Renesas Flash Programmer V3.06.02

Release Notes

R20UT4828EJ0100
Rev.1.00
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Introduction

Thank you for purchasing the Renesas Flash Programmer (RFP).

This document covers specifications of the RFP that have been added or changed, restrictions, and points for caution. For points for caution, also see the user's manual of the RFP.

See the following documents for restrictions applying to particular target MCUs.

- User's manuals of the target MCUs
- Documents in which restrictions applying to particular target MCUs are listed

Contents

1. Product Version

No.	Version Number of RFP	Remark
(1)	V3.00.00	
(2)	V3.01.00	
(3)	V3.02.00	
(4)	V3.02.01	
(5)	V3.03.00	
(6)	V3.03.01	
(7)	V3.04.00	
(8)	V3.05.00	
	V3.05.01	
	V3.05.02	
(9)	V3.05.03	
(10)	V3.06.00	
(11)	V3.06.01	
	V3.06.02	

Note: The version number of the RFP is displayed in the title bar of the main window.

2. Additions and Changes to Specifications

2.1 List of additions and changes to specifications

No.	Addition/Change	Applicable MCUs	Product Version (Corresponds to the Numbers for the 11 Versions in the Table of Section 1)										
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Display of the checksums of files	All	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Loading multiple program files	All	×	✓	✓	✓	✓ (*1)	✓ (*1)	✓ (*1)	✓ (*1)	✓ (*1)	✓ (*1)	✓ (*1)
3	Importing license files	All	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	Programming of unique codes	All	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	Generating RPI files	All	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	Entering user-specified bit-rates for COM connections	All	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	Using a board that includes the UPD78F0730 microcontroller, which supports serial (COM) connection through a virtual USB driver	All	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	Support for Renesas Synergy™ microcontrollers	Renesas Synergy™	—	—	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	Support for the E2 emulator	RH850	—	—	—	✓	✓	✓	✓	✓	✓	✓	✓
		RL78				—	✓	✓	✓	✓	✓	✓	✓
		RX				—	—	—	✓	✓	✓	✓	✓
10	Change to filling with 0xFF	All	—	—	—	—	✓	✓	✓	✓	✓	✓	✓
11	Addition to handling of out-of-range errors for the memory of the MCU	All	×	×	×	×	✓	✓	✓	✓	✓	✓	✓
12	Display of the checksums of files in particular areas of flash memory	RH850, RL78, RX	×	×	×	×	×	×	✓	✓	✓	✓	✓
13	Release from license authentication	—	×	×	×	×	×	×	✓	✓	✓	✓	✓
14	Expansion of command-line options	All	×	×	×	×	×	×	×	✓	✓	✓	✓
15	Support of relative paths for files	All	×	×	×	×	×	×	×	✓	✓	✓	✓
16	Change to the feature for generating RPI files	All	—	×	×	×	×	×	×	✓	✓	✓	✓
17	Addition of the feature for displaying projects that have recently been used	All	×	×	×	×	×	×	×	✓	✓	✓	✓
18	Addition of the feature for encrypting program files	All	×	×	×	×	×	×	×	×	×	✓	✓

19	Expansion of command-line options (2)	All	×	×	×	×	×	×	×	×	×	✓	✓
20	Addition of the feature for standard output from the command line	All	×	×	×	×	×	×	×	×	×	✓	✓
21	Support for RA and RE family	RA RE	—	—	—	—	—	—	—	—	—	—	✓

—: Not supported, ×: No additions or changes to specifications, ✓: Supported

Note: *1. Restrictions on the number of files to read have been removed.

2.2 Details of additions and changes

No. 1 Display of the checksums of files

Applicable MCUs: All

Description: When a file is selected in the [Program File] area on the [Operation] tabbed page, the checksum of the file as a whole is displayed within the [Program File] area and output in the log output panel.

Version: This feature is supported by V3.01.00 and later versions of the RFP.

No. 2 Loading multiple program files

Applicable MCUs: All

Description: The RFP is now capable of loading multiple program files. All of the files selected by the user are combined before being programmed in the flash memory.

Version: This feature is supported by V3.01.00 and later versions of the RFP.

No. 3 Importing license files

Applicable MCUs: All

Description: The RFP is now capable of importing license files.

Version: This feature is supported by V3.01.00 and later versions of the RFP.

No. 4 Programming of unique codes

Applicable MCUs: All

Description: The RFP now supports programming of a unique code in a designated area of flash memory.

Version: This feature is supported by V3.01.00 and later versions of the RFP.

No. 5 Generating RPI files

Applicable MCUs: All

Description: The RFP is now capable of generating RPI files, which contain data from a designated area of code flash or data flash memory, along with the flash option settings.

Version: This feature is supported by V3.01.00 and later versions of the RFP.

No. 6 Entering user-specified bit-rates for COM connections

Applicable MCUs: All

Description: While the values of [Speed] were only selectable from the pull-down menu on the [Connect Setting] tabbed page in V3.00.00 and earlier versions, V3.01.00 allows the user to enter a desired bit-rate (but only in the case of a COM connection).

Version: This feature is supported by V3.01.00 and later versions of the RFP.

No. 7 Using a board that includes the UPD78F0730 microcontroller, which supports serial (COM) connection through a virtual USB driver

Applicable MCUs: All

Description: V3.01.00 of the RFP is also capable of programming by using a board that include a UPD78F0730 microcontroller of the 78K0 family, which supports serial (COM) connection through a virtual USB driver. Programming in this way may lead to the following error if V3.00.00 or an earlier version is in use.

E4000003: A timeout error occurred.

<Example of an applicable board>

EZ-0012 evaluation board for DC/DC LED control by the RL78/I1A*

*: For other Renesas evaluation boards equipped with the UPD78F0730, check the corresponding user's manuals.

Version: This feature is supported by V3.01.00 and later versions of the RFP.

No. 8 Support for Renesas Synergy™ microcontrollers

Applicable MCUs: Renesas Synergy™

Description: The RFP now supports Renesas Synergy™ microcontrollers. Note that the supported versions may differ according to the microcontroller.

For details, refer to “Available microcontroller list for Renesas Flash Programmer V3” on the Renesas Website.

Version: This feature is supported by V3.02.00 and later versions of the RFP.

No. 9 Support for the E2 emulator

Applicable MCUs: RH850, RL78

Description: The RFP now supports programming of flash memory via the E2 emulator.

Version: For RH850 devices, this feature is supported by V3.02.01 and later versions of the RFP. For RL78 devices, this feature is supported by V3.03.00 and later versions of the RFP.

No. 10 Change to filling with 0xFF

Applicable MCUs: All

Description: For [Fill with 0xFF] in the [Operation Setting] tabbed page, the specification has been changed so that the target area can be selected but the configuration area is not selectable as a target. Since information on the setting for [Fill with 0xFF] is not carried over if a project that was created in V3.02.01 or an earlier version is read, change the setting as required.

Version: This change to the specification applies to V3.03.00 and later versions of the RFP.

No. 11 Addition to handling of out-of-range errors for the memory of the MCU

Applicable MCUs: All

Description: Previously, when an attempt at access to data out of the range of memory in the MCU was detected, the RFP output a warning message and continued processing. However, in such cases now, the RFP can be set to generate an error and stop processing with an optional function from V3.03.00.

Version: This feature is supported by V3.03.00 and later versions of the RFP.

No. 12 Display of the checksums of files in particular areas of flash memory

Applicable MCUs: RH850, RL78, RX

Description: A [File Checksum] feature has been added under the [File] menu. The checksums of program files in particular areas are displayed in the [Log output] panel. For the RL78, the checksums can be calculated within block-selection ranges.

Version: This feature is supported by V3.04.00 and later versions of the RFP.

No. 13 Release from license authentication

Applicable MCUs: All

Description: A feature for release from license authentication has been added.

Version: This feature is supported by V3.04.00 and later versions of the RFP.

No. 14 Expansion of command-line options

Applicable MCUs: All

Description: New commands have been added to those specifiable as command-line options. In addition to the existing specification of program files, the command can be executed with the specification of a tool or commands, by which the settings can be replaced with those in the project file.

Version: This feature is supported by V3.05.00 and later versions of the RFP.

No. 15 Support of relative paths for files

Applicable MCUs: All

Description: The specification has been changed so that the following files are saved with relative paths when they are placed under the project directory.

- Program file
- Unique code file

Version: This feature is supported by V3.05.00 and later versions of the RFP.

No. 16 Change to the feature for generating RPI files

Applicable MCUs: All

Description: The specification has been changed so that the following settings are reflected in [Save Image File] from the [File] menu.

- [P.V] on the [Block Setting] tabbed page
- [Fill with 0xFF] on the [Operation Setting] tabbed page

Note: Due to this change, RPI files may not perfectly match those that have been output by V3.04.00 and earlier versions.

Version: This feature is supported by V3.05.00 and later versions of the RFP.

No. 17 Addition of the feature for displaying projects that have recently been used

Applicable MCUs:	All
Description:	A feature for displaying the names of project files that have most recently been used (up to four names) has been added to the [File] menu. A filename can be selected to open the given project.
Version:	This feature is supported by V3.05.00 and later versions of the RFP.

No. 18 Addition of the feature for encrypting program files

Applicable MCUs:	All
Description:	A feature for encrypting program files has been added. Executing the encryption utility program from the command line allows the encryption with a password of program files.
Version:	This feature is supported by V3.06.00 and later versions of the RFP.

No. 19 Expansion of command-line options (2)

Applicable MCUs:	All
Description:	New commands (bin, read32, write32 and writebit) have been added to those specifiable as command-line options.
Version:	This feature is supported by V3.06.00 and later versions of the RFP.

No. 20 Addition of the feature for standard output from the command line

Applicable MCUs:	All
Description:	A feature for displaying a log and the state of progress in standard output from the command line when commands are executed has been added.
Version:	This feature is supported by V3.06.00 and later versions of the RFP.

No. 21 Support for RA and RE family

Applicable MCUs:	RA, RE
Description:	The RFP now supports RA and RE family. Note that the supported versions may differ according to the microcontroller. For details, refer to “Available microcontroller list for Renesas Flash Programmer V3” on the Renesas Website.
Version:	This feature is supported by V3.06.01 and later versions of the RFP.

3. Restrictions

3.1 List of restrictions

No.	Restriction	Applicable MCUs	Product Version (Corresponds to the Numbers for the 11 Versions in the Table of Section 1)										
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Errors occurring when commands are executed in the boot mode (USB interface) of MCUs of the RX64M and RX71M groups	RX64M RX71M	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	Self-checking of the E1 or E20 emulator leading to errors	All	×	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	An Error Occurring during Installation of the USB Driver for USB Boot MCU TypeB	Renesas Synergy™ RX651 RX65N	—	—	×	×	×	✓	✓	✓	✓	✓	✓
4	A Connection Error Occurring with the E2 Emulator (revision B)	RH850	—	—	—	×	×	✓	✓	✓	✓	✓	✓
		RL78	—	—	—	—	×	✓	✓	✓	✓	✓	✓
5	Setting lock bits in RX MCUs	RX21x RX22x RX610 RX62x RX63x RX64M RX71M	×	×	×	×	×	×	×	✓	✓	✓	✓
6	Restriction on enabling of the intelligent cryptographic unit slave E (ICUSE) of the RH850/C1M-A, RH850/F1K, RH850/F1KM-S1, RH850/P1L-C, and RH850/P1M-E groups	RH850/C1M-A RH850/F1K RH850/F1KM-S1 RH850/P1L-C RH850/P1M-E	×	×	×	×	×	×	×	×	✓	✓	✓
7	Restriction on lock bits and OTP of the RH850/C1M-A2 group	RH850/C1M-A2 (R7F701275)	—	—	—	—	—	—	—	×	×	✓	✓

—: Not supported, ×: Not fixed, ✓: Fixed

3.2 Details of restrictions

No. 1 Errors occurring when commands are executed in the boot mode (USB interface) of MCUs of the RX64M and RX71M groups

Applicable MCUs: RX64M and RX71M groups

Description: The following error will occur if commands such as for writing are executed while a target MCU is connected and is in boot mode (for the USB interface).

E100000D: A flow error occurred in the device. (Response 34:C3)

Resolution: This problem has been fixed and does not arise in V3.01.00 and later versions of the RFP.

No. 2 Self-checking of the E1 or E20 emulator leading to errors

Applicable MCUs: All

Description: Executing the self-checking program for an E1 or E20 emulator that has been connected with V3.00.00 of the Renesas Flash Programmer leads to errors.

The following are the log entries relating to errors in the self-checking program.

[Result of TEST1]	FAIL (Error 1103)
[Error Message]	The E1/E20 self-check has failed.
[Error Detail]	Internal module check has failed.

Facilities other than self-checking (flash programming and debugging) will operate correctly.

Supplementary Note:

Connecting the V3.00.00 Renesas Flash Programmer to an E1 or E20 emulator leads to overwriting of the firmware in the emulator. This leads to errors when the self-checking program for the emulator is executed.

Resolution: This problem has been fixed and does not arise in V3.01.00 and later versions of the RFP.

No. 3 An Error Occurring during Installation of the USB Driver for USB Boot MCU TypeB

Applicable MCUs: Renesas Synergy™, RX651 and RX65N group

Description: When using the applicable products shown in section 3.1 (No.3), the following error may occur during installation of the USB Driver for USB Boot MCU TypeB V1.00.00 (for Renesas Synergy™ microcontrollers and RX651 and RX65N groups in the RX family), and installation may not succeed. If the error does not occur, installation was successful.

E0140021: Some installations have failed. The installations of the specified tools are not completed

Resolution: This problem has been fixed and does not arise in V3.03.01 and later versions of the RFP.

No. 4 A Connection Error Occurring with the E2 Emulator (revision B)

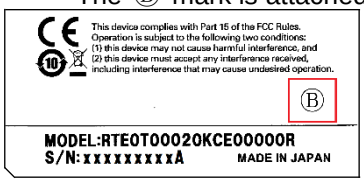
Applicable MCUs: RH850, RL78

Description: When using the applicable products shown in section 3.1 (No.4) and connecting the Renesas Flash Programmer to the MCU via the E2 emulator (revision B), the following error occurs, and connection is not established.

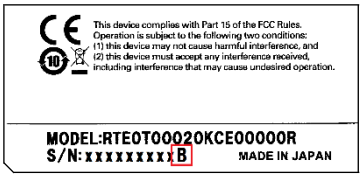
E30002FE: This tool is not supported

Note: E2 emulator revision B can be confirmed by the label on the back of the main unit.

- The Ⓑ mark is attached.



- The end of the serial No. is other than “A”.



Resolution: This problem has been fixed and does not arise in V3.03.01 and later versions of the RFP.

No. 5 Setting lock bits in RX MCUs

Applicable MCUs: RX21x, RX22x, RX610, RX62x, RX63x, RX64M, RX71M

Description: For details on this problem, refer to the issue of RENESAS TOOL NEWS (document no.: R20TS0330EJ0100) found by entering the following URL.

https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ts0330

Resolution: This problem has been fixed and does not arise in V3.05.00 and later versions of the RFP.

No. 6 Restriction on enabling of the intelligent cryptographic unit slave E (ICUSE) of the RH850/C1M-A, RH850/F1K, RH850/F1KM-S1, RH850/P1L-C, and RH850/P1M-E groups

Applicable MCUs: RH850/C1M-A, RH850/F1K, RH850/F1KM-S1, RH850/P1L-C, RH850/P1M-E

Description: For details on this problem, refer to the issue of RENESAS TOOL NEWS (document no.: R20TS0399EJ0100) found by entering the following URL.

https://www.renesas.com/search/keyword-search.html#genre=document&q=r20ts0399

Resolution: This problem has been fixed and does not arise in V3.05.03 and later versions of the RFP.

No. 7 Restriction on lock bits and OTP of the RH850/C1M-A2 group

Applicable MCUs: RH850/C1M-A2 (R7F701275)

Description: For the settings of lock bits or OTP, when blocks 69 and 70 which straddle code flash memory 1 and code flash memory 2 are successively set, the settings for all blocks above block 70 in code flash memory 2 are not reflected (only the settings of all blocks in code flash memory 1, that is, up to block 69 are reflected).

Resolution: This problem has been fixed and does not arise in V3.06.00 and later versions of the RFP.

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