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.

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RENESAS TECHNICAL UPDATE

Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan
RenesasTechnology Corp.

Product Category	MPU&MCU		Document No.	TN-H8*-A314A/E	Rev.	1.00
Title	About notes in WDT of H8/38086R Group and H8/38076R Group		Information Category	Technical Notification		
Applicable Product	H8/38076R Group H8/38086R Group	Lot No. All	Reference Document	H8/38076R Group hardware manual (REJ09B0093-0300 Rev.3.00) H8/38086R Group hardware manual (REJ09B0182-0200 Rev.2.00)		

An addition and correction of watchdog timer in standby/watch mode on H8/38086R group and H8/38076R group.

Please refer to following for details

[Before change]

H8/38076R Group hardware manual (Page298 of 620)

H8/38086R Group hardware manual (Page300 of 644)

14.2.1 Timer Control/Status Register WD1 (TCSRWD1)

Bit	Bit Name	Initial Value	R/W	Description
2	WDON	0	R/W	Watchdog Timer On TCWD starts counting up when the WDON bit is set to 1 and halts when the WDON bit is cleared to 0. [Setting condition] When 1 is written to the WDON bit and 0 to the B2WI bit while the TCSRWE bit is 1 [Clearing conditions] • Reset by RES pin • When 0 is written to the WDON bit and 0 to the B2WI bit while the TCSRWE bit is 1

H8/38076R Group hardware manual (Page502 of 620, Page521 of 620)

H8/38086R Group hardware manual (Page518 of 644,Page541 of 644)

Mode	$\overline{\text{RES}}$ Pin	Internal State	Other Pins	LCD Power Supply	Oscillator Pins
Watch mode	Vcc	Only on-chip timers operate, CPU stops On-chip WDT oscillator is off Only time base operates, CPU stops On-chip WDT oscillator is off	V_{CC}	Halted	System clock oscillator: crystal resonator Subclock oscillator: crystal resonator
Standby mode	Vcc	CPU and timers both stop On-chip WDT oscillator is off	V_{CC}	Halted	System clock oscillator:crystal resonator Subclock oscillator: Pin X1 = GND (32KSTOP=0)

[After change]

14.2.1 Timer Control/Status Register WD1 (TCSRWD1)

Bit	Bit Name	Initial Value	R/W	Description
2	WDON	0	R/W	Watchdog Timer On ***1*** TCWD starts counting up when the WDON bit is set to 1 and halts when the WDON bit is cleared to 0. [Setting condition] When 1 is written to the WDON bit and 0 to the B2WI bit while the TCSRWE bit is 1 [Clearing conditions] • Reset by RES pin • When 0 is written to the WDON bit and 0 to the B2WI bit while the TCSRWE bit is 1

Note: Clear WDON bit to 0 if the internal clock is selected (CKS3 bit is 1) , a transition to watch mode or standby mode is made.

H8/38076R Group hardware manual (Page502 of 620, Page521 of 620)

H8/38086R Group hardware manual (Page518 of 644,Page541 of 644)

Mode	$\overline{\text{RES}}$ Pin	Internal State	Other Pins	LCD Power Supply	Oscillator Pins
Watch mode	Vcc	Only on-chip timers operate, CPU stops On-chip WDT oscillator is off Only time base operates, CPU stops On-chip WDT oscillator is off **TCSRWD1(WDON)=0**	V_{CC}	Halted	System clock oscillator: crystal resonator Subclock oscillator: crystal resonator
Standby mode	Vcc	CPU and timers both stop On-chip WDT oscillator is off ***TCSRWD1(WDON)=0***	V_{CC}	Halted	System clock oscillator:crystal resonator Subclock oscillator: Pin X1 = GND (32KSTOP=0)