power path

J1
USB_C_Receptacle_USB2.0_14P

VBUS

R2 5.1K
R1 5.1K
R3 1.8K
U6 USBLC6-2P6
USB_D-
USB_D+

C3 1uF
C34 0.1uF
U3 BQ24075RGT
TH1 10K
C4 10uF
R6 1.13K
R5 1.13K
D2 LED
D1 LED

C5 10uF
R9 100K
R8 732K
TPS61023
+5V
C7 10uF
U4 AP2112K-3.3
+3V3
C6 1uF
L1 1uH

+BATT
J2 Conn_01x02

GND

audio path

C36 0.1uF
C13 1uF
C12 1uF
C11 1uF
+3V3
U9 PCM5102A
R7 470
R17 470
C19 1uF
C21 2.2nF
C18 10uF
C17 1uF
C20 2.2nF
+5V

C8 22uF
C14 1uF
U8 PAMB403D
LS2 Speaker
LS1 Speaker

C16 10uF
C10 0.1uF
+3V3
U5 MSM261DGT003
IO4
IO5

sensors

U14 ICM-45605
IO17
+3V3
SCL SDA
C24 0.1uF
C25 0.1uF

U13 QMC6309
SDA
C28 0.1uF
C31 1uF

U16 OPT4048DTSR
C29 0.1uF
SDA SCL

U10 ST25DV04KC-IE6S3
L2 NFC_ANTENNA
C26 0.1uF
C32 1uF
IO48

U17 SGP40-D-R4
C33 1uF
SDA +3V3

U11 SHT41I-AD1B-R2
SDA SCL
C27 0.1uF
C30 0.1uF

mcu and output

C15 22uF
C2 0.1uF
+3V3
U1 ESP32-S3-WROOM-1
SW3 SW_Push R11 10K
SW2 SW_Push R10 10K
D4 LED R13 470
R4 4.7K
R16 4.7K
U12 SSD1306

headers and multiplexer

J5 Conn_02x08_Odd_Even
J7 Conn_02x08_Top_Bottom
J6 Conn_02x02_Odd_Even
U7 MCP23017_SO
C9 0.1uF
R14 10K

sd card

J3 Micro_SD_Card
R15 10K R18 10K R19 10K R20 10K
+3V3
GND