YC99T reload the firmware for used instrument

Note: The operation base on Windows XP/ Windows 7/10 or above

Main control board firmware writing

File list of system

- x-load.KD
- x-load.KS
- mini_ubi.img
- u-boot.bin
- uImage
- ubi.img

PC software

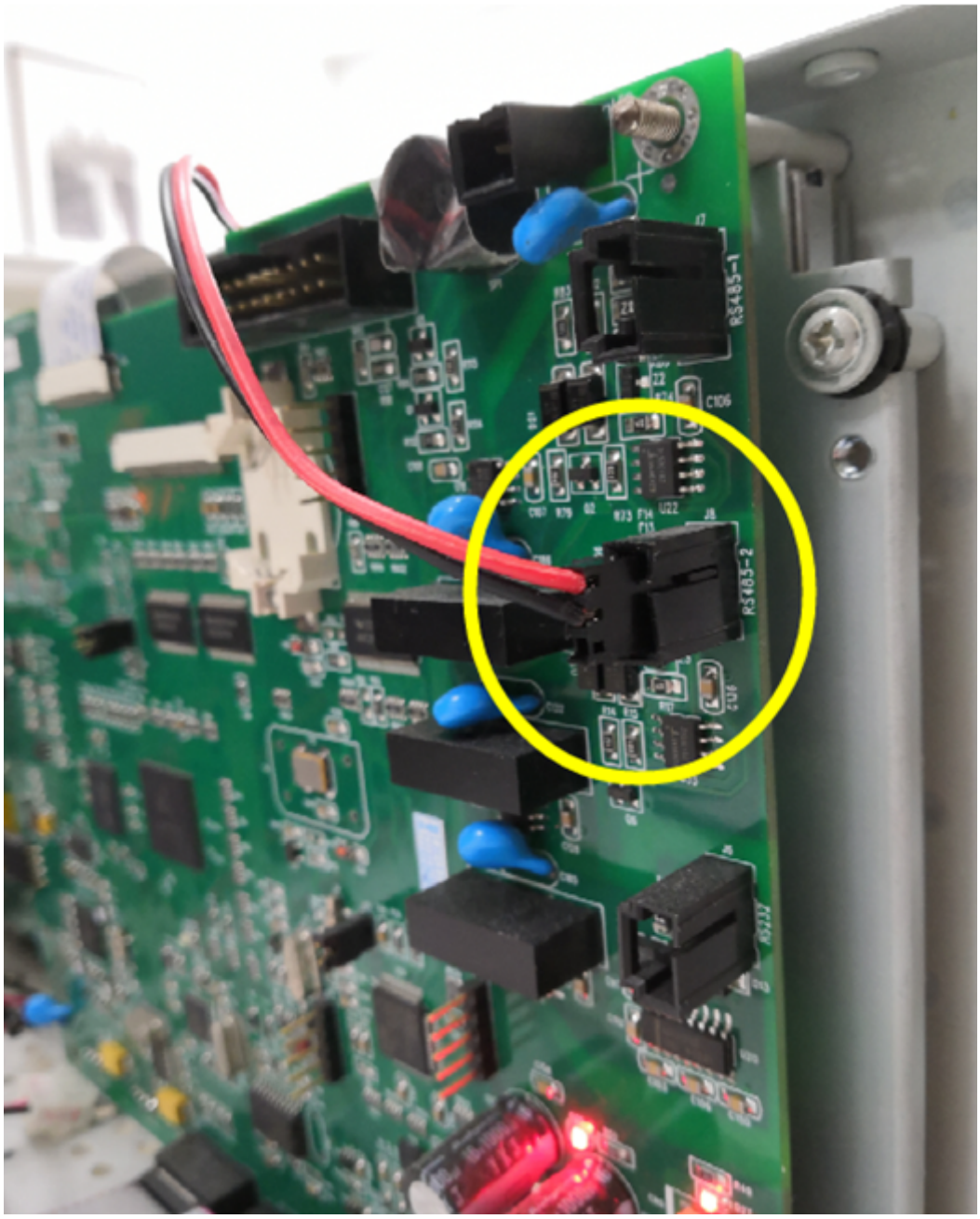
- putty.exe
- tftpd32.exe

Firmware writing process

Preparation

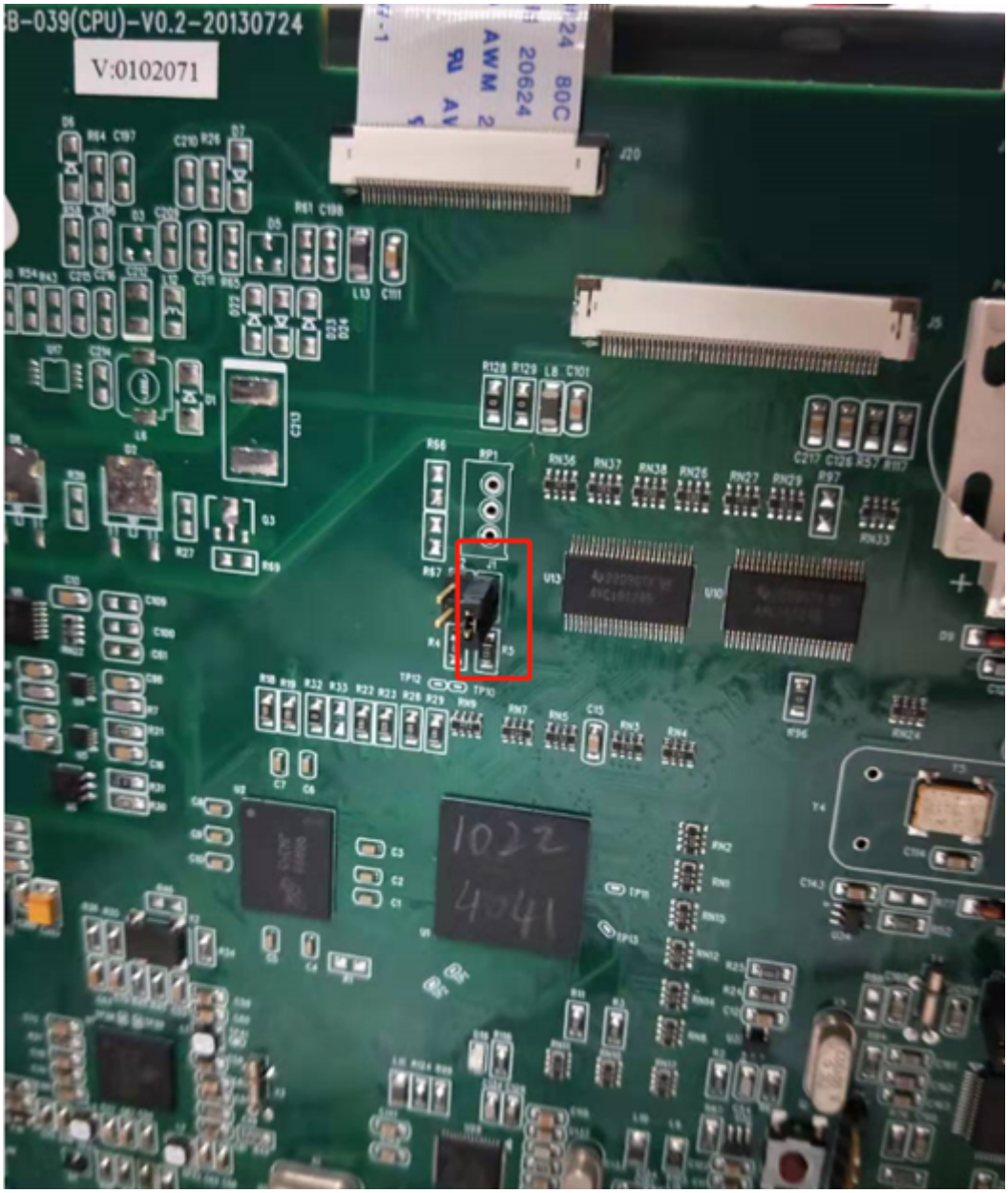
- YC99C-5T need an RS485 connection cable，recommend to use RS232-RS485 converter，RS232 end connect to PC，RS485 end connect to 99C-5T，99C-5T end the main board has a three pins connector, two of the pins are used for connection. Showed as photo below,

- Connect Rs485 wire to the J8 connector of 99T main board, meanwhile computer internet cable show be connect to 99T.

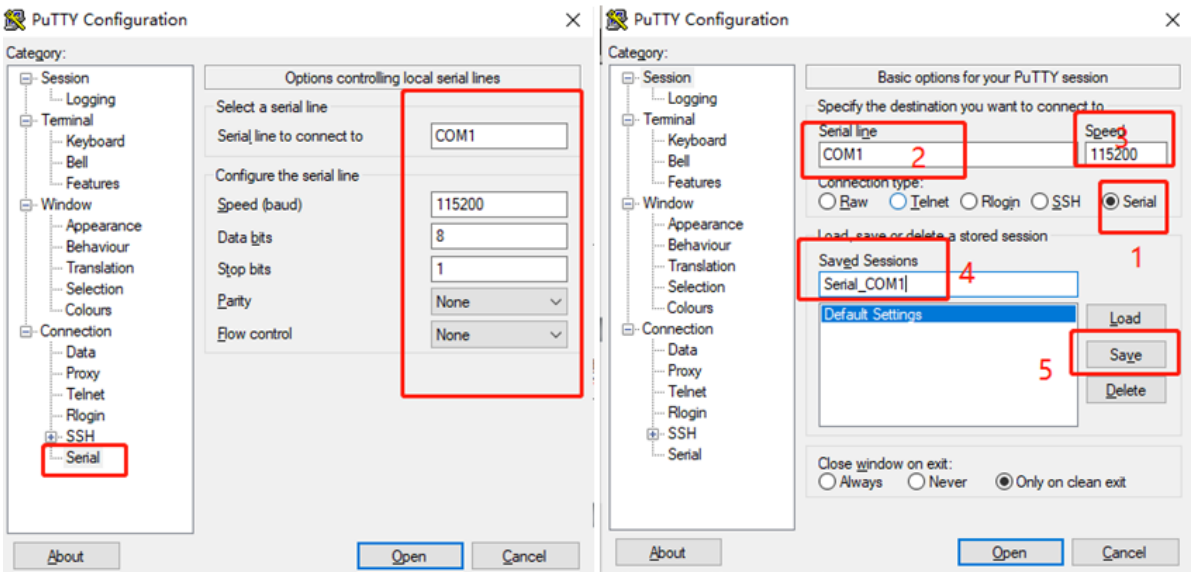


Note: only connect two pins

- **Remove** the short cap J1 on main board

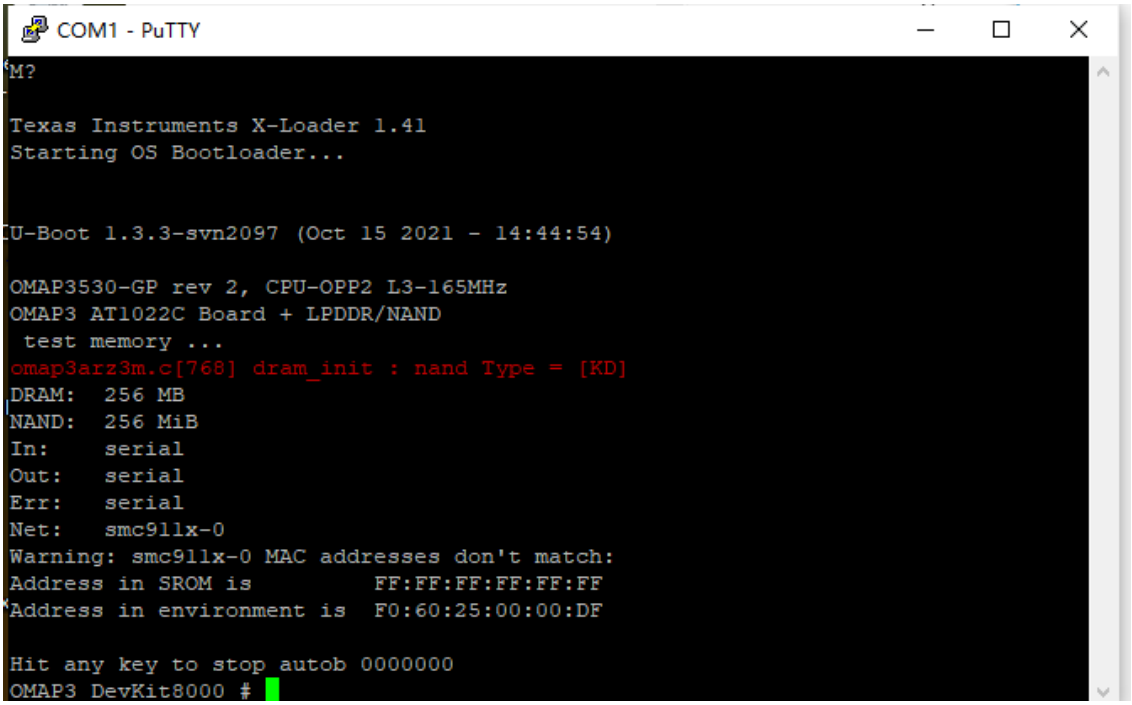


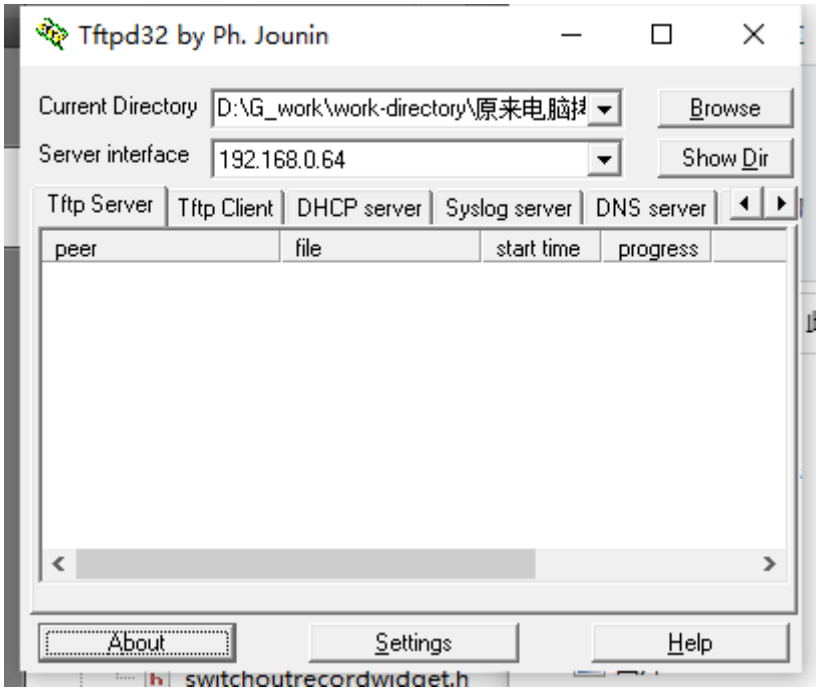
- Set computer internet IP as: ***192.168.0.64***
- Close all the other serial port related software (**very important!**).
- Connect to the RJ45 cable (the computer is directly connected to the instrument, or both are connected through the router)
- Setup putty software: create a new session. The setting as follow: (Comport was select according to the PC comport)



Write CPU

- Open the putty window, select Serial_COM1, click open; Power on the instrument and press Enter several times until it says "OMAP DevKit 8000#" as shown in the following figure, and start the tftp32 server at the same time, Note: Two software must be turned on, one less program cannot be burned.





- **Input the command to write CPU, format as follow,**

  upgrade_tftp [server IP] [Mother board IP] [ID]

```
[Server IP]: Computer IP addresses. For example like the photo above 192.168.0.64
[Mother board IP]: can be set to 192.168.0.10 (Has set to the same network
segment as server IP, the last digit can set it randomly without conflict with
Server IP and smaller than 255)
[ID]:  Randomly set, for example 1 , 2, 33, (use as the mac address in the u-
boot)

ID could be a 10 Decimal system or a Hexadecimal number, and the program will
convert it automatically.
 For example:  upgrade_tftp 192.168. 0.88 192.168. 0.10 23
upgrade_tftp 192.168. 0.88 192.168. 0.10 0x65
```

Run **upgrade_tftp 192.168.0.88 192.168.0.10 33**, the write CPU progress will start automatically.

The overall process will last for about 5 mins. No human interruption is needed. After finish the process, the equipment will reboot automatically.

Note: After the programming is completed, the power is cut off and J1 is shorted with a jumper cap.