## R0E521300MCU00 Release Notes - Read this before using this product -

Renesas Solutions Corp.

This document contains the information necessary for using this product. Be sure to read this before using the product.

#### Introduction

The R0E521300MCU00 is an MCU unit for the R8C Family R8C/3x Series of Renesas 16-bit MCUs.

## **Product Outline**

This product consists of the following two products.

(1) MCU unit: R0E521300MCU00 This is an MCU unit (board) for the R8C Family R8C/3x Series.

(2) M16C R8C E100 Emulator Software

The included software is stored in the CD-ROM.

- M16C R8C E100 Emulator Debugger

This is a control software for the R8C E100 Emulator to control the R0E521300MCU00 emulator.

#### For the Latest Information

Visit our website (URL below). Please use this website providing the latest information of Renesas tool products. Furthermore, the latest version of the included software (emulator debugger) can be downloaded. http://www.renesas.com/tools

#### **Setup Guide**

	For details, refer to
1. Check the contents	>> "Package Components"
▼	
2. Install emulator debugger	>> "Installing the Included Software Products"
▼	
3. Register your R0E521300MCU00	>> R0E521300MCU00 User's Manual "User Registration"
▼	
4. Setup hardware and turn on the emulator	>> R0E521300MCU00 User's Manual "Chapter 2. Setup"
▼	
5. Startup the High-performance Embedded Workshop and the emulator debugger	>>R0E521300MCU00 User's Manual "Chapter 3. Tutorial"
	Onaptor 5. Tutonai
6. For usage of each product	>R0E521300MCU00 User's Manual "Chapter 5. Debugging Functions"

## **Package Components**

Check to see if your product package contains all of the following items before using the product.		
1	R0E521300MCU00 MCU unit	1
2	R0E521300MCU00 Release Notes (this document)	1
	R0E521300MCU00 Release Notes (Japanese)	1
3	Repair Request Sheet (English)	1
	Repair Request Sheet (Japanese)	1
4	CD-ROM - M16C R8C E100 Emulator Software	1
4	Repair Request Sheet (Japanese)	1

If any of these items are missing or found faulty, please contact your local distributor.

### **Operating Environment of the Included Software Products**

The operating environments of the included software products are shown below.

(1) Operating environment of the host machine (Windows® XP)

IBM PC/AT compatibles		
Windows® XP 32-bit editions *1 *2		
Pentium 4 running at 1.6 GHz or more recommended		
emory 1 Gbyte or larger (more than 10 times the file size of the load module) recommended		
the host machine (Windows Vista® or Windows® 7)		
IBM PC/AT compatibles		
Windows Vista® 32-bit editions *1 *3		
Windows® 7 32-bit edition / 64-bit edition *1		
Pentium 4 running at 3GHz or		
Core 2 Duo running at 1GHz or more recommended		
2 Gbyte or larger (more than 10 times the file size of the load		
module)recommended (32-bit edition)		
3 Gbyte or larger (more than 10 times the file size of the load		
module)recommended (64-bit edition)		
*1 Windows and Windows Vista are either registered trademarks or trademarks of Microsoft		

Corporation in the United States and/or other countries.

\*2 The 64-bit editions of Windows® XP are not supported.

\*3 The 64-bit editions of Windows Vista® are not supported.

#### Installing the Included Software Products

After inserting the included CD-ROM into the host machine's CD-ROM drive, the installation window will open. Please install the product by following the menu of the dialog box.

Before installing the debugger, check that the High-performance Embedded Workshop is not started up on the PC environment you use and that any Renesas emulator is not connected to the PC.

\* If using Windows Vista®, Windows® XP or Windows® 7 as the host machine OS, have the software installed by someone of administrator access level. Installation cannot be completed by users with lower access level status.

(2)

# When a PC Running Windows Vista® Cannot Communicate with the Emulator

After connecting the E100 emulator to the host machine, power on the emulator. Then open the Device Manager and select Renesas USB Driver, and open its [Properties] dialog box. On [General] tab you can check the [Device status]. If it does not show "This device is working properly.", follow the procedure listed below to install the USB driver manually.

- 1. Double click dpinst.exe stored in the attached CD-ROM, in a directory:
- <drive name>\e100\_m16c\drivers\2000\_XP\_Vista\32bit\, to execute dpinst.exe.
- You'll see a [User Account Control] dialog box titled "An unidentified program wants access to your computer" and stating "Don't run the program unless you know where it's from or you've used it before." To continue the installation, click [Allow].
- \*dpinst.exe is a driver package installation utility provided by Microsoft.
- 3. When [Device Driver Installation Wizard] appears, click the [Next] button.
- 4. A dialog box appears asking "Would you like to install this device software?" Then, click the [Install] button.
- 5. When the driver installation is complete, click the [Finish] button on the [Device Driver Installation Wizard].

### Precautions for Using the Included Software Products

Release notes are installed during the software installation. Read it before using the software product.

\* Electronic manuals and release notes are included in the software package. To view electronic documents, download Adobe Reader from Adobe Systems website (http://www.adobe.com/). Adobe and Reader are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

# Applicable MCU Groups

The R0E521300MCU00 is available for the R8C/3x Series MCUs by using with the following converter boards.

Converter board	Applicable MCU Groups
R0E53038ACFK30 (PLQP0080KB-A)	: R8C/38A, 38C, 38E, 38F, 38G, 38H, 38M, 38W, 38X, 38Y and 38Z Groups
R0E53036ACFK40 (PLQP0064KB-A)	: R8C/36A, 36C, 36E, 36F, 36G, 36H, 36M, 36W, 36X, 36Y and 36Z Groups
R0E53036ACFG40 (PLQP0064GA-A)	: R8C/36A, 36C and 36M Groups
R0E53035ACFJ50 (PLQP0052JA-A)	: R8C/35A, 35C, 35D and 35M Groups
R0E53034ACFK60 (PLQP0048KB-A)	: R8C/34C and 34M Groups
R0E53034ECFK60 (PLQP0048KB-A)	: R8C/34E, 34F, 34G, 34H, 34P, 34R, 34W, 34X, 34Y and 34Z Groups
R0E53033ACFG90 (PLQP0032GB-A)	: R8C/33A, 33C, 33D and 33M Groups
R0E53033GCFG90 (PLQP0032GB-A)	: R8C/33G and 33H Groups
R0E53032ACSJC0 (PLSP0020JB-A)	: R8C/32A, 32C, 32D and 32M Groups
R0E53032GCSJC0 (PLSP0020JB-A)	: R8C/32G, and 32H Groups

The latest information of the Target Device can be confirmed from following URL.

http://www.renesas.com/e100/r0e521300mcu00

#### **To Contact Us**

For the emulator R0E521300MCU00 and emulator debugger, fill in the text file which is downloaded from the following URL, then send the information to your local distributor.

http://tool-support.renesas.com/eng/toolnews/registration/support.txt

# Restrictions (For Products Whose Serial Number Ends with "A" or "B")

If fOCO40M is selected as a count source of the RD timer, the TRDGRD0 register cannot be used as a buffer register for the TRDGRB0 register. To resolve the problem, use the following methods depending on the functions or modes.

(1) Output Compare function

- Select any of the count sources except fOCO40M.
- If fOCO40M is selected as a count source, do not use the TRDGRD0 register as the buffer register for the TRDGRB0 register.

(2) PWM mode

- Select any of the count sources except fOCO40M.
- If fOCO40M is selected as a count source, do not use the TRDGRD0 register as the buffer register for the TRDGRB0 register.

(3) Reset Synchronous PWM mode

- Select any of the count sources except fOCO40M.
- If fOCO40M is selected as a count source, do not use the TRDGRD0 register as the buffer register for the TRDGRB0 register.

(4) Complementary PWM mode

- Select any of the count sources except fOCO40M.
- (5) PWM3 mode
  - Select any of the count sources except fOCO40M.
  - If fOCO40M is selected as a count source, do not use the TRDGRD0 register as the buffer register for the TRDGRB0 register.

# Notes on Using This Product

Before using this product, be sure to read the user's manual carefully.

(1) Note on the A/D conversion condition select bit (ADSTCS)

With this product, the A/D conversion condition select bit (ADSTCS) in the A/D input select register (ADINSEL: address 00D5h) operates the same as when the bit is set to 0 (A/D conversion performed while programming/erasing flash memory) regardless of the value written to this bit.

(2) Note on the address match interrupt 1 enable bit

The allocation of the address match interrupt 1 enable bit is different between this product and the R8C/35D, R8C/33D and R8C/32D Groups.

This product: bit 0 of address 01C7h

R8C/3xD: bit 1 of address 01C3h

When using the address match interrupt 1, note the difference in the allocation of the address match interrupt 1 enable bit.

The allocation of the address match interrupt 0 enable bit is the same (bit 0 of address 01C3h) for both this product and the R8C/3xD Groups.

(3) Notes on Flash Ready Status Interrupts

To generate a flash ready status interrupt after the execution of a lock bit command while using this product, you need to set the FMR13 to "1" (disabled).

With the actual MCU, a flash ready status interrupt is generated after the execution of a lock bit command regardless of the status of the FMR13 bit.