

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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MSC TECHNICAL NEWS

No. M7700-20-9311

7700 Series Note for Serial I/O Error Flag

1. Related microcomputer

7700 Series

2. Note

<During receiving data in clock synchronous serial I/O and UART>

Receive the next data after reading the receive data from the receive buffer register when receiving data continuously.

Refer to the following figure.

During receiving data in clock synchronous serial I/O and UART, receive status flag*¹ is cleared by reading the contents of the receive buffer register.

*1: Receive completion flag, Overrun error flag, Framing error flag, Parity error flag, Error sum flag; Bit3 - 7 of UART transmit/receive control register

Thus, when receiving data continuously, errors happens not to be found in the following situation which occurs errors; after completing to receive one data (Data A), when receiving the next data (Data B) is completed from checking the receive status flag to reading the receive buffer register (Period T).

Especially, it may happen to deal with the previous data (Data A) as the next data (Data B) by reason of not to find overrun error (in this case the interrupt request is not occurred).

Therefore, receive the next data after reading the receive data from the receive buffer register when receiving data continuously.

