EEPROM programmer for microcontrollers of ST92F (ST9+) series

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web: http://garikbaza.narod.ru/index_en.html
http://garikbaza.at.ua/index/0-4
forum: http://garikbaza.at.ua/forum

This tool is intended to work with EEPROM of this microcontrollers. With this tool You can reset locked 10, locked 13, wait 30, even LOCKED FOREVER messages.

For example in this help file it`s used Ford 4000 by Visteon (shown on pictures1. & 2.):
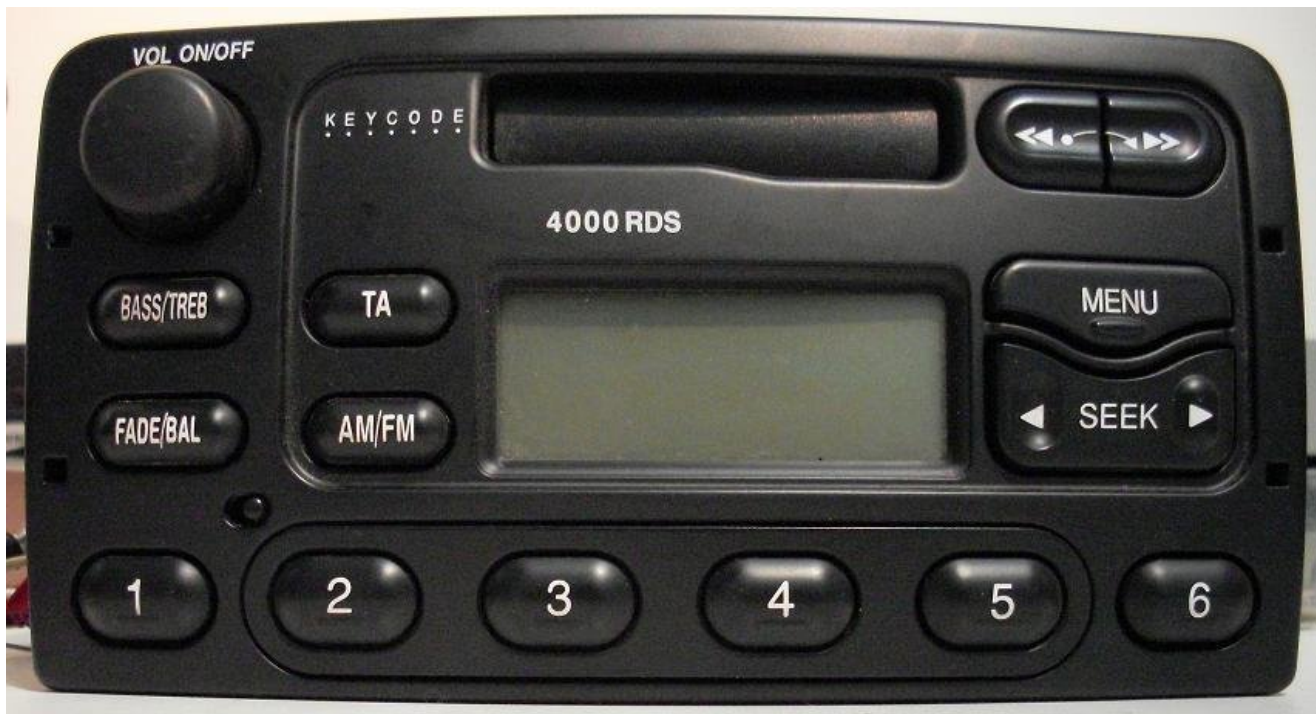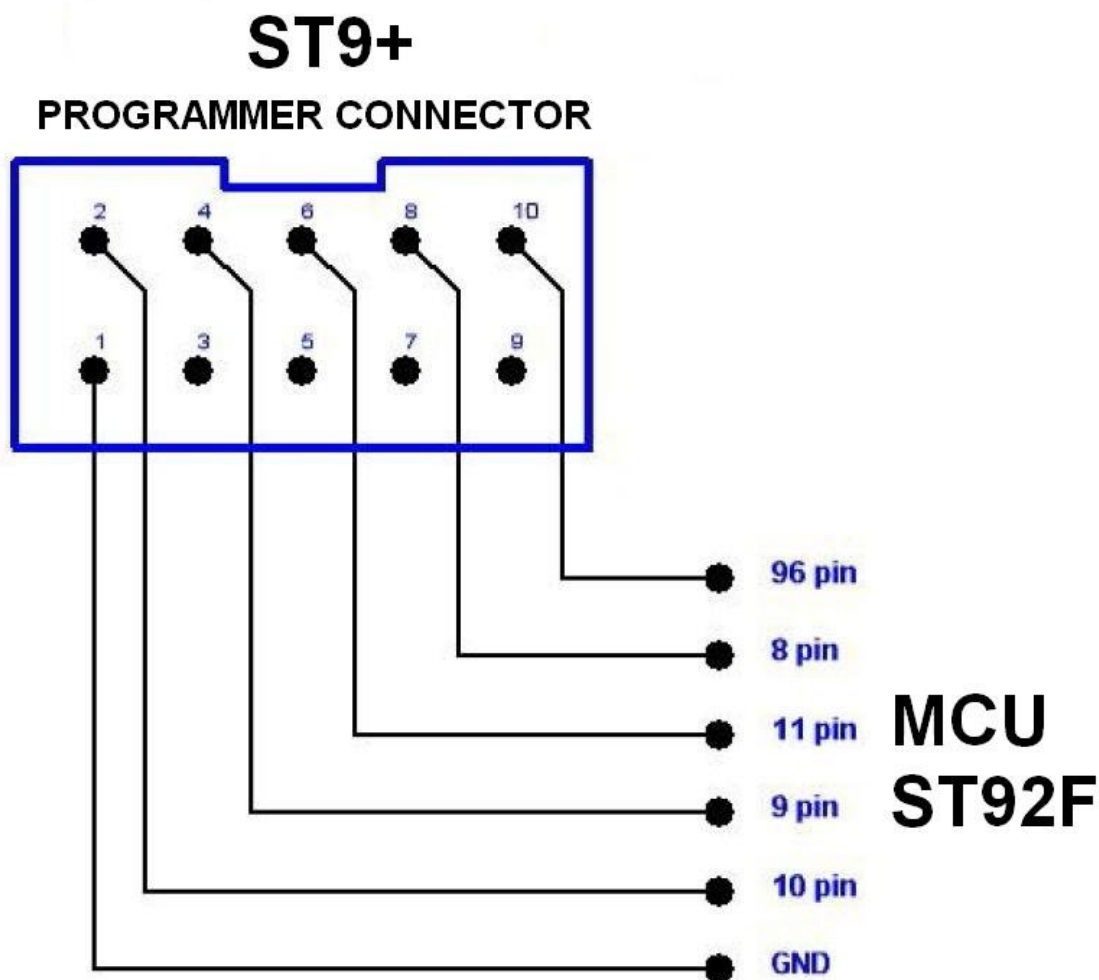

Picture 1.
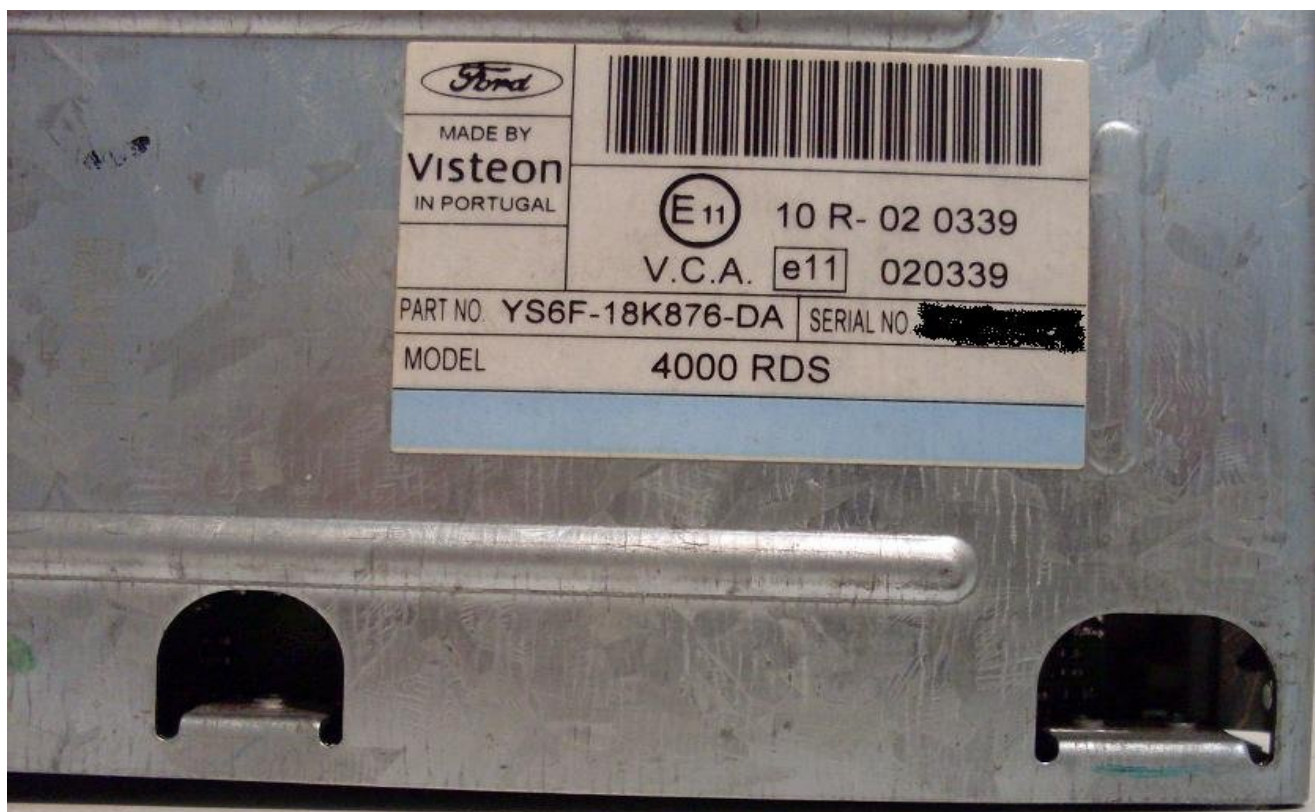
Picture 2.

First we will start with connecting of microcontroller (in further text MCU),to programmer :

As You can see on picture bellow (picture 3.), pins of programmer need to be connected to MCU just like on schematic .
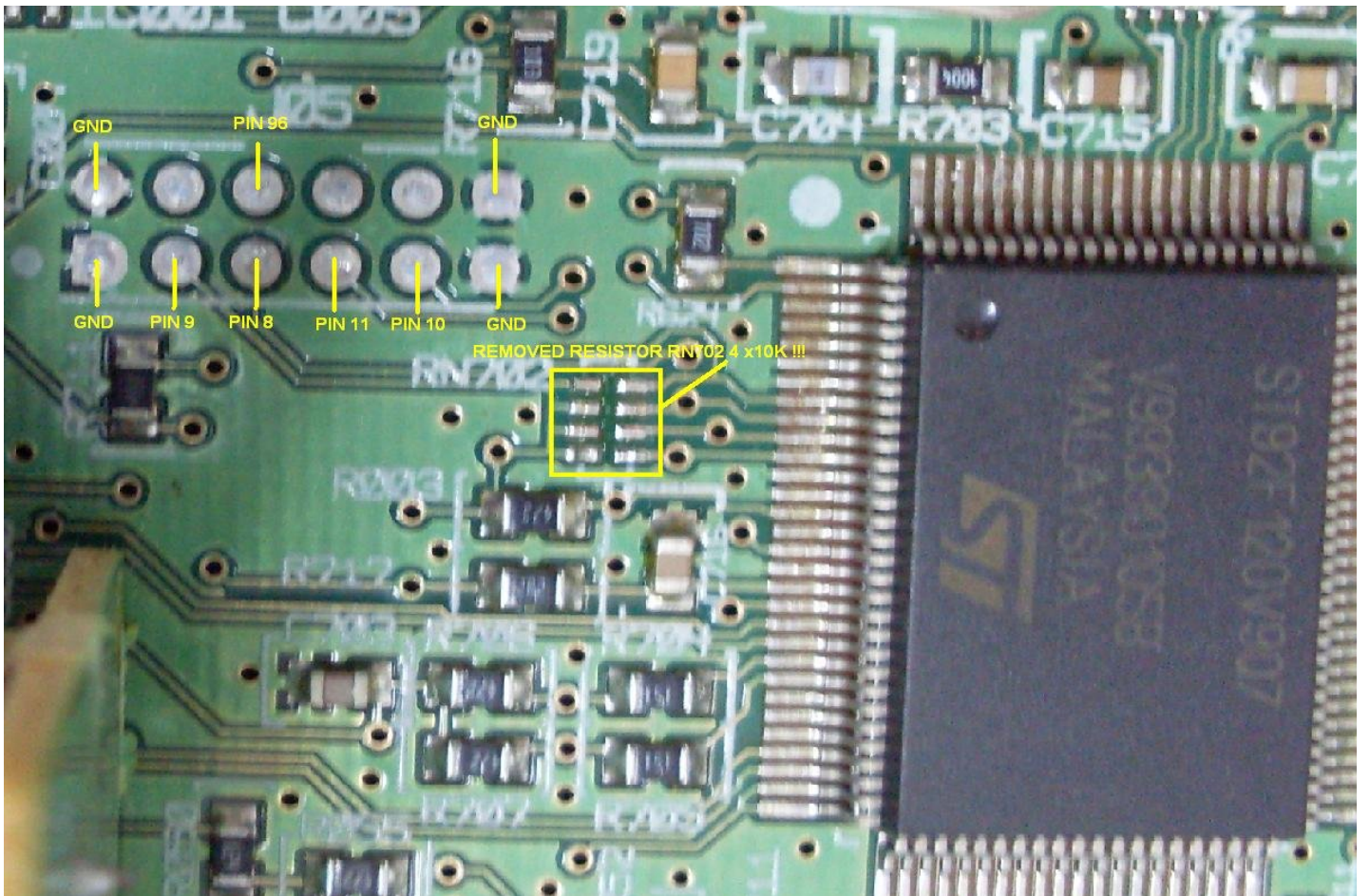

Picture 3.

ATTENTION!!! Before connecting be sure that pins 8 /9 /10 /11 of MCU
are free from rest of circuit. In most cases it is necessary to remove package of four
resistors (chip resistor 4 x 10K), see picture 4. Especially is very important to free
pin 9 from rest of circuit – if this pin is left connected, there is no communication !!!
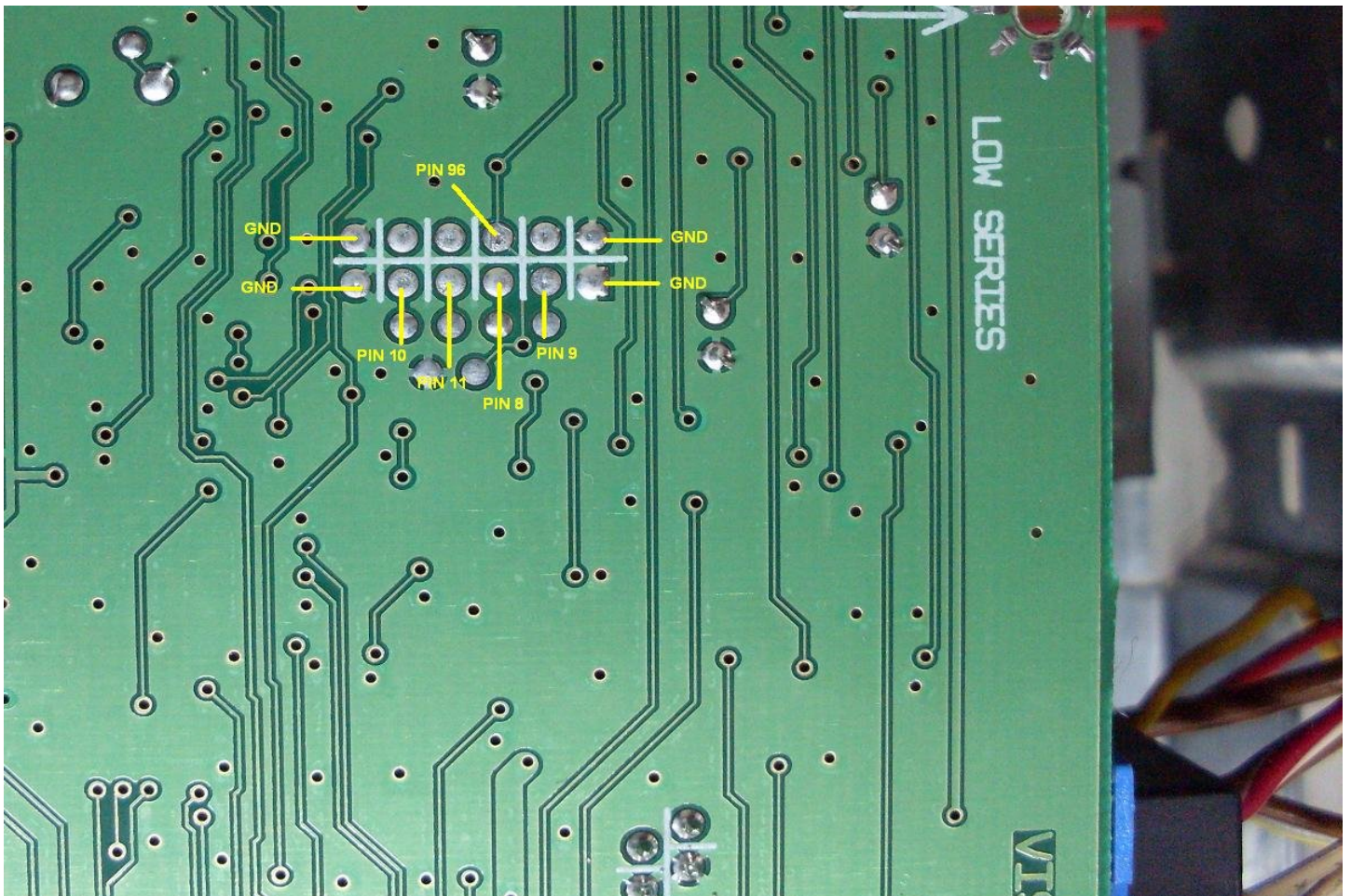
Detail explanations on pictures 4,5 and 6:
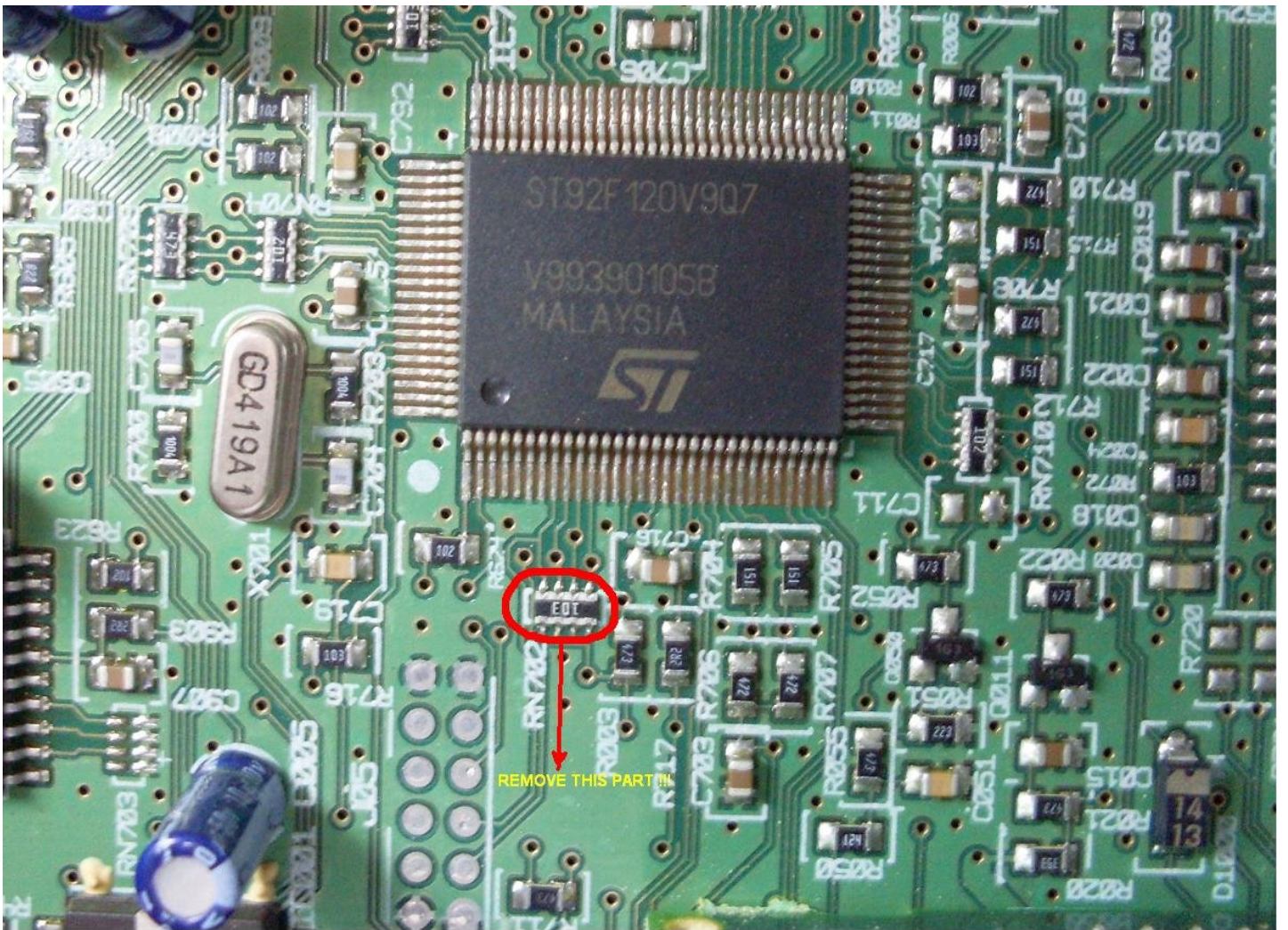
Picture 4.

Picture 5.

Picture 6.

Picture 5. and 6. showing the same soldering points, from top and bottom side.

Connect programmer to Your PC and You should see message:
FT232 USB-> UART which asking You for driver.
Give a full path to file " DRIVER_FT232 " which is on our web site and when
installation is finished, You can go further .
Detailed installation instructions is on following links:

http://www.reslers.de/IBUS/install.html
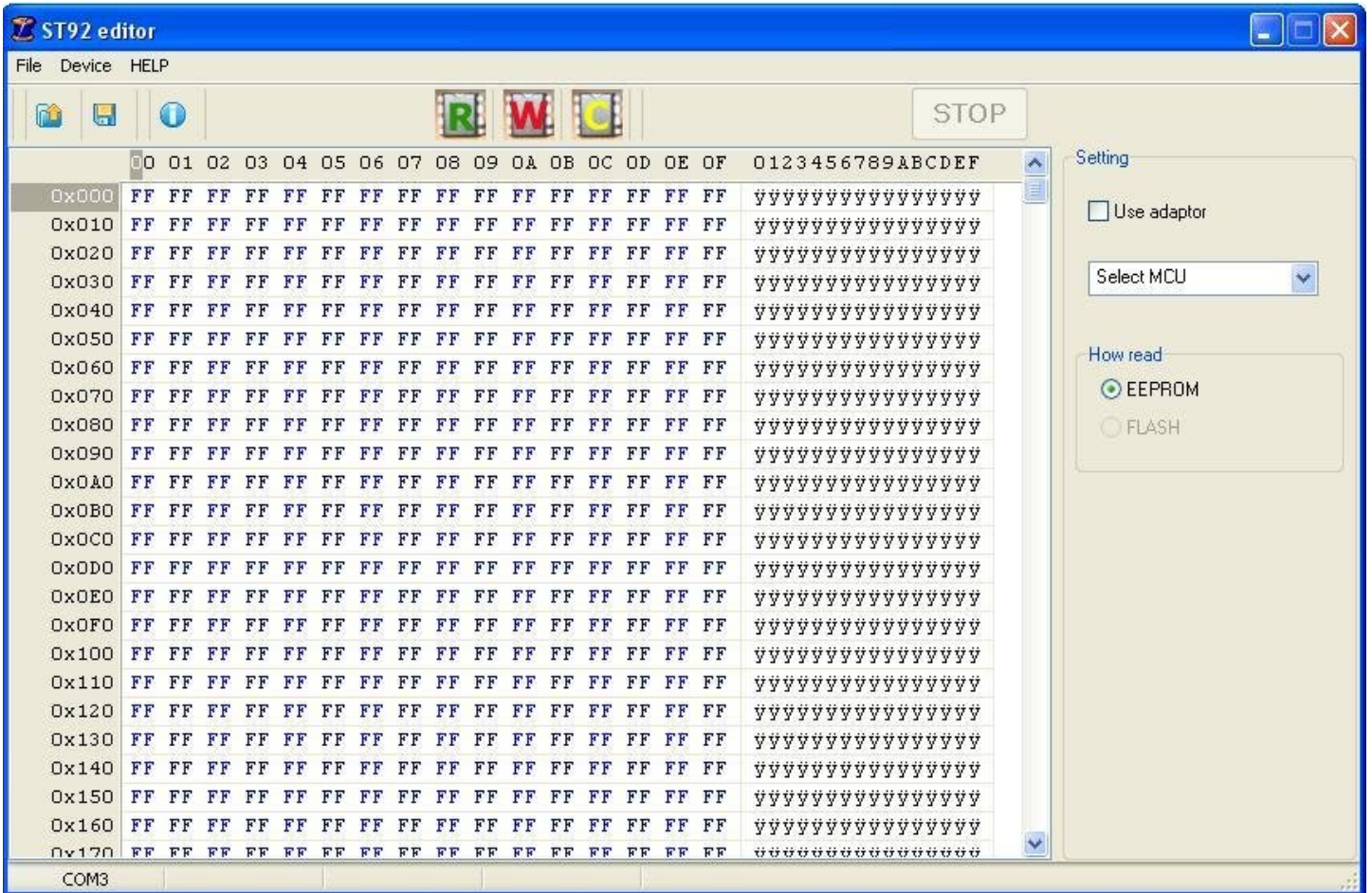
if You need to change port number (etc. COM4, COM5) here is link how to do that:

http://www.reslers.de/IBUS/port.html

After connecting programmer to MCU, You can start ST9 software.

You should see next screen (like shown on picture 7.):

Picture 7.

First is necessary to choose port on which one You connected programmer. To do this:
from menu choose:
Help===>Select port   (see picture 8. and 9.)
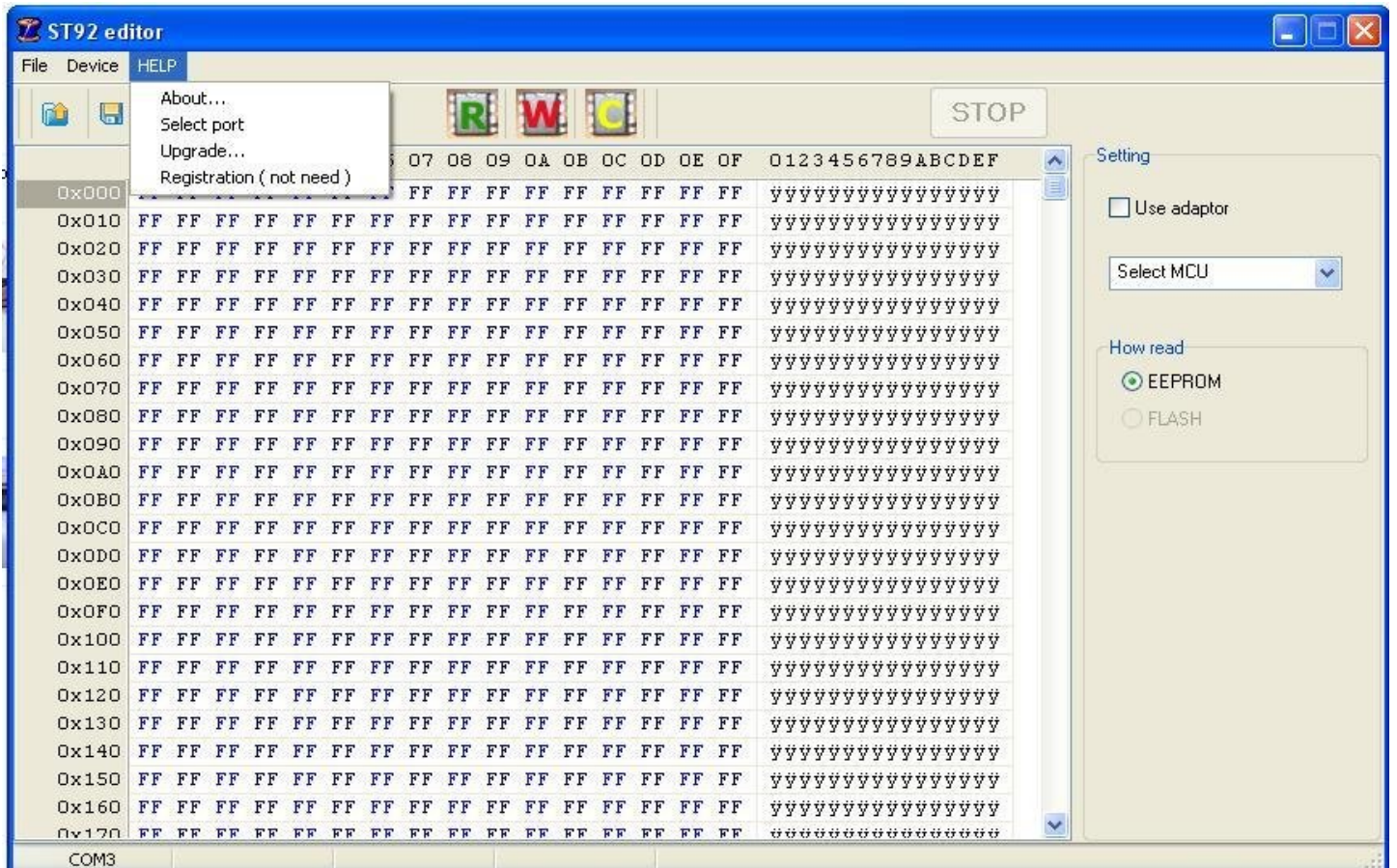
Picture 8.

Picture 9.

After this step it is necessary to click on "i" icon. You should get programmer info window with serial number on Your screen (see picture 10.) :

Picture 10.

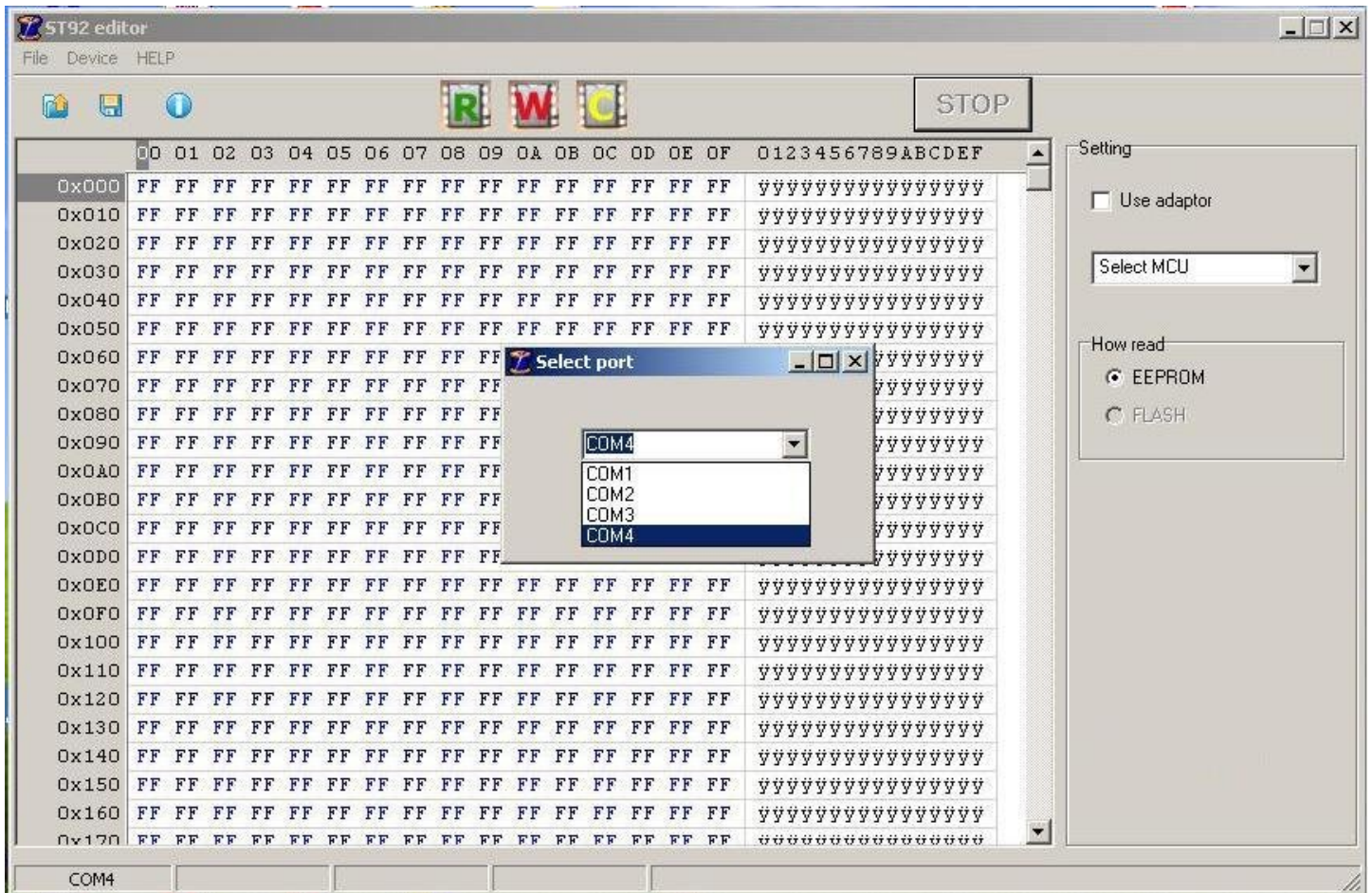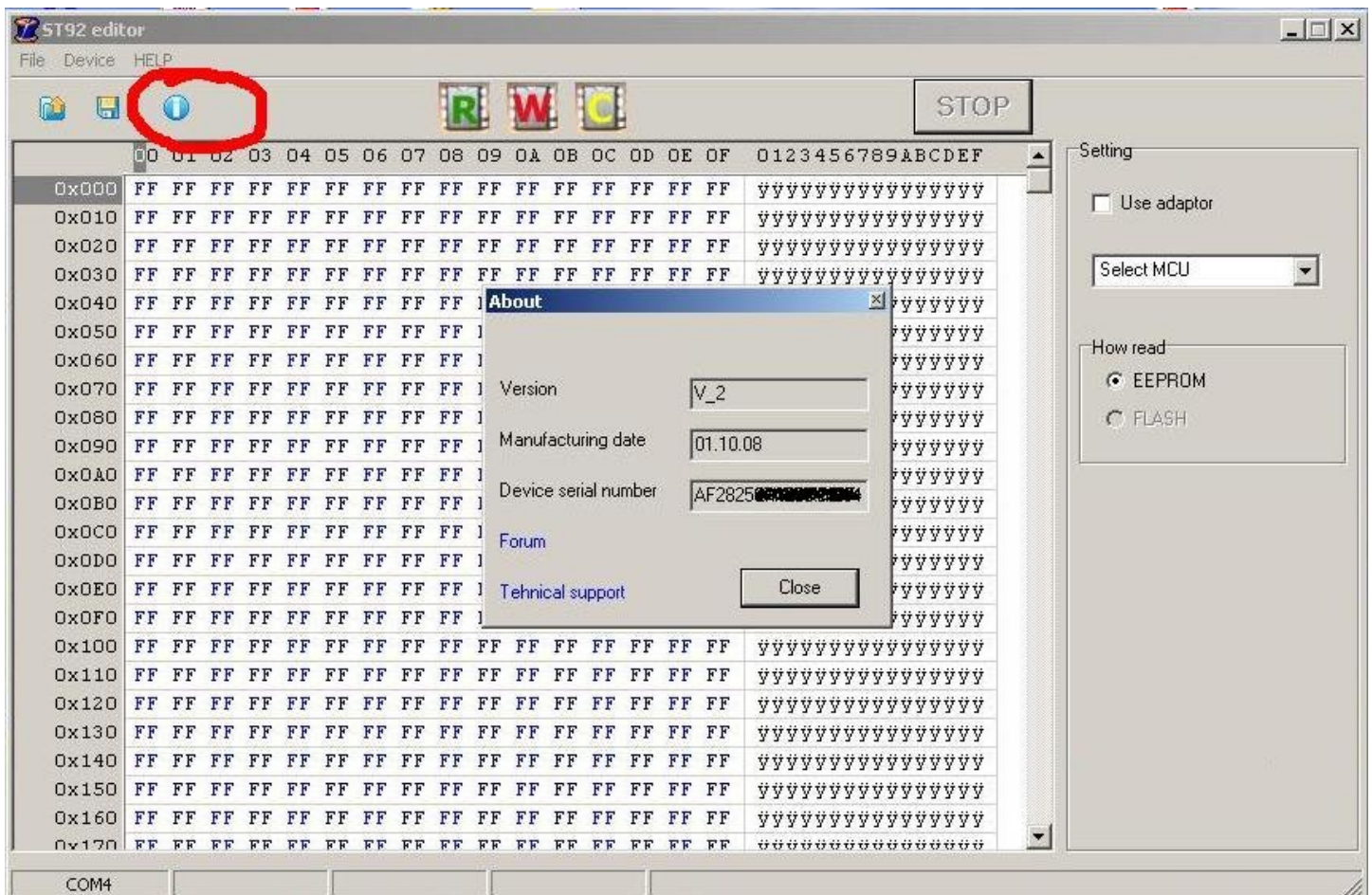Now close program (it will save port settings), start it again and all is ready for working.

- Short description of software -

Hot-keys :

F2 **-** save dump
F3 **-** open dump
F5 **-** read MCU EEPROM
F6 **-** write MCU EEPROM
F8 **-** clear all errors (LOCKED 10, LOCKED 13, WAIT 30....)

Button with green letter R   **-** read MCU eeprom
Button with red letter W   **-** write MCU eeprom
Button with yellow letter C **-** clear all errors (LOCKED 10, LOCKED 13, WAIT 30....)

In right part of program screen is option "Use adaptor" (picture 11.)

Picture 11.

This option is for using with external adapter which is included in package with ST9+ programmer. It will supply adapter with power and frequency signal (4Mhz) to work with MCU when is pulled out from target. Cable for connecting adapter and ST9+ programmer is included in package.

For all additional questions, mail to us at:

garikbaza@mail.ru
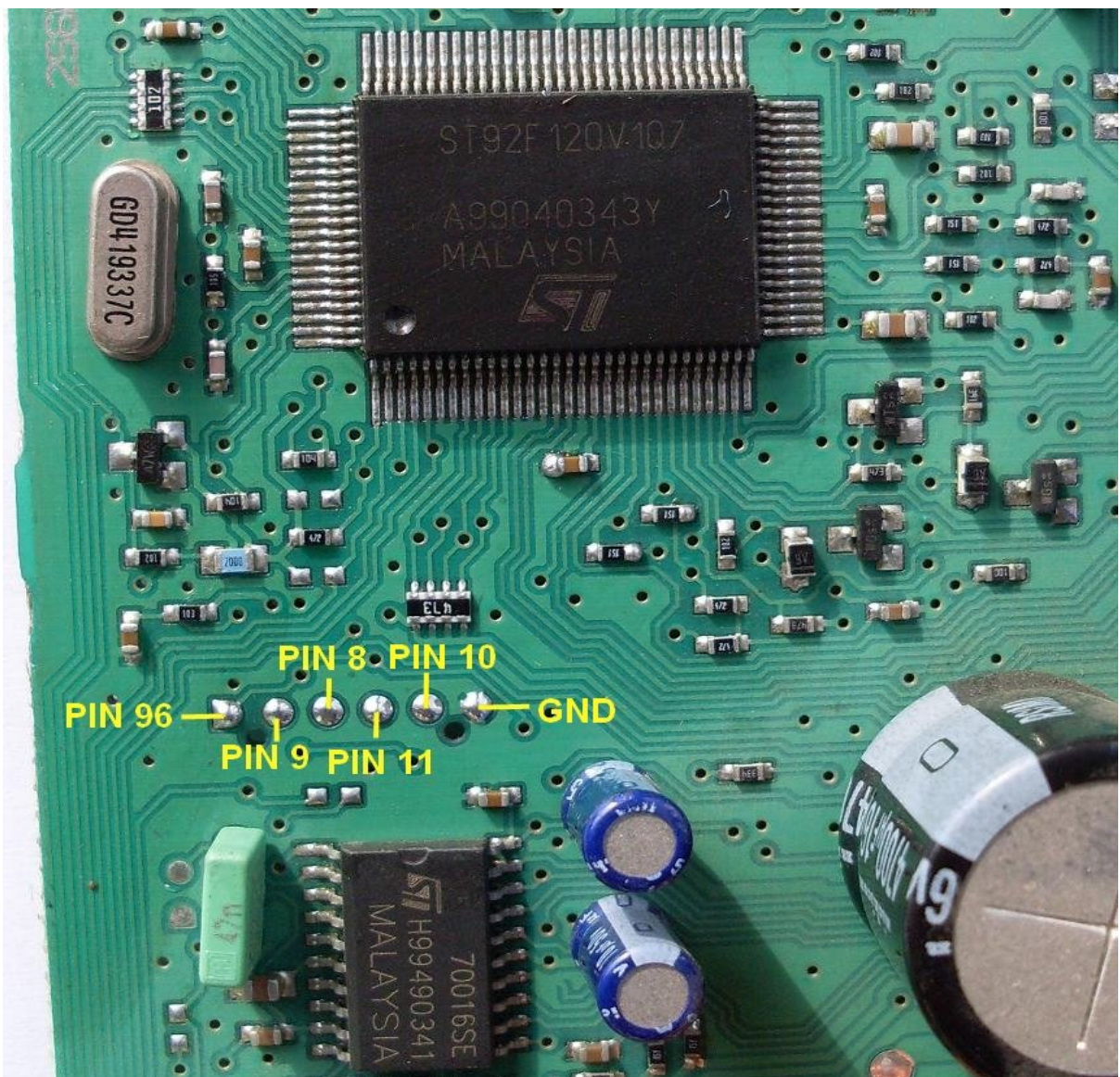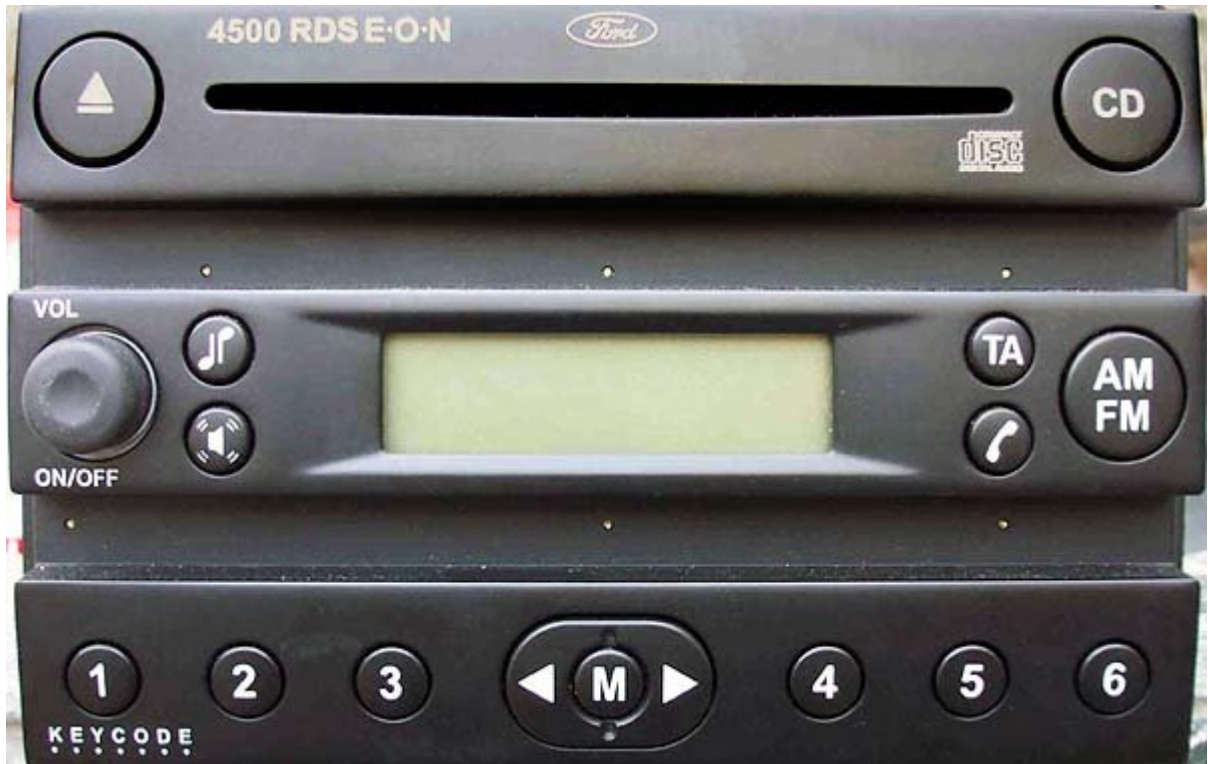mazur_pavel@ukr.net

APPENDIX

Here will be described connections for other models with ST92F microcontroller.
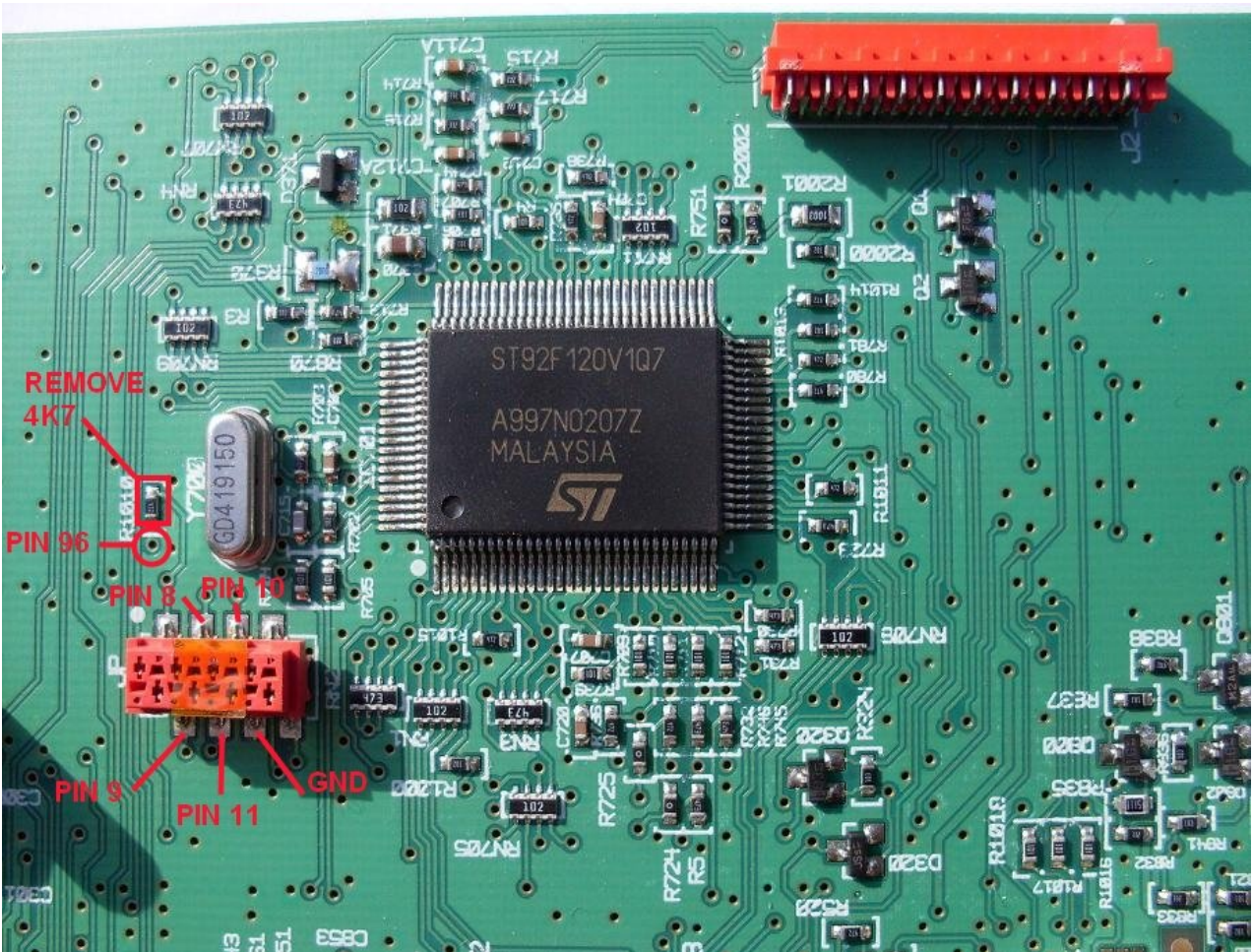At this moment here is description for next models:

- FORD 4500 by VISTEON 4S61-18C815-AA B3 LOW CD
- FORD 6006 by VISTEON 2S61-18C815-HA B5 CDX6 MID (DOT MATRIX)
- FIAT STILO OA by VISTEON 2FCF-18C838-AF
- FORD 6000 by VISTEON YS4F-18C815-AC
- FORD 6000 by VISTEON 3S7T-18C815-AD
- LANDROVER VUX500150 by VISTEON 4CFF-18C838-AB
- FORD 4500 by VISTEON 3S61-18C815-BB

How new models arriving to me it will be added in the future. If You have pictures from other units tested by Yourself and 100% checked connection points and all other informations concerning to this document please send it to me at rdelabyu@gmail.com and it will be added as soon as possible.
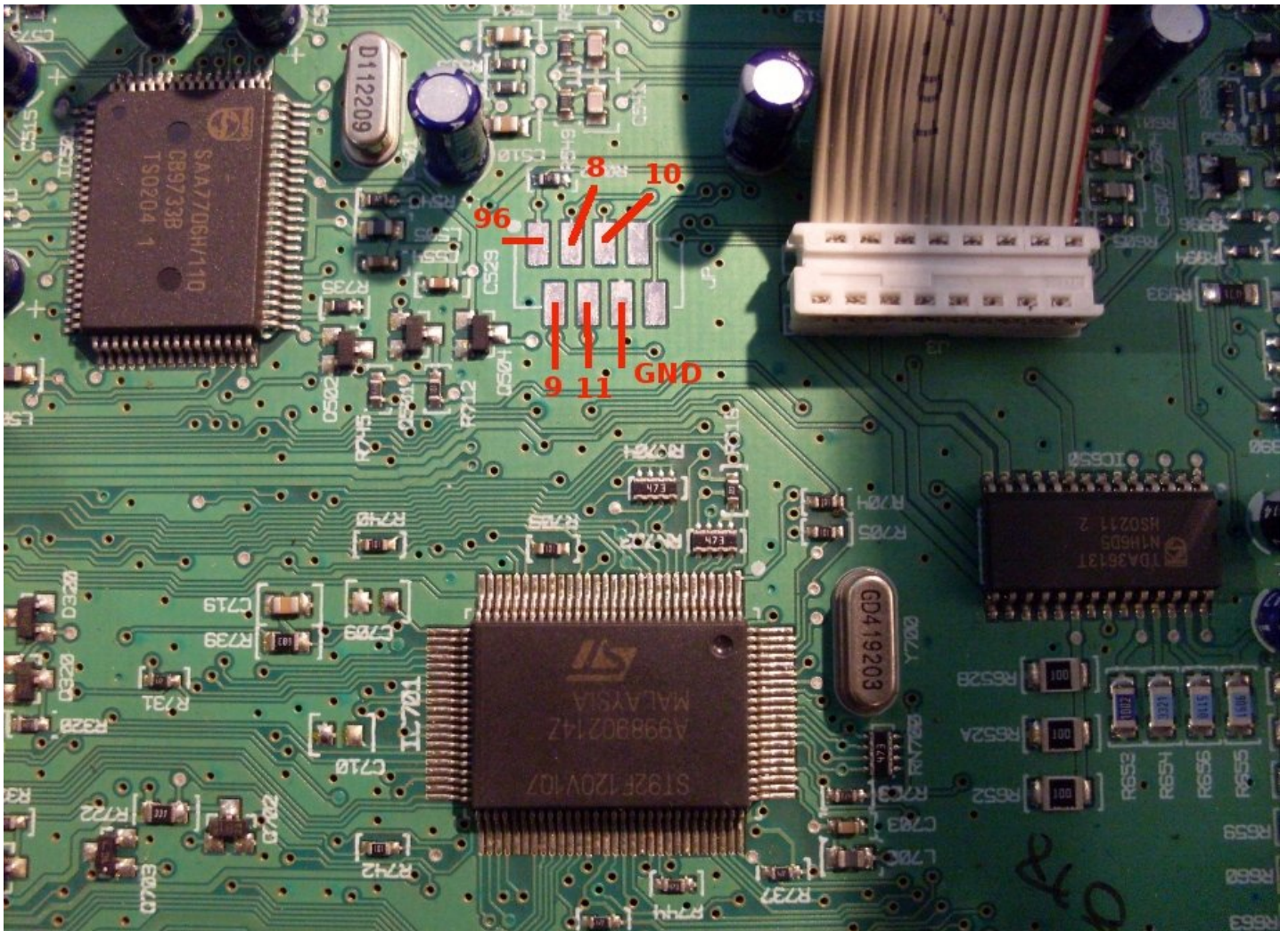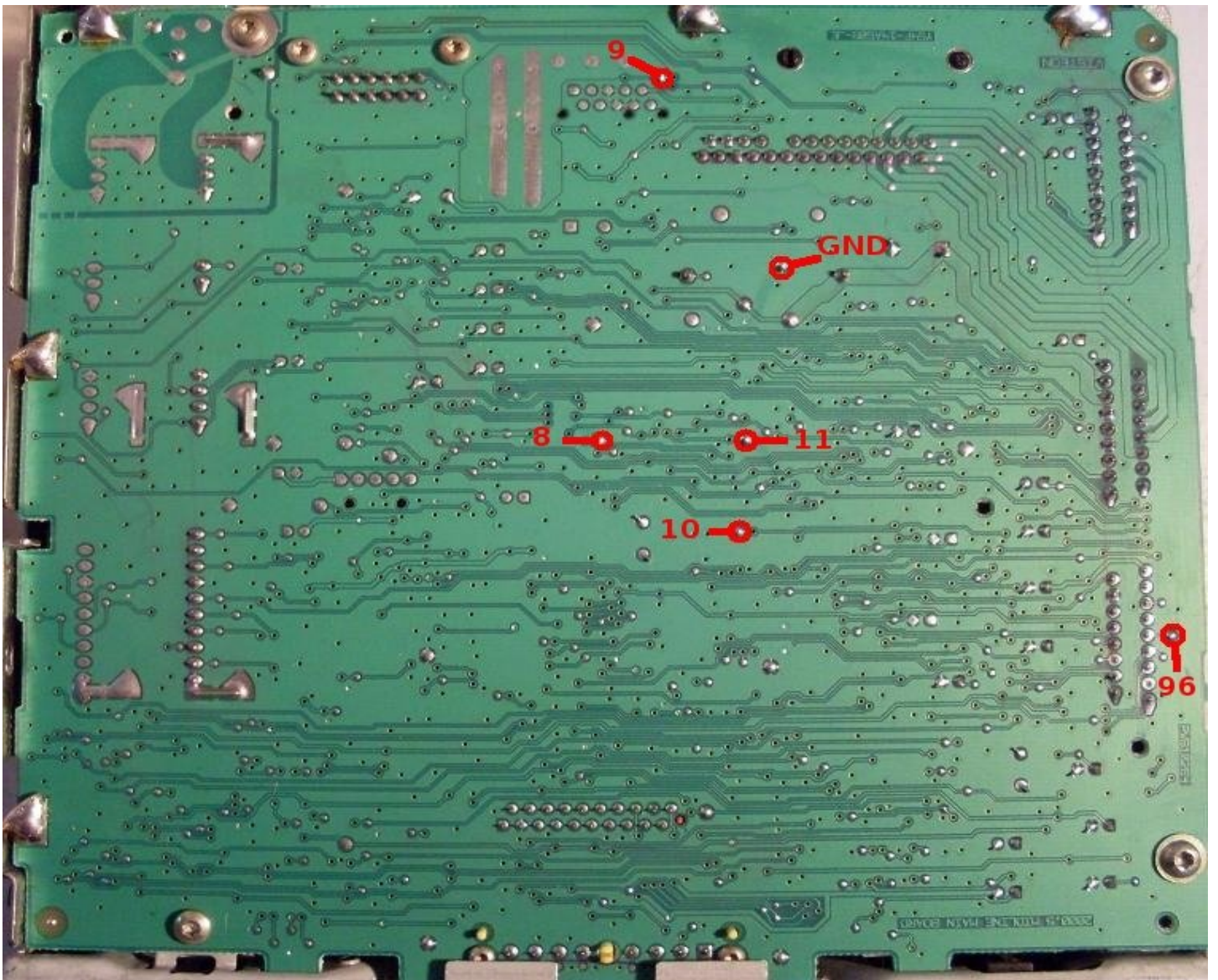
FORD 4500
4S61-18C815-AA
B3 LOW CD

PIN 96

PIN 8   PIN 10

PIN 9   PIN 11

GND

FORD 6006
2S61-18C815-HA
B5 CDX6 MID (DOT MATRIX)

REMOVE
4K7

PIN 96

PIN 8

PIN 10

PIN 9

PIN 11

GND

ST92F120V1Q7

A997N0207Z

MALAYSIA

FIAT STILO OA by VISTEON
2FCF-18C838-AF
MODEL OA

FORD 6000NE
YS4F-18C815-AC

FORD 6000
3S7T-18C815-AD
RADIO/SINGLE CD 6000 CD
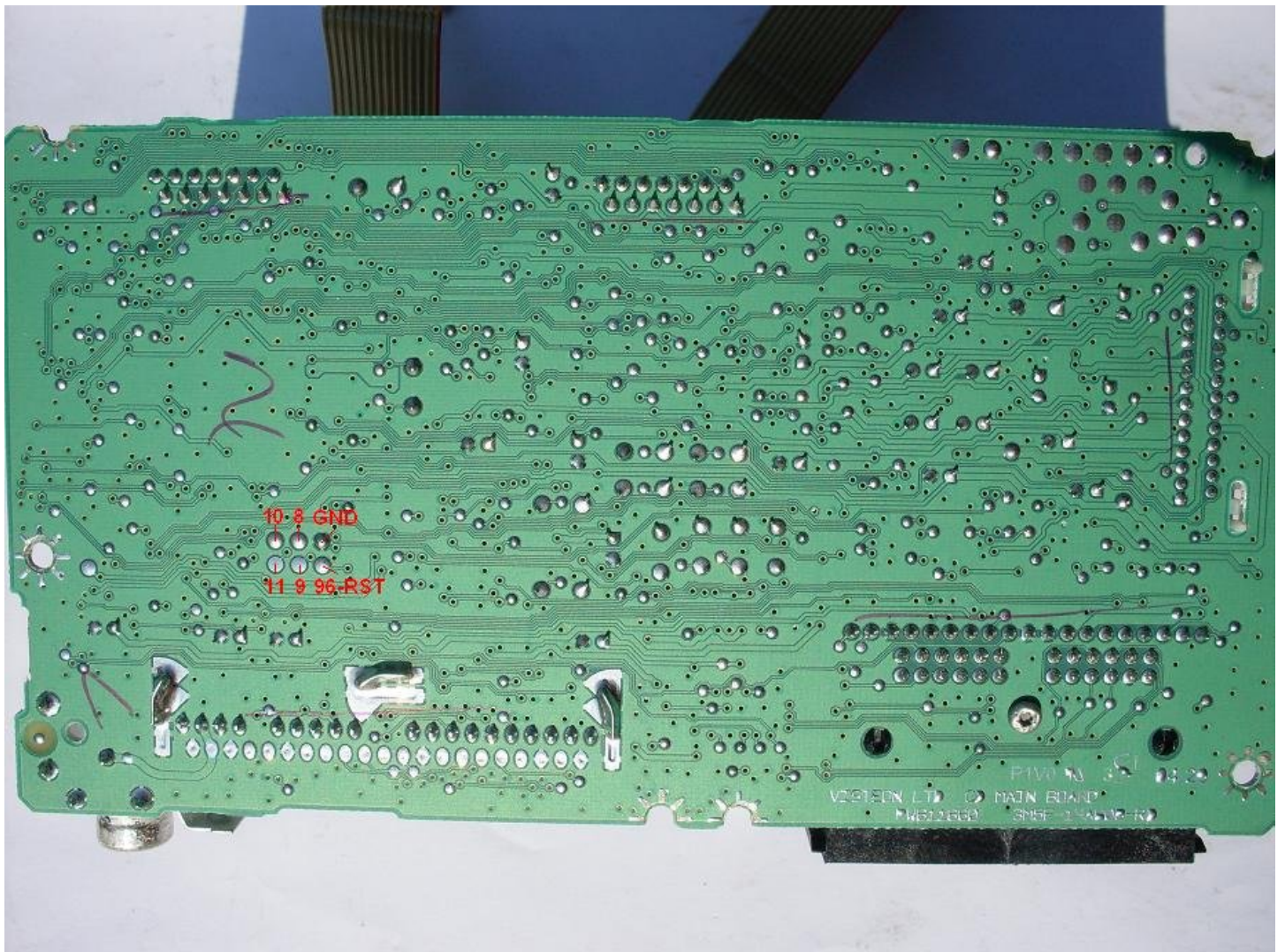
LANDROVER
4CFF-18C838-AB
FL3 CD EUROPE (VUX500150)

FORD 4500
3S61-18C815-BB
B3 LOW CD

PIN 10

PIN 9

PIN 11

PIN 96

PIN 8
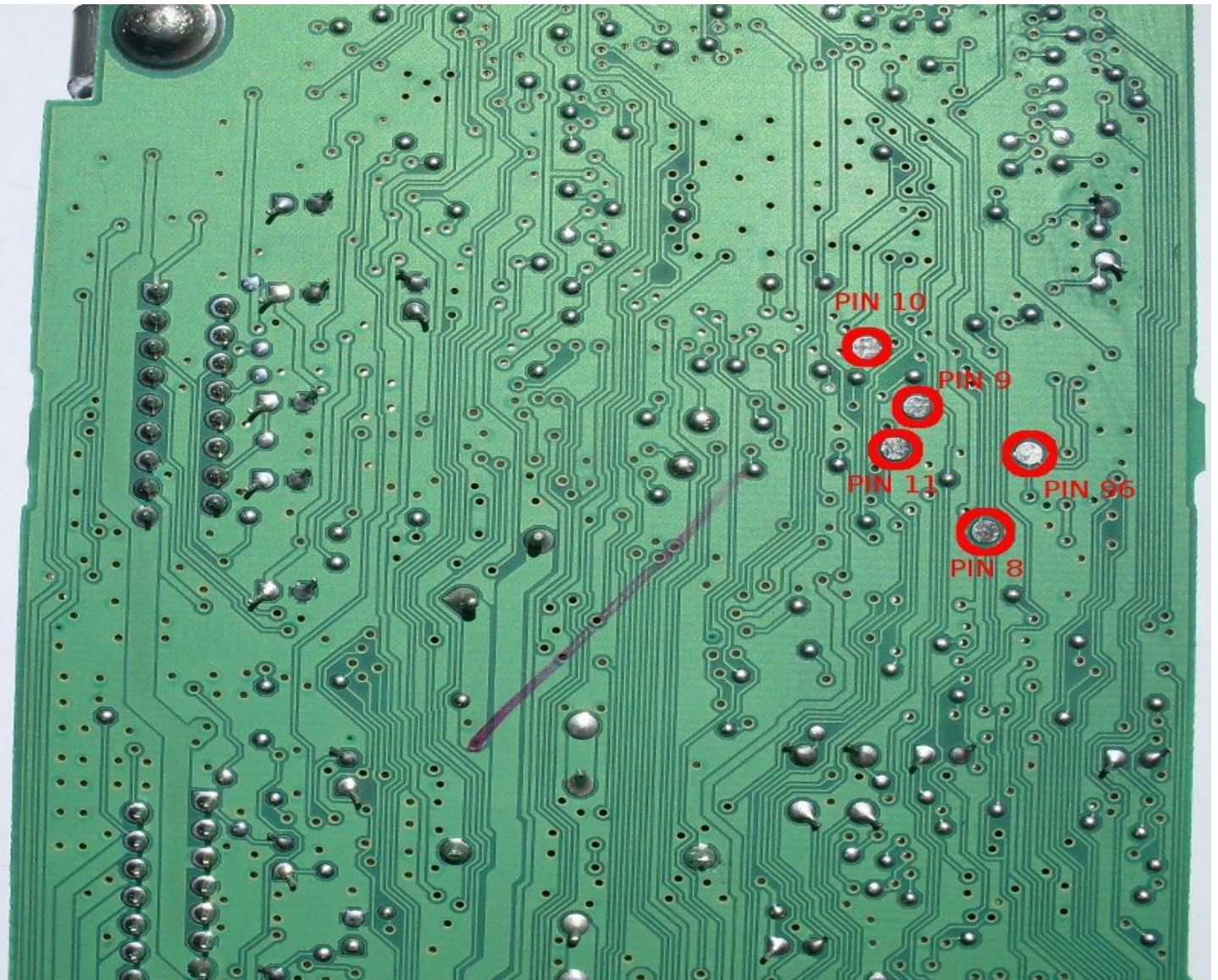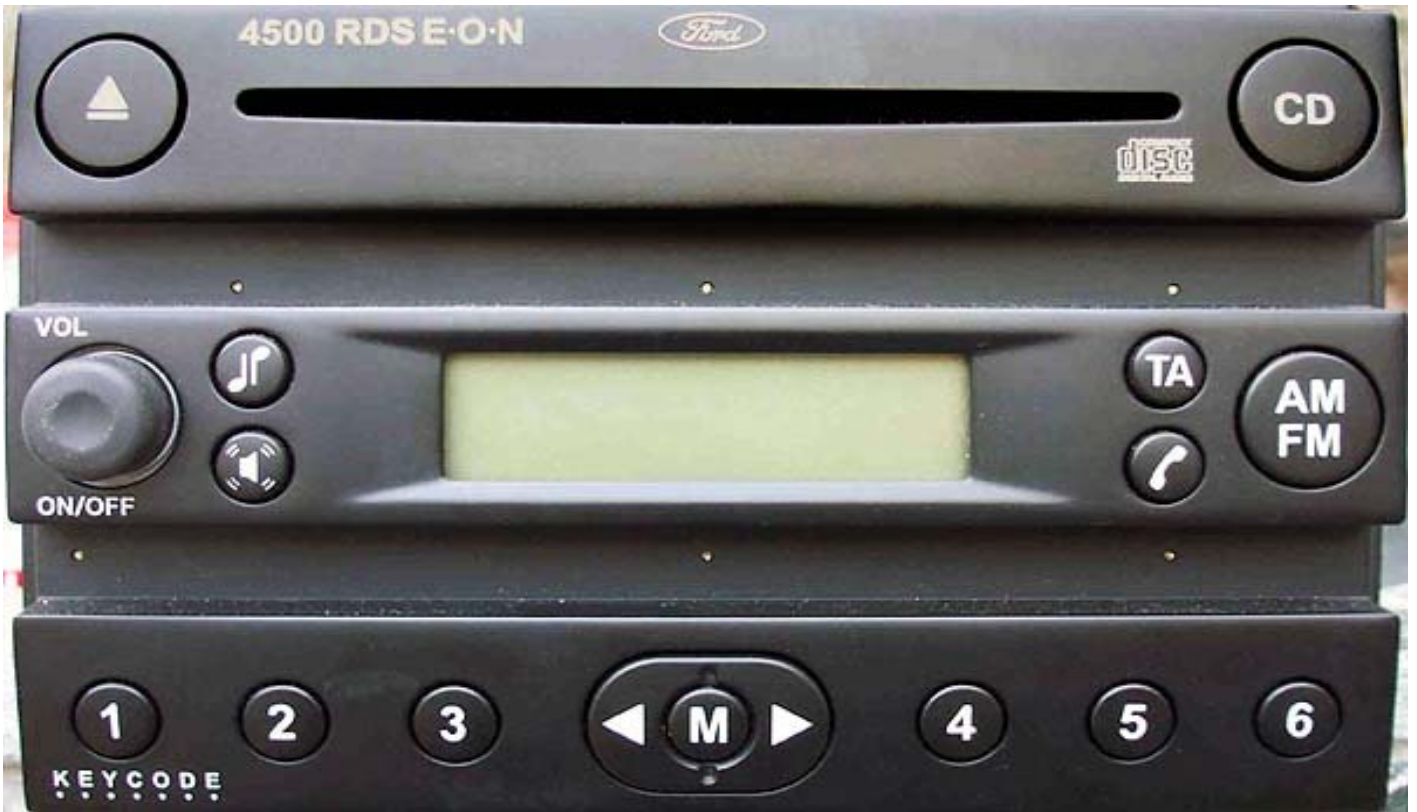
APPENDIX II

This is quick overview of all models for which I have some infos (considering eeprom and OTP).

Manufacturer	Part number	Model	MCU	EEPROM	OTP
VISTEON	YS6F-18K876-DA	FORD 4000	ST92F120V9Q7	NP	P
VISTEON	4S61-18C815-AA	FORD 4500 B3 LOW CD	ST92F120V1Q7	NP	NP
VISTEON	4S61-18C815-AB	FORD 4500 B3 LOW CD	ST92F120V1Q7	NP	NP
VISTEON	2S61-18C815-HA	FORD 6006 B5 CDX6 MID (DOT MATRIX)	ST92F120V1Q7	NP	NT
VISTEON	2FCF-18C838-AF	FIAT STILO OA	ST92F120V1Q7	NP	NP
VISTEON	YS4F-18C815-AC	FORD 6000	ST92F120V1Q7	NP	P
VISTEON	3S7T-18C815-AD	FORD 6000 RADIO/SINGLE CD 6000 CD	ST92F150CV1QB	P	NT
VISTEON	3S7T-18C815-AC	FORD 6000 RADIO/SINGLE CD 6000 CD	ST92F150CV1QB	P	NP
VISTEON	3M5T-18C815-BD	FORD 6000 RADIO/SINGLE CD 6000 CD	ST92F150CV1QB	P	NP
VISTEON	4CFF-18C838-AB	FL3 CD EUROPE VUX500150	ST92F120V1Q7	NP	NP
VISTEON	3S61-18C815-BB	B3 LOW CD	ST92F124V1QB	NP	NP

P – means PROTECTED
NP – means NOT PROTECTED
NT - means NOT TESTED