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)

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RENESAS

HITACHI SEMICONDUCTOR TECHNICAL UPDATE

Classification of Production	MCU&MPU			No	TN-SH7-408A/E	Rev	1
THEME	Countermeasure for SH7616 limitation on use of SH7616 debugger		Classification of Information	① 1. Spec change 2. Supplement of Documents 3. Limitation of Use 4. Change of Mask 5. Change of Production Line			
PRODUCT NAME	HD6417616RF	Lot No. ALL	Reference Documents	SH7616 Hardware manual (ADE-602-243)Rev.1.0		Effective Date Permanent	

Regarding limitation below on use of SH7616 debugger (e.g.E10A), which have been reported by
HITACHI MICROCOMPUTER TECHNICAL UPDATEs (No.TN-SH7-389A/E, TN-SH7-392A/E),
we have fixed the limitation with metal change and changed the product mark code.

<Limitation>

1.On use of SH7616 debugger, there are cases that SH7616 hangs up or can not read right data
from memories and registers when the debugger handles SH7616.
On use of SH7616 debugger, frequency of Iø(internal clock) must be less than or equal to 50MHz.

2.When you debug SH7616 with "02xx" code by SH7616 debugger, there is a limitation regarding
frequency of Iø(internal clock), circumstance temperature(Ta) and power supply voltage(Vcc).

<Countermeasure>

1.We fix the limitation above with metal change.

2.We change the product mark code as below.

HD6417616F → HD6417616RF

3.HD6417616RF will be mass-produced from May.2002.