HF-LPB120/HF-LPT120/HF-LPT220/ HF-LPB125/HF-SIP120 Wi-Fi Module Upgrade and Debug

Overview

HF-LPB120/HF-LPT120/HF-LPT220 Wi-Fi module support upgrade via serial port and mass production tools

1. Upgrade application via serial port
2. Upgrade via HFUpdate tools：

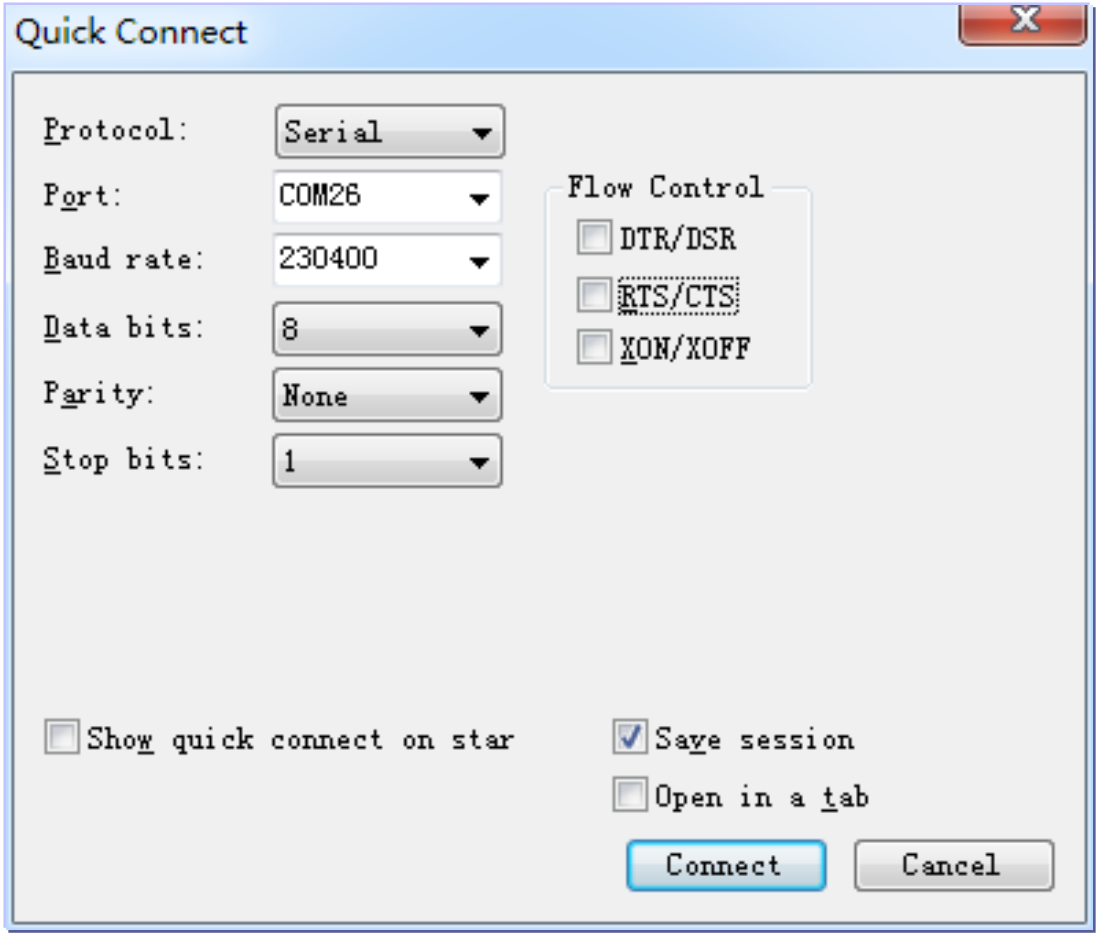
   The upgrade file is different via serial port or via HFUpdate tools. We define file name with UPGRADE is used for HFUpdate tools upgrade, for example：

LPB120_HFV2.01_20_2MB_20151216 ： is for serial port upgrade

LPB120_**UPGRADE**_HFV2.01_2MB_20151216_20 ： is for HFUpdate tools and OTA upgrade. It add CRC checksum which is useful for OTA upgrade application.

1. Upgrade application via serial port

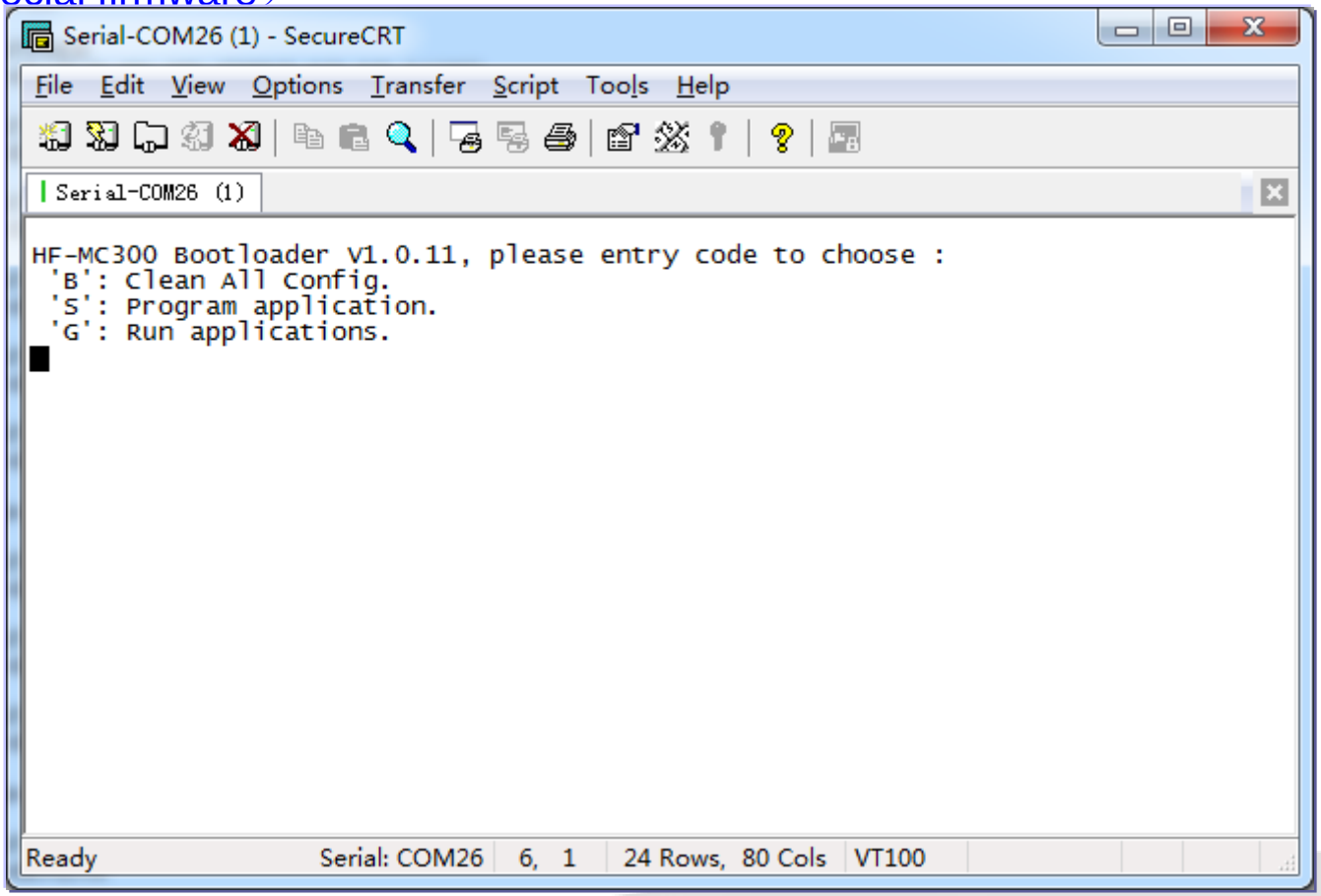
Open SecureCRT and set serial port communication parameters: 230400,8,1,none



Enter bootloader

Press down(Do not up) nReload Button on EVK and click nReset button or power up the module, then click space key on keyboard instantly（It should be within 1 second after device boot up）. The module is in bootloader for the following information output.(debug UART1 does not support booltoader, only UART0 support this)

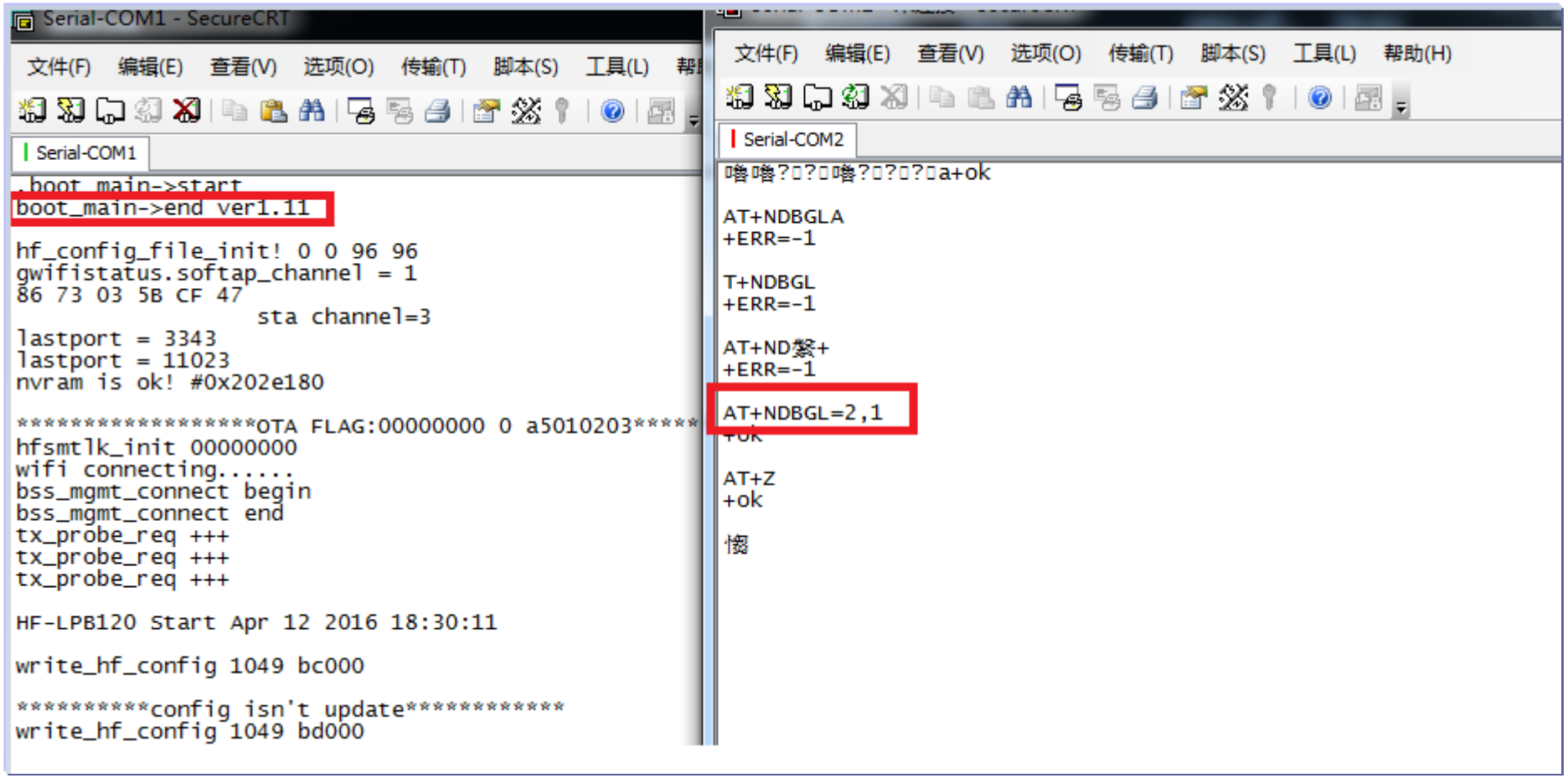
Note： that the current software should be at least 2.0.01-20 or above,(AT+VER to check the version). If the software version is very old, use AT+OTA command to upgrade the bootloader.（Contact us to get the bootupgrade special firmware）



Enter bootloader

Note: May check bootloader version(from debug UART1) to confirm that the module support enter bootloader mode, the version at least need version 11.

For 2.0.07-3 or above firmware, use AT+BVER to check bootloader version



Command

Command List：

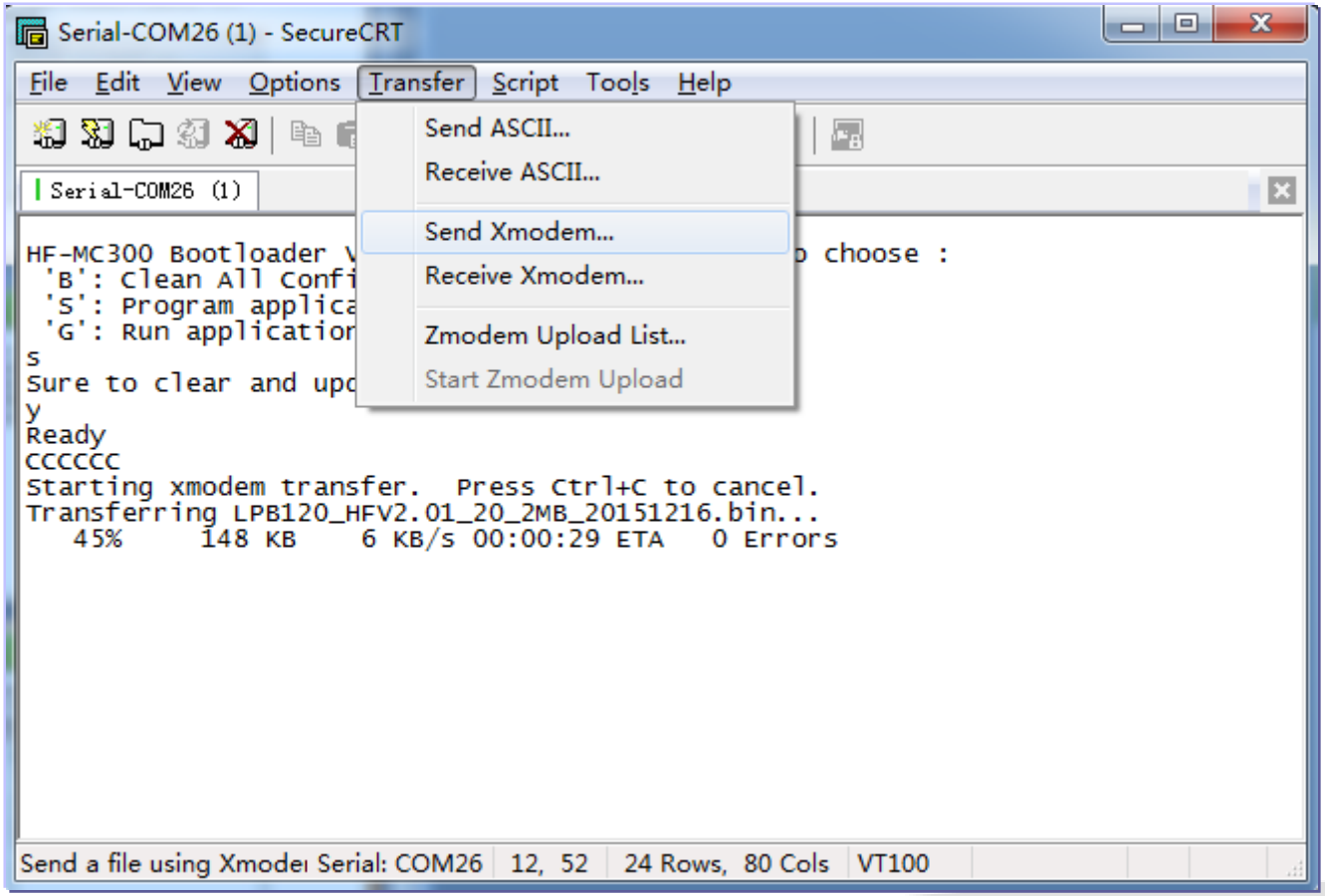
‘B’：Clear all setting parameter.(boot 1.14 support this feature)

‘S’：Upgrade application; Usually only need to upgrade this. For example: LPB120_HFV2.01_20_2MB_20151216

‘G’：Run application.

Upgrade Process

Press ’S’ to upgrade application，the screen show Ready, waiting for show ‘C’, then transfer upgrade file with Xmodem



2. Upgrade application via HFUpdate tools

Download HFUpdate mass production tools from High-Flying website. Open the tools and load the upgrade file.

Method One: Config module and PC connecting to the same router(Use Smartlink V7 or AT command), input AT+OTA command to execute the upgrade process.

AT+WMODE=STA

AT+WSSSID=XXXXX

AT+WSKEY=WPA2PSK,AES,12345678

AT+Z

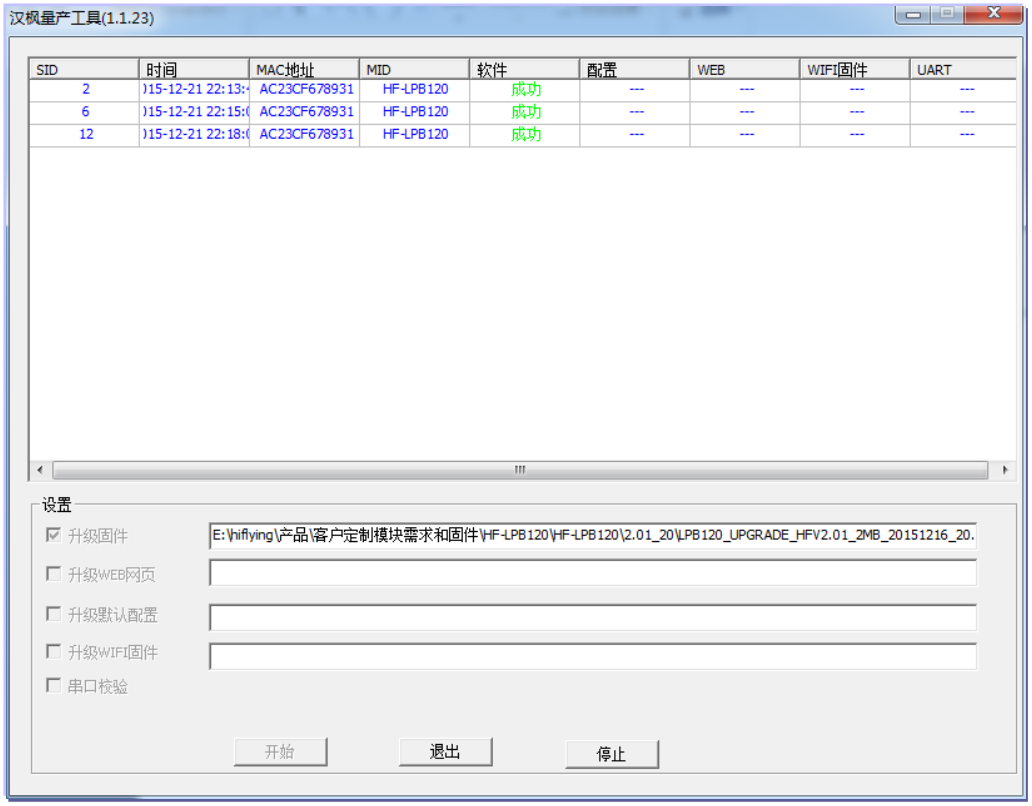
Then AT+WANN or AT+WSLK to check connection.

Method Two: PC connect to the predefined router(SSID:UPGRADE-AP, no key), press down the nReload button of module then reset or power on, then the module will execute upgrade process automatically.

Refer to the tools manual for the detailed operation.

2. Upgrade application via HFUpdate tools

Tools download address：
http://www.hi-flying.com/download_detail_dc/&downloadsId=07bc0a59-0a0d-4fb4-a5e5-c3403f09ab08.html
SmartLink V7 download address：
Android：http://www.hi-flying.com/download_detail_dc/&downloadsId=9a0d0290-477e-4184-8636-18510eaed6b1.html
Ios：http://www.hi-flying.com/download_detail_dc/&downloadsId=5cc0c241-77b4-48c1-bf9c-2ad2954b3b50.html
Note：
The PC network firewall must be turned off or using HFUpdate Tools.



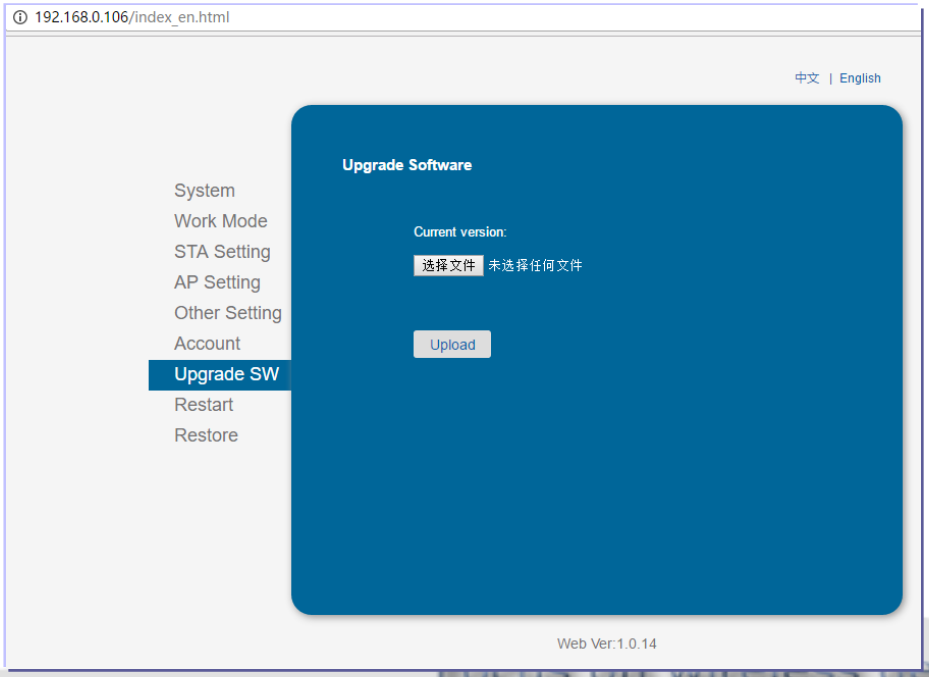
3.Webpage upgade

Module firmware 2.0.09-6 support webpage config and upgrade.

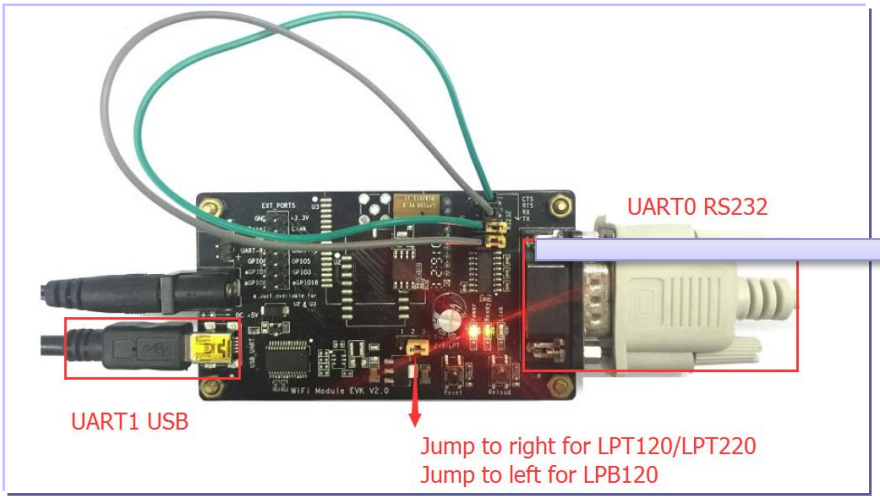
1、Connect to module AP(10.10.100.254) or use STA IP of module(connect to router already), input IP/iweb.html to enter the internal webpage to upgrade the external webpage(webpage.html file) or upgrade the firmware.

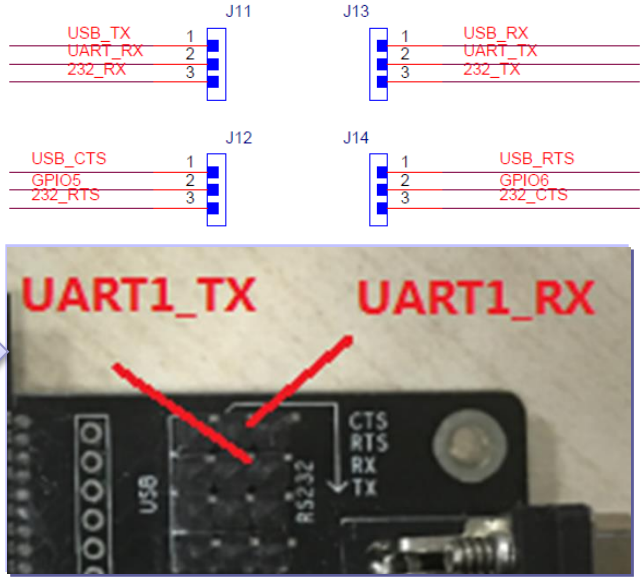
2、Due to the previous version does not support webpage, so this webpage function must upgrade to 2.0.09 version via the previous way, then upgrade the external webpage to use this webpage function

3、After upgrade success, manually reboot to make the new firmware or webpage valid



3.UART1 Debug Output





The up left is the origin
(1,1)
(1,1) USB_RTS
(1,2) GPIO6(UART1_RX)
(1,3) 232_CTS
(2,1) USB_CTS
(2,2) GPIO5(UART1_TX)
(2,3) 232_RTS
(3,1) USB_TX
(3,2) UART0_RX
(3,3) 232_RX
(4,1) USB_RX
(4,2) UART0_TX
(4,3) 232_TX

Connect the header as the above picture. The right side of RS232(UART0) is usually used for device communication, the left side USB(UART1) is used for debug information output(The FT232 driver can be download from our website http://www.hi-flying.com/download_detail_dc/downloadsId=108.html)

AT+NDBGL=2,1 enable UART1 debug information output(May input AT command with UART1)，AT+NDBGL=0 to turn off the debug information output. See LPB120 user manual for detailed AT command.

The latest 2.0.09-6 firmware UART1 function is closed by default. If need output the log information, enable it by AT+NDBGL=1,1 via UART0 and then reboot.