

To our customers,

Old Company Name in Catalogs and Other Documents

On April 1st, 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>

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Renesas Electronics Corporation

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

Send any inquiries to <http://www.renesas.com/inquiry>.

RENESAS TECHNICAL UPDATE

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Product Category	MPU&MCU		Document No.	TN-H8*-A300A/E	Rev.	1.0
Title	Usage Notes on I ² C Bus Interface 2 (IIC2)		Information Category	Technical Notification		
Applicable Product	See below	Lot No.	Reference Document	See below		
		All				

We would like to inform you of usage notes on the I²C bus interface 2 (IIC2) included in the following products.

[Usage Notes]

(1) Issue (retransmit) the start/stop conditions after the fall of the ninth clock is confirmed.

Check SCLO in the I²C control register 2 (IICR2)* to confirm the fall of the ninth clock.

When the start/stop conditions are issued (retransmitted) at the specific timing under the following condition (i) or (ii), such conditions may not be output successfully. This does not occur in other cases.

(i) When the rising of SCL falls behind the time specified in section xx.6, Bit Synchronous Circuit, by the load of the SCL bus (load capacitance or pull-up resistance)

(ii) When the bit synchronous circuit is activated by extending the low period of eighth and ninth clocks, that is driven by the slave device

(2) Control WAIT in the I²C bus mode register (ICMR) to be set to 0.

When WAIT is set to 1, and SCL is driven low for two or more transfer clocks by the slave device at the eighth and ninth clocks, the high period of ninth clock may be shortened. This does not occur in other cases.

Note: * This applies to the I²C control register B (ICCRB) in the H8S/2378, H8S/2378R, and H8S/2368 Groups.

[Products and Related Documents]

Products		Related Documents
Series	Group	
H8/300H Tiny Series	H8/3687	H8/3687 Group Hardware Manual (REJ09B0027-0400Z Rev.4.00)
	H8/3694	H8/3694 Group Hardware Manual (REJ09B0028-0400Z Rev.4.00)
	H8/36049	H8/36049 Group Hardware Manual (REJ09B0060-0200Z Rev.2.00)
	H8/36912	H8/36912 Group, H8/36902 Group Hardware Manual (REJ09B0105-0200Z Rev.2.00)
	H8/36064	H8/36064 Group Hardware Manual (REJ09B0068-0100Z Rev1.00)
	H8/36087	H8/36087 Group Hardware Manual (REJ09B0160-0100Z Rev.1.00)
H8/300H Super Low Power Series	H8/38076R	H8/38076R Group Hardware Manual (REJ09B0093-0200Z Rev.2.00)
	H8/38086R	H8/38086R Group Hardware Manual (REJ09B0182-0100Z Rev.1.00)
	H8/38602	H8/38602 Group Hardware Manual (REJ09B0152-0100Z Rev.1.00)
H8S Family	H8S/2378*, H8S/2378R*	H8S/2378 Group, H8S/2378R Group Hardware Manual (REJ09B0109-0400O Rev.4.00)
	H8S/2368*	H8S/2368 Group, H8S/2368F-ZTAT Group Hardware Manual (REJ09B0050-0300O Rev.3.00)
	H8S/2556, H8S/2552, H8S/2506	H8S/2556, H8S/2552, H8S/2506 Group Hardware Manual (REJ09B0099)

Note: * Optional