

RE Ecosystem Partner Solution

SEGGER Embedded Studio



Solution Summary

The [Embedded Studio](#) IDE and [the Renesas RE Family](#) work perfectly together to minimize power consumption in keeping with the resource constraints of a low power design. In the reader test of the renowned trade magazine Elektronik, Embedded Studio was awarded the best grade of all products ever tested.

Features/Benefits

Developers get all the tools and features needed for professional embedded C programming and development. Its highly-optimized runtime library ensures the best performance with the smallest code size – [Every byte counts!](#)

- FREE for non-commercial use with Renesas RE family and any other MCU
- Windows, Linux or Mac compatible
- Clang/LLVM & GCC & SEGGER C/C++ tool-chains included
- Multi-threaded build minimizes build times

Diagrams/Graphics



Target Markets and Applications

- Industrial Controls
- Smart Home
- Energy Saving IoT Appliance
- Home Appliance
- Health Care
- Aviation Electronic Equipment
- Automotive



Embedded developers can now use [SEGGER Embedded Studio](#) IDE for the Renesas RE Family of microcontrollers (MCUs). Embedded Studio is the cross-platform development environment for Embedded Systems development. The editor is quick to start up and the build process is blazingly fast, saving precious working hours. Embedded Studio contains SEGGER's own runtime and floating point libraries, compilers, and linkers. All of these components were developed from the ground up specifically for resource-constrained embedded systems, are extensively used internally, and are continuously updated and evolving. SEGGER's primary development goal is to create fast programs that are easily tailored to the target system and require as little memory as possible.

Optimizations are made at various stages of the build process to reduce code size and improve execution speed. The linker can make optimal use of the typically small memory of microcontrollers. Code blocks can be distributed over several memory areas and unusable memory locations can be omitted.

Embedded Studio supports all the features that characterize [J-Link](#) and [J-Trace](#), such as unlimited breakpoints in flash memory or [RTT \(Real Time Transfer\)](#).

For educational and non-commercial purposes, Embedded Studio can be downloaded free of charge and without registration from the SEGGER website. There are no restrictions in terms of code size, features, or duration of use.

The power efficiency of the Renesas RE Family MCUs (including the RE01-256K), combined with the low resource usage of SEGGER software, minimizes or sometimes even removes the need to recharge or replace batteries. This combined efficiency could have far reaching effects; for home and building automation, smart farming, factories, a wide range of medical devices, wearable applications, and more.

Download and Information:

<https://www.segger.com/products/development-tools/embedded-studio/>

Elektronik Reader Test Results:

<https://blog.segger.com/seggers-embedded-studio-achieves-top-rating-in-german-elektronik-magazine/>

Requirements:

Runs on any PC (Windows/MacOS/Linux)