



Himax Unites with Seeed Studio to Bring SenseCAP LoRaWAN Vision AI Sensor to Smart Agriculture

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Himax Technologies, Inc. a leading supplier and fabless manufacturer of display drivers and other semiconductor products, and Seeed Studio, the IoT hardware partner providing services that empower developers to implement their projects and products for digital transformation, announced the joint showcase of the SenseCAP A1101 LoRaWAN Vision AI Sensor, embedded with Himax WiseEye's smart image sensing solution (WiseEye), at the upcoming CES 2023 in Las Vegas, Nevada.

Seeed Studio, with its tinyML Edge AI platform enabling expertise, has created a plug-and-play and easy-to-integrate SenseCAP A1101 vision sensor that runs machine learning in support of a variety of AI models, such as image recognition, people counting, target detection, meter recognition and many others. This industry-leading battery-powered sensor solution incorporates Himax HM0360 CMOS image sensor, supporting up to 60 FPS VGA solution, and WiseEye WE1 AI processor, running at 400MHz local inferencing that facilitates powerful machine learning at extremely low power consumption, as well as a LoRaWAN module, featuring low-power, wide-area (LPWA) networking protocol for long-range networks.

At CES, Himax and Seeed Studio will showcase the SenseCAP A1101 sensor which has already been applied to real smart agriculture cases. Powered by Himax's ultralow power WiseEye technology, the SenseCAP A1101 vision AI sensor can operate for over 9 months while continuously collecting field images and uploading the final data results from local inferencing every minute. The vision AI sensor hardware is designed to adopt high industrial protection grade that supports an operating temperature range of -40 to 85 degrees Celsius and IP66 waterproof rating, making it a good fit for IoT applications placed either in outdoor or indoor argo-ecosystems. The sensor solution also supports rapid configuration of the Bluetooth APP, and fast connection to gateways and cloud servers, with only few clicks setup.

"We're really happy and honored to work with Himax to embed their WiseEye solution to this Vision AI device. To be the most reliable IoT Hardware Partner for global developers, we at Seeed are always looking to integrate advanced technologies into ready-to-deploy hardware solutions for digital transformation in vertical industries," said Joey Jiang, GM of Industry and Application Group of Seeed Studio. "Working with Himax is yet another step forward in Seeed's Vision to empower every developer to achieve their digital transformation goals with Vision AI technology. With SenseCAP A1101 LoRaWAN Vision AI Sensor, the developers can combine vision and LPWAN to their IoT solutions to serve various scenarios of smart

farming, smart metering and more.â?•

â??Seeed Studio is one of the leading AI platforms in the world and our collaboration in the smart agriculture application is a further validation of the suitability of our WiseEye technology to a wide range of markets,â? said Jordan Wu, CEO of Himax. â??The demand for battery-powered smart devices with AI-enabled smart sensing is rapidly growing providing an opportunity for us to further expand by joining forces with other AI platform partners by offering value-added features for our customers in terms of privacy, security, and superior battery life for diversified endpoint AI devices.â?