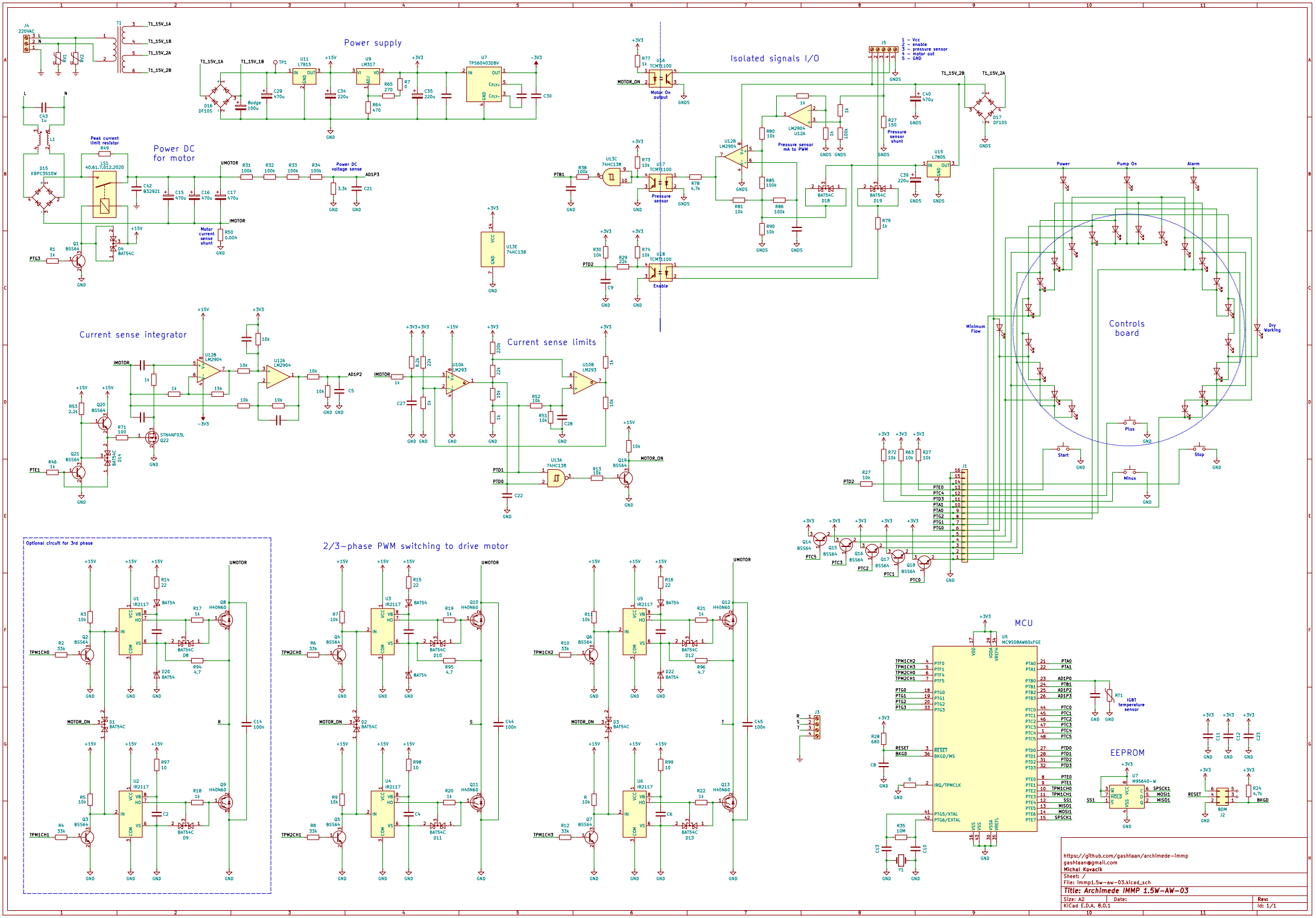
Power supply
Isolated signals I/O
Power DC for motor
Current sense integrator
Current sense limits
Controls board
2/3-phase PWM switching to drive motor
Optional circuit for 3rd phase
MCU
EEPROM
J4 220VAC
T1
T1_15V_1A
T1_15V_1B
T1_15V_2A
T1_15V_2B
U11 L7815
U9 LM317
U7 TPS60403DBV
D16 DF10S
D17 DF10S
D15 KBPC3510W
LS1 40.61.7.012.2020
Peak current limit resistor
Power DC voltage sense
Motor current sense shunt
U16 TCMB100
Motor On output
U17 TCMB100
Pressure sensor
U18 TCMB100
Enable
U13C 74HC138
U13E 74HC138
U13A 74HC138
U12B LM2904
U12A LM2904
LM2904 U12A
Pressure sensor mA to PWM
Pressure sensor shunt
U15 L7805
BAT54C D18
BAT54C D19
J5
1 - Vcc
2 - enable
3 - pressure sensor
4 - motor out
5 - GND
U12B LM2904
U12A LM2904
U10A LM293
U10B LM293
U13A 74HC138
STN4NF03L Q22
Power
Pump On
Alarm
Minimum Flow
Dry Working
Plus
Minus
Start
Stop
J1
U1 IR2117
U2 IR2117
U3 IR2117
U4 IR2117
U5 IR2117
U6 IR2117
H40N60
BAT54C
BAT54
BSS64
U5 MC9S08AW60xFGE
IGBT temperature sensor
U7 M95640-W
BDM J2
J3
https://github.com/gashtaan/archimede-immp
gashtaan@gmail.com
Michal Kovacik
Sheet: /
File: immp1.5w-aw-03.kicad_sch
Title: Archimede IMMP 1.5W-AW-03
Size: A2
Date:
Rev:
KiCad E.D.A. 8.0.1
Id: 1/1