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.

RENESAS

RENESAS TECHNOLOGY SINGLE-CHIP 16-BIT MICROCOMPUTER M30201M4-XXXFP MASK ROM CONFIRMATION FORM

Mask ROM number	

Receipt	Date :	
	Section head signature	Supervisor signature

Note : Please complete all items marked ※.

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

※ 1. Check sheet

Name the product you order, and choose which to give in, EPROMs or floppy disks.
If you order by means of EPROMs, three sets of EPROMs are required per pattern. If you order by means of floppy disks, one floppy disk is required per pattern.

☐ In the case of EPROMs

Renesas will create the mask using the data on the EPROMs supplied, providing the data is the same on at least two of those sets. Renesas will, therefore, only accept liability if there is any discrepancy between the data on the EPROM sets and the ROM data written to the product. Please carefully check the data on the EPROMs being submitted to Renesas.
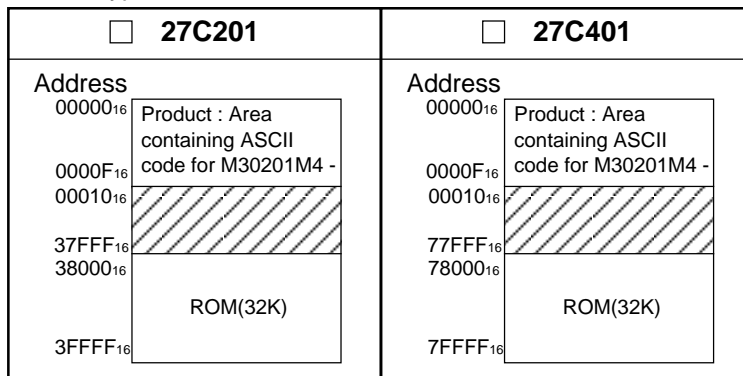
Microcomputer type No. :　☐ M30201M4-XXXFP

Checksum code for total EPROM area : ☐☐☐☐ (hex)

EPROM type :

☐ **27C201**	☐ **27C401**
Address	Address
00000_{16} — Product : Area containing ASCII code for M30201M4 -	00000_{16} — Product : Area containing ASCII code for M30201M4 -
$0000F_{16}$	$0000F_{16}$
00010_{16} — ///	00010_{16} — ///
$37FFF_{16}$	$77FFF_{16}$
38000_{16} — ROM(32K)	78000_{16} — ROM(32K)
$3FFFF_{16}$	$7FFFF_{16}$

(1) Write "FF_{16}" to the lined area.
(2) The area from 00000_{16} to $0000F_{16}$ is for storing data on the product type name.
The ASCII code for 'M30201M4-' is shown at right. The data in this table must be written to address 00000_{16} to $0000F_{16}$.
Both address and data are shown in hex.

Address			Address		
00000_{16}	'M '	$= 4D_{16}$	00008_{16}	' — '	$= 2D_{16}$
00001_{16}	'3 '	$= 33_{16}$	00009_{16}		FF_{16}
00002_{16}	'0 '	$= 30_{16}$	$0000A_{16}$		FF_{16}
00003_{16}	'2 '	$= 32_{16}$	$0000B_{16}$		FF_{16}
00004_{16}	'0 '	$= 30_{16}$	$0000C_{16}$		FF_{16}
00005_{16}	'1 '	$= 31_{16}$	$0000D_{16}$		FF_{16}
00006_{16}	'M '	$= 4D_{16}$	$0000E_{16}$		FF_{16}
00007_{16}	'4 '	$= 34_{16}$	$0000F_{16}$		FF_{16}

RENESAS

RENESAS TECHNOLOGY SINGLE-CHIP 16-BIT MICROCOMPUTER M30201M4-XXXFP MASK ROM CONFIRMATION FORM

The ASCII code for the type No. can be written to EPROM addresses 0000_{16} to $0000F_{16}$ by specifying the pseudo-instructions for the respective EPROM type shown in the following table at the beginning of the assembler source program.

EPROM type	27C201	27C401
Code entered in source program	△ .SECTION△ASCIICODE, ROM DATA △ .ORG △ 0C0000H △ .BYTE △ ' M30201M4- '	△ .SECTION△ASCIICODE, ROM DATA △ .ORG △ 080000H △ .BYTE △ ' M30201M4- '

Note: The ROM cannot be processed if the type No. written to the EPROM does not match the type No. in the check sheet.

☐ In the case of floppy disks

Renesas processes the mask files generated by the mask file generation utilities out of those held on the floppy disks you give in to us, and forms them into masks. Hence, we assume liability provided that there is any discrepancy between the contents of these mask files and the ROM data to be burned into products we produce. Check thoroughly the contents of the mask files you give in.
Prepare 3.5 inches 2HD(IBM format) floppy disks. And store only one mask file in a floppy disk.

Microcomputer type No. :   ☐ M30201M4-XXXFP

File code :   ☐☐☐☐☐☐☐☐ (hex)

Mask file name :   ☐☐☐☐☐☐☐☐ .MSK (alpha-numeric 8-digit)

※2. Mark specification

The mark specification differs according to the type of package. After entering the mark specification on the separate mark specification sheet (for each package), attach that sheet to this masking check sheet for submission to Renesas.
For the M30201M4-XXXFP, submit the 56P6S mark specification sheet.

※ 3. Usage Conditions

For our reference when of testing our products, please reply to the following questions about the usage of the products you ordered.

(1) Which kind of X_{IN}-X_{OUT} oscillation circuit is used?

☐ Ceramic resonator   ☐ Quartz-crystal oscillator

☐ External clock input   ☐ Other (   )

What frequency do you use?

$f(X_{IN})$ = ☐☐☐☐ MHz

RENESAS

**RENESAS TECHNOLOGY SINGLE-CHIP 16-BIT
MICROCOMPUTER M30201M4-XXXFP
MASK ROM CONFIRMATION FORM**

Mask ROM number	

(2) Which kind of X_{CIN}-X_{COUT} oscillation circuit is used?

☐ Ceramic resonator   ☐ Quartz-crystal oscillator

☐ External clock input   ☐ Other (   )

What frequency do you use?

f(X_{CIN}) = ☐ kHz

(3) Which operating ambient temperature do you use?

☐ −10 °C to 75 °C   ☐ −20 °C to 75 °C

☐ −10 °C to 85 °C   ☐ −20 °C to 85 °C

(4) Which operating supply voltage do you use?

☐ 2.7V to 3.2V   ☐ 3.2V to 3.7V   ☐ 3.7V to 4.2V

☐ 4.2V to 4.7V   ☐ 4.7V to 5.2V   ☐ 5.2V to 5.5V

Thank you cooperation.

※ 4. Special item (Indicate none if there is no specified item)