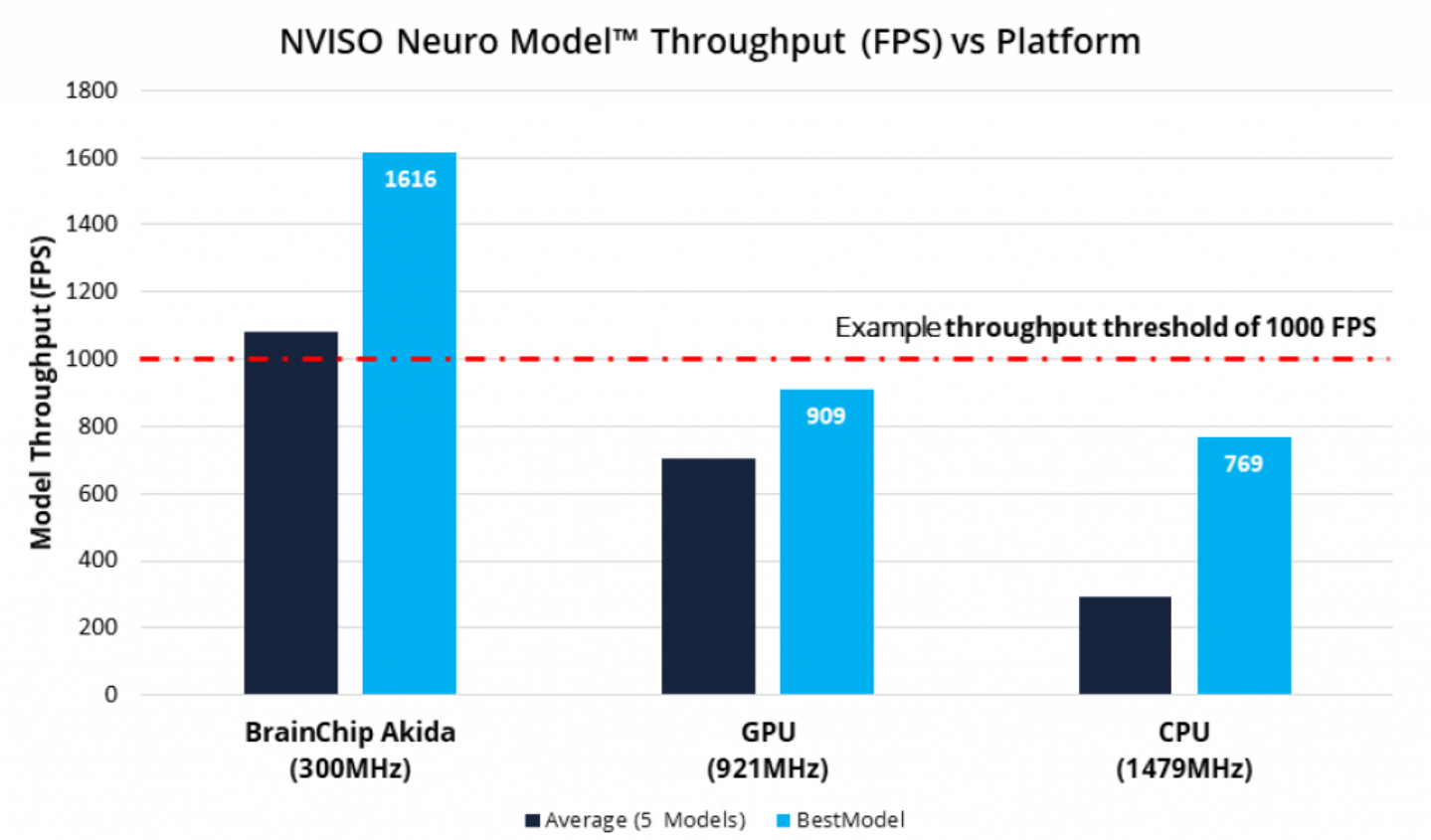
NVISO announces it has reached a key interoperability milestone with BrainChip Akida Neuromorphic IP

NVISO has implemented full interoperability of four AI Apps from its Human Behavioural AI catalogue on the BrainChip Akida neuromorphic processor achieving average model throughput at more than 1000 FPS and average model storage less than 140 KB..



Lausanne, Vaud Jul 18, 2022 (Issuewire.com) - nViso SA (NVISO), the leading Human Behavioural Analytics AI company, is pleased to announce it has released an Evaluation Kit (EVK) for its Human Behavioural AI SDK running on the BrainChip Akida™ neuromorphic processing platform. NVISO will release commercially its Human Behaviour AI as both an Evaluation Kit (EVK) and Software Development Kit (SDK) optimized for neuromorphic processors targeting innovators looking to adopt AI-driven human-machine interfaces to detect human behaviour in real-time at the edge. Both companies will jointly promote the EVK and SDK and the first evaluation with a semiconductor manufacturer in Japan has started. This deployment of NVISO's Human Behavioural AI exploits the superior performance capabilities of BrainChip Akida neuromorphic processor IP with latencies under 10ms and model storage requirements under 1MB for a complete target solution. Targeting the next generation of low-power SOC devices with embedded neuromorphic capabilities, target applications include Robotics, Automotive, Telecommunication, Infotainment, and Gaming.

NVISO's Neuro EVK will support performance evaluations within use case scenarios using a live camera feed and will soon be followed by an SDK for solution developers which will support a wide selection of NVISO's existing range of real-time, deep learning-based AI Apps such as those used for face detection, gaze, head pose recognition, facial recognition, emotion recognition, object detection,

and body pose analysis. A 30-day PC-based evaluation of the EVK is available for order online. Companies interested in a full evaluation of BrainChip neuromorphic hardware should contact BrainChip .

NVISOAI App benchmark performance data running on the BrainChip neuromorphic AI platform

Figure 1: NVISO Human Behaviour AI Model Throughput (FPS) Performance Comparison by Platform

Figure 2: NVISO Human Behaviour AI Model Storage (KB) Performance Comparison by Model Format

"NVISO's first neuromorphic optimised EVK was achieved in record time and exceeded all expectations", said Tim Llewellynn, CEO of NVISO, "BrainChip has delivered an excellent development environment for AI software specialists like NVISO, and the maturity of their tools really show why they are first commercial neuromorphic processor IP to market. Deployment of the combined technologies of NVISO AI Apps together with embedded neuromorphic processing can provide game-changing performance improvements for our most demanding customers and a wide range of use cases. We are really excited that the neuromorphic revolution is now upon us and could finally deliver on the promise of wide-scale deployment of human-centric technologies from consumer products to medical devices and automotive ADAS systems that will have a profound impact on our lives."

"We are delighted with the progress of our partner NVISO reinforcing the performance and efficiency gains of BrainChip's Akida neuromorphic processor design with compelling results demonstrated with NVISO's behavioural AI software", said Jerome Nadel, CMO at BrainChip. "Our uniquely differentiated AI acceleration provides equivalent performance benefits to any edge AI software; high inference performance, low latency, and ultra-low power consumption".

Figures 3 and 4: Example of one of NVISO's AI Apps running on the BrainChip Akida neuromorphic processor with robustness to natural lighting conditions inside demanding Automotive environments.

NVISO delivers solutions for a wide range of use cases including those in the areas of Smart Living, Smart Mobility, and Smart Health. This is achieved through a range of AI Apps providing visual observation, perception, and semantic reasoning capabilities, the results of which can be used in identifying issues, in decision-making processes, and in supporting autonomous "human-like" interactions. NVISO AI Apps are specifically designed for resource-constrained low-power and low-memory hardware platforms deployed at the extreme edge. These AI Apps analyse core signals of human behaviour, such as body movements, facial expressions, emotions, identity, head pose, gaze, eye state, gestures, or activities, and identify objects with which users interact. In addition, these AI Apps can be optimised for typically resource-constrained, low-power, and low-cost processing platforms deployed on the edge, as demonstrated with ultra-compact models such as the Emotion Recognition AI App with less than 100KB of memory. Furthermore, NVISO AI Apps can be easily configured to suit a camera system for optimal performance in terms of distance and camera angle, and thanks to NVISO's large-scale proprietary human behaviour databases NVISO's AI Apps are robust to the imaging conditions often found in real-world deployments. Unlike cloud-based solutions, NVISO's solutions do not require information to be sent off-device for processing elsewhere so user privacy and safety can be protected.

About NVISO

NVISO is an Artificial Intelligence ("AI") company founded in 2009 and headquartered at the Innovation

Park of the École Polytechnique Fédérale de Lausanne (EPFL) in Switzerland. Its mission is to help make autonomous machines safe, secure, and personalised for humans. As a leader in human behavioural AI, NVISO provides software solutions that can sense, comprehend, and act upon human behaviour in real-world environments. NVISO achieves this through real-time perception and observation of people and objects in contextual situations, combined with the reasoning and semantics of human behaviour based on trusted scientific research. NVISO's technology is made accessible through ready-to-use AI solutions addressing Smart Mobility and Smart Health and Living applications (interior sensing, health assessments, and robot interactions) with a key focus on deployments to the deep edge. With a singular focus on how to apply the most advanced and robust technology to industry and societal problems that matter, NVISO's solutions help advance human potential. www.nviso.ai

More information about NVISO can be found: https://www.ir.nviso.ai/site/investors/investor-fact-sheet

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 neuromorphic processor, AkidaTM, mimics the human brain to analyze only essential sensor inputs at the point of acquisition, processing data with unparalleled efficiency, precision, and economy of energy. Keeping machine learning local to the chip, independent of the cloud, also dramatically reduces latency while improving privacy and data security. In enabling effective edge to 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, in 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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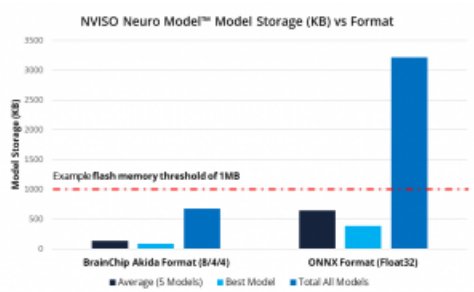

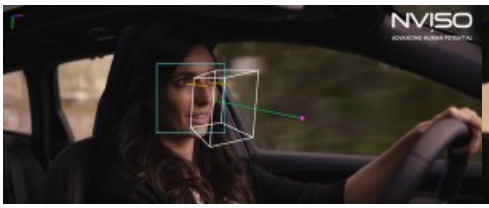

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