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	

REC19B0012-0102 Rev.1.02

QzROM PROGRAMMING CONFIRMATION FORM
8BIT SINGLE-CHIP MICROCOMPUTER
M38D28G8-XXXFP/HP
RENESAS TECHNOLOGY

Receipt	Date:	
	Section head signature	Supervisor signature

Note: Please fill in all items marked※.

※					
Customer	Company name	TEL ( )	Issuance signature	Supervisor	
	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: ☐M38D28G8-XXXFP ☐M38D28G8-XXXHP

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

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

Note: Write data to only ROM data area (addresses 8080_{16} to $FFDA_{16}$, $FFDC_{16}$ to $FFFD_{16}$).
ROM option data area: Addresses 10_{16}

Notes (RENESAS ⟶ Customer)

1 : ROM data confirmation request

QzROM programming will be processed based on the mask file generated by the mask file generating utility. Only in 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.

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 of protect area1(8080_{16}~$EFFF_{16}$) is protected	FE_{16}	Address 10_{16}
When the ROM data of all area (8080_{16}~$FFFD_{16}$) is protected	00_{16}	Address 10_{16}
When 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 ROM option address (10_{16}) to the actual ROM code protect address ($FFDB_{16}$).
Therefore, set FF_{16} to address $FFDB_{16}$ in 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.

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 64P6U MARK SPECIFICATION FORM for the M38D28G8-XXXFP, the 64P6Q MARK SPECIFICATION FORM for the M38D28G8-XXXHP, 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.

QzROM PROGRAMMING CONFIRMATION FORM

8BIT SINGLE-CHIP MICROCOMPUTER

M38D28G8-XXXFP/HP

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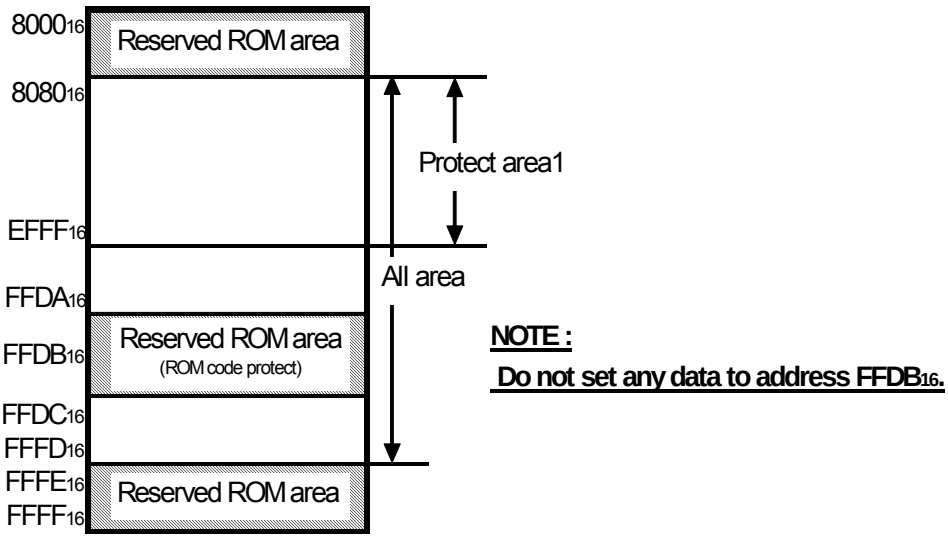
ROM-Protection-Area



※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
☐ External clock input
☐ Quartz-crystal oscillation
☐ Other( )
☐ On-chip oscillator

→ At what frequency?
f(XIN)= ☐ MHz

(2) Which operation source sub clock do you use?

☐ Quartz-crystal oscillation
☐ Other( )

→ At what frequency?
f(XCIN)= ☐ kHz

(3) What is the voltage of power supply (VCC) you use?

Typ.= ☐ V Min.= ☐ V Max.= ☐ V

(4) What is the ambient temperature you use?

Typ.= ☐ °C Min.= ☐ °C Max.= ☐ °C

(5) On which condition will you use OSCSEL?

☐ OSCSEL=H ☐ OSCSEL=L

(6) Which main clock (XIN-XOUT) division ratio mode will you use?

☐ In frequency/2 mode (f(Φ)=f(XIN)/2) ☐ In frequency/4 mode (f(Φ)=f(XIN)/4)
☐ In frequency/8 mode (f(Φ)=f(XIN)/8)

(7) Which function will you use the pins P61/XCIN and P62/XCOUT as P61 and P62, or XCIN and XCOUT?

☐ P61,P62 ☐ XCIN,XCOUT

ROM number	

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(8) On which condition will you use LCD drive control circuit?

LCD drive control circuit ☐ Use ☐ Not use

Duty ratio ☐ 4 ☐ 3 ☐ 2

Range of power source voltage(VL3) Min.= ☐ V Max.= ☐ V

Number of segment pins used ☐

Dividing resistor for LCD power ☐ Internal resistor ☐ External resistor

Resistor value/piece= ☐ kΩ/piece

LCD drive timing ☐ TypeA ☐ TypeB

(9) Which timer mode will you use?

Timer X ☐ Timer mode ☐ Pulse output mode ☐ IGBT output mode ☐ PWM mode

☐ Event counter mode ☐ Pulse width measurement mode ☐ Not use

Timer Y ☐ Timer mode ☐ Period Measurement Mode ☐ Event counter mode

☐ Pulse width HL continuously measurement mode ☐ Not use

Timer 3 ☐ Timer mode ☐ PWM mode ☐ Not use

Timer 4 ☐ Timer mode ☐ PWM mode ☐ Not use

(10) Which serial I/O will you use?

Serial I/O1 ☐ Clock synchronous ☐ UART ☐ Not use

Serial I/O2 ☐ Clock synchronous ☐ UART ☐ Not use

(11) On which condition will you use A/D converter?

10bit or 8bit conversion switch ☐ 8bitA/D ☐ 10bitA/D ☐ Not use

A/D conversion clock ☐ ΦSOURCE/2 ☐ ΦSOURCE/8 ☐ On-chip oscillator

ADKEY ☐ Use ☐ Not use

(12) On which condition will you use Watchdog timer?

Count source ☐ XIN ☐ On-chip oscillator ☐ Not use

(13) Do you use the ROM correction function?

ROM correction function ☐ Use(Jump to RAM) ☐ Use(Jump to ROM) ☐ Not use

Thank you for cooperation.

※3. Comments