



ASX Announcement

BrainChip Completes Testing Production Version of the Akida Chip

- Confirmed that functionality and performance testing of the AKD1000 production chips has been completed
 - Latest iteration has been optimized for lower power consumption than the original engineering samples
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Sydney – 09 November 2021: [BrainChip Holdings Ltd](#) (ASX: BRN), (OTCQX: BCHPY), a leading provider of ultra-low power, high-performance artificial intelligence technology and the world's first commercial producer of neuromorphic AI chips, today confirmed that functionality and performance testing of the AKD1000 production chips has been completed, which showed better performance than the original engineering samples.

As part of the continued development of its Akida™ Neuromorphic System-on-Chip (NSoC), BrainChip tested a production version of its AKD1000 chip with several neural network applications, including object classification, keyword spotting and spiking neural networks. The improved performance and lower power consumption results were achieved through a better layout and some minor design changes to the design, which were recognized after previous testing of earlier engineering samples.

The Akida production chips were manufactured by TSMC in Taiwan in a 28nm process. The chips are now being integrated into complete PCIe and Mini-PCIe boards. These boards and evaluation systems are being shipped to Early Access Customers for further testing and verification to see how they work as part of customers' products.

"This is another major milestone for the company as we migrate from our research and development phase into full production and commercialization of the AKD1000 chip and the Akida IP," said BrainChip CEO, Peter van der Made. "We have already seen significant uptake by Early Access Customers looking to leverage the clear advantages that Akida offers beyond the capabilities of other AI products. Akida is a 'Next Generation' AI device that offers real-time learning on chip and operates at a very low power consumption."

BrainChip is currently inviting partners and potential customers to order development kits for building Akida-based applications and solutions, and to learn how to bring 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. The Akida NSoC and intellectual property can be used in applications including Smart Home, Smart Health, Smart City and Smart Transportation. These applications include but are not limited to home automation and remote controls, industrial IoT, robotics, security cameras,



sensors, unmanned aircraft, autonomous vehicles, medical instruments, object detection, sound detection, odor and taste detection, gesture control and cybersecurity.

Organizations can purchase an Akida development kit via shop.brainchipinc.com Or via the Buy Now button at www.brainchip.com.

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

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

BrainChip is a global technology company that is producing a ground-breaking neuromorphic processor that brings artificial intelligence to the edge in a way that is beyond the capabilities of other products. The chip is high performance, small, ultra-low power and enables a wide array of edge capabilities that include on-chip training, learning and inference. The event-based neural network processor is inspired by the spiking nature of the human brain and is implemented in an industry standard digital process. By mimicking brain processing BrainChip has pioneered a processing architecture, 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 through transmission via the cloud to a data centre. Akida is designed to provide a complete ultra-low power and fast AI Edge Network for vision, audio, olfactory and smart transducer applications. The reduction in system latency provides faster response and a more power efficient system that can reduce the large carbon footprint of data centres.

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

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