U4
TPA6132A2RTER

2.2uF C17
2.2uF C18
1uF C16
3.3v

12 HPVDD
14 VDD
9 CPN
11 CPP

OUTR 5
OUTL 16

R11 10ohm
R8 10ohm
OUTL OUTR

1 INL−
2 INL+
3 INR+
4 INR−

OUTLN
OUTLP
OUTRP
OUTRN

3.3v 6 G0
7 G1
3.3v 13 EN
8 HPVSS

1.1uF C14

10 PGND
15 SGND
17 EP

J1
AudioJack3_Ground
S
R
T OUTR
OUTL
G

U3
EC11E18244A5
ENC_SWITCH A B
E D C
ENC_A
ENC_B
R12 10k
3.3v
10k R14
3.3v
10k R13
3.3v

PS1
TPS62162DSGR
1 PGND
4 AGND
9 EXP
5 FB
8 PG
6 VOS
7 SW
EN 3
VIN 2
C4 22uF
R2 100k
L1 2.2uH
3.3v
0.1uF C3
C2 0.1uF
C1 10uF
5v

J2
DFR0669
1 VBUS
2
3 SCREEN_SCLK
4 SCREEN_MOSI
5 SCREEN_MISO
6 SCREEN_CS
7 SCREEN_RES
8 SCREEN_DC
9 SCREEN_BL
10 SCL
11 SDA
12 TOUCH_INT
13 SD_CS

U1
ESP32-S3-WROOM-1-N4
RESET SW1
0.1uF C19
3.3v
R1 10k
3 EN
3V3 2
C6 10uF
3.3v
36 RXD0
37 TXD0
27 IO0
39 IO1 SDA
38 IO2 SCL
15 IO3
4 IO4 I2S_MCLK
5 IO5 I2S_BCLK
6 IO6 I2S_LRCLK
7 IO7 I2S_DOUT
12 IO8
17 IO9
18 IO10 XSMT
19 IO11
20 IO12
21 IO13 ENC_B
22 IO14 ENC_A
8 IO15 ENC_SWITCH
9 IO16 TOUCH_INT

10 IO17
11 IO18
13 IO19
14 IO20
23 IO21 SCREEN_BL
28 IO35 SCREEN_MOSI
29 IO36 SCREEN_SCLK
30 IO37 SCREEN_MISO
31 IO38
32 IO39
33 IO40 SCREEN_CS
34 IO41 SCREEN_DC
35 IO42 SCREEN_RES
26 IO45
16 IO46
24 IO47
25 IO48 SD_CS

10k R3
3.3v
SW2 BOOT

R4 27ohm USB_D−
R5 27ohm USB_D+

1 GND
40 GND_1
41_1 GND_2
41_2 GND_3
41_3 GND_4
41_4 GND_5
41_5 GND_6
41_6 GND_7
41_7 GND_8
41_8 GND_9
41_9 GND_10

U2
PCM5242RHBR
R6 4.7k 3.3v
SDA
R7 4.7k 3.3v
SCL
17 SDA
18 SCL
19 GPIO5
20 GPIO4
21 GPIO3
22 ADR2 DGND
23 MODE1 DGND
24 MODE2 DVDD
25 GPIO6
26 SCK I2S_MCLK
27 BCK I2S_BCLK
28 DIN I2S_DOUT
29 NC
30 NC
31 LRCK I2S_LRCLK
32 ADR1
33 EPAD DGND

16 VCOM
15 AGND
14 AVDD 3.3v
13 OUTRP OUTRP
12 OUTRN OUTRN
11 OUTLN OUTLN
10 OUTLP OUTLP
9 VNEG
8 CAPM
7 CPGND
6 CAPP
5 CPVDD
4 DVDD
3 DGND
2 LDOO
1 XSMT

C11 0.1uF C12 1uF
C15 2.2uF
C7 1uF
C8 0.1uF C9 2.2uF
C10 0.1uF C13 2.2uF
3.3v
DGND DVDD
XSMT

VBUS
F1 0603L100SLYR
C5 0.1uF
R9 5.1k
R10 5.1k

J3
A4 VBUS
A5 CC1 ENC_SWITCH
B5 CC2
A7 D−
B7 D−
A6 D+
B6 D+
A8 SBU1
B8 SBU2
S1 GND A1
SHIELD

U9
USBLC6-2SC6
RAW_D−
RAW_D+
1 2 3 4 5 6
USB_D−
USB_D+
VBUS