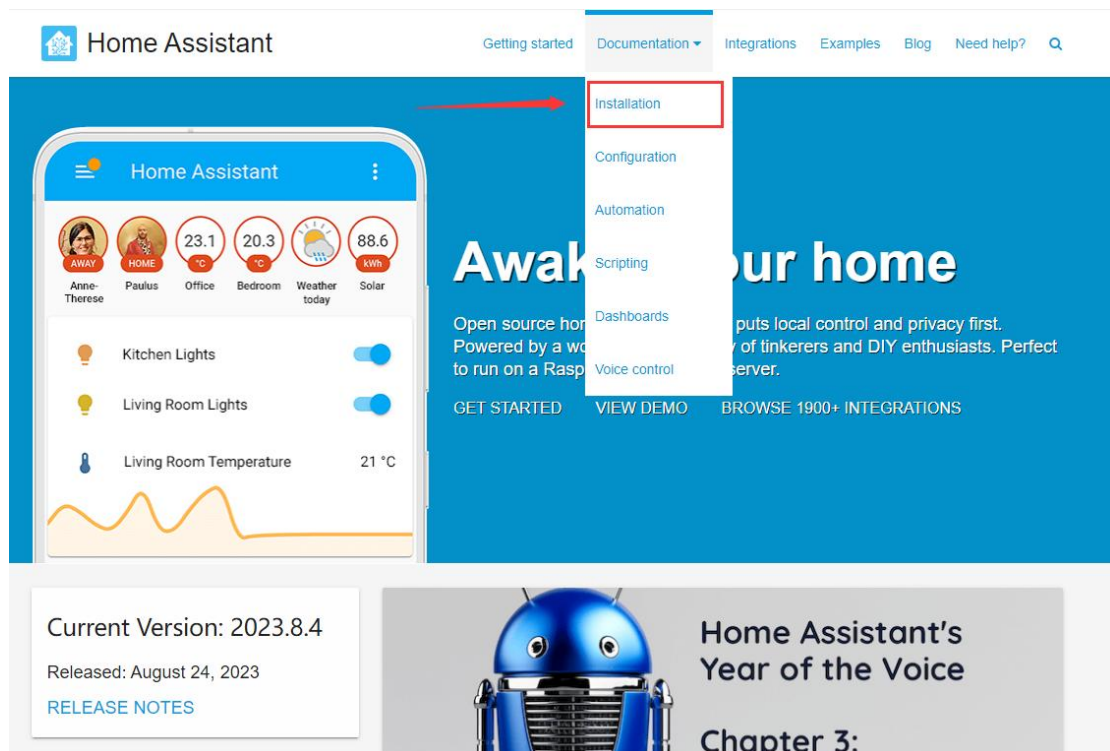


HOMEASSISTANT---ESPHOME

Terminal-SPI

1. Go to <https://www.home-assistant.io/>





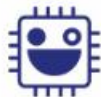
Raspberry Pi

- [Home Assistant Operating System](#)
- [Home Assistant Container](#)
- [Home Assistant Core](#)



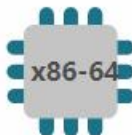
ODROID

- [Home Assistant Operating System](#)
- [Home Assistant Container](#)
- [Home Assistant Core](#)



ASUS Tinkerboard

- [Home Assistant Operating System](#)
- [Home Assistant Container](#)
- [Home Assistant Core](#)



Generic x86-64 (e.g. Intel NUC)

- [Home Assistant Operating System](#)
- [Home Assistant Container](#)
- [Home Assistant Core](#)



Windows

- [Home Assistant Operating System \(VM\)](#)
- [Home Assistant Core](#)



Writing the image with Balena Etcher

Use this procedure if Raspberry Pi Imager is not supported by your platform.

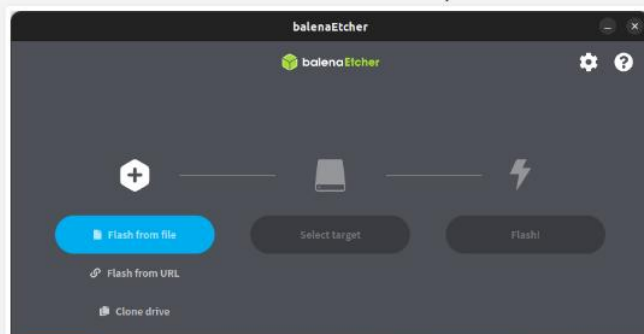
1. Insert the SD card into the computer. Note: the contents of the card will be overwritten.
2. Download and start **Balena Etcher**. You may need to run it with administrator privileges on Windows.
3. Download the image to your computer.
 - Copy the correct URL for the Raspberry Pi 3 or 4 (Note: there are 2 different links below!):

Raspberry Pi 4 Raspberry Pi 3

https://github.com/home-assistant/operating-system/releases/download/10.5/haos_rpi4-64-10.5.img.xz

Select and copy the URL or use the "copy" button that appear when you hover it.

4. Paste the URL into your browser to start the download.
5. Select **Flash from file** and select the image you just downloaded.
 - **Flash from URL** does not work on some systems.



Installation

Suggested Hardware

Install Home Assistant Operating System

- Write the image to your SD card
- Start up your Raspberry Pi

Install Home Assistant Container

- Platform installation
- Restart Home Assistant
- Docker compose
- Exposing devices
- Optimizations

Install Home Assistant Core

- Install dependencies
- Create an account
- Create the virtual environment

Writing the image with Balena Etcher

Download: <https://etcher.balena.io/>



More Products Resources Customers & Partners Pricing Contact

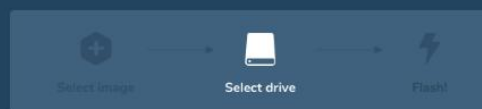
Login

Sign Up

ETCHER

Flash. Flawless.

Flash OS images to SD cards & USB drives, safely and easily.



Download Etcher

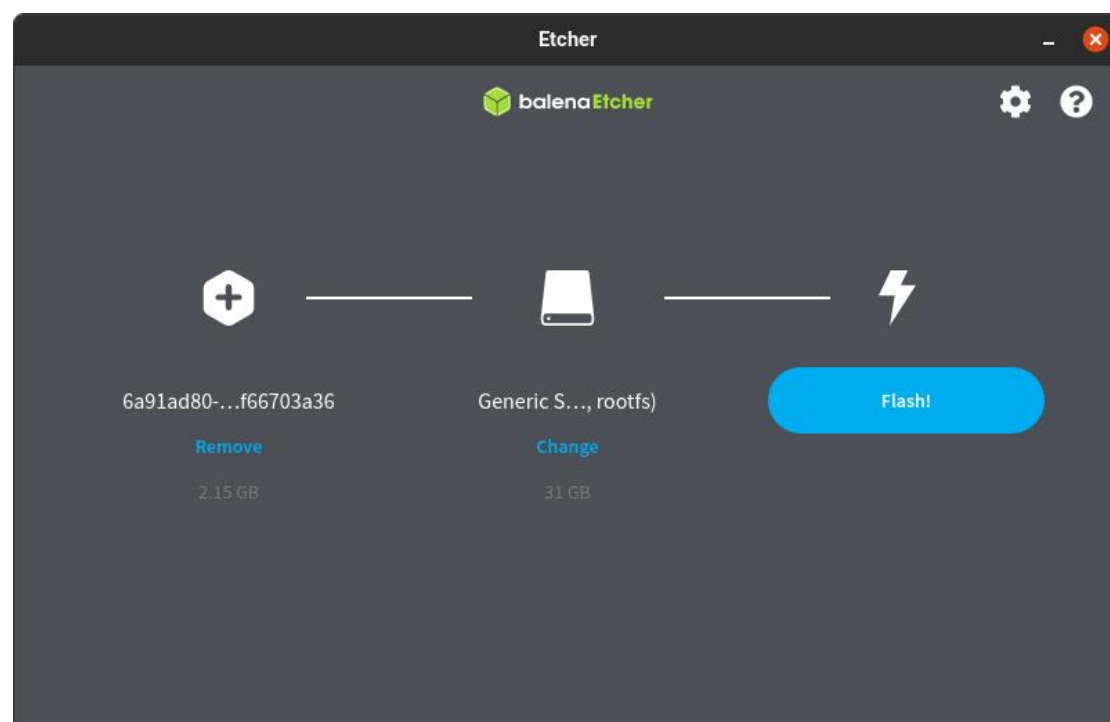
Download mirror image:

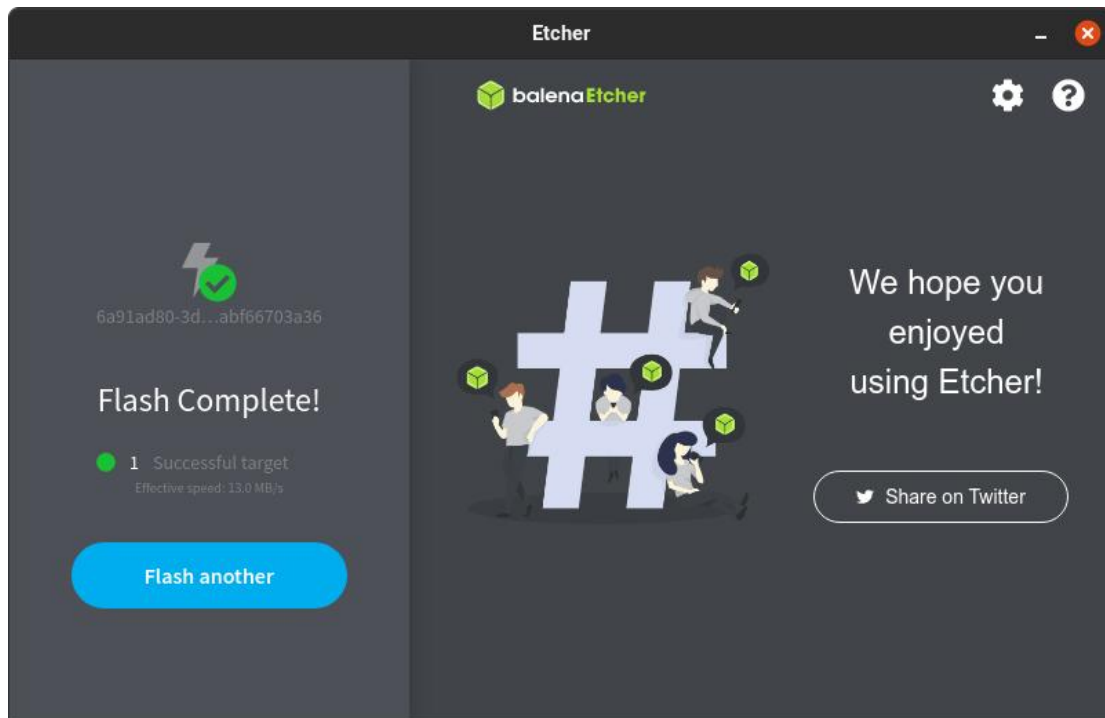
<https://github.com/home-assistant/operating-system/releases/>

| | | |
|---------------------------------|--------|-----------|
| haos_ova-10.5.qcow2.xz | 318 MB | last week |
| haos_ova-10.5.raucb | 182 MB | last week |
| haos_ova-10.5.vdi.zip | 389 MB | last week |
| haos_ova-10.5.vhdx.zip | 390 MB | last week |
| haos_ova-10.5.vmdk.zip | 389 MB | last week |
| haos_rpi2-10.5.img.xz | 245 MB | last week |
| haos_rpi2-10.5.raucb | 115 MB | last week |
| haos_rpi3-10.5.img.xz | 249 MB | last week |
| haos_rpi3-10.5.raucb | 120 MB | last week |
| haos_rpi3-64-10.5.img.xz | 254 MB | last week |
| haos_rpi3-64-10.5.raucb | 120 MB | last week |
| haos_rpi4-10.5.img.xz | 249 MB | last week |
| haos_rpi4-10.5.raucb | 120 MB | last week |
| haos_rpi4-64-10.5.img.xz | 256 MB | last week |
| haos_rpi4-64-10.5.raucb | 122 MB | last week |
| haos_tinker-10.5.img.xz | 239 MB | last week |
| haos_tinker-10.5.raucb | 108 MB | last week |
| haos_yellow-10.5.img.xz | 254 MB | last week |
| haos_yellow-10.5.raucb | 119 MB | last week |
| Source code (zip) | | last week |
| Source code (tar.gz) | | last week |

13 3 1 2 18 people reacted

Burn into the mirror:





Raspberry Pi Plug in the SD card and boot on:

```
Waiting for the Home Assistant CLI to be ready...

Welcome to the Home Assistant command line.

Waiting for Supervisor to startup...
System information
IPv4 addresses for enp11s0: 192.168.2.169/24
IPv6 addresses for enp11s0: fe80::...

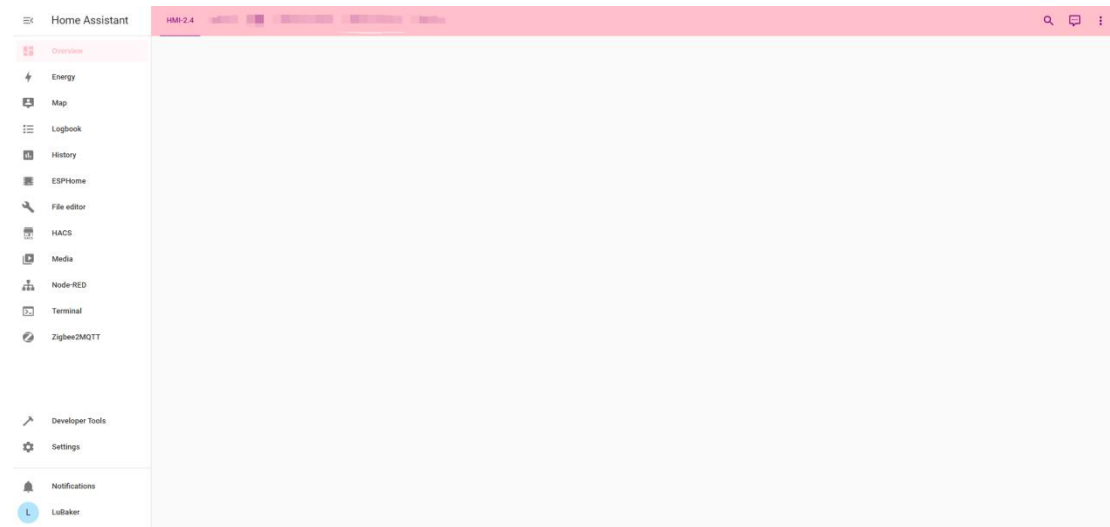
OS Version:           Home Assistant OS 10.2
Home Assistant Core:   2023.5.4

Home Assistant URL:    http://baker.local:8123
Observer URL:          http://baker.local:4357
```

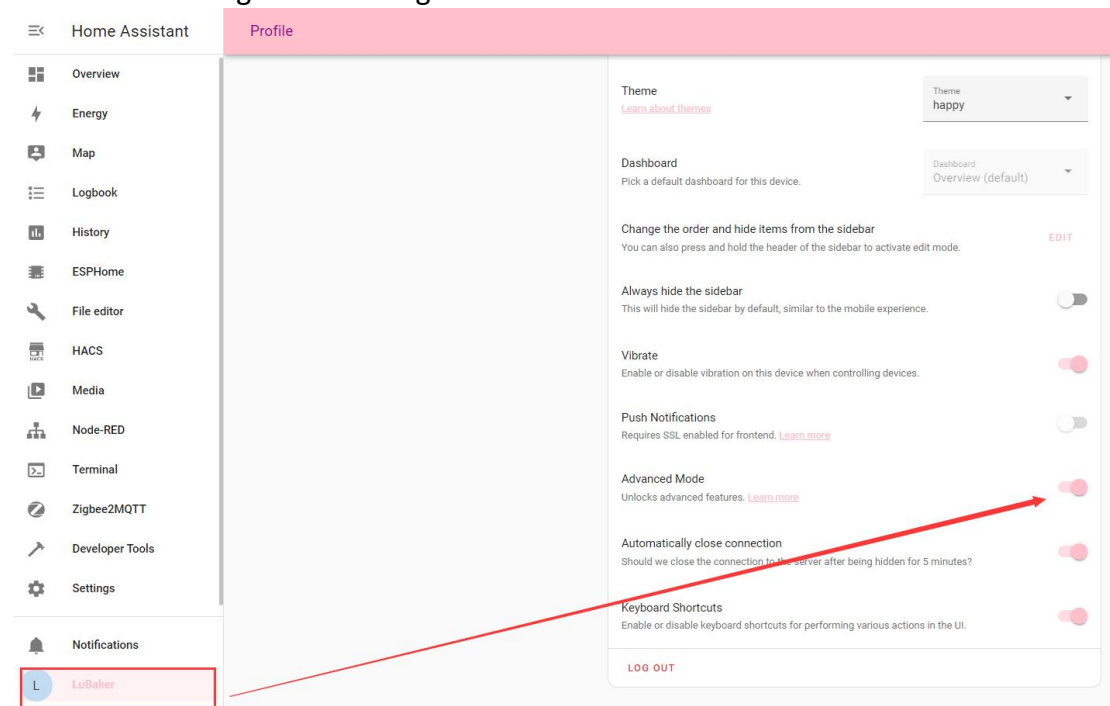
The above interface description is successful

Open the website: <http://192.168.2.169:8123>

The following interface appears after setting the account and password:



Start downloading and installing the ESPHOME



Home Assistant

Settings

Overview

Energy

Map

Logbook

History

ESPHome

File editor

HACS

Media

Node-RED

Terminal

Zigbee2MQTT

Developer Tools

Settings

Notifications

LuBaker

Home Assistant Cloud

Devices & Services

Automations & Scenes

Areas & Zones

Add-ons

Dashboards

Voice assistants

Tags

People

System

About

Add-ons

Search add-ons

ESPHome

ESPHome (beta)

ESPHome (dev)

File editor

Mosquitto broker

Node-RED

Samba share

Terminal & SSH

Zigbee2MQTT

ADD-ON STORE

Add-on Store

Search ESPHOME

No results found in Official add-ons.

ESPHome

ESPHome

ESPHome (beta)

ESPHome (dev)

Home Assistant Community Add-ons

ESPHome

No results found in Home Assistant Community Add-ons.

No results found in Home Assistant Community Add-ons - BETA.

ESPHome

Current version: 2023.5.5 (Changelog)


Rating

Host

Auth

Ingress

ESPHome add-on for intelligently managing all your ESP8266/ESP32 devices.
Visit the [ESPHome](#) page for more details

 **ESPHome**

Start on boot
Make the add-on start during a system boot

Watchdog
This will start the add-on if it crashes

Auto update
Auto update the add-on when there is a new version available

Show in sidebar
Add this add-on to your sidebar

STOP

RESTART

OPEN WEB UI

UNINSTALL

Hostname
5c53de3b-esphome

Add-on CPU Usage
0 %

Add-on RAM Usage
4.8 %

If the open fails, you need to restart the homeassistant

Home Assistant

Developer Tools

YAML

STATES

SERVICES

TEMPLATE

EVENTS

STATISTICS

Check and Restart

A basic validation of the configuration is automatically done before restarting. The basic validation ensures the YAML configuration doesn't have errors which will prevent Home Assistant or any integration from starting. It's also possible to only do the basic validation check without restarting.

CHECK CONFIGURATION

RESTART

YAML configuration reloading

Some parts of Home Assistant can reload without requiring a restart. Clicking one of the options below will unload their current YAML configuration and load the new one.

ALL YAML CONFIGURATION

LOCALIZE & CUSTOMIZATIONS

AUTOMATIONS

CONVERSATION

INPUT BOOLEANS

INPUT BUTTONS

INPUT DATE TIMES

Developer Tools

Settings

Notifications

Create the device after the download is complete

Home Assistant

ESPHome

UPDATE ALL

SECRETS

code

code.yaml

UPDATE

EDIT

LOGS

OFFLINE

ELECROW

elecrow.yaml

EDIT

LOGS

OFFLINE

growcube

growcube.yaml

EDIT

LOGS

OFFLINE

growcubeceshi

growcubeceshi.yaml

EDIT

LOGS

OFFLINE

HMI-24

hmi-24.yaml

EDIT

LOGS

ONLINE

HMI-28

hmi-28.yaml

EDIT

LOGS

OFFLINE

HMI-35

hmi-35.yaml

EDIT

LOGS

OFFLINE

HMI-43

hmi-43.yaml

EDIT

LOGS

OFFLINE

HMI-50

hmi-50.yaml

EDIT

LOGS

OFFLINE

HMI-70

hmi-70.yaml

EDIT

LOGS

OFFLINE

HMI

hmi.yaml

EDIT

LOGS

OFFLINE

LU

lu.yaml

EDIT

LOGS

ONLINE

lulu

lulu.yaml

EDIT

LOGS

OFFLINE

luluceshi

luluceshi.yaml

EDIT

LOGS

OFFLINE

+ NEW DEVICE

Overview

Energy

Map

Logbook

History

ESPHome

File editor

HACS

Media

Node-RED

Terminal

Zigbee2MQTT

Developer Tools

Settings

Notifications

LuBaker

Select your device type

Select the type of device that this configuration will be installed on.

ESP32 >

ESP32-S2 >

ESP32-S3 >

ESP32-C3 >

ESP8266 >

Raspberry Pi Pico W >



Use recommended settings

CANCEL



Configuration created!

You can now install the configuration to your device. The first time this requires a cable.

Once the device is installed and connected to your network, you will be able to manage it wirelessly.

Each ESPHome device has a unique encryption key to talk to other devices. You will need this key to include your device in Home Assistant. You can find the key later in the device menu.

Encryption key

qiIL1gmPmYfZATxPqrYoS2MPft8TT7PFQN!

SKIP

INSTALL

Generate the bin files

How do you want to install terminal-spi.yaml on your device?

Wirelessly

Requires the device to be online



Plug into this computer

For devices connected via USB to this computer



Plug into the computer running ESPHome Dashboard

For devices connected via USB to the server



Manual download

Install it yourself using ESPHome Web or other tools



CANCEL

What version do you want to download?

Modern format

For use with ESPHome Web and other tools.



Legacy format

For use with ESPHome Flasher.



[Open ESPHome Web](#)

BACK

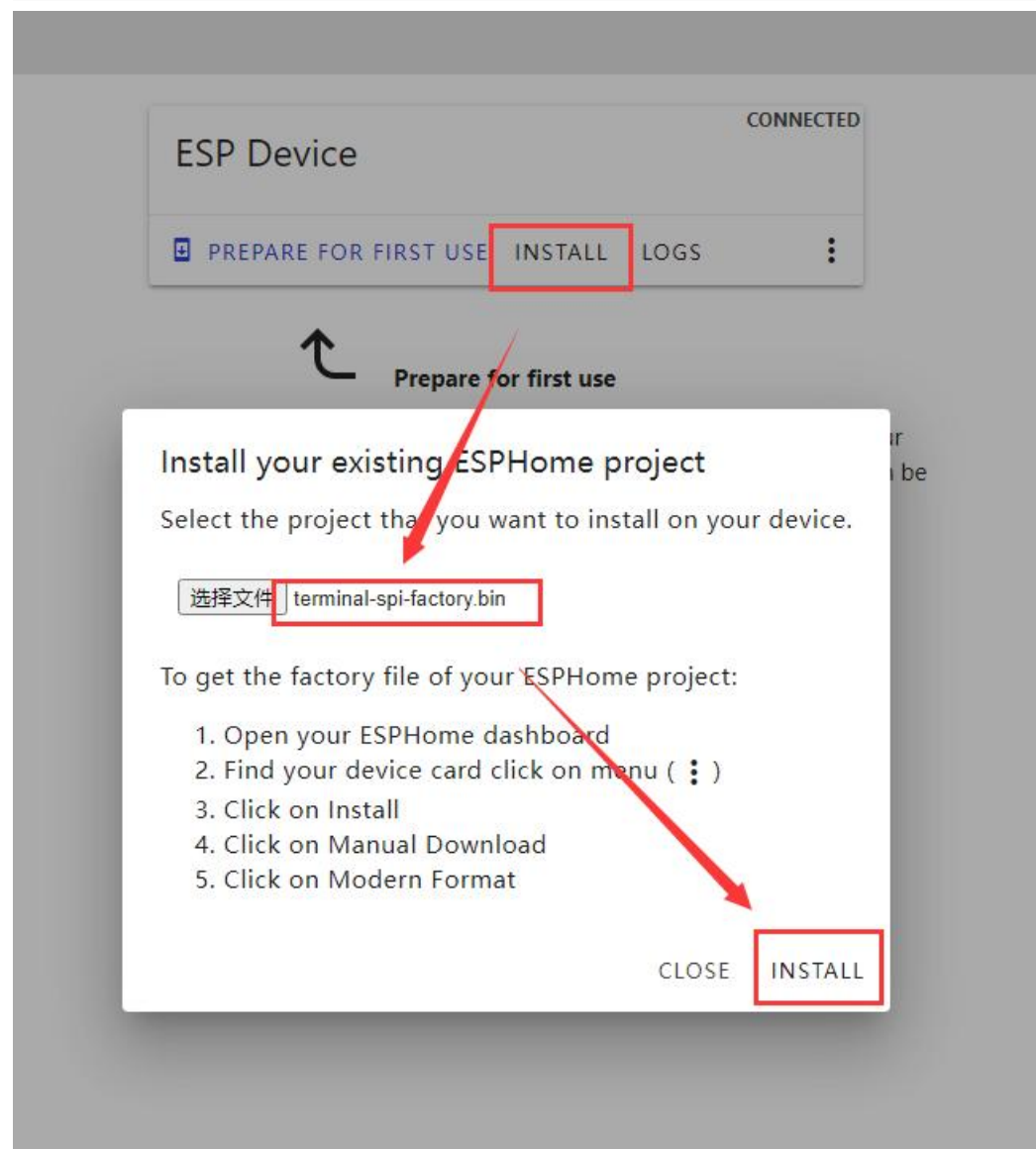
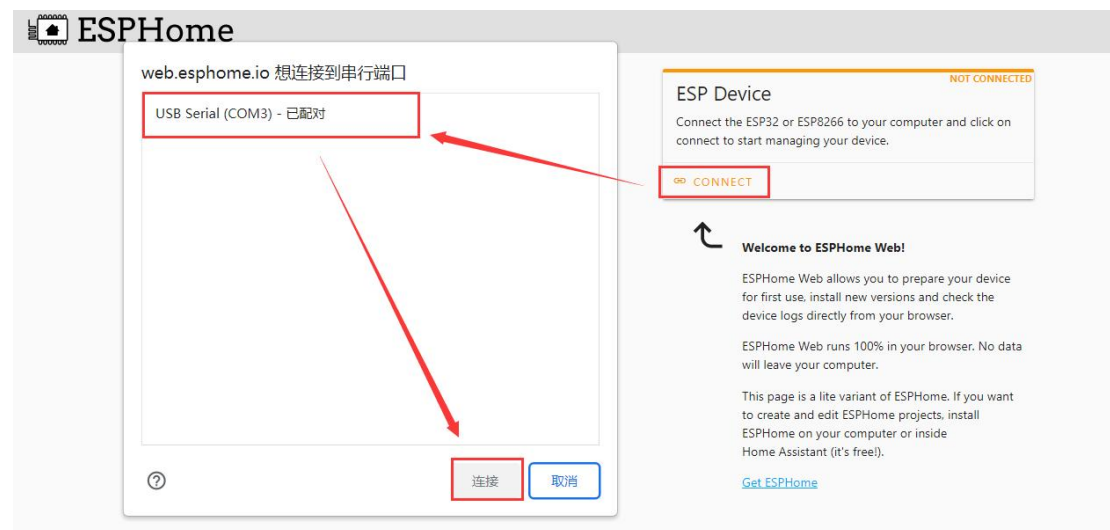
The screenshot shows the ESPHome dashboard interface. At the top, there's a header with the ESPHome logo, 'UPDATE ALL', and 'SECRETS'. Below the header, a section titled 'Download terminal-spi.yaml' displays a terminal output of the compilation process. The terminal text includes: 'INFO ESPHome 2023.5.5', 'INFO Reading configuration /config/esphome/terminal-spi.yaml...', 'WARNING GPIO4 is a Strapping PIN and should be avoided.', 'Attaching external pullup/down resistors to strapping pins can cause unexpected failures. See https://esphome.io/guides/faq.html#why-am-i-getting-a-warning-about-strapping-pins', 'WARNING GPIO3 is a Strapping PIN and should be avoided.', 'Attaching external pullup/down resistors to strapping pins can cause unexpected failures. See https://esphome.io/guides/faq.html#why-am-i-getting-a-warning-about-strapping-pins', 'INFO Generating C++ source...', 'INFO Compiling app...', 'Processing terminal-spi (board: esp32-s3-devkit-v1) (framework: arduino)', 'HARDWARE: ESP32S3 240MHz, 320KB RAM, 8MB Flash', ' - toolchain-riscv32-esp @ 8.4.0-2021r2-patch', ' - toolchain-xtensa-esp32s3 @ 8.4.0-2021r2-patch', 'Dependency Graph', ' |-- AsyncTCP-esphome @ 1.2.2', ' |-- WiFi @ 2.0.0', ' |-- FS @ 2.0.0', ' |-- Update @ 2.0.0', ' |-- ESPAsyncWebServer-esphome @ 2.1.0', ' | |-- AsyncTCP-esphome @ 1.2.2', ' |-- DNSServer @ 2.0.0', ' |-- ESP8266 @ 2.0.0', ' |-- noise-c @ 0.1.4', ' | |-- libodium @ 1.10018.1', ' |-- Wire @ 2.0.0', ' |-- SPI @ 2.0.0', ' RAM: [=====] 12.6K (used 41448 bytes from 327680 bytes)', ' Flash: [=====] 99.9K (used 1833493 bytes from 1835008 bytes)', ' ===== [40455] Took 7.66 seconds =====', 'INFO Successfully compiled program.'.

Overlaid on the terminal output is a '新建下载任务' (New Download Task) dialog box. It contains the following fields and buttons:

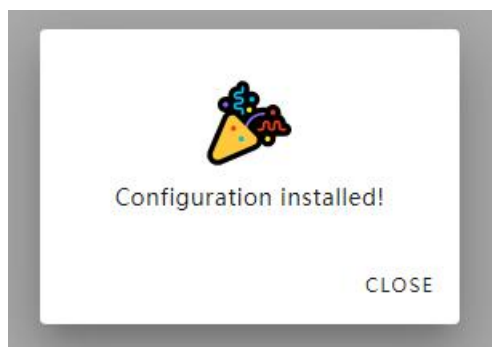
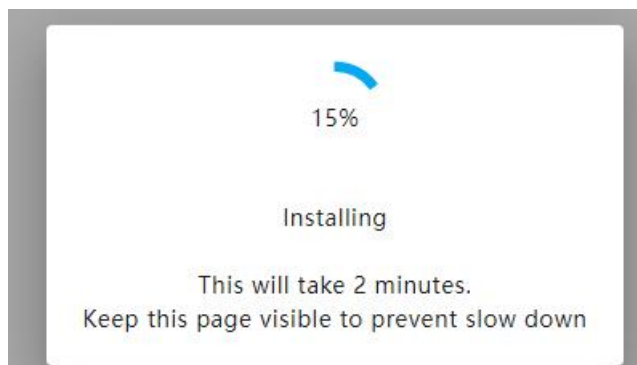
- 文件名 (Filename): terminal-spi-factory.bin (1.81MB)
- 保存到 (Save to): C:\Users\EB\Desktop\HMI-BIN
- 复制链接地址 (Copy link address): [empty]
- Buttons: 直接打开 (Open directly), 下载 (Download), 取消 (Cancel)

At the bottom of the dashboard, there are links for 'DOWNLOAD LOGS', 'DOWNLOAD', and 'CLOSE'. A green button labeled '+ NEW DEVICE' is also visible in the bottom right corner.

Open the website: https://web.esphome.io/?dashboard_wizard

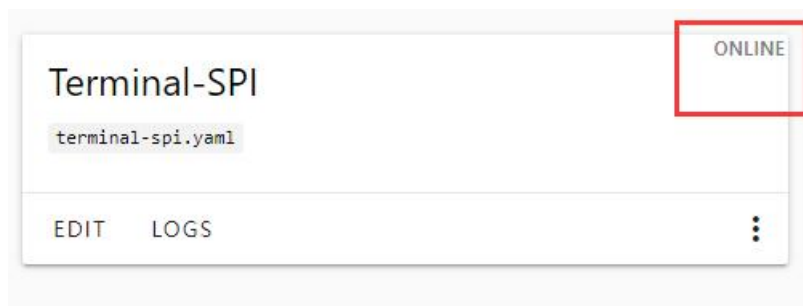


Waiting for the burning to be completed



Back to the ESPHOME interface and then restart the ESP32 to see the created device in the ONLINE state

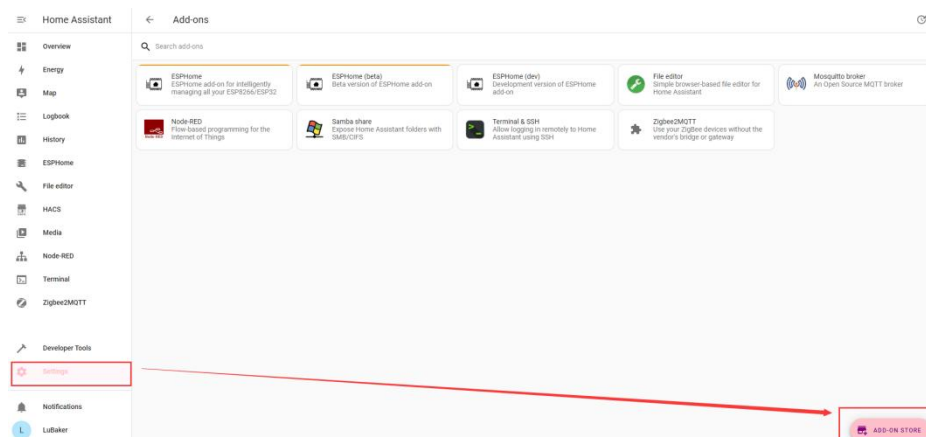
Note: Set the same WIFI account and password

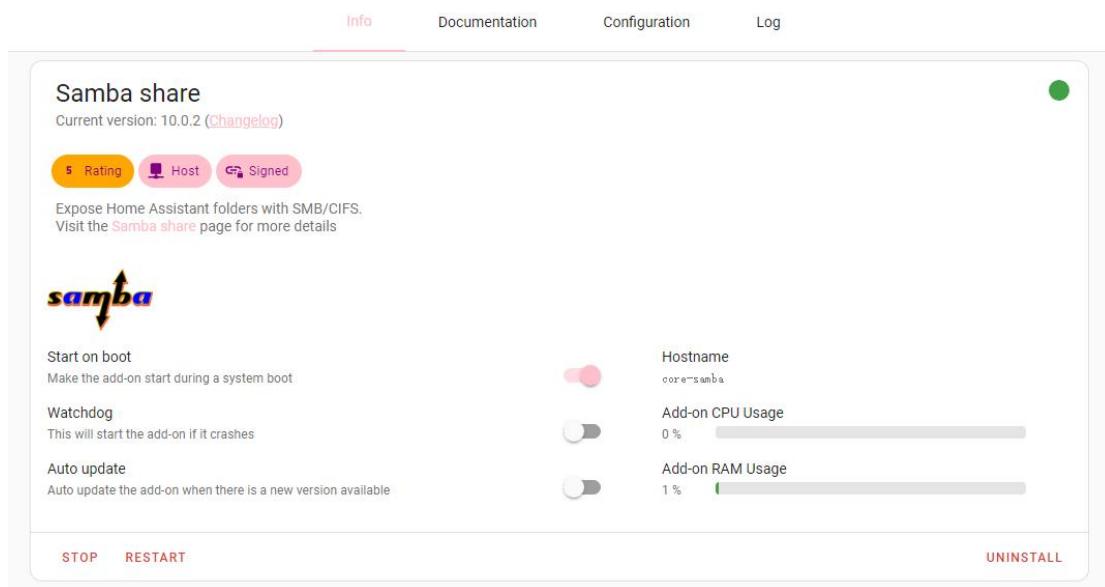
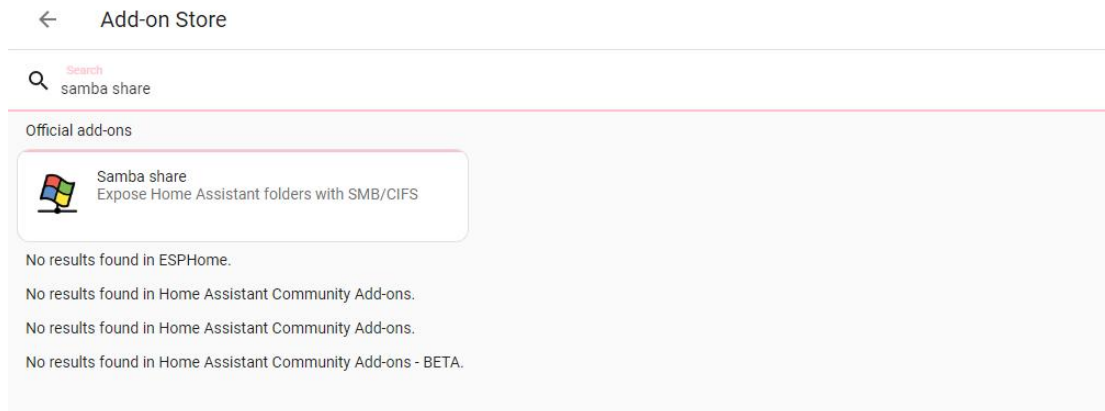


Before we start editing our code, we do some preparations:

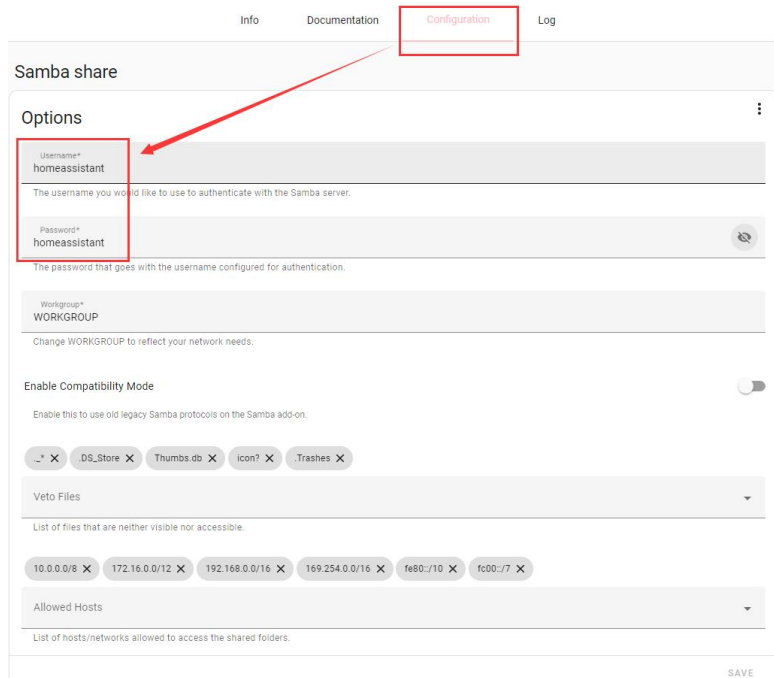
Put the picture and tft font file into the / config / esphome directory

We use a simple and easy to use tool to complete our requirements

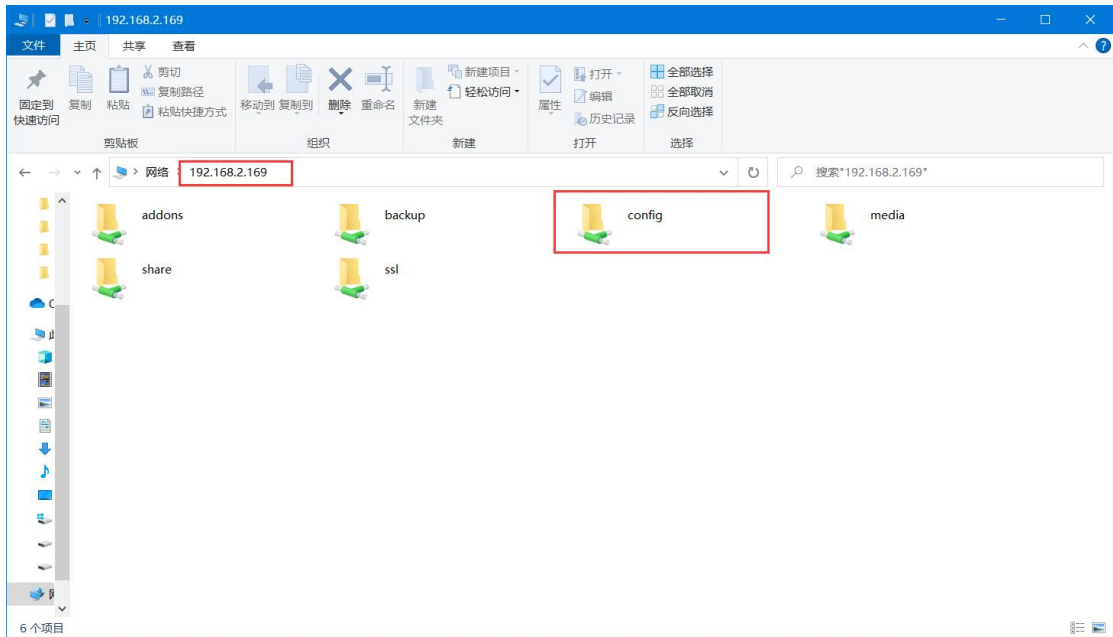




Enter the configuration interface and set up the account number and password



Then open my computer input [\\192.168.2.169](http://192.168.2.169) and display the following interface, and then we enter the / config / esphome directory



网络 > 192.168.2.169 > config >

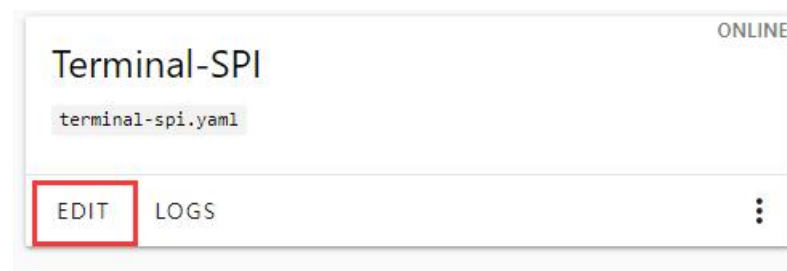
| 名称 | 修改日期 | 类型 | 大小 |
|--------------------------|-----------------|----------------|----------|
| .cloud | 2023/6/6 18:00 | 文件夹 | |
| .storage | 2023/8/29 10:38 | 文件夹 | |
| blueprints | 2023/6/6 18:02 | 文件夹 | |
| custom_components | 2023/8/25 9:29 | 文件夹 | |
| deps | 2023/6/6 18:00 | 文件夹 | |
| esphome | 2023/8/25 12:04 | 文件夹 | |
| my_themes | 2023/8/24 18:12 | 文件夹 | |
| node-red | 2023/8/25 11:40 | 文件夹 | |
| tts | 2023/6/6 18:02 | 文件夹 | |
| www | 2023/8/24 17:40 | 文件夹 | |
| zigbee2mqtt | 2023/8/25 13:06 | 文件夹 | |
| .HA_VERSION | 2023/6/6 18:00 | HA_VERSION 文件 | 1 KB |
| automations.yaml | 2023/8/24 18:15 | YAML 文件 | 2 KB |
| configuration.yaml | 2023/8/24 17:25 | YAML 文件 | 1 KB |
| home-assistant.log | 2023/8/29 10:44 | 文本文档 | 401 KB |
| home-assistant.log.1 | 2023/8/25 10:55 | 1 文件 | 262 KB |
| home-assistant.log.fault | 2023/8/25 10:55 | FAULT 文件 | 0 KB |
| home-assistant_v2.db | 2023/8/29 10:34 | Data Base File | 5,336 KB |
| home-assistant_v2.db-shm | 2023/8/29 10:43 | DB-SHM 文件 | 32 KB |

Put the following files into the folder

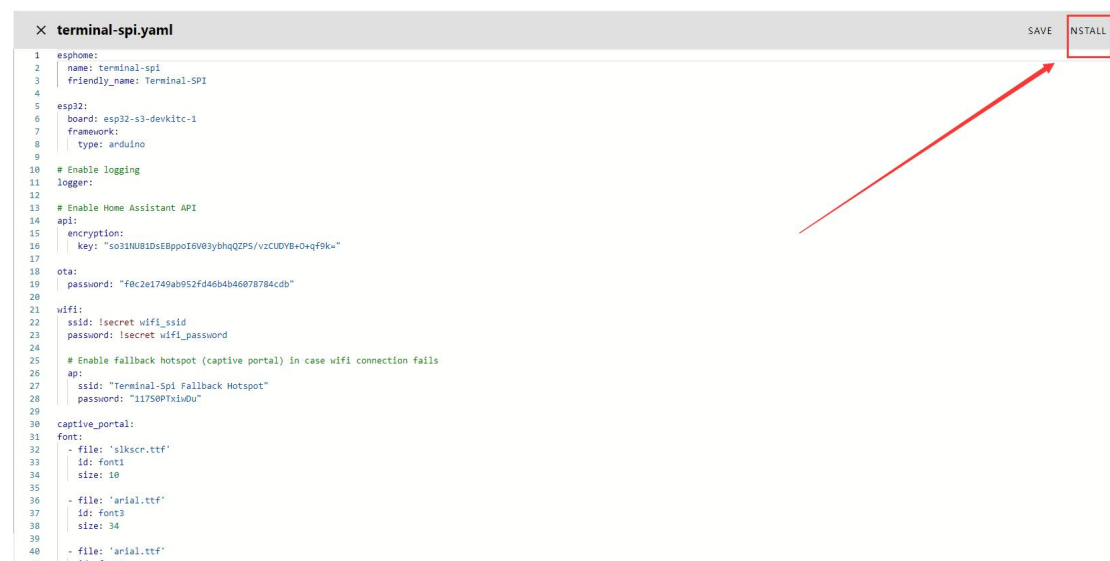
网络 > 192.168.2.169 > config > esphome

| 名称 | 修改日期 | 类型 | 大小 |
|-----------------------|-----------------|---------------|--------|
| hmi-24.yaml | 2023/8/29 10:15 | YAML 文件 | 4 KB |
| hmi.yaml | 2023/8/23 11:22 | YAML 文件 | 1 KB |
| growcubeceshi.yaml | 2023/6/30 15:51 | YAML 文件 | 1 KB |
| growcube.yaml | 2023/7/3 17:49 | YAML 文件 | 2 KB |
| elecrow.yaml | 2023/6/9 19:14 | YAML 文件 | 1 KB |
| code.yaml | 2023/6/8 10:56 | YAML 文件 | 2 KB |
| slkscr.ttf | 2023/6/8 10:56 | TrueType 字体文件 | 18 KB |
| BebasNeue-Regular.ttf | 2023/6/8 10:42 | TrueType 字体文件 | 102 KB |
| arial.ttf | 2023/6/8 10:56 | TrueType 字体文件 | 270 KB |
| xin.png | 2023/6/15 11:36 | PNG 文件 | 8 KB |
| ON_Light.png | 2023/8/25 11:59 | PNG 文件 | 24 KB |
| OFF_Light.png | 2023/8/25 11:59 | PNG 文件 | 16 KB |
| menu.png | 2023/8/25 11:00 | PNG 文件 | 52 KB |
| ELE2.png | 2023/8/24 15:42 | PNG 文件 | 200 KB |
| pca9555.h | 2023/6/30 15:40 | H 文件 | 1 KB |
| my_custom_sensor.h | 2023/8/22 12:23 | H 文件 | 0 KB |
| ft6236.h | 2023/6/30 11:54 | H 文件 | 1 KB |
| ahtx0.h | 2023/6/30 11:32 | H 文件 | 1 KB |
| ELE.bmp | 2023/8/24 15:41 | BMP 文件 | 226 KB |

Then we can start editing the program



After editing the program, you can choose to burn online recording, which becomes very convenient



Wirelessly
Requires the device to be online

Requires the device to be online

For devices connected via USB to this computer

For devices connected via USB to the server

Install it yourself using ESPHome Web or other tools

CANCEL

Successful burning:

```
1  X terminal-spi.yaml
2
3  1
4  2
5  3
6  4
7  5
8  6
9  7
10 8
11 9
12 10
13 11
14 12
15 13
16 14
17 15
18 16
19 17
20 18
21 19
22 20
23 21
24 22
25 23
26 24
27 25
28 26
29 27
30 28
31 29
32 30
33 31
34 32
35 33
36 34
37 35
38 36
39 37
40 38
41 39
42 40
43 41
```

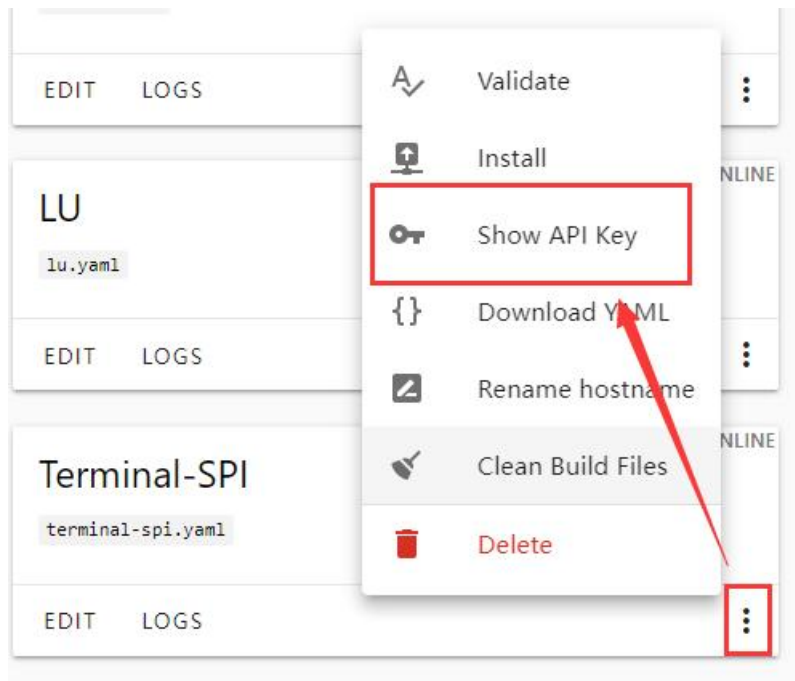
```
Processing terminal-spi (board: esp32-s3-devkitc-1; framework: arduino; platform: platformio/espressif32@5.3.0)
-----
HARDWARE: ESP32S3 240MHz, 320MB RAM, 5MB Flash
- toolchain-riscv32-esp @ 8.4.0-2021r2-patch5
- toolchain-xtensa-esp32s3 @ 8.4.0-2021r2-patch5
Dependency Graph
|-- AsyncTCP-esphome @ 1.2.2
|-- WiFi @ 2.0.0
|-- FS @ 2.0.0
|-- Update @ 2.0.0
|-- ESPAsyncWebServer-esphome @ 2.1.0
|   |-- AsyncTCP-esphome @ 1.2.2
|   |-- DNSServer @ 2.0.0
|   |-- ESPmDNS @ 2.0.0
|-- mongoose @ 0.1.4
|   |-- libodium @ 1.100.1.1
|-- Wire @ 2.0.0
|-- SPI @ 2.0.0
Compiling /data/terminal-spi/.pioenvs/terminal-spi/src/main.cpp.o
Linking /data/terminal-spi/.pioenvs/terminal-spi/firmware.elf
RAM: [=====] 12.06k (used 41448 bytes from 327680 bytes)
Flash: [=====] 99.9% (used 1833493 bytes from 18350080 bytes)
Building /data/terminal-spi/.pioenvs/terminal-spi/firmware.bin
Creating esp32s3 image...
Successfully created esp32s3 image.
esp32 create combined bin (/data/terminal-spi/.pioenvs/terminal-spi/firmware.bin), ["data/terminal-spi/.pioenvs/terminal-spi/firmware.elf"]
Write binary blob bytes to file /data/terminal-spi/.pioenvs/terminal-spi/firmware.factory.bin, ready to flash to offset 0x0
===== [SUCCESS] Took 16.66 seconds =====
INFO Successfully compiled program.
INFO Resolving IP address of terminal-spi.local
INFO -> 192.168.2.128
INFO Uploading /data/terminal-spi/.pioenvs/terminal-spi/firmware.bin (1833888 bytes)
Uploading: [=====] 100% Done...
INFO Waiting for result...
INFO OK Success
INFO Successfully uploaded program.
INFO Starting log output from terminal-spi.local using esphome API
```

Remember this IP address: **192.168.2.128**

Install terminal-spi.yaml

```
INFO Successfully uploaded program.
INFO Starting log output from terminal-spi.local using esphome API
INFO Successfully connected to terminal-spi.local
[10:41:04][I][app:102]: ESPHome version 2023.5.5 compiled on Sep 1 2023, 10:40:20
[10:41:04][C][wifi:505]: WiFi:
[10:41:04][C][wifi:363]:   Local MAC: 34:85:18:45:FD:18
[10:41:04][C][wifi:364]:   SSID: 'esphome'
[10:41:04][C][wifi:365]:   IP Address: 192.168.2.128
[10:41:04][C][wifi:367]:   BSSID: 00:5C:86:04:49:94
[10:41:04][C][wifi:368]:   Hostname: 'terminal-spi'
[10:41:04][C][wifi:370]:   Signal strength: -39 dB ▬▬▬
[10:41:04][C][wifi:374]:   Channel: 1
[10:41:04][C][wifi:375]:   Subnet: 255.255.255.0
[10:41:04][C][wifi:376]:   Gateway: 192.168.2.1
[10:41:04][C][wifi:377]:   DNS1: 192.168.2.1
[10:41:04][C][wifi:378]:   DNS2: 192.168.2.1
[10:41:06][C][logger:301]: Logger:
[10:41:06][C][logger:302]:   Level: DEBUG
[10:41:06][C][logger:303]:   Log Baud Rate: 115200
[10:41:06][C][logger:305]:   Hardware UART: UART0
[10:41:07][C][i2c.arduino:053]: I2C Bus:
[10:41:07][C][i2c.arduino:054]:   SDA Pin: GPIO2
[10:41:07][C][i2c.arduino:055]:   SCL Pin: GPIO1
[10:41:07][C][i2c.arduino:056]:   Frequency: 50000 Hz
[10:41:07][C][i2c.arduino:059]:   Recovery: bus successfully recovered
[10:41:07][I][i2c.arduino:069]: Results from i2c bus scan:
[10:41:07][I][i2c.arduino:075]: Found i2c device at address 0x38
[10:41:08][C][spi:101]: SPI bus:
[10:41:08][C][spi:102]:   CLK Pin: GPIO12
[10:41:08][C][spi:103]:   MISO Pin: GPIO14
[10:41:08][C][spi:104]:   MOSI Pin: GPIO13
[10:41:08][C][spi:106]:   Using HW SPI: YES
[10:41:10][D][dht:048]: Got Temperature=27.6°C Humidity=46.0%
[10:41:10][D][sensor:094]: 'Terminal-spi Temperature': Sending state 27.60000 °C with 1 decimals of accuracy
[10:41:10][D][sensor:094]: 'Terminal-spi Humidity': Sending state 46.00000 % with 0 decimals of accuracy
[10:41:11][C][switch.gpio:068]: GPIO Switch 'led'
[10:41:11][C][switch.gpio:091]:   Restore Mode: always OFF
[10:41:11][C][switch.gpio:031]:   Pin: GPIO40
```

Remember this key:



API key for hmi-2424.yaml

qiIL1gmPmYfZAT[REDACTED] = COPIED!

CLOSE

Now we begin to add our integrated devices

The image shows two screenshots from the Home Assistant interface. The top screenshot is the 'Settings' page, with a red box around the 'Settings' link in the left sidebar and a red box around the 'Devices & Services' option in the main menu. A red arrow points from the 'Settings' link to the 'Devices & Services' option. The bottom screenshot is the 'Integrations' page, with a red box around the 'ADD INTEGRATION' button at the bottom right. A red arrow points from the 'ADD INTEGRATION' button to a 'Select brand' dialog box. The dialog box shows a search for 'ESPHOME' and a result for 'ESPHOME' with a right arrow icon.

Enter the remembered IP address:

ESPHome

?

×

请输入您的 ESPHome 节点的连接设置。

主机*

192.168.2.128

端口

6053

提交

Enter the remembered key:

ESPHome

?

×

Please enter the encryption key for . You can find it in the ESPHome Dashboard or in your device configuration.

Encryption key*

qiLL1gmPmY.

提交

After completion, we can see that our device was added successfully:

成功!

?

×

为 Terminal-SPI 创建了配置。

已发现以下设备:

Terminal-SPI

esp32-s3-devkitc-1 (Espressif)

区域

客厅

×

▼

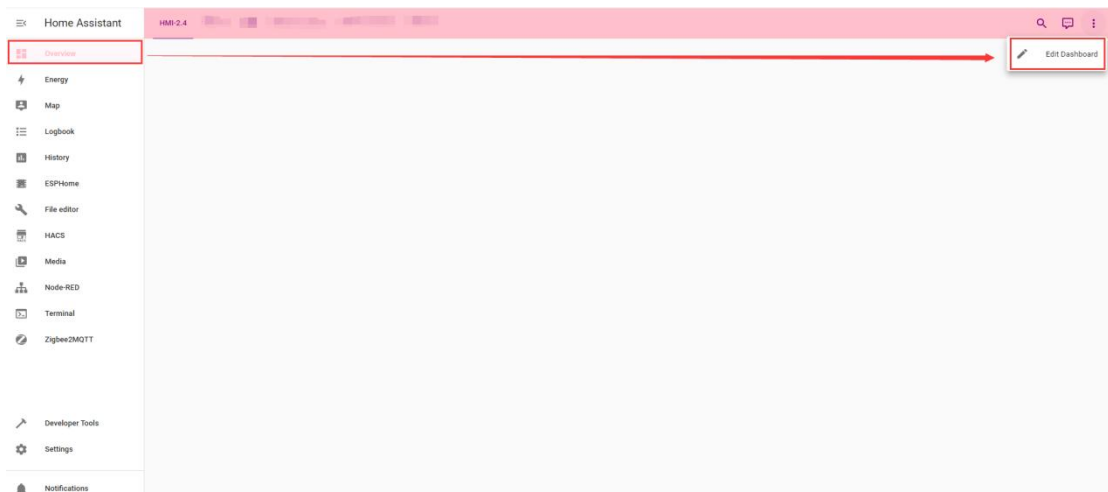
完成






You can see the entities we created inside:

| Integrations Devices Entities Helpers | | | | | | |
|--|-------------------------------------|--|-------------|------|-------------|--------|
| Q Search entities | | | | | | |
| Filtering by integration 'esphome: Terminal-SPI' CLEAR | | | | | | |
| <input type="checkbox"/> | Name | Entity ID | Integration | Area | Disabled by | Status |
| <input type="checkbox"/> | Living Room Humidity | sensor.terminal_spi_living_room_humidity | esphome | 客厅 | — | ⓘ |
| <input type="checkbox"/> | Living Room Temperature | sensor.terminal_spi_living_room_temperature | esphome | 客厅 | — | ⓘ |
| <input type="checkbox"/> | Terminal-SPI bck | switch.terminal_spi_bck | esphome | 客厅 | — | — |
| <input type="checkbox"/> | Terminal-SPI Firmware | update.terminal_spi_firmware | esphome | 客厅 | — | — |
| <input type="checkbox"/> | Terminal-SPI led | switch.terminal_spi_led | esphome | 客厅 | — | — |
| <input type="checkbox"/> | Terminal-SPI Terminal-spi Humidity | sensor.terminal_spi_terminal_spi_humidity | esphome | 客厅 | — | — |
| <input type="checkbox"/> | Terminal-SPI Terminal-spi Temper... | sensor.terminal_spi_terminal_spi_temperature | esphome | 客厅 | — | — |

Now we start adding entities to the main interface



Which card would you like to add to your "Terminal-SPI" view?

| BY CARD | | BY ENTITY |
|---|---|---|
| Thermostat The Thermostat card gives control of your climate entity. Allowing you to change the temperature and mode of the entity. | Weather Forecast  | Area  |
| Tile  | Conditional The Conditional card displays another card based on entity states. | Entity Filter The Entity Filter card allows you to define a list of entities that you want to track only when in a certain state. |
| Grid The Grid card allows you to show multiple cards in a grid. | Horizontal Stack The Horizontal Stack card allows you to stack together multiple cards, so they always sit next to each other in the space of one column. | Webpage The Webpage card allows you to embed your favorite webpage right into Home Assistant. |
| Logbook The Logbook card shows a list of events for entities. | Vertical Stack The Vertical Stack card allows you to group multiple cards so they always sit in the same column. | Shopping List The Shopping List card allows you to add, edit, check-off, and clear items from your shopping list. |

CANCEL

Horizontal Stack Card Configuration


+

Search cards

Alarm Panel

The Alarm Panel card allows you to arm and disarm your alarm control panel integrations.

Button



HMI-2424 led

Calendar

The Calendar card displays a calendar including day, week and list views

Entities

SHOW CODE EDITOR

CANCEL SAVE

Horizontal Stack Card Configuration



1 2 +

SHOW CODE EDITOR

Entity
Terminal-SPI led

Name
Icon
mdi:lightbulb

Show Name? ☒ Show State? ☐ Show Icon? ☒

Icon Height Theme (optional)

Tap Action (optional)
Toggle

Hold Action (optional)
Default Action

Terminal-SPI led

Terminal-... 28.0 °C

Terminal-SPI... 45%

SHOW CODE EDITOR

CANCEL SAVE

Horizontal Stack Card Configuration



1 2 +

SHOW CODE EDITOR

Title (optional)

Theme (optional)

Show Header Toggle? ☒ Color icons based on state? ☐

Header: None +

Footer: None +

Entities (required)

Entity
Terminal-SPI Terminal-spi Temperature

Entity
Terminal-SPI Terminal-spi Humidity

Entity

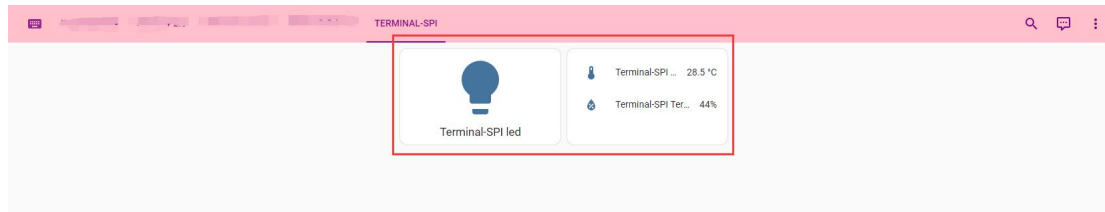
Terminal-SPI led

Terminal-... 28.5 °C

Terminal-SPI... 45%

SHOW CODE EDITOR

CANCEL SAVE

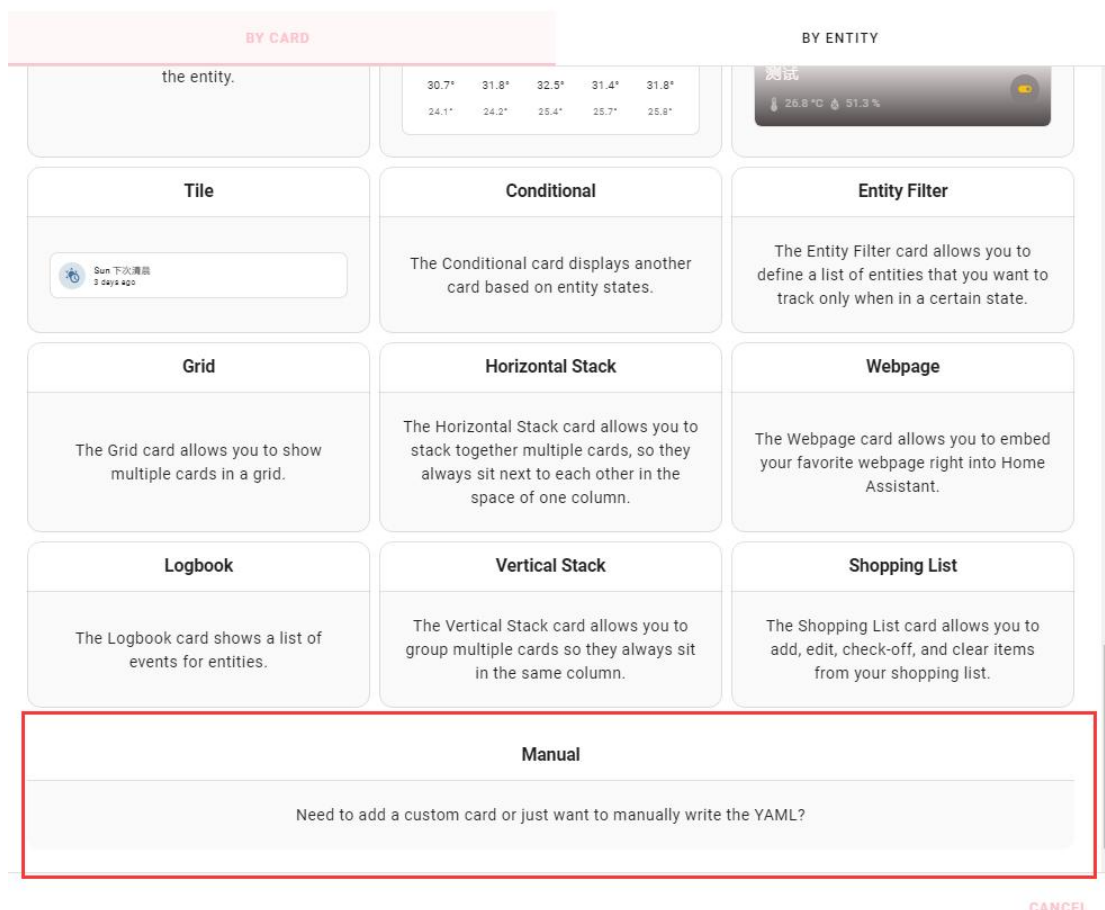


Click on the light:



Next, we make a graph of the temperature and humidity:

Which card would you like to add to your "WZ2432R024" view?



History Graph Card Configuration

```
1 type: history-graph
2 entities:
3   - entity: sensor.terminal_spi_terminal_spi_temperature
4   - entity: sensor.terminal_spi_terminal_spi_humidity
5 hours_to_show: 1
```



SHOW VISUAL EDITOR

CANCEL SAVE

done !

