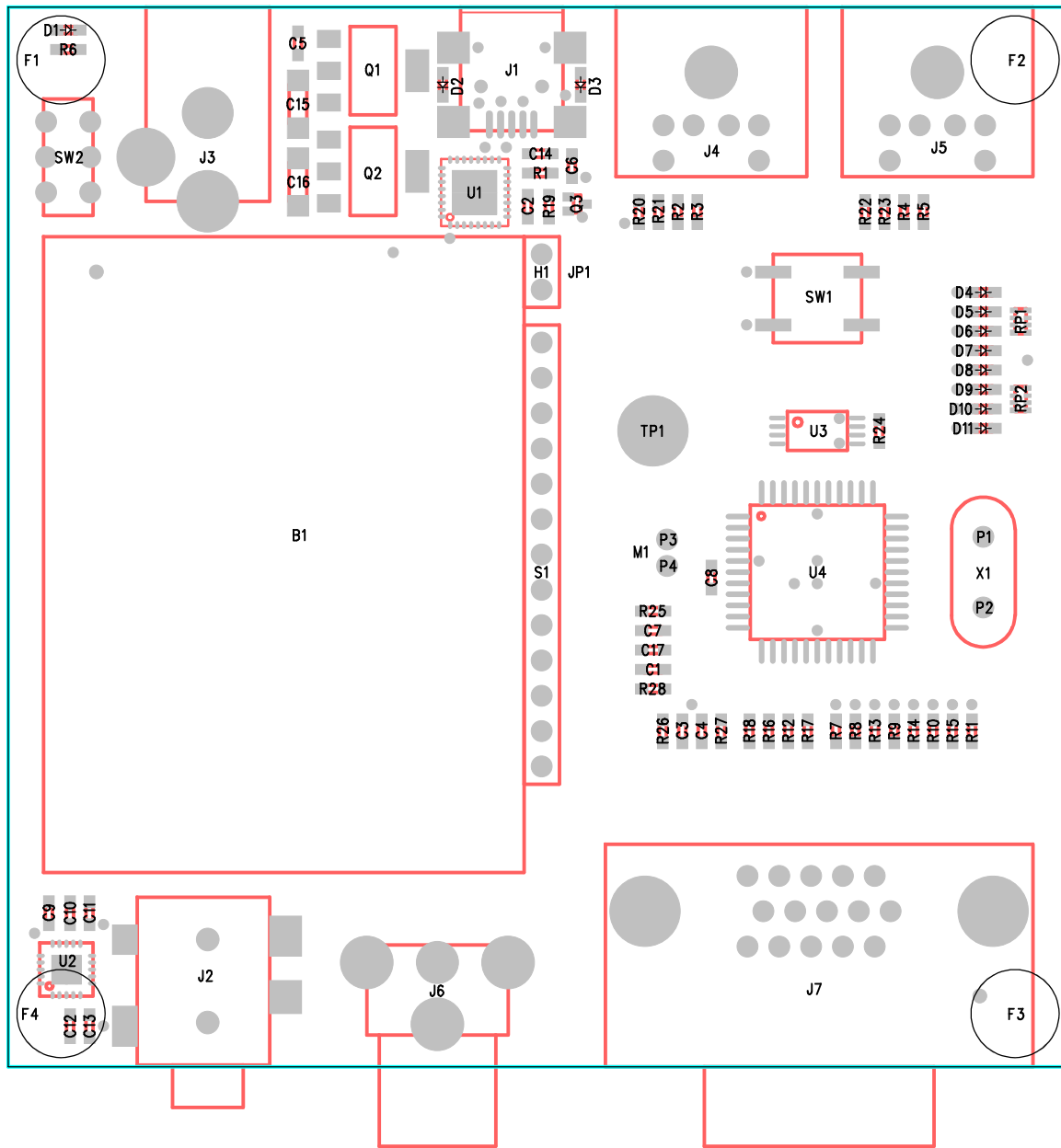


Propeller Demo, Rev F



SMT parts

Q1 = VREG SOT223, (LM2937IMP-5.0)
 Q2 = VREG SOT223, (LM2937IMP-3.3)
 Q3 = XSTR SS-MINI NPN, (2SD2216JOL)
 U1 = IC, QFN32, FTDI (FT232RQ)
 U2 = IC, QFN20, HEADPHONE AMP (MAX4411ETP)
 U3 = IC, SSOP8, (24LC256-I/ST)
 U4 = IC, LQFP44, PARALLAX (P8X32A-Q44)
 D1 = LED, 0603 green clear (Parallax 350-10003)
 D2 = LED, 0603 blue clear (Parallax 350-10004)
 D3 = LED, 0603 red clear (Parallax 350-10001)
 D4-D11 = LED, 0603 yellow clear (Parallax 350-10002)
 C1, C17 = Cap, 0603 1nF, 50V, type C0G
 C2-C4 = Cap, 0603 10nF, 50V, type X7R
 C5-C7 = Cap, 0603 100nF, 25V, type X7R
 C8-C13 = Cap, 0603 1uF, 16V, type X7R
 C14 = Cap, 0603 4.7uF, 6.3V, type X5R
 C15-C16 = Cap, 1206 10uF, 10V, type X7R
 R1-R5 = Res, 0603 100 ohm
 R6-R11 = Res, 0603 240 ohm
 R12 = Res, 0603 270 ohm
 R13-R15 = Res, 0603 470 ohm
 R16-R17 = Res, 0603 560 ohm
 R18 = Res, 0603 1.1k
 R19-R27 = Res, 0603 10k
 R28 = Res, 0603 100k
 RP1-RP2 = RES MNR04 NTWK, 4 x 240
 J1 = USB mini-b jack (Parallax 452-10006)
 (SMP U003-0510-104-Z)
 J2 = CONN, STEREO JACK 3.5mm (CUI SJ1-3514-SMT)
 SW1 = SWITCH SMT, TACTILE 3.5mm (KSC221J),
 (CLR BUTTON)

Through-hole parts

J3 = POWER JACK 2mm (MOUSER 806-KLDX-0202-A)
 J4-J5 = CONN, MINI DIN 6 R/A (SINGATRON 2MJ-0004A110)
 Use either both black or purple for J4 and green for J5.
 J6 = CONN, RCA YELLOW R/A (CUI RCJ-014)
 J7 = CONN, DB15 VGA (NORCOMP 181-015-212-171)
 H1 = CONN, SINGLE ROW 2-PIN HEADER
 S1 = CONN, SINGLE ROW 13-PIN SOCKET
 TP1 = CONN, TESTPOINT (KEYSTONE 1503-2)
 P1-P4 = CONN, PIN RECEPTACLE, (DIGIKEY ED90095-ND),
 (MILL-MAX 0552-1-15-15-11-27-10-0)
 SW2 = SWITCH, DPDT (E-SWITCH EG1271(A))

Miscellaneous

M1 = MICROPHONE, ELECTRET 6.0 X 2.7mm (Kobitone EM2208P)
 X1 = CRYSTAL, HC-49US, 5.0 MHz (ECS-50-20-4)
 JP1 = JUMPER, 2 PIN, .100"
 B1 = BREAD BOARD (K & H GL-2A(N) (Parallax 700-00012)
 F1-F4 = 1/4" FEET (BUMPER SPECIALTIES BS25)

ASSEMBLY INSTRUCTIONS

- 1) Solder SMT parts
- 2) Solder through-hole parts
- 3) Use flush cutters to cut tabs protruding from btm,
Do not cut P1-P4.
- 4) Clean
- 5) Plug in M1, X1, and JP1 and apply B1 and F1-F4