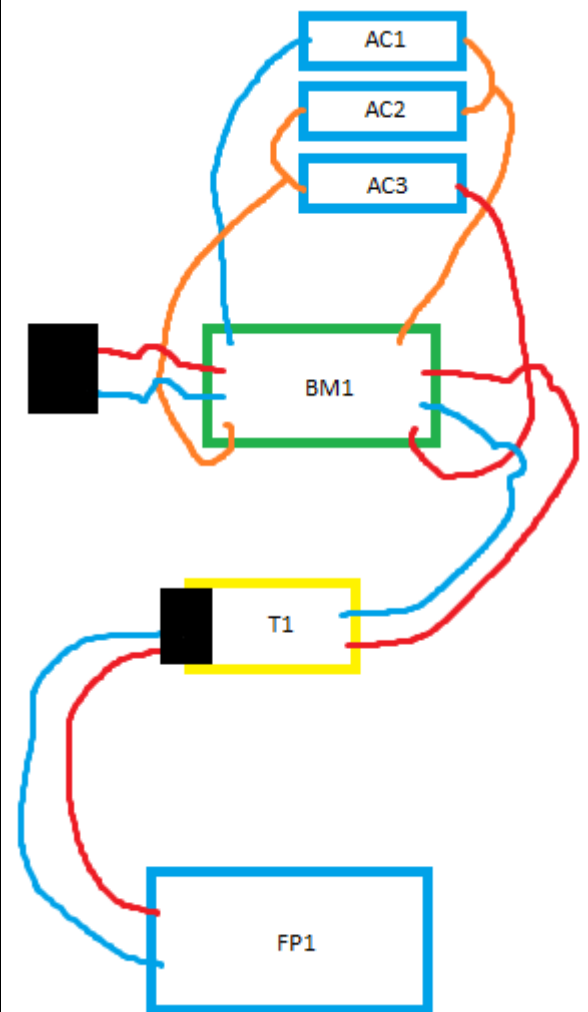
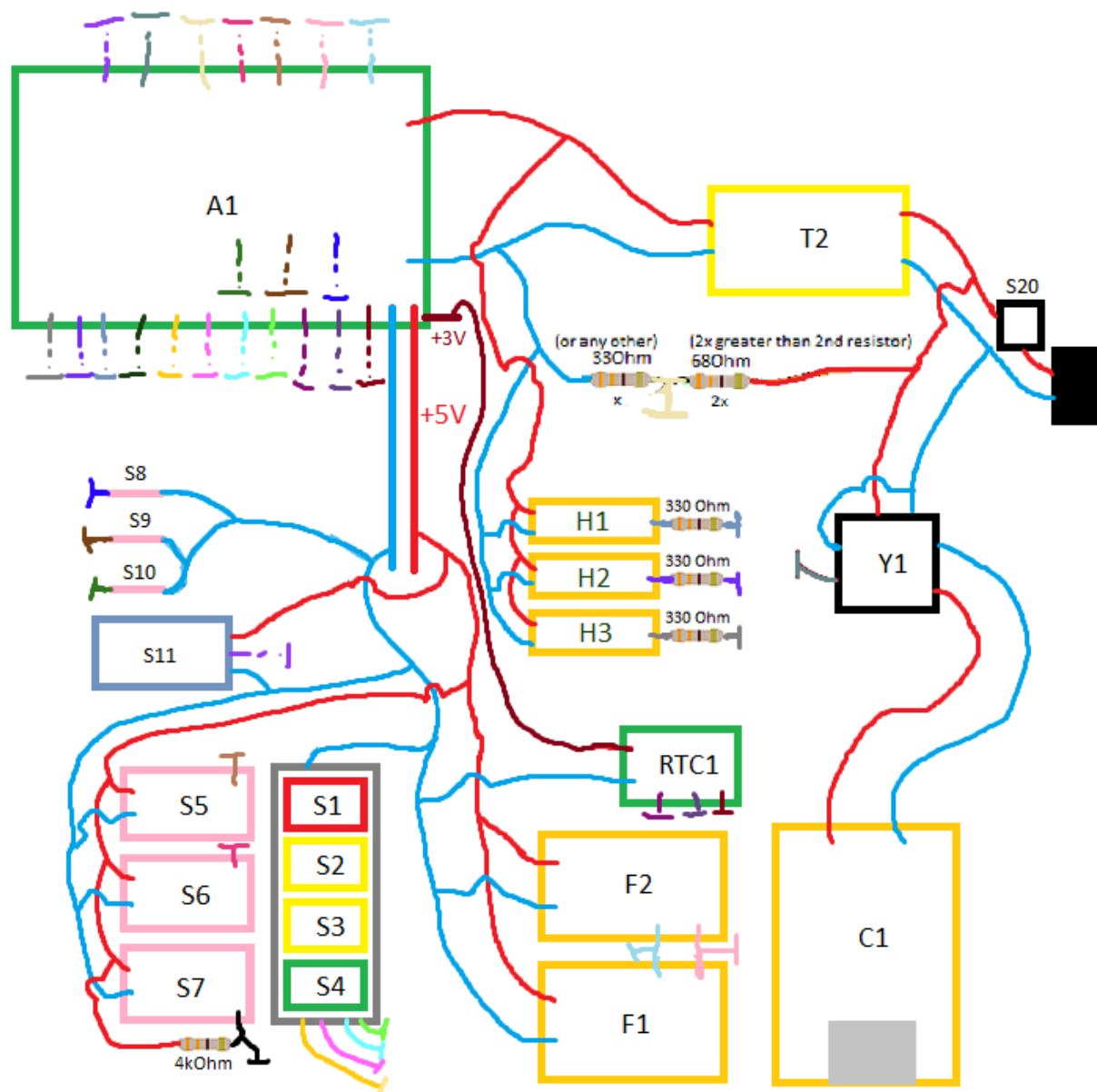


| 3S Li-ion Power source | | |
|------------------------|--|---|
| Sign | Description | Function |
| - | 4-pin MOLEX: [LINK 1] [LINK 2] [LINK 3] [LINK 4] |  |
| - | Baskets for 18650 accumulator (3x) | |
| T1 | DC-DC Transformer with microUSB (set to 12,6V) | |
| BM1 | Li-ion BMS charger 3S | |
| AC | Li-ion 18650 accumulator, required type: min. 5A max | |
| FP1 | Fotovoltaic panel (optional) | |

| Bicycle circuit | | | |
|-----------------|--------------|--|---|
| Sign | Arduino Sign | Description | Function |
| Lamps | | | |
| H1 | D0 | ARGB 0,85m 51 diodes=> 5V/3,06A | Main LED strip |
| H2 | D1 | ARGB 0,1m 6 diodes => 5V /0,36A | Front lamp LED strip |
| H3 | D2 | ARGB 0,05m 3 diodes => 5V /0,18A | Back lamp LED strip |
| Buttons | | | |
| S1 | D3 | Membrane keyboard => 4 keys | Details on the 3rd page |
| S2 | D4 | | |
| S3 | D5 | | |
| S4 | D6 | | |
| Screens | | | |
| F1 | A4/A5 | 0,96' OLED blue + yellow display | Displays current buttons type |
| F2 | A4/A5 | 2x16 LCD screen with I2C converter | Displays speed, clock, temperature and button-changed info |
| Sensors | | | |
| S5 | A6 | Light detector | Auto turn on/off and set brightness for lamps when autolights is on |
| S6 | A7 | Snow/rain detector | |
| S7 | D7 | Temperature sensor | Display temperature on lcd |
| S8 | D8 | Reed switch | Measure wheel speed and distance |
| S9 | D9 | | Detect left lever |
| S10 | D10 | | Detect right lever |
| S11 | A1 | IR receiver | Control main LED via remote |
| Chargers | | | |
| C1 | - | Transformer with USB and QC | Charging port for phone and other USB-charged devices |
| Voltage check | | | |
| - | A2 | Voltage divider (33% into port) | If voltage level is low (<3,7V) display warning at F1, turn off main LED, turn off autofunctions and cut off C1 |
| Relays | | | |
| Y1 | A0 | Relay | Cuts off C1 sometimes |
| Other stuff | | | |
| T2 | - | DC-DC Transformer (set to 5V and max amperage) | Voltage change for Arduino and LEDs |
| A1 | - | Arduino Nano Every | Main controller |
| RTC1 | D11/D12/D13 | Real Time Clock module | Provide current time |
| - | - | Resistors (3x 330Ohm, 1x 4.7kOhm, 3x any) | Needed to not burn LEDs and to check voltage higher than maximum |
| S20 | - | On/off button | Button starting whole circuit |
| - | - | IR remote control | Control main LED via remote |



Buttons functions:

4 – change device

[speedometer]

- 1 – 2secs hold – reset [trip dist, trip time, avg speed, max speed]
- 2 – next function of speedometer
- 3 – prev function of speedometer

[main led]

- 1 – on/off
- 2 – change glow type
- 3 – change brightness

[front led]

- 1 – on/off
- 2 – change glow type
- 3 – change brightness

[back led]

- 1 – on/off
- 2 – change glow type
- 3 – change brightness

[smart functions]

- 1 – turn signals and breaking led
- 1 – auto driving lights
- 2 – usb port on/off

(brake levers)

[turn signals]

- 2x left lever – left turn signal on/off
- 2x right lever – right turn signal on/off
- 2secs hold 2 levers – hazard lights on/off