

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

Corporate Headquarters

2325 Orchard Parkway
San Jose, CA 95131
USA
TEL: (1)(408) 441-0311
FAX: (1)(408) 487-2600

Europe

Atmel Sarl
Route des Arsenaux 41
Case Postale 80
CH-1705 Fribourg
Switzerland
TEL: (41) 26-426-5555
FAX: (41) 26-426-5500

Asia

Room 1219
Chinachem Golden Plaza
77 Mody Road Tsimshatsui
East Kowloon
Hong Kong
TEL: (852) 2721-9778
FAX: (852) 2722-1369

Japan

9F, Tonetsu Shinkawa Bldg.
1-24-8 Shinkawa
Chuo-ku, Tokyo 104-0033
Japan
TEL: (81) 3-3523-3551
FAX: (81) 3-3523-7581

e-mail

literature@atmel.com

Web Site

<http://www.atmel.com>



©Atmel Corporation, 2002

Atmel Corporation makes no warranty for the use of its products, other than those expressly contained in the Company's standard warranty which is detailed in Atmel's Terms and Conditions located on the Company's web site. The Company assumes no responsibility for any errors which may appear in this document, reserves the right to change devices or specifications detailed herein at any time without notice, and does not make any commitment to update the information contained herein. No licenses to patents or other intellectual property of Atmel are granted by the Company in connection with the sale of Atmel products, expressly or by implication. Atmel's products are not authorized for use as critical components in life support devices or systems. Atmel®, AVR® and AVR Studio® are registered trademarks of Atmel.

Other terms and product names may be the trademarks of others.

2509B-AVR-09/02/15M

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