Important information:

1.This instruction is suitable for RT809H programmer.

2.In order to connect the programmer more conveniently and faster,please connect the hardware after installing the software.

3.Please read the instruction carefully before using the programmer.

4.Please use the original USB data cable.

Copyright Statement

Software copyright www.HKLRF.com

User manual copyright www.HKLRF.com Rock Group

RT809 series of programmers have acquired 6 China National invention patents,any unit or individual is not allowed to copy,photograph,regenerate,translate or restore to any form of electronic media readable by other machines,or will be investigated for legal responsibility.

This manual is subject to change without notice.

Once there are some differences against this instruction caused by software upgrade please follow to the software.

Chapter 1 General Description

1.1 Brief

1.1.1 What is RT809H?

RT809H is a kind of cost-effective,reliable and fast universal programmer series,suitable for all the computers or laptops based on Pentium IV processors or the better processors.When working it can communicate with the USB2.0 fast port of computer directly,with driver program inside software,which makes installing operation more convenient.

1.1.2 Programmer Characteristic:

- Supporting Windows XP,Windows Vista,Windows 7,windows 8 and windows 10
- Do not need external power source,with low-power consumption,can be used as VGA signal generator,easy to repair.
- With Intellisense functionality,when reading and writing most types of chip off line, it support the function of intelligent identification and being put at will.
- Support 24/25/93/95 series serial SPI Flash. EEPROM offline read and write.
- Support 26/27/28/29/30/39/49/50 series NOR Flash/ PROM read and write;
- Support TSOP48/BGA footprint NAND Flash parameter automatic identification and offline reading;
- Support the mainstream device,including E/EPROM、MCU、EC、SPI NOR flash、parallel NOR flash、SPI NAND、parallel NAND、ONENAND、MCP、EMMC、EMCP,etc.

NAND_AUTO	Can recognize most of the NAND and go on to read and write.
EMMC_AUTO	Using BGA socket,supporting EMMC off-line fast read-writing(8bit main line)
EMMC_AUTO_4BIT	Using BGA socket,supporting EMMC off-line fast read-writing(4bit main line)
EMMC_AUTO_ISP	Read-write EMMC with flying line way.(1bit main line)

  Support the EMMC recognition in the on-line or off-line way,BOOT/USER/RPOM/GPP area read and write.
- I2C/ serial port ISP has strong function,compatible with most of the LCD chip scheme,can check the printing information on line,read and write NOR/NAND/EMMC chip on line,read and write the EC chip of laptop on line or off line.
- Support the IT8/KB90/NPCE/NEC16 series of laptop mainboard’ s EC chip to read and write.
- High-speed USB port,USB driver with WHQL certification,the reading and writing speed can be as much as 25 MB/S.
- Full driver structure,free software upgrade,the universal switch socket to reduce the using cost for the user.

1.1.3 Instruction Tissue

This instruction consists of three parts:

The part one is to introduce RT809H,including the system requirement,software and hardware installing,etc ;

The part two is the detailed instruction of software commands and each function;

The part three is appendix,including the user support and the wrong message.

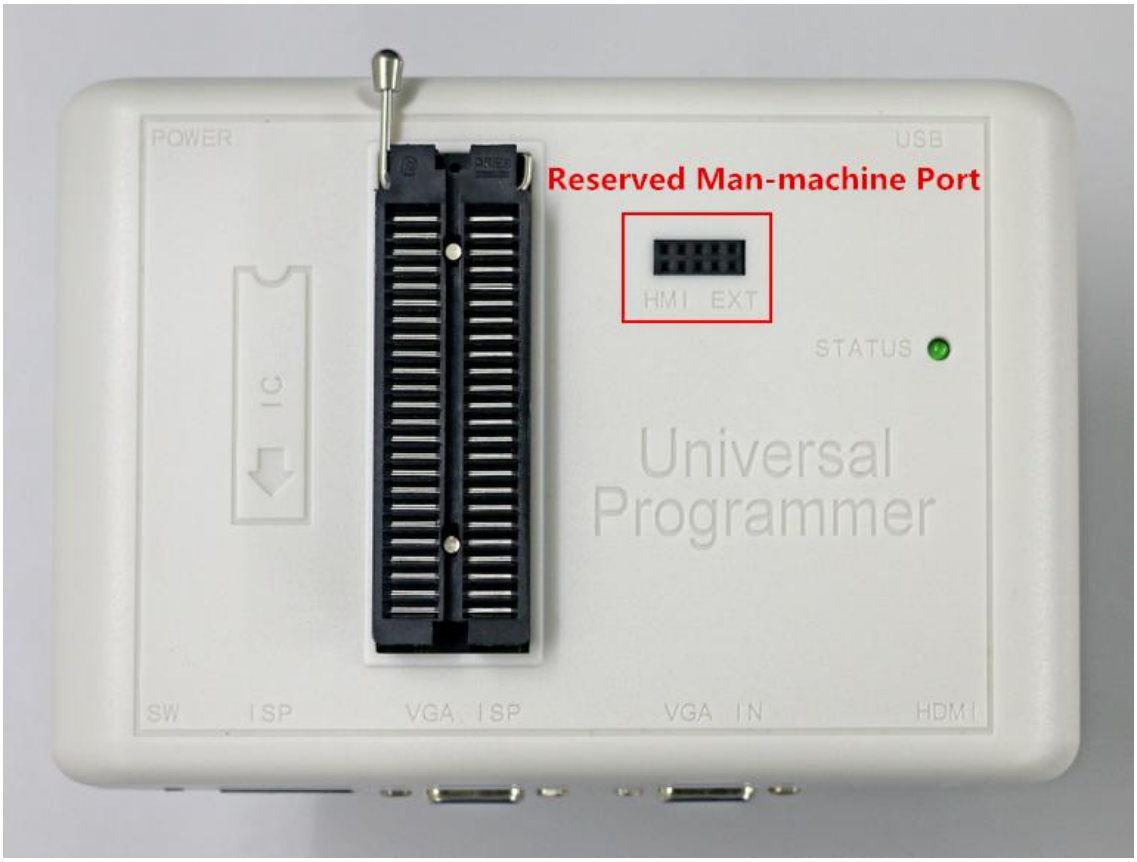
1.1.4 System Requirement

Minimum system configuration:

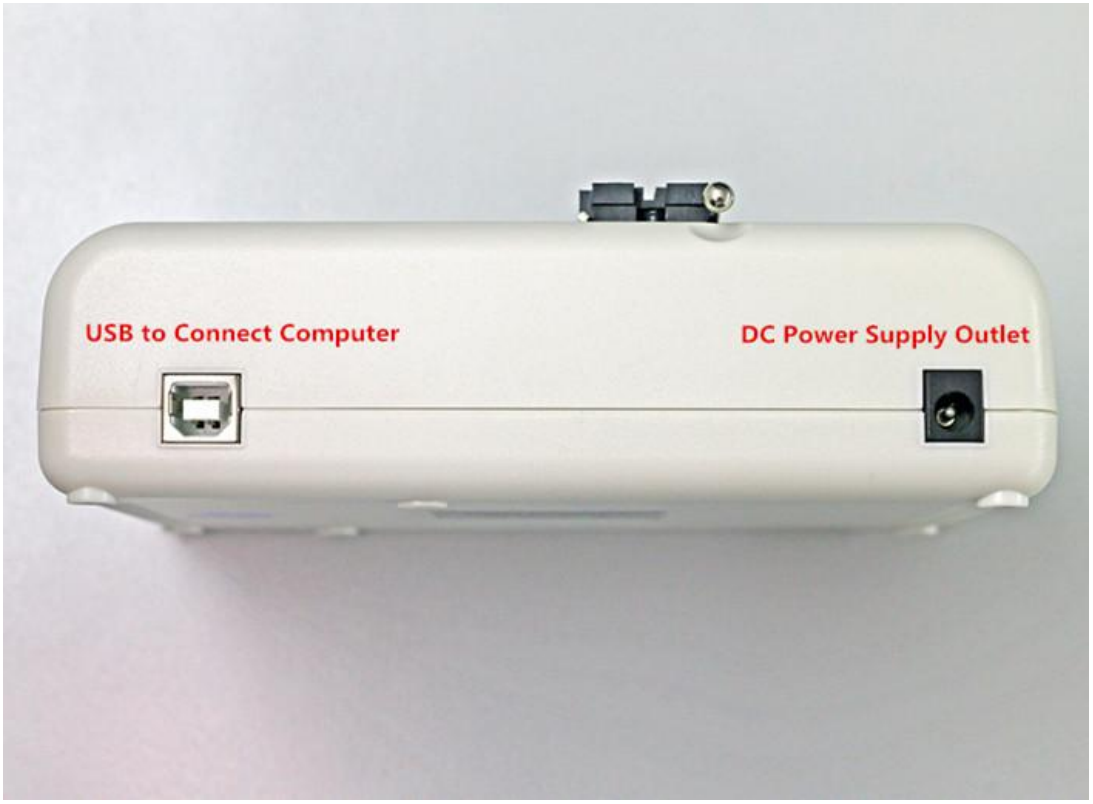
- Pentium IV and above compatibles,desktop or laptop computer,at least a universal serial main line port conform to USB2.0 high-speed standard.
- Windows XP/Vista operating system.
- The hard disk with at least 1G free space.

1.1.5 Programmer External Port Instruction

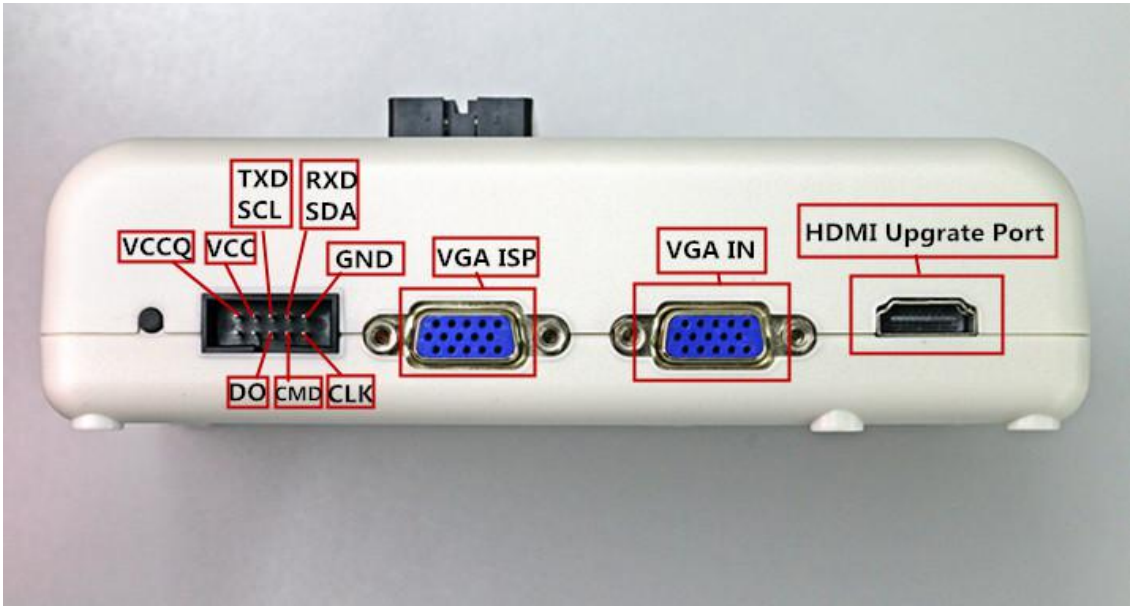
- Front view : HMI is reserved man-machine port,also be used by the footprint chip of TSOP56,BGA64,etc.



- DC lateral view : Except the USB outlet connected to the computer,there is a DC power supply outlet,9-12V power supply range(negative electrode outside and positive electrode inside),switching automatically between external power source and USB power supply. (Please use the power of good quality,or the programmer will may be damaged and no warranty.)



- Flashing port lateral view:



- Port instruction:
  - The leftmost button is the power button, also as the VGA signal switching button;
  - The IDC10 black outlet at the middle is ISP port,the main function is ISP of all sorts of MCU and flying line to read and write EMMC,etc.Use the Dupont line to connect this port

with the key signal of the board waiting for flashing, one to one correspondence connection.

- "VGA ISP" can be used as VGA signal output,be connected with the VGA port of the board when flashing.
- "VGA IN" is the VGA signal input,can be connected with the computer graphics.
  When unconnected,VGA ISP will output the VGA signal produced by itself;
  When connected,VGA ISP output the computer graphics signal;
- "HDMI Digital high-definition interface" can connect with the HMDI port of the flashing board.

1.1.6 Programmer Packing

- The standard packing:

Programmer mainframe	1
DIP 48 pin simple soldering board	1
SOP simple soldering board	1
USB2.0 high-speed cable	1
VGA connecting line	1

Chapter 2 Installing

If you are the first time to use RT809H USB universal programmer,please surf the programmer official web to download the latest software.

http://www.ifix.net.cn/thread-56912-1-1.html

Like this:

The file downloaded is ZIP format,should be unzipped before using.

Before unzipped		After unzipped	

2.1 Installing the Programmer Application Software

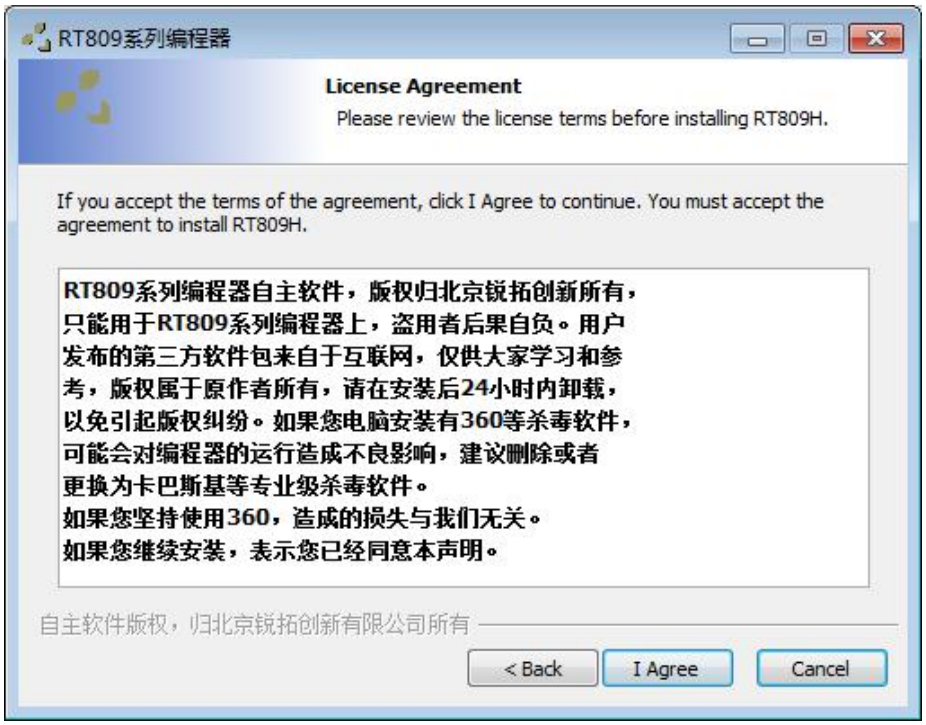
2.1.1 Installing the Software

Step 1:Move the mouse to this icon,double-click the right mouse button to start installation;

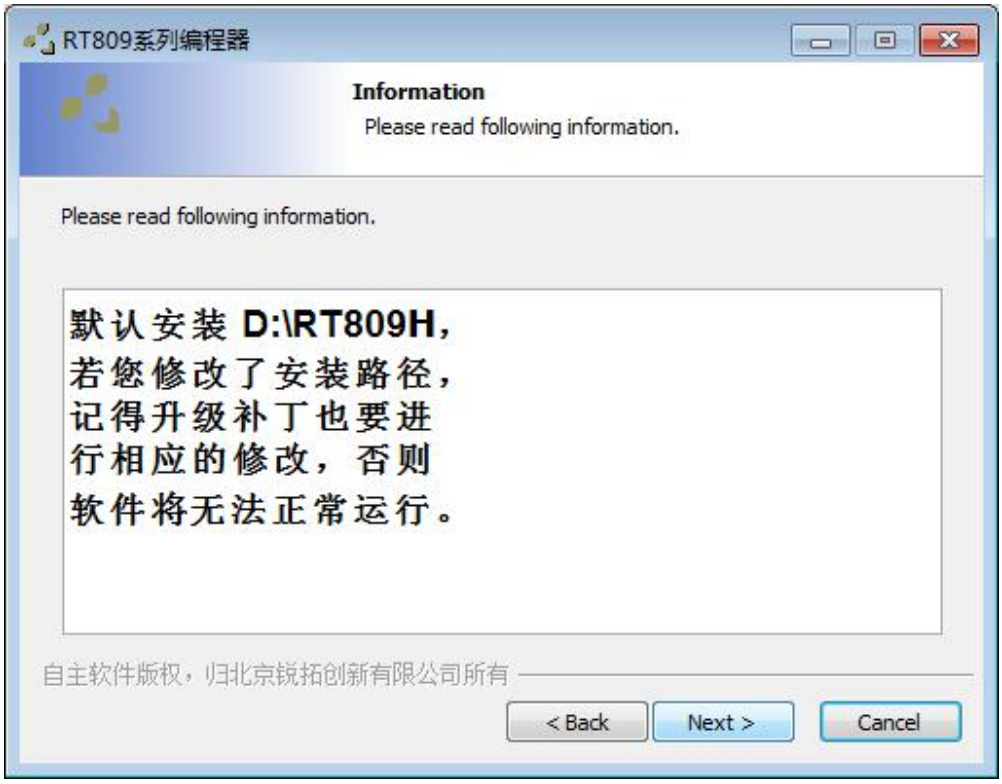
Step 2:Select the language in demand,if you need Chinese click “OK” directly;

Step 3:Click the “Next”;

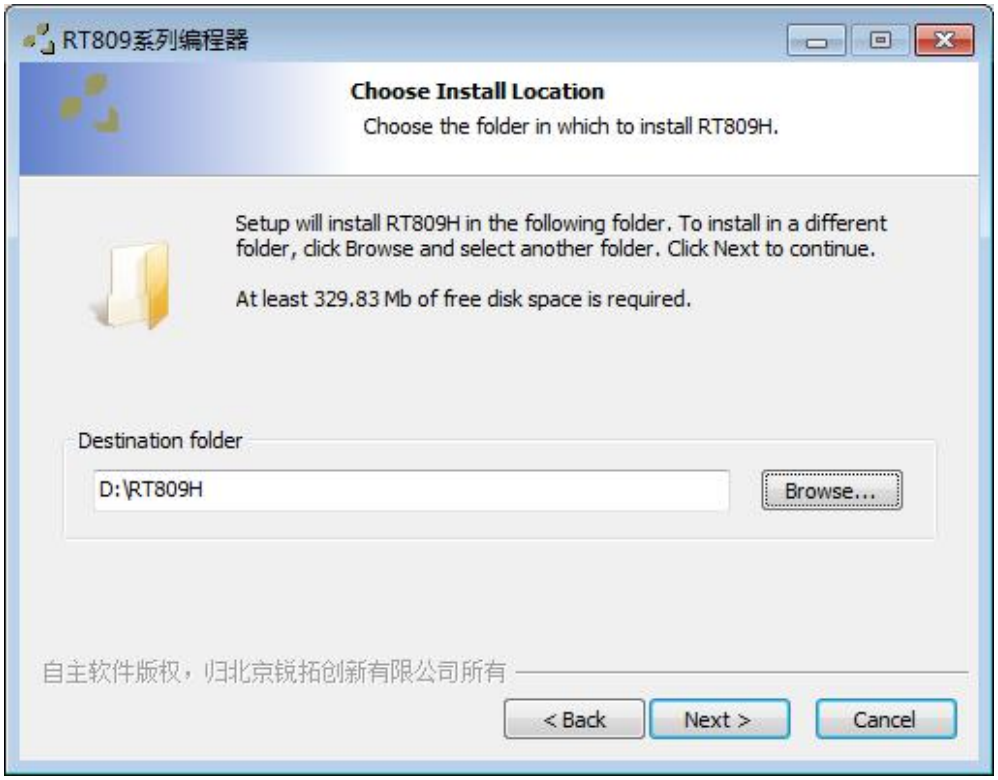
Step 4:Click the “Agree”；



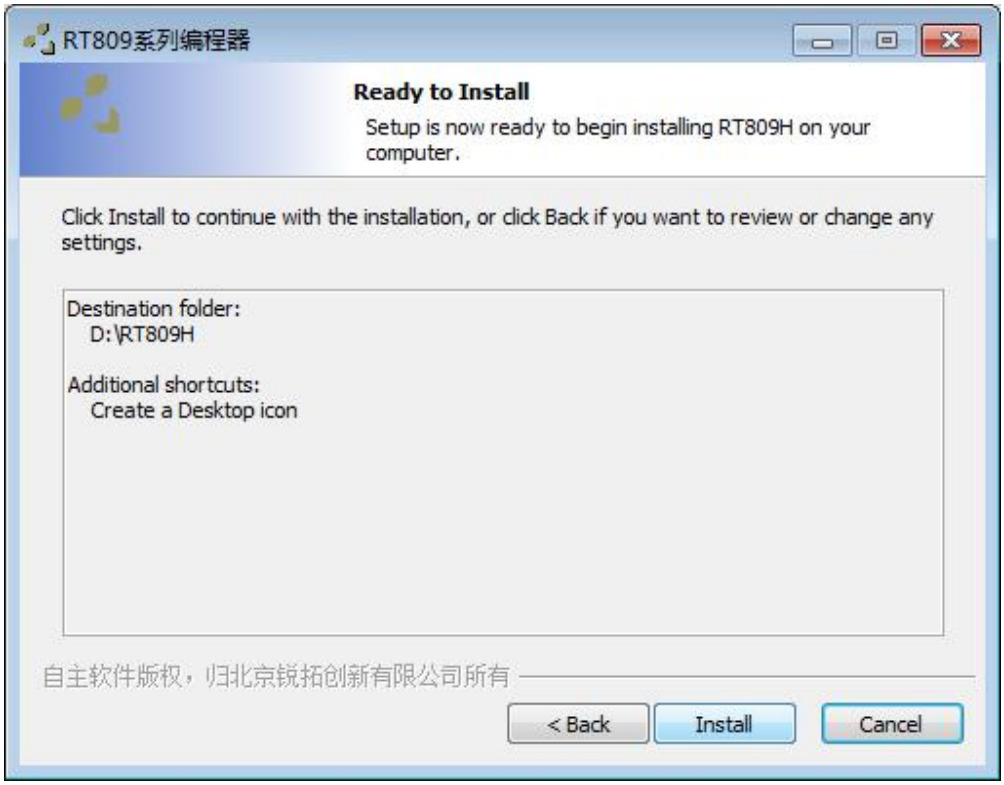
Step 5:Click the “Next”；



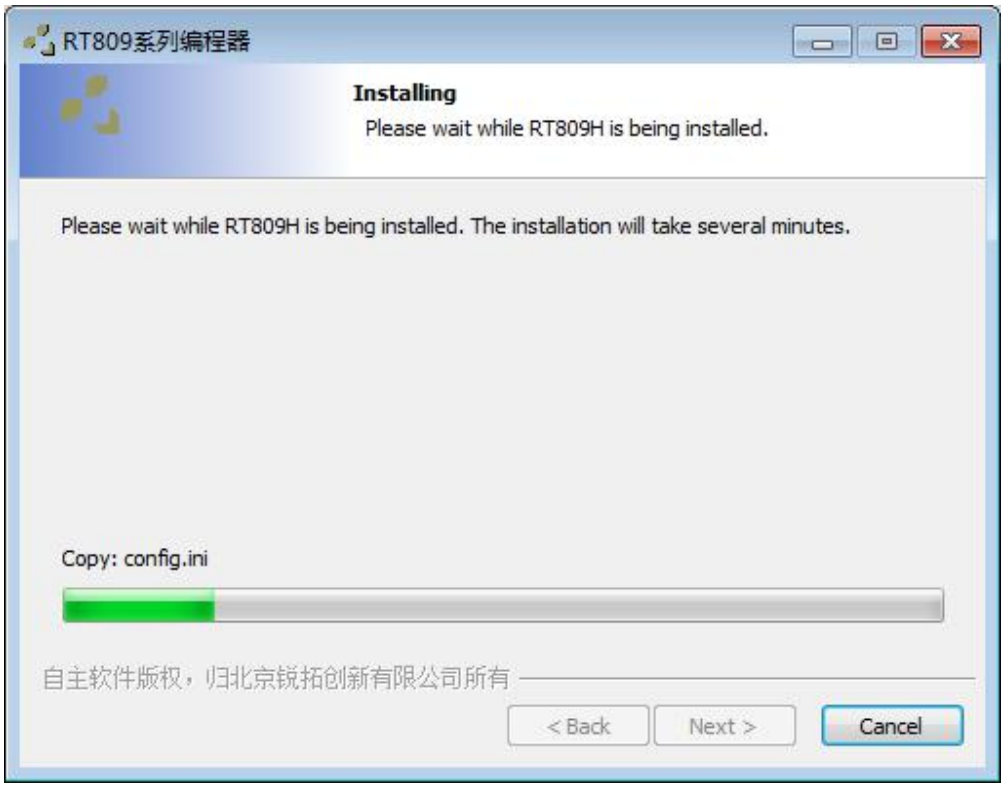
Step 6:Don’t change the path,click “Next”；



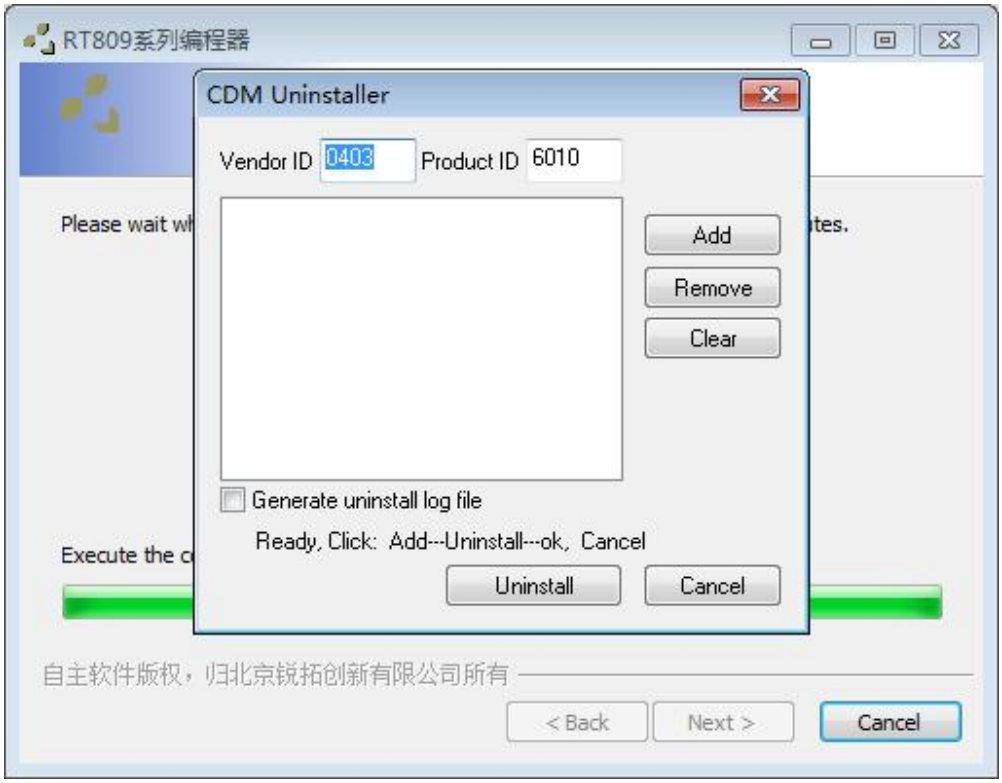
Step 8:Click the “Install”；



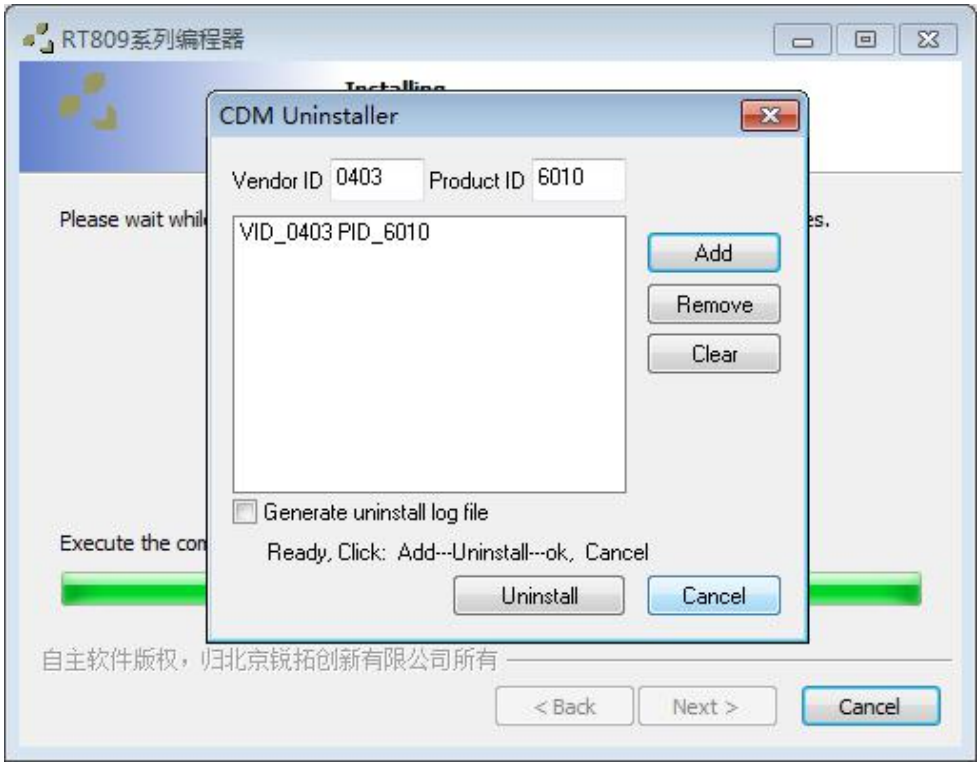
Step 9:Start to install,waiting to finish the progress bar;



Step 10:Click the “Add”;



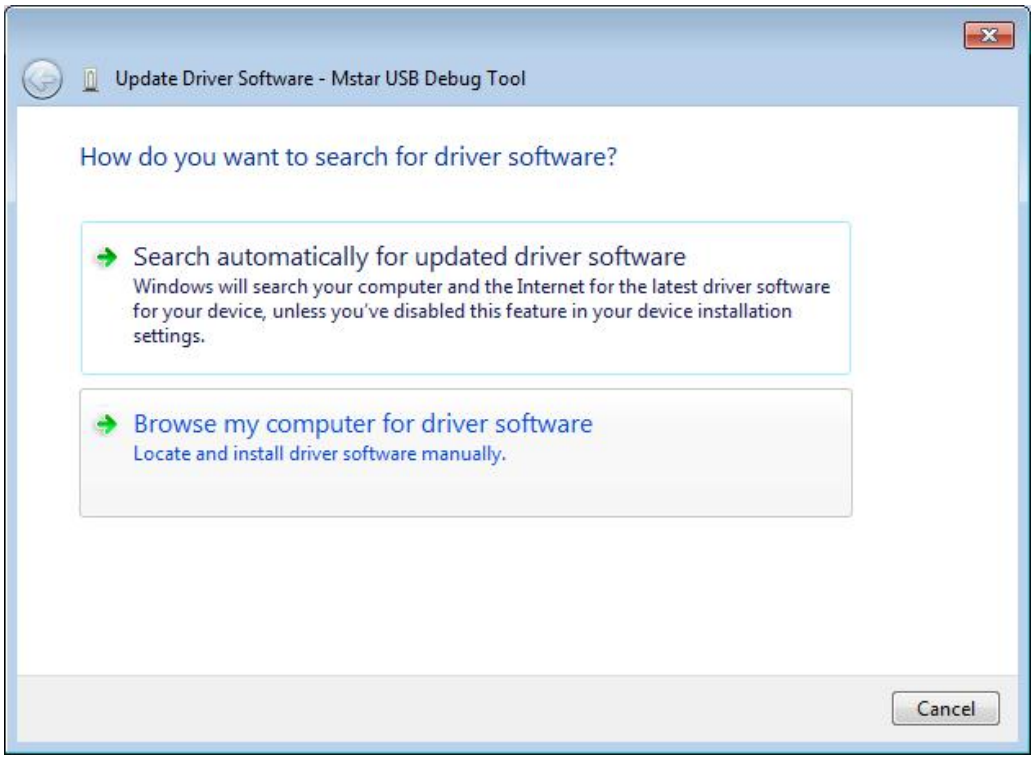
Step 11:Click the “Uninstall”;



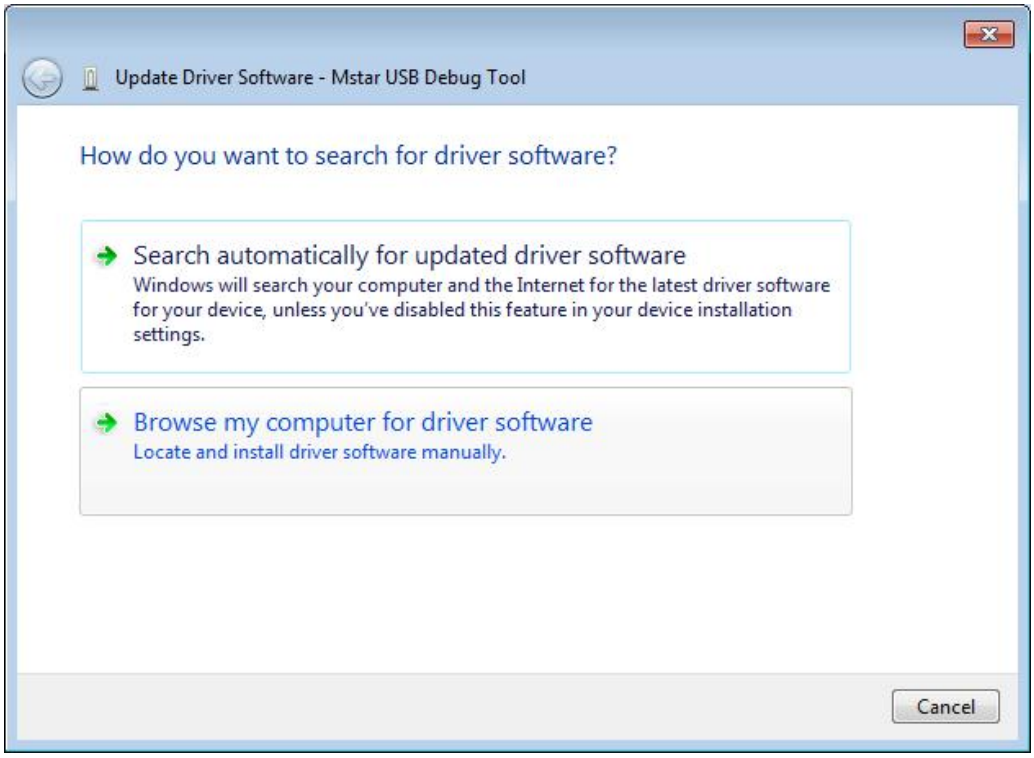
Step 12:Click the “OK” and then “Cancel”,then the installation has finished.

2.1.2 Installing the drivers

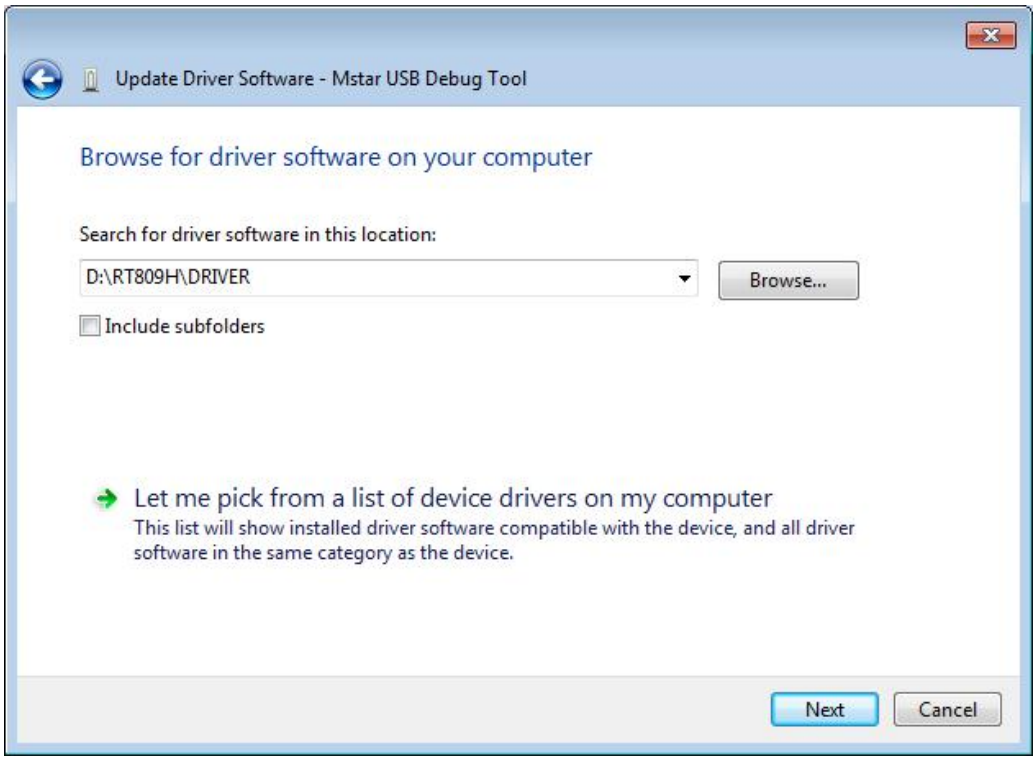
Step 1:Connect the computer with the programmer using the UCB line in packing,the computer will tell that there is a new hardware;

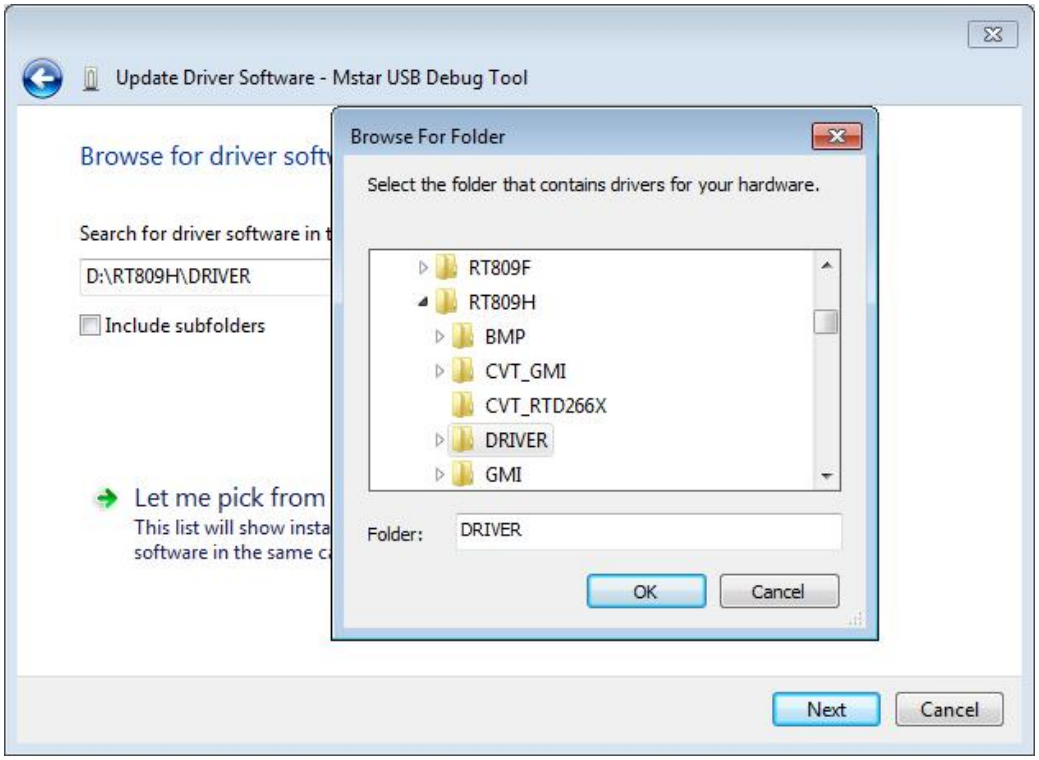


Step 2:Select “Browse my computer for driver software”;



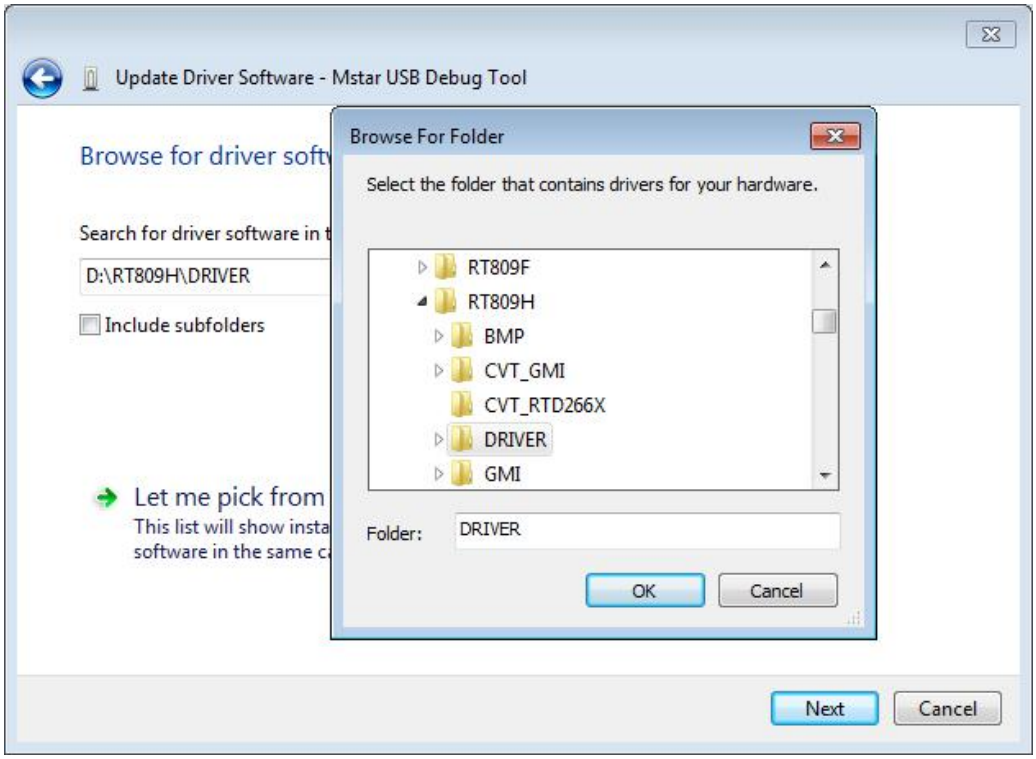
Step 3:Click the arrow at the right side down,change the path into "D:\809H\DRIVER",then click "Next";



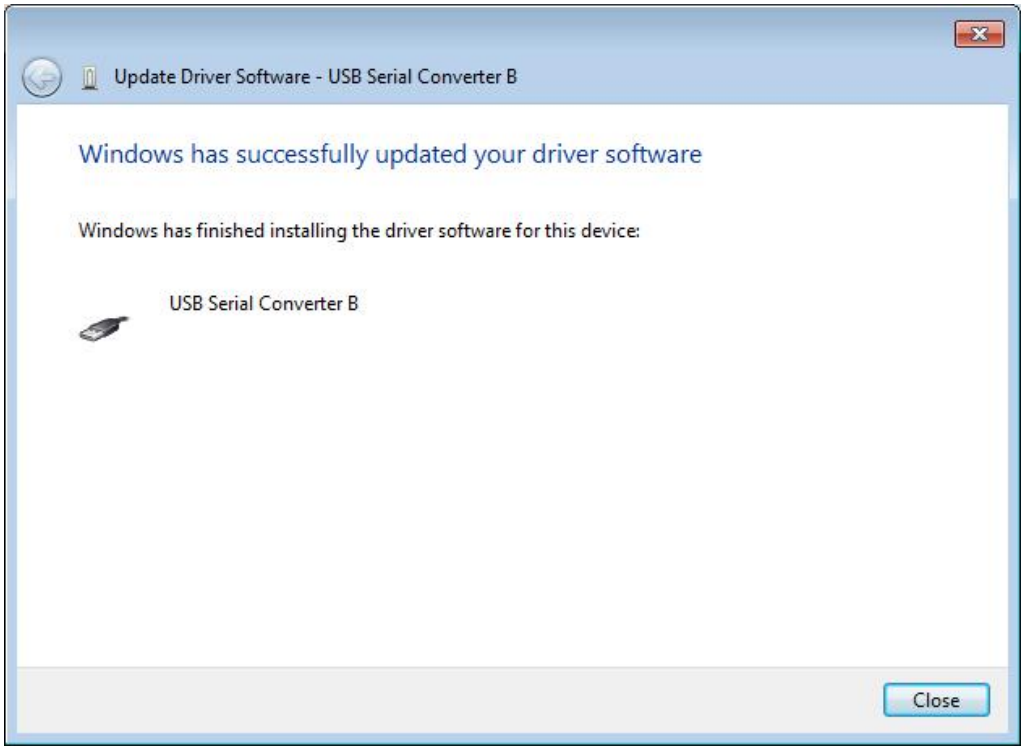


Step 4:Click “Complete”,USB Serial Converter A driver has installed already;

Step 5:Next go on to install the driver of USB Serial Converter B,click "Next";

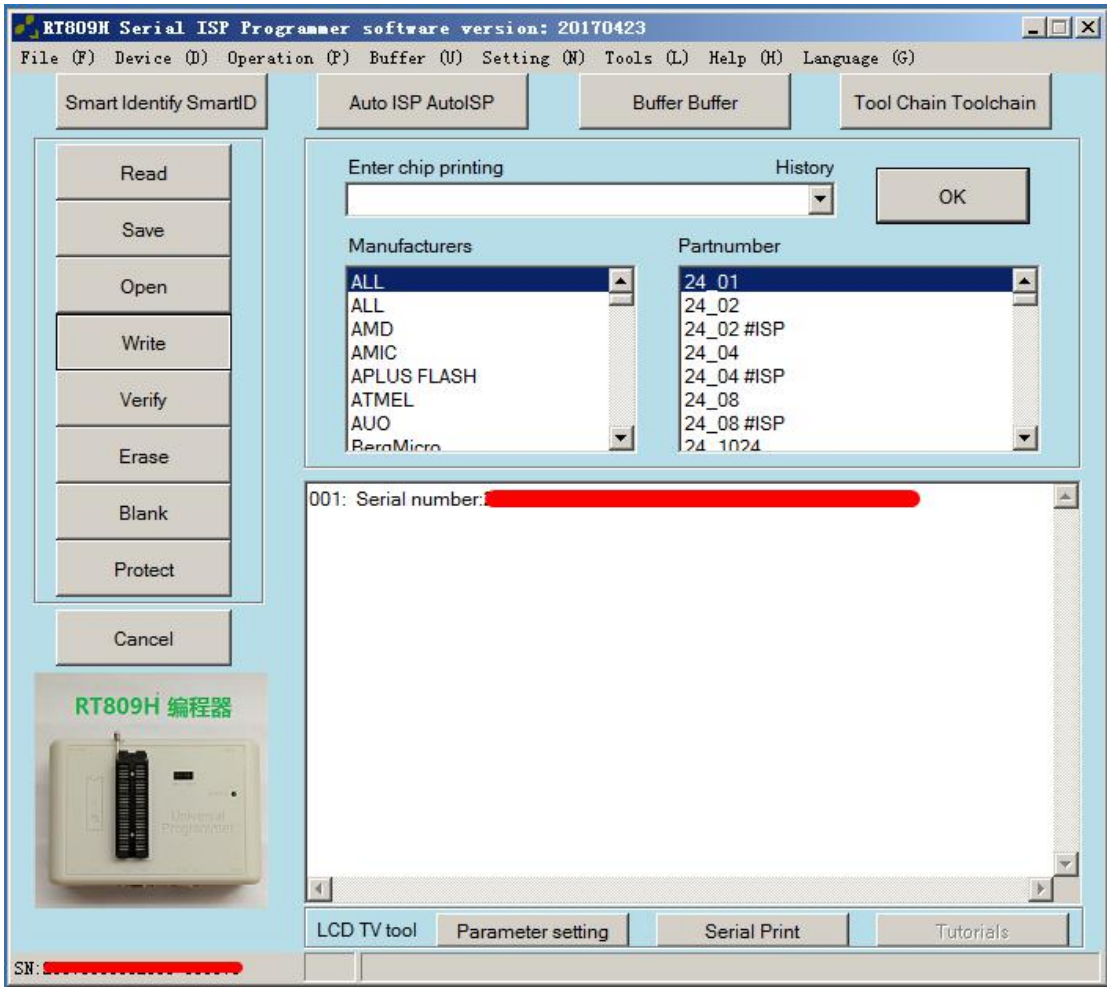


Step 6:Click "complete",the driver has been installed already;



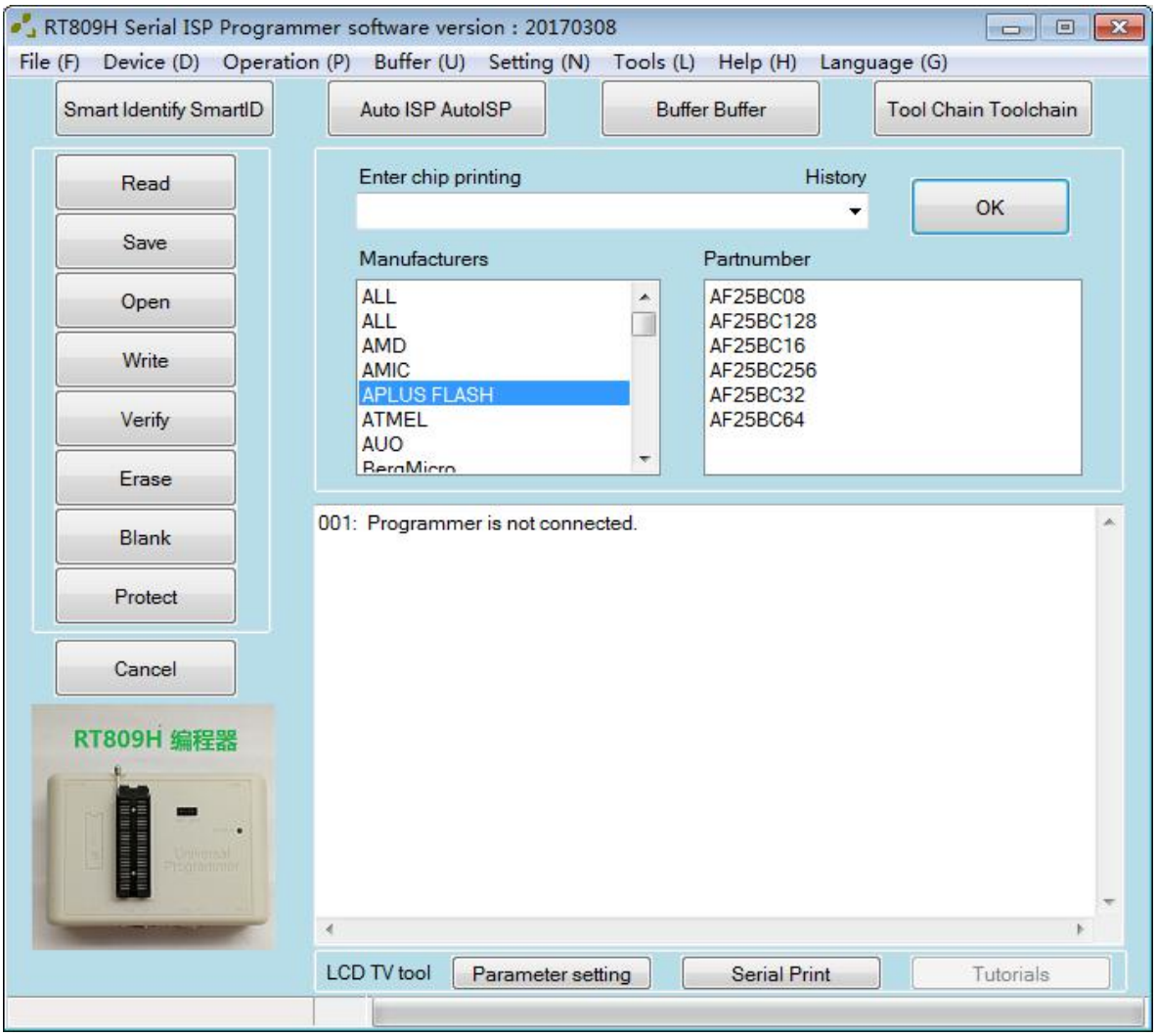
Open the operating software of 809H,the serial number of programmer will show.The serial number is the important document of technical support and warranty.

Please do not leak, properly kept.

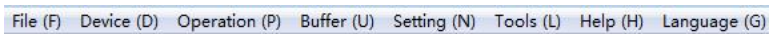
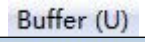
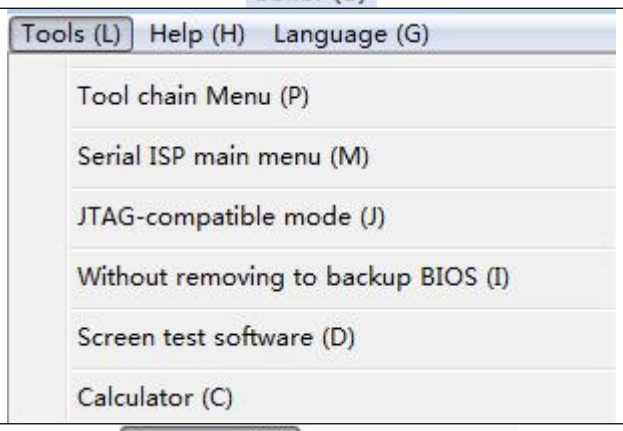

RT809H Serial ISP Programmer software version: 20170423
File (F) Device (D) Operation (P) Buffer (U) Setting (N) Tools (L) Help (H) Language (G)
Smart Identify SmartID
Auto ISP AutoISP
Buffer Buffer
Tool Chain Toolchain
Read
Save
Open
Write
Verify
Erase
Blank
Protect
Cancel
RT809H 编程器
Enter chip printing
History
OK
Manufacturers
Partnumber
ALL
ALL
AMD
AMIC
APLUS FLASH
ATMEL
AUO
24_01
24_02
24_02 #ISP
24_04
24_04 #ISP
24_08
24_08 #ISP
001: Serial number:
LCD TV tool
Parameter setting
Serial Print
Tutorials
SN:

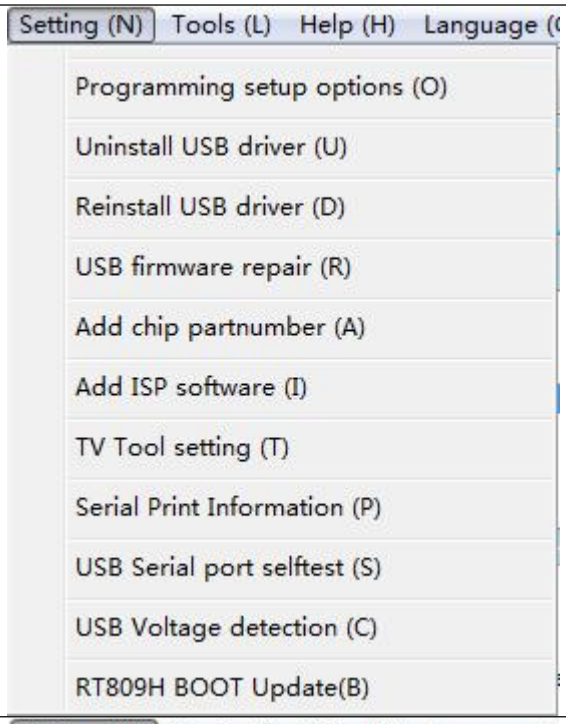
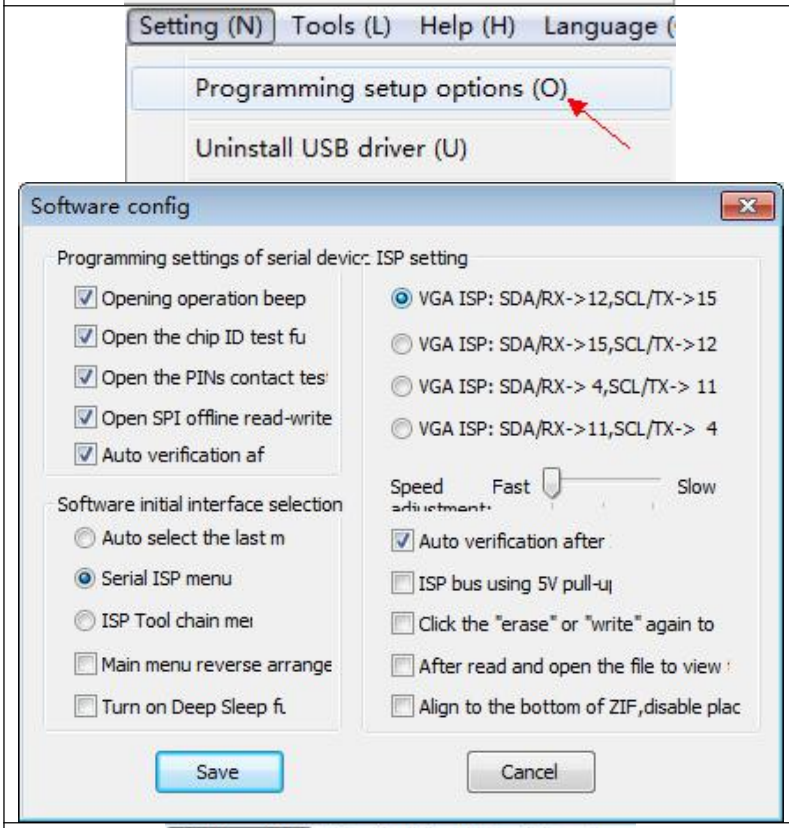
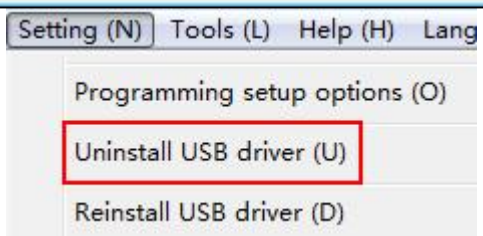
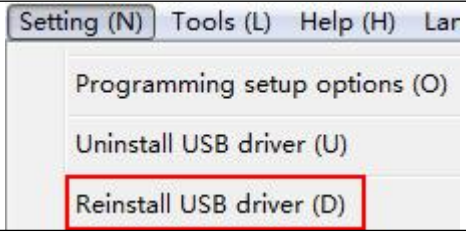
Chapter 3 The Software Instruction

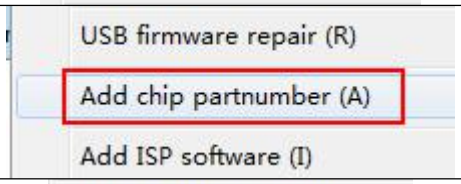
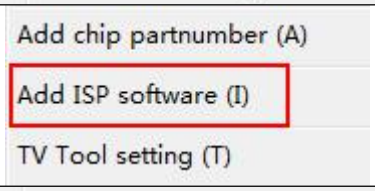
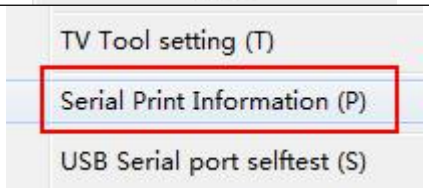
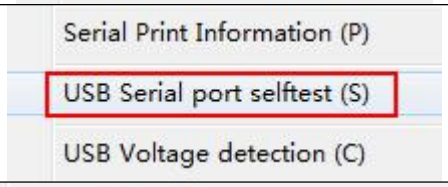
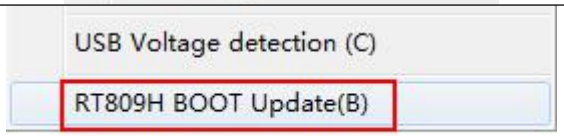
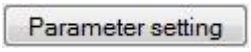
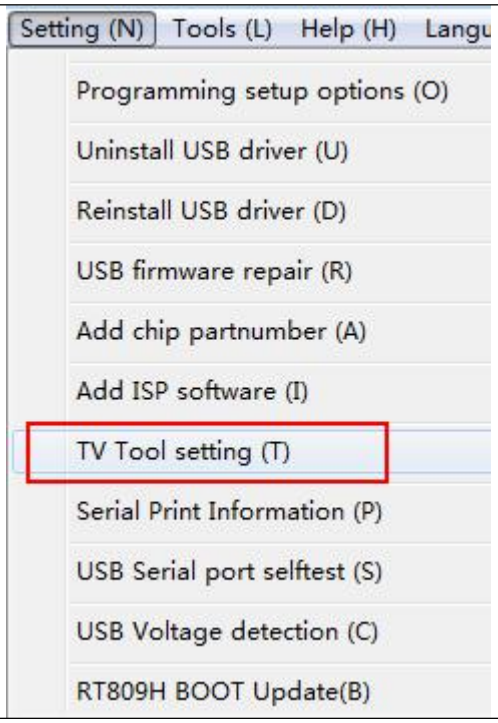
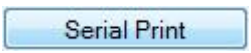
3.1 Software Interface Instruction

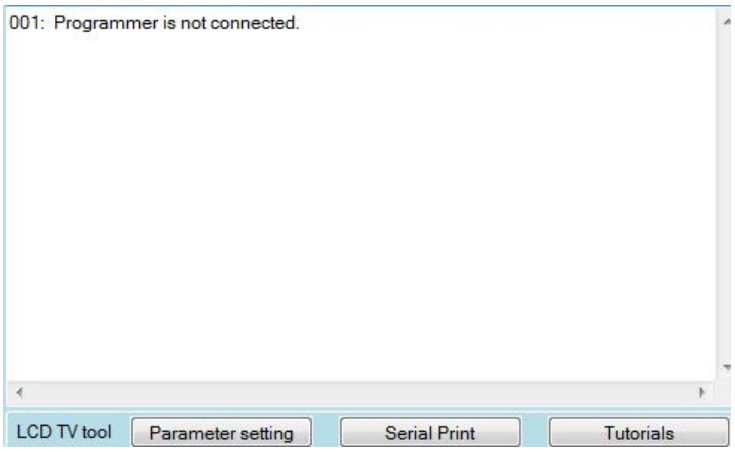


Smart Identify SmartID	Click this icon to recognize intelligently the type of most of the chip,easy to operate.
Auto ISP AutoISP	When connecting the mainboard to flash,click this icon it will recognize the mainboard scheme,easy to operate.
Buffer Buffer	Click this icon to check,read or write the hexadecimal data.
Tool Chain Toolchain	Click this icon to jump into the third-party flashing software.
Enter chip printing History	To input the printing letter on the chip type.
OK	Click it after inputting the printing letter.

	Operating area,the chip can be read,written,verified,erased,blacked,protected and so on.
	Operating menu.
	Click this icon to check the content of buffer.
	Click the "tool" and the pull-down menu appear.
	Click this icon and the pull-down menu appear to change the language type.

<table>
<tr>
<td> 
</td>
<td>Click the “setting” ,the pull-down menu appear.</td>
</tr>
<tr>
<td> 
</td>
<td>Click “Programming Setup Options”
The others are not needed to select,when ISP online flashing the mainboard,you should change the line sequence by yourself in the ISP setting.</td>
</tr>
<tr>
<td> 
</td>
<td>Click this icon to uninstall the programmer driver.</td>
</tr>
<tr>
<td> 
</td>
<td>Click this icon to reload the progammer driver.</td>
</tr>
</table>

	Click this icon to repair the programmer firmware.
	Click this icon to add the new chip.
	Click this icon to add the new flashing software.
	Click this icon to check the priting information of the repair mainboard.
	Click this icon to self-test the serial port.
	Click this icon to to BOOT upgrade.
	Click the icon of parameter setting to set the ISP on-line serial port.
	To set the parameters like serial port line sequence,Baud rate and so on.
	Click “serial port print” to open the serial port printing function.

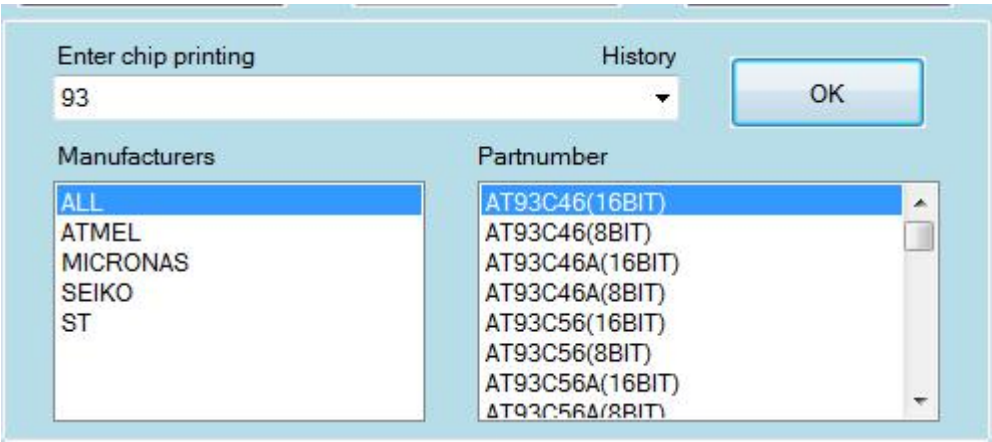
	Display the printing information here.

Chapter 4 Detailed Operation

4.1 24XX,25XX,93XX Series Chips' Reading and Writing

4.1.1 93XX' s Reading and Writing

Step 1:93XX chip' s selecting



- Input "93" in the "Input Chip Printing Letter",select the detailed chip type at the lower right,then click "OK" after selecting.

- Use the putting position of simple switch board,,when welding chip the 1 foot is at the lower left.(Support the 93XX,24XX,25XX to be placed at will)

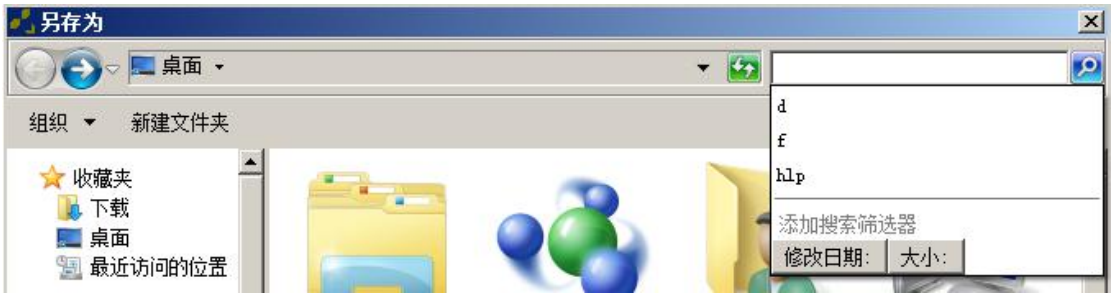
- When using the bounce seat,one foot of the chip should correspond to the top left corner.

Step 2: Reading the chip

- Click “Read” in the icon.

- Change the name of the file read.

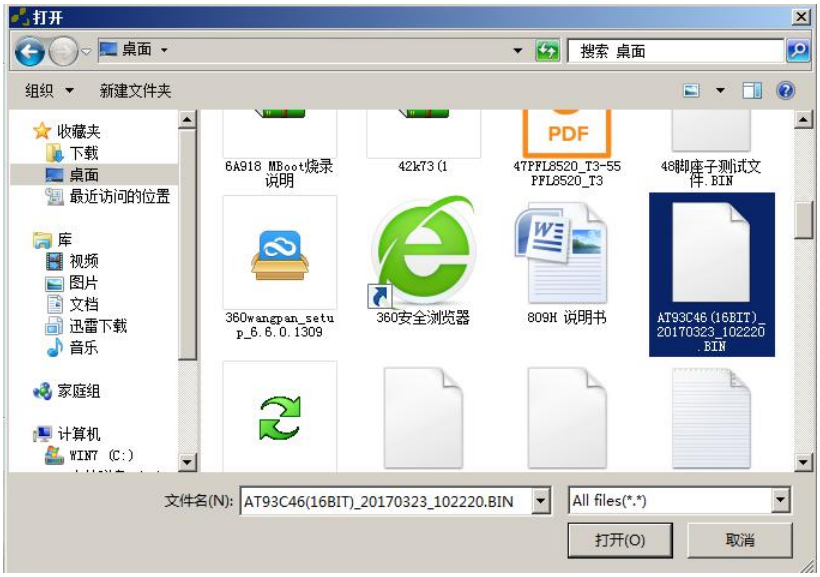
- Select the saving path at the top right corner.



Step 3:Writing the chip

- Click “Write” in the picture.

- Select the file going to be written and click “Open”.

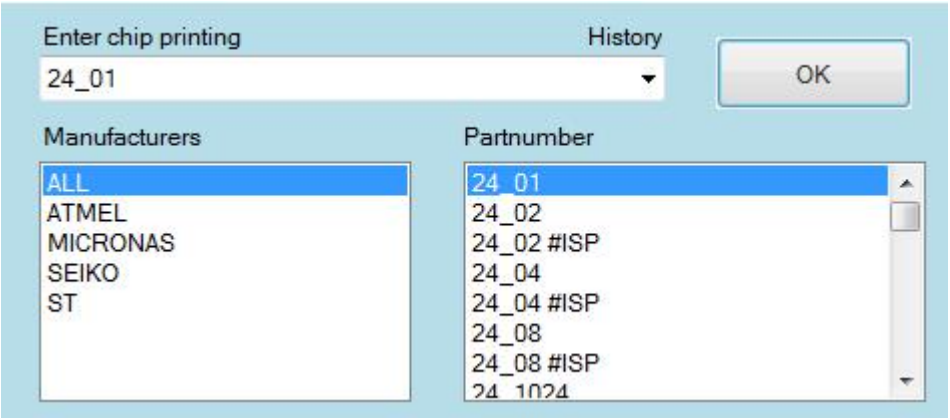


- Then it will hint that the writing succeed,after verifying the writing will finish.

4.1.2 24XX,25XX’s Reading and Writing

Step 1:24,25 chip’s selecting

- Use to identify the type of the chip,easy to use.
- Or input the letter of chip.

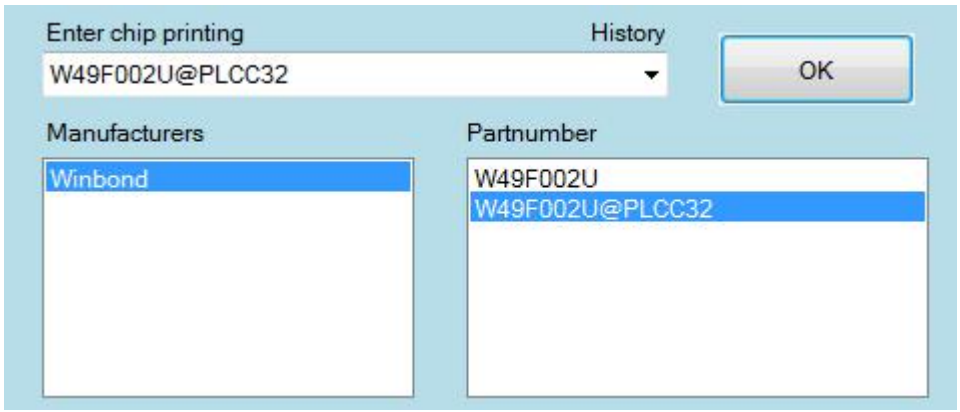


Step 2:The other steps are the same with 93XX’s.

4.2 PLCC Encapsulation Chip’s Reading and Writing

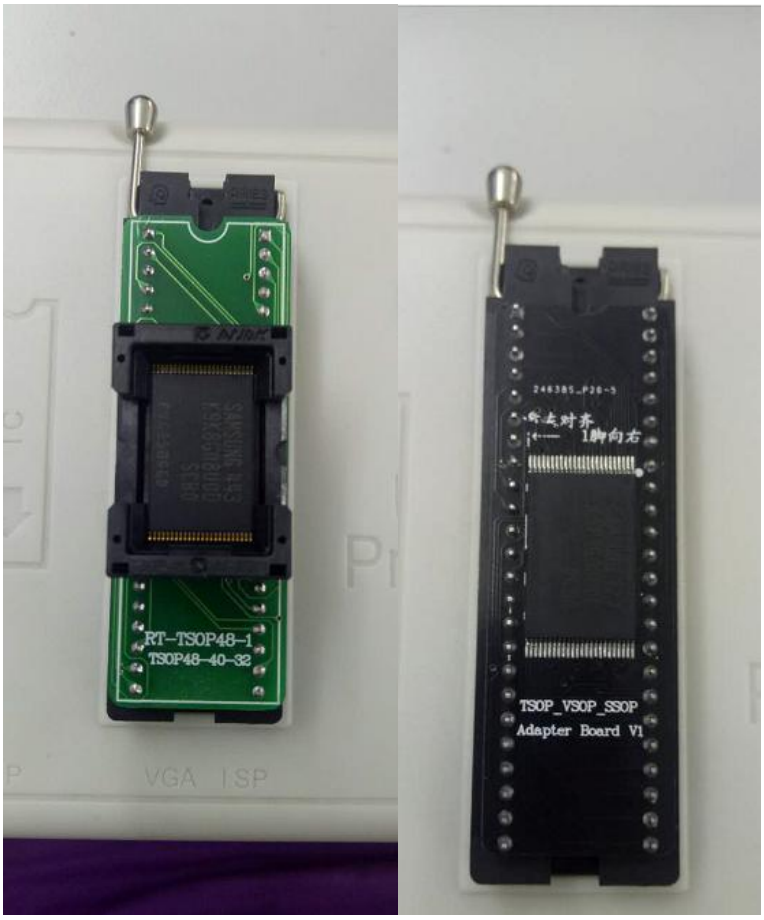
According to the difference of the encapsulation,when selecting the different switching seat to install,the user should follow the principle that make the gap upwards and the bottom aligned.(Please buy the established switching seat on the official website.)

Then input the type in the “Enter chip printing”,the way of reading,saving and writing are the same with 93XX.



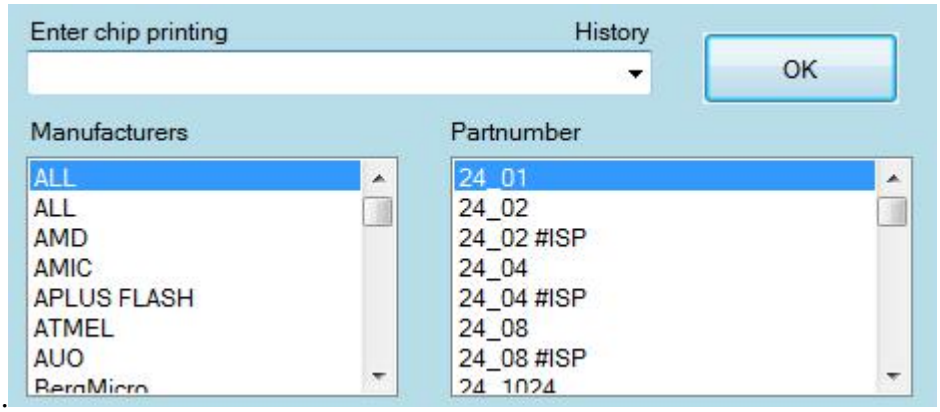
4.3 TSOP48 Encapsulation Chip’s Reading and Writing

- Select simple seat or the bounce seat with 48 feet;

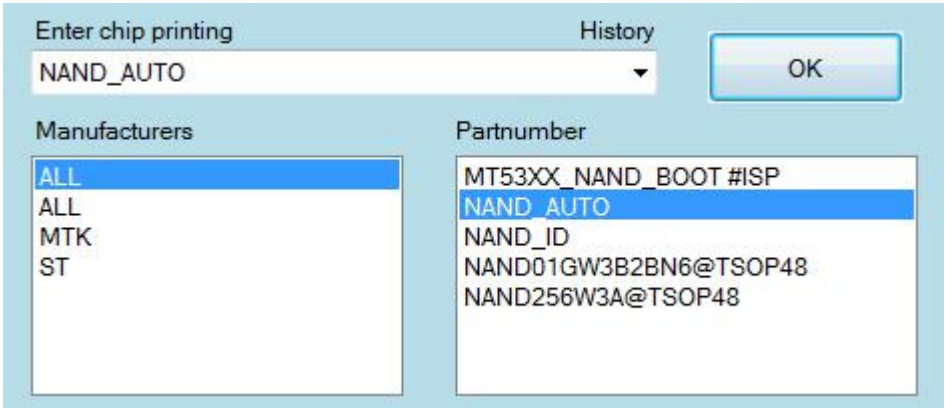


- Put the chip on the programmer,click the icon

to see if it can recognize the type of the chip;
- Can also enter the chip printing.



If it is the NAND chip,input the “NAND _AUTO” in the “Enter chip printing”.



- The way of reading,saving and writing are the same with 93XX.

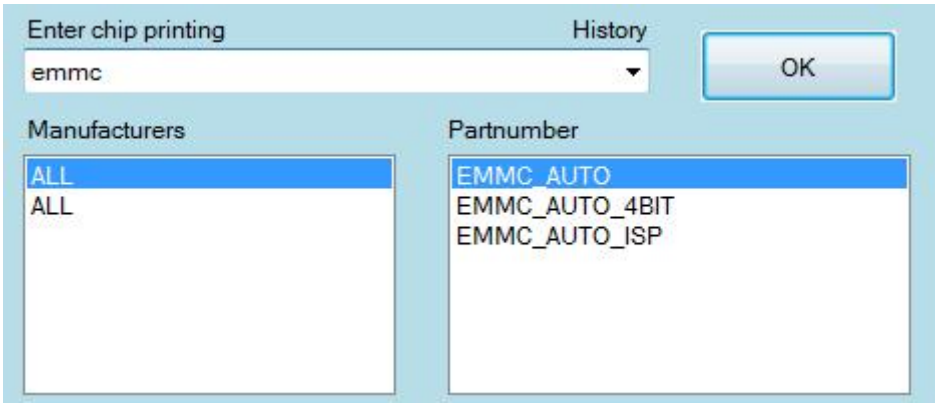
Attention:When using the bounce seat,please check carefully if contacts are in good condition.If the reading fail,try more times.If it still fails,please weld on the simple board to try.Otherwise it is important to weld well and clean the soldering paste,or it is easy to make some mistake under situation of high frequency.

4.4 EMMC’s Reading

- Choose the approved EMMC seat,don’t use the third-party seat,the sign of the chip should be in the direction of lower left.(EMMC must 植株,and be cleaned up or it will make the mistake easily)

- Click

to choose the printing letter,the default is EMMC_AUTO_4BIT.Can also input “EMMC” in the “Enter chip printing”.

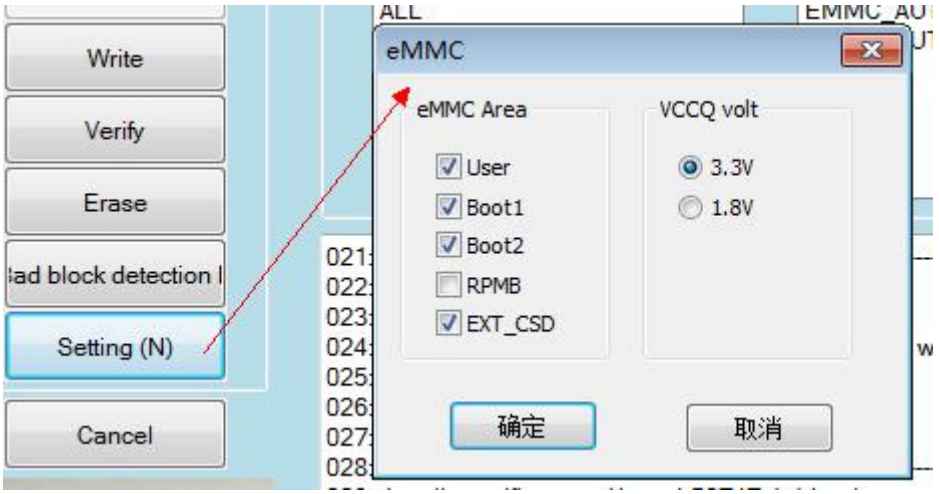


- EMMC_AUTO_4BIT:Slow-speed reading,but with high stability, higher successful rate,software default.

  EMMC_AUTO_8BIT:High-speed reading,suitable for most of the EMMC chips.

  If read and write on line,please choose EMMC_AUTO_ISP.

- Click “Setting” then the dialog box in the middle pop up.

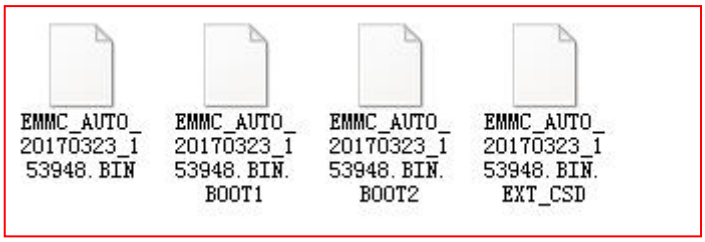


The left is the 5 partitions of EMMC,the “USER” is the user area, “RQMB” is the encryption area,the data in it can not come out so don’t have to be chosen.

The right is VCCQ power supply choice,it’s 3V generally,very few chip need to choose 1.8V.

- The success hint of reading chips:

- The software will create a folder automatically after EMMC already read the data,there will be the data of corresponding area,it’ s alright to save the whole folder.



(When the capacity of EMMC is more than 4G,the file read be divided into 2 parts automatically,it is normal that there will be 5 files.)

- When writing EMMC,drag just an icon into the display area of software then all the file will be loaded to the software.

4.5 Laptop EC Chip’ s Reading and Writing

4.5.1 1:85XX Series EC Chip’ s Reading and Writing

The location of chip on the simple board，and the direction of switching board.

Reading

```
006: >----------------------------------OK----------------------------------<
007: IT8586 , Ver : 06 , FlashID: 0x5AF08313061
008: 芯片ID校验正确。
009: 开始读取芯片.....
010: 读取成功，用时：1.072秒。
011: 自动校验...
012: 校验完成，用时：1.071秒。
013: 缓冲区数据累加校验和：16位_0x724D，32位_0x00FE724D；
014: 用时：2.15秒，平均速率121927字节/秒。
015: >----------------------------------OK----------------------------------<
```

Writing

```
016: IT8586 , Ver : 06 , FlashID: 0x5AF08313061
017: 芯片ID校验正确。
018: 开始写入芯片.....
019: 自动擦除...
020: 擦除成功，用时：0.061秒。
021: 开始写入...
022: 写入成功，用时：16.18秒。
023: 自动校验...
024: 校验完成，用时：1.071秒。
025: 用时：17.26秒，平均速率15185字节/秒。
026: >----------------------------------OK----------------------------------<
```

4.5.2 KB9012 Chip’ s Reading and Writing

The capacitance of the switching board is 104,the resistance is 473.

Reading chip.

```
001: 序列号：20170207192448-059629 ,PCB V1.70,Boot V1.00
002: http://www.ifix.net.cn/thread-11869-1-7.html
003: 当前所选：KB9012，容量：1M位，128K字节。
004: >----------------------------------OK----------------------------------<
005: 开始读取芯片.....
006: 读取成功，用时：3.552秒。
007: 自动校验...
008: 校验完成，用时：3.552秒。
009: 缓冲区数据累加校验和：16位_0x311E ，32位_0x00FE311E ；
010: 用时：7.108秒，平均速率36880字节/秒。
011: >----------------------------------OK----------------------------------<
```

Writing chip.

```
003: 当前所选：KB9012，容量：1M位，128K字节。
004: >----------------------------------OK----------------------------------<
005: 开始写入芯片.....
006: 写入成功，用时：26.65秒。
007: 自动校验...
008: 校验完成，用时：3.563秒。
009: 用时：30.23秒，平均速率8672字节/秒。
010: >----------------------------------OK----------------------------------<
```

4.5.3 NPCE 288,388 Chip’ s Reading and Writing

The resistance of the switching board is 103,the one foot of the chip is at the white point,and the gap of the switching board should be upward and the bottom be aligned.

Reading

```
012: 当前所选：NPCE288@TQFP128，容量：1M位，128K字节。
013: 转接座型号：NPCE288/388 Simple soldering Board
014: 正在下载器件编程算法 ......
015: 算法更新成功。
016: >----------------------------------OK----------------------------------<
017: 引脚接触良好。
018: 芯片ID校验正确。
019: 开始读取芯片.....
020: 读取成功，用时：0.634秒。
021: 自动校验...
022: 校验完成，用时：0.635秒。
023: 缓冲区数据累加校验和：16位_0x92B0，32位_0x00FD92B0；
024: 用时：1.284秒，平均速率204161字节/秒。
```

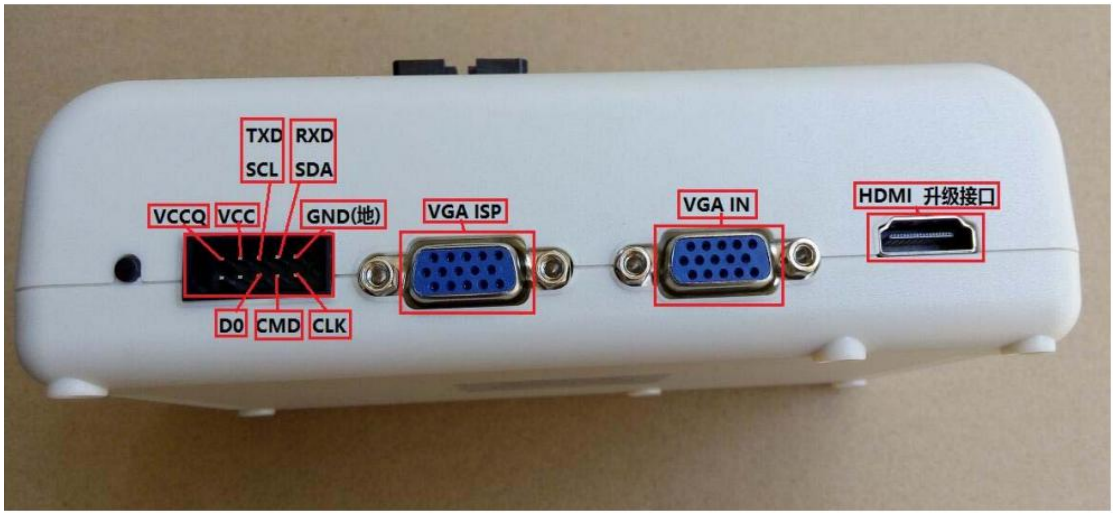
Writing

```
087: Chip pins contact is detected OK.
088: Chip ID verification OK.
089: Start writing chip.....
090: Auto erasing...
091: Erase successful，Elapsed time：0.374 seconds。
092: Start writing...
093: Write successful，Elapsed time：0.808 seconds。
094: Auto verifying...
095: Verification successful，Elapsed time：0.634 seconds。
096: Elapsed time: 1.835 seconds，average speed of 142857 bytes/sec.
097: >----------------------------------OK----------------------------------<
```

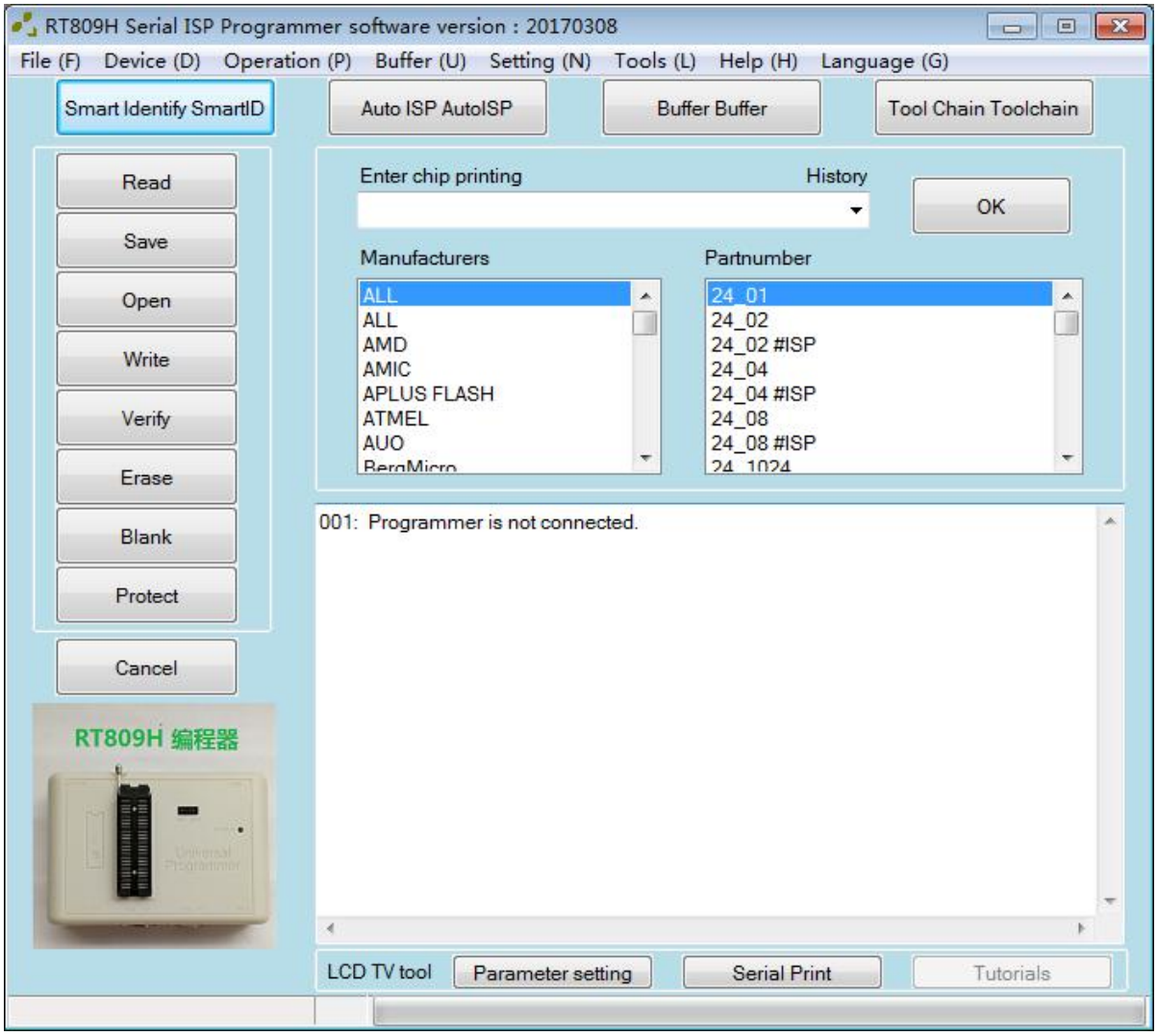
Chapter 5 ISP (on-line) Operation Application Instruction

5.1 Checking Liquid Crystal Board Printing Message

Step 1 : Connect the VGA ISP of flashing programmer with the VGA port of liquid crystal board using VGA line(using the original packing VGA line);



Step 2 : At first click the in the software interface to set;



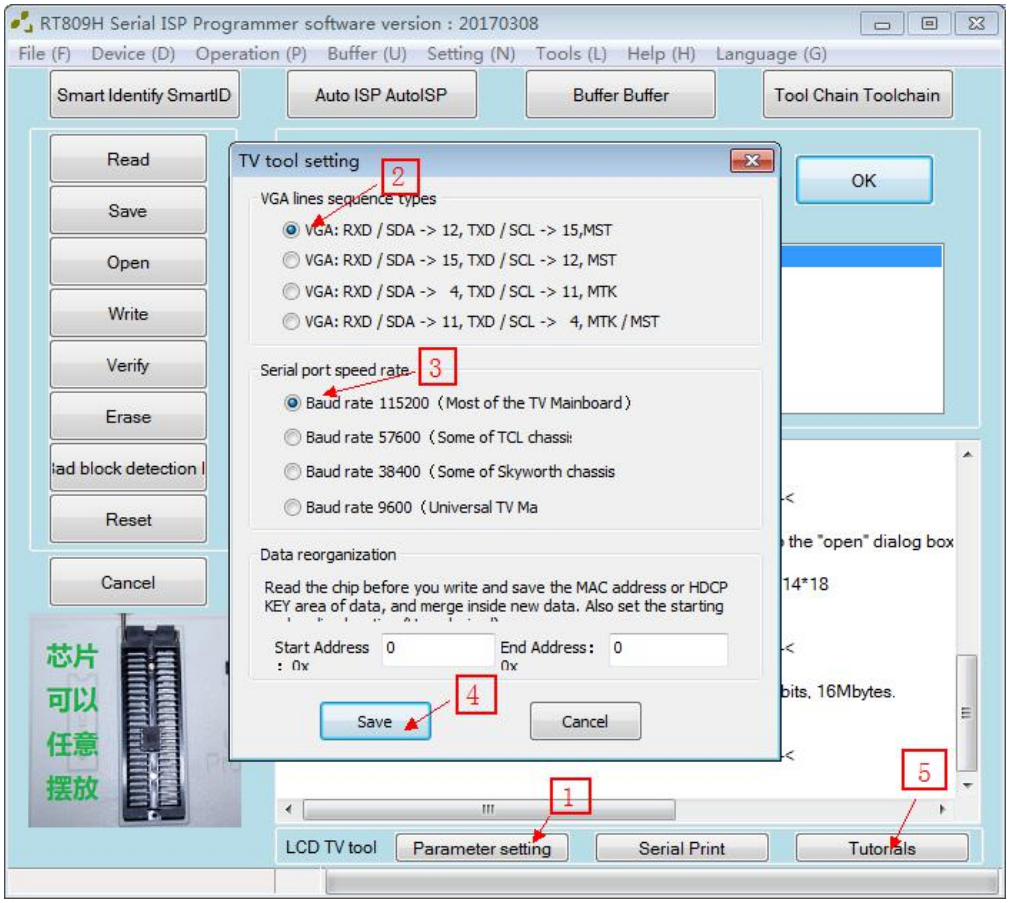
Step 3 :

Set when the window pops up.

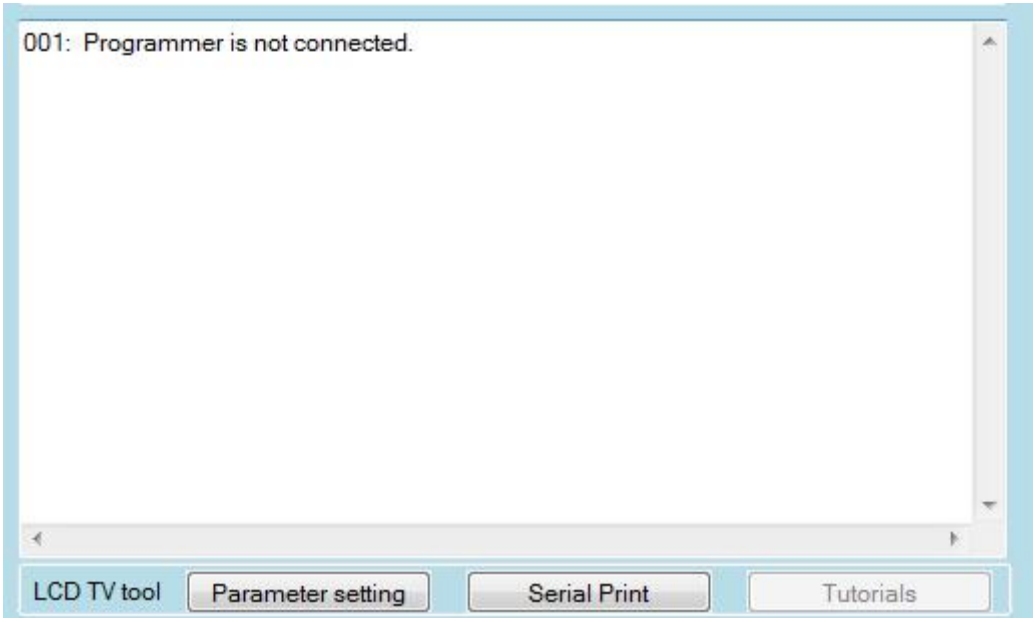
VGA line orders type : The different mainboard will use the different line orders, if it can’ t on line,please choose different line orders to test repeatedly.

Serial port speed : That is baud rate adjustment,the baud rate of different mainboard is different.If the printing message is messy code please try to change the baud rate.

After adjusting the parameter please click to save.



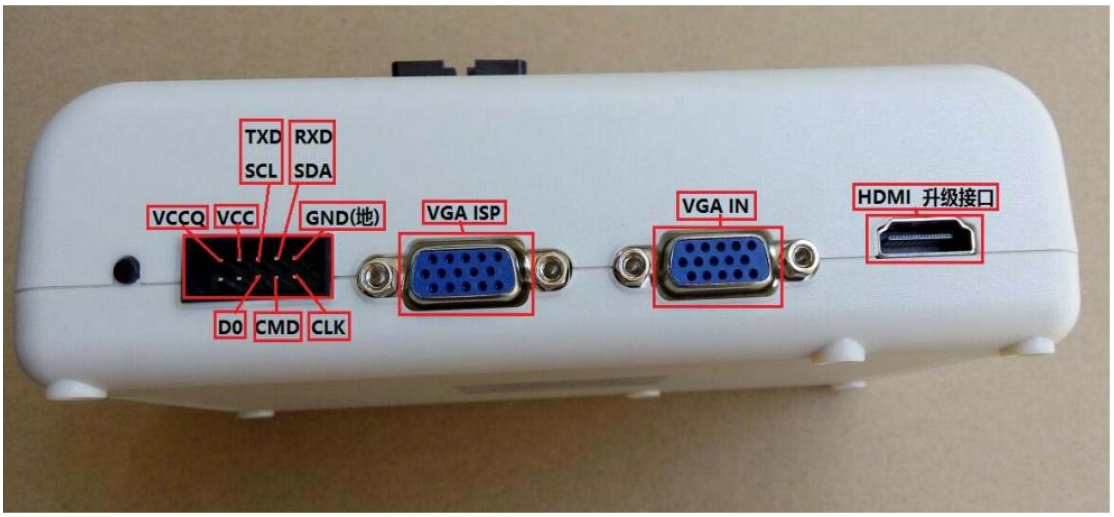
Step 4 : After setting the parameter,click Serial Print ,open the serial and electrify the mainboard in 2 seconds,the printing message will appear in the following dialog.



Attention : If the printing message haven’ t been appeared,please pay attention to following questions

- First click Serial Print ,then supply power to the mainboard;

- Some mainboards need to be supplied power in the stand-by mode and also the main power supply;
- If the line orders are not correct,please change it in the parameter setting and then try again;
- When the serial port of some mainboards is at HDMI or reserved port,it needs to connect HDMI or fly lines,that is to connect SCL,SDA,GND lines with the SCL,SDA,GND on the mainboard;



- The serial ports of some mainboard need to be opened in the factory pattern.

5.2 LCD TV Mainboard Program’s Transcription

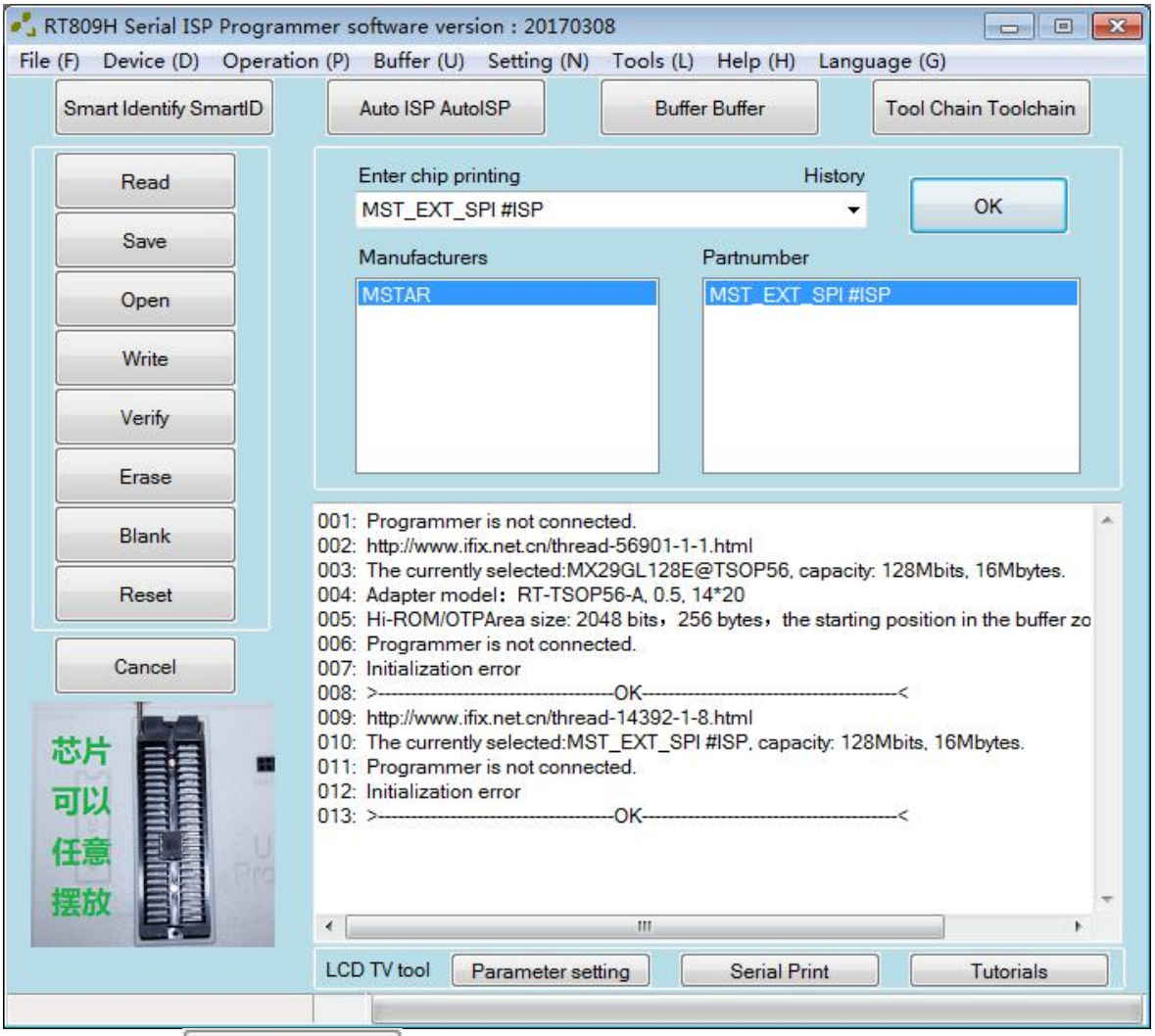
5.2.1 MST scheme

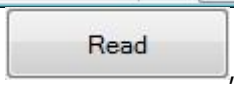
Taking board number：08-MS80105-MA200AA，TCL MS801movement，L46E5500A computer type，main chip MSD6A801，storage W25Q16 as the example.The ISP path and serial port of this version are the same port,both have 2 sets.Line orders 1 and line orders 4 can both receive printing message and and reveal the MBOOT program alone,and here we use line orders 1.

The way to back-up the program： “ISP automatic identification” → “Read” → “Save”.

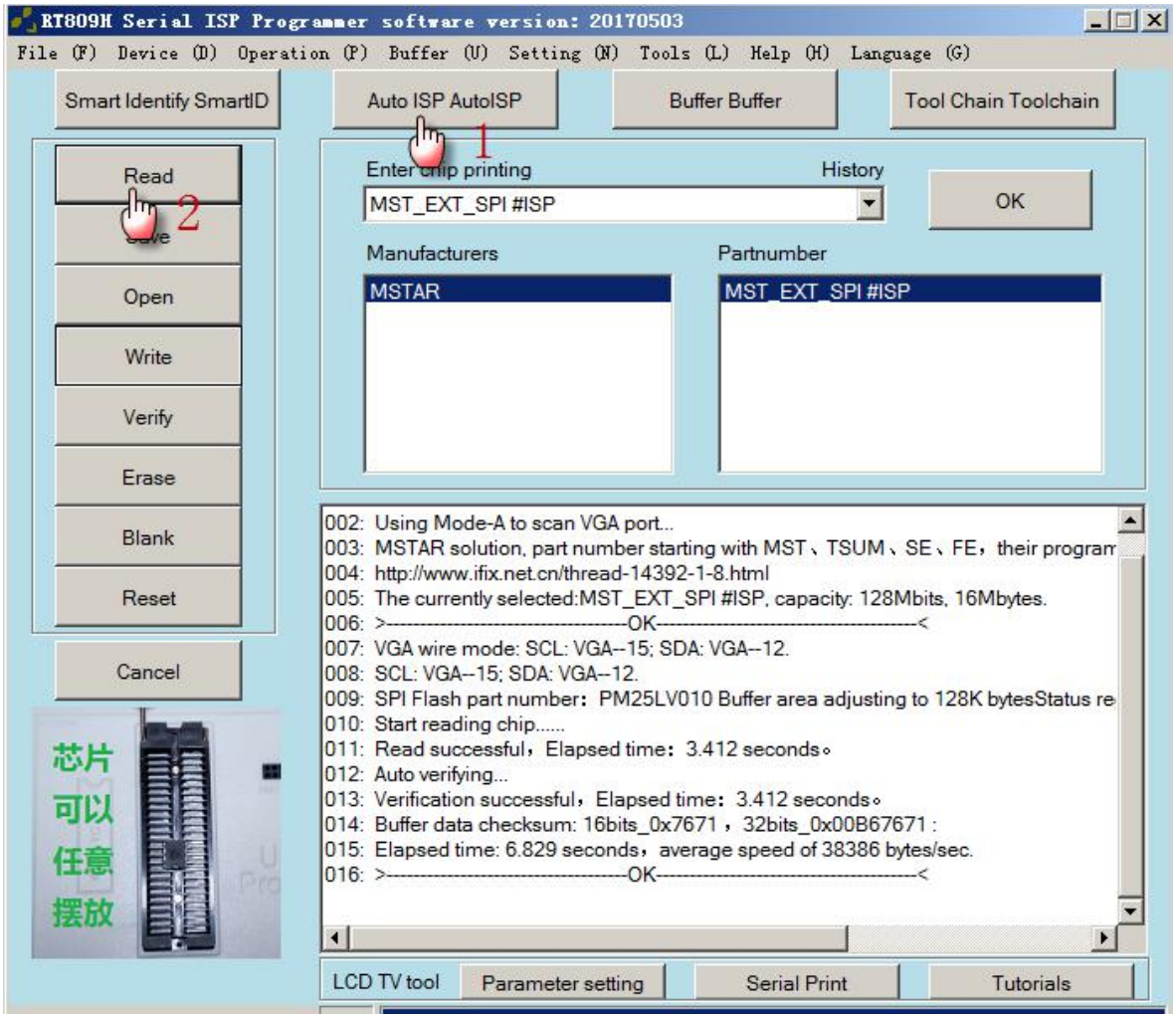
Step 1 : The VGA ISP port should be connected with board correctly by VGA line.Open the software to the main interface,first click

,then charge the mainboard(Keeping booting up,both with standby power supply and main power supply),then it will hint to detect the type of main chip.

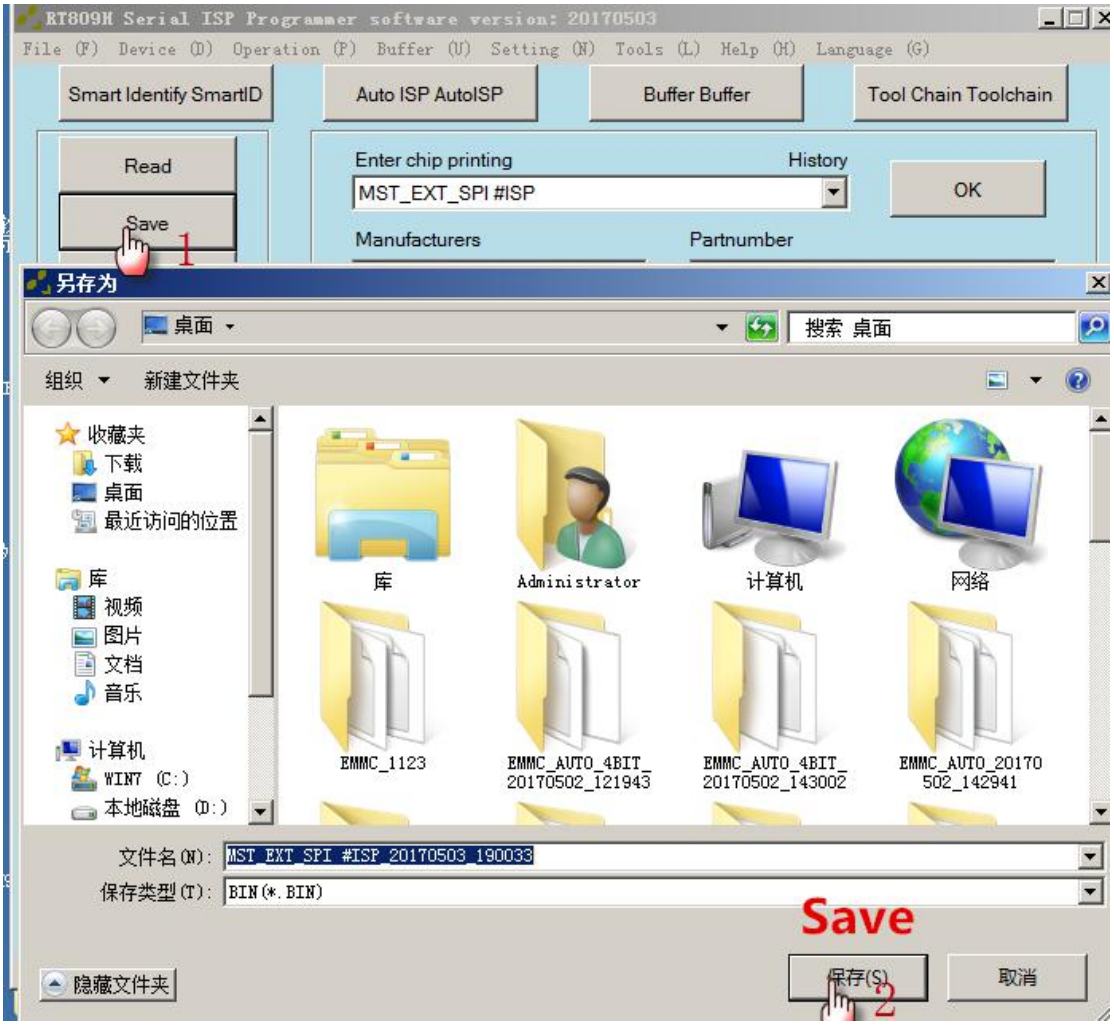


Step 2 : Click 

,809F will read and verify once automatically.(If it verifies by mistake,please set the low speed in the “setting” menu to read again)



Step 3 : Save the file after reading,try your best to name the file in detail,including the manufacturer,brand,model,screen type,main chip type,memorizer type.



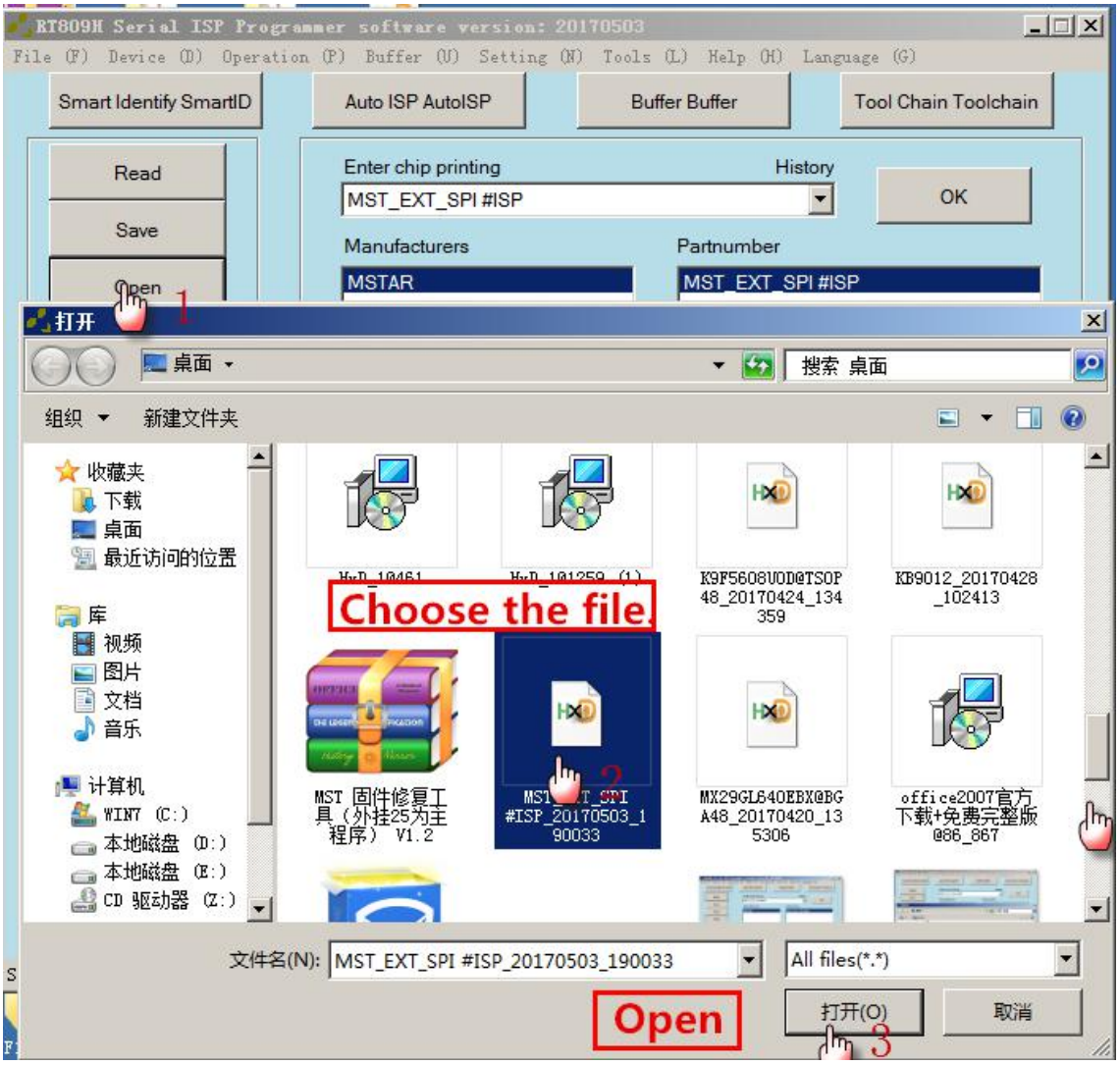
5.2.2 Burning Method

Key point: "ISP automatic identification" → "Open" the file waiting for burning→ "Write"

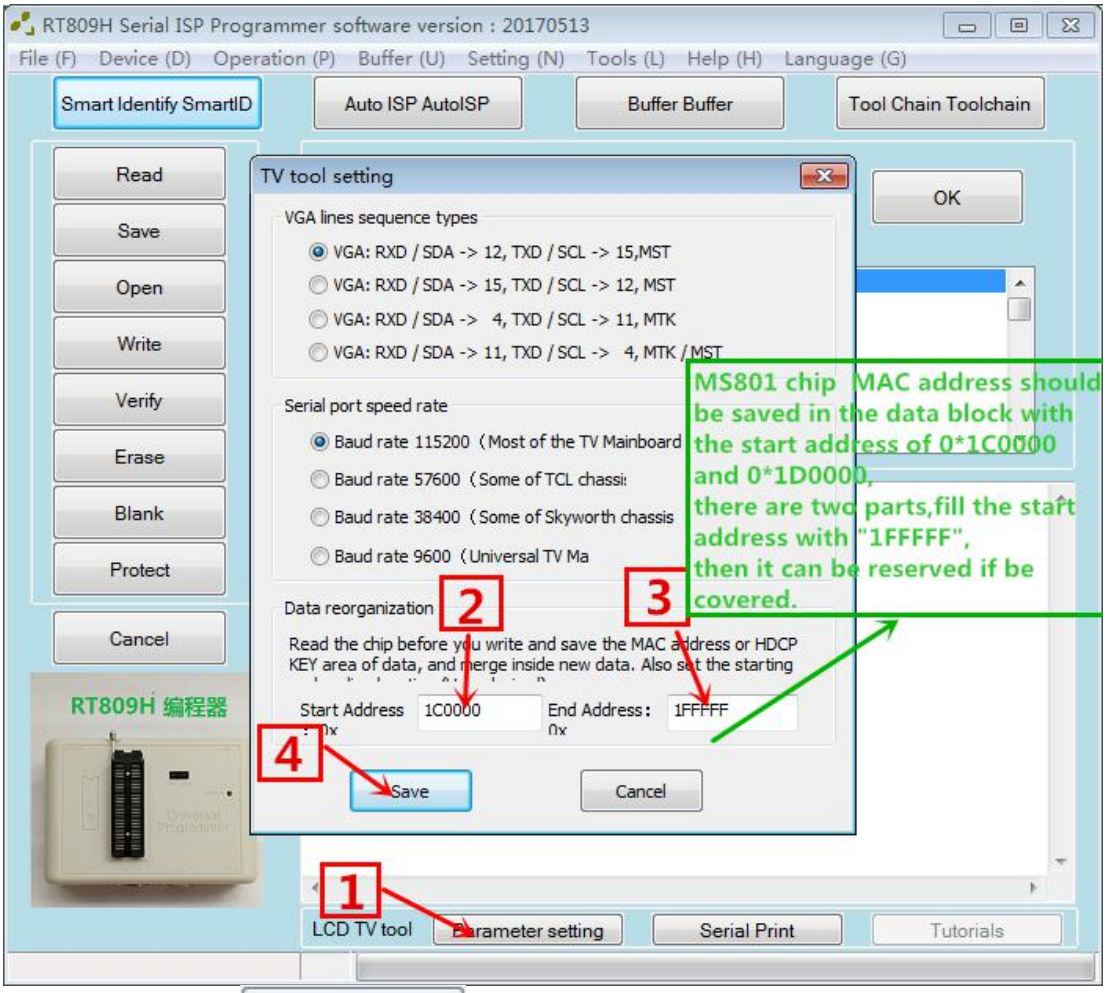
Step 1 : The VGA ISP port should be connected with board correctly by VGA line.Open the software to the main interface,first click

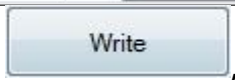
,then charge the mainboard(Keeping booting up,both with standby power supply and main power supply),then it will hint to detect the type of main chip.

Step 2 : Select the program file waiting for burning;

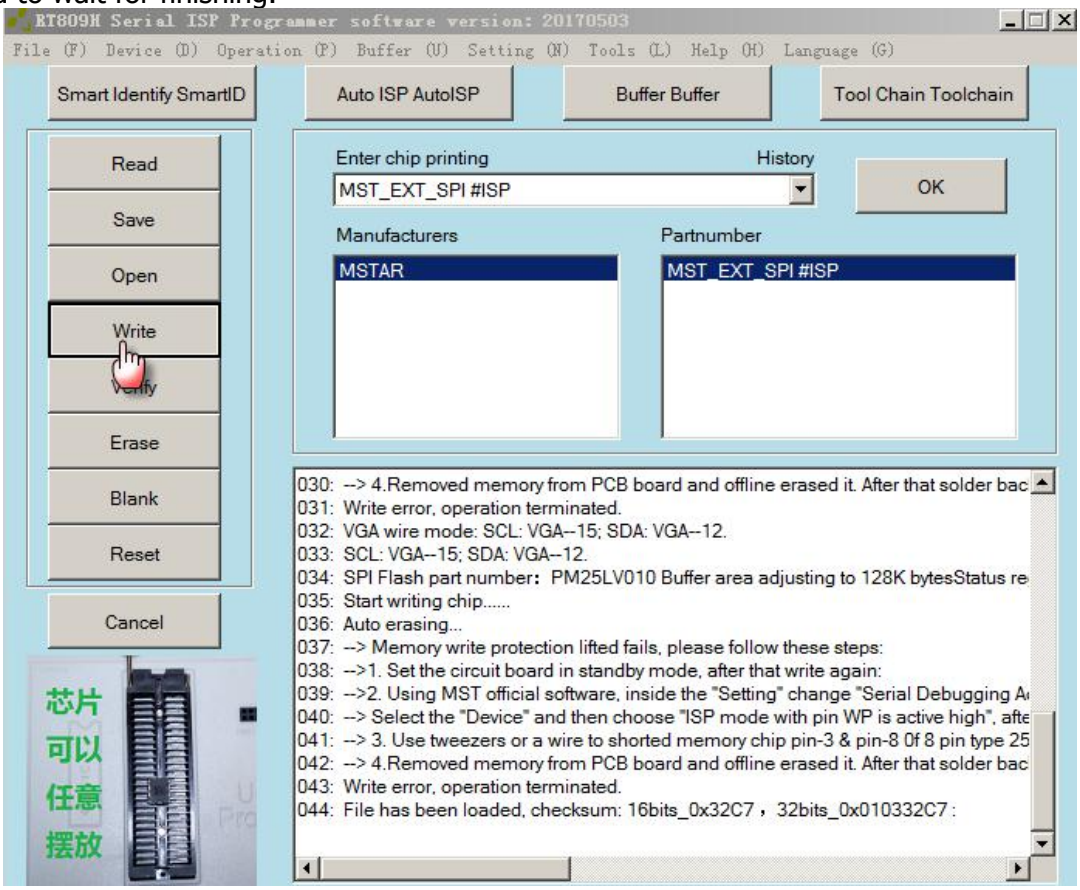


Step 3 : Setting the data reconstitution function to reserve the information like original MAC address and so on;



Step 4 : Click the 

,recombine the data automatically,erase,write,verify,you just need to wait for finishing.



5.2.3 MTK Scheme Flashing Method

Mechanism chip : Skyworth 8k27

Main chip : MT8222

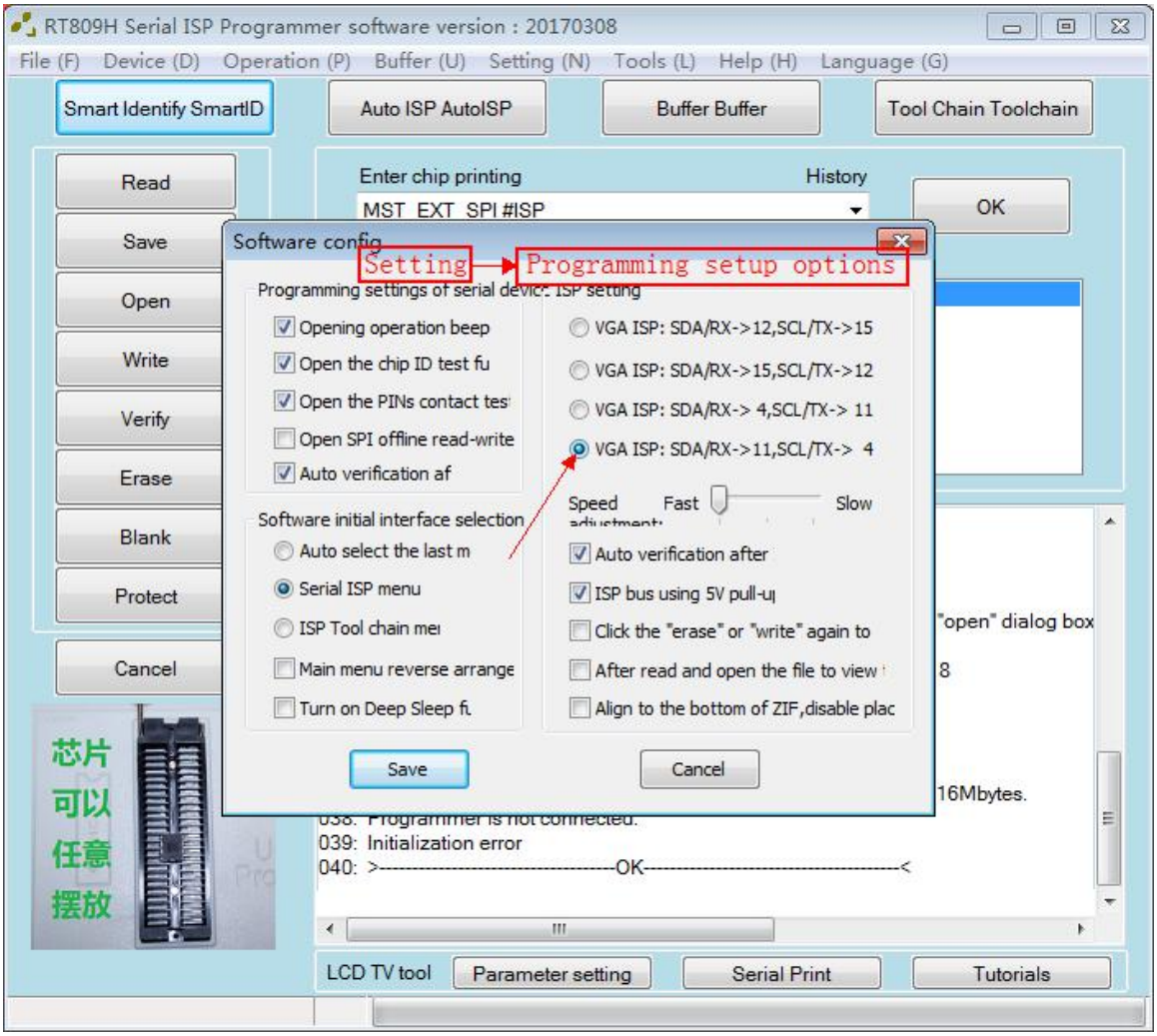
Memorizer : MX25L6405

Board type : 715G4089-M01-000-004L

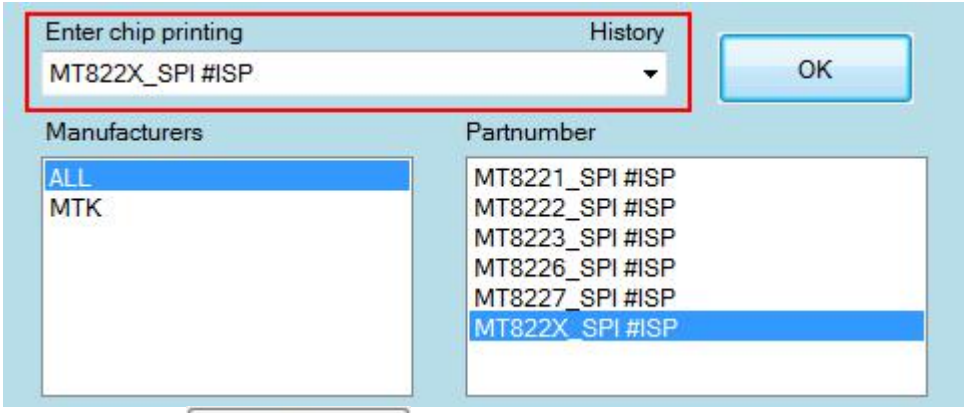
Back-up method outline : Setting the VGA line orders by hand → Choose the chip type → Read → Save

- **Reading:**

Step 1 : Connect the programmer VGA IS port with the board by VGA line correctly and supply the power,open the software to the main interface,like following picture,set the VGA line orders;

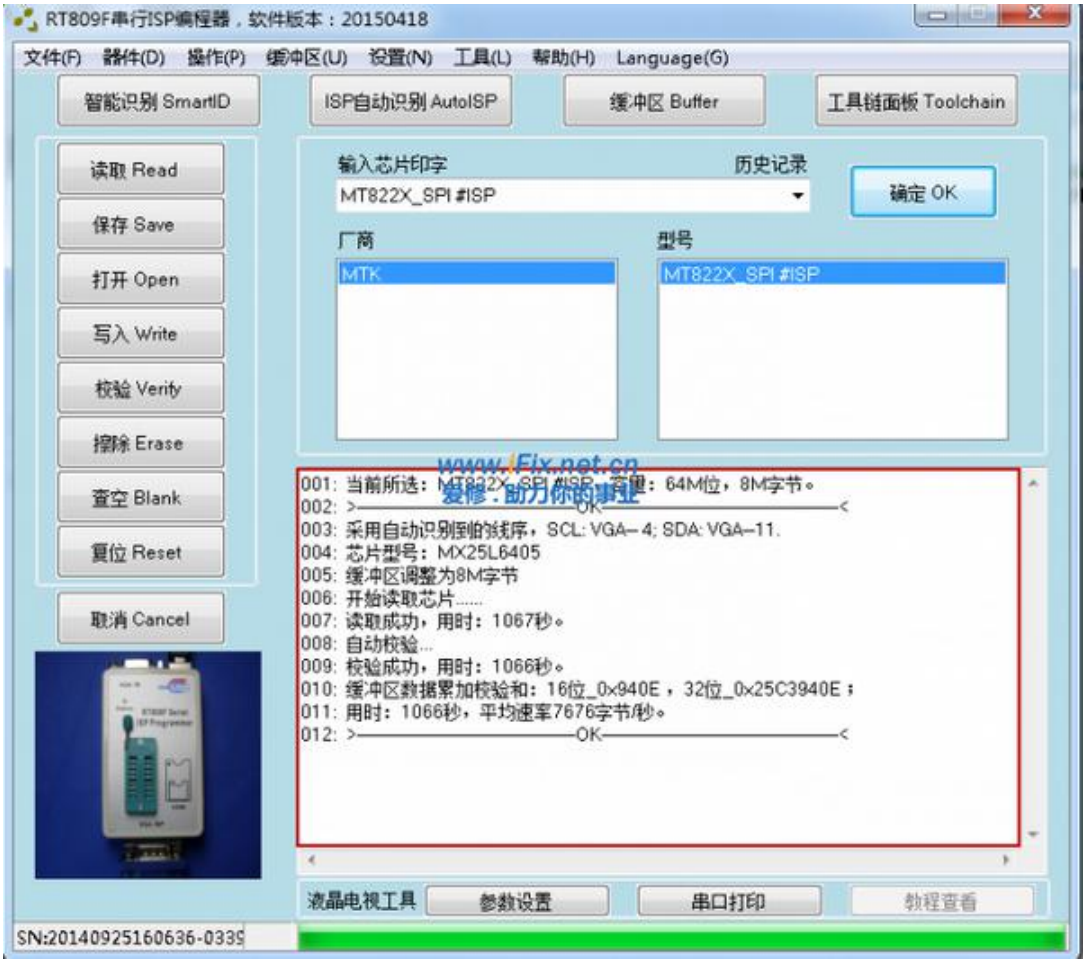


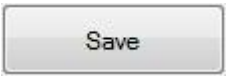
Step 2 : Input the type " MT822X_SPI#ISP" in the "Enter Chip Printing" on the software main interface;



Step 3 : Click

on the interface;



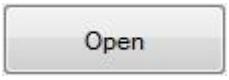
Step 4 : Click  to save the file after finishing reading.Try the best to name the file in detail,including the manufacturer,board number,screen type,main chip type,memorizer type for the convenient use in the later.

- **Writing:**

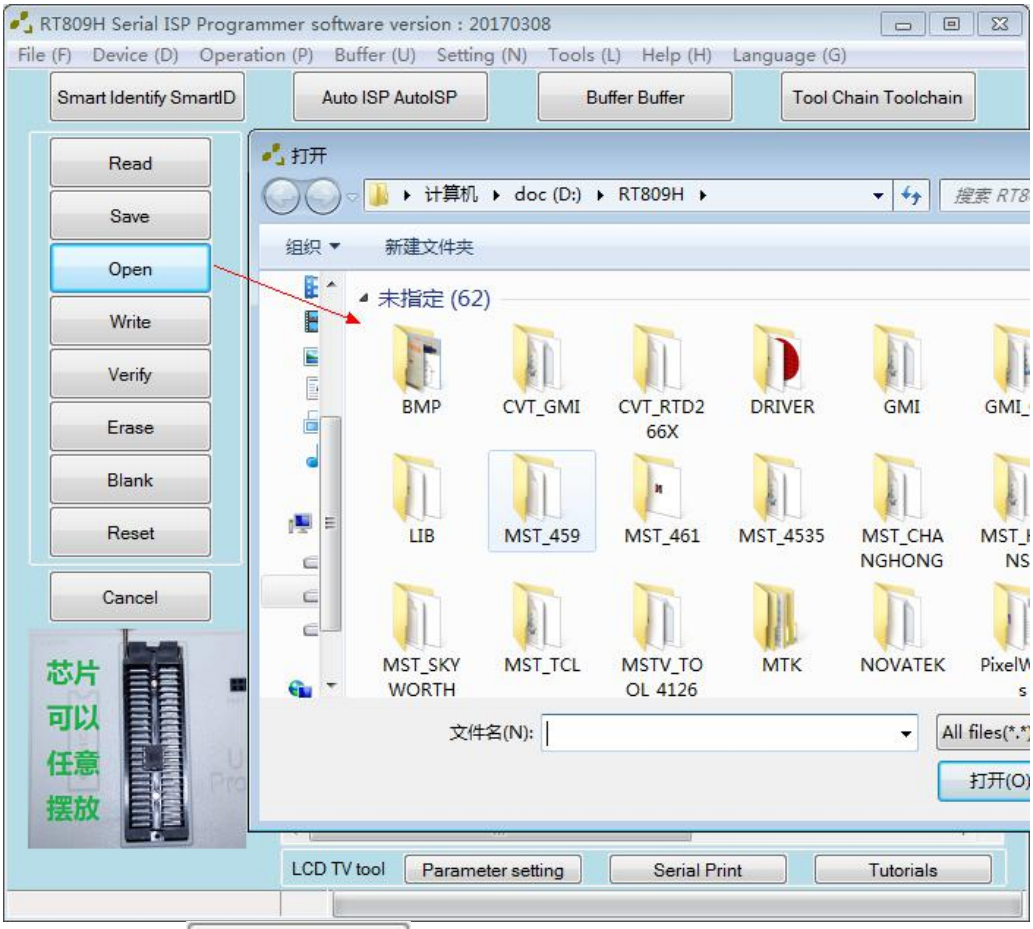
Set the VGA line orders by hand → Select the chip type → Open the file → Write

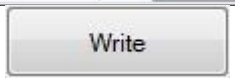
Step 1 : The same as above;

Step 2 : The same as above;

Step 3 : Click 

on the interface and choose the file waiting for being written;



Step 4 : Click 

on the interface,according to the words as shown in following picture it means the writing has finished.

5.2.3 RTD Scheme

Main chip : RTD2674S

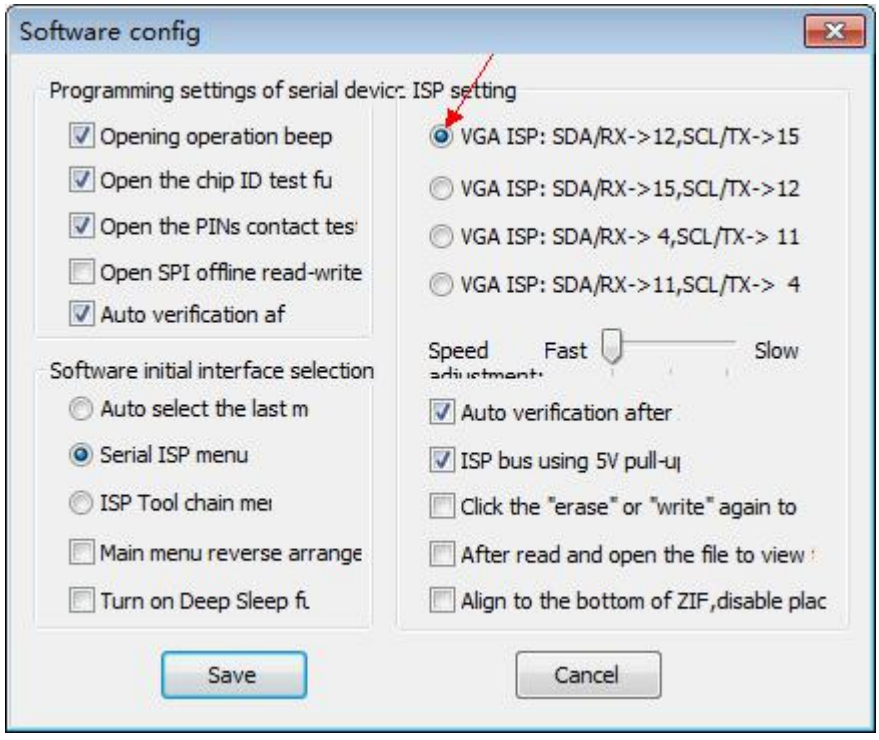
Memorizer : MX25L3205

Board type : 715G3934-M03-000-004F

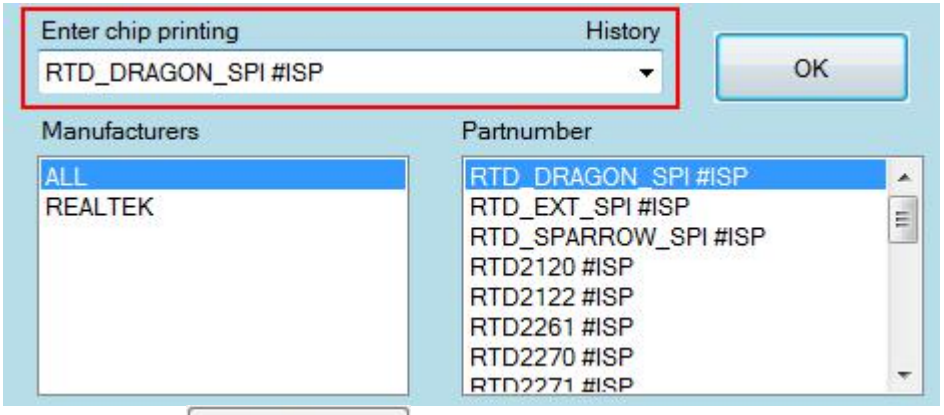
Back-up outline : Set the VGA line order manually → Choose the chip type → Read → Write

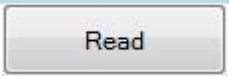
- **Reading:**

Step 1 : Connect the programmer VGA IS port with the board by VGA line correctly and supply the power,open the software to the main interface,like following picture,set the VGA line orders;

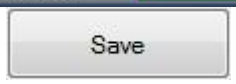


Step 2 : Input the type " RTD_DRAGON_SPI #ISP" in the "Enter Chip Printing" on the software main interface;

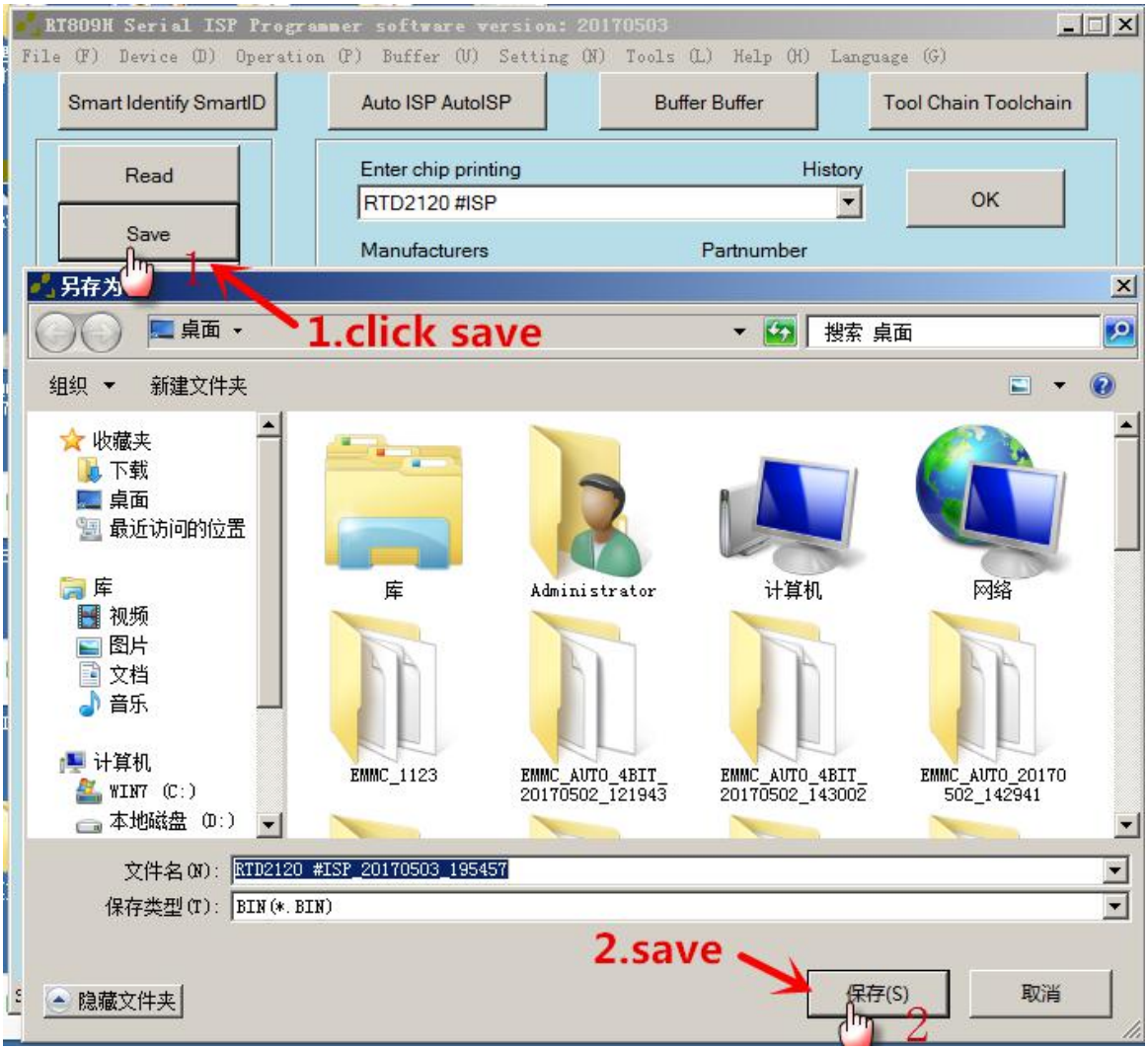


Step 3 : Click 

on the software interface,operate according to the hint;

Step 4 : Click 

to save the file after finishing reading.Try the best to name the file in detail,including the manufacturer,board number,screen type,main chip type,memorizer type for the convenient use in the later.

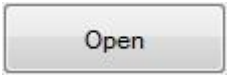


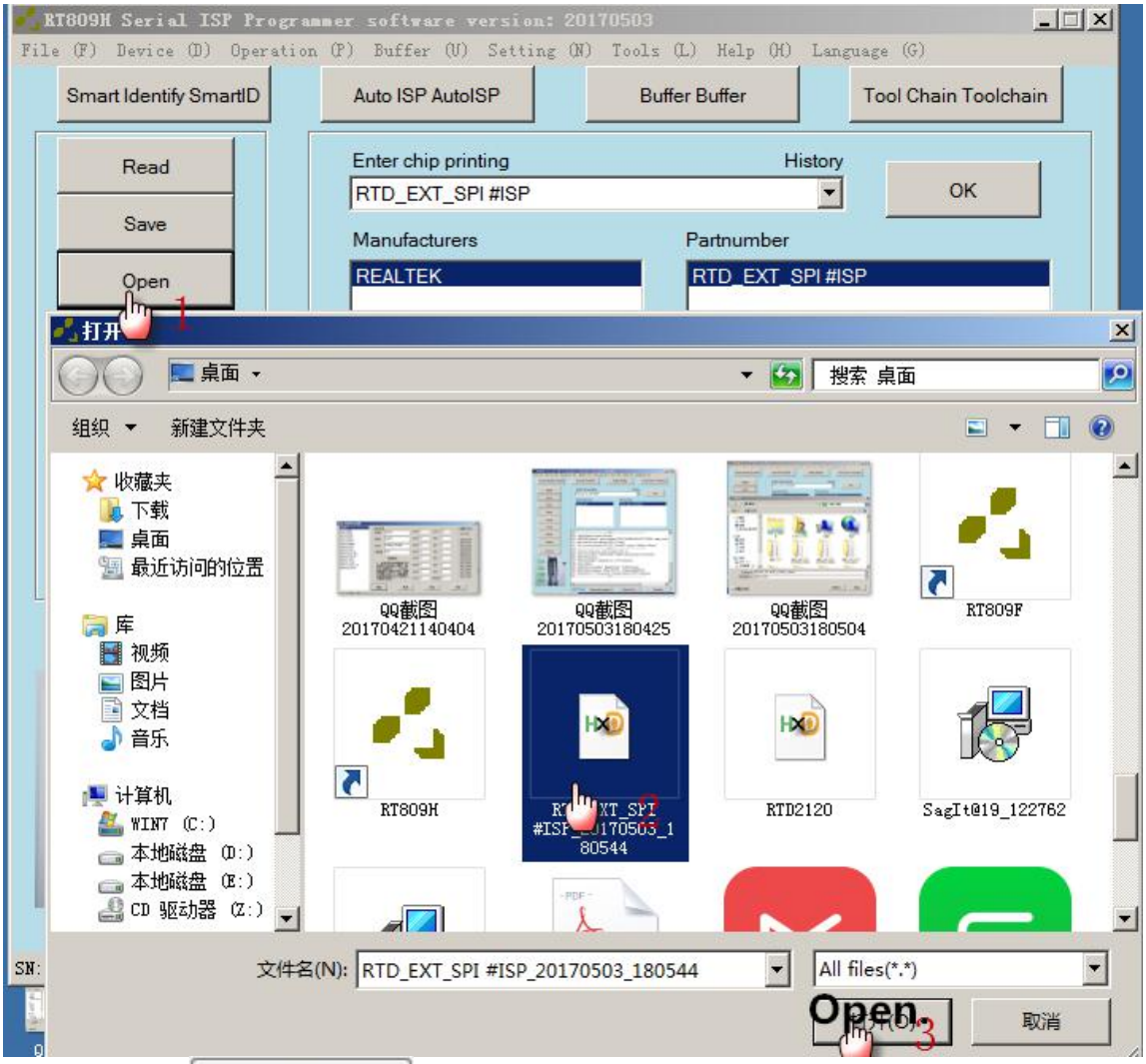
- **Writing:**

The writing method : Set the VGA line orders by hand → Select the chip type → Open the file → Write

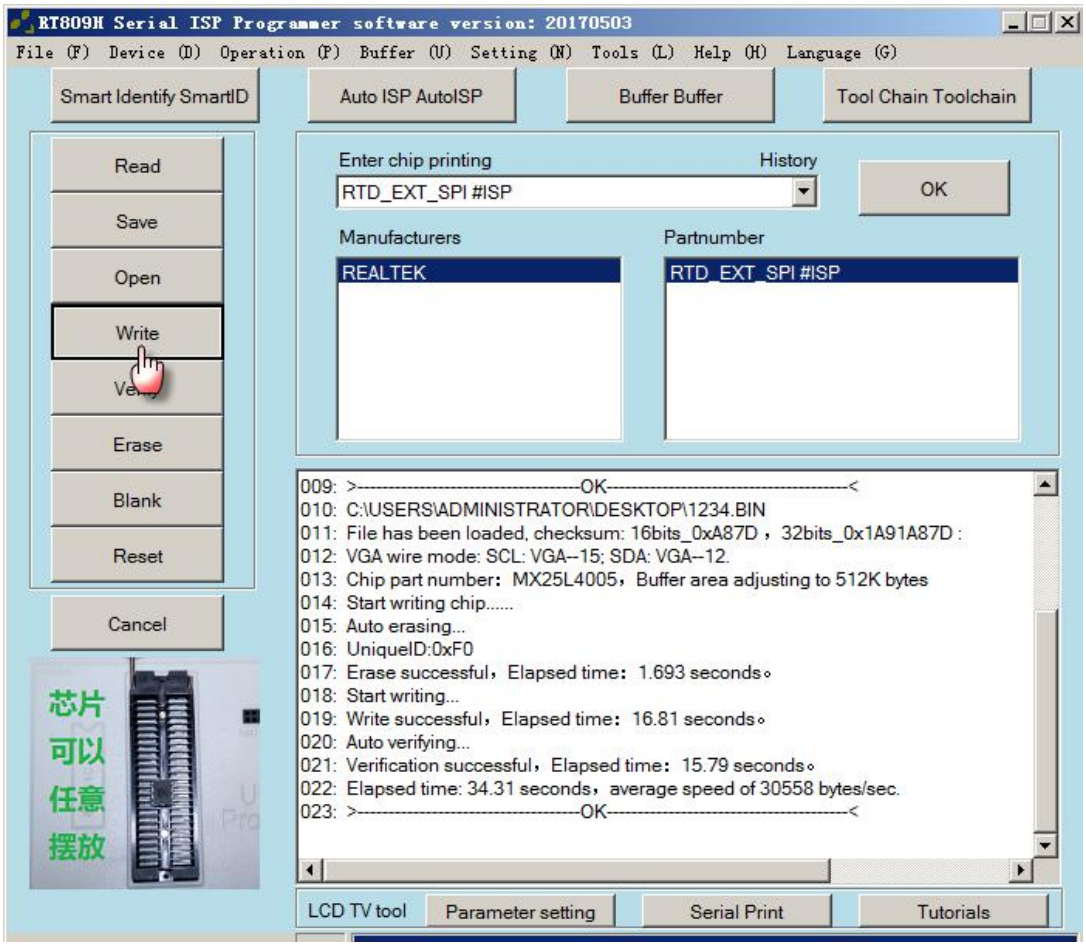
Step 1 : The same as above;

Step 2 : The same as above;

Step 3 : Click  on the interface and choose the file waiting for being written;

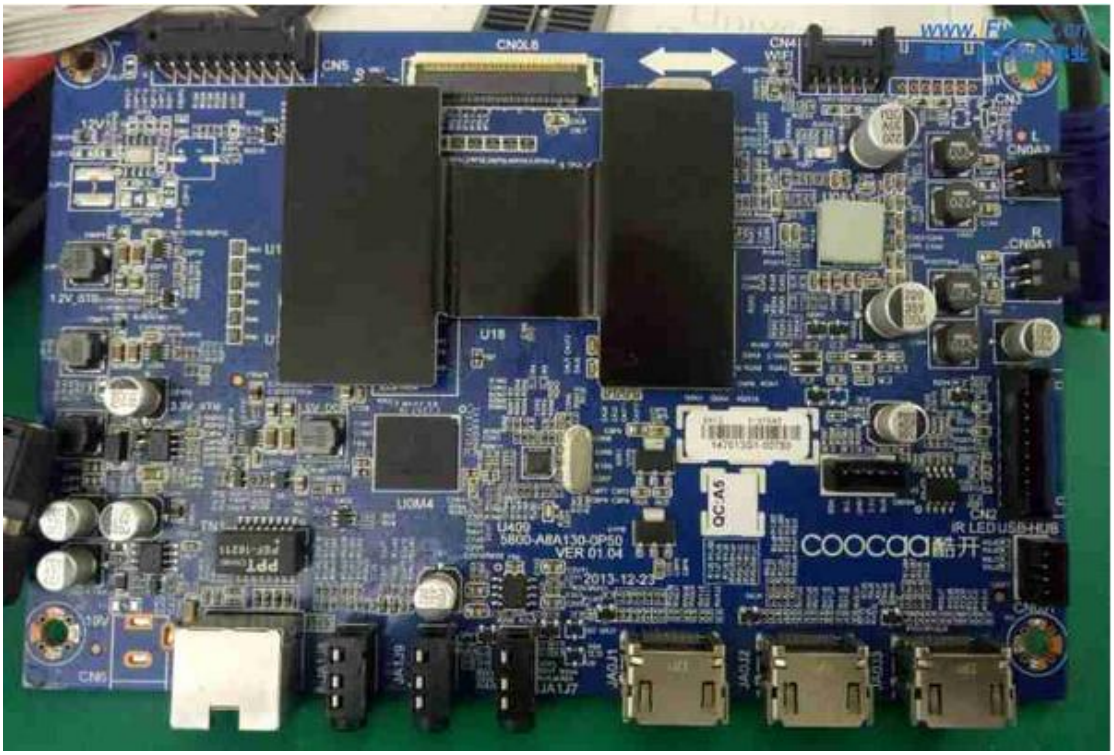


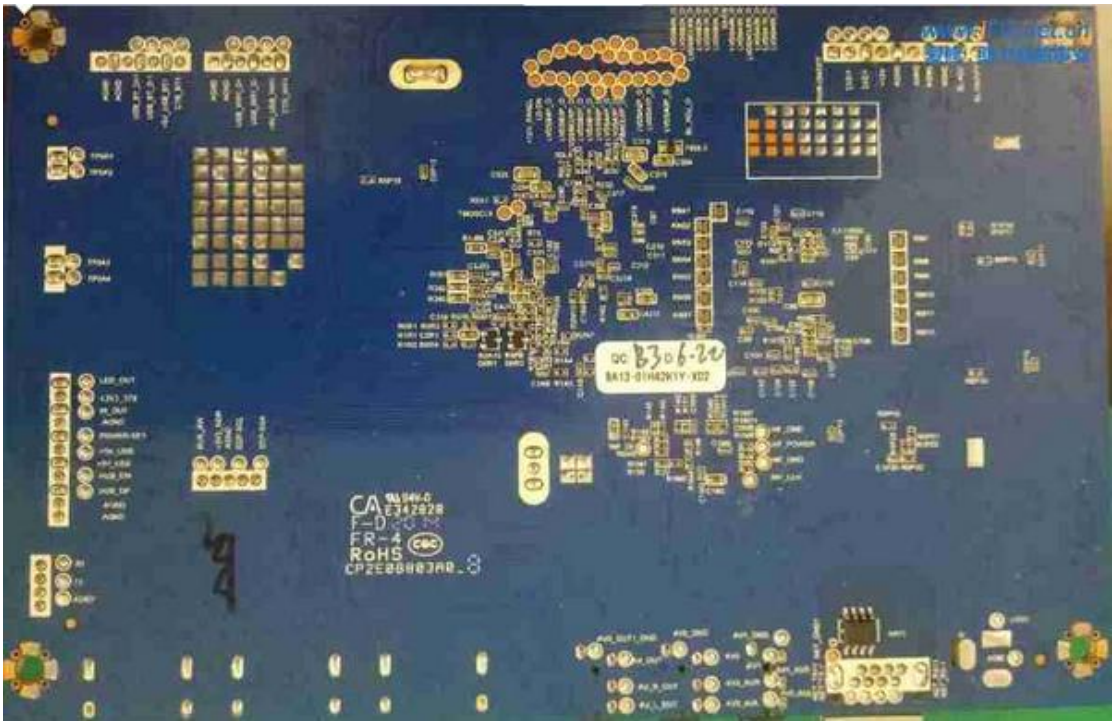
Step 4 : Click on the interface,according to the words as shown in following picture it means the writing has finished.



5.2.4 EMMC_ISP Reading and Writing Tutorial

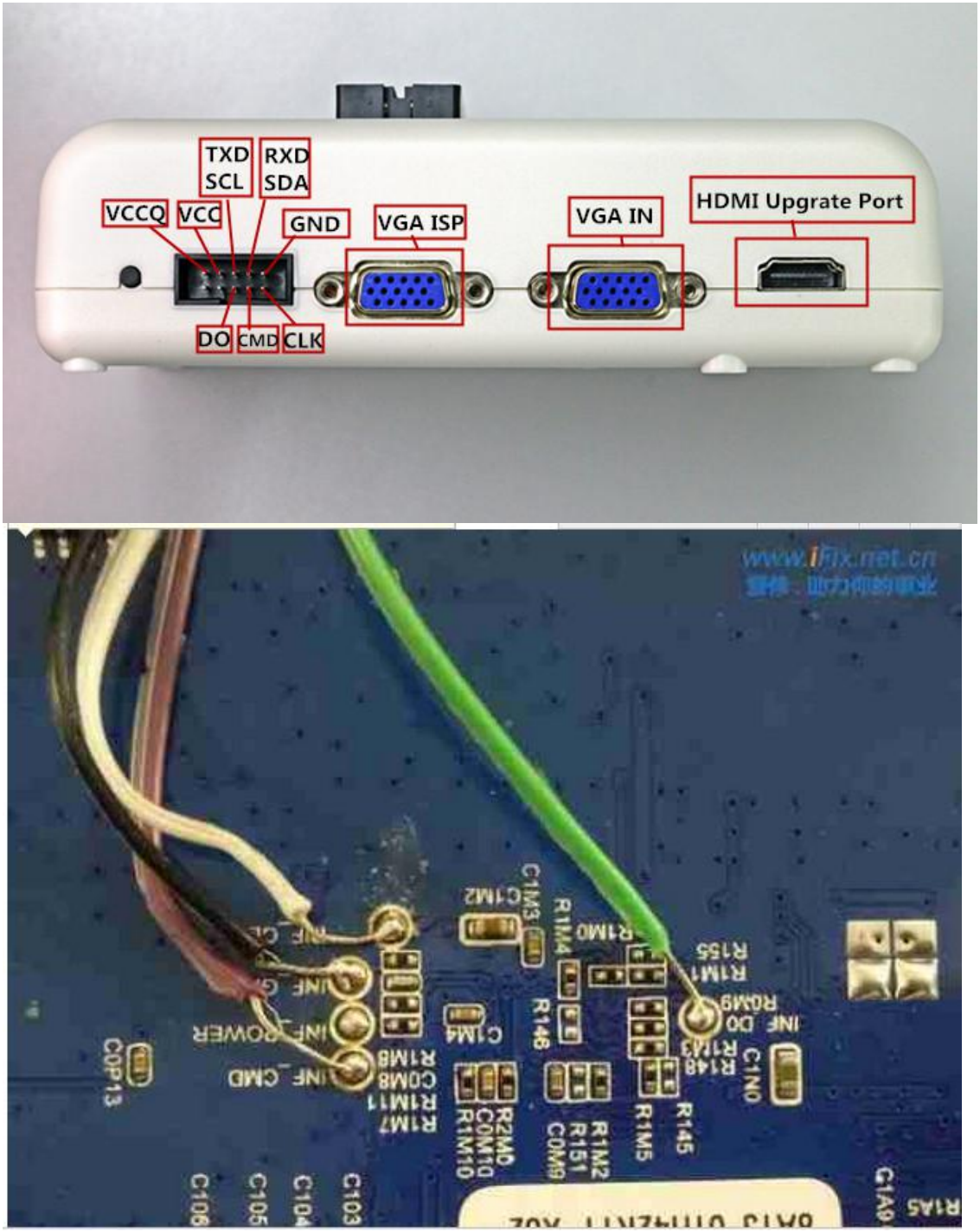
Board model:Skyworth coocaa 8A13



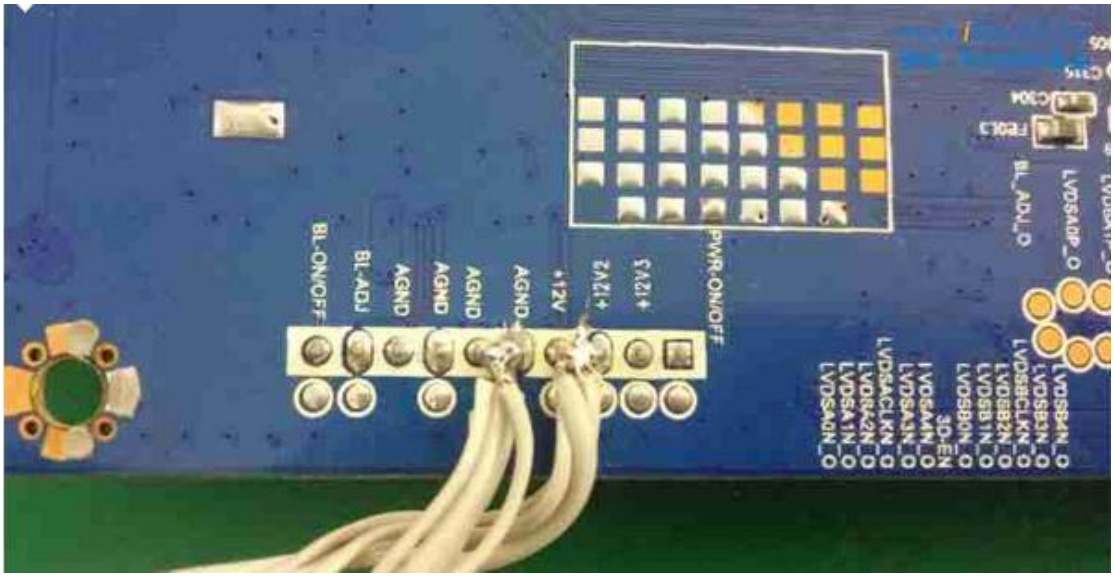


Step 1 : In order to stop the main chip working (power supply,clock,restoration),the easiest way is crystal oscillator, ground the 2 pins of the crystal oscillator X0R2(beside the shielded wire extension cord) of the main chip;

Step 2 : Find a few key pin test points DO,CMD,CLK,GND,at least 4 lines,and the line should be better within 10cm.



Step 3 : EMMC uses the power supply of board by self,so one line less,just need to supply the 12V power to the board.



Step 4 : Supply the 12V power to the Liquid Crystal mainboard,open the software of the programmer,choose EMMC_AUTO_ISP and then click " Read" .

The method of EMMC_AUTO to fly ISP line to write please refer to the EMMC offline writing method.

EMMC_AUTO_ISP flying line read-writing must stop the main chip working,then the efficiency of read-writing can be high.
The way includes : Stop the power supply,short sub the 2 pins of main chip crystal oscillator to the ground,supply the power to the reset pin to force to reset.

The easiest way is to short sub the 2 pins of main chip crystal oscillator to the ground,use the original power supply,the voltage of the VCCIO is the same as the EMMC power supply,fly 4 lines (CLK/CMD/D0/GND) to write.

5.2.5 On-line Reading IT85XX Series Laptop EC Chip

Wiring diagram(**Provide the FPC line and socket** : three kinds of separation distance:1mm,0.5mm,0.8mm,the FPC socket is 32pin connected down,FPC line is 24pin with the same direction,also can cut out the 32pin line into 24pin to be used)

Important instruction:

1.Don’ t forget to connect the GND,don’ t forget to connect the ground,the ground line can not be too slim;

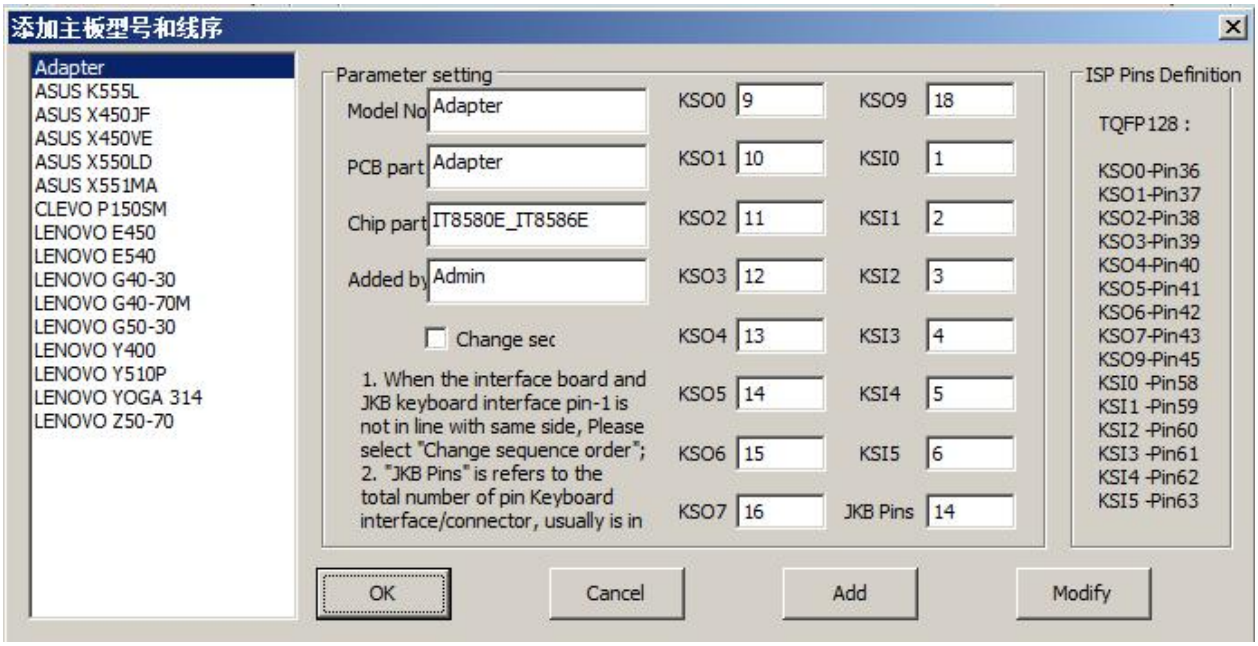
2.The FPC line must be cut and plug as requested,then we can see the clipping and connection in the following high-definition wiring diagram,which must be clear;

3.For the IT8586/IT8587 chip,if it can’ t enter the ISP mode,please fly the NO.100 pin of chip to GND(The NO.100 pin must be low level).But it don’ t need to fly line if it uses the switch board of V1.5 type;

4.Must not plug in when selecting the type and setting the line orders,can only after finishing the setting and click “read” or “write”;

5.When there are some board can not be connected,please turn off and plug in again,this kind of chip aims to catch the ISP ENTER signal when supply electricity.

6.If it still can’ t be connected,please check for the line order you want in the （ 设置线序 Set ） in the software of programmer,but if there is no the line order you want you can add the line order by yourself.



Laptop mainboard : Lenovo Y400,Board LA8691P,EC type IT8580. The other types like IT8586E，IT8586G，IT8585E,IT8587E and so on of TQFP128 和 BGA footprint EC,the reading and writing way:

www.iFix.net.cn
爱修，助力你的事业
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Programmer

RT809H通用编程器，软件版本：20151110
文件(F) 器件(D) 操作(P) 缓冲区(U) 设置(N) 工具(L) 帮助(H) Language(G)
爱修，助力你的事业
智能识别 SmartID
ISP自动识别 AutoISP
缓冲区 Buffer
工具链面板 Toolchain
读取 Read
保存 Save
打开 Open
写入 Write
校验 Verify
擦除 Erase
查空 Blank
保护 Protect
取消 Cancel
输入芯片印字
历史记录
IT8580E
确定 OK
厂商
型号
ITE
IT8580E
001: 当前所选：IT8580E，容量：1M位，128K字节。
002: 正在下载器件编程算法 .....
003: >——————————OK——————————<
004: ChipVer : 00
005: 芯片ID校验正确。
006: 开始读取芯片.....
007: 读取成功，用时：0.257秒。
008: 自动校验...
009: 校验成功，用时：0.258秒。
010: 缓冲区数据累加校验和：16位_0x2CE5，32位_0x01652CE5；
011: 用时：0.52秒，平均速率504123字节/秒。
012: >——————————OK——————————<
SOP16
液晶电视工具
参数设置
串口打印
教程查看
SN:20150910174332-044798

RT809H通用编程器，软件版本：20151110
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爱修，助力你的事业
智能识别 SmartID
ISP自动识别 AutoISP
缓冲区 Buffer
工具链面板 Toolchain
读取 Read
保存 Save
打开 Open
写入 Write
校验 Verify
擦除 Erase
查空 Blank
保护 Protect
取消 Cancel
输入芯片印字
历史记录
IT8580E
确定 OK
厂商
型号
ITE
IT8580E
010: 缓冲区数据累加校验和：16位_0x2CE5，32位_0x01652CE5；
011: 用时：0.52秒，平均速率504123字节/秒。
012: >——————————OK——————————<
013: 文件已载入，累加校验和：16位_0x2483，32位_0x00FE2483；
014: ChipVer : 00
015: 芯片ID校验正确。
016: 开始写入芯片.....
017: 自动擦除...
018: 擦除成功，用时：0.099秒。
019: 开始写入...
020: 写入成功，用时：4.802秒。
021: 自动校验...
022: 校验成功，用时：0.257秒。
023: 用时：5.08秒，平均速率51603字节/秒。
024: >——————————OK——————————<
SOP8
WIDE
液晶电视工具
参数设置
串口打印
教程查看
SN:20150910174332-044798

RT809H串行ISP编程器，软件版本：20160810

文件(F) 器件(D) 操作(P) 缓冲区(U) 设置(N) 工具(L) 帮助(H) 简体中文

爱修．助力你的事业

智能识别 SmartID | ISP自动识别 AutoISP | 缓冲区 Buffer | 工具链面板 Toolchain

读取 Read
保存 Save
打开 Open
写入 Write
校验 Verify
擦除 Erase
查空 Blank
设置线序 Set
取消 Cancel

输入芯片印字 | 历史记录 | 确定 OK

IT8985E

厂商 | 型号

ITE | IT8985E

```
001: 当前所选：IT8985E，容量：1M位，128K字节。
002: 正在下载器件编程算法 .....
003: 算法更新成功。
004: >————————————OK————————————<
005: 当前线序ASUS X551MA
006: IT8985 , Ver : 00 , FlashID: 0x5AF08313061
007: 芯片ID校验正确。
008: 开始读取芯片.....
009: 读取成功，用时：0.962秒。
010: 自动校验...
011: 校验完成，用时：0.963秒。
012: 缓冲区数据累加校验和：16位_0xC9C6 ，32位_0x0182C9C6 ；
013: 用时：1.935秒，平均速率135474字节/秒。
014: >————————————OK————————————<
```

液晶电视工具 | 参数设置 | 串口打印 | 教程查看

SN:20160629095622-004296

RT809H串行ISP编程器，软件版本：20160810

文件(F) 器件(D) 操作(P) 缓冲区(U) 设置(N) 工具(L) 帮助(H) 简体中文

爱修．助力你的事业

智能识别 SmartID | ISP自动识别 AutoISP | 缓冲区 Buffer | 工具链面板 Toolchain

读取 Read
保存 Save
打开 Open
写入 Write
校验 Verify
擦除 Erase
查空 Blank
设置线序 Set
取消 Cancel

输入芯片印字 | 历史记录 | 确定 OK

IT8985E

厂商 | 型号

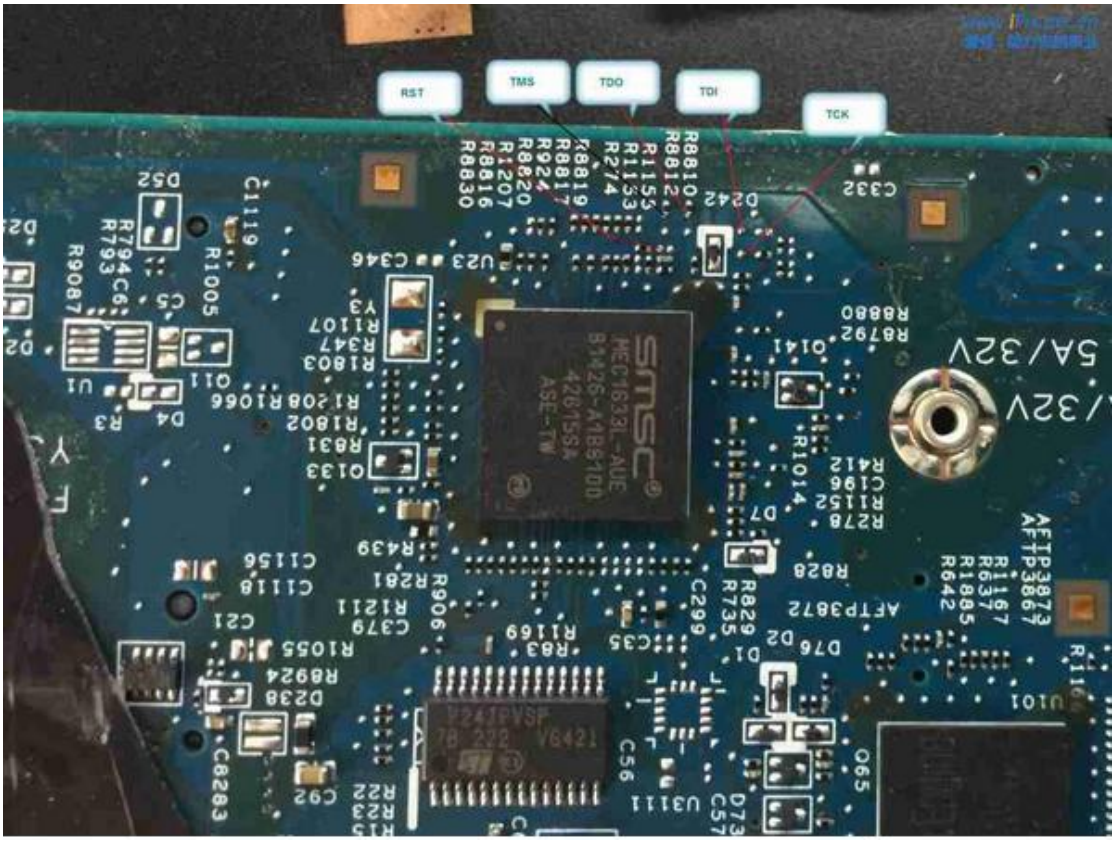
ITE | IT8985E

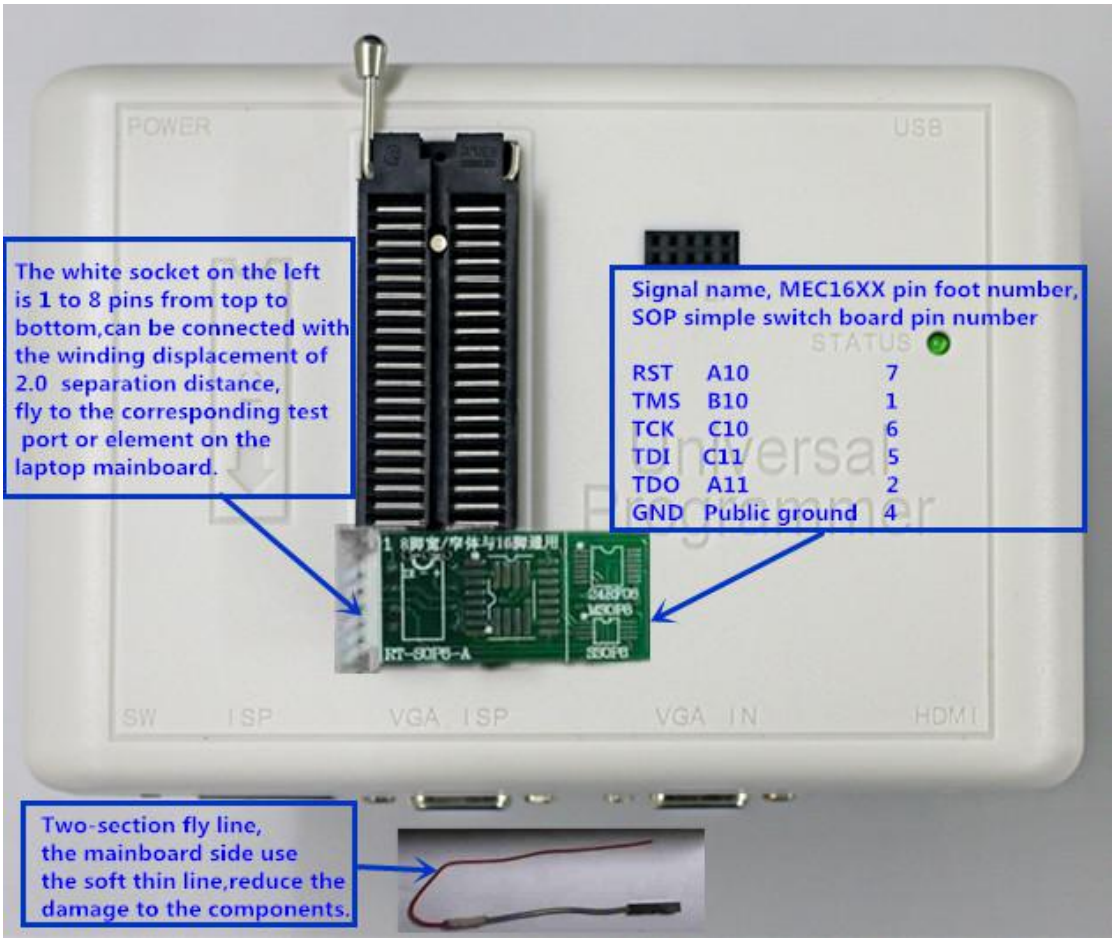
001: 当前所选：IT8985E，容量：1M位，128K字节。
002: 正在下载器件编程算法 .....
003: 算法更新成功。
004: >————————————OK————————————<
005: 当前线序ASUS X551MA
006: IT8985 , Ver : 00 , FlashID: 0x5AF08313061
007: 芯片ID校验正确。
008: 开始读取芯片.....
009: 读取成功，用时：0.962秒。
010: 自动校验...
011: 校验完成，用时：0.963秒。
012: 缓冲区数据累加校验和：16位_0xC9C6 ，32位_0x0182C9C6 ；
013: 用时：1.935秒，平均速率135474字节/秒。
014: >————————————OK————————————<

液晶电视工具 | 参数设置 | 串口打印 | 教程查看

SN:20160629095622-004296

Chapter 6 Laptop EC Chip MEC1633_MEC1609_MEC16 Series Flying Line Read-Write





Connect the test point with the simple socket with the wire.

RT809H编程器，软件版本：20161027
文件(F) 器件(D) 操作(P) 缓冲区(U) 设置(S) 工具(L) 帮助(H) 简体中文
爱修，助力你的事业
智能识别 SmartID
ISP自动识别 AutoISP
缓冲区 Buffer
工具链面板 Toolchain
读取 Read
保存 Save
打开 Open
写入 Write
校验 Verify
擦除 Erase
查空 Blank
保护 Protect
取消 Cancel
输入芯片印字
历史记录
MEC1633
确定 OK
厂商
型号
SMSC
MEC1633
RT809H 编程器
008: 缓冲区数据累加校验和：16位_0xEE46 ，32位_0x0160EE46 ；
009: 用时：9.834秒，平均速率53313字节/秒。
010: >——————————OK——————————<
011: 文件已保存。
012: 文件已载入，累加校验和：16位_0xF044 ，32位_0x0160F044 ；
013: MEC16xx Chip ID: 0x200024B1
014: 开始写入芯片.....
015: 自动擦除...
016: 擦除成功，用时：0.615秒。
017: 开始写入...
018: 写入成功，用时：17.85秒。
019: 自动校验...
020: 校验完成，用时：4.798秒。
021: 用时：23.3秒，平均速率22506字节/秒。
022: >——————————OK——————————<
液晶电视工具
参数设置
串口打印
教程查看
SN:20160928111508-057277

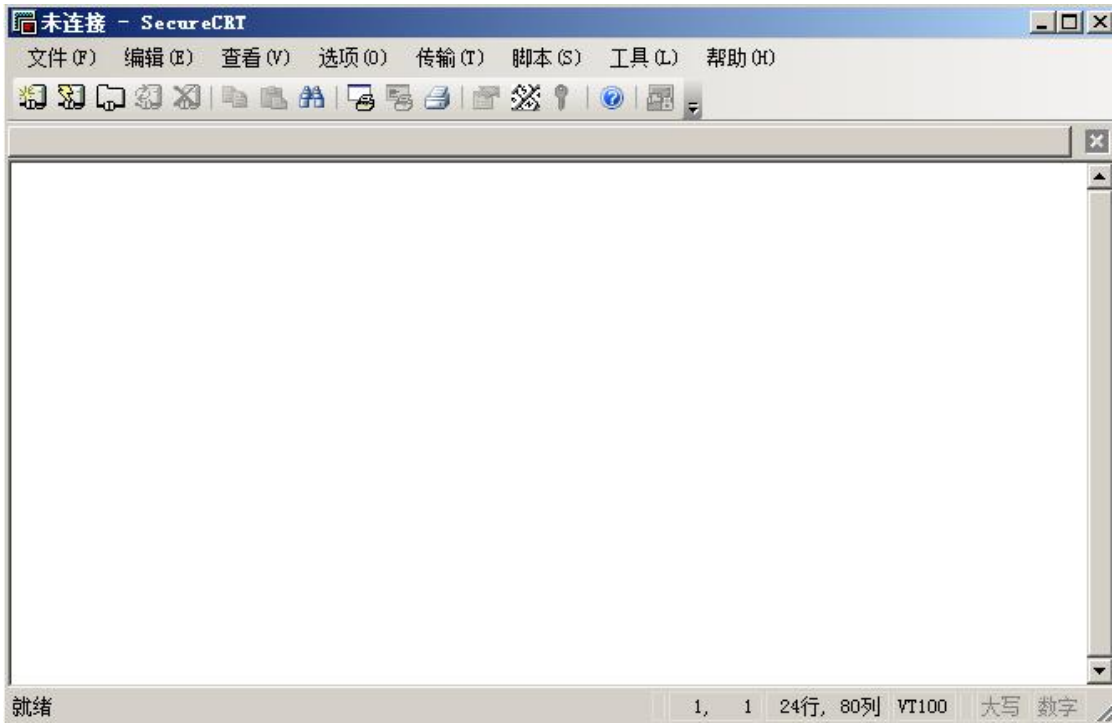
Chapter 7 Secure CRT Software Installation

Step 1 : Click

,the software appear;

Step 2 : Click

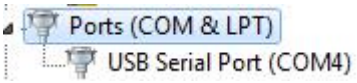
;



Step 3 : Click the “fast connect” icon in the middle in the following picture.

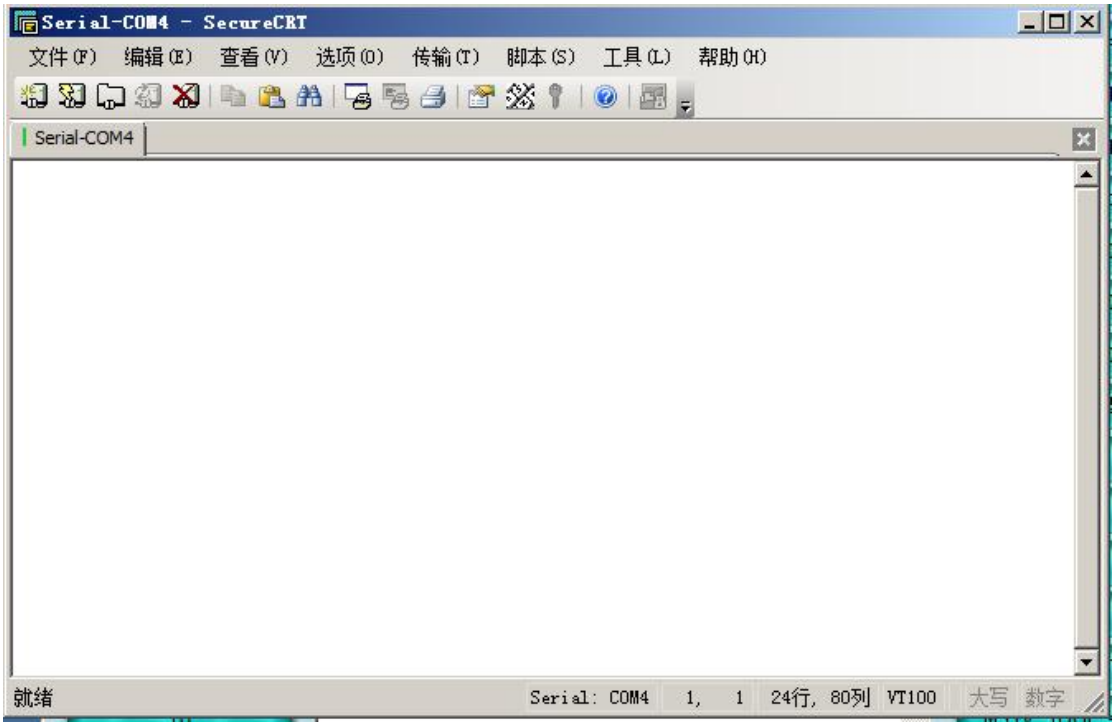
Step 4 : Choose “Serial” in the protocol;

Step 5 : The port should be selected the same with it in device manager;



Step 6 : After choosing click “Connect”,this computer use COM4,after finishing setting click “Connect”,once connect successfully there will be hint;

Connect normally:


Serial-COM4 - SecureCRT
文件(F) 编辑(E) 查看(V) 选项(O) 传输(T) 脚本(S) 工具(L) 帮助(H)
Serial-COM4
就绪
Serial: COM4 1, 1 24行, 80列 VT100 大写 数字

Chapter 8 Common Problem Diagnosis

8.1 Installing the software and driver unsuccessfully

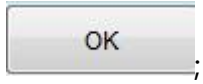
- First to ensure that the hardware configuration can not be too low,there must be enough space in D disk;
- Try the best to use Inter CPU computer,the compatibility of AMD CPU is not good.
- Change the different versions of operation system please try best to use the pure operation system;
- Close the similar software like antivirus software or computer keeper in the computer;
- Install correctly according to the hint in the instruction.

8.2 Programmer Unconnected with the Mainframe

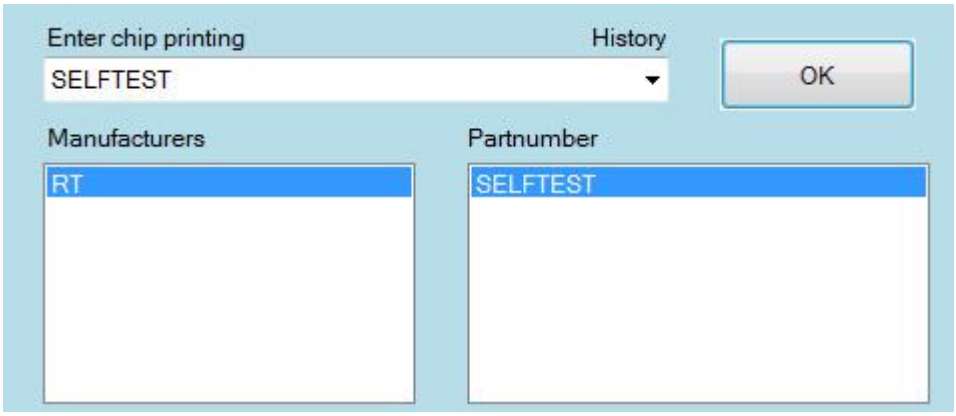
- Use the original USB line;
- Please connect the USB2.0 port,some chip can’ t be brushing written through USB3.0 port;
- AS the desktop computer,please use red 5V power-supply USB port,the purple one can’ t supply enough power.

8.3 The use of programmer selftest command,to check if there is problem itself.

8.3.1 Selftest way 1:

Step 1 : Input the “SELFTEST” in the “Enter chip printing”,click 

;



Step 2 : Click

,look at the hint in the display area,” selftest 0” means the test pass;

```
014: Start reading chip.....
015: Buffer data checksum: 16bits_0x1BE4 ， 32bits_0x00001BE4 :
016: SelfTest 0 test pass
017: Elapsed time: 1.906 seconds，average speed of 69 bytes/sec.
018: >----------------------------------OK----------------------------------<
```

Step 3 : Install the NO.1 test board and the short port of VGA ISP(short circuit the 4pins and 11pins,12pins and 15pins);

Step 4 : Click

,check the hint in the software,it will hint “Selftest 1,test pass”；

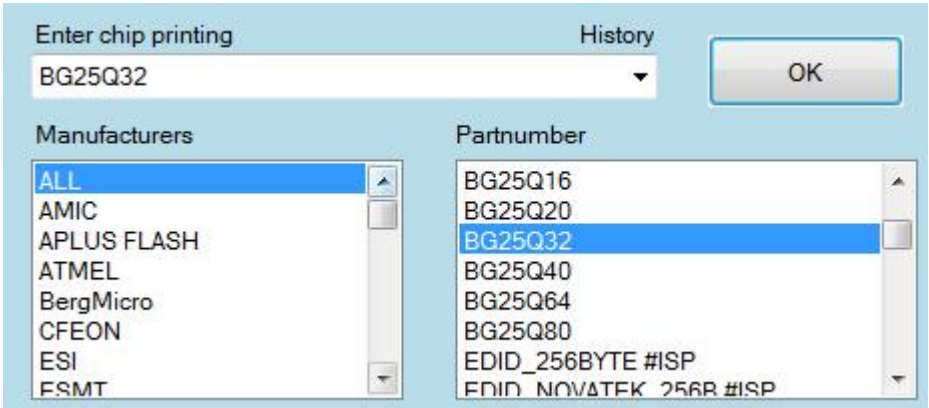
```
011: 开始写入芯片.....
012: 缓冲区数据累加校验和：16位_0x18F6 ，32位_0x000018F6 ；
013: 自检1.测试通过
014: 用时：1.283秒，平均速率102字节/秒。
015: >----------------------------------OK----------------------------------<
```

Step 5 : Install the NO.2 Self Test Board;

Step 6 : Click ,check the hint in the software,it will hint “Selftest 2, test pass”;

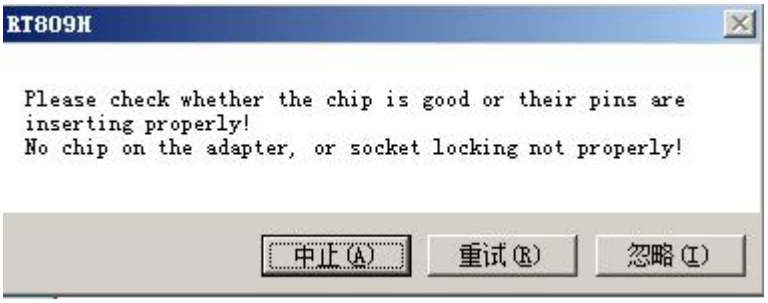
8.3.2 Selftest way 2 :

Step 1 : When there is no chip on the locking seat,input the type of 25XX in “Enter Chip Printing”;



Step 2 : Click

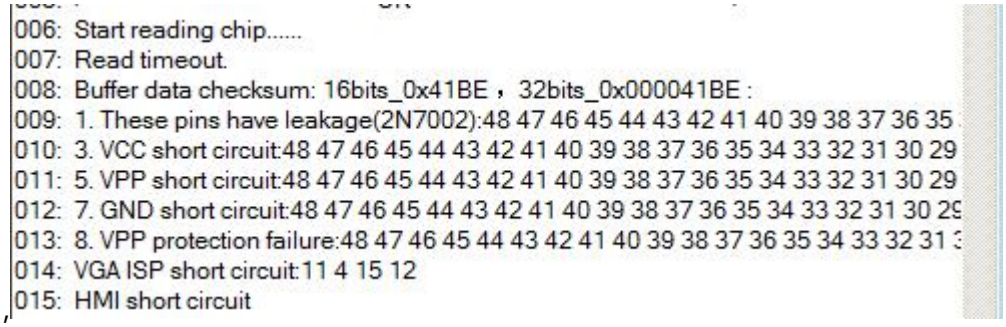
,it will hint that there is no chip or the locking seat hasn’ t been impacted well,which is normal;



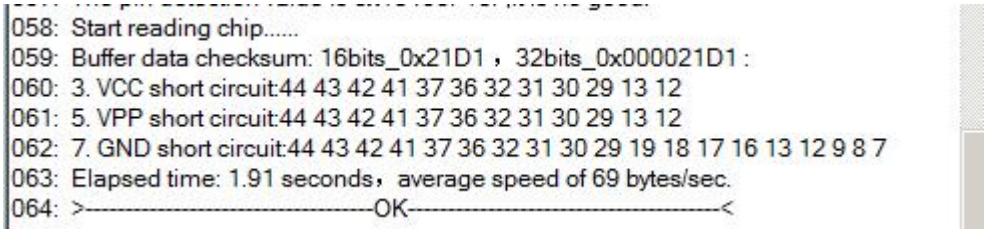
If it hints that there may be a pin empty solder;

Attention : In the case of that some users have no test board,as long as the selftest 0 and 25 chip test pass,the machine is normal.

If there is other hints when doing selftest 0,the way to deal with it could be as following:



- The problem of connection with computer and the programmer,please step-by examine according to the hint of failure process;



- Hardware trouble like pin electric leakage,problems inside the pins,VPP open circuit,GND open circuit,VPP short circuit,VCC short circuit,GND short circuit,VPP protection not shut off,which must be returned to factory to repair.

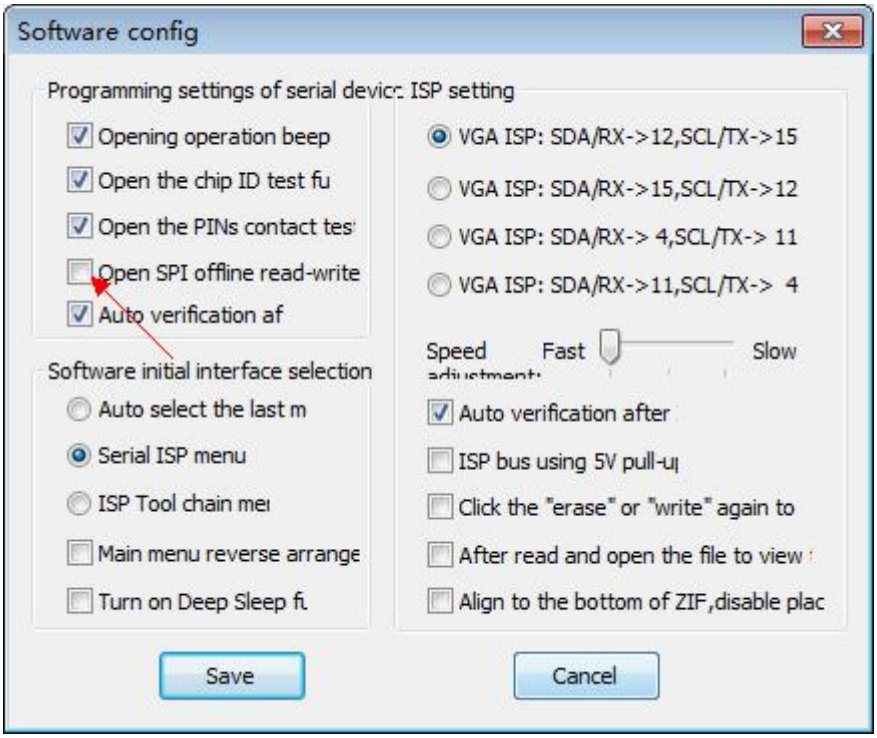
8.4 The Method of Solving the Problem When reading 25XX,24XX,93XX

The programmer do the self test;
Original USB line;
Make sure of the enough power supply of 5V (red line) for the desktop computer;
With nice 24XX,25XX,93XX chips(a new one is not always the nice one);
Use the simple board to replace the bounce seat,clean the welding paste after welding.

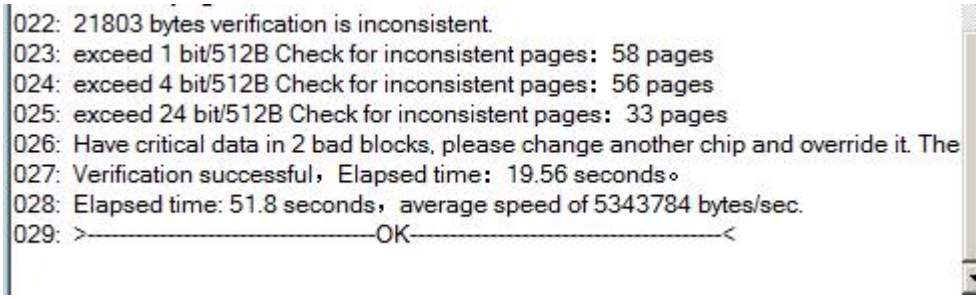
Cancel the √ of

in the programming setup options,click

;



The problem easy to appear when reading NAND chip : byte verify inconformity.



8.4.1 Handling Method

Don’ t use the NAND AUTO when there is other choice;

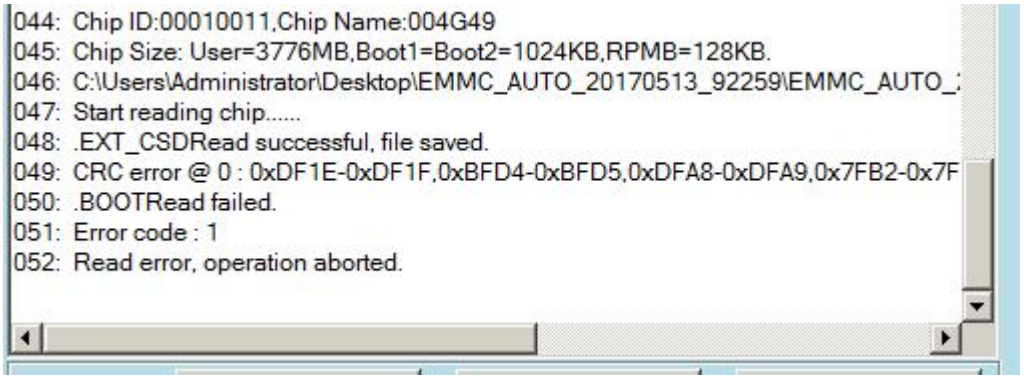
The chips pins dispose : 90% of the broken chips because of the not enough cleaning;

Weld on the simple board instead of bounce seat(must be cleaned up);

Remember to grinding the chips(with the same type,different ID)

Pay attention to the suffix of the Samsung chip(it’ s unusable with same type but different suffix)

8.5 The Method to Solve the Problem of Off-line Read and Write EMMC



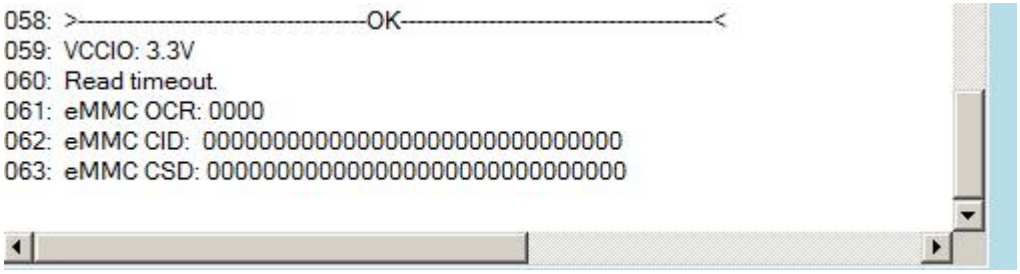
Step 1 : The EMMC must make planting-beads and wipe up the tin beads with the newspaper,and also change the VCCQ voltage in the setting;

Step 2 : If the EMMC_AUTO_8BIT can’ t work,use the EMMC_AUTO_4BIT to have a try;

If it can’ t work by reading four areas on the left,try to read a area alone;

Exchange the chip of same type to try(make sure of the chip well or not);

Fly line reading EMMC mistake:



Step 3 : Make sure of the length of the flying line in 10CM;

If the signal line and EMMC key port connect correctly;

If the EMMC power supply is normal,it is generally 3.3V or double power of 3.3V and 1.8V;

If the main chip has stopped working(power supply,clock,restoration),complete one is OK;

Or remove the resistance connecting with the signal line,weld the fly line on the welding pad beside to EMMC;

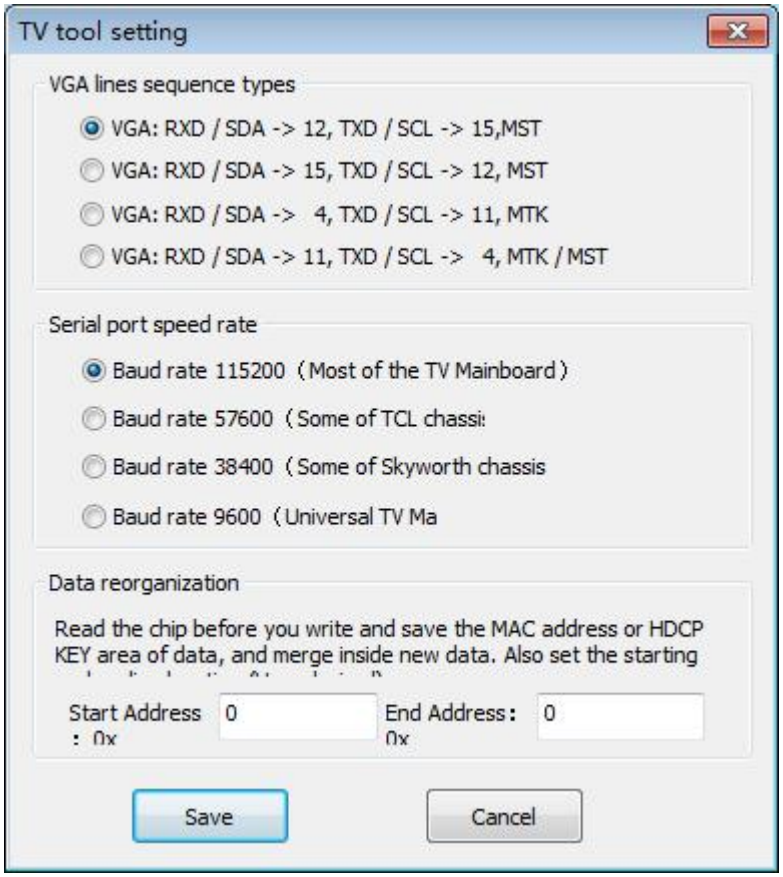
The EMMC chip damage itself : The reading has not finished(half or more),try more times to see if it’ s the same position every time.

The EMMC chip damage itself(find the mainboard with same chip);

Clean away the external interference(obvious for desktop computer) : electric soldering iron on-off,light on-off,etc.

8.6 The Method to Deal with the LCD Mainboard Printing Information Messy Code

Most reason is the wrong Baud rate,please choose these four Baud rate to have a try:


TV tool setting
VGA lines sequence types
VGA: RXD / SDA -> 12, TXD / SCL -> 15,MST
VGA: RXD / SDA -> 15, TXD / SCL -> 12, MST
VGA: RXD / SDA -> 4, TXD / SCL -> 11, MTK
VGA: RXD / SDA -> 11, TXD / SCL -> 4, MTK / MST
Serial port speed rate
Baud rate 115200 (Most of the TV Mainboard)
Baud rate 57600 (Some of TCL chassi
Baud rate 38400 (Some of Skyworth chassis
Baud rate 9600 (Universal TV Ma
Data reorganization
Read the chip before you write and save the MAC address or HDCP KEY area of data, and merge inside new data. Also set the starting
Start Address : 0x
0
End Address: 0x
0
Save
Cancel

Technical support way : Repairing forum : http://www.ififorumx.net.cn(Ifix)
Present 1000 points after buying RT809H to download the data.
Technical support TEL : +86 13600024226
Technical support WeChat：+86 13600024226
Technical support QQ : 113536588

Guarantee clause :

RT809H has a year of free maintenance service from the date of purchase, the following is not in the scope of free maintenance ——

1.

1.Man-made damage（Connect the wrong plug,appearance broken）；
2.The external equipment damage（Electric leakage of computer USB,the repairing board damage badly or electric leakage）；
3.Irresistible force（Lightning stroke or earthquake or other natural disaster）；
4.Out of the warranty（Unable to provide the purchase date，warranty of 15 months according to the date of the serial number）；
5.The machine which need to pay for repairing,you just need to pay for the parts but not service.

Editor's Note：Although we try to do our best ,but, error is inevitable.If you find some mistake,Welcome to contact us, we expressed the sincere thanks..