U1
CC2651P31T0RGZR

Left pins: RF_P, RF_N, NC, NC, TX_20DBM_P, TX_20DBM_N, RX_TX, X32K_Q1, X32K_Q2, DIO_5, DIO_6, DIO_7, VDDS2, DIO_8, DIO_9, DIO_10, DIO_11, DIO_12, DIO_13, DIO_14, DIO_15, VDDS3, DCOUPL, JTAG_TMSC

Right pins: EGP, VDDR_RF, X48M_P, X48M_N, VDDR, VDDS, DIO_30, DIO_29, DIO_28, DIO_27, DIO_26, DIO_25, DIO_24, DIO_23, DIO_22, RESET_N, VDDS_DCDC, DCDC_SW, DIO_21, DIO_20, DIO_19, DIO_18, DIO_17, DIO_16, JTAG_TCKC

RF_P, RF_N
Pin 48 — GND
Pin 47 — pin 47
Pin 45 — pin 46
Pin 44 — +3.3V
SEL Button
Right Arrow
Left Arrow
Down Arrow
Up Arrow
Audio PWM
MCU RESET
Pin 34 — DCDC_SW
LED
SQW — PWR_FLAG
SCL
SDA — Bootload Backdoor
UART TX
UART RX
+3.3V
PWR_FLAG

SPI MISO, SPI CLK, SPI CS SD, SPI CS Dis, SPI PWR DWN, SPI Interrupt, PWR Button
SPI MOSI
Pin 22
Pin 13
PWR_FLAG

Y2 ABS07-32.768KHZ-7-1-T
C1 12 pF, C2 15 pF
GND
C10 1 uF
GND

Oscillators
Y1 ABM8-48.000MHZ-10-B1U-T
pin 46 — pin 47
C3 7.5pF, C4 7.5pF
GND, GND_1
GND

Buzzer Header
Audio PWM — J11 Conn_01x02
GND

Bat Header
BAT P — J12 B2B-PH-K-S
GND

UART Header
UART TX, UART RX — J5 Conn_01x02

PWR Button — J13 Conn_01x02
GND

SD Card Header
5V, GND, SPI MISO, SPI CLK, SPI MOSI, SPI CS SD
J2 Conn_01x08

GND for Buttons
J6 Conn_01x08
GND

Header for Buttons
SEL Button, Right Arrow, Left Arrow, Down Arrow, Up Arrow, MCU RESET, Bootload Backdoor, LED
J7 Conn_01x08

H1 MountingHole, **H3** MountingHole
H2 MountingHole, **H4** MountingHole

R5 100k, R6 100k
C29 0.1uF, C30 0.1uF
GND
+3.3V

Display Header 16-30
J8 Conn_01x15
5V
GND

Display Header 1-15
J9 Conn_01x15
SPI CLK, SPI MISO, SPI MOSI, SPI CS Dis, SPI Interrupt, SPI PWR DWN

Real Time Clock Header
SQW, SCL, SDA, 5V, GND
J10 Conn_01x05

USB-C Header
GND, VBUS
J14 Conn_01x02

VDDS Decoupling Capacitors
+3.3V
Pin 13 — C24 0.1uF
Pin 22 — C25 0.1uF
Pin 44 — C26 0.1uF
Pin 34 — C28 0.1uF
C9 22uF
GND

L2 6.8uF
DCDC_SW
Pin 34, +3.3V, Pin 45, Pin 48
C8 22uF, C22 0.1uF, C23 0.1uF
GND

VDDR Coupling Capacitors

U2 BQ24030RHLR
Power-path management IC

Left pins: LDO, STAT1, STAT2, AC, BAT, BAT, ISET2, PSEL, CE, ISET1
Right pins: EPAD, USB, *USBPG/*VBSEL, *ACPG/*PG, OUT, OUT, OUT, TMR, DPPM, TS, VSS

TP1 TP Bat
C5 33 uF
BAT P
GND
R2 1070 Ohm
GND
BAT P
GND

GND
USB
C12 10 uF
GND
VBUS
C7 10 uF
GND
5V
TP DPPM OUT TP2
C6 10 uF
GND
R1 43.5 kOhm
GND
4.7uF
GND

U3 TPS629210DRLR
VIN, EN, MODE/S-CONF
SW, VOS, FB/VSET, PG, GND
L1 2.2uH
TP3 TP 3.3V output
+3.3V
C11 22uF
GND
R4 249k
GND
R3 80.6k
GND
GND

RF Circuit
RF_P, RF_N
L4 LQG15HS2N0S02D
C15 GJM1555C1H120JB01D
L3 LQG15HS15NJ02D
C13, C14
GND
SIGNAL, GND, GND
J1 U.FL-R-SMT-101
GND