

To our customers,

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## Old Company Name in Catalogs and Other Documents

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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.

Renesas Electronics website: <http://www.renesas.com>

April 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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# RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-SH7-A733A/E	Rev.	1.00
Title	SH7720, SH7721 and SH7705 Group Notice on Use of the DMAC Flag Bits		Information Category	Technical Notification		
Applicable Product	SH7720 Group SH7721 Group SH7705 Group	Lot No.	Reference Document	SH7720 Group, SH7721 Group hardware manual Rev.3.00 (REJ09B0033-0300) SH7705 Group hardware manual Rev.2.00 (REJ09B0082-0200)		
		All				

There are usage notes of the DMAC flag bits of SH7720, SH7721 and SH7705 Group .

When reading these following flag bits while they are just setting to 1, the read out value of the corresponding flag is 0, but the internal state of this operation may become same as read out 1. If writing 0 to the corresponding flag after this case, it is equivalent to write 0 after reading the corresponding flag is 1, as a result, the corresponding flag is cleared to 0 unintentionally.

- (1) DMA Channel Control Registers (CHCR\_0 to CHCR\_5) TE bit.
- (2) DMA Operation Register (DMAOR) AE bit and NMIF bit.

When using corresponding flag, not to clear the flag unintentionally, it is necessary to read and write by the following procedure.

When writing register that has the corresponding flags, write 1 to the flag bit except clearing the flag explicitly. Clearing the corresponding flag explicitly, write 0 to the flag bit after reading out 1. Writing 1 to the corresponding bit does not affect the value of the flag.

Note that, when not using corresponding flag, it is no problem to write always 0 (Clearing the corresponding flag explicitly, write 0 to the flag bit after reading out 1).