bus

File: bus.kicad_sch

VDP

File: VDP.kicad_sch

GAL

File: GAL.kicad_sch

IO

File: IO.kicad_sch

Amplifier

File: Amplifier.kicad_sch

power

File: power.kicad_sch

PSG

File: PSG.kicad_sch

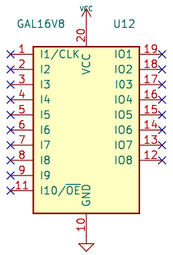
buffers

File: buffers.kicad_sch

ACR

File: ACR.kicad_sch

SPARE GAL FOR DEBUGGING



THROUGH HOLES FOR PATCH WIRE ROUTING ACROSS SIDES

H3
MountingHole

H4
MountingHole

SPARE SOCKETS FOR DEBUGGING

J1
DIL14

J4
DIL14

J2
DIL16

J5
DIL16

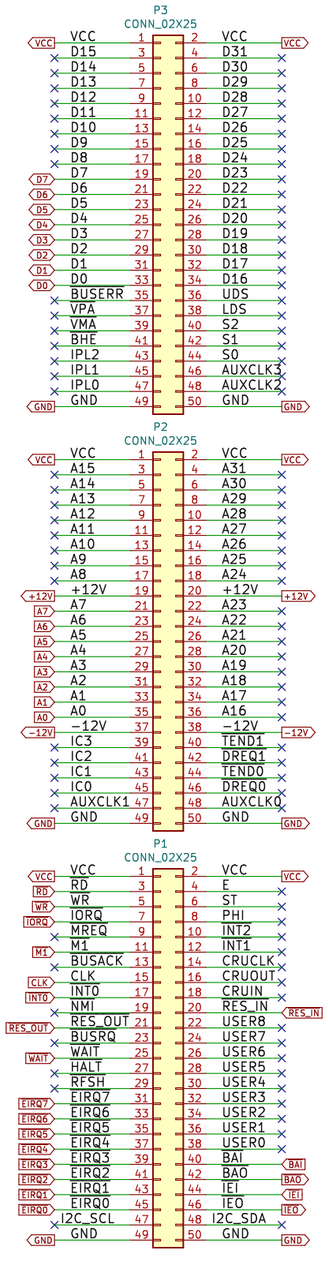
J3
DIL20

J6
DIL20

Sheet: /
File: input-output.Media.kicad_sch

Title:

Size: B | Date: | **Rev:**
KiCad E.D.A. kicad (6.0.11) | Id: 1/10



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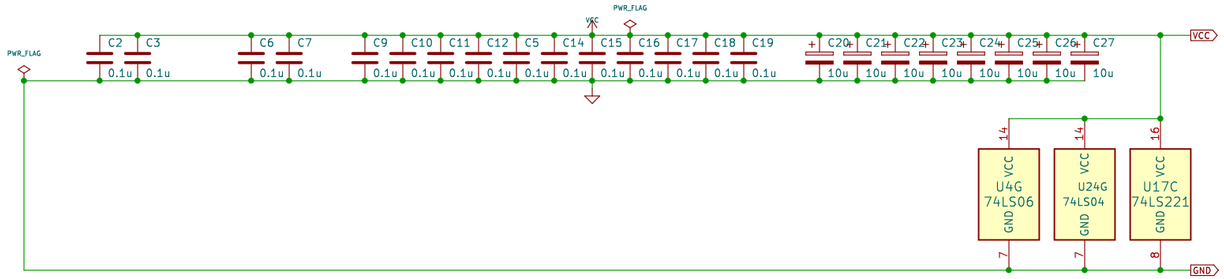
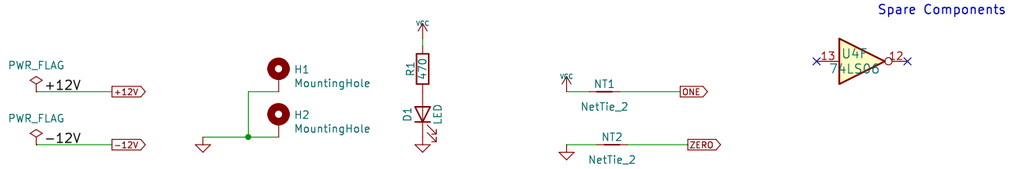
KiCad E.D.A. kicad (6.0.11)		Id: 2/10





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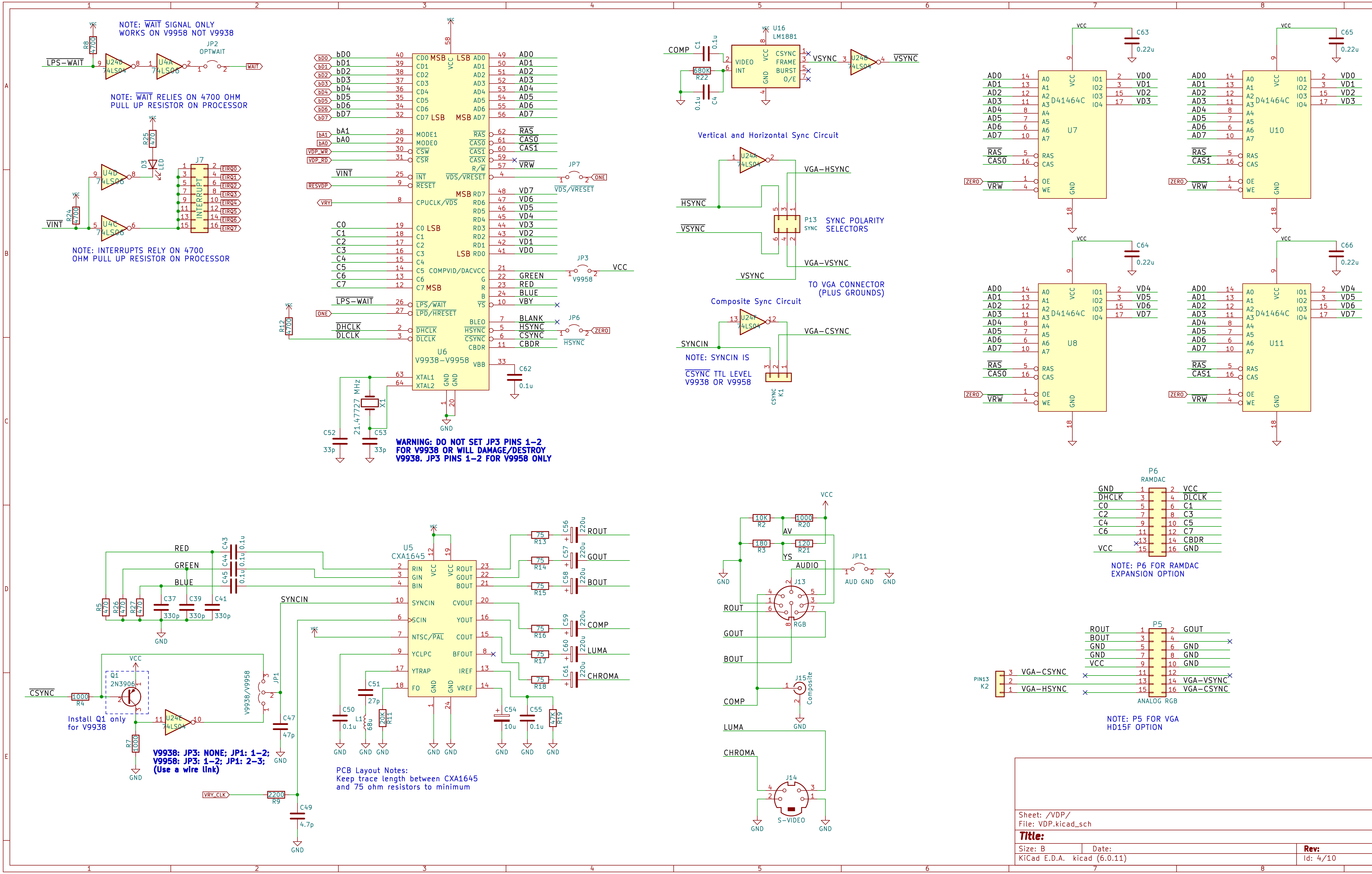
KiCad E.D.A. kicad (6.0.11)		Id: 3/10



Sheet: /VDP/
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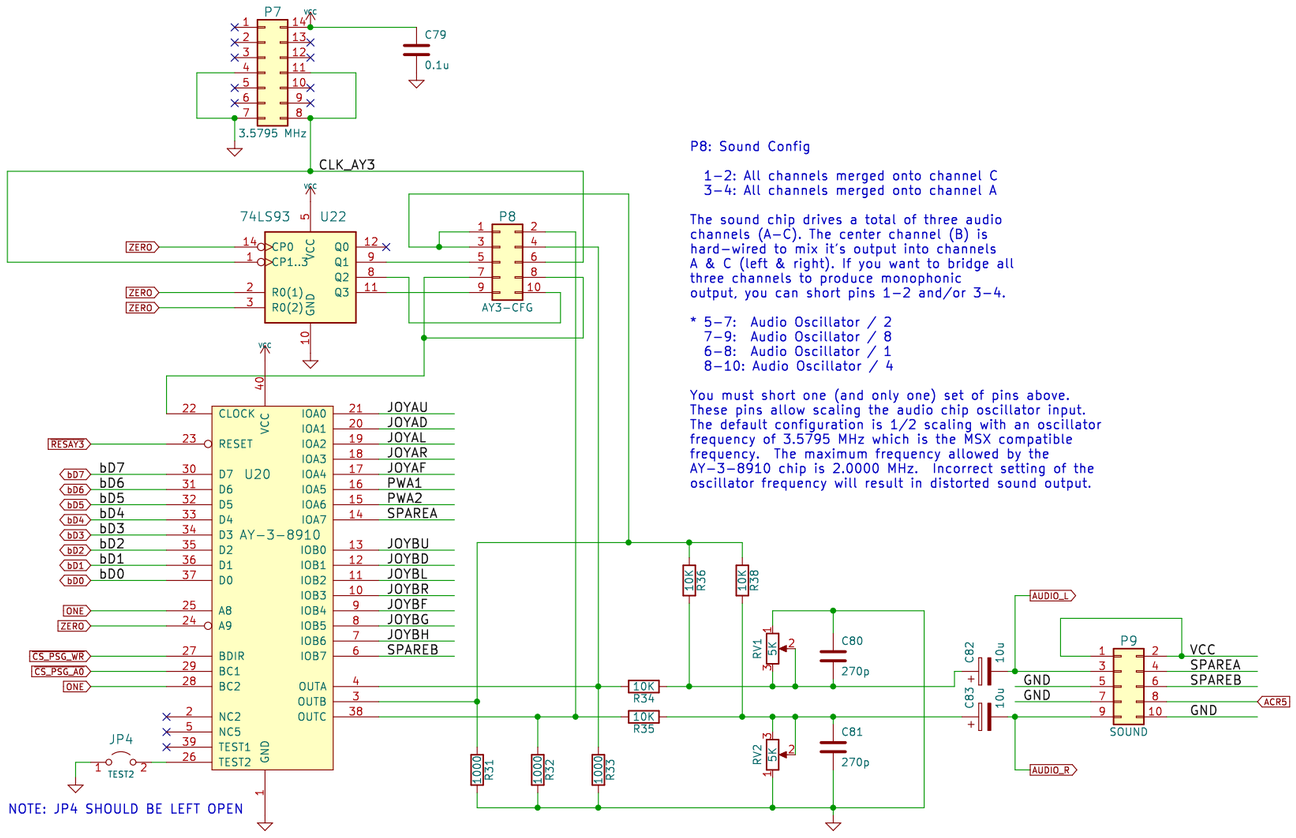
Title:
Size: B | Date: | Rev:
KiCad E.D.A. kicad (6.0.11) | Id: 4/10

NOTE: AY-3-8910 CLOCK IS MSX
COMPATIBLE 3.5795 MHz / 2
MAXIMUM CLOCK IS 2.0000 MHz



RV1 and RV2
Potentiometer
Bourns 3386P
5K ohm

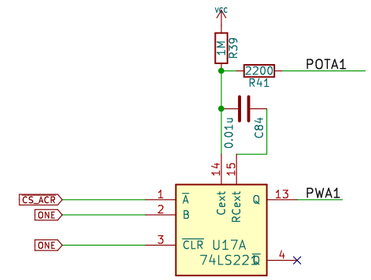
P8: Sound Config

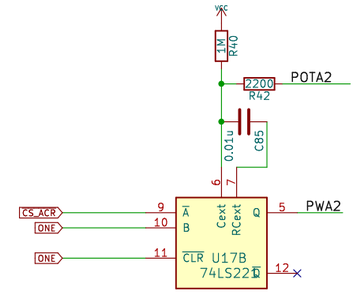
1-2: All channels merged onto channel C
3-4: All channels merged onto channel A

The sound chip drives a total of three audio channels (A-C). The center channel (B) is hard-wired to mix it's output into channels A & C (left & right). If you want to bridge all three channels to produce monophonic output, you can short pins 1-2 and/or 3-4.

* 5-7: Audio Oscillator / 2
7-9: Audio Oscillator / 8
6-8: Audio Oscillator / 1
8-10: Audio Oscillator / 4

You must short one (and only one) set of pins above. These pins allow scaling the audio chip oscillator input. The default configuration is 1/2 scaling with an oscillator frequency of 3.5795 MHz which is the MSX compatible frequency. The maximum frequency allowed by the AY-3-8910 chip is 2.0000 MHz. Incorrect setting of the oscillator frequency will result in distorted sound output.



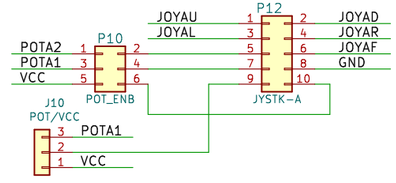


ATARI joystick	MSX joystick
1:U	1:U
2:D	2:D
3:L	3:L
4:R	4:R
5:N/C	5:N/C
6:B1	6:B1
7:N/C	7:B2
8:GND	8:GND
9:B2	9:VCC

JOYSTICK PORTS

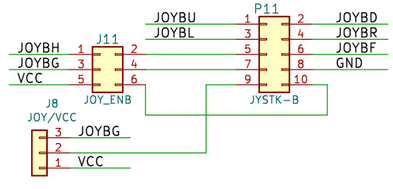
DEFINITIONS JOY A

U=JOYAU
D=JOYAD
L=JOYAL
R=JOYAR
B1=JOYAF
B2=POTA1
B3=POTA2



DEFINITIONS JOY B

U=JOYBU
D=JOYBD
L=JOYBL
R=JOYBR
B1=JOYBF
B2=JOYBG
B3=JOYBH



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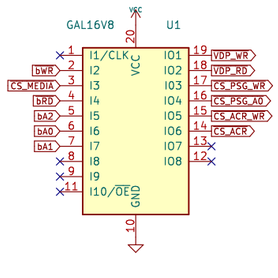
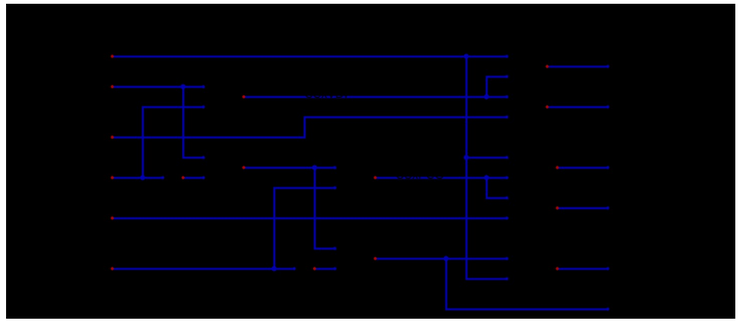
Size: B	Date:
KiCad E.D.A. kicad (6.0.11)	Id: 5/10

MEDIA CS GAL16V8





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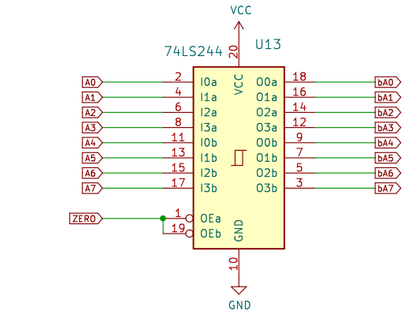
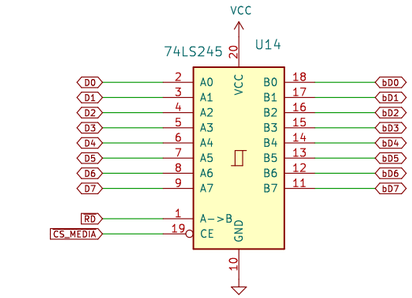
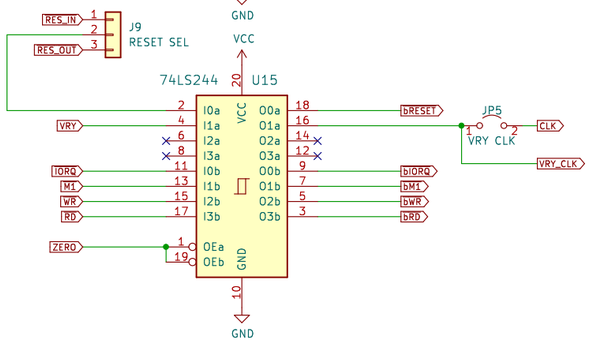
Size: B	Date:	**Rev:**
KiCad E.D.A. kicad (6.0.11)		Id: 6/10

Z80 BUS INTERFACE







Note: Buffers and Transceivers
respond to IO and MEM cycles

Sheet: /buffers/		
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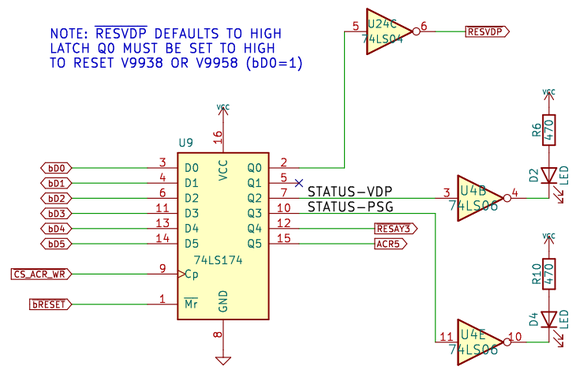
Size: B	Date:	**Rev:**
KiCad E.D.A. kicad (6.0.11)		Id: 7/10



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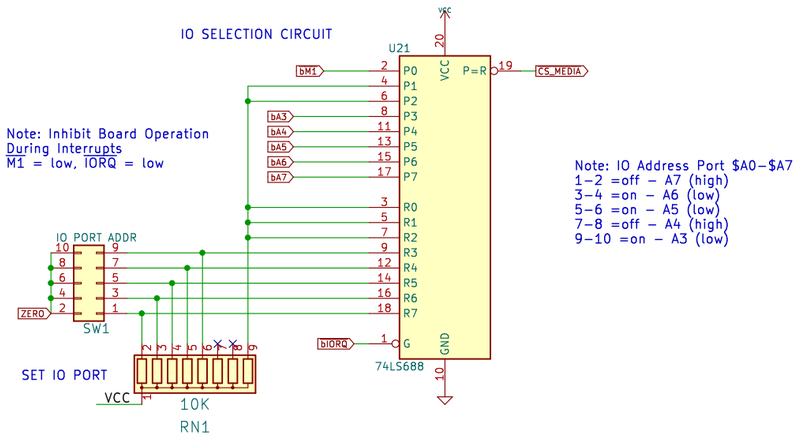
Size: B	Date:
KiCad E.D.A. kicad (6.0.11)	**Rev:** Id: 8/10



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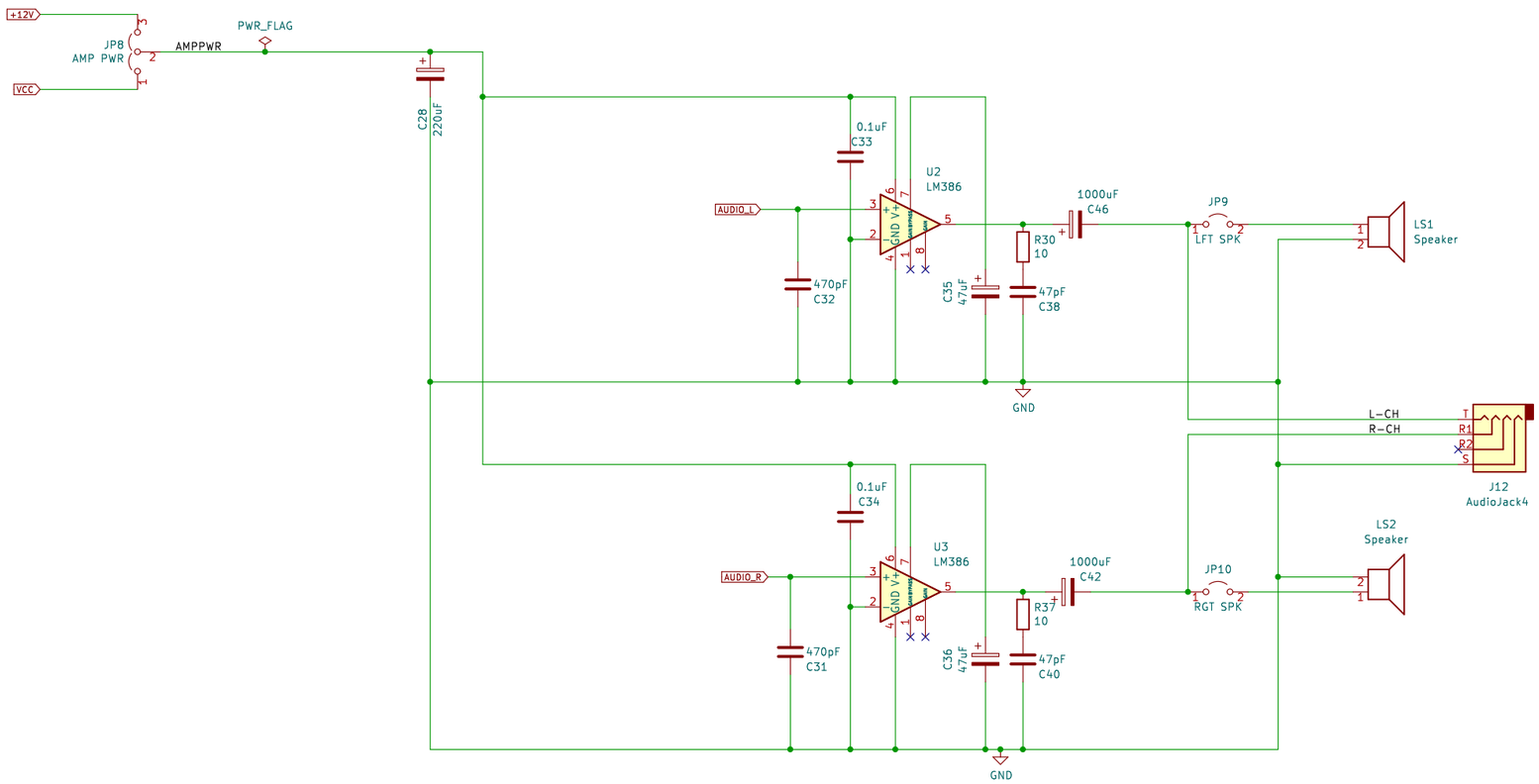
Size: B	Date:	**Rev:**
KiCad E.D.A. kicad (6.0.11)		Id: 9/10



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Size: B	Date:	**Rev:**
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