

Comment	Description	Designator	Footprint	LibRef	Quantity
ANT U.FL	Antenna	ANT1, ANT2, ANT3, ANT4	U.FL SMD	ANT U.FL	4
Button	PUSH BUTTON	B1, B2, B3, B4, B5, B6	PUSH BUTTON 4 PIN SMD 5	PUSH BUTTON 4 PIN	6
Button	TACTILE SWITCH	B7	PUSH BUTTON 12*12*8.5mm	TACTILE SWITCH	1
BUTTON	PUSH BUTTON	BOOT1, RESET1	PUSH BUTTON SMD	PUSH BUTTON RIGHT	2
1042		BT1	BAT_1042	1042	1
Battery		BT2	Bat	Battery	1
100nf	Capacitor	C1, C3, C5, C6, C7, C8, C13	CAP0805	CAP SMD	7
10uf	Capacitor	C2, C4	CAP0805	CAP SMD	2
Capacitor Tantalum SMD	Capacitor Tantalum SMD	C9, C10	Tan 1206 (3216X18L) Size A	Capacitor Tantalum SMD	2
10uf	Capacitor	C11, C12	CAP 1206 (3216X15L)	CAP SMD	2
LED	LED	CHG1, Rx1, STD1, Tx1	L0805	LED	4
TP4056	Complete single cell Li-Ion battery with a constant current / constant voltage linear charger	IC1	SOP-8	TP4056	1
TYPE-C-31-M-12	USB Connectors 24 Receptacle 1 8.94*7.3mm RoHS	J1	HRO_TYPE-C-31-M-12	TYPE-C-31-M-12	1
SMA	SMA Connector Jack, Female Socket 500Ohm Board Edge, End Launch Solder	J2, J3, J4, J5	SAMTEC_SMA-J-P-H-ST-EM1	SMA-J-P-H-ST-EM1	4
N-Header 10X2		P1	N-Header 10X2	N-Header 10X2	1
S8050	Bipolar (BJT) Transistor NPN 25 V 500 mA 150MHz 300 mW Surface Mount SOT-23	Q1, Q2, Q3	SOT-23	SMD-TRANSISTORS-NPN-25V-500MW(SOT-23)	3
4.7k	RESISTOR	R1, R3	RES 0805	RES	2
470	RESISTOR	R2	RES 0805	RES	1
12k	RESISTOR	R4, R9	RES 0805	RES	2
10K	RESISTOR	R5, R6, R7, R8	RES 0805	RES	4
1k	RESISTOR	R10, R11, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23, R26	RES 0805	RES	13
5.1k	RESISTOR	R12, R13	RES 0805	RES	2
10R	RESISTOR	R24, R25	RES 0805	RES	2
SlideSwitch	SWITCH, SLIDE, SPDT, SMD	SW1	SWSLIDT_SPDT_MS S3	SWSLIDT_SPDT_MS S3	1
SD CARD SPI MODE	SD CARD SPI MODE	U1	MICRO SD	SD CARD SPI MODE	1
ESP32-WROOM-32U	Bluetooth, WiFi 802.11b/g/n, Bluetooth v4.2 +EDR, Class 1, 2 and 3 Transceiver Module 2.4GHz ~ 2.5GHz Antenna Not Included, U.FL Surface Mount	U2	XCVR_ESP32-WROOM-32U	ESP32-WROOM-32U	1
CP2102	USB Bridge, USB to UART USB 2.0 UART Interface 28-QFN_5x5_	U3	QFN28G_0.5-5X5MM	INTERFACE-CP2102-GMR(QFN28)	1
LF33	3.3V VOLTAGE REGULATOR	U4	D-PACK	LF33	1
PCF8574T	I/O Expander 8 I <sup>2</sup> C 100 kHz 20-SSOP	U5	SOIC127P1032X265-16N	PCF8574T	1
2.8 240X320_ILI9341	LCD TFT FULL Color 2.8 240X320 ILI9341 Driver FLAT	U6	LCDTFT_1.8IN_ST7735_18P	LCD_TFT_Color_2.8 240X320_ILI9341 Driver_FLAT	1
XPT2046	Touch Screen Controller	U7	TSSOP16	XPT2046	1