

Item Name	Part Number	Description	Designator	Footprint	LibRef	Quantity	Link
Battery Holder	BK-18650-PC4	Battery Holder (Open) 18650 2 Cell PC Pi	BT1	BAT_BK-18650-PC4	BK-18650-PC4	1	BK-18650-PC4 M
Ceramic Capacitor	C0805C104K4RACTU	0.1µF ±10% 16V Ceramic Capacitor X7R	C1, C5, C7, C8,	CAPC2012X88N	C0805C104K4RACTU	8	C0805C104K4R/
Ceramic Capacitor	CL21A106KAYNNNE	10µF ±10% 25V Ceramic Capacitor X5R	C2, C4, C9, C10	CAPC2012X135N	CL21A106KAYNNNE	7	CL21A106KAYNI
Ceramic Capacitor	C0805C103K5RACTU	.010uF; Tol+10%; SMT; Vol-Rtg 50V; X7R;	C3	CAPC2012X88N	C0805C103K5RACTU	1	C0805C103K5R/
Ceramic Capacitor	C0805C222K5RACTU	2200pF, Tol 10%, SMT, 50V, X7R KE	C6	CAPC2012X88N	C0805C222K5RACTU	1	C0805C222K5R/
Tantalum Capacitors	TPSP106M010R2000	10µF Molded Tantalum Capacitors 10 V 0	C11	CAPC2012X140N	TPSP106M010R2000	1	TPSP106M010R
Ceramic Capacitor	C0805C220J5GACTU	22pF ±5% 50V Ceramic Capacitor C0G, N	C17, C18	CAPC2012X140N_C	C0805C220J5GACTU	2	C0805C220J5GA
Red LED	APTD1608SURCK	Red 630nm LED Indication - Discrete 1.9	D1, D2, D7, D9	LED_APTD1608SURCK	APTD1608SURCK	4	APTD1608SURC
Diode Schottky	1N5819HW-7-F	Diode Schottky 40 V 1A Surface Mount S	D3, D11	SOD3715X145N	1N5819HW-7-F	2	1N5819HW-7-F I
ESD Protection	LESDD5D5.0CT1G	Transient Voltage Suppressors for ESD Pr	D4, D5, D6	TVS_LESDD5D5.0CT1G	LESDD5D5.0CT1G	3	LESDD5D5.0CT1C
Green LED	APG1608CGKC/T	Green 570nm LED Indication - Discrete 2	D8, D10	LED_APG1608CGKC/T	APG1608CGKC/T	2	APG1608CGKC/
header pin	pad_sch	2pin pad	J1	pad_smd	pin_sch	1	
USB Connector	USB4105-GF-A(Type-C)	USB Type-C	J2	GCT_USB4105-GF-A	USB4105-GF-A	1	USB4105-GF-A C
header pin	pin_sch	pad	P1, P2, P3, P4, P	pad_smd	pin_sch	22	
P-channel MOSFET	AO3401A	P-Channel 30 V 4A (Ta) 1.4W (Ta) Surfac	Q1	SOT23-3	AO3401A	1	AO3401A UMW I
N-Channel MOSFET	2N7002	N-Channel 60V 280mA (Ta) 350mW (Ta)	Q2, Q3	SOT95P240X111-3N	2N7002	2	2N7002 onsemi I
Resistor	RC0603FR-0710KL	10 kOhms Â±1% 0.1W, 1/10W Chip Resis	R1, R10, R18	RESC1607X60N	RC0603FR-0710KL	3	RC0603FR-0710
Resistor	RC0603FR-074K7L	4.7k Resistor 0,1W 0603 TK100	R2, R3	RESC1607X60N	RC0603FR-074K7L	2	RC0603FR-074K
Resistor	RC0603FR-071KL	1kOhms Â±1% 0.1W, 1/10W Chip Resist	R4, R5, R9, R13	RESC1607X60N	RC0603FR-071KL	5	RC0603FR-071K
Resistor	RC0603FR-075K1L	5.1 kOhms 1% 0.1W, 1/10W Chip Resistor	R6, R7	RESC1607X60N	RC0603FR-075K1L	2	RC0603FR-075K
Resistor	RN73R1JTDD67R3B25	RES 67.3 OHM 0.1% 1/10W 0603	R8, R17	RESC1608X55N	RN73R1JTDD67R3B25	2	RN73R1JTDD67
Jumper Resistor	H CJ0603ZT0R00	0R 0603	R11, R14	RESC1608X70N	H CJ0603ZT0R00	2	H CJ0603ZT0R0C
Resistor	RL0603FR-070R4L	RES 0.4 OHM 1% 1/10W 0603	R12	RESC1608X55N	RL0603FR-070R4L	1	RL0603FR-070R
Resistor	RC0603FR-071K2L	1.2 kOhms ±1% 0.1W, 1/10W Chip Resist	R15	RESC1607X60N	RC0603FR-071K2L	1	RC0603FR-071K
Resistor	ERJ6ENF1003V	100K	R19	RES_ERJ6ENF1003V	ERJ6ENF1003V	1	ERJ-6ENF1003V
Tactile Switch	PTS636_SM43J_SMTR_LFS	Tactile Switch SPST-NO Top Actuated Sur	SW1, SW2	SW_PTS636_SM43J_SMTR	PTS636_SM43J_SMTR_LF	2	PTS636SM43JSI
SMD TP	test_point	smd tp	TP1, TP2, TP3, T	TEST_POINT	test_point	10	
IMU Module	MPU-6050	MPU-6050 series Accelerometer, Gyroscop	U1	QFN50P400X400X95-24N	MPU-6050	1	MPU-6050 TDK I
MCU ESP32	ESP32-WROOM-32D-N4	Bluetooth, WiFi 802.11b/g/n, Bluetooth v4	U2	MODULE_ESP32-WROOM	ESP32-WROOM-32D-N4	1	ESP32-WROOM
USB Converters	CH340G	USB Interface Integrated Circuit	U3	SOIC127P600X180-16N	CH340G	1	CH340G WCH(Ji
Linear Voltage Regulator	AMS1117-3.3	Sot223/Pkg 1-Amp 3.3-Volt Low Drop Out	U4	SOT229P700X180-4N	AMS1117-3.3	1	AMS1117-3.3 EV
Battery Management ROHS	TP4056	single cell Li-Ion battery with a constant c	U5	SOP127P600X175-9N	TP4056	1	TP4056 UMW(Yc
Thermistor	NTCLE100E3103HB0	thermistor	U6	THERMISTORS_100E3103F	NTCLE100E3103HB0	1	NTCLE100E310C
Crystal Oscillator	ECS-120-20-5PX-TR	12MHz ±30ppm Crystal 20pF 50 Ohms H	Y1	XTAL_ECS-120-20-5PX-TR	ECS-120-20-5PX-TR	1	ECS-120-20-5PX