

To our customers,

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## Old Company Name in Catalogs and Other Documents

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On April 1<sup>st</sup>, 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 1<sup>st</sup>, 2010  
Renesas Electronics Corporation

Issued by: Renesas Electronics Corporation (<http://www.renesas.com>)

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# RENESAS TECHNICAL UPDATE

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Renesas Technology Corp.

Product Category	MPU&MCU		Document No.	TN-H8*-A343A/E	Rev.	1.00
Title	H8SX/1520R Group: Change of Electrical Characteristics and Error Correction in the Hardware Manual		Information Category	Technical Notification		
Applicable Product	See below.	Lot No.	Reference Document	See below.		
		All lots				

Thank you for your consistent patronage of Renesas semiconductor products.

We would like to inform you of the error correction in the synchronous serial communication unit (SSU) and the change of electrical characteristics in the H8SX/1520R Group.

[Contents]

1. Error correction in section 14, Synchronous Serial Communication Unit (SSU)
2. Change in section 21, Electrical Characteristics

[Applicable Products and Related Document]

**Applicable Products**

Series	Group	Related Document
H8SX/1500 Series	H8SX/1520R	H8SX/1520R Group Hardware Manual (REJ09B0282-0100 Rev. 1.00)

1. Error correction in section 14, Synchronous Serial Communication Unit (SSU)

Section 14.3 Register Descriptions

14.3.7 SS Transmit Data Registers 0 to 3 (SSTDR0 to SSTDR3)

The description in table 14.2, Correspondence Between DATS Bit Setting and SSTDR, is corrected as shown below.

[Before change]

Table 14.2 Correspondence Between DATS Bit Setting and SSTDR

SSTDR	DATS[1:0] (SSCRL[1:0])			
	00	01	10	11 (Setting Invalid)
0	Valid	Valid	Valid	Valid
1	Invalid	Valid	Valid	Valid
2	Invalid	Invalid	Valid	Valid
3	Invalid	Invalid	Valid	Invalid

[After change]

Table 14.2 Correspondence Between DATS Bit Setting and SSTDR

SSTDR	DATS[1:0] (SSCRL[1:0])			
	00	01	10	11
0	Valid	Valid	Valid	Valid
1	Invalid	Valid	Valid	Valid
2	Invalid	Invalid	Valid	Valid
3	Invalid	Invalid	Valid	Invalid

14.3.8 SS Receive Data Registers 0 to 3 (SSRDR0 to SSRDR3)

The description in table 14.3, Correspondence Between DATS Bit Setting and SSRDR, is corrected as shown below.

[Before change]

Table 14.3 Correspondence Between DATS Bit Setting and SSRDR

SSRDR	DATS[1:0] (SSCRL[1:0])			
	00	01	10	11 (Setting Invalid)
0	Valid	Valid	Valid	Valid
1	Invalid	Valid	Valid	Valid
2	Invalid	Invalid	Valid	Valid
3	Invalid	Invalid	Valid	Invalid

[After change]

Table 14.3 Correspondence Between DATS Bit Setting and SSRDR

SSRDR	DATS[1:0] (SSCRL[1:0])			
	00	01	10	11
0	Valid	Valid	Valid	Valid
1	Invalid	Valid	Valid	Valid
2	Invalid	Invalid	Valid	Valid
3	Invalid	Invalid	Valid	Invalid

2. Change in section 21, Electrical Characteristics

Section 21 Electrical Characteristics

21.2 DC Characteristics

Table 21.2 DC Characteristics (2)

[Before change]

Item	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Current Consumption*2	Standby mode*3 $I_{CC}^{*4}$	—	50	300	mA	$T_a \leq 50^\circ\text{C}$
		—	—	1		$50^\circ\text{C} < T_a$

[After change]

Item	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Current consumption*2	Standby mode*3 $I_{CC}^{*4}$	—	50	500	$\mu\text{A}$	$T_a \leq 50^\circ\text{C}$
		—	—	1.5	mA	$50^\circ\text{C} < T_a$