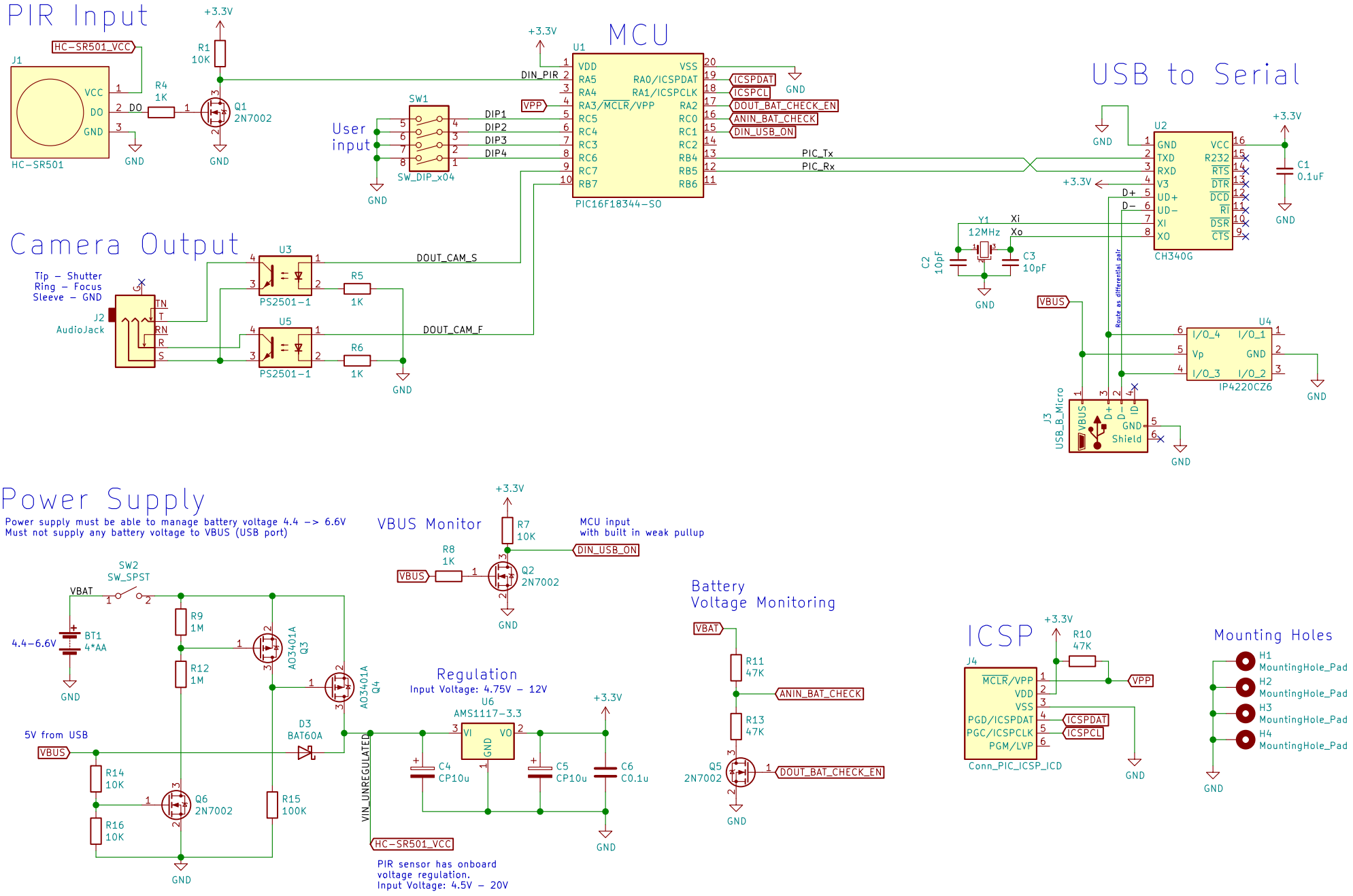
PIR Input
HC-SR501_VCC
J1
VCC
DO
GND
HC-SR501
R4
1K
DO
R1
10K
+3.3V
Q1
2N7002
GND
MCU
U1
VDD
VSS
RA5
RA0/ICSPDAT
RA4
RA1/ICSPCLK
RA3/MCLR/VPP
RA2
RC5
RC0
RC4
RC1
RC3
RC2
RC6
RB4
RC7
RB5
RB7
RB6
PIC16F18344-SO
DIN_PIR
VPP
ICSPDAT
ICSPCL
DOUT_BAT_CHECK_EN
ANIN_BAT_CHECK
DIN_USB_ON
SW1
SW_DIP_x04
User input
DIP1
DIP2
DIP3
DIP4
PIC_Tx
PIC_Rx
USB to Serial
U2
GND
TXD
RXD
V3
UD+
UD-
XI
XO
VCC
R232
RTS
DTR
DCD
RI
DSR
CTS
CH340G
C1
0.1uF
Y1
12MHz
Xi
Xo
C2
10pF
C3
10pF
D+
D-
Route as differential pair
VBUS
U4
I/O_4
I/O_1
Vp
GND
I/O_3
I/O_2
IP4220CZ6
J3
USB_B_Micro
ID
Shield
Camera Output
Tip – Shutter
Ring – Focus
Sleeve – GND
J2
AudioJack
TN
T
RN
R
S
U3
U5
PS2501-1
R5
1K
R6
1K
DOUT_CAM_S
DOUT_CAM_F
Power Supply
Power supply must be able to manage battery voltage 4.4 -> 6.6V
Must not supply any battery voltage to VBUS (USB port)
SW2
SW_SPST
VBAT
4.4-6.6V
BT1
4*AA
R9
1M
R12
1M
Q3
AO3401A
Q4
AO3401A
5V from USB
D3
BAT60A
R14
10K
R16
10K
Q6
2N7002
R15
100K
VIN_UNREGULATED
VBUS Monitor
R7
10K
R8
1K
Q2
2N7002
MCU input
with built in weak pullup
Regulation
Input Voltage: 4.75V – 12V
U6
AMS1117-3.3
VI
VO
GND
C4
CP10u
C5
CP10u
C6
C0.1u
HC-SR501_VCC
PIR sensor has onboard
voltage regulation.
Input Voltage: 4.5V – 20V
Battery
Voltage Monitoring
R11
47K
R13
47K
Q5
2N7002
ANIN_BAT_CHECK
DOUT_BAT_CHECK_EN
ICSP
J4
MCLR/VPP
VDD
VSS
PGD/ICSPDAT
PGC/ICSPCLK
PGM/LVP
Conn_PIC_ICSP_ICD
R10
47K
Mounting Holes
H1
H2
H3
H4
MountingHole_Pad