USB-C
(Flasher/Battery Charger)

J1
12401948E412A
VBUS
VBUS
R11
5K1
CC1   A5
D1+   A6   SBU2   B8
D1-   A7   D2-   B7   D2+
SBU1   A8   D2+   B6   D2-
CC2   B5
R14
5K1
GND   A12 B12
SHELL_GND S8
GND
A9_B9
D2+
D2-
GND

40 MHz
Crystal Oscillator

Y2
ECS-400-10-37B-CKY-TR3
R1
22R
XTAL_N
GND_1   2   IN/OUT   1
OUT/IN 3   GND_2   4
XTAL_P
10 pF
C10
10 pF
C9
GND

Battery Charging & Voltage Regulator (3.3V, 500 mA)

VBUS
PWR_FLAG
R13
10k
GND
U2
MCP73831-2-OT
C15
4.7uF
VDD   VBAT
PROG STAT
VSS
R12
2K
GND
C16
4.7 uF
GND
Q1
PMOS
G
S   D
J2
Conn_01x02_Pin
GND
The Pins above will be replaced
with a pad footprint for
the battery.
IC1
SPX3819M5-L-3-3_TR
VIN   ADJ/BYP
GND   VOUT
EN
GND
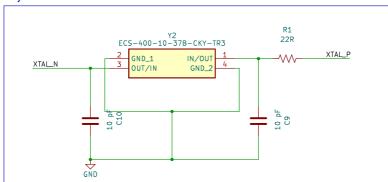C13
1uF
+3.3V
C14
1 uF
GND

WiFi Antenna

ANT2
NN01-001
ANT
FEED   1   NC_2   3
NC_1   2   NC_3   4

8 MB NOR SPI Flash

IC3
AT45DB081E-SSHN-B
SPID   SI   1   8   SO   SPIQ
SPICLK   SCK   2   7   GND   GND
SPIHD   RESET 3   6   VCC   VDD_SPI
SPICS0   CS   4   5   WP   SPIWP
10K
R7

ESP32-C6 and Male Pin Connectors

GND
.1 uF
C5
+3.3V
+3.3V
L1
2 nH
C4   C3   C2   C1
10 uF   1 uF   .1 uF   .1 uF
PWR_FLAG
GND
.1 uF
C6
GND
PWR_FLAG
+3.3V
1 uF   .01 uF
C7   C8
GND   GND

ANT
C19
3p3
L2
2n2
C18
3p3
GND
+3.3V
R15
10k
C17
1 uF

U1
ESP32-C6
ANT   1
CHIP_PU   4
GPIO0/XTAL_32K_P/ADC1_CH0   6
GPIO1/XTAL_32K_N/ADC1_CH1   7
XTAL_N   38   XTAL_N
XTAL_P   39   XTAL_P
MTMS/GPIO4/FSPIHD/ADC1_CH4   10
MTDI/GPIO5/FSPIWP/ADC1_CH5   11
MTCK/GPIO6/FSPICLK/ADC1_CH6   12
MTDO/GPIO7/FSPID   13
FSPICLK
FSPID
SPICS0   20   SPICS0/GPIO24
SPIQ   21   SPIQ/GPIO25
SPIWP   22   SPIWP/GPIO26
VDD_SPI 23   VDD_SPI/GPIO27
SPIHD   24   SPIHD/GPIO28
SPICLK   25   SPICLK/GPIO29
SPID   26   SPID/GPIO30
R6 0
R2 0
R3 0
R4 0
R5 0
VDD_SPI
C12
1 uF
.1 uF
C11
GND
GND

VDDA3P3
VDDPST1
VDDPST2
VDDA1
VDDA2

U0TXD/GPIO16/FSPICS0   29   FSPICS0
U0RXD/GPIO17/FSPICS1   19
GPIO13/USB_D+   18
GPIO12/USB_D-   17
GPIO2/FSPIQ/ADC1_CH2   FSPIQ
GPIO3/ADC1_CH3
GPIO8   14
GPIO9   15
GPIO10 16
GPIO11 17
GPIO15 27
GPIO18/SDIO_CMD/FSPICS2   31
GPIO19/SDIO_CLK/FSPICS3   32
GPIO20/SDIO_DATA0/FSPICS4   33
GPIO21/SDIO_DATA1/FSPICS5   34
GPIO22/SDIO_DATA2   35
GPIO23/SDIO_DATA3   36
D2+
D1+
D1-
D2-
D/C
LCD_RST
LCD_BL
H - pg 29
I2CEXT0_SCL_in
I2CEXT0_SDA_in
TP_INT
TP_RST
PWR_FLAG
GND

+3.3V
R8
10K
R9
10K
+3.3V

S1
ESB-33133
N.O._2   6   5   N.C._2
N.O._1   1   3   N.C._1
C_2
C_1
+3.3V
GND

ESP32-C6

J4
SAMTEC-FTS-107-03-X-D
GND
VDD_SPI   1   2   FSPID
FSPIQ   3   4   FSPICS0
FSPICLK   5   6   LCD_RST
D/C   7   8   I2CEXT0_SCL_in
LCD_BL   9   10 TP_INT
I2CEXT0_SDA_in 11   12
TP_RST   13   14
>PARTNO

SAMTEC-FTS-107-03-X-D