### 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: <a href="http://www.renesas.com">http://www.renesas.com</a>

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

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

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



Mask ROM number
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## 740 FAMILY MASK ROM CONFIRMATION FORM SINGLE-CHIP MICROCOMPUTER M37540M2T-XXXFP/GP RENESAS TECHNOLOGY

	Date:	
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Note: Please fill in all items marked \*.

		Company		TEL		ΦΦ	Submitted by	Supervisor
*	Customer	name		(	)	uanc natur		
		Date issued	Date:			Issi		

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Specify the name of the product being ordered.

Three EPROMs are required for each pattern if this order is performed by EPROMs.

One floppy disk is required for each pattern if this order is performed by a floppy disk.

Microcomputer name: ☐ M37540M2T-XXXFP ☐ M37540M2T-XXXGP

#### ☐ Ordering by EPROMs

Specify the type of EPROMs submitted.

If at least two of the three sets of EPROMs submitted contain identical data, we will produce masks based on this data. We shall assume the responsibility for errors only if the mask ROM data on the products we produce differs from this data. Thus, extreme care must be taken to verify the data in the submitted EPROMs.

Checksum code for entire EPROM (hexadecimal notation)

EPROM type (indicate the type used)

□ 27C256	□ 27C512
EPROM address	EPROM address
000016 Area for ASCII codes of the name of the product 'M37540M2T.'	000016 Area for ASCII codes of the name of the product 000F16/ \(\frac{\mathbb{M37540M2T}}{\mathbb{M37540M2T}}\)
001016 607F16 608016 Data ROM (8K-130) bytes 7FFE16 7FFF16	001016 E07F16 E08016 Data ROM (8K-130) bytes FFFE16 FFFF16

In the address space of the microcomputer, the internal ROM area is from address E08016 to FFFD16. The reset vector is stored in addresses FFFC16 and FFFD16.

- (1) Set the data in the unused area (the shaded area of the diagram) to "FF16".
- (2) The ASCII codes of the product name "M37540M2T-" must be entered in addresses 000016 to 000916. And set the data "FF16" in addresses 000A16 to 000F16. The ASCII codes and addresses are listed to the right in hexadecimal notation.

Address		Address	
000016	'M' = 4D16	000816	'T' = 5416
000116	<b>'3'</b> = <b>33</b> 16	000916	'–' = 2D16
000216	'7' = <b>37</b> 16	000A16	FF16
000316	'5' = 3516	000B16	FF16
000416	'4' = 3416	000C16	FF16
000516	'0' = 3016	000D16	FF16
000616	'M' = 4D16	000E16	FF16
000716	'2' = 3216	000F16	FF16



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## 740 FAMILY MASK ROM CONFIRMATION FORM SINGLE-CHIP MICROCOMPUTER M37540M2T-XXXFP/GP RENESAS TECHNOLOGY

We recommend the use of the following pseudo-command to set the start address of the assembler source program because ASCII codes of the product name are written to addresses 000016 to 000816 of EPROM.

EPROM type	27C256	27C512
The pseudo-command	$\triangle$ *= $\triangle$ \$8000 $\triangle$ .BYTE $\triangle$ 'M37540M2T-'	$\triangle$ *= $\triangle$ \$0000 $\triangle$ .BYTE $\triangle$ 'M37540M2T-'

Note: If the name of the product written to the EPROMs does not match the name of the mask confirmation form, the ROM will not be processed.

Ordering by floppy disk

We will produce masks based on the mask files generated by the mask file generating utility. We shall assume the responsibility for errors only if the mask ROM data on the products we produce differs from this mask file. Thus, extreme care must be taken to verify the mask file in the submitted floppy disk.

The submitted floppy disk must be 3.5-inch 2HD type and DOS/V format. And the number of the mask files must be 1 in one floppy disk.

File code

Mask file name

Mask (equal or less than eight characters)

#### \* 2. Mark specification

Mark specification must be submitted using the correct form for the package being ordered. Fill out the appropriate mark specification form (36P2R-A for M37540M2T-XXXFP, 32P6U-A for M37540M2T-XXXGP) and attach it to the mask ROM confirmation form.



Mask ROM number	
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# 740 FAMILY MASK ROM CONFIRMATION FORM SINGLE-CHIP MICROCOMPUTER M37540M2T-XXXFP/GP RENESAS TECHNOLOGY

*	<ol> <li>Usage conditions         For our reference when of testing our products, please reply to the following questions about the usage o the products you ordered.     </li> </ol>
	(1) Which operation source clock you use?  ☐ Ceramic resonator ☐ RC oscillation ☐ External clock input ☐ Quartz-crystal oscillation ☐ Other( ☐ Ring oscillator
	(2) What is the voltage of power supply (VDD) you use?  Typ.= V Min.= V Max.= V
	(3) What is the ambient temperature you use?  Typ.=  "C Min.=  "C Max.=  "C
	(4) Which clock division ratio you use? $\square$ Double-speed mode $(f(\phi)=F(X_{IN}))$ $\square$ High-speed mode $(f(\phi)=F(X_{IN})/2)$ $\square$ Middle-speed mode $(f(\phi)=F(X_{IN})/8)$ $\square$ Applied from ring oscillator
	(5) Please reply to the following questions about timer function.
	(i) Which timer you use?  timer1 timerA timerX timerY timerZ
	(ii) Which count source of timer you use?  • Timer X
	(iii) Which operating mode you use?  • Timer A
	(6) Do you use the Serial I/O?  Use Not use Serial I/O1 (Clock synchronous Serial I/O1 mode Asynchronous Serial I/O1(UART) mode) Serial I/O2
	(7) Do you use the A-D converter?  Use Not use
	(8) Do you use the Watchdog timer?  ☐ Use ☐ Not use
	(9) Do you use the oscillation stop detection circuit?  ☐ Use ☐ Not use
	Thank you cooperation.

\* 4. Comments

