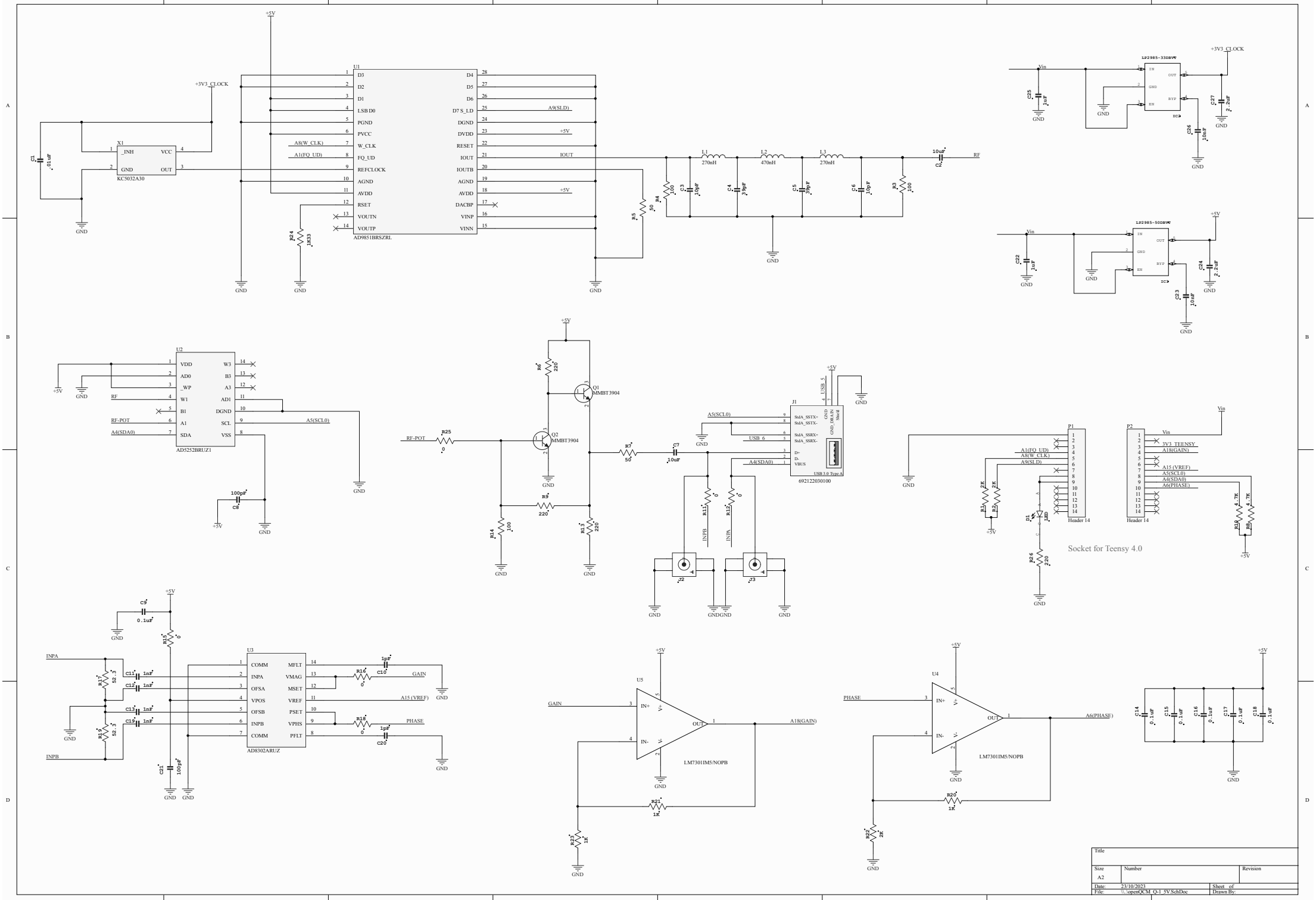
U1
AD9851BRSZRL
D3
D2
D1
LSB D0
PGND
PVCC
W_CLK
FQ_UD
REFCLOCK
AGND
AVDD
RSET
VOUTN
VOUTP
D4
D5
D6
D7 S_LD
DGND
DVDD
RESET
IOUT
IOUTB
AGND
AVDD
DACBP
VINP
VINN
A8(W_CLK)
A1(FQ_UD)
A9(SLD)
+5V
IOUT
RF
+3V3_CLOCK
X1
KC5032A30
_INH
VCC
GND
OUT
C1
.01uF
R24
1K33
R5
50
R4
100
C3
10pF
C4
39pF
C5
39pF
C6
10pF
R3
100
L1
270nH
L2
470nH
L3
270nH
C2
10uF
GND
LP2985-33DBVR
IC4
Vin
IN
OUT
GND
EN
BYP
C25
1uF
C27
2.2uF
C26
10nF
LP2985-50DBVR
IC5
C22
1uF
C24
2.2uF
C23
10nF
U2
AD5252BRUZ1
VDD
AD0
_WP
W1
B1
A1
SDA
W3
B3
A3
AD1
DGND
SCL
VSS
RF-POT
A4(SDA0)
A5(SCL0)
C8
100pF
Q1
MMBT3904
Q2
MMBT3904
R6
220
R9
220
R14
100
R13
220
R25
0
R7
50
C7
10uF
J1
692122030100
USB 3.0 Type A
Std_SSTX+
Std_SSTX-
Std_SSRX+
Std_SSRX-
D+
D-
VBUS
USB_5
USB_6
A4(SDA0)
R11
0
R12
0
INPB
INPA
J2
J3
P1
Header 14
P2
Header 14
Socket for Teensy 4.0
3V3_TEENSY
A18(GAIN)
A15 (VREF)
A6(PHASE)
R1
2K
R2
2K
D1
R26
220
R19
4.7K
R8
4.7K
C9
0.1uF
R15
0
U3
AD8302ARUZ
COMM
INPA
OFSA
VPOS
OFSB
INPB
COMM
MFLT
VMAG
MSET
VREF
PSET
VPHS
PFLT
R17
52.3
R19
52.3
C11
1nF
C12
1nF
C13
1nF
C15
1nF
C21
100pF
R16
0
C10
1pF
R18
0
C20
1pF
GAIN
A15 (VREF)
PHASE
INPA
INPB
U5
LM7301IM5/NOPB
IN+
IN-
OUT
R21
1K
R23
1K
A18(GAIN)
U4
LM7301IM5/NOPB
R20
1K
R22
2K
A6(PHASE)
C14
0.1uF
C15
0.1uF
C16
0.1uF
C17
0.1uF
C18
0.1uF
Title
Size
A2
Number
Revision
Date:
23/10/2023
Sheet of
File:
\\...\openQCM_Q-1_5V.SchDoc
Drawn By: