

RENESAS TECHNICAL UPDATE

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Product Category	MPU/MCU		Document No.	TN-SY*-A0060A/E	Rev.	1.00
Title	S124 MCU Group, S7G2 MCU Group, Note on ALeRASE command		Information Category	Technical Notification		
Applicable Product	Renesas Synergy™ S124 MCU Group Renesas Synergy™ S7G2 MCU Group	Lot No.	Reference Document	S124 Microcontroller Group User's Manual Rev.1.30 S7G2 Microcontroller Group User's Manual Rev.1.40		
		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 DATA 0xFFEF at (Address) 0x0000_0438
 Setting DATA 0xFFFF_FFFC at (Address) 0x0000_0408
 Setting DATA 0xFFFF_FFFF at (Address) 0x0000_040C
 These values can write by Flash programmer.

Or

- B) Setting AWSC

For S124, please set AWSC bit [14] = 0.

For S7G2, please set AWSC bit [28] = 0.

AWSC bit [14] or bit [28] cannot be changed to 1 once it is set to 0. After clearing the AWSC 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.