

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

Nippon Bldg., 2-6-2, Ohte-machi, Chiyoda-ku, Tokyo 100-0004, Japan  
Renesas Technology Corp.

Product Category	MPU&MCU		Document No.	TN-H8*-A315A/E	Rev.	1.00
Title	Usage Note Updates for the H8/38327 Group, H8/38427 Group, H8/38347 Group, and H8/38447 Group		Information Category	Technical Notification		
Applicable Product	H8/38327 Group mask-ROM version H8/38427 Group mask-ROM version H8/38347 Group mask-ROM version H8/38447 Group mask-ROM version	Lot No.	Reference Document	H8/38 327 Group, H8/38427 Group Hardware Manual (REJ09B0144-0500) H8/38 347 Group, H8/38447 Group Hardware Manual (REJ09B0145-0500)		
		All				

We would like to inform you of usage note updates for the mask-ROM versions of the H8/38327 Group, H8/38427 Group, H8/38347 Group, and H8/38447 Group.

### Usage Note of Subactive mode:

When  $\phi_w/8$  is selected in subactive mode, the LSI power consumption may be increased at high temperature. Use of  $\phi_w/2$  and  $\phi_w/4$  are recommended as the CPU clock rate in subactive mode.

### Electrical Characteristics:

H8/38 327 Group, H8/38427 Group Hardware Manual (Referring to Section 15.8.2, DC Characteristics, Table 15.23)

H8/38 347 Group, H8/38447 Group Hardware Manual (Referring to Section 15.8.2, DC Characteristics, Table 15.26)

#### · Before Changes

Item	Symbol	Applicable Pins	Values			Unit	Test Condition	Notes
			Min.	Typ.	Max.			
Subactive mode current consumption	I <sub>SUB</sub>	V <sub>CC</sub>	-	12	-	μA	V <sub>CC</sub> =2.7V, LCD on, 32-kHz crystal resonator used ( $\phi_{SUB} = \phi_w/8$ )	Reference value
			-	18	50			

#### · After Changes

Item	Symbol	Applicable Pins	Values			Unit	Test Condition	Notes
			Min.	Typ.	Max.			
Subactive mode current consumption	I <sub>SUB</sub>	V <sub>CC</sub>	-	12	<b>50</b>	μA	V <sub>CC</sub> =2.7V, LCD on, 32-kHz crystal resonator used ( $\phi_{SUB} = \phi_w/8$ )	<b>Ta=25°C</b> , Reference value
			-	12	<b>200</b>			<b>Ta=85°C</b> , Reference value
			-	18	50			V <sub>CC</sub> =2.7V, LCD on, 32-kHz crystal resonator used ( $\phi_{SUB} = \phi_w/2$ )