

SCA B16 Bill of Material

REV 2.1

Item	Qty	Ref	Value	Marking	Description	Mfg	Mfg Part Number	Source
1	1	C3	47pF	470	C0G Ceramic Capacitor	Kemet	C315C470J1G5TA	Mouser
2	5	C4, C5, C9, C32, C33	100pF	101	C0G Ceramic Capacitor	Kemet	C315C101J1G5TA	Mouser
3	1	C6	220pF	221	C0G Ceramic Capacitor	Kemet	C315C221J1G5TA	Mouser
4	1	C16	47nF	473	Metallized Film Capacitor	Panasonic	ECQ-V1H473JL	Mouser
5	14	C1-C2, C13-C14, C19, C23, C26-C27, C100-C105	100nF	104	X7R Ceramic Capacitor	Kemet	C315C104M5U5CA	Mouser
6	1	C21	220nF	224	Metallized Film Capacitor	Panasonic	ECQ-V1H224JL	Mouser
7	1	C10	10uF	10uF 25V or 35V	Tantalum Electrolytic Capacitor	Kemet	T351E106K025AT	Mouser
8	2	C12, C15	10uF	10uF 50V BP	Radial Electrolytic Capacitor	Nichicon	UVP1H100MED	Mouser
9	4	C7, C8, C22, C29	22uF	22uf 35V	Radial Electrolytic Capacitor	Panasonic	EEU-FC1V220	Mouser
10	2	C17, C18	47uF	47uf 35V or 50V	Radial Electrolytic Capacitor	Panasonic	EEU-FC1V470	Mouser
11	2	C24, C25	100uF	100uF 35V	Radial Electrolytic Capacitor	Panasonic	EEU-FC1V101	Mouser
12	1	C31	100uF	100uF 63V	Radial Electrolytic Capacitor	Panasonic	EEU-FC1J101L	Mouser
13	1	C20	220uF	220uF 6.3V	Radial Electrolytic Capacitor	Panasonic	ECA-0JM221	Mouser
14	2	C28, C30	1000uF	1000uF 50V	Radial Electrolytic Capacitor	Panasonic	ECO-S1HA152BA	Mouser
15	1	CONN1			XLR Female	Neutrik	NC3FBHR2	Brill
16	1	CONN2			XLR Male	Neutrik	NC3MBHR	Brill
17	1	CONN3 (optional)			2 Pin Header	Molex	22-28-4020	Digi-Key
18	3	D1, D2, D3	1N4148	1N4148	Diode	Fairchild	1N4148TA	Mouser
19	13	D6 - D18	1N4002	1N4002	Rectifier Diode	Fairchild	1N4002	Mouser
20	2	D4, D5			Red LED	Kingbright	WP132XIT	Mouser
21	1	J2			6 Pin Header	Molex	26-60-4060	Digi-Key
22	6	L1 - L6	1000pF	C102	Filter	Bourns	EMI102T-RC	Mouser
23	2	R38, R39 (Install If NO Transformer)	0	Black	Zero-Ohm Jumper	Xicon	291-0-RC	Mouser
24	1	R37	150	Brown-Green-Black-Black-Brown	Metal Film Resistor 1/4W	Xicon	271-150-RC	Mouser
25	2	R30, R31	180	Brown-Violet-Black-Black-Brown	Metal Film Resistor 1/4W	Xicon	271-180-RC	Mouser
26	1	R28	220	Red-Red-Black-Black-Brown	Metal Film Resistor 1/4W	Xicon	271-220-RC	Mouser
27	1	R3	1K4	Brown-Yellow-Black-Brown-Brown	Metal Film Resistor 1/4W	Xicon	271-1.4K-RC	Mouser
28	2	R29, R34	2.4K	Red-Yellow-Black-Brown-Brown	Metal Film Resistor 1/4W	Xicon	271-2.4K-RC	Mouser
29	2	R40, R41	2K49	Red-Yellow-White-Brown-Brown	Metal Film Resistor 1/4W	Xicon	271-2.49K-RC	Mouser
30	1	R32	4K7	Yellow-Violet-Black-Brown-Brown	Metal Film Resistor 1/4W	Xicon	271-4.7K-RC	Mouser
31	1	R42	4K99	Yellow-White-White-Brown-Brown	Metal Film Resistor 1/4W	Xicon	271-4.99K-RC	Mouser
32	3	R1, R21, R23	5K1	Green-Brown-Black-Brown-Brown	Metal Film Resistor 1/4W	Xicon	271-5.1K-RC	Mouser
33	1	R20	10K	Brown-Black-Black-Red-Brown	Metal Film Resistor 1/4W	Xicon	271-10K-RC	Mouser
34	3	R2, R33, R35	15K	Brown-Green-Black-Red-Brown	Metal Film Resistor 1/4W	Xicon	271-15K-RC	Mouser
35	3	R9, R19, R22	20K	Red-Black-Black-Red-Brown	Metal Film Resistor 1/4W	Xicon	271-20K-RC	Mouser
36	3	R13, R14, R16	30K1	Orange-Black-Brown-Red-Brown	Metal Film Resistor 1/4W	Xicon	271-30.1K-RC	Mouser
37	1	R25	32.4K	Orange-Red-Yellow-Red-Brown	Metal Film Resistor 1/4W	Xicon	271-32.4K-RC	Mouser
38	2	R12, R36	100K	Brown-Black-Black-Orange-Brown	Metal Film Resistor 1/4W	Xicon	271-100K-RC	Mouser
39	1	R15	470K	Yellow-Violet-Black-Orange-Brown	Metal Film Resistor 1/4W	Xicon	271-470K-RC	Mouser
40	1	R18	590K	Green-White-Black-Orange-Brown	Metal Film Resistor 1/4W	Xicon	271-590K-RC	Mouser
41	1	R17	2M7	Red-Violet-Green-Gold	Carbon Film Resistor 1/4W	Xicon	291-2.7M-RC	Mouser
42	1	R27	3M9	Orange-White-Green-Gold	Carbon Film Resistor 1/4W	Xicon	291-3.9M-RC	Mouser
43	1	R8	50K	503	Potentiometer	Bourns	3296Y-1-503LF	Digi-Key
44	2	R1, R4	10K/10K	81A2A-G36-A15/A15L	Potentiometer	Bourns	81A2A-G36-A15/A15L	Arrow
45	2	RLY1, RLY2		G5V-2-H DC48	DPDT Relay	Omron	G5V-2-H1 DC48	Mouser
46	1	SW1		100A WSP1	SPDT Switch (ON-OFF-ON)	E-Switch	100AWSP3T2B4M7RE	Digi-Key
47	1	SW201		100A WDP1	DPDT Switch	E-Switch	100AWDP1T2B4M7RE	Digi-Key
48	1	T1 (Optional)		CMOQ-2S	Output Transformer	CineMag	CMOQ-2S	CineMag
49	1	U1		THAT 4305	Dynamics Processor	THAT Corp	4305Q16-U	Mouser
50	3	U2, U7, U8		OPA2604AP	Dual CMOS Op Amp	Burr-Brown	OPA2604AP	Digi-Key
51	1	U3		THAT 1646	Line Driver	THAT Corp	1646P08-U	Mouser
52	1	U4		THAT 1200	Line Receiver	THAT Corp	1200P08-U	Mouser
53	1	U5		LM317	Voltage Regulator, Pos	Fairchild	LM317T	Mouser
54	1	U6		LM337	Voltage Regulator, Neg	Fairchild	LM337T	Mouser

55	2				Heatsink	Aavid	577202B00000	Mouser
56	2				Outer Knob	Cosmo		Cosmo
57	2				Inner Knob	Cosmo		Cosmo
58	4		M2.5 x 6		Pan head machine screw, black		.25S6PPMZB	Olander
59	2	Optional for transformer	#4-40 x 1"		Pan head machine screw			Olander
59	4	Two are Optional for transformer	#4-40 x 1/4"		Pan head machine screw		4C25PPMZR	Olander
60	2	Optional for transformer	1/8"		1/8" Nylon Spacer			Olander
61	4		#4-40		Keps nut		4CKNTZR	Olander
62	1				PCB	SCA		SCA