Smart Configurator for RX V1.3.0

Release Note

R20UT4220EJ0100
Rev.1.00
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Thank you for using the Smart Configurator for RX.
This document describes the restrictions and points for caution. Read this document before using the product.

Contents

Chapter 1. Introduction

The Smart Configurator for RX is a software tool to generate control programs (device driver programs) for peripheral modules (timers, UART, A/D, etc.). It generates device driver codes using user settings through GUI. Initialize code and API (Application Programming Interface) functions are provided.

Chapter 2. Target Devices

Below is a list of devices supported by the Smart Configurator for RX V1.3.0.

RX130 Group	
PIN	Device name
48pin	R5F51303AxFL, R5F51305AxFL, R5F51303AxNE, R5F51305AxNE R5F51306AxNE, R5F51306AxFL, R5F51307AxNE, R5F51307AxFL R5F51308AxNE, R5F51308AxFL
64pin	R5F51303AxFM, R5F51305AxFM, R5F51303AxFK, R5F51305AxFK R5F51306AxFK, R5F51306AxFM, R5F51307AxFK, R5F51307AxFM R5F51308AxFK, R5F51308AxFM
80pin	R5F51303AxFN, R5F51305AxFN, R5F51306AxFN, R5F51307AxFK R5F51308AxFM
100pin	R5F51305AxFP, R5F51306AxFP, R5F51307AxFP, R5F51308AxFP,
Following documents.	

Manual Name	Document Number
RX130 Group User's Manual: Hardware	R01UH0560EJ0100

RX230 Group	
PIN	Device name
48pin	R5F52305AxNE, R5F52306AxNE, R5F52305AxFL, R5F52306AxFL
64pin	R5F52305AxND, R5F52306AxND, R5F52305AxFM, R5F52306AxFM R5F52305AxLF , R5F52306AxLF
100pin	R5F52305AxLA, R5F52306AxLA, R5F52305AxFP, R5F52306AxFP
RX231 Group	
PIN	Device name
48pin	R5F52315AxNE, R5F52316AxNE, R5F52317AxNE, R5F52318AxNE R5F52315CxNE, R5F52316CxNE, R5F52317BxNE, R5F52318BxNE R5F52315AxFL, R5F52316AxFL, R5F52317AxFL, R5F52318AxFL R5F52315CxFL, R5F52316CxFL, R5F52317BxFL, R5F52318BxFL
64pin	R5F52315AxND, R5F52316AxND, R5F52317AxND, R5F52318AxND R5F52315CxND, R5F52316CxND, R5F52317BxND, R5F52318BxND R5F52315AxFM, R5F52316AxFM, R5F52317AxFM, R5F52318AxFM R5F52315CxFM, R5F52316CxFM, R5F52317BxFM, R5F52318BxFM R5F52315CxLF, R5F52316CxLF
100pin	R5F52315AxLA, R5F52316AxLA, R5F52317AxLA, R5F52318AxLA R5F52315CxLA, R5F52316CxLA, R5F52317BxLA, R5F52318BxLA R5F52315AxFP, R5F52316AxFP, R5F52317AxFP, R5F52318AxFP R5F52315CxFP, R5F52316CxFP, R5F52317BxFP, R5F52318BxFP
Following documents.	

Manual Name	Document Number
RX230 Group, RX231 Group User's Manual: Hardware	R01UH0496EJ0110

RX64M Group	
PIN	Device name
100pin	R5F56MFCxFP, R5F56MFCxLJ, R5F56MFDxFP, R5F56MFDxLJ R5F56MGCxFP, R5F56MGCxLJ, R5F56MGDxFP, R5F56MGDxLJ R5F56MJCxFP, R5F56MJCxLJ, R5F56MJDxFP, R5F56MJDxLJ R5F56MLCxFP, R5F56MLCxLJ, R5F56MLDxFP, R5F56MLDxLJ
144/145pin	R5F56MFCxFB, R5F56MFCxLK, R5F56MFDxFB, R5F56MFDxLK R5F56MGCxFB, R5F56MGCxLK, R5F56MGDxFB, R5F56MGDxLK R5F56MJCxFB, R5F56MJCxLK, R5F56MJDxFB, R5F56MJDxLK R5F56MLCxFB, R5F56MLCxLK, R5F56MLDxFB, R5F56MLDxLK
176/177pin	R5F56MFDxFC, R5F56MFDxBG, R5F56MFDxLC, R5F56MFCxFC R5F56MFCxBG, R5F56MFCxLC, R5F56MGDxFC, R5F56MGDxBG R5F56MGDxLC, R5F56MGCxFC, R5F56MGCxBG, R5F56MGCxLC R5F56MJDxFC, R5F56MJDxBG, R5F56MJDxLC, R5F56MJCxFC R5F56MJCxBG, R5F56MJCxLC, R5F56MLDxFC, R5F56MLDxBG R5F56MLDxLC, R5F56MLCxFC, R5F56MLCxBG, R5F56MLCxLC
Following documents.	
Manual Name	Document Number
RX64M Group User's Manual: Hardware	R01UH0377EJ0100

RX65N Group	
PIN	Device name
100pin	R5F565N9AxLJ, R5F565N9BxLJ, R5F565N9ExLJ, R5F565N9FxLJ R5F565N7AxLJ, R5F565N7BxLJ, R5F565N7ExLJ, R5F565N7FxLJ R5F565N4AxLJ, R5F565N4BxLJ, R5F565N4ExLJ, R5F565N4FxLJ R5F565N9AxFP, R5F565N9BxFP, R5F565N9ExFP, R5F565N9FxFP R5F565N7AxFP, R5F565N7BxFP, R5F565N7ExFP, R5F565N7FxFP R5F565N4AxFP, R5F565N4BxFP, R5F565N4ExFP, R5F565N4FxFP R5F565NCHxLJ, R5F565NCDxLJ, R5F565NEHxLJ, R5F565NEDxLJ R5F565NCHxFP, R5F565NCDxFP, R5F565NEHxFP, R5F565NEDxFP
144pin	R5F565N9AxFB, R5F565N9BxFB, R5F565N9ExFB, R5F565N9FxFB R5F565N7AxFB, R5F565N7BxFB, R5F565N7ExFB, R5F565N7FxFB R5F565N4AxFB, R5F565N4BxFB, R5F565N4ExFB, R5F565N4FxFB R5F565NCHxFB, R5F565NCDxFB, R5F565NEHxFB, R5F565NEDxFB
145pin	R5F565N9AxLK, R5F565N9BxLK, R5F565N9ExLK, R5F565N9FxLK R5F565N7AxLK, R5F565N7BxLK, R5F565N7ExLK, R5F565N7FxLK R5F565N4AxLK, R5F565N4BxLK, R5F565N4ExLK, R5F565N4FxLK R5F565NCHxLK, R5F565NCDxLK, R5F565NEHxLK, R5F565NEDxLK
176pin	R5F565NCHxBG, R5F565NCDxBG, R5F565NEHxBG, R5F565NEDxBG R5F565NCHxFC, R5F565NCDxFC, R5F565NEHxFC, R5F565NEDxFC
177pin	R5F565NCHxLC, R5F565NCDxLC, R5F565NEHxLC, R5F565NEDxLC
RX651 Group	
PIN	Device name

100pin	R5F56519AxLJ, R5F56519BxLJ, R5F56519ExLJ, R5F56519FxLJ R5F56517AxLJ, R5F56517BxLJ, R5F56517ExLJ, R5F56517FxLJ R5F56514AxLJ, R5F56514BxLJ, R5F56514ExLJ, R5F56514FxLJ R5F56519AxFP, R5F56519BxFP, R5F56519ExFP, R5F56519FxFP R5F56517AxFP, R5F56517BxFP, R5F56517ExFP, R5F56517FxFP R5F56514AxFP, R5F56514BxFP, R5F56514ExFP, R5F56514FxFP
144pin	R5F56519AxFB, R5F56519BxFB, R5F56519ExFB, R5F56519FxFB R5F56517AxFB, R5F56517BxFB, R5F56517ExFB, R5F56517FxFB R5F56514AxFB, R5F56514BxFB, R5F56514ExFB, R5F56514FxFB R5F5651CDxFB, R5F5651CHxFB, R5F5651EDxFB, R5F5651EHxFB
145pin	R5F56519AxLK, R5F56519BxLK, R5F56519ExLK, R5F56519FxLK R5F56517AxLK, R5F56517BxLK, R5F56517ExLK, R5F56517FxLK R5F56514AxLK, R5F56514BxLK, R5F56514ExLK, R5F56514FxLK R5F5651CDxLK, R5F5651CHxLK, R5F5651EDxLK, R5F5651EHxLK
176pin	R5F5651CDxBG, R5F5651CDxFC, R5F5651CHxBG, R5F5651CHxFC R5F5651EDxBG, R5F5651EDxFC, R5F5651EHxBG, R5F5651EHxFC
177pin	R5F5651CDxLC, R5F5651CHxLC, R5F5651EDxLC, R5F5651EHxLC

Following documents.

Manual Name	Document Number
RX65N Group, RX651 Group User's Manual: Hardware	R01UH0590EJ0100

RX71M Group

PIN	Device name
100pin	R5F571MFCxFP, R5F571MFCxLJ, R5F571MFDxFP, R5F571MFDxLJ R5F571MGDxFP, R5F571MGDxLJ, R5F571MGCxFP, R5F571MGCxLJ R5F571MJDxFP, R5F571MJDxLJ, R5F571MJCxFP, R5F571MJCxLJ R5F571MLDxFP, R5F571MLDxLJ, R5F571MLCxFP, R5F571MLCxLJ
144/145pin	R5F571MFCxFB, R5F571MFCxLK, R5F571MFDxFB, R5F571MFDxLK R5F571MGCxFB, R5F571MGCxLK, R5F571MGDxFB, R5F571MGDxLK R5F571MJCxFB, R5F571MJCxLK, R5F571MJDxFB, R5F571MJDxLK R5F571MLCxFB, R5F571MLCxLK, R5F571MLDxFB, R5F571MLDxLK
176/177/178pin	R5F571MFDxFC, R5F571MFDxBG, R5F571MFDxLC, R5F571MFCxFC, R5F571MFCxBG, R5F571MFCxLC, R5F571MGDxFC, R5F571MGDxBG, R5F571MGDxLC, R5F571MGCxFC, R5F571MGCxBG, R5F571MGCxLC, R5F571MJDxFC, R5F571MJDxBG, R5F571MJDxLC, R5F571MJCxFC, R5F571MJCxBG, R5F571MJCxLC, R5F571MLDxFC, R5F571MLDxBG, R5F571MLDxLC, R5F571MLCxFC, R5F571MLCxBG, R5F571MLCxLC

Following documents.

Manual Name	Document Number
RX71M Group User's Manual: Hardware	R01UH0493EJ0100

Chapter 3. Operating Environment

- Host machine
  - IBM PC/AT compatibles (Windows® 10, Windows® 8.1, Windows® 7)
  - Processor: 1 GHz or higher (must support hyper-threading, multi-core CPUs)
  - Memory capacity: 2 GB or more recommended. Minimum requirement is 1 GB or more (64-bit Windows requires 2 GB or more)
  - Hard disk capacity: 200 MB or more spare capacity
  - Display: 1024 x 768 or higher resolution, 65,536 or more colors
  - All other necessary software environments in addition to Windows OS
    - .NET Framework version4.5

- Development Environments

Product Name	Version
Renesas electronics Compiler for RX [CC-RX]	V2.07.00 or later
GNURX	4.8.4.201703 or later

Chapter 4. Changes

This chapter describes changes to the Smart Configurator for RX V1.3.0.

4.1 List of Changes

No	Description	Device				
		RX130	RX230, RX231	RX64M	RX65N, RX651	RX71M
1	Supported RX231/RX230 group	/	○	/	/	/
2	Supported RX71M group	/	/	/	/	○
3	Supported general configuration window for FIT modules *1	○	○	○	○	○

○: Applicable, /: Not Applicable

Note 1: Availability of this function depends on whether the FIT module supports configuration function

4.2 Details of Changes

4.2.1 Supported RX231/RX230

RX231.RX230 group devices listed in the Chapter 2. Target Devices has been supported.

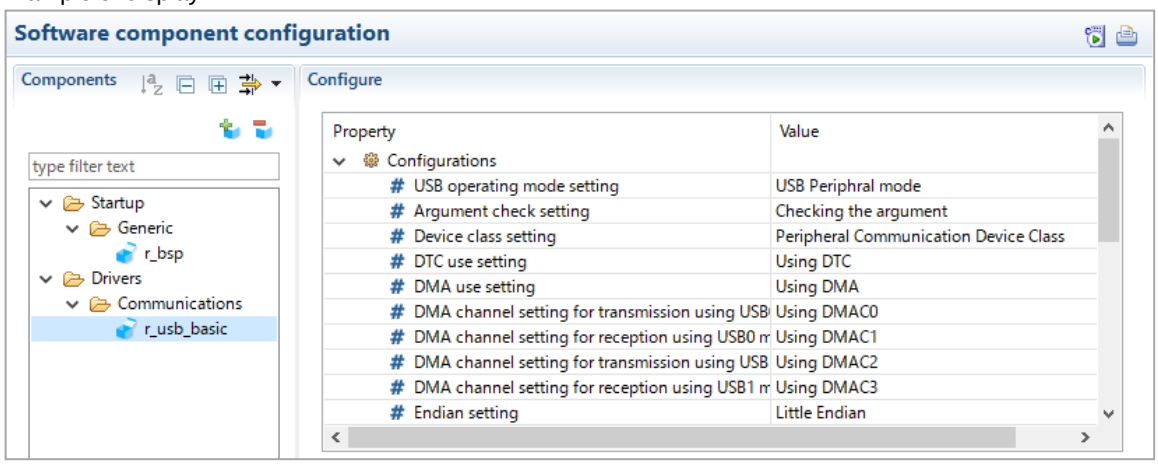
4.2.2 Supported RX71M

RX71M group devices listed in the Chapter 2. Target Devices has been supported.

4.2.3 Supported general configuration window for FIT modules

The general configuration window for FIT module has been supported. The configurations for FIT modules was previously changed by editing config file manually. By using configuration window, general configuration for FIT modules can be made on GUI. Availability of this function depends on whether the FIT module has supported this function. When importing FIT module that has supported this configuration function, the configuration window will be displayed. By generating the code, configurations made on this window will be output to the config file.

Example of display



Chapter 5. Points for Caution

This section describes points for caution regarding the Smart Configurator for RX V1.3.0. Please refer to a document of each module about a caution of a FIT module.

5.1 List of Caution

No	Description	Device				
		RX130	RX230, RX231	RX64M	RX65N, RX651	RX71M
1	Note on configuring GPT interrupts	/	○	/	/	/
2	Notes on configuring sub-clock and IWDT-dedicated clock in RX231/RX230	/	○	/	/	/

○: Applicable, /: Not Applicable

5.2 Details of Caution

5.2.1 Note on configuring GPT interrupts

The GPT interrupts are not specified as the Software Configurable Interrupt in the initial state even after the GPT interrupts are configured by GPT component. To specify GPT interrupts as Software Configurable Interrupt source, release unused Software Configurable interrupt source on the Interrupt sheet and allocate GPT interrupts instead.

5.2.2 Notes on configuring sub-clock and IWDT-dedicated clock in RX231/RX230

Even if both sub-clock and IWDT-dedicated clock are not enabled on the clock configuration view, either one specified by the definition BSP_CFG_LPT_CLOCK_SOURCE in r_bsp_config_reference.h will be activated. To stop both clocks, stop oscillating clock by user program.

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