



Press release
Communiqué de presse
Comunicato stampa
新聞稿 / 新聞稿
プレスリリース
보도자료

P4572S

STMicroelectronics releases secure software for STM32-powered edge devices connecting to AWS IoT Core

New developer software for STM32H5 leverages ST's Secure Manager to simplify safe connectivity to AWS IoT devices platform

Geneva, Switzerland, September 21, 2023 – STMicroelectronics (NYSE: STM), a global semiconductor leader serving customers across the spectrum of electronics applications, has added new software to its STM32Cube development tools that simplifies connecting high-performing Internet of Things (IoT) devices to the AWS cloud.

ST has released the [X-CUBE-AWS-H5](#) expansion package which enables a seamless and secure connection to the AWS cloud. It contains a set of libraries and application examples designed for high-performance microcontrollers of the STM32H5 series, which act as end devices.

The solution is built on the FreeRTOS open-source real-time operating system and ST's [Secure Manager](#) embedded security software. The recently announced [STM32H5 Discovery kit](#) is available to use with this solution and lets developers easily and securely connect their STM32H5-based prototypes to AWS IoT Core.

“The STM32H5 is ready for the next generation of IoT edge devices, bringing the performance to handle complex applications within a tight energy budget,” said Daniel Colonna, STM32 Marketing Director, STMicroelectronics. *“The STM32Cube ecosystem helps developers unleash its powerful capabilities, accelerate development, and, with our latest software, connect securely to the powerful storage and data-analytics services in the AWS cloud.”*

[STM32H5](#) is one of the most powerful Arm® Cortex®-M33 MCU series. Devices are programmed with their own immutable identity at the ST factory. Combined with ST's Secure Manager, this simplifies registering smart devices to AWS cloud and removes the need for costly infrastructure otherwise necessary to keep the identities of IoT objects secret during their production.

Remote provisioning and administration of credentials will also be available via third-party service providers, during production of devices and in the field.

The isolation properties provided by Secure Manager enable the intellectual property of multiple owners to be protected. This is also known as multitenant IP protection. It is part of a comprehensive set of services that protect the confidentiality and integrity of assets belonging to STM32 developers and partners, through development, manufacturing, and in the field.

This is a perfect fit for edge AI use cases, where models are running on the edge, on devices, protected by the Secure Manager, and further trained and securely updated via the cloud. [The STM32Trust TEE Secure Manager](#) makes stronger security simpler.

Overall, the STM32Cube ecosystem with STM32H5 microcontrollers provides developers with a powerful and secure platform for developing IoT applications that comply with future regulations and standards. [STM32H5](#), introduced in March 2023, is the first to support Secure Manager and targets [PSA Certified level 3](#) and [SESIP3](#) certifications.

X-CUBE-AWS-H5 is ready to download now.

For more information, please go to www.st.com/x-cube-aws-h5.

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.

About STMicroelectronics

At ST, we are over 50,000 creators and makers of semiconductor technologies mastering the semiconductor supply chain with state-of-the-art manufacturing facilities. An integrated device manufacturer, we work with more than 200,000 customers and thousands of partners to design and build products, solutions, and ecosystems that address their challenges and opportunities, and the need to support a more sustainable world. Our technologies enable smarter mobility, more efficient power and energy management, and the wide-scale deployment of the Internet of Things and connectivity. We are committed to achieving our goal to become carbon neutral on scope 1 and 2 and partially scope 3 by 2027. Further information can be found at www.st.com.

For Press Information Contact:

Michael Markowitz
STMicroelectronics
Tel: +1 781 591 0354
Email: michael.markowitz@st.com