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)

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RENESAS

RENESAS TECHNICAL UPD

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

Product Category	MPU&MCU		Document No.	TN-SH7-509A/EA	Rev.	1.0
Title	SH7705 an errata on the IrDA function		Information Category	Usage Limitation		
Applicable Product	HD6417705F133, HD6417705BP133 HD6417705F133V, HD6417705BP133V HD6417705F100, HD6417705BP100 HD6417705F100V, HD6417705BP100V	Lot No.	Reference Document	SH7705 Group Hardware Manual Rev. 2.0 REJ09B0082-0200O		
		All				

1. Phenomenon

Receive

When the Serial Communication Interface with FIFO (SCIF) is used for the IrDA, it may not receive data properly.

Send

When the Serial Communication Interface with FIFO (SCIF) is used for the IrDA, it may not send the start bit.

2. Work around

Receive

Please synchronize the IrRx signal with CKIO(Figure 1).

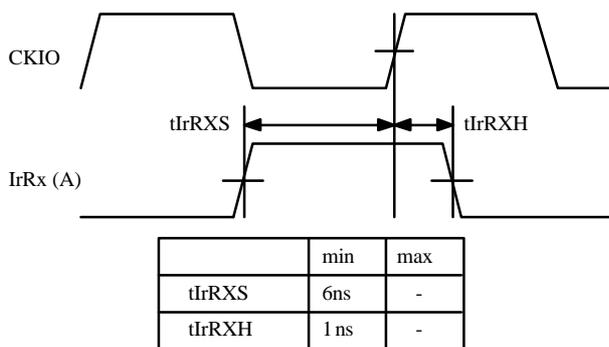Figure 2 shows an example of the circuit. An example of the F/F is HD74ALVC1G79.

	min	max
tIrRXS	6ns	-
tIrRXH	1 ns	-

Figure 1.

When the polarity of the optical receiver is different from the SH IrRx pin, please insert an inserter.
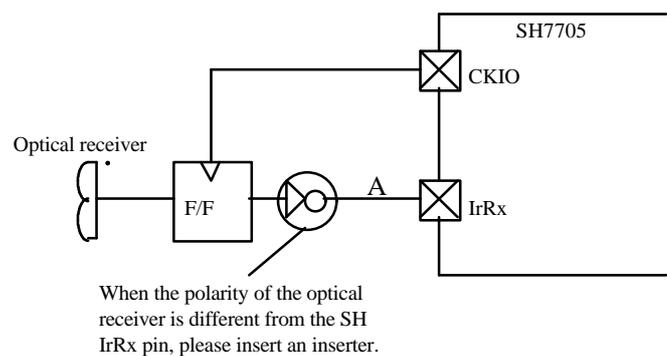
Figure 2.

Send

When there is an error, please re-send data in IrDA upper communication protocol layer.