Upgraded sensor board from STMicroelectronics accelerates plug-and-play evaluation with ST MEMS Studio

New hardware integrates closely with convenient, graphical development environment

GENEVA, SWITZERLAND, January 27, 2025 /EINPresswire.com/ -- --
Developing context-aware applications with MEMS sensors is faster, more powerful, and more flexible with ST's latest-generation sensor evaluation board, the STEVAL-MKI109D. Now upgraded with an STM32H5 microcontroller, USB-C connector, and


Get more from ST MEMS sensors with latest evaluation board

ST MEMS sensor eval board

extra digital interfaces including I3C for flexible communication , the new board lets users quickly evaluate sensors and confidently handle demanding projects.

Engineers unveiled the STEVAL-MKI109D during a live tech lab, showing how to simply plug in a sensor module, connect a PC, and start analyzing data in ST MEMS Studio. Using this all-in-one graphical environment, developers can visualize the sensor output, quickly fine-tune settings, configure features, and exercise the AI capabilities of ST sensors with a machine-learning core (MLC) and intelligent sensor processing unit (ISPU) inside. The tool provides advanced functions including power monitoring and supply voltage management that help optimize energy consumption and debugging.

ST's MEMS portfolio contains inertial sensors, pressure sensors, biosensors, and digital and analog microphones offering many choices of speed, accuracy, full-scale range, and package style in industrial, consumer, and automotive grades. Extremely compact and robust, they are suited to diverse applications including consumer products, smartphones, wearables, smart-home devices, industrial sensing, safety equipment, healthcare, environmental monitoring, and many more. Automotive-grade devices target applications including navigation support, advanced driver assistance, and automated driving.

An evaluation module is available for each sensor type, mounted on a convenient DIL24 card
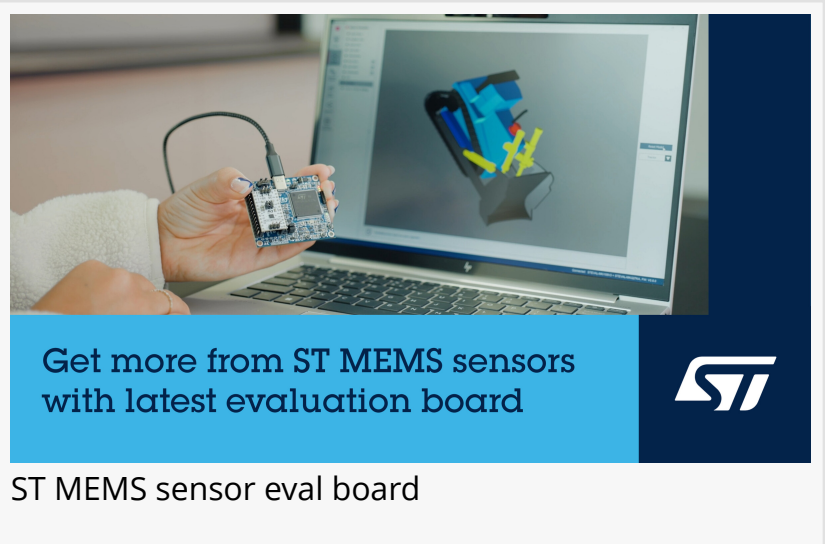
with headers, ready to connect to the STEVAL-MKI109D board. Additional plug-and-play accessories are available, including biosensor electrodes and remote-sensing extension cables to quickly evaluate sensors when building proof-of-concept models and developing prototypes.

The STM32H5 MCU at the heart of the new board has the latest high-performing and efficient Arm® Cortex®-M33 core with extensive peripherals that enable faster, more convenient development. Customers' sensor projects can target any of the over 1400 microcontrollers and microprocessors in the STM32 family. The MLC, finite-state machine (FSM), and ISPU embedded in select MEMS devices help optimize application performance and power consumption for superior functionality, responsiveness, and battery runtime.

The STEVAL-MKI109D board is available from distributors and the eSTore, from $105. ST MEMS Studio is ready to download now at www.st.com/mems-studio and is supported with automatic upgrades to ensure users always have the latest software and firmware.

For further information please visit: www.st.com/mems-studio

STM32 is a registered and/or unregistered trademark of STMicroelectronics International NV or its affiliates in the EU and/or elsewhere. In particular, STM32 is registered in the US Patent and Trademark Office.

Alexander Jurman
STMicroelectronics
Alexander.Jurman@st.com

This press release can be viewed online at: https://www.einpresswire.com/article/780664002