

KTS-Kempston+TurboSound

Item	Qty	Reference(s)	Value	Footprint
1	2	C2, C3	10uF	Electrolytic Capacitor_SMD: 4x5.4
2	10	C4, C8, C9, C10, C11, C12, C13, C15, C16, C17	100nF	Electrolytic Capacitors_SMD: 0805
3	2	C5, C6	22uF	Electrolytic Capacitor_SMD: 4x5.4
4	1	C7	100uF	Capacitor_SMD: 6.3x5.4
5	1	D1	LED	LED_SMD: 0805
6	1	J1	KEMP_SW	Pin_Headers:3x04_Pitch2.54mm
7	1	J2	DB9_Male	Connectors_Dsub:DSUB-9_Male_Horizontal_Pitch2.77x2.84mm
8	1	J4	AudioJACK	5pin PJ-307
9	1	L1	100uH	Inductor_SMD:C_0805
10	5	R1, R2, R4, R27, R28	1K	Resistors_SMD:R_0805
11	4	R5, R8, R9, R12	1.5K	Resistors_SMD:R_0805
12	4	R6, R7, R10, R11	3.3K	Resistors_SMD:R_0805
13	9	R13, R14, R15, R16, R17, R18, R19, R20, R29	150R	Resistors_SMD:R_0805
14	2	R21, R22	510R	Resistors_SMD:R_0805
15	2	R23, R24	10K	Resistors_SMD:R_0805
16	2	R25, R26	22K	Resistors_SMD:R_0805
17	1	RN1	10K	Resistors_THT:R_Array_SIP9
18	1	SW1	RESET	Buttons_Switches_THT:SW_Tactile
19	1	U1	74HCT32	Housings_SOIC:SOIC-14_3.9x8.7mm_Pitch1.27mm
20	1	U2	74HCT240	Housings_SOIC:SO-20_12.8x7.5mm_Pitch1.27mm
21	1	U3	74HCT138	Housings_SSOP:SOP-16_4.4x10.4mm_Pitch1.27mm
22	1	U5	74HCT30	Housings_SOIC:SOIC-14_3.9x8.7mm_Pitch1.27mm
23	1	U6	74HCT00	Housings_SOIC:SOIC-14_3.9x8.7mm_Pitch1.27mm
24	1	U7	74HCT74	Housings_SOIC:SOIC-14_3.9x8.7mm_Pitch1.27mm
25	2	U8, U10	YM2149F	YM2149F internal clock divider is used. (Don't use AY-3-8910 it won't work)
26	1	U9	LM358	Housings_SOIC:SOIC-8_3.9x4.9mm_Pitch1.27mm
27	1	U11	LM1117-3.3	TO_SOT_Packages_SMD:SOT-223-3_TabPin2
				7.0x5.0mm 7050 active crystal 3.3V
28	1	Y1	3.5795Mhz Clock	ECS-3953M-035-BN-TR CB3LV-3I-3M579545