

To our customers,

---

## Old Company Name in Catalogs and Other Documents

---

On April 1<sup>st</sup>, 2010, NEC Electronics Corporation merged with Renesas Technology Corporation, and Renesas Electronics Corporation took over all the business of both companies. Therefore, although the old company name remains in this document, it is a valid Renesas Electronics document. We appreciate your understanding.

Renesas Electronics website: <http://www.renesas.com>

April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

Send any inquiries to <http://www.renesas.com/inquiry>.

## Notice

1. All information included in this document is current as of the date this document is issued. Such information, however, is subject to change without any prior notice. Before purchasing or using any Renesas Electronics products listed herein, please confirm the latest product information with a Renesas Electronics sales office. Also, please pay regular and careful attention to additional and different information to be disclosed by Renesas Electronics such as that disclosed through our website.
2. Renesas Electronics does not assume any liability for infringement of patents, copyrights, or other intellectual property rights of third parties by or arising from the use of Renesas Electronics products or technical information described in this document. No license, express, implied or otherwise, is granted hereby under any patents, copyrights or other intellectual property rights of Renesas Electronics or others.
3. You should not alter, modify, copy, or otherwise misappropriate any Renesas Electronics product, whether in whole or in part.
4. Descriptions of circuits, software and other related information in this document are provided only to illustrate the operation of semiconductor products and application examples. You are fully responsible for the incorporation of these circuits, software, and information in the design of your equipment. Renesas Electronics assumes no responsibility for any losses incurred by you or third parties arising from the use of these circuits, software, or information.
5. When exporting the products or technology described in this document, you should comply with the applicable export control laws and regulations and follow the procedures required by such laws and regulations. You should not use Renesas Electronics products or the technology described in this document for any purpose relating to military applications or use by the military, including but not limited to the development of weapons of mass destruction. Renesas Electronics products and technology may not be used for or incorporated into any products or systems whose manufacture, use, or sale is prohibited under any applicable domestic or foreign laws or regulations.
6. Renesas Electronics has used reasonable care in preparing the information included in this document, but Renesas Electronics does not warrant that such information is error free. Renesas Electronics assumes no liability whatsoever for any damages incurred by you resulting from errors in or omissions from the information included herein.
7. Renesas Electronics products are classified according to the following three quality grades: “Standard”, “High Quality”, and “Specific”. The recommended applications for each Renesas Electronics product depends on the product’s quality grade, as indicated below. You must check the quality grade of each Renesas Electronics product before using it in a particular application. You may not use any Renesas Electronics product for any application categorized as “Specific” without the prior written consent of Renesas Electronics. Further, you may not use any Renesas Electronics product for any application for which it is not intended without the prior written consent of Renesas Electronics. Renesas Electronics shall not be in any way liable for any damages or losses incurred by you or third parties arising from the use of any Renesas Electronics product for an application categorized as “Specific” or for which the product is not intended where you have failed to obtain the prior written consent of Renesas Electronics. The quality grade of each Renesas Electronics product is “Standard” unless otherwise expressly specified in a Renesas Electronics data sheets or data books, etc.
  - “Standard”: Computers; office equipment; communications equipment; test and measurement equipment; audio and visual equipment; home electronic appliances; machine tools; personal electronic equipment; and industrial robots.
  - “High Quality”: Transportation equipment (automobiles, trains, ships, etc.); traffic control systems; anti-disaster systems; anti-crime systems; safety equipment; and medical equipment not specifically designed for life support.
  - “Specific”: Aircraft; aerospace equipment; submersible repeaters; nuclear reactor control systems; medical equipment or systems for life support (e.g. artificial life support devices or systems), surgical implantations, or healthcare intervention (e.g. excision, etc.), and any other applications or purposes that pose a direct threat to human life.
8. You should use the Renesas Electronics products described in this document within the range specified by Renesas Electronics, especially with respect to the maximum rating, operating supply voltage range, movement power voltage range, heat radiation characteristics, installation and other product characteristics. Renesas Electronics shall have no liability for malfunctions or damages arising out of the use of Renesas Electronics products beyond such specified ranges.
9. Although Renesas Electronics endeavors to improve the quality and reliability of its products, semiconductor products have specific characteristics such as the occurrence of failure at a certain rate and malfunctions under certain use conditions. Further, Renesas Electronics products are not subject to radiation resistance design. Please be sure to implement safety measures to guard them against the possibility of physical injury, and injury or damage caused by fire in the event of the failure of a Renesas Electronics product, such as safety design for hardware and software including but not limited to redundancy, fire control and malfunction prevention, appropriate treatment for aging degradation or any other appropriate measures. Because the evaluation of microcomputer software alone is very difficult, please evaluate the safety of the final products or system manufactured by you.
10. Please contact a Renesas Electronics sales office for details as to environmental matters such as the environmental compatibility of each Renesas Electronics product. Please use Renesas Electronics products in compliance with all applicable laws and regulations that regulate the inclusion or use of controlled substances, including without limitation, the EU RoHS Directive. Renesas Electronics assumes no liability for damages or losses occurring as a result of your noncompliance with applicable laws and regulations.
11. This document may not be reproduced or duplicated, in any form, in whole or in part, without prior written consent of Renesas Electronics.
12. Please contact a Renesas Electronics sales office if you have any questions regarding the information contained in this document or Renesas Electronics products, or if you have any other inquiries.

(Note 1) “Renesas Electronics” as used in this document means Renesas Electronics Corporation and also includes its majority-owned subsidiaries.

(Note 2) “Renesas Electronics product(s)” means any product developed or manufactured by or for Renesas Electronics.

# M34559T2-CPE Release Notes

Renesas Solutions Corp.

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

## Introduction

The M34559T2-CPE is a compact emulator for the 4500 Series 4559 Group of Renesas 4-bit MCUs. This product consists of the following three products.

- (1) Emulator M34559T2-CPE  
Compact emulator (board product) for the 4500 Series 4559 Group of 4-bit MCUs.
- (2) Emulator debugger M3T-PD45M  
Control software specifically designed to control the M34559T2-CPE emulator.
- (3) Absolute assembler ASM45  
Absolute assembler for the 4500 Series.

## Setup Guide

	<i>For details, refer to...</i>
1. Check the contents.	► "Package Components" (right)
▼	
2. User Registration	► H/W Tool Customer Registration Sheet
▼	
3. Install emulator debugger M3T-PD45M.	► This document "Installing Included Software Products"
▼	
4. Setup hardware.	► M34559T2-CPE User's Manual "Chapter 2. Setup"
▼	
5. Turn on the emulator.	► M34559T2-CPE User's Manual "Chapter 2. Setup"
▼	
6. Start up the emulator debugger M3T-PD45M.	► M34559T2-CPE User's Manual "Chapter 3. Usage"
▼	
7. For usage of each product	► For the M34559T2-CPE, refer to "M34559T2-CPE User's Manual" ► For M3T-PD45M and ASM45, refer to the online manuals installed with the programs.

## Package Components

Check to see if your product package contains all of the following items before using it.

1	M34559T2-CPE emulator	1
2	M34559T-PTCA converter board	1
3	USB interface cable	1
4	Power cable (External power supply not included)	1
5	64-wire half-pitch cable	1
6	External trace cable	1
7	Oscillator circuit board OSC-2 (6 MHz, premounted on the M34559T2-CPE)	1
8	Oscillator circuit board OSC-2 (Only J1 mounted)	1
9	Evaluation MCU M34559G6EFP (premounted)	1
10	H/W Tool Customer Registration Sheet (English)	1
11	H/W Tool Customer Registration Sheet (Japanese)	1
12	M34559T2-CPE Release Notes (this document)	1
13	M34559T2-CPE Release Notes (Japanese)	1
14	M34559T2-CPE User's Manual (English)	1
15	M34559T2-CPE User's Manual (Japanese)	1
16	CD-ROM - Emulator debugger M3T-PD45M - Absolute assembler ASM45	1

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

## Operating Environment for the Included Software Products

The operating environment for the included software products are shown below.

Host machine	IBM PC/AT compatibles
OS	Windows 98
	Windows 2000
	Windows Me
	Windows XP
CPU	Pentium II 233 MHz or greater recommended
Memory	128 MB or greater recommended

## Installing Included Software Products

---

- \* If using Windows 2000 or Windows XP 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.
- (1) Install emulator debugger M3T-PD45M (required)
  - \* After inserting the included CD-ROM into the host machine's CD-ROM drive, the installation window will open. Then, install the software as instructed by the displayed messages.
- (2) Install assembler ASM45
  - \* Absolute Assembler ASM45 is installed with the emulator debugger M3T-PD45M.

## Precautions for Using the Included Software Products

---

- (1) Electronic manuals and release notes are included in the software package. Acrobat Reader 4.0 or later, or Adobe Reader is needed to view these manuals. The latest version of Adobe Reader can be downloaded from Adobe Systems website (<http://www.adobe.com/>). Acrobat and Adobe are registered trademarks of Adobe Systems Incorporated.
- (2) Emulator Debugger M3T-PD45M
  - \* MCU data file names are displayed in the MCU type name field of the INIT dialog box which appears when the M3T-PD45M starts up. Select an MCU data file according to your target MCU.
- (3) Absolute Assembler ASM45
  - \* Select an MCU data file (\*.DAT) according to your target MCU.

### (4) Applicable MCUs and MCU Data File Names

When using the emulator debugger M3T-PD45M and absolute assembler ASM45, use an MCU data file for your target MCU. The applicable MCUs and MCU data file names are shown below.

MCU type name	MCU data file name
M34559G6-XXXFP	M34559G6.DAT
M34559G6FP	

## For the Latest Information

---

Please visit our website for the latest information on our development tool products.

<http://www.renesas.com/en/tools>

## To Contact Us

---

For inquiries for the emulator M34559T2-CPE and the emulator debugger M3T-PD45M, fill in the text file which is downloaded from the following page, then send the information to your local distributor.

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