Synaptics Accelerates Low Power Edge AI Deployment with Edge Impulse Partnership

September 29, 2021

Proven software platform enables fast development of embedded ML models for Katana SoCs in power sensitive intelligent IoT applications

SAN JOSE, Calif., Sept. 29, 2021 (GLOBE NEWSWIRE) -- Synaptics® Incorporated (Nasdaq: SYNA) today announced a partnership with Edge Impulse, the leading development platform for machine learning on edge devices. The partnership combines Synaptics' Katana™ Ultra Low-Power Edge AI Platform with the Edge Impulse software development platform used by thousands of embedded developers to create, train and deploy custom models for a wide range of AI applications.

The Edge Impulse Embedded ML Platform allows developers to create production-ready models, faster and efficiently. Additionally, it enables easy testing, training, and model optimization in a complete MLOps environment. For example, developers can create new tinyML models in as little as five minutes using an innovative and interactive cloud-based platform without writing a single line of code.

“Edge Impulse has a wealth of experience through its highly efficient platform for rapid development of ML models specifically for low power IoT applications. This partnership provides our customers a fast and efficient way to create and optimize custom models for the Katana platform that will significantly improve overall time to market for battery-powered connected devices at the edge,” said Venkat Kodavati, Chief Product Officer at Synaptics.

The Katana SoC platform features a multi-core architecture optimized for ultra-low-power and low latency voice, audio and vision applications. Its integrated advanced Neural Network Engine supports simultaneous inference of both computer vision and sound detection events with the ability to process both AI models in parallel. The Katana SoC platform integrates Synaptics’ market-leading Wi-Fi and Bluetooth solutions to provide complete modules that further simplifies system design and implementation.

“The key to the successful deployment of low-power edge AI devices at scale is a strong relationship between silicon solutions providers such as Synaptics and AI software and platform vendors such as Edge Impulse. Synaptics’ low-power AI solution will enable many of our customers to develop products that address the stringent power requirements for the market segments they play in. This partnership strengthens our mutual solutions as well as the ecosystem needed to proliferate smart IoT across a wider range of applications,” said Zach Shelby, CEO at Edge Impulse.

The combination of the two technologies will enable quick deployment of low-power AI-enriched edge devices for offices, retail, factories and smart homes. Typical applications include people detection and counting, object and pattern recognition, keyword spotting, sound event detection, asset or inventory tracking, and environmental sensing.

Evaluation Kit Availability
The Katana Evaluation Kit will be hosted on the Edge Impulse platform, enabling customers to train and optimize machine learning models using their custom application datasets. The first evaluation kit will be available by the end of 2021. To learn more about the Katana Edge AI Platform visit https://www.synaptics.com/products/low-power-edge-ai.

About Synaptics Incorporated:
Synaptics (Nasdaq: SYNA) is changing the way humans engage with connected devices and data, engineering exceptional experiences throughout the home, at work, in the car, and on the go. Synaptics is the partner of choice for the world’s most innovative intelligent system providers who are integrating multiple experiential technologies into platforms that make our digital lives more productive, insightful, secure, and enjoyable. These customers combine Synaptics’ differentiated technologies in touch, display, and biometrics with a new generation of advanced connectivity and AI-enhanced video, vision, audio, speech, and security processing. Follow Synaptics on LinkedIn, Twitter and Facebook, or visit www.synaptics.com.

About Edge Impulse
Edge Impulse is the leading development platform for embedded machine learning, used by over 1,000 enterprises across 20,000 ML projects worldwide. We are on a mission to enable the ultimate development experience for machine learning on embedded devices for sensors, audio, and computer vision, at scale. From getting started in under five minutes to MLOps in production, we enable highly optimized ML deployable to a wide range of hardware from MCUs to CPUs. To learn more visit, https://www.edgeimpulse.com/.

With Edge Impulse, developers, engineers, and domain experts solve real problems using machine learning in embedded solutions, speeding up development time from years to weeks. We specialize in industrial and professional applications, including predictive maintenance, asset tracking, monitoring, and human and animal sensing.

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