



## ASX Announcement

### **BrainChip and Socionext Sign Memorandum of Understanding** Akida™ Development moves forward with an Industry Leading ASIC Partner

---

- **Path to physical production of Akida™ Neuromorphic System-on-Chip**
  - **Memorandum of Understanding with Socionext**
    - Socionext is a leading provider of Application Specific Integrated Circuits (ASIC)
    - Memorandum of Understanding outlines Key Terms of a Definitive Agreement
  - **Definitive Agreement to be negotiated in coming months**
    - Preparatory works under way in the interim
- 

**Sydney, Australia – 14 March, 2019:** BrainChip Holdings Ltd (**ASX: BRN**), the leading neuromorphic computing company, today announced the execution of a Memorandum of Understanding (MoU) with Socionext America Inc. for the development of the Akida™ Neuromorphic System-on-Chip (NSoC).

Since inception, BrainChip has been committed to providing an artificial intelligence solution as an integrated circuit. The MoU with Socionext marks a major milestone in the development of the Akida NSoC, setting out the basis on which the companies will negotiate a definitive agreement to deliver a physical Akida chip. That agreement is expected to be finalised within the coming months, although each of the parties is undertaking necessary preparatory works in the interim.

Socionext is a leading ASIC supplier with demonstrated success in delivering the highest quality product with an efficient time-to-market record for its partners. Socionext was created from the SoC businesses of Fujitsu and Panasonic.

The joint development between BrainChip and Socionext is founded upon the combination of BrainChip's extensive experience in implementing Spiking Neural Networks (SNNs) and Socionext's proven competency in delivering ASIC products.

BrainChip has made great strides in the Akida development, creating a design that is very compact, flexible, provides low-latency and is low-power for AI Edge applications. The device can be user-configured for both convolutional and fully-connected networks and is applicable to a broad range of visual, data, and sensor applications. Akida will deliver up



to 1.2 million neurons and over 10 billion synapses in a low-power chip, expandable to a far greater capacity by utilizing off-chip memory.

The details of the design are proprietary and are described in the Company's currently pending provisional patent. The Company is working on a series of patents covering all aspects of the unique Akida design in detail.

Anil Mankar, BrainChip Chief Development Officer commented, "After a great deal of investigation and diligence, it is clear that Socionext has the commitment, competency, intellectual property and desire to work with us on the implementation and launch of Akida. This is a complex design that requires close collaboration with our design and manufacturing partner. Socionext is a leader in the ASIC market and has specific domain competency in image processing. We are proud to announce this memorandum of understanding and look forward to working with Socionext to complete the design and introduce Akida."

---

### **About BrainChip Holdings Ltd (ASX: BRN)**

BrainChip Holdings Ltd is a leading provider of neuromorphic computing solutions, a type of artificial intelligence that is inspired by the biology of the human neuron. The Company's revolutionary new spiking neural network technology can learn autonomously, evolve and associate information just like the human brain. The proprietary technology is fast, completely digital and consumes very low power. The Company provides hardware focused solutions that address high-performance requirements in civil surveillance, gaming, financial technology, cybersecurity, ADAS, autonomous vehicles, and other advanced vision systems. [www.brainchipinc.com](http://www.brainchipinc.com)

#### **Company Contact:**

Robert Beachler

[rbeachler@brainchipinc.com](mailto:rbeachler@brainchipinc.com)

+1 (949) 330-6750