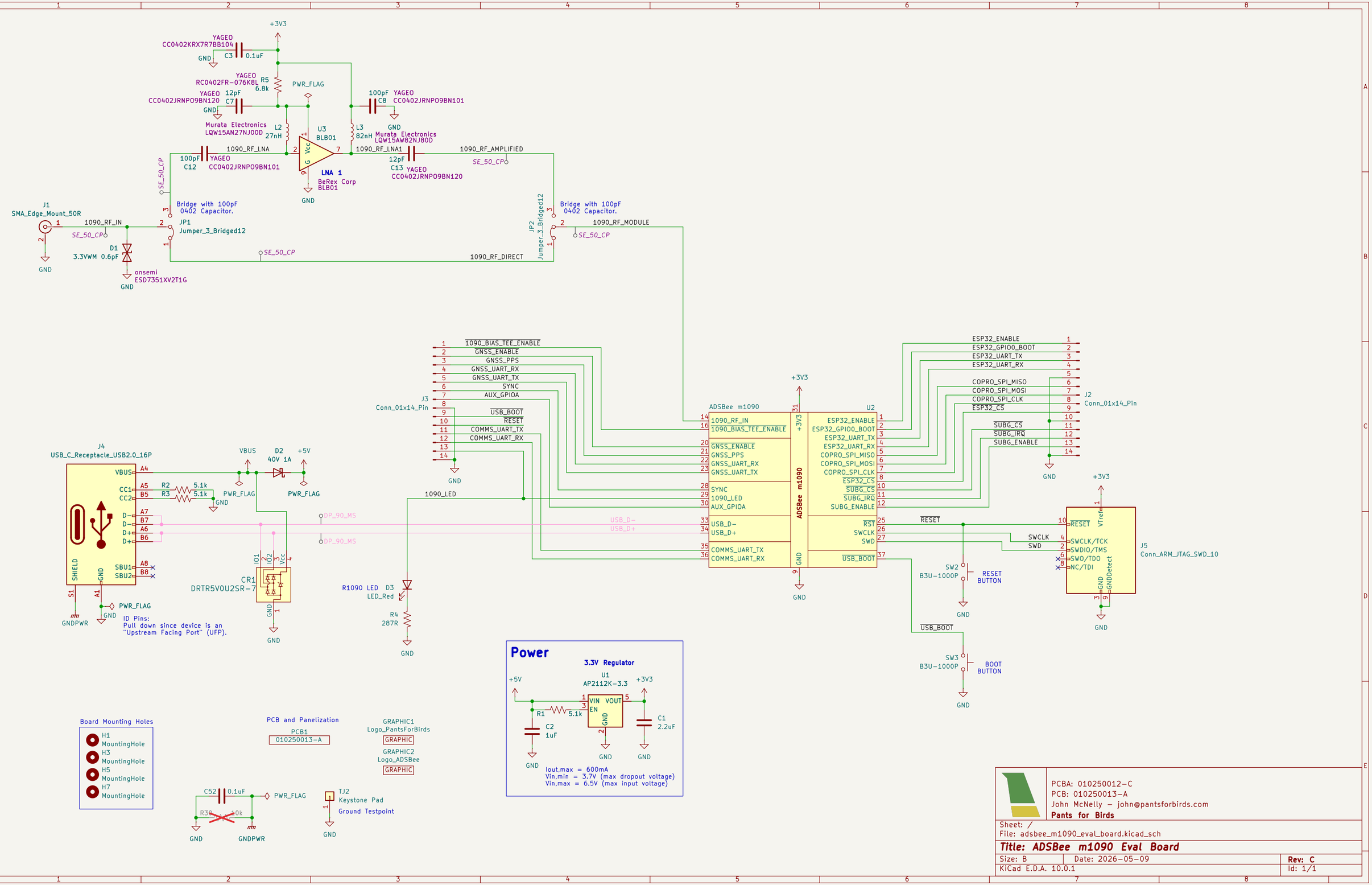
+3V3
YAGEO
CC0402KRX7R7BB104
C3 0.1uF
GND
YAGEO
RC0402FR-076K8L R5
6.8k
PWR_FLAG
YAGEO 12pF
CC0402JRNPO9BN120 C7
100pF YAGEO
C8 CC0402JRNPO9BN101
Murata Electronics
LQW15AN27NJ00D L2
27nH
U3
BLB01
L3
82nH Murata Electronics
LQW15AW82NJ80D
1090_RF_LNA
1090_RF_LNA1
1090_RF_AMPLIFIED
100pF
C12 YAGEO
CC0402JRNPO9BN101
12pF
C13 YAGEO
CC0402JRNPO9BN120
SE_50_CP
LNA 1
BeRex Corp
BLB01
J1
SMA_Edge_Mount_50R
1090_RF_IN
JP1
Jumper_3_Bridged12
Bridge with 100pF
0402 Capacitor.
D1
3.3VWM 0.6pF
onsemi
ESD7351XV2T1G
JP2
Jumper_3_Bridged12
1090_RF_MODULE
1090_RF_DIRECT
J3
Conn_01x14_Pin
1090_BIAS_TEE_ENABLE
GNSS_ENABLE
GNSS_PPS
GNSS_UART_RX
GNSS_UART_TX
SYNC
AUX_GPIOA
USB_BOOT
RESET
COMMS_UART_TX
COMMS_UART_RX
1090_LED
ADSBee m1090
U2
ESP32_ENABLE
ESP32_GPIO0_BOOT
ESP32_UART_TX
ESP32_UART_RX
COPRO_SPI_MISO
COPRO_SPI_MOSI
COPRO_SPI_CLK
ESP32_CS
SUBG_CS
SUBG_IRQ
SUBG_ENABLE
USB_D-
USB_D+
J2
Conn_01x14_Pin
J4
USB_C_Receptacle_USB2.0_16P
VBUS
D2
40V 1A
+5V
R2 5.1k
R3 5.1k
CC1
CC2
D-
D+
SBU1
SBU2
SHIELD
GNDPWR
ID Pins:
Pull down since device is an
"Upstream Facing Port" (UFP).
DP_90_MS
CR1
DRTR5V0U2SR-7
R1090 LED D3
LED_Red
R4
287R
RESET
SWCLK
SWD
USB_BOOT
SW2
B3U-1000P
RESET
BUTTON
SW3
BOOT
BUTTON
J5
Conn_ARM_JTAG_SWD_10
VTref
SWCLK/TCK
SWDIO/TMS
SWO/TDO
NC/TDI
GNDDetect
Power
3.3V Regulator
U1
AP2112K-3.3
VIN
VOUT
EN
R1 5.1k
C2 1uF
C1 2.2uF
Iout,max = 600mA
Vin,min = 3.7V (max dropout voltage)
Vin,max = 6.5V (max input voltage)
Board Mounting Holes
H1 MountingHole
H3 MountingHole
H5 MountingHole
H7 MountingHole
PCB and Panelization
PCB1
010250013-A
GRAPHIC1
Logo_PantsForBirds
GRAPHIC
GRAPHIC2
Logo_ADSBee
GRAPHIC
C52 0.1uF
R30 0k
TJ2
Keystone Pad
Ground Testpoint
PCBA: 010250012-C
PCB: 010250013-A
John McNelly – john@pantsforbirds.com
Pants for Birds
Sheet: /
File: adsbee_m1090_eval_board.kicad_sch
Title: ADSBee m1090 Eval Board
Size: B
Date: 2026-05-09
Rev: C
KiCad E.D.A. 10.0.1
Id: 1/1