Latest version of this Manual here:

Home Assistant Green Guide



03/26/2024

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The Home Assistant Green includes



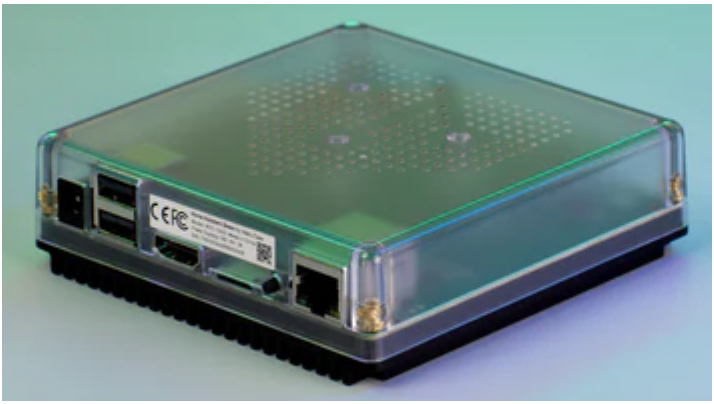
1. Home Assistant Green smart home hub: This is the main board, which comes with a 32GB eMMC on board flashed with the Home Assistant OS
2. Gigabit Ethernet cable: This cable will go from the Ethernet Port in your Green to your Router.
3. Universal power supply, 12VDC/1A, Comes with plug adapters for EU, US, and UK: Provide power to your Green whichever country adapter you need.
4. Quick Start Guide, Warranty and Safety Information.

Things that you need to supply

1. Ethernet connection to the Internet
2. A power outlet into which to plug the power adapter
3. Your excitement!

We'll discover some things you can do with your kit. We're sure you'll find many more things to do after you've gotten familiar with some of these projects!

Connecting Accessories



For the final steps:

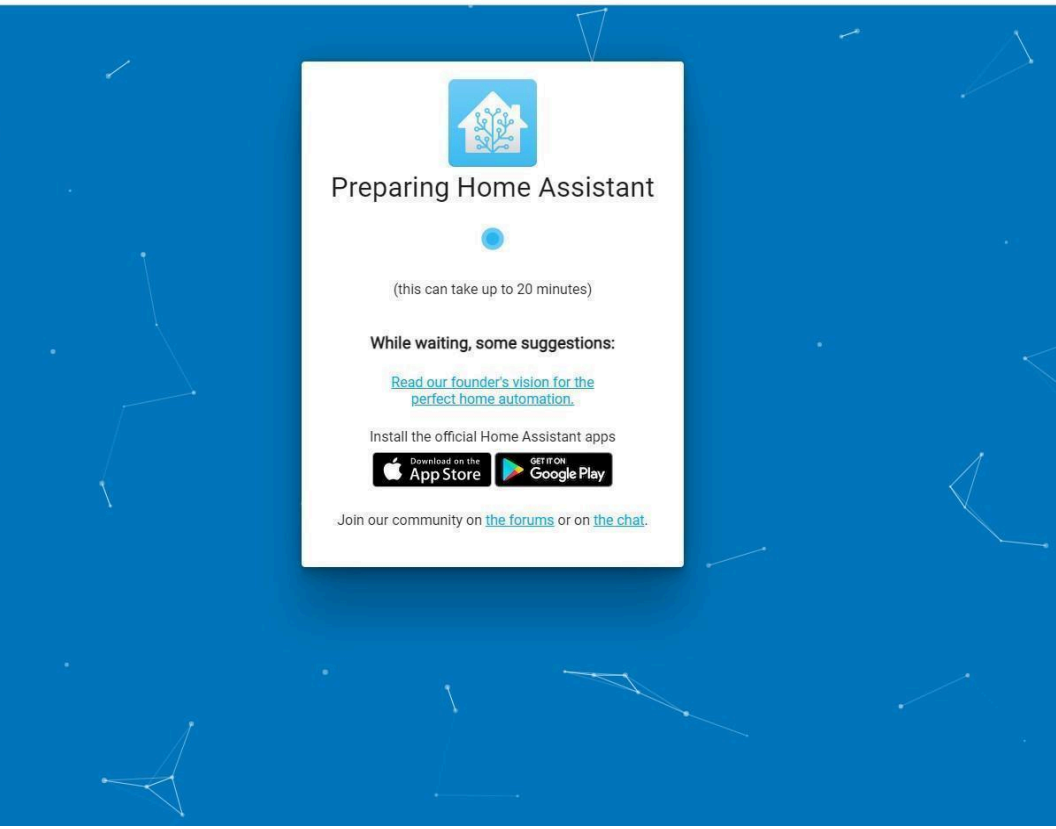
- Use the Ethernet cable by connecting it to the Ethernet port (Gigabit Ethernet) and the other end to your network router or active network port.
- Connect the Power Supply.
- Enjoy Home Assistant Green

Next Steps

Setting up Home Assistant

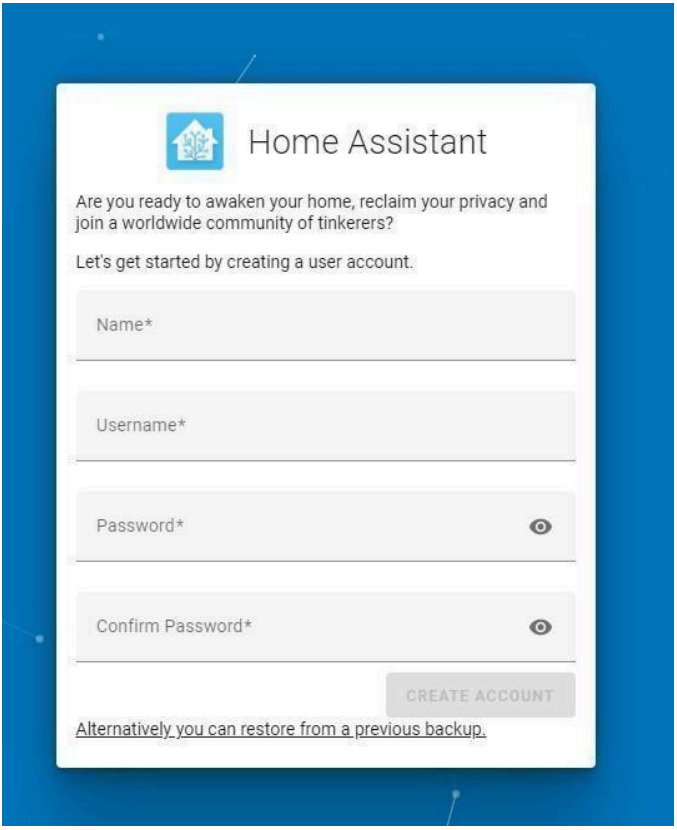
STEP 1: Go to your browser

Go to your browser on your laptop, phone or tablet and try accessing http://homeassistant.local:8123/ you can also download the home assistant app on iOS or Android. If this doesn't work, try "Alternate Step 1" below.

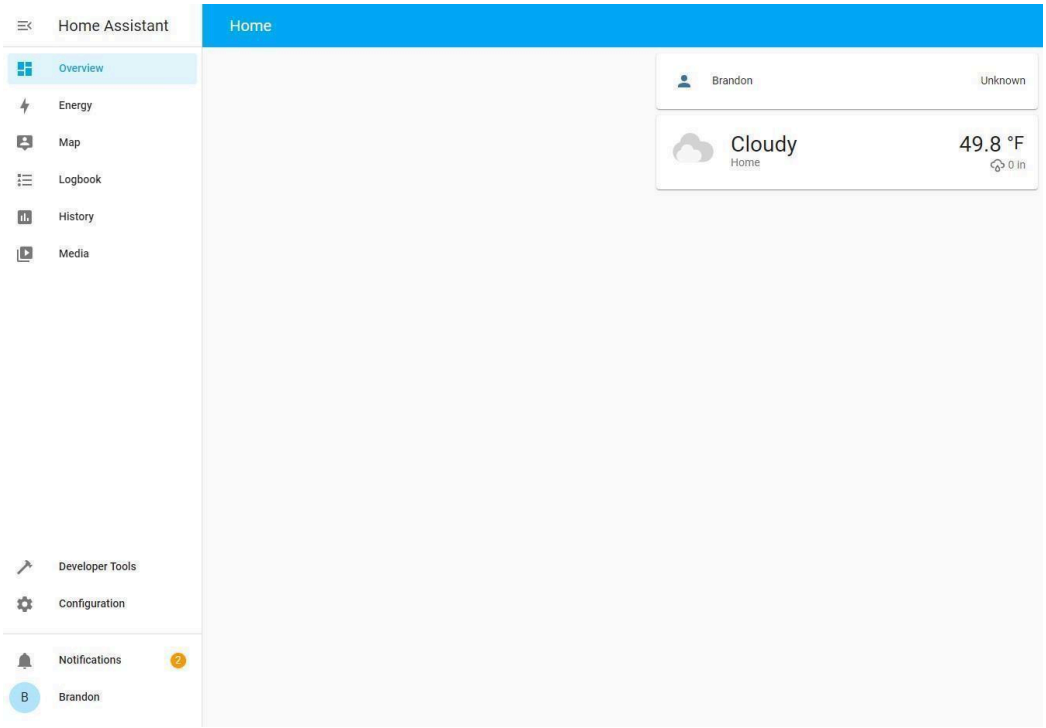


STEP 2: Create Account

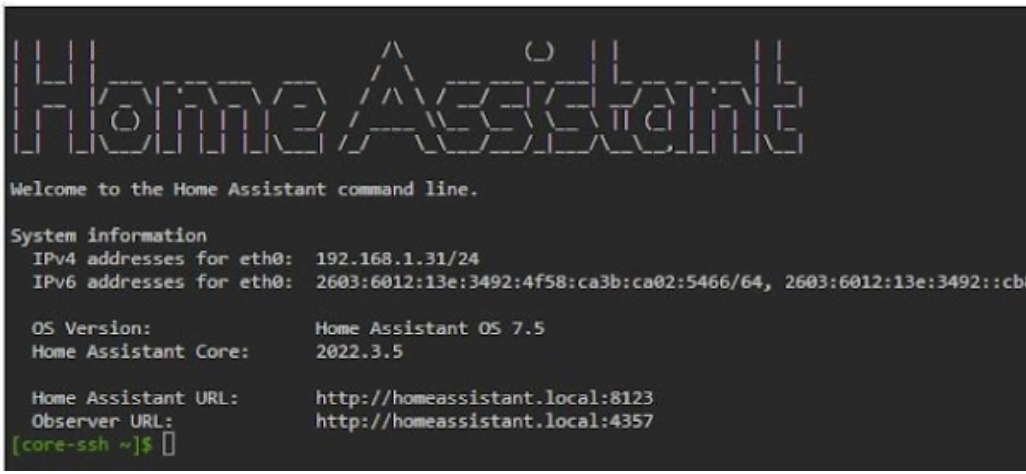
Wait until the Home Assistant OS gets updated and create your account.



STEP 3: Enjoy Home Assistant



Alternate STEP 1: Accessing Home Assistant from IPv4 Address



If you are not able to access http://homeassistant.local:8123/ you will most likely be able to access Home Assistant using the IPv4 address assigned to your device. In order to find the IPv4 follow the next steps:

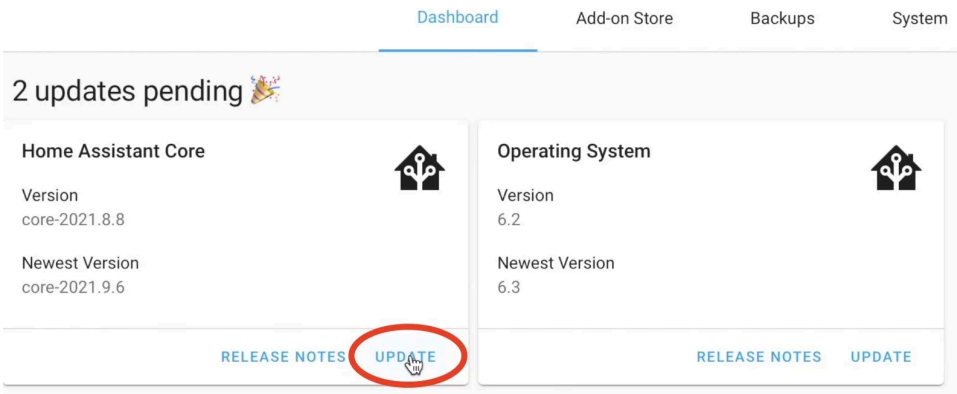
- Connect your Home Assistant Green to a monitor using the HDMI cable and a Keyboard via USB.
- If the username is asked, write “root” and press enter.
- If a password is required, write “root” and press enter.

You should get a screen like the one on the one above. Make a note of the line that states “IPv4 addresses for eth0”. The part from the slash to the end of the line (“/24” in the example above) should be ignored in this case.

- Now just use the IPv4 address to access Home Assistant from your web browser.
- Based on the example above, it would be http://192.168.1.31:8123/ (replace the “192.168.1.31” with the IPv4 address shown on your Home Assistant, but leave the “:8123/” on the end)

If you have the Home Assistant app it will automatically detect your Home Assistant Green if connected to the same network that your phone is connected to, make sure to write down the IPv4 address before you continue with the setup process on your phone.

After creating a Home Assistant account and logging in, go to the "Settings" option in the sidebar and look at the top item in the list. If it says something about an update, install the Home Assistant updates (Make sure to update both the Operating System and Home Assistant Core).

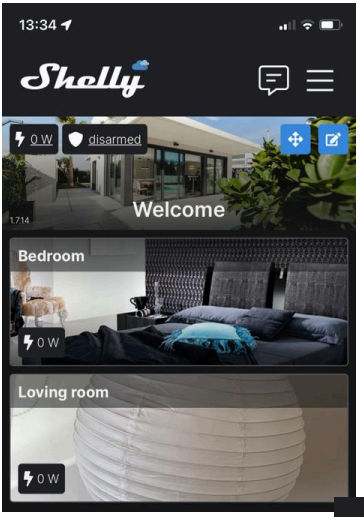


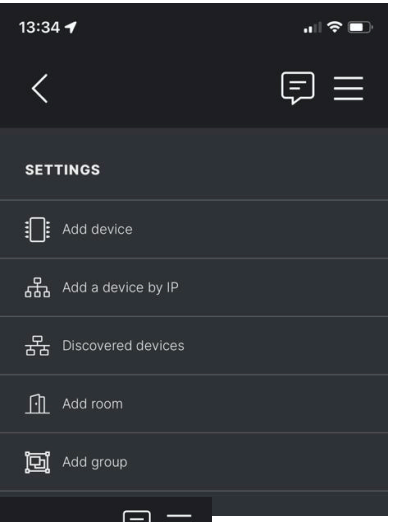
Setting Up Shelly and Other IP-Based Devices

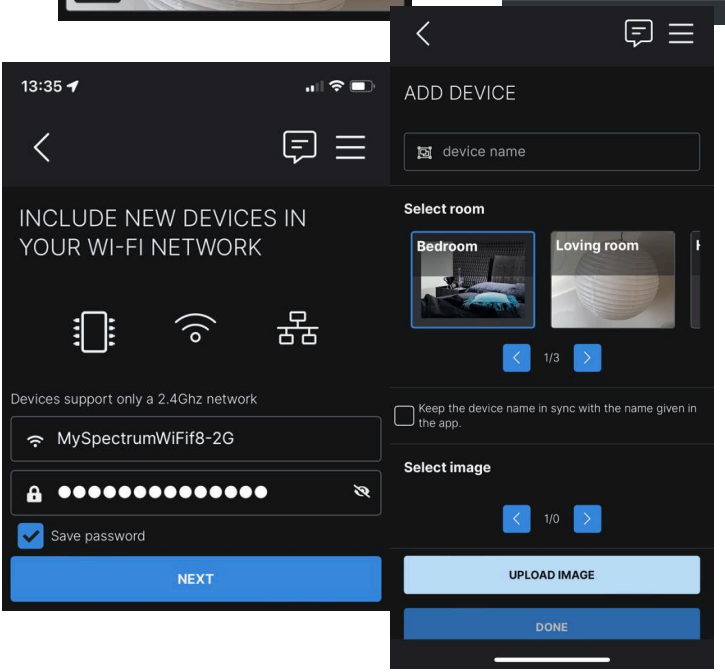
STEP 1: Add your device in your device's App

(Shelly shown as a demonstration)

Go to your Shelly app, select ☰ and click on "Add device"



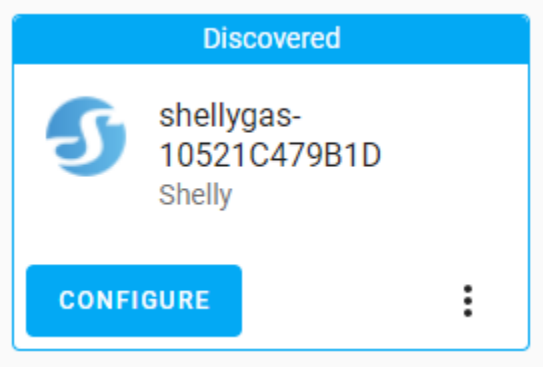


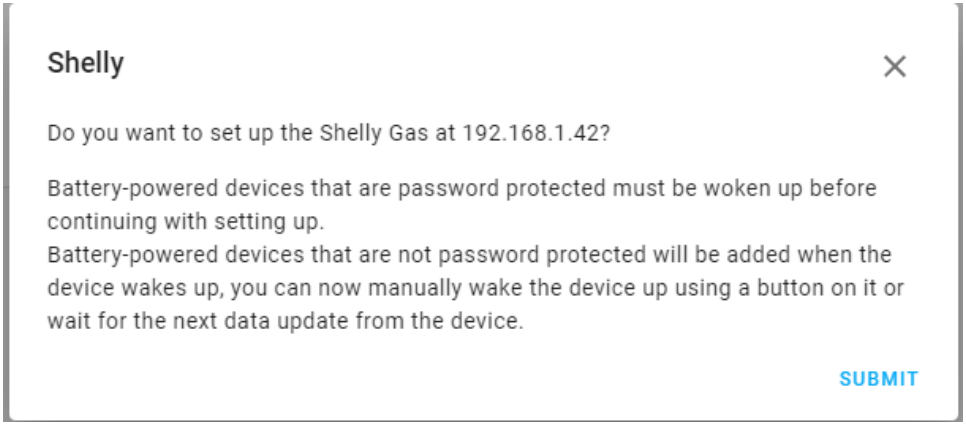


Make sure to connect to your 2.4Ghz network, pick a name, a room and hit "Done"

STEP 2: Configure Shelly Device on Home Assistant

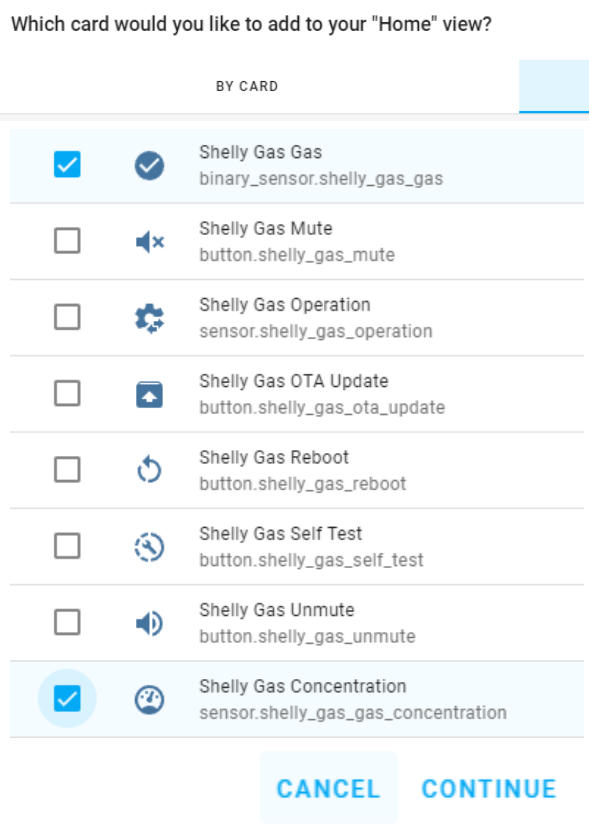
Once your Shelly device is connected to the same network as your Home Assistant, it should be detected automatically. Press “Configure” and then “Submit”.



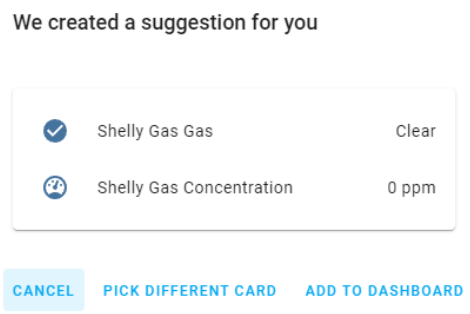


STEP 3: Add device to Overview

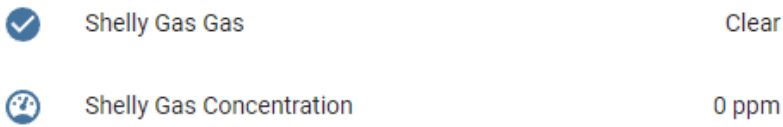
In your overview menu, select the three dots on the right top corner, and hit “Edit Dashboard”, once in there select the “Add Card” option, and go to the “Select by Entity” tab.



There you should find the entities included with your device, in my case “Shelly Gas”. Mark all the entities that you would like to add and hit “Continue”

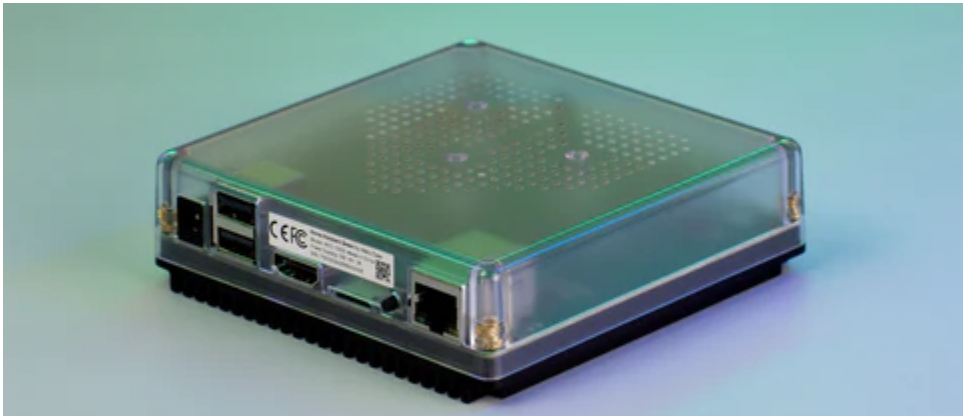


Then you can pick a different card, or add the suggested one to the dashboard, and it will look like this.



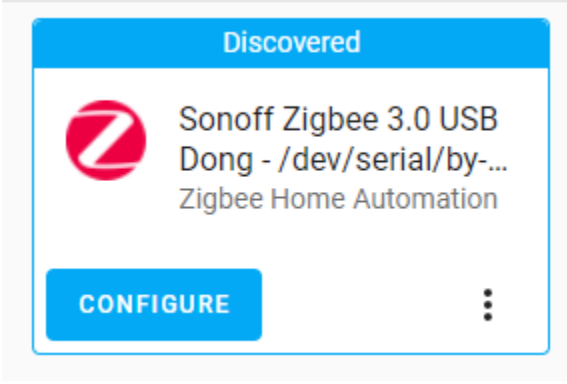
Setting Up Zigbee

STEP 1: Insert the Zigbee 3.0 USB Dongle Plus E or SkyConnect in one of the USB ports

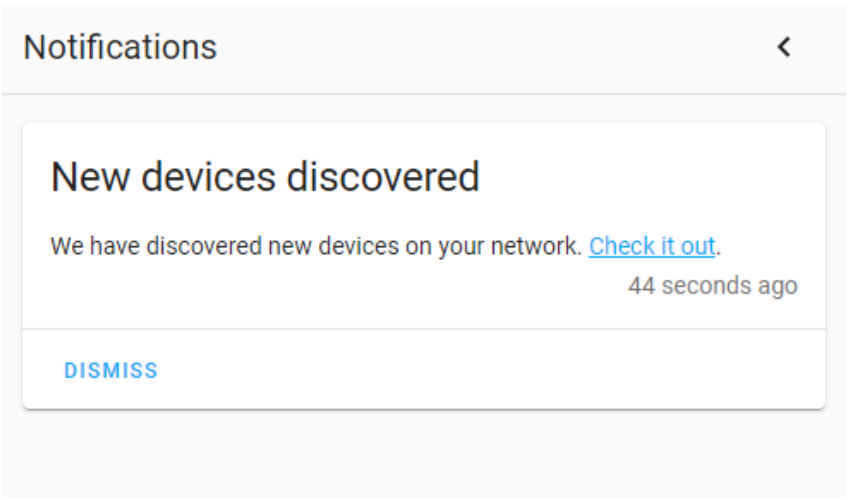


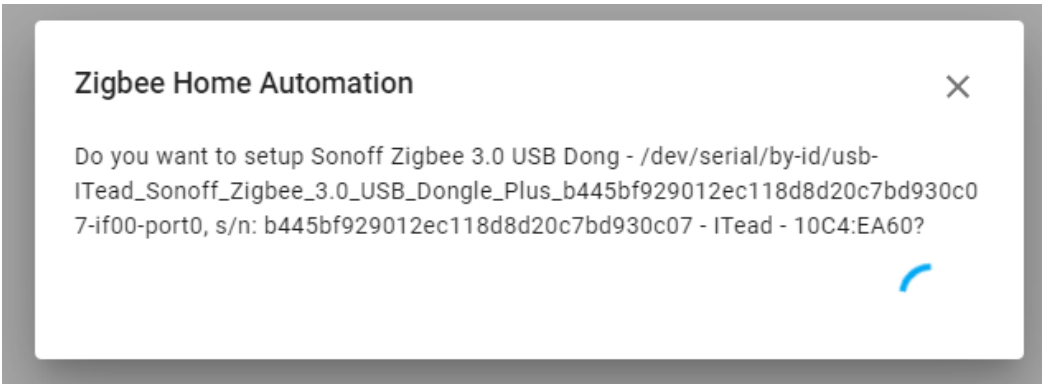
Connect your preferred Zigbee USB Dongle in the USB Port right next to the Power Supply port.

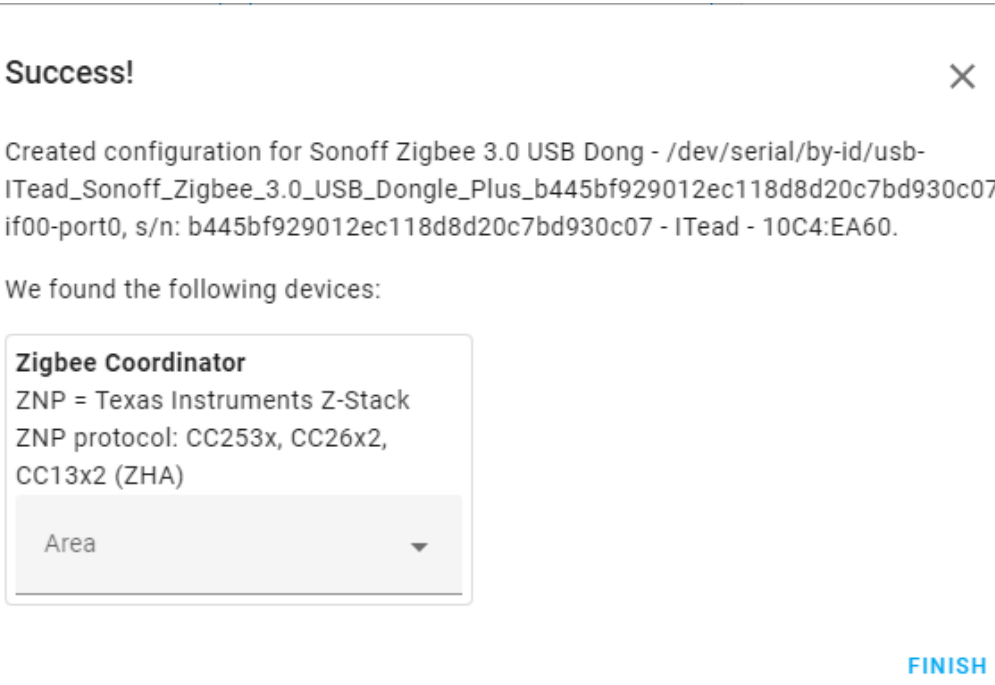
STEP 2: Configure the Zigbee Dongle on the Home Assistant Interface



Check out the new devices discovered, select “configure” and then hit submit, it will take a minute to configure Zigbee.

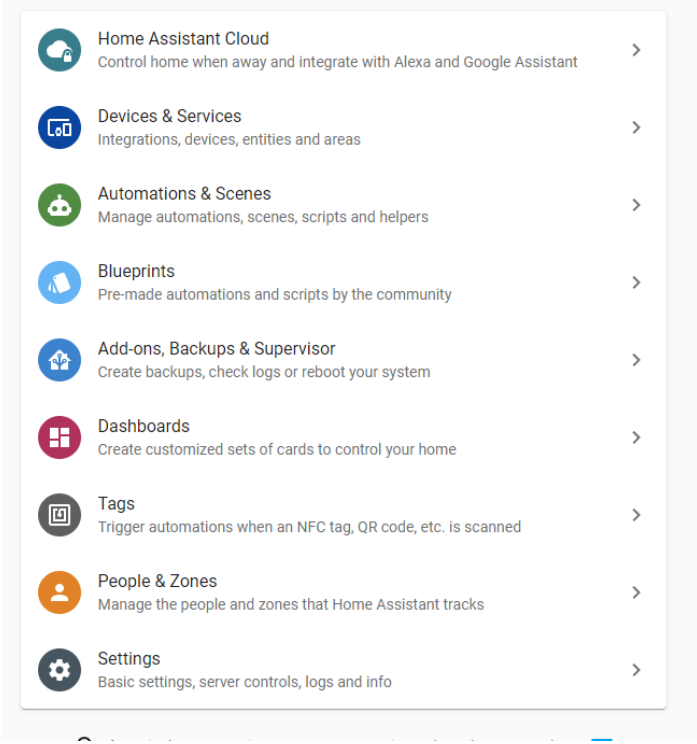


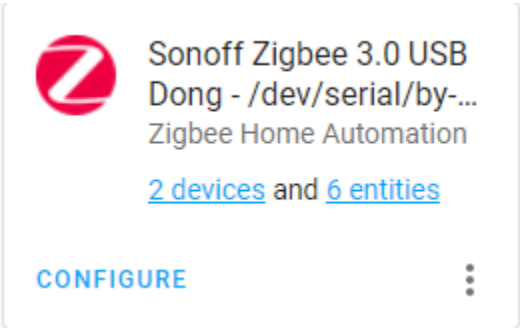




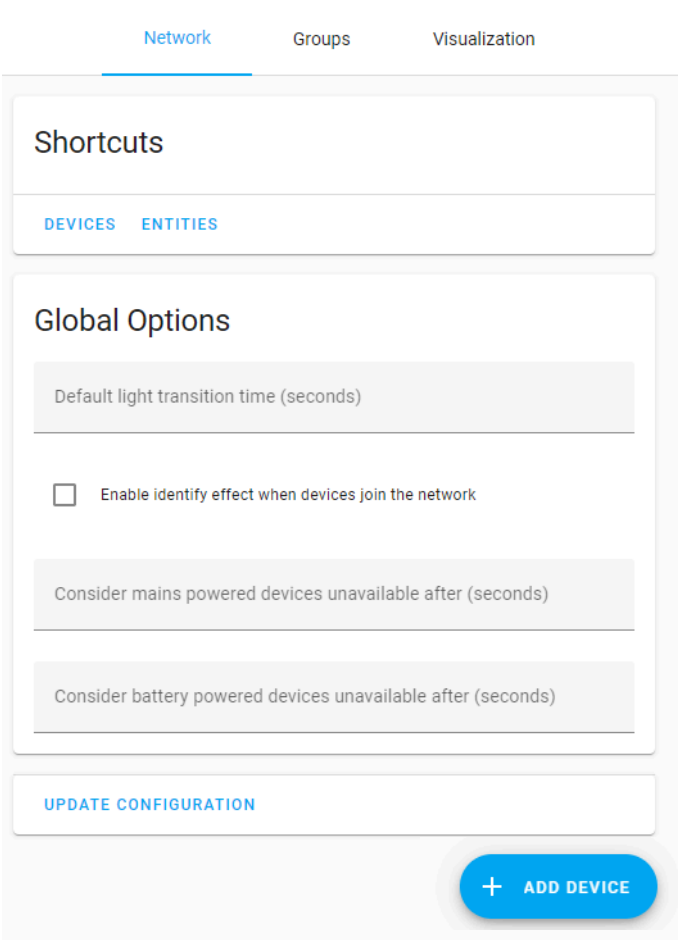
Once you get the success message, select the area where your Zigbee is and hit “finish”

Go to “Configuration”-->”Devices & Services” and hit “Configure” on your Zigbee Device.

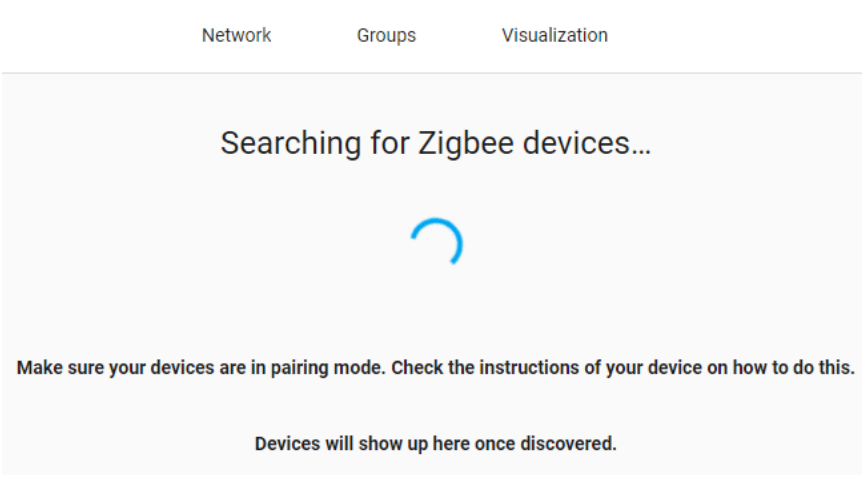


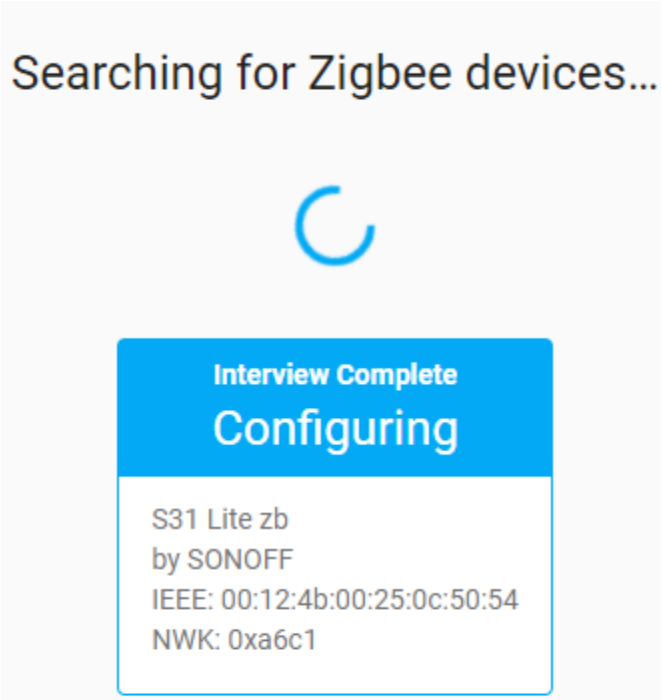


Once you enter your Zigbee configuration select “Add device” on your bottom right.

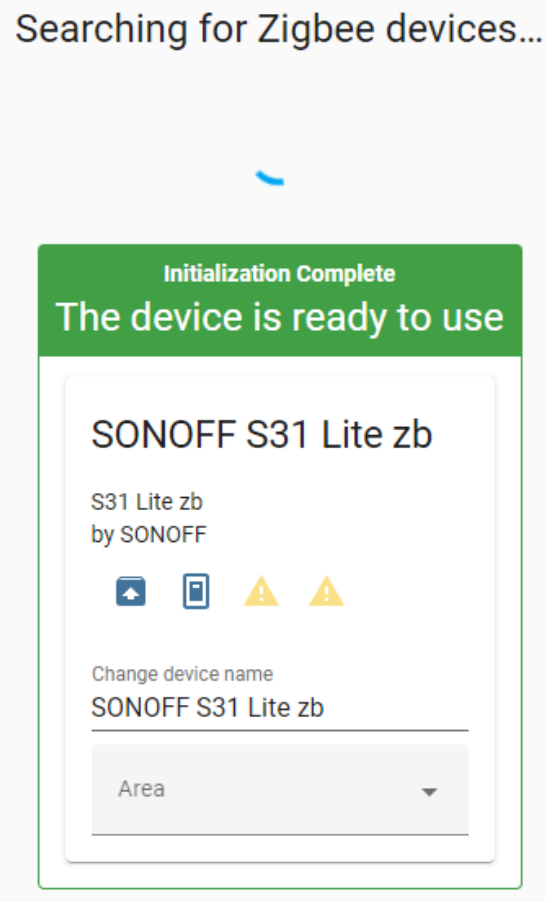


Home Assistant will use the Zigbee Dongle to search for Zigbee compatible devices that are in pairing mode.


Network
Groups
Visualization
Searching for Zigbee devices...
Make sure your devices are in pairing mode. Check the instructions of your device on how to do this.
Devices will show up here once discovered.

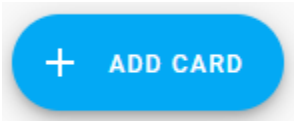

Searching for Zigbee devices...
Interview Complete
Configuring
S31 Lite zb
by SONOFF
IEEE: 00:12:4b:00:25:0c:50:54
NWK: 0xa6c1

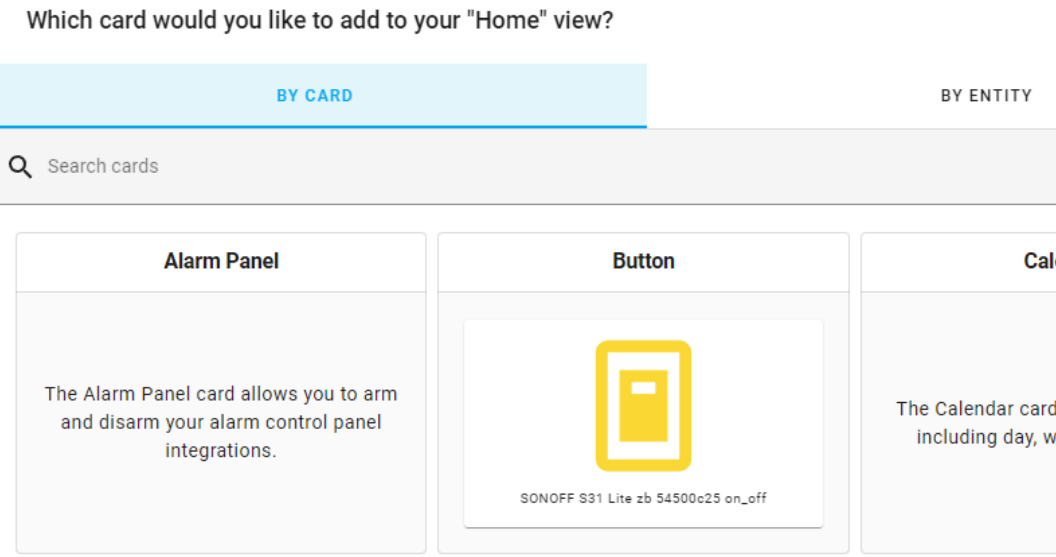
Home Assistant will automatically detect and configure the device

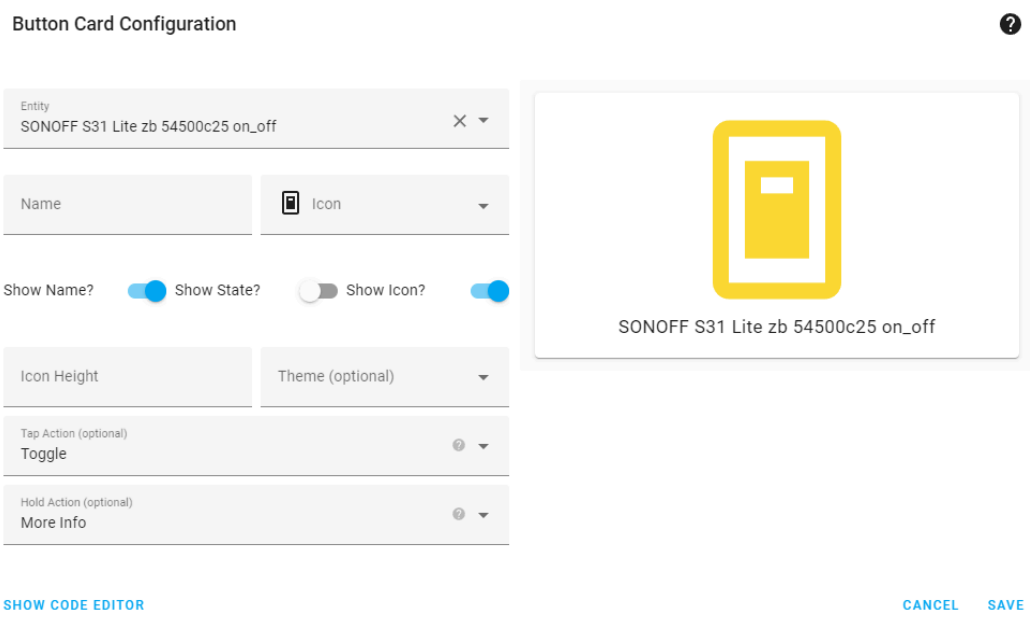


STEP 3: Add your new device to your Overview

In your overview menu, select the three dots on the right top corner, and hit “Edit Dashboard”, once in there select the “Add Card” option, where you should find the option of adding your recently detected device

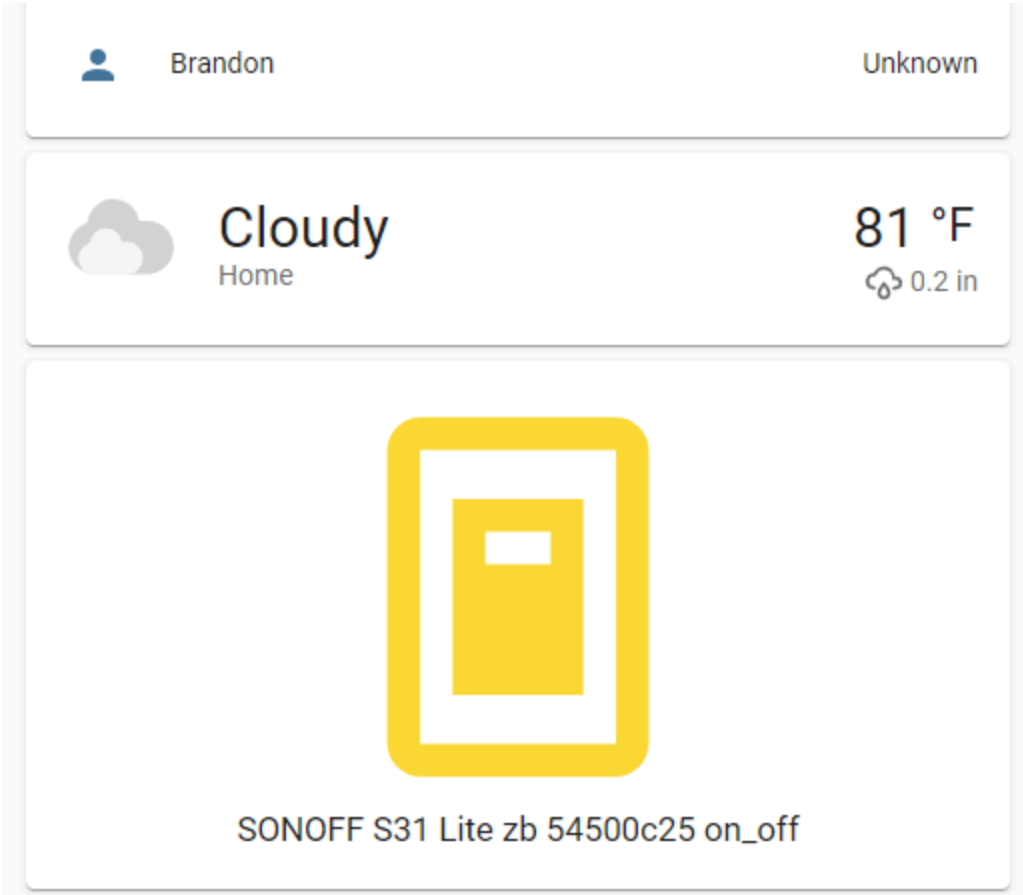






Configure your selected card and hit “save”.

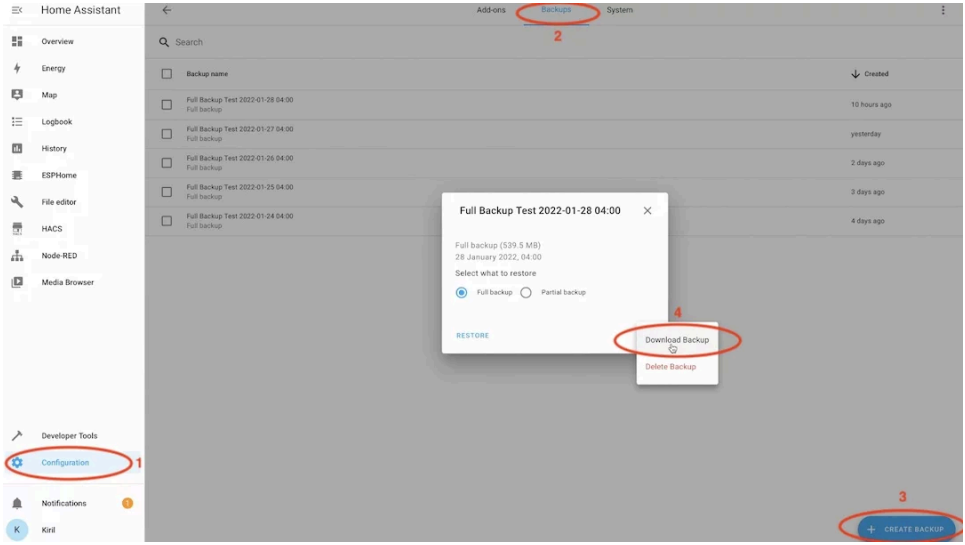
Now you will be able to control your new device from your Home Assistant Overview.


Brandon
Unknown
Cloudy
Home
81 °F
0.2 in
SONOFF S31 Lite zb 54500c25 on_off

Moving data to external hard drive (SSD)

STEP 1: Create and Download Backup

Create a backup & download it first, before continuing with the Home Assistant External Data Disk move procedure.



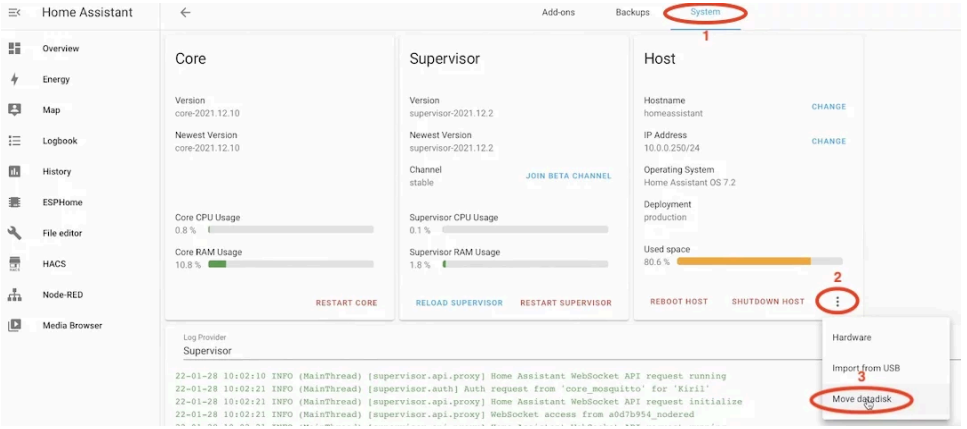
STEP 2: Connect your external SSD

When you are ready with the backups, boot your Home Assistant as usual and connect the SSD drive to any of the blue USB ports (USB 3.0) on your device, as they are faster.

STEP 3: Use UI to move the Home Assistant data to the external data disk

Open your Home Assistant web interface and go to:

Configuration > Add-ons, Backups & Supervisor > System tab and click on this three dots menu then select Move datadisk.



You should see a warning/dialog saying the following:

You are currently using /dev/mmcblkXXXX (this is the representation of your eMMC or microSD) as data disk.

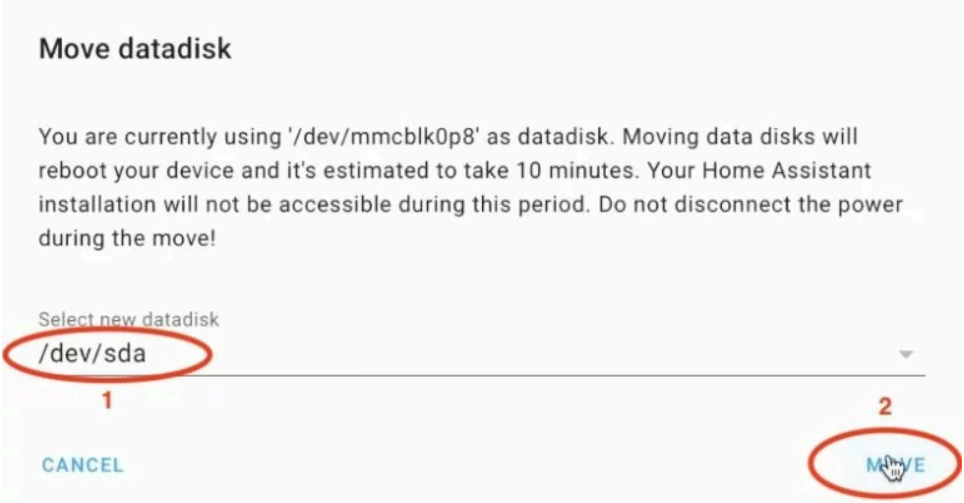
Moving data disk will reboot your device and it is estimated to take 10 minutes.

Your Home Assistant installation will not be accessible during this period.

Do not disconnect the power during the move.

To continue, select your SSD drive from the dropdown list and click on the move button.

Select USB drive and move the data disk



Installing Home Assistant Community Store (HACS)

Allowing Additional Functionality

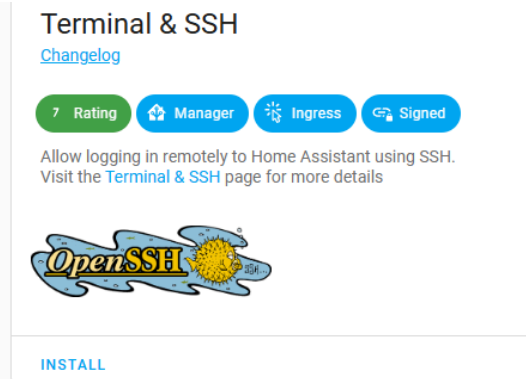
STEP 0: Create Github account

If you already have a Github account, continue to Step 1.

Otherwise, go to https://github.com and follow the instructions to create an account.

STEP 1: Install SSH add-on

Go to Settings→Add-ons→Add-on Store and search for “Terminal & SSH”, if it is not showing up, please make sure “Advanced mode” is enabled, to enabled Advanced mode, go to your profile (Bottom left corner) scroll down the the end of “User Settings” and enable “Advanced mode”. Once enabled go back and search for “Terminal & SSH”. Once there click install



Once installed, enable Show in sidebar, and either click on the sidebar icon, or click on “open web ui”



That will take you to the Home Assistant Terminal where you can download HACS.

STEP 2: Download and Install HACS

Once on the terminal run this command:

“wget -O - https://get.hacs.xyz | bash -" (without the “”)

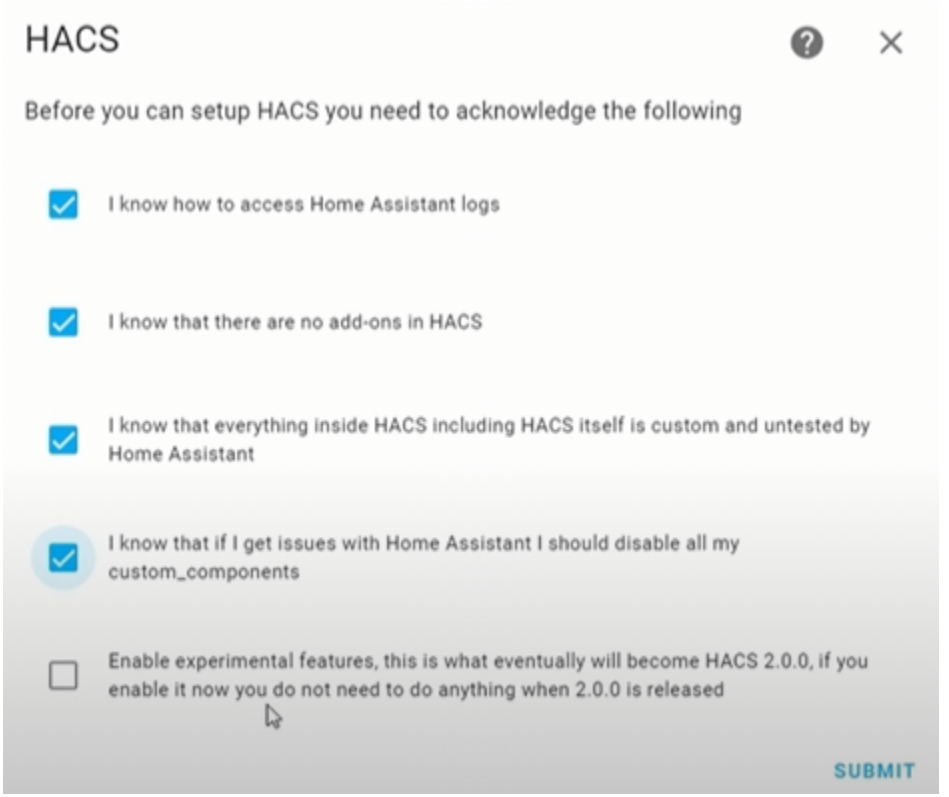
Alternatively you can try following these instructions “https://hacs.xyz/docs/use/download/download/”

Once the command has finished, go to settings, click the 3 dots on the top right and restart Home Assistant.

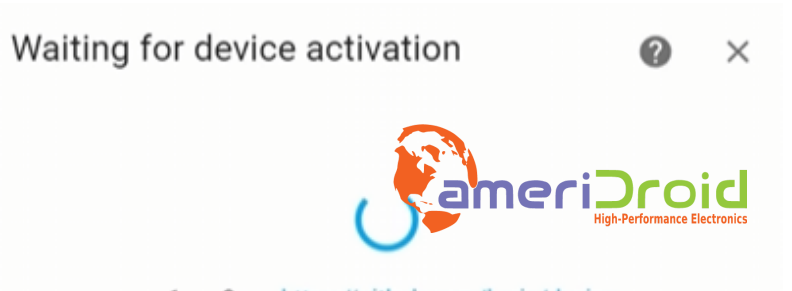


Once HA has restarted, go to Settings, Devices & Services, Add Integration and search for HACS

Mark all boxes except the last one and submit.



Follow the instructions for device

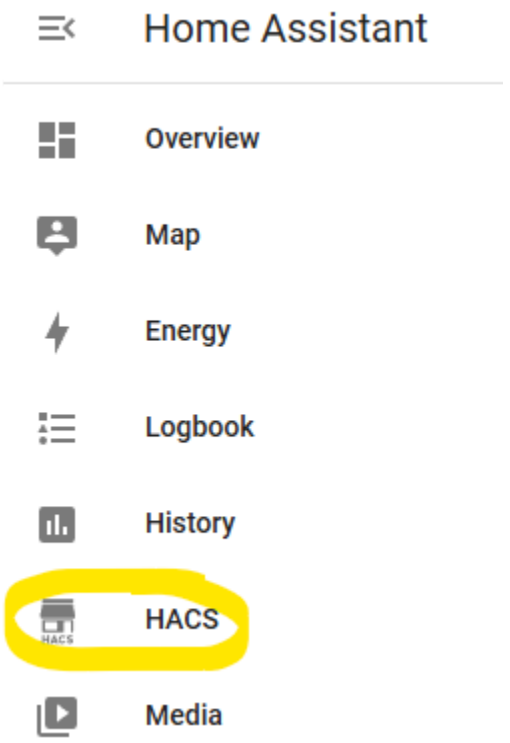


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AmeriDroid
High-Performance Electronics

activation in Github (you need a Github account)

Once you have the success message, just click on finish.



HACS will not show up in your sidebar.

Now you can browse the Home Assistant Community Store.

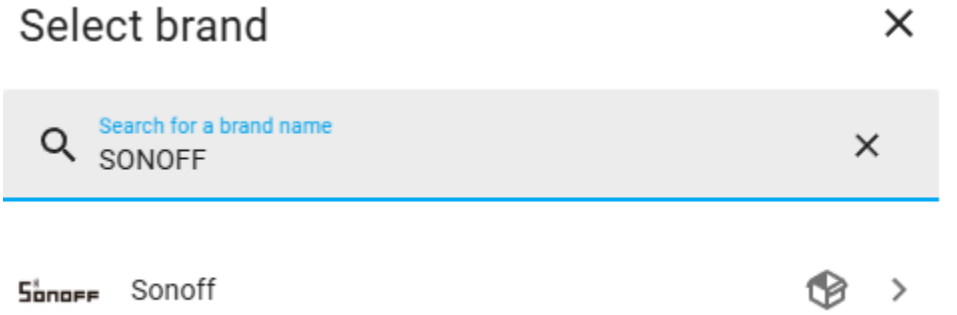
Add SONOFF WiFi Devices to Home Assistant

Now that we have HACS installed we can add integrations like SONOFF LAN, SONOFF LAN will allow us to add to Home Assistant SONOFF WiFi devices that are not directly supported by Home Assistant.

For instance, to install SONOFF LAN, click “HACS” in the sidebar and enter “SONOFFLAN” in the search bar. When it is found, click on it and select “Download” from the bottom right corner.

First, go to HACS > Integrations > Plus > SonoffLAN and click install.

Then simply go to Settings > Integrations > Add integration and search for SONOFF



Then use your eWeLink username and password and you will be able to import your eWeLink devices to Home Assistant.

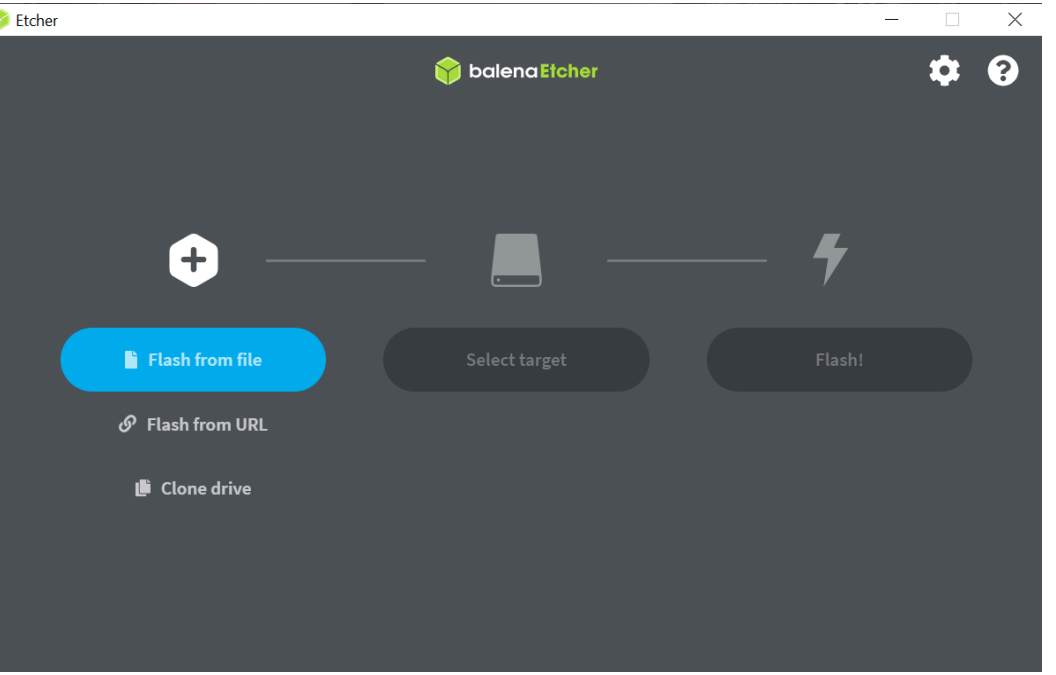
Appendices

Appendix A: Reflash your eMMC or microSD with Home Assistant or Other Operating System

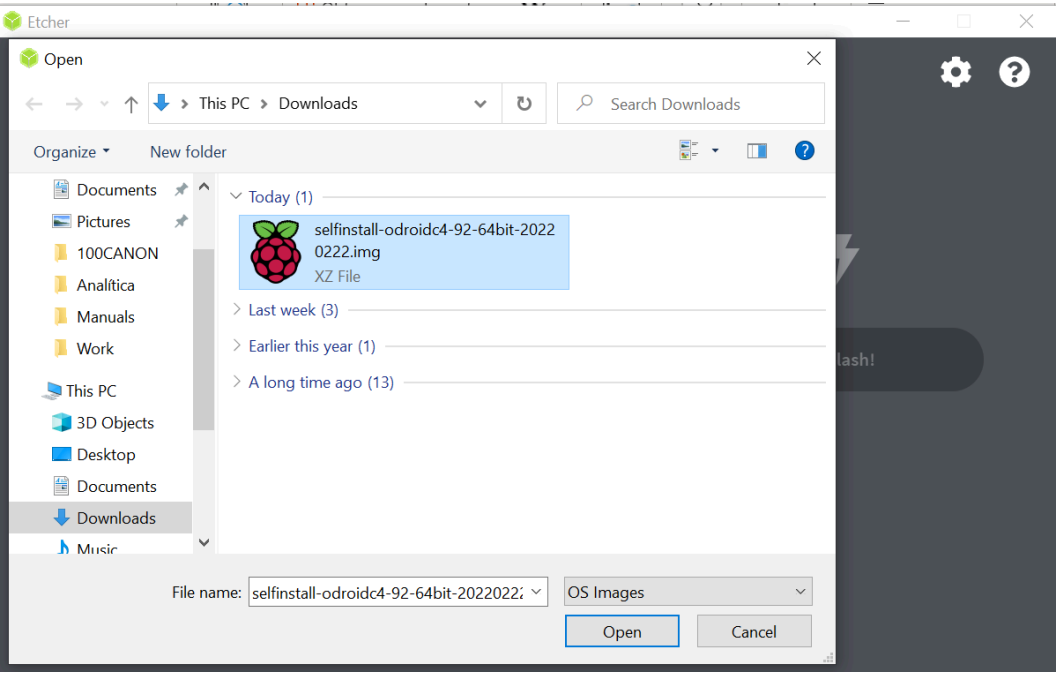
STEP 1: Download the Home Assistant OS for the Green

To download the Home Assistant Green OS installer, paste this URL “https://github.com/NabuCasa/buildroot-installer/releases/tag/green-installer-20230822” into your browser. You can use the QR code above to gain access to the virtual version of this guide.

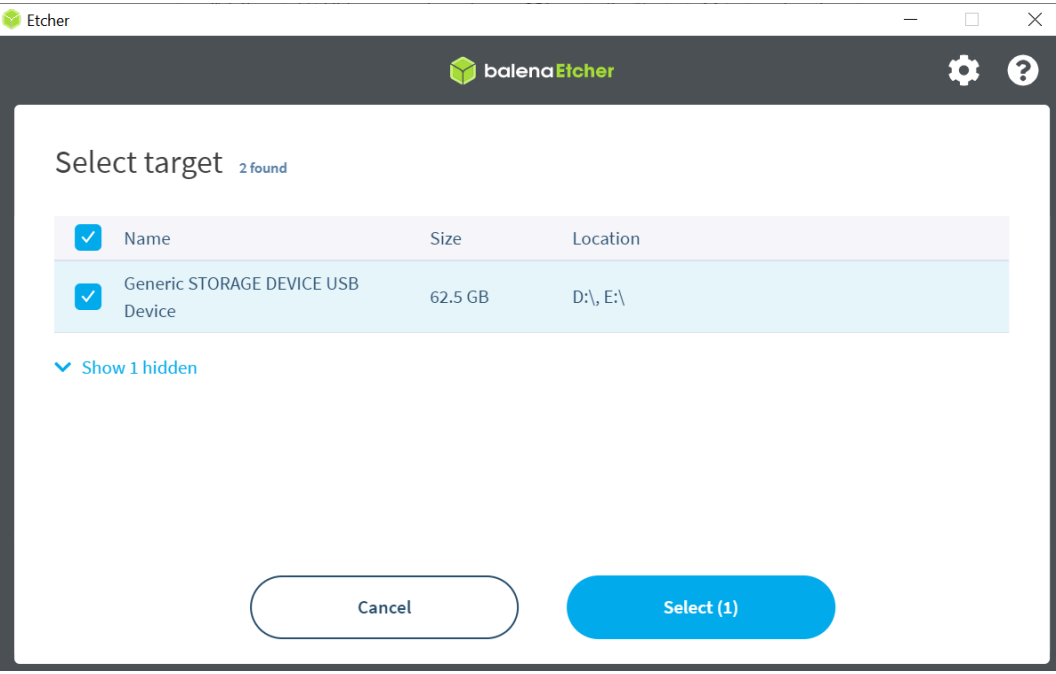
STEP 2: Connect your microSD to a computer and Download Balena Etcher



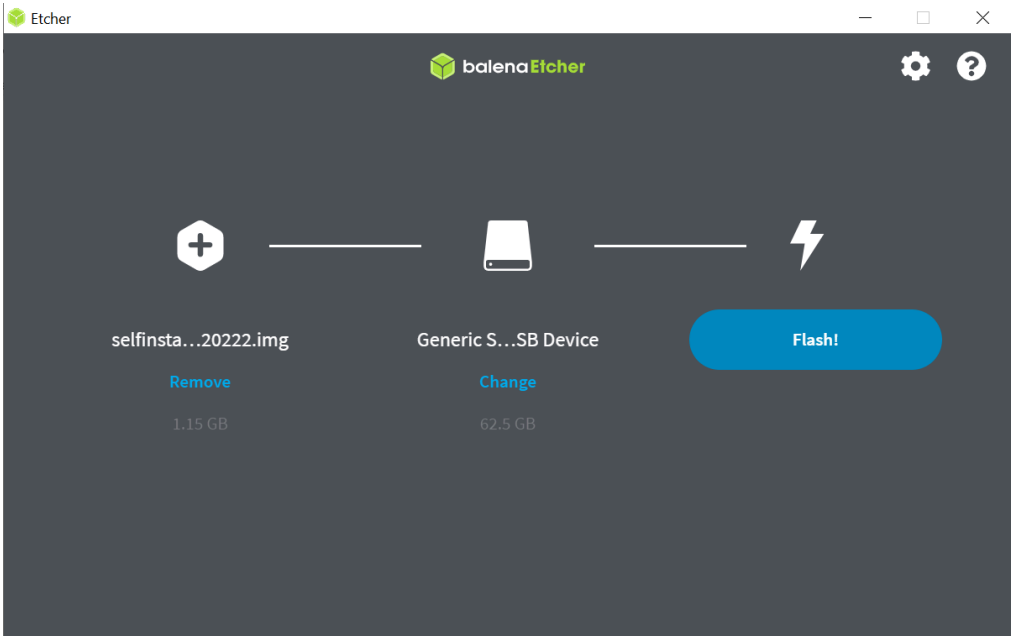
Download balenaEtcher from https://www.balena.io/etcher/. Next, Now, run balenaEtcher and select the “Flash from file” option and find the operating system file that was just downloaded on step 1.



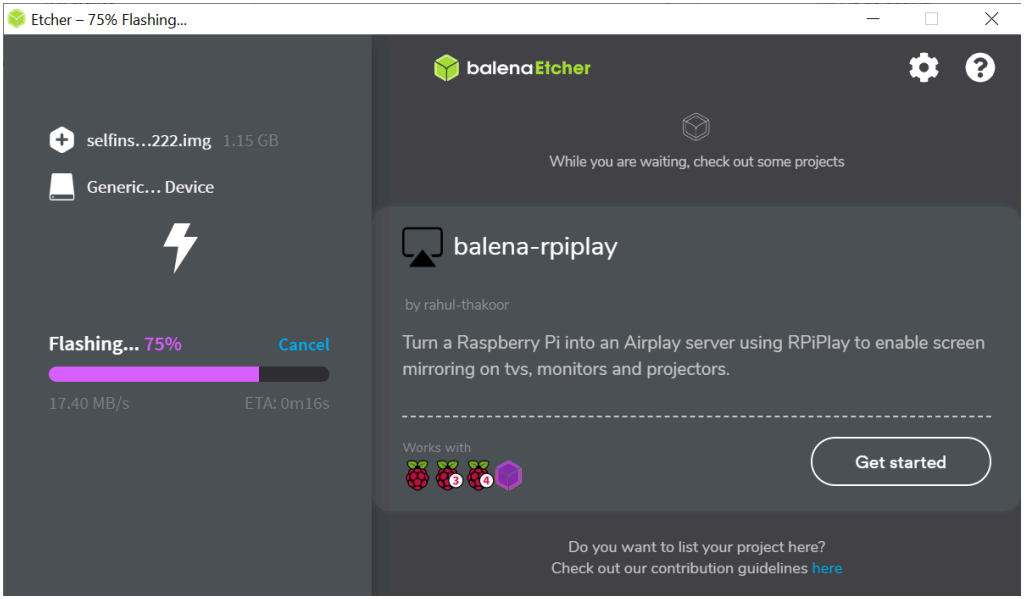
Next, click “Target” and select the microSD card


Etcher
balenaEtcher
Select target
2 found
Name
Size
Location
Generic STORAGE DEVICE USB Device
62.5 GB
D:\, E:\
Show 1 hidden
Cancel
Select (1)

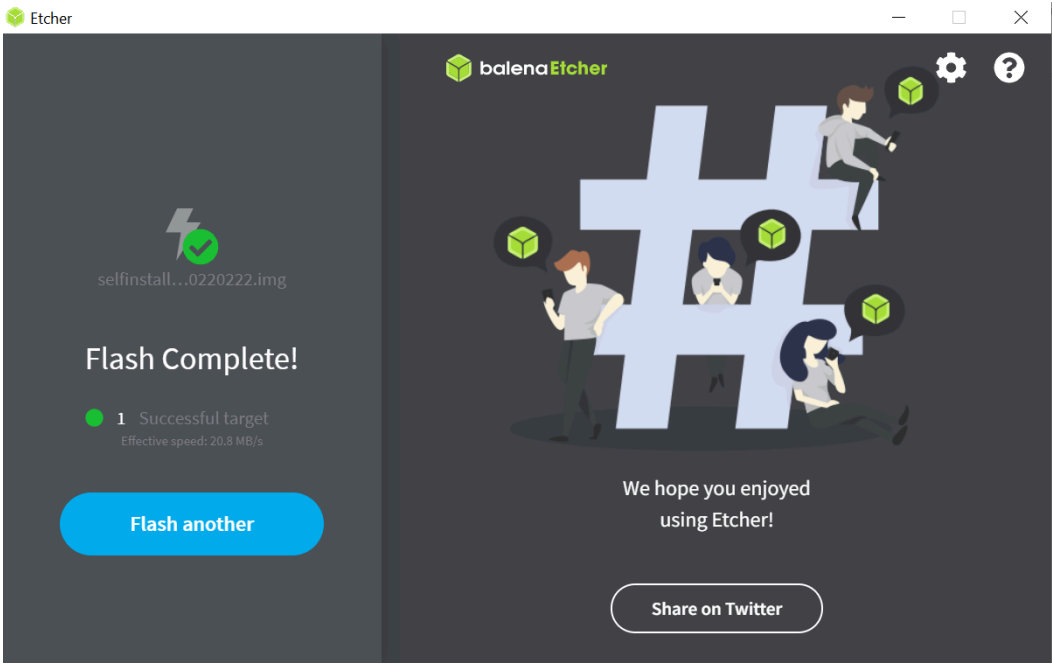
Once the correct target is selected, click “Flash!”



Wait while it flashes



And it is done!



STEP 3: Insert the microSD card in your Home Assistant Green

Make sure the Home Assistant Green is connected to the Internet and Press the power button, the operating system is being written to the eMMC. During this time, the yellow LED will be blinking fast. Wait for the LEDs to turn off. When the LEDs turn off, the operating system has been written to the eMMC. Remove the SD card. Press the power button. Once the yellow LED blinks in a heartbeat pattern, the system is ready.

Appendix B: Interesting Notes About Power Supplies

Did you know that almost all electronic devices are designed to work with a specific voltage (V), or range of voltages? It's easiest to use the power supply recommended by the manufacturer. However, in some cases it may be necessary to find a different power supply.

- When deciding whether or not to connect a power supply to a device, check to make sure the voltage (V) of the power supply is in the range required by the device, not more or less.
- Check the amperage (A) of the power supply. Make sure it is equal to or more than the amperage specified by the device.
- If the amperage is listed in **mA**, simply move the decimal three digits to the left to find out how much it is in amps. For instance, 1500mA = 1500.0mA = 1.5A. Again, this number should be equal to or more than the device calls for.
- In some cases, it is possible for the device to draw more power than what is specified under "normal" operation. For instance, if a USB device is connected that draws a lot of power, like an external hard drive, it can require more power from the device than is stated for "normal" operation.
- These reasons (and others) are why we recommend particular power supplies for each device.