



## Company Announces Wafer Fabrication of the Akida™ System-on-Chip

---

- BrainChip and Socionext have delivered the Akida design files to Taiwan Semiconductor Manufacturing Company (TSMC) for manufacturing
  - TSMC Multi-Project Wafer (MPW) and Shuttle reduces the fabrication expenses and provides faster delivery of engineering samples
  - MPW at TSMC is scheduled to commence on 8 April 2020
  - Engineering samples will support the the validation of the Akida Intellectual Property (IP) for ASIC development and hardware designs in conjunction with the Akida Development Environment (ADE) for integration of BrainChip's IP or device into commercial AI applications
- 

**Aliso Viejo, California – 7 April 2020** – [BrainChip Holdings Ltd](#) (ASX: BRN), a leading provider of ultra-low power, high performance AI technology announced that the Company and [Socionext Inc.](#), it's development, manufacturing and commercial partner, have provided its wafer fabrication partner, TSMC, with the completed Akida design files and the Multi-Project Wafer (MPW) is scheduled to commence fabrication on 8 April 2020. Given the accelerated processing time for MPW wafers, engineering samples of the Akida device are expected to be available in the third quarter of 2020.

BrainChip has developed the Akida advanced neural networking processor which brings artificial intelligence to “Edge” devices in a way that existing technologies are not capable. Edge devices include IoT controllers, laptops, mobile phones, smart sensors, medical monitors and other devices that are at the edge of the internet or cloud where data is acquired.

This innovative, event-based, neural network processor is inspired by the way the human brain processes information. The resulting intellectual property and device are robust, high performance, small, ultra-low power and can be used in a wide array of Edge applications, including the detection and recognition of images, objects and faces in videos, human speech and other physical inputs without requiring a host processor or external memory.

The Akida device is capable of learning at the Edge to recognize new items. Other technologies require extensive and expensive retraining to add new items and use significantly more power.

“Our neural network processor enables ultra-low power and real-time learning to be implemented effectively in equipment at the Edge,” said Peter AJ van der Made, CTO of BrainChip. “Since inception, our mission has been to provide highly advanced artificial intelligence intellectual property and devices for commercial use in equipment that is used at the Edge. Edge devices have size, reliability and power consumption constraints that require the Akida technology. The Akida device and licensing of the intellectual property puts BrainChip at the forefront of this high-growth market.”

Louis DiNardo, BrainChip CEO added, “With our intellectual property available for licensing and our integrated circuit moving to the most incremental point in our history, BrainChip has moved well beyond development and into commercialisation. The Company has delivered on its financial obligations as described in the quarter update provided in conjunction with the 4C lodged on 30 January 2020, including payments for services rendered by Socionext for the Akida device development and a pre-payment for the multi-project wafer fabrication. Peter, Anil, me and the entire BrainChip team are proud of the innovation and effort demonstrated to reach this important milestone.”

[This announcement is authorised for release by the BRN Board of Directors.](#)

---

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

BrainChip is a global technology company that has developed a revolutionary advanced neural networking processor that brings artificial intelligence to the edge in a way that existing technologies are not capable. The solution is high performance, small, ultra-low power and enables a wide array of edge capabilities that include inference and incremental learning. The company markets an innovative event-based neural network processor that is inspired by the spiking nature of the human brain and implements the network processor in an industry standard digital process. By mimicking brain processing, BrainChip has pioneered an event domain neural network processor, called Akida™, which is both scalable and flexible to address the requirements in edge devices. At the edge, sensor inputs are analyzed at the point of acquisition rather than transmission to the cloud or a datacenter. The Akida neural processor is designed to provide a complete ultra-low power Edge AI network processor for vision, audio and smart transducer applications. The reduction in system latency provides faster response and a more power efficient system that can help reduce the large carbon footprint of datacenters.

---

Additional information is available at <https://www.brainchipinc.com>

Follow BrainChip on Twitter: <https://www.twitter.com/BrainChip>

Follow BrainChip on LinkedIn: <https://www.linkedin.com/company/7792006>

**Company contact:**

**Roger Levinson**

[rlevinson@brainchip.com](mailto:rlevinson@brainchip.com)

**+1 (949) 330-6750**

---

BrainChip Holdings Ltd

ACN 151 159 812

Level 12 225 George St Sydney NSW 2000

T: +61 2 9290 9606 | F: +61 2 9297 0644 | W: [www.brainchipinc.com](http://www.brainchipinc.com)