Bill of Materials

Part	Qty	Value	Description
C1,C4,C6-C12	9	0.1uF	Unpolarized capacitor
C2	1	$10\mathrm{uF}$	Polarized capacitor
C3, C5	2	$220 \mathrm{uF}$	Polarized capacitor
J1	1		Connector, double row, 02x20
J2	1		Audio Jack, 3.5mm
JP1	1		Jumper, 3-pole, pins 1+2 closed/bridged
R1	1	2K2	Resistor
R2 - R5	4	10K	Resistor
RV1	1	10K	Potentiometer
U1	1	SN76489	Digital Complex Sound Generator
U2, U4	2	74LS30	8-input NAND
U3	1	74LS02	Quad 2-input NOR gate
U5	1	74LS373	8-bit Latch, 3-state outputs
U6	1	74LS04	Hex Inverter
U7	1	74LS74	Dual D Flip-flop, Set & Reset
U8	1	LM386	Low Voltage Audio Power Amplifier
Y1	1	$4.0 \mathrm{Mhz}$	Two pin crystal
PCB	1		PAL-1 Digital Complex Sound Generator
			PCB

PAL-1 Digital Complex Sound Generator V1.0A components