

SEQUENTIAL VOLTAGE SOURCE MODEL 246

BILL OF MATERIALS REV 1.0

PCB1

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
1N457	D1 - D97	97		512-1N457
RESISTORS				
VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
78K	R1	1	1% 1/4W	271-78.7K-RC
52K	R2	1	1% 1/4W	271-52.3K-RC
10K	R3	1	1% 1/4W	271-100K-RC
100K	R4, R6	2	1% 1/4W	271-10K-RC
33K	R5	1	1% 1/4W	271-33K-RC
68K	R7	1	1% 1/4W	271-68K-RC
4K7	R8, R9, R10, R11, R12, R13, R14, R15, R16, R17, R18, R19, R20, R21, R22, R23	16	1% 1/4W	271-4.7K-RC
1K	R24, R25, R26, R30	4	1% 1/4W	271-1K-RC
4K99	R27, R28, R29, R31	4	1% 1/4W	271-4.99K-RC
10K-100K LINEAR	POT1 - POT67	67	16MM ANGLED	http://smallbear-electronics.mybigcommerce.com/alpha-single-gang-16mm-right-angle-pc-mount/

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
	B1, B4, B5, B7, B8, B9, B10, B11, B12, B13, B14, B15, B16, B17, B18, B19, B20, B21, B22, B23, B24, B25, B26, B27, B28, B29, B30, B31, B32, B33, B34, B35, B36, B37, B38, B39, B40, B41, B42, B43, B44, B45, B46, B47, B48, B49, B50, B51, B52, B53, B54, B55, B62	52	BANANA JACK RED	530-108-0902-1
	B2, B6, B56, B57, B58, B59, B60, B61, B63, B64	11	BANANA JACK BLACK	530-108-0903-1
	B3	1	BANANA JACK WHITE	530-108-0901-1
	LED1, LED3, LED4, LED5, LED6, LED7, LED8, LED9, LED10, LED11, LED12, LED13, LED14, LED15, LED16, LED17, LED18	17	5MM RED LED	604-WP7113ID5V
	LED2	1	5MM BLUE LED	EBAY ITEM #281532603412
	PLD1	1	PLD 14 PIN (FEMALE)	517-929975-01-07-RK
	PLD2, PLD3, PLD4	3	PLD 30 PIN (FEMALE)	517-929975-01-15-RK
	PLD5	1	PLD 10 PIN (FEMALE)	517-929975-01-05-RK
SPDT (ON)-ON	SW1, SW2	2	TOGGLE SWITCH	108-1MS2T1B1M1QE-EVX
DPDT ON-ON	SW3, SW4, SW5, SW6, SW7, SW8, SW9, SW10, SW11, SW12, SW13, SW14, SW15, SW16, SW17	15	TOGGLE SWITCH	108-1MD1T1B1M1QE-EVX
		67	SMALL DAVIES KNOB	5164-1610AA
		1	BLUE SWITCH CAP	108-00357-EV
		16	RED SWITCH CAP	108-00323-EV

PCB2

SEMICONDUCTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
1N457	D1, D2, D3, D4, D5, D6, D7, D8, D9, D10	10		512-1N457
TL072	IC1	1		595-TL072IP
LM741	IC2, IC31, IC32, IC33, IC34	5		926-LM741CN/NOPB
CD4001	IC3, IC8, IC11, IC14, IC17, IC20, IC23, IC26, IC29	9		595-CD4001BE
CD4011	IC4, IC5	2		595-CD4011BE
TL071	IC6	1		595-TL071CP
LM311	IC7, IC9, IC10, IC12, IC13, IC15, IC16, IC18, IC19, IC21, IC22, IC24, IC25, IC27, IC28, IC30	16		926-LM311N/NOPB
7805	IC35	1		512-LM7805ACT
2N3906	Q1, Q2, Q3, Q4, Q11, Q15, Q19, Q23, Q27, Q31, Q35, Q39, Q43, Q47, Q51, Q55, Q59, Q63, Q67, Q71, Q75, Q76, Q77, Q78, Q79	25		610-2N3906
J201	Q5	1		106-J201
2N3904	Q7, Q8, Q9, Q10, Q12, Q13, Q14, Q16, Q17, Q18, Q20, Q21, Q22, Q24, Q25, Q26, Q28, Q29, Q30, Q32, Q33, Q34, Q36, Q37, Q38, Q40, Q41, Q42, Q44, Q45, Q46, Q48, Q49, Q50, Q52, Q53, Q54, Q56, Q57, Q58, Q60, Q61, Q62, Q64, Q65, Q66, Q68, Q69, Q70, Q72, Q73, Q74, Q80, Q81	54		610-2N3904
LS312	Q6	1	OR ANY MATCHED NPN	http://www.linearsystems.com

CAPACITORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
0.01uF	C1, C2, C7, C8, C9, C10, C12, C13, C15, C16, C18, C19, C21, C22, C24, C25, C27, C28, C30, C31, C33, C34, C36, C37, C39, C40, C42, C43, C45, C46, C48, C49, C51, C52, C54, C55	36	CERAMIC 5MM LS	81-DEBF33A103ZA2B
150nF	C4	1	FILM 5MM LS	871-B32529C154K289
100pF	C5, C6, C57, C58, C59, C60, C61	7	CERAMIC 5MM LS	81-DEA1X3D101JA2B
1000pF	C11, C14, C17, C20, C23, C26, C29, C32, C35, C38, C41, C44, C47, C50, C53, C56, C62, C63	18	CERAMIC 5MM LS	81-DEBF33D102ZP2A
15uF	C3, C64, C65, C66, C67	5	TANTALUM SMD CASE D	74-TR3D156K035C0150
0.1uF	F1 - F38	38	CERAMIC 5MM LS	581-SA105E104M

RESISTORS

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
10K	R1, R7, R13, R30, R47, R51, R56, R57, R64, R67, R68, R73, R74, R81, R82, R87, R88, R95, R96, R101, R102, R109, R110, R115, R116, R123, R124, R129, R130, R137, R138, R143, R144, R151, R152, R157, R158, R165, R166, R171, R172, R179, R180, R185, R186, R193, R194, R199, R200, R207, R208, R213, R214, R221, R222, R227, R228, R235, R236, R241, R242, R249, R250, R255, R256, R263, R264, R269, R270, R278, R294, R296, R298, R308, R313, R315, R317	77	1% 1/4W	271-10K-RC
4K7	R2, R4, R10, R12, R35, R36, R53, R70, R84, R98, R112, R126, R140, R154, R168, R182, R196, R210, R224, R238, R252, R266, R312	23	1% 1/4W	271-4.7K-RC
1K5	R3, R23, R24	3	1% 1/4W	271-1.5K-RC
470R	R5, R11	2	1% 1/4W	271-470-RC
15K	R6, R17, R19, R20, R32, R301	6	1% 1/4W	271-15K-RC
6K8	R8, R9, R15, R25, R279, R282, R285, R302	8	1% 1/4W	271-6.8K-RC
100R	R14, R63	2	1% 1/4W	271-100-RC
330K	R16	1	1% 1/4W	271-330K-RC
220R	R18	1	1% 1/4W	271-220-RC
180K	R21	1	1% 1/4W	271-180K-RC
150K	R22, R27, R29, R291, R292, R293, R295, R297, R299, R316, R318	11	1% 1/4W	271-150K-RC
100K	R26, R31, R34, R43, R45, R46, R48, R49, R50, R54, R58, R71, R75, R85, R89, R99, R103, R113, R117, R127, R131, R141, R145, R155, R159, R169, R173, R183, R187, R197, R201, R211, R215, R225, R229, R239, R243, R253, R257, R267, R272, R300, R309, R314	44	1% 1/4W	271-100K-RC
68K	R28, R40	2	1% 1/4W	271-68K-RC
47K	R33, R44, R59, R60, R76, R77, R90, R91, R104, R105, R118, R119, R132, R133, R146, R147, R160, R161, R174, R175, R188, R189, R202, R203, R216, R217, R230, R231, R244, R245, R258, R259, R273, R274	34	1% 1/4W	271-47K-RC
22K	R37, R41, R65, R66	4	1% 1/4W	271-22K-RC
27K	R38	1	1% 1/4W	271-27K-RC
1M	R39	1	5% 1/4W	291-1M-RC
1K	R52, R61, R69, R78, R80, R83, R92, R94, R97, R106, R108, R111, R120, R122, R125, R134, R136, R139, R148, R150, R153, R162, R164, R167, R176, R178, R181, R190, R192, R195, R204, R206, R209, R218, R220, R223, R232, R234, R237, R246, R248, R251, R260, R262, R265, R275, R277, R280, R283, R286, R303, R306	52	1% 1/4W	271-1K-RC
330R	R55, R72, R86, R100, R114, R128, R142, R156, R170, R184, R198, R212, R226, R240, R254, R268	16	1% 1/4W	271-330-RC
470K	R62, R79, R93, R107, R121, R135, R149, R163, R177, R191, R205, R219, R233, R247, R261, R276	16	1% 1/4W	271-470K-RC
3K3	R281, R284, R287, R304	4	1% 1/4W	271-3.3K-RC
33K	R288, R289, R290, R305, R307, R311	6	1% 1/4W	271-33K-RC
300K	R310	1	1% 1/4W	271-300K-RC
49K9	R42	1	1% 1/4W	271-49.9K-RC
OR	R271	1	OR LINK	603-MFR-25FTE52-OR
100K	TR1, TR2	2	SINGLE-TURN	858-25PR100KLF

MISC

VALUE	DESIGNATOR	QTY	DESCRIPTION	MOUSER PART#
	PBD1	1	PLD 14 PIN (MALE)	517-929836-01-07
	PBD2, PBD3, PBD4	3	PLD 30 PIN (MALE)	517-929836-09-16
	PBD5	1	PLD 10 PIN (MALE)	517-929836-01-05-RK
		1	POWER CONNECTOR	587-306-50-010