



Crankk official guide for onboarding a SyncroB.it gateway

- 1) Flash the Crankk image to the SyncroB.it's internal memory (eMMC module)
- 2) Local Dashboard setup
- 3) User Dashboard setup



For this guide you will need:

Screwdriver

SD adapter

Download **balenaEtcher** and **Crankk image**

PC/Laptop with Windows OS

Also, a Raspberry IO Board, like the one used in the guide, looks like this



1) Flash the Crankk image to the SyncroB.it's internal memory (eMMC module)

1. Open the SyncroB.it gateway.

Remove the rubber covers and take out the four bolts located on the back of the gateway.



2. Access the Raspberry Pi Module.

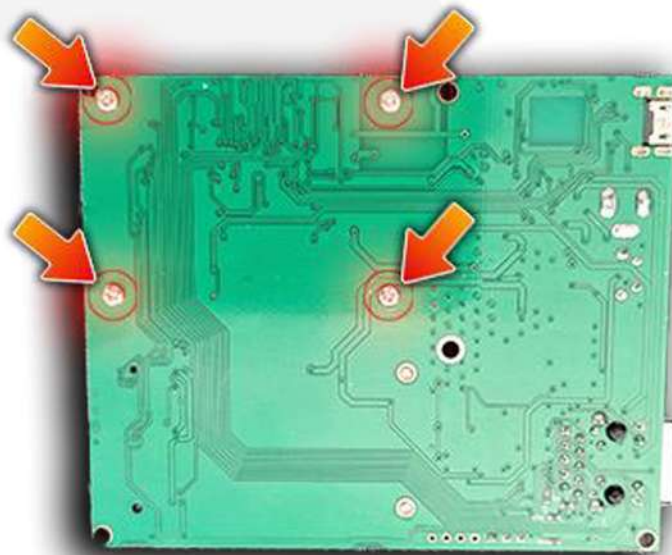
Begin by disconnecting the **LoRa cable** and the **fan cable** from the motherboard.



Take off any other bolts that might prevent the removal of the mainboard.

Then retrieve the board itself.

Uninstall the cooling system by unscrewing the four bolts situated at the back of the board.

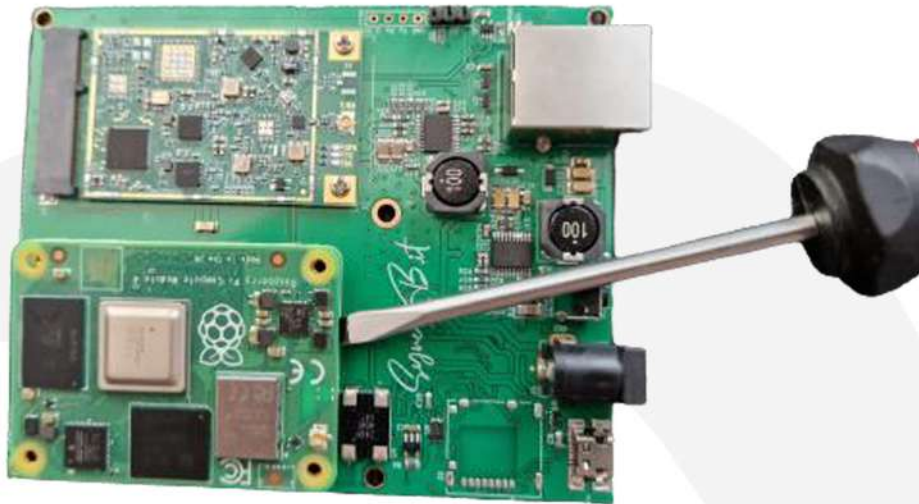


Once the bolts are out, you will be able to gently pull off the whole system.

3. Connect the Raspberry Pi eMMC module to your PC via IO Board.

With the cooling system detached successfully, you can now proceed to remove the Raspberry Pi module.

Using a screwdriver, gently release the board from one side.



Place the Raspberry Pi board onto the IO board, aligning it precisely as depicted in the picture below.

Apply gentle pressure on the top to establish a connection between the two boards.



Power on the IO board by connecting **USB-C** (on the IO board side) to **USB-A** (on the computer side).

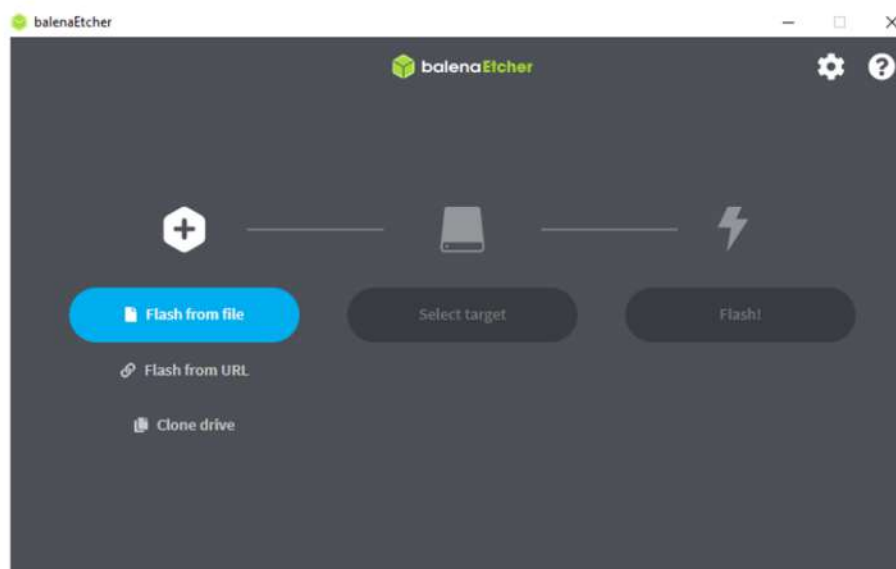
Download and install the **RPI boot tool**; this is necessary to establish a connection between the board and your PC.

Wait for the driver installation to complete then the Compute Module **eMMC** will appear on Windows as a disk.

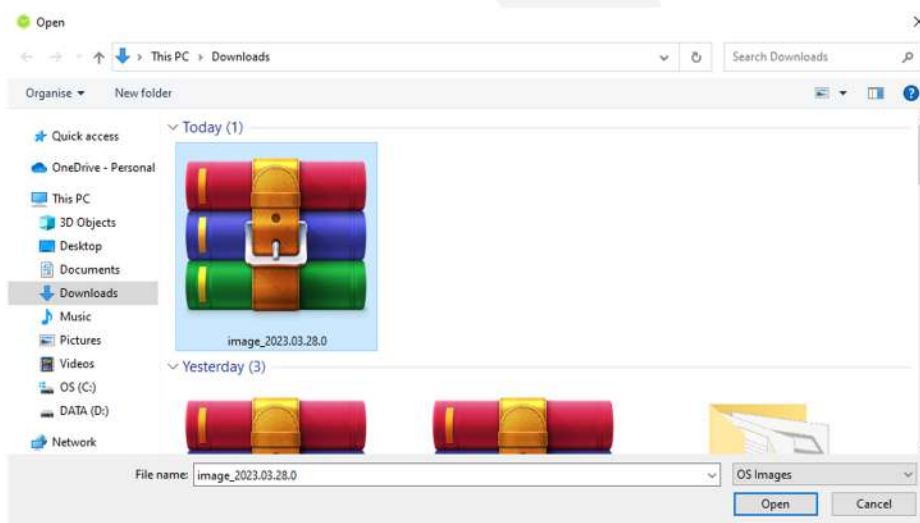
If the **eMMC** doesn't appear, run the **RPIboot.exe** file (search for "rpiboot" in the search bar to locate the file).

4. Flash the Crankk image to the eMMC module

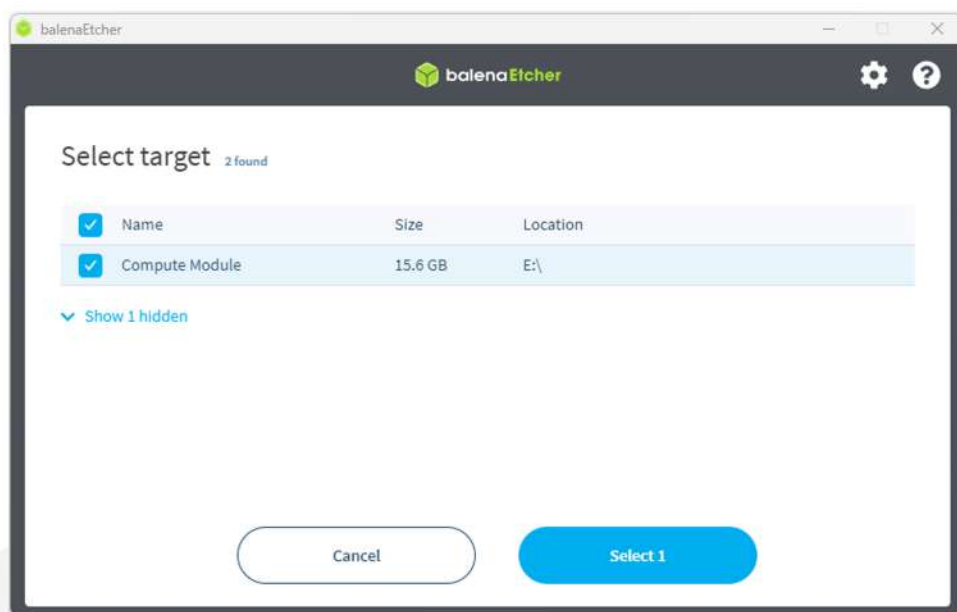
Install **balenaEtcher** and start the program.



Use the **Flash from file** option and select the **Crankk image** file you have downloaded. You don't need to unzip the file, just select it as is.



Okay, next pick your **SD card** > **Select** > **Flash**



The flashing process can vary, but usually takes about 20-30 minutes.

4. Reassemble the gateway.

Once the process is completed, remove the **eMMC module** from the IO board and reassemble the gateway.

Please make sure that the Raspberry Pi module is placed back to the gateway exactly as it was before (see the screenshot).

Then connect the gateway via an **Ethernet LAN** cable to your local network and power it on.

Please wait a few minutes for the gateway to boot up and then return to your PC.

2) Local Dashboard setup

5. Log in to the Local Dashboard.

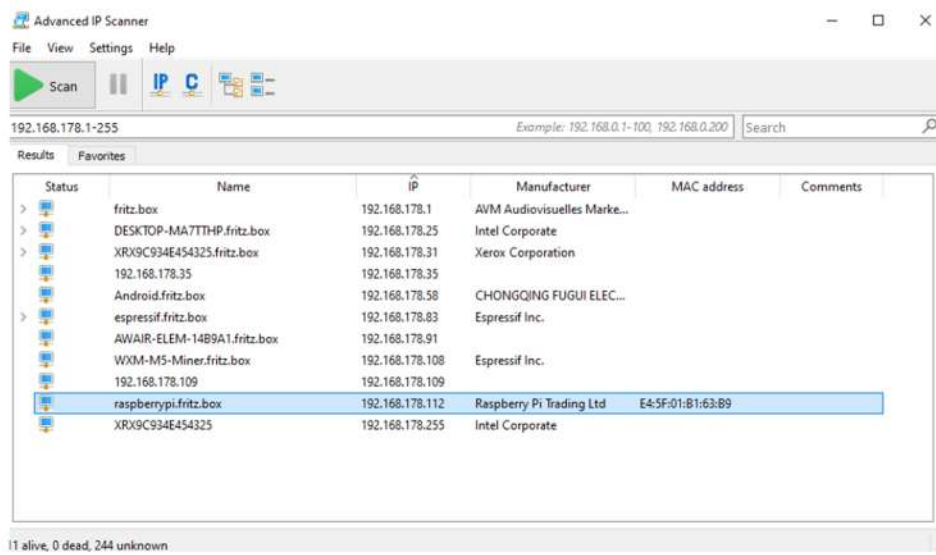
We have automated the process and you do **NOT** need to download the **Crankk Installer** anymore.

Instead, just log in to the **Local Dashboard**.

If you have any VPN enabled on your PC, please turn it off.

Now check your router to find the **gateway IP address**.

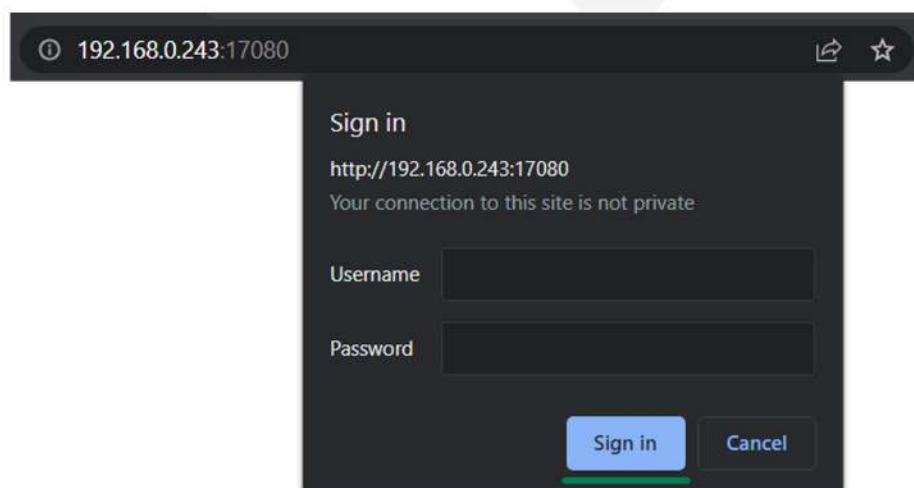
If you are unsure how to do this, you can use free tools like **Advanced IP Scanner** to help you out. Check the **MAC address** of your gateway to find the correct IP address.



Once you have the LAN IP address of your gateway, open a new browser tab from a PC on the same network and paste the IP followed by **:17080**

`http://192.168.0.243:17080`

When logging in for the first time, you do not need to enter any credentials, just press **Sign in**.



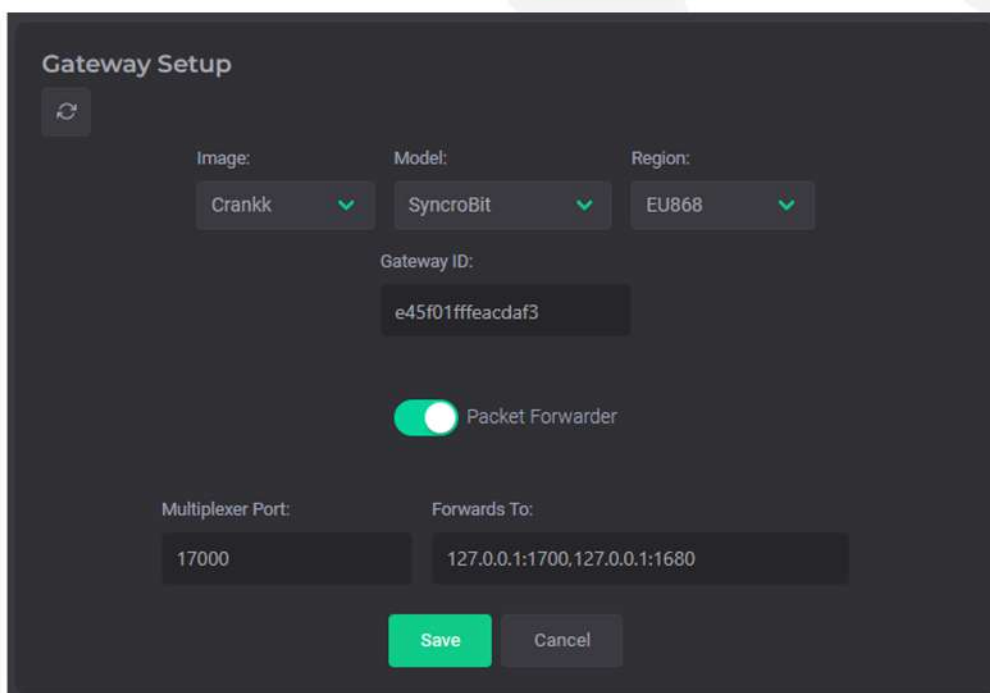
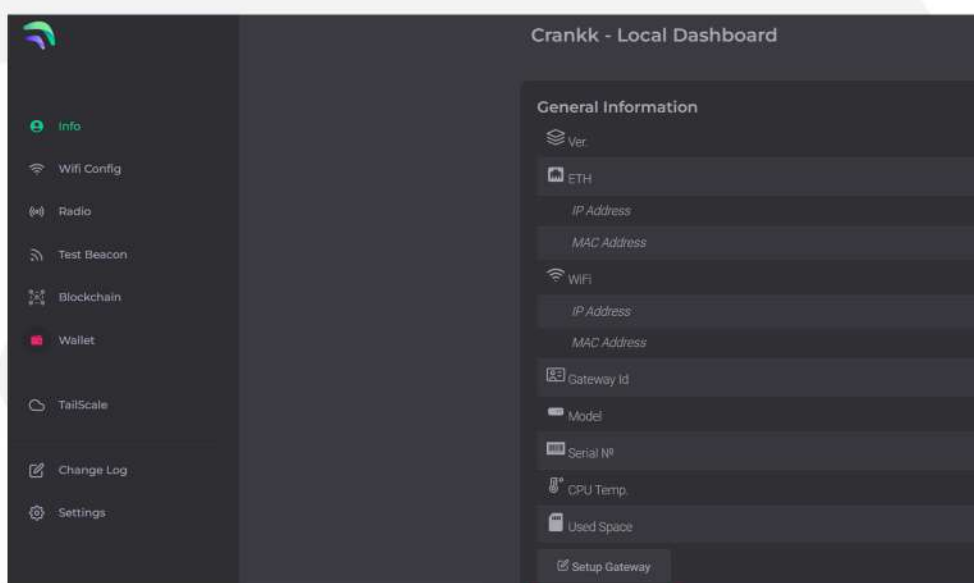
After setting up your gateway, next time you can log in with the following credentials:

- Username: **admin**
- Password: **the last 6 symbols of the gateway's MAC address (e.g. B163B9)**

Please note that you can change the password in the **Settings** tab.

6. Set up the gateway.

Go to the **Info** tab > **Setup Gateway**



Copy your **Gateway ID**, as we will need it later.

Select the **Image** that is installed on your gateway (Crankk / Helium / Nebra), **Model** and **Region*** (EU868 / AU915 / US915).

For **SyncroB.it** gateways, only the Crankk image is available at the moment.

Turn on the **Packet Forwarder**.

If you are currently mining or planning to mine Helium, leave the **Forwards to** box unchanged as shown in the screenshot.

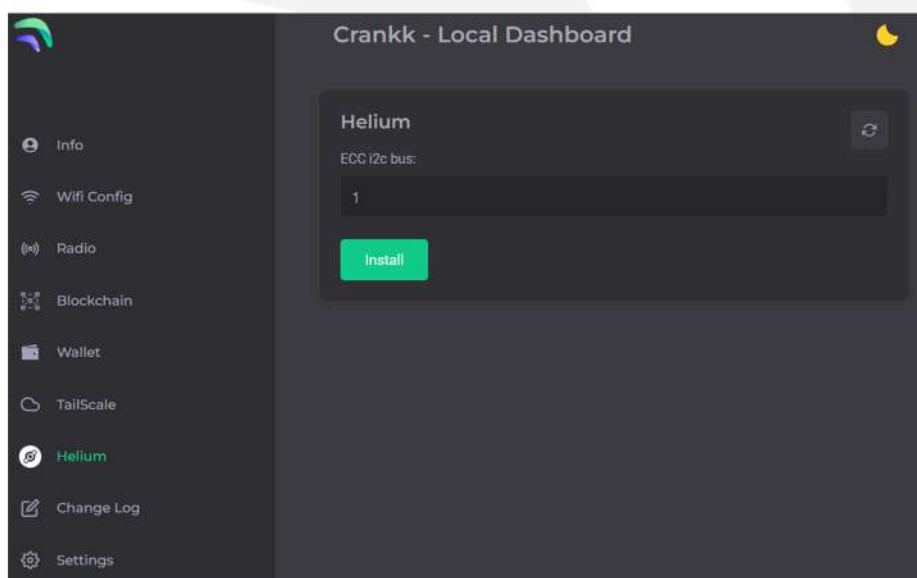
If you don't wish to mine Helium, leave only **127.0.0.1:1700**

Hit **Save**.

Your gateway will restart automatically. Please wait a few minutes while it loads.

7. Double mining.

If you want to participate in Double mining, you can install Helium from here:

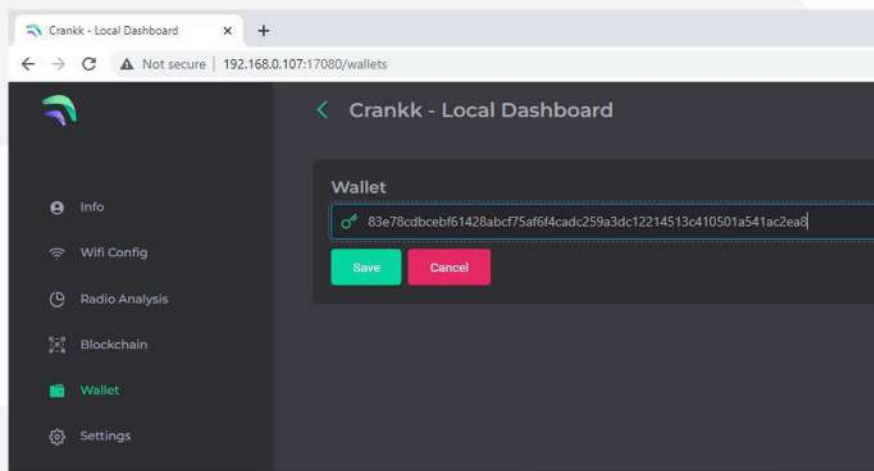


8. Import your secret key.

Hint: If you don't have your secret key saved, you can go to the **User Dashboard > Wallets > find the correct wallet > use the three dots to reveal the secret key.**

Navigate to the **Wallet** section in the **Local Dashboard** and enter your **secret key**, keeping the following in mind:

- Please ensure that you copy and paste the **secret key** exactly as it is, without any spaces or other symbols
- Please double-check that it is the correct **secret key** and that it does not belong to another gateway
- Please also note that your **secret key** is different from your **wallet address/public key** starting with k:



Hit **Save**.

If you have entered the correct secret key, then you will see your **k: wallet address** displayed in the **Wallet** field.

3) User Dashboard setup

9. Assign your gateway ID to a wallet in the User Dashboard.

Visit **User Dashboard** and sign in into your account.

Navigate to the **Wallets** section and select the wallet that you want to use for your software license activation.

Assign your gateway ID to the chosen wallet by clicking on the **Assign** button. If you don't see such a button, it means you haven't purchased a software license for this wallet.

PUBLIC KEY	ALIAS	GATEWAY	BALANCE KDA	BALANCE CRKK
k:f54e8d0096a43bf9333d0761f870c7a54 8e3d0221822b25c8da82e3e70fa6fb1	test123	Assign	0.998 \$0.52	0 \$0.00

Select your gateway **Model**, copy and paste your **Gateway ID** (please double-check that it is correct) and hit the **Submit** button.

Assign Gateway

Enter Model and Gateway ID that you want to assign to this wallet.

Select Model
SyncroB.it

SyncroB.it Gateway ID
e45f01fffeacdaf3

[Cannot find the Gateway ID?](#)

Want to use custom ID instead?

[Cancel](#) [Submit](#)

Please wait a few minutes to allow the changes to sync to the blockchain.

Congratulations! You have successfully onboarded your **SyncroB.it** gateway on Crankk!

** Crankk currently supports the following frequencies: EU868 MHz, AU915 MHz and US915 MHz. It is essential to ensure that any hardware purchased from a third-party company for use with Crankk operates on the correct frequency for your region of residence. Crankk Inc. assumes no responsibility for any issues arising from the use of hardware with an incorrect frequency. It is the responsibility of the user to select the appropriate frequency for their region of residence.*

Please note that any modifications, updates or restrictions made by the gateway manufacturer that may impact the performance or functionality of the gateway on the Crankk network are beyond the control and responsibility of Crankk Inc. Users are advised to check compatibility and seek assistance from the gateway manufacturer for any gateway-related issues.