

BrainChip Holdings Ltd Appendix 4C & Quarterly Activities Report for the Period Ended 30 June 2024

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- Cash Balance as of 30 June 2024 US\$10.9M

Sydney – 25 July 2024 – [BrainChip Holdings Ltd](#) (ASX: **BRN**, OTCQX: **BRCHF, BHPY**), the world's first commercial producer of neuromorphic artificial intelligence technology, today provides the Quarterly Activities Report in conjunction with its Appendix 4C lodged for the quarter ending 30 June 2024.

OPERATIONS UPDATE

The period from the end of March 2024 to the end of June 2024 was a period in which the Company continued to focus on advancing its customer engagements towards commercialization.

On 6 May, BrainChip announced a collaboration partnership with Frontgrade Gaisler to explore the integration of BrainChip's neuromorphic processor into Frontgrade Gaisler's next generation fault-tolerant, radiation-hardened microprocessors.

This collaboration represents a significant milestone as it aims to introduce the first space-grade SoC worldwide with incorporated true artificial intelligence (AI) capabilities.

These next generation microprocessors would include BrainChip's AI processing capabilities, thereby enabling a considerable step forward in the computing resources available for space-borne systems. In particular, the inclusion of the Akida neuromorphic processor aims to deliver compelling power efficiency and inference performance while maintaining compatibility with existing Convolutional Neural Networks (CNNs).

"Adding AI capabilities to our next generation microprocessors would set a new standard for modern space-grade computing devices," said Sandi Habinc, General Manager at Frontgrade Gaisler.

"The success of this joint effort could empower organizations to leverage AI technology to enhance mission efficiency, ultimately advancing the frontiers of what is possible in space."

Space programs are increasingly turning to neuromorphic AI technology to overcome the latency and power consumption demands that are hindering those within the sector. The goal in integrating AI and neuromorphic computing into space technology is to strengthen deployments that require more autonomy and adaptability by providing the ability to learn on device and adapt in environments with constantly changing variables."

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On 21 May, the BrainChip AGM was held in Sydney, Australia and was attended by approximately 100 shareholders in person and viewed by many hundreds more via the online Lumi platform. The AGM provided an opportunity for the CEO Sean Hehir to introduce the new Chief Technology Officer (CTO), Dr. Tony Lewis to Australian shareholders, and for Dr. Lewis to provide an overview of the new technology and product development strategy for Brainchip going forward.

Dr. Lewis's presentation highlighted the exceptional potential for commercializing BrainChip's proprietary TENNs algorithm, using a simulation of TENNs being applied to a ChatGPT2 program to demonstrate TENNs ability to enhance the speed and performance of Large Language Models (LLMs).

To illustrate this growing focus on TENNs, on 17 June in Seattle, BrainChip's (Rudy) Yan Ru Pei delivered a presentation at the AIS 2024 workshop, based on his authored paper "*A Lightweight Spatiotemporal Network for Online Eye Tracking*". The presentation captivated a large audience, sparking engaging discussions both during and after the event, highlighting the extraordinary interest TENNs is generating.

To learn more, read Rudy's white paper: <https://brainchip.com/a-lightweight-spatiotemporal-network-for-online-eye-tracking/>.

The AGM offered shareholders an opportunity to directly convey their performance expectations to the board and executive leadership. Their feedback was acknowledged, and the board and management committed to improvement.

This feedback was reflected in the vote on the adoption of the Remuneration report, where the Company picked up a second consecutive "strike", despite more than 66% of the shareholders voting to accept the remuneration report. The effect of this second consecutive strike was that the Company was required to put forward a resolution to spill the Board, which was overwhelmingly rejected by more than 90% of voting shareholders. All other resolutions passed comfortably.

Following the AGM, the CEO and Head of Investor Relations met several institutional investors and analysts in both Sydney and Melbourne.

On 27 March, BrainChip issued a Capital Call Notice to LDA Capital to subscribe for up to 40 million BrainChip shares, as part of its commitment to draw down a minimum of A\$12 million no later than 31 December 2024.

The capital call was closed on 28 June 2024 after the sale of 31.1M shares, net of the 8.5% discount. Proceeds received from the sale of shares were received in instalments over the capital call period with A\$2.82 million received on 19 April and \$5.565 million received after the close of the quarter on 3 July.

As reported separately to the market today, the remaining current obligation of \$3.7M was fulfilled in conjunction with the capital raise, where LDA agreed to contribute all remaining unpurchased issued shares of 10.1M to the Placement Offer pool, in exchange for an "Early Buyout Fee" payment of \$371k.

In recognition of the Company's growing commercial maturity and the need to develop a more streamlined and efficient Research & Development program, in late June BrainChip management

reluctantly decided to shut down the Brainchip Research Institute (BRI) in Perth, Western Australia.

This decision will consolidate the Company's Research & Development Team under the CTO's direct supervision, allowing for more co-ordination and less duplication of effort, reduced expense and headcount. As part of the reorganisation, some members of the BRI team have relocated to the Laguna Hills office in the US. The closure of the research institute was a very challenging decision given the support of the local community, the quality of the team and their valuable contributions to our next generation technology portfolio.

BrainChip will continue to maintain its Company Secretarial, Share registry and Investor Relations functions in Australia.

On 6 May, the Company announced it had been granted a new Australian patent. Patent AU202287647 is a valuable IP asset that facilitates one-shot learning and confirms BrainChip's leadership in the field of one/low shot learning as an alternative to traditional machine learning (ML) processes, which are by contrast extremely inefficient, expensive and power intensive.

BrainChip currently has 20 issued and granted patents (13x US, 5x Australia, 2x China) and there are 23 pending patent applications across the US, Europe, Australia, Canada, Japan, Korea, India and Israel.

On 9 May the Company publicised that Pennsylvania State University (Penn State) had joined the BrainChip University AI Accelerator Program.

Penn State is a top-ranked research university founded with a mission of high-quality teaching, expert research, and global service. The Neuromorphic Computing Lab located in Penn State's School of Electrical Engineering and Computer Science (EECS) aims to create a new type of computer that can learn and operate with brain-scale efficiency.

In joining the BrainChip University AI Accelerator Program, EECS students will now have access to cutting-edge neuromorphic technology that will directly affect their communities and solve big problems that may positively impact humanity.

Penn State University joins Arizona State University, Carnegie Mellon University, Rochester Institute of Technology, University of Oklahoma, University of Virginia, and University of Western Australia which have recently joined the Brainchip University AI Accelerator Program.

FINANCIAL UPDATE

The Company ended the June Quarter with US\$10.9M in cash compared to US\$12.9M in the prior quarter.

BrainChip reported net operating cash outflows of US\$3.9M vs.US\$4.4M in the prior quarter.

Cash inflow from customers in the current quarter totaled US\$0.05M whereas the prior quarter reported US\$0.09M. The Company continues to experience long sales cycle times but remains optimistic based on the number of active engagements and level of interest from our prospective customers.

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Total payments to suppliers and employees of US\$4.1M in the current quarter were slightly lower than the prior quarter (US\$4.9M).

Cash used for operating activities includes payments to BrainChip's Board of Directors totaling US\$337,075 as noted in item 6.1 of the accompanying Appendix 4C, comprising fees for Non-Executive Directors and salaries and bonuses for Executive Directors.

Cash inflows from financing activities included \$1.8M (A\$2.8M) received upon the partial completion of the capital call notice that was issued to LDA Capital in April 2024, resulting in the sale of 31.1M shares. BrainChip also received \$0.3M resulting from the exercise of Long-Term Incentive Plan ("LTIP") stock options.

BrainChip has entities in Perth, Australia; Laguna Hills, California (United States); Toulouse, France; and Hyderabad, India.

This announcement is authorised for release by the BRN Board of Directors.

About BrainChip Holdings Ltd (ASX: BRN)

BrainChip is the worldwide leader in edge AI on-chip processing and learning. The Company's first-to-market neuromorphic processor, Akida™, mimics the human brain to analyze only essential sensor inputs at the point of acquisition, processing data with unparalleled efficiency, precision, and economy of energy. Keeping machine learning local to the chip, independent of the cloud, also dramatically reduces latency while improving privacy and data security. In enabling effective edge compute to be universally deployable across real world applications such as connected cars, consumer electronics, and industrial IoT, BrainChip is proving that on-chip AI, close to the sensor, is the future for its customers' products as well as the planet. Explore the benefits of Essential AI at www.brainchip.com.

Additional information is available at:

<https://www.brainchipinc.com>

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Appendix 4C

Quarterly cash flow report for entities subject to Listing Rule 4.7B

Name of entity

BrainChip Holdings Ltd

ABN

64 151 159 812

Quarter ended ("current quarter")

30 June 2024

Consolidated statement of cash flows	Current quarter \$US'000	Year to date (6 months) \$US'000
1. Cash flows from operating activities		
1.1 Receipts from customers	48	138
1.2 Payments for		
(a) research and development	(1,657)	(3,597)
(b) product manufacturing and operating costs	(30)	(55)
(c) advertising and marketing	(1,073)	(2,440)
(d) leased assets	-	-
(e) staff costs	(906)	(1,670)
(f) administration and corporate costs	(407)	(1,195)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	90	203
1.5 Interest and other costs of finance paid	(21)	(42)
1.6 Income taxes paid	53	35
1.7 Government grants and tax incentives	-	329
1.8 Other (provide details if material)	-	-
1.9 Net cash from / (used in) operating activities	(3,903)	(8,294)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	(34)	(51)

Consolidated statement of cash flows	Current quarter \$US'000	Year to date (6 months) \$US'000
(d) investments	-	-
(e) intellectual property	-	-
(f) other non-current assets	-	-
2.2 Proceeds from disposal of:		
(a) entities	-	-
(b) businesses	-	-
(c) property, plant and equipment	-	-
(d) investments	-	-
(e) intellectual property	-	-
(f) other non-current assets	-	-
2.3 Cash flows from loans to other entities	-	-
2.4 Dividends received (see note 3)	-	-
2.5 Other (provide details if material)	-	-
2.6 Net cash from / (used in) investing activities	(34)	(51)

3. Cash flows from financing activities		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)	1,810	4,346
3.2 Proceeds from issue of convertible debt securities	-	-
3.3 Proceeds from exercise of options	278	821
3.4 Transaction costs related to issues of equity securities or convertible debt securities	(7)	(33)
3.5 Proceeds from borrowings	-	-
3.6 Repayment of borrowings	-	-
3.7 Transaction costs related to loans and borrowings	-	-
3.8 Dividends paid	-	-
3.9 Other (provide details if material)		
- Reduction in leases	(110)	(219)
- Funds received from shareholders on exercise of options	(119)	(30)
3.10 Net cash from / (used in) financing activities	1,852	4,885

Consolidated statement of cash flows	Current quarter \$US'000	Year to date (6 months) \$US'000
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4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	12,960	14,343
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(3,903)	(8,294)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(34)	(51)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	1,852	4,885
4.5	Effect of movement in exchange rates on cash held	30	22
4.6	Cash and cash equivalents at end of period	10,905	10,905

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$US'000	Previous quarter \$US'000
5.1	Bank balances	10,891	14,301
5.2	Call deposits	14	42
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	10,905	14,343

6.	Payments to related parties of the entity and their associates	Current quarter \$US'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	337
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

7. Financing facilities	Total facility amount at quarter end \$US'000	Amount drawn at quarter end \$US'000
<i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	686	-
7.3 Other (please specify)	-	-
7.4 Total financing facilities	686	-
7.5 Unused financing facilities available at quarter end		686
7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
<p>BrainChip SAS has a secured overdraft facility with Credit Agricole, France, to the value of 20,000 Euros which incurs interest at 8.39%.</p> <p>BrainChip Inc has an Irrevocable Standby Letter of Credit to the value of US\$665,000 with First Republic Bank as security for the office lease. The Letter of Credit expires 31 May 2027 and incurs interest at 0.9%.</p>		

8. Estimated cash available for future operating activities	\$US'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(3,903)
8.2 Cash and cash equivalents at quarter end (item 4.6)	10,905
8.3 Unused finance facilities available at quarter end (item 7.5)	686
8.4 Total available funding (item 8.2 + item 8.3)	11,591
8.5 Estimated quarters of funding available (item 8.4 divided by item 8.1)	3.0
<i>Note: if the entity has reported positive net operating cash flows in item 1.9, answer item 8.5 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.5.</i>	
8.6 If item 8.5 is less than 2 quarters, please provide answers to the following questions:	
8.6.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Answer: n/a	
8.6.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?	
Answer: n/a	

8.6.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: n/a

Note: where item 8.5 is less than 2 quarters, all of questions 8.6.1, 8.6.2 and 8.6.3 above must be answered.

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

25 July 2024

Date:

Board of Directors

Authorised by:
(Name of body or officer authorising release – see note 4)

Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.