MAR31c

The MAR31c is a portable music player with clock and input based on AVR microcontroller.

Parts list

<https://detail.tmall.com/item.htm?id=536177311143>

<https://detail.tmall.com/item.htm?id=563596251820>

<https://detail.tmall.com/item.htm?id=14601487966>

<https://detail.tmall.com/item.htm?id=555380054234>

<https://detail.tmall.com/item.htm?id=17952641393>

<https://detail.tmall.com/item.htm?id=21123656085>

<https://item.taobao.com/item.htm?id=529059737540>

<https://detail.tmall.com/item.htm?id=533054527075>

<https://detail.tmall.com/item.htm?id=41210227078>

<https://detail.tmall.com/item.htm?id=45823224665>

<https://item.taobao.com/item.htm?id=35014299078>

<https://item.taobao.com/item.htm?id=521729293708>

<https://detail.tmall.com/item.htm?id=536471530768>

<https://detail.tmall.com/item.htm?id=14768953772>

M3

[https://detail.tmall.com/item.htm?id=13866722304](https://detail.tmall.com/item.htm?id=13866722304&_u=m3oj6mk0c361)

M3

Uses Arduino pro mini 5v/16mhz as controller

Pinout schematic

18650 Battery TP4056

+ B+

- B-

Voltage regulator

In+ OUT+

In- OUT-

Arduino pro mini

OUT+ RAW

OUT- GND

Nokia 5110 LCD display

Vcc VCC

Gnd GND

CLK 8

DIN 9

DC 10

RST 11

CS 12

BL 13

Rotary encoder

+ VCC

GND GND

SW A1

CLK 2

DT 3

DS1307

+ VCC

- GND

SDA A4

SCL A5

DFPlayer mini (pin numbers go from top left in counter-clockwise from 1)

1. VCC
2. 5
3. 4

7 GND

16 A2

Resistors 3.5mm Headphone jack

6 220ohm Left

8 220ohm Right

GND 1kohm GND

DFPlayer SDcard file arrangement

Folder names

1. English songs
2. Mandarin songs
3. Active series
4. Casual audiobook content
5. Musicals
6. Explicit content

Libraries list

ds1307(custom library based on RTClib)

<http://www.rinkydinkelectronics.com/library.php?id=47>

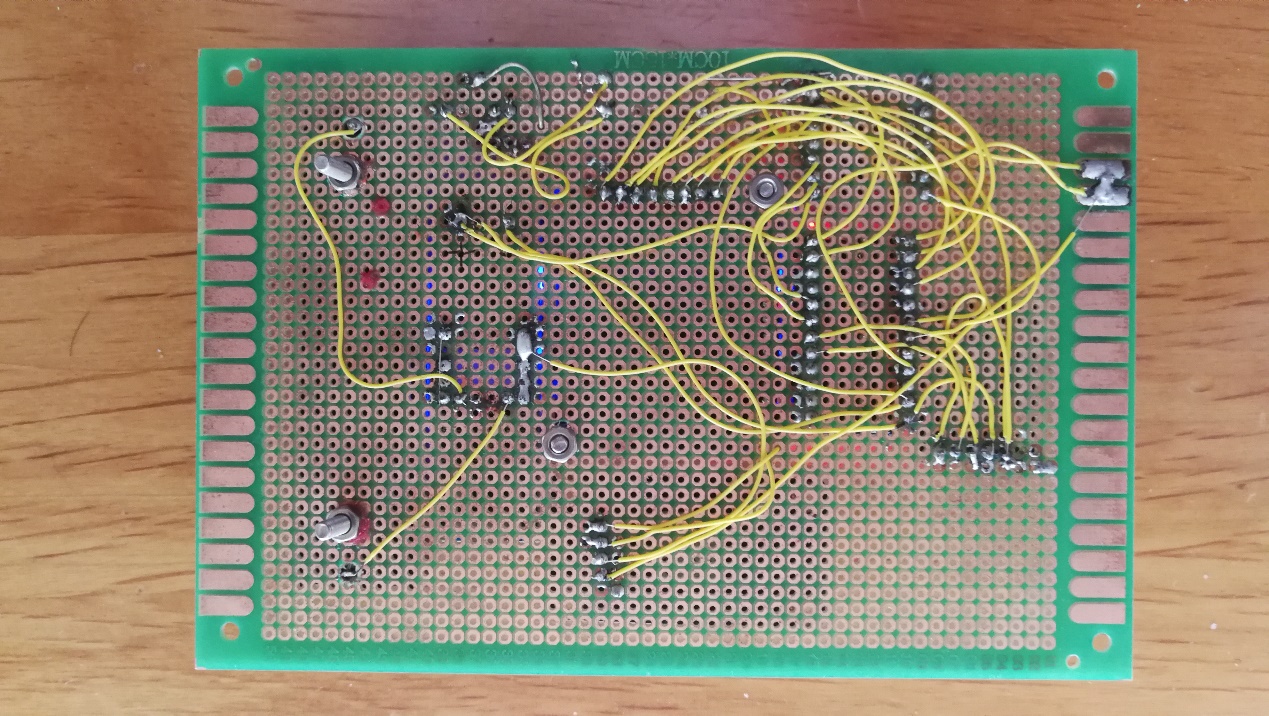
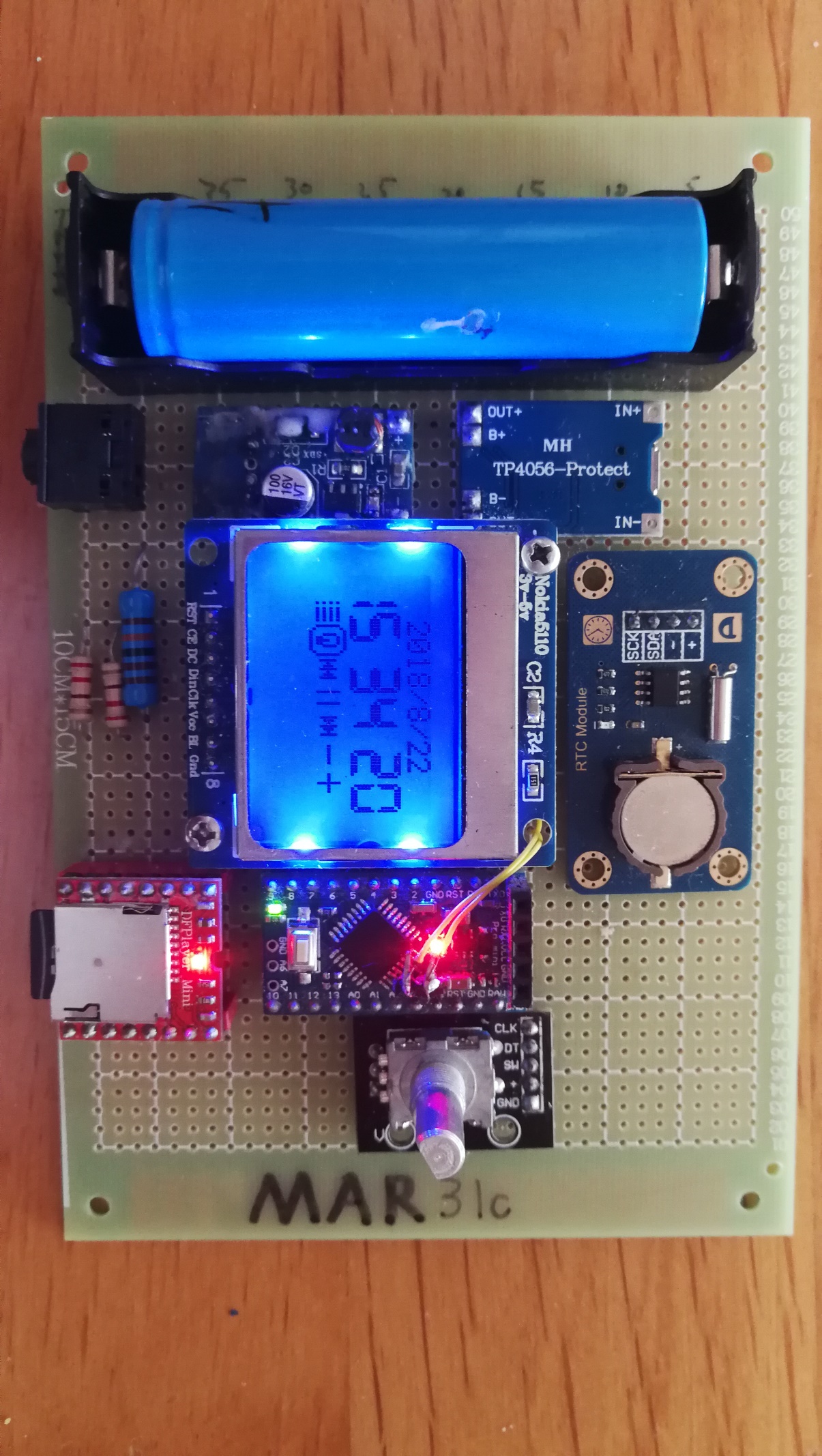
<https://www.pjrc.com/teensy/td_libs_Encoder.html>

<https://github.com/DFRobot/DFRobotDFPlayerMini>

<https://github.com/adafruit/Adafruit-GFX-Library>

and other libraries that comes with the IDE

Reference photos



This concludes the MAR31c project datasheet.

Datasheet updated 2018/8/22

Copyright Xiachuan Xu aka. Non-GUI Coder / Non-GUI Programmer

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