

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*-A349A/E	Rev.	1.00
Title	The error Correction about H8S/2378 series		Information Category	Technical Notification		
Applicable Product	H8S/2378 group, H8S/2378R group	Lot No.	Reference Document	H8S/2378 group, H8S/2378R group Hardware Manual (REJ09B0109-0600 Rev.6.00)		
		All				

Thank you for your consistent patronage of Renesas semiconductor products.

We would like to inform you of the following corrections of SCI in the H8S/2378 Group and H8S/2378R Group Hardware Manual.

## 1. Table15.3 BBR Settings for Various Bit Rates(Asynchronous Mode)

Bit Rate (bit/s)	Operating Frequency $\phi$ (MHz)											
	8			9.8304			10			12		
	n	N	Error (%)	n	N	Error (%)	n	N	Error (%)	n	N	Error (%)
110	2	141	0.03	2	174	-0.26	2	177	-0.25	2	212	0.03
150	2	103	0.16	2	127	0.00	2	129	0.16	2	155	0.16
300	1	207	0.16	1	255	0.00	2	64	0.16	2	77	0.16
600	1	103	0.16	1	127	0.00	1	129	0.16	1	155	0.16
1200	0	207	0.16	0	255	0.00	1	64	0.16	1	77	0.16
2400	0	103	0.16	0	127	0.00	0	129	0.16	0	155	0.16
4800	0	51	0.16	0	63	0.00	0	64	0.16	0	77	0.16
9600	0	25	0.16	0	31	0.00	0	32	<del>-1.36</del>	-1.36	3	0.16
19200	0	12	0.16	0	15	0.00	0	15	<del>-1.70</del>	1.73	9	<del>-2.40</del>
31250	0	7	0.00	0	9	<del>-1.73</del>	-1.70	0.00			1	0.00
38400	—	—	—	0	7	0.00	0	7	<del>-1.70</del>	1.73	9	<del>-2.40</del>

Bit Rate (bit/s)	Operating Frequency $\phi$ (MHz)											
	12.288			14			14.7456			16		
	n	N	Error (%)	n	N	Error (%)	n	N	Error (%)	n	N	Error (%)
110	2	217	0.08	2	248	-0.17	3	64	0.69	3	70	0.03
150	2	159	0.00	2	181	0.16	2	191	0.00	2	207	0.16
300	2	79	0.00	2	90	0.16	2	95	0.00	2	103	0.16
600	1	159	0.00	1	181	0.16	1	191	0.00	1	207	0.16
1200	1	79	0.00	1	90	0.16	1	95	0.00	1	103	0.16
2400	0	159	0.00	0	181	0.16	0	191	0.00	0	207	0.16
4800	0	79	0.00	0	90	0.16	-	-	0.00	0	103	0.16
9600	0	39	0.00	0	45	-0.94	-0.93	-	0.00	0	51	0.16
19200	0	19	0.00	0	22	-0.94	-0.93	-	0.00	0	25	0.16
31250	0	11	-2.34	2.40	13	0.00	0	14	-1.73	-1.70	0.00	0.00
38400	0	9	0.00	-	-	-	0	11	0.00	0	13	0.16

Operating Frequency $f$ (MHz)												
17.2032				18			19.6608			20		
Bit Rate (bit/s)	n	N	Error (%)	n	N	Error (%)	n	N	Error (%)	n	N	Error (%)
110	3	75	0.48	3	79	-0.12	3	86	0.31	3	88	-0.25
150	2	223	0.00	2	233	0.16	2	255	0.00	3	64	0.16
300	2	111	0.00	2	116	0.16	2	127	0.00	2	129	0.16
600	1	223	0.00	1	233	0.16	1	255	0.00	2	64	0.16
1200	1	111	0.00	1	116	0.16	1	127	0.00	1	129	0.16
2400	0	223	0.00	0	233	0.16	0	255	0.00	1	64	0.16
4800	0	111	0.00	0	116	0.16	0	127	0.00	0	129	0.16
9600	0	55	0.00	0	58	-0.69	0	63	0.00	0	64	0.16
19200	0	27	0.00	0	28	<del>-1.01</del> 1.02	0	31	0.00	0	32	<del>-1.38</del> -1.36
31250	0	16	1.20	0	17	0.00	0	19	<del>-1.73</del> -1.70	0	19	0.00
38400	0	13	0.00	0	14	<del>-2.46</del> -2.34	0	15	0.00	0	15	<del>-1.70</del> 1.73

Operating Frequency $f$ (MHz)												
25				30			33			34 <sup>*1</sup>		
Bit Rate (bit/s)	n	N	Error (%)	n	N	Error (%)	n	N	Error (%)	n	N	Error (%)
110	3	110	-0.02	3	132	0.13	3	145	0.33	3	150	-0.05
150	3	80	0.47	3	97	-0.35	3	106	0.39	3	110	-0.29
300	2	162	-0.15	2	194	0.16	2	214	-0.07	2	220	0.16
600	2	80	0.47	2	97	-0.35	2	106	0.39	2	110	-0.29
1200	1	162	-0.15	1	194	0.16	1	214	-0.07	1	220	0.16
2400	1	80	0.47	1	97	-0.35	1	106	0.39	1	110	-0.29
4800	0	162	-0.15	0	194	0.16	0	214	-0.07	0	220	0.16
9600	0	80	0.47	0	97	-0.35	0	106	0.39	0	110	-0.29
19200	0	40	-0.76	0	48	-0.35	0	53	-0.54	0	54	<del>-0.61</del> 0.62
31250	0	24	0.00	0	29	0.00	0	32	0.00	0	33	0.00
38400	0	19	<del>-1.70</del> -1.73	0	23	1.70	0	26	-0.54	0	27	<del>-1.20</del> -1.18

Operating Frequency $\phi$ (MHz)			
$35^{+2}$			
Bit Rate (bit/s)	n	N	Error (%)
110	3	154	0.23
150	3	113	-0.06
300	2	227	-0.06
600	2	113	-0.06
1200	1	227	-0.06
2400	1	113	-0.06
4800	0	227	-0.06
9600	0	113	-0.06
19200	0	56	-0.06
31250	0	34	0.00
38400	0	27	<del>-1.76</del> 1.73

- Notes: 1. Supported on the H8S/2378 0.18 $\mu$ m F-ZTAT Group and H8S/2378R 0.18 $\mu$ m F-ZTAT Group only.  
2. Supported on the H8S/2378 only.