

**SCA S90-500 Bill of Material**

**Rev 1**

Item	Qty	Ref	Value	Description	Manufacturer	Manufacturer's Number
1	4	C103,C114,C203,C213	3.3pF	C0G Ceramic	Kemet	FG18C0G1H3R3CNT06
2	2	C209,C405	10pF	C0G Ceramic	Kemet	C315C100J2G5TA
3	6	C17,C18,C106,C116,C207,C220	100pF	C0G Ceramic	Kemet	C315C101J2G5TA
4	4	C105,C107,C115,C119	330pF	C0G Ceramic	Kemet	C315C331J2G5TA
5	2	C108,C120	470pF	C0G Ceramic	Kemet	C315C471J2G5TA
6	18	C1,C5,C12,C102,C110,C111,C118,C202,C206,C208,C211,C212,C214,C216-C219,C401,C404	.1uF	X7R Ceramic	Kemet	C315C104M5U5TA
7	2	C402,C403	.15uF	Film Capacitors 63volts 0.15uF 5%	KEMET	R82DC3150AA60J
8	6	C201,C204,C223,C224,C226,C227	.47uF	Film Capacitors 63volts 0.47uF 5%	KEMET	R82DC3470AA60J
9	4	C104,C113,C205,C215	2.2uF/50V	Film Capacitors 50volts 2.2uF 10% LS=5mm	Wima	MKS2B042201F00KSSD
10	2	C210,C406	100uF/50V BP	Aluminum Electrolytic Capacitors - Radial Leaded 100UF 50V SU BI-POLAR	Panasonic	ECE-A1HN101U
11	2	C7,C8	100uF/63V	Aluminum Electrolytic Capacitors - Radial Leaded 100uF 63V	Panasonic	EEU-FC1J101U
12	1	C117	10uF/25V	Aluminum Electrolytic Capacitors - Radial Leaded 10UF 25V ELECT FC RADIAL	Panasonic	EEA-FC1E100
13	2	C221,C225	10uF/35V BP	Aluminum Electrolytic Capacitors - Radial Leaded 10uF 35 Volts 20% BI-POLAR	Nichicon	UVF1V100MDD1TD
14	2	C2,C6	1000uF/50V	Aluminum Electrolytic Capacitors - Radial Leaded 1000uF 50 Volts 20%	Panasonic	EEU-FM1H102B
15	4	C3,C4,C9,C10	22uF/35V	Aluminum Electrolytic Capacitors - Radial Leaded 22uF 35V	Panasonic	EEU-FC1V220
16	3	C101,C112,C121	220uF/25V	Aluminum Electrolytic Capacitors - Radial Leaded 25volts 220uF 20%	Nichicon	UFW1E221MPD
9	1	C11	330uF	Radial Electrolytic Capacitor	Panasonic	ECO-S1HA152BA
10	2	C13, C14	1000pF/2KV	Suppression Cap	Vishay	S102M33Z5UR63L6R
17	7	D1,D3,D4,D6-D9	1N4002	Rectifiers Vr/100V Io/1A	Micro Commercial Components (MCC)	1N4002-TP
11	1	L1	4.7uH	Shielded Inductor	Bourns	CM322522-4R7JL
19	4	L102,L103,L201,L202	102J	EMI Filter Circuits 1KpF 20% 50VOLT 5AMP	Bourns	EM102T-RC
20	2	L101,L104	15uH	Fixed Inductors 15uH 10% Wirewound	Bourns	CM322522-150KL
18	1	Q1	A06	Bipolar Transistors - BJT 500mA 80V	Micro Commercial Components (MCC)	MPSA06-AP
24	4	R13, R25, R210, R401	10	Metal Film Resistors - Through Hole 10 OHM 1/4W 1%	Yageo	MFR-25FBF-52-10R
25	2	R303,R304	17.4	Metal Film Resistors - Through Hole 17.4 OHM 1/4W 1%	Yageo	MFR-25FBF-52-17R4
26	2	R301,R302	41.2	Metal Film Resistors - Through Hole 41.2 OHM 1/4W 1%	Yageo	MFR-25FBF-52-41R2
27	2	R102,R120	47	Metal Film Resistors - Through Hole 47 OHM 1/4W 1%	Yageo	MFR-25FBF-52-47R
28	1	R109	54.9	Metal Film Resistors - Through Hole 54.9 OHM 1/4W 1%	Yageo	MFR-25FBF-52-54R9
29	2	R305,R306	73.2	Metal Film Resistors - Through Hole 73.2 OHM 1/4W 1%	Yageo	MFR-25FBF-52-73R2
30	1	R213	78.7	Metal Film Resistors - Through Hole 78.7 OHM 1/4W 1%	Yageo	MFR-25FBF-52-78R7
31	3	R101,R111,119	100	Metal Film Resistors - Through Hole 100 OHM 1/4W 1%	Yageo	MFR-25FBF-52-100R
32	2	R321,R322	118	Metal Film Resistors - Through Hole 118 OHM 1/4W 1%	Yageo	MFR-25FBF-52-118R
33	1	R7	150	Metal Film Resistors - Through Hole 150 OHM 1/4W 1%	Yageo	MFR-25FBF-52-150R
34	2	R319,R320	178	Metal Film Resistors - Through Hole 178 OHM 1/4W 1%	Yageo	MFR-25FBF-52-178R
35	2	R1,R6	180	Metal Film Resistors - Through Hole 180 OHM 1/4W 1%	Yageo	MFR-25FBF-52-180R
35	2	R105,R115	200	Metal Film Resistors - Through Hole 200 OHM 1/4W 1%	Yageo	MFR-25FBF-52-200R
36	2	R317,R318	267	Metal Film Resistors - Through Hole 267 OHM 1/4W 1%	Yageo	MFR-25FBF-52-267R
37	2	R110,R117	300	Metal Film Resistors - Through Hole 300 OHM 1/4W 1%	Yageo	MFR-25FBF-52-300R
38	2	R315,R316	392	Metal Film Resistors - Through Hole 392 OHM 1/4W 1%	Yageo	MFR-25FBF-52-392R
39	2	R313,R314	590	Metal Film Resistors - Through Hole 590 OHM 1/4W 1%	Yageo	MFR-25FBF-52-590R
40	2	R311,R312	887	Metal Film Resistors - Through Hole 887 OHM 1/4W 1%	Yageo	MFR-25FBF-52-887R
41	4	R107,R118,R204,R216	1K	Metal Film Resistors - Through Hole 1K OHM 1/4W 1%	Yageo	MFR-25FBF-52-1K
42	2	R309,R310	1430	Metal Film Resistors - Through Hole 1430 OHM 1/4W 1%	Yageo	MFR-25FBF-52-1K43
43	2	R3,R4	2400	Metal Film Resistors - Through Hole 2400 OHM 1/4W 1%	Yageo	MFR-25FBF-52-2K4
44	2	R307,R308	2490	Metal Film Resistors - Through Hole 2490 OHM 1/4W 1%	Yageo	MFR-25FBF-52-2K49
45	1	R505	3.4K	Metal Film Resistors - Through Hole 3.4K OHM 1/4W 1%	Yageo	MFR-25FBF-52-3K4
46	2	R104,R112	3.92K	Metal Film Resistors - Through Hole 3.92K OHM 1/4W 1%	Yageo	MFR-25FBF-52-3K92
47	2	R103,R503	4.22K	Metal Film Resistors - Through Hole 4.22K OHM 1/4W 1%	Yageo	MFR-25FBF-52-4K22
48	1	R501	4.99K	Metal Film Resistors - Through Hole 4.99K OHM 1/4W 1%	Yageo	MFR-25FBF-52-4K99
49	1	R523	6.19K	Metal Film Resistors - Through Hole 6.19K OHM 1/4W 1%	Yageo	MFR-25FBF-52-6K19
50	2	R106,R113	6.65K	Metal Film Resistors - Through Hole 6.65K OHM 1/4W 1%	Yageo	MFR-25FBF-52-6K65
51	5	R205,R206,R212,R214,R506	6.8K	Metal Film Resistors - Through Hole 6.8K OHM 1/4W 1%	Yageo	MFR-25FBF-52-6K8
52	1	R521	7.5K	Metal Film Resistors - Through Hole 7.5K OHM 1/4W 1%	Yageo	MFR-25FBF-52-7K5
53	1	R504	8.25K	Metal Film Resistors - Through Hole 8.25K OHM 1/4W 1%	Yageo	MFR-25FBF-52-8K25
54	1	R519	9.31K	Metal Film Resistors - Through Hole 9.31K OHM 1/4W 1%	Yageo	MFR-25FBF-52-9K31
55	4	R9,R116,R211,R502	10K	Metal Film Resistors - Through Hole 10K OHM 1/4W 1%	Yageo	MFR-25FBF-52-10K
56	1	R517	12.4K	Metal Film Resistors - Through Hole 12.4K OHM 1/4W 1%	Yageo	MFR-25FBF-52-12K4
57	1	R524	12.7K	Metal Film Resistors - Through Hole 12.7K OHM 1/4W 1%	Yageo	MFR-25FBF-52-12K7
58	2	R515,R522	15K	Metal Film Resistors - Through Hole 15K OHM 1/4W 1%	Yageo	MFR-25FBF-52-15K
59	1	R513	18.7K	Metal Film Resistors - Through Hole 18.7K OHM 1/4W 1%	Yageo	MFR-25FBF-52-18K7
60	1	R520	19.1K	Metal Film Resistors - Through Hole 19.1K OHM 1/4W 1%	Yageo	MFR-25FBF-52-19K1
61	1	R518	25.5K	Metal Film Resistors - Through Hole 25.5K OHM 1/4W 1%	Yageo	MFR-25FBF-52-25K5

62	1	R511	30K	Metal Film Resistors - Through Hole 30K OHM 1/4W 1%	Yageo	MFR-25FBF-52-30K
63	2	R509,R516	30.1K	Metal Film Resistors - Through Hole 30.1K OHM 1/4W 1%	Yageo	MFR-25FBF-52-30K1
64	1	R514	37.4K	Metal Film Resistors - Through Hole 37.4K OHM 1/4W 1%	Yageo	MFR-25FBF-52-37K4
65	3	R208,R218,R512	49.9K	Metal Film Resistors - Through Hole 49.9K OHM 1/4W 1%	Yageo	MFR-25FBF-52-49K9
66	1	R510	60.4K	Metal Film Resistors - Through Hole 60.4K OHM 1/4W 1%	Yageo	MFR-25FBF-52-60K4
67	7	R8,R108,R114,R202,R203,R207,R215	100K	Metal Film Resistors - Through Hole 100K OHM 1/4W 1%	Yageo	MFR-25FBF-52-100K
68	1	R507	150K	Metal Film Resistors - Through Hole 150K OHM 1/4W 1%	Yageo	MFR-25FBF-52-150K
69	1	R508	300K	Metal Film Resistors - Through Hole 300K OHM 1/4W 1%	Yageo	MFR-25FBF-52-300K
70	3	R201,R209,R217	470K	Metal Film Resistors - Through Hole 470K OHM 1/4W 1%	Yageo	MFR-25FBF-52-470K
71	1	U1	LM317T	Linear Voltage Regulators 1.2-37V Adj Positive 1.5 Amp Output	STMicroelectronics	LM317T
72	1	U2	LM337TG	Linear Voltage Regulators 1.5A -1.2 to -37V ADJ Negative	ON Semiconductor	LM337TG
73	6	U101,U103,U201,U203,U204,U401	NE5534	Operational Amplifiers - Op Amps Single Low Noise	Texas Instruments	NE5534P
74	1	U102	SSM2212	Bipolar Transistors - BJT Low Noise Matched Dual NPN	Analog Devices Inc.	SSM2212RZ
75	1	U202	TL072	TL072 Opamp	Texas Instruments	TL072IDR
76	1	U205	THAT 1646	Audio Amplifiers AUDIO LINE DRIVERS	THAT Corp.	THAT1646
46	1	U4		DC-DC Converter	CUI	PDQE10-Q24-D24-D
77	1	S1		SPDT Switch	E-Switch	100AWSP1T2B4M7RE
78	1	S201		DPDT Switch	E-Switch	100AWDP1T2B4M7RE
79	2	SW301,SW501		Grayhill 2-deck Rotary Switch	Grayhill	71BDF30-02-1-AJS
80	2			Heatsink	Aavid	577202B00000G
81	2			Fluted Knob	Cosmo	39-7747-001-00-3-10
82	2	HARDWARE	#4-40 x 1/4"	Pan head machine screw, trilobe		
59	1	HARDWARE		500 Tray		
60	1	HARDWARE		500 Cover		
61	1	HARDWARE		B16-500 Faceplate		
62	8	HARDWARE	#4-40 x 1/8"	Flat head machine screw		
64	2	HARDWARE	#4-40	Kepps nut		
65	4	HARDWARE	#4-40 x 3/16"	HEX STANDOFF #4-40 ALUM 3/16"		
66	2	HARDWARE		1/8" Nylon spacer		
67	4	HARDWARE	#4-40 x 1-1/16"	1/4 HEX 1-1/16" LENGTH Spacer		
68	1				PCB	SCA