

# Doodlebug - Design/Layout by James White, Soundwerx

Last revised:  
2/13/14

BOM by  
Tom Blanchard

PART ID	DESCRIPTION	QTY	SOURCE	PART NO	EACH	TOTAL	SOURCE	PART NO	EACH	TOTAL
<b>SMD IC Chips</b>										
IC1	LM317D2T	1	Mouser	<a href="#">863-LM317D2TG</a>	\$0.87	\$ 0.87	DigiKey	<a href="#">497-1571-1-ND</a>	\$ 0.80	\$ 0.80
IC2	Analog Devices ADuM3160	1	Mouser	<a href="#">584-ADUM3160BRWZ</a>	\$7.07	\$ 7.07	DigiKey	<a href="#">ADUM3160BRWZ-ND</a>	\$ 7.07	\$ 7.07
<b>SMD Parts (1206)</b>										
C2	Ceramic 10uf 16V X7R 5%	1	Mouser	<a href="#">80-C1206C106J4R</a>	\$0.97	\$ 0.97	DigiKey	<a href="#">399-9309-1-ND</a>	\$ 2.50	\$ 2.50
C3, C4, C7, C8	Ceramic 0.1uf 16V X7R 10%	4	Mouser	<a href="#">80-C1206C104K4R</a>	\$0.45	\$ 1.80	DigiKey	<a href="#">399-9305-1-ND</a>	\$ 0.11	\$ 1.10
C9	Ceramic 1000pf 16V X7R 10%	1	Mouser	<a href="#">80-C1206C102K4R</a>	\$0.32	\$ 0.32	DigiKey	<a href="#">399-9300-1-ND</a>	\$ 0.29	\$ 0.29
R1	Thick Film 49.9R 1/8W	1	Mouser	<a href="#">71-CRCW1206-49.9</a>	\$0.15	\$ 0.15	DigiKey	<a href="#">311-49.9FRCT-ND</a>	\$ 0.10	\$ 0.10
R2, R3, R4, R5	Thick Film 24R 1/8W	4	Mouser	<a href="#">71-CRCW1206-24</a>	\$0.15	\$ 0.60	DigiKey	<a href="#">311-24.0FRCT-ND</a>	\$ 0.10	\$ 0.40
L1, L2, L3, L4	Ferrite 600 ohm	4	Mouser	<a href="#">81-BLM31PG601SN1</a>	\$0.37	\$ 1.48	DigiKey	<a href="#">495-2638-1-ND</a>	\$ 0.70	\$ 2.80
F1	Resettable Fuse 15V 0.5A 1206	1	Mouser	<a href="#">504-PTS120615V050</a>	\$0.20	\$ 0.20	DigiKey	<a href="#">MF-NSMF050-2CT-ND</a>	\$ 0.33	\$ 0.33
<b>Through-Hole Parts</b>										
C1	1000pf 100V 5mm ls, film capacitor	1	Mouser	<a href="#">505-FKS1000/100/10</a>	\$0.22	\$ 0.22	DigiKey	<a href="#">495-2456-1-ND</a>	\$ 0.30	\$ 0.30
C1 alternate	1000pf 400V 5mm ls, film capacitor	1	Mouser	<a href="#">75-MKT1817210404</a>	\$0.70					
C5, C6	470uf 16V 5mm ls, Panasonic FM	2	Mouser	<a href="#">667-EEU-FM1C471</a>	\$0.51	\$ 1.02	DigiKey	<a href="#">P12375-ND</a>	\$ 0.51	\$ 1.02
D1, D2, D3, D4, D5, D6	IN400X general purpose diode	6	Mouser	<a href="#">512-1N4002</a>	\$0.13	\$ 0.78	DigiKey	<a href="#">1N4001DICT-ND</a>	\$ 0.14	\$ 0.84
LED1, LED2	3mm LED, Red Diffused, low mcd	2	Mouser	<a href="#">859-LTL-4221N</a>	\$0.08	\$ 0.16	DigiKey	<a href="#">160-1139-ND</a>	\$ 0.34	\$ 0.68
VR1	3/8" sq. top adjust multi-turn trimmer 100R	1	Mouser	<a href="#">72-T93YA-100</a>	\$1.53	\$ 1.53	DigiKey	<a href="#">3296W-101LF-ND</a>	\$ 2.88	\$ 2.88
<b>Connectors</b>										
J1	Mini USB, right angle, SMD termination, through-hole mounting	1	Mouser	<a href="#">798-UX60-MB-5S8</a>	\$1.25	\$ 1.25	DigiKey	<a href="#">H2960CT-ND</a>	\$ 1.38	\$ 1.38
J2	DC power connector, PCB mount 2.1mm ctr	1	Mouser	<a href="#">163-7620E-E</a>	\$0.63	\$ 0.63	DigiKey	<a href="#">CP-059AH-ND</a>	\$ 1.17	\$ 1.17
J3	USB A female, upright, PCB mount	1	Mouser	<a href="#">571-292336-1</a>	\$4.50	\$ 4.50	DigiKey	<a href="#">A223392-ND</a>	\$ 5.68	\$ 5.68
<b>Power Supply</b>										
	6VAC 1A walwart	1	Mouser	NA		\$ -	DigiKey	<a href="#">T1124-P5-ND</a>	\$ 12.65	\$ 12.65
	9VDC, 300ma, unregulated walwart	1	Mouser	<a href="#">412-109034</a>	\$8.72	\$ 8.72				
	9VAC, 1500ma walwart	1	Jameco	<a href="#">2167648</a>	\$9.95	\$ -				
<b>Printed Circuit Board</b>										
	Doodlebug PCB	1	Beezar	Doodlebug PCB	\$2.00	\$ 2.00	Beezar	Doodlebug PCB	\$ 2.00	\$ 2.00
<b>Recommended Enclosure</b>										
	Hammond 1455C801		Mouser	<a href="#">Hammond 1455C801BK</a>	\$13.14	\$ -	DigiKey	<a href="#">Hammond 1455C801BK</a>	\$ 13.14	\$ -
<b>TOTAL, Mouser</b>						<b>\$ 34.27</b>	<b>Total, DigiKey</b>			<b>\$ 43.99</b>