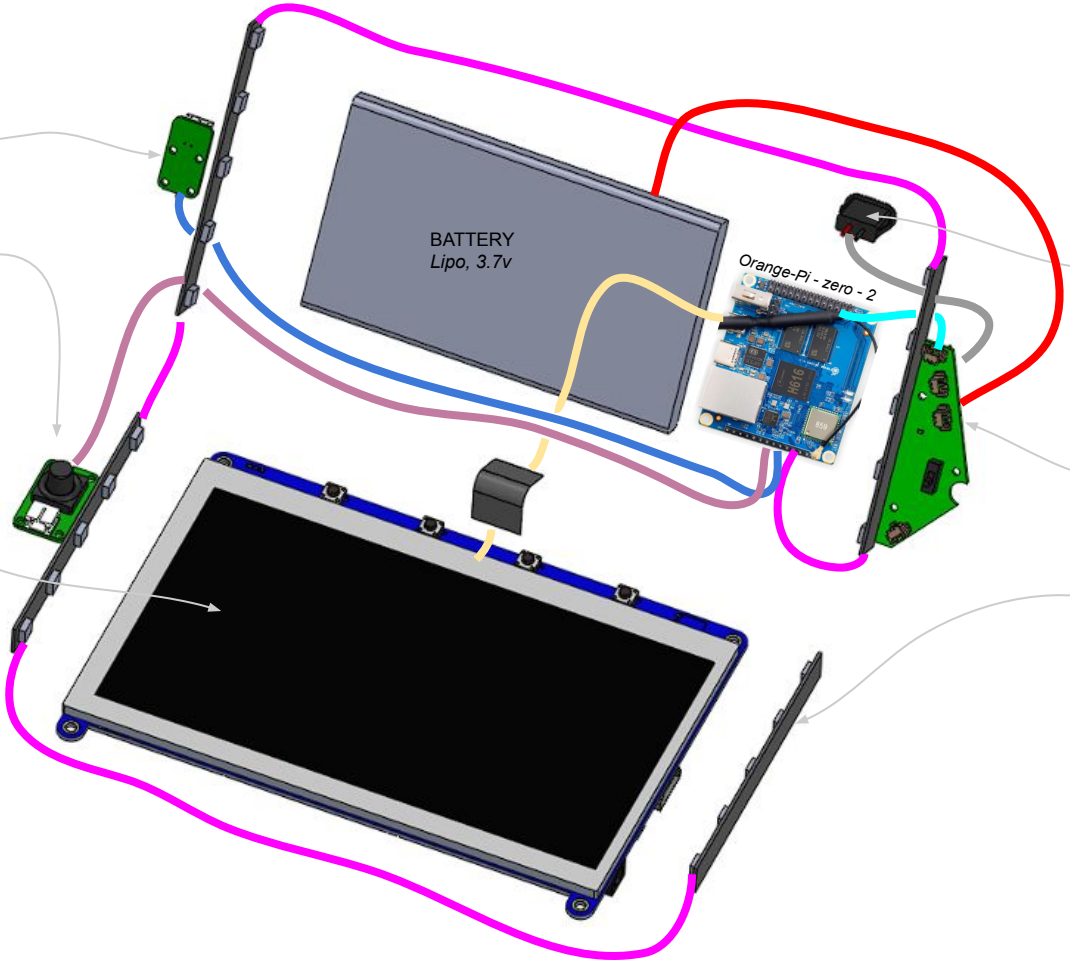
1. Do the wiring diagram according to page2
2. Design the little pcbs, Sensor PCB, 4-WAY PCB, PCB2, add to wiring diagram
3. Port image file to orange pi - test on screen
4. Write new firmware for functions on pages 4 5 and 6 for orange

PARTS LAYOUT



SENSOR-PCB
A mini PCB with an open/close mechanical sensor + JST connector

4-WAY-PCB
A 4-WAY SMD button + JST connector

SCREEN1
A TFT screen with USB-C connector on the back

USB-C-1
Female USB C socket, for recharging BATTERY

FLEX CONNECTOR
Thin flex connector for connecting the screen to the MAIN-PCBA

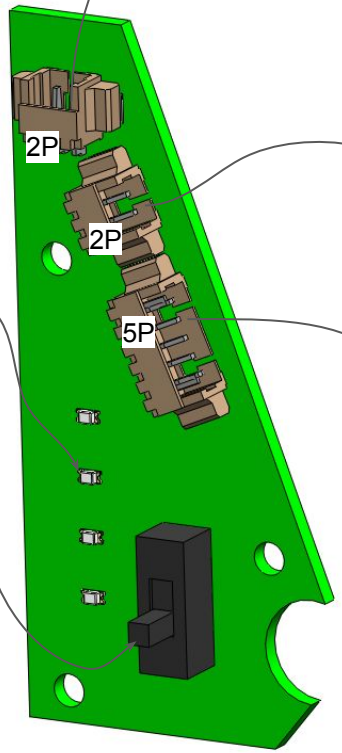
PCB-2
Small custom PCB
Battery LEVEL LEDS
Power switch, ON/OFF for whole device
Battery recharge circuit

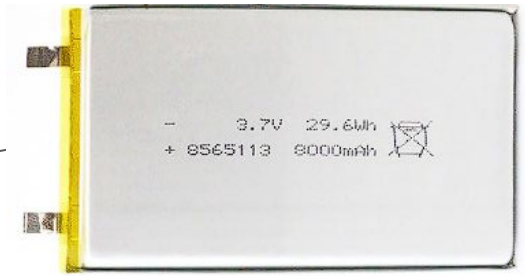
LED-STRIP
4 lengths of LED strip, wired together as 1-string

BOM here

PCB2
Step-up voltage to PI
Do the recharge circuit using TC4056A or similar
Show battery level
Control power to PI (on/off)

USB-C charger
5V 3A





Functions:
Battery LEVEL LEDS
Power on/off to PI
Battery recharge circuit

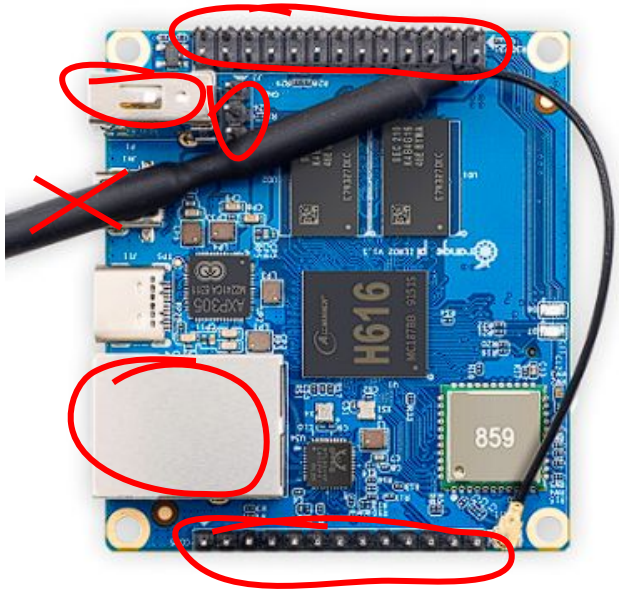
2 pins for power
1 pin, pcb2 communicate to orange-pi
1 pin, orange-pi communicate to pcb2

Orange PI zero 2

Even if battery is being recharged,
this 5V 2A output must remain stable

5V 3A

It needs to be thin, inside the final product so the following items should be remove from the board



FLOW CHART

FLOWCHART

POWER SWITCH

Turn to position 1 (on)
Device = ON

Turn to position 2 (off)
Device = OFF

SENSOR1

Detect if the device is open or closed

SENSOR1 = Closed → Device is closed
LED-STRIP = OFF
LCD = OFF
orange-PI = SLEEP

SENSOR1 = Open → Device is open
LED-STRIP = ON
orange-PI = ON
LCD = ON
(if LED-STRIP is enabled) → Show Battery_level x 3 seconds

BRIGHTNESS

Adjust brightness, there are 10 levels of brightness where level 1 is the least bright and level 10 is the highest bright and they are adjusted in levels of 10%

Device is =
ON + OPEN → Press + hold 4WAY
x 2 seconds

Enter brightness
adjustment mode

Flash LED-STRIP x 2
(this means its in brightness adjustment mode)

Press 4WAY, UP x 1
= Increase brightness 1 level

Press 4WAY, DOWN x 1
= Reduce brightness 1 level

Press + hold 4WAY
x 2 seconds

Exit brightness adjustment
mode

Flash LED-STRIP x 3
(this means it has exited brightness adjustment mode)

FLOWCHART

DISABLE-ENABLE

When the device is opened/closed, LED-strip light will automatically turn on/off if enabled-disabled.

LED strip light is enabled ON by default

Device is OPEN → Long press DOWN direction, 4-WAY = Enable if disabled / Disable if enabled →

IF change to enabled, flash 3 times LED-strip light, then turn ON

IF change to disabled, flash 2 times LED-strip light, then turn OFF

RECHARGE

Connect 5V-CHARGER to USB-C-1 → Charger supply: 5 volts, 1000 ma → Flash slowly, battery LEDs according to the charged capacity

FLOWCHART

LOAD .IMG

Load .img to SD CARD

Load to RPI

Temporarily connect it to the hotspot on the RPI

Change this to BLE process

BLE connectivity

Phone passes data to screen (by BLE)

BLE connectivity

Use 4WAY
Scroll up, down, left, right on screen display (displayed from phone by BLE)

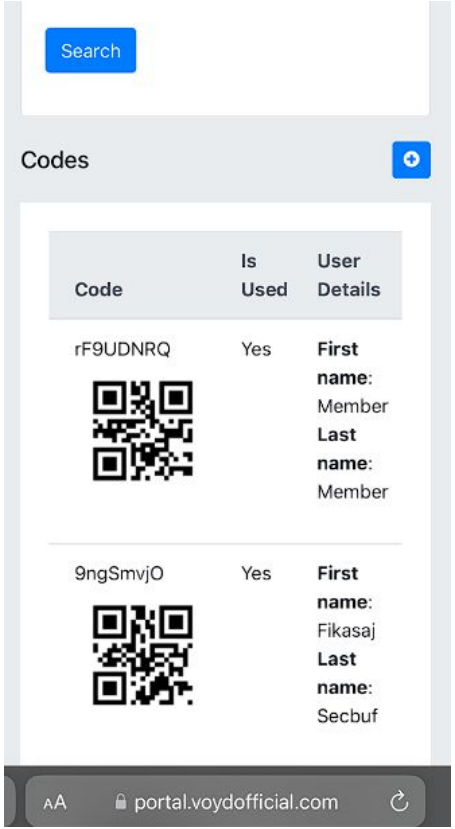
Below is a list of details about our mobile app:

- It is built for only iOS.
- Currently, the files are put on an SD card, inserted on a RPI, and need wifi to connect the device to the app.
- The image used to burn onto SD: https://drive.google.com/file/d/1cm67nAKRhkbbGX5w50zBW7ONim_GSlkb/view?usp=sharing
- The following site is used to host the display page: https://www.ssdnodes.com/
- Wireframe is attached/uploaded

Below are some details to connect the RPI to the wifi hotspot:
Hotspot name: voyd
Username: voyd
Password: voyd09022021
Go to site voyd.local see a form website
Username: admin
Password: secret

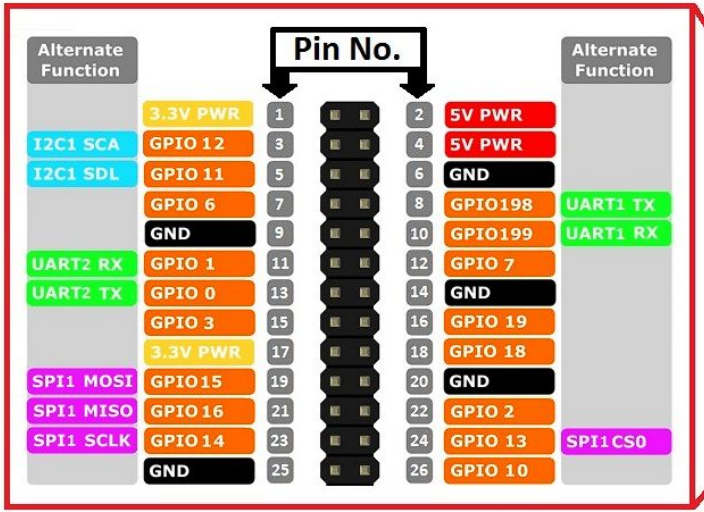
Below are some details to access the site the RPI is pointing to:
https://portal.voydofficial.com/admin/login
admin@manaknight.com
a123456

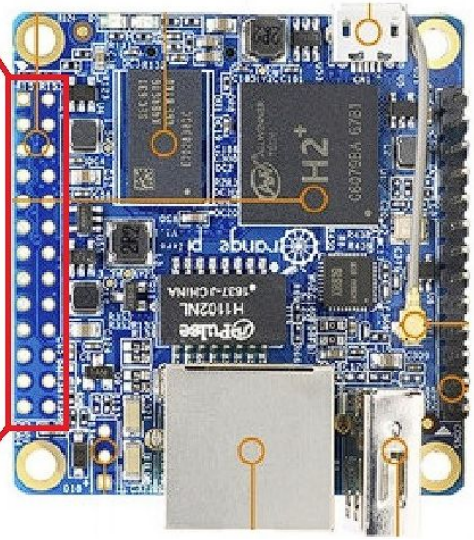
The dashboard url in the raspberry pi image will be
https://portal.voydofficial.com/dashboard?code=<code>

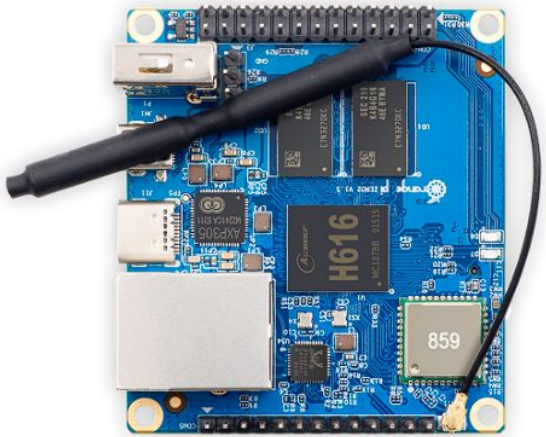


Each dashboard is different for each user and they are given their own code, previously updated when manually imaging on the SD card. The code is generated on the portal
https://portal.voydofficial.com/admin/login
User: admin@manaknight.com
Password: a123456
The dashboard url in the raspberry pi image will be
https://portal.voydofficial.com/dashboard?code=<code>

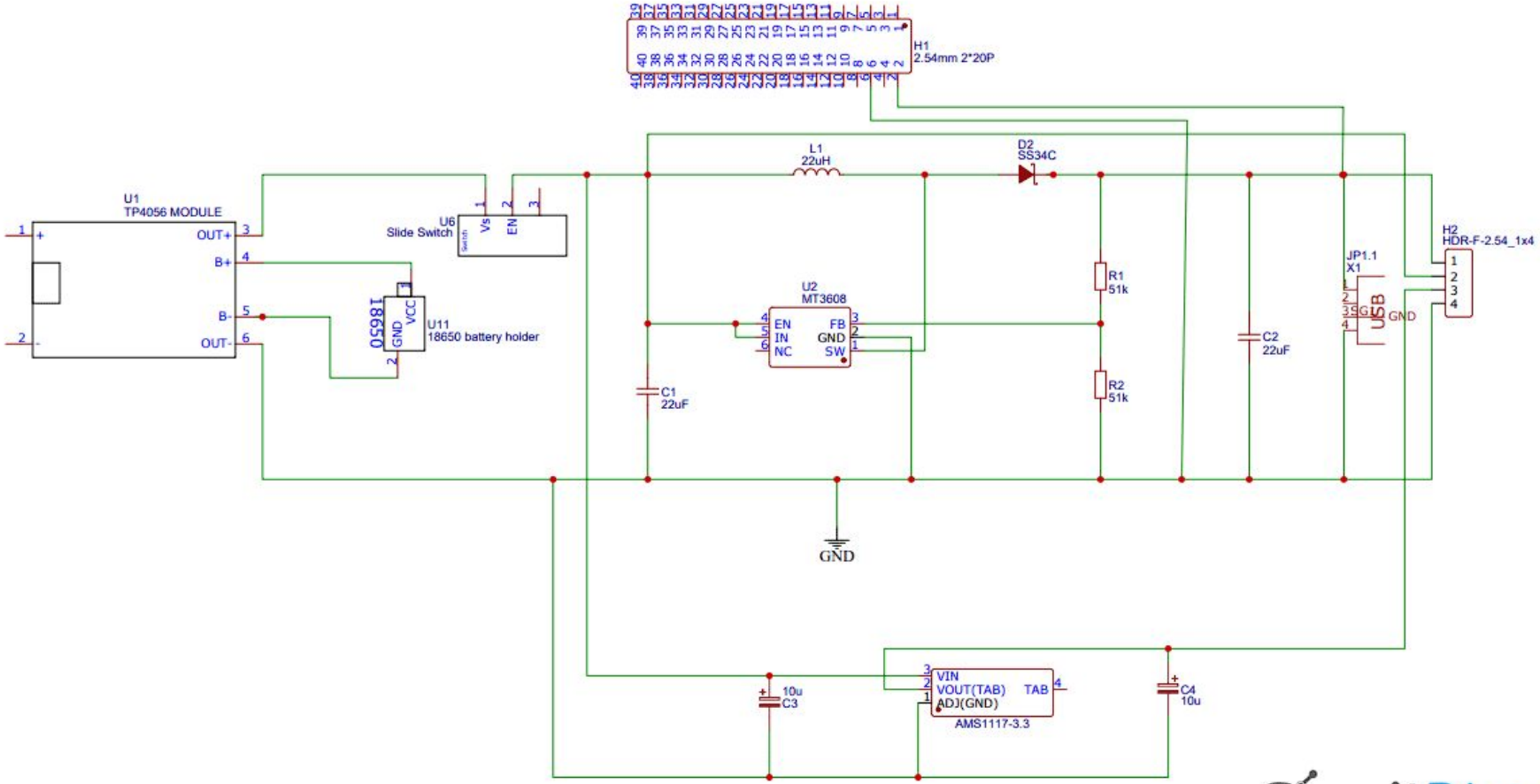
ARCHIVE - IGNORE THE BELOW


Alternate Function
Pin No.
Alternate Function
3.3V PWR 1
5V PWR 2
I2C1 SCA GPIO 12 3
5V PWR 4
I2C1 SDL GPIO 11 5
GND 6
GPIO 6 7
GPIO198 8
UART1 TX
GND 9
GPIO199 10
UART1 RX
UART2 RX GPIO 1 11
GPIO 7 12
UART2 TX GPIO 0 13
GND 14
GPIO 3 15
GPIO 19 16
3.3V PWR 17
GPIO 18 18
SPI1 MOSI GPIO15 19
GND 20
SPI1 MISO GPIO 16 21
GPIO 2 22
SPI1 SCLK GPIO 14 23
GPIO 13 24
SPI1 CS0
GND 25
GPIO 10 26




H616
859

https://circuitdigest.com/electronics-circuits/design-and-build-raspberry-pi-li-ion-batery-hat



CircuitDigest

1. Revise to MR/AMR sensor Hide inside mirror area

Hardware
- rebuild it on 16GB stick

Mobile
- move the setting and profile down on menu
- replace onboarding images
- location section remove dropdown and put text only

Dashboard
- remove white border
- move date stuff text to the right
- open link in full screen mode

Steps to build product
- take the image i get you and burn it to an sd card https://www.balena.io/etcher/
- go to admin portal and choose a sync code
- open sd card and find url.txt -> and replace the sync code and click save
- connect the sd card to raspberry pi
- solder a wire on the third pin from the right with a push button
https://www.google.com/search?q=push+button&rlz=1C5CHFA_enCA925CA925&oq=push+button&aqs=chrome..69i57j0i512l9.1560j0j7&sourceid=chrome&ie=UTF-8
- connect power supply
- connect lcd power and hdmi to raspberry pi
- boot it up
- once its up, go to phone and connect to hotspot voyd
username voyd
password voyd09022021
- go to site voyd.local see a form website
type in
admin
secret
- choose a wifi to use and device will remember that wifi

Schedules

VOID

Notes