

EASE-8051

Evatronix Application-debugging Support Environment for the R8051XC2/T8051 Microcontrollers

MAJOR FEATURES

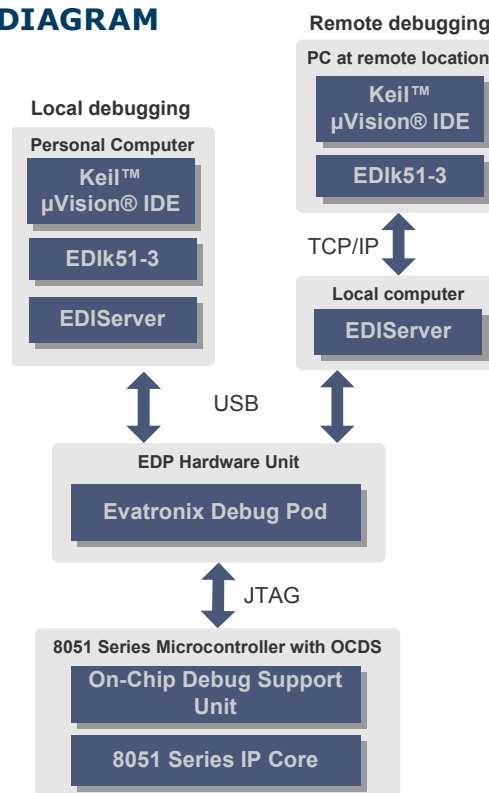
- ◆ Program execution control reset, stop, go and step in ANSI C or ASM instruction mode
- ◆ Software breakpoints (SWBP) to stop program execution on code fetch
- ◆ Hardware breakpoints (HWBP) to stop program execution from a selected address/address range
- ◆ Full read/write access to memory
- ◆ Read/write access to internal processor registers, including PC

OVERVIEW

The **EASE-8051** is a special set of hardware and software solutions for all variations of the **R8051XC2/T8051** microcontrollers that allows in-system core debugging while a user application is being executed. A complete solution includes the following components:

- ◆ **R8051XC2/T8051 On Chip Debug Support** (OCDS) unit, which allows controlled execution of a user program, reading or writing memories and registers and much more
- ◆ **Evatronix Debug Interface** (EDIk51-3) – a dedicated software package for a Windows PC that works with the debugger environment
- ◆ **Evatronix Debug Pod** (EDP) – an external hardware unit, which transmits data between the debugger and the debug target through two interfaces: USB and JTAG. The first one is used to communicate with the PC while the second one establishes connection with the **R8051XC2/T8051**.

BLOCK DIAGRAM



EASE-8051

BENEFITS

- ◆ **EASE-8051** provides a convenient and fast environment for debugging all 8051-based applications thus speeding time to market
- ◆ Remote debugging via Internet network (using TCP/IP protocol)
- ◆ Simple and easy installation (user friendly Install Guide)

CONFIGURABILITY

Thanks to the additional application which transmits data from the CrossView Debugger to the EDP device over any network via the TCP/IP protocol there are two possibilities for debugging:

- ◆ Local - CrossView debugger is running on a PC and EDP with hardware target connected directly to it
- ◆ Remote - CrossView debugger is running on one PC while EDP with hardware target is connected to the other PC, so an engineer can work on target hardware which is placed in a different room, building or any other location. All what is needed a network connection

APPLICATIONS

- ◆ Debugging and testing embedded software in target environment. It is especially recommended when the project integrates a Real Time Operating System and/or peripheral controllers as USB or Ethernet devices
- ◆ Testing additional peripheral controllers via debugger interface

RELATED PRODUCTS

R8051XC2 - the world's fastest, most configurable 8051-compatible microcontroller.

T8051 - the world's smallest microcontroller which executes the ASM51 instruction set.

STANDARD DELIVERABLES

- ◆ EDP package (with full documentation, cables, etc.)
- ◆ User Manual and Installation Guide
- ◆ EDI51-3 and EDIServer software installation pack with a user-friendly Install Guide

DELIVERY OPTIONS

- ◆ **EB5-Tiny** evaluation board with an FPGA adapter with Xilinx or Altera FPGA

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