To our customers,

Old Company Name in Catalogs and Other Documents

On April 1st, 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 1st, 2010
Renesas Electronics Corporation

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

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

REJ19B0695-0100

Mask ROM number	

740 FAMILY MASK ROM CONFIRMATION FORM
SINGLE-CHIP MICROCOMPUTER M38022M2-XXXSP/FP
RENESAS TECHNOLOGY

Receipt	Date:	
	Section head signature	Supervisor signature

Note : Please fill in all items marked ✵.

✵	Customer	Company name	TEL ( )	Issuance signature	Submitted by	Supervisor
		Date issued	Date:			

✵ 1. Confirmation

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: ☐ M38022M2-XXXSP ☐ M38022M2-XXXFP

☐ 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)

☐ 27256	☐ 27512
EPROM address	EPROM address
0000$_{16}$ Product name ASCII code : 'M38022M2-'	0000$_{16}$ Product name ASCII code : 'M38022M2-'
000F$_{16}$	000F$_{16}$
0010$_{16}$	0010$_{16}$
607F$_{16}$	E07F$_{16}$
6080$_{16}$ data ROM (8K-130) bytes	E080$_{16}$ data ROM (8K-130) bytes
7FFD$_{16}$	FFFD$_{16}$
7FFE$_{16}$	FFFE$_{16}$
7FFF$_{16}$	FFFF$_{16}$

In the address space of the microcomputer, the internal ROM area is from address E080$_{16}$ to FFFD$_{16}$. The reset vector is stored in addresses FFFC$_{16}$ and FFFD$_{16}$.

(1) Set the data in the unused area (the shaded area of the diagram) to "FF$_{16}$".
(2) The ASCII codes of the product name "M38022M2–" must be entered in addresses 0000$_{16}$ to 0008$_{16}$. And set the data "FF$_{16}$" in addresses 0009$_{16}$ to 000F$_{16}$. The ASCII codes and addresses are listed to the right in hexadecimal notation.

Address	
0000$_{16}$	'M' = 4D$_{16}$
0001$_{16}$	'3' = 33$_{16}$
0002$_{16}$	'8' = 38$_{16}$
0003$_{16}$	'0' = 30$_{16}$
0004$_{16}$	'2' = 32$_{16}$
0005$_{16}$	'2' = 32$_{16}$
0006$_{16}$	'M' = 4D$_{16}$
0007$_{16}$	'2' = 32$_{16}$

Address	
0008$_{16}$	'–' = 2D$_{16}$
0009$_{16}$	FF$_{16}$
000A$_{16}$	FF$_{16}$
000B$_{16}$	FF$_{16}$
000C$_{16}$	FF$_{16}$
000D$_{16}$	FF$_{16}$
000E$_{16}$	FF$_{16}$
000F$_{16}$	FF$_{16}$

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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 0000_{16} to 0008_{16} of EPROM.

EPROM type	27256	27512
The pseudo-command	*= △$8000 .BYTE △'M38022M2–'	*= △$0000 .BYTE △'M38022M2–'

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 ☐☐☐☐☐☐☐☐ (hexadecimal notation)

Mask file name ☐☐☐☐☐☐☐☐ .MSK (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 (64P4B for M38022M2-XXXSP, 64P6N for M38022M2-XXXFP) and attach it to the mask ROM confirmation form.

✺ 3. Usage conditions

Please answer the following questions about usage for use in our product inspection :

(1) How will you use the XIN-XOUT oscillator?

☐ Ceramic resonator ☐ Quartz crystal

☐ External clock input ☐ Other ( )

At what frequency? f(XIN) = ☐ MHz

(2) In which operation mode will you use your microcomputer ?

☐ Single-chip mode ☐ Memory expansion mode

☐ Microprocessor mode

✺ 4. Comments

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