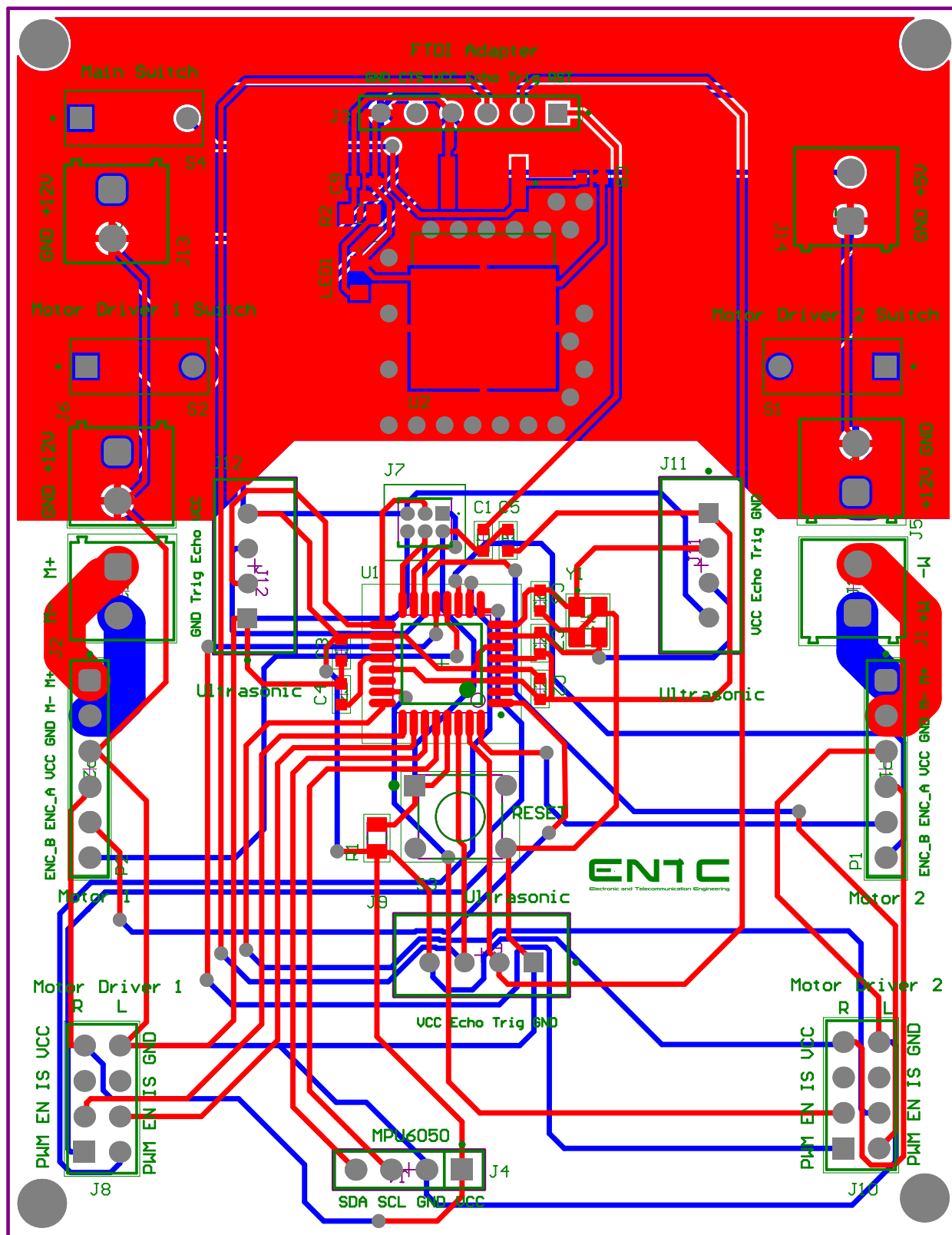


| | | |
|--------------------------------|-----------|----------|
| Title Main PCB | | |
| Size A4 | Number | Revision |
| Date: 7/20/2024 | Sheet of | |
| File: C:\Users\...\Main.SchDoc | Drawn By: | |



| Comment | Description | Designator | Footprint | LibRef | Quantity |
|--------------------|--|--------------------------|-------------------------------------|-----------------------|----------|
| 100nF | WCAP-CSSTMultilayer Ceramic Chip Capacitor, Soft Termination, size 0603, X7R Class II, 100nF, 50VDC | C1, C4, C5, C8, C9 | WCAP-CSST_0603_L1.6W0.8 H0.8_Reflow | 885382206004 | 5 |
| 10nF | WCAP-CSSTMultilayer Ceramic Chip Capacitor, Soft Termination, size 0603, X7R Class II, 10nF, 50VDC | C2, C3 | WCAP-CSST_0603_L1.6W0.8 H0.8_Reflow | 885382206002 | 2 |
| 22pF | WCAP-CSGP Multilayer Ceramic Chip Capacitor, General Purpose, size 0603, NP0, 22pF, 10VDC | C6, C7 | WCAP-CSGP_0603_L1.6W0.8 H0.8_Reflow | 885012006004 | 2 |
| 691214110002 | | J1, J2, J5, J6, J13, J14 | 691214110002 | CMP-1502-02464-2 | 6 |
| ESQ-106-59-G-S | | J3 | SAMTEC_ESQ-106-59-G-S | ESQ-106-59-G-S | 1 |
| MPU6050 | M20-9990445 Conn Unshrouded Header HDR4 POS2.54mm Solder STThru-Hole Bulk/Loose | J4 | FP-M20-9990445-MFG | CMP-00671-05399696-1 | 1 |
| 20021111-00006T4LF | Connector | J7 | 2002111100006T4LF | 20021111-00006T4LF | 1 |
| Motor Driver 1 | SQ Post Socket, Through-hole, Vertical, -55 to 125 degC, 2.54mm Pitch, 8-Pin, Female, RoHS | J8 | SMTC-SSW-104-02-X-D | CMP-1023-00343-1 | 1 |
| Ultrasonic 1 | CONN HEADER VERT 4POS2.5MM | J9 | FP-B4B-XH-A_LF_SN-MFG | CMP-17439-000250-1 | 1 |
| Motor Driver 2 | SQ Post Socket, Through-hole, Vertical, -55 to 125 degC, 2.54mm Pitch, 8-Pin, Female, RoHS | J10 | SMTC-SSW-104-02-X-D | CMP-1023-00343-1 | 1 |
| Ultrasonic 2 | CONN HEADER VERT 4POS2.5MM | J11 | FP-B4B-XH-A_LF_SN-MFG | CMP-17439-000250-1 | 1 |
| Ultrasonic 3 | CONN HEADER VERT 4POS2.5MM | J12 | FP-B4B-XH-A_LF_SN-MFG | CMP-17439-000250-1 | 1 |
| 150080SS75000 | LED | LED1 | 150080SS75000 | 150080SS75000 | 1 |
| Motor 1 | | P1 | 61300611121 | CMP-1502-01070-3 | 1 |
| Motor 2 | | P2 | 61300611121 | CMP-1502-01070-3 | 1 |
| RMCF0805FG10K0 | | R1, R2 | RESC2012X65N | RMCF0805FG10K0 | 2 |
| DS01-254-L-01BE | 1 Position, Through Hole, 2.54 mm Pitch, Raised Slide Actuator, Flat Bottom, Long Pin, DIP Switch | S1, S2, S4 | SW_DS01-254-L-01BE | DS01-254-L-01BE | 3 |
| FSM8JH | Tactile Switch SPST-NO Top Actuated Through Hole | S3 | SW_FSM8JH | FSM8JH | 1 |
| ATmega328P-AU | 8-bit AVR Microcontroller, 32KB Flash, 1KB EEPROM, 2KB SRAM, 32-pin TQFP, Industrial Grade (-40°C to 85°C) | U1 | 32A_M | CMP-0095-00269-2 | 1 |
| 7805CD2T | Linear Voltage Regulator IC Positive Fixed 1 Output 1.5A D2PAK | U2 | TO254P1542X460-3N | 7805CD2T | 1 |
| 830072604 | 830072604 WE-XTAL Quartz Crystal | Y1 | WE-XTAL_CFPX-180 | CMP-03913-116876517-1 | 1 |