RL78 FAMILY FLASH MEMORY REPROGRAMMING SOFTWARE INTRODUCTION

04TH, NOV. 2025 R2 SVMB5

R20CD0026EJ0101 REV.1.01

MCAL AND BOOTLOADER DEPARTMENT

SERVICES

SOFTWARE & DIGITALIZATION GROUP

RENESAS ELECTRONICS CORPORATION



FLASH MEMORY REPROGRAMMING SOFTWARE FOR RL78 FAMILY

This document introduce the flash memory reprogramming software available for each MCU group.

The flash memory reprogramming software provided for RL78 family depends on MCU group used.

- RL78/G2x Group, RL78/F23 and RL78/F24 Group,

RL78/L23 Group, RL78/F22 and RL78/F25 Group: Flash Driver

– RL78/G15 and RL78/G16 Group:Sample Program

– RL78/x1x Group*:Self Programming Library

For information on the flash memory reprogramming software products available for each MCU group, refer to "LIST OF FLASH REPROGRAMMING SOFTWARE BY GROUP" on next page and beyond.

For details of flash memory reprogramming software, please refer to the respective user's manual.

Note. The "Renesas Flash Driver" may be abbreviated as "RFD" and the "EEPROM Emulation Software" may be abbreviated as "EES".

* The MCUs belonging to the RL78/x1x group are listed in the "MCU Group" column on the "RL78 Family Self RAM list of Flash Self Programming Library".



LIST OF FLASH REPROGRAMMING SOFTWARE BY GROUP (1)

RL78/G2x Group

Family	Group	Series Name	Software Name (Flash Driver)	Page (Link)
RL78	G22	R7F102Gxx	· Renesas Flash Driver RL78 Type 01 (Simple version)	
	G23	R7F100Gxx	· Renesas Flash Driver RL78 Type 01 (SC version)	Page 09
	G24	R7F101Gxx	• EEPROM Emulation Software RL78 Type 01	

RL78/F23 and RL78/F24 Group

	Family	Group	Series Name	Software Name (Flash Driver)	Page (Link)
	• Renesas	 Renesas Flash Driver RL78 Type 02 (Simple version) Renesas Flash Driver RL78 Type 02 (SC version) 	Page 12		
		F24	R7F124FxJ	• EEPROM Emulation Software RL78 Type 02	<u>1 ago 12</u>

LIST OF FLASH REPROGRAMMING SOFTWARE BY GROUP (2)

RL78/L23 Group

Family	Group	Series Name	Software Name (Flash Driver)	Page (Link)
RL78	L23	R7F100Lxx	 Renesas Flash Driver RL78 Type 11 (Simple version) Renesas Flash Driver RL78 Type 11 (SC version) EEPROM Emulation Software RL78 Type 11 	<u>Page 15</u>

RL78/F22 and RL78/F25 Group

	Family	Group	Series Name	Software Name (Flash Driver)	Page (Link)
		R7F122FxG	 Renesas Flash Driver RL78 Type 03 (Simple version) Renesas Flash Driver RL78 Type 03 (SC version) 	Page 18	
		F25	R7F125FxL	• EEPROM Emulation Software RL78 Type 03	<u>1 ago 10</u>

LIST OF FLASH REPROGRAMMING SOFTWARE BY GROUP (3)

RL78/G15 and RL78/G16 Group

Family	Group	Series Name	Software Name (Sample Program)	Page (Link)
RL78	 G15 R5F120xx Renesas Flash Sample Program Type 01 (Simple version) Renesas Flash Sample Program Type 01 (SC version) 	Dega 24		
	G16	R5F121xx	renesas i lasir sample i regiani Type or (se verelen)	Page 21

LIST OF FLASH REPROGRAMMING SOFTWARE BY GROUP (4)

RL78/ x1x Group (Japanese Release)

Target Region: Mainland China/ Hong Kong/ Singapore/ South & Southeast Asia/ Oceania/ India/ South Korea/ Taiwan/ Japan

Family	Group	Software Name (Self Programming Library)	Page (Link)
RL78	x1x	- Flash Self Programming Library Type01 for RL78 Family	
		- Data Flash Library Type04 for RL78 Family	
		- EEPROM Emulation Library Pack02 for RL78 Family	Page 23
		- EEPROM Emulation Library Pack01 for RL78 Family	

Note. The products of RL78/x1x group are eligible for the flash memory reprogramming software listed in the table, but it may not be available depending on the size of the ROM, RAM and data flash memory installed.

Please check the "RL78 Family Self RAM list of Flash Self Programming Library" for available flash reprogramming software for the MCU to be used.

LIST OF FLASH REPROGRAMMING SOFTWARE BY GROUP (4)

RL78/ x1x Group (European Release)

Target Region: Americas/ Brazil/ Europe/ Middle East/ Africa

Family	Group	Software Name (Self Programming Library)	Page (Link)	
RL78	x1x	- Flash Self Programming Library Type01 for RL78 Family		
		- Data Flash Library Type04 for RL78 Family		
		- EEPROM Emulation Library Pack02 for RL78 Family	Page 26	
		- EEPROM Emulation Library Pack01 for RL78 Family		

Note. The products of RL78/x1x group are eligible for the flash memory reprogramming software listed in the table, but it may not be available depending on the size of the ROM, RAM and data flash memory installed.

Please check the "RL78 Family Self RAM list of Flash Self Programming Library" for available flash reprogramming software for the MCU to be used.

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 RL78/G15 AND RL78/G16 GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 	<u>Page 21</u>
 RL78/x1x GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE JAPANESE RELEASE Target region: Mainland China/ Hong Kong/ Singapore/ South & Southeast Asia/ Oceania/ India/ South Korea/ Taiwan/ Japan 	E <u>Page 23</u>
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Target region: Americas/ Brazil/ Europe/ Middle East/ Africa	<u>Page 26</u>
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RL78/G2x GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 1/3

Flash Driver Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR, LLVM

Renesas Flash Driver RL78 Type 01 for RL78/G2x

The Renesas Flash Driver RL78 Type 01 for RL78/G2x is available in a "Simple version" and a "Smart Configurator version (SC version)" and the following areas can be reprogramming.

Code Flash Memory, Data Flash Memory,

Extra Area (Reprogramming of flash memory security, boot swap function, etc.).

- Renesas Flash Driver RL78 Type 01 for RL78/G2x Simple version

The simple version package includes the process of reprogramming "Code flash memory", "Data flash memory" and "Extra area".

Renesas Flash Driver RL78 Type 01 for RL78/G2x Smart Configurator version (SC version)

The SC version is the RFD RL78 Type 01 linked to the frequency setting of the Smart Configurator. The component is separated into a "Code Flash memory", a "Data Flash memory" and an "Extra area". Start the Smart Configurator from development environment and download and use the target component. The "Flash Common" is required to reprogramming the "Code flash memory", "Data flash memory" and "Extra area".

EEPROM Emulation Software RL78 Type 01 for RL78/G2x

The EES is sample software for executing the EEPROM emulation mechanism from user program.



RL78/G2x GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 2/3

Flash Driver Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR, LLVM

- Renesas Flash Driver RL78 Type 01 for RL78/G2x Simple version
 - Renesas Flash Driver RL78 Type 01 for RL78/G2x
 - Renesas Flash Driver RL78 Type 01 User's Manual for RL78/G2x
- Renesas Flash Driver RL78 Type 01 for RL78/G2x Smart Configurator version (SC version)

The procedure for downloading using the Smart Configurator is described in the Application Note (.pdf).

Please click on the link below to download and check.

- RL78 Family Renesas Flash Driver RL78 Type 01 SC version (Code Flash) Application Note
- RL78 Family Renesas Flash Driver RL78 Type 01 SC version (Data Flash) Application Note
- RL78 Family Renesas Flash Driver RL78 Type 01 SC version (Extra Area) Application Note
- RL78 Family Renesas Flash Driver RL78 Type 01 SC version (Flash Common) Application Note



RL78/G2x GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 3/3

Flash Driver Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR, LLVM

- EEPROM Emulation Software RL78 Type 01 for RL78/G2x
 - EEPROM Emulation Software RL78 Type 01 for RL78/G2x
 - <u>EEPROM Emulation Software RL78 Type 01 User's Manual for RL78/G2x</u>

Note. This software uses the Renesas Flash Driver RL78 Type 01 (Simple version) as a built-in driver. Please also download the Renesas Flash Driver RL78 Type 01 (Simple version) together.



RL78/F23 AND RL78/F24 GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 1/3

Flash Driver Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR

Renesas Flash Driver RL78 Type 02 for RL78/F23 and RL78/F24 Group

The Renesas Flash Driver RL78 Type 02 for RL78/F23 and RL78/F24 is available in a "Simple version" and a "Smart Configurator version (SC version)" and the following areas can be reprogramming.

Code Flash Memory, Data Flash Memory,

Extra Area (Reprogramming of flash memory security, boot swap function, etc.)

- Renesas Flash Driver RL78 Type 02 for RL78/F23 and RL78/F24 Group Simple version
 The simple version package includes the process of reprogramming "Code flash memory", "Data flash memory" and "Extra area".
- Renesas Flash Driver RL78 Type 02 for RL78/F23 and RL78/F24 Group Smart Configurator version (SC version) The SC version is the RFD RL78 Type 02 linked to the frequency setting of the Smart Configurator. The component is separated into a "Code Flash memory", a "Data Flash memory" and an "Extra area". Start the Smart Configurator from development environment and download and use the target component. The "Flash Common" is required to reprogramming the "Code flash memory", "Data flash memory" and "Extra area".
- EEPROM Emulation Software RL78 Type 02 for RL78/F23 and RL78/F24

The EES is sample software for executing the EEPROM emulation mechanism from user program.



RL78/F23 AND RL78/F24 GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 2/3

Flash Driver Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR

- Renesas Flash Driver RL78 Type 02 for RL78/F23 and RL78/F24 Group Simple version
 - Renesas Flash Driver RL78 Type 02 for RL78/F23 and RL78/F24
 - Renesas Flash Driver RL78 Type 02 User's Manual for RL78/F23 and RL78/F24
- Renesas Flash Driver RL78 Type 02 for RL78/F23 and RL78/F24 Group Smart Configurator version (SC Version)

The procedure for downloading using the Smart Configurator is described in the Application Note (.pdf).

Please click on the link below to download and check.

- RL78 Family Renesas Flash Driver RL78 Type 02 SC version (Code Flash)
- RL78 Family Renesas Flash Driver RL78 Type 02 SC version (Data Flash)
- RL78 Family Renesas Flash Driver RL78 Type 02 SC version (Extra Area)
- RL78 Family Renesas Flash Driver RL78 Type 02 SC version (Flash Common)



RL78/F23 AND RL78/F24 GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 3/3

Flash Driver Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR

- EEPROM Emulation Software RL78 Type 02 for RL78/F23 and RL78/F24 Group
 - EEPROM Emulation Software RL78 Type 02 for RL78/F23 and RL78/F24
 - EEPROM Emulation Software RL78 Type 02 User's Manual for RL78/F23 and RL78/F24

Note. This software uses the Renesas Flash Driver RL78 Type 02 (Simple version) as a built-in driver. Please also download the Renesas Flash Driver RL78 Type 02 (Simple version) together.

RL78/L23 GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 1/3

Flash Driver Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR, LLVM

Renesas Flash Driver RL78 Type 11 for RL78/L23

The Renesas Flash Driver RL78 Type 11 for RL78/L23 is available in a "Simple version" and a "Smart Configurator version (SC version)" and the following areas can be reprogramming.

Code Flash Memory, Data Flash Memory,

Extra Area (Reprogramming of flash memory security, boot swap and bank swap functions, etc.).

Renesas Flash Driver RL78 Type 11 for RL78/L23 Simple version

The simple version package includes the process of reprogramming "Code flash memory", "Data flash memory" and "Extra area".

Renesas Flash Driver RL78 Type 11 for RL78/L23 Smart Configurator version (SC version)

The SC version is the RFD RL78 Type 11 linked to the frequency setting of the Smart Configurator. The component is separated into a "Code Flash memory", a "Data Flash memory", an "Extra area" and "Bank Operation". Start the Smart Configurator from development environment and download and use the target component. These components require a "Common" component.

EEPROM Emulation Software RL78 Type 11 for RL78/L23

The EES is sample software for executing the EEPROM emulation mechanism from user program.



RL78/L23 GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 2/3

Flash Driver Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR, LLVM

- Renesas Flash Driver RL78 Type 11 for RL78/L23 Simple version
 - Renesas Flash Driver RL78 Type 11 for RL78/L23
 - Renesas Flash Driver RL78 Type 11 User's Manual for RL78/L23
- Renesas Flash Driver RL78 Type 11 for RL78/L23 Smart Configurator version (SC version)

The procedure for downloading using the Smart Configurator is described in the Application Note (.pdf). Please click on the link below to download and check.

- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Code Flash) Application Note
- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Data Flash) Application Note
- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Extra FSW) Application Note
- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Bank Operation) Application Note
- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Common) Application Note



RL78/L23 GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 3/3

Flash Driver Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR, LLVM

- EEPROM Emulation Software RL78 Type 11 for RL78/L23
 - EEPROM Emulation Software RL78 Type 11 for RL78/L23
 - EEPROM Emulation Software RL78 Type 11 User's Manual for RL78/L23

Note. This software uses the Renesas Flash Driver RL78 Type 11 (Simple version) as a built-in driver. Please also download the Renesas Flash Driver RL78 Type 11 (Simple version) together.



RL78/F22 AND RL78/F25 GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 1/3

Flash Driver Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR

Renesas Flash Driver RL78 Type 03 for RL78/F22 and RL78/F25 Group

The Renesas Flash Driver RL78 Type 03 for RL78/F22 and RL78/F25 is available in a "Simple version" and a "Smart Configurator version (SC version)" and the following areas can be reprogramming.

Code Flash Memory, Data Flash Memory,

Extra Area (Reprogramming of flash memory security, boot swap function, etc.)

- Renesas Flash Driver RL78 Type 03 for RL78/F22 and RL78/F25 Group Simple version
 The simple version package includes the process of reprogramming "Code flash memory", "Data flash memory" and "Extra area".
- Renesas Flash Driver RL78 Type 03 for RL78/F22 and RL78/F25 Group Smart Configurator version (SC version) The SC version is the RFD RL78 Type 03 linked to the frequency setting of the Smart Configurator. The component is separated into a "Code Flash memory", a "Data Flash memory" and an "Extra area". Start the Smart Configurator from development environment and download and use the target component. The "Common" is required to reprogramming the "Code flash memory", "Data flash memory" and "Extra area".
- EEPROM Emulation Software RL78 Type 03 for RL78/F22 and RL78/F25

The EES is sample software for executing the EEPROM emulation mechanism from user program.



RL78/F22 AND RL78/F25 GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 2/3

Flash Driver Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR

- Renesas Flash Driver RL78 Type 03 for RL78/F22 and RL78/F25 Group Simple version
 - Renesas Flash Driver RL78 Type 03 for RL78/F22 and RL78/F25
 - Renesas Flash Driver RL78 Type 03 User's Manual for RL78/F22 and RL78/F25
- Renesas Flash Driver RL78 Type 03 for RL78/F22 and RL78/F25 Group Smart Configurator version (SC Version)

The procedure for downloading using the Smart Configurator is described in the Application Note (.pdf). Please click on the link below to download and check

- RL78 Family Renesas Flash Driver RL78 Type 03 SC version (Code Flash) Application Note
- RL78 Family Renesas Flash Driver RL78 Type 03 SC version (Data Flash) Application Note
- RL78 Family Renesas Flash Driver RL78 Type 03 SC version (Extra Area) Application Note
- RL78 Family Renesas Flash Driver RL78 Type 03 SC version (Common) Application Note



RL78/F22 AND RL78/F25 GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 3/3

Flash Driver Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR

- EEPROM Emulation Software RL78 Type 03 for RL78/F22 and RL78/F25 Group
 - EEPROM Emulation Software RL78 Type 03 for RL78/F22 and RL78/F25
 - EEPROM Emulation Software RL78 Type 03 User's Manual for RL78/F22 and RL78/F25

Note. This software uses the Renesas Flash Driver RL78 Type 03 (Simple version) as a built-in driver. Please also download the Renesas Flash Driver RL78 Type 03 (Simple version) together.

RL78/G15 AND RL78/G16 GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 1/2

Sample Program Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR, LLVM

RL78/G15 Group and RL78/G16 Group Renesas Flash Sample Program Type 01

The RL78/G15 Group and RL78/G16 Group Renesas Flash Sample Program Type 01 is available in a "Simple version" and a "Smart Configurator version (SC version)" and the following areas can be reprogramming.

Code Flash Memory, Data Flash Memory.

- RL78/G15 Group and RL78/G16 Group Renesas Flash Sample Program Type 01 Simple version

The simple version package includes the process of reprogramming "Code flash memory" and "Data flash memory".

 RL78/G15 Group and RL78/G16 Group Renesas Flash Sample Program Type 01 Smart Configurator version (SC version)

The SC version is the Renesas Flash Sample Program Type 01 linked to the frequency setting of the Smart Configurator. The component is separated into a "Code Flash memory" and a "Data Flash memory". Start the Smart Configurator from development environment and download and use the target component. The "Flash Common" is required to reprogramming the "Code flash memory" and "Data flash memory".

Note. RL78/G15 group and RL78/G16 group products cannot use the flash memory reprogramming software for the RL78/x1x group.

RL78/G15 AND RL78/G16 GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE 2/2

Sample Program Products:

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CC-RL, IAR, LLVM

- RL78/G15 Group and RL78/G16 Group Renesas Flash Sample Program Type 01 Simple version
 - RL78/G15 Group and RL78/G16 Group Renesas Flash Sample Program Type 01
 - RL78/G15 Group and RL78/G16 Group Renesas Flash Sample Program Type 01 Application Note
- RL78/G15 Group and RL78/G16 Group Renesas Flash Sample Program Type 01 Smart Configurator version (SC version)

The procedure for downloading using the Smart Configurator is described in the Application Note (.pdf). Please click on the link below to download and check.

- RL78/G15 Group and RL78/G16 Group Renesas Flash Sample Program Type 01 SC Version (Code Flash)
- RL78/G15 Group and RL78/G16 Group Renesas Flash Sample Program Type 01 SC Version (Data Flash)
- RL78/G15 Group and RL78/G16 Group Renesas Flash Sample Program Type 01 SC Version (Flash Common)



RL78/x1x GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE JAPANESE RELEASE 1/3

Self Programming Library Products:

Target Region: Mainland China/ Hong Kong/ Singapore/ South & Southeast Asia/ Oceania/ India/ South Korea/ Taiwan/ Japan

Target IDE: CS+, e² studio

Target Compiler: CA78K0R, CC-RL, LLVM

Flash Self Programming Library Type01 for RL78 Family

Reprogramming code flash memory.

- Flash Self Programming Library Type01 for RL78 Family
- RL78 Family Flash Self Programming Library Type01 User's Manual in Japan and Other Asian Countries (Japanese Release)
- Data Flash Library Type04 for RL78 Family

Reprogramming data flash memory.

- Data Flash Library Type04 for RL78 Family
- RL78 Family Data Flash Library Type04 User's Manual in Japan and Other Asian Countries (Japanese Release)

Note. Please check the "RL78 Family Self RAM list of Flash Self Programming Library" for available flash reprogramming software for the MCU to be used.



RL78/x1x GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE JAPANESE RELEASE 2/3

Self Programming Library Products:

Target Region: Mainland China/ Hong Kong/ Singapore/ South & Southeast Asia/ Oceania/ India/ South Korea/ Taiwan/ Japan

Target IDE: CS+, e² studio

Target Compiler: CA78K0R, CC-RL, LLVM

EEPROM Emulation Library Pack02 for RL78 Family

The EEPROM emulation library is a software library used to execute EEPROM emulation from a user-created program.

- **EEPROM Emulation Library Pack02 for RL78 Family**
- RL78 Family EEPROM Emulation Library Pack02 User's manual in Japan and Other Asian Countries (Japanese Release)

Note. Please check the "RL78 Family Self RAM list of Flash Self Programming Library" for available flash reprogramming software for the MCU to be used.

RL78/x1x GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE JAPANESE RELEASE 3/3

Self Programming Library Products:

Target Region: Mainland China/ Hong Kong/ Singapore/ South & Southeast Asia/ Oceania/ India/ South Korea/ Taiwan/ Japan

Target IDE: CS+

Target Compiler: CA78K0R

EEPROM Emulation Library Pack01 for RL78 Family

The EEPROM emulation library is a software library used to execute EEPROM emulation from a user-created program.

- **EEPROM Emulation Library Pack01 for RL78 Family**
- RL78 Family EEPROM Emulation Library Pack01 Japanese Release user's manual
- Notes 1. Only CA78K0R compiler is supported. There are no plans to support CC-RL and LLVM compilers.
 - 2. Please check the "RL78 Family Self RAM list of Flash Self Programming Library" for available flash reprogramming software for the MCU to be used.

RL78/x1x GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE EUROPEAN RELEASE 1/3

Self Programming Library Products:

Target Region: Americas/ Brazil/ Europe/ Middle East/ Africa

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CA78K0R, GNU, CC-RL, IAR, LLVM

Flash Self Programming Library Type01 for RL78 Family

Reprogramming code flash memory.

- Flash Self Programming Library Type01 for RL78 Family
- Flash Self-programming Library Type T01, European Release User's Manual
- Data Flash Library Type04 for RL78 Family

Reprogramming data flash memory.

- Data Flash Library Type04 for RL78 Family
- Data Flash Access Library Type T04 (Pico), European Release User's Manual

Note. Please check the "RL78 Family Self RAM list of Flash Self Programming Library" for available flash reprogramming software for the MCU to be used.



RL78/x1x GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE EUROPEAN RELEASE 2/3

Self Programming Library Products:

Target Region: Americas/ Brazil/ Europe/ Middle East/ Africa

Target IDE: CS+, e² studio, IAR Embedded Workbench

Target Compiler: CA78K0R, GNU, CC-RL, IAR, LLVM

EEPROM Emulation Library Pack02 for RL78 Family

The EEPROM emulation library is a software library used to execute EEPROM emulation from a user-created program.

The package includes EEL Type T02(Tiny) and FDL Type T02(Tiny).

- EEPROM Emulation Library Pack02 for RL78 Family
- <u>EEPROM Emulation Library Type T02 (Tiny), European Release User's Manual</u>
- Data Flash Access Library Type T02 (Tiny), European Release User's Manual

Note. Please check the "RL78 Family Self RAM list of Flash Self Programming Library" for available flash reprogramming software for the MCU to be used.



RL78/x1x GROUP SUPPORTED FLASH MEMORY REPROGRAMMING SOFTWARE EUROPEAN RELEASE 3/3

Self Programming Library Products:

Target Region: Americas/ Brazil/ Europe/ Middle East/ Africa

Target IDE: CS+, IAR Embedded Workbench

Target Compiler: CA78K0R, IAR

EEPROM Emulation Library Pack01 for RL78 Family

The EEPROM emulation library is a software library used to execute EEPROM emulation from a user-created program.

The package includes EEL Type T01 and FDL Type T01.

- EEPROM Emulation Library Pack01 for RL78 Family
- <u>EEPROM Emulation Library Type T01, European Release User's Manual</u>
- Data Flash Access Library FDL-T01 RL78 Series, European Release User's Manual
- Notes 1. There are no plans to support CC-RL, GNU and LLVM compilers.
 - 2. Please check the "RL78 Family Self RAM list of Flash Self Programming Library" for available flash reprogramming software for the MCU to be used.



RELATED DOCUMENTS

- Related documents for the Renesas Flash Driver and EEPROM Emulation Software products
 - Renesas Flash Driver and EEPROM Emulation Software for RL78 Target MCU List General-Purpose
 - Renesas Flash Driver and EEPROM Emulation Software Target MCU List for RL78 Automotive
- Related document for the Self Programming library products
 - RL78 Family Self RAM list of Flash Self Programming Library



VIDEO INTRODUCTION 1/2

Here is a video on flash memory reprogramming

Re-programming the flash memory build-in the microcomputer [Time 5:00]

This video explains how to re-program the flash memory. This focus on the mechanism of re-programming the flash memory built-in the microcomputer.

Flash Library and Flash Driver Products [Time 4:10]

This video will introduce some flash libraries and flash drivers provided by Renesas Electronics.

EEPROM Emulation Software for RL78 [Time 4:08]

This video introduces the EEPROM Emulation software, one of Renesas Electronics' self-programming software products for the RL78 microcontroller.

How to Use Renesas Flash Driver RL78 Type 01 SC Version on e² studio [Time 4:51]

This video introduces how to reprogram the RL78/G2x data flash memory using the Renesas Flash Driver RL78 Type 01 Smart Configurator Version on e² studio.

■ How to Use EEPROM Emulation Software RL78 Type 01 on e² studio [Time 4:35]

This video provides a step-by-step guide on performing EEPROM emulation on the RL78/G2x data flash memory using the EEPROM Emulation Software RL78 Type 01.



VIDEO INTRODUCTION 2/2

Here is a video on flash memory reprogramming

- Reprogramming RL78/G2x Code Flash Memory with Flash Driver SC [e² studio] [Time 4:32]
 - This video demonstrates how to reprogram the RL78/G2x code flash memory using the Renesas Flash Driver RL78 Type 01 Smart Configurator Version.
- How to Reprogram the RL78/G2x Extra Area Using Flash Driver SC Version in e² studio [Time 4:32]

This video demonstrates how to reprogram the RL78/G2x extra area using the Renesas Flash Driver RL78 Type 01 Smart Configurator Version.

Renesas.com

