

Continuously evolving programmer

# Renesas Flash Programmer

<https://www.renesas.com/rfp>

## Programmer supporting flash programming in all phases from development up to mass production

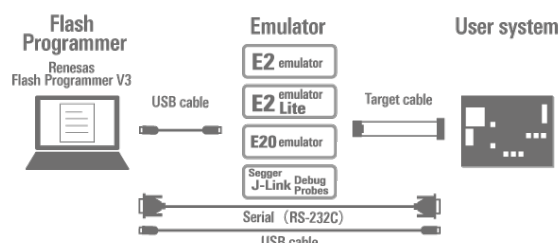
A programmer is software that supports programming in the development and mass-production phases. The Renesas Flash Programmer (RFP) has a simple GUI that even beginners can use to program software in flash memory.

Supported operating systems: Windows, Linux, and macOS

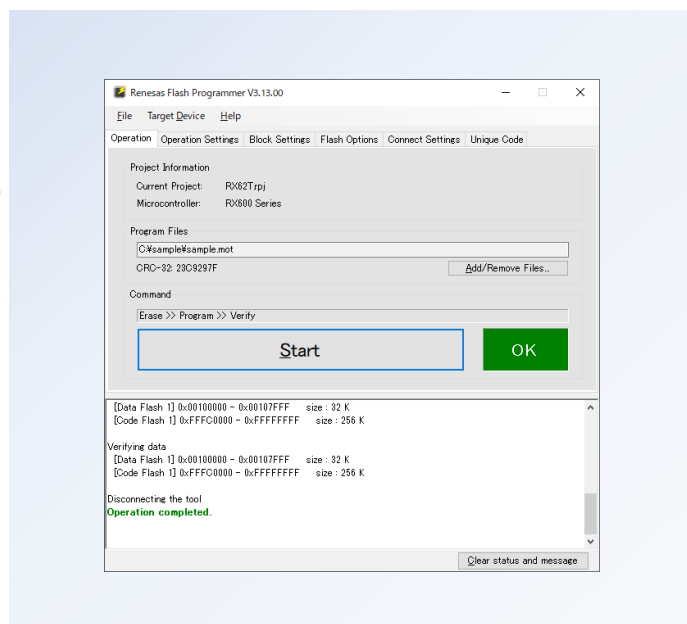
### Main Functions

- Supported file types for programming: Intel HEX format for HEX and HCUHEX files, Motorola S format for HEX and HCUHEX files, and binary, RPE, RPI, and SFP files
- Supported communications interfaces: USB, CSI, UART, FINE, and SWD
- Checksum calculation
- Blank checking, erasure, writing, verification, reading out, checksum, setup and acquisition of flash options
- Sequential execution of multiple commands (for erasure, programming, verification, etc.)
- Multiple files for programming are simultaneously selectable.

### System Configuration



[Details www.renesas.com/rfp\\_system](https://www.renesas.com/rfp_system)



## Features and supported functions

The ever-evolving Renesas Flash Programmer provides strong support for customers developing applications.

### Simple GUI\*

A simple GUI makes operations easy, even for first-time developers.

### PC-controlled programming

PC-controlled programming via an emulator (E2, E2 Lite, or E20), J-Link debug probe from SEGGER, serial port, or USB

### Enhanced security

Enhanced security against theft through the encryption of program files

### Programming of external flash memory

Support for the programming of external flash memory mounted on evaluation kits for RA8-series devices

\* Only supported under Windows.

### Programming unique codes

The RFP is configurable for the programming of unique codes in a specified area of flash memory.

### Auto-programming from the command line

In the mass-production phase, programming instructions can easily be run repeatedly from the command line (rather than using the GUI) for efficiency in mass production.

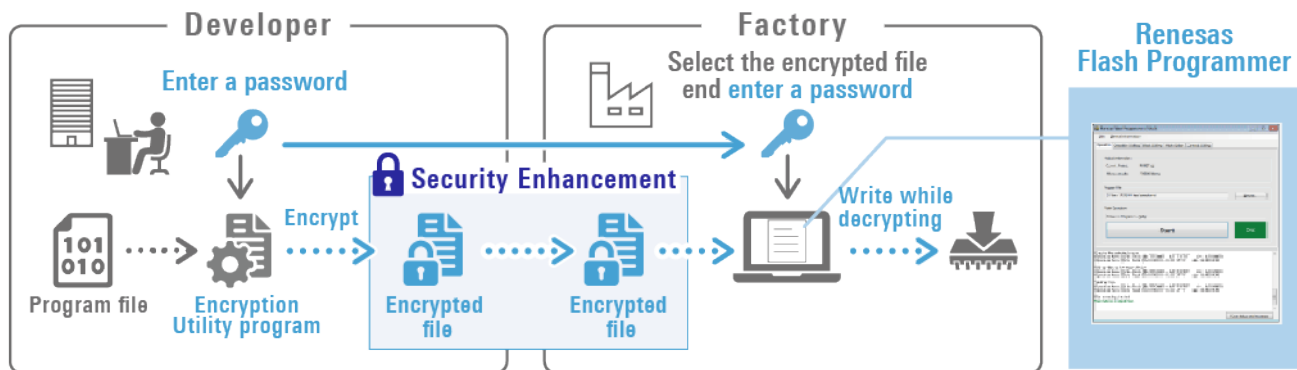
### Aids for project creation\*

Simplifying selection of type name and setting of mode pins eases the creation of projects.

## Enhanced security against theft through the encryption of program files

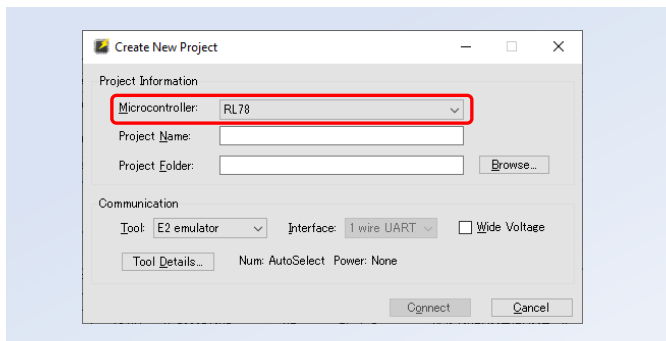
The function for encrypting program files enhances security against theft.

You can run this function by using the encryption utility program (RPE.exe) from the command line. The file is among those installed by the Renesas Flash Programmer installer.

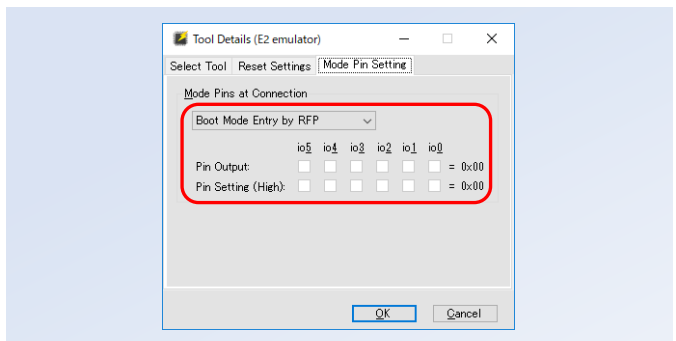


## Aids for project creation

Eliminating the need to select a detailed type name eases the creation of projects.



When the recommended connection examples are in use, setting of mode pins is not required.



## Download

[www.renesas.com/rfp\\_download](http://www.renesas.com/rfp_download)

The Renesas Flash Programmer is available for download as free evaluation software.

We do not provide technical support for the free version, so will not be able to answer any questions you may have regarding the evaluation software and send to our technical support center via the Renesas web site. If you require technical support, we recommend that you purchase a software license through one of our sales offices or distributors.

The evaluation version of Renesas Flash Programmer can be used not only for evaluation, but also for product development and programming of final products.

## Major supported MCUs

RA Family RL78 Family RX Family RISC-V MCUs  
RH850 Family Renesas Synergy™

## Videos

Tutorial videos for microcontrollers are available:

For RA Family [www.renesas.com/ra-how-to-video](http://www.renesas.com/ra-how-to-video)  
For RL78 Family [www.renesas.com/rl78-how-to-video](http://www.renesas.com/rl78-how-to-video)  
For RX Family [www.renesas.com/rx-how-to-video](http://www.renesas.com/rx-how-to-video)

## FAQ

[en-support.renesas.com/knowledgeBase](http://en-support.renesas.com/knowledgeBase)



## Community

[community.renesas.com](http://community.renesas.com)

## Operating environments

Windows® 11 Windows® 10 (32- and 64-bit versions)

Linux (Ubuntu 24.04 LTS, x64/ARM64/  
Ubuntu 22.04 LTS, x64/ARM32/ARM64/)

macOS (macOS 15 Sequoia/macOS 14 Sonoma): Only supported on machines with Apple Silicon.

[Details](#) [www.renesas.com/system-requirements](http://www.renesas.com/system-requirements)

## renesas.com

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## Contact information

For further information on a product technology, to most up-to-date version of a document, or your nearest office, please visit [www.renesas.com/contact/](http://www.renesas.com/contact/)