AVR Programmer

This programmer is mainly for ATMEL AVR microcontrollers' chips. We have classified those chips into five categories, each on a certain socket. First take a look on this diagram it contains sockets' description:

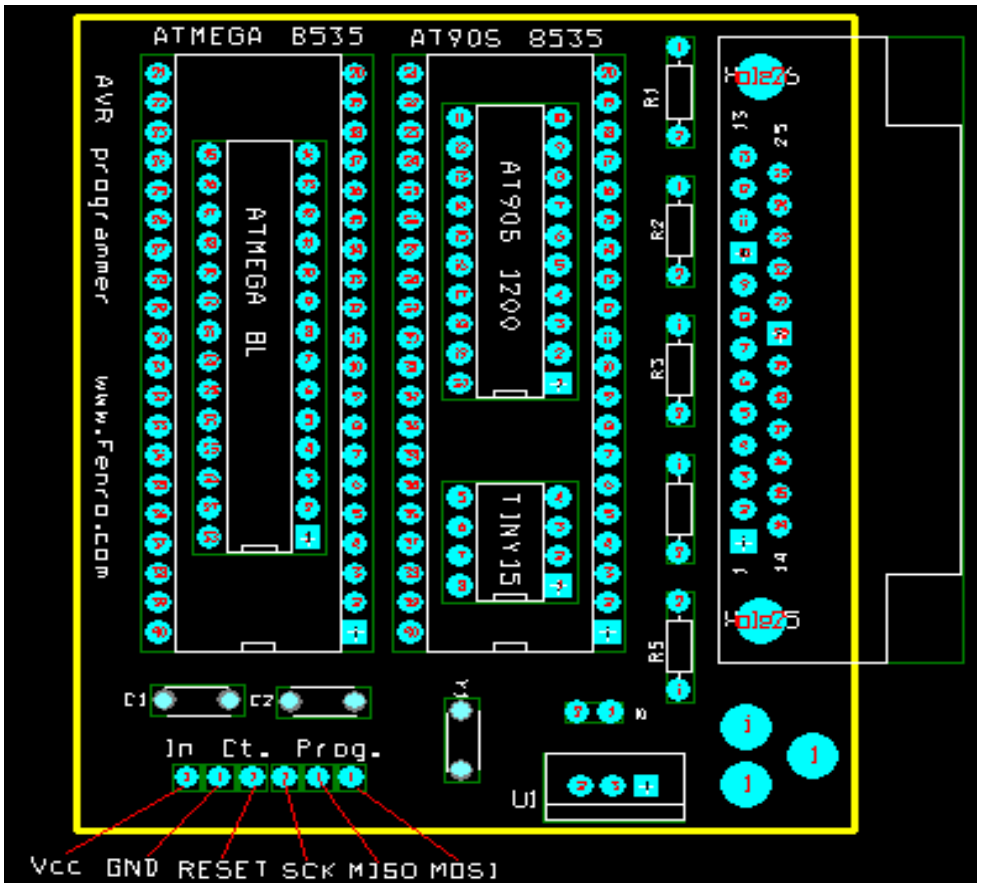

Figure 1-1

Now, this table to know the types of microcontroller on each socket:

Socket I (40 pins): ▪ **ATMEGA 8535** ▪ ATMEGA 8535L ▪ ATMEGA 32 ▪ ATMEGA 16 ▪ ATMEGA 323 ▪ ATMEGA 163 ▪ AT 90S8535	***Socket II (40 pins):*** ▪ **ATMEGA 8515** ▪ ATMEGA 161 ▪ ATMEGA 162 ▪ AT 90S8515
Socket III (28 pins): ▪ **ATMEGA 8L** ▪ AT 4433 ▪ ATMEGA 48, 88, 168	***Socket IV (20 pins):*** ▪ **AT 90S1200** ▪ AT 90S2313
Socket V (8 pins): ▪ **AT tiny 15** ▪ Tiny 11,12 ▪ Tiny 13 ▪ Tiny 22	

Table 1-1

Features:

1- A burning utility to burn any program to the mentioned types of AVR microcontrollers.

2- External output pins for in circuit programming purposes.

3- Easy power supply installation. Cause you need nothing but a simple DC adaptor.

4- External crystal oscillator.

5- Has no harm effects on your PC & that's different from other serial burning utilities.

6- There is a CD containing all software utilities needed.

7- Supporting many software utilities like codevision, ponyprog & icprog.

8- Simple design that is easy to maintain & troubleshooting by yourself.

How to:

Here are the instructions to use our programmer:

1- Put your chip on its socket & be sure it is in the right socket in the right way. Because it has to be fixed in the same direction of the socket i.e. the notch of the IC on the notch of the socket.

2- Set your adaptor to 7.5V & be sure it is on the position of + —o)— – . Plug the socket & be sure that the led is on. If not remove it quickly & check adaptor's position.

3- Plug the parallel port socket. Start your software.

▪ *Precautions:*

1- Be sure that the power supply is set to + —o)— – . That means the inner should be Vcc & the outer should be GND. Reversing that may cause regulator damage.

2- Be aware to put the controller in the right way. I.e. in the same direction of the socket. Putting the chip in the wrong way may lead to chip damage.

3- When using the in circuit programming facility you have to carefully make the right connections. Misconnecting may cause chip damage.

4- Sometimes when using parallel ports you have to be sure that your PC is earthed to avoid electrical shocks.

5- Don't miss or scratch any tracks "connections" or any components especially the regulator "IC7805".

▪ *In the CD:*

You will find that manual & all other software programs and here is a little description of it:

- Code vision:

It is a C programming utility that is easy to use & configure. After installing this software you can use:

1. *File/New:* to make a new project using its wizard. Then *File/generate save & exit:* in the wizard window to start writing your program.
2. *File/Open:* to open an existed code vision project.
3. *Project/configure:* to manage your project and chip.
4. *Settings/programmer:* select STK200+/300 programmer & LPT1 for right using this programmer.

5. *Project/make:* to make your project ready to be burned on the chip.
6. *Tools/chip programmer:* to open the chip programmer window.
7. in the programmer window:
   - *program/erase chip*: to erase the chip contents.
   - *Program/flash:* to program flash memory.
   - *Program/eeprom:* to program eeprom memory.
   - *Program/all:* to program flash, eeprom memories & fuse bits "never use this option unless you know what you are doing".

- PonyProg:

It is a C programming utility that is easy to use & configure. After installing this software you can use:

8. *Device:* to select your chip & of course it should be one of AVR micro menu.
9. *Setup/ Interface setup:* to select the chip programmer type & you should select parallel then select AVR ISP I/O.
10. In the command menu:
    - *Read All:* to read hexa code from your chip including FLASH, EEPROM & fuse bits.
    - *Verify ALL:* to compare the included data to the current loaded.
    - *Erase*: to erase the chip contents.
    - *Write program (Flash):* to program flash memory.
    - *Write data (EEPROM):* to program eeprom memory.
    - *Write all:* to program flash, eeprom memories & fuse bits "never use this option unless you know what you are doing".

Note: PonyProg updates can be found at
http://www.lancos.com/prog.html

For more information a bout this hardware u may contact us at:
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