

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>

April 1st, 2010
Renesas Electronics Corporation

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

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

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*-A370A/E	Rev.	1.00
Title	Delta sigma A/D converter Analog power supply current		Information Category	Technical Notification		
Applicable Product	H8/38086R Group	Lot No.	Reference Document	H8/38086R Group Hardware manual (REJ09B0182-0300)		
		All				

Delta sigma A/D converter Analog power supply current of the H8/38086R group hardware manual is corrected.

Please refer to the following for details.

[Before change]

H8/38086R Group Hardware manual (Page 519 of 616)

Table 25.7 $\Delta\Sigma$ A/D Converter Characteristics

Item	Symbol	Applicable Pins	Test Condition	Values			Unit	Notes
				Min.	Typ.	Max.		
Analog power supply current	Dlope	DVcc	PGA not used, BGR=OFF, DVcc=3.0V, Fovs=2.0MHz	-	2.0	-	mA	Reference value
	Dlstop1	DVcc		-	0.1	-	μ A	*2 Reference value
	Dlstop2	DVcc		-	0.1	-	μ A	*3 Reference value

Notes: 2. Dlstop1 is the current in active and sleep modes while the $\Delta\Sigma$ A/D converter is idle.

3. Dlstop2 is the current at a reset and in standby, watch, subactive, and subsleep modes while the $\Delta\Sigma$ A/D converter is idle.

[After change]

H8/38086R Group Hardware manual (Page 519 of 616)

Table 25.7 $\Delta\Sigma$ A/D Converter Characteristics

Item	Symbol	Applicable Pins	Test Condition	Values			Unit	Notes
				Min.	Typ.	Max.		
Analog power supply current	Dlope	DVcc	PGA not used, BGR=OFF, DVcc=3.0V, Fovs=2.0MHz	-	2.0	-	mA	Reference value
	Dlstop1	DVcc		-	1.8	-	mA	*2*8 Reference value
	Dlstop2	DVcc		-	0.1	-	μ A	*3*8 Reference value
	DIRESET	DVcc	RES=GND	-	2.7	-	mA	Reference value

Notes: 2. Dlstop1 is the current in active and sleep modes while the $\Delta\Sigma$ A/D converter is idle.

3. Dlstop2 is the current in standby, watch, subactive, and subsleep modes while the $\Delta\Sigma$ A/D converter is idle.

8. VREF1 and 0 bits in the ADCR is set to B'00.

[Before change]

H8/38086R Group Hardware manual (Page 543 of 616)

Table 25.18 $\Delta\Sigma$ /D Converter Characteristics

Item	Symbol	Applicable Pins	Test Condition	Values			Unit	Notes
				Min.	Typ.	Max.		
Analog power supply current	Dlope	DVcc	PGA not used, BGR=OFF, DVcc=3.0V, Fovs=2.0MHz	-	2.0	-	mA	Reference value
	Dlstop1	DVcc		-	0.1	-	μ A	*2 Reference value
	Dlstop2	DVcc		-	0.1	-	μ A	*3 Reference value

Notes: 2. Dlstop1 is the current in active and sleep modes while the $\Delta\Sigma$ /D converter is idle.

3. Dlstop2 is the current at a reset and in standby, watch, subactive, and subsleep modes while the $\Delta\Sigma$ /D converter is idle.

[After change]

H8/38086R Group Hardware manual (Page 543 of 616)

Table 25.18 $\Delta\Sigma$ /D Converter Characteristics

Item	Symbol	Applicable Pins	Test Condition	Values			Unit	Notes
				Min.	Typ.	Max.		
Analog power supply current	Dlope	DVcc	PGA not used, BGR=OFF, DVcc=3.0V, Fovs=2.0MHz	-	2.0	-	mA	Reference value
	Dlstop1	DVcc		-	1.8	-	mA	*2*8 Reference value
	Dlstop2	DVcc		-	0.1	-	μ A	*3*8 Reference value
	DIRESET	DVcc		-	2.7	-	mA	Reference value

Notes: 2. Dlstop1 is the current in active and sleep modes while the $\Delta\Sigma$ /D converter is idle.

3. Dlstop2 is the current in standby, watch, subactive, and subsleep modes while the $\Delta\Sigma$ /D converter is idle.

8. VREF1 and 0 bits in the ADCR is set to B'00.