

Keil MDK for Arm Cortex-M and Ethos-U based Embedded Systems

Use the Keil Microcontroller Development Kit and benefit from multi-platform support, cost-efficiency, and improved productivity for your embedded systems projects.

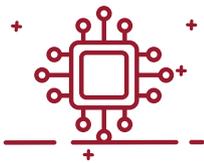
Keil MDK V6 is your state-of-the art engineering environment for implementing advanced embedded systems and software

Keil MDK Version 6 represents a comprehensive evolution of the trusted MDK V5 development environment for Cortex-M and Ethos-U processors. The most important benefits from a user perspective are flexibility thanks to multi-platform support and cost-efficiency resulting from enhanced features sets now included in lower-cost editions.

Furthermore, integration of VS code is now also supported as well as integration into a state-of-the-art Dev/Ops environment. With support of Ethos-U based systems, Keil MDK V6 is optimized for machine learning and IoT solutions.

USE CASES

- Use case 1: implement advanced embedded systems in a state-of-the art and well-proven engineering environment.
- Use case 2: simplify development with built-in support for common safety standards in regulated industries.



COMPLETE STATE-OF-THE-ART MICROCONTROLLER DEVELOPMENT KIT

The Keil packages include IDE, debugger, debug adapter, C/C++ compiler and CMSIS support, and are available from SodiusWillert for Arm Cortex-M and Arm Ethos-U based systems.

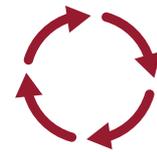
We will gladly assist you in integrating your embedded software project into the context of your lifecycle tools to take advantage of requirements management and other disciplines.



DEVELOPMENT OF SAFETY-CRITICAL SYSTEMS

The Functional Safety Package for Arm-based systems (Arm FuSa RTS) helps you comply with typical safety standards in regulated industries. FuSa is integrated in the Professional Edition at no extra costs.

In addition, SodiusWillert provides the necessary templates and process descriptions to help you comply with approval-relevant requirements and reduce the effort required for successful certification.



LIFECYCLE INTEGRATION

Integrate your embedded software project into the product lifecycle context.

For complex systems that include microcontroller-based subsystems, integration with your lifecycle tools enables visibility into requirements coverage, consistent change and configuration management, and more efficient quality assurance through automated testing

PRODUCT FEATURES

State-of-the-art C/C++ compiler for Arm Cortex-M and Ethos-U systems

Arm compilers provide the most comprehensive, best-in-class support for Arm Cortex-M and Ethos-U microcontroller architectures. Leading companies around the world in a wide range of industries are using Arm C/C++ compilers to leverage many powerful optimizations that save memory and increase performance..

Embedded Software integrated into the lifecycle

When developing complex systems involving embedded software modules, it helps to broaden the view and look at the lifecycle context. Expand visibility to include requirements management, UML models, configuration management and test automation for increased transparency and traceability from requirements to code.

Safety-critical embedded systems

The Arm FuSa RTS functional safety module for Arm Cortex based systems helps you comply with industry-specific safety standards such as ISO 26262, IEC 61508, IEC 62304, EN 50128 and more. In addition, SodiussWillert provides you with an integrated environment optimized for safety projects with the necessary templates, documentation and pre-built processes,

CMSIS Toolbox and standardized workflows

The new CMSIS-based development provides you with simplified device and board selection. The toolchain can be configured automatically, including debug setup. You can choose from various RTOS kernels. A CMSIS view is available for event-based software verification. To accommodate further automation, a command-line interface (CLI) is also available.

About SodiussWillert

SodiussWillert helps organizations manage the challenges of developing complex products and systems by providing powerful add-ons for engineering lifecycle tools, advanced solutions for embedded systems, and expert advice for developing complex systems and software. We support organizations in Aerospace, Automotive, Transportation, Defense and Medical industries. For more information, visit sodiusswillert.com.

BENEFITS OF KEIL MDK V6

Use with all popular microcontrollers

Use the Keil MDK to develop software for Arm Cortex-M microcontroller families as well as for Arm Ethos-U based systems specialized for machine learning applications. Your investment in tool technology, know-how, and integrations is secured in the long term.

Flexibility through simple licensing scheme

Keil MDK V6 is available in three editions, providing your teams with maximum flexibility regarding platforms, work locations, or scalability. Enjoy simplified license management and expanded accessibility of options

Simplify development of safety-critical systems

The Keil functional safety module Arm FuSa RTS simplifies the creation, analysis, and verification of complex safety-critical microcontroller applications. Add the proven templates and processes provided by SodiussWillert for the development of safety-critical systems to reduce the effort required for a successful certification procedure.

Traceability through to Code

Gain transparency and end-to-end traceability by integrating your embedded software modules into the product lifecycle. Embedded software is no longer a "black box" but a module that allows insight, e.g. which requirements were implemented by which code sections and which tests were used to verify those requirements.