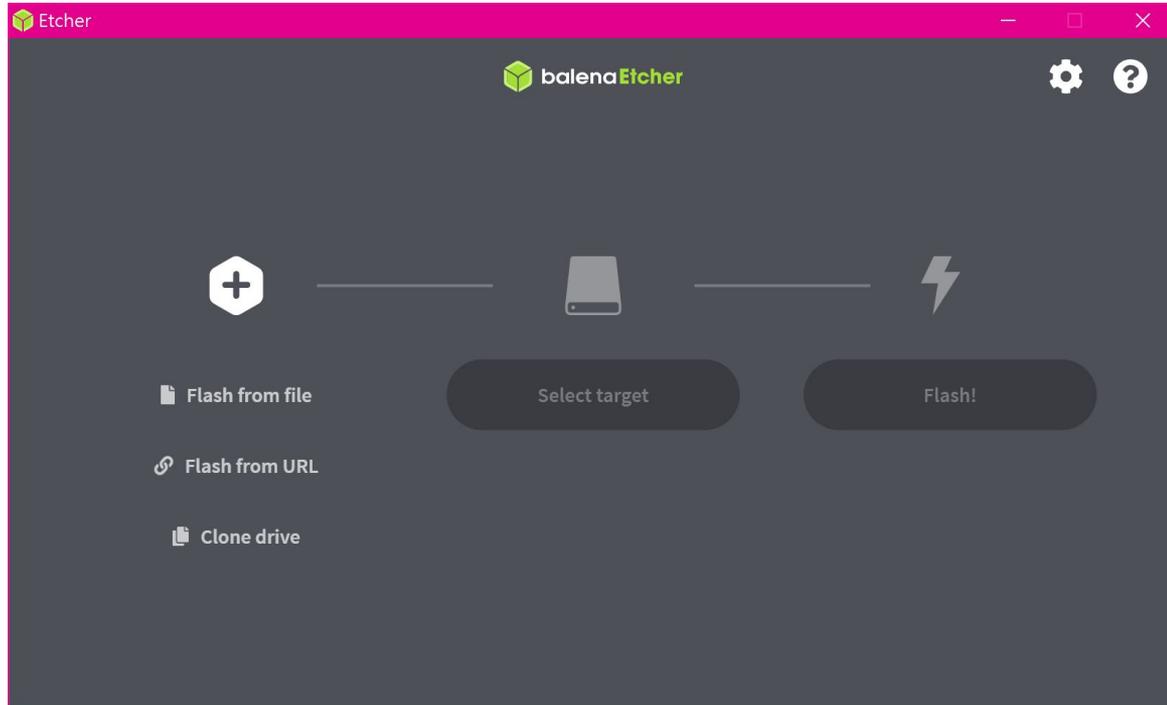


PYNOQ-Z2 Setup

Flash Boot Image

Mount SD card and open Etcher

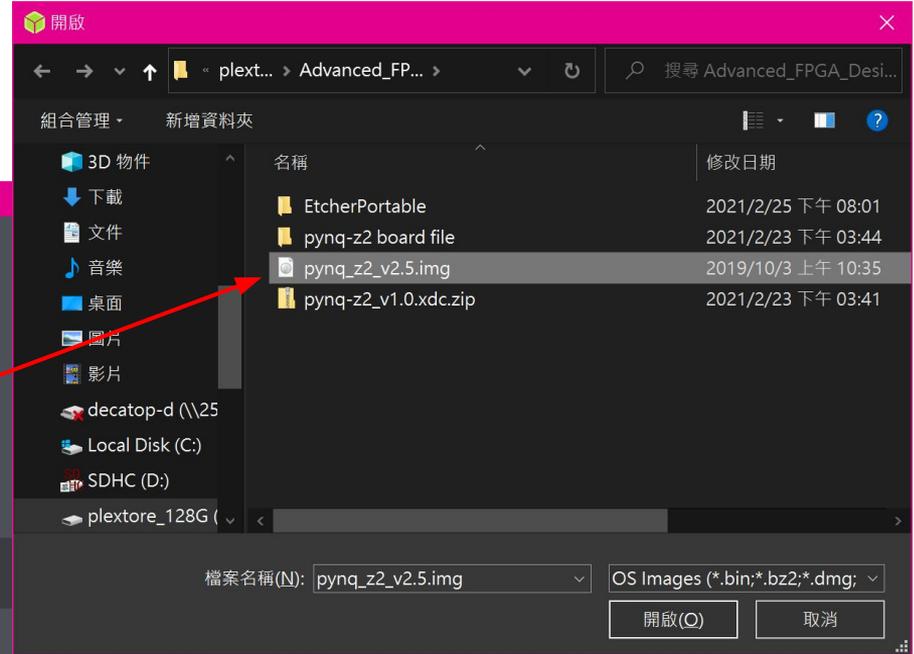
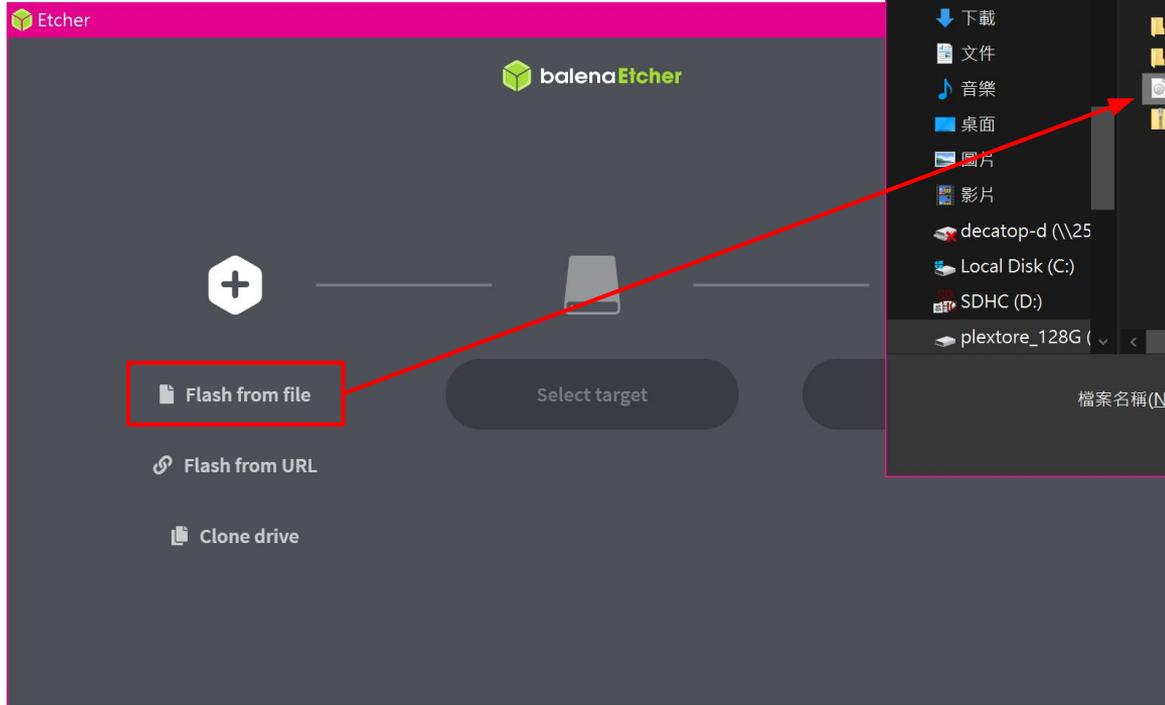
Path:Desktop/Advanced_FPGA_Design/EtcherPortable/



Select img file

select pynq_z2_v2.5.img

Path: Desktop/Advanced_FPGA_Design/



Select Target

select SDHC

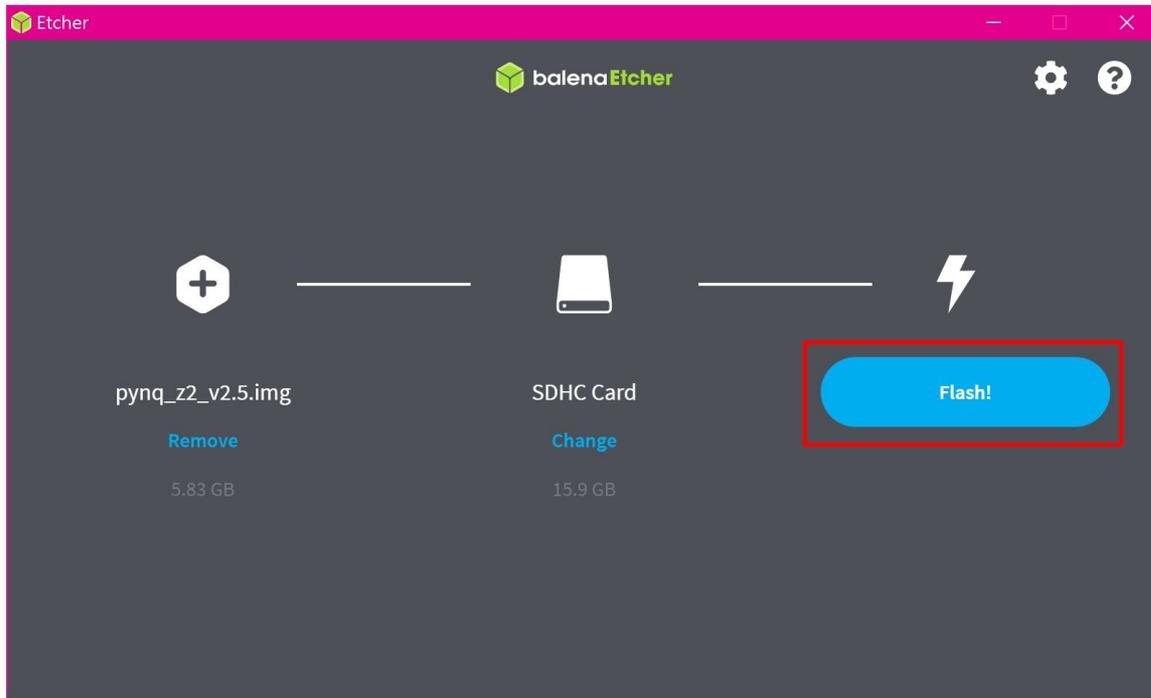
The image shows the Etcher application interface. The main window displays a file named 'pynq_z2_v2.5.img' with a size of 5.83 GB. A blue 'Select target' button is highlighted with a red box. A red arrow points from this button to a 'Select target' dialog box. The dialog box shows a table of available targets:

<input type="checkbox"/>	Name	Size	Location	
<input type="checkbox"/>	PLEXTOR PX-128M6Pro SCSI Disk Device	128 GB	E:\	Large drive Source drive
<input checked="" type="checkbox"/>	SDHC Card	15.9 GB	D:\	

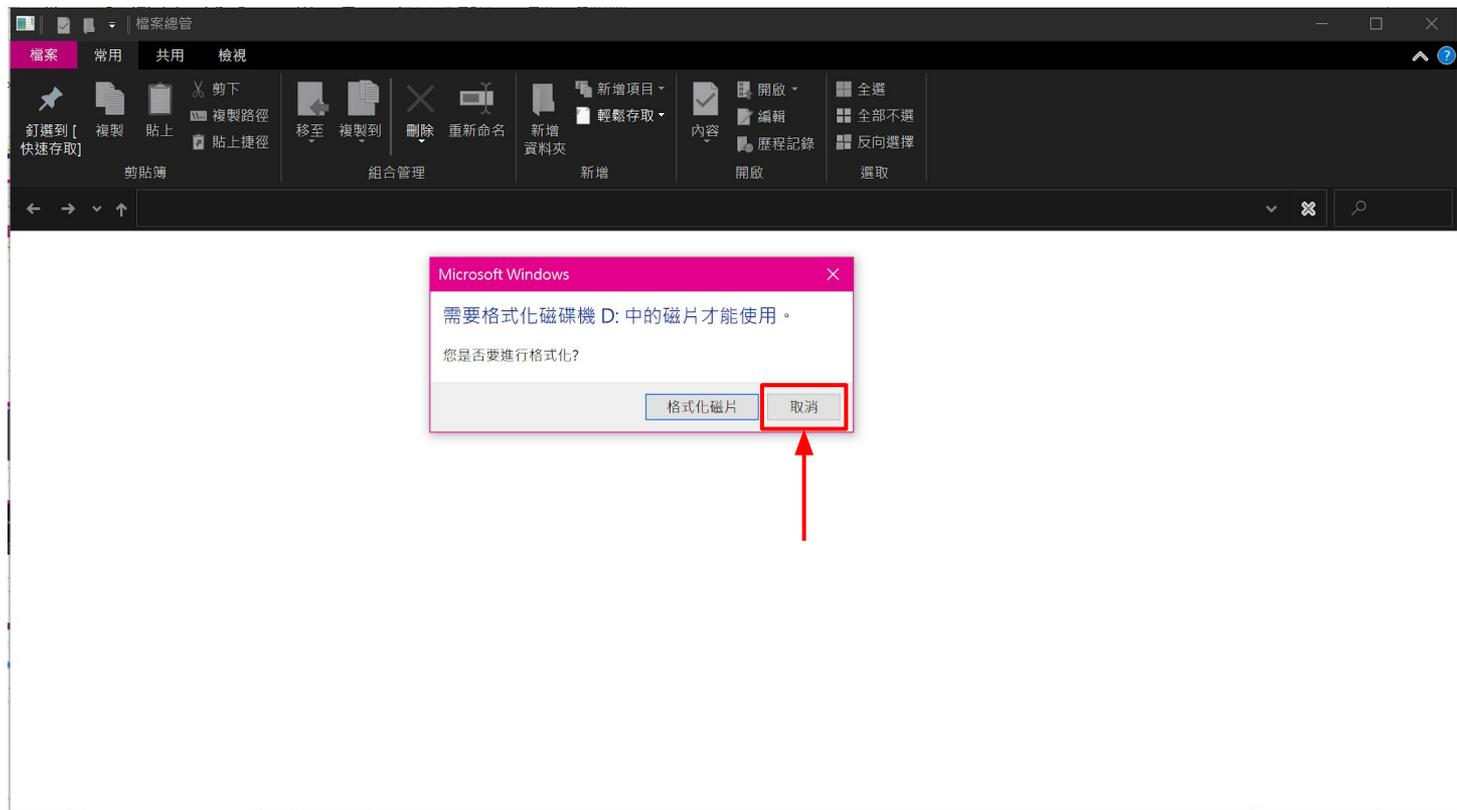
Below the table, there is a 'Show 1 hidden' link. At the bottom of the dialog box, there are two buttons: 'Cancel' and 'Select (1)'. The 'Select (1)' button is highlighted with a red box, and a red arrow points from the 'SDHC Card' row to it.

Click Flash

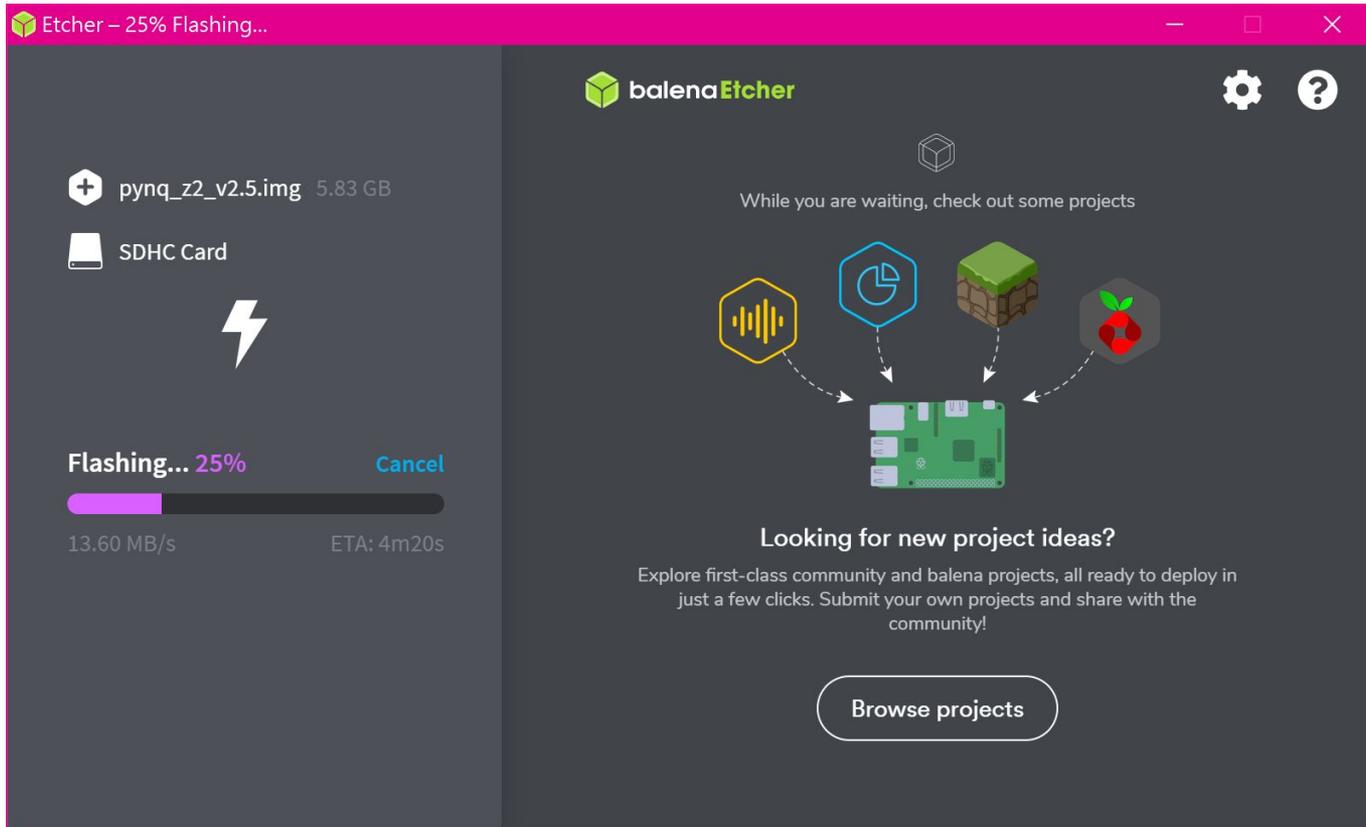
Please make sure your etcher looks like this



Select cancel and ignore error message if this pop out.
Do not format the disk manually!



Make sure it's flashing and wait for it



The screenshot shows the balenaEtcher application window. The title bar reads "Etcher - 25% Flashing...". The interface is split into two main panels. The left panel shows the source image "pynq_z2_v2.5.img" (5.83 GB) and the target "SDHC Card". A large lightning bolt icon indicates the flashing process. A progress bar shows "Flashing... 25%" with a "Cancel" button. Below the progress bar, the speed is "13.60 MB/s" and the estimated time is "ETA: 4m20s". The right panel features the "balenaEtcher" logo and settings/help icons. It contains a section titled "While you are waiting, check out some projects" with four icons representing different project types: a waveform, a pie chart, a cube, and a Raspberry Pi. Below this is a "Looking for new project ideas?" section with a brief description and a "Browse projects" button.

Etcher - 25% Flashing...

balenaEtcher

+ pynq_z2_v2.5.img 5.83 GB

SDHC Card

Flashing... 25% Cancel

13.60 MB/s ETA: 4m20s

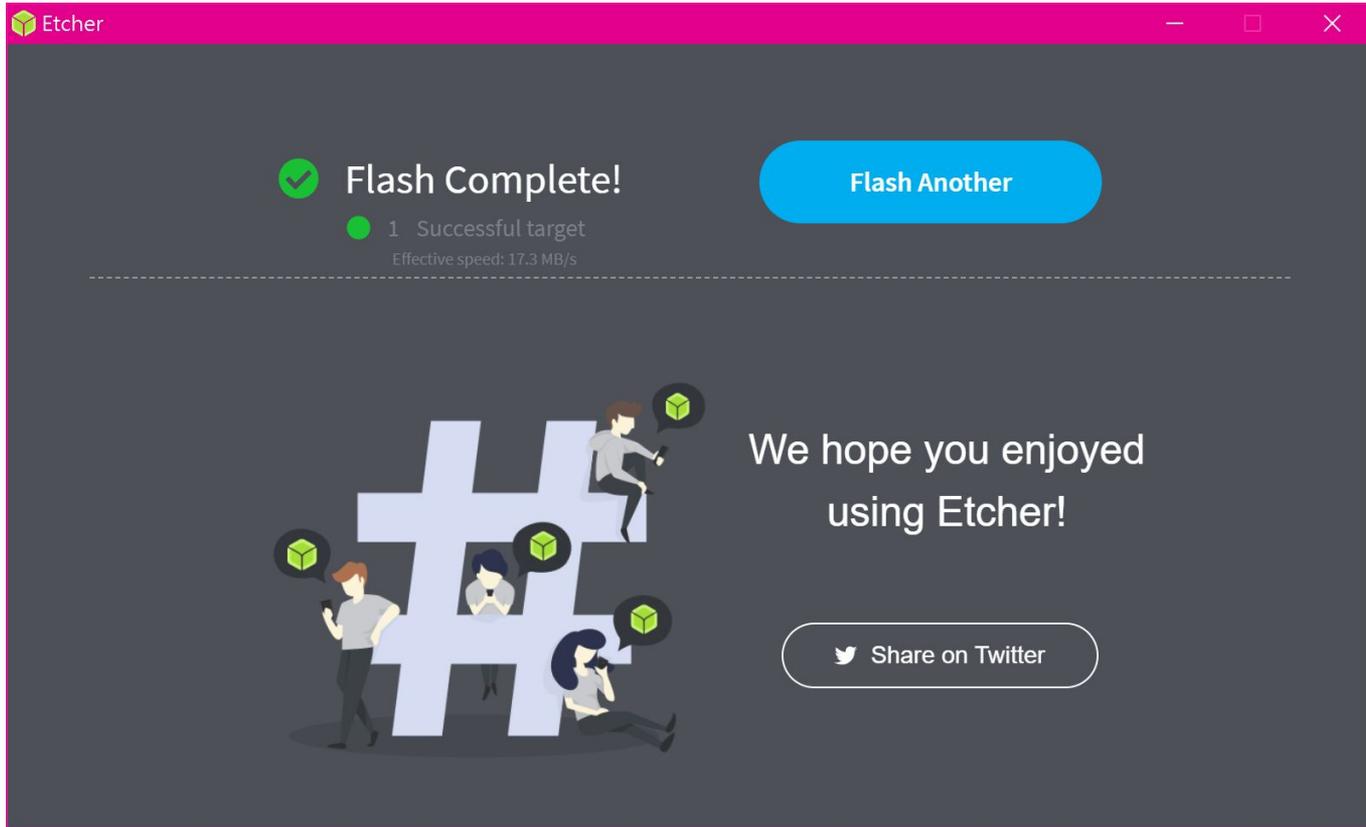
While you are waiting, check out some projects

Looking for new project ideas?

Explore first-class community and balena projects, all ready to deploy in just a few clicks. Submit your own projects and share with the community!

Browse projects

Done!



PYNQ-Z2 board setup

Board set up

1. Set the **** Boot**** jumper to the SD position.

2.set the **Power** jumper to the **REG** position.

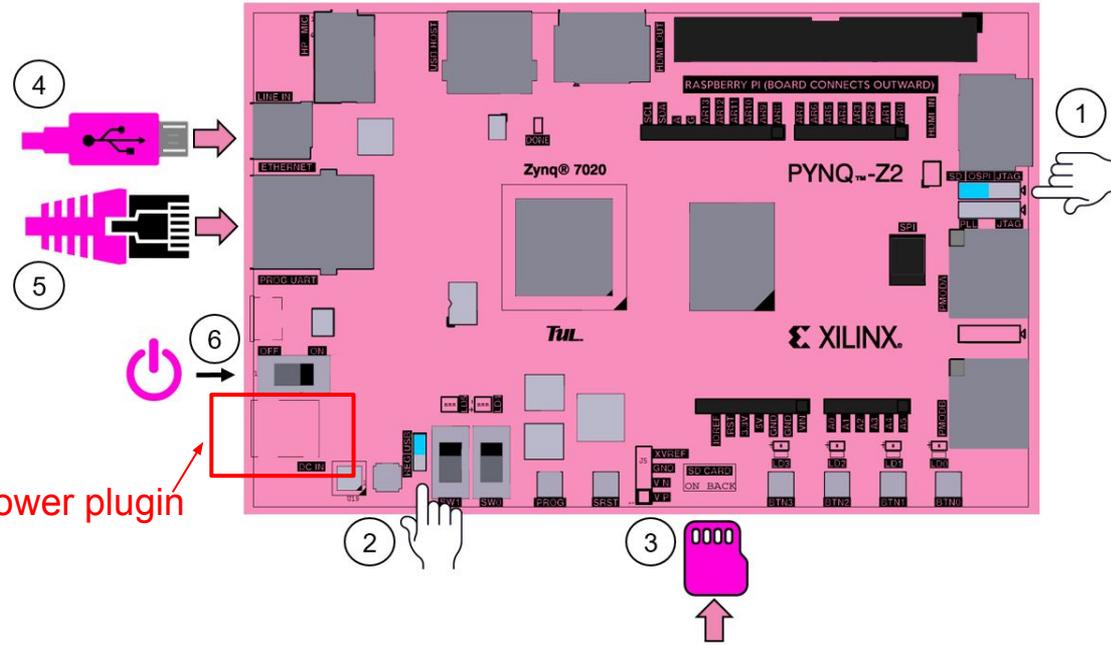
3.Insert the Micro SD card (which you just flashed) into the **Micro SD** card slot underneath the board.

4.Connect the USB cable to your PC/Laptop, and to the **PROG - UART** MicroUSB port on the board

5.Connect the Ethernet port to your PC.

****Please plugin external DC 12V power!**

6.Turn on the PYNQ-Z2

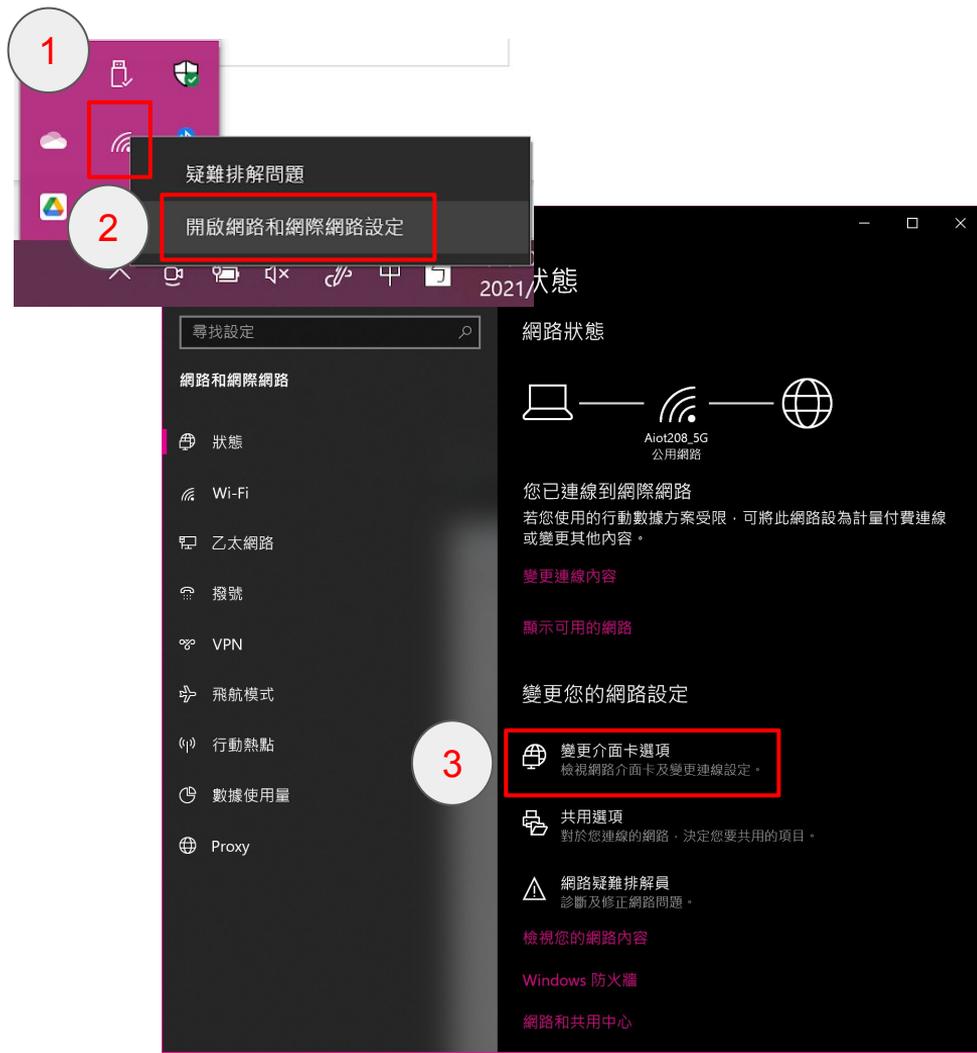


Host setup

1.Right click on Internet icon

2.Click open settings.

3.Click change settings.



Host setup

4. Right click on ethernet with 'unidentified internet' and select info(R).

5. Select (TCP/IPv4) and click info(R)

6. Set the IP address to 192.168.2.1 and mask to 255.255.255.0

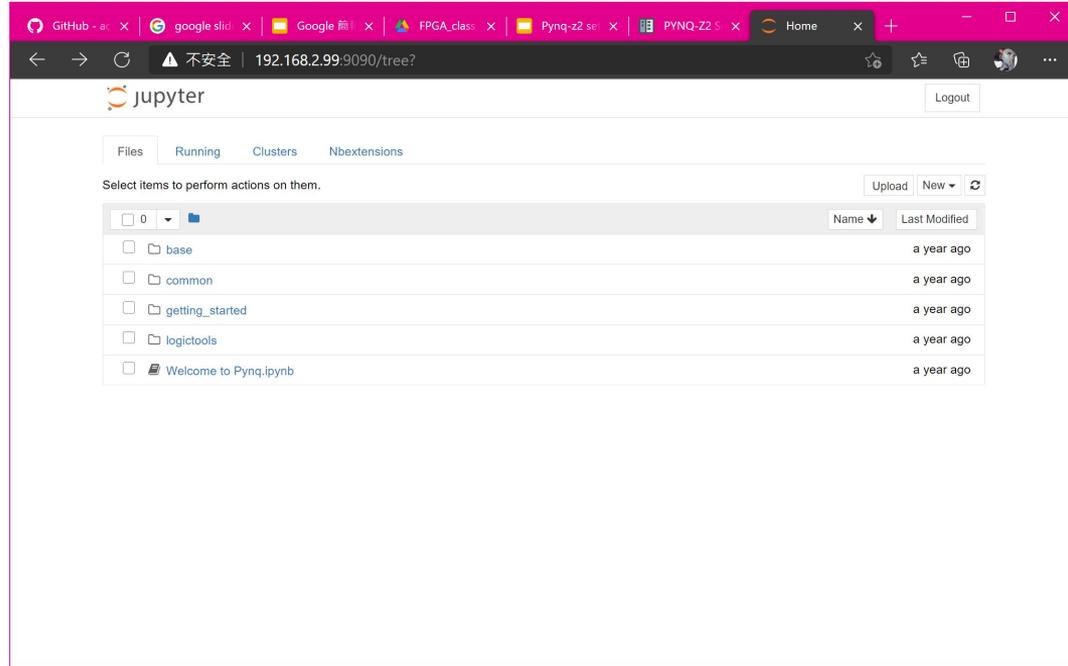


Login PYNQ

1. Open browser

2. Browse <https://192.168.2.99:9090/>

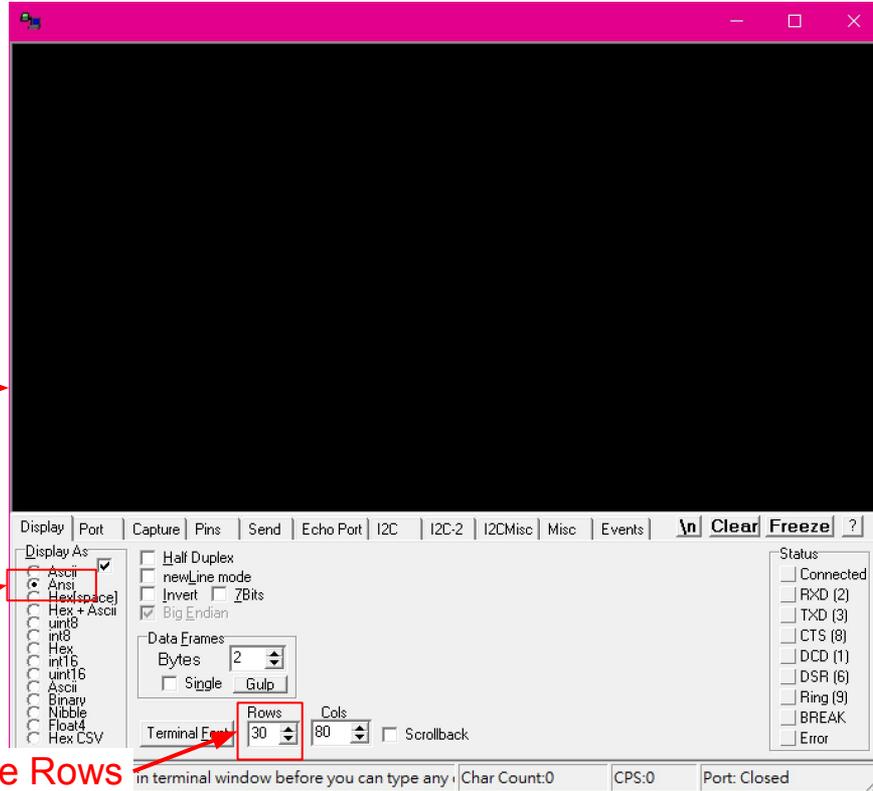
password:xilinx



Stetup realterm

(You can skip this setup if you login the PYNQ successfully)

Open realterm on the Desktop



Select Ansi

change Rows

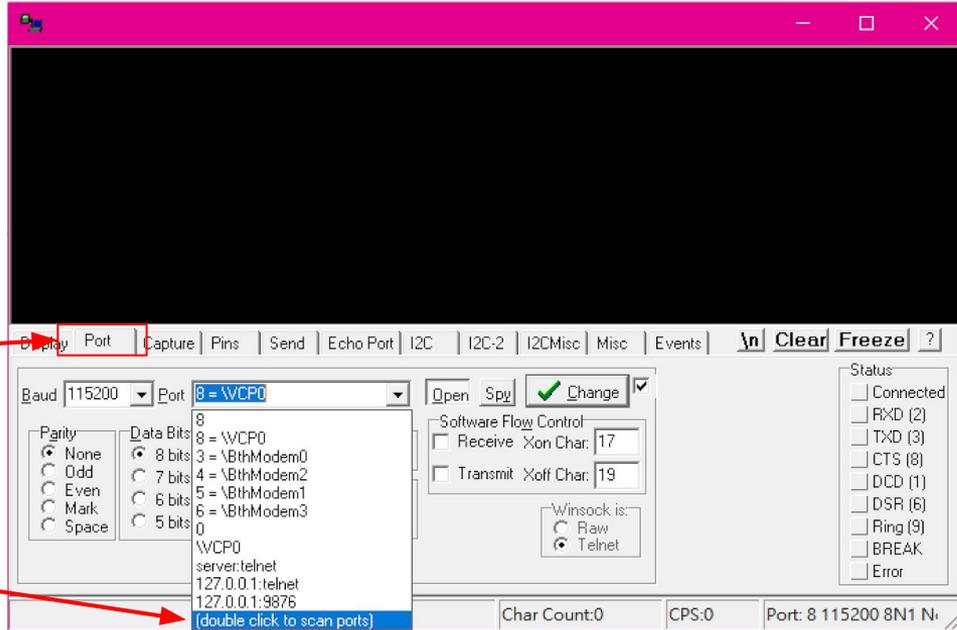
Scan ports

select “double click to scan ports” and look for new port ‘(num) = \VCP0’

Select Port

Select

double click to scan ports



Setup Port configuration

The image shows a terminal configuration window with several settings. Annotations in red text and arrows point to specific elements:

- 1. Baud 115200**: Points to the Baud rate dropdown menu.
- 2. Port (num) = \VCPO**: Points to the Port dropdown menu.
- 3. click Change**: Points to the Change button.
- 4. click Open**: Points to the Open button.

Additional settings visible in the window include:

- Parity: None, Odd, Even, Mark, Space
- Data Bits: 8 bits, 7 bits, 6 bits, 5 bits
- Stop Bits: 1 bit, 2 bits
- Hardware Flow Control: None, RTS/CTS, DTR/DSR, RS485-rts
- Software Flow Control: Receive, Transmit
- Xon Char: 17, Xoff Char: 19
- Winsock is: Raw, Telnet
- Status: Connected, RXD (2), TXD (3), CTS (8), DCD (1), DSR (6), Ring (9), BREAK, Error

At the bottom, a status bar reads: "You have to click in terminal window before you can type any | Char Count:0 | CPS:0 | Port: 8 115200 8N1 N|"

ps. usually num = 5

Check ip status

2. when
`xilinx@pynq:~$`
show up,
enter `ifconfig` command

3. if 192.168.2.99 shows,
means board set up
successfully.

```
xilinx@pynq:~$  
xilinx@pynq:~$ ifconfig  
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500  
inet6 fe80::205:6bff:fe00:f707 prefixlen 64 scopeid 0x20<link>  
ether 00:05:6b:00:f7:07 txqueuelen 1000 (Ethernet)  
RX packets 227 bytes 35380 (35.3 KB)  
RX errors 0 dropped 0 overruns 0 frame 0  
TX packets 728 bytes 237915 (237.9 KB)  
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
device interrupt 29 base 0xb000  
  
eth0:1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500  
inet 192.168.2.99 netmask 255.255.255.0 broadcast 192.168.2.255  
ether 00:05:6b:00:f7:07 txqueuelen 1000 (Ethernet)  
device interrupt 29 base 0xb000  
  
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536  
inet 127.0.0.1 netmask 255.0.0.0  
inet6 ::1 prefixlen 128 scopeid 0x10<host>  
loop txqueuelen 1000 (Local Loopback)  
RX packets 7521 bytes 463352 (463.3 KB)  
RX errors 0 dropped 0 overruns 0 frame 0  
TX packets 7521 bytes 463352 (463.3 KB)  
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0  
  
xilinx@pynq:~$
```

1. Click this area
and press enter

Display Port Capture Pins Send Echo Port I2C I2C-2 I2CMisc Misc Events **Clear Freeze** ?

Baud 115200 Port 8 = WCP0 Open Spg Change

Parity: None Odd Even Mark Space

Data Bits: 8 bits 7 bits 6 bits 5 bits

Stop Bits: 1 bit 2 bits

Hardware Flow Control: None RTS/CTS DTR/DSR RS485-its

Software Flow Control: Receive Xon Char: 17 Transmit Xoff Char: 19

Winsock is: Raw Telnet

Status: Connected RXD (2) TXD (3) CTS (8) DCD (1) DSR (6) Ring (9) BREAK Error

You can use ActiveX automation to control me! Char Count:1178 CPS:0 Port: 8 115200 8N1 N: