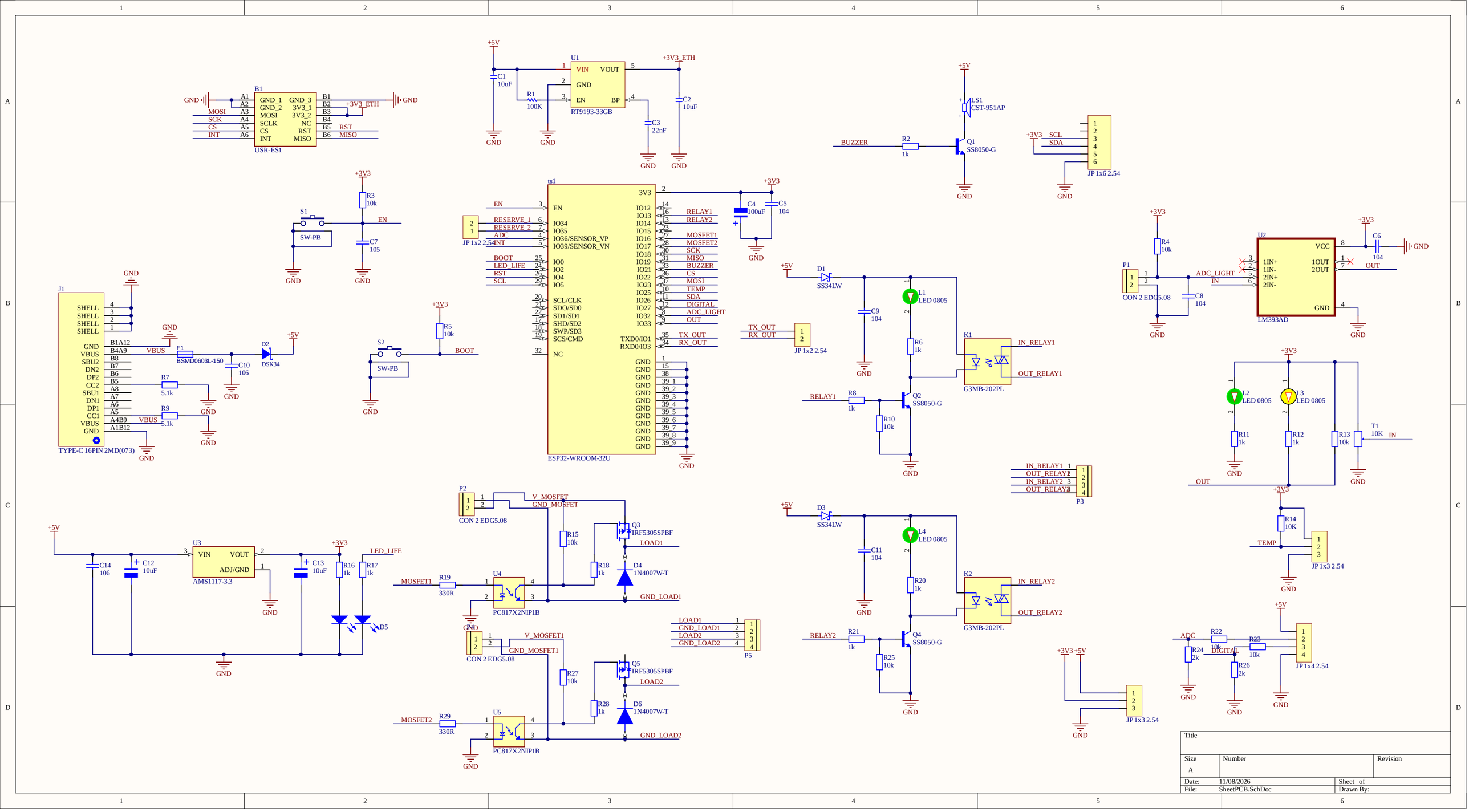

B1
USR-ES1
GND_1
GND_2
MOSI
SCLK
CS
INT
GND_3
3V3_1
3V3_2
NC
RST
MISO
+3V3_ETH
RST
MISO
U1
RT9193-33GB
VIN
GND
EN
VOUT
BP
+5V
+3V3_ETH
C1
10uF
R1
100K
C2
10uF
C3
22nF
BUZZER
R2
1k
LS1
CST-951AP
Q1
SS8050-G
+3V3
SCL
SDA
JP 1x6 2.54
S1
SW-PB
R3
10k
C7
105
EN
ts1
ESP32-WROOM-32U
3V3
EN
IO12
IO13
IO14
IO15
IO16
IO17
IO18
IO19
IO21
IO22
IO23
IO25
IO26
IO27
IO32
IO33
TXD0/IO1
RXD0/IO3
IO34
IO35
IO36/SENSOR_VP
IO39/SENSOR_VN
IO0
IO2
IO4
IO5
SCL/CLK
SDO/SD0
SD1/SD1
SHD/SD2
SWP/SD3
SCS/CMD
NC
RESERVE_1
RESERVE_2
ADC
INT
BOOT
LED_LIFE
RST
SCL
RELAY1
RELAY2
MOSFET1
MOSFET2
SCK
MISO
BUZZER
CS
MOSI
SDA
TEMP
DIGITAL
ADC_LIGHT
OUT
TX_OUT
RX_OUT
JP 1x2 2.54
C4
100uF
C5
104
J1
TYPE-C 16PIN 2MD(073)
SHELL
GND
VBUS
SBU2
DN2
DP2
CC2
SBU1
DN1
DP1
CC1
B1A12
B4A9
B8
B7
B6
B5
A8
A7
A6
A5
A4B9
A1B12
F1
BSMD0603L-150
D2
DSK34
C10
106
R7
5.1k
R9
5.1k
S2
SW-PB
R5
10k
BOOT
D1
SS34LW
C9
104
L1
LED 0805
R6
1k
K1
G3MB-202PL
IN_RELAY1
OUT_RELAY1
R8
1k
Q2
SS8050-G
R10
10k
P1
CON 2 EDG5.08
R4
10k
C8
104
ADC_LIGHT
IN
U2
LM393AD
VCC
1IN+
1IN-
2IN+
2IN-
1OUT
2OUT
C6
104
OUT
L2
LED 0805
L3
LED 0805
R11
1k
R12
1k
R13
10k
T1
10K
IN
R14
10K
TEMP
JP 1x3 2.54
U3
AMS1117-3.3
VIN
VOUT
ADJ/GND
C14
106
C12
10uF
C13
10uF
R16
1k
R17
1k
LED_LIFE
D5
P2
CON 2 EDG5.08
V_MOSFET
GND_MOSFET
Q3
IRF5305SPBF
LOAD1
R15
10k
R18
1k
D4
1N4007W-T
GND_LOAD1
MOSFET1
R19
330R
U4
PC817X2NIP1B
P5
LOAD1
GND_LOAD1
LOAD2
GND_LOAD2
P3
IN_RELAY1
OUT_RELAY1
IN_RELAY2
OUT_RELAY2
D3
SS34LW
C11
104
L4
LED 0805
R20
1k
K2
G3MB-202PL
R21
1k
Q4
SS8050-G
R25
10k
R22
10k
R23
10k
R24
2k
R26
2k
DIGITAL
ADC
JP 1x4 2.54
MOSFET2
R29
330R
U5
PC817X2NIP1B
Q5
IRF5305SPBF
LOAD2
R27
10k
R28
1k
D6
1N4007W-T
GND_LOAD2
Title
Size
A
Number
Revision
Date:
11/08/2026
Sheet of
File:
SheetPCB.SchDoc
Drawn By: