

Electrical Parts

Name	Part Number	Mouser Number	Quantity	Unit Price	Price	Info.
CR1, CR2, CR6	1N914	78-1N914	3	\$0.04	\$0.12	Silicon
CR5, CR6	1N5819	625-1N5819-E3	2	\$0.58	\$1.16	Schottky
Pot1	10K Linear Pot	31VA401-F	1	\$1.12	\$1.12	¼" shaft
SW1	Rotary 2x5	105-SR2511F-25NS	1	\$2.77	\$2.77	¼" shaft
SW2,SW3	Toggle DPDT	108-2MD1T1B1M1QE-EVX	2	\$3.57	\$7.14	Miniature
C1	0.022u film	505-MKS4.022/100/10	1	\$0.59	\$0.59	Metalized Film
C2	0.033u film	505-MKS4.033/100/10	1	\$0.59	\$0.59	Metalized Film
R1,R2	1.2K	71-RN55D-F-1.2K	2	\$0.11	\$0.22	1/8W Metal Film
R5,R18,R22,R34	1.0K	71-RN55D-F-1K	4	\$0.11	\$0.44	1/8W Metal Film
R6,R17	6.18K	71-RN55D-F-6.18K	2	\$0.11	\$0.22	1/8W Metal Film
R15,R20	2.74K	71-RN55D-F-2.74K	1	\$0.11	\$0.11	1/8W Metal Film
R23,R24,R26,R25,R16	10.0K	71-RN55D-F-10K	5	\$0.11	\$0.55	1/8W Metal Film
R4,R33,R3,R32,R31	4.7K	71-RN55D-F-4.7K	5	\$0.11	\$0.55	1/8W Metal Film
R21	3.32K	71-RN55D-F-3.32K	1	\$0.11	\$0.11	1/8W Metal Film
R19	2.21K	71-RN55D-F-2.21K	1	\$0.11	\$0.11	1/8W Metal Film
R22	27.4K	71-RN55D-F-27.4K	1	\$0.11	\$0.11	1/8W Metal Film
R28,R29,R27,R30	49.9K	71-RN55D-F-49.9K	4	\$0.11	\$0.44	1/8W Metal Film
R9	4.02K	71-RN55D-F-4.02K	1	\$0.11	\$0.11	1/8W Metal Film
R7	15K	71-RN55D-F-15K	1	\$0.11	\$0.11	1/8W Metal Film
R8	13K	71-RN55D-F-13K	1	\$0.11	\$0.11	1/8W Metal Film
R10	47.5k	71-RN55D-F-47.5K	1	\$0.11	\$0.11	1/8W Metal Film
RS1	499Ω	71-RN60D-F-499	1	\$0.12	\$0.12	1/4W Metal Film
RS2	1.0K	71-RN60D-F-1K	1	\$0.12	\$0.12	1/4W Metal Film
RS3	13.3K	71-RN55D-F-13.3K	1	\$0.11	\$0.11	1/8W Metal Film
R14	100K	71-RN55D-F-100K	1	\$0.11	\$0.11	1/8W Metal Film
RS4	82.5K	71-RN55D-F-82.5K	1	\$0.11	\$0.11	1/8W Metal Film
RS5	1 Meg	71-RN55D-F-1.0M	1	\$0.11	\$0.11	1/8W Metal Film
R11,R13	2.0Ω	660-CF1/4C2R0J	2	\$0.27	\$0.54	1/4W Carbon
C3,C4,C28	4.7uF	647-UVR1H4R7MDD	3	\$0.17	\$0.51	Electrolytic
C6,C7,C12,C16,C18,C21,C22,C23,C24,C25,C27	0.1uF	810-FK18X7R1H104K	11	\$0.21	\$2.31	Ceramic XR7
C8,C11,C13,C14,C15,C26	1.0uF	810-FK18Y5V1C105Z	6	\$0.23	\$1.38	Ceramic XR7
C29	0.01uF	810-FK18X7R1H103K	1	\$0.22	\$0.22	Ceramic XR7
C20,C19	39pF	810-FK18C0G1H390J	2	\$0.20	\$0.40	Ceramic C0G
Y1	22.1184MHz	695-HC49US-221-U	1	\$0.58	\$0.58	Crystal
JTAG	5x2 header	517-836-01-05	1	\$0.42	\$0.42	0.1" spaced
Micro	C8051F121	634-C8051F121-GQ	1	\$24.06	\$24.06	
USB1	DLP USB1232H	626-DLP-USB1232H	1	\$28.95	\$28.95	18 pin DIP
PWR	TPS2041	595-TPS2041BDBVTG4	1	\$2.07	\$2.07	
DCDC1,DCDC2	MEA1D0509DC	580-MEA1D0509DC	2	\$8.76	\$17.52	14 pin DIP
VR1	LD11117S33	511-LD11117AS33	1	\$0.97	\$0.97	
Jack1	1/8"	161-3142M-E	1	\$1.36	\$1.36	
Knob	1/4"	45KN018-GRX	2	\$0.96	\$1.92	
Post	Banana Binding	164-R109B-EX, (R109R)	3	\$1.37	\$4.11	Red,Blk,Yel
AR1,AR2,AR3,AR4,AR5	TL072	511-TL072ACN	5	\$1.06	\$5.30	Plastic DIP

Total \$110.09

Misc. Parts

Description	Quantity	Info.
Printed Circuit Card	1	mini_ct_E_Nss.123
Nylon Spacer	3	0.25"L 0.115" ID 0.188"OD
4-40 Pan Head Screw	3	1/2"L
#4 Sheet Metal Screw	2	3/8"L Pan Head Phillips
Sheet Metal 20 gage	1	6" x 4.2"
Wood 1/4" Thick	1	6" x 20"
Liquid Rosin Flux		Isopropyl and Rosin Flux*
Rosin Core Solder		0.020" dia. SN60PB40 44 Rosin Core
Wood Glue		
Spray Paint		
Insulated Wire		24 gage Stranded
Ribbon cable		
Wood Stain		
Polyurethane Varnish		
USB Cable	1	A to mini-B
Test Hook Clips	3	

*Rosin flux is non-conductive once it is dry. No-clean flux may or may not leave an ionic residue that can cause leakage or corrosion. If you use a no clean flux, remove all flux residue from the board. Removal means cleaning with organic and polar solvents. Read the MSDS prior to using solvents, flux and lead/tin solder. Use the appropriate safety measures for protection from hazardous exposure and fire.

- **Tool List**

- Drill Press
- Step Drill
- Table Saw
- Sheet Metal Cutter
- Sheet Metal Bender
- Grounded Soldering Iron
- 0.015" conical soldering tip
- Magnifying Visor
- Diagonal Cutter
- Stainless Steel Tweezers
- ESD grounded Work Area
- Wire Strippers
- Jumper Clips
- Digital Multimeter
- Screw Drivers
- 4-40 Tap and Drill
- Safety Glasses
- Wood Clamps
- Personal Computer