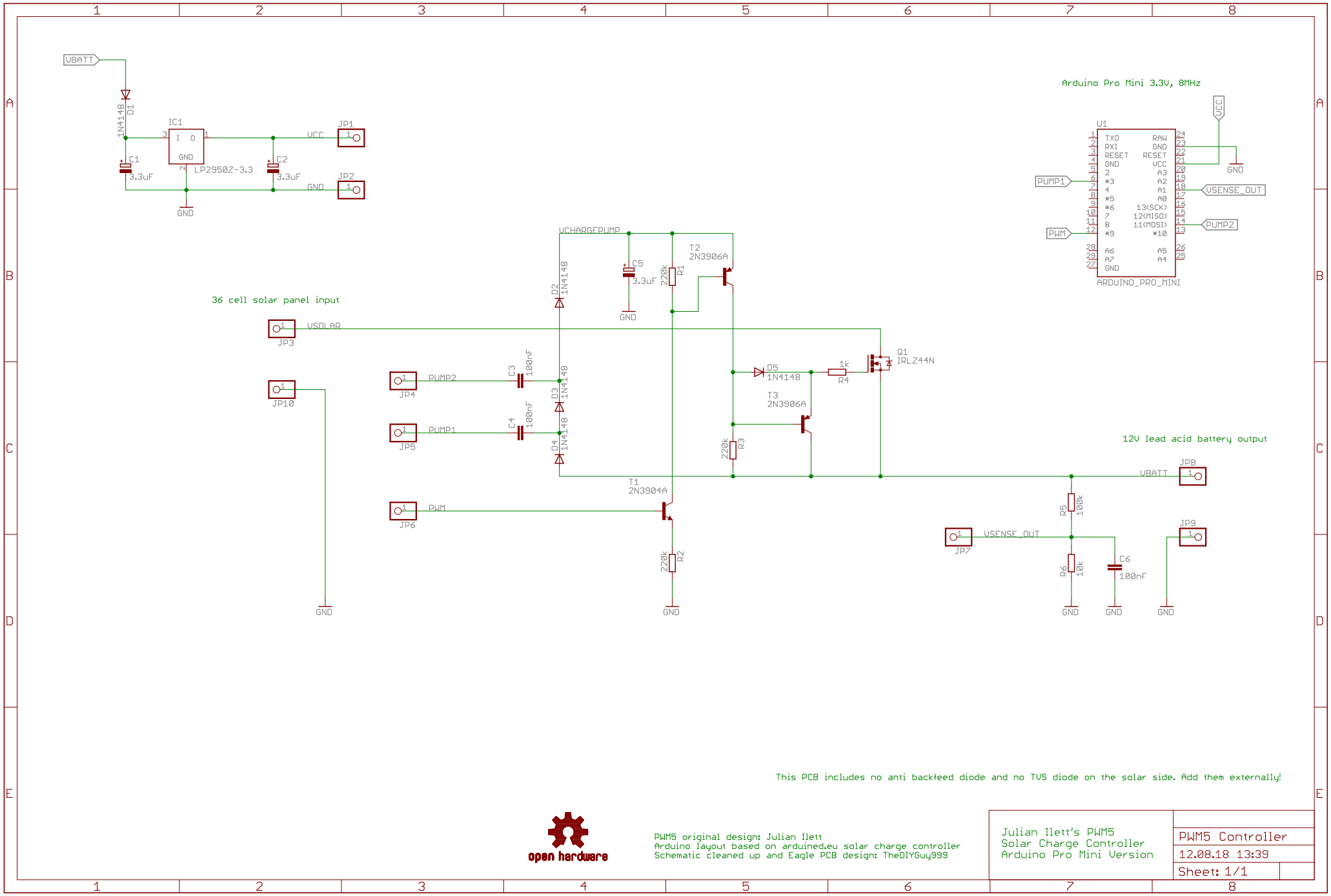
VBATT
D1
1N4148
IC1
I O
GND
LP2950Z-3.3
C1
3.3uF
C2
3.3uF
VCC
JP1
JP2
GND
Arduino Pro Mini 3.3V, 8MHz
U1
TXO
RXI
RESET
GND
2
*3
4
*5
*6
7
8
*9
A6
A7
GND
RAW
GND
RESET
VCC
A3
A2
A1
A0
13(SCK)
12(MISO)
11(MOSI)
*10
A5
A4
ARDUINO_PRO_MINI
PUMP1
PWM
VSENSE_OUT
PUMP2
VCHARGEPUMP
C5
3.3uF
R1
220k
T2
2N3906A
D2
1N4148
36 cell solar panel input
JP3
VSOLAR
JP10
JP4
PUMP2
C3
100nF
D3
1N4148
JP5
PUMP1
C4
100nF
D4
1N4148
D5
1N4148
1k
R4
Q1
IRLZ44N
T3
2N3906A
R3
220k
T1
2N3904A
JP6
PWM
R2
220k
12V lead acid battery output
JP8
VBATT
R5
100k
JP7
VSENSE_OUT
R6
10k
C6
100nF
JP9
This PCB includes no anti backfeed diode and no TVS diode on the solar side. Add them externally!
open hardware
PWM5 original design: Julian Ilett
Arduino layout based on arduined.eu solar charge controller
Schematic cleaned up and Eagle PCB design: TheDIYGuy999
Julian Ilett's PWM5
Solar Charge Controller
Arduino Pro Mini Version
PWM5 Controller
12.08.18 13:39
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