

# Contents List of RX65N Envision Kit Firmware

## Demo Firmware

By writing this firmware to a USB memory stick, you can rewrite the firmware on the board during a demo.

Documentation and demo software	Description
<a href="#">Standard Firmware</a>	Download the latest versions of four types of demo firmware (2D Drawing Engine, Bouncing Balls, Mandelbrot Calculation, and Firmware Bank Swap Demo).
<a href="#">Benchmark Firmware</a>	Download demo firmware for benchmarking (dual bank rewriting image, storage benchmark, and system log).

Documentation and so on can be downloaded below.

(Download Link)

Documentation and demo software	Description
Demo firmware (source code)	Download the latest versions of four types of demo software (2D Drawing Engine, Bouncing Balls, Mandelbrot Calculation, and Firmware Bank Swap Demo).
<a href="#">User's manual (instruction manual)</a>	Download the instruction manual for this kit. (Download Link)
<a href="#">Circuit diagram and bill of materials</a>	Download the circuit diagram and bill of materials for this kit.
<a href="#">Declaration of conformity for CE logo</a>	Declaration of conformity for the CE logo for Europe.
<a href="#">Declaration of conformity for China</a>	Declaration of conformity for China.

name on website	download filename	contents	Description
Standard Firmware	standard.zip	std.rsu	initial
		stdxxx.rsu	update(xxx=version)
Benchmark Firmware	benchmark.zip	bench.rsu	initial
		benchxxx.rsu	update(xxx=version)

name on website	download filename	contents	description
Demo firmware(source code)	rx65n_envisionkit.zip	rx65n_secure_boot	boot loader project
		standard	standard demo project
		benchmark	benchmark demo project
		convert.exe	mot file converter
		rx65n_envisionkit_demo_readme.txt	readme

# Quick Start to Update



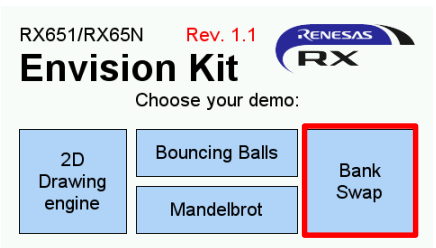
power on reset



Boot loader initial message

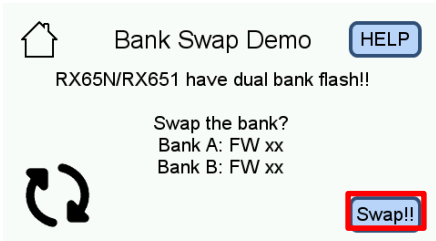
(primary bank)

wait



Wakeup standard demo

push bank swap



swap bank and software reset

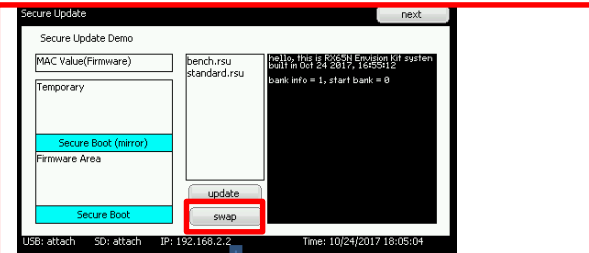
(secondary bank)

wait



Wakeup benchmark demo

touch display



swap bank and software reset

Insert USB memory stick into your RX65N Envision Kit.



Download all of latest Demo Firmware file, and de-compress zip file to extract firmware file(\*.rsu), and input them(\*.rsu) into your USB memory stick.



Renesas website  
RX65N Envision Kit page

**How to Update:**  
You can choose update data from file list. The file list comes from \*.rsu file in your USB memory. You can update other bank of demo. Please select benchxxx.rsu or stdxxx.rsu and push update button.

Please refer to this data flow if you need customization for demo, confirm behavior of demo, etc.

# Data flow of firmware installation

Demo firmware (source code)



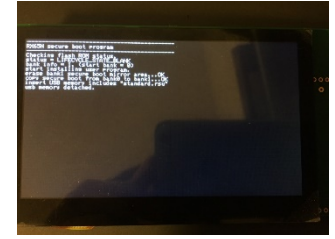
import 3 folders  
rx65n\_secure\_boot,  
standard,  
benchmark,  
in rx65n\_envisionkit.zip



build Boot loader (rx65n\_secure\_boot.mot)  
download with SW1-1 **on** and SW1-2 off and SW4-1 off and SW4-2 don't care.



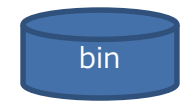
power on reset with SW1-1 **off** and SW1-2 off and SW4-1 off and SW4-2 don't care.  
Boot loader initial message



build Standard Firmware (RX65N\_EnvisionKit.mot)  
tool convert.exe



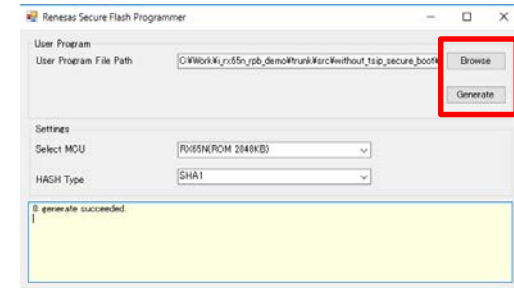
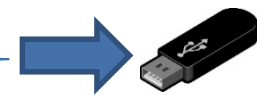
bin Standard Firmware for envision kit boot loader (rename from userprog.rsu to std.rsu)



build Benchmark Firmware (rx65n\_envision\_kit\_demo.mot)  
tool convert.exe



bin Benchmark Firmware for envision kit boot loader (rename from userprog.rsu to bench.rsu)



Convert from \*.mot to \*.rsu.

# Data flow of firmware installation

