

## SCA B16 Bill of Material

Rev 1.2

Item	Qty	Ref	Value	Marking	Description	Mfg	Mfg Part Number	Source	Cat Number
1	1	C3	47pF	470	C0G Ceramic Capacitor	Kemet	C315C470J1G5TA	Mouser	C315C470J1G5TA
2	5	C4, C5, C9, C32, C33	100pF	101	C0G Ceramic Capacitor	Kemet	C315C101J1G5TA	Mouser	C315C101J1G5TA
3	1	C16	47nF	473	Metallized Film Capacitor	Panasonic	ECQ-V1H473JL	Mouser	ECQ-V1H473JL
4	10	C1, C2, C6, C11, C13, C14, C19, C23, C26, C27	100nF	104	X7R Ceramic Capacitor	Kemet	C315C104M5U5CA	Mouser	C315C104M5U5CA
5	1	C21	220nF	224	Metallized Film Capacitor	Panasonic	ECQ-V1H224JL	Mouser	ECQ-V1H224JL
6	1	C10	10uF	10uF 25V	Tantalum Electrolytic Capacitor	Kemet	T351E106K025AT	Mouser	T351E106K025AT
7	2	C12, C15	10uF	10uF 50V BP	Radial Electrolytic Capacitor	Nichicon	UVP1H100MED	Mouser	UVP1H100MED
8	4	C7, C8, C22, C29	22uF	22uf 35V	Radial Electrolytic Capacitor	Panasonic	EEU-FC1V220	Mouser	EEU-FC1V220
9	2	C17, C18	47uF	47uf 35V	Radial Electrolytic Capacitor	Panasonic	EEU-FC1V470	Mouser	EEU-FC1V470
10	2	C24, C25	100uF	100uF 35V	Radial Electrolytic Capacitor	Panasonic	EEU-FC1V101	Mouser	EEU-FC1V101
11	1	C31	100uF	100uF 63V	Radial Electrolytic Capacitor	Panasonic	EEU-FC1J101L	Mouser	EEU-FC1J101L
12	1	C20	220uF	220uF 6.3V	Radial Electrolytic Capacitor	Panasonic	ECA-0JM221	Mouser	ECA-0JM221
13	2	C28, C30	1500uF	1500uF 50V	Radial Electrolytic Capacitor	Panasonic	ECO-S1HA152BA	Mouser	ECO-S1HA152BA
14	1	CONN1			XLR Female	Neutrik	NC3FBHR2	Brill	NC3FBHR2
15	1	CONN2			XLR Male	Neutrik	NC3MBHR	Brill	NC3MBHR
16	3	D1, D2, D3	1N4148	1N4148	Diode	Fairchild	1N4148TA	Mouser	1N4148TA
17	13	D6 - D18	1N4002	1N4002	Rectifier Diode	Fairchild	1N4002	Mouser	512-1N4002
18	2	D4, D5			Red LED	Kingbright	WP132XIT	Mouser	604-WP132XIT
19	1	J1			2 Pin Header	Molex	22-28-4020	Digi-Key	22-28-4020
20	2	J1,J2			3 Pin Header	Molex	22-28-4030	Digi-Key	22-28-4030
21	2				Shorting Jumpers	Sullins	STC02SYAN	Digi-Key	STC02SYAN
22	1	J3			6 Pin Header	Molex	26-60-4060	Digi-Key	26-60-4060
23	6	L1 - L6	1000pF	C102	Filter	Bourns	EMI102T-RC	Mouser	EMI102T-RC
24	2	R38, R39	0	Black	Zero-Ohm Jumper	Xicon	291-0-RC	Mouser	291-0-RC
25	1	R11	51	Green-Brown-Black-Gold-Brown	Metal Film Resistor 1/4W	Xicon	271-51-RC	Mouser	271-51-RC
26	3	R30, R31, R37	150	Brown-Green-Black-Black-Brown	Metal Film Resistor 1/4W	Xicon	271-150-RC	Mouser	271-150-RC
27	1	R28	220	Red-Red-Black-Black-Brown	Metal Film Resistor 1/4W	Xicon	271-220-RC	Mouser	271-220-RC
28	1	R3	1K4	Brown-Yellow-Black-Brown-Brown	Metal Film Resistor 1/4W	Xicon	271-1.4K-RC	Mouser	271-1.4K-RC
29	2	R29, R34	2K	Red-Black-Black-Brown-Brown	Metal Film Resistor 1/4W	Xicon	271-2K-RC	Mouser	271-2K-RC
30	2	R40, R41	2K49	Red-Yellow-White-Brown-Brown	Metal Film Resistor 1/4W	Xicon	271-2.49K-RC	Mouser	271-2.49K-RC
31	1	R32	4K7	Yellow-Violet-Black-Brown-Brown	Metal Film Resistor 1/4W	Xicon	271-4.7K-RC	Mouser	271-4.7K-RC
32	1	R42	4K99	Yellow-White-White-Brown-Brown	Metal Film Resistor 1/4W	Xicon	271-4.99K-RC	Mouser	271-4.99K-RC
33	2	R21, R23	5K1	Green-Brown-Black-Brown-Brown	Metal Film Resistor 1/4W	Xicon	271-5.1K-RC	Mouser	271-5.1K-RC
34	1	R20	10K	Brown-Black-Black-Red-Brown	Metal Film Resistor 1/4W	Xicon	271-10K-RC	Mouser	271-10K-RC
35	3	R2, R33, R35	15K	Brown-Green-Black-Red-Brown	Metal Film Resistor 1/4W	Xicon	271-15K-RC	Mouser	271-15K-RC
36	3	R9, R19, R22	20K	Red-Black-Black-Red-Brown	Metal Film Resistor 1/4W	Xicon	271-20K-RC	Mouser	271-20K-RC
37	1	R25	28K7	Red-Gray-Violet-Red-Brown	Metal Film Resistor 1/4W	Xicon	271-28.7K-RC	Mouser	271-28.7K-RC
38	3	R13, R14, R16	30K1	Orange-Black-Brown-Red-Brown	Metal Film Resistor 1/4W	Xicon	271-30.1K-RC	Mouser	271-30.1K-RC
39	2	R12, R36	100K	Brown-Black-Black-Orange-Brown	Metal Film Resistor 1/4W	Xicon	271-100K-RC	Mouser	271-100K-RC
40	1	R10	300K	Orange-Black-Black-Orange-Brown	Metal Film Resistor 1/4W	Xicon	271-300K-RC	Mouser	271-300K-RC
41	1	R15	470K	Yellow-Violet-Black-Orange-Brown	Metal Film Resistor 1/4W	Xicon	271-470K-RC	Mouser	271-470K-RC
42	1	R18	590K	Green-White-Black-Orange-Brown	Metal Film Resistor 1/4W	Xicon	271-590K-RC	Mouser	271-590K-RC
43	2	R24, R26	1M2	Brown-Red-Green-Gold	Carbon Film Resistor 1/4W	Xicon	291-1.2M-RC	Mouser	291-1.2M-RC
44	1	R17	2M7	Red-Violet-Green-Gold	Carbon Film Resistor 1/4W	Xicon	291-2.7M-RC	Mouser	291-2.7M-RC
45	1	R27	3M9	Orange-White-Green-Gold	Carbon Film Resistor 1/4W	Xicon	291-3.9M-RC	Mouser	291-3.9M-RC
46	2	R7, R8	50K	503	Potentiometer	Bourns	3296Y-1-503LF	Digi-Key	3296Y-1-503LF
47	2	R1, R4	10K/10K	81A2A-G36-A15/A15L	Potentiometer	Bourns	81A2A-G36-A15/A15L	Arrow	81A2A-G36-A15/A15L
48	2	RLY1, RLY2		G5V-2-H DC48	DPDT Relay	Omnron	G5V-2-H1 DC48	Mouser	G5V-2-H1 DC48
49	1	SW1		100A WSP1	SPDT Switch (ON-OFF-ON)	E-Switch	100AWSP3T2B4M7RE	Digi-Key	100AWSP3T2B4M7RE
50	1	SW2		100A WDP1	DPDT Switch	E-Switch	100AWDP1T2B4M7RE	Digi-Key	100AWDP1T2B4M7RE
51	1	T1 (Optional)		CMOQ-2S	Output Transformer	CineMag	CMOQ-2S	CineMag	CMOQ-2S
52	1	U1		THAT 4301AP	Dynamics Processor	THAT Corp	4301AP20-I	Mouser	887-4301AP20-I
53	1	U2		OPA2604AP	Dual CMOS Op Amp	Burr-Brown	OPA2604AP	Digi-Key	OPA2604AP-ND
54	1	U3		THAT 1646	Line Driver	THAT Corp	1646P08-U	Mouser	887-1646P08-U
55	1	U4		THAT 1200	Line Receiver	THAT Corp	1200P08-U	Mouser	887-1200P08-U
56	1	U5		LM317	Voltage Regulator, Pos	Fairchild	LM317T	Mouser	512-LM317T
57	1	U6		LM337	Voltage Regulator, Neg	Fairchild	LM337T	Mouser	512-LM337T
58	2				Heatsink	Aavid	577202B00000	Mouser	532-577202B00

59	2	0			Outer Knob				
60	2				Inner Knob				
61	4		M2.5 x 6		Pan head machine screw, black		.25S6PPMZB	Olander	.25S6PPMZB
62	2		#4-40 x 1/4"		Pan head machine screw		4C25PPMZR	Olander	4C25PPMZR
63	2		#4-40		Keps nut		4CKNTZR	Olander	4CKNTZR
64	1				PCB	SCA		SCA	