

### 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

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## 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	

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.	Applicable MCUs	Addition/Change	Product Version (Corresponds to the Numbers for the Five Versions in the Table of Section 1)				
			(1)	(2)	(3)	(4)	(5)
1	All	Display of the checksums of files	×	✓	✓	✓	✓
2	All	Loading multiple program files	×	✓	✓	✓	✓ (*1)
3	All	Importing license files	×	✓	✓	✓	✓
4	All	Programming of unique codes	×	✓	✓	✓	✓
5	All	Generating RPI files	×	✓	✓	✓	✓
6	All	Entering user-specified bit-rates for COM connections	×	✓	✓	✓	✓
7	All	Using a board that includes the UPD78F0730 microcontroller, which supports serial (COM) connection through a virtual USB driver	×	✓	✓	✓	✓
8	Renesas Synergy	Support for Renesas Synergy microcontrollers	—	—	✓	✓	✓
9	RH850, RL78	Support for the E2 emulator	—	—	—	✓ (*2)	✓
10	All	Change to filling with 0xFF	—	—	—	—	✓
11	All	Addition to handling of out-of-range errors for the memory of the MCU	—	—	—	—	✓

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

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

\*2. Only applicable to RH850 devices.

## 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.
Resolution:	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.
Resolution:	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.
Resolution:	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.
Resolution:	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.
Resolution:	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).
Resolution:	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.
Resolution:	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.
Resolution:	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.
Resolution:	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.
Resolution:	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.
Resolution:	This feature is supported by V3.03.00 and later versions of the RFP.

### 3. Restrictions

#### 3.1 List of restrictions

No.	Applicable MCUs	Addition/Change	Product Version (Corresponds to the Numbers for the Four Versions in the Table of Section 1)			
			(1)	(2)	(3)	(4)
1	RX64M RX71M	Errors occurring when commands are executed in the boot mode (USB interface) of MCUs of the RX64M and RX71M groups	—	✓	✓	✓
2	All	Self-checking of the E1 or E20 emulator leading to errors	—	✓	✓	✓

—: 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.

## **Website and Support**

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<https://www.renesas.com>

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