digital part | analog part

74HCT688

SW1
I/O address

U1B
U1C
U1D
74LS32

U3
G
GND
R7 18
R6 16
R5 14
R4 12
R3 9
R2 7
R1 5
R0 3

P7 17
P6 15
P5 13
P4 11
P3 8
P2 6
P1 4
P0 2
P=R 19
VCC 20

U1A
1
3
2

J1
41 1
42 2
43 3
44 4
45 5
46 6
47 7
48 8
49 9 A7
50 10 A6
51 11 A5
52 12 A4
53 13 A3
54 14 A2
55 15 A1
56 16 A0
57 17 GNDD
58 18 +5VD
59 19
60 20
61 21 RESET
62 22 −WR
63 23
64 24
65 25
66 26 −IORQ
67 27 D0
68 28 D1
69 29 D2
70 30 D3
71 31 D4
72 32 D5
73 33 D6
74 34 D7
75 35
76 36
77 37
78 38
79 39
80 40

GNDD
+5VD
+5VD   +5VD

+5VD

RN1
8x1k

C2
47u

C4
100n

7809
U5
IN OUT
GND
+12VA
+9VA
D1
1N5395
C9 220u
C10 1n
C13 1n
C15
R19 470
D2
J4
12V in

+9VA
C16
C11 100n
C100n C17 100u
LM386
U6
GND V+
C14 220u
3
7
6
2
4 1 8
5
C20 220u
J5
1
2
Earphone
8–32 ohm
R20*
R21 10
C18**
C19 50n

Line out
J2
1
2
J3
1
2
1
2
Volume
50kA
potm.
C6 1u Ta
R18 47k–100k

U4
Input 1
Control 2
GND 3
N.C. 4
Vcc 8
Output 7
Roll–off 6
N.C. 5
MC3340P

C7 100n
C8 10u
C12 50n

C3
100n
VCC 20
U2
D0 3
D1 4
D2 7
D3 8
D4 13
D5 14
D6 17
D7 18
Q0 2
Q1 5
Q2 6
Q3 9
Q4 12
Q5 15
Q6 16
Q7 19
Cp 11
Mr 1
GND 10
74LS273

R1 20k R9 10k R10
R2 20k 10k R11
R3 20k 10k R12
R4 20k 10k R13
R5 20k 10k R14
R6 20k 10k R15
R7 20k 10k R16
R8 20k 10k
R17 10k
C5 10n

U1E
VCC 14
GND 7
C1 100n
+5VD

digital GND
analog GND

Zacchaeus Microcomputer
Pozsar Zsolt
Sheet: /
File: pcox.kicad_sch
Title: PCOX – COVOX module
Size: A4 | Date: 2025–12–27 | Rev: 1.0
KiCad E.D.A. 9.0.6 | Id: 1/1