

EUROS Embedded Studio®

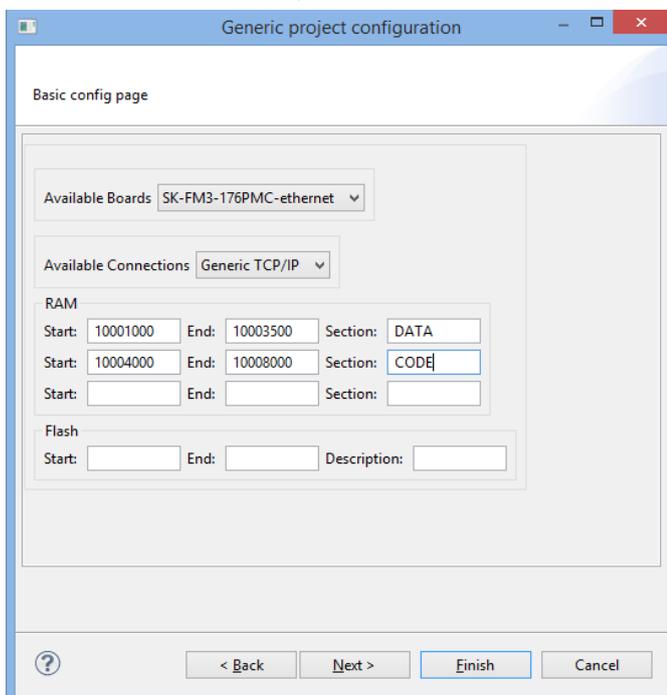
Comprehensive Cross-Development Environment

Powered by Eclipse

Overview

EUROS Embedded Studio® is a universal cross-development environment based on Eclipse and designed to facilitate all phases of embedded software development. Starting from the mapping of the hardware, establishing the target and debug connections, the user can easily create an application based on the chosen microcontroller and using a real target hardware platform.

In addition, EUROS Embedded Studio offers a number of supplementary tools that can substantially enhance debugging of embedded applications. Some examples are software real-time tracing, code coverage, RTOS-awareness (where appropriate), and many others.



Default RTOS Configuration

The current version of EUROS Embedded Studio supports the automatic configuration of the EUROS general purpose RTOS as well as EUROSmot, which is compliant with OSEK-/AUTOSAR.

Automatic Sample Program Generation

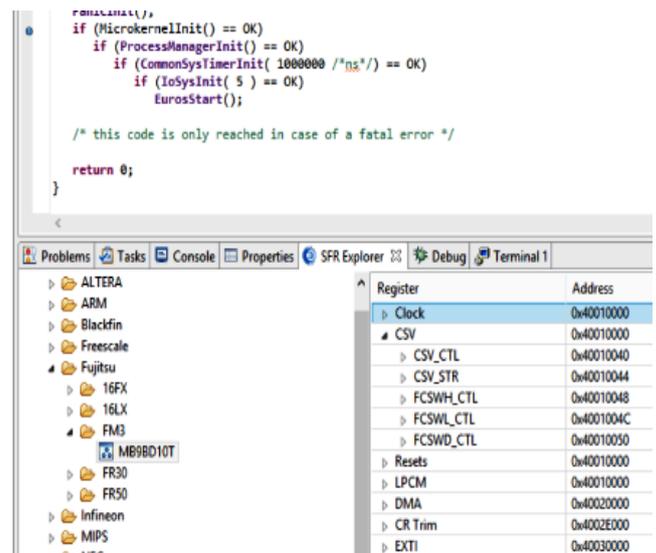
An important feature of EUROS Embedded Studio is that it automatically generates an example program that is designed for testing the selected system software. It can be downloaded to the target system in order to test and verify both the implemented target and debug connection as well as the system software.

Use of Operating Systems

The basic version of EUROS Embedded Studio is a bare-metal one; that is, it runs without using a real-time operating system. However, if an RTOS is used, EUROS Embedded Studio offers a step-by-step graphical configuration procedure in order to compile a tailored embedded application.

Updateable Development Environment

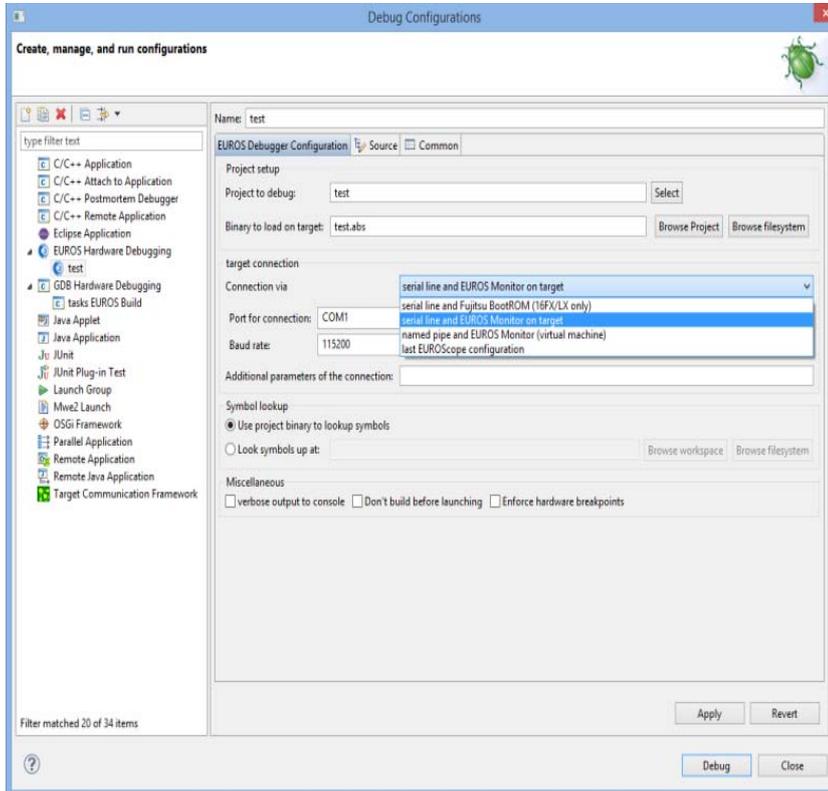
Created with flexibility and portability in mind, EUROS Embedded Studio works on top of Eclipse, which makes it suitable for all projects that rely on the open and automatically updateable Eclipse environment.



Extendable Plug-in Architecture

Powered by extendable plug-in architecture, available tools from different vendors can be combined and used in order to facilitate and speed up the development process.

EUROS Embedded Studio[®]



- Choosing one of the following target and debug connections:
 - BDM, serial, USB, CAN, arcnet
 - Ethernet, SDB, OCD
 - Real-Time Debug Agent (EUROSrda)
 - JTAG Adapter (Macraigor, Renesas, Lauterbach, Abatron, iSystem, PEEDI, etc.)
- Tool chain (compiler) settings
- Wizard-guided configuration for standalone applications
 - Generation of board support package
- Wizard-guided EUROS configuration of the following components:
 - Hardware Abstraction Layer (HAL)
 - Microkernel
 - Input-/Output System
 - Process Manager
 - C/C++ Libraries
 - Driver packages like serial, I2C, SPI, CAN, USB, Ethernet, etc.
 - Graphical libraries
 - File systems
 - Configuration of network protocols, such as USB host/device, CANopen, TCP/IP, PROFINET, EtherCAT, OPC UA, etc.

Extensive Feature Set

EUROS Embedded Studio[®] provides all features of a modern development environment, including the following:

- Project management
- Code writing, editing and syntax highlighting
- Context sensitive code and auto completion
- Templates for projects and documents
- Multiple tool chain configuration and error parsing support
- On-the-fly code analysis with support for coding rules
- Integration of user-defined tools
- Powerful search & replace utility with RegEx support
- Code parsing and preprocessing
- Context sensitive help system

Key Benefits – Summary

- Wizard-guided basic configuration as follows:
 - Memory mapping of the target system applications

- Wizard-guided EUROSmot configuration
 - OIL configuration tool
- Support for test tools:
 - VectorCAST configuration

EUROS Embedded Studio speeds up the entire development process. At the same time it minimizes potential errors, by automatically generating board support packages to performing static and dynamic tests of the application code.