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.

Mask ROM number	

740 FAMILY MASK ROM CONFIRMATION FORM
SINGLE-CHIP MICROCOMPUTER M37160M8-XXXSP/FP
RENESAS

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.

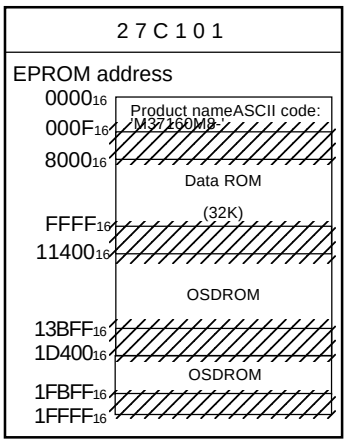
One floppy disk is required for each pattern if this order is performed by a floppy disk.

☐ Ordering by EPROMs

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)



(1) Set “FF16” in the shaded area.

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(2) Write the ASCII codes that indicate the product name of "M37160M8–" to addresses 0000_{16} to $000F_{16}$.

Addresses 0000_{16} to $000F_{16}$ store the product name.
ASCII codes 'M37160M8-' are listed on the right.
The addresses and data are in hexadecimal notation.

Note: If the name of the product contained in the EPROMs does not match the name on the mask ROM confirmation form, the ROM processing is disabled. Please make sure the data is written correctly.

Address		Address	
0000_{16}	'M' = $4D_{16}$	0008_{16}	'–' = $2D_{16}$
0001_{16}	'3' = 33_{16}	0009_{16}	FF_{16}
0002_{16}	'7' = 37_{16}	$000A_{16}$	FF_{16}
0003_{16}	'1' = 31_{16}	$000B_{16}$	FF_{16}
0004_{16}	'6' = 36_{16}	$000C_{16}$	FF_{16}
0005_{16}	'0' = 30_{16}	$000D_{16}$	FF_{16}
0006_{16}	'M' = $4D_{16}$	$000E_{16}$	FF_{16}
0007_{16}	'8' = 38_{16}	$000F_{16}$	FF_{16}

☐ 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 type of package being ordered. Fill the appropriate mark specification form (42P4B for M37160M8-XXXSP, 42P2R for M37160M8-XXXFP) and attach to the mask ROM confirmation form.

✻3. Comments

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Notes 1 : The 80-byte addresses corresponding to the character code "$7F_{16}$" and "80_{16}" of a character font, 320-byte addresses corresponding to the character code "15_{16}" and "$2A_{16}$" of a color dot font, in OSD ROM are the test data storing area. Set data to the area as follows. Set "FF_{16}" to the area (We stores the test data to this area and the different data from "FF_{16}" is stored for the actual products.)
The test data storing area :
addresses $11000_{16}+(4+2n)\times100_{16}+FE_{16}$ to $11000_{16}+(5+2n)\times100_{16}+01_{16}$(n=0 to 19)

addresses $114FE_{16}$ to 11501_{16}
addresses $116FE_{16}$ to 11701_{16}
•
•
•
addresses $138FE_{16}$ to 13901_{16}
addresses $13AFE_{16}$ to $13B01_{16}$

addresses $1D400_{16}+8n\times10_{16}+2A_{16}$, $1D400_{16}+8n\times10_{16}+2B_{16}$(n=0 to 79)

addresses $1D42A_{16}$, $1D42B_{16}$
addresses $1D4AA_{16}$, $1D4AB_{16}$
•
•
•
addresses $1FB2A_{16}$, $1FB2B_{16}$
addresses $1FBAA_{16}$, $1FBAB_{16}$

addresses $1D400_{16}+8n\times10_{16}+54_{16}$, $1D400_{16}+8n\times10_{16}+55_{16}$(n=0 to 79)

addresses $1D454_{16}$, $1D455_{16}$
addresses $1D4D4_{16}$, $1D4D5_{16}$
•
•
•
addresses $1FB54_{16}$, $1FB55_{16}$
addresses $1FBD4_{16}$, $1FBD5_{16}$

2 : The character code "09_{16}" is used for "transparent space".
Therefore, set "00_{16}" to the 40-byte addresses corresponding to the character code "09_{16}."
The transparent space font data storing area :
addresses $11000_{16}+(4+2n)\times100_{16}+12_{16}$ to $11000_{16}+(4+2n)\times100_{16}+13_{16}$ (n=0 to 19)

addresses 11412_{16} and 11413_{16}
addresses 11612_{16} and 11613_{16}
•
•
•
addresses 13812_{16} and 13813_{16}
addresses $13A12_{16}$ and $13A13_{16}$