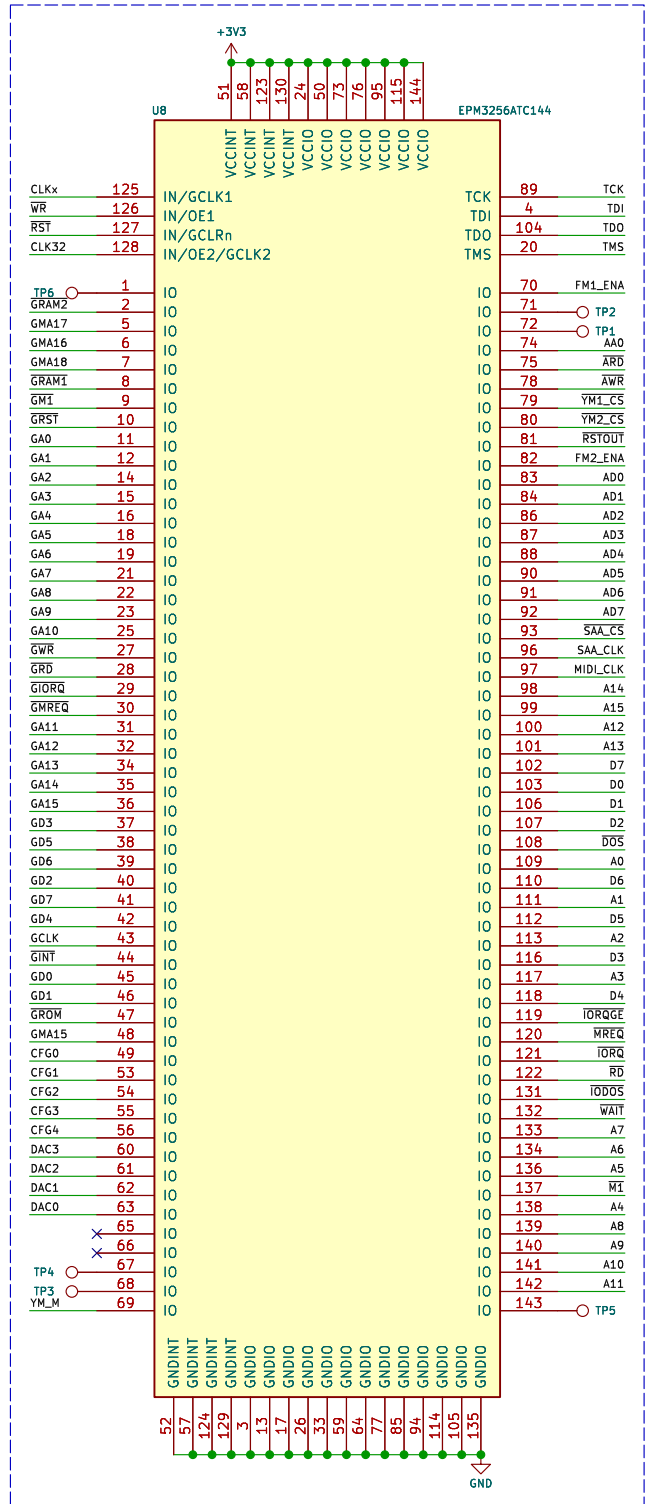
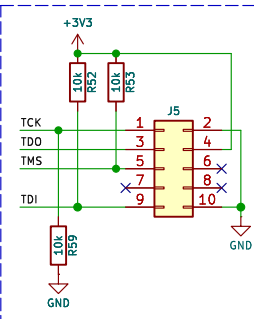


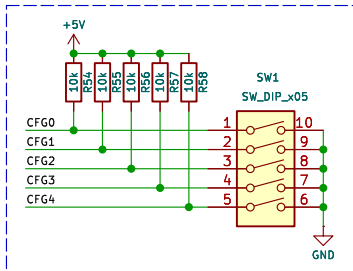
CPLD



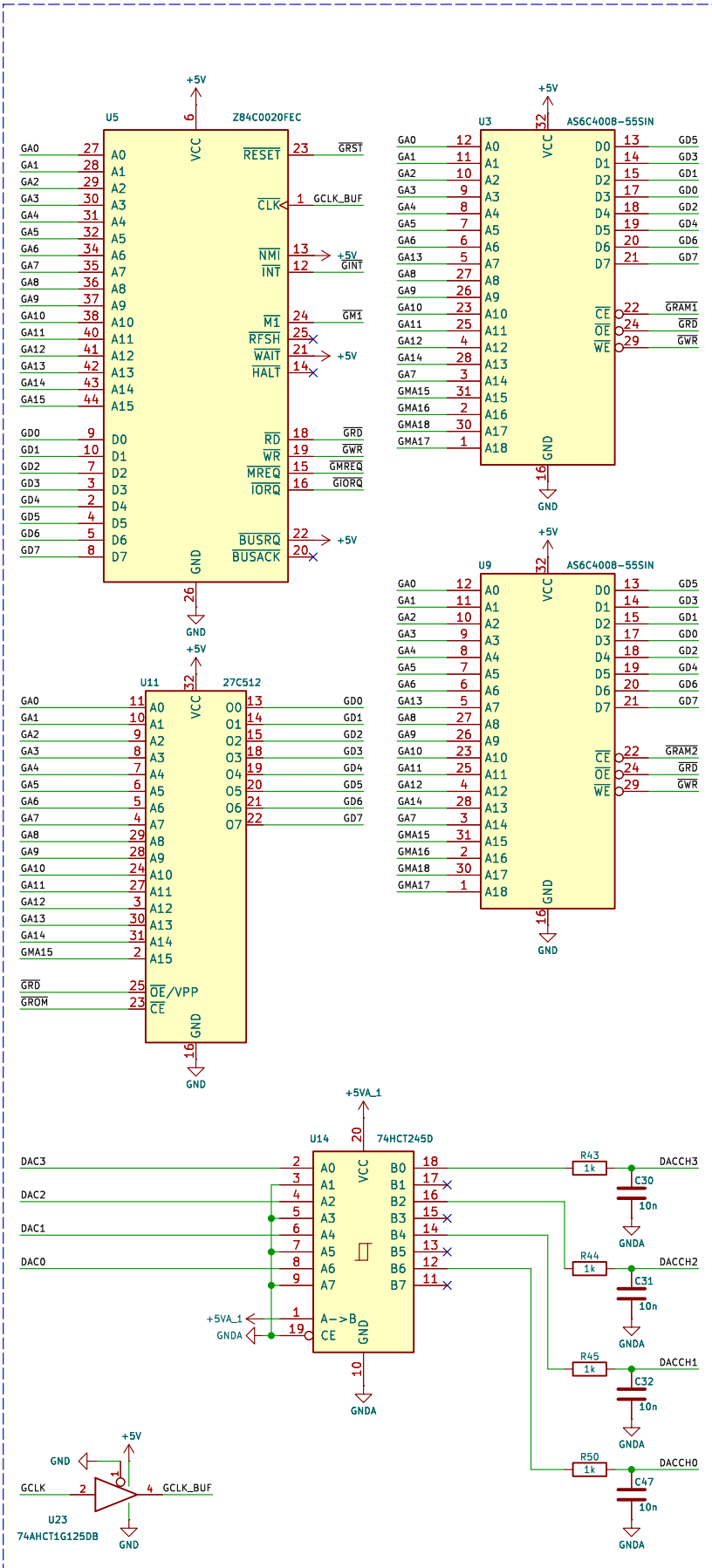
JTAG



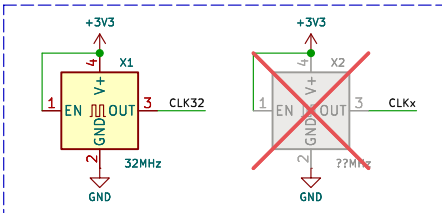
CONFIGURATION



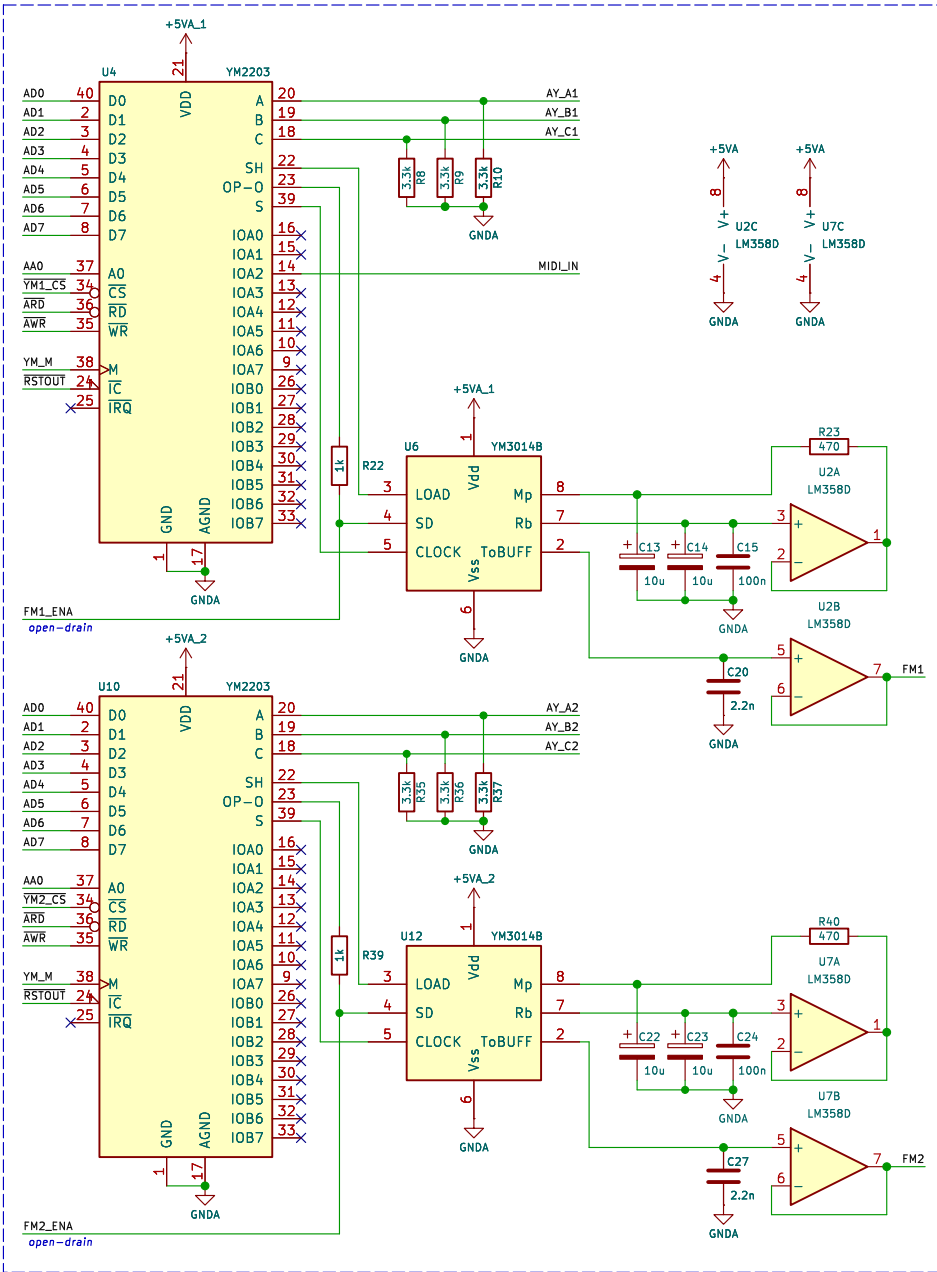
GENERAL SOUND



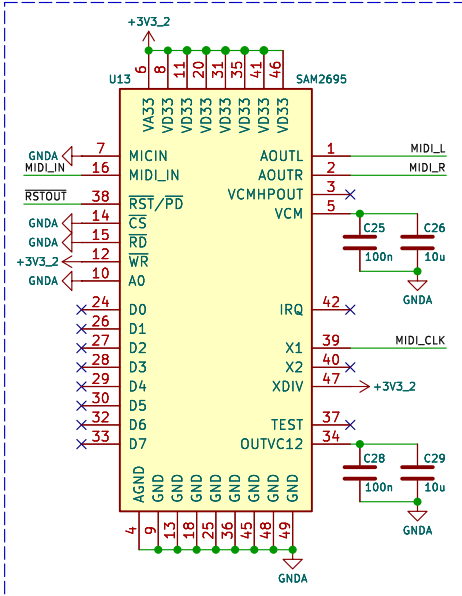
CLOCK



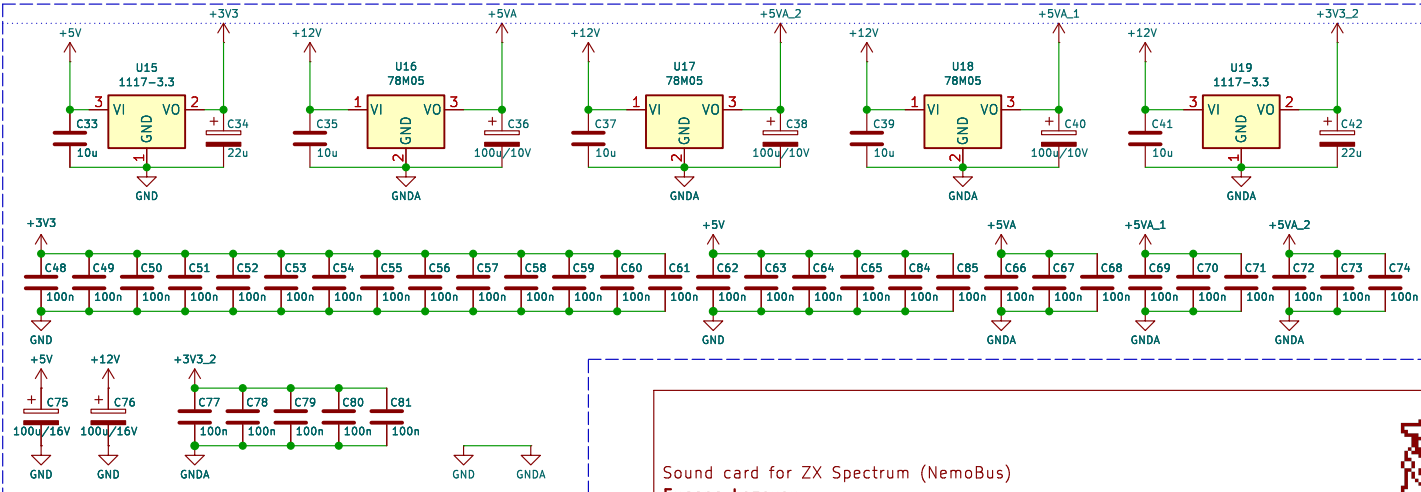
TURBO SOUND FM



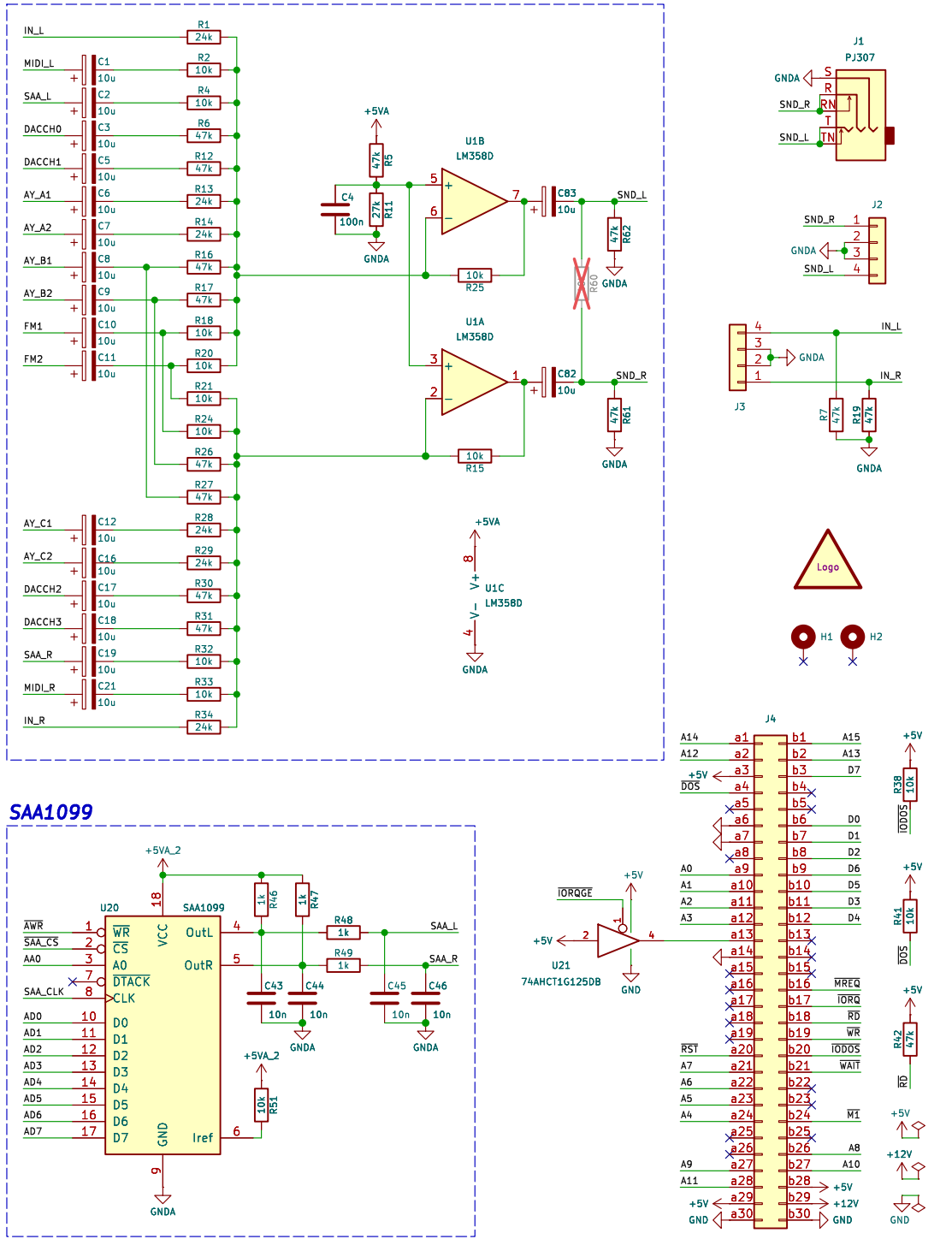
MIDI



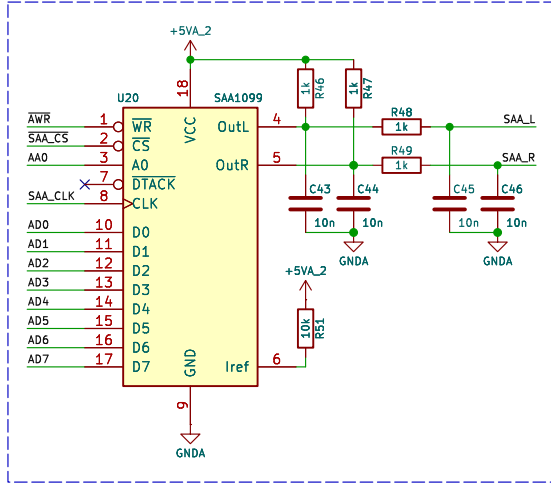
POWER



MIXER



SAA1099



Sound card for ZX Spectrum (NemoBus)

Eugene Lozovoy

Sheet: /

File: zx-multisound.kicad_sch

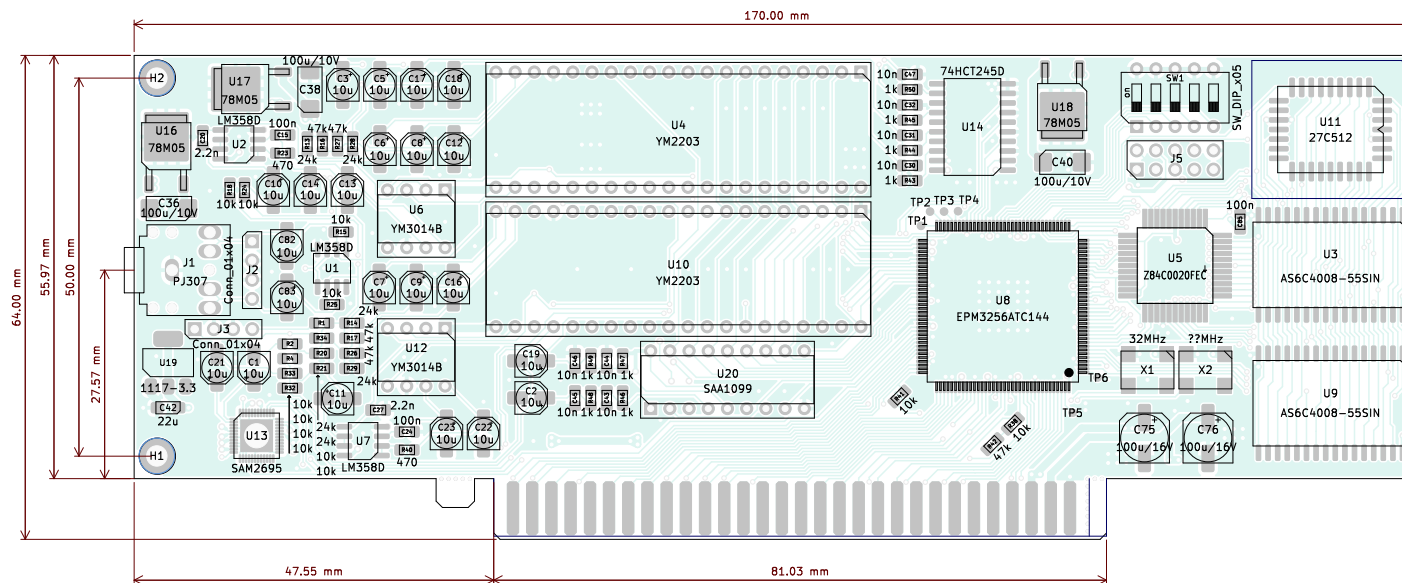
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Size: User Date: 2025-03-08

KiCad E.D.A. 8.0.9

Rev: A2

Id: 1/1



Dimensions: 170x64mm
Layers: 2
Thickness: 1.6mm

Min clearance: 0.2mm
Min track: 0.2mm
Min hole: 0.3mm
Min annular ring: 0.15mm



Eugene Lozovoy

Sheet:
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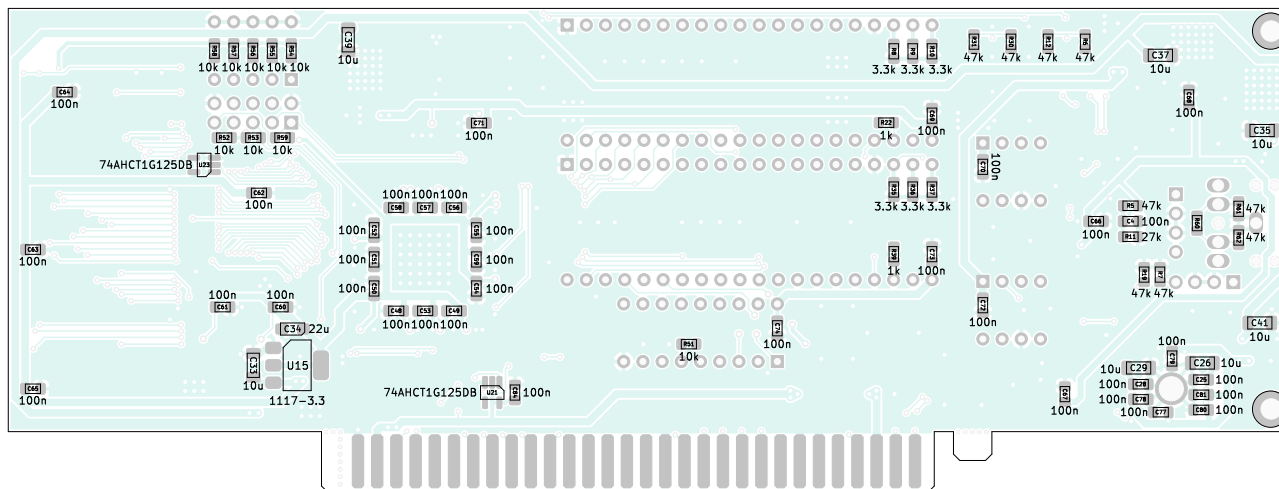
Title: ZX-MULTISOUND


Size: A4 Date: 2025-03-08

KiCad E.D.A. 8.0.9

Rev: A2

Id: 1/1



Dimensions: 170x64mm		Min clearance: 0.2mm	
Layers: 2		Min track: 0.2mm	
Thickness: 1.6mm		Min hole: 0.3mm	
Eugene Lozovoy		Min annular ring: 0.15mm	
Sheet:			
File: zx-multisound.kicad_pcb			
Title: ZX-MULTISOUND			
Size: A4		Date: 2025-03-08	Rev: A2
KiCad E.D.A. 8.0.9			Id: 1/1

Bill Of Materials

References	Value	Footprint	Qty
C1 C2 C3 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C16 C17 C18 C19 C21 C22 C23 C82 C83	10u	Capacitor_SMD:CP_Elec_4x5.4	22
C4 C15 C24 C25 C28 C48 C49 C50 C51 C52 C53 C54 C55 C56 C57 C58 C59 C60 C61 C62 C63 C64 C65 C66 C67 C68 C69 C70 C71 C72 C73 C74 C77 C78 C79 C80 C81 C84 C85	100n	Capacitor_SMD:C_0805_2012Metric_Pad1.1 8x1.45mm_HandSolder	39
C20 C27	2.2n	Capacitor_SMD:C_0805_2012Metric_Pad1.1 8x1.45mm_HandSolder	2
C26 C29 C33 C35 C37 C39 C41	10u	Capacitor_SMD:C_1206_3216Metric_Pad1.3 3x1.80mm_HandSolder	7
C30 C31 C32 C43 C44 C45 C46 C47	10n	Capacitor_SMD:C_0805_2012Metric_Pad1.1 8x1.45mm_HandSolder	8
C34 C42	22u	Capacitor_Tantalum_SMD:CP_EIA-3216-18_ Kemet-A_Pad1.58x1.35mm_HandSolder	2
C36 C38 C40	100u/10V	Capacitor_Tantalum_SMD:CP_EIA-6032-28_ Kemet-C_Pad2.25x2.35mm_HandSolder	3
C75 C76	100u/16V	Capacitor_SMD:CP_Elec_6.3x7.7	2
J1	PJ307	my:PJ-307	1
J2 J3	Conn_01x04	Connector_PinHeader_2.54mm:PinHeader_1 x04_P2.54mm_Vertical	2
J5	Conn_02x05_Odd_Even	Connector_PinHeader_2.54mm:PinHeader_2 x05_P2.54mm_Vertical	1
R1 R13 R14 R28 R29 R34	24k	Resistor_SMD:R_0805_2012Metric_Pad1.20 x1.40mm_HandSolder	6
R2 R4 R15 R18 R20 R21 R24 R25 R32 R33 R38 R41 R51 R52 R53 R54 R55 R56 R57 R58 R59	10k	Resistor_SMD:R_0805_2012Metric_Pad1.20 x1.40mm_HandSolder	21
R5 R6 R7 R12 R16 R17 R19 R26 R27 R30 R31 R42 R61 R62	47k	Resistor_SMD:R_0805_2012Metric_Pad1.20 x1.40mm_HandSolder	14
R8 R9 R10 R35 R36 R37	3.3k	Resistor_SMD:R_0805_2012Metric_Pad1.20 x1.40mm_HandSolder	6
R11	27k	Resistor_SMD:R_0805_2012Metric_Pad1.20 x1.40mm_HandSolder	1
R22 R39 R43 R44 R45 R46 R47 R48 R49 R50	1k	Resistor_SMD:R_0805_2012Metric_Pad1.20 x1.40mm_HandSolder	10
R23 R40	470	Resistor_SMD:R_0805_2012Metric_Pad1.20 x1.40mm_HandSolder	2
SW1	SW_DIP_x05	Button_Switch_THT:SW_DIP_SPSTx05_Slid e_6.7x14.26mm_W7.62mm_P2.54mm_LowP rofile	1
U1 U2 U7	LM358D	Package_SO:SOIC-8_3.9x4.9mm_P1.27mm	3
U3 U9	AS6C4008-55SIN	Package_SO:SSOP-32_11.305x20.495mm_ P1.27mm	2
U4 U10	YM2203	Package_DIP:DIP-40_W15.24mm_Socket	2
U5	Z84C0020FEC	my:TQFP-44_14x14mm_P0.8mm	1
U6 U12	YM3014B	Package_DIP:DIP-8_W7.62mm_Socket	2

U8	EPM3256ATC144	PCM_Package_QFP_AKL:TQFP-144_20x20mm_P0.5mm	1
U11	27C512	my:PLCC-32_11.4x14.0mm_P1.27mm-longpads	1
U13	SAM2695	my:QFN-48-1EP_6x6mm_P0.4mm_EP4.2x4.2mm	1
U14	74HCT245D	Package_SO:SOIC-20W_7.5x12.8mm_P1.27mm	1
U15 U19	1117-3.3	Package_TO_SOT_SMD:SOT-223-3_TabPin2	2
U16 U17 U18	78M05	Package_TO_SOT_SMD:TO-252-2	3
U20	SAA1099	Package_DIP:DIP-18_W7.62mm_Socket	1
U21 U23	74AHCT1G125DB	Package_TO_SOT_SMD:SOT-23-5_HandSoldering	2
X1	32MHz	my:Oscillator_SMD_7050_7.0x5.0mm	1

