

BITMAIN

AntMiner-U3 User Guide

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1. The First Glance

AntMiner U3 is the third generation of USB miner. The U3 utilizes 4 of BITMAIN's latest generation BM 1382 chips in high quality, domed case. Setup consists of plugging in the USB and power cables and running Antminer CGMiner.



2. Accessories and Connection

2.1 Accessories

The accessories of AntMiner U3 including:

12V AC/DC power brick of 6A, but AC power line not included * 1

USB connection cable * 1

2.2 Connection

- a) Plug one side of 12V AC/DC power brick into U3, and plug the other side into AC input.
- b) Connect U3 and the computer via the USB line.

Noted:

Connection order must be "a)" first, and then "b)". Order cannot be

reversed.

To prevent the interruption of USB power supply, please ensure the computer is not in standby or sleep mode. Otherwise, the cgminer wouldn't find the miner even make it ZOMBIE.

3. Install Driver

Cgminer for antminer-U3:

<https://www.bitmaintech.com/Support/Antminer>

USB/Cgminer/cgminer-run-windows-20150107.rar

Open sourced code of Cgminer for antminer-U3:

<https://github.com/bitmaintech/cgminer>

CP2102 Driver:

<http://www.silabs.com/products/mcu/Pages/USBtoUARTBridgeVCPDrivers.aspx>

zadig:

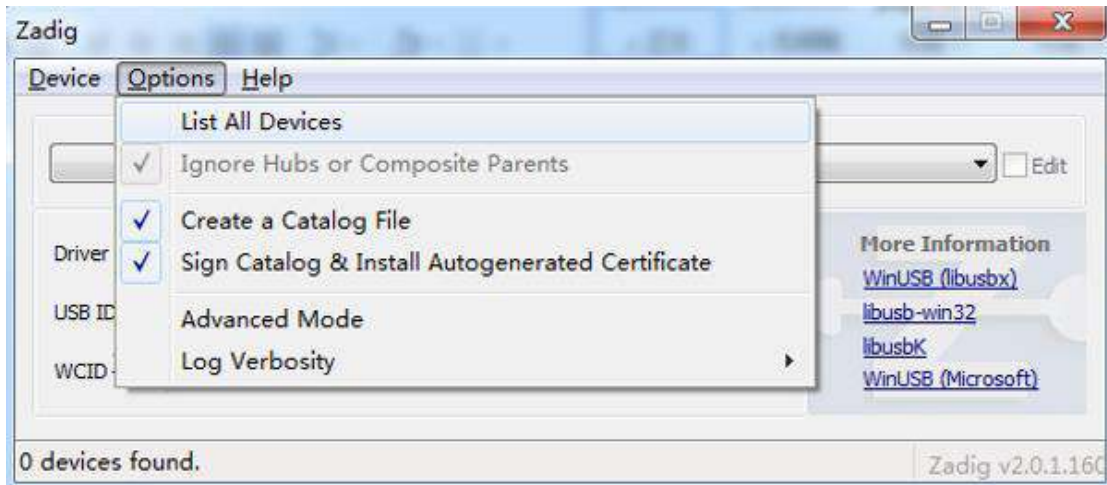
<http://zadig.akeo.ie/>



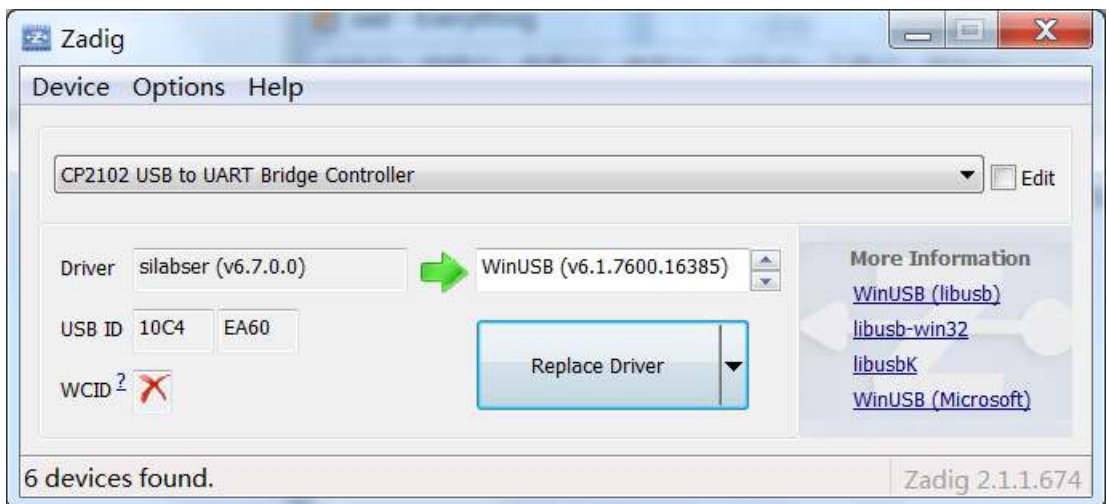
1> Install CP210x_VCP driver.

2> Plug in Antminer-U3.

3> Open Zadig and click "Options -> List All Devices"



4> Select CP2102 USB to UART Bridge Controller, and then click “Replace Driver”

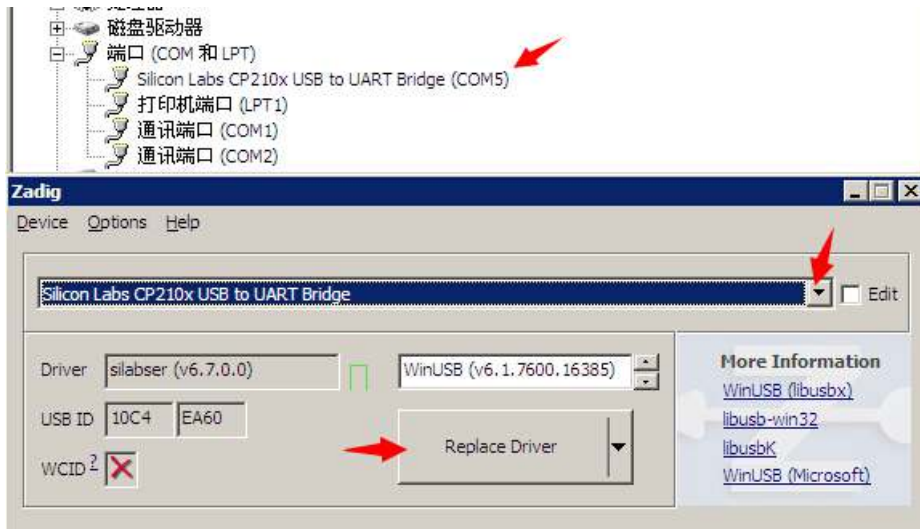


XP:

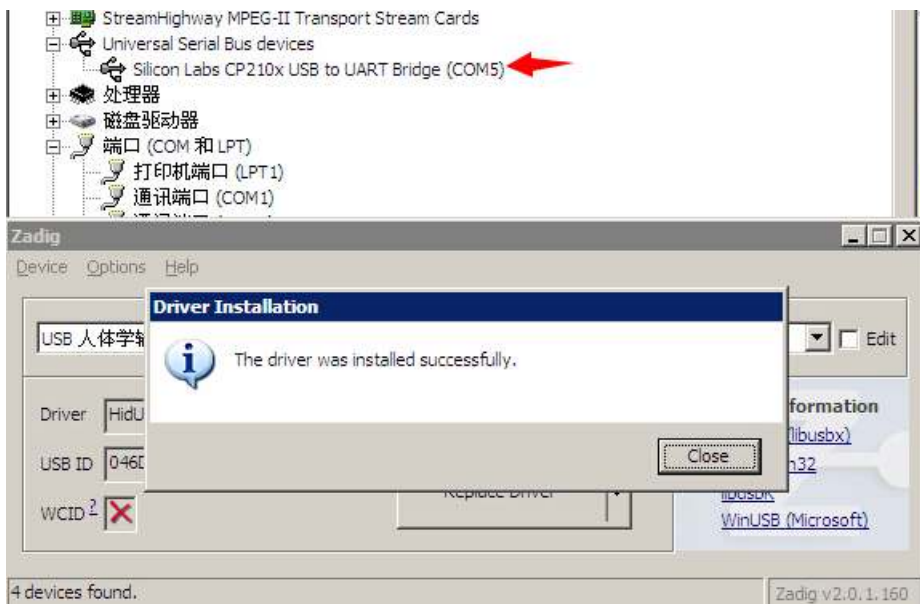
a. Install CP210x_VCP driver.



b. zadig

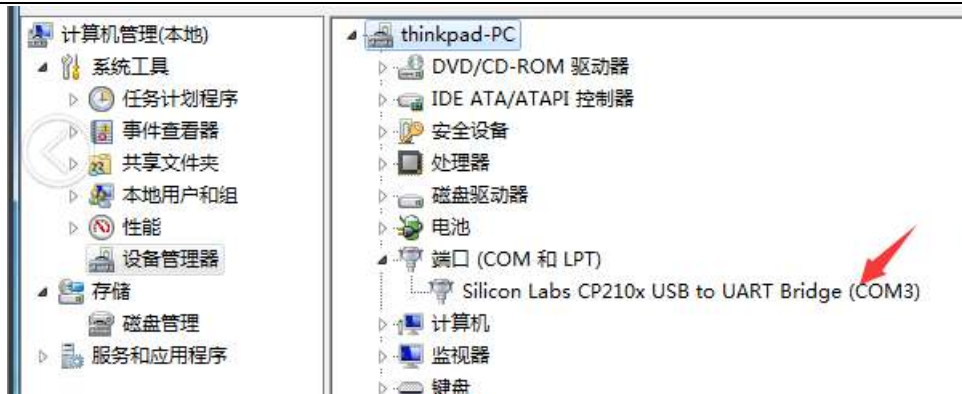


c.

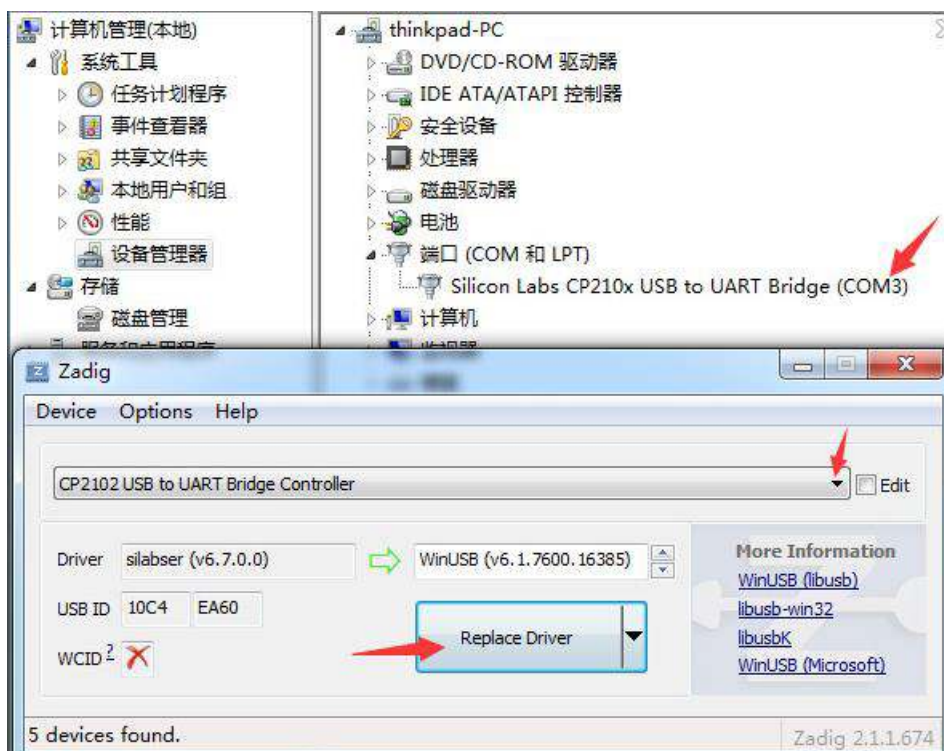


WIN 7:

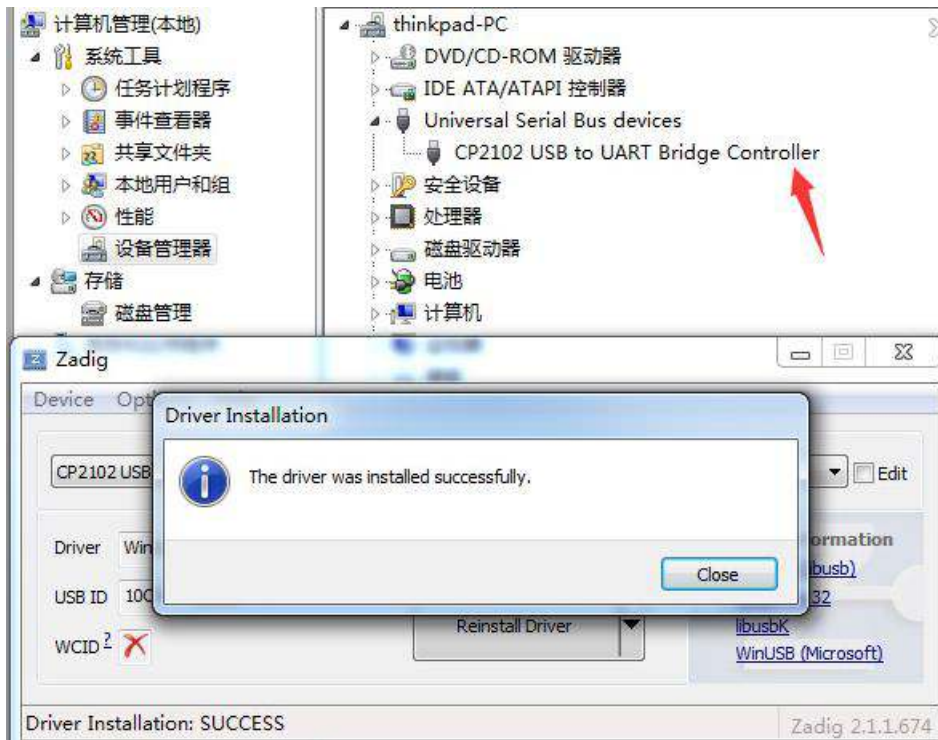
a. Install CP210x_VCP driver.



b. zadig

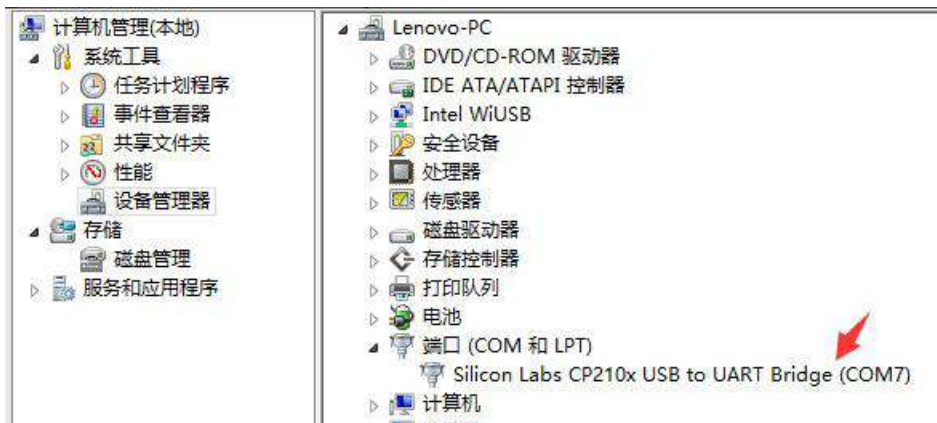


c.

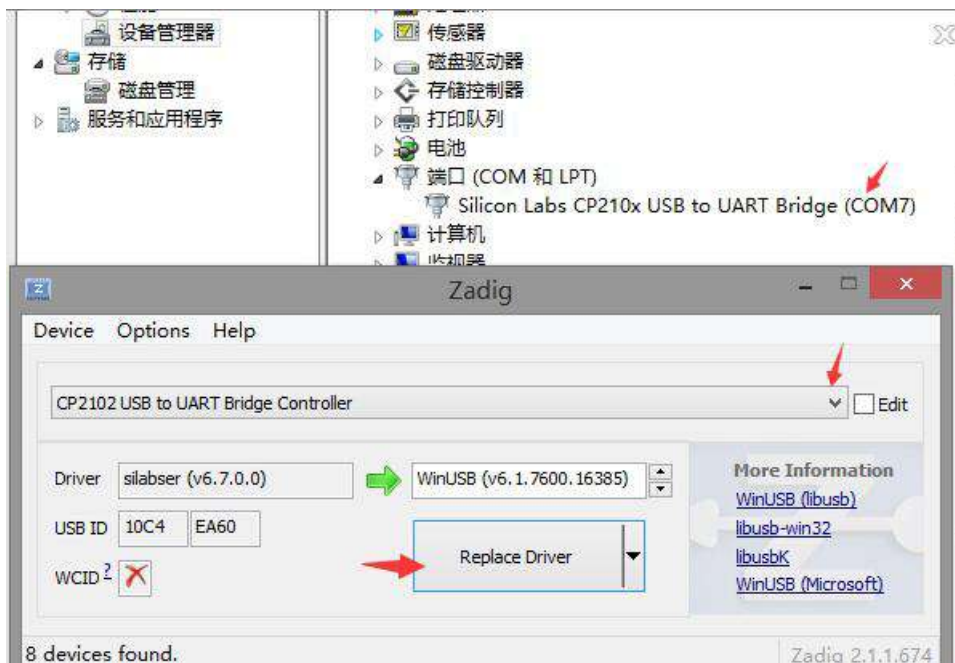


Win 8:

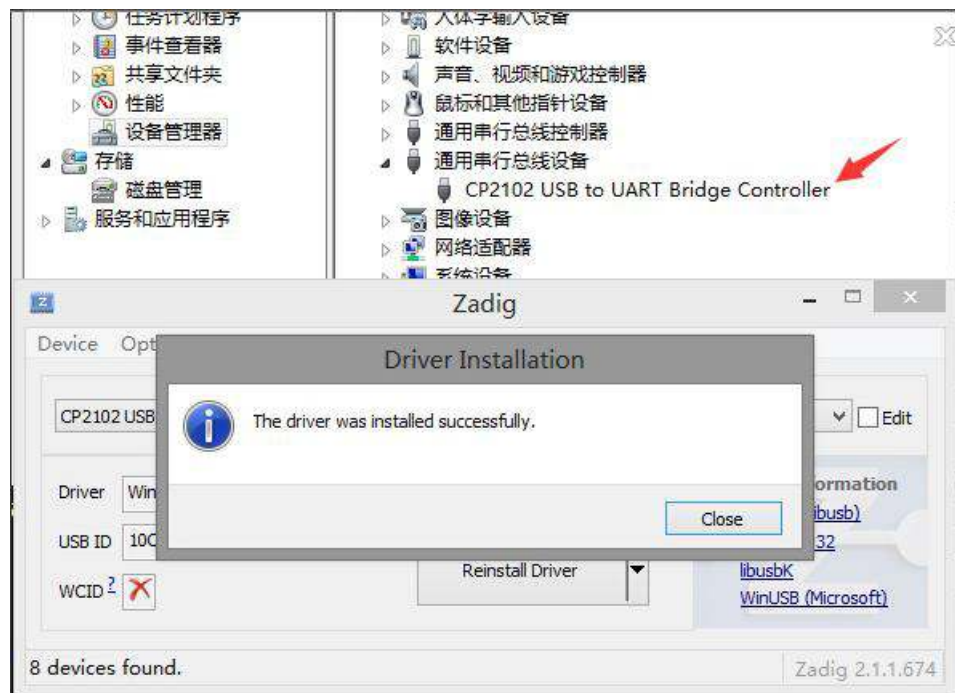
a. Install CP210x_VCP driver



b. zadig



c.



5> Run cgminer following the below:

```
cgminer.exe --bmsc-options 115200:0.54 -o 50.31.149.57:3333 -u
antminer -p 123 --bmsc-voltage 0830 --bmsc-freq 0982 --startdiff 6
some pools: p2p.antpool.com:25; solo.antpool.com:3333
```

Noted:

- a) Please note that “115200” stands for the “Baud Rate”, and “0.65” means “timeout”.It changes with Freq you set to guarantee the speed. Details see chart 2.
- b) ‘--startdiff 6’ is to make the low hash rate miners getting a proper difficulty asap, which is still under developing by Antpool
- c) Core Voltage can be changed by setting the figure “0830”
Operating frequency can be changed by setting the figure “0982”

4. Core voltage & Operating Frequency Adjustments

Core voltage and operating frequency can be adjusted by software.

1> Core Voltage can be changed by setting the figure “0800”.

The voltage varieties from 0.725 to 0.85v, 0.75v by default, and min unit is 0.005v.Higher voltage supports higher Freq. As 0.75v,U3 can work not more than 225M.

Please refer below chart:

Insert Value	Voltage (V)
0725	0.725
0730	0.730
0735	0.735
0740	0.740
0745	0.745
0750	0.750
0755	0.755
0760	0.760
0765	0.765
0770	0.770
0775	0.775
0780	0.780
0785	0.785
0790	0.790
0795	0.795

0800	0.800
0805	0.805
0810	0.810
0815	0.815
0820	0.820
0825	0.825
0830	0.830
0835	0.835
0840	0.840
0845	0.845
0850	0.850

Chart 1

2> Operating frequency can be changed by setting the figure "0882". Please refer below chart:

Eg. `-bms-coptions 115200:0.57 --bmsc-freq 1286`

Insert Value	Frequency (M)	Prefer timeout (100 ms)
0783	100.00	1.36
0983	125.00	1.09
0B83	150.00	0.91
0D83	175.00	0.78
0F03	193.75	0.71
1F07	196.88	0.69
0782	200.00	0.68
1006	206.25	0.66
1086	212.50	0.64
1106	218.75	0.62
0882	225.00	0.61
1286	237.50	0.57
1306	243.75	0.55

0982	250.00	0.54
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Chart 2