

Items list				(c) Bewator Cotag	
Title	SP500 PCA			IL00496	Issue
Drawn	PMB	date	28-03-03		
Authorised	KOF	date	28-03-03		
Issued	PMB	date	31-03-03		
Change notes	CN001833				
Actioned	P Buckle	date	13/11/03		
Used on	DL00493				
Approvals					

Item	Ident	M.I.	Description	Qty	Units	Part No	Var	Remarks
1			PCB	1		A00492		
2								
3			<u>Surface mount components</u>					
4								
5	C1		100nF 10% 6V X7R 0603	10		C362		
6	C2		10 uF -20 +80% Tant 6V size B	1		C355		
7	C3		22pF 10% 6V X7R 0603	3		C356		
8	C4		4u7 -20 +80% Tant 6V size B	1		C331		
9	C5		3n9 5% cog 50 V 1206	2		C358		
10	C6		3n9 5% cog 50 V 1206	-		C358		
11	C7		not fitted cog 50V 0805	-		-		
12	C8		not fitted cog 50V 0805	-		-		
13	C9		820pF 2% 6 V C0G	1		C364		
14	C10		1nF 10% 6V X7R 0603	4		C359		
15	C11		680p 2% 6V C0G	1		C363		
16	C12		10nF 10% 6V X7R 0603	3		C360		
17	C13		10nF 10% 6V X7R 0603	-		C360		
18	C14		10nF 10% 6V X7R 0603	-		C360		
19	C15		100nF 10% 6V X7R 0603	-		C362		
20	C16		1nF 10% 6V X7R 0603	-		C359		
21	C19		100nF 10% 6V X7R 0603	-		C362		
22	C20		100nF 10% 6V X7R 0603	-		C362		
23	C21		100nF 10% 6V X7R 0603	-		C362		
24	C22		100nF 10% 6V X7R 0603	-		C362		
25	C23		100nF 10% 6V X7R 0603	-		C362		
26	C24		100nF 10% 6V X7R 0603	-		C362		
27	C25		1nF 10% 6V X7R 0603	-		C359		
28	C26		22pF 10% 6V X7R 0603	-		C356		
29	C27		22pF 10% 6V X7R 0603	-		C356		
30	C28		100nF 10% 6V X7R 0603	-		C362		
31	C29		1nF 10% 6V X7R 0603	-		C359		
32	C30		39nF 10% 50V X7R 0603	1		C361		
33	C31		100nF 10% 6V X7R 0603	-		C362		
34	C32							See R69, fitted instead
35								
36								
37								
38	D1		BAS16 diode SOT23	5		J188		
39	D2		BAS16 diode SOT23	-		J188		
40	D3		BAS16 diode SOT23	-		J188		
41	D4		BAS16 diode SOT23	-		J188		
42	D6		trans prot 5V 0603	7		J223		

Item	Ident	M.I.	Description	Qty	Units	Part No	Var	Remarks
43	D7		trans prot 5V 0603	-		J223		
44	D8		trans prot 5V 0603	-		J223		
45	D9		trans prot 5V 0603	-		J223		
46	D10		trans prot 5V 0603	-		J223		
47	D11		trans prot 5V 0603	-		J223		
48	D12		trans prot 5V 0603	-		J223		
49	D16		BAS16 diode SOT23	-		J188		
50	D18		trans prot 36V 1206	1		J224		33V OK but check spec of new types
51	D19		BAV99 diode SOT23	1		J176		
52								
53								
54								
55	F1		polyswitch SMD030	1		B141		
56								
57								
58								
59	L1		330uH Inductor SM 1210	1		Q133		
60	L2		22uH Inductor SM 1210	1		Q132		
61								
62								
63								
64	Q1		NDS7002A	4		J202		
65	Q2		BCW30 SOT 23 npn	1		J195		or equiv, min hfe 180
66	Q5		BC846B SOT 23 npn	3		J194		or equiv, min hfe 180
67	Q6		NDS7002A	-		J202		
68	Q7		NDS7002A	-		J202		
69	Q8		NDS7002A	-		J202		
70	Q12		BC846B SOT 23 npn	-		J194		or similar npn
71	Q13		BC846B SOT 23 npn	-		J194		or similar npn
72								
73								
74								
75	R1		not fitted 0R 5% 50mW 0603	-		-		
76	R2		47R 5% 50mW 0603	2		R357		
77	R3		1k 5% 50mW 0603	4		R360		
78	R4		100k 5% 50mW 0603	6		R365		
79	R5		100k 5% 50mW 0603	-		R365		
80	R6		100k 5% 50mW 0603	-		R365		
81	R7		6k8 5% 50mW 0603	5		R362		
82	R8		22k 1% 50mW 0603	8		R368		5% ok here
83	R9		33k 1% 50mW 0603	5		R369		
84	R10		22k 1% 50mW 0603	-		R368		
85	R11		22k 1% 50mW 0603	-		R368		
86	R12		33k 1% 50mW 0603	-		R369		
87	R13		22k 1% 50mW 0603	-		R368		5% ok here
88	R14		6k8 5% 50mW 0603	-		R362		
89	R15		6k8 5% 50mW 0603	-		R362		
90	R16		22k 1% 50mW 0603	-		R368		5% ok here
91	R17		33k 1% 50mW 0603	-		R369		
92	R18		22k 1% 50mW 0603	-		R368		
93	R19		22k 1% 50mW 0603	-		R368		
94	R20		33k 1% 50mW 0603	-		R369		
95	R21		22k 1% 50mW 0603	-		R368		5% ok here
96	R22		6k8 5% 50mW 0603	-		R362		
97	R23		10k 5% 50mW 0603	18		R363		
98	R24		100k 5% 50mW 0603	-		R365		

Item	Ident	M.I.	Description	Qty	Units	Part No	Var	Remarks
99	R25		100k 5% 50mW 0603	-		R365		
100	R26		100k 5% 50mW 0603	-		R365		
101	R27		47k 5% 50mW 0603	4		R364		
102	R28		220k 5% 50mW 0603	1		R366		
103	R29		0R 5% 50mW 0603	1		R356		link
104	R30		not fitted 0603	-		-		
105	R31		1k 5% 50mW 0603	-		R360		
106	R32		10k 5% 50mW 0603	-		R363		
107	R33		10k 5% 50mW 0603	-		R363		
108	R34		2k2 5% 50mW 0603	4		R361		
109	R35		47k 5% 50mW 0603	-		R364		
110	R36		10M 5% 50mW 0603	1		R367		
111	R37		10k 5% 50mW 0603	-		R363		
112	R38		10k 5% 50mW 0603	-		R363		
113	R39		33k 1% 50mW 0603	-		R369		5% ok here
114	R40		47k 5% 50mW 0603	-		R364		
115	R41		10k 5% 50mW 0603	-		R363		
116	R42		10k 5% 50mW 0603	-		R363		
117	R43		47R 5% 50mW 0603	-		R357		
118	R44		1k 5% 50mW 0603	-		R360		
119	R45		10k 5% 50mW 0603	-		R363		
120	R46		10k 5% 50mW 0603	-		R363		
121	R47		10k 5% 50mW 0603	-		R363		
122	R48		10k 5% 50mW 0603	-		R363		
123	R49		10k 5% 50mW 0603	-		R363		
124	R50		10k 5% 50mW 0603	-		R363		
125	R51		180R 5% 50mW 0603	3		R358		
126	R52		180R 5% 50mW 0603	-		R358		
127	R53		180R 5% 50mW 0603	-		R358		
128	R54		6k8 5% 50mW 0603	-		R362		
129	R55		47k 5% 50mW 0603	-		R364		
130	R56		10k 5% 50mW 0603	-		R363		
131	R57		not fitted 0R 5% 50mW 0603	-		-		
132	R58		2k2 5% 50mW 0603	-		R361		
133	R59		2k2 5% 50mW 0603	-		R361		
134	R60		470R 5% 50mW 0603	2		R359		
135	R61		470R 5% 50mW 0603	-		R359		
136	R62		0805 short link	2.		R348		
137	R63		0805 short link	-		R348		
138	R64		10k 5% 50mW 0603	-		R363		
139	R65		10k 5% 50mW 0603	-		R363		
140	R66		10k 5% 50mW 0603	-		R363		
141	R67		2k2 5% 50mW 0603	-		R361		
142	R68		10k 5% 50mW 0603	-		R363		
143	R69		1k 5% 50mW 0603	-		R360		
144								
145								
146								
147	U1		MIC4417BM4 4 PIN SOT143-M4	1		N149		
148	U2		MAX4122EUK 5 PIN SOIC I/O OP AMP	1		N153		
149	U3		MAX274 28 PIN ACTIVE FILTER	1		N148		
150	U4		MIC6211BM5 5 PIN SOIC OP AMP	2		N147		
151	U5		74HC164 SOIC	1		M174		
152	U6		LM2936MP5 Reg 5V sot 223	1		J225		
153	U7		74HC74PW TSSOP	1		M202		
154	U8		MIC6211BM5 5 PIN SOIC OP AMP	-		N147		

Item	Ident	M.I.	Description	Qty	Units	Part No	Var	Remarks
155	U9		PIC12F629-I/SN SOIC	1		M00077-xx		8 pin SOIC M207 programmed with SS00077. See D00600 for latest issue
156	U10		78M15CDT reg 15V sot 252	1		J226		SOT252 or DPAK
157	U11		PIC16F87-20ISS	1		M00074-xx		20 pin SSOP M205 programmed with SS00076. See D00600 for latest issue
158								
159			<u>Through hole and other components</u>					
160								
161	HS1		wire heatsink 1 mm	75 mm		W260		See assembly D01487
162	HS2		wire heatsink 1 mm	52 mm		W260		See assembly D01487
163								
164	U12		Piezo transducer	1		E144		
165								
166	X1		7.392 MHz HC49U-4	1		X109		
167								
168	L3		Rx coil	1		D00668-2		As Pr100
169			glue	as reqd		F158		
170								
171			<u>Other components - Reference only</u>					
172								
173	D13		Green LED					Ref only. Fitted at later stage
174	D14		Red LED					Ref only. Fitted at later stage
175	D15		Amber LED					Ref only. Fitted at later stage
176	J1		Connector					Ref only. Fitted at later stage
177	L4		Tx coil					Ref only. Fitted at later stage
178								