

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>

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Renesas Electronics Corporation

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

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# HITACHI SEMICONDUCTOR TECHNICAL UPDATE

Classification of Production	Development Environment		No	TN-OS*-061A/E	Rev	1
THEME	HI7000/4 Bugs regarding cyclic handler and ref_alm	Classification of Information	1. Spec change 2. Supplement of Documents ③. Limitation of Use 4. Change of Mask 5. Change of Production Line			
PRODUCT NAME	HS0700ITI41SRE, HS0700ITI41SRB, HS0700ITI41SRS, HS0700ITI41SRE-E, HS0700ITI41SRB-E, HS0700ITI41SRS-E	Lot No.  V1.0Cr1	Reference Documents	HI7000/4 series User's Manual ADE-702-248 (Rev.1.0)		Effective Date  Forever

The HI7000/4 includes following bugs.

We will revise the bugs by the end of this November. And we will announce when the revision will be completed.

1. When using SH-1, undefined instruction exception occurs in the kernel when execution of cyclic handler is completed.

#### 1.1 Generation Conditions

(1) Microcomputers : SH-1(SH7020 series, SH7030 series)

(2) Cyclic handler function is used.

#### 1.2 Countermeasure

Please examine whether it is possible to substitute it by the alarm handler when it wants to do periodic processing. For example, the alarm handler can be periodically started by doing ista\_alm from the alarm handler to oneself.

2. The "lefttim" which is returned by ref\_alm and iref\_alm may be illegal.

#### 2.1 Generation Conditions

(1) Six or more alarm handlers are used.

(2) There are five or more alarm handlers which will be started before the target alarm handler at issuing ref\_alm or iref\_alm.

#### 2.2 Countermeasure

If using six or more alarm handlers, the "lefttim" which is returned by ref\_alm and iref\_alm should not be used.

If using "lefttim", the number of alarm handlers should be five or less.

#### 2.3 Remark

The alarm handlers are executed correctly.