Baikal miner

CUBE

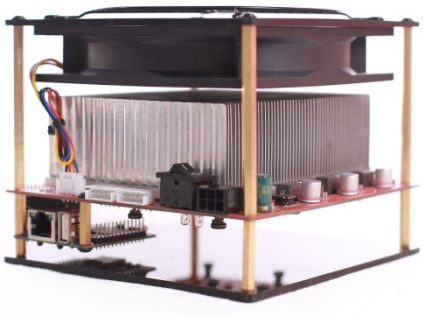
USER'S GUIDE

http://www.baikalminer.com

Start Cube

Installation guide

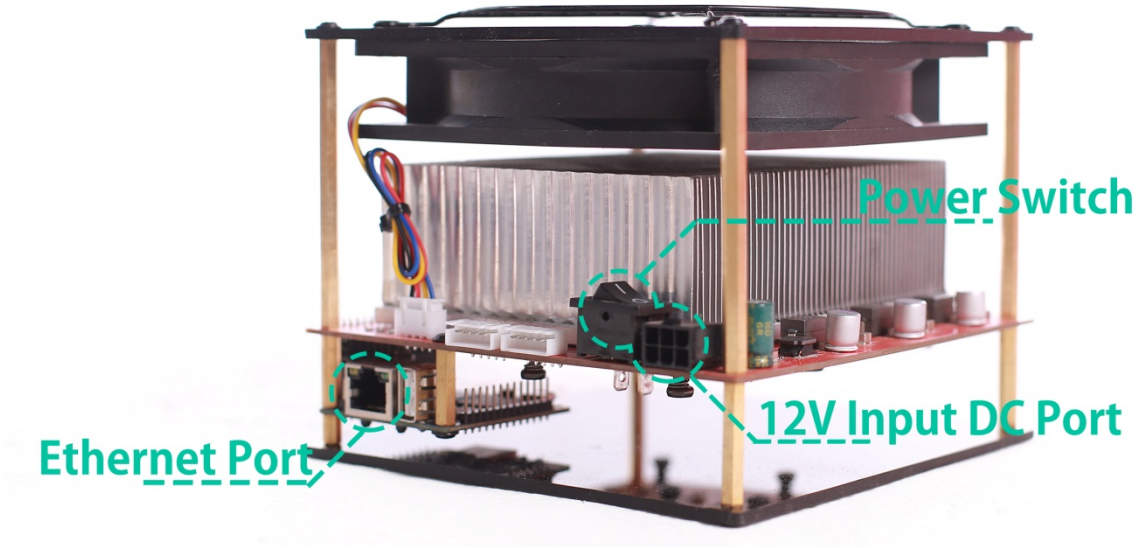
✓ Cube Specifications



Hash Rate	300MH/s(±10%)
Input Power	12V/10A DC
Interface	Ethernet
Operation Temp	0 ~ 40 ℃
Dimension	135mm(L) x 135mm(W) x108mm(H)
Weight	810g

Algorithm	Hash Rate	Power (at the wall, with 25℃ ambient temp)	Power Efficiency
X11	300MH/s±10%	75W±5%	0.25J/MH
X13	300MH/s±10%	87W±5%	0.29J/MH
X14	300MH/s±10%	89W±5%	0.29J/MH
X15	300MH/s±10%	91W±5%	0.3J/MH
Quark	300MH/s±10%	50W±5%	0.16J/MH
Qubit	300MH/s±10%	55W±5%	0.18J/MH

✓ Introduction



✓ Package Contents

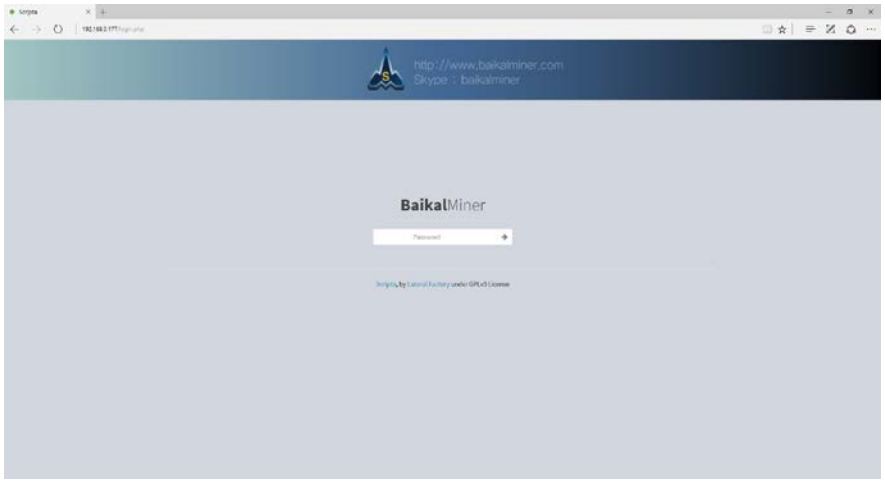
Cube Miner *1ea

✓ Connection Guide

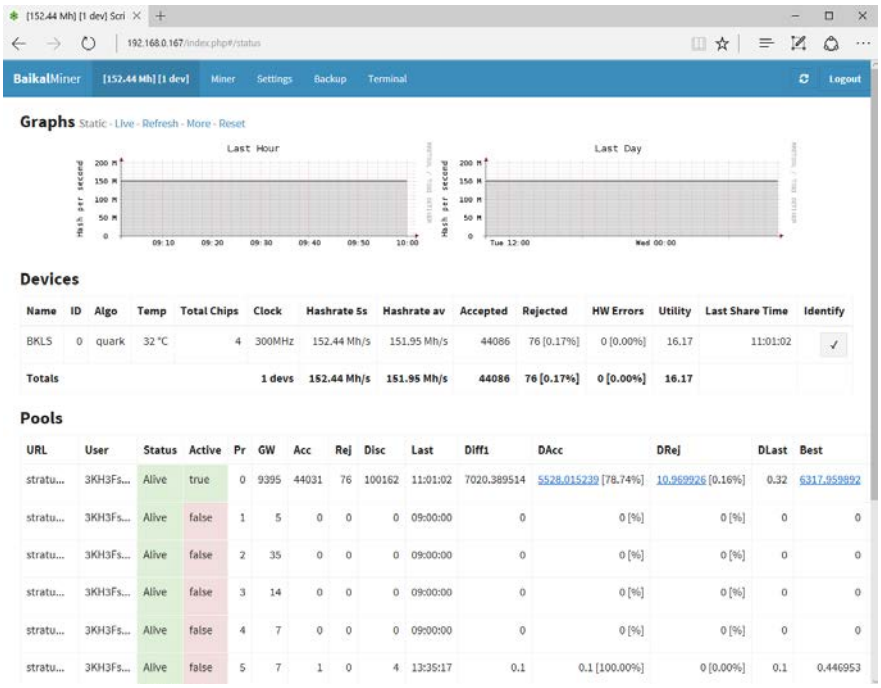
1. Connect Cube to Ethernet with Ethernet cable.
2. Plug power cable to 12V 10A DC port and to the power outlet as well.
3. Make sure the switch is off when plugging in.
4. Turn the switch on and check if you have blinking lights on at the Ethernet Port.

✓ Pool setting

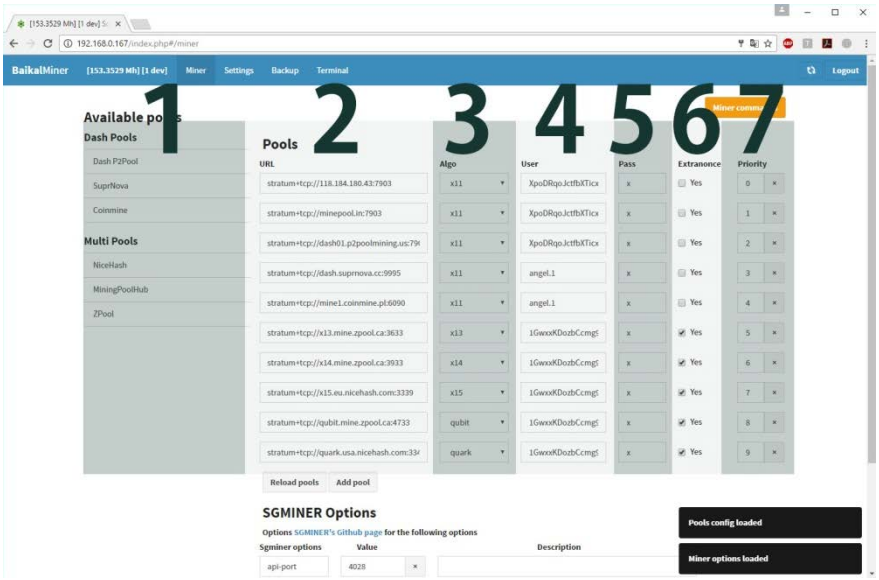
1. Enter Cube IP address on your web browser to access pool setting page and log in with 'baikal' as password.
   (IP address can be found either on setting page of your internet router or by using our program *BaikalScanner.exe* from download link)



2. First page you'd see if you log in successfully.



3. Go to Miners tab to set pool lists and give them mining details.



① Pool links for your information
② Server URLs from each pools.
③ Select Algorithm type.
④ Enter your wallet address.
⑤ Pool password (normally set as x)
⑥ Check box for pools supporting Extranonce.

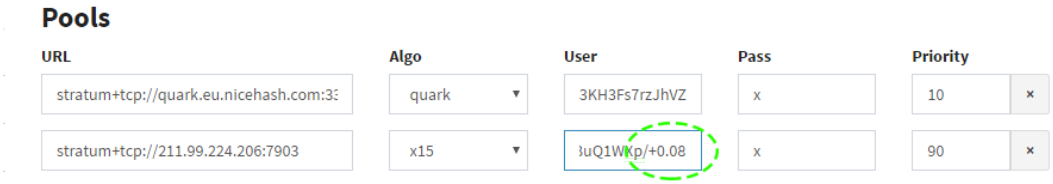
- ◆ Check the box if the pool supports Extranonce (such as nicehash or zpool etc.)
- ◆ Leave the box unchecked if the pool doesn't support Extranonce.
- ◆ Availability of supporting Extranonce should be asked to Pool Operator.

⑦ Give priorities with your own numbers; However, the first number should be 0. The system counts lowest number (which is 0,) as first and the next as second regardless how big are the numbers.

Note

For P2Pool you should add **/+0.08** at the end of your account to manage the hashrate for the best outcome.

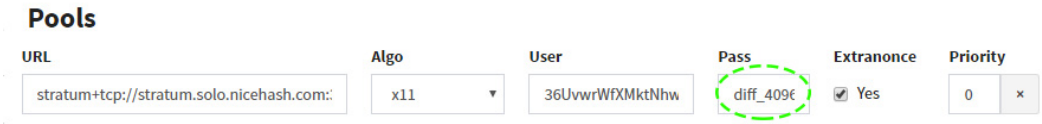
Example)



Note

If you are solo mining at Nicehash, add “diff_4096” as below to the password field.

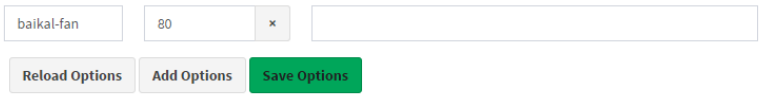
Example)



Link for more details : *Can I adjust mining difficulty*

Note

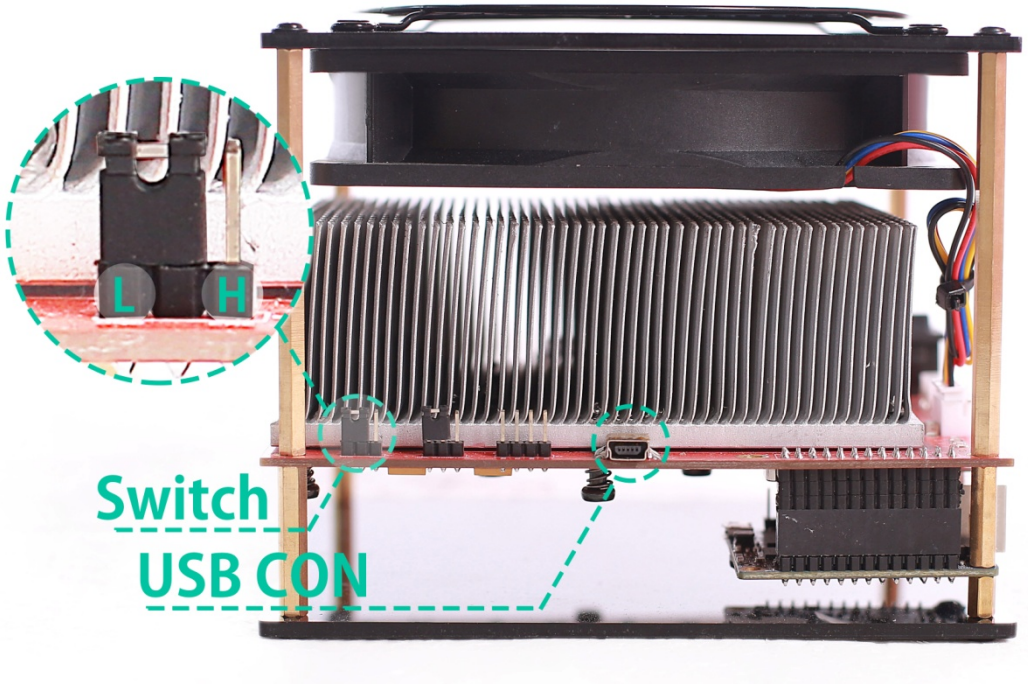
Fan speed can be adjusted through the control as below (0~100%)



Keep Cube Up-to-date

Upgrade guide

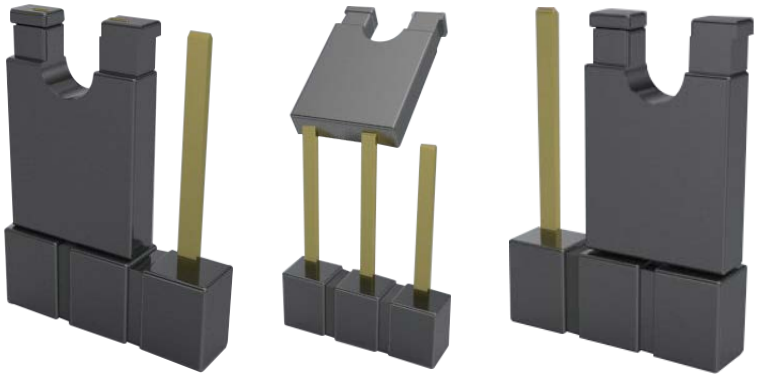
✓ Configuration



	Description
Switch	Boot mode setting. H : DFU boot mode , L : Normal
USB CON	Cube USB connector.
LED	Show DFU boot mode enter in 'H' of Switch. RGB is blinking one by one.
USB mini cable	USB A to Mini-A5p Cable

✓ Firmware Update

1. Before the installation
   ① Power off Cube.
   ② Set the switch to H.



Mode L Mode H

③ Connect USB mini cable into USB CON.

④ Turn Cube on. LED at installation mode should have the lights flow through.

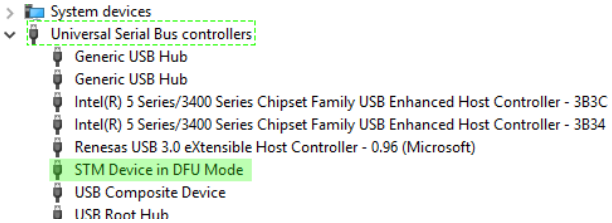
⑤ Download following list of updating tools available from here (Baikal_Cube_V00_DATE.zip):

Name	Description
dfu-util.exe	USB DFU(Device Firmware Utility) utility.
update_firmware_cube.bat	Firmware update batch file.
zadig_2.1.2.exe	USB Driver Installer
baikal_cube.bin	Firmware binary image.

2. Install DFM Utility driver

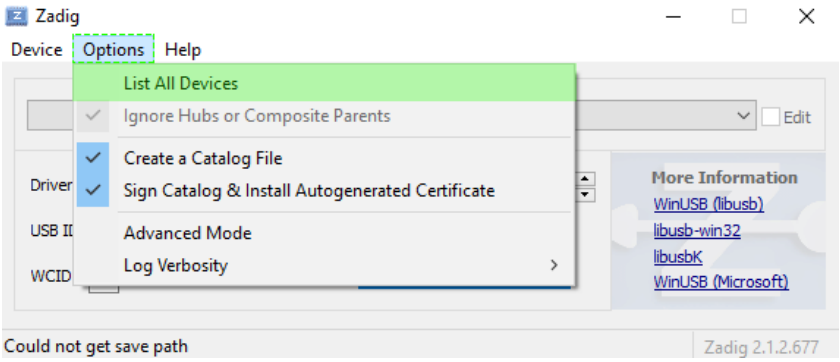
① Connect the other end of USB mini cable to your PC.

② Check if you have STM Device in DFU Mode on device manager.

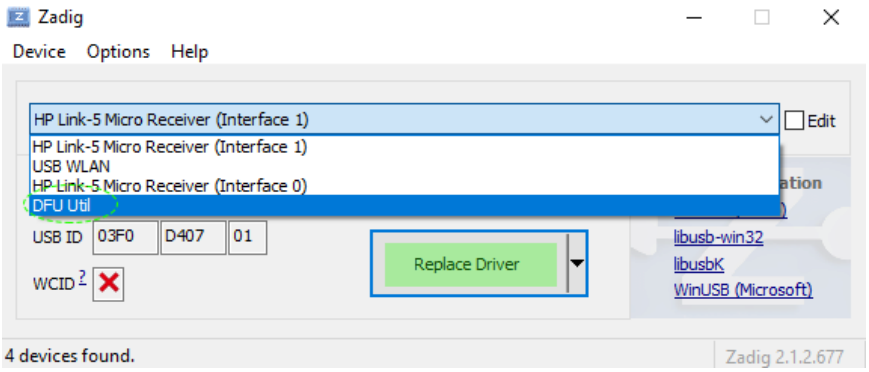


③ Run zadig_2.1.2.exe

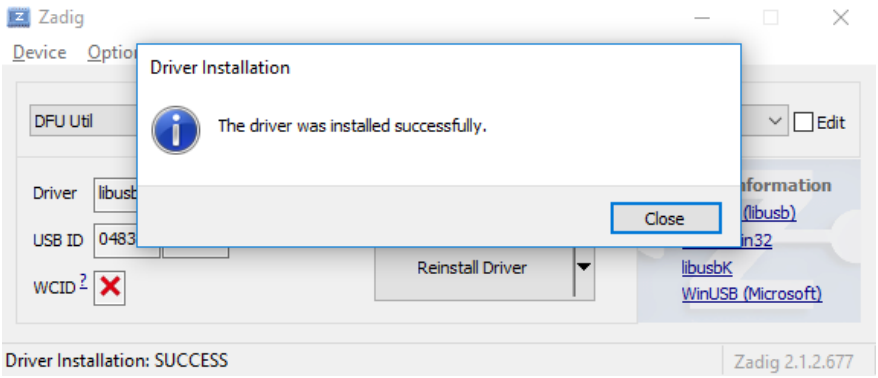
④ Select Options>List all devices.



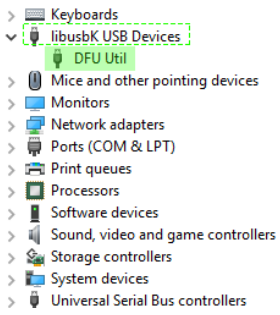
⑤ Select ‘DFU Util’ on USB device list, then replace driver.



⑥ It should be followed by pop-up message below.



⑦ DFU Util would appear as a replacement of STM Device in DFU Mode on Device Manager if installed successfully.



3. Update firmware

① Run update_firmware_cube.bat and console window would pop up.

② When the progress reaches 100% window will close itself.

4. Finish

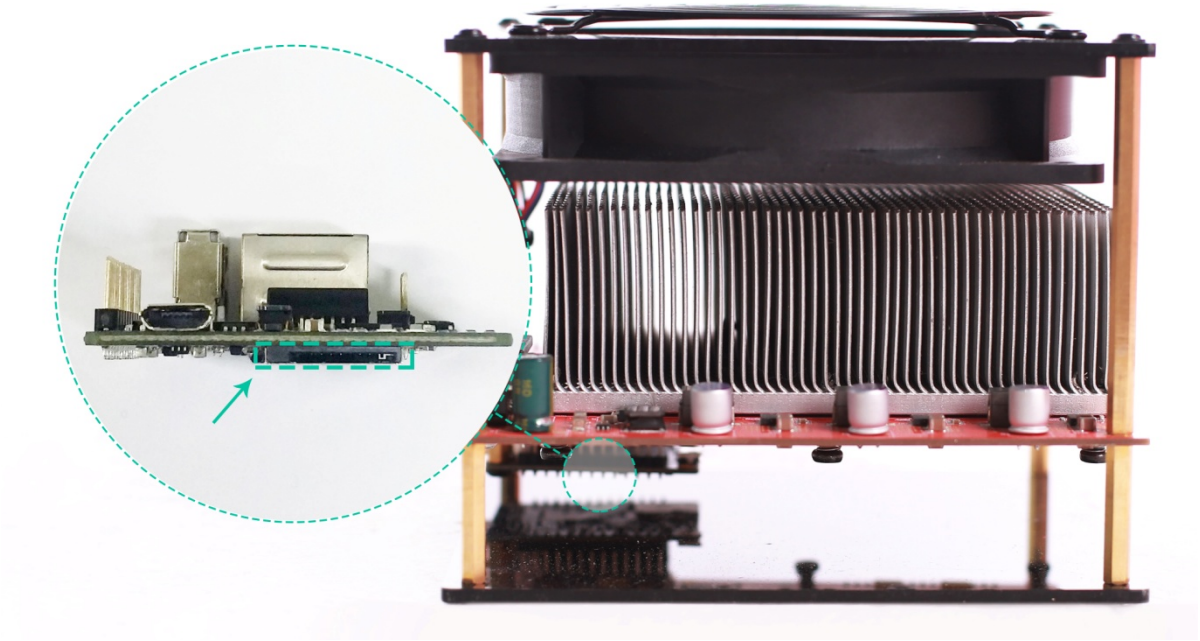
① Power off Cube.
② Remove USB mini cable from USB CON.
③ Set the switch to ‘L’.
④ Power on Cube-ready-to-mine.

✓ SD Card Update

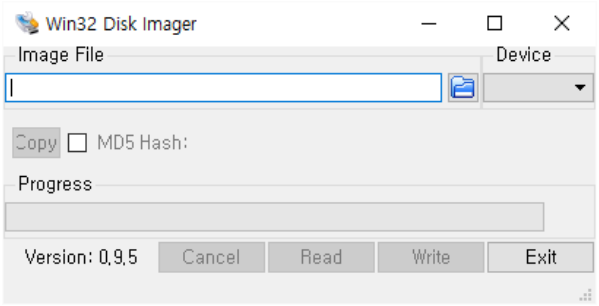
OrangePI SD Card setup guide

1. Download PiZero image and Win32diskImager Utility from following links :
   Download Link 1 : Google
   Download Link 2 : Baidu

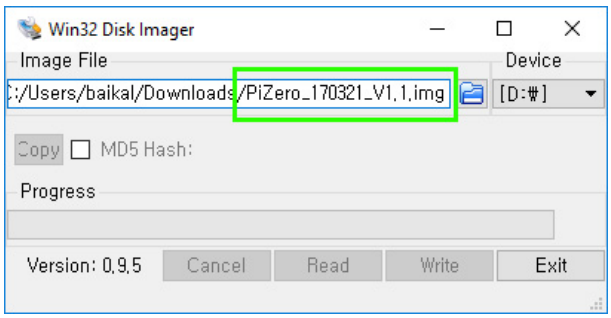
2. Update OrangePI SD Card
   ① Turn Cube off.
   ② Remove the SD Card from the OrangePI Controller.



   ③ Read the SD card on your computer and check which drive letter it assigned.
   ④ Run the win32diskImager utility.

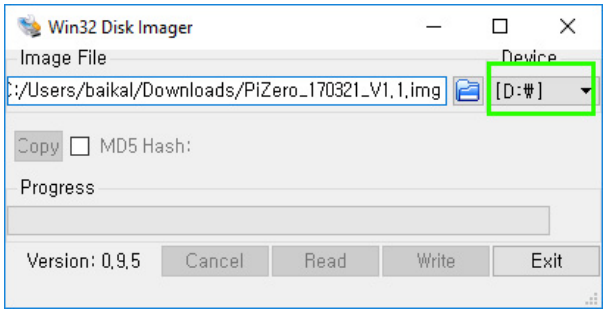


   ⑤ Select the PiZero_170321_V1.1.img



⑥ Select the driver letter of the SD card in the device box.

⑦ Be careful to select the correct drive; if you get the wrong one you can destroy your data on the computer's hard disk!



⑧ Click Write and wait for the write to complete.

⑨ You are now ready to plug the card into your OrangePI.

Link

https://github.com/baikalminer/multi-algo-miner
https://drive.google.com/drive/folders/0B1GBwN5-i39VRzNQS28tWlpsTVk
https://pan.baidu.com/s/1kULEO31#list/path=%2Fcube