Silicon Labs and Edge Impulse Partner to Accelerate Machine Learning Applications

--New development tool enables integration of TinyML on Silicon Labs IoT Products--

AUSTIN, Texas, Jan. 27, 2021 /PRNewswire/ -- Silicon Labs (NASDAQ: SLAB), a leading provider of silicon, software and solutions for a smarter, more connected world, and Edge Impulse, a leading development platform for machine learning on edge devices, announce a collaboration to enable rapid development and deployment of machine learning (ML) on Silicon Labs EFR32 wireless SoCs and EFM32 microcontrollers (MCUs). Implementation of the Edge Impulse tool enables complex motion detection, sound recognition and image classification on low-power, memory-constrained, and remote edge devices.

Studies have shown that 87% of data science projects never reach full production often due to artificial intelligence/ML implementation challenges. This new collaboration between Silicon Labs and Edge Impulse enables device developers to generate and export the ML models directly to the device or Simplicity Studio, the integrated development environment from Silicon Labs, with the click of a button, implementing machine learning in minutes.

"Silicon Labs believes the infusion of machine learning into the edge devices we help create will make the IoT smarter," said Matt Saunders, vice president of IoT at Silicon Labs. "The secure, private and user-friendly tool from Edge Impulse saves developers time and money when implementing machine learning and enables amazing new user experiences across real-world commercial applications, from predictive maintenance to asset tracking to monitoring and human detection."

Edge Impulse allows developers to quickly create neural networks across a wide range of Silicon Labs products for free, with integrated deployment to Simplicity Studio. By embedding state-of-the-art TinyML models on EFR32 and EFM32 devices such as MG12, MG21 and GG11, the solution enables:

- Machine learning
- Real-world sensor data collection and storage
- Advanced signal processing and data feature extraction
- Deep Neural Network (DNN) model training
- Deployment of optimized embedded code

The Edge Impulse tool also leverages Edge Impulse's Edge Optimized Neural (EON™) technology to optimize memory use and inference time.

"The industrial, enterprise and consumer applications of embedded ML are endless," said Zach Shelby, co-founder and CEO of Edge Impulse. "Integrating ML with the advanced development tools and multi-protocol solutions from Silicon Labs unlocks robust wireless development opportunities for customers."

Edge Impulse support is now available for the Silicon Labs Thunderboard Sense 2 and Silicon Labs wireless SoCs and MCUs. For more information, visit silabs.com/solutions/artificial-intelligence-machine-learning. To learn more about the AI/ML capabilities on the Silicon Labs platform, Edge Impulse is sponsoring a hands-on workshop at the tinyML Summit, March 22-26, 2021. The first 250 workshop registrants will receive a free Silicon Labs development kit to use during the event.

About Edge Impulse

Edge Impulse is the leading development platform for embedded machine learning, used by over 1,000 enterprises across 10,000 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.

About Silicon Labs

Silicon Labs (NASDAQ: SLAB) is a leading provider of silicon, software and solutions for a smarter, more connected world. Our award-winning technologies are shaping the future of the Internet of Things, internet infrastructure, industrial automation, consumer and automotive markets. Our world-class engineering team creates products focused on performance, energy savings, connectivity and simplicity. silabs.com

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