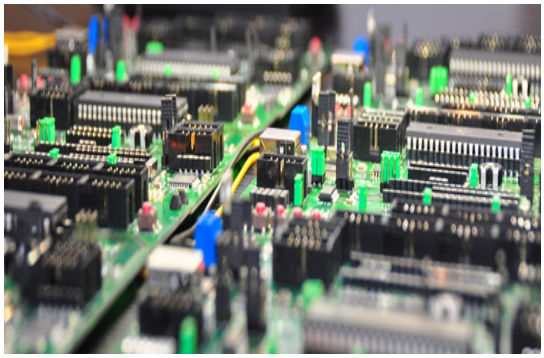
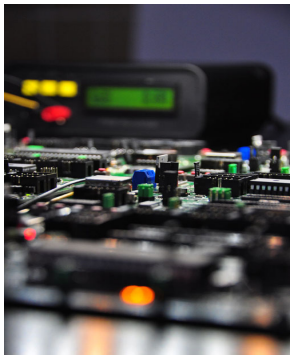


MegaPin is a modern development board built upon the experience of many microcontroller programmers. It's user-friendly, very compact and yet offers many possibilities in developing microcontroller programs.



The MegaPin development board for AVR microcontrollers supports all 8-pin, 20-pin, 28-pin and 40-pin DIL AVRs, including with AT90USB1287 USB AVR. MegaPin features jumpers which select the USB connection: using either the built-in FT232RL chip or directly to an AT90USB1287, which includes its own USB port. With the help of Bascom's USB Add-on Library, one can make their own USB chips. In case you need your own VID or PID numbers, you can order them from the MCS company.

The Initial connection of MegaPin to USB

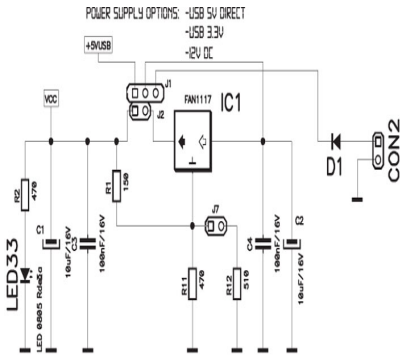
The first time you connect MegaPin to your PC system, it will likely inform you that you have to install drivers. If this is the case, you can install them from the FTDI driver folder.

When Setup finishes, you may connect MegaPin to the PC's USB port via a standard USB cabl

e (such as a USB printer cable, for example). MegaPin is, by default, set to use the FTDI USB chip FT232RL (with jumpers J16 & J17). When you plug in the USB cable, you will see the Rx & Tx LEDs flash a few times. This indicates that the FTDI USB chip has successfully connected MegaPin to the PC's USB port.

Connect MegaPin with AVR Studio 4 as you would normally do, by pressing the CON button (see Figure 1). A new window will open, see Figure 2. Select STK500, leave Port on "Auto" and press "Connect" button. The Rx & Tx LEDs should flash quickly and the AVR Studio window should appear as seen in Figure 3.

Troubleshooting



In case your AVR Studio does not connect, you'll have to check the COM port. Press and hold the Window key and the Pause/Break key on your keyboard. This shortcut will open System- choose Hardware and press Device manager. Within Device manager find Ports (COM & LPT) as seen in Figure 4.

Right-Click on the USB Serial Port entry and select "Properties". A new window will open (Figure 5). Select the Port Settings tab and within click "Advanced". A new window will open (Figure 6). While all of the COM ports listed in the List Box are valid, some versions of Studio do not recognize any COM port above 9. Therefore select an available COM port below 9. When doing this, MS Windows® may inform you that the port you have chosen is already in use, even though you may think it is not. This happens because MS Windows® "remembers" what COM port it has assigned to any USB-COM port bridge devices you have connected in the past, even though they are not currently plugged in, and which may no longer be used.

MegaPin development board

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