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Dispositius IoT

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@rPrimTech



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What is it?

ChipChop is a lightning fast little IoT cloud engine that cuts through the complexities of transforming your little gizmos into Smart IoT Devices

If you are a hobbyist, student, software developer, artist or just plain common geek that likes to tinker with micro-electronics and you want to easily remote control those pesky little micro-controllers in a Home Automation style... this is the place.

ChipChop's engine is also device agnostic, it couldn't care less what you've plugged at the other end. If it's an Arduino type micro-controller or something bigger like Raspberry PI, nVidia Jetson, laptop, phone, Node.js, Electron app, The Matrix itself ... anything goes.

Oh, yeah...and you can experiment with it for free as much as you like!

CHIP / CHOP

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Multidispositiu

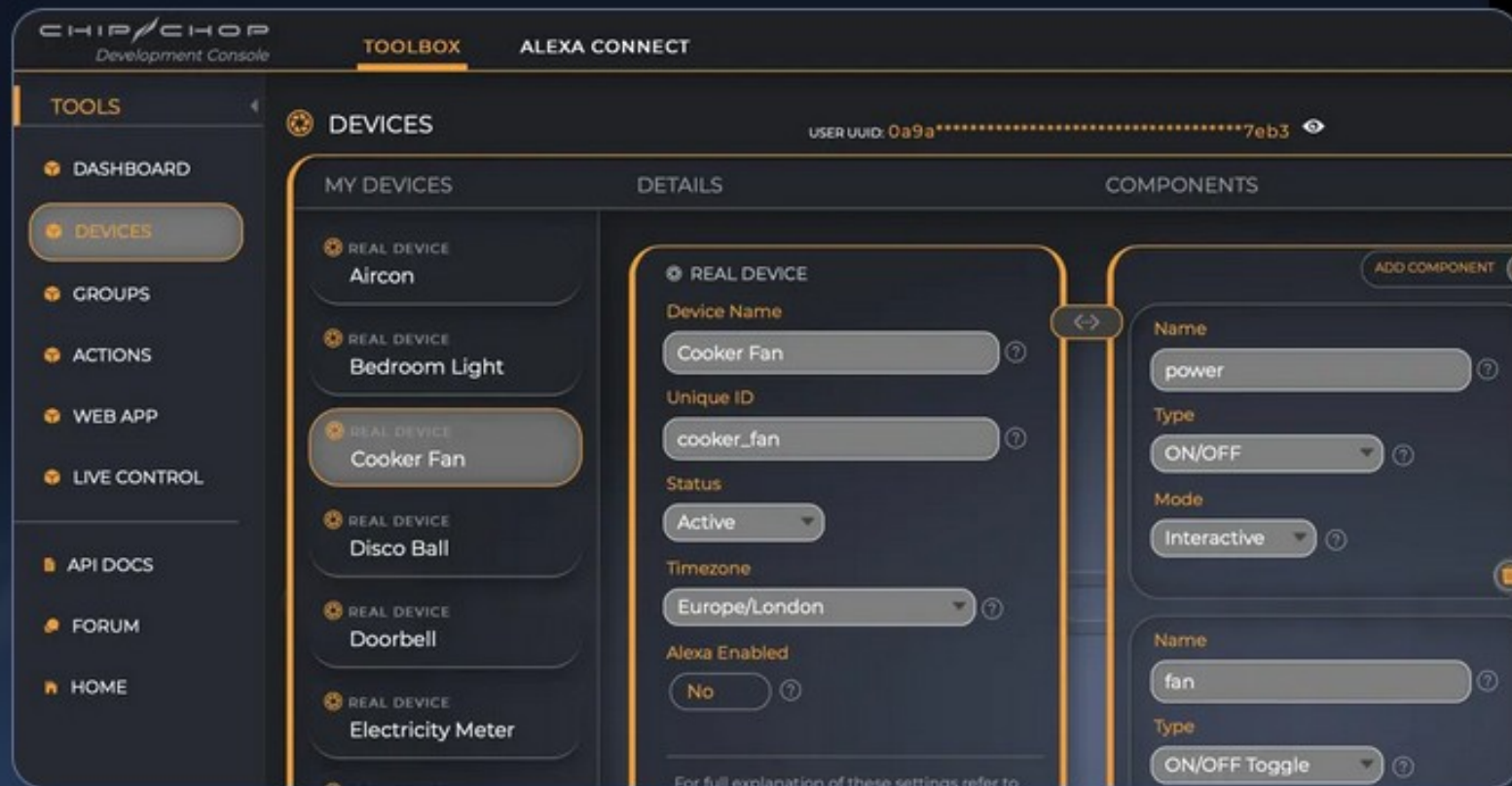
WEB
ANDROID
IPHONE
TABLE



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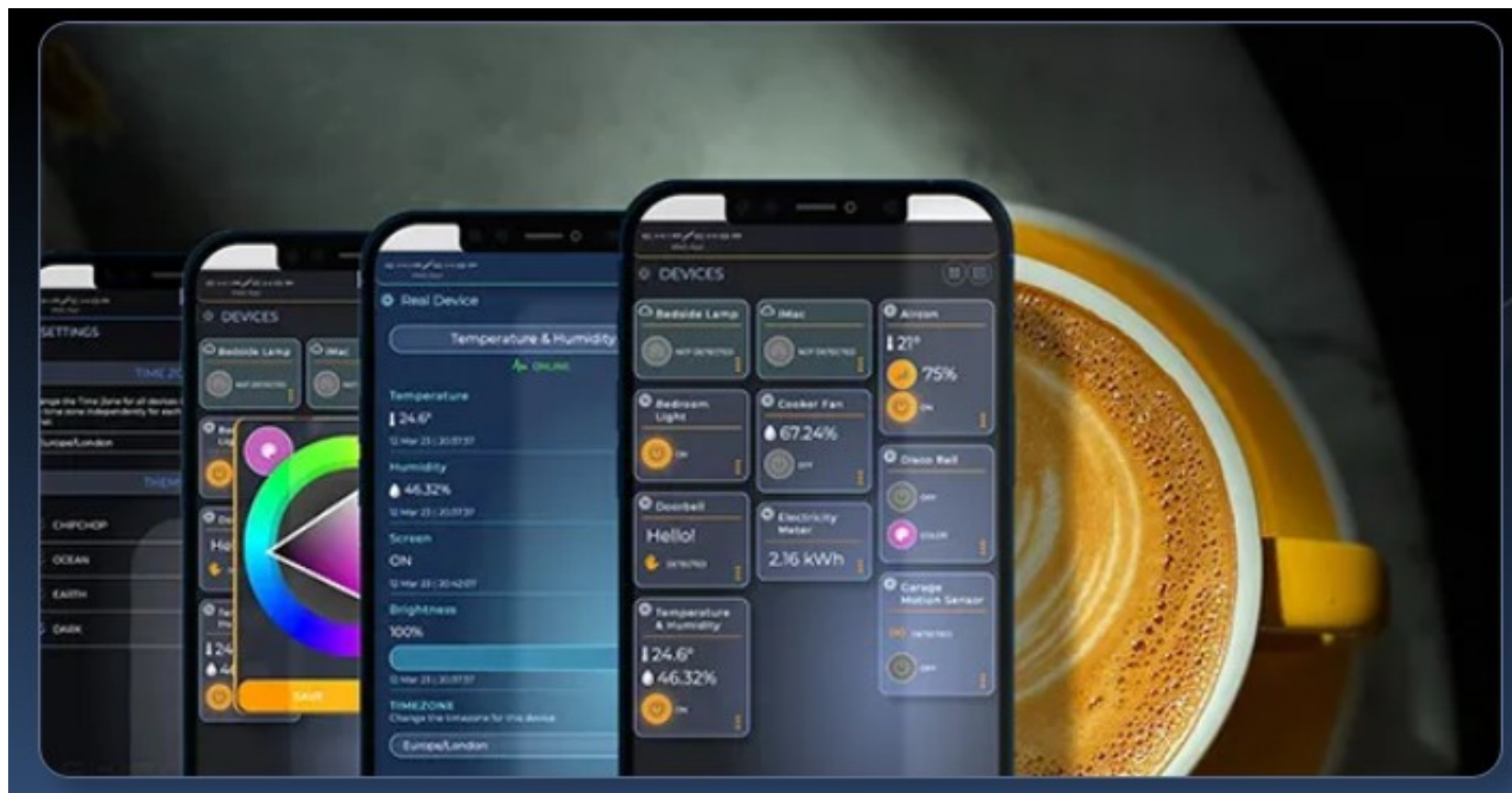
Consola



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**Web
APP**

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**Alexa
Compatible**

CHIP / CHOP

What do you get

The following list may not look very long but it's actually an insane amount of resources allocated for you to play!

- Shared resources on one of the ChipChop community engines
- 3,000,000 monthly platform requests
- 5,000 monthly Alexa requests
- 10 x device persistent bi-directional channels
- 10 components per device

- 10 x Virtual Triggers

multifunctional and designed to be used with Alexa !

- 10 second per device Heartbeat
- up to 1kb status data packet per Heartbeat
- 6 Event Triggers per minute per device

500 millisecond spaced micro-bursts allowed !

Prestacions

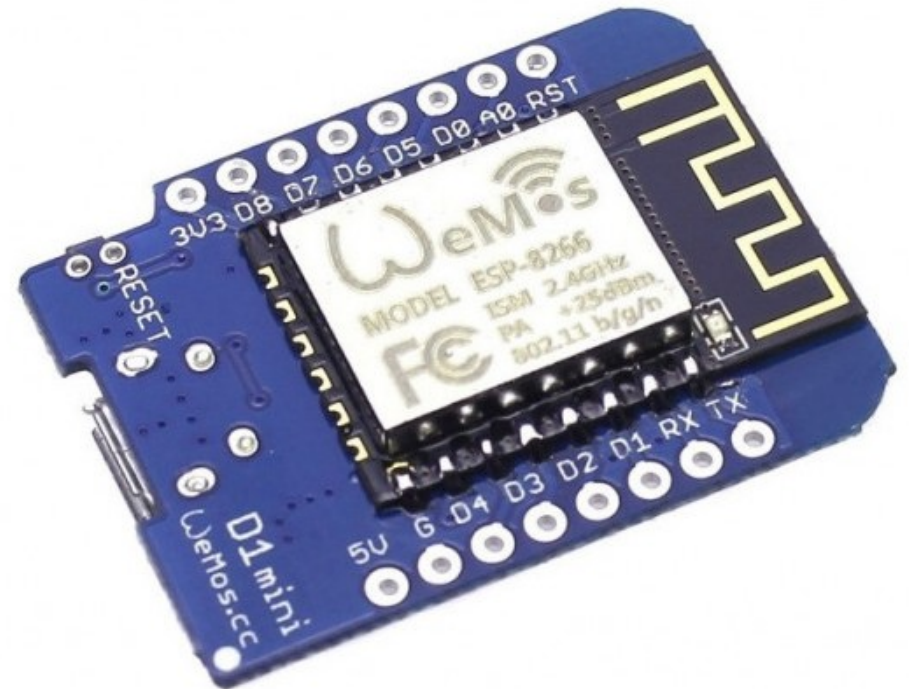
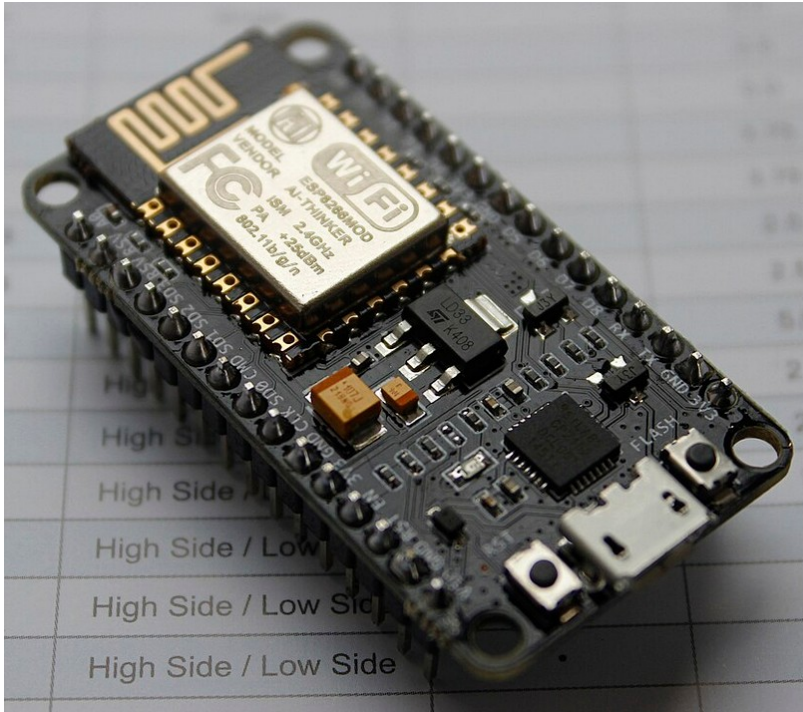


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ESP8266



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ESP32

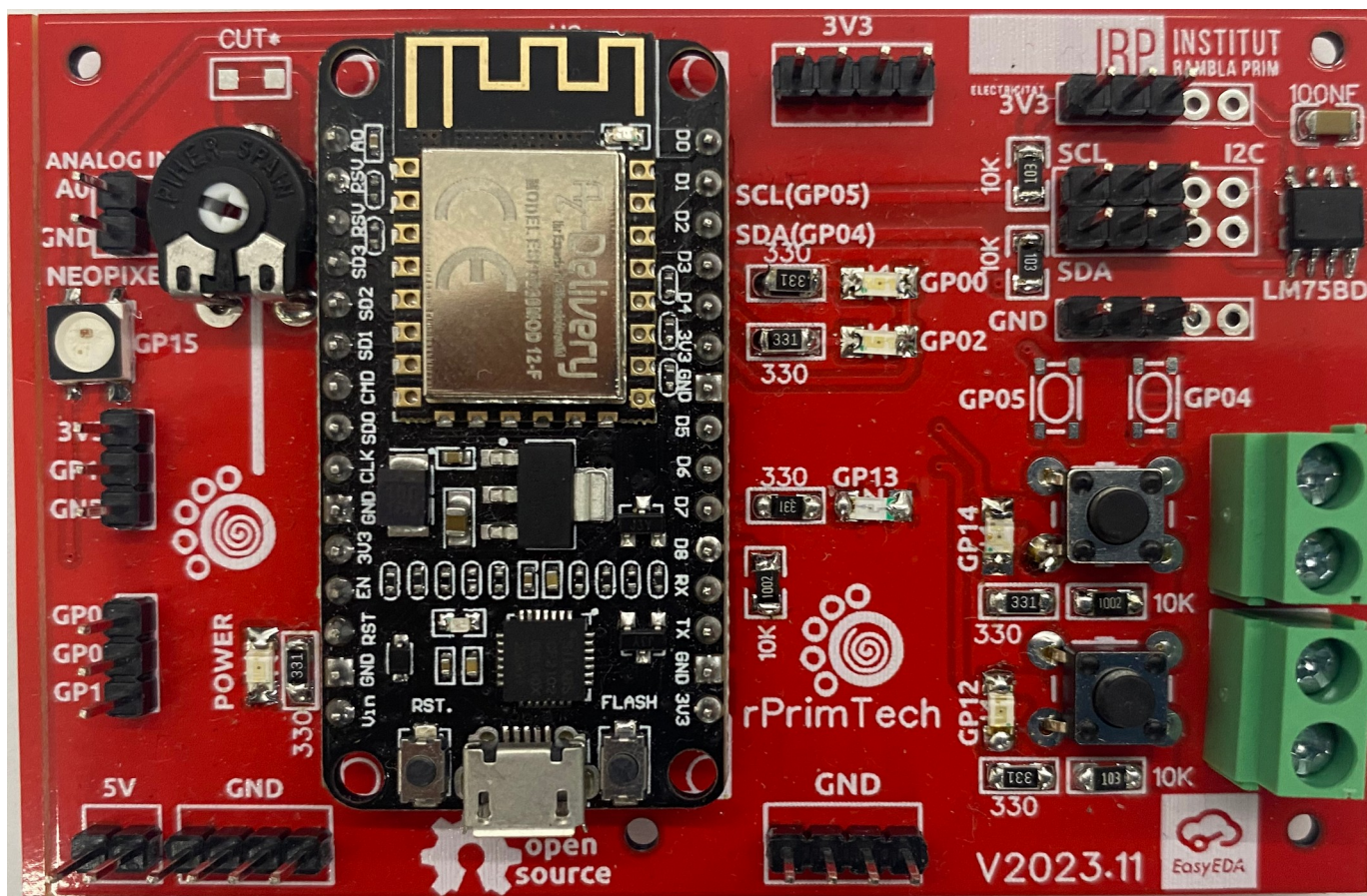


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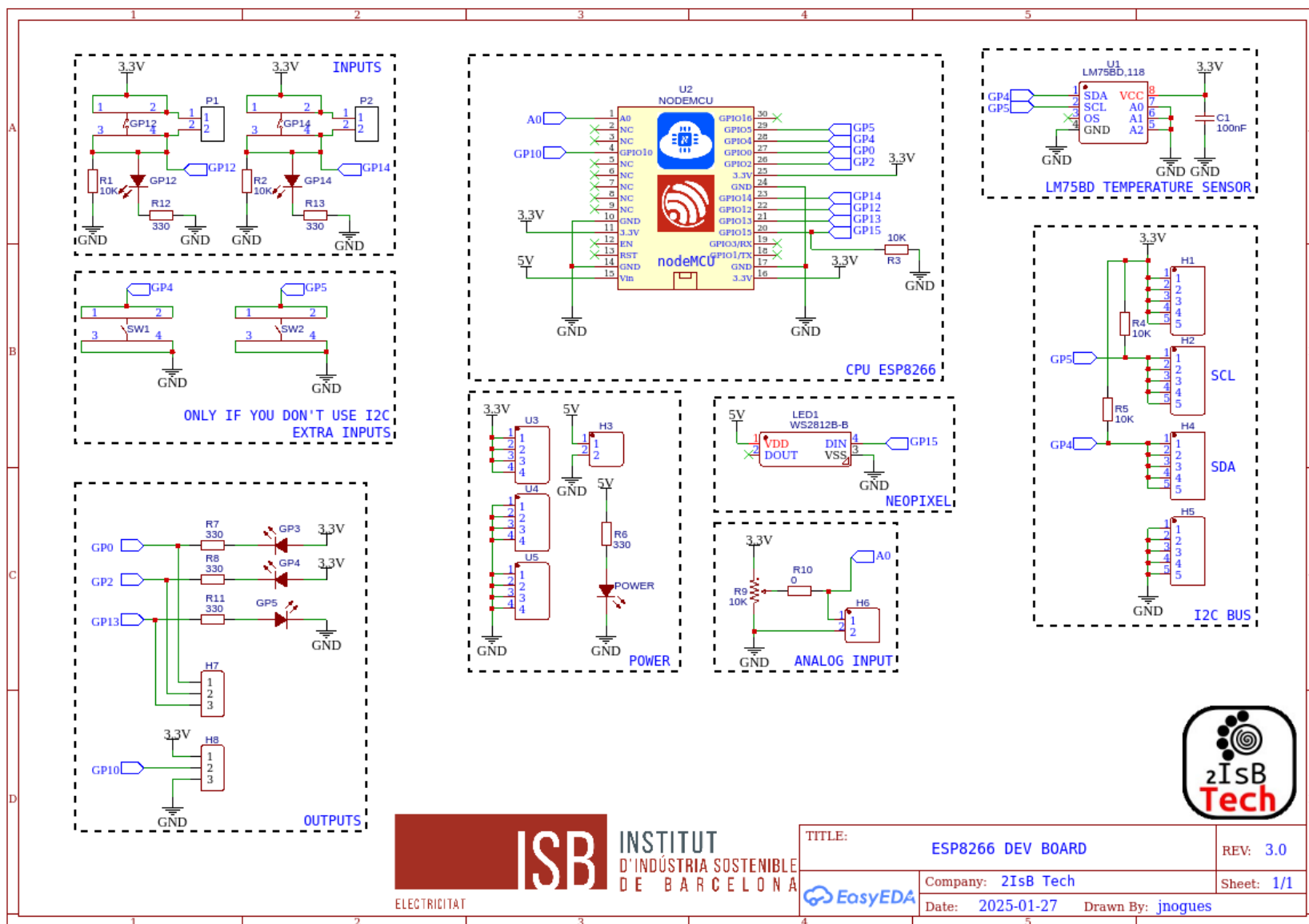
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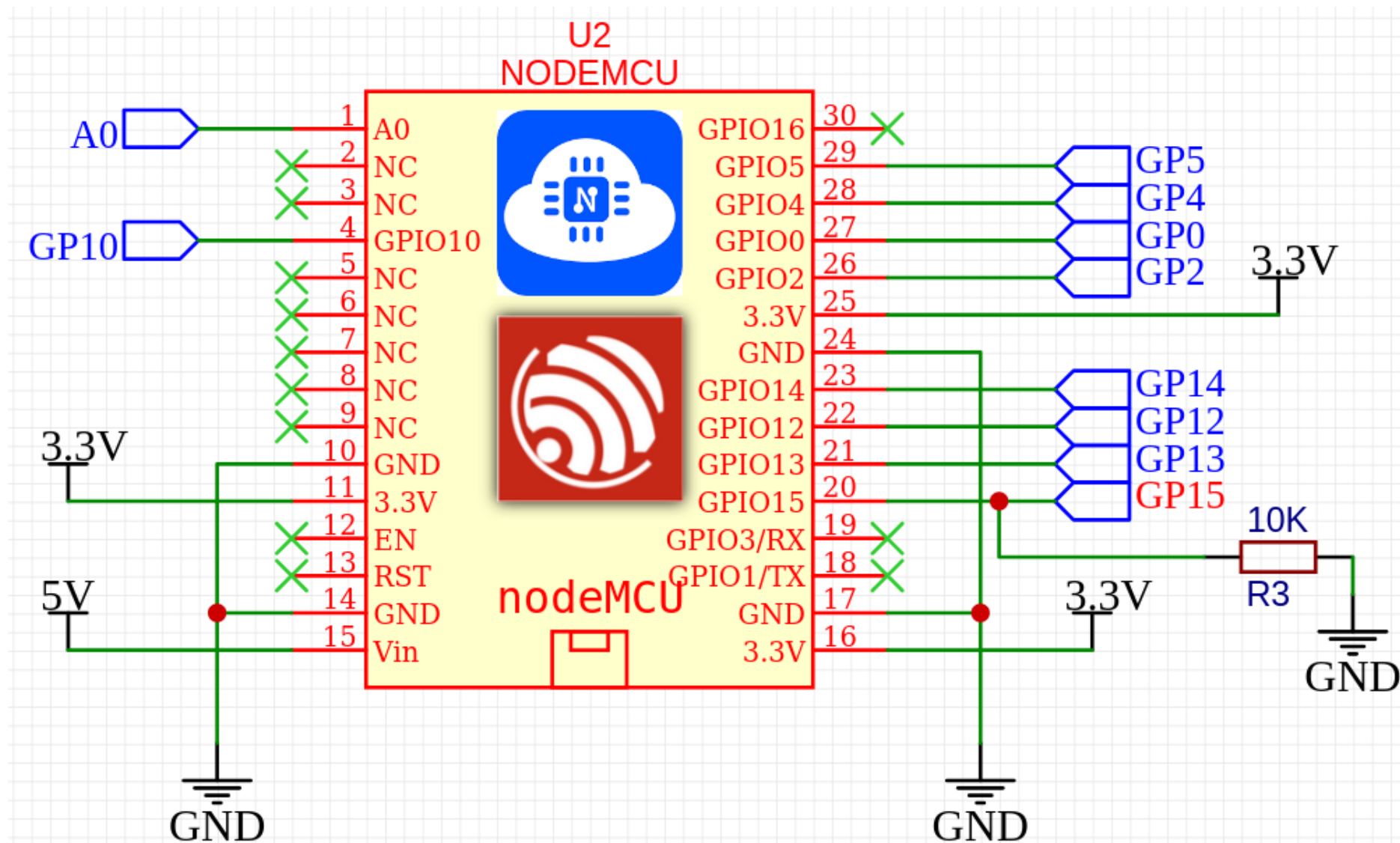
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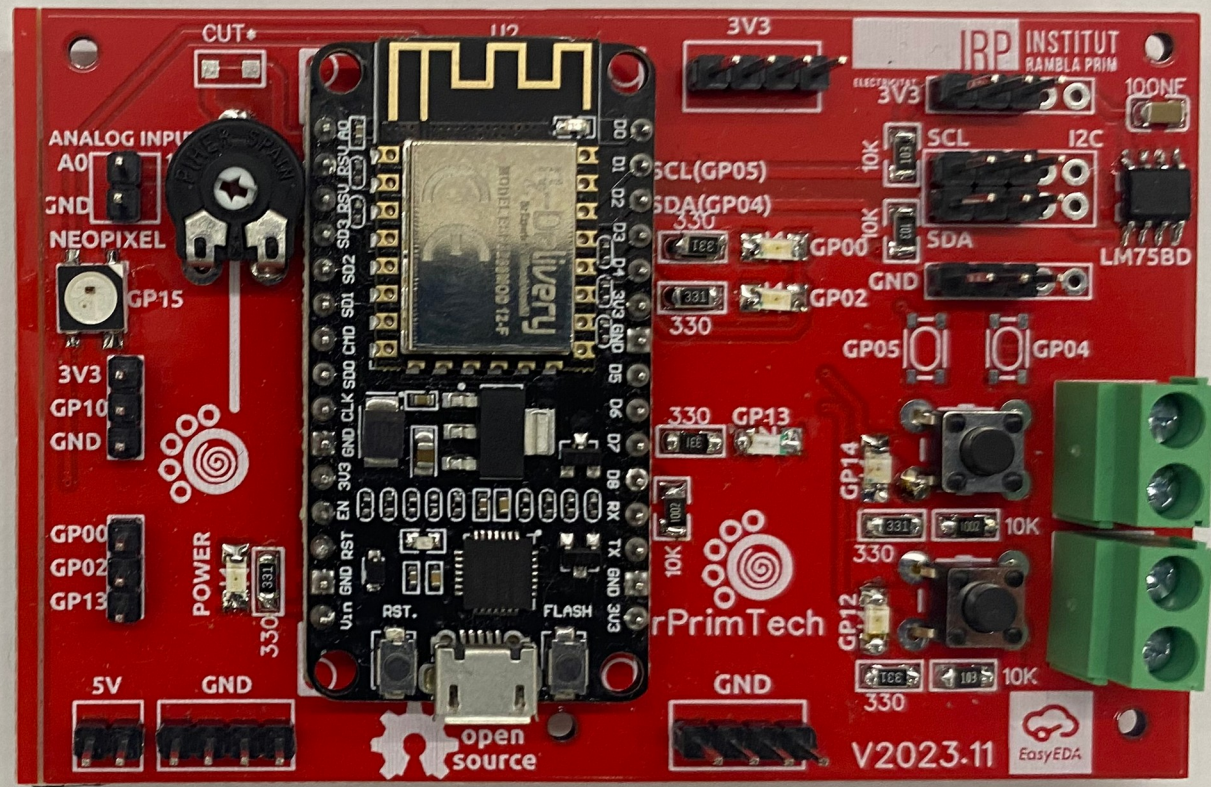
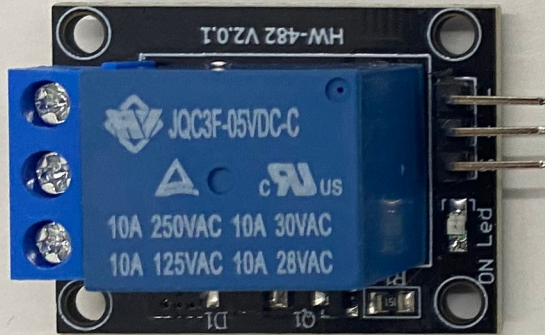
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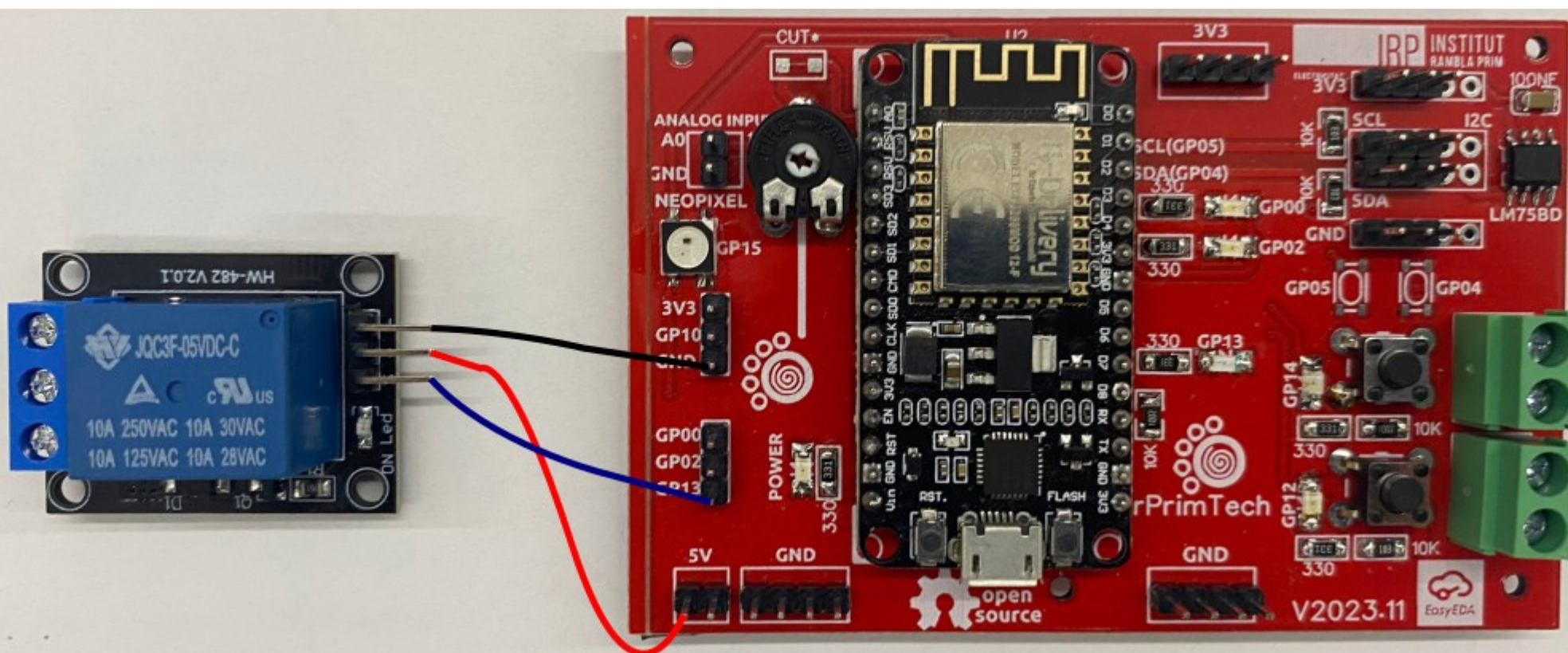


CHIP / CHOP









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DEVICES

USER UUID: api1*****78ad

MY DEVICESDETAILSCOMPONENTS

REAL DEVICE

Chipchop-EMC-Xa...

REAL DEVICE

Chipchop-EMC-Xa...

REAL DEVICE

Chipchop-GIGA

REAL DEVICE

Chipchop-GIGA-V2

REAL DEVICE

Chipchop-M5-001

REAL DEVICE

Chipchop-Codebui...

REAL DEVICE

Chipchop-Nodejs

REAL DEVICE

Chipchop-Sql

REAL DEVICE

EMC 2025-01

REAL DEVICE

ERE 2025-01

REAL DEVICE

JORNADES-2025

JORNADES-2025

Device Name

JORNADES-2025

Device ID (unique and no spaces!)

device_f43b5d3251fa

Status

Active

Timezone

Europe/Andorra

Alexa Enabled

No

DUPLICATE

Share

For full explanation of these settings refer to the ChipChop API pages or post a question in the ChipChop forum

ADD COMPONENT

GPII13

Name

GPII13

Type

ON/OFF

Mode

Interactive

Heartbeat Log

--Not used--

CONNECTION CREDENTIALS

server_uri: wss://api14.chipchop.io/wsdev/
uuid: ChpChpUsRapi14xd8da4ee343824e5e9a45...
auth_code: bd63eb82aaad4110907622fdc94f74a9
device_id: device_f43b5d3251fa

View & Copy Details

SMART CODE TEMPLATE

Use the Code Builder to help you automatically generate a code template and all plugins with library files that you will need to setup your project.

CODE BUILDER

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↑ ↓

CONNECTION CREDENTIALS
server_uri: wss://api14.chipchop.io/wsdev/
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auth_code: bd63eb82aaad4110907622fdc94f74a9
device_id: device_f43b5d3251fa

View & Copy Details

SMART CODE TEMPLATE
Use the Code Builder to help you automatically generate a code template and all plugins with library files that you will need to setup your project.

CODE BUILDER

```
String server_uri = "wss://api14.chipchop.io/wsdev/";  
String uuid = "ChpChpUsRapi14xd8da4ee343824e5e9a45bcc7a82378ad";  
String auth_code = "bd63eb82aaad4110907622fdc94f74a9";  
String device_id = "device_f43b5d3251fa";
```

CLOSE

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CODE BUILDER

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Start your project quickly and in few clicks generate a downloadable package with a basic code template and all plugins and library files you need



Code Builder can output the project package in both PlatformIO and Arduino IDE formats so you can keep using your favorite IDE

Start New

Build a project template for the first time or start a fresh one from scratch

JORNADES-2025

What is it?

ESP8266

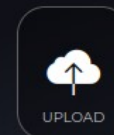
Which one is it exactly?

NODEMCUV2

Next →

Load Existing

Upload and edit a code template you've built before, you will find in the downloaded zip a file ending with "Code Builder File.json"



« or »

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CODE BUILDER

USER UUID: api1*****78ad



ChipChop Code Builder for ESP32 & ESP8266

Pick the plugins you would like to include in your build, you will set them up in the next step.

Please note that on smaller chips like ESP8266 you may not be able to run too many plugins together.

In general, just try different combinations to find out what would work for you or ask for advice in the forum.

AVAILABLE PLUGINS



ChipChop Plugin by: Gizmo

Keep Alive



ChipChop Plugin by: Gizmo

Preferences Manager



ChipChop Plugin by: Gizmo

Auto Mode (pin control)



ChipChop Plugin by: Gizmo

WiFi Portal



ChipChop Plugin by: Gizmo

OTA (Over the air updates)



ChipChop Plugin by: Gizmo

DS1820 Temperature Sensor



ChipChop Plugin by: Gizmo

AHT Temperature-Humidity

SELECTED PLUGINS

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Next →

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CODE BUILDER

USER UUID: apil*****78ad



ChipChop Code Builder for ESP32 & ESP8266

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AVAILABLE PLUGINS



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ChipChop Plugin by: Gizmo
OTA (Over the air updates)



ChipChop Plugin by: Gizmo
DS1820 Temperature Sensor



ChipChop Plugin by: Gizmo
AHT Temperature-Humidity

SELECTED PLUGINS



Keep Alive

REMOVE



Preferences Manager

REMOVE



Auto Mode (pin control)

REMOVE



WiFi Portal

REMOVE



OTA (Over the air updates)

REMOVE


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
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 **CODE BUILDER**



USER UUID: apil*****78ad 



 **ChipChop Code Builder for ESP32 & ESP8266**



Set all required parameters for each plugin and the ChipChop Library Engine.
You need to view the settings for each plugin and confirm by pressing the "Save" button even if you haven't made any changes.



 **ChipChop Engine** 



 **Keep Alive** 

 **Preferences Manager** 

 **Auto Mode (pin control)** 

 **WiFi Portal** 

 **OTA (Over the air updates)** 

 **Back** **Next** 

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CODE BUILDER

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ChipChop Code Builder for ESP32 & ESP8266

We are almost there!

This may take some time so please be patient, the Code Builder will have a lot of work to do.



Build for Arduino IDE

Get a project template that you can open and compile with Arduino IDE.
Make sure to read the "Instructions.txt" that will be included in the compilation zip file.

Start →



Build for PlatformIO

Get a project template that you can open and compile with PlatformIO.
Make sure to read the "Instructions.txt" that will be included in the compilation zip file.

Start →

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Nom



JORNADES-2025

Nom



src



JORNADES-2025.ino



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Programa mínim

```
1
2 #include <ESP8266WiFi.h>
3
4 #define CHIPCHOP_DEBUG true
5
6 #include "src/ChipChop_Config.h"
7 #include "src/ChipChopEngine.h"
8 extern ChipChopEngine ChipChop;
9 #include "src/ChipChopPlugins.h"
10 extern ChipChopPluginsManager ChipChopPlugins;
11 #include "src/ChipChop_Includes.h"
12
13 String server_uri = "wss://api14.chipchop.io/wsdev/";
14 String uuid = "ChpChpUsRapi14xd8da4ee343824e5e9a45bcc7a82378ad";
15 String auth_code = "bd63eb82aaad4110907622fdc94f74a9";
16 String device_id = "device_f43b5d3251fa";
17
18 AutoStartPins on_off_pins[MAX_COMPONENTS] = {
19     {"GPIO13",13,LOW,"OFF",AUTO_MODE_RESTORE,{"ON","OFF"}},
20 };
21
22 void ChipChop_onCommandReceived(String target_component,String command_value, String command_source, int command_age){
23     Serial.println(target_component);
24     Serial.println(command_value);
25 }
26
```




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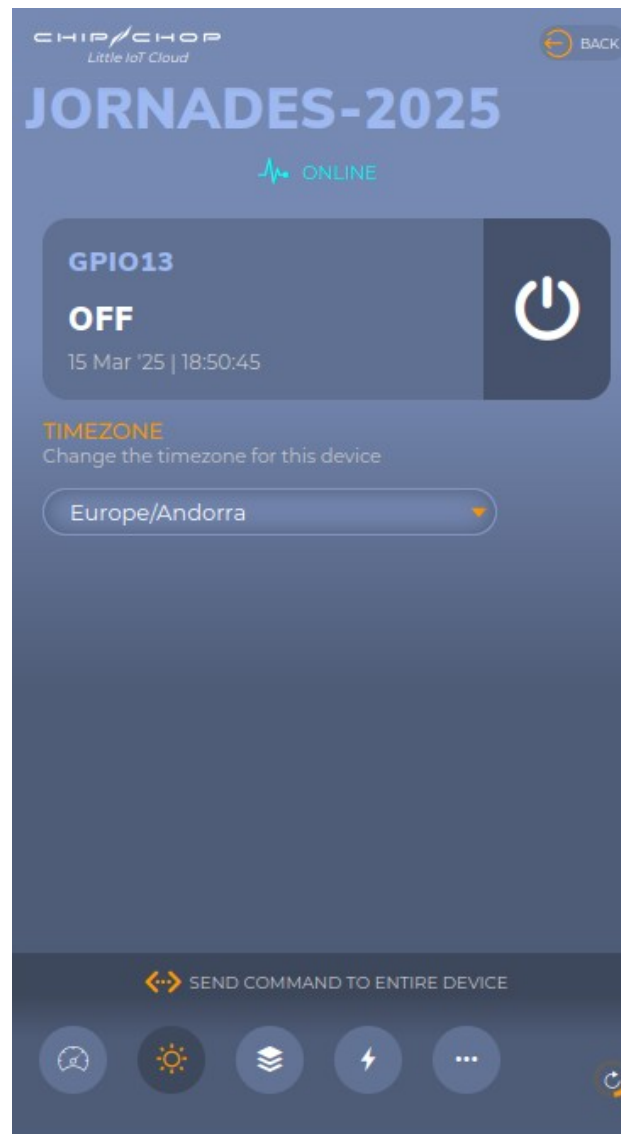
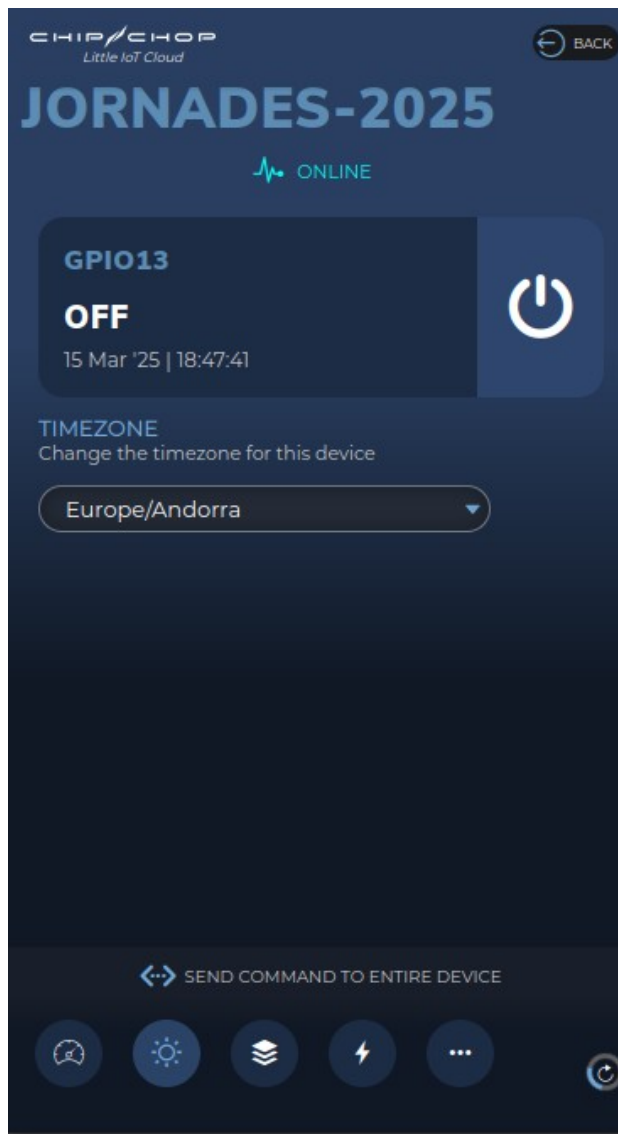
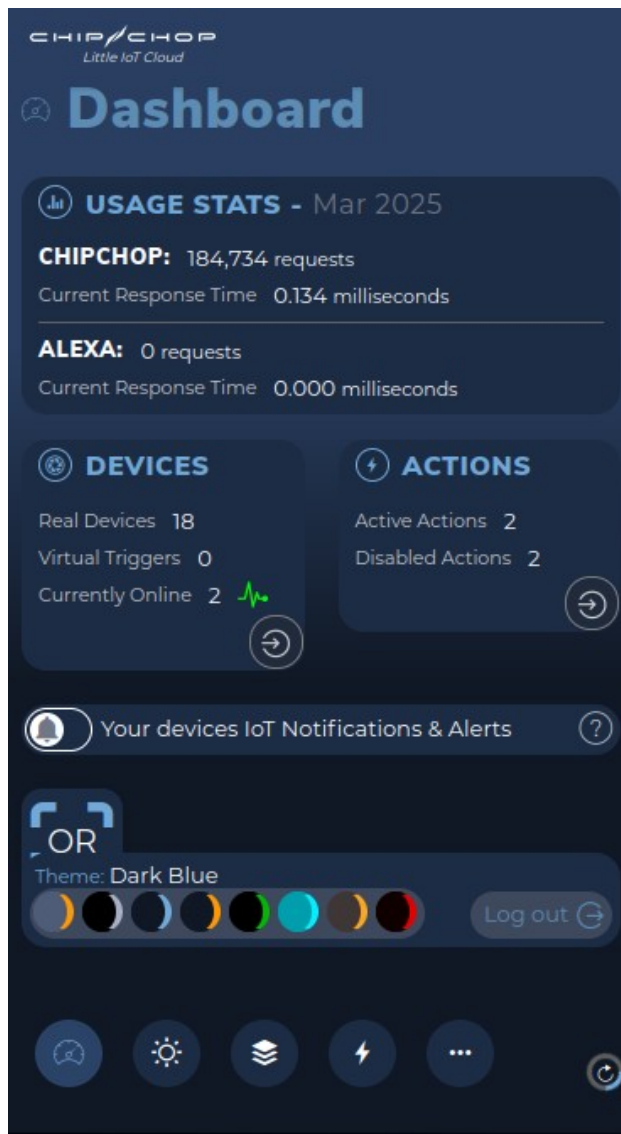
Programa mínim

```
26
27 void setup(){
28
29     Serial.begin(115200);
30     delay(1000);
31     Serial.println("Comencem...");
32
33     WifiPortal.ssid("<ssid name>", "<password>");
34
35     ChipChop.debug(true);
36     ChipChop.commandCallback(ChipChop_onCommandReceived);
37     ChipChop.start(server_uri, uuid, device_id, auth_code);
38
39     ChipChopPlugins.start();
40
41     AutoMode.start(on_off_pins);
42 }
43
44 void loop(){
45     //keep the ChipChop engine and plugins running
46     ChipChop.run();
47     ChipChopPlugins.run();
48
49 }
50
```



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ON GPIO13



OFF GPIO13

The logo for Institut d'Indústria Sostenible de Barcelona (ISB) features the letters 'ISB' in a large, white, sans-serif font, set against a dark red rectangular background.

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Moltes gràcies!



`jnogues@irp.cat`



`@rPrimTech`



`github.com/jnogues/jornades2025`

