Useful links:

https://github.com/mrbonkerz/ESP-Miner-LVXX/releases - Firmware (for Lucky miner LV07 and LV08 choose base on you miner)

<u>GitHub - skot/ESP-Miner: A bitcoin ASIC miner for the ESP32</u> – bitaxetool installation, follow the guide. When there is an error, you can add the command at the end –break-system-packages "pip install bitaxetool –break-system-packages"

Before flashing, you need to install the bitaxetool on your computer or laptop (the sample below uses Ubuntu) and download the necessary .bin file (LV08 or LV07)

Disconnect your LV08 and turn it upside down:

Remove the rubber feet and, using a Philips screwdriver, get the bolts out



Disconnect the 2 connectors circled in blue and put the top to the side



Disconnect the 2 DC XT connectors and the 2 FAN connectors (all in BLUE)



Remove the 2 black screws in the red circle; you will need to peel off the sticker on the top first

then push the 2 clips on the left side to release the PCB (just a bit; it is still attached on the right side)



Unscrew the two black screws on the other side of the heatsink and push the clip (blue).

The whole circuit board should now come off.



I soldered 2 rows of 3 pins that I broke off from a longer piece in the 6 holes circled in red



I used these pins, but you can buy them already as 2 rows.

Use a sharp knife or small cutters to reach two rows of 3 pins. Make sure you stick them in from the other side. The side where you will solder is shown above.



How mine looks after soldering. I can see the GND isn't soldered properly (didn't get hot enough), but it worked,

You will need it only 1 time ;-)



Another side



You will need a USB \leftrightarrow TTL converter.

There are 5 VOLT TTL and 5 VOLT/3.3 VOLT converters. The ESP32 needs a 3.3 Volt version. It will not work with a 5 VOLT version, but luckily, it will not damage the unit (ask me how I know)

I bought one of these for US\$5 from Amazon If you search for CP2102 Module USB to TTL 5PIN Serial Converter Adapter Module Downloader for UART STC 3.3V and 5V with Jumper Wires You will find it.

Other/better and more expensive versions are available, but this worked for me.



Connecting the USB TTL to Lucky Miner

Using Dupont wire female to female, the sequence looks like this:

USB TTL	Luckyminer
GND	GND
TXD	RXD
RXD	TXD



When the Lucky Miner is turned off, plug the USB TTL into your laptop or desktop. Using Ubuntu open the terminal and run this command:

Sudo apt install minicom – Install the minicom following the prompt.



Make sure your user has access to a serial port (dial-out group)

Sudo adduser (user) dialout

Then, log out and log in again. Open the terminal.

Type id - you will see dialout (,20(dial out)

To setup minicom: type minicom -s

Select serial port set up – prompt like this: Change which setting? Press A:/dev/modem.



Change the:/dev/modem to /dev /ttyUSB0

+	
A - Serial Device :	/dev/ttyUSB0
B - Lockfile Location :	/var/lock
C - Callin Program :	
D - Callout Program :	
E - Bps/Par/Bits :	115200 8N1
F - Hardware Flow Control :	No
G - Software Flow Control :	No
H - RS485 Enable :	No
I - RS485 Rts On Send :	No
J - RS485 Rts After Send :	No
K - RS485 Rx During Tx :	No
L - RS485 Terminate Bus :	No
M - RS485 Delay Rts Before:	Θ
N - RS485 Delay Rts After :	Θ

Hit enter

Put the Lucky Miner to flash mode: Using a small screw, short the GND and I00 (lift the GND wire a bit to make contact)

Turn on the Lucky Miner while the small screw is pointed to GND and I00, release it, and the terminal show in the downloading mode.



Open another terminal - go to the Bitaxe folder where the Bitaxetool was there. I copy the .bin file inside that folder and run the command "bitaxetool -p /dev/ttyUSB0 -f esp-miner-factory-lv08-v2.6.0-1.0.2.bin"

Before hitting enter, close the other terminal that shows "download mode." Wait until the flashing finishes. When you see the "Leaving. Hard resetting via RTS pin. You can now turn off the miner and assemble again. It is back to set up; you need to set up the like when you set it up on your first use using 2.4 Ghz wifi, and viola!!! Your Lucky Miner is running an open-source Bitaxe firmware. 😕



```
File /home/pc/.local/lib/python3.12/site-packages/esptool/loader.pv
File "/home/pc/.local/lib/python3.12/site-packages/esptool/loader.py", lin
  val, _ = self.command(
           -----
File "/home/pc/.local/lib/python3.12/site-packages/esptool/loader.py", line 479. t
  p = self.read()
      File "/home/pc/.local/lib/python3.12/site-packages/esptool/loader.py", line 412, in read
  return next(self._slip_reader)
          ******
 File "/home/pc/.local/lib/python3.12/site-packages/esptool/loader.py", line 1615, in slip_reader
   read_bytes = port.read(1 if waiting == 0 else waiting)
                File "/usr/lib/python3/dist-packages/serial/serialposix.py", line 595, in read
   raise SerialException(
serial.serialutil.SerialException: device reports readiness to read but returned no data (device disconnec
                b/python3.12/site-packages/bitaxetool$ bitaxetool -p /dev/ttyUSB0 -f-esp-miner-factory-lv08
Connecting to port: /dev/ttyUSB0
Flashing firmware: esp-miner-factory-lv08-v2.6.0-1.0.2.bin
Flashing config: None
 esptool.py v4.8.1
 Serial port /dev/ttyUSB0
 Detecting chip type... ESP32-S3
 Chip is ESP32-S3 (QFN56) (revision v0.2)
  Features: WiFi, BLE, Embedded PSRAM &MB (AP_3v3)
  Crystal is 40MHz
   Configuring flash size...
   Compressed 15802368 bytes to 1602851...
Wrote 15802368 bytes (1602851 compressed) at 0x00000000 in 179.6 seconds (effe
Hash of data verified.
```