# AYR® STK500

# STARTER KIT AND DEVELOPMENT SYSTEM



The Atmel AVR STK500 is a starter kit and development system for Atmel's AVR Flash microcontrollers. The STK500 gives designers a quick start to developing code on the AVR, combined with features for developing prototypes and testing new designs. The STK500 interfaces AVR Studio<sup>®</sup>, Atmel's Integrated Development Environment (IDE) for code writing and debugging. The STK500 starter kit includes the following:

- AVR Studio Software Interface
- RS-232 Interface to PC for Programming and Configuration
- Power Supply Regulator for 9V - 12V DC Power
- Sockets for 8-, 20-, 28- and 40-pin AVR Devices
- Serial In-System Programming (ISP) of AVR Devices
- In-System Programmer for Programming AVR Devices in External Target Systems
- Parallel and Serial High-voltage Programming of AVR Devices

- 8 Push Buttons and 8 LEDs for General Use
- All AVR I/O Ports Easily Accessible through Pin Header Connectors
- · RS232 Port for General Use
- Expansion Connectors for Plug-in Modules and Prototype Area
- On-board 2-megabit DataFlash® for Nonvolatile Data Storage
- Software Upgradable from AVR Studio to Support Future AVR Devices
- Flexible Clocking, Voltage and Reset System





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The STK500 is a complete starter kit, programming tool and development system for Atmel's AVR microcontrollers. The STK500 gives AVR users the freedom to develop and test complete AVR designs and prototypes. The STK500 supports the following Atmel AVR devices:

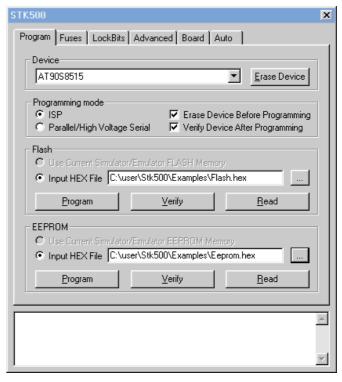
- ATtiny11
- ATtiny12
- ATtiny15
- ATtiny22
- ATtiny28
- AT90S1200
- AT90S2313
- AT90S2323
- AT90S2333
- AT90S2343

- AT90S4414
- AT90S4433
- AT90S4434
- AT90S8515
- AT90S8535
- ATmega161
- ATmega163
- ATmega323
- ATmega103<sup>1</sup>
- ATmega1281

Note 1: The device is supported through ISP programming of external target or through the STK501 expansion module.

The STK500 supports In-System Programming (ISP) of all AVR microcontrollers in the sockets as well as programming of external target systems. The AVR I/O ports are accessible on pin headers that can be used for connecting the onboard LEDs and push buttons, or external signals. The extra RS232 port can be connected to any of the I/O pins.

The STK500 programming interface is integrated in AVR Studio. The Flash, EEPROM and all fuse options can be programmed individually or with the sequential automatic programming option. The DOS programming software is included for efficient batch programming in a production environment. The STK500 clock frequency and supply voltage are controlled from AVR Studio.



The active simulator or emulator code in AVR Studio can easily be programmed into the STK500 with a simple click of the mouse.

# **Ordering Information for the STK500**

The STK500 starter kit and development system is available from Atmelfranchised distributors; the ordering code is ATSTK500. The latest version of AVR Studio is freely available from the Atmel web site (http://www.atmel.com).