NEWS RELEASE

BrainChip Makes Second-Generation Akida Platform Available to Advance State of Edge AI Solutions

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LAGUNA HILLS, Calif.--(BUSINESS WIRE)-- **BrainChip Holdings Ltd** (ASX: BRN, OTCQX: BRCHF, ADR: BCHPY), the world's first commercial producer of ultra-low power, fully digital, event-based, neuromorphic AI IP, today announced the Early Access availability of its second-generation Akida™ IP solution for use in a wide range of applications across the Smart Home, Smart City, Industrial and Automotive markets.

The 2nd generation Akida platform is designed for extremely energy-efficient processing of complex neural network models on Edge devices. The support for 8-bit weights, activations, and long-range skip connections expands the reach of models that are accelerated completely in Akida's hardware. With the exponential increase in Cloud compute requirements for AI compounded by the growth of Generative AI, the move towards Hybrid AI solutions needs more capable and efficient compute at the Edge.

The introduction of Temporal Event Based Neural Nets (TENNs) revolutionizes the advanced sequential processing for multi-dimensional streaming and time-series data. This can radically reduce model size and improve performance, as well as efficiency, without compromising accuracy, which is an important consideration for Edge devices. Reducing the model size and improving compute density by order of magnitude, allows more capable AI use cases to compute closer to sensor in a more secure fashion.

Combining this with hardware acceleration of Vision Transformers (ViT) models, which boosts vision performance, unlocks the potential to create game-changing Edge devices that can process advanced vision and video applications in milliwatts or audio and other similar applications in microwatts at the sensor.

"Generative AI and LLMs at the Edge are key to intelligent situational awareness in verticals from manufacturing to

healthcare to defense," said Jean-Luc Chatelain, MD of Verax Capital Advisors and former MD and Global CTO at Accenture Applied Intelligence. "Disruptive innovation like BrainChip TENNs support Vision Transformers built on the foundation of neuromorphic principles, can deliver compelling solutions in ultra-low power, small form factor devices at the Edge, without compromising accuracy."

The second generation MetaTF software enables developers to evaluate the capabilities of Akida, optimize, and customize their designs to get a head start on architecting their System on a Chip (SoC) along with their software solutions. In addition to TensorFlow, MetaTF will support ONNX which allows for greater compatibility across various frameworks including PyTorch.

"Multimodal Edge AI is an irreversible trend, and it is intensifying the demands on intelligent compute required from Edge devices," said Zach Shelby, CEO Edge Impulse. "We're excited that the 2nd Generation Akida addresses the critical elements of performance, efficiency, accuracy, and reliability needed to accelerate this transition. Most importantly, BrainChip has been a strategic partner that has collaborated closely with Edge Impulse to make their solutions easy to integrate, develop and deploy to the market."

Akida processors power the next generation of Edge AI devices that enable growth in intelligence in industrial, home, automotive and other IoT environments. Akida's fully digital, customizable, event-based neural processing solution is ideal for advanced intelligent sensing, medical monitoring and prediction, high-end video-object detection and more. Along with its extreme efficiency, accuracy and performance, Akida also has a unique ability to securely learn on-device without the need for cloud retraining.

"This is a significant step in BrainChip's vision to bring unprecedented AI processing power to Edge devices, untethered from the cloud," said Sean Hehir, CEO, BrainChip. "With Akida's 2nd generation in advanced engagements with target customers, and MetaTF enabling early evaluation for a broader market, we are excited to accelerate the market towards the promise of Edge AI."

BrainChip partners looking to leverage the latest capabilities of Akida IP into their Edge products to maximize efficiency, reduce latency and conserve energy should contact **sales@brainchip.com** for additional opportunities.

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, fully digital, event-based AI processor, Akida™, uses neuromorphic principles to mimic the human brain, analyzing only essential sensor inputs at the point of acquisition, processing data with unparalleled efficiency, precision, and economy of energy. Akida uniquely enables Edge learning local to the chip, independent of the cloud, dramatically reducing latency while improving privacy and data security. Akida Neural processor IP, which can be integrated into

SoCs on any process technology, has shown substantial benefits on today's workloads and networks, and offers a platform for developers to create, tune and run their models using standard AI workflows like Tensorflow/Keras. 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 **www.brainchip.com**.

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