AVR[®] STK501

64-PIN SUPPORT FOR STK500

The STK501 board is an expansion module designed to add 64-pin support to the Atmel® STK500 Development Board. The STK500 and STK501 expansion module extends support to all current AVR® devices.

The STK501 includes connectors. jumpers, and hardware allowing full support for the new features on ATmega103, ATmega64, and ATmega128. The Zero Insertion Force (ZIF) socket allows easy use of TQFP packages. In addition to providing support for new devices, the STK501 also adds support for peripherals previously not supported by the STK500. An additional RS-232 driver



and an XRAM interface are among the new features. Devices with dual UART or XRAM interface can thus take advantage of the new resources on the STK501 board.

- AVR Studio[®] Operated
- Plug-in Module for STK500 (STK500 Required)
- Serial In-System Programming
- Parallel High-voltage Programming
- Zero Insertion Force Socket for TQFP Packages
- All AVR I/O Ports Easily Acessible through Pin Header Connector
- Spare RS-232 Driver and Connector

- Expansion Connectors for Plug-in Modules and Prototype Areas
- TQFP Footprint for Emulator Adapters
- JTAG Connector for On-chip Debugging using the JTAG ICE
- Adds XRAM Support to the STK500 Board for Devices with XRAM Interface
- On-board 32 kHz Clock Crystal for Easy RTC Implementation
- Target Voltage 2.7 6.0V
- Powered by STK500





STK501 64-PIN AVR EXPANSION BOARD

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The STK501 board is a hardware expansion module for the STK500 Development Board. The ZIF socket on the STK501 adds support for ATmega103, ATmega64, and ATmega128 to the list of devices supported by the STK500. The STK500 supports all megaAVR[®], tinyAVR[™], and classic AVR devices.

The STK500 board provides full programming and development support for the ATmega103, ATmega64, and ATmega128. Additional ports and interfaces on the STK500 have now been made available with the STK501. Among the new features are:

- Port E, F, and G headers for the additional ports on the 64-pin ATmega103, ATmega64, and ATmega128
- Footprint for mounting an external SRAM on the board directly connected to the XRAM interface of the AVR device
- External SRAM interface (including address latch)
- Additional RS-232 port for dual UART devices
- JTAG connector for On-chip emulation using the JTAG ICE on supported devices
- On-board 32 kHz clock crystal for easy implementation of Real Time clock applications



The STK501 supports both the In-System Programming mode (ISP) and the High-voltage Programming mode of its supported devices.

AVR Studio, Atmel's front-end tool for the STK500 Development Board, provides support for STK501.

Supported Devices

ATmega103, ATmega64, and ATmega128 Note: Low voltage devices are also supported.

Ordering Information

The STK501 is available from Atmel franchised distributors.

The ordering code is ATSTK501.

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

Note: STK501 is not a stand-alone product. STK500 is needed for operation.