



ASX Announcement

## **BrainChip Inc and Magik Eye Inc. Partner to Combine Best of AI with 3D Sensing for Total 3D Vision Solution**

*Companies to jointly pursue market opportunities using BrainChip AI processor and MagikEye 3D image sensor technology*

**Sydney, NSW Australia – 17 August 2020** – [BrainChip Holdings Ltd](#) (ASX: BRN), a leading provider of ultra-low power high performance AI technology, today announced that it has partnered with Magik Eye Inc., developers of revolutionary 3D sensors that change how machines see the world, to market a breakthrough solution for object detection, object classification and gesture recognition based on MagikEye's Invertible Light™ 3D depth sensing technology and the Akida™ neuromorphic processor. This relationship opens a new and exciting gateway for BrainChip in Japan. MagikEye's Invertible Light provides the smallest, fastest and most power-efficient 3D depth sensing. This is done using a standard CMOS image sensor and a regular dot projector along with a proprietary and patented technique to produce 3D point cloud data. Coupled with the Akida neuromorphic processor, the companies intend to jointly provide a total 3D vision solution to customers for fast 3D object detection and recognition in applications, including robotics, automotive and emerging consumer products, such as AR/VR and others. The MagikEye technology addresses the need for devices to see clearly and understand the surrounding environment, which is critical for new classes of 3D vision applications. The BrainChip Akida neuromorphic processor efficiently utilizes AI to gather new insights from the 3D data.

“The combination of advanced neuromorphic processing with a low power 3D sensor is the perfect solution for many products in end-point devices,” said Richard Wawrzyniak, Principal Analyst for ASIC & SoC at Semico Research Corp.” 3D imaging is attracting great interest in the market today and the BrainChip architecture, which delivers a power-efficient, scalable solution that enables increased functionality with minimal impact on system cost and the power budget, is the right fit for this class of applications. It is not surprising their solution would be paired with the MagikEye's Invertible Light Technology for real-time object detection in all types of applications, where low power and high throughput are valued elements for success. Semico believes this technology partnership is a winning combination for the market,” said Wawrzyniak.

BrainChip's groundbreaking Akida neuromorphic processor is uniquely suited to provide the analytics necessary for manufacturers to implement a complete 3D vision system. With ultra-low power and the ability to directly process the 3D image generated by the MagikEye sensor, the companies can jointly address gesture recognition in Smart Home applications, such as gaming and other consumer products. Smart Transportation and Smart City applications are additional

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primary markets for collaboration. This includes Advanced Driver Assistance Systems (ADAS) and Autonomous Vehicles (AV).

“By combining the strengths of BrainChip’s Neural Network capabilities with MagikEye’s Invertible Light, we are excited about the game-changing benefits that customers will experience, in terms of a total 3D vision solution for robotics, machine vision and many other new applications,” said Takeo Miyazawa, MagikEye, founder and CEO.

“Our relationship with MagikEye is exciting,” said Louis DiNardo, BrainChip CEO. “The innovation brought to the market by their proprietary Invertible Light technology is impressive and this collaboration provides both companies an opportunity to address large and growing markets with outstanding technology to solve difficult real-world challenges.”

Other particulars:

This partnership is for one year and can be extended by mutual consent of the parties. It starts with joint marketing services to promote compatibility that could lead to customers for each company. The agreement does not define any material conditions that need to be satisfied by either company.

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

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## About Brainchip Holdings Ltd (ASX: BRN)

BrainChip is a global technology company that is producing a groundbreaking 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 center. 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 centers.

### About Magik Eye Inc.

Founded in 2015, Magik Eye Inc. has a family of 3D depth sensing solutions that support a wide range of applications for smartphones, robotic and surveillance. Magik Eye’s patent protected technology is based on Invertible Light™ that enables the smallest, fastest & most power-efficient 3D sensing. For more information, see [www.magik-eye.com](http://www.magik-eye.com)

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

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