

Cloud Connectivity Solution

Cloud Connectivity for your IoT Devices

Benefit

- ✓ **Certified Device** : AWS and Microsoft partner qualification **by Certified Device**
- ✓ **Quick Started** : Cloud Connectivity & OTA **by Dedicated Evaluation kits**
- ✓ **Smart Development** : GUI-based easy RTOS import & development **by Tool**

Features

Certified MCU by Cloud Vendor

- ✓ **Certified by AWS and Microsoft**
RX is a suitable MCU for IoT devices that can implement Cloud connectivity, Secure communication and OTA feature.



[AWS Device Catalog](#)



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Suitable Evaluation kit

- ✓ **Cloud connectivity with this one**
 Evaluation kits for developing IoT devices equipped with a Cellular module and 6 sensors. Other kits for Ether and Wi-Fi are also available.

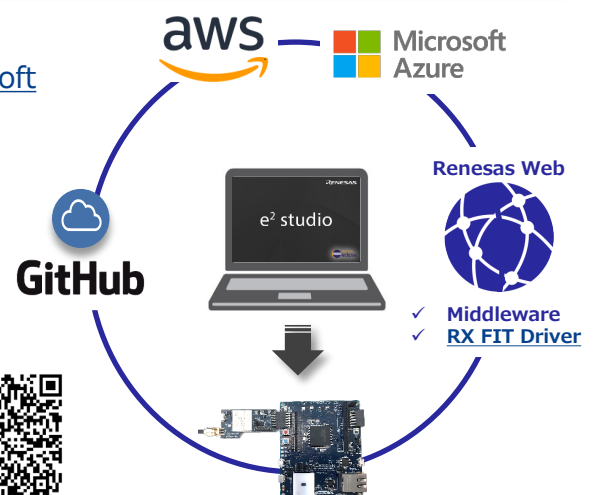


Renesas CK-RX65N



User Friendly Development Environment

- ✓ **Provide suitable RTOS and S/W for IoT with RX**
 - Certified for [FreeRTOS of AWS](#), [AzureRTOS of Microsoft](#)
 - Sensor data upload and monitoring via Cloud
 - OTA Firmware update sample program
 - Various IoT related Application Note and program
- ✓ **Quick and Easy Start by Renesas IDE**
 - New project creation for FreeRTOS and AzureRTOS
 - [FWUP FIT Driver](#) for either RTOS or BareMetal
 - Automatically set clock and PIN functions according to Evaluation kits and MCU used
 - Simply set peripheral functions based on GUI by Smart Configurator
 - OTA assist Tool '[QE for OTA](#)'



Cloud Connectivity Solution

MCU	Part Name	CPU	Frequency	ROM	RAM	Trusted Secure IP	BGO, Dual Bank	RX Driver support		
								Ether	Wi-Fi	Cat-M1
	RX72M/RX72N	RXv3	240 MHz	4 MB	1 MB	✓	✓	✓	✓	✓
	RX66N	RXv3	120 MHz	4 MB	1 MB	✓	✓	✓	✓	✓
	RX671	RXv3	120 MHz	2MB	384 KB	✓	✓	-	✓	TBD
	RX65N/RX651	RXv2	120 MHz	2 MB	640 KB	✓	✓	✓	✓	✓

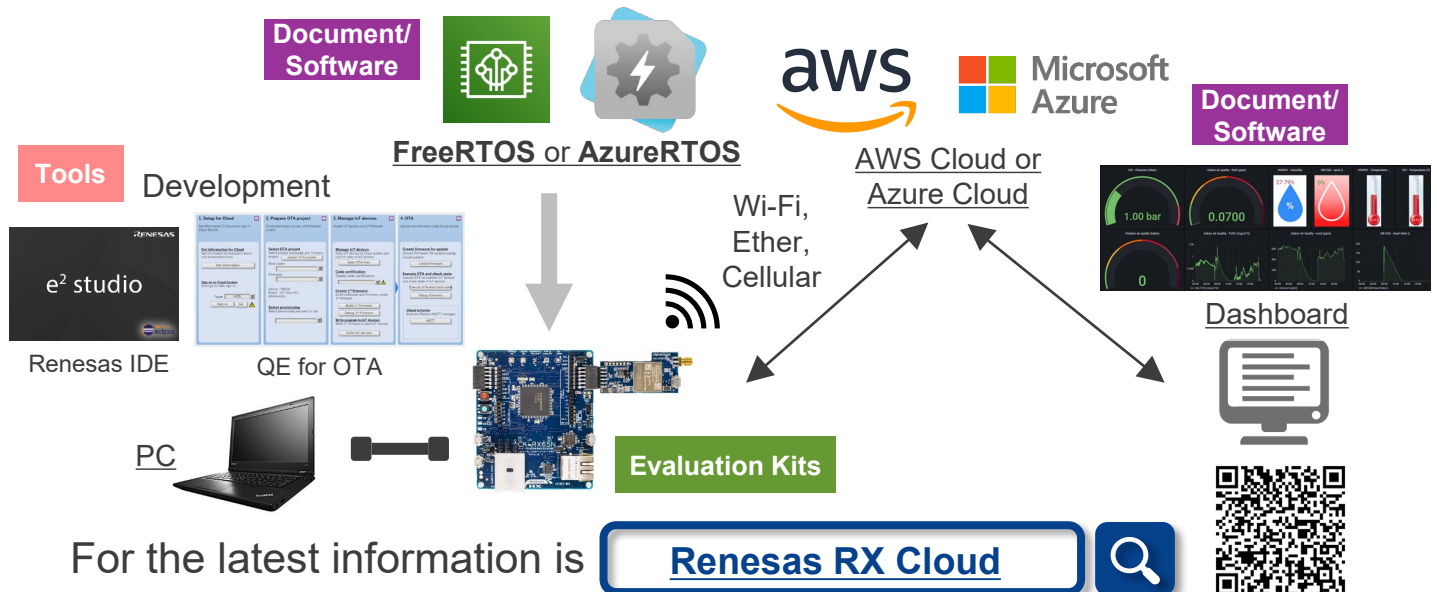
Evaluation Kits	Kit Name		Orderable Part Number	AWS	Azure	Communication
	Renesas Starter Kit+ for RX65N-2MB		RTK50565N2S10000BE	✓	✓	Ether
	RX65N Cloud Kit	for EU, JPN, SGP	RTK5RX65N0S00000BE	✓	✓	Wi-Fi
		for US	RTK5RX65N0S010000BE			
	RX72N Envision Kit		RTK5RX72N0C00000BJ	✓	✓	Ether, Wi-Fi
	Renesas Starter Kit+ for RX671		RTK55671EHS10000BE	✓	✓	Wi-Fi
	Renesas CK-RX65N		RTK5CK65N0S04000BE	✓	CY22 Q4	Cat-M1, Ether

Tools	Tool Name	Category	Feature Description
	e² studio	Integrated Development Environment	- Easy create or import FreeRTOS and Azure RTOS projects as a new project - Automatically set clock & PIN functions according to the board and MCU - Simply set peripheral functions based on GUI by Smart Configurator
	QE for OTA	Cloud Assist Tool	- Smoothly integrate complicated cloud registration and OTA execution by following the GUI guide

Document & Software	Application Note		Document No.
	Renesas MCU Firmware Update Design Policy		R01AN5548
	How to implement FreeRTOS OTA using Amazon Web Services on RX65N		R01AN5549
	CK-RX65N SIM activation, Creating the trial account and using Dashboard Getting Started Guide		R01QS0064
	RX65N Sample Code for OTA Update of Secondary Device with Amazon Web Services Using FreeRTOS		R01AN6220
	RX72N Envision Kit Using Quick-Connect IoT to Send Sensor Information to Amazon Web Services		R11AN0560
	Low Power Consumption (Intermittent Operation) using LTE Cat-M1 Module (RYZ014A) and FreeRTOS		R01AN6271

Solution Configuration

- You can easily build an IoT development environment by using the RX Cloud Solution.



For the latest information is

[Renesas RX Cloud](#)

