

# **ASX Announcement**

## **BrainChip Granted New US Patent**

 Patent US 11,468,299 "An Improved Spiking Neural Network" issued to BrainChip

#### Sydney – 12 October 2022:

BrainChip Holdings Ltd ("BrainChip" or the "Company") (ASX: BRN, OTCQX: BRCHF, ADR: BCHPY), the world's first commercial producer of ultra-low power neuromorphic AI IP, today announced that the US Patents and Trademarks Office has issued a US patent for "An Improved Spiking Neural Network".

### US 11,468,299 "An Improved Spiking Neural Network" Issuance:

The patent, US 11,468,299, was issued on 11 October 2022 at the US Patents and Trademarks Office (USPTO). The patent is considered by the Company to be a valuable IP asset and increases the patent protection around BrainChip's unique neuromorphic on-chip learning technology.

#### Key features of patent:

The patent protects the learning function of BrainChip's digital neuron circuit implemented on a neuromorphic integrated circuit/system (e.g. Akida<sup>TM</sup>).

- The neurons and synapses are implemented efficiently so that a significantly high number of them can be implemented in the most efficient and resource constrained computational environment.
- The memory management of membrane potential values, synapse weights and synapse connections amongst the spiking neuron circuits is handled innovatively, contributing significantly to reducing the power and the cost when delivering edge applications to customers.
- The patent protects a key learning feature when choosing the synapses for weight variation during on-chip learning. The right combination of factors related to accuracy and efficiency is chosen that delivers valuable results during edge learning.

BrainChip's portfolio now comprises 10 US and 1 Chinese issued patents. In addition, some 27 patent applications are pending in the US, Europe, Australia, Canada, Japan, Korea, India, Brazil, Russia, Mexico, and Israel.

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



### About BrainChip Holdings Ltd (ASX: BRN, OTCQX: BRCHF, ADR: BCHPY)

BrainChip is the worldwide leader in edge AI on-chip processing and learning. The company's first-to-market neuromorphic processor, Akida<sup>TM</sup>, 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 <a href="https://www.brainchip.com">www.brainchip.com</a>.

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Additional information is available at <a href="https://www.brainchipinc.com">https://www.brainchipinc.com</a>

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For more information contact:	

Tony Dawe

Manager Investor Relations

BrainChip Holdings Ltd.

tdawe@brainchip.com