

# RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-SH7-A889A/E	Rev.	1.00
Title	SCI Break Detection and Processing in Asynchronous Mode		Information Category	Technical Notification		
Applicable Product	See below.	Lot No.	Reference Document	See below.		
		All lots				

A part of descriptions of serial communication interface (SCI), for the applicable products listed below, in the section of break detection and processing in asynchronous mode contains unclear description and the description is corrected as shown below.

[Corrections in the User's Manual]

Corrections of the User's Manual are described below using the SH7214 Group, SH7216 Group User's Manual: Hardware as an example.

## 16.7.3 Break Detection and Processing

[Before correction (p.828)]

Break signals can be detected by reading the RXD pin directly when a framing error (FER) is detected. In the break state the input from the RXD pin consists of all 0s, so the FER flag is set and the parity error flag (PER) may also be set. **Note that, although transfer of receive data to SCRDR is halted in the break state, the SCI receiver continues to operate.**

[After correction]

Break signals can be detected by reading the RXD pin directly when a framing error (FER) is detected. In the break state the input from the RXD pin consists of all 0s, so the FER flag is set and the parity error flag (PER) may also be set.

**After a break is received, the SCI halts receive operation. At this time not only transfer of receive data from SCRSR to SCRDR stops; setting in SCRSR of serial data input on the RXD pin stops as well.**

**To restart receive operation, input a high-level signal on the RXD pin, and clear the overrun error (ORER), FER, and PER flags.**

## [Applicable Products and Reference Documents]

Series	Group	Reference Document	Rev.	Ref. No.
<b>SH7080</b>	SH7083, SH7084, SH7085, SH7086	SH7080 Group User's Manual: Hardware	5.00	R01UH0198EJ0500
<b>SH7137</b>	SH7131, SH7132, SH7136, SH7137	SH7137 Group Hardware Manual	3.00	REJ09B0402-0300
<b>SH7146</b>	SH7146, SH7149	SH7146 Group User's Manual: Hardware	4.00	R01UH0049EJ0400
<b>SH7216</b>	SH7214, SH7216	SH7214 Group, SH7216 Group User's Manual: Hardware	4.00	R01UH0230EJ0400
<b>SH7231</b>	SH7231	SH7231 Group User's Manual: Hardware	2.00	R01UH0073EJ0200
<b>SH7239</b>	SH7237, SH7239	SH7239 Group, SH7237 Group User's Manual: Hardware	2.00	R01UH0086EJ0200
<b>SH7243</b>	SH7243	SH7280 Group, SH7243 Group User's Manual: Hardware	3.00	R01UH0229EJ0300
<b>SH7280</b>	SH7285, SH7286	SH7280 Group, SH7243 Group User's Manual: Hardware	3.00	R01UH0229EJ0300
<b>SH/Tiny</b>	SH7124, SH7125	SH7125 Group, SH7124 Group Hardware Manual	5.00	REJ09B0243-0500

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