USB-C

J1
629720000214
VBUS
VBUS1
SBU1
SBU2
D-1
D-2
D+1
D+2
CC1
CC2
GND1
GND

A4
A9
A8
B8
A7
B7
B6
A6
A5
B5
A12
A1

S1*4   Shield

+5V   TP2   +3V3   TP4

U1
TPS73633DBVR
IN   OUT
EN
NR/FB   GND

C1
22u   GND

C3
10n

C2
1u   GND

U2
USBLC6-2SC6

USB_D_N
USB_D_P
USB_CC2   USB_CC1
GND

IN_D_N
IN_D_P
R24
R23
R33
GND   GND
GND   GND

TP10   GND

MCU

U4
ESP32-S3-WROOM-1-N4R8
EN
RXD0
TXD0
IO0
IO1
IO2
IO3
IO4
IO5
IO6
IO7
IO8
IO9
IO10
IO11
IO12
IO13
IO14
IO15
IO16
3V3
IO17
IO18
IO19
IO20
IO21
IO35
IO36
IO37
IO38
IO39
IO40
IO41
IO42
IO46
IO47
IO48
GND

R5   10k
C6   1u
MCU_EN
MCU_IO0
DAC_SPI_MOSI
DAC_SPI_SCLK
ENEABLE_24V
USB_CC1
USB_CC2
DAC_SPI_MISO
DAC_SPI_CS

USB_D_N
USB_D_P

C5
100n
+3V3
C4
22u   GND

AMPS

I1C
OPA4209AIPW
GND

I1D
OPA4209AIPW
X_DRV_IN+
R7
10k
R10   5k1   GND
GND

Y_DRV_IN+
C10
100n   GND
+24V

I1B
R8
10k
R11   5k1   GND

Z_DRV_IN+

I1A
R9
10k
R12   5k1   GND

DAC

U3
DAC80504RTER
OUT0
OUT1
OUT2
OUT3
SDO/ALARM
REF
CS
LDAC
GAIN
REFDIV
RSTSEL
SCLK
SDI
EPAD
VDD
VIO
GND

DAC_SPI_CS
DAC_SPI_SCLK
DAC_SPI_MOSI
+3V3
GND
GND
C9
100n
C8
1u
C7
1u   GND

DAC_SPI_MISO

PDu150

SV2
NS2   NS3   NS6   NS7   NS10   NS11   GND
8 7 6 5 4 3 2 1
G 3- 3+ 2- 2+ 1- 1+ G
GND

SV1
10 9 8 7 6 5 4 3 2 1
VS G EN R+ R- V1 V2 V3 G OS
+24V   GND   X_DRV_IN+ Y_DRV_IN+ Z_DRV_IN+   GND

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+24V

+24V

L1
2u7, 8m

U5
LM5157RTER

SW   14
SW_3   13
SW_2   12
PGOOD   4
FB   9

EP   17
PGND   16
PGND_2   1
AGND   7

VCC   2
BIAS   3

NC   15

EN/UVLO/SYNC   6
MODE   11
RT   5
SS   10
COMP   8

D1
B240A-13-F

R6   57k6
R13   2k49

C15 100n
C14 6u8
C18 6u8
C19 6u8

C16 100n
C17 1u

C20 2u2

C11 27n
R1   1k91

C12 5p6

C13 10n

R4   9k76

R14 9k76

+5V

ENEABLE_24V

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