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.

Date: Nov.04.2008

RENESAS TECHNICAL UPDATE

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

Product Category	MPU&MCU		Document No.	TN-SH7-A689A/E	Rev.	1.00
Title	Notice on Use of SH7785 DMAC Flag Bit		Information Category	Technical Notification		
Applicable Product	SH7785 Group	Lot No. All lots	Reference Document	SH7785 Hardware Manual Rev.1.00 Jan.10.2008 (REJ09B0261-0100)		

The HE, TE, AE and NMIF flags of the SH7785 DMAC have the following note.

[Summary]

As for the half end flag and transfer end flag in channel control register (CHCRm.HE and CHCRn.TE, m=0 to 3, 6 to 9, n=0 to 11) and the address error flag and NMI flag in DMA operation register (DMAOR0/1.AE and DMAOR01.NMIF) in the SH7785 DMAC, when reading these flags 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.

[Workaround]

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).

- End of Text -