified within individual grant agreements.

Both options and RSUs typically vest over four years with 25% vesting after one year from the grant date with the remaining 75% vesting equally each month over the following 36 months. They have a life of five years which can be extended with Board approval. The exercise price of option grants was set at the fair value of the Company's common shares as determined by the implied valuation at the prior funding round.

Each share option or RSU in Alphawave IP Inc. became 20 share options or RSUs in the Company by way of an amendment to the option or RSU agreements immediately prior to the Company's Admission to listing on 18 May 2021. The exercise price of any share options outstanding at that time was divided by 20.

Each share option or RSU converts into one voting share of the Company on exercise or vesting. No amounts are paid or payable by the recipient on receipt of the option or RSU. The options or RSUs carry neither rights to dividends nor voting rights. Options may be exercised at any time from the date of vesting to the date of their expiry. The only vesting condition of the options and RSUs is that the individual remains an employee of the Group over the vesting period.

Options on voting common shares:	**31 December 2021 Number of share options**	**31 December 2021 Weighted average exercise price (US$)**	31 December 2020 Number of share options	31 December 2020 Weighted average exercise price (US$)
Outstanding at the beginning of the period	**-**	**-**	1,199,000	0.270
Exercised during the period	**-**	**-**	(1,199,000)	0.270
Outstanding at the end of the period	**-**	**-**	-	-

Exercisable at the end of the period	**-**	**-**	-	-

The exercise price of options over voting shares outstanding at 31 December 2021 was US$nil (2020: US$0.27)

Options on non-voting common shares:	**31 December 2021 Number of share options**	**31 December 2021 Weighted average exercise price (US$)**	31 December 2020 Number of share options	31 December 2020 Weighted average exercise price (US$)
Outstanding at the beginning of the period	**4,557,955**	**1.874**	4,078,372	0.263
Exercised during the period	**(936,944)**	**5.760**	(911,833)	1.016
Forfeited during the period	**-**	**-**	(152,084)	1.795
Granted during the period	**1,142,650**	**20,04**	1,543,500	5.514
Share exchange during the period	**90,509,559**	**-**	-	-
Outstanding at the end of the period	**95,273,220[1]**	**0.280[1]**	4,557,955	1.874
Exercisable at the end of the period	**63,833,174[1]**	**0.08[1]**	1,603,004	1.085

The exercise price of options over non-voting shares outstanding at 31 December 2021 ranged between US0.08[1] cents and US$1.13[1] (2020: US$0.08[1] cents and US$1.13[1]) and their weighted average contractual life was 3.07 years (2020: 2.79 years).

1. Stated after adjusting for the 20:1 share split which happened in May 2021.

The weighted average value per option during the year was US$0.17.

The total expense included within the consolidated statement of comprehensive income for the Group for the current year is US$6,143,000 (2020: US$565,000), and for the Company is US$342,000.

The following information is relevant in the determination of the fair value of options granted during the year:

Option pricing model used	**31 December 2021 Black-Scholes-Merton**	31 December 2020 Black-Scholes-Merton
Risk-free interest rate	**0.91%**	0.57%
Expected volatility	**29.72%**	27.16%
Expected dividend yield	**0%**	0%
Expected life of stock option	**4 years**	4 years

The Group has determined the forfeiture rate to be nil and volatility was determined in reference to listed entities similar to the Group.

Volatility was determined with reference to similar listed entities using the historical stock price volatility of those entities over the estimated expected term of the option awards.

26 Financial instruments – risk management

The Group is exposed through its operations to the following financial risks:

- credit risk;
- interest rate risk;
- foreign exchange risk;
- other market price risk;
- liquidity risk; and
- capital risk.

In common with other businesses, the Group is exposed to risks that arise from its use of financial instruments. This note describes the Group's objectives, policies and processes for managing those risks and the methods used to measure them. Further quantitative information in respect of these risks is presented throughout these financial statements.

There have been no substantive changes in the Group's exposure to financial instrument risks, its objectives, policies and processes for managing those risks or the methods used to measure them from previous periods unless otherwise stated in this note.

Principal financial instruments

The principal financial instruments used by the Group, from which financial instrument risk arises are as follows:

- trade and other receivables;
- cash and cash equivalents; and
- trade and other payables.

The Group and Company's financial instruments are categorised as follows:

Financial assets

Amortised cost

	Group 2021 US$'000	Group 2020 US$'000	**Company 2021 US$'000**
Trade receivables	**12,074**	5,214	**-**
Amounts owed by Group undertakings	**-**	-	**23,364**
Other receivables	**158**	428	**-**
Accrued revenue	**31,719**	10,328	**-**
Cash and cash equivalents	**500,964**	14,039	**463,360**
Total financial assets held at amortised cost	**544,915**	30,009	**486,724**

Financial assets

Amortised cost

	Group 31 December 2021 US$'000	Group 31 December 2020 US$'000	**Company 31 December 2021 US$'000**
Trade payables	**1,317**	1,091	**366**
Other payables	**-**	3	**-**
Accrued expenses	**4,038**	979	**637**
Employee-related liabilities	**450**	134	**10**
Amounts owed to Group undertakings	**-**	-	**150**
Flexible spending account	**6,819**	2,335	**-**
Loans and borrowings	**-**	54	**-**
Total financial liabilities held at amortised cost	**12,624**	4,596	**1,163**

Financial instruments not measured at fair value

Financial instruments not measured at fair value include cash and cash equivalents, trade and other receivables, trade and other payables, and loans and borrowings.

Due to their short-term nature, the carrying value of cash and cash equivalents, trade and other receivables, and trade and other payables approximates their fair value.

General objectives, policies and processes

The Board has overall responsibility for the determination of the Group's risk management objectives and policies. Whilst retaining ultimate responsibility for them, it has delegated the authority for designing and operating processes that ensure the effective implementation of the objectives and policies to the Group's centralised finance function, from which the Board receives regular updates.

The overall objective of the Board is to set policies that seek to reduce risk as far as possible without unduly affecting the Group's competitiveness and flexibility. Further details regarding these policies are set out below:

Credit risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations. The Group is mainly exposed to credit risk from its operating activities (primarily for accounts receivable). The Group recognises expected credit losses based on past experience of losses arising, the current position and forward-looking information where it is available. The Group's experience with such customers has been characterised by prompt payment and no uncollectible accounts.

Under the general approach under IFRS 9 there is an assessment of whether there has been a significant increase in the credit risk since initial recognition. If there has been a significant increase in credit risk, then the loss allowance is calculated based on lifetime expected credit losses. If not, then the loss allowance is based on twelve month expected credit losses. This determination is made at the end of each financial period.

Thus, the basis of the loss allowance for a specific financial asset could change year on year. For trade receivables which do not contain a significant financing component, the loss allowance is determined as the lifetime expected credit losses of the instruments. For financial assets other than trade receivables, the general approach under IFRS 9 is followed.

The Group applies the IFRS 9 simplified approach to measuring expected credit losses using a lifetime expected credit loss provision for trade receivables and contract assets. To measure expected credit losses on a collective basis, trade receivables and contract assets are grouped based on similar credit risk and ageing. The contract assets have similar risk characteristics to the trade receivables for similar types of contracts. The expected credit losses are based on the Group’s historical credit losses which are then adjusted for current and forward-looking information on macroeconomic factors affecting the Group’s customers. The Group has identified gross domestic growth rates, unemployment rates and inflation rates as the key macroeconomic factors in the countries in which the Group operates.

As at 31 December 2021, the Group had accounts receivable from one customer that made up 25% (2020: 51%) of the total balance. None of the amounts outstanding have been challenged by the customer and the Group continues to conduct business with them on an ongoing basis. Accordingly, management has no reason to believe that these balances are not fully collectible in the future.

Credit risk also arises from cash and cash equivalents and deposits with banks and financial institutions. The Group monitors the credit quality of financial institutions where it keeps its funds. Currently, it deals with a bank having Aa2 credit rating by Moody's.

The Group trades only with recognised, creditworthy third parties and independent credit checks and credit limits are managed by the trading entities. Credit limits can only be exceeded if authorised by the CFO. Receivable balances are monitored on an ongoing basis with the result that the Group’s exposure to bad debts is not significant, especially given past payment history of longstanding customers. There are no significant concentrations of credit risk within the Group.

Market risk

Market risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices, whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting similar financial instruments traded in the market. Market price risks includes interest rate risk, currency risk and other price risk.

The Group also repaid its long-term borrowings in the year and is not exposed to interest rate risk in the current year.

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. In the prior year, the Group was exposed to interest rate risk on its floating rate bank indebtedness. If the interest rates were to fluctuate by 5%, there would be no significant impact on the Group's financial statements due to the short-term nature of the debt.

Foreign exchange risk

Foreign exchange risk is the risk to the Group's earnings that arise from fluctuations of foreign exchange rates and the degree of volatility of these rates. There is a risk that significant fluctuations in the exchange rates between US$ and CAD$ and between US$ and GBP cause an adverse impact on the Group’s profitability. The Group does not use derivative instruments to reduce its exposure to foreign exchange risk.

The Group’s exposure to foreign exchange risk is as follows:

31 December 2021	**CAD** **US$’000**	**GBP** **US$’000**	**Total** **US$’000**

Cash and cash equivalents	**876**	**364,837**	**365,713**
Trade and other receivables	**12,836**	**146**	**12,982**
Accrued income	**28,016**	**-**	**28,016**
Trade and other payables	**4,615**	**366**	**4,981**
Deferred income	**12,661**	**-**	**12,661**
	59,004	**365,349**	**424,353**

31 December 2020	CAD US $'000	GBP US $'000	Total US $'000
Cash and cash equivalents	339	-	339
Trade and other receivables	6,224	-	6,224
Accrued income	10,328	-	10,328
Trade and other payables	2,207	-	2,207
Loans and borrowings	54	-	54
Deferred income	7,381	-	7,381
	26,533	-	26,533

As at 31 December 2021, if CAD$ had strengthened/weakened by 5% with all other variables held constant, profit for the year would have been approximately US$10,405,000 and US$9,640,000 (2020: US$12,843,000 and US$11,627,000), respectively, mainly as a result of the foreign exchange gains and losses on translation of foreign exchange financial instruments.

As at 31 December 2021, if GBP had strengthened/weakened by 5% with all other variables held constant, profit for the year would have been approximately US$10,376,000 and US$9,631,000 respectively, mainly as a result of the foreign exchange gains and losses on translation of foreign exchange financial instruments.

Other price risk

Other price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market. There are no financial assets subject to market rate price fluctuations. The Group's exposure to other price risk is minimal.

Liquidity risk

Liquidity risk arises from the Group's management of working capital and the finance charges and principal repayments on its debt instruments. Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due.

The Group's policy is to ensure that it will always have sufficient liquid assets to allow it to meet its liabilities when they become due.

The Group manages its liquidity risk by reviewing its growth plans on an ongoing basis as well as maintaining excess capacity on its line of credit.

The following table sets out the contractual maturities (representing undiscounted contractual cash flows) of financial liabilities:

31 December 2021	**Due within 1 year US$'000**	**Due between 1 and 5 years US$'000**	**Due > 5 years US$'000**	**Total US$'000**
Trade payables	**1,317**	**-**	**-**	**1,317**
Other payables	**-**	**-**	**-**	**-**
Accrued expenses	**4,038**	**-**	**-**	**4,038**
Employee-related liabilities	**450**	**-**	**-**	**450**
Loans and borrowings	**-**	**-**	**-**	**-**
Flexible spending account	**6,819**	**-**	**-**	**6,819**
Lease liabilities	**2,160**	**5,525**	**143**	**7,828**
	14,784	**5,525**	**143**	**20,452**

	Due within 1 year	Due between 1 and 5 years	Due > 5 years	Total

31 December 2020	US$'000	US$'000	US$'000	US$'000
Trade payables	1,091	-	-	1,091
Other payables	3	-	-	3
Accrued expenses	979	-	-	979
Employee-related liabilities	134	-	-	134
Loans and borrowings	27	27	-	54
Flexible spending account	2,335	-	-	2,335
Lease liabilities	1,672	4,032	1,097	6,801
	6,241	4,059	1,097	11,397

Capital risk management

The Group's primary objectives with respect to its capital management are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital and to have sufficient cash resources to fund the research, development and operations. To secure the additional capital necessary to pursue these plans, if needed, the Group may attempt to raise additional funds through the issuance of equity.

Management reviews its capital management approach on an ongoing basis. There were no changes in the Group's approach to capital management in the year ended 31 December 2021. The Group is not subject to externally imposed capital requirements.

27 Retirement benefit schemes

Defined contribution schemes

Group

The Group operates defined contribution retirement benefit schemes. The pension cost charge for the year represented contributions payable by the Group to the schemes and amounted to US$253,000 (2020: US$133,000). Contributions totalling US$2,000 (2020: US$nil) were payable to the schemes at the end of the year and are included in other creditors.

28 Government assistance

In 2020, the Group received Canadian Emergency Wage Subsidy (CEWS) from the Government of Canada totalling US$1,063,014. CEWS was offered to qualifying companies in response to the COVID-19 virus to support wages paid to employees. Government assistance was applied to reduce salaries expensed during the year under IAS 20.

During 2021, the Group received US$55,000 CEWS from the Government of Canada. This was prior to the Initial Public Offering when Alphawave IP Inc. was a private Canadian company faced with uncertainty as to the longer-term impact on the business. Post the Initial Public Offering, whilst Alphawave IP Inc. is entitled to COVID-related grants, the Board and management team has elected not to receive them. No government assistance has been requested nor taken in the UK since the Company's incorporation and Initial Public Offering.

29 Related party transactions

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note.

Transactions with Directors and key management personnel of the Group are disclosed in note 8.

During the year Group companies entered into the following transactions with related parties who are not members of the Group.

	31 December 2021 US$'000	31 December 2020 US$'000
Transactions:		
Revenue from companies on which a Director is the chairman of the board[1]	**9,855**	1,392
Revenue from VeriSilicon		1,720

	8,861	
Revenue from WiseWave, a joint venture, where there is common directorship		-
	29,846	
	48,562	3,112
Balances:		
Accounts receivable from a company on which a Director is the chairman of the board	**500**	-
Accounts receivable from VeriSilicon		-
	2,469	
Accrued revenue from companies on which a Director is the chairman of the board		-
	5,631	
Accrued revenue from VeriSilicon		
	423	396
Accrued revenue from WiseWave, a joint venture, where there is common directorship	**5,803**	-
	14,826	396
Deferred revenue from a company on which a Director is the chairman of the board[1]	**727**	710
Deferred revenue from VeriSilicon		-
	593	
	1,320	710

2. US$949k of this revenue and US$677k of this deferred revenue is from Achronix Semiconductor Corporation, where John Lofton Holt ceased to be chairman of the board on 8 July 2021.
3. Companies on which a Director is the chairman of the board are Achronix Semiconductor Corporation, FLC Technology Group and DreamBig Semiconductor Inc.

Sales to related parties are made at market prices and in the ordinary course of business. Outstanding balances are unsecured and settlement occurs in cash. Any estimated credit losses on amounts owed by related parties would not be material and are therefore not disclosed. This assessment is undertaken at each key reporting period through examining the financial position of the related party and the market in which the related party operates.

In the interests of transparency, we have opted to disclose VeriSilicon as a related party within this note. However, we have received advice that VeriSilicon is not a related party as defined by IAS 24 or Listing Rule 11.

30 Capital commitments

The Group has contractually committed to investing up to US$170.0m in WiseWave and to date has invested US$22.4m.

31 Events after the reporting date

On 1 January 2022, the Group acquired 100% of the voting equity instruments of Precise-ITC Inc., a company whose principal activity is the development of Ethernet Controller IP. The principal reason for this acquisition was to increase the product offering of the Group. The initial accounting for this acquisition has not been completed, and as such has not been included in the disclosures below.

The book value of the net assets acquired is as follows:

	US$'000
Property and equipment	**52**
Cash	**792**
Payables	**(223)**
Net assets	**621**

At the date of authorisation of these financial statements a detailed assessment of the fair value of the identifiable net assets has not been completed.

Fair value of consideration paid

	US$'000
Cash	**20,283**

A fair value assessment is planned for this acquisition which we expect will result in some recognition of intangible assets and that therefore recognised goodwill will be less than US$19.7m. These intangible assets will provide a competitive advantage to the Group that will be realised through vertical integration of semiconductor IP development. The consideration consisted of US$14.5m in cash, US$0.3m relating to employee retention and a further US$5.5m being payable if certain targets are met by the Precise organisation.

AWIPINSURE Limited, a company governed by the Laws of Barbados, was incorporated on 31 January 2022. All 125,000 common shares with zero par value are owned by Alphawave IP Group plc and has been set up as part of our captive insurance programme.

On 14 March 2022, the Group announced that definitive agreements had been signed for the acquisition of the OpenFive business unit of SiFive Inc. for a total cash consideration of US$210m, subject to customary closing conditions including adjustments for working capital. The consideration will be met from the existing cash resources of the Group. The transaction is expected to close in the second half of 2022, pending regulatory approvals.

32 Notes supporting the consolidated statement of cash flows

	Group 31 December 2021 US$'000	Group 31 December 2020 US$'000	**Company 31 December 2021 US$'000**
Cash at bank and in hand	**500,964**	14,039	**463,360**

There are no significant amounts of cash and cash equivalents that are held by the Group that are not available to the Group.

Movements in the Group's loans and borrowings have been analysed below.

	Non-current loans and borrowings US$'000	**Current loans and borrowings US$'000**	**Total US$'000**
At 1 January 2021	**27**	**27**	**54**
Cash flows	**(27)**	**(27)**	**(54)**
Non-cash flows	**-**	**-**	**-**
At 31 December 2021	**-**	**-**	**-**

	Non-current loans and borrowings US$'000	Current loans and borrowings US$'000	Total US$'000
At 1 January 2020	-	-	-
Cash flows	27	27	54
Non-cash flows	-	-	-

At 31 December 2020	27	27	54

	Total US$'000
Opening trade and other payables	2,207
Amount not relating to operating expenses	739
Movements to be adjusted in the cash flow	2,859
Closing trade payables	**5,805**