

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

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RENESAS TECHNICAL UPDATE

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Product Category	MPU&MCU		Document No.	TN-H8*-A322A/E	Rev.	1.00
Title	About the 3-V Constant-Voltage Power Supply Circuit		Information Category	Technical Notification		
Applicable Product	H8/38086R Group H8/38076R Group	Lot No.	Reference Document	H8/38086R Group Hardware manual (REJ09B0182-0200 Rev.2.00) H8/38076R Group Hardware manual (REJ09B0093-0300 Rev.3.00)		
		All				

An addition of 3-V Constant-Voltage Power Supply Circuit Usage note on H8/38086R group and H8/38076R group. Please refer to following for details.

1, H8/38086R Group Hardware manual Page 431.

Note:2. Setting of LTRMR and BGRMR

The standard of the voltage after it trims becomes the following.

V1 Initial state output voltage : A
LTRMR ResisterTRM3 to 0 : B
LTRMR Resister CTRM2 to 0 : C
BGRMR Resister BTRM2 to 0 : D

$V1 \text{ Output voltage} = A+B+C+3*D/1.2$
 $V2 \text{ Output voltage} = (A+B+C+3*D/1.2)*2/3$
 $V3 \text{ Output voltage} = (A+B+C+3*D/1.2)/3$

Please set A, B, C, and D so that the V1 voltage may become 3-V.

Note:3. Please use the specification of both functions BGR control register (BGRMR) is 3V sharing the fixed voltage power supply circuit adjustment with the REF output adjustment of $\Sigma\Delta A/D$ converter by a setting condition that finishes being satisfactory.

2, H8/38076R Group Hardware manual Page 414.

Note:2. Setting of LTRMR

The standard of the voltage after it trims becomes the following.

V1 Initial state output voltage : A
LTRMR ResisterTRM3 to 0 : B
LTRMR Resister CTRM2 to 0 : C

$V1 \text{ Output voltage} = A+B+C$
 $V2 \text{ Output voltage} = (A+B+C)*2/3$
 $V3 \text{ Output voltage} = (A+B+C)/3$

Please set A, B, and C so that the V1 voltage may become 3-V.

3. H8/38086R Group Hardware manual Page 440.

Note: 4. The output voltage in the initial state is different in an individual device according to the manufacturing difference.
Please set and adjust LCD trim ming register (LTRMR) and BGR control register (BGRMR) of each individual device.

4. H8/38076R Group Hardware manual Page 424.

Note: 4. The output voltage in the initial state is different in an individual device according to the manufacturing difference.
Please set and adjust LCD trim ming register (LTRMR) of each individual device.