

Name	Board References	Part Number
op amp	Not needed	MCP6001UT-I/OTCT-ND
Schottky Diode	Not needed	MBRM110LT1GOSCT-ND
Zener Diode	Not needed	DZ2W03300LCT-ND
Orange LED	Not needed	160-1445-1-nd
Red LED	Not needed	160-1447-1-nd
GRN LED	Not needed	160-1828-1-nd
BLU LED	Not needed	160-1837-1-ND
2.54mm Jumper	Not needed	WM23943-ND
2.54mm 2pin male head	Not needed	A121481-ND
reset switch	Not needed	CKN9085CT-ND
3.3 500mA LDO	Not needed	296-13424-1-ND
1 amp 5V buck	Not needed	945-2201-ND
9V battery clip	Not needed	36-232-ND
9V battery	Not needed	P687-ND
bluetooth module	Not needed	RN4871-I/RM128-ND
stm32f4 MCU	Not needed	497-17437-1-nd
8mHz Crystal	Not needed	631-1100-nd
molex 3x2 micro plug	Not needed	WM13209-ND
molex 3x2 micro jack	Not needed	wm1815-nd
molex micro crimp fem	Not needed	wm1837ct-ND
sheilded wire	Not needed	N/A
2pin Screw term	Not needed	1297-1108-1-ND
6pos screw term	Not needed	1297-1112-1-ND
4pin vertical 2.54 head	Not needed	S7002-ND
buzzer threw hole	Not needed	668-1204-ND
buzzer wired	Not needed	102-3740-ND
10k 5turn pot	Not needed	3214X-1-103ECT-ND
10R pot	Not needed	3314G-1-100ECT-ND
10pin Male Head	Not needed	SAM8796-ND
board Stand Off		RPC4731-ND
10uF Cap	SC1,SC2,CC19	587-1256-1-ND
1uF capacitor	CC18	587-1242-1-ND
0.1uF capacitor	SC3,SC4,CC1,CC2,CC3,CC4,	399-1095-1-ND
30pF capacitor	CC10,CC11	490-1414-1-ND
0.33uF Capacitor	CC16	399-4917-1-ND
2.2uF Cap	CC12,CC13	587-1430-1-ND
10k	CR1,CR6,CR9,CR10,CR11,C	RR08P10.0KDCT-ND
OR resistor	N/A	311-0.0GRCT-ND
330R	CR2,CR4,CR5,CR7,CR8,CR1	311-330HRCT-ND
4K7	CR3	311-4.70KHRCT-ND
150R	SR10,SR11	RR08P150DCT-ND

499R	SR12	311-499HRCT-ND
2R	SR3	311-2.00HRCT-ND
30K	SR7	RR08P30.0KDCT-ND
100R	SR8	311-100HRCT-ND

Name	# needed	# ordered	Cost (each)	Extended
op amp	8	15	0.37	5.55
Schottky Diode	10	14	0.397	5.558
Zener Diode	4	6	0.48	2.88
Orange LED	7	10	0.202	2.02
Red LED	5	10	0.218	2.18
GRN LED	4	7	0.43	3.01
BLU LED	1	5	0.49	2.45
2.54mm Jumper	6	8	0.58	4.64
2.54mm 2pin male head	6	10	0.379	3.79
reset switch	2	4	0.25	1
3.3 500mA LDO	3	3	0.66	1.98
1 amp 5V buck	1	1	3.58	3.58
9V battery clip	1	3	0.89	2.67
9V battery	1	3	2.06	6.18
bluetooth module	2	2	10.9	21.8
stm32f4 MCU	1	1	14.61	14.61
8mHz Crystal	1	2	0.39	0.78
molex 3x2 micro plug	8	10	0.54	5.4
molex 3x2 micro jack	8	10	1.599	15.99
molex micro crimp fem	25	10	0.149	1.49
sheilded wire		0	0	0
2pin Screw term	1	2	3.83	7.66
6pos screw term	4	5	8.91	44.55
4pin vertical 2.54 head	14	15	0.437	6.555
buzzer threw hole	4	5	3.9	19.5
buzzer wired	4	5	2.91	14.55
10k 5turn pot	4	5	3.55	17.75
10R pot	4	5	2.4	12
10pin Male Head	1	2	2.99	5.98
Board Stand Off	4	5	0.44	2.2
10uF Cap	9	15	0.159	2.385
1uF capacitor	1	10	0.074	0.74
0.1uF capacitor	19	30	0.03	0.9
30pF capacitor	2	10	0.084	0.84
0.33uF Capacitor	1	10	0.102	1.02
2.2uF Cap	2	10	0.122	1.22
10k	24	100	0.041	4.1
OR resistor	none	25	0.0116	0.29
330R	16	30	0.018	0.54
4K7	1	10	0.018	0.18
150R	8	20	0.108	2.16

499R	4	10	0.025	0.25
2R	4	10	0.108	1.08
30K	4	10	0.018	0.18
100R	4	10	0.018	0.18
Sum =				254.368
tax =				0.05
total =				267.0864