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 Group, S3A3 MCU Group, S3A6 MCU Group MCU Group, S5D3 MCU Group, S5D5 MCU S5D9 MCU Group, Note on ALeRASE comm	o, S3A7 Group,	Information Category	Technical Notification				
		Lot No.		S128 Microcontrolle Manual Rev.1.10	r Group	User's		
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 [™] S5D3 MCU Group Renesas Synergy [™] S5D5 MCU Group Renesas Synergy [™] S5D9 MCU Group	All	Reference Document	S1JA Microcontrolle Manual Rev.1.40 S3A1 Microcontrolle Manual Rev.1.20 S3A3 Microcontrolle Manual Rev.1.10 S3A6 Microcontrolle Manual Rev.1.20 S3A7 Microcontrolle Manual Rev.1.40 S5D3 Microcontrolle Manual Rev.1.10 S5D5 Microcontrolle Manual Rev.1.30 S5D9 Microcontrolle Manual Rev.1.30	r Group r Group r Group r Group r Group r Group	User's User's User's User's User's User's		

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 SECMPCAC shifts by 2000h.)
- Please set data as 0xFEFF at SECMPUAC.



	b15	b14	b13	b12	b11	b10	b9	b 8	b7	b6	b5	64	b3	b2	b1	60
	-	-	-	-	-	-	DISPC 1	DISPC	-	-	-	-	DI83	DI82	DIS1	DIS
Value after reset	1	1	1	1	1	1		ve set by ser	1	1	1	1	Π	he value :	set by us	er
																R/W
Bit	Symbol		Bit	Bit name			Description									
60	DISO			Reg	ion 0 D	Isable		: Securi : Securi	-	-						R
b1	DIS1			Reg	ion 1 D	isable		: Securi : Securi		-						R
b2	DI82			Reg	ion 2 D	isable		: Securi : Securi	-	-						R
63	DI83			Reg	ion 3 D	isable		: Securi : Securi	-							R
b7 to b4	-			Res	erved			hese bi alue shi				writing	to flash,	the wri	te	R
b8	DISPO	0		PC I	Region	0 Disat	ie O	: Securi	ty MPU	PC reg	ion 0 Is	enabled	1			R

Figure 1. SECMPUAC register

0: Security MPU PC region 0 is enabled

1: Security MPU PC region 0 is disabled.

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.

PC Region 0 Disable

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.

