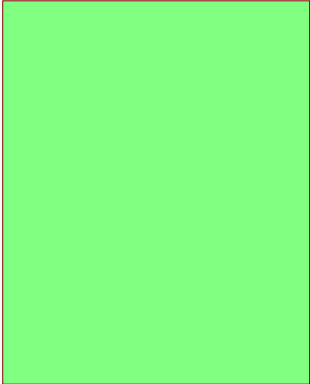
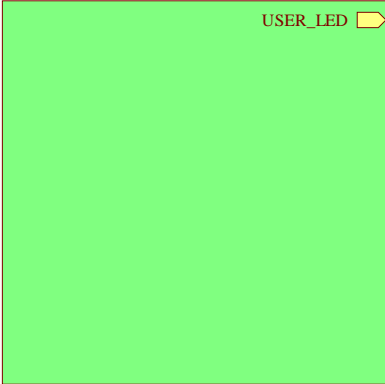


U_Power
Power.SchDoc



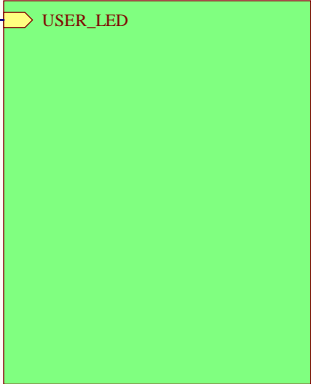
U_STM32WB55
STM32WB55.SchDoc



USER_LED



U_IO
IO.SchDoc

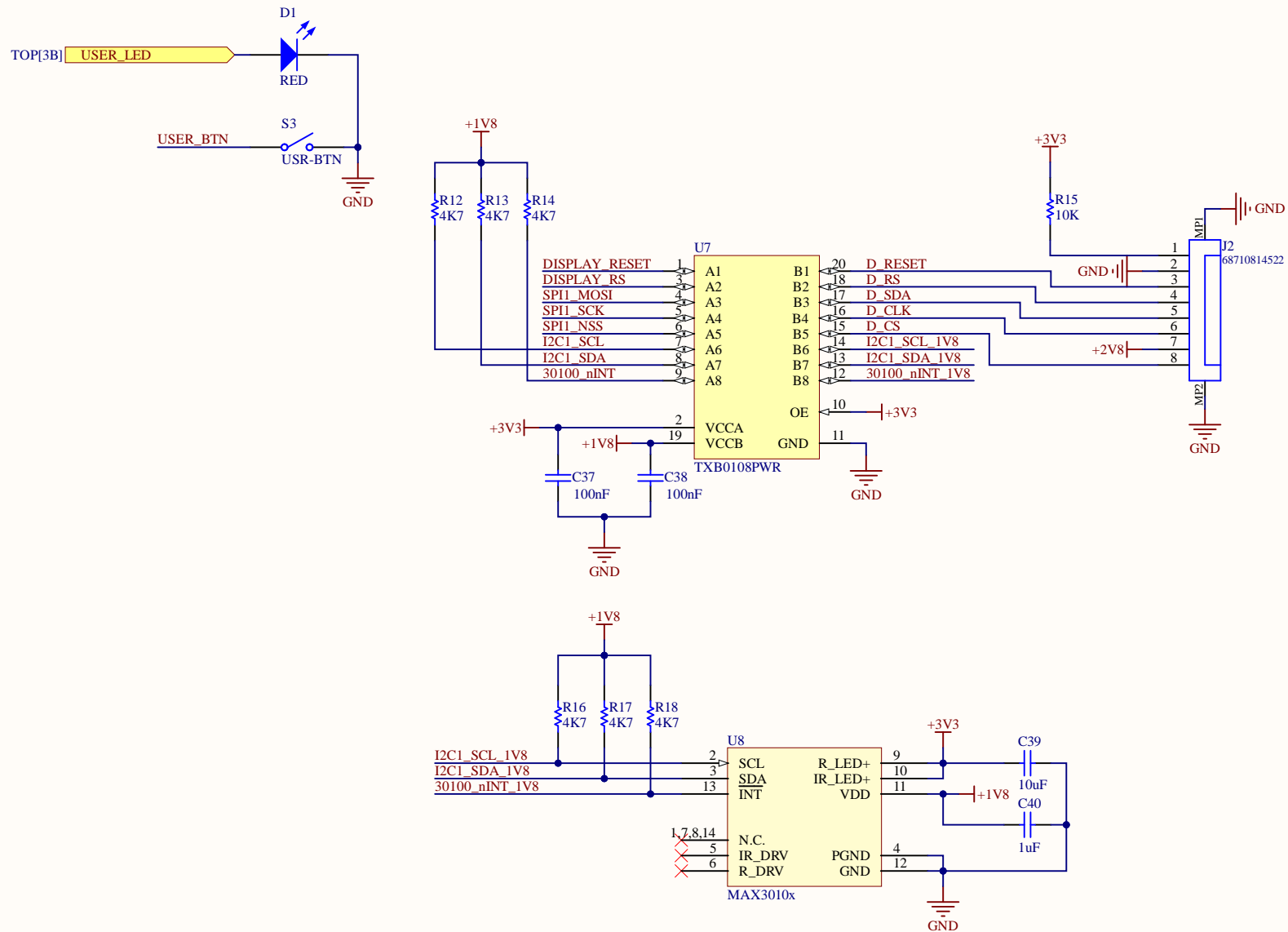


USER_LED

| | | |
|--|------------------|---------------------|
| Title HB+SPO2 / Top | | |
| Size: A4 | Number: 1 | Revision: 1b |
| Date: 4/21/2021 | Time: 8:06:27 PM | Sheet 1 of 4 |
| File: C:\Users\Public\Documents\Altium\Projects\PE2\TOP.SchDoc | | |







Title **HB+SPO2 / IO**

Size: **A4**

Number: **4**

Revision: **1a**

Date: **4/21/2021**

Time: **8:06:27 PM**

Sheet **4** of **4**

File: **C:\Users\Public\Documents\Altium\Projects\PE2\IO.SchDoc**

ShareFox



| Comment | Description | Designator | Footprint | LibRef | Quantity |
|------------------------|--|---|--------------------------------|------------------------|----------|
| Meander Antenna 2.4GHz | PCB TRACE DONT TRY TO LOOK FOR PARTS | ANT1 | Meander2.4G | Meander Antenna 2.4GHz | 1 |
| 4.7uF | Capactor | C1, C34, C36 | C_1206 | Cap | 3 |
| 100nF | Capactor | C2, C5, C8, C11, C14, C15, C18, C25, C26, C27, C28, C29, C30, C31, C33, C35, C37, C38 | C_0603 | Cap | 18 |
| 10uF | Capactor | C3, C4, C39 | C_0805 | Cap | 3 |
| 1uF | Capactor | C6, C7, C9, C12, C13, C16, C17, C40 | C_0603 | Cap | 8 |
| 150nF | Capactor | C10 | C_0603 | Cap | 1 |
| 0.8pF | Capactor | C19 | C_0603 | Cap | 1 |
| 0.3pF | Capactor | C20 | C_0603 | Cap | 1 |
| Not Fitted | Capactor | C21 | C_0603 | Cap | 1 |
| 1.2pF | Capactor | C22 | C_0603 | Cap | 1 |
| 20pF | Capactor | C23, C24 | C_0603 | Cap | 2 |
| 100pF | Capactor | C32 | C_0603 | Cap | 1 |
| RED | Typical RED, GREEN, YELLOW, AMBER GaAs LED | D1, D7 | D-0603 | LED2 | 4 |
| LF8182G45BG4D268 | Ultra-small, low-profiled, lightweight band-pass filters. | FLT1 | LF8182G45BG4D268 | LF8182G45BG4D268 | 1 |
| MicroUSB | Micro USB B Type Receptade, 1.8A, -55 to 85 degC, 5-Pin SMD, RoHS, Tape and Reel | J1 | FCI-10118194-0001LF-5_V | CMP-2000-05120-1 | 1 |
| 68710814522 | SMT ZIF Connectors WR-FPC, Horizontal, Bottom Contact, pitch 0.5 mm, 8 pins | J2 | 68710814522 | CMP-1502-01528-1 | 1 |
| 2.2uH | Inductor | L1 | L-1008 | Inductor | 1 |
| 2.7nH | Inductor | L2 | L-0603 | Inductor | 1 |
| 3.6nH | Inductor | L3 | L-0603 | Inductor | 1 |
| 10uH | Inductor | L4 | L-0603 | Inductor | 1 |
| JST-PH | Male Header, Pitch 2 mm, 1 x 2 Position, Height 5.5 mm, -25 to 85 degC, RoHS, Tape and Reel | P1 | JST- S2B-PH-SM4-TB(LF)(SN)-2_V | CMP-1755-00001-1 | 1 |
| PWR | Header, 2-Pin | P2, P9 | MHDR1X2 | MHDR1X2 | 2 |
| UART | Header, 2-Pin | P3, P6 | MHDR1X2 | MHDR1X2 | 2 |
| BAT | Header, 3-Pin | P4, P7 | MHDR1X3 | MHDR1X3 | 2 |
| Programmer | Header, 5-Pin | P5 | HDR1X5 | MHDR1X5 | 1 |
| MHDR1X9 | Header, 9-Pin | P8, P10 | MHDR1X9 | MHDR1X9 | 2 |
| 10K | Resistor | R1, R2, R3, R6, R7, R8, R9, R10, R11, R15, R7 | C_0603 | Res1 | 12 |
| 1K2 | Resistor | R4 | C_0603 | Res1 | 1 |
| 3K | Resistor | R5 | C_0603 | Res1 | 1 |
| 4K7 | Resistor | R12, R13, R14, R16, R17, R18 | C_0603 | Res1 | 6 |
| NTC | 2322-640-63103 | RT1 | HDR1X2 | NTC/PTC | 1 |
| NRESET | Single-Pole, Single-Throw Switch | S1 | B3U-1000P-B | SW-SPST | 1 |
| BOOT | Single-Pole, Single-Throw Switch | S2 | B3U-1000P-B | SW-SPST | 1 |
| USR-BTN | Single-Pole, Single-Throw Switch | S3 | HDR1X2 | SW-SPST | 1 |
| MAX8903A | 2A 1-Cell Li+ DC-DC Chargers for USB and Adapter Power | U1 | QFN28P40S400X400E P260x260 | MAX8903A | 1 |
| USBLC6-2 | Very low capacitance ESD protection | U2 | SOT23-6P95R280X90 | USBLC6-2 | 1 |
| LD39050PU33R | 500mA low quiescent current and low noise voltage regulator | U3 | SON6P95S300X300EP 237x149 | LD39050PUxxR | 1 |
| MIC5502-1.8VMT | Single 300mA LDO | U4 | DFN4P65S100x100EP4 8x48 | MIC550x-x.xVMT | 1 |
| MIC5502-2.8VMT | Single 300mA LDO | U5 | DFN4P65S100x100EP4 8x48 | MIC550x-x.xVMT | 1 |
| STM32WB55Cx | Multiprotocol wireless 32-bit MCU Arm®-based Cortex®-M4 with FPU, Bluetooth® 5 and 802.15.4 radio solution | U6 | QFN48P50S700x700E P560x560 | STM32WB55Cx | 1 |
| TXB0108PWR | TXB0108 8-Bit Bidirectional Voltage-Level Translator with Auto-Direction Sensing and +/- 15-kV ESD Protection, 1.2 to 3.6 V, -40 to 85 degC, 20-Pin TSSOP (PW), Green (RoHS & no Sb/Br), Tape and Reel | U7 | PW0020A_L | CMP-2000-07337-1 | 1 |
| MAX3010x | Pulse Oximeter and Heart-Rate Sensor IC for Wearable Health | U8 | OESIP14R560x330 | MAX3010x | 1 |
| 32.768KHz | | Y1 | ECX-31B | XTAL 3215 | 1 |
| 32MHz | | Y2 | Y_3225 | XTAL 3225 2_4GND | 1 |