

RX261,260 handbook for engineers

The information/materials required at the time of product development summarized and listed for each development phase.

Please use it as a handbook when developing.

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Step1: MCU selection

	Item	Content	Link
1	Hardware information	Datasheet	Doc
2	Products & Solutions	Video	261: Web site 260: Web site
3		Blog	261: Web site 260: Web site
4		Reference Designs (Winning combination)	261: Web site 260: Web site
5		Product longevity program	Overview of Product Longevity Program (PLP)
6	(PLP)	Product selection (product selector) Note: Refer to PLP column in the chart.	261: Web site 260: Web site
7	Replacement information	Differences of specification among RX products	Doc
8		[SH/H8/H8S/H8SX/M16C/V850] → RX microcontroller migration guide	Web site
9		Design guide for migration between RX family differences in package external form	Doc

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Step2: Designing and evaluating

Item		Content	Link
Common			
1	Hardware information	User's manual: Hardware	Doc
2		RX family hardware manual guidance (how to read user's manual: hardware)	Doc
3		Part number guide for RX family product (the meaning of character in part number)	261: Doc 260: Doc
4		Semiconductor reliability handbook	Doc
5		RELIABILITY REPORT	261: Doc 260: Doc
6		RoHS Product Options → Part Number → Package information → RoHS Info	261: Web site 260: Web site
7	Software information	Instruction set for RXv3 core architecture (user's manual)	Doc
8	Evaluation board (for general purpose)	EK-RX261 (Evaluation Kit for RX261 MCU Group)	Web site
9		Fast Prototyping Board for RX261 (low-cost model)	Web site
10	Solution board	Capacitive touch evaluation system for RX261	Web site
11	Partner information	Partner products (system solutions provider)	Web site
12		Partner products (trusted technology partners that deliver commercial-grade building blocks)	Web site
Hardware design			
1	Design information	Hardware design guide	Web site
2		Design guide for main clock circuit and Sub- Clock circuit	Doc
3		Notes regarding high-temperature operation	Doc
4		Guidelines for full-speed USB2.0 board design	Doc
5	Board simulates	ECAD, board simulation model (IBIS) Note: ECAD can be found by clicking on the respective part number of the product options. 	261: Web site 260: Web site

Item		Content	Link
Hardware design			
6	Other	Resonator and matching circuit information	261: Web site 260: Web site
7		Package information (package outline information, mount manual, etc.)	Web site
8	Development environment	Supplemental user's manual for E1/E20/E2 Lite/E2 emulator	Doc
Software design			
1	Software information	Getting started with the RX family development environment	Web site
2		Development tools for RX family	Web site
3		Software environment (OS, middleware, drivers)	Web site
4		RX smart configurator user's guide (tools for code generation)	Doc
5	Training information	Smart configurator tutorial - create a LED blinking program using RX family MCU	Web site
6		How to use tools and solutions (video clips)	Web site
7	System design	Examples of snooze mode usage	Doc Sample
8		Examples of transitioning to low power consumption modes	Doc Sample
Solution			
1	GUI	Portal page	Graphical user interface (GUI) solutions Web site
2		Support information	RX family LCD-related FAQ list Web site
3			QE for display GUI display application development guide using serial connection LCD Doc
4			GUI sample program using serial LCD and emWin library Doc Sample
5			Module for image rendering (emWin) Doc Sample
6	Security	Support tools for secure functions	Security Key Management Tool Web site
7		Hardware security IP driver	RSPI (RSIP-E11A) driver Doc Sample
8		Other information	Video Web site
9	Capacitive touch	Portal page	Capacitive touch sensor solution Web site
10		Design guide	First step guide (CTSU Capacitive touch introduction guide) Doc
11			The electrode design guide for capacitive touch (CSTU) Doc

	Item		Content	Link	
Solution					
12	Capacitive touch	Design guide	Capacitive touch noise immunity guide	Doc	
13			The development guide for capacitive touch applications using QE and FIT	Doc	
14		Application notes		The development guide for 3D gesture recognition application using QE for capacitive touch	Doc
15				How to use QE for capacitive touch for renesas RX family with IAR EWRX	Doc
16				3D Gesture demo set (hardware)	Doc Sample
17				3D Gesture demo set sample software	Doc Sample
18	Functional safety	Portal page	IEC61508 functional safety solutions for industry	Web site	
19		Other information	Functional safety solution for Industrial automation	Doc	
20			Introduction to Renesas functional safety (Video)	Web site	
Support					
1	Support information		FAQ (frequently asked inquiries)	Web site	
2			RX forum (community)	Web site	
3			Ask to technical support Note: Please click login in the upper right corner	Web site	

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Step3: Mass production

	Item		Content	Link	
1	Writing a program	Programmer	PG-FP6	Web site	
2		Writing tool	Renesas flash programmer (GUI tool for PC)	Web site	
3	Firmware update	Application notes	Renesas MCU firmware update design policy	Doc	
4				Firmware update module using firmware integration technology	Doc Sample
5				How to manage the access control for flash memory	Doc
6	Inspection	Design information	Boundary Scan Description Language (BSDL) file	Not available	

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