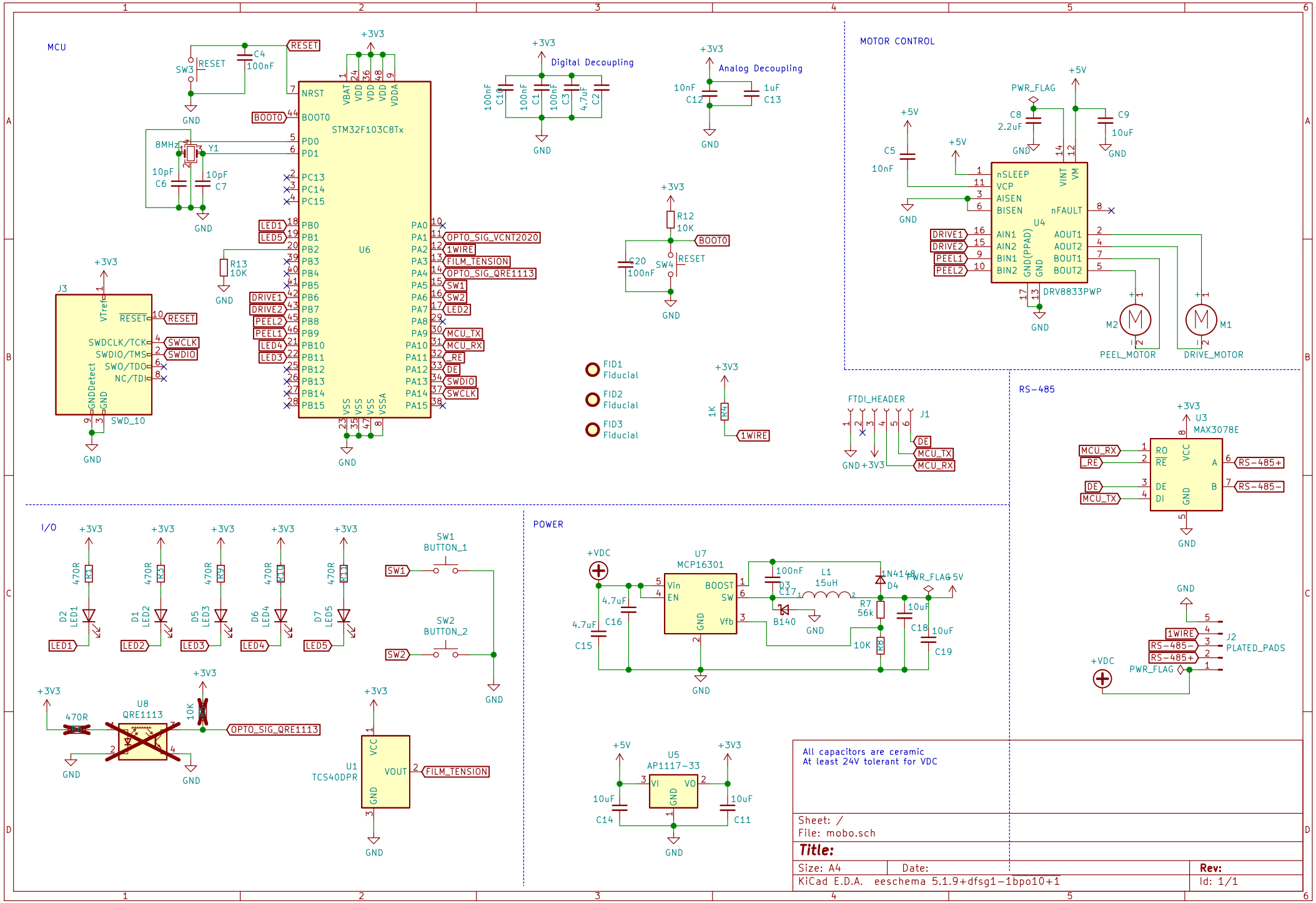
MCU
STM32F103C8Tx
U6
Y1
8MHz
10pF
C6
C7
C4
100nF
SW3
RESET
BOOT0
NRST
VBAT
VDD
VDDA
VSS
VSSA
PD0
PD1
PC13
PC14
PC15
PB0
PB1
PB2
PB3
PB4
PB5
PB6
PB7
PB8
PB9
PB10
PB11
PB12
PB13
PB14
PB15
PA0
PA1
PA2
PA3
PA4
PA5
PA6
PA7
PA8
PA9
PA10
PA11
PA12
PA13
PA14
PA15
OPTO_SIG_VCNT2020
1WIRE
FILM_TENSION
OPTO_SIG_QRE1113
SW1
SW2
LED2
MCU_TX
MCU_RX
_RE
DE
SWDIO
SWCLK
LED1
LED5
LED4
LED3
DRIVE1
DRIVE2
PEEL2
PEEL1
R13
10K
J3
VTref
SWDCLK/TCK
SWDIO/TMS
SWO/TDO
NC/TDI
GNDDetect
SWD_10
Digital Decoupling
Analog Decoupling
C10
C1
C3
C2
C12
C13
R12
C20
SW4
FID1
Fiducial
FID2
Fiducial
FID3
Fiducial
R14
FTDI_HEADER
J1
MOTOR CONTROL
PWR_FLAG
C8
2.2uF
C9
10uF
C5
10nF
nSLEEP
VCP
AISEN
BISEN
VINT
VM
nFAULT
AIN1
AIN2
BIN1
BIN2
GND(PPAD)
AOUT1
AOUT2
BOUT1
BOUT2
U4
DRV8833PWP
M2
M1
PEEL_MOTOR
DRIVE_MOTOR
RS-485
U3
MAX3078E
RO
RE
DE
DI
VCC
GND
A
B
RS-485+
RS-485-
J2
PLATED_PADS
I/O
R1
R3
R9
R10
R11
D2
D1
D5
D6
D7
LED1
LED2
LED3
LED4
LED5
SW1
BUTTON_1
SW2
BUTTON_2
U8
QRE1113
470R
10K
OPTO_SIG_QRE1113
U1
TCS40DPR
VCC
VOUT
FILM_TENSION
POWER
+VDC
U7
MCP16301
Vin
EN
BOOST
SW
Vfb
4.7uF
C16
C15
100nF
C17
D3
B140
L1
15uH
1N4148
D4
R7
56k
R8
10K
10uF
C18
C19
U5
AP1117-33
VI
VO
C14
C11
All capacitors are ceramic
At least 24V tolerant for VDC
Sheet: /
File: mobo.sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. eeschema 5.1.9+dfsg1-1bpo10+1
Id: 1/1