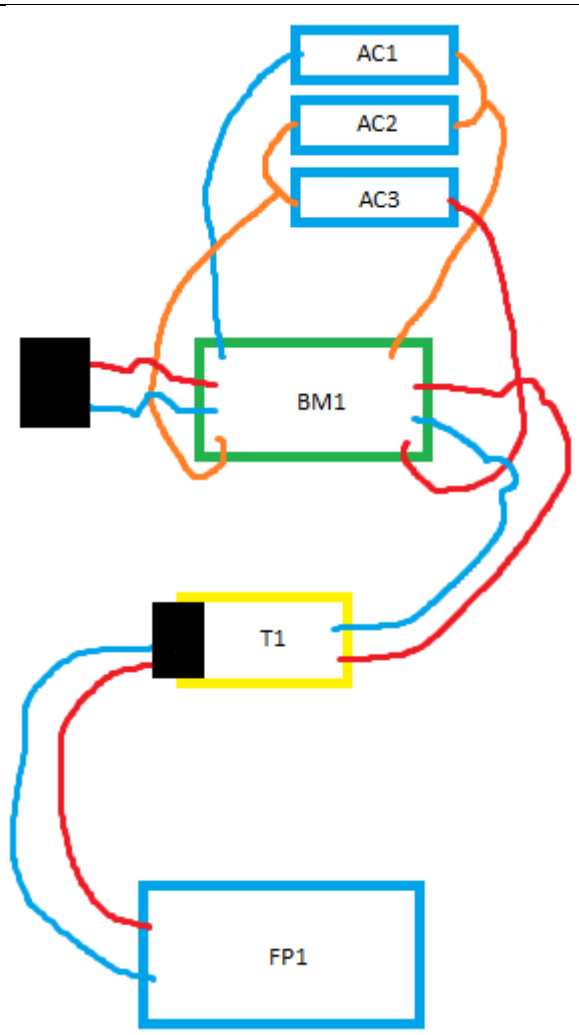
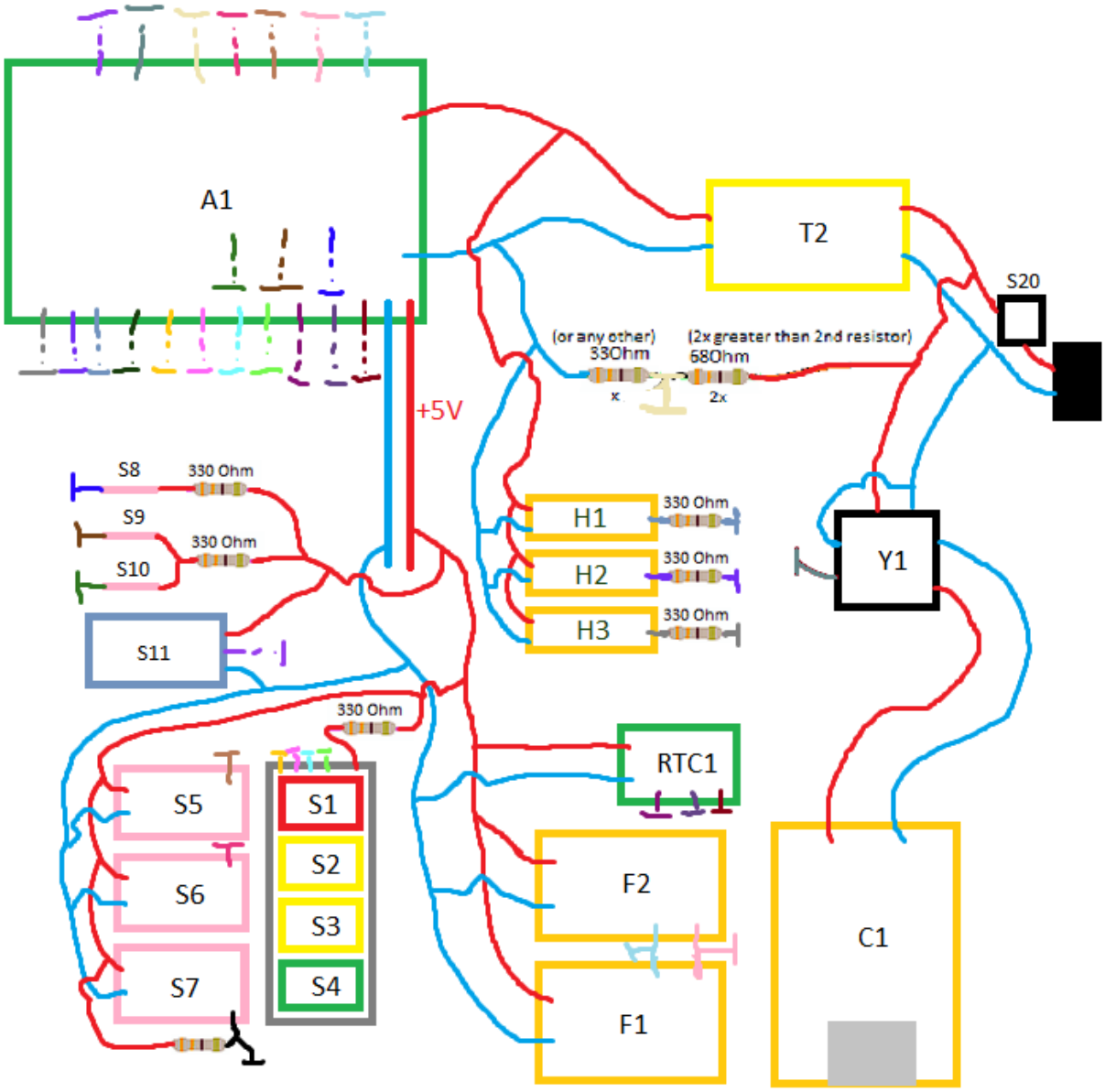
3S Li-ion Power source		
Sign	**Description**	**Function**
-	4-pin MOLEX: [LINK 1] [LINK 2] [LINK 3] [LINK 4]	
-	Baskets for 18650 accumulator (3x)	
T1	DC-DC Transformer with microUSB (set to 12,6V)	
BM1	Li-ion BMS charger 3S	
AC	Li-ion 18650 accumulator, required type: min. 5A max	
FP1	Fotovoltaic panel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


A1
T2
S20
(or any other)
330Ohm
x
(2x greater than 2nd resistor)
680Ohm
2x
+5V
S8
330 Ohm
S9
330 Ohm
S10
S11
H1
330 Ohm
H2
330 Ohm
H3
330 Ohm
Y1
330 Ohm
RTC1
S5
S6
S7
S1
S2
S3
S4
F2
F1
C1

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