

Ultra-Low Power Consumption with Fast Standby Recovery

RENESAS RX100 MCU SERIES

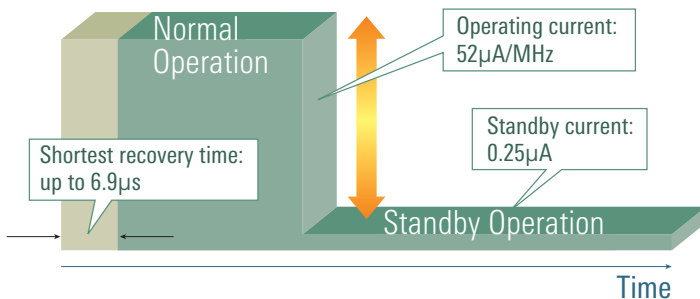


Renesas RX100 MCU series is developed based on RX proprietary core, providing cost optimization with high performance for applications such as health care, portable devices, industrial equipment by embedding touch sensor and HMI functions in a compact package. With an industry-leading ultra-low power consumption and faster standby recover, it is suitable for energy-saving products.

Consumer (battery drive)	Healthcare	Home appliances	Industrial
Sensor hubs (smartphones, game consoles, PCs, tablets), digital cameras, digital camcorders	Healthcare devices, wearable devices	Cooking appliances, water heaters	Power meters, detectors (smoke detectors, etc.), pressure gauges, thermostats

Benefits/ Key Features

Industry-Leading Ultra-Low Power Consumption



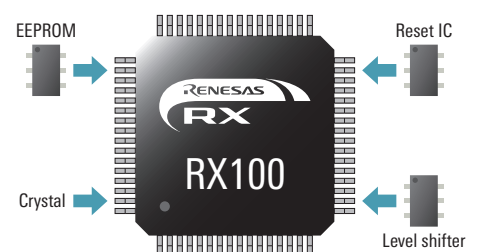
- Ultra-low current consumption operation in both standby and operation modes
- Ultra-fast recovery from standby mode
- Ideal for battery and battery-powered applications

Functions Suitable for Various Applications

RX100 Functions and Specification	Home Appliances	Healthcare	Portable	Industrial
5V operation	✓	-	-	-
HMI (Touch, LCD)	✓	✓	✓	✓
Communication (CAN, USB)	-	✓	✓	✓
Security (AES)	✓	✓	✓	✓

Excellent Cost Performance

- Small pin / Small ROM lineup
- BOM reduction by incorporating peripheral ICs
- High compatibility between RX families help to reduce development costs for other RX products



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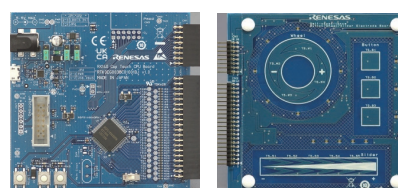
Product Information

Product	CPU	Supply Voltage	Flash/ SRAM	HMI		Communication	Analog	Security	Low Power Consumption	
RX140	RXv2 48MHz	1.8V to 5.5V	256KB/ 64KB	Touch key	-	CAN	12-bit ADC 8-bit DAC	AES	Low power timer	Snooze
RX130	RXv1 32MHz	1.8V to 5.5V	512KB/ 48KB	Touch key	-	Remote control reception	12-bit ADC 8-bit DAC	-	Low power timer	-
RX113	RXv1 32MHz	1.8V to 3.6V	512KB/ 64KB	Touch key	Segment LCD	USB	12-bit ADC 12-bit DAC	-	Low power timer	-
RX111	RXv1 32MHz	1.8V to 3.6V	512KB/ 64KB	-	-	USB	12-bit ADC 8-bit DAC	-	-	-
RX110	RXv1 32MHz	1.8V to 3.6V	128KB/ 16KB	-	-	-	12-bit ADC	-	-	-

Solution/ Development Environment

Starts development immediately with RX140 touch key evaluation system

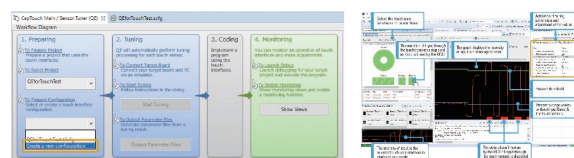
- Third-generation touch IP (CTS2SL) dramatically improves noise resistance and water resistance
- Includes microcomputer board and touch key-boards
- For button/slider/wheel evaluation
- Immediate evaluation applicable to user's custom board



RX140 Capacitive Touch Evaluation Kit

Reduce development man-hours

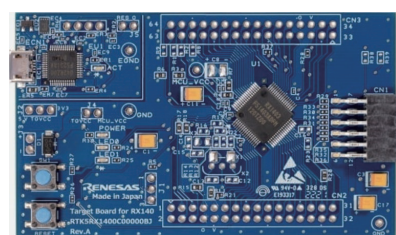
- Easy sensitivity adjustment with QE for Capacitive Touch
 - Easy operation with an intuitive GUI interface
 - Auto adjusted source code output
- Maintenance of touch-only driver
- Extensive application notes
- Immediately resolve questions on the FAQ site



QE for Capacitive Touch

Target Board for RX140

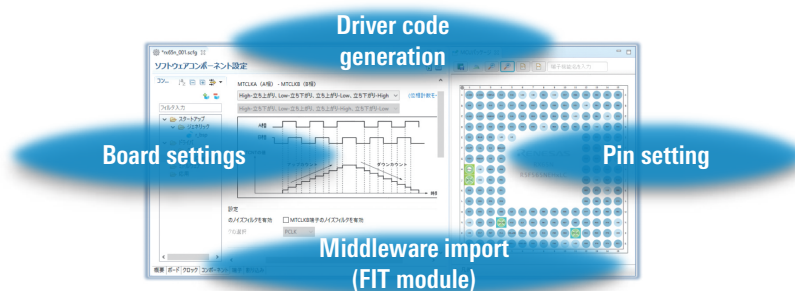
- Easy evaluation of RX140 is possible
- Initial evaluation of third-generation touch is possible by implementing the LPF capacitors
- Through hole with access to all pins
- No emulator purchase required (installed on the board)



Target Board for RX140

Smart Configurator

Terminal setting, code generation, middleware import possible



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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