

# TCPSimDBG VB v1 - AVR Studio Plug-in communicator

## **License:**

This plug-in was developed under AVR Studio SDK License, so no violation or abuse is permitted.

**You have to read the ATMEL License Agreement ("AVR SDK License agreement.pdf").**

This build was made for sharing development with AVR users (not in the point of view source-code).

## **Contact informations:**

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## **Description:**

This example of application was developed under **Microsoft Visual Basic 6** , and it demonstrate how to set up a server application using **Winsock** control to be able to communicate with the **TCPSimDBG** plug-in which is the client part loaded by AVR Studio 4.

**Note:** This is just a beta/non-stable example so it may be some exceptions that may cause errors, it was just made to help **TCPSimDBG** users to understand the functionalities of this plug-in.

## **How to use:**

This application, once loaded, it set-ups a server in listening mode on port **333** , and wait until you click on **reconnect** button in the AVR Studio toolbar (which is the **TCPSimDBG** plug-in).

Once the plug-in is connected in the server, a message will be displayed on the application text box **"Connection request: xxxxxx"** .

The application contain a text field next to Send button which allow user to send hex codes to the plug-in over TCP , text could be like this ( "03 00 00 00 88" separated with single space).

When you send a Read command to the plug-in, the application will display the answer of the plug-in in the **"Received Data from AVR Studio"** text box.

The application allow you also to remotely start and stop debugging, and making single steps while you are in debug mode in AVR Studio.

When server/client (VB application / AVR Studio [Plug-in]) are connected , you can click on the 8 little white boxes , which represent the register in data memory pointed by the text box **"SRAM Addr(HEX) :"** (address 3B is the PORTA address in ATmega16 , you can find register mapping in devices datasheets or in **.inc** files of each device) , so by clicking on these little boxes they toggle white(0)/Green(1) and their values are written in the device in AVR Studio (you have to make auto steps to be able to refresh data in AVR Studio , to see changes that little boxes do).

And by clicking in the **"START auto Req/Get"** button, the program will request the pointed register from AVR Studio with an interval approximately 50ms, then display the register contents in the little boxes.

**NOTE:** Little boxes are: the most left one is the MSB bit, and the most right one is the LSB bit of a register.