

AVR[®] ICE50

In-Circuit Emulator

REDUCE TIME-TO-MARKET WITH COMPLETE CONTROL DURING DEBUGGING

The AVR ICE50 from Atmel[®] is a top-of-the-line development tool for complete In-Circuit Emulation of all new AVR[®] 8-bit RISC microcontrollers. The ICE50 and the AVR Studio[®] user interface give the user complete control of the internal resources of the microcontroller, helping to reduce development time by making debugging easier. The ICE50 performs Real Time emulation of the microcontroller while running in a target system.



- AVR Studio Operated (Ver. 4 or Newer)
- Full Emulation of All Analog and Digital Functions
- Built-in Self-test
- Built-in 128K x 144 Bits Trace Buffer
- Code Profiler & Code Coverage Detection
- USB & RS-232 Interface to PC
- Full Support for Assembly and High Level Languages
- Unlimited Number of Program Breakpoints
- Real Time Memory Readout
- All Operations and Breakpoints are Real Time
- Upgrades are done from AVR Studio
- Target Voltage 2.2 – 5.5V
- Supplied with 100 – 240VAC 50/60 Hz Adaptator

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The AVR ICE50 In-Circuit Emulator from Atmel is a powerful development tool for shortening development time of applications using AVR microcontrollers. The AVR ICE50 has all the advanced features that give complete control of the AVR microcontrollers, combined with an intuitive user interface. This makes the AVR ICE50 the perfect tool for rapid design of efficient microcontroller applications.



The ICE50 allows access to all the powerful features of the AVR microcontrollers. All AVR resources can be emulated: Flash memory, EEPROM memory, SRAM memory, Register File, Program Counter, and all I/O modules. The ICE50 also offers extensive support for break conditions, including break on change of Program memory flow, Program memory Break Points on single address or address range, and Data memory Break Points on single address or address range.

The ICE50 supports advanced program analysis tools like profiling. The profiler is an analysis tool that can be used to examine the run-time behavior of applications. By using profiler information, the user can determine which sections of the code are working efficiently, and which will benefit most from further optimization. The profiler can produce information showing areas of code that are not being executed or that are taking a long time to execute.

The ICE50 will automatically be upgraded by future AVR Studio releases to support new devices as they are released. The ICE50 interface is integrated in AVR Studio, Atmel's front-end tool for development on the AVR architecture. All phases of the AVR development can be done in this Integrated Development Environment.

Supported Devices

ATtiny26	ATmega161	ATmega32
ATmega8	ATmega162	ATmega64
ATmega8515	ATmega16	ATmega103
ATmega8535	ATmega169	ATmega128

Note: Low voltage devices are also supported.

Ordering Information

The AVR ICE50 is available from Atmel franchised distributors.

The ordering code is **ATICE50**

The latest version of AVR Studio is available free of charge from Atmel web site: www.atmel.com