



The RX Family Flagship Product with High Performance and Scalable Product Lineup RENESAS RX700, RX600 MCU SERIES



Renesas RX700 and RX600 series are ideal for real-time applications with its outstanding processing performance based on the latest RX CPU core. Abundant peripheral functions enable various device control and network control with a single chip, allowing more smaller devices developed with lesser parts needed. Also, enabling HMI control and cloud connectivity with top-level security for IoT solutions; and the RX72M supports major industrial network protocols including EtherCAT[®].

Industrial								Office Au	tomation	Consumer			
Robots, Machine tools	General-purpose inverters	PLC	Smart meter	Power conditioner	HVAC controller	Security controller		Copiers Printers	Projector	Audiovisual equipment	Camera body Lens	Air conditioner (outdoor unit, indoor unit)	
	Q						1			• •			
Benefits/ Key Features													
Overwhelming Real-Time Processing Performance													
Product A					31 cy				ilt-in Flash o 120MHz	Capable of r	io-wait		
Product B	7	cycle						•					
RX72N	1 cycle		Compe	ccess destination titor A: External SD titor B, RX: Built-in		9	Stable	e CPU pe	rformance	with no wait	time		
RX66N	0 cycle						Ideal 1	for real-ti	ime applica	tions with th	ne high-		
fast	•	CPU	wait cycle co	unt	slow	9	speed	operatio	n		- T		
Large-Capacity Memory and Minimal Package Lineup													



Extensive line-up to suit market needs

Large-capacity memory that does not require external memory

Small package can be mounted on a small board

Equipped with Essential Functions for IoT Implementation



 UI with contact/Touchless UI can be implemented with Touch Key

RENESAS RX700, RX600 MCU SERIES

Product Information

Product	CPU	Supply Voltage	Flash/ SRAM	н	MI	Commu	Security	
RX72M	RXv3 240MHz	3.3V	4MB*1/ 1MB	LCD	l²S	EtherCAT Ethernet	CAN,SDHI, USB,QSPI	Trusted Secure IP
RX72N	RXv3 240MHz	3.3V	4MB*1/ 1MB	LCD	²S	Ethernet	CAN,SDHI, USB,QSPI	Trusted Secure IP
RX66N	RXv3 120MHz	3.3V	4MB*1/ 1MB	LCD	²S	Ethernet	CAN,SDHI, USB,QSPI	Trusted Secure IP
RX671	RXv3 120MHz	3.3V	2MB*1/ 384KB	Touch key	l²S	Home Bus Support	CAN,SDHI, USB,QSPI	Trusted Secure IP
RX65N	RXv2 120MHz	3.3V	2MB*1/ 640KB	LCD	-	Ethernet	CAN,SDHI, USB,QSPI	Trusted Secure IP
RX651	RXv2 120MHz	3.3V	2MB*1/ 640KB	LCD	-	-	CAN,SDHI, USB,QSPI	Trusted Secure IP
RX660	RXv3 120MHz	2.7~5V	1MB/ 128KB	-	-	Home Bus Support	CAN-FD, Remote control reception	-

*1: Dual Bank compatible

Solution/ Development Environment

Cloud Solution

Simple Cloud connection

- Obtained FreeRTOSTM certification
- Easy connection to AWS cloud



Renesas RX65N Cloud Kit

Industrial Network Solution

Multi-protocol support

Industries supporting major protocols Network solutions available



GUI Solution

One-stop service

One-stop service for evaluation boards, middleware, and useful tools



Wer Win for RX

Smart Configurator

Terminal setting, code generation, middleware import possible



Security Solution

One-stop solution

Renesas original key management function

Protect from Threats

Life cycle management support

Cryptographic technology with proven

Product safety

safety

Long-term Product Supply Program

Renesas Electronics operates a long-term product supply program (commonly known as PLP: Product Longevity Program) so that customers with long equipment life cycles can select products with peace of mind. We will supply for up to 15 years.

For more details, please visit www.renesas.com/RX

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Contact information

For further information on a product, technology, the most up-to-date version of a document, or your nearest sales office, please visit: www.renesas.com/contact/

Product

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