

Bill of Materials



Project Title: Bill of Materials for BOM Document [bill_of_materials.BomDoc]
Project File Name: TIK_HandheldDevice.PyPcb
Assembly Variant: None

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USA

Part Number	Description	Designator	Manufacture	Manufacture Part Number	Supplier	Supplier Part Number	Supplier Unit Price	Quantity
Cap_cer_0603_1	Ceramic cap size 0805	C22						1
Cap_cer_1206_1	Ceramic cap size 1206	C23, C24						2
Cap_cer_0603_2	Ceramic cap size 0805	C25						1
Ferrite Bead Chip	0805, 60Ω, 3A, 25% SMT	FB1, FB2						2
CON EXPANSION	3.5mm Jack 4-pole with normally closed switches	J5						1
CON LOAD CELL	3.5mm Jack 4-pole with normally closed switches	J6						1
Ind 2uH_Wire_S	Shielded Power Inductor 2.2 uH 20% 2.2 A 50.4 mohms 3.11 A (sat) 60MHz 4018: 4x4x1.8mm	L1						1
IC F58205A Dual	Dual N-channel Enhancement mode power MOSFET	Q1						1
PNP_BJT_MID210	MID210 PNP BJT transistor DPAK (decawatt) 5A dc	Q2						1
PNP_BJT_BC858	65 V, 100 mA PNP general-purpose transistor	Q6						1
Res_0805_150K	Res size 0805 SMD mounting, low power Yageo-RC0805FR-07150KL	R1						1
Res_0603_1.2K	Res size 0603 SMD mounting, low power	R8						1
Res_0805_1M_1	Res size 0805 SMD mounting, low power Yageo-RC0805FR-071ML	R14, R17						2
Res_0603_220_5	Res size 0603 SMD mounting, low power	R23, R24						2
Res_0603_150_5	Res size 0603 SMD mounting, low power	R26, R27, R28, R29						4
Res_0603_22K_5	Res size 0603 SMD mounting, low power	R36						1
NTC_10K_tht	NTC THERMISTOR 10K for soldering a cable from the battery NTC	RT1						1
IC AP9429_A dcd	1.0MHZ, 2A STEP-DOWN DC-DC BUCK CONVERTER, with latch-off protection	U1						1
IC NCP5625Q18T	Fixed output lowdropout linear regulator. 1.8 V 80 mA	U2						1
IC LMV358DGKR	LMV358IDGKR Dual OpAmp; low voltage rail to rail opamp; 2.7V to 5V Vss; ESD protection; MSOP-8 Package.	U6						1
IC HX711 load cell	HX711 load cell amplifier	U10						1
IC TPD35014 Cur	TPD35014TOBVRQ1 ESD prot. & current limit	U11						1
Cap_cer_0805_4	Ceramic cap size 0805	C1, C14, C34						3
Cap_cer_0805_1	Ceramic cap size 0805	C2, C8, C13, C15, C17, C18, C20, C21, C27, C30, C31, C32, C33, C35, C37, C39, C40.						39
Cap_cer_0805_1	Ceramic cap size 0805	C3, C16, C26, C29, C36, C38						1
Cap_cer_0805_2	Ceramic cap size 0805	C5						1
Cap_cer_0805_2	Ceramic cap size 0805							1
Cap_cer_0805_2	Ceramic cap size 0805 CC0805MXK5R68B236 Yageo MLCC 22uF 10V 20% X5R	C4, C6, C7, C9, C12, C43						6
Cap_cer_0805_1	Ceramic cap size 0805	C10, C11, C19						3
Cap_cer_0603_4	Ceramic cap size 0805	C28						1
Diode_1N4148W	SURFACE MOUNT FAST SWITCHING DIODE	D2, D3, D4, D5, D12, D13						6
Diode_LED_G_0805	Low power LED color Green	D1, D6, D8, D10						4
Diode_LED_R_0805	Low power LED color Red	D7, D9, D11						3
CON USB-MINI-B	USB-MINI-B Female, Manufacturer PN/ID: 10033526-N3212LF	J1						1
CON BNC Female	BNC coaxial female connector	J2, J3						2
MOD_ILI9341 TFT	ILI9341 TFT LCD Jumper pin headers., plus SD card reader pins	J4						1
MCU ESP32-WRO	- Transceiver: 802.11 b/g/n Wi-Fi, WIFI, WLAN , Bluetooth Smart Ready 4.x Dual Mode For Use With ESP-WROOM-32	MCU1						1
NMOS_2N7002		Q3, Q4						2
PMOS_BSS84AK	PMOS BSS84AK	Q5						1
Res_0603_4.7K	Res size 0603 SMD mounting, low power	R18, R21, R22						3
Res_0805_33K_1	Res size 0805 SMD mounting, low power	R3						1
Res_0603_0ohm	Res size 0603 SMD mounting, zero-ohm DR Yageo RCD603JR-070RL	R4, R5, R25						3
Res_0603_10K_5	Res size 0603 SMD mounting, low power	R9, R10, R11, R12, R13, R35, R37, R38, R39, R40						10
Res_0603_100R	Res size 0603 SMD mounting, low power	R2, R6, R33, R34						4
Res_0603_1K_5	Res size 0603 SMD mounting, low power	R7, R15, R16						3
Res_0603_1.5K_1	Res size 0603 SMD mounting, low power	R19						1
Res_1206_0R2_1	Res size 1206 SMD mounting, high power, smart, current sense.	R20						1
Res_0603_100K	Res size 0603 SMD mounting, low power	R30, R31, R32						3
SWITCH_Multidire	SWITCH Multidirection Slide Push Button SMD TS-003	S1						1
Button	Generic 2 pin button.	S2, S3, S4						3
IC DW01A bat pro	DW01A One cell Li-Po/Li-ion Battery protection IC	U3						1
IC TP4056 BAT CH	1A Standalone Linear Li-Ion Battery Charger with Thermal Regulation in SOP	U4						1
IC USBLC6-25C6	Very low capacitance ESD protection	U5						1
IC LTC4060EFE Bat	LTC4060EFE	U7						1
IC INA219 current	Zero-Drift, Bi-Directional CURRENT/POWER MONITOR with I2C, SPI-8	U8						1
IC CH340C usb to	USB to serial chip CH340C, integrated oscillator.	U9						1
							50.00	128

Approved	Notes
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