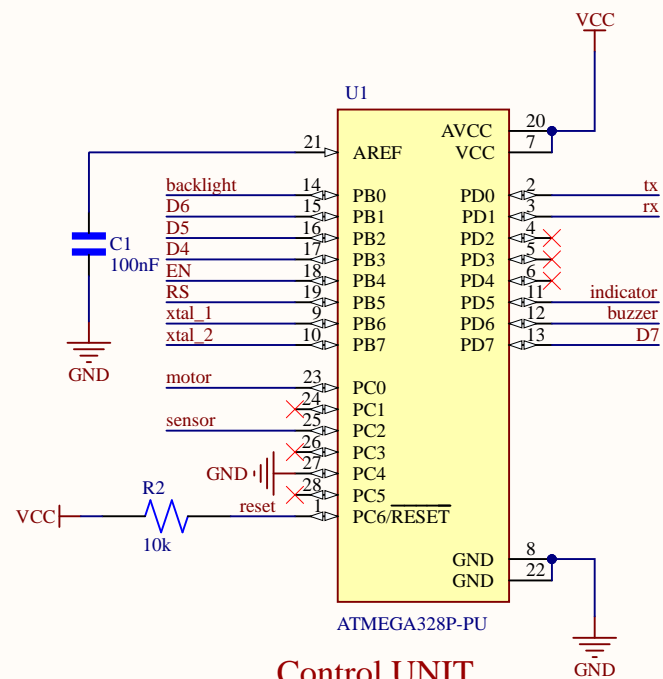
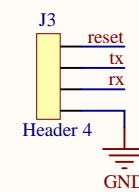


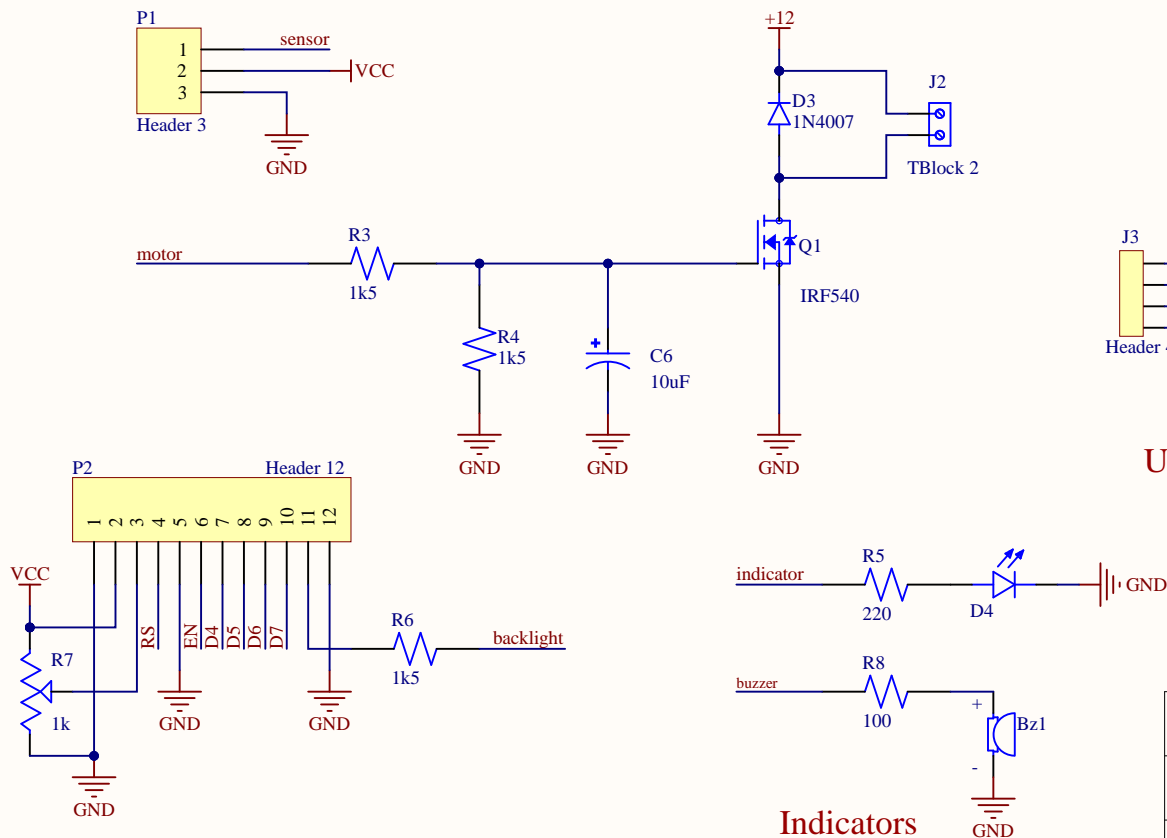
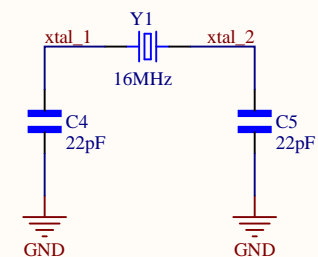
## Power supply UNIT



## Control UNIT

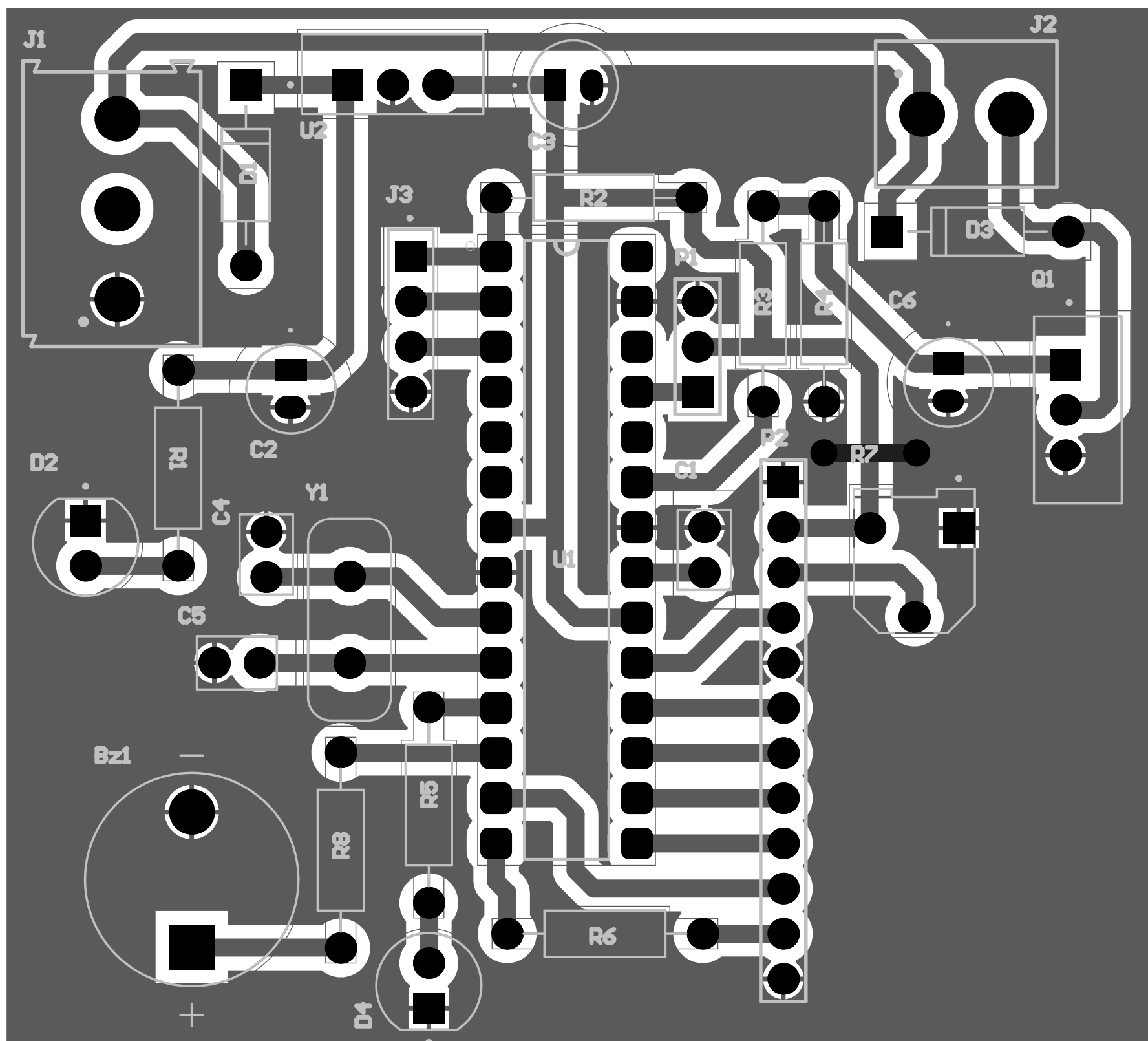


## UART



## Indicators

|           |                                |           |
|-----------|--------------------------------|-----------|
| Title     |                                |           |
| Size<br>A | Number                         | Revision  |
| Date:     | 5-12-2023                      | 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             | 2200 pF $\pm 10\%$ 250V Ceramic Capacitor X7R Radial   | C1         | CAPR8500W50L450T3 00H550    | Ceramic capacitor      | 1        |
| 100uF             | FS-A   | C2         | CAPPRD500W50D500 H1100      | Electrolytic capacitor | 1        |
| 10uF              | FS-A   | C3, C6     | CAPPRD500W50D500 H1100      | Electrolytic capacitor | 2        |
| 22pF              | 2200 pF $\pm 10\%$ 250V Ceramic Capacitor X7R Radial   | C4, C5     | CAPR8500W50L450T3 00H550    | Ceramic capacitor      | 2        |
| 1N4007            | Diode Switching 1KV 1A 2-Pin DO-41   | D1, D3     | DIOAD1060W80L520D 270       | 1N4007                 | 2        |
| L08R5000Q1        | LED, Orange, Through Hole, T-1 3/4 (5mm), 30 mA, 2.1 V, 635 nm   | D2, D4     | LEDRD254W57D500H1 070       | LED                    | 2        |
| TBlock 3          | 5.08 MM TERMINAL BLOCK   | J1         | Terminal block - 3Pins      | 3Pins Terminal block   | 1        |
| TBlock 2          | 2 Position Wire to Board Terminal Block Horizontal with Board 0.197 _5.00mm_ Through Hole                | J2         | 691111710002                | Terminal Block - 2Pins | 1        |
| Header 4          | 4 Position Header Connector Through Hole   | J3         | SULLINS_PPTC041LFB N-RC     | Female header - 4Pins  | 1        |
| Header 3          | Header, 3-Pin  | P1         | HDR1X3                      | Header 3               | 1        |
| Header 12         | Header, 12-Pin   | P2         | HDR1X12                     | Header 12              | 1        |
| IRF540            | N-Channel 100V 22A (Tc) 85W (Tc) Through Hole TO-220AB   | Q1         | TO254P1052X465X198 9-3      | IRF540                 | 1        |
| 1k                | (MFR-25F52-10K) 10,2 kOhm bei 1% 0,25W, 1/4W Durchbohrlochwidertand Axial Metal Film                     | R1         | RESAD1100W55L680D 260       | Resistor (0.25W)       | 1        |
| 10k               | (MFR-25F52-10K) 10,2 kOhm bei 1% 0,25W, 1/4W Durchbohrlochwidertand Axial Metal Film                     | R2         | RESAD1100W55L680D 260       | Resistor (0.25W)       | 1        |
| 1k5               | (MFR-25F52-10K) 10,2 kOhm bei 1% 0,25W, 1/4W Durchbohrlochwidertand Axial Metal Film                     | R3, R4, R6 | RESAD1100W55L680D 260       | Resistor (0.25W)       | 3        |
| 220               | (MFR-25F52-10K) 10,2 kOhm bei 1% 0,25W, 1/4W Durchbohrlochwidertand Axial Metal Film                     | R5         | RESAD1100W55L680D 260       | Resistor (0.25W)       | 1        |
| 1k                | (3306F-1-105) 1 MOhms 0.2W, 1/5W PC Pins Through Hole Trimmer Potentiometer Cermet 1 Turn Top Adjustment | R7         | TRIM_3306F-1-105            | Potentiometer1         | 1        |
| 100               | (MFR-25F52-10K) 10,2 kOhm bei 1% 0,25W, 1/4W Durchbohrlochwidertand Axial Metal Film                     | R8         | RESAD1100W55L680D 260       | Resistor (0.25W)       | 1        |
| ATMEGA328P-PU     | ATmega Series 20 MHz 32 KB Flash 2 KB SRAM 8-Bit Microcontroller - DIP-28                                | U1         | DIP794W46P254L2967 H457Q28B | ATMEGA328P-PU          | 1        |
| LM7805            |  | U2         | TO255P1020X450X196 8-3      | LM78__                 | 1        |
| 16MHz             | CRYSTAL T/H  | Y1         | XTAL_ECS-160-20-4X          | Crystal oscillator     | 1        |