

● **Simple:**
Plugs into AVR Studio

● **USB or Serial:**
Serial Port or USB versions available

● **Flexible:**
Uses JTAG interface or port headers on STK200, STK300 or STK500

● **Easy operation:**
Powered from target

● **Comprehensive:**
Debugging or device programming

● **Convenient:**
Compatible with STK200/300/500

● **Voltage range:**
3V - 5V

● **Firmware updates:**
Use any ISP to update firmware for new devices

● **Breakpoints:**
Data and Program Memory breakpoints plus Break on Change of Program Flow

● **Supports:**
Assembler and HLL Source Level Debugging

● **Device Support**

ATmega16
ATmega162
ATmega169
ATmega32
ATmega323
ATmega64
ATmega128
AT90CAN128

Order Codes
JTAGAVR
JTAGAVRU
STK200ICE
STK200ICEU
STK300ICE
STK300ICEU

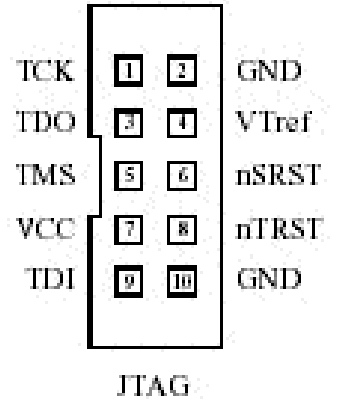


Interfaces

Atmel JTAG Interface

The JTAGAVR tool uses the standard JTAG interface pictured here. This interface is present on some development boards eg STK501 and new STK300 (2006 on).

If your target system has this interface, simply plug in the JTAG tool without any adapters.

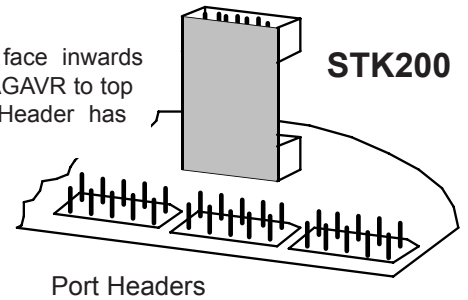


STK200, older STK300 and STK500 Interface

Two interface adapters are supplied to allow the JTAGAVR to be connected directly to the port headers on these boards. Different AVR devices have the JTAG port on different device port pins, which is why two interfaces are supplied type A and B. The adapters correctly route the JTAG signals, GND and VCC pins so that you just need to connect the adapter to the correct port header on the STK200, STK300 or STK500 and plug-in the JTAGAVR.

Adapter:

Box Headers face inwards
Connect JTAGAVR to top header. Top Header has keyway



<u>AVR Type1</u>	<u>JTAG Interface</u>	<u>Connection</u>
ATmega128	TDI - PF7	Connect Adapter A to Port F header on STK200/STK300 or STK500. Also called Analog header on STK300.
ATmega64	TDO - PF6	
ATmega169	TMS - PF5	
ATmega165	TCK - PF4	
ATmega325/625 ATmega3250/6250		

Note: On STK300 boards without JTAG Interface, ensure AREF Pot is turned fully anticlockwise

<u>AVR Type2</u>	<u>JTAG Interface</u>	<u>Connection</u>
ATmega32	TDI - PC5	Connect Adapter B to Port C header on STK200/STK300 or STK500.
ATmega323	TDO - PC4	
ATmega16	TMS - PC3	
	TCK - PC2	

<u>AVR Type3</u>	<u>JTAG Interface</u>	<u>Connection</u>
ATmega162	TDI - PC7	Connect Adapter A to Port C header on STK200/STK300 or STK500.
	TDO - PC6	
	TMS - PC5	
	TCK - PC4	

Layout of port headers on STK200, older STK300 and STK500 is shown in this diagram. The adapter routes the JTAG signals to the correct pin on the AVR device. You just need to connect the right adapter to the JTAGAVR and plug it into the right port header on the board.

Edge of STK200/300/500

