

# Smart Configurator for RZ V1.9.0

### **Release Note**

#### Introduction

Thank you for using the Smart Configurator for RZ.

This document describes the restrictions and points for caution. Read this document before using the product.

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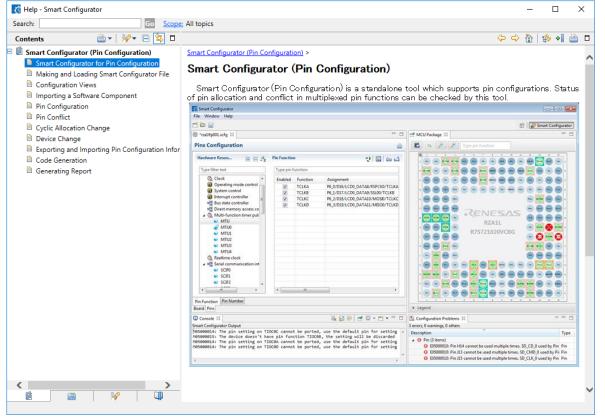
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#### 1. Introduction

The Smart Configurator for RZ is a standalone GUI-based tool for setting the assignments of pin functions to pins in the design of hardware specifications. The assignments of pins can be set up from a GUI, which also checks and offers solutions for cases of contention for the same pins by multiplexed functions.

#### Please refer to "Help Contents" about how to use.



#### 1.1 System Requirements

The operating environment is as follows:

#### 1.1.1 PC

- IBM PC/AT compatibles (Windows® 10, Windows® 8,1)
- 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: 300 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
  - Java Runtime Environment



#### 2. Support List

#### 2.1 Supported Devices List

Below is a list of devices supported by the Smart Configurator for RZ V1.9.0.

#### Table 1. Supported Devices

RZ/A1L group		
PIN		Device name
176pin	R7S721020VCBG, R7S72	1020VCFP, R7S721020VLFP
208pin	R7S721021VCFP, R7S721	021VLFP
RZ/A1LU group		
PIN		Device name
176pin	R7S721030VCBG, R7S72	1030VCFP, R7S721030VLFP
208pin	R7S721031VCFP, R7S721031VLFP	
233pin	R7S721031VCBG, R7S722031VLBG	
RZ/A1LC group		
PIN	Device name	
176pin	R7S721034VCBG	
Following documents.		
Manual Name		Document Number
RZ/A1L, RZ/A1LU, RZ/A1LC Group User's Manual: Hardware		R01UH0437EJ0300

RZ/A1H group		
PIN		Device name
256pin	R7S721000VCBG, R7S721	1000VCFP, R7S721000VLFP
324pin	R7S721001VCBG, R7S721	1001VLBG
RZ/A1M group		
PIN	Device name	
256pin	R7S721010VCBG, R7S721010VCFP, R7S721010VLFP	
324pin	R7S721011VCBG, R7S721011VLBG	
Following documents.		
Manual Name Document Number		Document Number
RZ/A1H, RZ/A1M Group User's Manual: Hardware		R01UH0403EJ0200



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RZ/G1M group		
PIN		Device name
831pin	R8A77430	
Following documents		
Manual name		Document Number
RZ/G1M User's Manual: Hardware		R01UH0626EJ0100

RZ/G1C group		
PIN		Device name
501pin	R8A77470	
Following documents		
Manual name		Document Number
RZ/G1C User's Manual: Hardware		R01UH0695EJ0100

RZ/G1E group		
PIN		Device name
501pin	R8A77450	
Following documents		
Manual name		Document Number
RZ/G1E User's Manual: Hardware		R01UH0544EJ0100

RZ/G1H group		
PIN		Device name
831pin	R8A77420	
Following documents		
Manual name Document Number		
RZ/G1H User's Manual: Hardware		R01UH0627EJ0100



RZ/G1N group		
PIN		Device name
831pin	R8A77440	
Following documents		
Manual name Document Number		
RZ/G1N User's Manual: Hardware		R01UH0628EJ0100

RZ/G2E group		
PIN		Device name
552pin	R8A774C0	
Following documents		
Manual name Document Number		
RZ/G2E User's Manual: Hardware		R01UH0848EJ0080

RZ/G2M group		
PIN		Device name
1022pin	R8A774A0	
Following documents		
Manual name Document Number		Document Number
RZ/G2M User's Manual: Hardware		R01UH0846EJ0080

RZ/G2N group		
PIN		Device name
1022pin	R8A774B0	
Following documents		
Manual name		Document Number
RZ/G2N User's Manual: Hardware		R01UH0847EJ0080



RZ/G2H group		
PIN		Device name
1022pin	R8A774E0	
Following documents		
Manual name Document Number		
RZ/G2 Series, 2nd Generation User's Manual: Hardware		R01UH0808EJ0100

RZ/G2L, G2LC group			
PIN	Device name		
456pin 551pin 361pin Following docume	R9A07G044L (15mm) R9A07G044L (21mm) R9A07G044LC		
Manual name		Document Number	
RZ/G2 Series, 2nd Generation User's Manual: Hardware		R01UH0914EJ0041	



#### 3. Changes

This chapter describes the changes for Smart Configurator for RZ V1.9.0.

#### 3.1 New Support

#### 3.1.1 Added support for new device package RZ/G2L, RZ/G2LC

Smart Configurator for RZ now supports new device package R9A07G044L (15mm) R9A07G044L (21mm) from the RZ/G2L device group, and R9A07G044LC from the RZ/G2LC device group.

[Target] RZ/G2L, RZ/G2LC

#### 3.1.2 Opening generated source folder directly from console window link

A link will be displayed in the console window to allow the generated source folder to be opened in the System Explorer directly.

C Smart Configurator				- 🗆 X		
File Window Help						
				er   🔊		
@ 15mm.scfg 😫			o 8			
Pin configuration			Generate Code Generate Report	💼 🤹 🔎 🖻 🕒 Type pin function >>		
Hardware Resource 🛛 🕀 🖽 🖓	Pin Function		() 🖩 🖬 🖬 🗠 🖄			
Type filter text	type filter text (* = any string, ? = any character)		All ~			
	Enabl Group	Function         Assignment           ADC_CH0         Not assigned           ADC_CH1         Not assigned           ADC_CH2         Not assigned           ADC_CH3         Not assigned           ADC_CH4         Not assigned           ADC_CH5         Not assigned           ADC_CH6         Not assigned	Pin Number       Direct         Not assigned       None         Not assigned       None			
Board Pins				► Legend		
Console © Smart Configurator Output M00000001: Code generation is sta M05000012: File generated;src\smc	gen\dts\r9a07g0 pi		0 items Description	n *		
¢			> <	>		

[Target]

All devices



#### 3.2 Correction of issues/limitations

There are no correction of issues and limitations for Smart Configurator for RZ V1.9.0.

#### 4. List of RENESAS TOOL NEWS

Below is a list of notifications delivered by RENESAS TOOL NEWS.

Issue date	Document No.	Description	Applicable MCUs	Fixed version
2019/12/16	<u>R20TS0520</u>	Incorrect display of peripheral function names "Camera Serial Interface" and "SPI Multi I/O Bus Controller" on pin function tab	RZ/G2E	V1.8.0

#### 5. Points for Limitation

There are no limitations for Smart Configurator for RZ V1.9.0.



#### 6. Point for Caution

This chapter describes the cautions for Smart Configurator for RZ V1.9.0.

#### 6.1 List of Caution

No.	Descriptions	RZ/A1	RZ/G1	RZ/G2
1	Functions not supported by RZ/A1 package	1	-	-
2	Projects created using Smart Configurator for RZ V1.3.0 and before		1	-

✓:Applicable, -:Not Applicable

#### 6.2 Details of Caution

#### 6.2.1 Functions not supported by RZ/A1 package

RZ/A1 package does not support code generation and board configuration.

[Target] RZ/A1H, A1L, A1LC, A1LU, A1M

#### 6.2.2 Projects created using Smart Configurator for RZ V1.3.0 and before

Projects created using Smart Configurator for RZ V1.3.0 and before do not have [Group] information. Please confirm [Group] after opening those projects.

[Workaround]

None.

[Target] RZ/G1C, G1E, G1H, G1M, G1N



## **Revision History**

		Description		
Rev.	Date	Page	Summary	
1.6.0	July.22.19	-	First edition issued	
1.7.0	October.21.19	4	Updated information for Smart Configurator for RZ V1.7.0	
			<ul> <li>Added new device support for RZ/G2N</li> </ul>	
1.7.1	December.20.19	8, 9	, 9 Added new limitation of 5.2.1	
1.8.0	August.05.20	Updated information for Smart Configurator for RZ V1.8.0		
		7	<ul> <li>Added new device support for RZ/G2H</li> </ul>	
		8	- Added correction of issues/limitations 3.2.1 and 3.2.2	
		11	- Removed limitation of 5.2.1	
1.9.0	April.20.21	6,7	Updated information for Smart Configurator for RZ V1.9.0	
			- Added new device support for RZ/G2L, G2LC	



# General Precautions in the Handling of Microprocessing Unit and Microcontroller Unit Products

The following usage notes are applicable to all Microprocessing unit and Microcontroller unit products from Renesas. For detailed usage notes on the products covered by this document, refer to the relevant sections of the document as well as any technical updates that have been issued for the products.

#### 1. Precaution against Electrostatic Discharge (ESD)

A strong electrical field, when exposed to a CMOS device, can cause destruction of the gate oxide and ultimately degrade the device operation. Steps must be taken to stop the generation of static electricity as much as possible, and quickly dissipate it when it occurs. Environmental control must be adequate. When it is dry, a humidifier should be used. This is recommended to avoid using insulators that can easily build up static electricity. Semiconductor devices must be stored and transported in an anti-static container, static shielding bag or conductive material. All test and measurement tools including work benches and floors must be grounded. The operator must also be grounded using a wrist strap. Semiconductor devices must not be touched with bare hands. Similar precautions must be taken for printed circuit boards with mounted semiconductor devices.

2. Processing at power-on

The state of the product is undefined at the time when power is supplied. The states of internal circuits in the LSI are indeterminate and the states of register settings and pins are undefined at the time when power is supplied. In a finished product where the reset signal is applied to the external reset pin, the states of pins are not guaranteed from the time when power is supplied until the reset process is completed. In a similar way, the states of pins in a product that is reset by an on-chip power-on reset function are not guaranteed from the time when power is supplied until the power is supplied until the power is supplied until the power reaches the level at which resetting is specified.

3. Input of signal during power-off state

Do not input signals or an I/O pull-up power supply while the device is powered off. The current injection that results from input of such a signal or I/O pull-up power supply may cause malfunction and the abnormal current that passes in the device at this time may cause degradation of internal elements. Follow the guideline for input signal during power-off state as described in your product documentation.

4. Handling of unused pins

Handle unused pins in accordance with the directions given under handling of unused pins in the manual. The input pins of CMOS products are generally in the high-impedance state. In operation with an unused pin in the open-circuit state, extra electromagnetic noise is induced in the vicinity of the LSI, an associated shoot-through current flows internally, and malfunctions occur due to the false recognition of the pin state as an input signal become possible.

5. Clock signals

After applying a reset, only release the reset line after the operating clock signal becomes stable. When switching the clock signal during program execution, wait until the target clock signal is stabilized. When the clock signal is generated with an external resonator or from an external oscillator during a reset, ensure that the reset line is only released after full stabilization of the clock signal. Additionally, when switching to a clock signal produced with an external resonator or by an external oscillator while program execution is in progress, wait until the target clock signal is stable.

#### 6. Voltage application waveform at input pin

Waveform distortion due to input noise or a reflected wave may cause malfunction. If the input of the CMOS device stays in the area between  $V_{IL}$  (Max.) and  $V_{IH}$  (Min.) due to noise, for example, the device may malfunction. Take care to prevent chattering noise from entering the device when the input level is fixed, and also in the transition period when the input level passes through the area between  $V_{IL}$  (Max.) and  $V_{IH}$  (Min.) due to noise, for example, the device may malfunction. Take care to prevent chattering noise from entering the device when the input level is fixed, and also in the transition period when the input level passes through the area between  $V_{IL}$  (Max.) and  $V_{IH}$  (Min.).

7. Prohibition of access to reserved addresses

Access to reserved addresses is prohibited. The reserved addresses are provided for possible future expansion of functions. Do not access these addresses as the correct operation of the LSI is not guaranteed.

8. Differences between products

Before changing from one product to another, for example to a product with a different part number, confirm that the change will not lead to problems. The characteristics of a microprocessing unit or microcontroller unit products in the same group but having a different part number might differ in terms of internal memory capacity, layout pattern, and other factors, which can affect the ranges of electrical characteristics, such as characteristic values, operating margins, immunity to noise, and amount of radiated noise. When changing to a product with a different part number, implement a systemevaluation test for the given product.

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(Rev.5.0-1 October 2020)

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