[Notes]
Renesas Flash Programmer

R20TS0330EJ0100
Rev.1.00
Jul. 16, 2018

Outline

When using the Renesas Flash Programmer, a software tool for programing flash memory, take note of the following points.

1. Lock bit settings for RX64M and RX71M groups
2. Lock bit settings for RX family excluding RX64M and RX71M groups

1. Lock Bit Settings for RX64M and RX71M Groups

1.1 Applicable Products

Renesas Flash Programmer (RFP hereafter)
V3.00.00, V3.01.00, V3.02.00, V3.02.01, V3.03.00, V3.03.01, and V3.04.00

1.2 Applicable MCUs

RX64M and RX71M groups

1.3 Details

The two problems described below might occur when lock bits are set by selecting blocks in the [Lockbit] column on the [Block Setting] tab. If these problems occur, unintended processing is performed during erasing or programming of user areas by self-programming.

- Writing Lock Bits in Wrong Blocks
- Generating an Incorrect RPI File

The above two problems occur under the same conditions. Refer to the following for details of the problems and conditions.

1.3.1 Writing Lock Bits in Wrong Blocks

If all the following lock bit setting conditions are met and lock bits are written by the flash option programming command, lock bits are also written in unselected blocks in condition 3. RFP does not indicate an error.

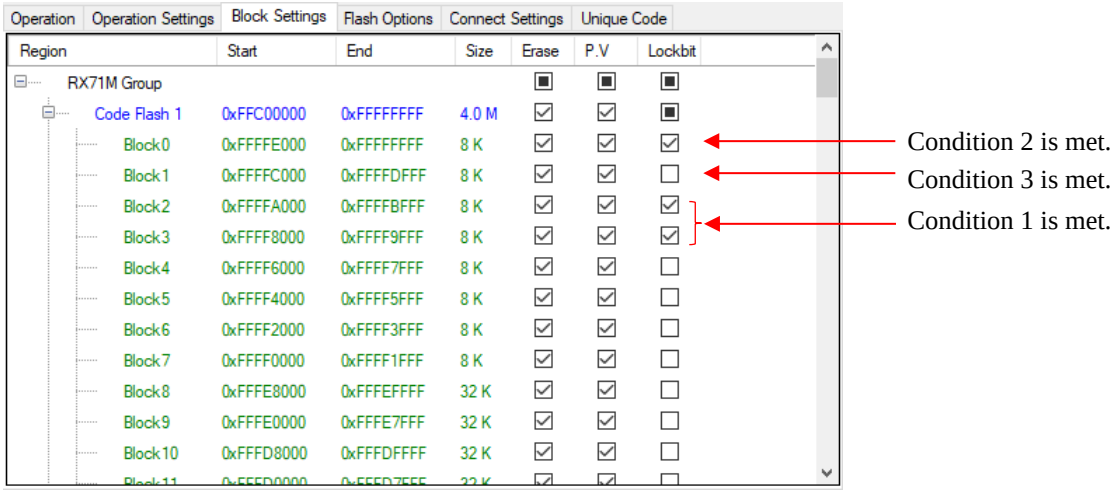
Condition 1: Two or more consecutive blocks are selected.

Condition 2: One or more blocks whose block number is smaller than those in condition 1 are selected.

Condition 3: One or more blocks are not selected between a block selected in condition 1 and a block selected in condition 2.

- Example case: When only Block0, Block2, and Block3 are selected for lock bit setting

  A lock bit is also written in Block1 not selected in the Lockbit column.



1.3.2 Generating an Incorrect RPI File

If all the conditions 1 to 3 in section 1.3.1 are met, the unselected block in condition 3 is also saved in the RPI file as a block subject to lock bit setting.

- Example case: When only Block0, Block2, and Block3 are selected for lock bit setting (Note)

  Block1 not selected in the Lockbit column is also output and saved in the RPI file as a block subject to lock bit setting.

  Note: Because this example is the same as the one in section 1.3.1, see section 1.3.1 for the example of the RFP setting window.

2. Lock Bit Settings for RX Family Excluding RX64M and RX71M Groups

2.1 Applicable Products

Renesas Flash Programmer (RFP hereafter)
V3.00.00, V3.01.00, V3.02.00, V3.02.01, V3.03.00, V3.03.01, and V3.04.00

2.2 Applicable MCUs

RX210, RX21A, RX220, RX610, RX621, RX62G, RX62N, RX62T, RX630, RX631, RX634, RX63N, and RX63T groups

2.3 Details

When lock bits are set by selecting blocks in the [Lockbit] column on the [Block Setting] tab, the three problems below might occur. If these problems occur, unintended processing is performed during erasing or programming of user areas by self-programming.

- Writing Lock Bits in Wrong Blocks
- Lock Bit Write Error
- Generating an Incorrect RPI File

Refer to the following for details of the problems and conditions.

2.3.1 Writing Lock Bits in Wrong Blocks

If all the following lock bit setting conditions are met and lock bits are written by the flash option programming command, lock bits are also written in an unselected block in condition 3. RFP does not indicate an error.

Condition 1: Two or more consecutive blocks are selected.

Condition 2: One or more blocks whose block number is smaller than those in condition 1 are selected.

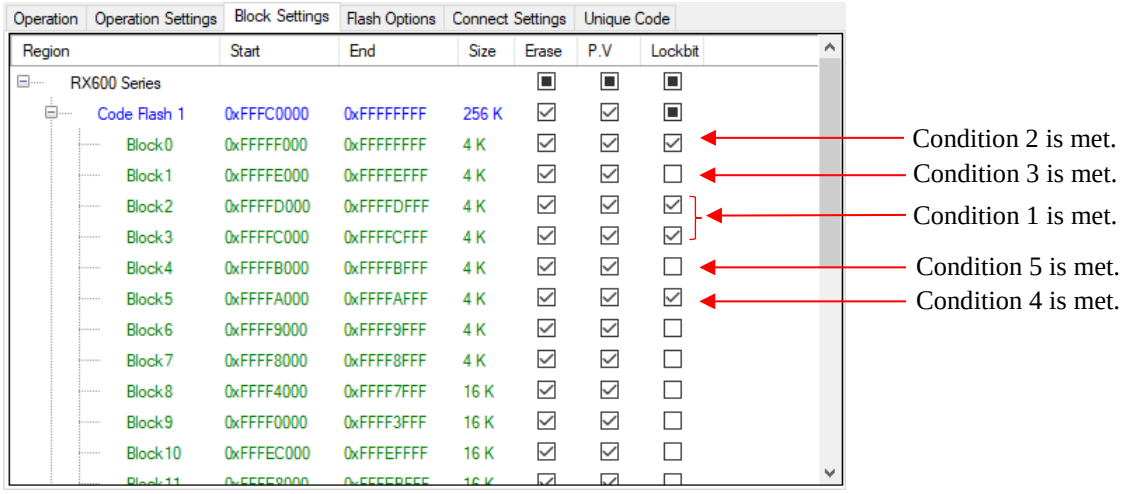
Condition 3: One or more blocks are not selected between a block selected in condition 1 and a block selected in condition 2.

Condition 4: Only one block whose block number is larger than those in condition 1 is selected.

Condition 5: One or more blocks are not selected between a block selected in condition 1 and a block selected in condition 4.

- Example case: When only Block0, Block2, Block3, and Block5 are selected for lock bit setting

  A lock bit is also written in Block1 that is not selected in the Lockbit column.



2.3.2 Lock Bit Write Error

If all the following lock bit setting conditions are met and lock bits are written by the flash option programming command, RFP displays the following error message, and then stops flash operation.

Error (E1000011): A write error occurred in the device. (Response 77:53)

Condition 1: Two or more consecutive blocks are selected.

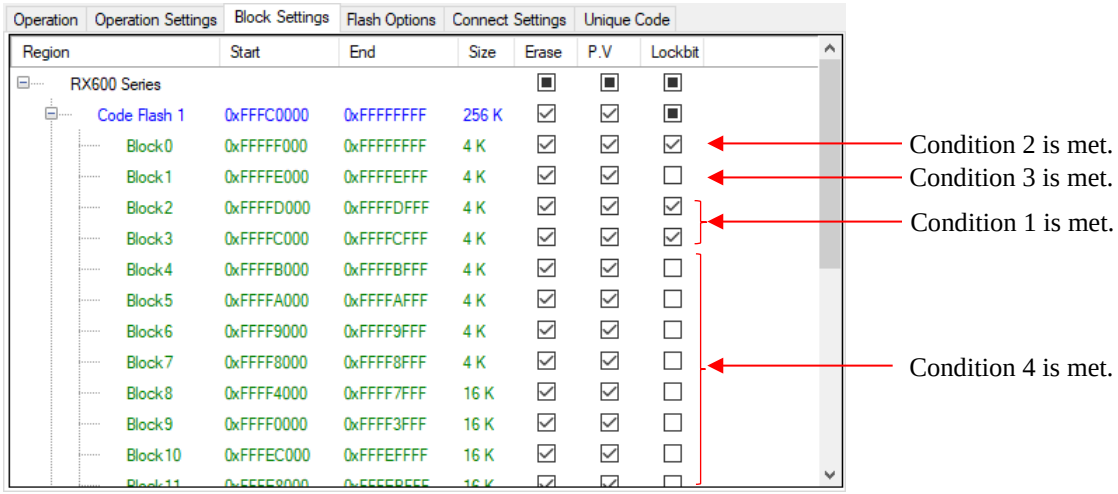
Condition 2: One or more blocks whose block number is smaller than those in condition 1 are selected.

Condition 3: One or more blocks are not selected between a block selected in condition 1 and a block selected in condition 2.

Condition 4: A block whose block number is larger than those in condition 1 is not selected.

- Example case: When only Block0, Block2, and Block3 are selected for lock bit setting

The error message indicated above is displayed, and then RFP flash operation stops.



2.3.3 Generating an Incorrect RPI File

If all the following lock bit setting conditions are met, the unselected block in condition 3 is also saved in the RPI file as a block subject to lock bit setting.

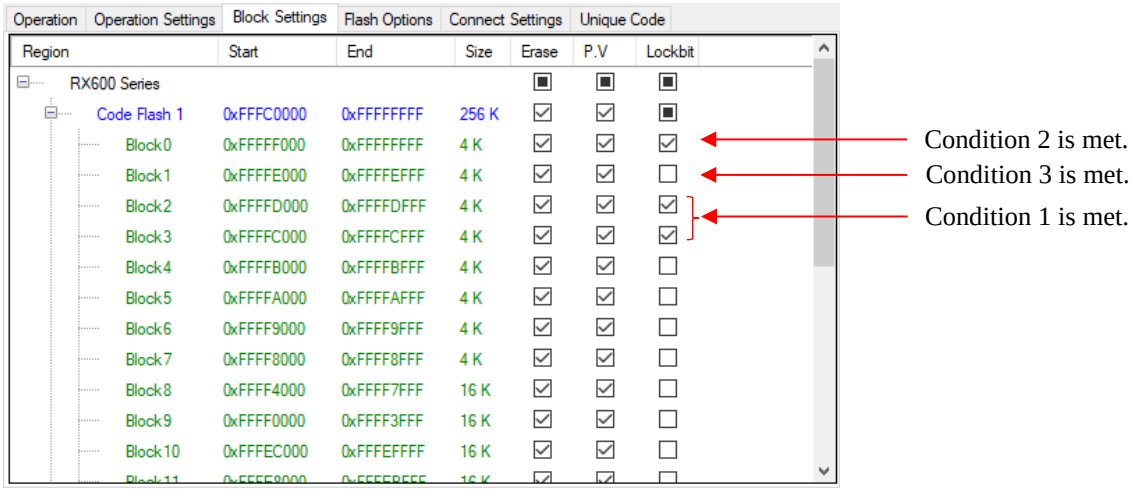
Condition 1: Two or more consecutive blocks are selected.

Condition 2: One or more blocks whose block number is smaller than those in condition 1 are selected.

Condition 3: One or more blocks are not selected between a block selected in condition 1 and a block selected in condition 2.

- Example case: When only Block0, Block2, and Block3 are selected for lock bit setting

Block1 not selected in the Lockbit column is also output and saved in the RPI file as a block subject to lock bit setting.



3. How to Check Lock Bits Written in the MCU

The lock bit settings written in the MCU cannot be checked by Verify. To check the settings, from the [Device Information] menu, select [Read Block Operation].

4. Schedule for Fixing the Problem

This problem will be fixed in V3.05.00. This program will be available from July 20, 2018.

<Reference>

Lock bits that are written incorrectly can be corrected by running commands in V3.05.00.

Execute the following command in sequence for the blocks containing the lock bits to be corrected.

(1) Block Erase command

(2) Program command and Program Flash Options command

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Jul. 16, 2018	-	First edition issued

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■Inquiry

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