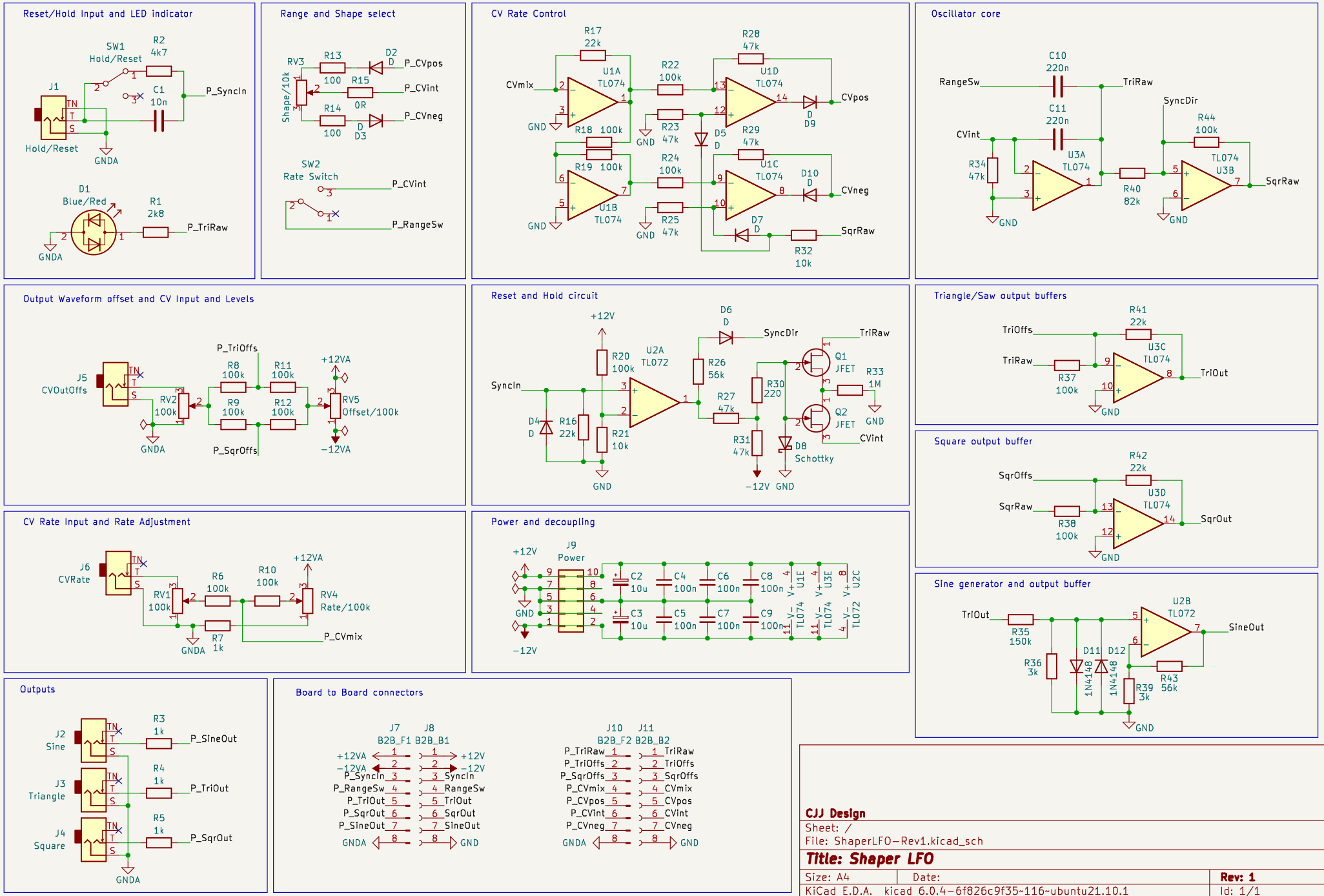
Reset/Hold Input and LED indicator
SW1
Hold/Reset
R2
4k7
J1
C1
10n
P_SyncIn
Hold/Reset
GNDA
D1
Blue/Red
R1
2k8
P_TriRaw
Range and Shape select
RV3
Shape/10k
R13
100
D2
D
P_CVpos
R15
0R
P_CVint
R14
100
D
D3
P_CVneg
SW2
Rate Switch
P_CVint
P_RangeSw
CV Rate Control
R17
22k
U1A
TL074
CVmix
GND
R18 100k
R19 100k
U1B
TL074
R22
100k
R23
47k
R24
100k
R25
47k
R28
47k
U1D
TL074
D5
D
R29
47k
U1C
TL074
D7
D
D
D9
CVpos
D10
D
CVneg
R32
10k
SqrRaw
Oscillator core
RangeSw
C10
220n
TriRaw
C11
220n
CVint
R34
47k
U3A
TL074
R40
82k
SyncDir
R44
100k
TL074
U3B
SqrRaw
GND
Output Waveform offset and CV Input and Levels
J5
CVOutOffs
RV2
100k
P_TriOffs
R8
100k
R11
100k
R9
100k
R12
100k
P_SqrOffs
+12VA
RV5
Offset/100k
−12VA
GNDA
Reset and Hold circuit
+12V
D6
D
SyncIn
R20
100k
U2A
TL072
R26
56k
R27
47k
R30
220
R31
47k
D4
D
R16
22k
R21
10k
GND
Q1
JFET
Q2
JFET
R33
1M
D8
Schottky
TriRaw
CVint
−12V
Triangle/Saw output buffers
R41
22k
TriOffs
TriRaw
R37
100k
U3C
TL074
TriOut
Square output buffer
R42
22k
SqrOffs
SqrRaw
R38
100k
U3D
TL074
SqrOut
CV Rate Input and Rate Adjustment
J6
CVRate
RV1
100k
R6
100k
R10
100k
+12VA
RV4
Rate/100k
R7
1k
P_CVmix
Power and decoupling
J9
Power
C2
10u
C3
10u
C4
100n
C5
100n
C6
100n
C7
100n
C8
100n
C9
100n
U1E
TL074
U3E
TL074
U2C
TL072
Sine generator and output buffer
TriOut
R35
150k
U2B
TL072
SineOut
R36
3k
D11
1N4148
D12
1N4148
R39
3k
R43
56k
Outputs
J2
Sine
R3
1k
P_SineOut
J3
Triangle
R4
1k
P_TriOut
J4
Square
R5
1k
P_SqrOut
Board to Board connectors
J7 B2B_F1
J8 B2B_B1
+12VA
−12VA
P_SyncIn
P_RangeSw
P_TriOut
P_SqrOut
P_SineOut
GNDA
J10 B2B_F2
J11 B2B_B2
P_TriRaw
P_TriOffs
P_SqrOffs
P_CVmix
P_CVpos
P_CVint
P_CVneg
CJJ Design
Sheet: /
File: ShaperLFO−Rev1.kicad_sch
Title: Shaper LFO
Size: A4
Date:
Rev: 1
KiCad E.D.A. kicad 6.0.4−6f826c9f35~116~ubuntu21.10.1
Id: 1/1