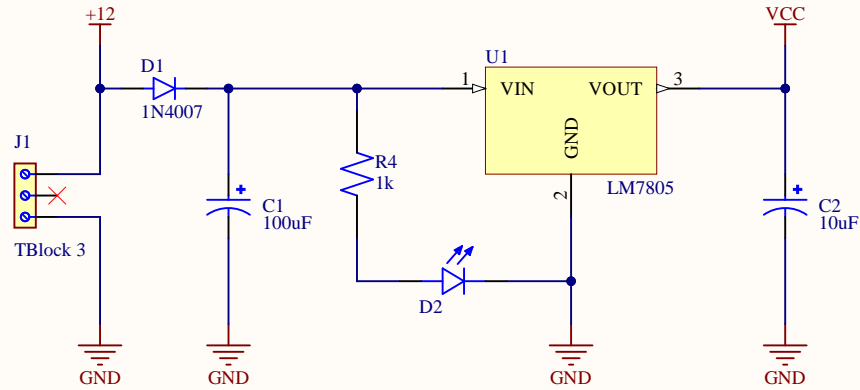
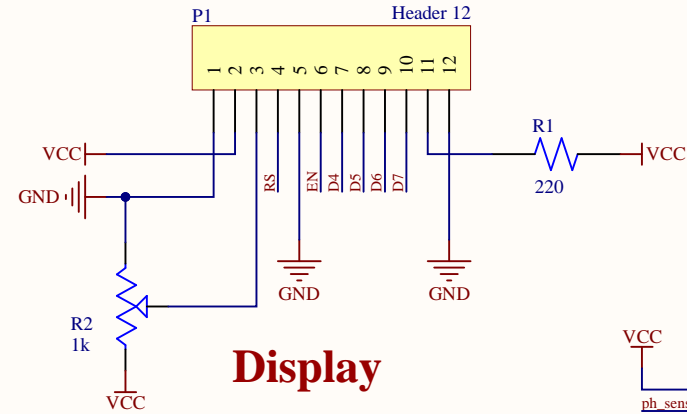


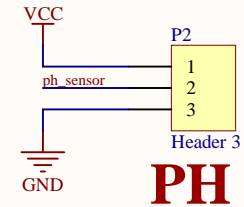
A



Power supply UNIT

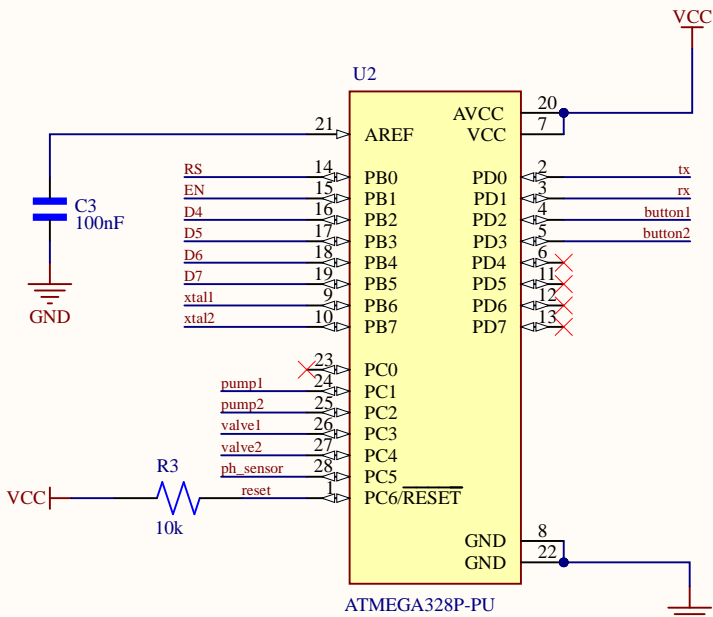


Display

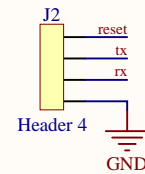


PH

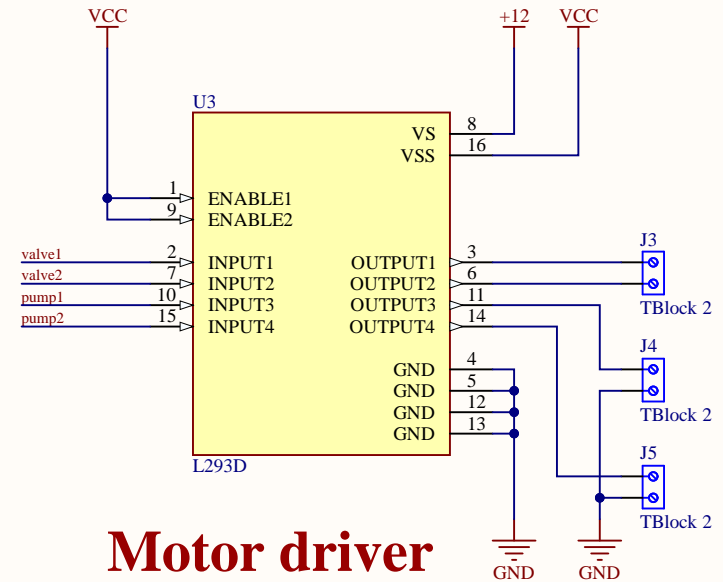
B



Control UNIT

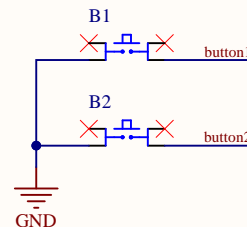
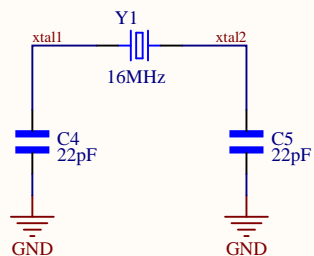


UART



Motor driver

D



Buttons

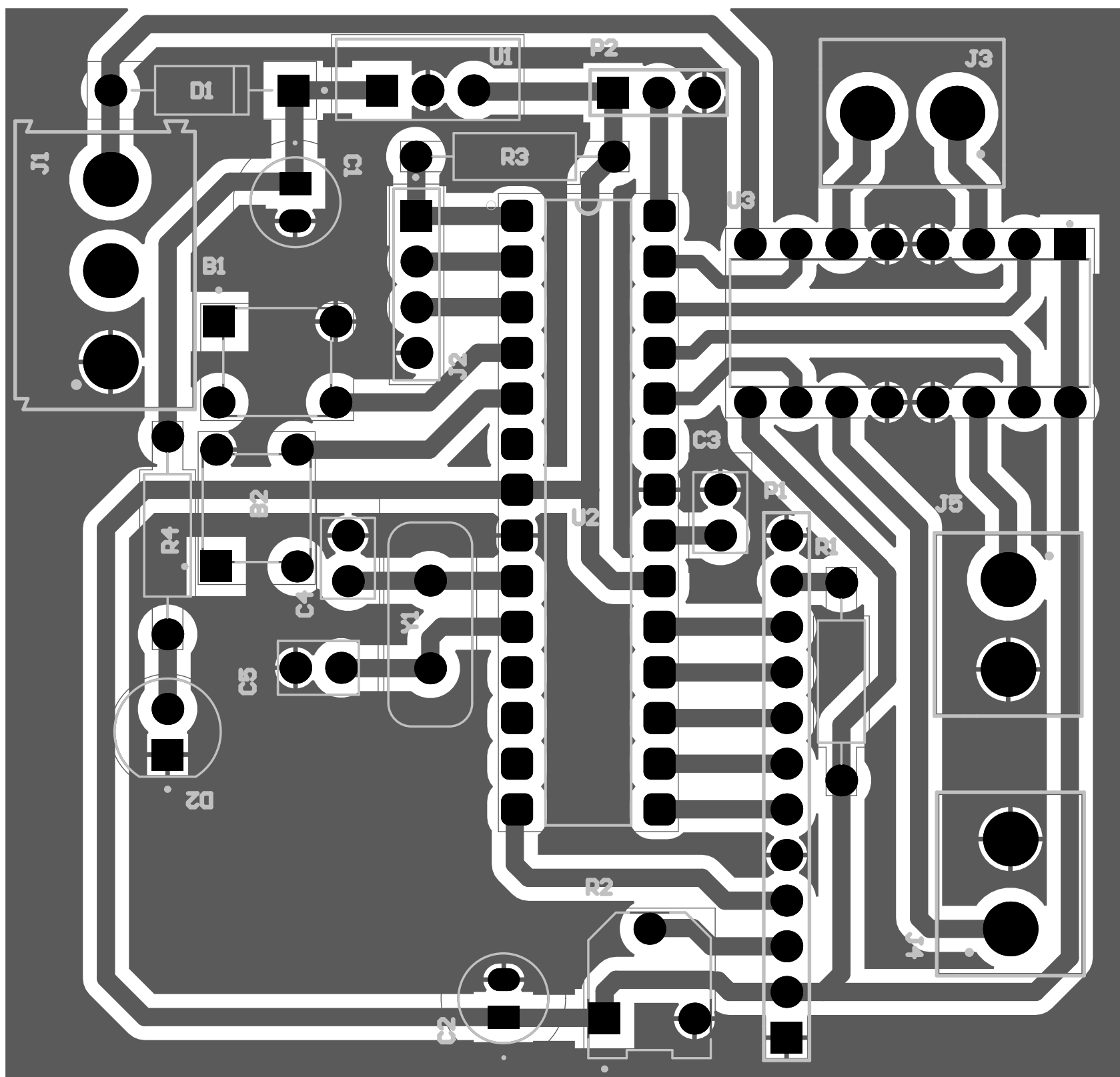
A

B

C

D

| Title | | |
|-------|--------------------------------|-----------|
| Size | Number | Revision |
| A | | |
| Date: | 5-28-2023 | Sheet of |
| File: | V:\Office\...\schematic.SchDoc | Drawn By: |



| Comment | Description | Designator | Footprint | LibRef | Quantity |
|---------------|--|------------|----------------------------|------------------------|----------|
| Push button | | B1, B2 | SW_TS02-66-95-BK-260-LCR-D | Push button | 2 |
| 100uF | FS-A | C1 | CAPPRD500W50D500H1100 | Electrolytic capacitor | 1 |
| 10uF | FS-A | C2 | CAPPRD500W50D500H1100 | Electrolytic capacitor | 1 |
| 100nF | 2200 pF Â±10% 250V Ceramic Capacitor X7R Radial | C3 | CAPRB500W50L450T300H550 | Ceramic capacitor | 1 |
| 22pF | 2200 pF Â±10% 250V Ceramic Capacitor X7R Radial | C4, C5 | CAPRB500W50L450T300H550 | Ceramic capacitor | 2 |
| 1N4007 | Diode Switching 1KV 1A 2-Pin DO-41 | D1 | DIOAD1060W80L520D270 | 1N4007 | 1 |
| L08R5000Q1 | LED, Orange, Through Hole, T-1 3/4 (5mm), 30 mA, 2.1 V, 635 nm | D2 | LEDRD254W57D500H1070 | LED | 1 |
| TBlock 3 | 5.08 MM TERMINAL BLOCK; | J1 | Terminal block - 3Pins | 3Pins Terminal block | 1 |
| Header 4 | 4 Position Header Connector Through Hole | J2 | SULLINS_PPTC041LFB N-RC | Female header - 4Pins | 1 |
| TBlock 2 | 2 Position Wire to Board Terminal Block Horizontal with Board 0.197 _5.00mm_ Through Hole | J3, J4, J5 | 691111710002 | Terminal Block - 2Pins | 3 |
| Header 12 | Header, 12-Pin | P1 | HDR1X12 | Header 12 | 1 |
| Header 3 | Header, 3-Pin | P2 | HDR1X3 | Header 3 | 1 |
| 220 | (MFR-25FBF52-10K) 10,2 kOhm bei 1% 0,25W, 1/4W Durchbohrlochwidertand Axial Metal Film | R1 | RESAD1100W55L680D260 | 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 | R2 | TRIM_3306F-1-105 | Potentiometer1 | 1 |
| 10k | (MFR-25FBF52-10K) 10,2 kOhm bei 1% 0,25W, 1/4W Durchbohrlochwidertand Axial Metal Film | R3 | RESAD1100W55L680D260 | Resistor (0.25W) | 1 |
| 1k | (MFR-25FBF52-10K) 10,2 kOhm bei 1% 0,25W, 1/4W Durchbohrlochwidertand Axial Metal Film | R4 | RESAD1100W55L680D260 | Resistor (0.25W) | 1 |
| LM7805 | | U1 | TO255P1020X450X1968-3 | LM78__ | 1 |
| ATMEGA328P-PU | ATmega Series 20 MHz 32 KB Flash 2 KB SRAM 8-Bit Microcontroller - DIP-28 | U2 | DIP794W46P254L2967H457Q28B | ATMEGA328P-PU | 1 |
| L293D | 4-Channel Motor Driver 24V 16-Pin Power PDIP Tube | U3 | DIP880W50P254L2000H510Q16 | L293D | 1 |
| 16MHz | CRYSTAL T/H | Y1 | XTAL_ECS-160-20-4X | Crystal oscillator | 1 |