#### Old Company Name in Catalogs and Other Documents

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.

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# MESC TECHNICAL NEWS No. M380-17-9910

## Corrections and Supplementary Explanation for "3822 Group User's Manual"

This news includes all corrections and supplementary explanation for the 3822 Group User's Manual (1995.3 issued, document number: H-ED347-A) issued before. Please refer to the corrected information as shown below.

- Corrections and supplementary explanation for the 3822 Group User's Manual issued before
  - (A) M380-11-9507 Correction of "3822 Group User's Manual"
  - (B) M380-14-9907 Corrections and Supplementary Explanation for "3820/3822/3825 Group User's

Note: Alphabets in parentheses are corresponding to the alphabets in the parameter "REV." of the following corrections and supplementary explanation list. "Rev.C" is the new information added in this time.

Rev.	Page	Contents
С	P1-20	Error
	(Left columun)	A key input interrupt request is generated by applying "L" level
		Correct
		A key input interrupt request is generated by <u>detecting falling edge</u>
A	P1-22	Error
	line 7	(However, if the real time port control bit is changed from "0" to "1",
	(Right column)	data are output without the timer X.)
		Correct
		(However, after rewriting a data storage bit for real time port, if the
		real time port control bit is changed from "0" to "1", data is output without the timer X.)
A	P2-40	Error
^	line 8	A data output from the real time port is started at setting the real
		time port control bit to "1".
		Correct
		A data output from the real time port is started at setting the real
		time port control bit to "1" (when setting "1" to the real time port
		control bit of the timer X mode register, use the SEB instruction).
В	P2-65	Previous change
	(1) Timer X	[Notes on use]
	■ Timer mode	Notes 1: For using interrupt processing, set the following:
	Fig. 2.3.22	•Before setting ① below, clear the timer X interrupt enable
		bit and the timer X interrupt request bit to "0".
		•After setting ④ below, set the timer X interrupt enable bit
		to "1" (interrupts enabled).
		After change
		[Notes on use]
		Notes 1: For using interrupt processing, set the following:
		•Before timer X stops counting (before setting ① below),
		clear the timer X interrupt enable bit to "0".  •After setting ③ below, clear the timer X interrupt request
		bit to "0" and next set the timer X interrupt request
		"1" (interrupt enabled).
		•Set @ last.
В	P2-66	Previous change
	(1) Timer X	[Notes on use]
	■ Pulse output mode	<b>Notes 1:</b> For using interrupt processing, set the following:
	Fig. 2.3.23	•Before setting ① below, clear the interrupt enable bits
	, and the second	(timer X or CNTR <sub>0</sub> ) and the interrupt request bits (timer
		X or CNTR <sub>0</sub> ) to "0".
		<ul> <li>After setting s below, set the interrupt enable bits (timer)</li> </ul>
		X or CNTR <sub>0</sub> ) to "1" (interrupts enabled).
		After change
		[Notes on use]
		Notes 1: For using interrupt processing, set the following:
		•Before timer X stops counting (before setting ② below),
		clear the interrupt enable bit (timer X or CNTR <sub>0</sub> ) to "0".
		•After setting @ below, clear the interrupt request bit (timer
		X or CNTR <sub>0</sub> ) to "0" and next set the interrupt enable bit
		(timer X or CNTR <sub>0</sub> ) to "1" (interrupt enabled).
		•Set ⑤ last.

Rev.	Page	Contents
В	P2-67	Previous change
	(1) Timer X	[Notes on use]
	■ Event counter mode	<b>Notes 1:</b> For using interrupt processing, set the following:
	Fig. 2.3.24	•Before setting ① below, clear the interrupt enable bits
		(timer X or CNTRo) and the interrupt request bits (timer
		X or CNTRo) to "0".
		•After setting ⑤ below, set the interrupt enable bits (timer
		X or CNTRo) to "1" (interrupts enabled).
		After change
		[Notes on use]
		<b>Notes 1:</b> For using interrupt processing, set the following:
		•Before timer X stops counting (before setting @ below),
		clear the interrupt enable bit (timer X or CNTR <sub>0</sub> ) to "0".
		•After setting @ below, clear the interrupt request bit (timer
		X or CNTR <sub>0</sub> ) to "0" and next set the interrupt enable bit
		(timer X or CNTRo) to "1" (interrupt enabled).
		•Set ⑤ last.
В	P2-68	Previous change
	(1) Timer X	[Notes on use]
	■ Pulse width measurement	Notes 1: For using interrupt processing, set the following:
	mode	•Before setting ① below, clear the interrupt enable bits
	Fig. 2.3.25	(timer X or CNTR <sub>0</sub> ) and the interrupt request bits (timer
		X or CNTR <sub>0</sub> ) to "0".
		•After setting ⑤ below, set the interrupt enable bits (timer
		X or CNTR <sub>0</sub> ) to "1" (interrupts enabled).
		After change
		[Notes on use]
		Notes 1: For using interrupt processing, set the following:
		•Before timer X stops counting (before setting @ below),
		clear the interrupt enable bit (timer X or CNTR <sub>0</sub> ) to "0".
		•After setting @ below, clear the interrupt request bit (timer
		X or CNTRo) to "0" and next set the interrupt enable bit
		(timer X or CNTR <sub>0</sub> ) to "1" (interrupt enabled).
<u> </u>	P2-70	•Set ⑤ last.
В		Previous change
	(2) Timer Y ■ Timer mode	[Notes on use]  Notes 1: For using interrupt processing, set the following:
	Fig. 2.3.27	•Before setting ① below, clear the timer Y interrupt enable
		bit and the timer Y interrupt request bit to "0".
		•After setting 4 below, set the timer Y interrupt enable bit
		to "1" (interrupts enabled).
		After change
		[Notes on use]
		<b>Notes on user</b> Notes 1: For using interrupt processing, set the following:
		•Before timer Y stops counting (before setting ① below),
		clear the timer Y interrupt enable bit to "0".
		•After setting ③ below, clear the timer Y interrupt request
		bit to "0" and next set the timer Y interrupt enable bit to
		"1" (interrupt enabled).
		•Set @ last.

Rev.	Page	Contents
В	P2-71	Previous change
	(2) Timer Y ■ Period measurement mode Fig. 2.3.28	Notes 1: For using interrupt processing, set the following:  •Before setting ① below, clear the interrupt enable bits (timer Y or CNTR1) and the interrupt request bits (timer Y or CNTR1) to "0".  •After setting ⑤ below, set the interrupt enable bits (timer Y or CNTR1) to "1" (interrupts enabled).  After change  [Notes on use]  Notes 1: For using interrupt processing, set the following:  •Before timer Y stops counting (before setting ② below), clear the interrupt enable bit (timer Y or CNTR1) to "0".  •After setting ④ below, clear the interrupt request bit (timer Y or CNTR1) to "0" and next set the interrupt enable bit (timer Y or CNTR1) to "0" and next set the interrupt enable bit (timer Y or CNTR1) to "1" (interrupt enabled).  •Set ⑤ last.
В	P2-72	Previous change
	(2) Timer Y  Event counter mode Fig. 2.3.29	[Notes on use]
В	P2-73	Previous change
	(2) Timer Y ■ Pulse width HL continuously measurement mode Fig. 2.3.30	[Notes on use]  Notes 1: For using interrupt processing, set the following:  •Before setting ① below, clear the interrupt enable bits (timer Y or CNTR1) and the interrupt request bits (timer Y or CNTR1) to "0".  •After setting ⑤ below, set the interrupt enable bits (timer Y or CNTR1) to "1" (interrupts enabled).  After change
		[Notes on use]  Notes 1: For using interrupt processing, set the following:  •Before timer Y stops counting (before setting ② below), clear the interrupt enable bit (timer Y or CNTR1) to "0".  •After setting ④ below, clear the interrupt request bit (timer Y or CNTR1) to "0" and next set the interrupt enable bit (timer Y or CNTR1) to "1" (interrupt enabled).  •Set ⑤ last.

Rev.		Page	Contents
Α	P2-148		Error
	line 18		■ Interrupt source selection bit
			Note:
			Correct
			(addition)
			Note 2: When an external trigger is selected, an ADT/A-D conversion
			interrupt may occur by switching the interrupt source selection
			bit from "1" to "0" or "0" to "1". Before accepting an interrupt,
			set the interrupt request bit to "0" after disabling interrupts and
			setting the interrupt source selection bit.