AVR MICROCONTROLLERS

AVR® JTAGICE mkII

On-chip Debug System

DEBUG AVR APPLICATIONS USING JTAG OR DEBUGWIRE INTERFACE

The AVR® JTAGICE mkII from Atmel® is a powerful development tool for On-chip Debugging of all AVR 8-bit RISC microcontrollers with IEEE 1149.1 compliant JTAG interface or debugWIRE Interface. DebugWIRE enables on chip debug of AVR microcontrollers in small pin count packages, using only a single wire for the debug interface. The JTAGICE mkII 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 JTAGICE mkII performs Real Time emulation of the microcontroller while it is running in a target system. The JTAGICE mkII provides emulation capability at a fraction of the cost of traditional emulators.

- AVR Studio Operated
- Full Emulation of All Analog and Digital Functions
- Full JTAG Programming Support
- Supports Multiple Devices in a JTAG Scan Chain
- USB 1.1 or RS-232 Interface to PC
- Full Support for Assembly and High Level Languages
- Program and Data Breakpoints
- All Operations and Breakpoints are Real Time
- Adapter for Direct Connection to STK500
- Upgrades are done from AVR Studio
- Target Voltage 1.8 – 5.5V
- Supply Voltage 9V – 12V, or Powered from USB port

ATMEL®

JTAGICE mkII AVR On-chip Debug System

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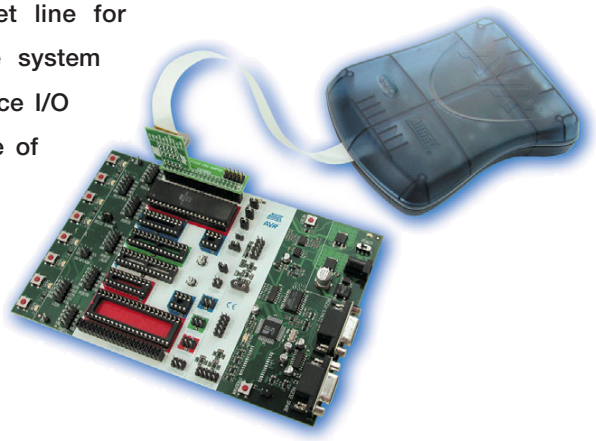
The JTAGICE mkII allows access to all the powerful features of the AVR microcontroller. All AVR resources can be monitored: Flash memory, EEPROM memory, SRAM memory, Register File, Program Counter, Fuse and Lock Bits, and all I/O modules. The JTAGICE mkII also offers extensive On-chip Debug support for 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 debugWIRE uses the Reset line for electrical connection; hence the system designer does not have to sacrifice I/O capabilities to take full advantage of the On-Chip-Debug system.



The JTAGICE mkII will automatically be upgraded by future AVR Studio releases to support future devices with JTAG and debugWIRE support as they are released.

The JTAGICE mkII 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

JTAG

ATmega16
ATmega162
ATmega169
ATmega32
ATmega329
ATmega3290
ATmega64
ATmega649
ATmega6490
ATmega128
ATmega1281
ATmega1280
ATmega128CAN11
ATmega256
ATmega2560

DebugWIRE

ATtiny13
ATtiny2313
ATtiny25
ATtiny45
ATmega48
ATmega88
ATmega168

Note: Low voltage devices are also supported.

Ordering Information

The JTAGICE is available from Atmel franchised distributors.

The ordering code is **ATJTAGICE2**

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

The JTAGICE will automatically be upgraded by future AVR Studio releases to support future devices with JTAG support as they are released.

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