Wogglebug Rev3 PCB

Qty	Reference	Description	Mouser P/N	Comments
PCB Components				
SMT Capacitors; ceramic 1206				
14	C1,C2,C3,C4,C5,C6,C7,C8, C9,C10,C11,C12,C13,C14	100nF	80-C1206C103K5R	Use 0.1 uF 80-C1206C104K5R
Metalized Polyester Capacitors; 0.2" lead spacing				
1	C18	1nF	75-MKT1817210405	
1	C15	10nF	75-MKT1817310254	
2	C23, C24	47nF	75-MKT1817347014	
Metalized Polyester Capacitor				
1	C25	4.7nF	140-PEI2A472J-RC	Add on back of PCB between junction of R35/VR1 and ground for increased stability
Electrolytic Capacitors; 0.15" lead spacing				
2	C19, C20	1uF	647-UKL1H010KDDANA	2mm LS; spread to fit
1	C21	2.2uF	647-UKL1H2R2KDDANA	2mm LS; spread to fit
1	C22	3.3uf NP	647-UVP1H3R3MDD	2mm LS; spread to fit
2	C16, C17	10uF	647-UKL1V100MDDANA	2mm LS; spread to fit
Resistors; 1/4W 1% metal film				
2	R42, R43	0R		Use jumper
1	R35	470R	271-470-RC	Change to 1K 271-1K-RC for increased stability
7	R20,R21,R22,R23,R24,R25, R26,R27	1K	271-1K-RC	
1	R1	1.2K	271-1.2K-RC	
1	R2	1.8K	271-1.8K-RC	
1	R34	4.7K	271-4.7K-RC	
6	R11,R12,R13,R14,R15,R16	10K	271-10K-RC	
1	R19	15K	271-15K-RC	
2	R31, R32	20K	271-20K-RC	
5	R36, R37, R38, R39, R40	49.9K	271-49.9K-RC	
1	R41	82K	271-82K-RC	
8	R3,R4,R5,R6,R7,R8,R9,R10	100K	271-100K-RC	
1	R18	150K	271-150K-RC	
1	R33	330K	271-330K-RC	
3	R28, R29, R30	1M	271-1.0M-RC	
1	R17	10M	291-10M-RC	Use 5%
Semiconductors				
4	D1, D2, D3, D4	1N4148	512-1N4148	
2	Q1, Q2	BC550	512-BC550CBU	
1	Q3	BC560	512-BC560CBU	
2	U1, U2	4046	595-CD4046BEE4	
1	U3	LF398		Digikey LF398N-ND
1	U4	LMC555	595-TLC555CP	
2	U5, U6	TL072	595-TL072BCP	
1	U7	TL074	595-TL074BCN	
Miscellaneous Parts				
1	VC1	VTL5C3		Allied 980-0710 or Bridechamber
1	VC2	VTL5C3/2		Allied 980-0730 or Bridechamber
2	L1, L2	Ferrite bead	623-2743001112LF	
2	U1, U2	16 pin DIP socket	517-4816-3000-CP	Use for 4046
1	U4	8 pin DIP socket	517-4808-3000-CP	Use for LM555
1	P1	0.156 MTA 4 pin header	571-6404454	
8	2 pin MTA header		571-6404542	0.100 spacing mating connectors have insufficient clearance for specific header locations
4	3 pin MTA header		571-6404543	0.100 spacing mating connectors have insufficient clearance for specific header locations

Qty	Designator	Description	Mouser P/N	Comments
Panel Mounted Components				
Controls and jacks				
1	V6	50K linear potentiometer		Change to 100K
2	V1, V5	100K linear potentiometer		BI Technologies P260P-D1BS3CB100K
3	V2, V3, V4	1M linear potentiometer		Oakley Sound BI Technologies; pins 1 & 3 reversed on schematic
6	V1,V2,V3,V4,V5,V6	Knobs	506-PKES90B1/4	
9	J1,J2,J3,J4,J5,J6,J7,J8,J9	1/4" NC Jack	502-112AX	Bridechamber for lower cost alternative
2		4 pin MTA connector	571-3-640426-4	power cable
2		4 pin MTA dust cover	571-6405514	power cable
These MTA 0.100" IDC connectors have insufficient clearance for the closely spaced headers: J2/J3, J4/J5, J8/J9. I substituted FCI mini-latch housings and crimp pins for J3, J5, and J8. These connectors work with the MTA headers although the MTA pins are 0.065" too long.				
8		2 pin MTA connector	571-3-640441-2	insufficient clearance for specific header locations
8		2 pin MTA dust cover	571-6405502	
4		3 pin MTA connector	571-3-640441-3	insufficient clearance for specific header locations
4		3 pin MTA dust cover	571-6405503	

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