

[Released on the Web]

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Rev.1.00

Oct. 20, 2025

Renesas Flash Driver RL78 Type 11

for RL78/L23 SC version Application Notes V1.00

Outline

Renesas Flash Driver RL78 Type 11 for RL78/L23 Smart Configurator Version V1.00 has been released on the web.

This product is available free of charge.

1. Product Features

Renesas Flash Driver RL78 Type 11 (hereinafter called “RFD RL78 Type 11”) Smart Configurator Version (hereinafter called “SC Version”) for RL78/L23, it is the Smart Configurator Version of already released RFD RL78 Type 11.

RFD RL78 Type 11 SC Version is the software for reprogramming the flash memory in RL78/L23. The API functions of RFD RL78 Type 11 are called from user program and reprogram the code flash memory, data flash memory or extra area. There are also application note available to perform bank programming control and bank swap control.

2. Supported Devices

RL78/L23

RFD RL78 Type 11 SC Version cannot be used in RL78 Family devices other than RL78/L23.

3. Operating Environment

The operating environment is as follows.

Table 1 Operating Environment for the RFD RL78 Type 11 SC Version

Compiler (IDE)	Manufacturer	Version
CC-RL (for CS+, or e ² studio)	Renesas Electronics	V1.15 or later
IAR Embedded Workbench	IAR Systems	V5.10.3 or later
LLVM (for e ² studio)	(Open Source Software)	V17.0.1.202412 or later

Note. Integrated development environment (IDE) and compiler must support the target device.

4. Application Notes

The application notes for the RFD RL78 Type 11 SC Version (PDF file) are stored in the RFD RL78 Type 11 SC Version package for each reprogramming target. To use only the application note (PDF file), download them from “Documentation” in the URL below.

https://www.renesas.com/flash_libraries/self_prg (Code Flash Libraries)

https://www.renesas.com/flash_libraries/data_flash (Data Flash Libraries)

- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Code Flash)
Application Note Rev.1.00 [R20AN0778]
- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Data Flash)
Application Note Rev.1.00 [R20AN0779]
- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Extra FSW)
Application Note Rev.1.00 [R20AN0780]
- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Bank Operation)
Application Note Rev.1.00 [R20AN0781]
- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Common)
Application Note Rev.1.00 [R20AN0782]

For the detail specification of RFD RL78 Type 11, download and confirm RFD RL78 Type 11 User's Manual.

- RL78 Family Renesas Flash Driver RL78 Type 11 User's Manual [R20UT5539]

5. Obtaining the Product

It is possible to choose and download "RL78/L23" by smart configurator. Alternatively, each package (zip file) can be download from "Design & Development" section of Code Flash Libraries (Flash Self Programming Libraries) and Data Flash Libraries below.

Be sure to download and use application reprograms and "Flash Common" containing common API.

<Example> The case where the code flash memory area is reprogramed.

It is necessary to download both RFD RL78 Type 11 SC Version (Code Flash) and RFD RL78 Type 11 SC Version (Flash Common).

https://www.renesas.com/flash_libraries/self_prg (Code Flash Libraries)

https://www.renesas.com/flash_libraries/data_flash (Data Flash Libraries)

- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Code Flash) Application Note Rev.1.00
The name of SC display: Flash Driver[Renesas Flash Driver RL78 Type11 Code Flash]
Zip file name: r20an0778xx0100-RL78-code_flash.zip
- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Data Flash) Application Note Rev.1.00
The name of SC display: Flash Driver[Renesas Flash Driver RL78 Type11 Data Flash]
Zip file name: r20an0779xx0100-RL78-data_flash.zip
- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Extra FSW) Application Note Rev.1.00
The name of SC display: Flash Driver[Renesas Flash Driver RL78 Type11 Extra FSW]
Zip file name: r20an0780xx0100-RL78-extra_fsw.zip
- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Bank Operation) Application Note Rev.1.00
The name of SC display: Flash Driver[Renesas Flash Driver RL78 Type11 Bank Operation]
Zip file name: r20an0781xx0100-RL78-bank_operation.zip
- RL78 Family Renesas Flash Driver RL78 Type 11 SC version (Common) Application Note Rev.1.00
The name of SC display: Flash Driver[Renesas Flash Driver RL78 Type11 Flash Common]
Zip file name: r20an0782xx0100-RL78-flash_common.zip

Revision History

Rev.	Date	Description	
		Page	Summary
1.00	Oct.20.25	-	First edition issued

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Corporate Headquarters

TOYOSU FORESIA, 3-2-24 Toyosu,
Koto-ku, Tokyo 135-0061, Japan
www.renesas.com

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