AND TECH

JTAG-AVR USB v2

MANUAL

Contents:

1. Parameters

- compatible with AVR JTAG ICE
- supported by Atmel AVR Studio
- enables emulation and programming of AVR processors equipped with JTAG interface
- enables debugging of code written in assembler as well as in C language
- connection with PC via USB
- work in range of 3.3V – 5V
- emulator's work is indicated with three LEDs
- standard 10-pin connector for target circuit in Atmel's standard
- able to supply programmed unit

2. Installation

To connect programmer to computer, mini USB A-B cable is needed (widely used with mobile devices and cameras). It is recommended to use 1.8m long cable or shorter.
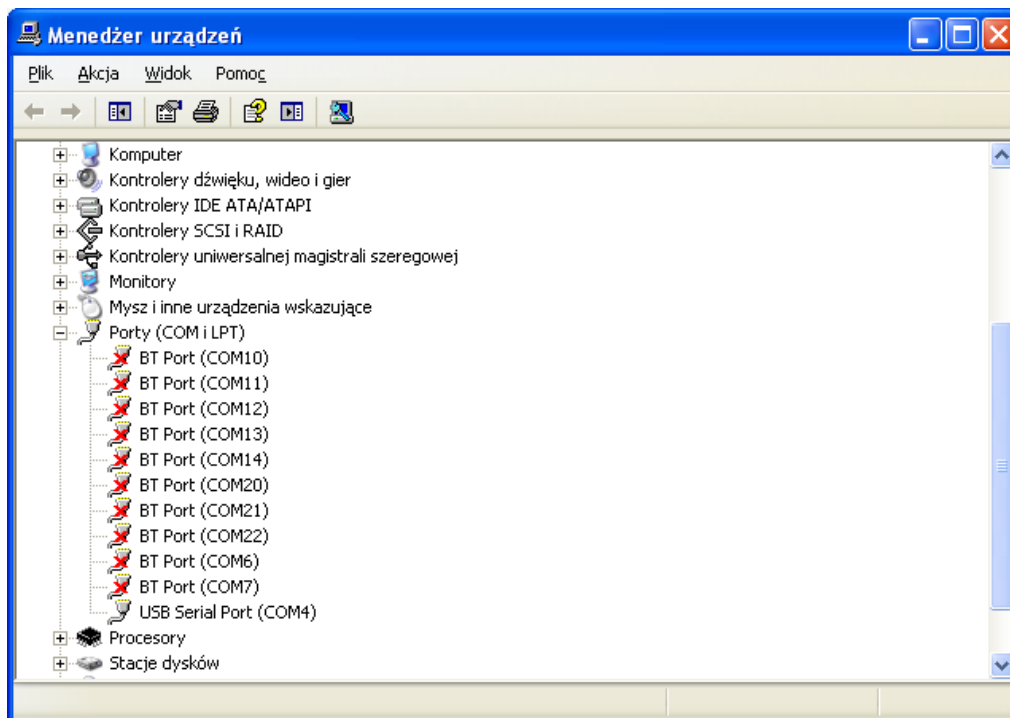
To connect programmed circuit to programmer, IDC-10 cable is needed. Pin order is compatible with Atmel's standard.

Before you connect JTAG-AVR USB v2 to computer, please install drivers available at:

http://and-tech.pl/files/Drivers-FT.exe

After drivers are installed, connect debugger to USB port – drivers should be installed automatically.
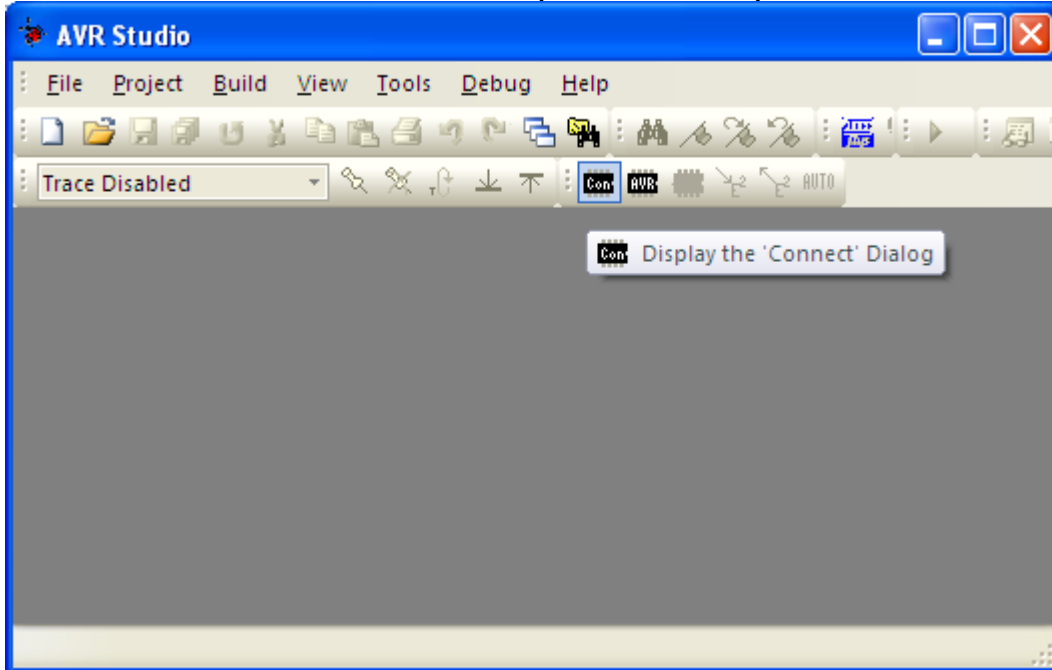
In a Device Manager should be visible new COM port used by newly installed debugger. As it is presented below - USB Serial Port on COM4:
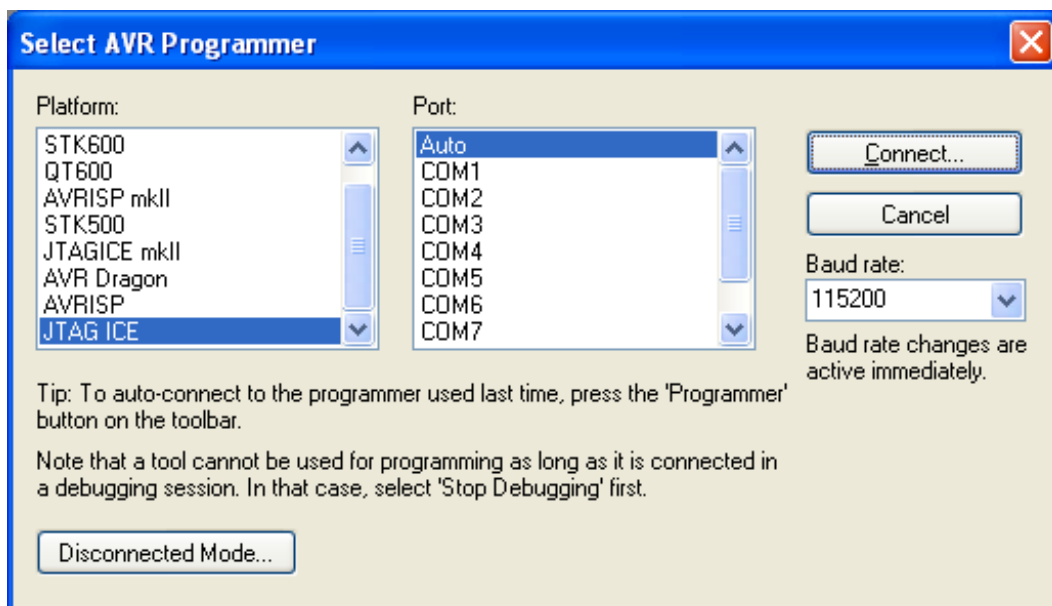
3. JATG-AVR USB v2 and AVRStudio

JTAG-AVR USB v2 debugger is completely compatible with an original Atmel JTAG ICE debugger. Connect debugger to PC via USB and to programmed circuit via JTAG connector. Note that debugger is supplied from target circuit, that is why please check if circuit is supplied. It is possible to supply target circuit from programmer – place jumper located next to debugger's USB connector.
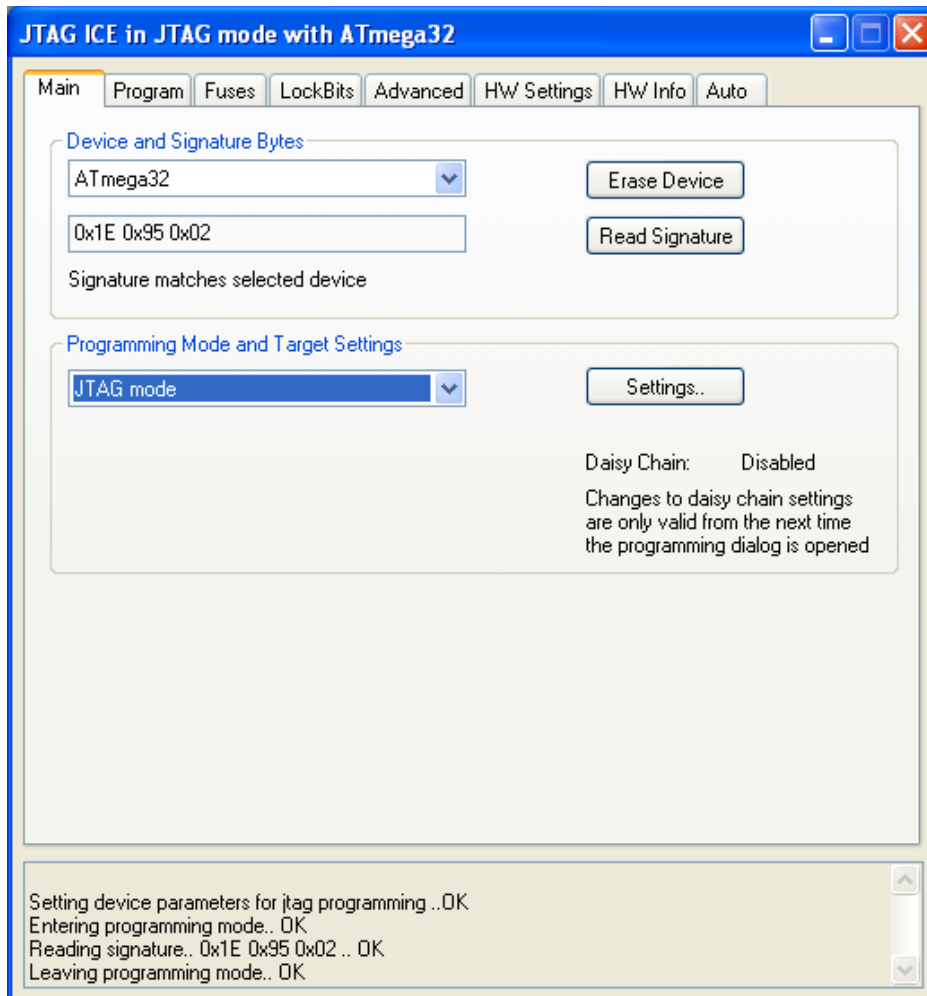
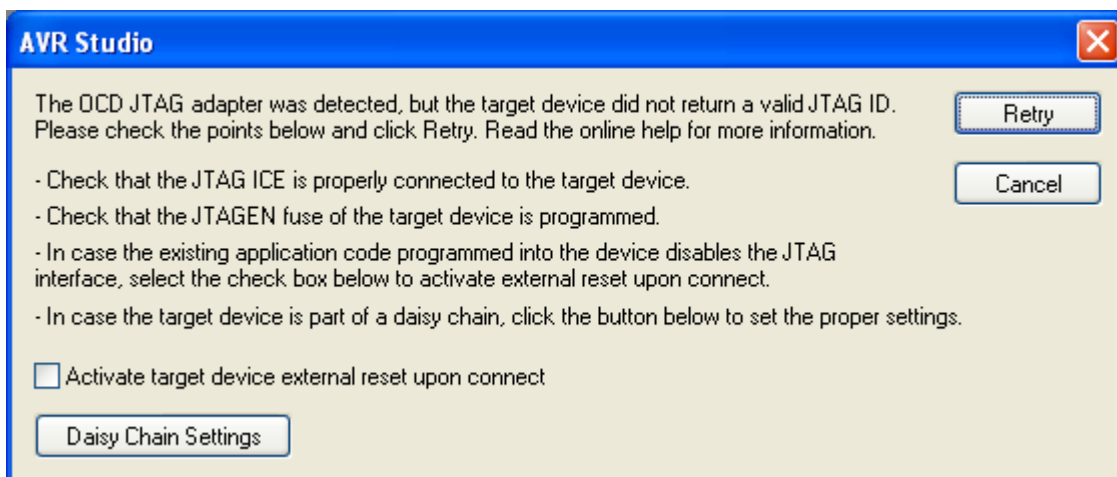Turn on AVRStudio and choose icon Com presented in picture below:

Please choose „JTAG ICE" Platform and Port „Auto", Baud rate 115200

If after button Connect is pressed, appears window presented below, it means that JTAG-AVR USB v2 is configured correctly.
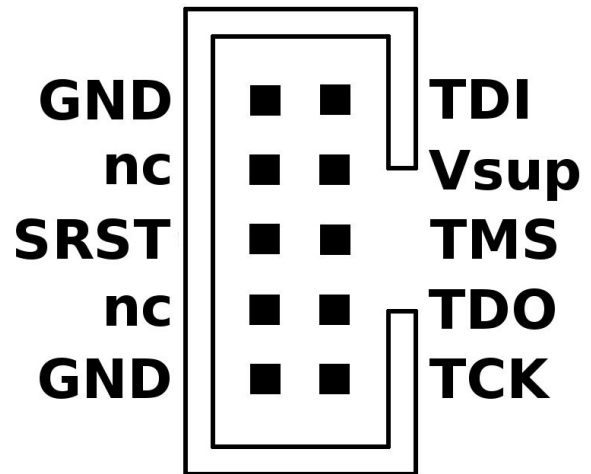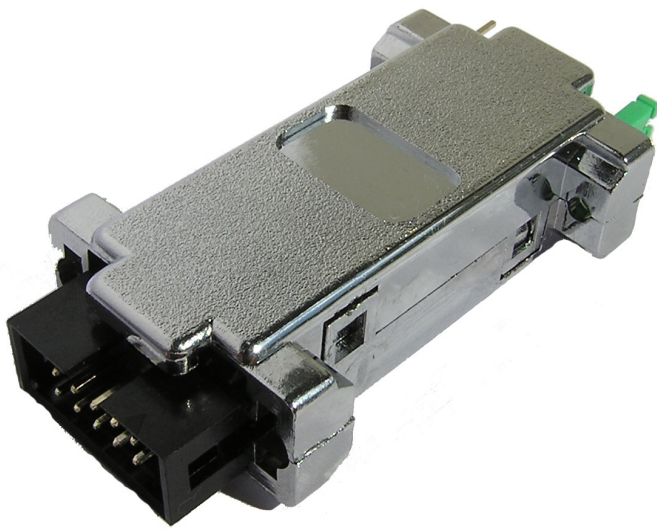

If appears this window, debugger cannot connect with target circuit.

Please check if circuit is supplied, JTAG cable is correctly connected with processor and processor has JTAG port turned on – fuse bits settings.

4. JTAG connector

Programmer is quipped with 10-pin JTAG connector in Atmel's standard. Picture below presents pin order:

GND	■ ■	TDI
nc	■ ■	Vsup
SRST	■ ■	TMS
nc	■ ■	TDO
GND	■ ■	TCK

5. Jumpers and LEDs

Jumpers:
Green   – target circuit supplied from debugger (approx. 4.6V)

LED diodes:
Green   – debugger supply
Red   – programming
Detailed instruction of emulator and AVRStudio program is available at Atmel company page:

http://www.atmel.com/dyn/resources/prod_documents/DOC2475.PDF

Environment protection

The crossed-out wheeled bin means that within the European Union the product must be taken to separate collection at the product end-of-life. This applies to your device but also to any enhancements marked with this symbol. Do not dispose of these products as unsorted municipal waste.