K150 PIC Programmer
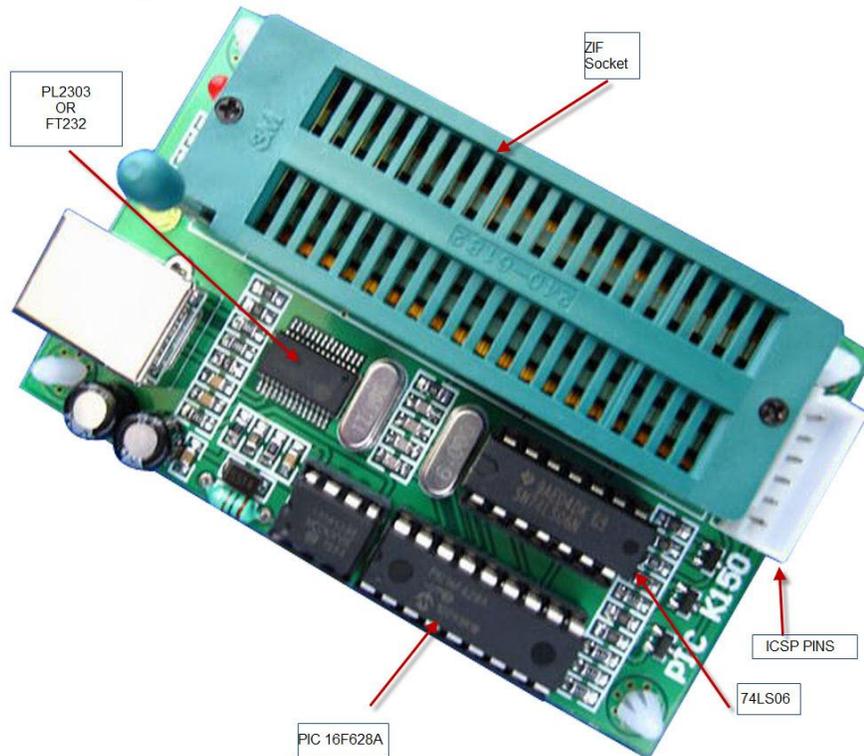
PL2303
OR
FT232

ZIF
Socket

ICSP PINS

74LS06

PIC 16F628A

Protocol Number: To help match hardware and firmware there is a protocol number in each. If they are the same (P016) in this case then the software and firmware are matched. This should stop problems with matching firmware with MicroPro versions in the past. (Protocol number was called Build number in diypack12 but we changed it.)

Upgrading. You can upgrade by buying and programming a second 628 (-20/P or 628A) PIC, or if you have access to a second PIC programmer and reprogram the existing 628 with the later hex file.

ICSP: Does not support low voltage programming. The LOW pin is an open collector output, which when active will pull the LOW pin to ground. It can be used in ICSP to hold the LVP pin low while programming, or the OSC1 pin, or any part on the target board which may need control (in this manner) during programming.

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K150V2 PCB : This board is the same as the original version except 3 3K3 resistors have been added to stop all programming voltages appearing at the programming and ICSP pins during board reset.

K150 Schematic:
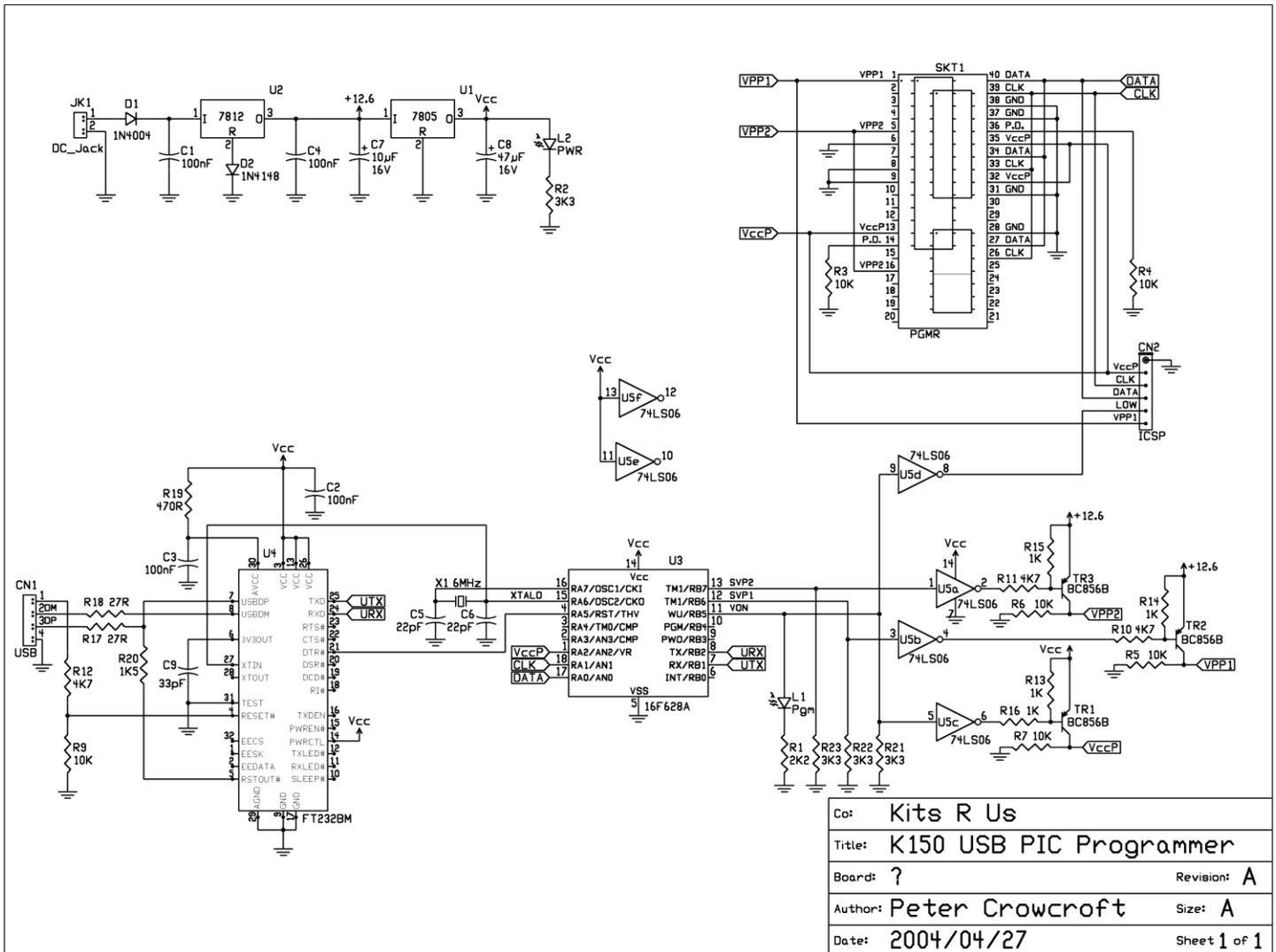
NOTE: K150 PIC programmer is working only using its own software that will be shown in the next pages .

K150 Supporting PIC:

12C508 16C65A 16C77 16F76 16F877
12C508A 16C65B 16C710 16F77 16F877A
12C509 16C66 16C711 16F737 18F242
12C509A 16C66A 16C712 16F747 18F248
12C671 16C67 16C716 16F767 18F252
12C672 16C620 16C745 16F777 18F258
12CE673 16C620A 16C765 16F83 18F442
12CE674 16C621 16C773 16F84 18F448
12F62916C621A 16C774 16F84A 18F452
12F675 16C622 16C83 16F87 18F458
16C505 16C622A 16C84 16F88 18F1220
16C554 16C71 16F627 16F818 18F1320
16C558 16C71A 16F627A 16F819 18F2220
16C61 16C72 16F628 16F870 18F2320
16C62 16C72A 16F628A 16F871 18F4220
16C62A 16C73 16F630 16F872 18F4320
16C62B 16C73A 16F648A 16F873 16C63
16C73B 16F676 16F873A
Added from diypack23:
16C63A 16C74 16F684 16F874 16F5x
16C64 16C74A 16F688 16F874A 10Fxxx
18F6525 6621 8525 8621
(all beta) 16C64A 16C74B 16F73 16F876
16C65 16C76 16F74 16F876A
Added diypack25 12F683

Support for 16F88 added in diypack22 on. Note 10K resistor needs to be

K150 Software:

Download diypack25 and the USB to Serial driver from the website and follow this instructions.

Driver Installation:

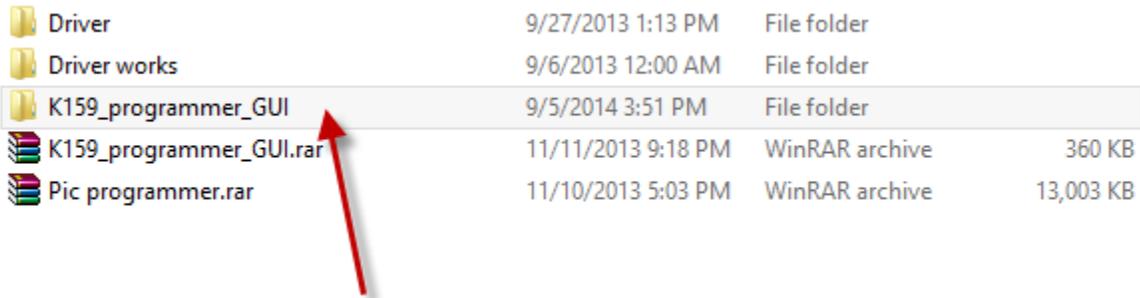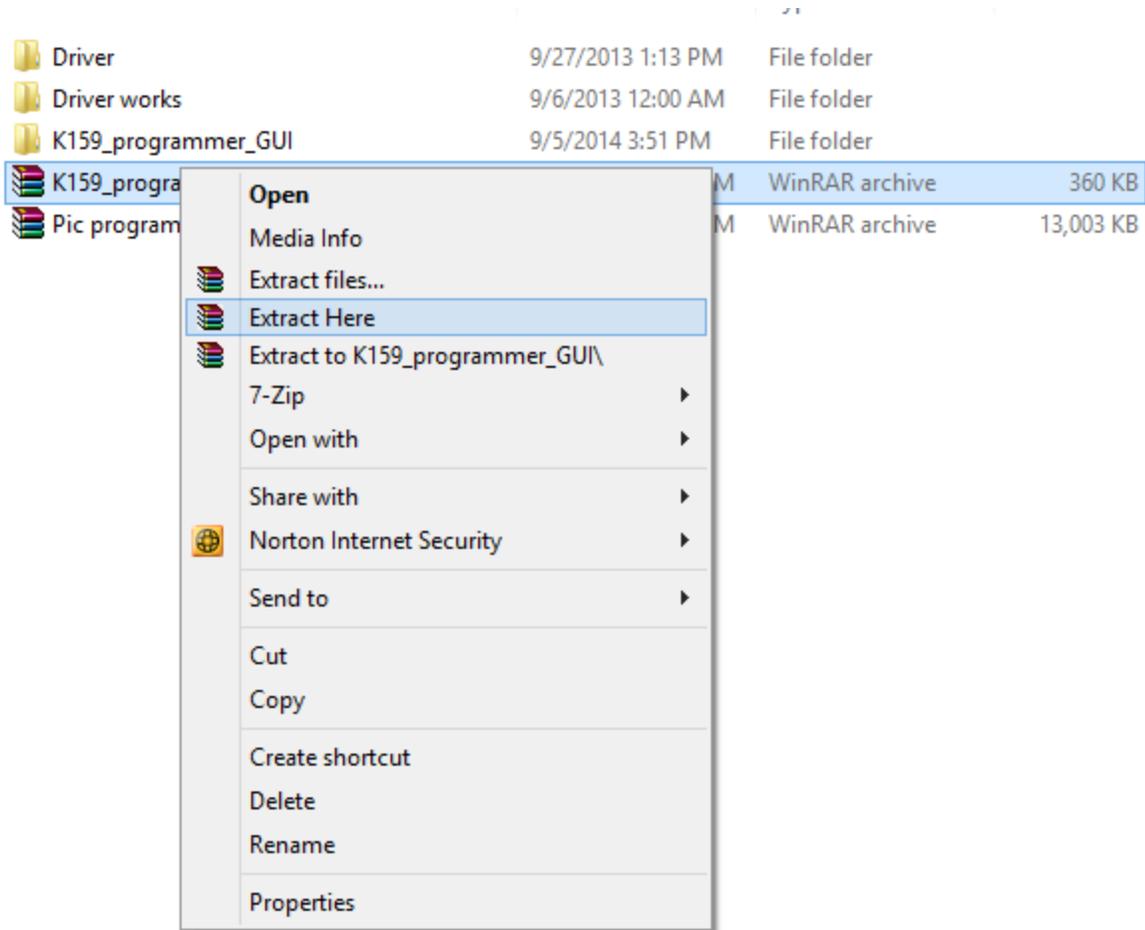|			
📁 Driver	9/27/2013 1:13 PM	File folder	
📁 Driver works	9/6/2013 12:00 AM	File folder	
📁 K159_programmer_GUI	9/5/2014 3:51 PM	File folder	
K159_programmer_GUI.rar	11/11/2013 9:18 PM	WinRAR archive	360 KB
Pic programmer.rar	11/10/2013 5:03 PM	WinRAR archive	13,003 KB

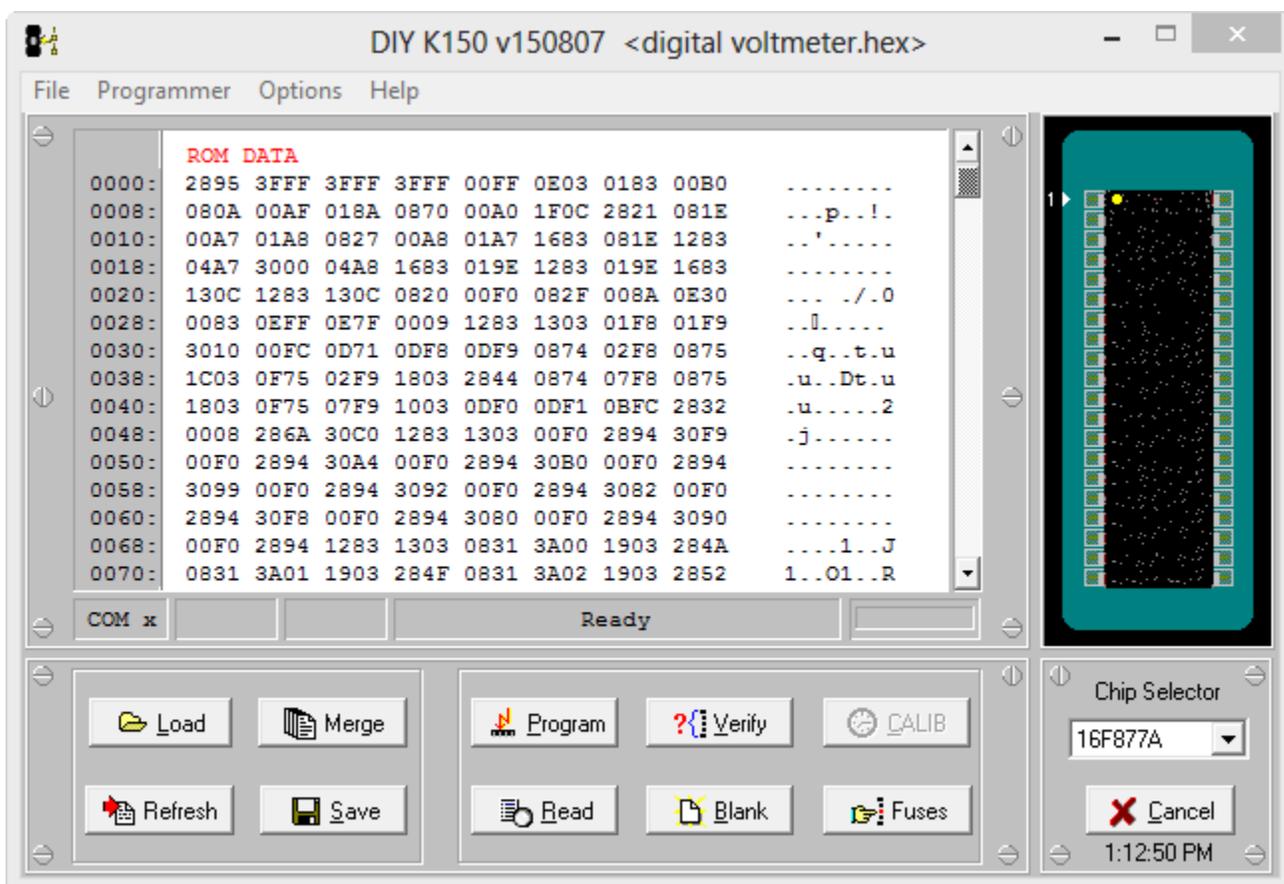| Name	Date modified	Type	Size
PL2303_Prolific_DriverInstaller_v1210.exe	4/8/2010 4:27 PM	Application	3,098 KB
PL2303_Prolific_DriverInst...		Compressed (zipp...	2,317 KB
releasenote.txt		Text Document	2 KB
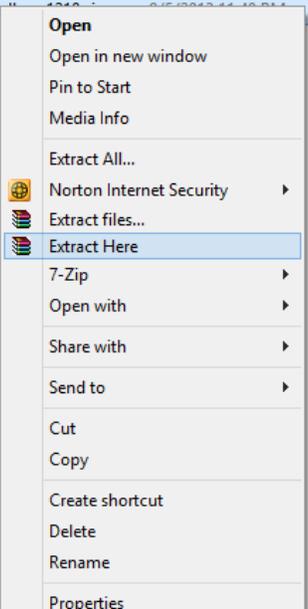
Open
Open in new window
Pin to Start
Media Info

Extract All...
🌐 Norton Internet Security ▶
Extract files...
Extract Here
7-Zip ▶
Open with ▶

Share with ▶

Send to ▶

Cut
Copy

Create shortcut
Delete
Rename

Properties

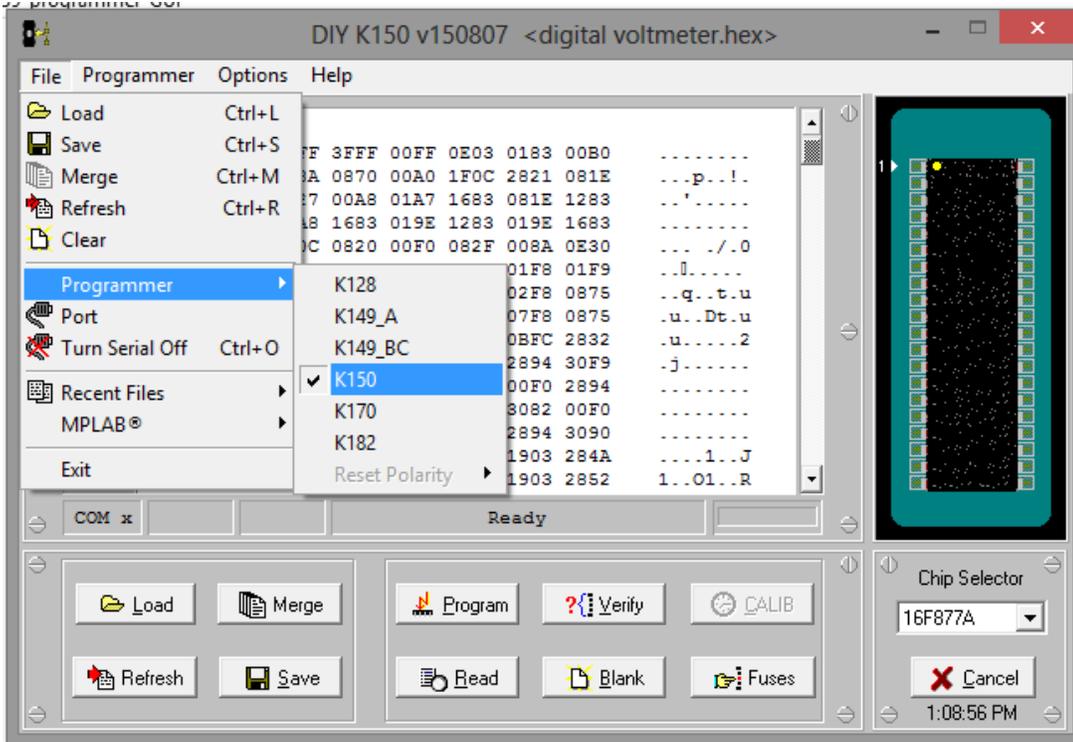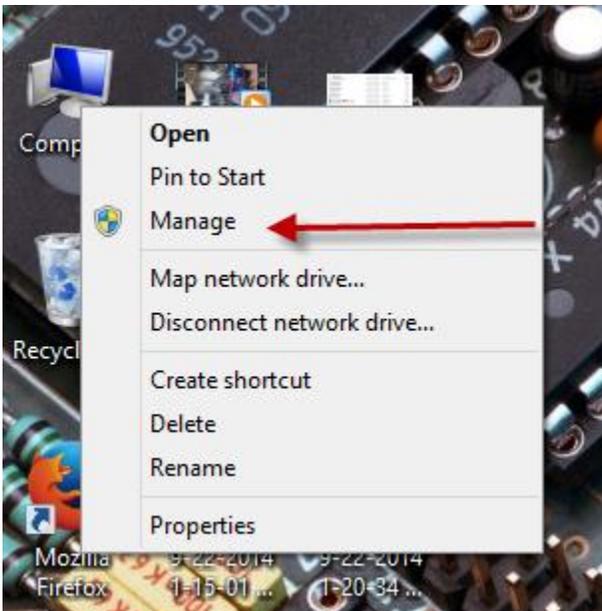| Name	Date modified	Type	Size
PL2303_Prolific_DriverInstaller_v1210.exe	4/8/2010 4:27 PM	Application	3,098 KB
PL2303_Prolific_DriverInstaller_v1210.zip	9/5/2013 11:48 PM	Compressed (zipp...	2,317 KB
releasenote.txt	4/13/2010 11:39 AM	Text Document	2 KB

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K150 Software installation:

📁 Driver	9/27/2013 1:13 PM	File folder	
📁 Driver works	9/6/2013 12:00 AM	File folder	
📁 K159_programmer_GUI	9/5/2014 3:51 PM	File folder	
K159_progra...	M	WinRAR archive	360 KB
Pic program...	M	WinRAR archive	13,003 KB

Open
Media Info
📚 Extract files...
📚 Extract Here
📚 Extract to K159_programmer_GUI\
7-Zip ▸
Open with ▸
Share with ▸
🌐 Norton Internet Security ▸
Send to ▸
Cut
Copy
Create shortcut
Delete
Rename
Properties

📁 Driver	9/27/2013 1:13 PM	File folder	
📁 Driver works	9/6/2013 12:00 AM	File folder	
📁 K159_programmer_GUI	9/5/2014 3:51 PM	File folder	
📚 K159_programmer_GUI.rar	11/11/2013 9:18 PM	WinRAR archive	360 KB
📚 Pic programmer.rar	11/10/2013 5:03 PM	WinRAR archive	13,003 KB

chipdata.cid	8/23/2007 5:06 PM	CID File	200 KB
DIYpack25ep.zip	9/2/2013 3:28 PM	Compressed (zipp...	405 KB
epk128.hex	9/5/2007 12:52 PM	HEX File	12 KB
epk149a.hex	9/5/2007 12:52 PM	HEX File	12 KB
epk149bf.hex	9/5/2007 12:52 PM	HEX File	12 KB
epk150.hex	9/5/2007 12:52 PM	HEX File	12 KB
epk182.hex	9/5/2007 12:52 PM	HEX File	12 KB
fixhex2.exe	9/12/2007 2:56 PM	Application	22 KB
microbrn.exe	8/23/2007 5:06 PM	Application	660 KB
microbrn.hlp	8/23/2007 6:16 PM	Help file	47 KB
pro.dat	9/22/2014 12:39 AM	DAT File	1 KB
readme_ep.pdf	9/11/2007 10:30 PM	Adobe Acrobat D...	44 KB

DIY K150 v150807 <digital voltmeter.hex>

File   Programmer   Options   Help

ROM DATA

```
0000:  2895 3FFF 3FFF 3FFF 00FF 0E03 0183 00B0     ........
0008:  080A 00AF 018A 0870 00A0 1F0C 2821 081E     ...p..!.
0010:  00A7 01A8 0827 00A8 01A7 1683 081E 1283     ..'.....
0018:  04A7 3000 04A8 1683 019E 1283 019E 1683     ........
0020:  130C 1283 130C 0820 00F0 082F 008A 0E30     ... ./.0
0028:  0083 0EFF 0E7F 0009 1283 1303 01F8 01F9     ..[.....
0030:  3010 00FC 0D71 0DF8 0DF9 0874 02F8 0875     ..q..t.u
0038:  1C03 0F75 02F9 1803 2844 0874 07F8 0875     .u..Dt.u
0040:  1803 0F75 07F9 1003 0DF0 0DF1 0BFC 2832     .u.....2
0048:  0008 286A 30C0 1283 1303 00F0 2894 30F9     .j......
0050:  00F0 2894 30A4 00F0 2894 30B0 00F0 2894     ........
0058:  3099 00F0 2894 3092 00F0 2894 3082 00F0     ........
0060:  2894 30F8 00F0 2894 3080 00F0 2894 3090     ........
0068:  00F0 2894 1283 1303 0831 3A00 1903 284A     ....1..J
0070:  0831 3A01 1903 284F 0831 3A02 1903 2852     1..O1..R
```

COM x   Ready

Load   Merge   Program   Verify   CALIB

Refresh   Save   Read   Blank   Fuses

Chip Selector

16F877A

Cancel

1:12:50 PM

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Select the K150 Board:

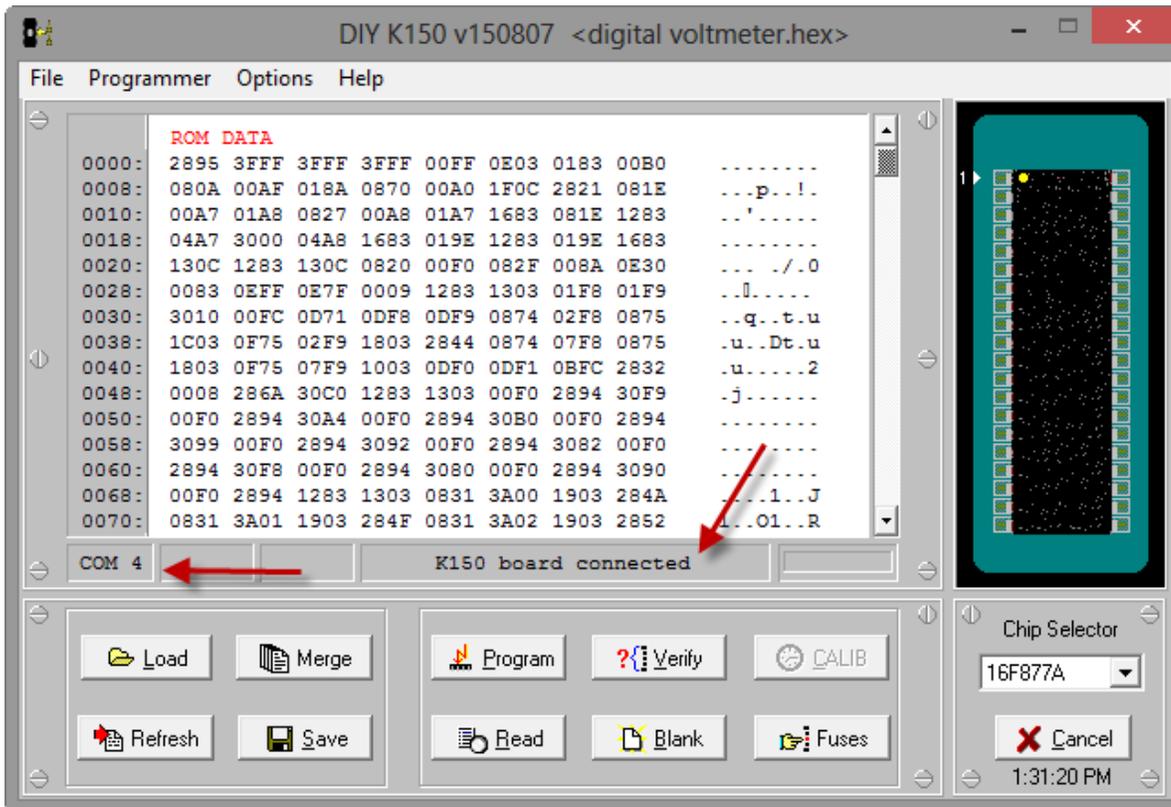## 2-Select the COM Port:

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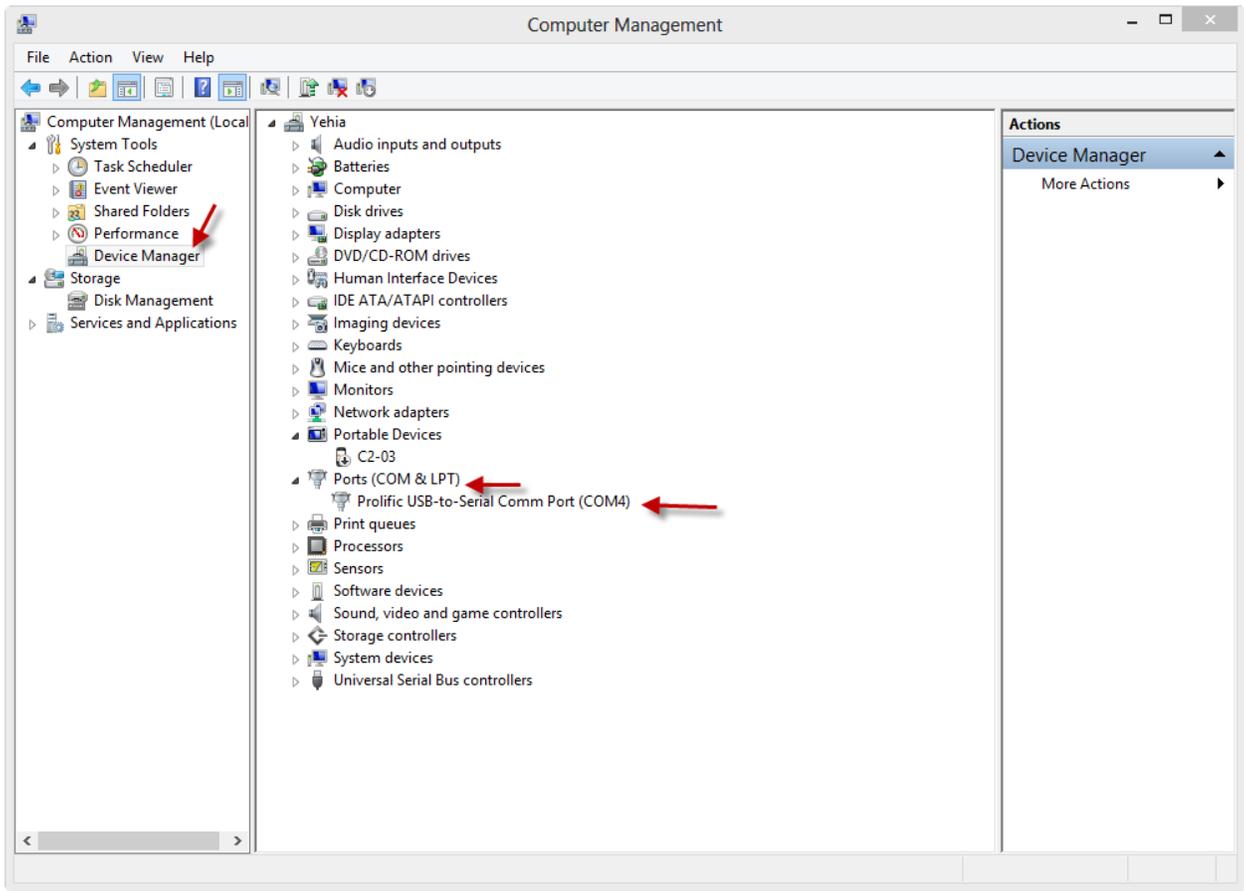
NOW we know that out COM Port is COM num 4.
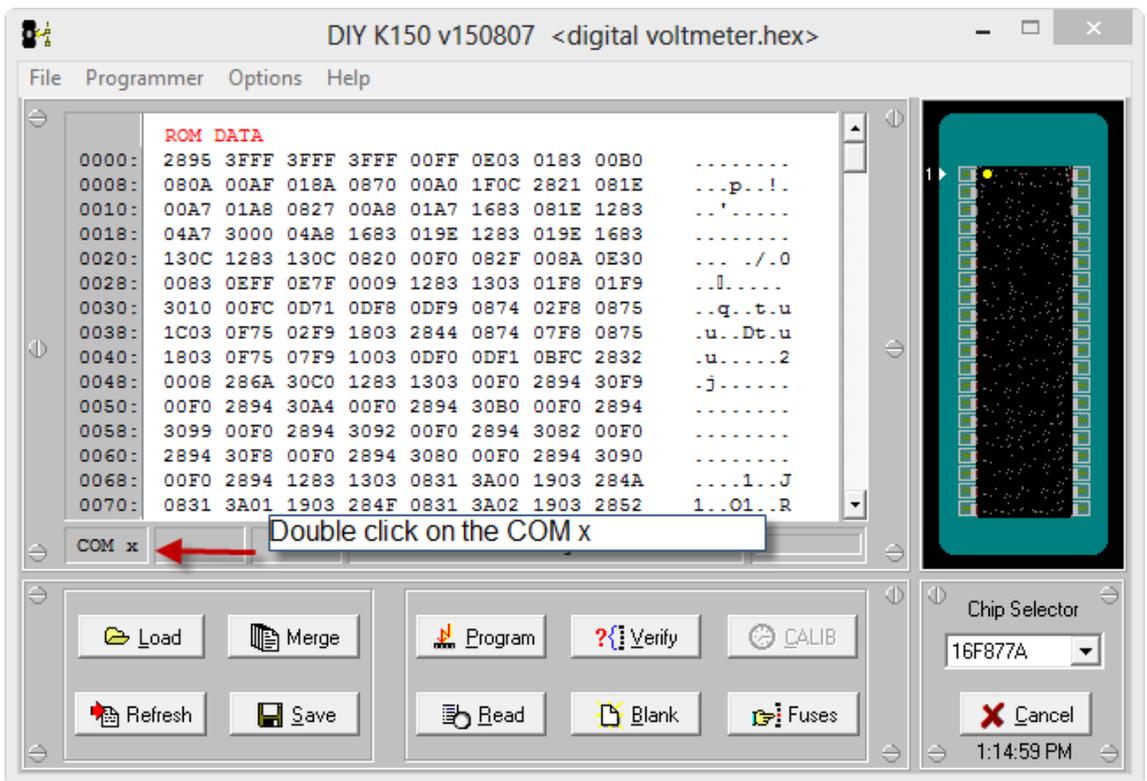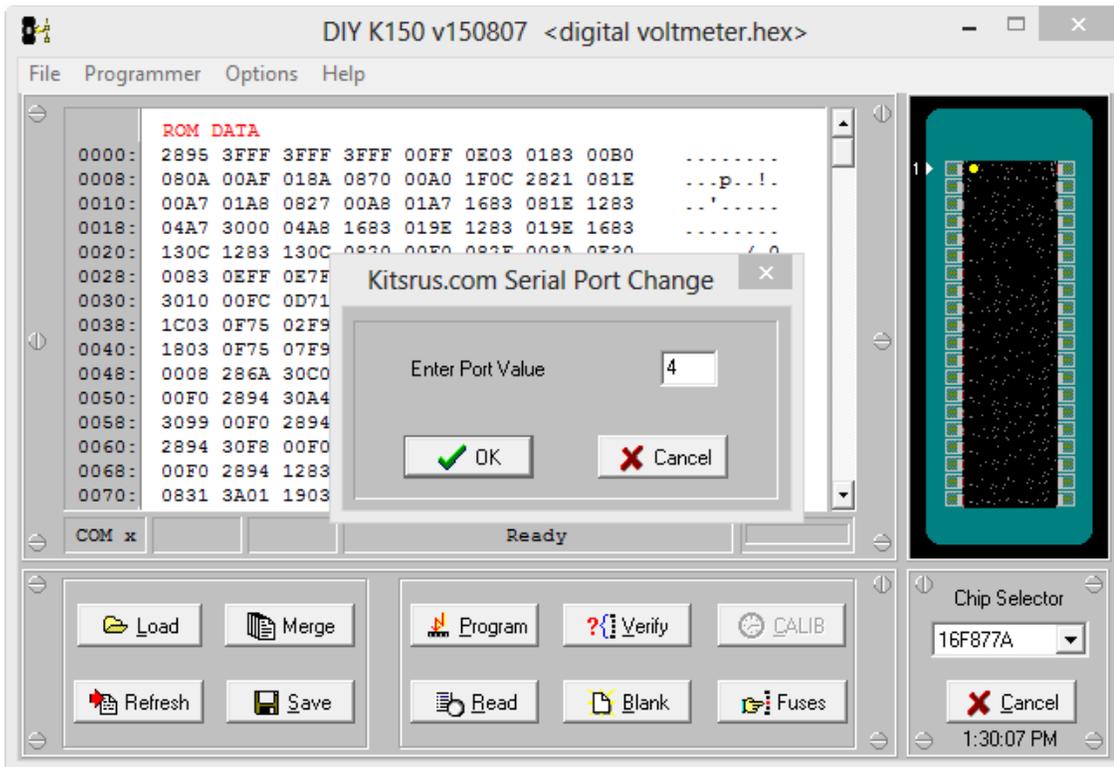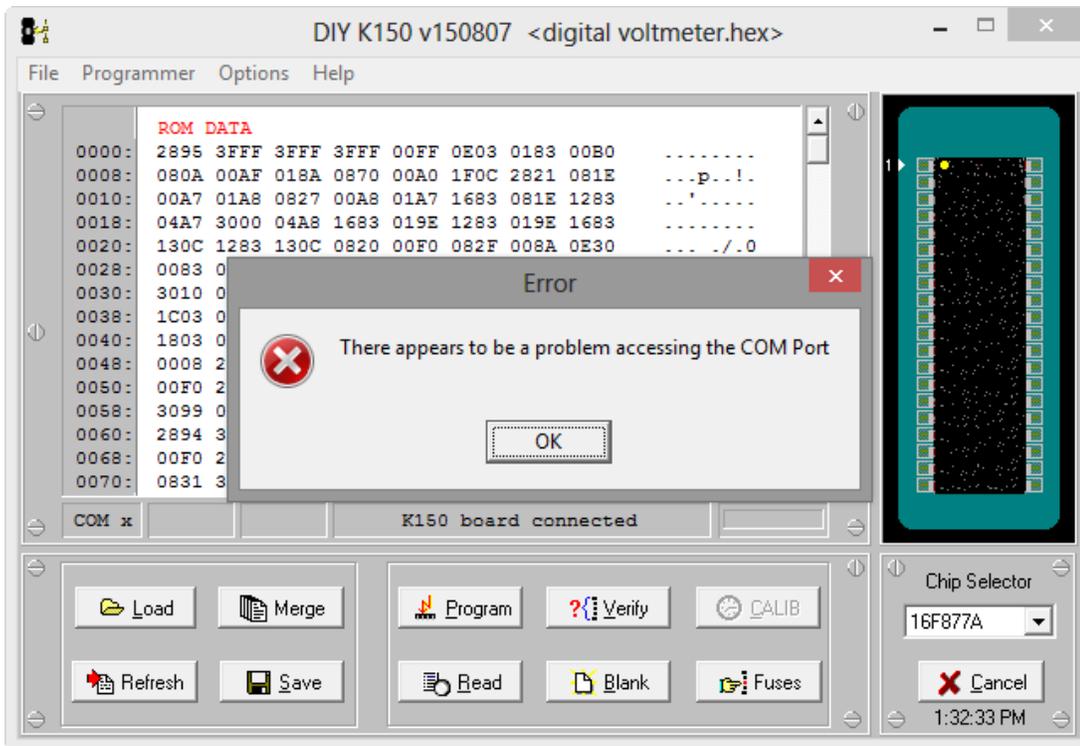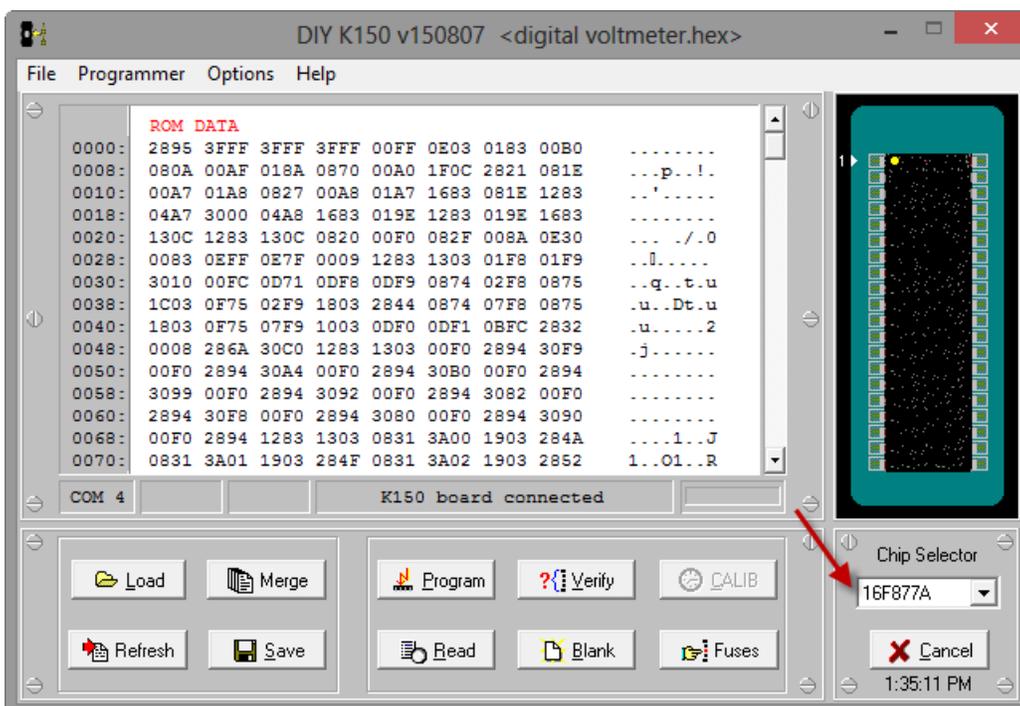
Type 4 and press ok

Now it is ready to work

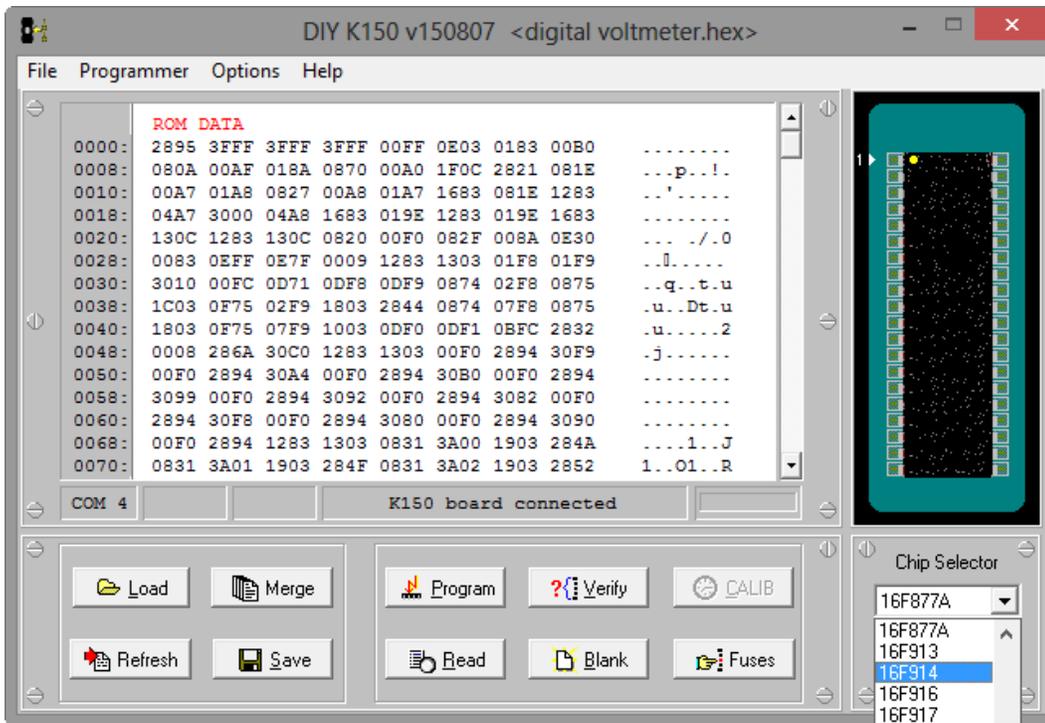**If Some thing like that appear to you**

so you have type a wrong COM Port or didn't install the driver correctly
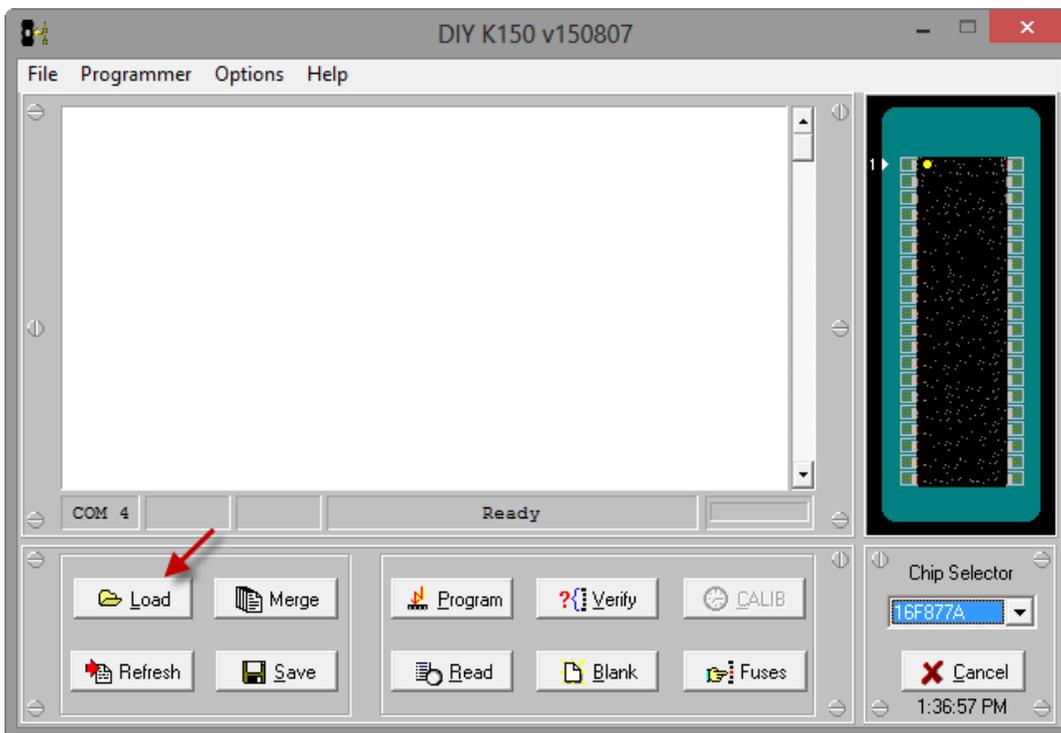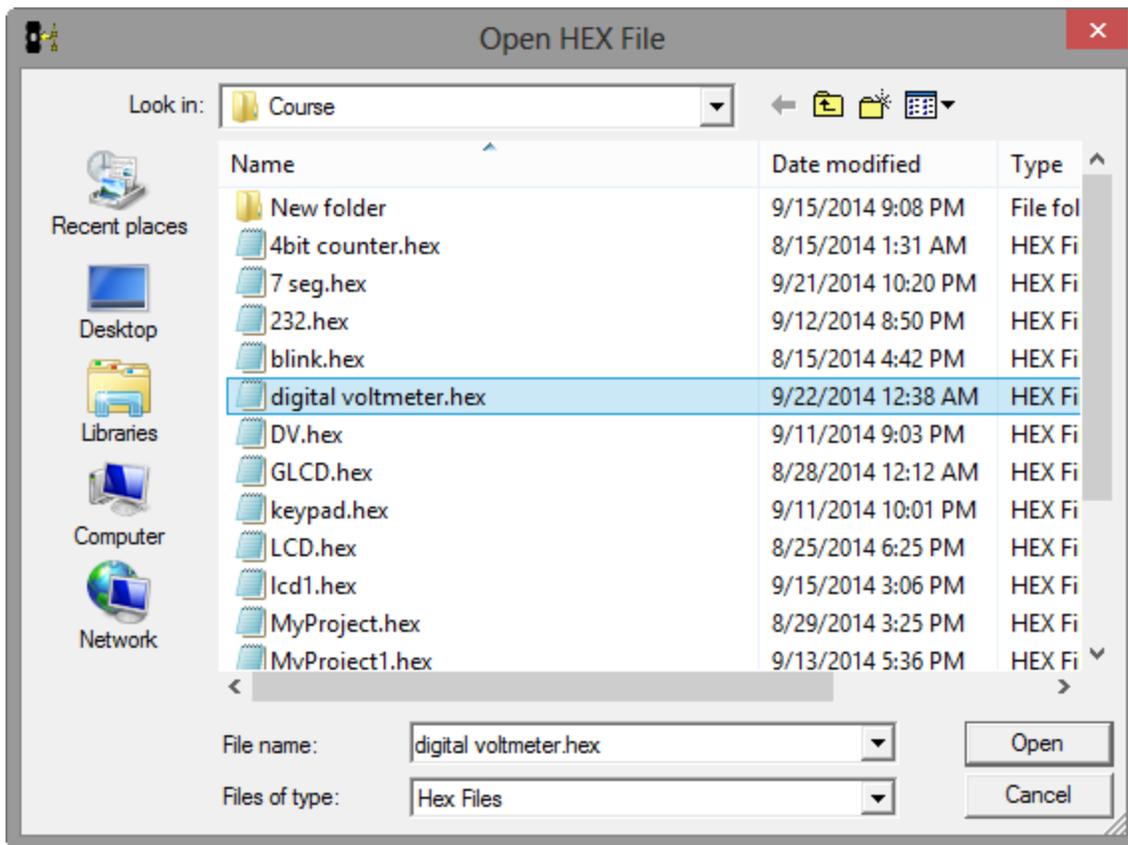
Upload Hex file and programming:
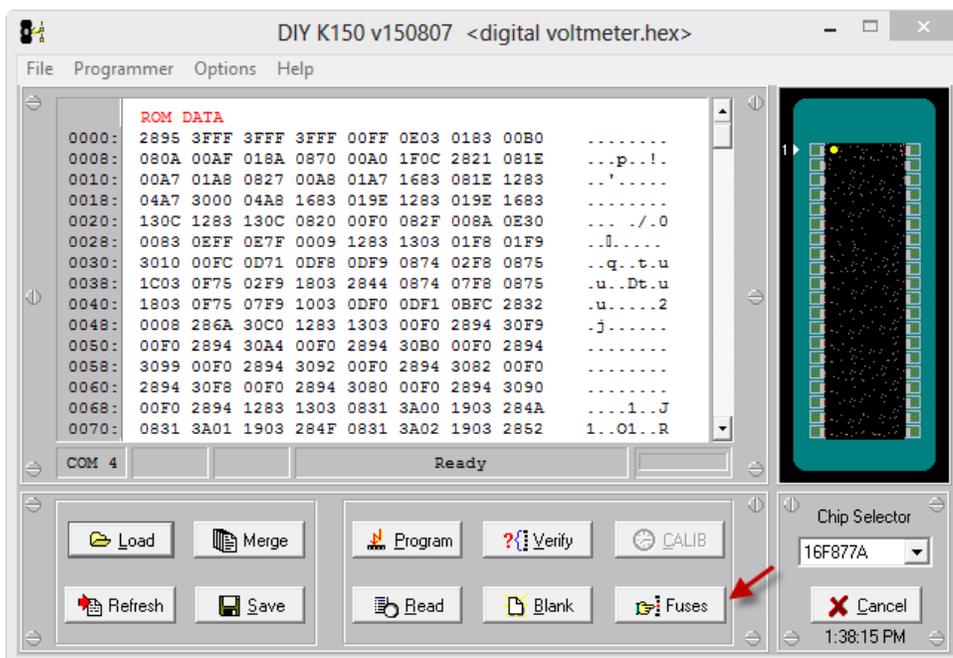
select the PIC you want to program from that combo box
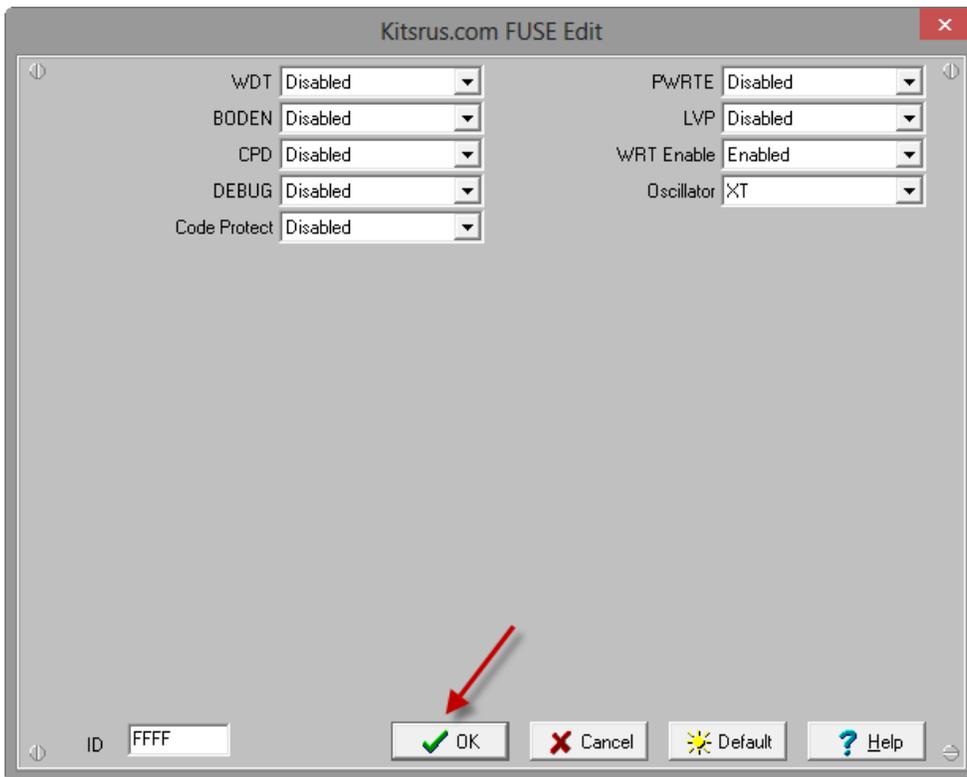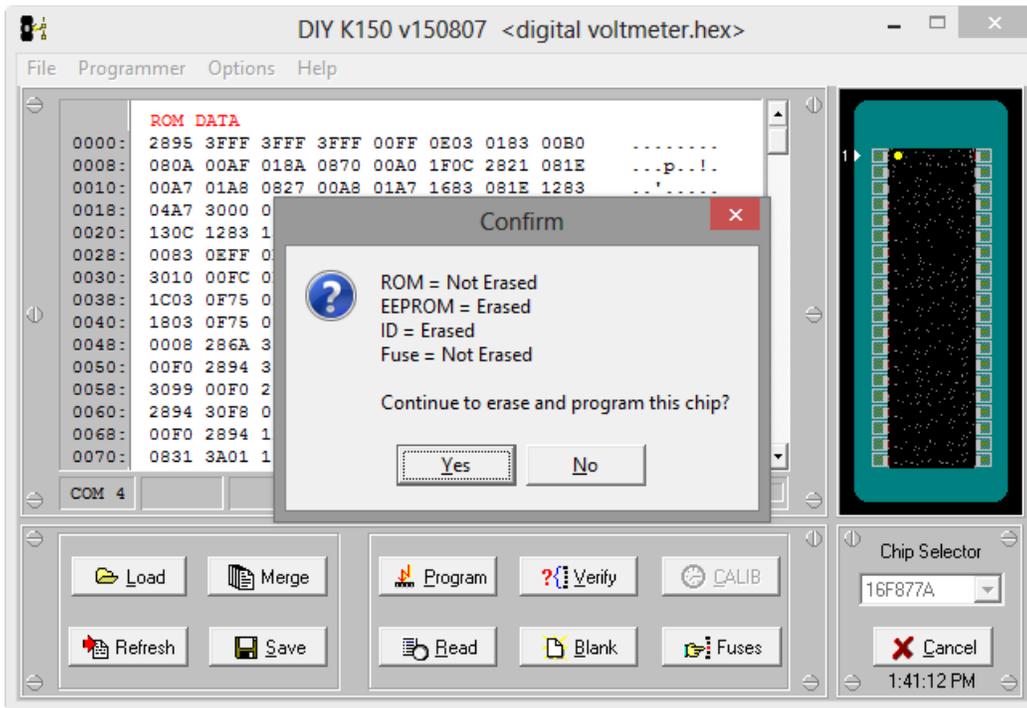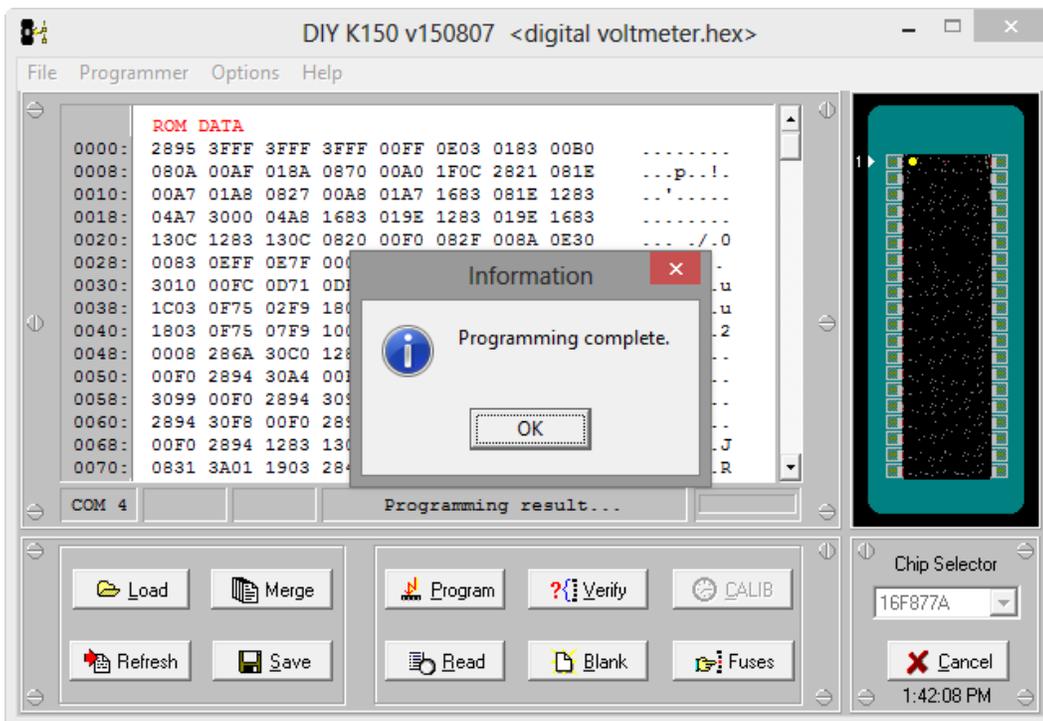

then upload your HEX file

click open

then choose your fuses configuration and if you already do so in your compiler you must open fuses and press ok
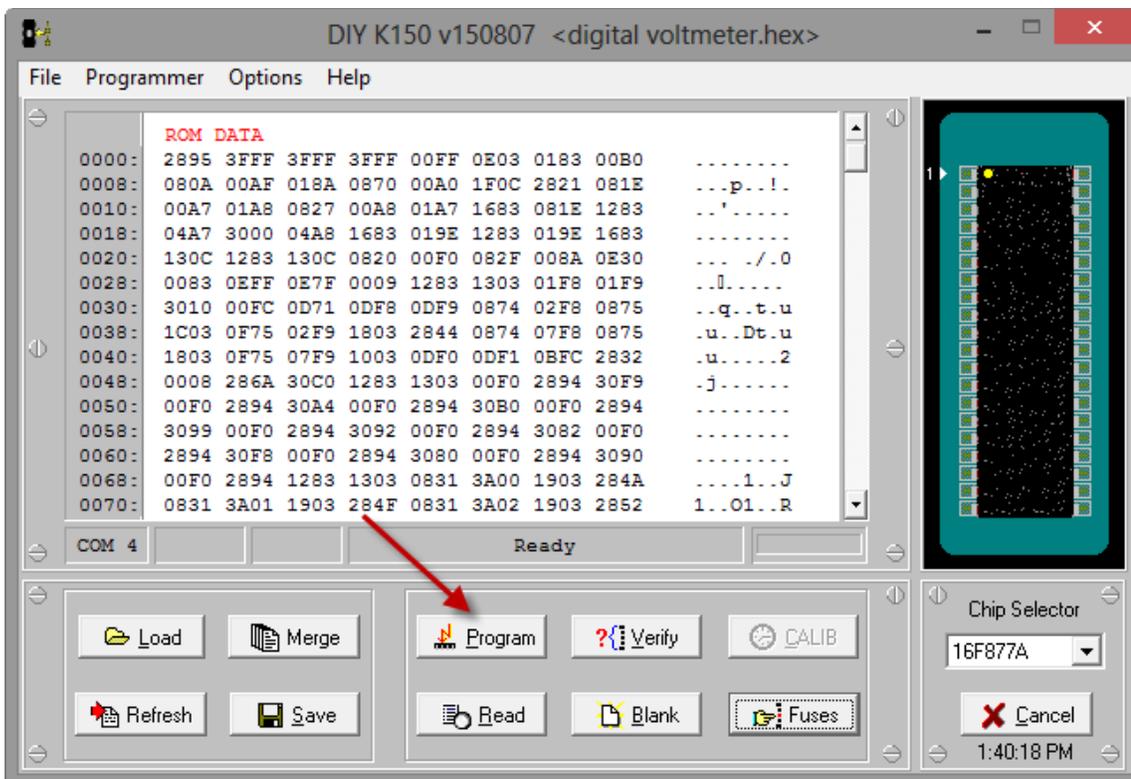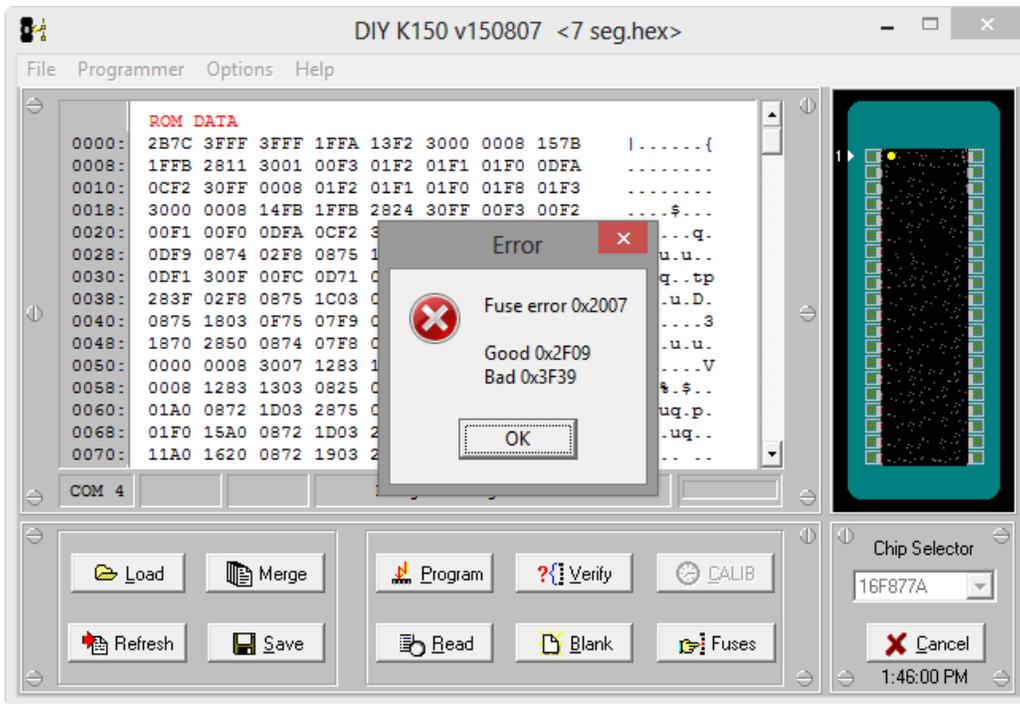

Then press program

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press yes

Now the Uploading is done and Enjoy
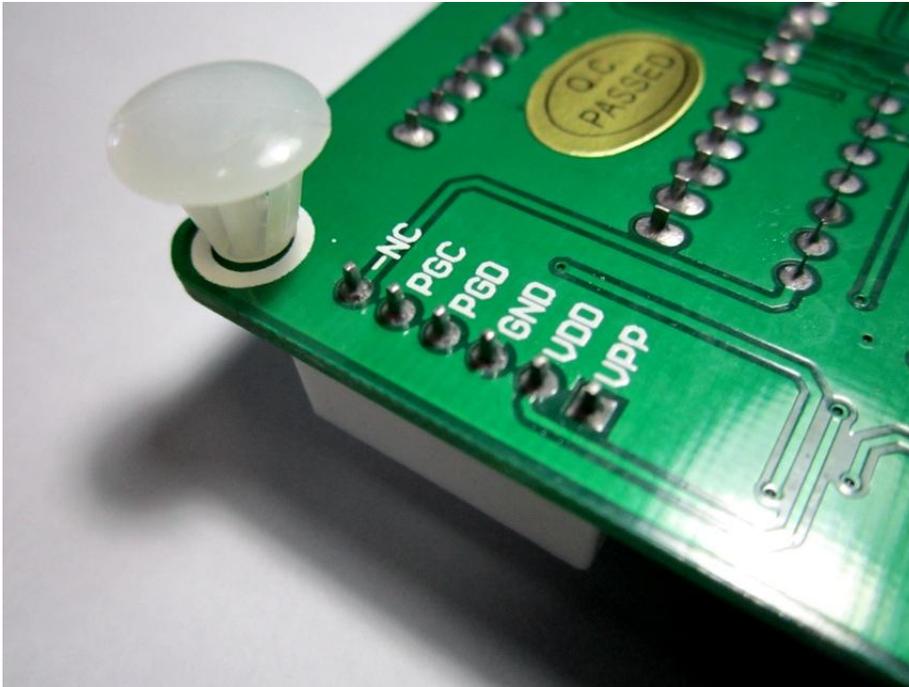
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Note:

if something like that appear so your forgot to check the fuses as said before.

fuses box must be checked once even if you make the right configuration just open it and press ok as we said before.

ICSP programming:

Just connect this pins with the equivalent in the PIC and program by the same way .

Note: NC is not connected pin