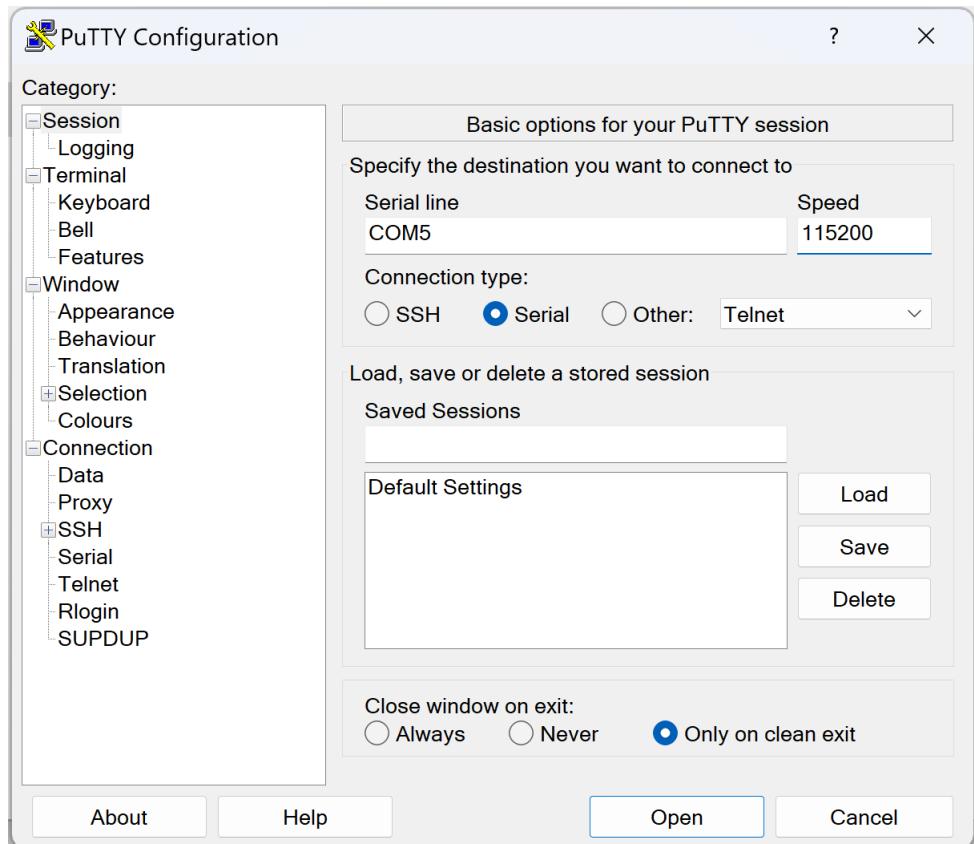


How to burn the firmware to flash

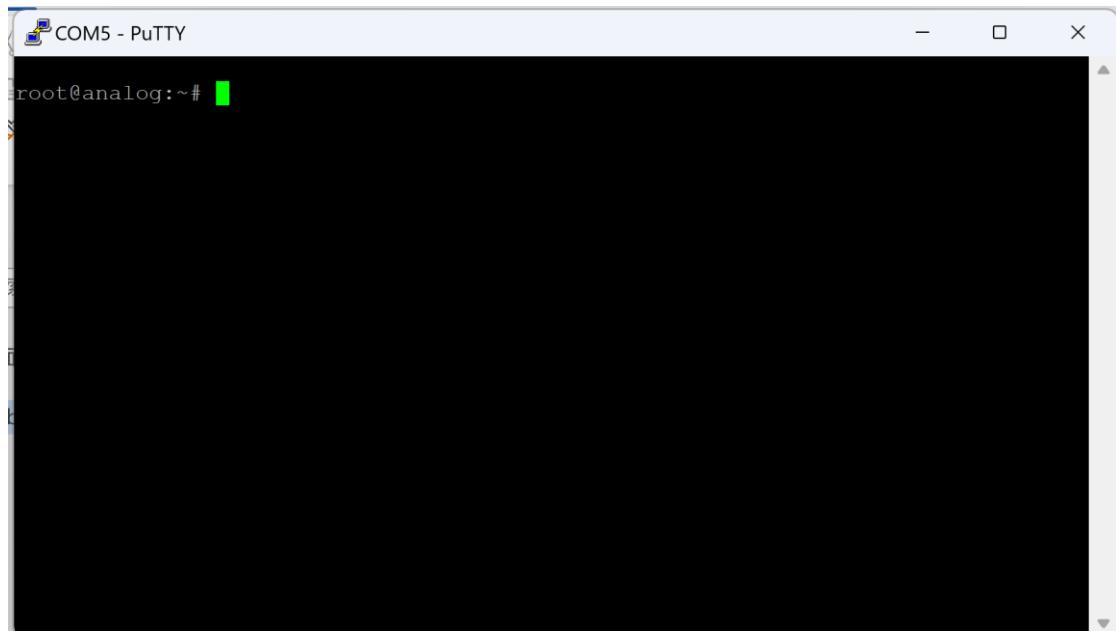
1. Get the file all we need;
2. Install the install_digilent.exe;
3. Reboot the computer;
4. Cope the burn_flash folder to the sd card;
- 5.
6. Insert the SD card into the module and connect to the computer through the debug port
7. Find the uart port;



- 8.
9. Use the 2ed port as an console;
10. Open the putty



- 11.
12. Click the open
13. Type the end we will get an linux console;



- 14.
15. Enter commands
 - mount /dev/mmcblk0p1 /mnt
 - cd /mnt/burn_flash
 - chmod +x autoconfig.sh
 - ./autoconfig.sh

➤

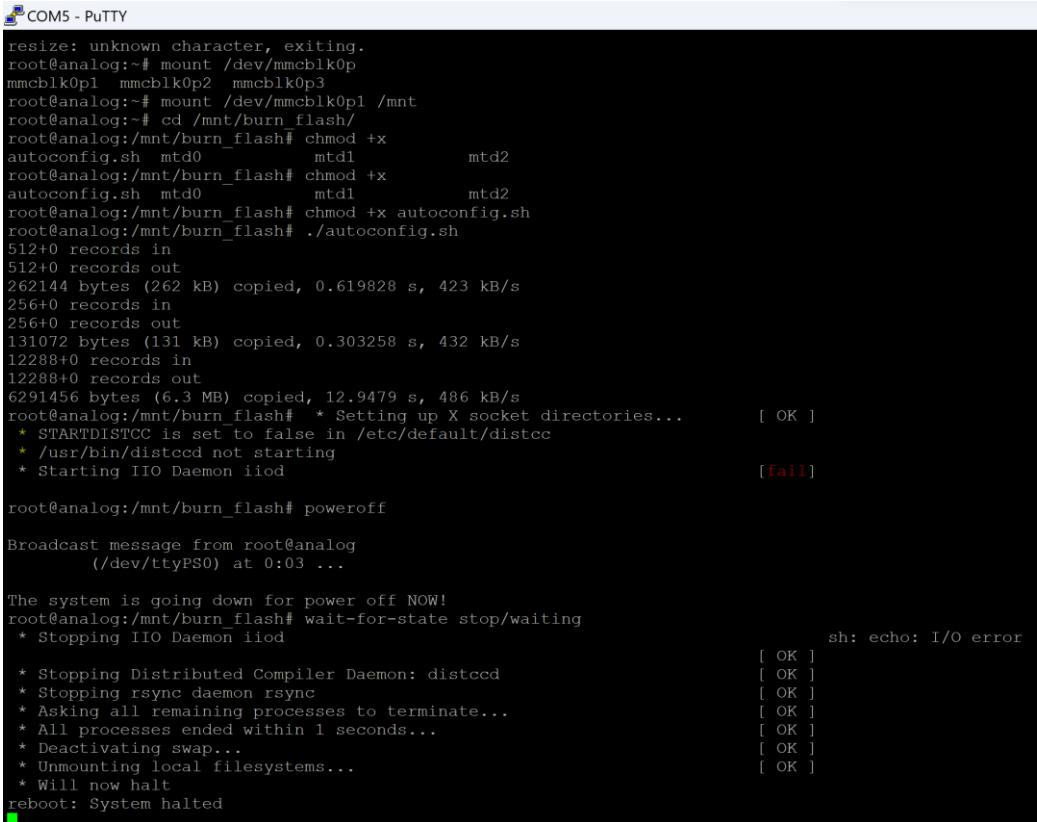
➤

```
root@analog:~# mount /dev/mmcblk0p1 /mnt
root@analog:~# cd /mnt/burn_flash/
root@analog:/mnt/burn_flash# chmod +x
autoconfig.sh mtd0          mtd1          mtd2
root@analog:/mnt/burn_flash# chmod +x
autoconfig.sh mtd0          mtd1          mtd2
root@analog:/mnt/burn_flash# chmod +x autoconfig.sh
root@analog:/mnt/burn_flash# ./autoconfig.sh
512+0 records in
512+0 records out
262144 bytes (262 kB) copied, 0.619828 s, 423 kB/s
256+0 records in
256+0 records out
131072 bytes (131 kB) copied, 0.303258 s, 432 kB/s
12288+0 records in
12288+0 records out
6291456 bytes (6.3 MB) copied, 12.9479 s, 486 kB/s
root@analog:/mnt/burn_flash# █
```

16.

17. Wait for complete;

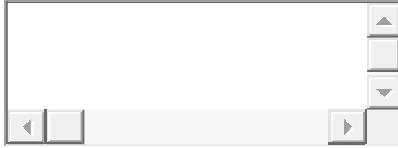
18. Enter the poweroff command



```
COMS - PuTTY
resize: unknown character, exiting.
root@analog:~# mount /dev/mmcblk0p1
mmcblk0p1 mmcblk0p2 mmcblk0p3
root@analog:~# mount /dev/mmcblk0p1 /mnt
root@analog:~# cd /mnt/burn_flash/
root@analog:/mnt/burn_flash# chmod +x
autoconfig.sh mtd0          mtd1          mtd2
root@analog:/mnt/burn_flash# chmod +x
autoconfig.sh mtd0          mtd1          mtd2
root@analog:/mnt/burn_flash# chmod +x autoconfig.sh
root@analog:/mnt/burn_flash# ./autoconfig.sh
512+0 records in
512+0 records out
262144 bytes (262 kB) copied, 0.619828 s, 423 kB/s
256+0 records in
256+0 records out
131072 bytes (131 kB) copied, 0.303258 s, 432 kB/s
12288+0 records in
12288+0 records out
6291456 bytes (6.3 MB) copied, 12.9479 s, 486 kB/s
root@analog:/mnt/burn_flash# * Setting up X socket directories... [ OK ]
* STARTDISTCC is set to false in /etc/default/distcc
* /usr/bin/distccd not starting
* Starting IIO Daemon iiod [ fail ]
root@analog:/mnt/burn_flash# poweroff
Broadcast message from root@analog
(/dev/ttys0) at 0:03 ...
The system is going down for power off NOW!
root@analog:/mnt/burn_flash# wait-for-state stop/waiting
* Stopping IIO Daemon iiod sh: echo: I/O error
[ OK ]
* Stopping Distributed Compiler Daemon: distccd [ OK ]
* Stopping rsync daemon rsync [ OK ]
* Asking all remaining processes to terminate... [ OK ]
* All processes ended within 1 seconds... [ OK ]
* Deactivating swap... [ OK ]
* Unmounting local filesystems... [ OK ]
* Will now halt
reboot: System halted █
```

19.

20.



- 21.
22. Congratulations, you have completed 99% of the work

23. Install the pluto driver [Windows Drivers \[Analog Devices Wiki\]](#)

24. Connect the module use the otg port;

Update using DFU mode

How to update the firmware using DFU mode? How to rewrite the default uboot environment?

Windows

The PlutoSDR/M2k driver package bundles also a dfu utility. There is a windows command console batch script called [UPDATE.BAT](#) which eases the update procedure.

1. Download and save [UPDATE.BAT](#)
2. Download and unzip the latest PlutoSDR respectively M2k release
 1. [PlutoSDR Release](#)
 2. [M2k Release](#)
3. Open a windows command prompt
4. Execute UPDATE.BAT with the path to the pluto.dfu or m2k.dfu file. (In case you need to rewrite the default uboot environment the use the uboot-env.dfu file)
5. Wait for the script to complete

25.

26. [Pluto/M2k Firmware Updates \[Analog Devices Wiki\]](#) **Update the firmware ! provided with UPDATE.BAT**

```
Windows PowerShell
版权所有 (C) Microsoft Corporation。保留所有权利。
安装最新的 PowerShell，了解新功能和改进！https://aka.ms/PSWindows
PS C:\Users\81246\Desktop\烧写flash> .\UPDATE.BAT .\plutosdr-fw-v0.37-dirty\pluto.dfu
dfu-util 0.9

Copyright 2005-2009 Weston Schmidt, Harald Welte and OpenMoko Inc.
Copyright 2010-2016 Tormod Volden and Stefan Schmidt
This program is Free Software and has ABSOLUTELY NO WARRANTY
Please report bugs to http://sourceforge.net/p/dfu-util/tickets/

Opening DFU capable USB device...
ID 0456:b674
Run-time device DFU version 0110
Claiming USB DFU Interface...
Setting Alternate Setting #1 ...
Determining device status: state = dfuIDLE, status = 0
dfuIDLE, continuing
DFU mode device DFU version 0110
Device returned transfer size 4096
Copying data from PC to DFU device
Download      [=          ]    4%        499712 bytes|
```

27.

28. Wait for a moment

```
Windows PowerShell
版权所有 (C) Microsoft Corporation。保留所有权利。
安装最新的 PowerShell，了解新功能和改进！https://aka.ms/PSWindows
PS C:\Users\81246\Desktop\烧写flash> .\UPDATE.BAT .\plutosdr-fw-v0.37-dirty\pluto.dfu
dfu-util 0.9

Copyright 2005-2009 Weston Schmidt, Harald Welte and OpenMoko Inc.
Copyright 2010-2016 Tormod Volden and Stefan Schmidt
This program is Free Software and has ABSOLUTELY NO WARRANTY
Please report bugs to http://sourceforge.net/p/dfu-util/tickets/

Opening DFU capable USB device...
ID 0456:b674
Run-time device DFU version 0110
Claiming USB DFU Interface...
Setting Alternate Setting #1 ...
Determining device status: state = dfuIDLE, status = 0
dfuIDLE, continuing
DFU mode device DFU version 0110
Device returned transfer size 4096
Copying data from PC to DFU device
Download      [=====] 100%    12238283 bytes
Download done.
state(?) = dfuMANIFEST, status(0) = No error condition is present
state(2) = dfuIDLE, status(0) = No error condition is present
Done!
PS C:\Users\81246\Desktop\烧写flash>
```

29.

30. Reconnect the usb.

31. You will see an LED flashing;

Summary:

1. We use SD cards to burn down the basic parts
2. Using dfu to burn and write pluto firmware

Attention points:

When using dfu mode, unplug the SD card