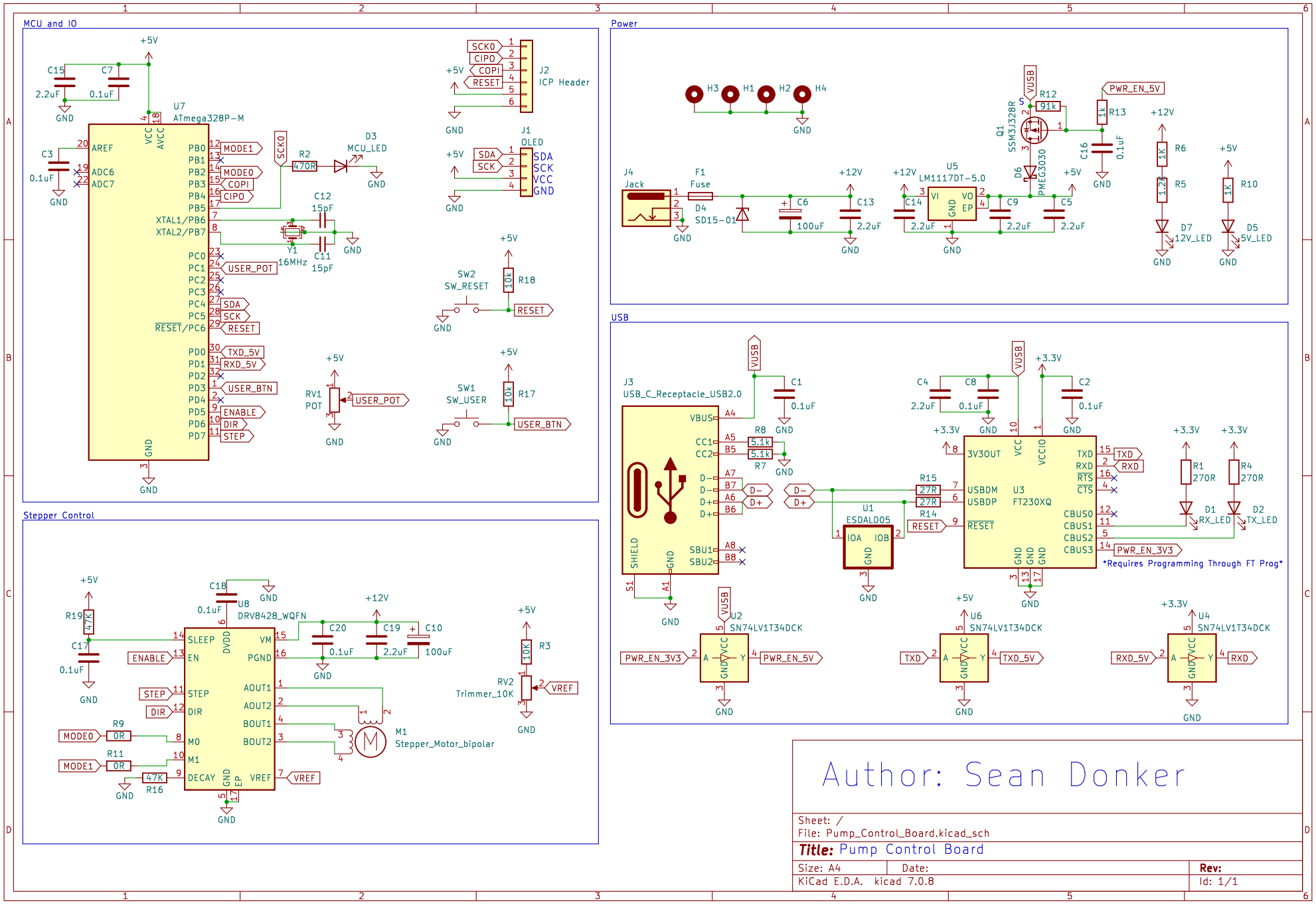
MCU and IO
U7
ATmega328P-M
J2
ICP Header
J1
OLED
SDA
SCK
VCC
GND
D3
MCU_LED
R2
470R
Y1
16MHz
C11
15pF
C12
15pF
SW2
SW_RESET
R18
10k
RESET
RV1
POT
USER_POT
SW1
SW_USER
R17
USER_BTN
Power
J4
Jack
F1
Fuse
D4
SD15-01
C6
100uF
C13
2.2uF
U5
LM1117DT-5.0
C14
2.2uF
C9
2.2uF
C5
2.2uF
Q1
SSM3J328R
D6
PMEG3030
R12
91k
R13
1k
C16
0.1uF
PWR_EN_5V
R6
1K
R5
1.2k
D7
12V_LED
R10
1K
D5
5V_LED
H3
H1
H2
H4
USB
J3
USB_C_Receptacle_USB2.0
VBUS
C1
0.1uF
R8
5.1k
R7
5.1k
U1
ESDALD05
R15
27R
R14
27R
U3
FT230XQ
3V3OUT
USBDM
USBDP
RESET
TXD
RXD
RTS
CTS
CBUS0
CBUS1
CBUS2
CBUS3
PWR_EN_3V3
Requires Programming Through FT Prog
C4
2.2uF
C8
0.1uF
C2
0.1uF
R1
270R
D1
RX_LED
R4
270R
D2
TX_LED
U2
SN74LV1T34DCK
U6
SN74LV1T34DCK
U4
SN74LV1T34DCK
TXD_5V
RXD_5V
Stepper Control
U8
DRV8428_WQFN
R19
47K
C17
0.1uF
C18
0.1uF
C20
0.1uF
C19
2.2uF
C10
100uF
SLEEP
EN
STEP
DIR
MO
M1
DECAY
PGND
AOUT1
AOUT2
BOUT1
BOUT2
VREF
R9
0R
R11
0R
R16
47K
M1
Stepper_Motor_bipolar
R3
10K
RV2
Trimmer_10K
Author: Sean Donker
Sheet: /
File: Pump_Control_Board.kicad_sch
Title: Pump Control Board
Size: A4
Date:
Rev:
KiCad E.D.A. kicad 7.0.8
Id: 1/1