pigetArduino/gpsLogger

 github.com/pigetArduino/gpsLogger

Record gps coordinate in a csv file on an SD card every 15 seconds (DAYHOURMINUTESSECOND.csv)
[Example file](#)

Download link

http://gps.madnerd.org

How to convert the track

Gpsies.com

- Go to http://gpsies.com
- Click on Create a track
- Import the csv file
- Or click on convert to get a gpx track file

Viking

- Download it here : https://sourceforge.net/projects/viking/
- Go to file
- Retrieve
- Import file with GPS Babel
- Choose (at the end of the list) : Import with gps babel
- Add a map in layer
- Use Open Street Map (Mapnick) or Bing Aerial

Buzzer

The buzzer will tell you if there is any issues with the gps/sdcard

- Heavy sound : Wiring issues or no microsd
- Soft repetitive sound : GPS is calibrating (can take up to 5 minutes)
- Melody : GPS is online
- Soft and short sound : GPS coordinates saved to sd

Components

Use theses keyword to find the components

- Gps module ublox Aircraft model mwc: 8€

- Micro sd card 2go : 4€

- Batteries holder 4AAA on/off : 1€

- Arduino mini pro 3.3V : 1,50€

- Passive buzzer 3v: 1€

- Total : 15.50€

Tools

- FTDI basic breakout usb ttl 3.3 : 6.23€

- Cable 30awg 8-color: 5.37€

Software needed:

- Arduino (Programmation): http://arduino.madnerd.org

- Cura (3D printing): https://ultimaker.com/en/products/cura-software
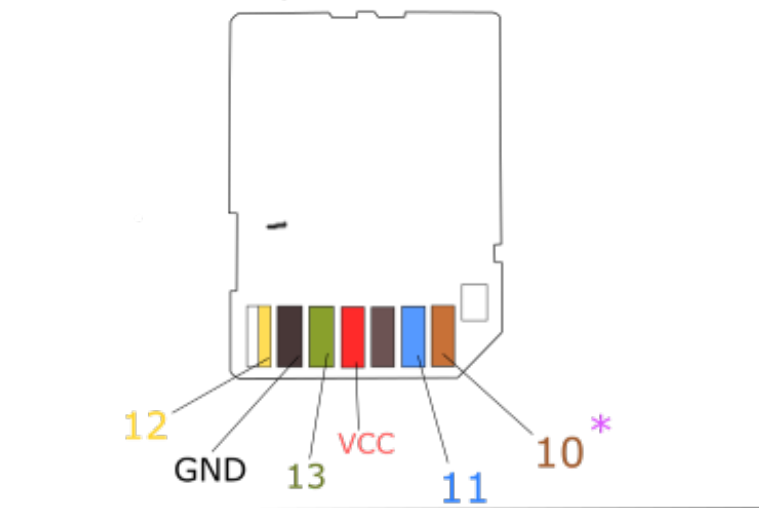
3D models

See 3D models

```
Tested on Ultimaker 2 GO with PLA
To improve solidity print A in
solid
A Infill: Solid
B Infill: Light
```

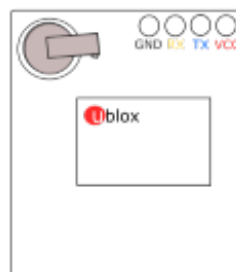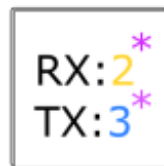- Author : Olivier Sarrailh

Wiring:

SD card Adapter

12
GND 13
VCC
11
10 *

GPS

RX:2*
TX:3*

GND Rx TX VCC

ublox

DO NOT PLUG TX/RX INTO TX/RX

GPSlogger   *changeable

SD card

```
1 --> X
2 --> 12
3 --> GND
4 --> 13
5 --> VCC
6 --> GND
7 --> 11
8 --> 10 (Chip
select)
```

GPS

```
RX -->
2
TX -->
3
```

Buzzer

```
+ --->
9
```

Libraries

TinyGPS++ library : https://github.com/mikalhart/TinyGPSPlus