User's Manual

# HS0005KCU01H
# HS0005KCU02H

Test Program Manual

HS0005TM01HE

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Rev. 4.00 Apr 2013

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# Section 1 Test Program

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

## 1.1 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™ 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.

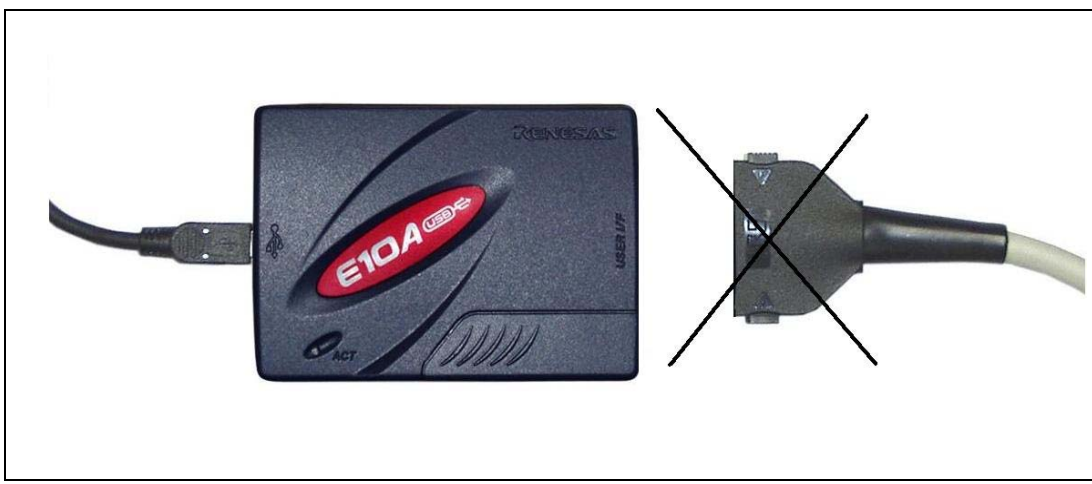


**Figure 1 Connection**

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

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

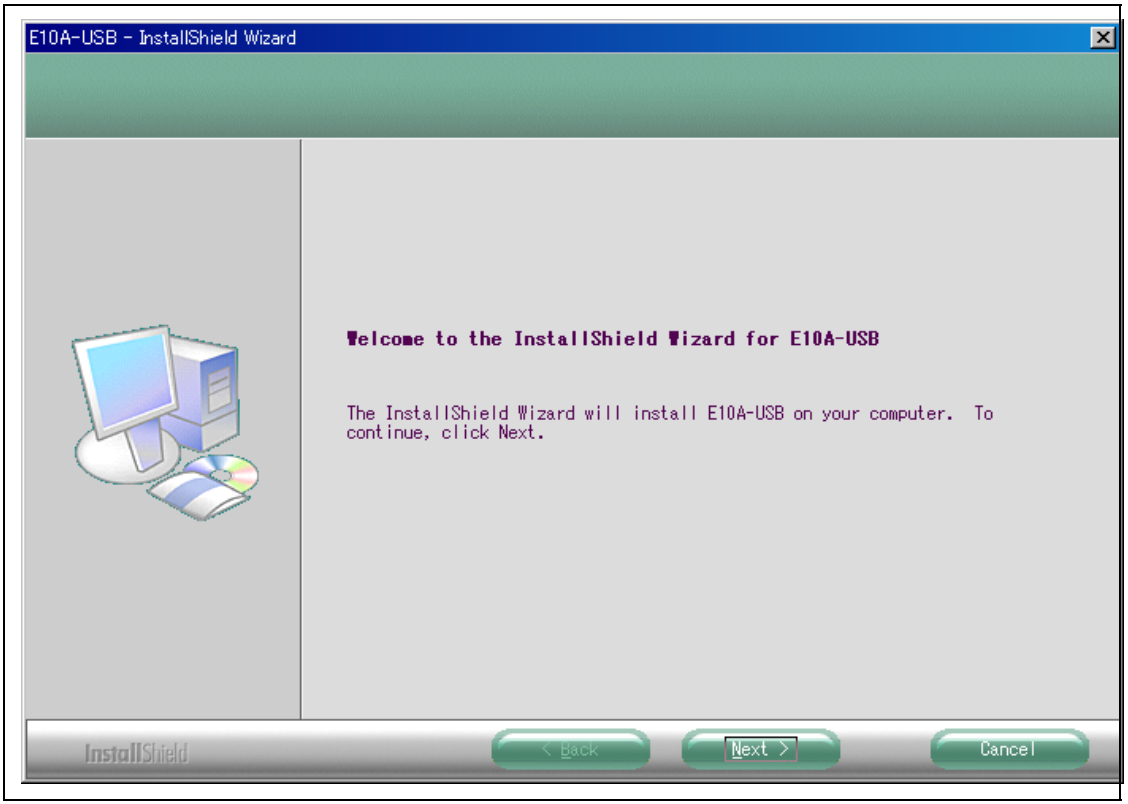


**Figure 2 Start Setup**

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. If you specify a different directory, ensure that you have the write privilege for that directory.

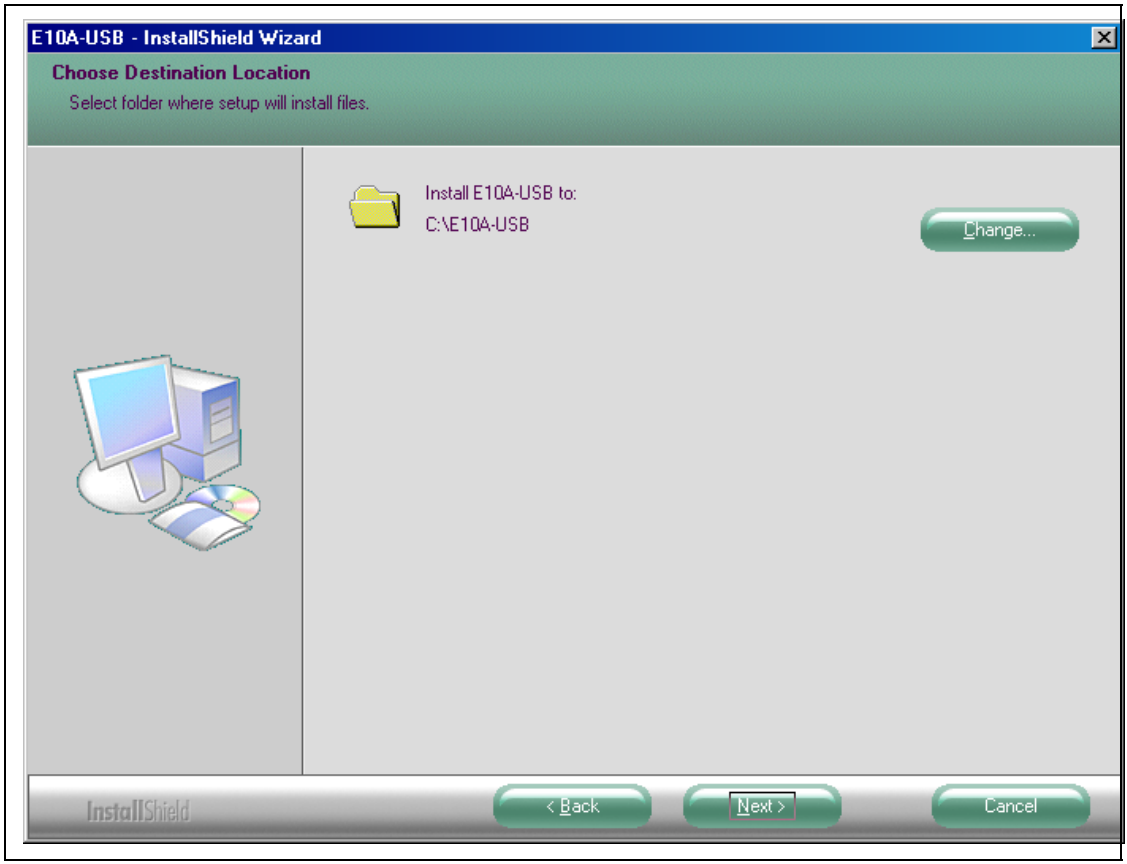


**Figure 3 Specify Directory**

Clicking on the "Install" button starts the process of installation.

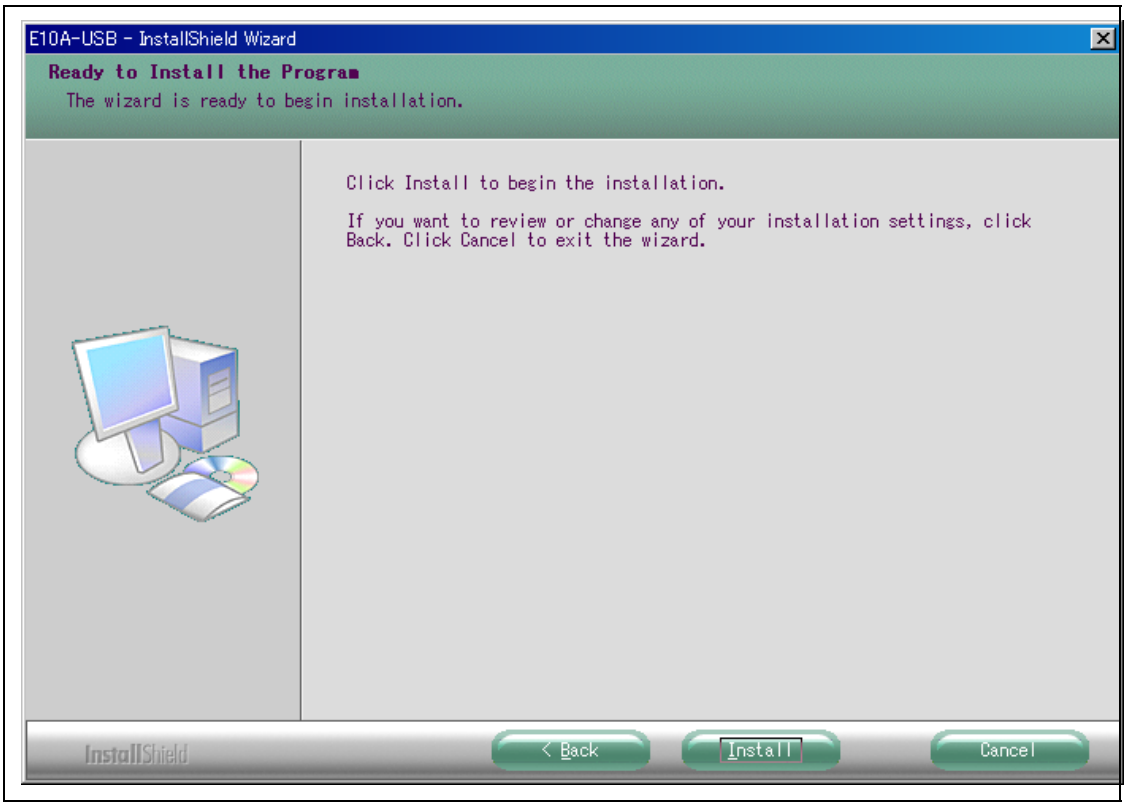


**Figure 4 Start the Installation**

Complete the installation process by clicking on the ″Finish″button.

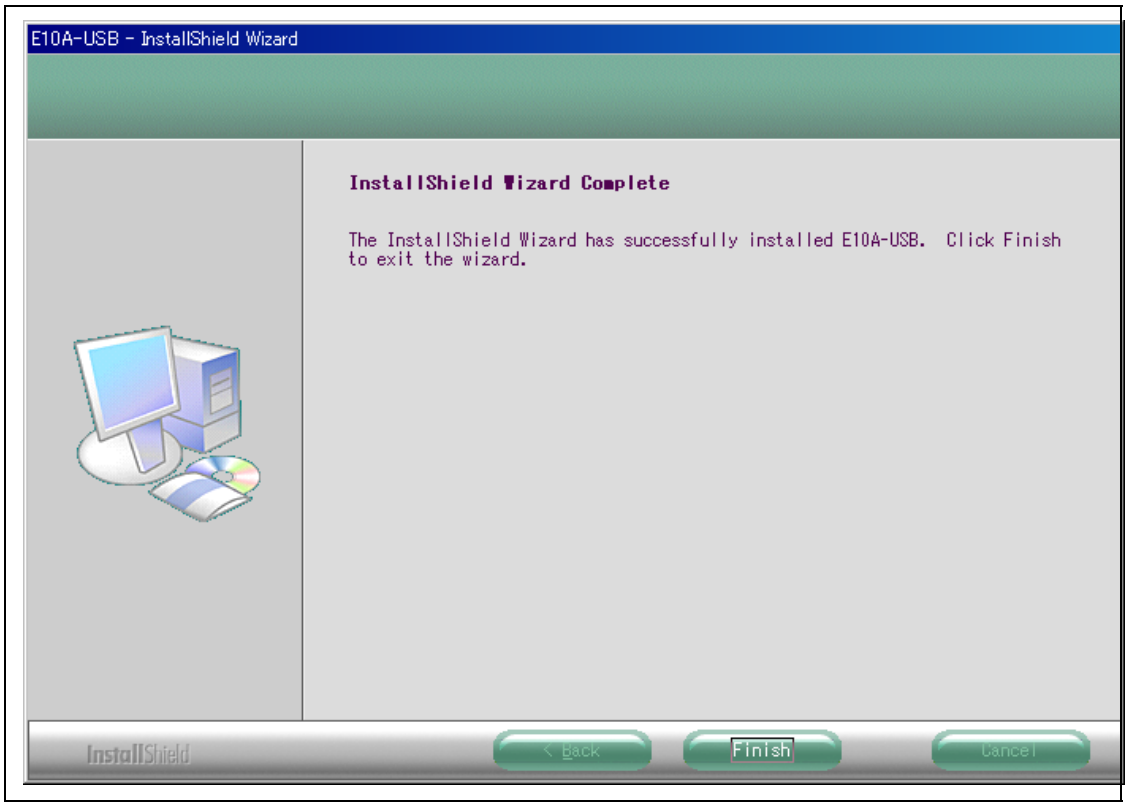


**Figure 5 Complete the Installation**

This finishes the installation. The [E10A-USB] icon added to the [Start] menu (as shown in figure 6) indicates that the installation is complete.

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

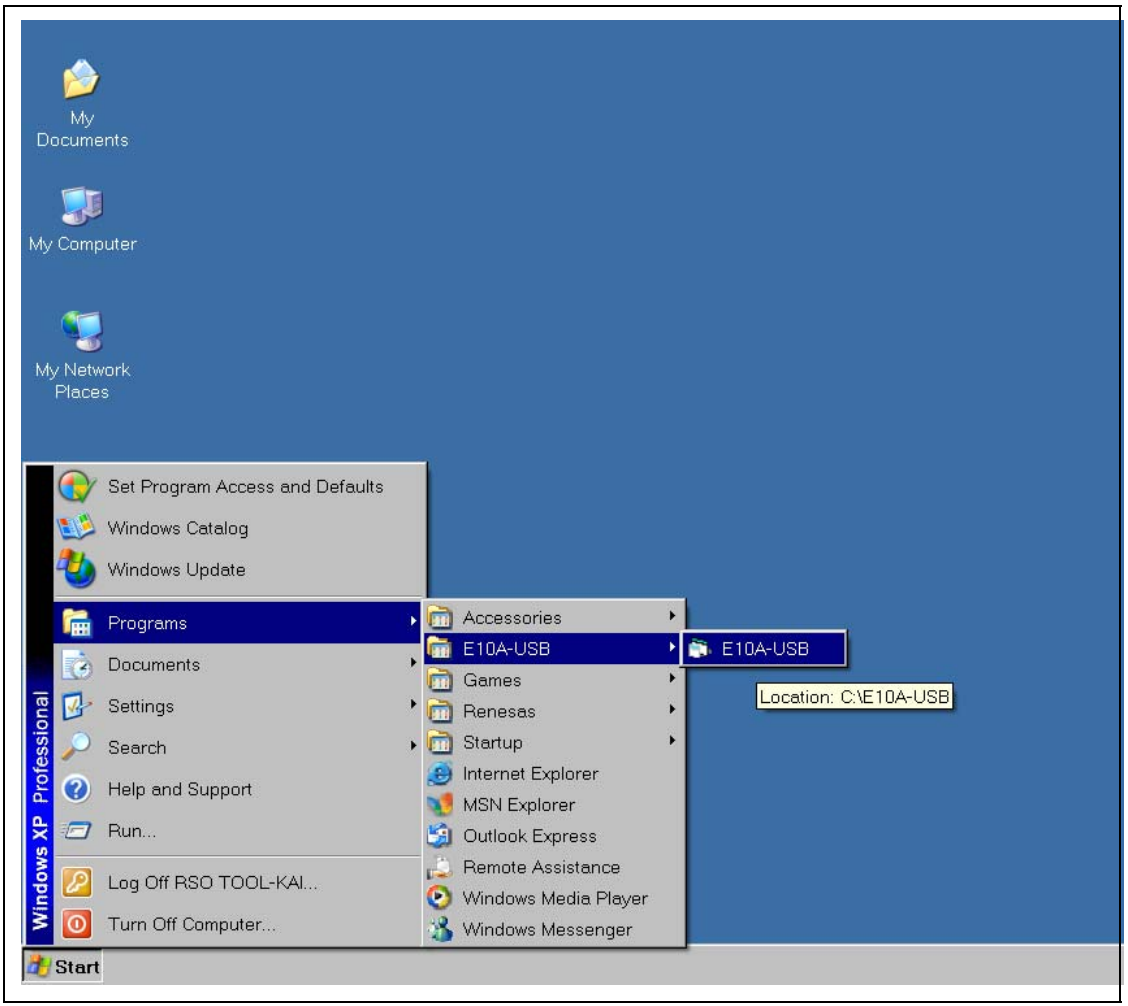


**Figure 6 Starting Up the Test Program**

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Figure 8 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 7. 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™ Family E10A-USB Emulator User’s Manual.

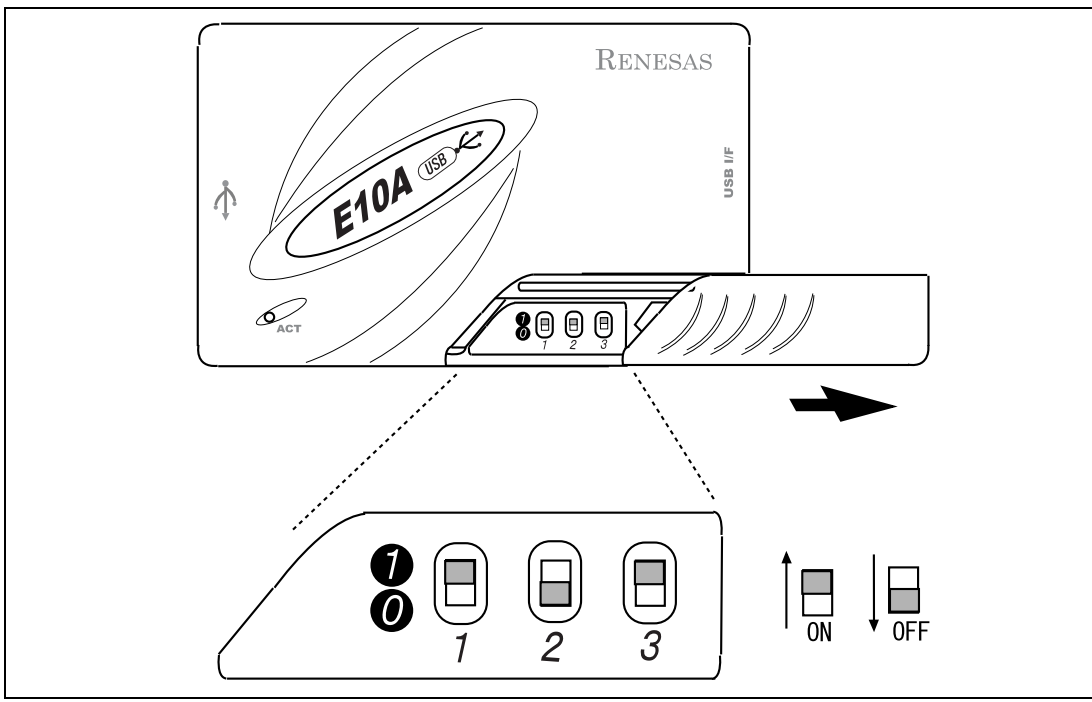


**Figure 7 Switch Settings**

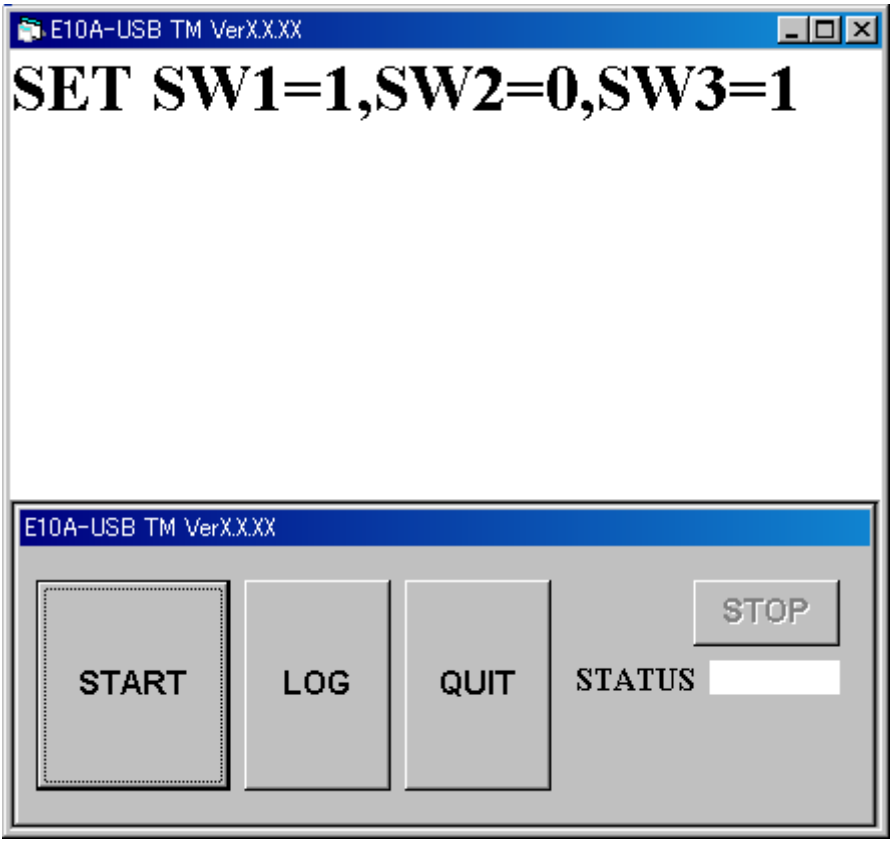


**Figure 8 Starting up the Test Program**

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

**Figure 9 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.

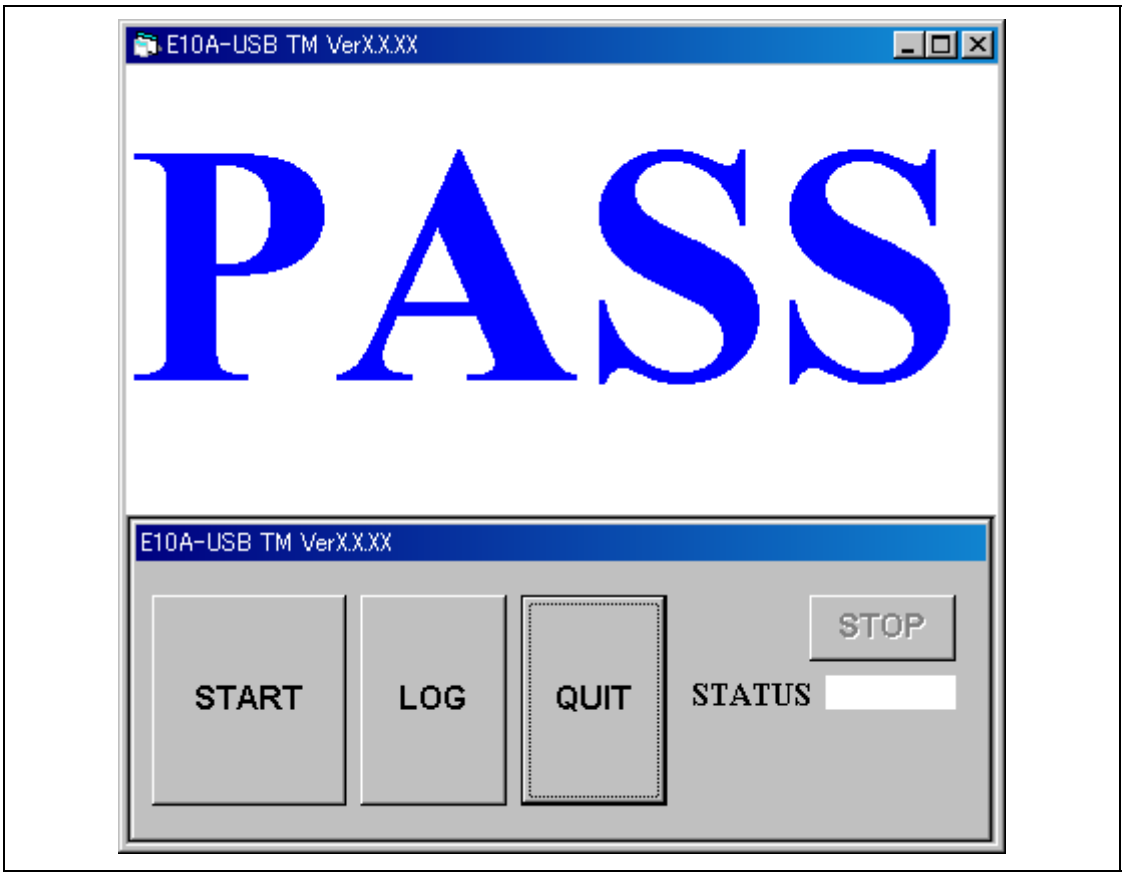


**Figure 10 “PASS” Message**

## 1.2 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.

**Figure 11 “FAIL” Message**

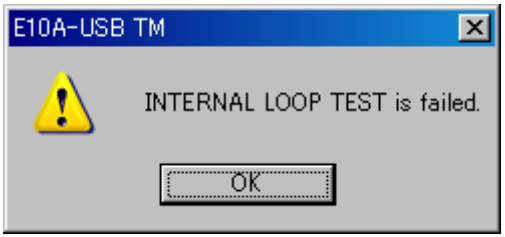


**Figure 12 Error Message (Example)**

(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. Send the file to the website of your region by e-mail.

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

(4) Figures 11 and 12 show examples when an error occurred. However, if a message “INTERNAL LOOP TEST is failed” is shown and the error status indicates “5001”, the switches of the E10A-USB emulator may have been incorrectly set. Check that those switches of the E10A-USB emulator have been set as follows: SW1 = 1, SW2 = 0, and SW3 = 1.

(5) If the message “FLASH MEMORY TEST is failed” is displayed and the error status is 1001 as shown in figures 13 and 14, the E10A-USB emulator test program or the E10A-USB emulator firmware may be an old version. 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.

**Figure 13 Status Number 1001 (Example)**

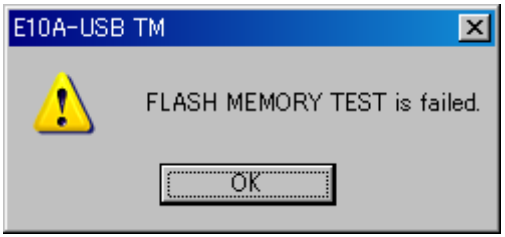


**Figure 14 Error Message of the Flash Memory Test (Example)**

## 1.3 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 15 or 16 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™ Family E10A-USB Emulator User’s Manual.

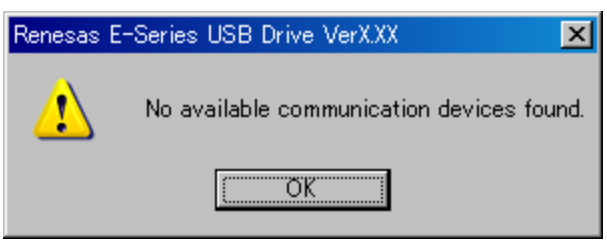


**Figure 15 USB Connection Error (1)**

**Figure 16 USB Connection Error (2)**

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Publication Date: Rev. 1.00, Oct 20, 2003
Rev. 4.00, Apr 24, 2013

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