Date: April. 5, 2012

RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU	Document No.	TN-SH7-A841A/E	1.00		
Title	Notes on SH725x User's Manual	Information Category	Technical Notification			
		Lot No.				
Applicable Product	See below.	All Lots	Reference Document	See below.		

This document describes modifications in ROM section in each SH725x user's manual. The applicable products are listed at the end of this document.

[Applicable Registers]

- (1) ROM MAT select register (ROMMAT)
- (2) Flash P/E Mode Entry Register (FENTRYR) *EEPROM excluded

Please refer to following statements for details of modifications in each register.

(1) ROMMAT register

Following notes will be added to ROMMAT register description in user's manuals.

When switching MAT by changing ROMMAT register setting, write to ROMMAT register and execute a minimum of 5 NOP instructions after performing a dummy read of ROMMAT register.

Following notes will be added to ROMMAT register description in user's manuals, and description for notes on user MAT/boot MAT switch.

When switching user MAT/ boot MAT by changing ROMMAT register setting, write to ROMMAT register and execute a minimum of 5 NOP instructions after performing a dummy read of ROMMAT register.



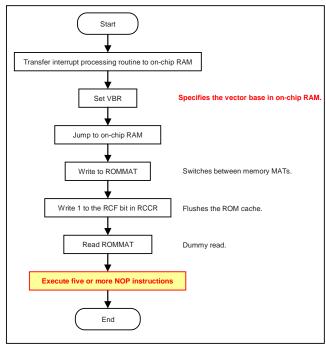
Following figures show modifications in MAT switching procedures.

Before modification

Transfer interrupt processing routine to on-chip RAM Set VBR Jump to on-chip RAM Specifies the vector base in on-chip RAM. Write to ROMMAT Switches between memory MATs. Write 1 to the RCF bit in RCCR Flushes the ROM cache. Dummy read.

Example of MAT Switching Steps

After modification



Example of MAT Switching Steps

* Notes and figures on switching user MAT/ boot MAT are already being modified for user's manuals of applicable products and SH72531, SH72533, SH7254R user's manuals.

(2) FENTRYR register

Following notes are to be added to FENTRYR register description in user's manual ROM section, ROM read mode description in FCU command acceptable condition, and other notes in the manual.

When transiting to ROM read mode by changing FENTRYn bit in FENTRYR register from 1 to 0, write 0 to FENTRYn bit and execute a minimum of 5 NOP instructions after performing a dummy read of FENTRYR register.

n: Relation between bits and products are shown below.

n = 0, 1 SH72533, SH7254R (SH72543R)

n = 0, 3 SH72531

n = 0, 1, 3, 4 SH7254R (SH72544R)

 $n = 0 \sim 5$ SH72546R $n = 0 \sim 6$ SH7256

[Applicable Products and Reference Documents]

Series	Group	Reference Documents	Rev.	Document No.
SH7250	SH72531	SH72531 User's Manual: Hardware		R01UH0267EJ0200
	SH72533	SH72533 User's Manual: Hardware	1.00	R01UH0304EJ0100
	SH7254R	SH7254R Group User's Manual: Hardware	3.00	R01UH0306EJ0300
	SH7256	SH7256 Group User's Manual: Hardware	1.00	REJ09B0475-0100
	SH72546R	SH72546R User's Manual: Hardware	1.00	R01UH0235EJ0100