

RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-SY*-A0061A/E	Rev.	1.00
Title	S128 MCU Group, S1JA MCU Group, S3A1 MCU Group, S3A3 MCU Group, S3A6 MCU Group, S3A7 MCU Group, S5D3 MCU Group, S5D5 MCU Group, S5D9 MCU Group, Note on ALeRASE command		Information Category	Technical Notification		
Applicable Product	Renesas Synergy™ S128 MCU Group Renesas Synergy™ S1JA MCU Group Renesas Synergy™ S3A1 MCU Group Renesas Synergy™ S3A3 MCU Group Renesas Synergy™ S3A6 MCU Group Renesas Synergy™ S3A7 MCU Group Renesas Synergy™ S5D3 MCU Group Renesas Synergy™ S5D5 MCU Group Renesas Synergy™ S5D9 MCU Group	Lot No.	Reference Document	S128 Microcontroller Group User's Manual Rev.1.10 S1JA Microcontroller Group User's Manual Rev.1.40 S3A1 Microcontroller Group User's Manual Rev.1.20 S3A3 Microcontroller Group User's Manual Rev.1.10 S3A6 Microcontroller Group User's Manual Rev.1.20 S3A7 Microcontroller Group User's Manual Rev.1.40 S5D3 Microcontroller Group User's Manual Rev.1.10 S5D5 Microcontroller Group User's Manual Rev.1.30 S5D9 Microcontroller Group User's Manual Rev.1.30		
		All				

This technical update provides a cautionary note regarding ALeRASE command operation.

1. Note

An emulator connection will be refused when OSIS bit [127] is set as 0 however the ALeRASE command will be accepted. When the ALeRASE command is executed, the User memory region and Option memory region are erased. The OSIS register value is also erased, so that the emulator can be connected again.

2. Countermeasures

When OSIS bit [127]=0, disabling acceptance of the ALeRASE command needs some additional settings as below.

User can select between two equivalent workarounds.

- A) Setting SECMPUAC (when boot swap is set, the address of SECMPAC shifts by 2000h.)
 - Please set data as 0xFEFF at SECMPUAC.

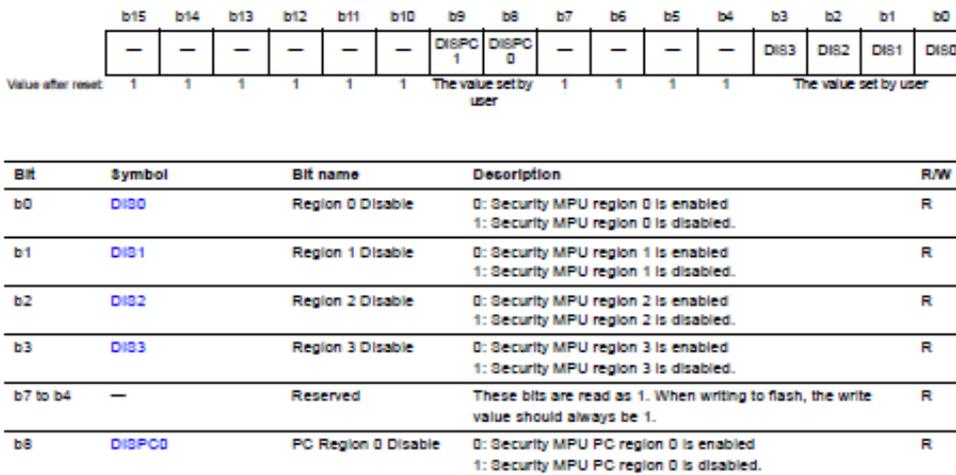


Figure 1. SECMPUAC register

- Please set 0xFFFF_FFFC at SECMPUPCS0 and set 0xFFFF_FFFF at SECMPUPCE0.

Or

B) Setting AWSC or AWS

For S128, S1JA, S3A1, S3A3, A3A6 and S3A7, please set AWSC bit [14] = 0.

For S5D3, S5D5 and S5D9, please set AWS bit [15] = 0.

AWSC bit[14] or AWS bit[15] cannot be changed to 1 once it is set to 0. After clearing the AWSC or AWS bits, the access window and startup area selection options are permanently fixed and cannot be used again. In this case, the self-programming is prohibited because the startup area cannot be exchanged.