

RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-SH7-873A/E	Rev.	1.00
Title	Note on Serial Communication Interface with FIFO A(SCIFA) in SH7730 Group		Information Category	Technical Notification		
Applicable Product	SH7730 Group	Lot No.	Reference Document	SH7730 Group User's Manual: Hardware (R01UH0346EJ0400) Rev.4.00		
		All				

There is following usage note of the Serial Communication Interface with FIFO A(SCIFA) in the SH7730 Group.

1.Summary

When using the SCIFA in the SH7730 Group, if satisfying the following all conditions , the receive data may not be received normally.

[Conditions]

- (1) Asynchronous mode (When setting of the Communication Mode bit(CA) to B'0 in Serial Mode Register (SCASMR))
- (2) Sampling rate 1/5 (When setting of the Sampling Control bits (SRC[2:0]) to B'001 in Serial Mode Register (SCASMR))
- (3) When the receive data is input before the idle state. An idle state is that the SCIFA is in a condition awaiting the start bit of receive data.

2.Workaround

Use the SCIFA in the state of one of the following.

- Sampling rate needs to set other than 1/5.
- When using the asynchronous mode and sampling rate 1/5, it is necessary to wait for transmission from the transmitter device at least 1 serial data period (1 bit time × the number of serial data) after setting of the Receive Enable bit(RE) to B'1 in Serial Control Register (SCASCR) .