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.

ROM number	

QzROM PROGRAMMING CONFIRMATION FORM
SINGLE-CHIP 8-BIT MICROCOMPUTER
M37548G3-XXXFP
RENESAS TECHNOLOGY

Receipt	Date:	
	Section head signature	Supervisor signature

Note : Please fill in all items marked ∗.

∗	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: M37548G3-XXXFP

File code | | | | | | | | | (hexadecimal notation)

Mask file name | | | | | | | | | .MSK (equal or less than eight characters)

Note1: Write data to only ROM data area (addresses $E880_{16}$ to $FFD3_{16}$, $FFD8_{16}$ to $FFDA_{16}$, $FFDC_{16}$ to $FFFD_{16}$).
ROM option data area: Addresses 10_{16}

Note2: The function set ROM data 0 to 2 (address $FFD8_{16}$ to $FFDA_{16}$) must be set according to the data sheet.
The designated value must be set to those bits whose set value is fixed to 1 or 0.

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_{16}) 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	**00_{16}**	Address 10_{16}
When the ROM data is not protected	**FF_{16}**	Address 10_{16}

If you set except the above data or nothing at the ROM option data address (10_{16}), 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_{16}) to the actual ROM code protect address ($FFDB_{16}$).
Therefore, set FF_{16} to address $FFDB_{16}$ in the ROM data regardless of the presence or absence of a protect.
When data other than FF_{16} is set, we may ask that the ROM data be submitted again.

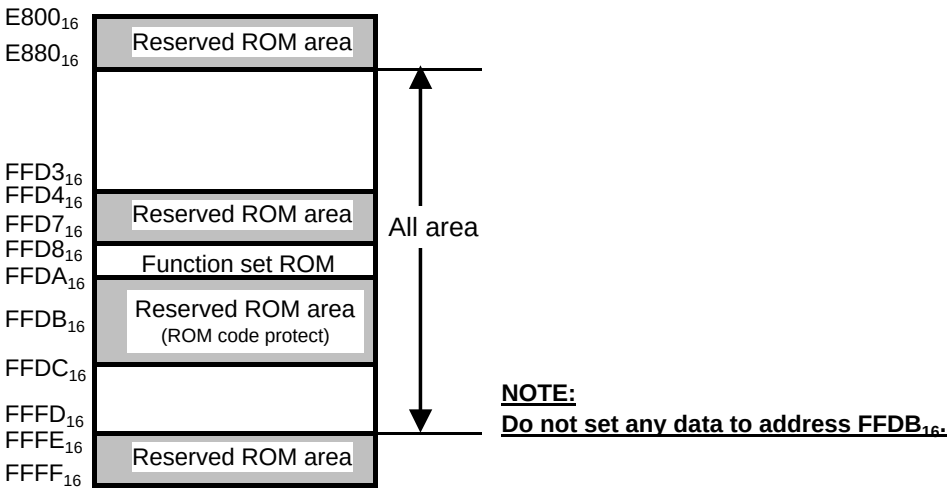
Note 3 : Mark specification

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 20P2E/F MARK SPECIFICATION FORM 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.

ROM number

QzROM PROGRAMMING CONFIRMATION FORM
SINGLE-CHIP 8-BIT MICROCOMPUTER
M37548G3-XXXFP
RENESAS TECHNOLOGY

ROM-Protection-Area



∗2. Usage conditions

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

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

☐ Ceramic resonator ☐ RC oscillation ☐ High-speed on-chip oscillator

☐ Quartz-crystal oscillation ☐ External clock input ☐ Low-speed on-chip oscillator

☐ Other ( )

At what frequency? $f(X_{IN})$= ☐ MHz

(2) What is the voltage of power supply (V_{DD}) you use?

Typ.= ☐ V Min.= ☐ V Max.= ☐ V

(3) What is the ambient temperature you use?

Typ.= ☐ ℃ Min.= ☐ ℃ Max.= ☐ ℃

(4) Which clock division ratio mode do you use?

☐ Double-speed mode (f(ϕ)=ϕSOURCE/1) ☐ High-speed mode (f(ϕ)=ϕSOURCE/2)

☐ Middle-speed mode (f(ϕ)=ϕSOURCE/4) ☐ Low-speed mode (f(ϕ)=ϕSOURCE/8)

(5) Which function of $P2_0$/ X_{OUT}/ X_{COUT}, $P2_1$/ X_{IN}/ X_{CIN} pins do you use?

☐ Clock pins not used ($P2_0$ and $P2_1$ are used as I/O ports) ☐ X_{IN} , X_{OUT}

☐ X_{CIN} , X_{COUT} ☐ External clock input ($P2_1$ is used as I/O port)

ROM number

QzROM PROGRAMMING CONFIRMATION FORM
SINGLE-CHIP 8-BIT MICROCOMPUTER
M37548G3-XXXFP
RENESAS TECHNOLOGY

(6) Please reply to the following questions about timer function.

(i) Which timer do you use?

☐ Timer1 ☐ Timer2 ☐ TimerA

(ii) Which count source of timer do you use?

・Timer2 [☐ φSOURCE/16 ☐ φSOURCE/256 ☐ Prescaler 12 output ☐ TimerA underflow signal]

・TimerA [☐ φSOURCE/16 ☐ φSOURCE/2 ☐ φSOURCE/32 ☐ φSOURCE/64 ☐ φSOURCE/128 ☐ φSOURCE/256 ☐ Low-speed on-chip oscillator output ☐ X_{CIN} input clock]

(iii) Do you use the Output compare?

☐ Use ( ) channel ☐ Not use

(iv) Do you use the Input capture?

☐ Use ☐ Not use

(7) Do you use the Serial I/O?

☐ Use ☐ Not use

(☐ Clock synchronous Serial I/O mode ☐ Asynchronous Serial I/O(UART) mode)

(8) Do you use the A/D converter?

☐ Use ☐ Not use

(9) Do you use the Watchdog timer?

☐ Use ☐ Not use

(10) Do you use the oscillation stop detection circuit?

☐ Use ☐ Not use

Thank you cooperation

∗3. Comments