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# Embedded Studio Reference Manual

**Version: 3.12**





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# Introduction

This guide is divided into a number of sections:

## **Introduction**

Covers installing SEGGER Embedded Studio on your machine and verifying that it operates correctly, followed by a brief guide to the operation of the SEGGER Embedded Studio integrated development environment, debugger, and other software supplied in the product.

## **SEGGER Embedded Studio User Guide**

Contains information on how to use the SEGGER Embedded Studio development environment to manage your projects, build, and debug your applications.

## **C Library User Guide**

Contains documentation for the functions in the standard C library supplied in SEGGER Embedded Studio.

## **ARM target support**

Contains a description of system files used for startup and debugging of ARM applications.

# What is SEGGER Embedded Studio?

SEGGER Embedded Studio is a complete C/C++ development system for ARM and Cortex, microcontrollers and microprocessors that runs on Windows, Mac OS and Linux.

## C/C++ Compiler

SEGGER Embedded Studio comes with pre-built versions of both GCC and Clang/LLVM C and C++ compilers and assemblers. The GNU linker and librarian are also supplied to enable you to immediately begin developing applications for ARM.

## SEGGER Embedded Studio C Library

SEGGER Embedded Studio has its own royalty-free ANSI and ISO C compliant C library that has been specifically designed for use within embedded systems.

## SEGGER Embedded Studio C++ Library

SEGGER Embedded Studio supplies a C++ library that implements STL containers, exceptions and RTTI.

## SEGGER Embedded Studio IDE

SEGGER Embedded Studio is a streamlined integrated development environment for building, testing, and deploying your applications. SEGGER Embedded Studio provides:

*Source Code Editor:* A powerful source code editor with multi-level undo and redo, makes editing your code a breeze.

*Project System:* A complete project system organizes your source code and build rules.

*Build System:* With a single key press you can build all your applications in a solution, ready for them to be loaded onto a target microcontroller.

*Debugger and Flash Programming:* You can download your programs directly into Flash and debug them seamlessly from within the IDE using a wide range of target interfaces.

*Help system:* The built-in help system provides context-sensitive help and a complete reference to the SEGGER Embedded Studio IDE and tools.

*Core Simulator:* As well as providing cross-compilation technology, SEGGER Embedded Studio provides a PC-based fully functional simulation of the target microcontroller core so you can debug parts of your application without waiting for hardware.

## **SEGGER Embedded Studio Tools**

SEGGER Embedded Studio supplies command line tools that enable you to build your application on the command line using the same project file that the IDE uses.