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aiSensing Deploys Highly Successful End-Point AI Vibration Sensor Using SensiML Analytics Toolkit and QuickLogic EOS S3

- *Monitors equipment health and issues maintenance requests*
- *Increases factory productivity and reduces downtime for major manufacturer*
- *Implements local AI for low cost, fast reaction times, and high data security*

PORTLAND, Ore., July 20, 2022 /PRNewswire/ -- SensiML™ Corporation, a leading developer of AI tools for building intelligent Internet of Things (IoT) endpoints, today announced that its customer, aiSensing, has successfully completed and deployed an endpoint AI-based vibration sensor for a large multi-national manufacturer in Asia. This intelligent endpoint monitors vibration patterns for multiple machines, detects potential anomalies, and issues maintenance requests when necessary. The result is reduced equipment downtime and higher overall factory productivity. Since the AI implementation is local, rather than cloud-based, the system features low cost, low latency and fast reaction times while simultaneously providing higher data security.

aiSensing's customer is one of the largest and most successful manufacturing companies in Taiwan. It is the leading manufacturer of specialty adhesives, footwear adhesives, hot-melt adhesives, and liquid and powder coatings. The company has adopted this Edge AI-based approach to detect anomalies for vacuum pumps and chilling machines used in its manufacturing flow, including problems related to lack of lubrication, water leakage, bearing failures, and belt failures. By identifying potential problems before they arise, maintenance issues can be addressed in a managed way rather than as ad hoc emergency situations. This type of predictive maintenance is a key component of modern smart manufacturing initiatives.

The AI-based endpoint was developed on a QuickLogicEOS S3 ultra-low power multi-core Arm Cortex® MCU-based SoC, which delivered more than enough processing bandwidth for the application at a low cost. The AI application running on the QuickLogic device was built

using the SensiML Analytics Toolkit, which provided a complete solution for the quick development of this sophisticated IoT endpoint.

"Smart manufacturing is a significant trend across a broad range of industries," said Chris Rogers, chief executive officer at SensiML. "Predictive maintenance is one of the core initiatives in that trend, and aiSensing's vibration sensor is a great example of how to effectively use AI to implement a practical and cost-effective predictive maintenance solution."

"Our endpoint AI-based vibration sensor has been very successful," said Dennis Chu, chief technology officer at aiSensing. "Its low power consumption, fast response times, and low cost are the ideal combination of features for this predictive maintenance application. With the SensiML tools, we can easily modify the design to address new and unique requirements for our customers."

The SensiML Analytics Toolkit, QuickLogic EOS S3 SoC, and aiSensing's endpoint AI vibration sensor are each available now.

For more information on the SensiML tools, visit the SensiML website at: https://sensiML.com/products. More information on QuickLogic's EOS S3 SoC is available at https://www.quicklogic.com/products/soc. For more information on the aiSensing vibration sensor, visit: https://www.youtube.com/watch?v=z7TPI7i2vn4.

About SensiML
SensiML, a subsidiary of QuickLogic (NASDAQ: QUIK), offers cutting-edge software that enables ultra-low power IoT endpoints that implement AI to transform raw sensor data into meaningful insight at the device itself. The company's flagship solution, the SensiML Analytics Toolkit, provides an end-to-end development platform spanning data collection, labeling, algorithm and firmware auto generation, and testing. The SensiML Toolkit supports Arm® Cortex®-M class and higher microcontroller cores, Intel® x86 instruction set processors, and heterogeneous core QuickLogic SoCs and QuickAI platforms with FPGA optimizations. For more information, visit www.sensiml.com.

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