

A

A

B

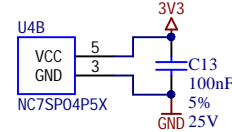
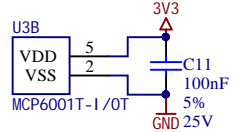
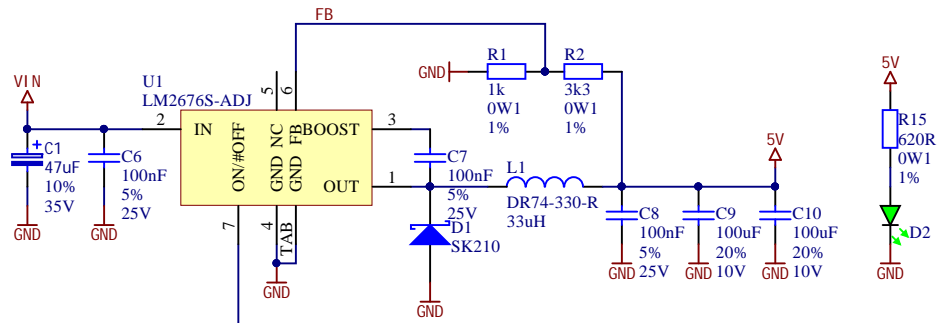
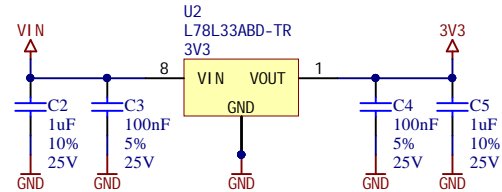
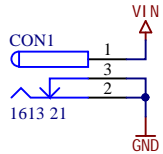
B

C

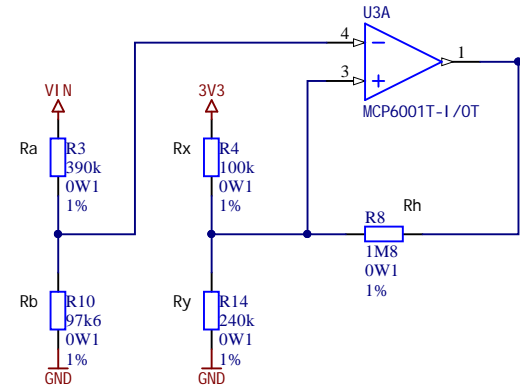
C

D

D



Low pass filter - the battery voltage drops at ignition.

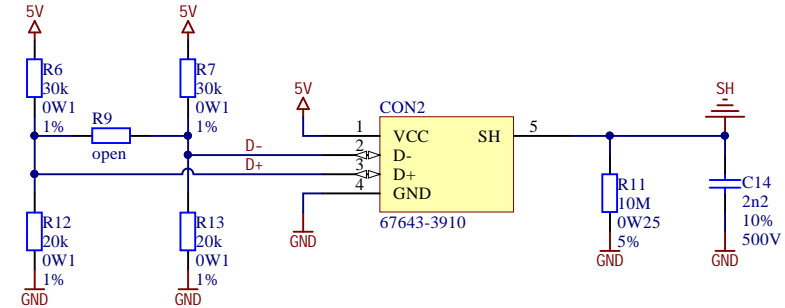


Initial resistor values calculations
V_batHi = 11.900000 [V]
V_batLo = 11.300000 [V]
vI = 2.261854 [V]
vh = 2.381952 [V]
Ra = 390000.000000 [Ohm]
Rb = 97600.000000 [Ohm]
Rx = 100000.000000 [Ohm]
Ry = 246376.552587 [Ohm]
Rh = 1883333.333333 [Ohm]

Actual battery voltage thresholds
V_batHi = 11.820492 [V]
V_batLo = 11.198361 [V]
Ra = 390000.000000 [Ohm]
Rb = 97600.000000 [Ohm]
Rx = 100000.000000 [Ohm]
Ry = 240000.000000 [Ohm]
Rh = 1800000.000000 [Ohm]

DATE
DATE1

12V Battery Voltage	Volts Per Cell	State of charge
12.7	2.12	100%
12.6	2.08	90%
12.42	2.07	80%
12.32	2.05	70%
12.2	2.03	60%
12.06	2.01	50%
11.9	1.98	40%
11.79	1.96	30%
11.58	1.93	20%
11.31	1.89	10%
10.6	1.75	0%



Title: CarCharger.SchDoc

Project: CarCharger.PrjPcb

Drawn by: Łukasz Przeniosło

Date: 2018-08-23 Time: 20:50:03

File: M:\Github\CarCharger\CarCharger.SchDoc

Number: Number

Sheet 1 of 1

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Electronics
&
Software