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
Standard Firmware	Download the latest versions of four types of demo firmware (2D Drawing Engine, Bouncing Balls, Mandelbrot Balculation, and Firmware Bank Swap Demo).
Benchmark Firmware	Download demo firmware for benchmarking (dual bank rewriting image, storage benchmark, and system log).

(Download Link)

Documentation and so on can be downloaded below.

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).
User's manual (instruction manual)	Download the instruction manual for this kit.
Circuit diagram and bill of materials	Download the circuit diagram and bill of materials for this kit.
Declaration of conformity for CE logo	Declaration of conformity for the CE logo for Europe.
Declaration of conformity for China	Declaration of conformity for China.

(Download Link)

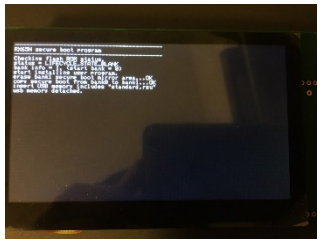
name on website	download filename	contents	Description
Standard Firmware	standard.zip	std.rsu	initial
		stdxxx.rsu	updata(xxx=version)
Benchmark Firmware	benchmark.zip	bench.rsu	initial
		benchxxx.rsu	updata(xxx=version)

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

© 2017 Renesas Electronics Corporation. All rights reserved.

Quick Start to Update

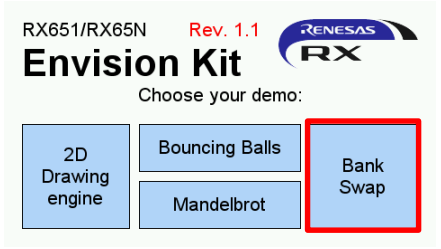
power on reset



Boot loader initial message

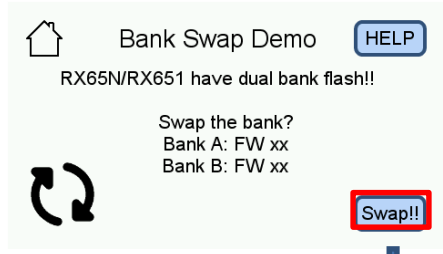
(primary bank)

wait



Wakeup standard demo

push
bank swap



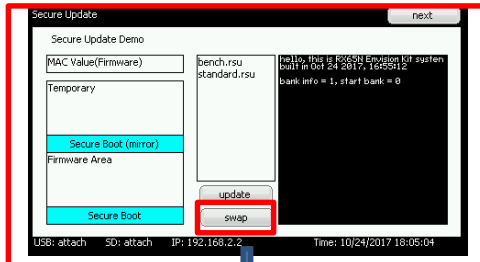
swap bank and software reset

Insert USB memory stick
into your RX65N Envision Kit.

wait
(secondary bank)

Wakeup benchmark demo

touch display



swap bank and software reset

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.

© 2017 Renesas Electronics Corporation. All rights reserved.

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)

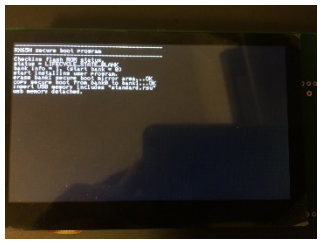
import
3 folders
rx65n_secure_boot,
standard,
benchmark,
in rx65n_envisionkit.zip

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

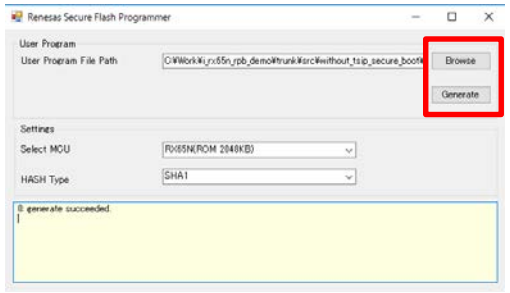
Benchmark Firmware
(rx65n_envision_kit_demo.mot)

tool

convert.exe

bin

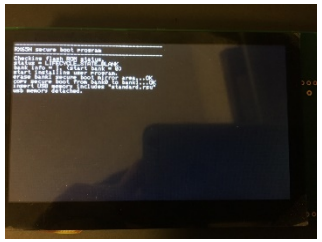
Benchmark Firmware for envision kit boot loader
(rename from userprog.rsu to bench.rsu)



Convert from *.mot to *.rsu.

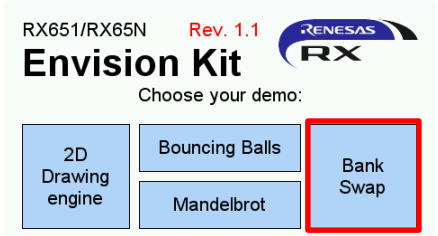
© 2017 Renesas Electronics Corporation. All rights reserved.

Data flow of firmware installation



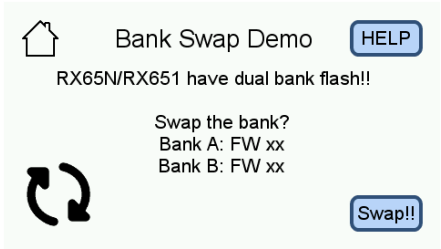
Boot loader initial message

wait
(download “std.rsu” in automatically.)

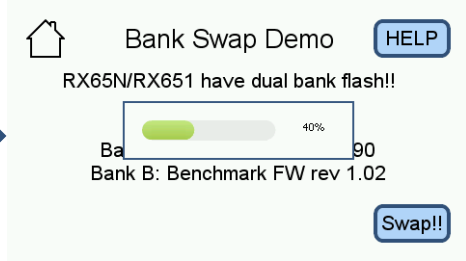


Wakeup standard demo

push
bank swap

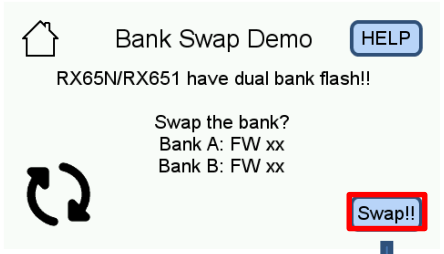


Keep pushing
SW2 in
3 seconds.



Insert USB memory stick
into your RX65N Envision Kit.

Start download
“bench.rsu”
in automatically



swap bank and software reset

© 2017 Renesas Electronics Corporation. All rights reserved.