

## UC Santa Cruz CMPE118/218 Parts Kit List

Item	Qty / kit	Description	Mfr P/N	Mfr	Vendor P/N	Vendor
1	10	IC, OpAmp, MCP6004	MCP6004	Microchip	MCP6004-E/P-ND	Digikey
2	1	IC, regulator, LDO, TO220, 1.5A, 3.3V	LD1086V33	STMicro	497-3450-5-ND	Digikey
3	5	IC, regulator, LDO, TO92, 100mA, 3.3V	LP2950-33LPRE3	Texas Inst	296-31455-1-ND	Digikey
4	1	LED, IR, clear, side-looking, 1.2Vf@2mA	LTE-302	LITE-ON	160-1063-ND	Digikey
5	2	phototransistor, IR, NPN, sidelooking	LTR-301	LITE-ON	160-1065-ND	Digikey
6	4	sensor, optical, IR, NPN output	TCRT5000L	Vishay	751-1034-5-ND	Digikey
7	1	inductor, Ferrite Core, 10mH	RLB0812-103KL	Bourns Inc.	RLB0812-103KL-ND	Digikey
8	1	capacitor, 3.3nF Ceramic +/-10% (50V)	K332K15X7RF5TL2	Vishay	BC1075CT-ND	Digikey
9	1	potentiometer, 9MM sq rtang, 10K	3310C-001-103L	Bourns Inc.	3310C-001-103L-ND	Digikey
10	1	switch, mom, push button, SPST-NO	EVQ-11L07K	Panasonic	P8080SCT-ND	Digikey
11	3	header, .100 dual str 72pos	PEC36DABN	Sullins	S2022E-36-ND	Digikey
12	10	connector,header,2POS, .156, vertical	26-60-4020	Molex	WM4620-ND	Digikey
13	3	connector, plug, banana, male, Red	108-0302-001	Emerson	J145-ND	Digikey
14	3	connector, plug, banana, male, Black	108-0303-001	Emerson	J146-ND	Digikey
15	1	heat shrink, 1/8", asst colors, 6", 31pcs	Q2-F-RK4-1/8-11-6IN-31	Qualtek	Q2F17-KIT-ND	Digikey
16	1	switch, rocker, SPST	RA1113112R	E-switch	RA1113112R-ND	Digikey
17	1	IC, level comparator, LM339N, 14DIP	LM339N	Jameco	23851	Jameco
18	2	IC, Timer, LMC555, 8DIP	LMC555CN	Jameco	126797	Jameco
19	1	IC, voltage regulator, +5V, TO-220	7805T	Jameco	51262	Jameco
20	2	transistor, TIP122 NPN power	TIP122(FSC)	Fairchild	179303	Jameco
21	1	diode, Zener 1N4744 15V 1W	1N4744A	Jameco	36185	Jameco
22	10	diode, 1N4006 (Rectifier, 800V 1A)	1N4006	Jameco	76996	Jameco
23	4	LED, visible, green	LTL-307G	LITE-ON	697531	Jameco
24	4	LED, visible, red	LTL-307E	LITE-ON	697522	Jameco
25	1	resistor assortment (540 total pcs)	ASST30-R	Jameco	103166	Jameco
26	10	capacitor, Mylar, 0.01uF	MY.01	Jameco	26884	Jameco
27	10	capacitor, Mylar, 0.022uF	MY.022	Jameco	26905	Jameco
28	10	capacitor, Mylar, 0.047uF	MY.047	Jameco	26930	Jameco
29	10	capacitor, ceramic, 20% (50V), 0.01 uF	DC.01	Jameco	15229	Jameco
30	40	capacitor, ceramic, 20% (50V), 0.1 uF	K104Z15Y5VE5TL2	Vishay	BC1148TR-ND	Digikey
31	10	capacitor, electrolytic, 50V, 10uF	R10/50	Jameco	29891	Jameco
32	10	capacitor, electrolytic, 25V, 220uF	R220/25	Jameco	30496	Jameco
33	1	breadboard, nylon, 1360 contacts	WBU-204-3-R	Jameco	20758	Jameco
34	10	connector, socket, 2 row, IDC, 14pos	8000-14-R	Jameco	153948	Jameco
35	2	heatsink, TO-220	GHS206	Jameco	129242	Jameco
36	2	connector, 'T', nylon, male, 10pcs/bag	WSD1302	W.S.Deans	LM2626	Tower
37	5	jumper wire, male pin to male pin, 12"	PRT-09388	Sparkfun	PRT-09388	Sparkfun