

# HS0005KCU01H HS0005KCU02H Test Program Manual HS0005TM01HE (B)

Renesas Microcomputer Development Environment System

Rev.2.00 2003.12.4

RenesasTechnology www.renesas.com

#### Cautions

Keep safety first in your circuit designs!

1. Renesas Technology Corp. puts the maximum effort into making semiconductor products better and more reliable, but there is always the possibility that trouble may occur with them. Trouble with semiconductors may lead to personal injury, fire or property damage. Remember to give due consideration to safety when making your circuit designs, with appropriate measures such as (i) placement of substitutive, auxiliary circuits, (ii) use of nonflammable material or (iii) prevention against any malfunction or mishap.

Notes regarding these materials

- 1. These materials are intended as a reference to assist our customers in the selection of the Renesas Technology Corp. product best suited to the customer's application; they do not convey any license under any intellectual property rights, or any other rights, belonging to Renesas Technology Corp. or a third party.
- 2. Renesas Technology Corp. assumes no responsibility for any damage, or infringement of any third-party's rights, originating in the use of any product data, diagrams, charts, programs, algorithms, or circuit application examples contained in these materials.
- 3. All information contained in these materials, including product data, diagrams, charts, programs and algorithms represents information on products at the time of publication of these materials, and are subject to change by Renesas Technology Corp. without notice due to product improvements or other reasons. It is therefore recommended that customers contact Renesas Technology Corp. or an authorized Renesas Technology Corp. product distributor for the latest product information before purchasing a product listed herein. The information described here may contain technical inaccuracies or typographical errors. Renesas Technology Corp. assumes no responsibility for any damage, liability, or other loss rising from these inaccuracies or errors. Please also pay attention to information published by Renesas Technology Corp. by various means, including the Renesas Technology Corp. Semiconductor home page

(http://www.renesas.com).

- 4. When using any or all of the information contained in these materials, including product data, diagrams, charts, programs, and algorithms, please be sure to evaluate all information as a total system before making a final decision on the applicability of the information and products. Renesas Technology Corp. assumes no responsibility for any damage, liability or other loss resulting from the information contained herein.
- 5. Renesas Technology Corp. semiconductors are not designed or manufactured for use in a device or system that is used under circumstances in which human life is potentially at stake. Please contact Renesas Technology Corp. or an authorized Renesas Technology Corp. product distributor when considering the use of a product contained herein for any specific purposes, such as apparatus or systems for transportation, vehicular, medical, aerospace, nuclear, or undersea repeater use.
- 6. The prior written approval of Renesas Technology Corp. is necessary to reprint or reproduce in whole or in part these materials.
- 7. If these products or technologies are subject to the Japanese export control restrictions, they must be exported under a license from the Japanese government and cannot be imported into a country other than the approved destination. Any diversion or reexport contrary to the export control laws and regulations of Japan and/or the country of destination is prohibited.
- 8. Please contact Renesas Technology Corp. for further details on these materials or the products contained therein.

### Test Program

This manual describes the troubleshooting procedure that applies the test program for the E10A-USB emulator.

#### 1. System Setup for Executing Test Program

- (1) The following equipments are required to execute the test program. Do not connect the user system interface cable or the user system when executing the test program.
  - E10A-USB emulator
  - USB cable
  - "E10A-USB emulator software" CD-R
  - Host computer (hereafter referred to as the PC)

To begin, make sure that the emulator software and USB driver are installed in the PC. For details on installation, refer to section 3.4, Installing Emulator's Software, in the Debugger Part of the SuperH<sup>TM</sup> Family E10A-USB Emulator User's Manual.

(2) Start up the PC and connect the E10A-USB emulator to the USB connector of the PC with the attached USB cable. Note that the user interface cable must be disconnected.



Figure 1 Connection

(3) Execute Setup.exe from the E10A-USB TM folder of the "E10A-USB emulator software" CD-R to start the install wizard. Follow the instructions of the install wizard.

When Setup.exe is executed, the start-up screen displayed in figure 2 will appear. Click the "Next" button.



Figure 2 Start Setup

The screen in figure 3 shows the directory to which the E10A-USB TM will be installed. If you do not need to specify a different directory, click the "Next" button.

	Setup will install E10A-USB in the following directory.			
	To install to this directory, click Next.			
	To install to a different directory, click Browse and select another directory.			
	You can choose not to install E10A-USB by clicking Cancel to exit Setup.			
	Destination Directory			
29	C:\Program Files\E10A-USB Browse			
1				

Figure 3 Specify Directory

The screen in figure 4 shows the program folder selection of the E10A-USB TM. If you do not need to add or specify a different folder, click the "Next" button.

Select Program Folder	×
	Setup will add program icons to the Program Folder listed below. You may type a new folder name, or select one from the existing Folders list. Click Next to continue.
	Program Folders: E10A-USB
	Existing Folders:
	E10Usb E10USBTM E10USBTM
	HDI for E10A SH7710 KeyServer 5 Microsoft Office ツール
InstallShield	
	< <u>B</u> ack <u>N</u> ext > Cancel

Figure 4 Select Folder

This finishes the installation. The [E10A-USB] icon added to the [Start] menu (as shown in figure 5) indicates that the installation is complete.

(4) Start up the E10A-USB TM from the [Start] menu.

*						
1		E.	Accessories	+		
Adobe Acrobat		Ē	StartUp	+		
4.0		e	Internet Explorer			
		X	Microsoft Excel			
Adobe		4	Microsoft Photo Editor			
Ilustrator 7.0		•	Microsoft PowerPoint			
		W	Microsoft Word			
		<u> </u>	MS-DOS Prompt			
figs_sec2j			Windows Explorer			
			Illustrator 7.0	+		
Ner	w Office Document		Adobe	+		
			Adobe Acrobat 4.0	•		
Ope	en Office Document		Outlook Express			
🛛 🥦 Wir	ndows Update		Norton AntiVirus Corpo	orate Edition 🕨		
<u> </u>	•		Lhaca Eusewithe Collinson Di	•		
📑 <u>P</u> ro	ograms	•	Executive Software Di	skeeper	E10AJ Ist	
			Erodiusb			
* F <u>a</u> v	vorites	<b>'</b>				
🔿 Dor	cuments	•				
Set Set	ttings					
👰 Eine	d	•				
	I-					
oo 🞽 🛄	μ.					
🛜 🞦 🛚 <u>B</u> ur	in					
8	a Off 02014s					
🔁 🌋 Log	g = = = =					
per 🌮 Frod	<u>u</u> t Down					

Figure 5 Starting Up the Test Program

Figure 7 shows the start-up screen of the E10A-USB TM. Before clicking on "START", check that the E10A-USB emulator switch settings are the same as those indicated on the screen.

The DIP switches are attached to the lower right of the emulator's upper-side panel as shown in figure 6. To open the sliding switch cover, slide it to the right. The state of the switches will be 1 when they are in the upper position or 0 when they are in the lower position, respectively. For details regarding the switch settings, refer to section 3.8, Setting the DIP Switches, in the Debugger Part of the SuperH<sup>TM</sup> Family E10A-USB Emulator User's Manual.



Figure 6 Switch Settings



Figure 7 Starting up the Test Program

(5) Click the "START" button appeared on the window. This starts execution of the test program showing the message "RUNNING".

F10A LISB TM \/er1	1000		
LIUA COB TM Ver		STO	DP

Figure 8 Running the Test Program

(6) The message "FAIL" or "PASS" will be displayed. "PASS" indicates that there is no problem with the emulator. Click the "QUIT" button to complete the test program.

P	A	S	S
E10A USB TM Ver1.	0.00		

Figure 9 "PASS" Message

#### 2. Process when an Error Occurred

Follow the procedure listed below if "FAIL" is displayed (i.e. an error has occurred) during execution of the test program.

(1) If "FAIL" appears during execution of the test program, the status is displayed in the lower right side of the window, as well as a separate window indicating an error message.

E10A USB TM Ver1.0	.00		
START	LOG	QUIT	STOP STATUS 5001

Figure 10 "FAIL" Message



Figure 11 Error Message (Example)

- (2) Click the "LOG" button to create a log file.
- (3) Go to the E10A-USB TM installation directory and then find the "TM\_LOG.TXT" file. Visit the following website and send the file to the site of your region by e-mail:

http://www.renesas.com/eng/contact/index.html

The e-mail text should contain information such as your contact address, MCU in use, and details on the error that has occurred.

(4) If the message "FLASH MEMORY TEST is failed" is displayed and the error status is 1001 as shown in figures 12 and 13, the E10A-USB emulator test program or the E10A-USB emulator firmware may be an old version. Go to the above listed website's download area and download updates for the E10A-USB emulator firmware and/or the E10A-USB emulator test program. For the method to update the E10A-USB emulator firmware, refer to section 3.10, Setting up the Emulator, in the Debugger Part of the E10A-USB Emulator User's Manual.

E10A US	B TM Ver1.0.00			I
E10A USB	TM Ver1.0.00			
STA	RT LOG	QUIT	STOP STATUS 1001	

Figure 12 Status Number 1001 (Example)



Figure 13 Error Message of the Flash Memory Test (Example)

#### 3. When a USB Connection is Not Established

To run the test program, it is assumed that a communication between the PC and the emulator via USB is established. If a message such as in figures 14 or 15 is displayed, check the following:

- 1. Is the emulator setup switch is set to "1"?
- 2. Is the PC setup for the environment under which USB is available?
- 3. Does the PC recognize the USB driver?
- 4. Is the USB cable connected? Are you using the attached USB cable?

For details regarding the switch settings, refer to section 3.8, Setting the DIP Switches, in the Debugger Part of the SuperH<sup>™</sup> Family E10A-USB Emulator User's Manual.



Figure 14 USB Connection Error (1)

E10A USB TM 🔀
USB CONNECT ERROR
<u>OK</u>

Figure 15 USB Connection Error (2)

### HS0005KCU01H HS0005KCU02H Test Program Manual

Publication Date:	Rev.2.00, December 4, 2003
Published by:	Sales Strategic Planning Div.
	Renesas Technology Corp.
Edited by:	Technical Documentation & Information Department Renesas Kodaira Semiconductor Co., Ltd.

©2003 Renesas Technology Corp. All rights reserved. Printed in Japan.

## HS0005KCU01H HS0005KCU02H Test Program Manual





RenesasTechnologyCorp. 2-6-2, Ote-machi, Chiyoda-ku, Tokyo, 100-0004, Japan

REJ10B0051-0200H