Date: Aug. 22, 2014

RENESAS TECHNICAL UPDATE

1753, Shimonumabe, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8668 Japan
Renesas Electronics Corporation

Product Category	MPU/MCU		Document No.	TN-SH7-A887A/E	Rev.	1.00
Title	SCIF Break Detection and Processing in Asynchronous Mode		Information Category	Technical Notification		
Applicable Product	See below.	Lot No. All lots	Reference Document	See below.		

A part of descriptions of FIFO internal serial communication interface (SCIF), for the applicable products listed below, in the section of break detection and processing and usage notes contains unclear description and the description is corrected as shown below.

[Corrections in 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.

17.6.4 Break Detection and Processing

[Before Correction (p.893)]

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 SCFRDR is halted in the break state, the SCIF receiver continues to operate.

[After Correction (p.893)]

When data containing a framing error is received and then space 0 (low level) is input for more than one frame length, a break (BRK) is detected. When a break is detected, not only the transfer of receive data (H'00) to SCFRDR but also the setting in SCRSR of serial data input on the RXD pin is stopped. If the RIE or REIE bit in SCSCR is set to 1, a break interrupt request (BRI) is issued. Reception resumes when the break ends and the receive signal is mark 1 (high level).

It is also possible to perform break detection by reading the value of 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.

[Applicable Products and Reference Documents]

Series	Group	Reference Document	Rev.	Ref. No.
SH7200	SH7201	SH7201 Group User's Manual: Hardware	3.00	R01UH0026EJ0300
	SH7203	SH7203 Group User's Manual: Hardware	4.00	R01UH0458EJ0400
	SH7205	SH7205 Group Hardware Manual	2.00	REJ09B0372-0200
	SH7206	SH7206 Group User's Manual: Hardware	4.00	R01UH0283EJ0400
SH7210	SH7211	SH7211 Group Hardware Manual	3.00	REJ09B0344-0300
SH7216	SH7214, SH7216	SH7214 Group, SH7216 Group User's Manual: Hardware	4.00	R01UH0230EJ0400
SH7231	SH7231	SH7231 Group User's Manual: Hardware	2.00	R01UH0073EJ0200
SH7239	SH7237, SH7239	SH7239 Group, SH7237 Group User's Manual: Hardware	2.00	R01UH0086EJ0200
SH7243	SH7243	SH7280 Group, SH7243 Group User's Manual: Hardware	3.00	R01UH0229EJ0300
SH7260	SH7261	SH7261 Group User's Manual: Hardware	3.00	R01UH0025EJ0300
	SH7262, SH7264	SH7262 Group, SH7264 Group User's Manual: Hardware	3.00	R01UH0134EJ0300
	SH7263	SH7263 Group User's Manual: Hardware	4.00	R01UH0459EJ0400
	SH7265	SH7265 Group Hardware Manual	2.00	REJ09B0351-0200
	SH7266, SH7267	SH7266 Group, SH7267 Group User's Manual: Hardware	2.00	R01UH0412EJ0200
	SH7268, SH7269	SH7268 Group, SH7269 Group User's Manual: Hardware	2.00	R01UH0048EJ0200
	SH726A, SH726B	SH726A Group, SH726B Group User's Manual: Hardware	1.00	R01UH0202EJ0100
SH7280	SH7285, SH7286	SH7280 Group, SH7243 Group User's Manual: Hardware	3.00	R01UH0229EJ0300
SH7450	SH7450, SH7451	SH7450 Group, SH7451 Group User's Manual: Hardware	1.10	R01UH0286EJ0110
	SH7455, SH7456	SH7455 Group, SH7456 Group User's Manual: Hardware	1.10	R01UH0030EJ0110
	SH7457, SH7459	SH7457 Group, SH7459 Group User's Manual: Hardware	1.20	R01UH0420EJ0120
SH-Ether	SH7670	SH7670 Group User's Manual: Hardware	3.00	R01UH0234EJ0300

End of Document