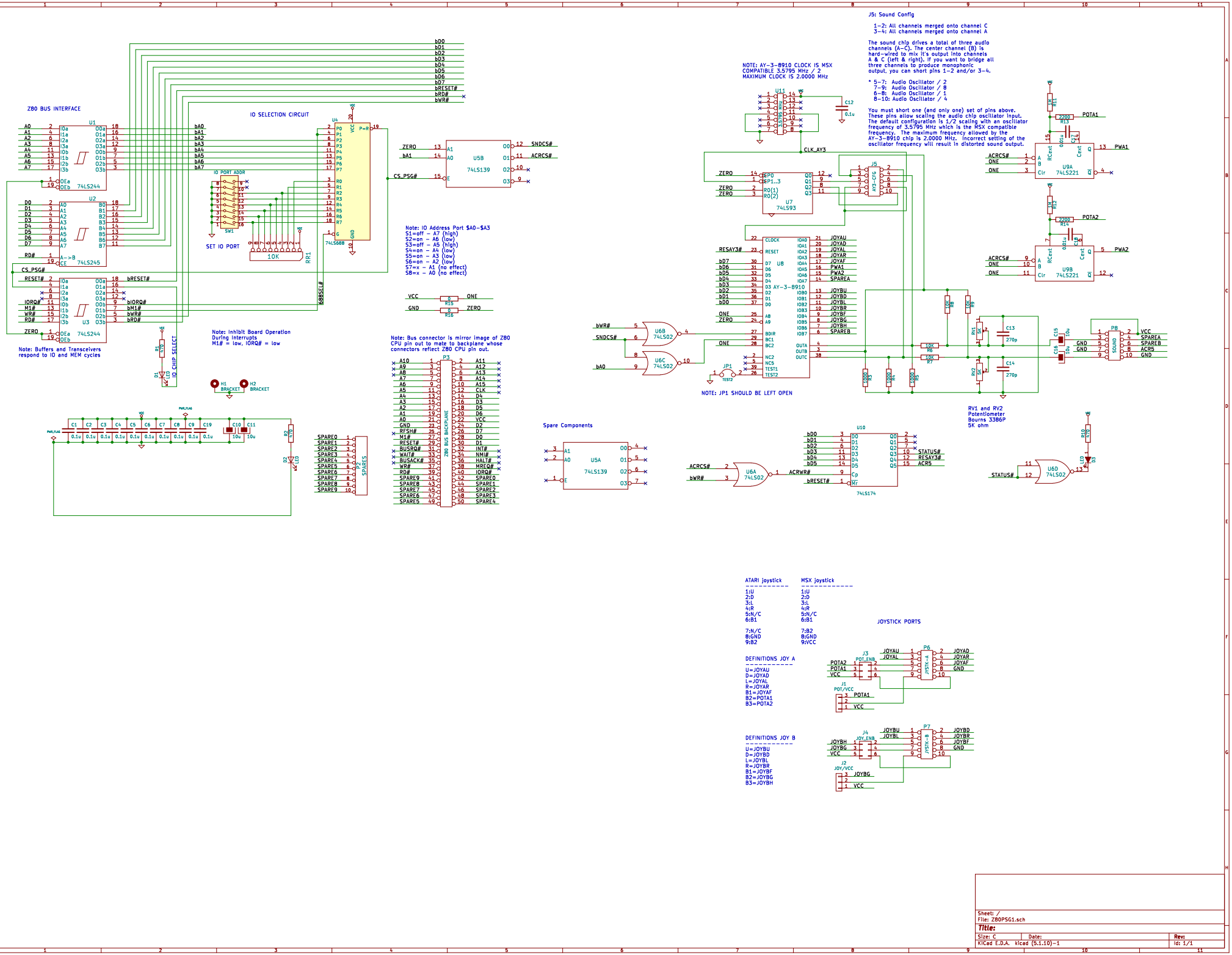
Z80 BUS INTERFACE
IO SELECTION CIRCUIT
IO PORT ADDR
SET IO PORT
SW1
10K
RR1
74LS688
74LS139
74LS244
74LS245
74LS244
Note: Buffers and Transceivers respond to IO and MEM cycles
Note: Inhibit Board Operation During Interrupts
M1# = low, IORQ# = low
IO CHIP SELECT
Note: IO Address Port $A0-$A3
S1=off – A7 (high)
S2=on – A6 (low)
S3=off – A5 (high)
S4=on – A4 (low)
S5=on – A3 (low)
S6=on – A2 (low)
S7=x – A1 (no effect)
S8=x – A0 (no effect)
Note: Bus connector is mirror image of Z80 CPU pin out to mate to backplane whose connectors reflect Z80 CPU pin out.
Z80 BUS BACKPLANE
Spare Components
SPARES
NOTE: AY-3-8910 CLOCK IS MSX COMPATIBLE 3.5795 MHz / 2
MAXIMUM CLOCK IS 2.0000 MHz
J5: 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.
NOTE: JP1 SHOULD BE LEFT OPEN
RV1 and RV2 Potentiometer Bourns 3386P 5K ohm
ATARI joystick
MSX joystick
JOYSTICK PORTS
DEFINITIONS JOY A
DEFINITIONS JOY B
Sheet: /
File: Z80PSG1.sch
Title:
Size: C
Date:
Rev:
KiCad E.D.A. kicad (5.1.10)-1
Id: 1/1