Q3 2023 Trading and Business Update

- Expanded customer base with 9 new design wins, 5 IP licence design wins and 4 custom silicon design wins
- Approximately 80% of Licence & NRE bookings in advanced nodes, 7nm and below
- Advanced node custom silicon design win with our 112G SerDes IP
- Two 3nm IP licencing design wins with a leading telecommunications business and a hyperscaler; 2 chiplet-based design wins
- Strong rate of quarterly design wins reflects the scalability of our technology
- Custom silicon NRE booking of over US$20m signed in the first three weeks of Q4 2023
- Design award for next generation chiplet-based AI part in early Q4 2023
- Strong pipeline of opportunities in Q4 2023
- Management remains confident in the outlook for the business

LONDON, United Kingdom and TORONTO, Ontario, Canada 24 October 2023 – Alphawave IP Group plc (LN: AWE, the "Company" or "Alphawave Semi"), a global leader in high-speed connectivity for the world's technology infrastructure, is pleased to publish its trading and business update for the three months ended 30 September 2023.

US$m	**Q3 2023**	**Q3 2022**	**Change**
Licence and NRE	42.9	57.8	(26)%
Royalties and Silicon Orders	30.1	22.2	35%
New Bookings	72.9	80.0	(9)%
Additional design win activity - FSA drawdowns and China re-sale licences[1]	-	8.5	nm

Due to rounding, numbers presented in the table may not add up to the totals provided and percentages may not precisely reflect the absolute figures.

Tony Pialis, President and Chief Executive Officer of Alphawave Semi said: "In the past quarter we achieved exciting new wins such as a networking custom silicon with our 112G SerDes IP for a tier one semiconductor device company, and a 3nm IP licencing deal for a leading European telecommunications business. Design wins continued during the first few weeks of October as we engage with our customers to build the next generation of AI infrastructure. Our strong pipeline continues to grow alongside customers' demand for our high-performance IP and products. We are excited about the prospects ahead and the long-term growth potential of our business."

John Lofton Holt, Executive Chairman of Alphawave Semi said: "The strong momentum of design wins in advanced nodes is a reflection of our technology leadership in the most advanced

[1] Both FSA (Flexible Spending Account) drawdowns and China re-sale licences convert previously announced contractual commitments included within bookings reported in prior periods to new product design wins which will be recognised as revenue over time.

technologies and the role it plays in the development of next-generation AI infrastructure. As we approach the end of the year, we remain laser focused on strong execution and long-term value creation."

Key Highlights

New bookings in Q3 2023 were 9% below the prior period at US$72.9m (Q3 2022: US$80.0m). In the first three weeks of Q4 2023 we signed an additional custom silicon NRE booking of over US$20m.

Licence and Non-recurring Engineering ("NRE") bookings in Q3 2023 were 26% below Q3 2022 as the signature of a custom silicon NRE booking slipped into Q4 2023. North American customers represented over two thirds of these bookings, including an advanced node custom silicon design win with a leading North American semiconductor device company and two 3nm IP licencing design wins, with a leading European Telco business and a North American hyperscaler. Chinese customers[2] represented 17% of the Licence & NRE bookings in the period (11% on a year-to-date basis) and approximately 80% of the Licence & NRE bookings were in advanced nodes, 7nm and below.

Royalties and Silicon orders were US$30.1m, up 35% over Q3 2022. The level of silicon orders was driven by pre-existing custom silicon designs mostly for Chinese customers. In the quarter we also ramped the production of AI silicon for a Japanese customer.

Our pipeline of opportunities in Q4 2023 is very strong. The level of bookings in the quarter reflects the scalability of our technology through IP licensing and custom silicon. Our vertically integrated business model enables us to generate larger revenue streams and capture the full value embedded in our custom silicon offering. Our Connectivity Products Group continues to make made good progress toward our plan to start generating revenue in 2024.

Expanding Technology Leadership and Strong Customer Traction

Since 2017, the Company has demonstrated connectivity technology leadership in leading-edge technologies, including the 3nm process. In Q3 2023 we licenced our 3nm 112G SerDes IP to a leading European telecommunications business and to a North American hyperscaler. These design wins reflect the increased market momentum of leading-edge connectivity and chiplet architectures. The Company expects further design wins in 3nm and continues to work with its foundry partners in 3nm and beyond.

With our expanded IP portfolio, we are strongly positioned to deliver complete connectivity solutions for our IP and custom silicon customers. In Q3 2023, we won an advanced node custom silicon design win with a leading semiconductor device company incorporating our 112G SerDes technology. In addition, during early Q4 2023, we received a design award for a next generation chiplet-based AI part, with a view to execute a definitive agreement during the quarter. As a result of this design award, Alphawave Semi will replace a long-standing semiconductor vendor, a reflection of the strength of our connectivity technology and custom silicon offering.

[2] These Chinese customers are out of scope from the WiseWave and VeriSilicon agreements.

In Q3 2023, there were no Flexible Spending Accounts[3] ("FSA") drawdowns (Q3 2022: US$3.0m) and no China (VeriSilicon) reseller deals[4] (Q3 2022: US$5.5m). Both FSA and reseller deals represent the conversion of customer commitments to design wins.

Overall, design win activity in the quarter was strong with 9 new design wins, 3 from new end-customers and 6 from existing end-customers.

Alphawave Semi has more than half of the top twenty semiconductor device companies as customers[5], a reflection of its continued strength in the data infrastructure markets that require the world's most advanced connectivity technology.

In Q3 2023, the Company announced two successful tapeouts on TSMC's most advanced 3nm process of its High Bandwidth Memory 3 (HBM3) PHY and Universal Chiplet Interconnect Express™ (UCIe™) PHY IPs, paving the way for a new generation of chiplet-enabled silicon platforms, tailored for hyperscaler and data infrastructure customers. Alphawave Semi was the first company to announce UCIe PHY IP supporting faster die-to-die data rates of 24Gbps per lane, delivering an impressive bandwidth of 7.9 Terabits per second over a tight space of a mm of a chip beachfront.

In AI and high-performance computing (HPC) systems where the key performance indicator is Memory Bandwidth per Watt, HBM emerges as a top choice, offering highest bandwidth, optimal area footprint, and superior power efficiency. Alphawave Semi's HBM3 PHY IP targets leading edge high-performance memory interfaces up to 8.6Gbps and 16 channels, operating at very low power. Customers are deploying complete HBM subsystem solutions from Alphawave Semi which integrate the HBM PHY with a highly configurable HBM controller that can be fine-tuned to maximize the efficiency for application specific AI and high-performance computing workloads.

Alphawave Semi announced on 18 October that it had joined Arm Total Design, an ecosystem to make specialised solutions based on Arm® Neoverse™ Compute Subsystems (CSS) widely available across the infrastructure. Generative AI has fundamentally transformed data center compute and connectivity by creating a surge in demand for compute, memory bandwidth, I/O speeds, and energy efficiency. Customers gain a significant time to market advantage by integrating Alphawave Semi's Universal Chiplet Express (UCIe™) enabled custom silicon and pre-built connectivity chiplets with Arm Neoverse CSS compute.

Outlook

The outlook for 2023 remains unchanged. Alphawave Semi expects 2023 revenue of US$340m to US$360m and adjusted EBITDA of approximately US$87m (or approximately 25% of revenue), which is at the mid-point of the revenue guidance range.

Despite the uncertain macroeconomic environment, our growing pipeline reflects positive secular growth trends in data infrastructure markets and the continued investment in next-generation AI-

[3] FSAs or Flexible Spending Accounts represent contracts with customers who have committed to regular periodic payments. These payments are not in respect of specific licences but can be used as credit against future deliverables. FSA drawdowns represent the design win value of transactions signed during the period, against which FSA payments will be credited and will convert to revenue over time.
[4] In February 2021, Alphawave IP signed a three-year exclusive subscription reseller agreement with VeriSilicon with a minimum value of US$54 million. Reseller deals represent the subsequent licensing of IP by VeriSilicon to third parties in China and do not constitute additional bookings for the Company as they are part of the US$54 million minimum commitment.
[5] Semiconductor device companies ranked on market capitalisation as of 17.10.23.

centric connectivity solutions. This, combined with our talented team and strong balance sheet, give us confidence in our future.

About Alphawave Semi

Alphawave Semi is a global leader in high-speed connectivity for the world's technology infrastructure. Faced with the exponential growth of data, Alphawave Semi's technology services a critical need: enabling data to travel faster, more reliably and with higher performance at lower power. We are a vertically integrated semiconductor company, and our IP, custom silicon, and connectivity products are deployed by global tier-one customers in data centers, compute, networking, AI, 5G, autonomous vehicles, and storage. Founded in 2017 by an expert technical team with a proven track record in licensing semiconductor IP, our mission is to accelerate the critical data infrastructure at the heart of our digital world. To find out more about Alphawave Semi, visit: awavesemi.com

Related Party Disclosures

There are no new related parties disclosed in this press release.

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Trademarks

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