

Renesas Microcomputer

RX Family Selection Guide

RX600 Series

Application	Device			Memory				CPU				DMA		External Bus Interface		Clock		Power Supply Voltage Detection		ADC	DAC	Timer		Serial Interface		CAN	Ethernet	USB HOST	USB Function	I/O Ports			External Interrupt Pins	Internal debug functions		Other functions	Operating Frequency/Supply Voltage	Operating Ambient Temperature(C)	Package Code
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time (ns)	Divystone Performance	FPU	DMAC(channels)	EXDMAC	DTC/DMACII	Bus State Controller	Sub-clock	RTC	On-Chip Oscillator	POR (Power-On Reset)	LVD (Low Voltage Detection)	Resolution x Channels	Resolution x Channels	8-bit	16-bit					Clock Sync./Clock Async.	Clock Sync. Only	FC bus		Channels	Input Only (Numbers)				
General-purpose	RX600	RX63N	R5F563NECDLC**	2M	128K	F	32K (E2Data Flash)	RX CPU core	90	10 (@100MHz)	165	Yes	4	2	DTC	Yes	Yes	Yes	Yes	Yes (LVD)	12bit x 21, 10bit x 8	10bit x 2	4	TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	4	-	-	134	134	17	-	Yes/Yes	-	100MHz/ 2.7 to 3.6V	-40 to 85	LGA-177		
			R5F563NECDBG*																																		BGA-176		
			R5F563NECDFC*																																		LQFP-176		
			R5F563NECDLK*																																		LGA-145 (7x7)		
			R5F563NECDFB*																																		LQFP-144		
			R5F563NECDLJ*																																		LGA-100		
			R5F563NECDFP*																																		LQFP-100		
			R5F563NEDDL**																																		LGA-177		
			R5F563NEDDBG*																																		BGA-176		
			R5F563NEDDFC*																																		LQFP-176		
	R5F563NEDDLK*	LGA-145 (7x7)																																					
	R5F563NEDDFB*	LQFP-144																																					
	R5F563NEDDLJ*	LGA-100																																					
	R5F563NEDDFP*	LQFP-100																																					
	R5F563NDCDLC**	1.5M	128K	F	32K (E2Data Flash)	RX CPU core	90	10 (@100MHz)	165	Yes	4	2	DTC	Yes	Yes	Yes	Yes	Yes	Yes (LVD)	12bit x 21, 10bit x 8	10bit x 2	4	TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	4	-	-	134	134	17	-	Yes/Yes	-	100MHz/ 2.7 to 3.6V	-40 to 85	LGA-177			
	R5F563NDCDBG*																																			BGA-176			
	R5F563NDCDFC*																																			LQFP-176			
	R5F563NDCDLK*																																			LGA-145 (7x7)			
	R5F563NDCDFB*																																			LQFP-144			
	R5F563NDCDLJ*																																			LGA-100			
R5F563NDCDFP*	LQFP-100																																						
R5F563NDDLC**	LGA-177																																						
R5F563NDDDBG*	BGA-176																																						
R5F563NDDDFC*	LQFP-176																																						
R5F563NDDDLK*	LGA-145 (7x7)																																						
R5F563NDDDFB*	LQFP-144																																						
R5F563NDDDLJ*	LGA-100																																						
R5F563NDDDFP*	LQFP-100																																						

* : New product ** : Under development ☆ : In planning stage
 *F : Flash memory version, L : ROM-less version, M : Mask ROM version, O : One-time PROM version, Qz : QzROM version

RX600 Series

Application	Device			Memory				CPU				DMA		External Bus Interface	Clock		Power Supply Voltage Detection		ADC	DAC	Timer		Serial Interface		CAN	Ethernet	USB HOST	USB Function	I/O Ports			External Interrupt Pins	Internal debug functions	Other functions	Operating Frequency/Supply Voltage	Operating Ambient Temperature(C)	Package Code
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time (ns)	Divystone Performance	FPU	DMAC(channels)	EXDMAC	DTC/DMACII	Bus State Controller	Sub-clock	RTC	On-Chip Oscillator	POR (Power-On Reset)	LVD (Low Voltage Detection)	Resolution x Channels	Resolution x Channels	8-bit					16-bit	Clock Sync./Clock Async.	Clock Sync. Only						
General-purpose	RX600	RX63N	R5F563NBCDL**	1M	128K	F	32K (E2Data Flash)	RX CPU core	90	10 (@100MHz)	165	Yes	4	2	DTC	Yes	Yes	Yes	Yes	Yes (LVD)	12bit x 21, 10bit x 8	10bit x 2	4	TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	3(RSPI)	4	-	134	134	17	-	100MHz/2.7 to 3.6V	-40 to 85	LGA-177		
			R5F563NBCDBG*																																-/Yes	BGA-176	
			R5F563NBCDFC*																																Yes/Yes	LQFP-176	
			R5F563NBCDLK*																																Yes/Yes	LGA-145 (7x7)	
			R5F563NBCDFB*																																-/Yes	LQFP-144	
			R5F563NBCDLJ*																																-/Yes	LGA-100	
			R5F563NBCDFP*																																Yes/Yes	LQFP-100	
			R5F563NBDDL**																																Yes/Yes	LGA-177	
			R5F563NBDDBG*																																-/Yes	BGA-176	
			R5F563NBDDFC*																																Yes/Yes	LQFP-176	
			R5F563NBDDLK*																																Yes/Yes	LGA-145 (7x7)	
			R5F563NBDDFB*																																-/Yes	LQFP-144	
	R5F563NBDDLJ*	-/Yes	LGA-100																																		
	R5F563NBDDFP*	Yes/Yes	LQFP-100																																		
	R5F563NACDL**	768K	128K	F	32K (E2Data Flash)	RX CPU core	90	10 (@100MHz)	165	Yes	4	2	DTC	Yes	Yes	Yes	Yes	Yes	Yes (LVD)	12bit x 21, 10bit x 8	10bit x 2	4	TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	3(RSPI)	4	-	134	134	17	-	100MHz/2.7 to 3.6V	-40 to 85	LGA-177			
	R5F563NACDBG*																																	-/Yes	BGA-176		
	R5F563NACDFC*																																	Yes/Yes	LQFP-176		
	R5F563NACDLK*																																	Yes/Yes	LGA-145 (7x7)		
	R5F563NACDFB*																																	-/Yes	LQFP-144		
	R5F563NACDLJ*																																	-/Yes	LGA-100		
	R5F563NACDFP*																																	Yes/Yes	LQFP-100		
	R5F563NADDL**																																	Yes/Yes	LGA-177		
	R5F563NADDBG*																																	-/Yes	BGA-176		
	R5F563NADDFC*																																	Yes/Yes	LQFP-176		
R5F563NADDLK*	Yes/Yes																																	LGA-145 (7x7)			
R5F563NADDFB*	-/Yes																																	LQFP-144			
R5F563NADDLJ*	-/Yes	LGA-100																																			
R5F563NADDFP*	Yes/Yes	LQFP-100																																			

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RX600 Series

Application	Device			Memory				CPU				DMA		External Bus Interface		Clock		Power Supply Voltage Detection		ADC		DAC		Timer		Serial Interface		CAN		Ethernet		USB HOST		USB Function		I/O Ports		External Interrupt Pins		Internal debug functions		Other functions		Operating Frequency/ Supply Voltage	Operating Ambient Temperature(°C)	Package Code
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ EZ Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time (ns)	Divystone Performance	FPU	DMAC(channels)	EXDMAC	DTC/DMACII	Bus State Controller	Sub-clock	RTC	On-Chip Oscillator	POR (Power-On Reset)	LVD (Low Voltage Detection)	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Clock Sync./ Clock Async.	Clock Sync. Only	FC bus	Channels	Ethernet	USB HOST	USB Function	Input Only (Numbers)	CMOS I/O (Numbers)	N-Chipm. Open Drain Port(Numbers)	External Interrupt Pins	Boundary Scan/JTAG	Others	Operating Frequency/ Supply Voltage	Operating Ambient Temperature(°C)						
General-purpose	RX600	RX631	RF5631ECDLC**	2M	128K	F	32K (E2Data Flash)	RX CPU core	90	10 (@100MHz)	165	Yes	4	2	DTC	Yes	Yes	Yes	Yes (LVD)	12bit x 21, 10bit x 8	10bit x 2	4	8	TPU(12) MTU2(6) CMT(4)	13(SCI)	3(RSPI)	4	-	-	Yes	Yes	1	134	134	17	Yes/Yes	-	100MHz/ 2.7 to 3.6V	-40 to 85	LGA-177						
			RF5631ECDBG*																																					BGA-176						
			RF5631ECDFC*																																					LQFP-176						
			RF5631ECDLK*																																					LGA-145(7x7)						
			RF5631ECDFB*																																					LQFP-144						
			RF5631ECDLJ*																																					LGA-100						
			RF5631ECDFP*																																					LQFP-100						
			RF5631EDDLC**																																					LGA-177						
			RF5631EDDBG*																																					BGA-176						
			RF5631EDDFC*																																					LQFP-176						
			RF5631EDDLK*																																					LGA-145(7x7)						
			RF5631EDDFB*																																					LQFP-144						
			RF5631EDDLJ*																																					LGA-100						
			RF5631EDDFP*																																					LQFP-100						
			RF5631DCDLC**																																					LGA-177						
			RF5631DCDBG*																																					BGA-176						
			RF5631DCDFC*																																					LQFP-176						
			RF5631DCDFB*																																					LGA-145(7x7)						
			RF5631DCDLJ*																																					LQFP-144						
			RF5631DCDFP*																																					LGA-100						
			RF5631DDDLK**																																					LQFP-100						
			RF5631DDDBG*																																					LGA-177						
			RF5631DDDFC*																																					BGA-176						
			RF5631DDDLK*																																					LQFP-176						
RF5631DDDFB*	LGA-145(7x7)																																													
RF5631DDDLJ*	LQFP-144																																													
RF5631DDDFP*	LGA-100																																													
RF5631BCDLC**	LQFP-100																																													
RF5631BCDBG*	LGA-177																																													
RF5631BCDFC*	LGA-176																																													
RF5631BCDLK*	LQFP-176																																													
RF5631BCDFB*	LGA-145(7x7)																																													
RF5631BCDLJ*	LQFP-144																																													
RF5631BCDFP*	LGA-100																																													
RF5631BCDFP*	LQFP-100																																													

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RX600 Series

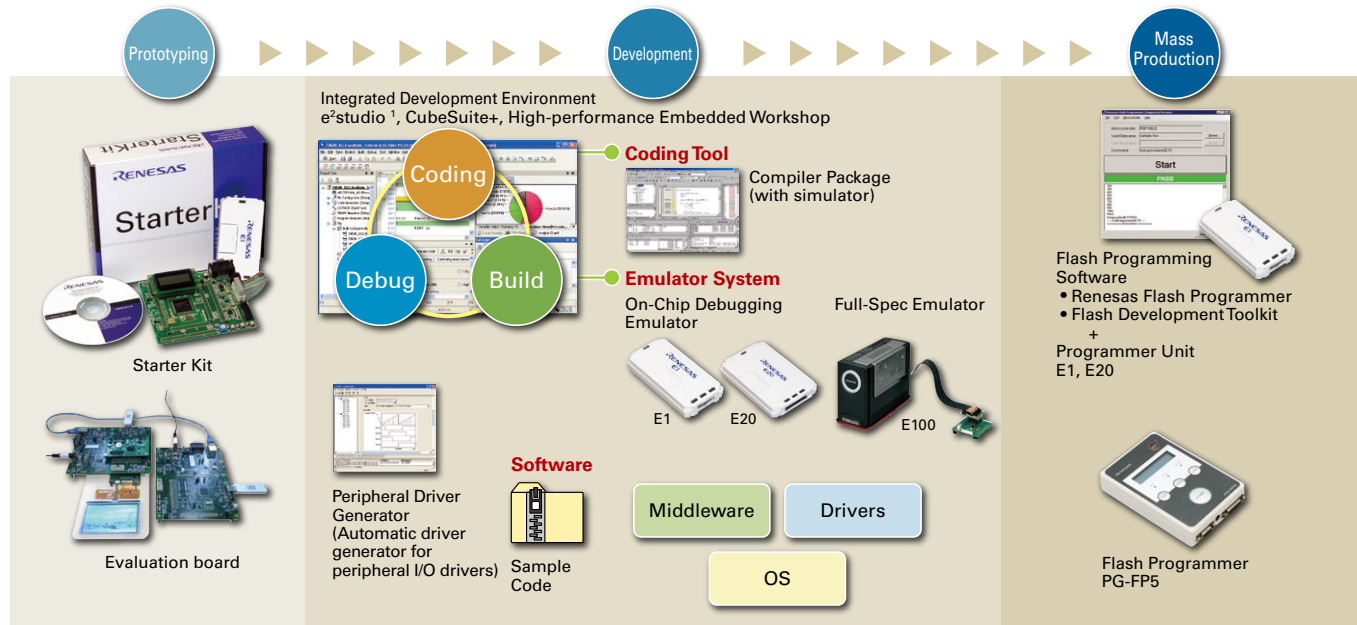
Application	Device			Memory				CPU				DMA		External Bus Interface		Clock		Power Supply Voltage Detection		ADC	DAC	Timer		Serial Interface		CAN	Ethernet	USB HOST	USB Function	I/O Ports			External Interrupt Pins	Internal debug functions		Other functions	Operating Frequency/Supply Voltage	Operating Ambient Temperature(C)	Package Code				
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/E2Data flash	CPU	Basic Instructions	Minimum Instruction Execution Time (ns)	Divystone Performance	FPU	DMAC(channels)	EXDMAC	DTC/DMACII	Bus State Controller*	Sub-clock	RTC	On-Chip Oscillator			POR (Power-On Reset)	LVD (Low Voltage Detection)	Resolution x Channels	Resolution x Channels					8-bit	16-bit	Clock Sync./Clock Async.		Clock Sync. Only	FC bus					Channels	Input Only (Numbers)	CMOS I/O (Numbers)	N-Channel Open Drain Port(Numbers)
General-purpose	RX600	RX630	R5F5630ECDLC**	2M	128K	F	32K (E2Data Flash)	RX CPU core	90	10	165MIPS	Yes	4	-	DTC	SRAM/ROM/Byte control SRAM/Page access supported	Yes	Yes	Yes	Yes	Yes (LVD)	12bit x 21, 10bit x 8	10bit x 2	4	TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	3(RSPI)	4	-	-	-	Yes	1	17	148	148	Yes/Yes	-	Yes/Yes	-	100MHz/2.7 to 3.6V	-40 to 85	LGA-177
			R5F5630ECDBG*																																								BGA-176
			R5F5630ECDFC*																																								LQFP-176
			R5F5630ECDLK*																																								LGA-145(7x7)
			R5F5630ECDLDB*																																								LQFP-100
			R5F5630ECDLA**																																								LGA-100
			R5F5630ECDFFP*																																								LQFP-100
			R5F5630EDDLC**																																								LGA-177
			R5F5630EDDBG*																																								BGA-176
			R5F5630EDDFC*																																								LQFP-176
			R5F5630EDDLK*																																								LGA-145(7x7)
			R5F5630EDDFB*																																								LQFP-100
			R5F5630EDDLA**																																								LGA-100
			R5F5630EDDFP*																																								LQFP-100
			R5F5630DCDLC**																																								LGA-177
			R5F5630DCDBG*																																								LQFP-176
			R5F5630DCDFC*																																								BGA-176
			R5F5630DCDLK*																																								LGA-145(7x7)
			R5F5630DCDFB*																																								LQFP-100
			R5F5630CDLA**																																								LGA-100
			R5F5630CDLDB*																																								LQFP-100
			R5F5630DDLC**																																								LGA-177
			R5F5630DDDBG*																																								LQFP-176
			R5F5630DDDFC*																																								BGA-176
R5F5630DDDLK*	LGA-145(7x7)																																										
R5F5630DDDFB*	LQFP-100																																										
R5F5630DDDLA**	LGA-100																																										
R5F5630DDDFP*	LQFP-100																																										
R5F5630BCDLC**	LGA-177																																										
R5F5630BCDBG*	BGA-176																																										
R5F5630BCDFC*	LQFP-176																																										
R5F5630BCDLK*	LGA-145(7x7)																																										
R5F5630BCDFB*	LQFP-144																																										
R5F5630BCDLA**	LGA-100																																										
R5F5630BCDFP*	LQFP-100																																										

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RX600 Series

Application	Device			Memory				CPU				DMA		External Bus Interface	Clock		Power Supply Voltage Detection		ADC	DAC	Timer		Serial Interface		CAN	Ethernet	USB HOST	USB Function	I/O Ports		Internal debug functions	Other functions	Operating Frequency/ Supply Voltage	Operating Ambient Temperature (C)	Package Code							
	Series	Group	Part No.	ROM (bytes)	RAM (bytes)	ROM Type*	Data flash/ EZData flash	CPU	Basic Instructions	Minimum Instruction Execution Time (ns)	Divystone Performance	FPU	DMAC(channels)	EXDMAC	DTC/DMACII	Bus State Controller*	Sub-clock	RTC	On-Chip Oscillator	POR (Power-On Reset)	LVD (Low Voltage Detection)	Resolution x Channels	Resolution x Channels	8-bit	16-bit	Clock Sync/ Clock Async.	Clock Sync. Only	FC bus	Channels	USB Function	Input Only (Numbers)	CMOS I/O (Numbers)	N-Channel Open Drain Port(Numbers)	External Interrupt Pins	Boundary Scan/JTAG	Others						
General-purpose	RX600	RX630	R5F56308DDL* R5F56308DDFC* R5F56308DDBG* R5F56308DDLK* R5F56308DDFB* R5F56308DDLA** R5F56308DDFP*	1M																		12bit x 21, 10bit x 8	10bit x 2		TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	4	2		148	148		Yes/Yes	-/Yes							LGA-177 BGA-176 LQFP-176 LGA-145(7x7) LQFP-144	
			R5F56308ACDLC** R5F56308ACDBG* R5F56308ACDFC* R5F56308ACDLK* R5F56308ACDFB* R5F56308ACDLA** R5F56308ACDFP*	96K																				12bit x 14, 10bit x 8	10bit x 1		TPU(6) MTU2(6) CMT(4)	8(SCI) 2(RSPI)	2		78	78		-/Yes							LGA-100 LQFP-100	
			R5F56308ADDLC** R5F56308ADDBG* R5F56308ADDFC* R5F56308ADDLK* R5F56308ADDFB* R5F56308ADDLA** R5F56308ADDFP*	768K																				12bit x 21, 10bit x 8	10bit x 2		TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	4		148	148		Yes/Yes	-/Yes							LGA-177 BGA-176 LQFP-176 LGA-145(7x7) LQFP-144
			R5F56308CDB* R5F56308CDL* R5F56308CDFB* R5F56308CDLA** R5F56308CDFP*	512K		32K (E2Data Flash)	RX CPU core	90	10	165MIPS	Yes	4	-	DTC			SRAM/ROM/Byte control SRAM/ Page access supported	Yes	Yes	Yes	Yes	Yes (LVD)			12bit x 21, 10bit x 8	10bit x 2	4	TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	4		148	148	17	Yes/Yes	-/Yes			100MHz/ 2.7 to 3.6V	-40 to 85	LGA-145(7x7) LQFP-144 LGA-100 LQFP-100	
			R5F56308CDB* R5F56308CDL* R5F56308CDFB* R5F56308CDLA** R5F56308CDFP*	64K																				12bit x 14, 10bit x 8	10bit x 1		TPU(6) MTU2(6) CMT(4)	8(SCI) 2(RSPI)	2		78	78		-/Yes							LGA-100 LQFP-100	
			R5F56307CDL* R5F56307CDFB* R5F56307CDLA* R5F56307CDFP*	384K																				12bit x 11, 10bit x 4	10bit x 2		TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	4		117	117		Yes/Yes								LGA-145(7x7) LQFP-144
			R5F56307CDL* R5F56307CDFB* R5F56307CDLA* R5F56307CDFP*																					12bit x 14, 10bit x 8	10bit x 1		TPU(6) MTU2(6) CMT(4)	8(SCI) 2(RSPI)	2		78	78		-/Yes								LGA-100 LQFP-100
			R5F56307DDL* R5F56307DDFB* R5F56307DDLA* R5F56307DDFP*																					12bit x 11, 10bit x 4	10bit x 2		TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	4		58	58		Yes/Yes								LGA-145(7x7) LQFP-144
			R5F56307DDL* R5F56307DDFB* R5F56307DDLA* R5F56307DDFP*																					12bit x 14, 10bit x 8	10bit x 2		TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	4		117	117		Yes/Yes								LGA-145(7x7) LQFP-144
			R5F56307DDL* R5F56307DDFB* R5F56307DDLA* R5F56307DDFP*																					12bit x 11, 10bit x 4	10bit x 1		TPU(6) MTU2(6) CMT(4)	8(SCI) 2(RSPI)	2		58	58		-/Yes								LQFP-80
			R5F56307DDL* R5F56307DDFB* R5F56307DDLA* R5F56307DDFP*																					12bit x 11, 10bit x 4	10bit x 2		TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	4		117	117		Yes/Yes								LGA-145(7x7) LQFP-144
			R5F56307DDL* R5F56307DDFB* R5F56307DDLA* R5F56307DDFP*																					12bit x 14, 10bit x 8	10bit x 1		TPU(6) MTU2(6) CMT(4)	8(SCI) 2(RSPI)	2		78	78		-/Yes								LGA-100 LQFP-100
			R5F56307DDL* R5F56307DDFB* R5F56307DDLA* R5F56307DDFP*																					12bit x 11, 10bit x 4	10bit x 2		TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	4		58	58		Yes/Yes								LGA-145(7x7) LQFP-144
			R5F56307DDL* R5F56307DDFB* R5F56307DDLA* R5F56307DDFP*																					12bit x 14, 10bit x 8	10bit x 1		TPU(6) MTU2(6) CMT(4)	8(SCI) 2(RSPI)	2		78	78		-/Yes								LGA-100 LQFP-100
			R5F56307DDL* R5F56307DDFB* R5F56307DDLA* R5F56307DDFP*																					12bit x 11, 10bit x 4	10bit x 2		TPU(12) MTU2(6) CMT(4)	13(SCI) 3(RSPI)	4		58	58		Yes/Yes								LGA-145(7x7) LQFP-144

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Note: 1. e²studio is available in Europe and America.

*A free evaluation version of the coding tool and flash programming software (Renesas Flash Programmer, Flash Development Toolkit) is provided.

■ RX Family Development Tool Lineup mainly for Asia

MCU	Real Time OS ¹	Software Tool ²	Emulator ⁴	Programming Tool
			On-Chip Debugging Emulator	Programmer ⁶
RX600 Series	RI600PX RI600V4	CubeSuite+ for RX (An integrated development environment ³ , compiler, simulator and emulator-debugger are included.)	E20, E1	PG-FP5 ⁷ E1 ⁸ E20 ⁸
RX200 Series			E1 ⁵	

Notes:

1. In the High-performance Embedded Workshop environment, use RI600/PX or RI600/4 as a real-time OS.

2. In the High-performance Embedded Workshop environment, use the C/C++ Compiler Package for RX Family (including an integrated development environment, compiler and simulator).

3. The CubeSuite+ is provided as an integrated development environment.

4. Only with RX610 can the full-spec emulator E100 be used in the High-performance Embedded Workshop environment.

5. The E20 emulator may be used as well, but the supported debugging functions are equivalent to those of the E1.

6. A programmer for flash microcontrollers from Renesas. For compatible microcomputers and detailed specifications, access the following website: <http://www.renesas.com/programmer>

7. Used in conjunction with a programming GUI (included free of charge).

8. Use in combination with the writing software Renesas Flash Programmer (free evaluation version available). The conventional writing software Flash Development Toolkit [R0C00000FDW04R] (free evaluation version available) can also be used.

*CubeSuite+ is not generally promoted to U.S. and European customers. Customers in the U.S. and Europe who are interested in CubeSuite+ are requested to contact our regional marketing departments for details.

*For information about microcontrollers compatible with the emulator or emulator specifications, access the website: http://www.renesas.com/emulation_debugging

Compatible emulators may vary according to the microcontroller part number.

RX Tool

Middleware

The RX Tool features a rich lineup of tools for RX applications such as display systems, file systems, networks, voice and security. This tool works flexibly in RX Family product development with a shared interface design. Sample programs are included. These Middleware can help save on the time required to market products with highly efficient designs.

RX Family Middleware Lineup

■ Image Processing

- Graphics Library
- GUI Builder (run time)
- JPEG Encoder ¹
- JPEG Decoder
- PNG Decoder ¹
- GIF Decoder ¹

■ Audio

- MP3 Decoder ¹

■ Voice

- ADPCM Encoder/Decoder

■ Security

- DES Library
- SHA Hash Function Library
- RSA Library ¹
- AES Library
- Key Exchange Library ¹

■ Communication

- TCP/IP protocol stack (T4)
- DTMF Encoder/Decoder

■ Signal Processing/Numerical Libraries

- DSP Library
- Fixed-point Library

■ File Systems

- Original File System (TFS)
- Open Source FAT File System (TFAT)
- FAT File System

■ Memory Drivers

- SPI mode MultiMediaCard Driver
- SPI Serial Flash memory Driver
- SPI Single Master Driver
- Renesas SPI Serial EEPROM Driver
- Renesas I²C Serial EEPROM Driver ¹
- I²C Single Master Driver ¹

Note:

1. Under development or planning

*Library can be used with both CubeSuite+ and High-performance Embedded Workshop, but the library's attached sample can only be used with High-performance Embedded Workshop.

Application Notes/Sample Code

Renesas provides sample programs with documentation describing how to use microcontroller peripheral functions as well as system examples.

- Lineup of numerous RX sample codes is available and currently provided online.
- Most sample programs include source code and register definition files are also available in the source program.
- This code can contribute to significantly shortening time to market for product development.

The sample code has been written to make development quick and easy and can be downloaded for use from the Web page on the right.



<http://www.renesas.com/software>

RX Tool

Get up and running quickly: Starter kit

Want to start evaluating the RX right away? The Renesas Starter Kit is just what you need. It brings together in a single package all the development tools needed for microcontroller evaluation and initial implementation. The control signals from the microcontroller are output to the expansion board interface of the CPU board, allowing connection to the target system under development for easy debugging.

Including:

- RX On-board CPU Board
- On-Chip Debugging Emulator E1
- Free evaluation version of the C/C++ Compiler Package (with simulator)
- Free evaluation version of the Flash Development Toolkit
- The High-performance Embedded Workshop is provided as an integrated development environment.

*Starter Kits for RX62N and RX63N include multi region power supply.



Renesas Starter Kit for RX Family

Target Device		Product Name	Part Number
Series	Group		
RX600	RX610	Renesas Starter Kit for RX610	R0K556100S000BE
	RX621, 62N	Renesas Starter Kit+ for RX62N	R0K5562N0S000BE
	RX62G	Renesas Starter Kit for RX62G	R0K50562GS000BE
	RX62T	Renesas Starter Kit for RX62T	R0K5562T0S000BE
	RX630	Renesas Starter Kit for RX630	R0K505630S000BE
	RX631, 63N	Renesas Starter Kit+ for RX63N	R0K50563NS000BE
	RX63T	Renesas Starter Kit for RX63T (64-pin)	R0K50563TS000BE
RX200	RX210	Renesas Starter Kit for RX210	R0K505210S000BE
	RX220	Renesas Starter Kit for RX220	R0K505220S000BE**

★★ : Under development

Extensive Renesas Development Ecosystem

A wide variety of products for the RX family, such as compilers and programmers, are available from partner tool vendors. These products enable the RX family to be used in an even broader range of applications.

IDE/Compiler

- GNU C Compiler www.kpitgnutools.com
- IAR Embedded Workbench (EWRX) www.iar.com/ewrx

RTOS

- CMX Systems CMX-RTX www.cmx.com
- Express Logic ThreadX www.freertos.org
- FreeRTOS www.freertos.org
- Micrium μ C/OS-II and μ C/OS-III www.micrium.com
- MiSPO NORTi Professional www.segger.com
- SEGGER Microcontroller embOS www.segger.com

Emulators/Debuggers

- Segger J-Link www.segger.com
- Sophia Systems EjSCATT www.sophia-systems.com

Programmers²

- Data I/O Corporation
- Falcon Denshi K.K.¹
- Flash Support Group, Inc.
- MINATO ELECTRONICS INC.
- SMH Technologies S.r.l.¹
- SUISEI ELECTRONICS SYSTEM CO., LTD.
- Sunny Giken Inc.
- Wave Technology Co., Ltd.
- Yokogawa Digital Computer Corporation

Notes:

1. Under development or to be developed
2. Contact the manufacturer to determine if use on a mass production line is supported.

Get the latest information here. http://www.renesas.com/rx_partners



The Alliance Partner Program provides online tools to increase the synergy between our Customers, 3rd Party Partners, and Renesas.

<http://www.renesas.com/partners>

Renesas Microcomputer RX Family Selection Guide

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Renesas Electronics Corporation

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