

# Renesas Flash Programmer V3.05.03

## Release Notes

R20UT4522EJ0100

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

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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              |        |
| (6) | V3.03.01              |        |
| (7) | V3.04.00              |        |
| (8) | V3.05.00              |        |
|     | V3.05.01              |        |
|     | V3.05.02              |        |
| (9) | V3.05.03              |        |

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<br>(Corresponds to the Numbers for the Eight Versions in the Table of Section 1) |     |     |     |           |           |           |           |           |
|-----|---|-----------------|--|-----|-----|-----|-----------|-----------|-----------|-----------|-----------|
|     |   |                 | (1)  | (2) | (3) | (4) | (5)       | (6)       | (7)       | (8)       | (9)       |
| 1   | Display of the checksums of files   | All             | ×  | ✓   | ✓   | ✓   | ✓         | ✓         | ✓         | ✓         | ✓         |
| 2   | Loading multiple program files  | All             | ×  | ✓   | ✓   | ✓   | ✓<br>(*1) | ✓<br>(*1) | ✓<br>(*1) | ✓<br>(*1) | ✓<br>(*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             | × | × | × | × | × | × | × | ✓ | ✓ |

—: 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.

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:     | <p>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.</p> <p>E4000003: A timeout error occurred.</p> <p>&lt;Example of an applicable board&gt;</p> <p>EZ-0012 evaluation board for DC/DC LED control by the RL78/I1A*</p> <p>*: For other Renesas evaluation boards equipped with the UPD78F0730, check the corresponding user's manuals.</p> |
| 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.<br>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.  |

**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. |
| Resolution:      | 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.    |
| Resolution:      | 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. |
| Resolution:      | 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. <ul style="list-style-type: none"><li>• Program file</li><li>• Unique code file</li></ul> |
| Resolution:      | 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:     | <p>The specification has been changed so that the following settings are reflected in [Save Image File] from the [File] menu.</p> <ul style="list-style-type: none"><li>• [P.V] on the [Block Setting] tabbed page</li><li>• [Fill with 0xFF] on the [Operation Setting] tabbed page</li></ul> <p>Note: Due to this change, RPI files may not perfectly match those that have been output by V3.04.00 and earlier versions.</p> |
| Resolution:      | 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:     | <p>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.</p> |
| Resolution:      | This feature is supported by V3.05.00 and later versions of the RFP.   |

### 3. Restrictions

#### 3.1 List of restrictions

| No. | Restriction   | Applicable MCUs   | Product Version<br>(Corresponds to the Numbers for the Eight Versions in the Table of Section 1) |     |     |     |     |     |     |     |     |
|-----|---|---|--|-----|-----|-----|-----|-----|-----|-----|-----|
|     |   |   | (1)  | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| 1   | Errors occurring when commands are executed in the boot mode (USB interface) of MCUs of the RX64M and RX71M groups  | RX64M<br>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<br>RX651<br>RX65N                                       | —  | —   | ×   | ×   | ×   | ✓   | ✓   | ✓   | ✓   |
| 4   | A Connection Error Occurring with the E2 Emulator (revision B)  | RH850   | —  | —   | —   | ×   | ×   | ✓   | ✓   | ✓   | ✓   |
|     |   | RL78  | —  | —   | —   | —   | ×   | ✓   | ✓   | ✓   | ✓   |
| 5   | Setting lock bits in RX MCUs  | RX21x<br>RX22x<br>RX610<br>RX62x<br>RX63x<br>RX64M<br>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<br>RH850/F1K<br>RH850/F1KM-S1<br>RH850/P1L-C<br>RH850/P1M-E | ×  | ×   | ×   | ×   | ×   | ×   | ×   | ×   | ✓   |

—: 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)

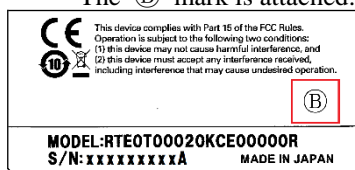
Applicable MCUs: RH850, RL78

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

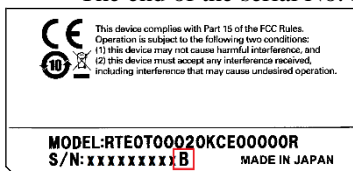
Note: E2 emulator revision B can be confirmed by the label on the back of the main unit.

➤ 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.

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**Renesas Electronics Corporation**  
TOYOSU FORESIA, 3-2-24 Toyosu, Koto-ku, Tokyo 135-0061, Japan

**Renesas Electronics America Inc.**  
1001 Murphy Ranch Road, Milpitas, CA 95035, U.S.A.  
Tel: +1-408-432-8888, Fax: +1-408-434-5351

**Renesas Electronics Canada Limited**  
9251 Yonge Street, Suite 8309 Richmond Hill, Ontario Canada L4C 9T3  
Tel: +1-905-237-2004

**Renesas Electronics Europe Limited**  
Dukes Meadow, Millboard Road, Bourne End, Buckinghamshire, SL8 5FH, U.K  
Tel: +44-1628-651-700

**Renesas Electronics Europe GmbH**  
Arcadiastrasse 10, 40472 Düsseldorf, Germany  
Tel: +49-211-6503-0, Fax: +49-211-6503-1327

**Renesas Electronics (China) Co., Ltd.**  
Room 1709 Quantum Plaza, No.27 ZhichunLu, Haidian District, Beijing, 100191 P. R. China  
Tel: +86-10-8235-1155, Fax: +86-10-8235-7679

**Renesas Electronics (Shanghai) Co., Ltd.**  
Unit 301, Tower A, Central Towers, 555 Langao Road, Putuo District, Shanghai, 200333 P. R. China  
Tel: +86-21-2226-0888, Fax: +86-21-2226-0999

**Renesas Electronics Hong Kong Limited**  
Unit 1601-1611, 16/F., Tower 2, Grand Century Place, 193 Prince Edward Road West, Mongkok, Kowloon, Hong Kong  
Tel: +852-2265-6688, Fax: +852 2886-9022

**Renesas Electronics Taiwan Co., Ltd.**  
13F, No. 363, Fu Shing North Road, Taipei 10543, Taiwan  
Tel: +886-2-8175-9600, Fax: +886 2-8175-9670

**Renesas Electronics Singapore Pte. Ltd.**  
80 Bendemeer Road, Unit #06-02 Hyflux Innovation Centre, Singapore 339949  
Tel: +65-6213-0200, Fax: +65-6213-0300

**Renesas Electronics Malaysia Sdn.Bhd.**  
Unit 1207, Block B, Menara Amcorp, Amcorp Trade Centre, No. 18, Jln Persiaran Barat, 46050 Petaling Jaya, Selangor Darul Ehsan, Malaysia  
Tel: +60-3-7955-9390, Fax: +60-3-7955-9510

**Renesas Electronics India Pvt. Ltd.**  
No.777C, 100 Feet Road, HAL 2nd Stage, Indiranagar, Bangalore 560 038, India  
Tel: +91-80-67208700, Fax: +91-80-67208777

**Renesas Electronics Korea Co., Ltd.**  
17F, KAMCO Yangjae Tower, 262, Gangnam-daero, Gangnam-gu, Seoul, 06265 Korea  
Tel: +82-2-558-3737, Fax: +82-2-558-5338