

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>

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Renesas Electronics Corporation

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HITACHI SEMICONDUCTOR TECHNICAL UPDATE

Classification of Production	Microprocessor		No	TN-SH7-427A/E	Rev	1
THEME	SH7727B usage notice on SIOF	Classification of Information	1. Spec change 2. Supplement of Documents ③ 3. Limitation of Use 4. Change of Mask 5. Change of Production Line			
PRODUCT NAME	HD6417727B	Lot No.	Reference Documents	SH7727 Hardware Manual Rev.3.0 ADE-602-209B	Effective Date	
		All			Eternity	

HD6417727B's SIOF module has the following usage notice.

- (1) Do not use DMA 16-byte transfer.
(Reference:14.3.4 DMA Transfer Types of SH7727 Hardware Manual)
- (2) When accessing transmit and receive FIFO of SIOF from CPU,
put other access cycles except transmit / receive FIFO of SIOF during
transmit and receive FIFO of SIOF accesses.
Do not access transmit and receive FIFO of SIOF continuously.
- (3) When Transmit/Receive FIFO goes to be underflow condition during
transmit and receive operation, the control circuit of Transmit and
Receive FIFO of SIOF may not work correctly and may lose some data.
Work around :
Set the watermark with considering not to make an underflow condition,
or execute transmit reset (TXRST) or receive reset (RXRST) at the timing
which empty interrupt is requested.
- (4) After transmit/receive operation or incorrect operation and prior to use SIOF
again, execute transmit reset (TXRST) or receive reset (RXRST) .