

To our customers,

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## Old Company Name in Catalogs and Other Documents

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Renesas Electronics Corporation

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# Precautions on Using H8/3048F-ONE E10T Emulator

# IMPORTANT INFORMATION

## READ FIRST

- **READ this user's manual before using this emulator product.**
- **KEEP the user's manual handy for future reference.**

**Do not attempt to use the emulator product until you fully understand its mechanism.**

### **Emulator Product:**

Throughout this document, the term "emulator product" shall be defined as the following products produced only by Renesas Technology Corp. excluding all subsidiary products.

- Emulator
- User system interface cable

The user system or a host computer is not included in this definition.

### **Purpose of the Emulator Product:**

This emulator product is a software and hardware development tool for systems employing the Renesas microcomputer. This emulator product must only be used for the above purpose.

### **Limited Applications:**

This emulator product is not authorized for use in MEDICAL, atomic energy, aeronautical or space technology applications without consent of the appropriate officer of a Renesas sales company. Such use includes, but is not limited to, use in life support systems. Buyers of this emulator product must notify the relevant Renesas sales offices before planning to use the product in such applications.

### **Improvement Policy:**

Renesas Technology Corp. (including its subsidiaries, hereafter collectively referred to as Renesas) pursues a policy of continuing improvement in design, performance, and safety of the emulator product. Renesas reserves the right to change, wholly or partially, the specifications, design, user's manual, and other documentation at any time without notice.

### **Target User of the Emulator Product:**

This emulator product should only be used by those who have carefully read and thoroughly understood the information and restrictions contained in the user's manual. Do not attempt to use the emulator product until you fully understand its mechanism.

It is highly recommended that first-time users be instructed by users that are well versed in the operation of the emulator product.

## **LIMITED WARRANTY**

Renesas warrants its emulator products to be manufactured in accordance with published specifications and free from defects in material and/or workmanship. Renesas, at its option, will replace any emulator products returned intact to the factory, transportation charges prepaid, which Renesas, upon inspection, shall determine to be defective in material and/or workmanship. The foregoing shall constitute the sole remedy for any breach of Renesas's warranty. See the Renesas warranty booklet for details on the warranty period. This warranty extends only to you, the original Purchaser. It is not transferable to anyone who subsequently purchases the emulator product from you. Renesas is not liable for any claim made by a third party or made by you for a third party.

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**The Warranty is Void in the Following Cases:**

Renesas shall have no liability or legal responsibility for any problems caused by misuse, abuse, misapplication, neglect, improper handling, installation, repair or modifications of the emulator product without Renesas's prior written consent or any problems caused by the user system.

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2. No license is granted by implication or otherwise under any patents or other rights of any third party or Renesas.

**Figures:**

Some figures in this user's manual may show items different from your actual system.

**Limited Anticipation of Danger:**

Renesas cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this user's manual and on the emulator product are therefore not all inclusive. Therefore, you must use the emulator product safely at your own risk.

# SAFETY PAGE

## READ FIRST

- **READ** this user's manual before using this emulator product.
- **KEEP** the user's manual handy for future reference.

Do not attempt to use the emulator product until you fully understand its mechanism.

## DEFINITION OF SIGNAL WORDS



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



**DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.



**WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.



**CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.



**CAUTION** used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

**NOTE** emphasizes essential information.

## **WARNING**

Observe the precautions listed below. Failure to do so will result in a **FIRE HAZARD** and will damage the user system and the emulator product or will result in **PERSONAL INJURY**.

The **USER PROGRAM** will be **LOST**.

1. Do not repair or remodel the emulator product by yourself for electric shock prevention and quality assurance.
2. Always switch **OFF** the host computer and user system before connecting or disconnecting any **CABLES** or **PARTS**.
3. Confirm the correct direction of the connectors before connecting them in the user system side and in the user interface cable side.
4. If the PCI interface board for the E6000 or E8000 emulator (HS6000EIC01H) and the E10T emulator PCI card are mounted on the same host computer, the connectors may be illegally connected.



READ this document before using this emulator.  
KEEP the document handy for future reference.

# 1. Emulator Preparation Flow Chart

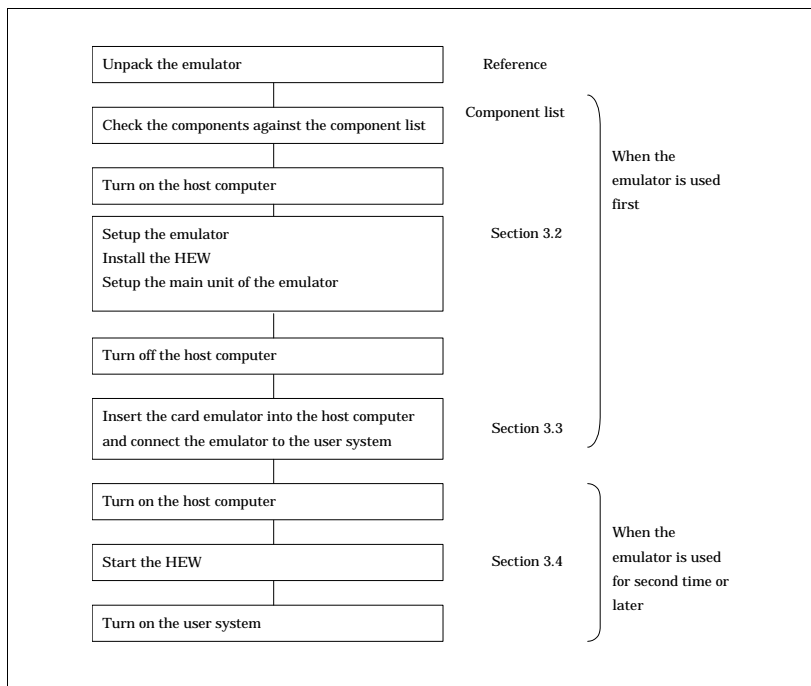


Figure 1 Emulator Preparation Flow Chart

## **2. Installing Emulator's Software**

Excute Setup.exe from the root directory of the CD-R.

Follow the cues given by the installation wizard to install the software.

Since hardware settings are also made during installation, the installation procedure differs according to the operating system or interface (PCI or PCMCIA) being used. Follow the installation steps carefully according to the environment you are using.

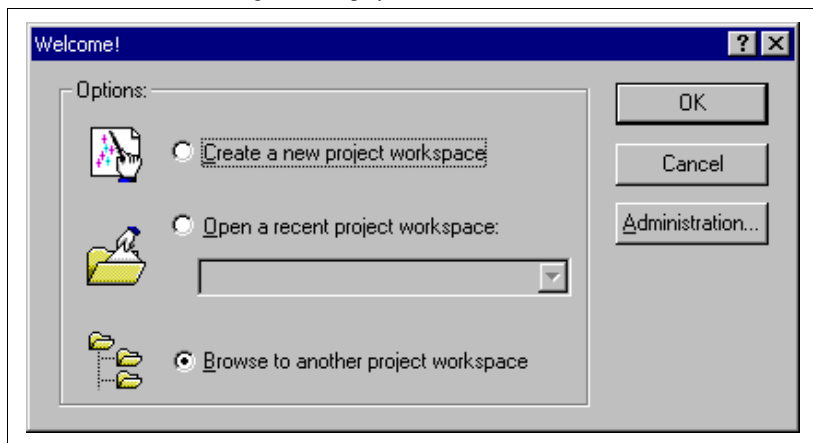
For the installation procedure, refer to Debugger part section 3.2, Installing Emulator's Software, in the H8 family E10T Emulator user's manual provided by the CD-R.

### **3. System Check**

When the software is executed, use the procedure below to check that the emulator is connected correctly. Here, use the workspace for a tutorial provided on the product.

1. Connect the emulator to the host computer.
2. Connect the user system interface cable to the connector of the emulator.
3. Connect the user system interface cable to the connector in the user system.
4. Turn on the host computer.
5. Select [Renesas High-performance Embedded Workshop] -> [High-performance Embedded Workshop] from the [Programs] in the [Start] menu.

6. The [Welcome!] dialog box is displayed.



**Figure 2 [Welcome!] Dialog Box**

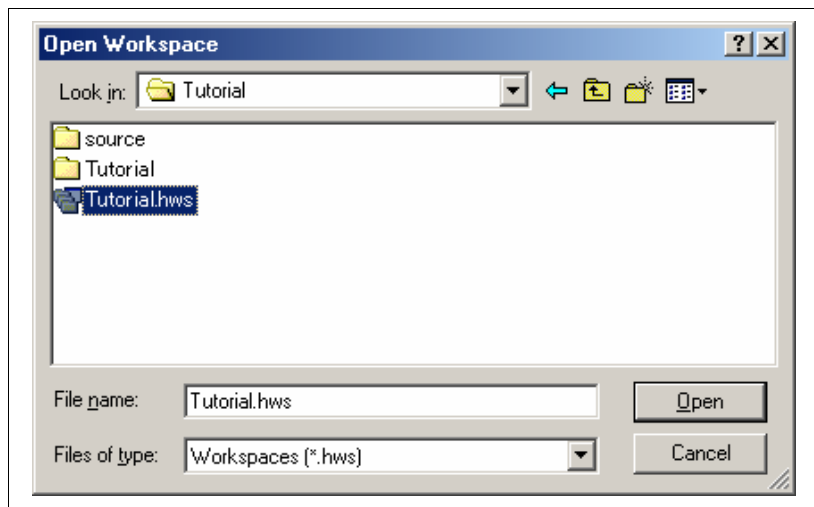
To use a workspace for the tutorial, select the [Browse to another project workspace] radio button and click the [OK] button.

When the [Open workspace] dialog box is opened, specify the following directory:

<Hew installation

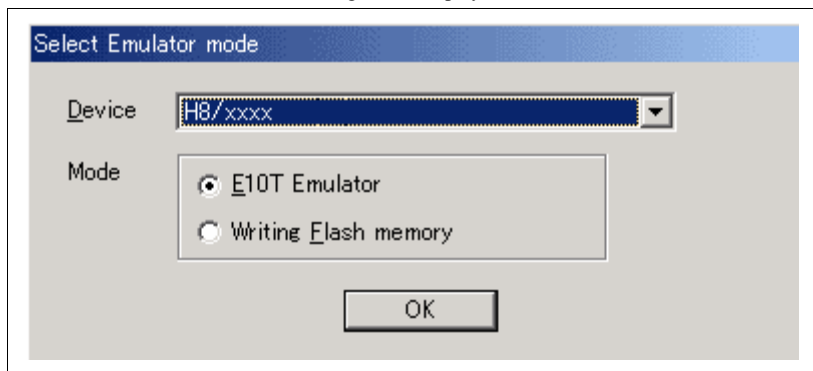
directory>\Tools\Renasas\DebugComp\Platform\E10T2\3048\_ONE\Tutorial

After the directory has been specified, select the following file and click the [Open] button.



**Figure 3 [Open Workspace] Dialog Box**

7. The [Select Emulator mode] dialog box is displayed.



**Figure 4 [Select Emulator mode] Dialog Box**

[Device]: Select the device name in use.

[Mode]:

— E10T Emulator

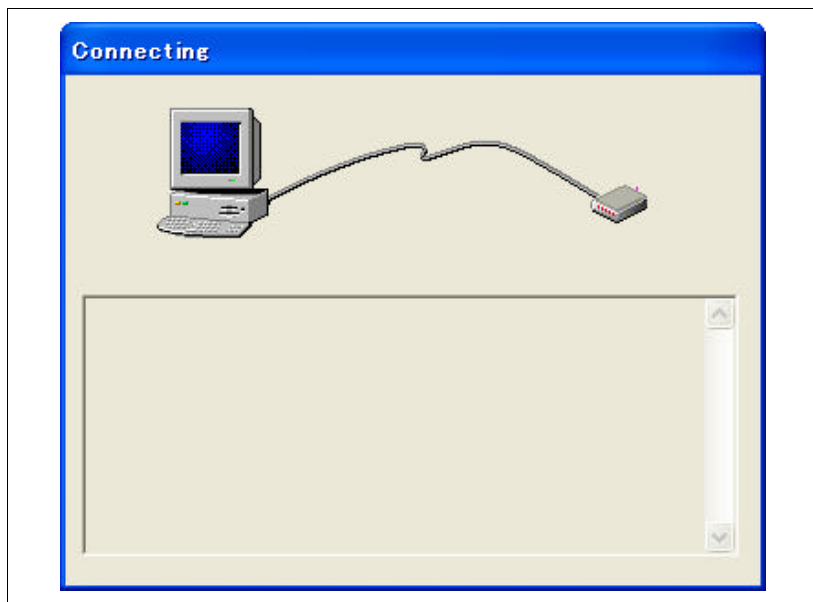
The emulator for the specified MCU is activated to debug programs.

— Writing Flash memory

The user program is written to the flash memory. Debugging the program is disabled. To download the load module, register it in the workspace.

Select the E10T Emulator radio button and click the [OK] button.

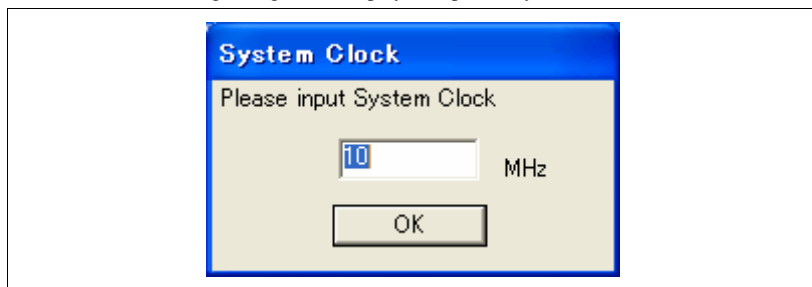
8. The [Connecting] dialog box is displayed and the emulator connection is started.



**Figure 5 [Connecting] Dialog Box**



9. After the following dialog box is displayed, input the system clock value.



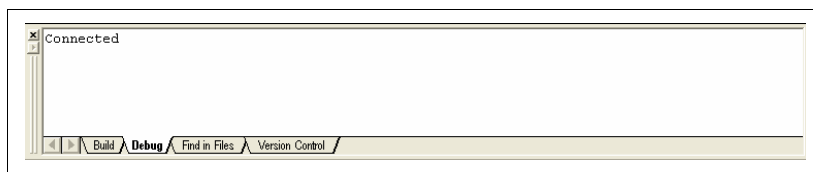
**Figure 6 [System Clock] Dialog Box**

10. After the following dialog box is displayed, input the ID code. When the emulator is activated in the [E10T Emulator] mode, input the ID code to be set.



**Figure 7 [ID Code] Dialog Box**

11. When "Connected" is displayed in the [Output] window of the HEW, the emulator initiation is completed.



**Figure 8 [Output] Window**

**Note:** If an error message is displayed, refer to Debugger part section 3.5, System Check, in the H8 family E10T Emulator user's manual provided by the CD-R.

## 4. Environmental Conditions

**Table 1 Environmental Conditions**

<b>Item</b>	<b>Specifications</b>
Temperature	Operating: +10°C to +35°C Storage: -10°C to +50°C
Humidity	Operating: 35% RH to 80% RH, no condensation Storage: 35% RH to 80% RH, no condensation
Vibration	Operating: 2.45 m/s <sup>2</sup> max. Storage: 4.9 m/s <sup>2</sup> max. Transportation: 14.7 m/s <sup>2</sup> max.
Ambient gases	There must be no corrosive gases present

**Table 2 Operating Environments**

<b>Item</b>	<b>Description</b>
Host computer	Built-in Pentium3 600 MHz or higher recommended; IBM PC or compatible machine with the PCMCIA TYPE II slot or PCI slot.
OS	Windows <sup>®</sup> 98SE, Windows <sup>®</sup> Me, Windows <sup>®</sup> 2000, Windows <sup>®</sup> XP, or Windows NT <sup>®</sup>
Minimum memory capacity	128 Mbytes or more (double of the recommended load module size)
Hard-disk capacity	Installation disk capacity: 100 Mbytes or more. Prepare an area at least double the memory capacity (four-times or more recommended) as the swap area.
Pointing device such as mouse	Connectable to the host computer; compatible with Windows <sup>®</sup> 98, Windows <sup>®</sup> Me, Windows <sup>®</sup> 2000, Windows <sup>®</sup> XP, and Windows NT <sup>®</sup> .
Power voltage	5.0 ± 0.25 V
Current consumption	HS0005TCM02H: 100 mA (Max.) HS0005TCI02H: 100 mA (Max.)
CD-ROM drive	Required to install the emulator and to refer to the manual provided by the CD-R.

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## **5. Precautions on Using Emulator**

### **5.1 Precaution on Connecting the Emulator**

— When the emulator is connected, the [System Clock] dialog box may hide behind the [Connecting] dialog box.

### **5.2 Limitation during Writing to Flash Memory**

Do not update the [Memory] or [Disassembly] window during writing to flash memory. Otherwise, the values displayed in the window will be different from the data in the actual memory.