POWER AND FILTERING

VBUS VBAT 3.3V VBAT 3.3V 3.3V

DMG3415U
Q3

D4
MBR540
VHI

R12
100K

R7
100K
EN

U2
IN OUT
EN
GND P4
AP2112/RT9080-3.3

C6 10µF
C8 10µF
C2 10µF

JSTPH
X1G$1
JSTPH
X1MT1 X1MT2
JSTPH

C1 10µF
C4 1µF

GND

RESET
3.3V
R1 5.1K
RESET
SW2 KMR2
GND GND

USB TO SERIAL CONVERTER

SW1
BOOT0
KMR2
GND

X3
VBUS
D+
D-
CC1
CC2
SBU1
SBU2
GND
USB C

VBUS
D+
D-

R4 5.1K
R5 5.1K
R2

GND GND GND

VBAT
LC709203F
A3 VDD
C2 SCL TSENSE C3
C1 SDA TSW B3
A2 ALR TEST B1
A1 VSS
GND
IC1
GND

U1
3V3 3

RESET 45 EN
TXD0 39 TXD0
RXD0 40

44 IO46_DEBUGOUT IO15 19 A3
41 IO45_SPIV IO16 20 A2
BOOT0 4 IO0_BOOT0 IO17/DAC1 21 A1
TP1 IO18/DAC2 22 A0
5 IO1 IO19/D- 23 D-
6 IO2 IO20/D+ 24 D+
SDA 7 IO3 IO21 25 NEOPIX_PWR
SCL 8 IO4 IO26 26 PSRAMCS
D5 9 IO5 IO33 28 NEOPIX
D6 10 IO6 IO34 29 IO34_DBLTAP
I2C_PWR 11 IO7 IO35 31 MOSI
A5 12 IO8 IO36 32 SCK
D9 13 IO9 IO37 33 MISO
D10 14 IO10 IO38 34 RX
D11 15 IO11 IO39/TCK 35 TX
D12 16 IO12 IO40/TDO 36
D13 17 IO13 IO41/TDI 37
A4 18 IO14 IO42/TMS 38

27 IO47 EXP 61*9
30 IO48 GND 1*23
GND ESP32-S3-MINI-1 GND

3.3V 3.3V 3.3V
C7 10µF C9 10µF C10 1µF
GND GND GND

IO34_DBLTAP
R17 1Meg
C5 1µF
GND GND

VBAT JP3
VBUS EN 1
D13 2
D12 3
D11 4
D10 5
D9 6
D6 7
D5 8
SCL 9
SDA 10
11
12

3.3V RESET 16
15
14
13
A0 12
A1 11
A2 10
A3 9
A4 8
A5 7
SCK 6
MOSI 5
MISO 4
RX 3
TX 2
TXD0 1
JP1
GND

LIPO CHARGING

VBUS VBAT
U3
MCP73831/2
LIPO Charger
4 VDD VBAT 3
CHG 1 STAT PROG 5
R2 5.1K VSS 2
R4 5.1K
C3 10µF
ORANGE
VDD: 3.75-6V
Temp: -40-85°C
MCP73831T-2ACI/OT
GND GND

10K = 100mA
5.0K = 200mA
2.0K = 500mA
1.0K = 1000mA

LED
GND
D3 RED
R10 5.1K
D13

ADAFRUIT INDUSTRIES

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>CHECKED	DATE 30-06-2023 08:27 PM	DRG Nº >DRGNO
DATE		
>DATE	FILE: Adafruit ESP32-S3 8MB No PSRAM	PAGE: 1/1

VSENSOR
MT2 MT
MT1 MT
GND CONN1G$1
R3G$1 10K
R3G$2 10K
GND
V+
SDA SDA
SCL SCL
JST SH

NEOPIXEL
NEOPIX_PWR
WS2812B
VDD
DI GND DO
NEOPIX
GND

VSENSOR
R3G$3 10K
U4
BMEx80 Digital
Environ. Sensor
8 VDD SDO 5
6 VDDIO CSB 7
4 SCL
GND SDA 3
1*2 SCK/SDI
VDD: 1.8-3.6V
Temp: -40~85°C
BME280
GND

SCL
SDA
C11 10µF
GND

U5
OUT IN VHI
EN
P4 GND I2C_PWR
AP2112/RT9080-3.3
R3G$4 10K
GND

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