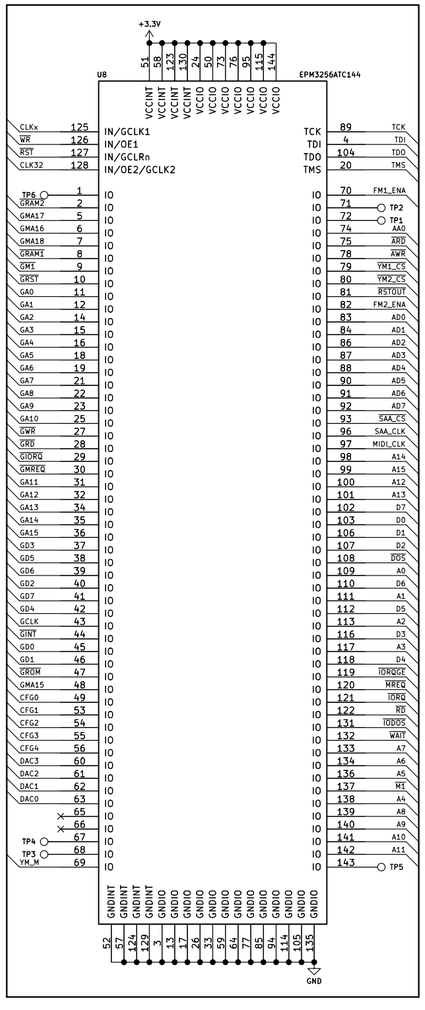
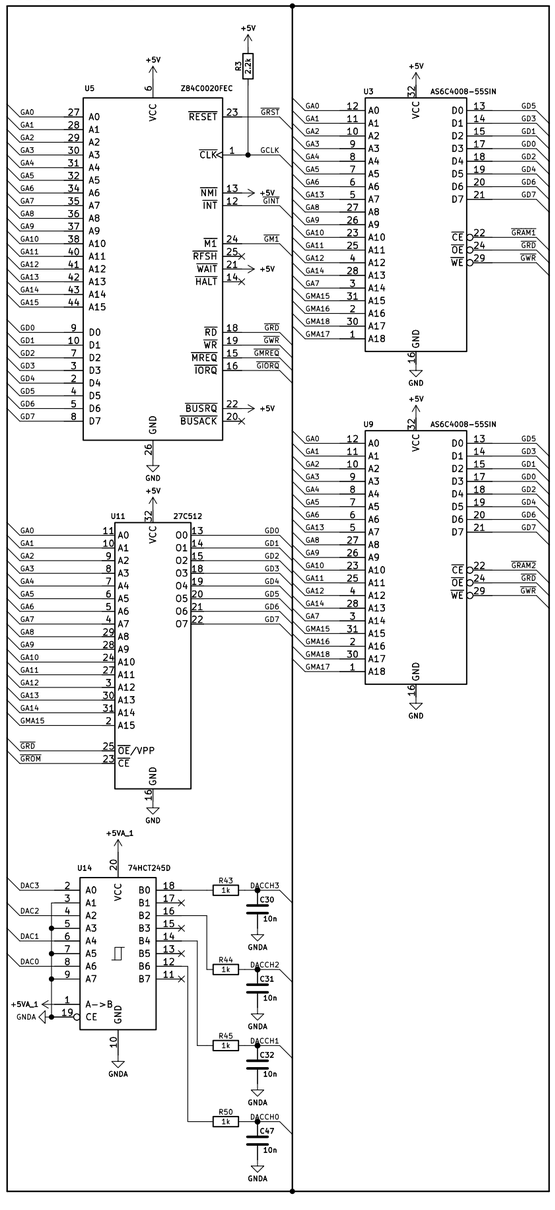
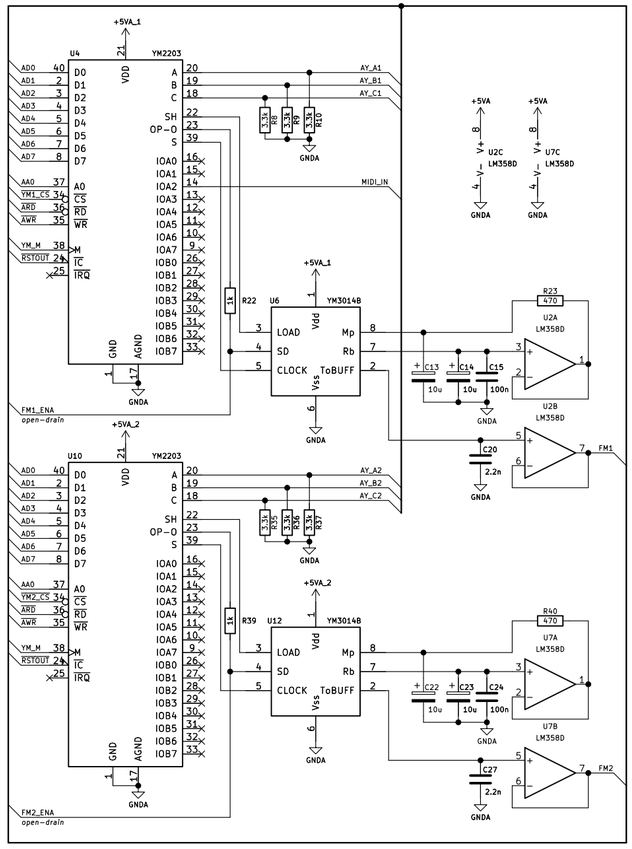
CPLD



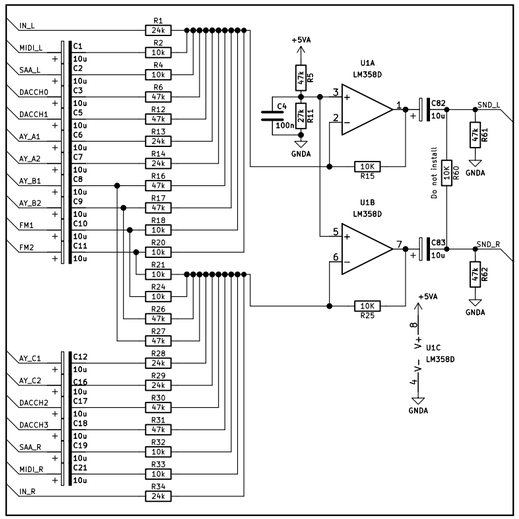
GENERAL SOUND



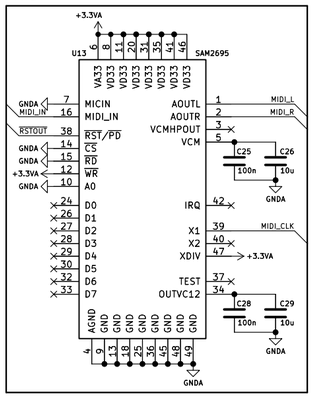
TURBO SOUND FM

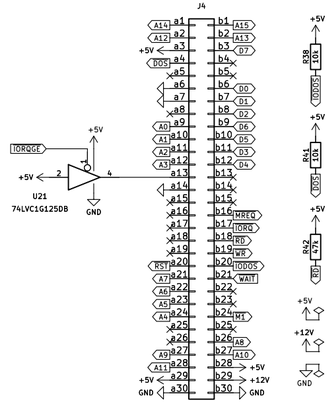


MIXER

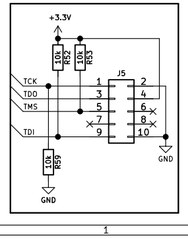


MIDI

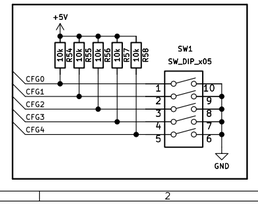




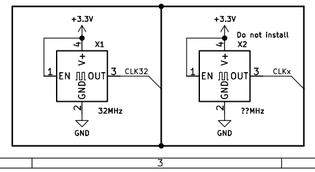
JTAG



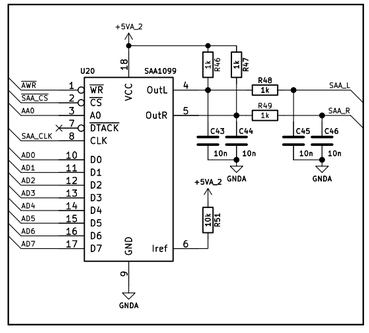
CONFIGURATION



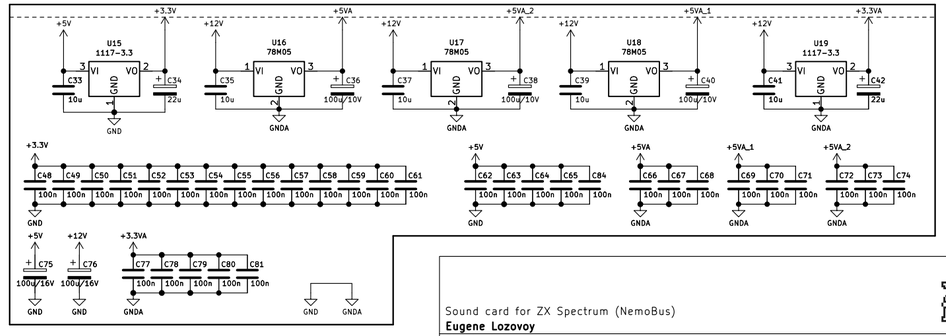
CLOCK



SAA1099



POWER



Sound card for ZX Spectrum (NemoBus)

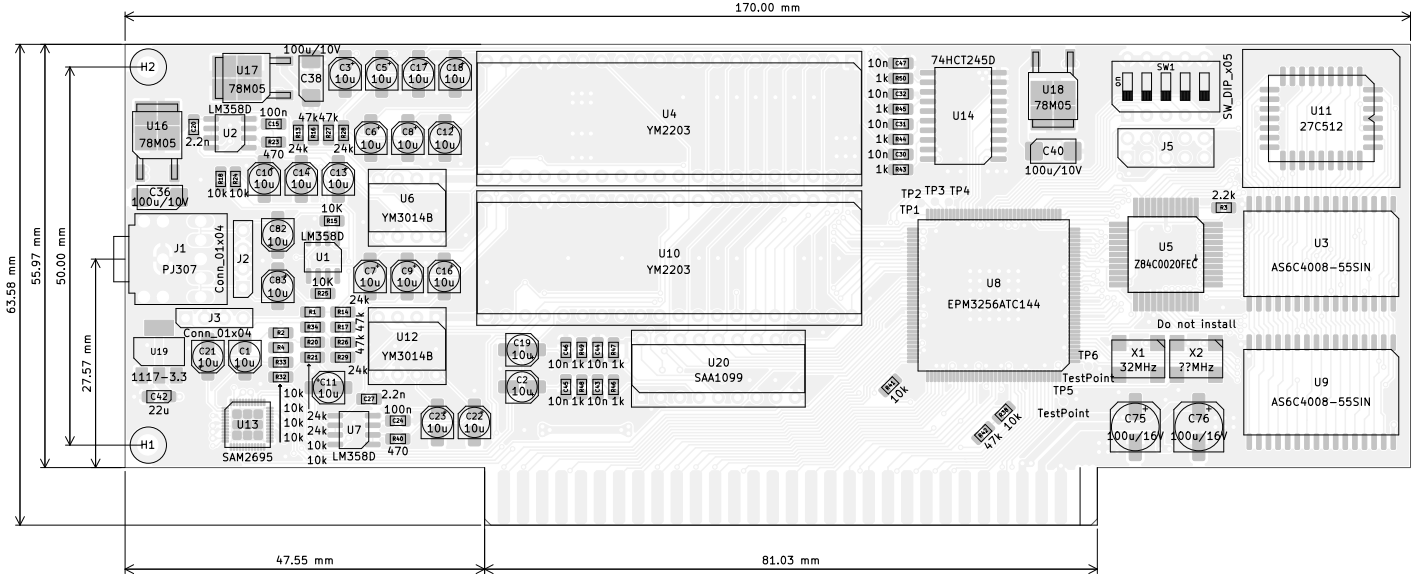
Eugene Lozovoy

Sheet: /

File: zx-multisound.kicad_sch

Title: ZX-MULTISOUND

Size: User	Date: 2022-11-12	**Rev: A1**
KiCad E.D.A. kicad (6.0.9)		Id: 1/1



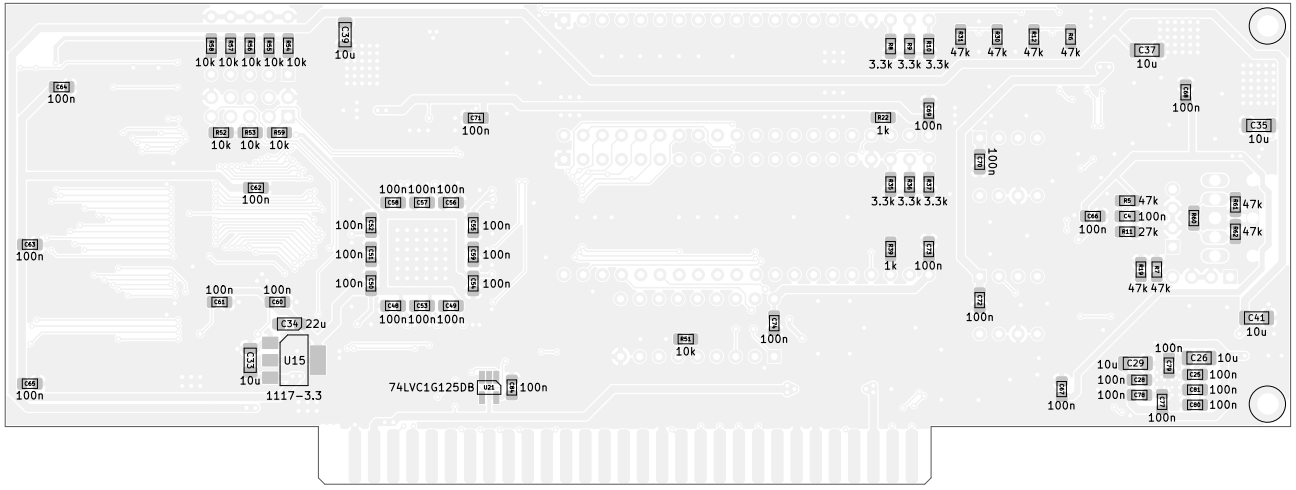
Layers: 2	Min clearance: 0.2mm
Dimensions: 170x63.58mm	Min track: 0.2mm
Thickness: 1.6mm	Min hole: 0.3mm
	Min annular ring: 0.15mm

Eugene Lozovoy

Sheet: Assembly
File: zx-multisound.kicad_pcb

Title: ZX-MULTISOUND

Size: A4	Date: 2022-11-12	**Rev: A1**
KiCad E.D.A. kicad (6.0.9)		Id: 1/1



Eugene Lozovoy		
Sheet: Assembly File: zx-multisound.kicad_pcb		
Title: ZX-MULTISOUND		
Size: A4	Date: 2022-11-12	**Rev: A1**
KiCad E.D.A. kicad (6.0.9)		Id: 1/1

Designator	Package	Value	Quantity
C1, C2, C3, C5, C6, C7, C8, C9, C10, C11, C12, C13, C14, C16, C17, C18, C19, C21, C22, C23, C82, C83	CP_Elec_4x5.4	10u	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	C_0805_2012Metric_Pad1.18x1.45mm_HandSolder	100n	38
C20, C27	C_0805_2012Metric_Pad1.18x1.45mm_HandSolder	2.2n	2
C26, C29, C33, C35, C37, C39, C41	C_1206_3216Metric_Pad1.33x1.80mm_HandSolder	10u	7
C30, C31, C32, C43, C44, C45, C46, C47	C_0805_2012Metric_Pad1.18x1.45mm_HandSolder	10n	8
C34, C42	CP_EIA-3216-18_Kemet-A_Pad1.58x1.35mm_HandSolder	22u	2
C36, C38, C40	CP_EIA-6032-28_Kemet-C_Pad2.25x2.35mm_HandSolder	100u/10V	3
C75, C76	CP_Elec_6.3x7.7	100u/16V	2
J1	SWITCHCRAFT_35RAPC4BHN2	PJ307	1
J2, J3	PinHeader_1x04_P2.54mm_Vertical	Conn_01x04	2
J5	PinHeader_2x05_P2.54mm_Vertical	Conn_02x05_Odd_Even	1
R1, R13, R14, R28, R29, R34	R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	24k	6
R2, R4, R18, R20, R21, R24, R32, R33, R38, R41, R51, R52, R53, R54, R55, R56, R57, R58, R59	R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	10k	19
R3	R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	2.2k	1
R5, R6, R7, R12, R16, R17, R19, R26, R27, R30, R31, R42, R61, R62	R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	47k	14
R8, R9, R10, R35, R36, R37	R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	3.3k	6
R11	R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	27k	1
R15, R25	R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	10K	2
R22, R39, R43, R44, R45, R46, R47, R48, R49, R50	R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	1k	10
R23, R40	R_0805_2012Metric_Pad1.20x1.40mm_HandSolder	470	2
SW1	SW_DIP_SPSTx05_Slide_6.7x14.26mm_W7.62mm_P2.54mm_LowProfile	SW_DIP_x05	1
U1, U2, U7	SOIC-8_3.9x4.9mm_P1.27mm	LM358D	3
U3, U9	SSOP-32_11.305x20.495mm_P1.27mm	AS6C4008-55SIN	2
U4, U10	DIP-40_W15.24mm_Socket	YM2203	2
U5	TQFP-44_14x14mm_P0.8mm	Z84C0020FEC	1
U6, U12	DIP-8_W7.62mm_Socket	YM3014B	2
U8	TQFP-144_20x20mm_P0.5mm	EPM3256ATC144	1
U11	PLCC-32_11.4x14.0mm_P1.27mm-longpads	27C512	1
U13	QFN-48-1EP_6x6mm_P0.4mm_EP4.2x4.2mm	SAM2695	1
U14	SOIC-20W_7.5x12.8mm_P1.27mm	74HCT245D	1
U15, U19	SOT-223-3_TabPin2	1117-3.3	2
U16, U17, U18	TO-252-2	78M05	3
U20	DIP-18_W7.62mm_Socket	SAA1099	1
U21	SOT-23-5_HandSoldering	74LVC1G125DB	1
X1	my:Oscillator_SMD_7050_7.0x5.0mm	32MHz	1