

Bill of Materials											
Bill of Materials for Project [Audio-Beamformer.PrjPcb]											
File name:			Audio-Beamformer.PrjPcb								
Project:			Audio-Beamformer								
Variant:			V1.0								
Creation Date:			31.05.2022								
Print Date:			31.05.2022								
Designator	Component Description	Component Value	Footprint	JLC-Parts	Farnell	Mouser	Digikey	Quantity	Unit Price	Total Price	
C1, C10, C47, C48, C49	Multilayer Ceramic Capacitors MLCC, Multilayer Ceramic Capacitors	10nF 50V	SMD Keramikkondensator 0603	C57112	2346966	581-06031C103J, 77-VJ0603V103ZXAPBC	478-3700-1-ND, 445-5662-1-ND	5	SFr. 0.01	SFr. 0.05	
C2, C6, C16, C17, C19, C20, C21_1, C21_2, C22_1, C22_2, C23_1, C23_2, C24_1, C24_2, C51, C52, C53, C54, C94, C96	Multilayer Ceramic Capacitors	10µF 50V	SMD Keramikkondensator 1206	C13585	2211092	810-CGA5L3X5R1H106K	445-7886-1-ND	20	SFr. 0.27	SFr. 5.40	
C3, C7, C18	Electrolytic Capacitor	470µF 25V	SMD Elko 10.0x10.0	C176672		140-VEJ471M1ETR1010		3	SFr. 0.17	SFr. 0.51	
C4, C8, C12, C13	Electrolytic Capacitor	220µF 63V	SMD Elko 12.5x13.5	C249502				4	SFr. 0.42	SFr. 1.68	
C5, C9, C11, C14, C25_1, C25_2, C25_3, C25_4, C25_5, C25_6, C25_7, C25_8, C25_9, C25_10, C25_11, C25_12, C25_13, C25_14, C25_15, C25_16, C25_17, C25_18, C25_19, C29_1, C29_2, C29_3, C29_4, C29_5, C29_6, C29_7, C29_8, C29_9, C29_10, C29_11, C29_12, C29_13, C29_14, C29_15, C29_16, C29_17, C15, C26_1, C26_2, C26_3, C26_4, C26_5, C26_6, C26_7, C26_8, C26_9, C26_10, C26_11, C26_12, C26_13, C26_14, C26_15, C26_16, C26_17, C26_18, C26_19, C30_1, C30_2, C30_3, C30_4, C30_5, C30_6, C30_7, C30_8, C30_9, C30_10, C30_11, C30_12, C30_13, C30_14, C30_15, C30_16, C30_17, C30_18, C30_19, C33, C34, C35, C36, C40, C42, C46, C50, C55, C56, C57, C58, C59, C60, C61, C62, C63, C64, C65, C66, C67, C68, C69, C70, C71, C72, C73, C74, C27_1, C27_2, C27_3, C27_4, C27_5, C27_6, C27_7, C27_8, C27_9, C27_10, C27_11, C27_12, C27_13, C27_14, C27_15, C27_16, C27_17, C27_18, C27_19, C31_1, C31_2, C31_3, C31_4, C31_5, C31_6, C31_7, C31_8, C31_9, C31_10, C31_11, C31_12, C31_13, C31_14, C31_15, C31_16, C31_17, C31_18, C31_19,	Multilayer Ceramic Capacitors MLCC, Multilayer Ceramic Capacitors	1µF 50V	SMD Keramikkondensator 0603	C15849	3013383	187-CL10A105KB8NNNC	1276-1860-1-ND	86	SFr. 0.01	SFr. 0.86	
C28_1, C28_2, C28_3, C28_4, C28_5, C28_6, C28_7, C28_8, C28_9, C28_10, C28_11, C28_12, C28_13, C28_14, C28_15, C28_16, C28_17, C28_18, C28_19, C32_1, C32_2, C32_3, C32_4, C32_5, C32_6, C32_7, C32_8, C32_9, C32_10, C32_11, C32_12, C32_13, C32_14, C32_15, C32_16, C32_17, C32_18, C32_19, C95, C97, C98	Multilayer Ceramic Capacitors	27pF 50V	SMD Keramikkondensator 0603	C1656	1414627	80-C0603C270J5G	399-C0603C270J5GAC7867CT-ND	40	SFr. 0.01	SFr. 0.40	
C95, C97, C98	Multilayer Ceramic Capacitors	1µF 16V	SMD Keramikkondensator 0603	C15849	1327680	963-EMK107BJ105KA-T	587-1251-1-ND	3	SFr. 0.01	SFr. 0.03	
D1, D2, D3	Low Voltage Schottky-Diode	SP1060L	SMD Diode TO-277	C2693399				3	SFr. 0.32	SFr. 0.96	
D4_1, D4_2, D4_3, D4_4, D4_5, D4_6, D4_7, D4_8, D4_9, D4_10, D4_11, D4_12, D4_13, D4_14, D4_15, D4_16, D4_17, D4_18, D4_19, D5_1, D5_2, D5_3, D5_4, D5_5, D5_6, D5_7, D5_8, D5_9, D5_10, D5_11, D5_12, D5_13, D5_14, D5_15, D5_16, D5_17, D5_18, D5_19, D6_1, D6_2, D6_3, D6_4, D6_5, D6_6, D6_7, D6_8, D6_9, D6_10, D6_11, D6_12, D6_13, D6_14, D6_15, D6_16, D6_17, D6_18, D6_19, D7_1, D7_2, D7_3, D7_4, D7_5, D7_6, D7_7, D7_8, D7_9, D7_10, D7_11, D7_12, D7_13, D7_14, D7_15, D7_16, D7_17, D7_18, D7_19, D8_1, D8_2, D8_3, D8_4, D8_5, D8_6, D8_7, D8_8, D8_9, D8_10, D8_11, D8_12, D8_13, D8_14, D8_15, D8_16, D8_17, D8_18, D8_19, D9_1, D9_2, D9_3, D9_4, D9_5, D9_6, D9_7, D9_8, D9_9, D9_10, D9_11, D9_12, D9_13, D9_14, D9_15, D9_16, D9_17, D9_18, D9_19, D10_1, D10_2, D10_3, D10_4, D10_5, D10_6, D10_7, D10_8, D10_9, D10_10, D10_11, D10_12, D10_13, D10_14, D10_15, D10_16, D10_17, D10_18, D10_19, D11_1, D11_2, D11_3, D11_4, D11_5, D11_6, D11_7, D11_8, D11_9, D11_10, D11_11, D11_12, D11_13, D11_14, D11_15, D11_16, D11_17, D11_18, D11_19, D12_1, D14, D15	Fast Switching Diode	1N4148WTR	SMD Diode SOD-123	C81598	2306363	750-1N4148W-HF	1655-1360-1-ND	191	SFr. 0.01	SFr. 1.91	
F1	ESD Suppressor	PD4E1U06	SMD IC SOT-363 (SC-70-6)	C194628	3116516	595-TPD4E1U06DCKR	296-39347-1-ND	2	SFr. 0.12	SFr. 0.24	
F1	PTC Resettable Fuse	8V/1500mA/3000mA/100ms	SMD PPTC-Fuse 1206	C118413	2383296	576-1206L150THWR	F3372CT-ND	1	SFr. 0.07	SFr. 0.07	
K1_1, K1_2, K1_3, K1_4, K1_5, K1_6, K1_7, K1_8, K1_9, K1_10, K1_11, K1_12, K1_13, K1_14, K1_15, K1_16, K1_17, K1_18, K1_19, K2_1, K2_2, K2_3, K2_4, K2_5, K2_6, K2_7, K2_8, K2_9, K2_10, K2_11, K2_12, K2_13, K2_14, K2_15, K2_16, K2_17, K2_18, K2_19, K3_1, K3_2, K3_3, K3_4, K3_5, K3_6, K3_7, K3_8, K3_9, K3_10, K3_11, K3_12, K3_13, K3_14, K3_15, K3_16, K3_17, K3_18, K3_19, K4_1, K4_2, K4_3, K4_4, K4_5, K4_6, K4_7, K4_8, K4_9, K4_10, K5, K6, K7, K8	MOSFET N-Channel	BSS123	SMD MOSFET SOT-23	C431506	3755132	726-BSS123NH6433	3191-BSS123-F2-0000HFCT-ND	76	SFr. 0.02	SFr. 1.52	
L1, L2	MOSFET N-Channel	AO3400A	SMD MOSFET SOT-23	C20917			785-1000-1-ND	4	SFr. 0.20	SFr. 0.80	
L1, L2	Shielded Power Inductor	47µH 5.0A	SMD Inductor 13.8x12.6x6.5	C497913	3929029	652-SRP1265WA-470M	118-SRP1265WA-470MCT-ND	2	SFr. 0.68	SFr. 1.36	
L3_1, L3_2, L3_3, L3_4, L3_5, L3_6, L3_7, L3_8, L3_9, L3_10, L3_11, L3_12, L3_13, L3_14, L3_15, L3_16, L3_17, L3_18, L3_19, L4_1, L4_2, L4_3, L4_4, L4_5, L4_6, L4_7, L4_8, L4_9, L4_10, L4_11, L4_12, L4_13, L4_14, L4_15,	Shielded Power Inductor	SLF7045T-221MR33-PF (220µH)	SMD Inductor 7x7x4.5	C24679	2215715	810-SLF7045T-221M	445-1210-1-ND	38	SFr. 0.32	SFr. 12.16	
P1	General Purpose LED	Green (5mA, 2.4V)	SMD LED 0603	C72043	1465991	645-598-8070-107F	350-2035-1-ND	1	SFr. 0.34	SFr. 0.34	
P2, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P20, P21, P22, P23, P24, P25, P26, P27, P28, P29, P30, P31, P32, P33,	Smart RGB-LED	APA102C	SMD LED APA102C-5050			474-COM-16345	1568-COM-16345-ND	38	SFr. 0.35	SFr. 13.30	
Q1_1, Q1_2, Q1_3, Q1_4, Q1_5, Q1_6, Q1_7, Q1_8, Q1_9, Q1_10, Q1_11, Q1_12, Q1_13, Q1_14, Q1_15, Q1_16, Q1_17, Q1_18, Q1_19, Q2_1, Q2_2, Q2_3, Q2_4, Q2_5, Q2_6, Q2_7, Q2_8, Q2_9, Q2_10, Q2_11, Q2_12, Q2_13, Q2_14, Q2_15, Q2_16, Q2_17, Q2_18, Q2_19, Q3_1, Q3_2, Q3_3, Q3_4, Q3_5, Q3_6, Q3_7, Q3_8, Q3_9, Q3_10, Q3_11, Q3_12, Q3_13, Q3_14, Q3_15, Q3_16, Q3_17, Q3_18, Q3_19, Q4_1, Q4_2, Q4_3, Q4_4, Q4_5, Q4_6, Q4_7, Q4_8, Q4_9, Q4_10, Q4_11, Q4_12, Q4_13, Q4_14, Q4_15, Q4_16, Q4_17, Q4_18, Q4_19, Q5_1, Q5_2, Q5_3, Q5_4, Q5_5, Q5_6, Q5_7, Q5_8, Q5_9, Q5_10, Q5_11, Q5_12, Q5_13, Q5_14, Q5_15, Q5_16, Q5_17, Q5_18, Q5_19, Q6_1, Q6_2, Q6_3, Q6_4, Q6_5, Q6_6, Q6_7, Q6_8, Q6_9, Q6_10, Q6_11, Q6_12, Q6_13, Q6_14, Q6_15, Q6_16, Q6_17, Q6_18, Q6_19, Q7_1, Q7_2, Q7_3, Q7_4, Q7_5, Q7_6, Q7_7, Q7_8, Q7_9, Q7_10, Q7_11, Q7_12, Q7_13,	Ultrasonic Transducer	MA40A16 (40kHz, 16mm)	THT Transducer (MA40A16) (5mm Offset)					152	SFr. 0.40	SFr. 60.80	
Q9	Crystal	24MHz	SMD Crystal 3.2X2.5X0.8	C271629	3649756	520-240-18-33-JGNT	XC2310CT-ND	1	SFr. 0.11	SFr. 0.11	
R1, R11_1, R11_2, R11_3, R11_4, R11_5, R11_6, R11_7, R11_8, R11_9, R11_10, R11_11, R11_12, R11_13, R11_14, R11_15, R11_16, R11_17, R11_18, R11_19, R13_1, R13_2, R13_3, R13_4, R13_5, R13_6, R13_7, R13_8, R13_9, R13_10, R13_11, R13_12, R13_13, R13_14, R13_15, R13_16, R13_17, R13_18, R13_19, R16_1, R16_2, R16_3, R16_4, R16_5, R16_6, R16_7, R16_8, R16_9, R16_10, R16_11, R16_12, R16_13, R16_14, R16_15, R16_16, R16_17, R16_18, R16_19, R17_1, R17_2, R17_3, R17_4, R17_5, R17_6, R17_7, R17_8, R17_9, R17_10, R17_11, R17_12, R17_13, R17_14, R17_15, R17_16, R17_17, R17_18, R17_19, R19_1, R19_2, R19_3, R19_4, R19_5, R19_6, R19_7, R19_8, R19_9, R19_10, R19_11, R19_12, R19_13, R19_14, R19_15, R19_16, R19_17, R19_18,	Thick Film Chip Resistor	10 (75V, 100mW, 1%)	SMD Widerstand 0603	C22859	2302958	667-ERJ-3EKF10R0V	P10.0HCT-ND	115	SFr. 0.01	SFr. 1.15	
R2	Thick Film Chip Resistor	13k (75V, 100mW, 1%)	SMD Widerstand 0603	C22797	2059416	667-ERJ-3EKF1302V	P13.0KHCT-ND	1	SFr. 0.01	SFr. 0.01	
R3, R6, R9, R21_1, R21_2, R21_3, R21_4, R21_5, R21_6, R21_7, R21_8, R21_9, R21_10, R21_11, R21_12, R21_13, R21_14, R21_15, R21_16, R21_17, R21_18, R21_19, R22_1, R22_2, R22_3, R22_4, R22_5, R22_6, R22_7, R22_8, R22_9, R22_10, R22_11, R22_12, R22_13, R22_14, R22_15, R22_16, R22_17,	Thick Film Chip Resistor	10k (75V, 100mW, 1%)	SMD Widerstand 0603	C25804	2303192	667-ERJ-3EKF1002V	P10.0KHCT-ND	52	SFr. 0.01	SFr. 0.52	
R4	Thick Film Chip Resistor	1.5k (75V, 100mW, 1%)	SMD Widerstand 0603	C22843	2303156	667-ERJ-3EKF1501V	P1.50KHCT-ND	1	SFr. 0.01	SFr. 0.01	
R5, R7	Thick Film Chip Resistor	100k (75V, 100mW, 1%)	SMD Widerstand 0603	C25803	2303232	667-ERJ-3EKF1003V	P100KHCT-ND	2	SFr. 0.01	SFr. 0.02	
R10, R12_1, R12_2, R12_3, R12_4, R12_5, R12_6, R12_7, R12_8, R12_9, R12_10, R12_11, R12_12, R12_13, R12_14, R12_15, R12_16, R12_17, R12_18, R12_19, R14_1, R14_2, R14_3, R14_4, R14_5, R14_6, R14_7, R14_8, R14_9, R14_10, R14_11, R14_12, R14_13, R14_14, R14_15, R14_16, R14_17, R14_18, R15_1, R15_2, R15_3, R15_4, R15_5, R15_6, R15_7, R15_8, R15_9, R15_10, R15_11, R15_12, R15_13, R15_14, R15_15, R15_16, R15_17, R15_18, R15_19, R20_1, R20_2, R20_3, R20_4, R20_5, R20_6, R20_7, R20_8, R20_9, R20_10, R20_11, R20_12, R20_13, R20_14, R20_15, R20_16, R20_17, R20_18, R20_19,	Thick Film Chip Resistor	3.0k (75V, 100mW, 1%)	SMD Widerstand 0603	C4211	2059357	667-ERJ-3EKF3001V	P3.00KHCT-ND	1	SFr. 0.01	SFr. 0.01	
R18, R19, R21_1, R21_2, R21_3, R21_4, R21_5, R21_6, R21_7, R21_8, R21_9, R21_10, R21_11, R21_12, R21_13, R21_14, R21_15, R21_16, R21_17, R21_18, R21_19, R21_20, R21_21, R21_22, R21_23, R21_24, R21_25, R21_26, R21_27, R21_28, R21_29, R21_30, R21_31, R21_32, R21_33, R21_3											