**News Release**

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**Renesas Launches Cellular-to-Cloud IoT Development Platforms Powered by RA and RX MCU Families**

Renesas Combines its MCUs, Sensors, Analog and Power Devices with Cat-M1 Cellular Module to Enable End-to-End Cloud Connectivity

**Düsseldorf, June 15, 2022 ―** Renesas Electronics Corporation (TSE:6723), a premier supplier of advanced semiconductor solutions, today announced two new cloud development kits, CK-RA6M5 and CK-RX65N, providing a complete connectivity solution for the RA and RX Families of 32-bit microcontrollers (MCUs). The cloud kits are the first to be equipped with Renesas’ RYZ014A Cat-M1 module, a certified LTE cellular module that offers the ability to establish wireless connection between MCUs and cloud services quickly and securely without a gateway.

Armed with these cloud kits, users can rapidly develop IoT cloud products and solutions without having to design their own complex circuitry and software stacks. The kits include the RYZ014A Cat-M1 Pmod™ module, multiple sensors, a high-performance MCU, hardware-based security, and a reliable software stack.

The cloud kits are ready to connect to global cloud service providers such as AWS Cloud and IoT services. Both kits are designed to run on AWS (Amazon Web Services) FreeRTOS for CK-RA6M5 using FSP (Flexible Software Package) and CK-RX65N using RDP (RX Driver Package). Once connected to AWS IoT Core, the kits have access to many Cloud and IoT services from AWS for data analytics and IoT device management.

“We are pleased that the Renesas cloud kits are qualified AWS Partner Devices. Renesas’ IoT cloud kits are great examples of hardware and software platforms that can help IoT developers to realize the full potential of AWS IoT services and accelerate solution development,” said **Muneyuki Watanabe, Director, Head of Partner Alliance, Amazon Web Services Japan**. “The new cloud kits combine highly secure MCUs, AWS libraries, the FreeRTOS software stack, and a dashboard with a vast collection of IoT cloud services. Together, the kits provide access to market-ready platforms for manageable and scalable cloud solutions.”

“With Renesas’ first cellular Cat-M1 module, we are adding ubiquitous cellular connectivity to our cloud solution offerings, providing our customers more flexible and reliable cloud connectivity options,” said **Roger Wendelken, Senior Vice President in Renesas’ IoT and Infrastructure Business Unit**. “Our complete cloud solutions allow engineers to focus on designing unique IoT systems that can be adopted in a wide variety of applications such as building and home automation, smart metering, healthcare and industrial applications.”

“Mobile cloud computing is leading a new era for data storage and processing, especially now that cellular IoT devices have become so pervasive,” said **Georges Karam, CEO of Sequans Communications**. “Packed with on-board sensors and the Cat-M1 module powered by Sequans’ Monarch technology, Renesas’ cloud kits will be ideal platforms for evaluating and deploying mobile cloud applications for wireless IoT systems.”

The cloud kits are the first to support the Renesas’ RA6M5 and RX65N MCU groups under a unified development platform, ensuring a consistent user experience. The [CK-RA6M5](https://www.renesas.com/products/microcontrollers-microprocessors/ra-cortex-m-mcus/ck-ra6m5-cloud-kit-based-ra6m5-mcu-group?utm_campaign=mcu_cloud&utm_source=press_release&utm_medium=press_release&utm_content=ra_kit) and [CK-RX65N](https://www.renesas.com/products/microcontrollers-microprocessors/rx-32-bit-performance-efficiency-mcus/ck-rx65n-cloud-kit-based-rx65n-mcu-group?check_logged_in=1?utm_campaign=mcu_cloud&utm_source=press_release&utm_medium=press_release&utm_content=rx_kit) both have identical hardware and software features and a common dashboard user interface to access real-time cloud data.

In addition to the [Cat-M1 RYZ014A wireless module](https://www.renesas.com/products/interface-connectivity/wireless-communications/cellular-iot-modules/ryz014a-lte-cat-m1-cellular-iot-module?utm_campaign=mcu_cloud&utm_source=press_release&utm_medium=press_release&utm_content=ryz014), the kits also provide an option to use Ethernet to securely connect to cloud when the Cat-M1 network is not available. Renesas plans to offer more wireless connectivity options in the future. These kits will also be offered as part of [Renesas’ Quick-Connect IoT Platform](https://www.renesas.com/application/industrial/building-home-automation/quick-connect-iot?utm_campaign=mcu_cloud&utm_source=press_release&utm_medium=press_release&utm_content=qc-iot), which combines standard hardware and software building blocks to enable rapid prototyping of IoT systems.

**Key Features of the Renesas CK-RA6M5 and CK-RX65N Kits**

* Two network connectivity options: RYZ014A LTE Cat-M1 Pmod and Ethernet
* Highly secure Arm® Cortex®-M33 core-based RA6M5 MCUs with TrustZone® and Secure Crypto Engine, and RX65N MCUs with TSIP (Trusted Secure IP)
* AWS qualified devices with a comprehensive software suite and a custom designed dashboard to visualize sensor data

**Availability**

The CK-RA6M5 and CK-RX65N kits are available from Renesas worldwide distributors and will include a $10 AWS credit and 30 days of free Cat-M1 data for a hassle-free cloud connection experience. More information is available at [renesas.com/cloudsolutions](https://www.renesas.com/application/iot-applications/smart-home/iot-cloud-solutions?utm_campaign=mcu_cloud&utm_source=press_release&utm_medium=press_release&utm_content=lp).

**About Renesas Electronics Corporation**

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