

RENESAS TECHNICAL UPDATE

1753, Shimonumabe, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8668 Japan
Renesas Electronics Corporation

Product Category	MPU/MCU		Document No.	TN-RX*-A001A/E	Rev.	1.00
Title	RX610 Group Notes on Compare Match Timer (CMT)		Information Category	Technical Notification		
Applicable Product	RX610 Group	Lot No.	Reference Document	RX610 Group Hardware Manual		
		All lots				

Thank you for your consistent patronage of Renesas semiconductor products.

We would like you to inform you of notes on Compare Match Timer (CMT) in the RX610 group.

1. Notes on rewriting Compare Match Timer Control Register (CMCR)

When rewriting to the CMCR competes with generation of the Compare Match, writing to the CMCR is ignored. Therefore, it is necessary to check if data is written correctly by reading the CMCR after writing to the CMCR. If the data is not written correctly, once again the writing should be carried out to the CMCR.

Because the read value of the bit 7 in CMCR is not defined, care should to be taken while comparing it with the written data.

2. Notes on Compare Match Timer Counter (CMCNT) and Compare Match Constant Register (CMCOR)

Do not set the CMCNT and the CMCOR to the same value while the count operation of the CMCNT is stopped.

If the CMCNT and the CMCOR are set to the same value with the CMCNT count operation halted, the Compare Match occurs irrespective of halted count operation. At this time, when the Compare Match interrupt bit (the CMIE bit in CMCR) has been enabled (set to 1), the Compare Match interrupt occurs.

Despite of disabling/enabling of the Compare Match interrupt, if the Compare Match occurs due to matching of the value with the value of the CMCOR, the CMCNT is automatically cleared to 0000h.