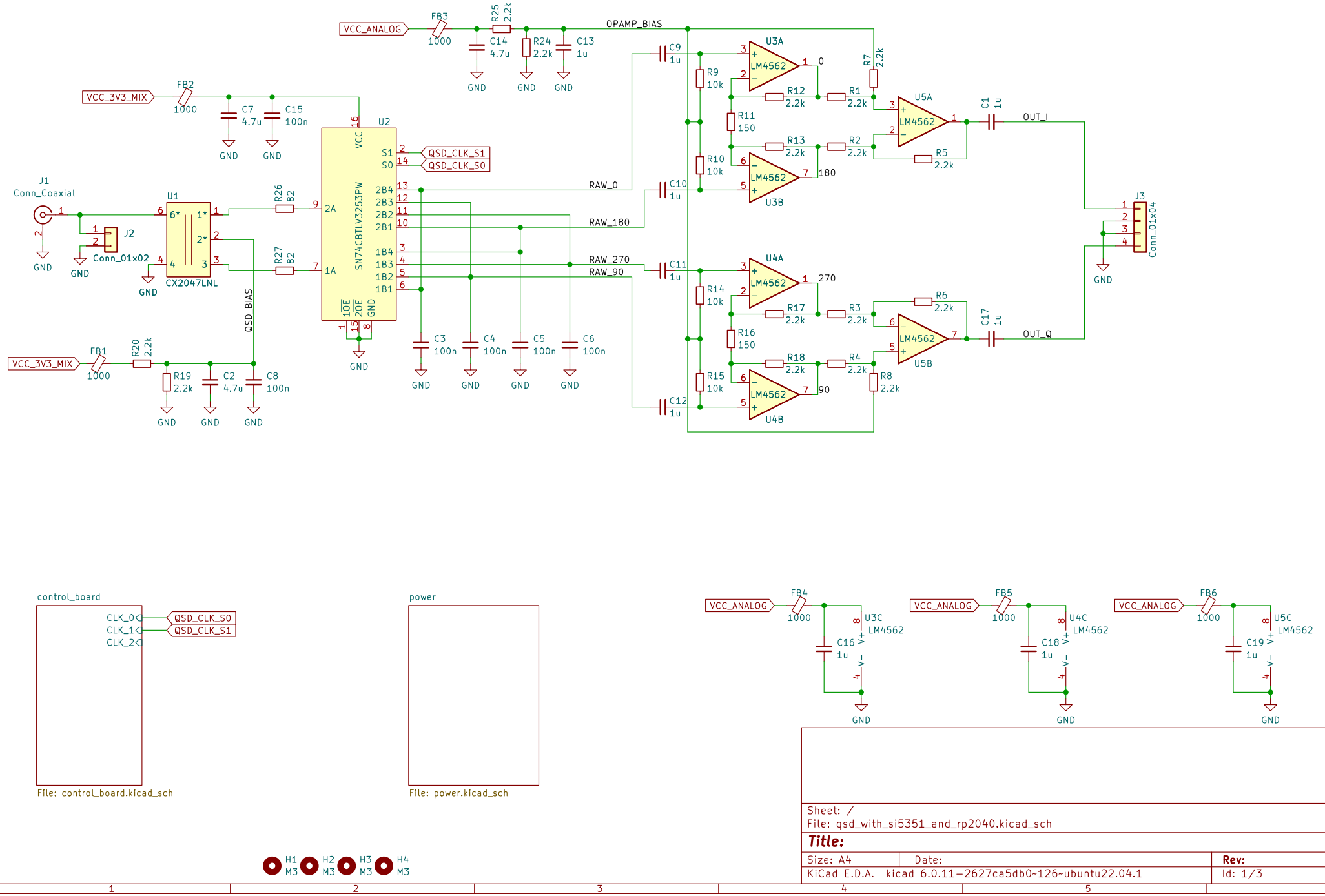
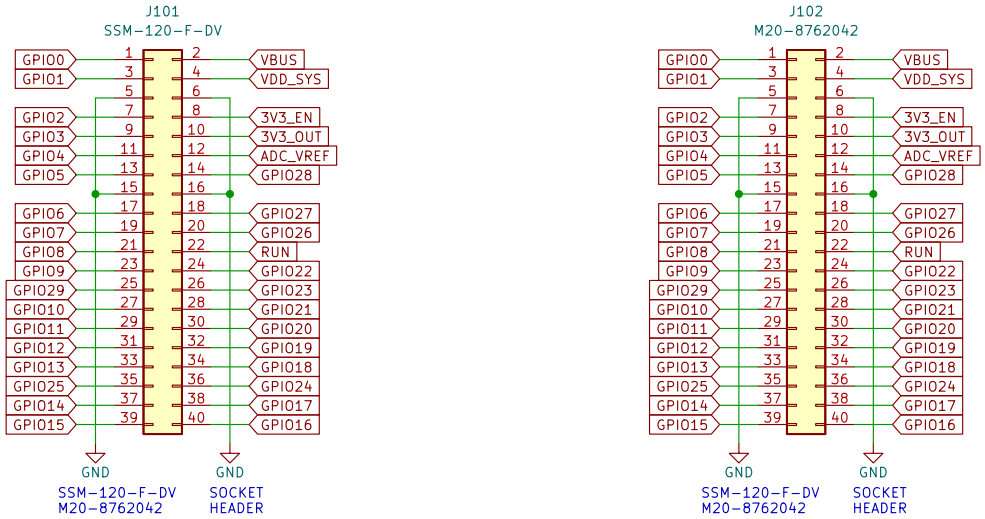
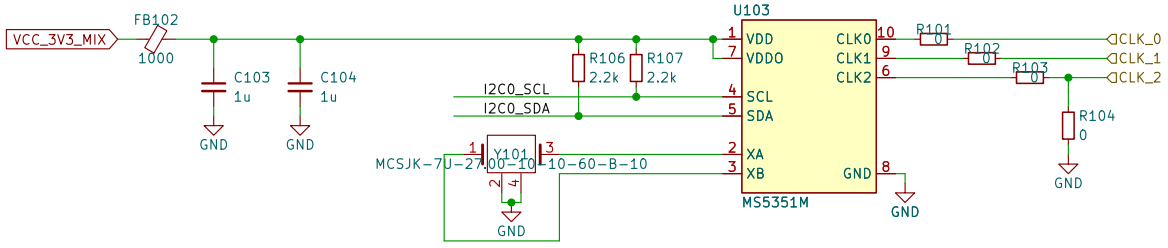

VCC_ANALOG
FB3
1000
R25
2.2k
C14
4.7u
R24
2.2k
C13
1u
OPAMP_BIAS
VCC_3V3_MIX
FB2
1000
C7
4.7u
C15
100n
U2
VCC
SN74CBTLV3253PW
S1
S0
QSD_CLK_S1
QSD_CLK_S0
2B4
2B3
2B2
2B1
1B4
1B3
1B2
1B1
2A
1A
1OE
2OE
GND
RAW_0
RAW_180
RAW_270
RAW_90
J1
Conn_Coaxial
J2
Conn_01x02
U1
CX2047LNL
R26
82
R27
82
QSD_BIAS
FB1
1000
R20
2.2k
R19
2.2k
C2
4.7u
C8
100n
C3
100n
C4
100n
C5
100n
C6
100n
C9
1u
C10
1u
C11
1u
C12
1u
U3A
U3B
U4A
U4B
U5A
U5B
LM4562
R9
10k
R10
10k
R14
10k
R15
10k
R11
150
R16
150
R12
2.2k
R13
2.2k
R17
2.2k
R18
2.2k
R7
2.2k
R1
2.2k
R2
2.2k
R3
2.2k
R4
2.2k
R5
2.2k
R6
2.2k
R8
2.2k
0
180
270
90
C1
1u
C17
1u
OUT_I
OUT_Q
J3
Conn_01x04
control_board
CLK_0
CLK_1
CLK_2
File: control_board.kicad_sch
power
File: power.kicad_sch
FB4
FB5
FB6
U3C
U4C
U5C
C16
C18
C19
H1
M3
H2
M3
H3
M3
H4
M3
Sheet: /
File: qsd_with_si5351_and_rp2040.kicad_sch
Title:
Size: A4
Date:
Rev:
KiCad E.D.A. kicad 6.0.11-2627ca5db0~126~ubuntu22.04.1
Id: 1/3

CENTERED AT : X34 Y6 FROM TOP LEFT CORNER





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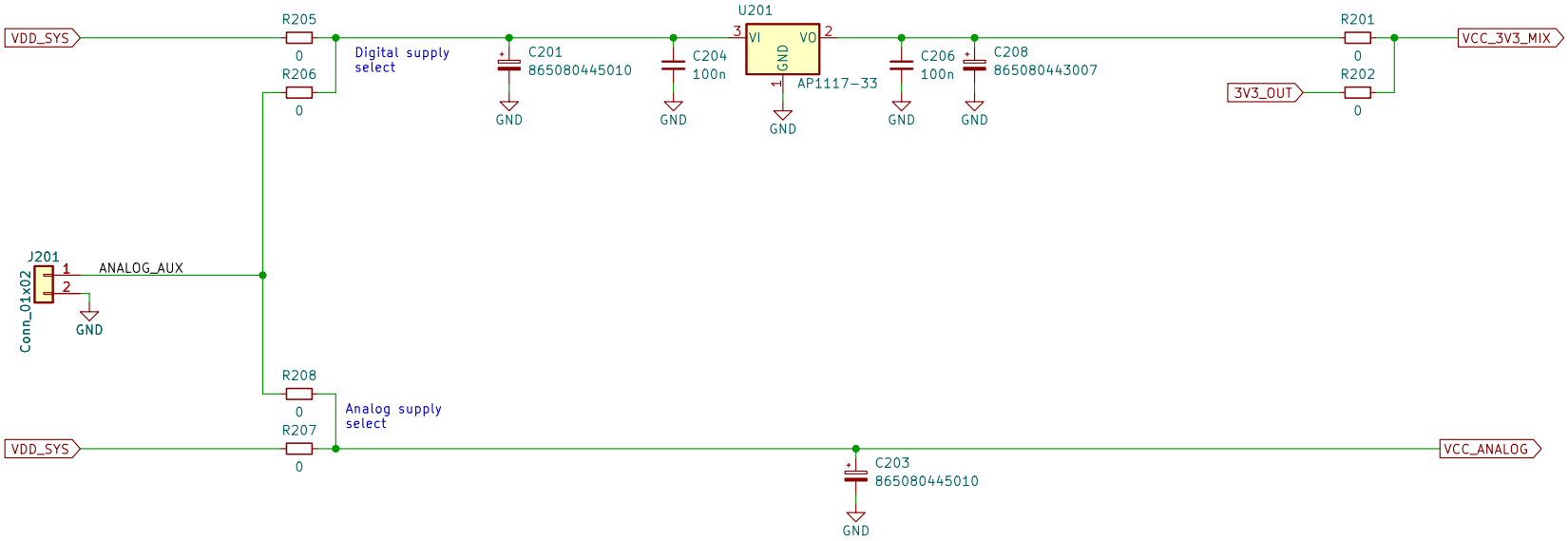
File: control_board.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 6.0.11-2627ca5db0~126~ubuntu22.04.1		Id: 2/3



Power supply options:

1. VDD_SYS used to power the entire board:
   - R207 bridged – analog section powered by stack VDD_SYS
   - R205 and R101 bridged – local 3V3 from LDO
   - R202 bridged – local 3V3 from stack 3V3_OUT2

2. VDD_SYS powers local 3V3 LDO, J201 for analog
   - R205 and R101 bridged
   - R208 bridged for the analog section

3. Stack 3V3 for local 3V3, J201 for analog
   - R202 bridged
   - R208 bridged

4. independent supply from J201, max 18V
   - R206 and R101 bridged
   - R208 bridged

Sheet: /power/		
File: power.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. kicad 6.0.11-2627ca5db0~126~ubuntu22.04.1		Id: 3/3