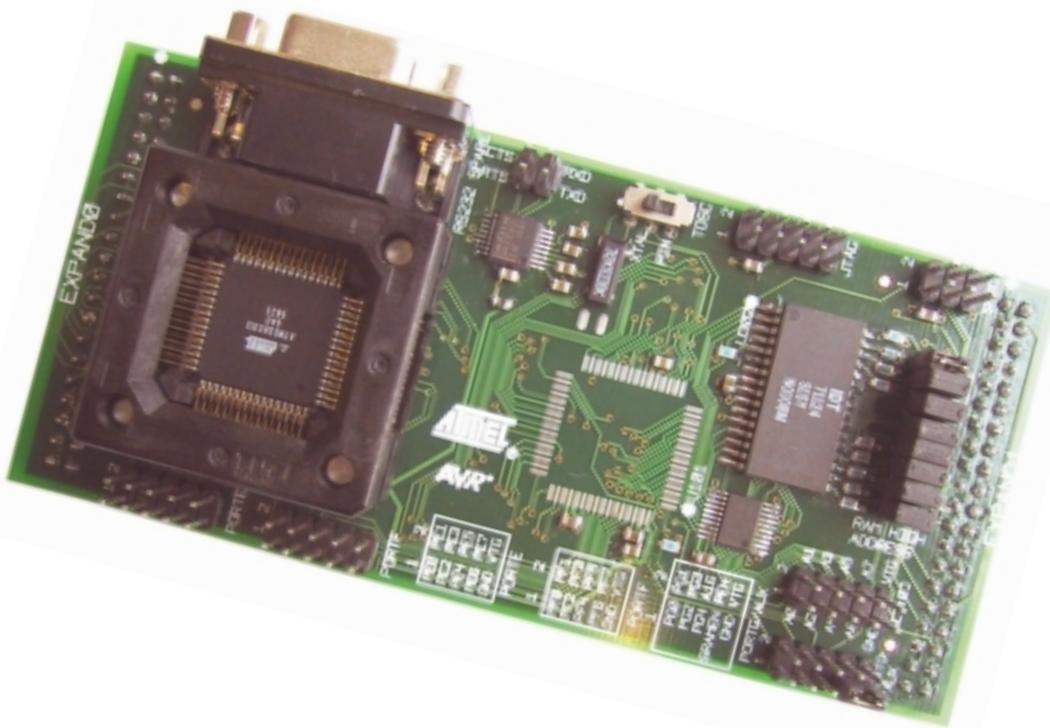


AVR<sup>®</sup> STK501EXPANSION  
BOARD

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 the 64-pin devices. 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 SRAM 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. The STK501 contains the following features:

- AVR Studio<sup>®</sup> Software Interface
- STK500 Compatible
- Supports 64-pin ATmega Devices
- Supports ISP and High-voltage Programming
- Zero Insertion Force Socket for TQFP Packages
- TQFP Footprint for Emulator Adapters
- JTAG Connector for On-chip Debugging Using the JTAG ICE
- Additional RS-232 Driver and Connector
- Adds XRAM support to the STK500 board for Devices with XRAM Interface
- On-board 32 kHz Clock Oscillator for Easy RTC Implementations


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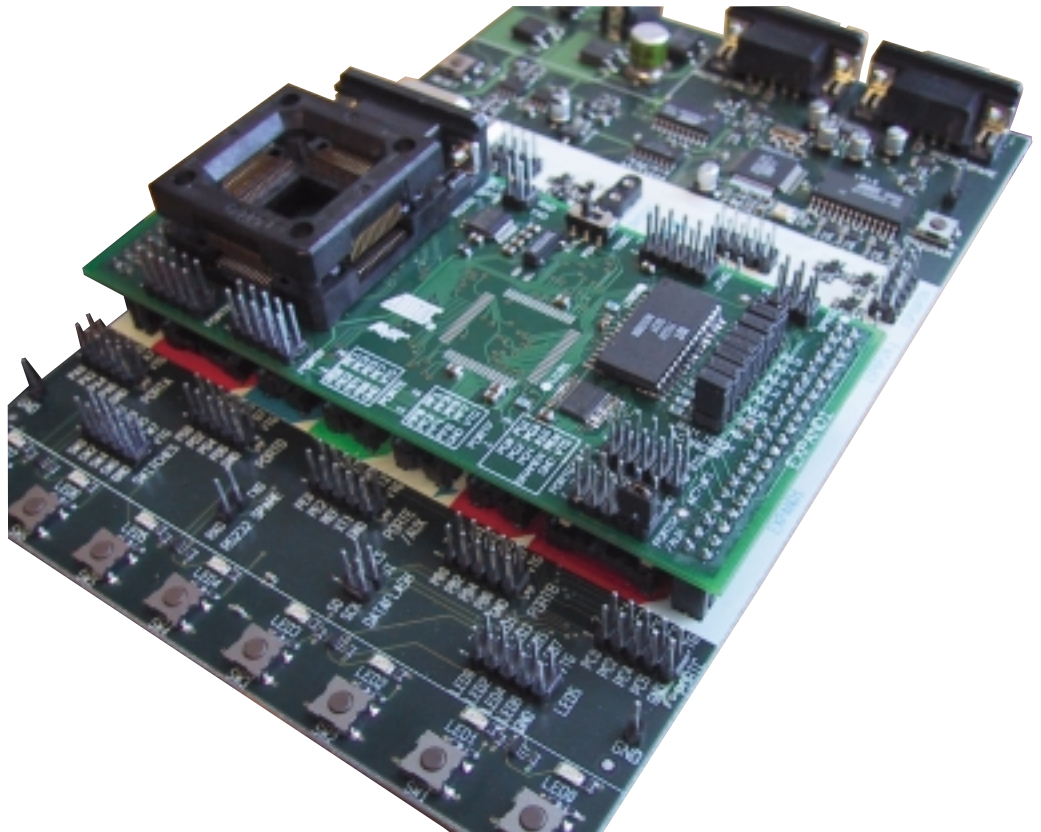
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The STK501 board is a hardware expansion module for the STK500 Development Board. The Zero Insertion Force (ZIF) socket on the STK501 adds support for 64-pin TQFP devices to the list of devices supported by the STK500. The STK500 now supports all current ATmega, ATtiny and classic AVR devices.

The STK500 board provides full programming and development support for all 64-pin TQFP devices. 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 ATmega parts
- Footprint for mounting an external SRAM on the board directly connected to the SRAM 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 oscillator 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 software for the STK500 Development Board, provides support for the STK501 from version 3.50.

**Ordering Information for the STK501 Expansion Board**

The STK501 Expansion Board is available from any of Atmel's franchised distributors. The ordering code is ATSTK501. The latest version of AVR Studio is freely available from <http://www.atmel.com>.