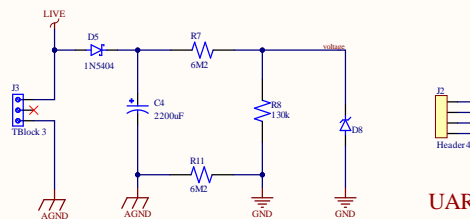
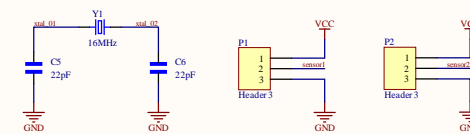


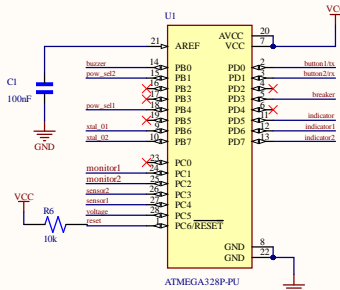
Power supply UNIT



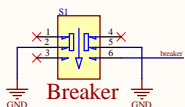
Voltage measuring



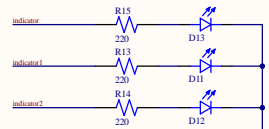
Sensors



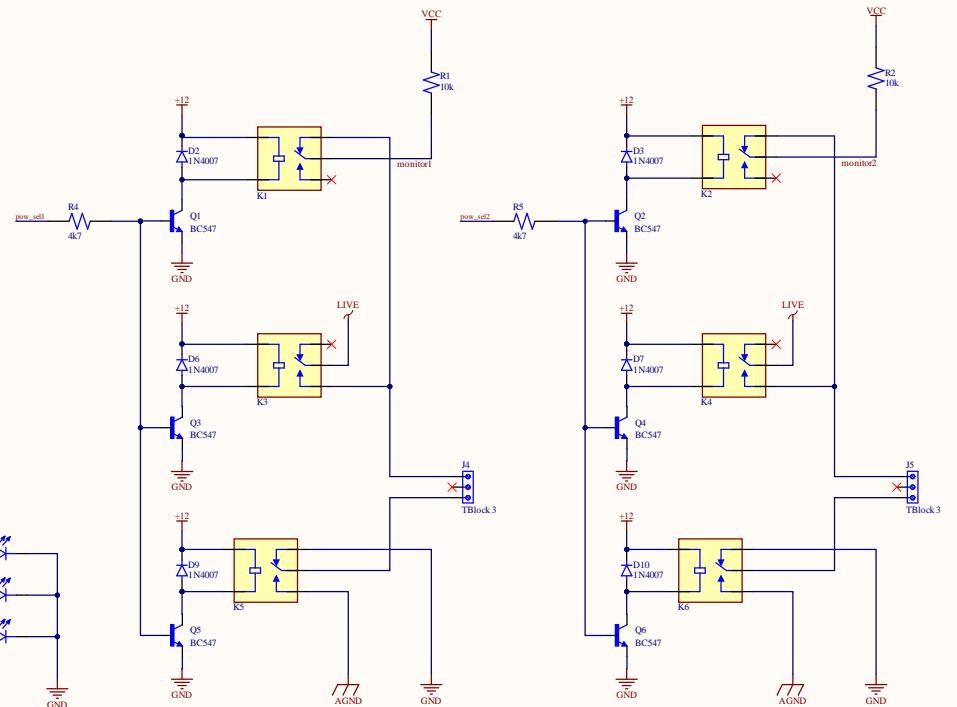
Control UNIT



Breaker

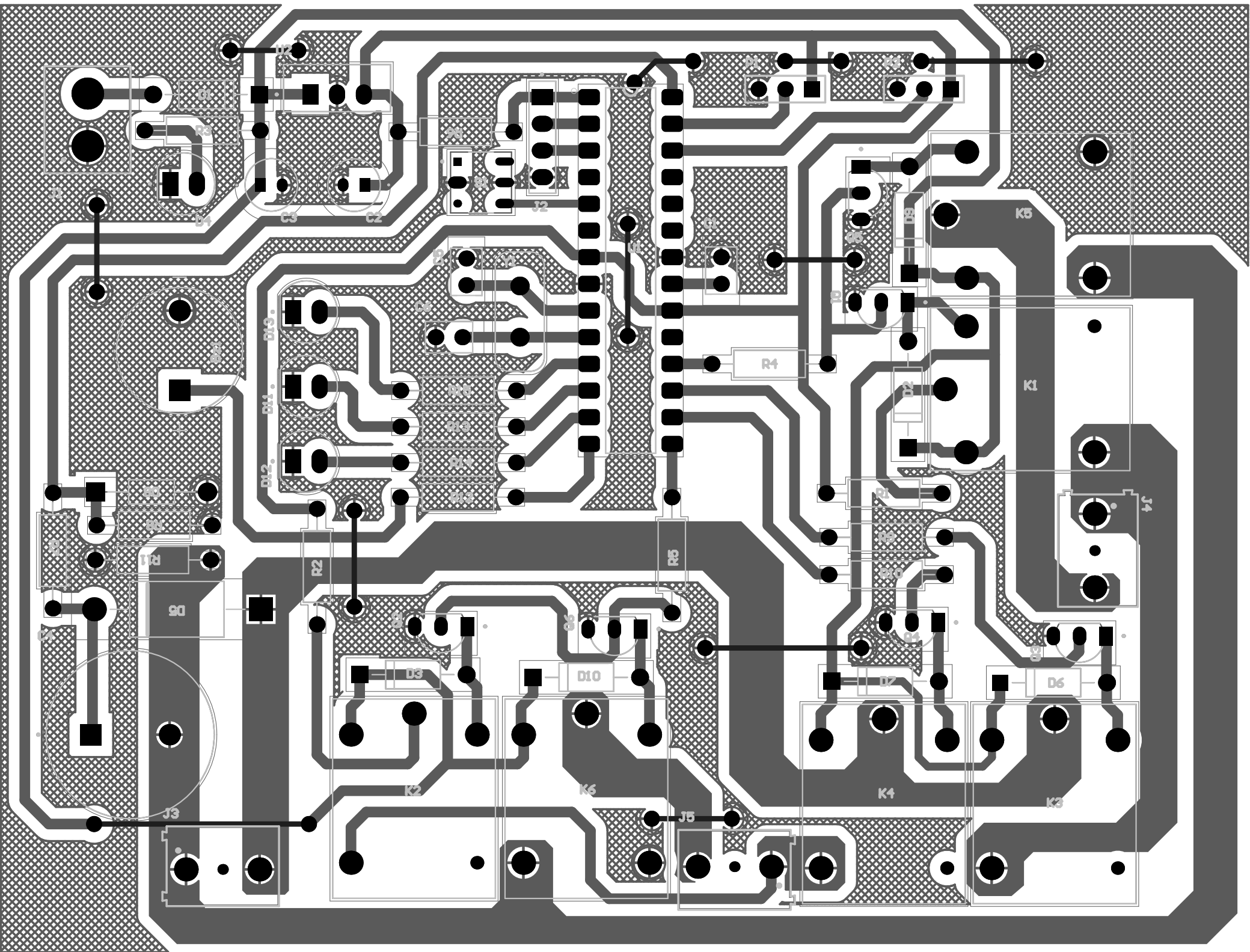


Indicators



Main switching UNIT

Title		
Size	Number	Revision
A3		
Date:	5-08-2023	Sheet of
File:	V:\Office\...\schematic.SchDoc	Drawn By:



Comment	Description	Designator	Footprint	LibRef	Quantity
AI-1223-TWT-12V-R	ELECTRO-MECHANICAL AUDIO INDICATOR	Bz1	XDCR_AI-1223-TWT-12V-R	Buzzer	1
100nF	2200pF A±10% 250V Ceramic Capacitor K7R Radial	C1	CAPR8500W50L450T3 00H650	Ceramic capacitor	1
10µF	PS-A	C2	CAPPRD500W50D500 H1100	Electrolytic capacitor	1
2200µF	PS-A	C3	CAPPRD500W50D500 H1100	Electrolytic capacitor	1
2200µF	Cap Aluminum 33µF 400V 20% (16 x 25mm) Radial Aluminum Cylindrical Can 7.5mm 275mA 2000 hr 85A°C Bulk	C4	CAPPRD750W80D160 04Z500	Capacitor (16 x 25mm)	1
22pF	2200pF A±10% 250V Ceramic Capacitor K7R Radial	C5, C6	CAPR8500W50L450T3 00H650	Ceramic capacitor	2
1N4007	Diode Switching 1KV 1A 2-295 DO-41	D1, D2, D3, D6, D7, D9, D10	DIOAD1060W80LS500 270	1N4007	7
08R500001	LED, Orange, Through Hole, 1-1/4 (5mm), 30 mA, 2.1V, 635 nm	D4, D11, D12, D13	LEDRO254W570500H1 070	LED	4
1N5404	Diode Standard 400V 3A Through Hole DO-201AD	D5	DIOAD1990W125L900 0530	Schottky diode	1
1N4745A	Zener Diode 16V 1W 4-6% Through Hole DO-204AL (DO-41)	D8	DIOAD1060W70L435D 230	Zenner diode	1
TBlock 2	2 Position Wire to Board Terminal Block Horizontal with Board 0.197", 5.00mm, Through Hole	J1	6911111710002	Terminal Block - 2Pins	1
Header 4	4 Position Header Connector Through Hole	J2	SULLINS_PP1C04TLFB N-RC	Female header - 4Pins	1
TBlock 3	3 Position Wire to Board Terminal Block Horizontal with Board 0.138 (3.50mm) Through Hole	J3, J4, J5	6912141100003	Terminal blocks - 3Pins (Small)	3
JOC-3F-1C-24VDC	Miniature PCB Relay 24VDC, 10A 250VAC, 15A 125VAC, 10A 250VAC	K1, K2, K3, K4, K5, K6	RELAY_JOC-3F-1C-24VDC	Relay (Standard)	6
Header 3	Header, 3-Pin	P1, P2	HDR1X3	Header 3	2
BC547	«a href="https://pricing.snapeda.com/parts/B/C337-16%20A1/Taiwan%20Semiconductor/view-part?ref=eda">Check availability«a href="https://pricing.snapeda.com/parts/B/C337-16%20A1/Taiwan%20Semiconductor/view-part?ref=eda">Check availability	Q1, Q2, Q3, Q4, Q5, Q6	TO92250P510H170-3	BC547B	6
10k	(MFR-25BF52-10K) 10.2 kOhm bei 1% 0.25W, 1/4W Durchbohrlochwidens tand Axial Metal Film	R1, R2, R6	RESAD1100W55L6800 260	Resistor (0.25W)	3
1k5	(MFR-25BF52-10K) 10.2 kOhm bei 1% 0.25W, 1/4W Durchbohrlochwidens tand Axial Metal Film	R3	RESAD1100W55L6800 260	Resistor (0.25W)	1
4k7	(MFR-25BF52-10K) 10.2 kOhm bei 1% 0.25W, 1/4W Durchbohrlochwidens tand Axial Metal Film	R4, R5	RESAD1100W55L6800 260	Resistor (0.25W)	2
6M2	(MFR-25BF52-10K) 10.2 kOhm bei 1% 0.25W, 1/4W Durchbohrlochwidens tand Axial Metal Film	R7, R11	RESAD1100W55L6800 260	Resistor (0.25W)	2
130k	(MFR-25BF52-10K) 10.2 kOhm bei 1% 0.25W, 1/4W Durchbohrlochwidens tand Axial Metal Film	R8	RESAD1100W55L6800 260	Resistor (0.25W)	1
100	(MFR-25BF52-10K) 10.2 kOhm bei 1% 0.25W, 1/4W Durchbohrlochwidens tand Axial Metal Film	R12	RESAD1100W55L6800 260	Resistor (0.25W)	1
220	(MFR-25BF52-10K) 10.2 kOhm bei 1% 0.25W, 1/4W Durchbohrlochwidens tand Axial Metal Film	R13, R14, R15	RESAD1100W55L6800 260	Resistor (0.25W)	3
TL2203EE	Pushbutton Switch DPDT Standard Through Hole	S1	SW_TL2203EE	Switch button	1
ATMEGA328P-PU	ATmega Series 20 MHz 32 KB Flash 2 KB SRAM 8-Bit Microcontroller - DIP-28	U1	DIP794W46P254L296J H457028B	ATMEGA328P-PU	1
LM7805		U2	TO25SP1020K450X194 B-3	LM78_	1
16MHz	CRYSTAL T/H	Y1	XTAL_FCS-160-20-4X	Crystal oscillator	1