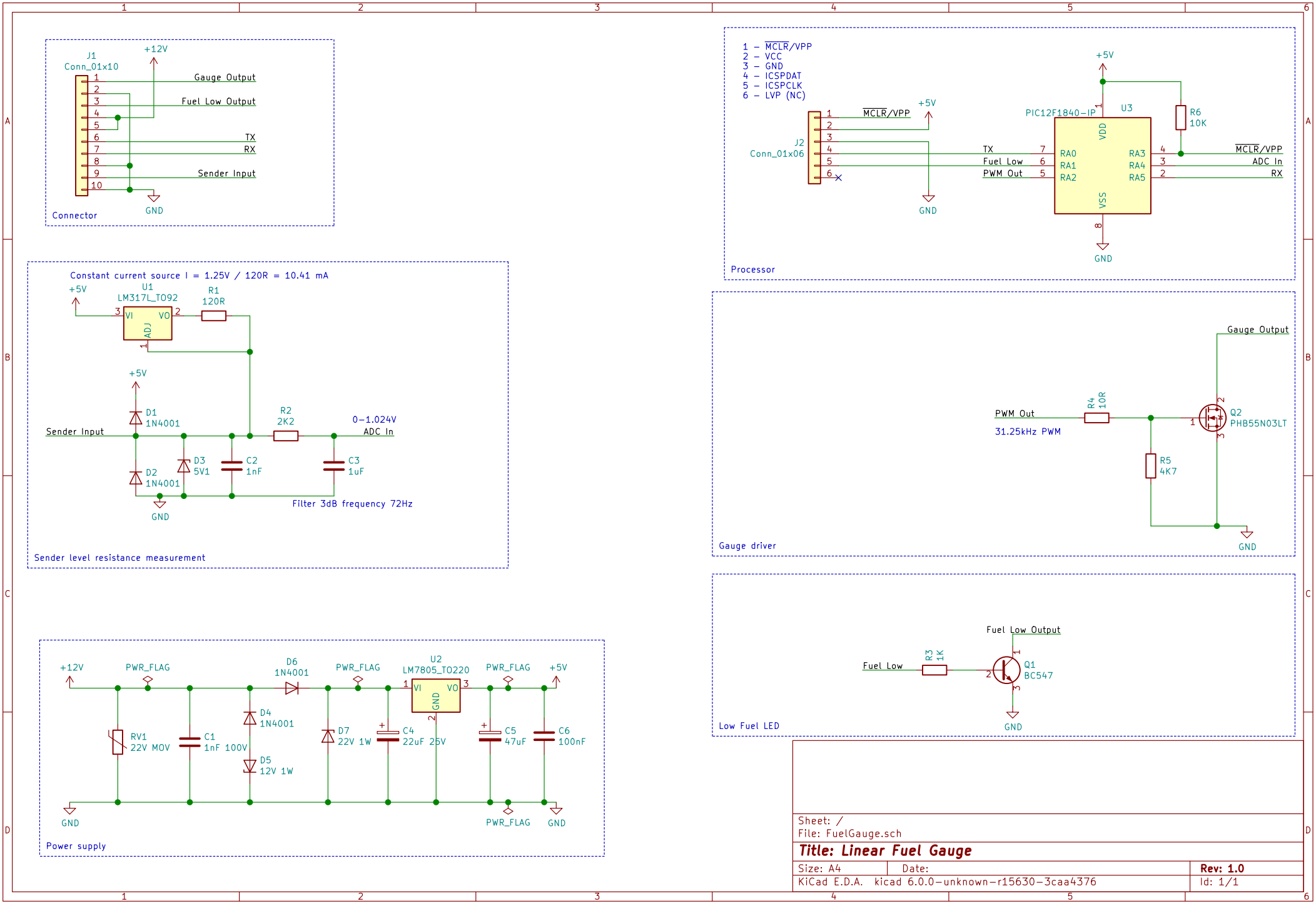
J1
Conn_01x10
+12V
Gauge Output
Fuel Low Output
TX
RX
Sender Input
GND
Connector
1 – MCLR/VPP
2 – VCC
3 – GND
4 – ICSPDAT
5 – ICSPCLK
6 – LVP (NC)
J2
Conn_01x06
+5V
MCLR/VPP
TX
Fuel Low
PWM Out
PIC12F1840-IP
U3
VDD
VSS
RA0
RA1
RA2
RA3
RA4
RA5
R6
10K
ADC In
RX
Processor
Constant current source I = 1.25V / 120R = 10.41 mA
U1
LM317L_TO92
VI
VO
ADJ
R1
120R
D1
1N4001
D2
1N4001
D3
5V1
C2
1nF
R2
2K2
C3
1uF
0–1.024V
ADC In
Sender Input
Filter 3dB frequency 72Hz
Sender level resistance measurement
Gauge Output
PWM Out
31.25kHz PWM
R4
10R
R5
4K7
Q2
PHB55N03LT
Gauge driver
Fuel Low Output
Fuel Low
R3
1K
Q1
BC547
Low Fuel LED
PWR_FLAG
D6
1N4001
U2
LM7805_TO220
GND
RV1
22V MOV
C1
1nF 100V
D4
1N4001
D5
12V 1W
D7
22V 1W
C4
22uF 25V
C5
47uF
C6
100nF
Power supply
Sheet: /
File: FuelGauge.sch
Title: Linear Fuel Gauge
Size: A4
Date:
Rev: 1.0
KiCad E.D.A. kicad 6.0.0-unknown-r15630-3caa4376
Id: 1/1