

To our customers,

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## Old Company Name in Catalogs and Other Documents

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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>.

ROM number	
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**QzROM PROGRAMMING CONFIRMATION FORM  
SINGLE-CHIP 8-BIT MICROCOMPUTER  
M38588GC-XXXSP/FP  
RENESAS TECHNOLOGY**

Note : Please fill in all items marked\*.

Receipt	Date:	
	Section head signature	Supervisor signature

* Customer	Company name		Issuance signature	Supervisor
	Telephone number	(      )		
	Date issued	Date:		

\*1. Confirmation

Specify the name of the product being ordered.

The submitted floppy disk must be 3.5-inch 2HD type and DOS/V format if this order is performed by a floppy disk. And the number of the mask files must be 1 in one floppy disk.

Microcomputer name:

 M38588GC-XXXSP

 M38588GC-XXXFP

File code

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(hexadecimal notation)

Mask file name

--	--	--	--	--	--	--	--

.MSK (equal or less than eight characters)

Note: Write data to only ROM data area (addresses 4080<sub>16</sub> to FFDA<sub>16</sub>, FFDC<sub>16</sub> to FFFD<sub>16</sub>).  
ROM option data area: Addresses 10<sub>16</sub>

**Notes (RENESAS ---> Customer)**

Note 1 : ROM data confirmation request

QzROM programming will be processed based on the mask file generated by the mask file generating utility. Only in the case when ROM data programmed in the actual mass produced product differs from that of above mentioned mask file, Renesas takes the responsibility. There is no Engineering Sample, thus please confirm the ROM data at the receipt of the Initial product delivery.  
Should you find any problem, please return immediately. Two weeks without technical error feedback towards Renesas will automatically be regarded as acceptance of products.

Note 2 : ROM option ("Mask option" written in the mask file converter MM)

Either of the following data should be set to the ROM option data address (10<sub>16</sub>) of the mask file you have ordered. When you don't protect the ROM data, a third party can read out it.

When the ROM data is protected

<b>00<sub>16</sub></b>
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Address 10<sub>16</sub>

When the ROM data is not protected

<b>FF<sub>16</sub></b>
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Address 10<sub>16</sub>

If you set except the above data or nothing at the ROM option data address (10<sub>16</sub>), We can't generate the ROM data. Then we request to submit the data again.

When Renesas ships QzROM write products, we write the data in the ROM option address (10<sub>16</sub>) to the actual ROM code protect address (FFDB<sub>16</sub>).

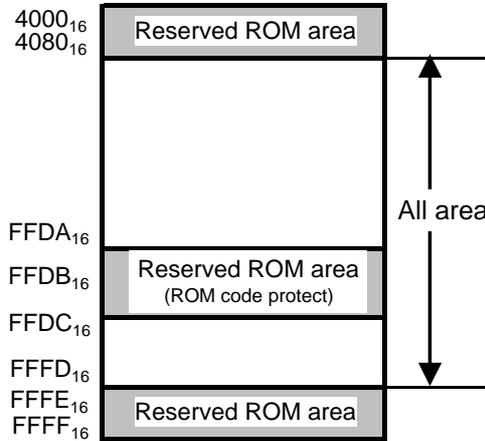
Therefore, set FF<sub>16</sub> to address FFDB<sub>16</sub> in the ROM data regardless of the presence or absence of a protect. When data other than FF<sub>16</sub> is set, we may ask that the ROM data be submitted again.

Note 3 : Mark specification

You can appoint the mark by the mark specification form. Without submitting the mark specification form, your mark will be a standard mark. Please fill out the 42P4B MARK SPECIFICATION FORM for the M38588GC-XXXSP, the 42P2R MARK SPECIFICATION FORM for the M38588GC-XXXFP, and attach it when you submit the QzROM PROGRAMMING CONFIRMATION FORM. We can't deal with special font marking (customer's trademark etc.) in QzROM microcomputer.

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M38588GC-XXXSP/FP  
RENESAS TECHNOLOGY**

ROM-Protection-Area



**NOTE:**  
**Do not set any data to address FFDB<sub>16</sub>.**

\*2. Usage conditions

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

(1) Which operation source main clock do you use?

- Ceramic resonator                       Quartz-crystal oscillation  
 External clock input                       Other (                      )

At what frequency?       $f(X_{IN}) =$   MHz

(2) Which operation P21/X<sub>CIN</sub> and P20/X<sub>COU</sub>T do you use?

- P20, P21 Port function                       X<sub>CIN</sub>-X<sub>COU</sub>T clock function                       Not use

(3) What is the voltage of power supply (V<sub>CC</sub>) you use?

Typ.=  V                      Min.=  V                      Max.=  V

(4) What is the ambient temperature you use?

Typ.=  °C                      Min.=  °C                      Max.=  °C

(5) Which main clock division ratio mode do you use? (Except program start timing)

- High-speed mode ( $f(\phi) = f(X_{IN})/2$ )  
 Middle-speed mode ( $f(\phi) = f(X_{IN})/8$ )  
 Slow-speed mode ( $f(\phi) = f(X_{CIN})/2$ )

ROM number	
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(6) Which function do you use?

- Timer1       Timer2       TimerX       TimerY       TimerZ1  
 TimerZ2       A/D converter       Watchdog Timer       PWM       Serial I/O2  
 Serial I/O1    (  Clock synchronous Serial I/O mode     Asynchronous Serial I/O(UART) mode )  
 LED direct drive port

**Thank you cooperation**

\*3. Comments