

Items list				(c) Bewator Cotag	
Title PR500-2 PCA				IL00506	
Issue 2					
Drawn	KOF / PMB	date	9 July 2003		
Authorised	KOF	date	9-7-03		
Issued	MDS	date	14-7-03		
Change notes					
CN001833					
Actioned	P Buckle	date	13-11-03		
Used on	DL00504				
Approvals					

Item	Ident	M.I.	Description	Qty	Units	Part No	Var	Remarks
1			PCB	1		A00491		
2								
3			Surface mount components					
4								
5	C1		100nF 10% 6V X7R 0603	10		C362		
6	C2		10 uF -20 +80% Tant 6V size B	1		C355		
7	C4		4u7 -20 +80% Tant 6V size B	1		C331		
8	C5		3n9 5% 50V COG 1206	2		C358		
9	C6		3n9 5% 50V COG 1206	-		C358		
10	C7		not fitted 0805	-		-		
11	C8		not fitted 0805	-		-		
12	C9		820pF 2% 6V C0G	1		C364		
13	C10		1nF 10% 6V X7R 0603	4		C359		
14	C11		680p 2% 6V C0G	1		C363		
15	C12		10nF 10% 6V X7R 0603	3		C360		
16	C13		10nF 10% 6V X7R 0603	-		C360		
17	C14		10nF 10% 6V X7R 0603	-		C360		
18	C15		100nF 10% 6V X7R 0603	-		C362		
19	C16		1nF 10% 6V X7R 0603	-		C359		
20	C19		100nF 10% 6V X7R 0603	-		C362		
21	C20		100nF 10% 6V X7R 0603	-		C362		
22	C21		100nF 10% 6V X7R 0603	-		C362		
23	C22		100nF 10% 6V X7R 0603	-		C362		
24	C23		100nF 10% 6V X7R 0603	-		C362		
25	C24		100nF 10% 6V X7R 0603	-		C362		
26	C25		1nF 10% 6V X7R 0603	-		C359		
27	C26		22pF 10% 6V X7R 0603	2		C356		use COG or X7R
28	C27		22pF 10% 6V X7R 0603	-		C356		
29	C28		100nF 10% 6V X7R 0603	-		C362		
30	C29		1nF 10% 6V X7R 0603	-		C359		
31	C30		39nF 10% 50V X7R 0603	1		C361		Note minimum voltage rating
32	C31		100nF 10% 6V X7R 0603	-		C362		
33	C32							See R44, fitted instead
34								
35								
36								
37	D1		BAS16 diode SOT23	5		J188		
38	D2		BAS16 diode SOT23	-		J188		
39	D3		BAS16 diode SOT23	-		J188		
40	D4		BAS16 diode SOT23	-		J188		

Item	Ident	M.I.	Description	Qty	Units	Part No	Var	Remarks
41	D6		trans prot 5V 0603	7		J223		
42	D7		trans prot 5V 0603	-		J223		
43	D8		trans prot 5V 0603	-		J223		
44	D9		trans prot 5V 0603	-		J223		
45	D10		trans prot 5V 0603	-		J223		
46	D11		trans prot 5V 0603	-		J223		
47	D12		trans prot 5V 0603	-		J223		
48	D13		LED green HLMP1540	1		L151		
49	D14		LED red HLMP1340	1		L161		
50	D15		LED amber HLMP1440	1		L162		
51			spacer 3/15	0.2		L166		fitted under LEDs
52	D16		BAS16 diode SOT23	-		J188		
53	D18		trans prot 33V 1206	1		J224		
54	D19		BAV99 diode SOT23	1		J176		
55								
56								
57								
58	F1		polyswitch SMD030	1		B141		
59								
60								
61								
62	L1		330uH Inductor SM 1210	1		Q133		
63	L2		22uH Inductor SM 1210	1		Q132		
64								
65								
66								
67	Q1		NDS7002A	4		J202		
68	Q2		BCW30 SOT 23 pnp	1		J195		or equiv, min hfe 180
69	Q5		BC846B SOT 23 npn	3		J194		or equiv, min hfe 180
70	Q6		NDS7002A	-		J202		
71	Q7		NDS7002A	-		J202		
72	Q8		NDS7002A	-		J202		
73	Q12		BC846B SOT 23 npn	-		J194		or similar npn
74	Q13		BC846B SOT 23 npn	-		J194		or similar npn
75								
76								
77								
78	R1		not fitted 0603	-		-		
79	R2		47R 5% 50mW 0603	2		R357		
80	R3		1k 5% 50mW 0603	3		R360		
81	R4		100k 5% 50mW 0603	6		R365		
82	R5		100k 5% 50mW 0603	-		R365		
83	R6		100k 5% 50mW 0603	-		R365		
84	R7		6k8 5% 50mW 0603	5		R362		
85	R8		22k 1% 50mW 0603	8		R368		5% ok here
86	R9		33k 1% 50mW 0603	5		R369		
87	R10		22k 1% 50mW 0603	-		R368		
88	R11		22k 1% 50mW 0603	-		R368		
89	R12		33k 1% 50mW 0603	-		R369		
90	R13		22k 1% 50mW 0603	-		R368		5% ok here
91	R14		6k8 5% 50mW 0603	-		R362		
92	R15		6k8 5% 50mW 0603	-		R362		
93	R16		22k 1% 50mW 0603	-		R368		5% ok here
94	R17		33k 1% 50mW 0603	-		R369		
95	R18		22k 1% 50mW 0603	-		R368		
96	R19		22k 1% 50mW 0603	-		R368		
97	R20		33k 1% 50mW 0603	-		R369		

Item	Ident	M.I.	Description	Qty	Units	Part No	Var	Remarks
98	R21		22k 1% 50mW 0603	-		R368		5% ok here
99	R22		6k8 5% 50mW 0603	-		R362		
100	R23		10k 5% 50mW 0603	14		R363		
101	R24		100k 5% 50mW 0603	-		R365		
102	R25		100k 5% 50mW 0603	-		R365		
103	R26		100k 5% 50mW 0603	-		R365		
104	R27		47k 5% 50mW 0603	4		R364		
105	R28		220k 5% 50mW 0603	1		R366		
106	R29		0R link 5% 50mW 0603	1		R356		
107	R30		not fitted 0603	-		-		
108	R31		1k 5% 50mW 0603	-		R360		
109	R32		10k 5% 50mW 0603	-		R363		
110	R33		10k 5% 50mW 0603	-		R363		
111	R34		2k2 5% 50mW 0603	3		R361		
112	R35		47k 5% 50mW 0603	-		R364		
113	R36		10M 5% 50mW 0603	1		R367		
114	R37		10k 5% 50mW 0603	-		R363		
115	R38		10k 5% 50mW 0603	-		R363		
116	R39		33k 1% 50mW 0603	-		R369		5% ok here
117	R40		47k 5% 50mW 0603	-		R364		
118	R41		10k 5% 50mW 0603	-		R363		
119	R42		10k 5% 50mW 0603	-		R363		
120	R43		47R 5% 50mW 0603	-		R357		
121	R44		1k 5% 50mW 0603	-		R360		Fitted in place of C32
122	R45		10k 5% 50mW 0603	-		R363		
123	R46		10k 5% 50mW 0603	-		R363		
124	R47		10k 5% 50mW 0603	-		R363		
125	R48		10k 5% 50mW 0603	-		R363		
126	R49		10k 5% 50mW 0603	-		R363		
127	R50		10k 5% 50mW 0603	-		R363		
128	R51		180R 5% 50mW 0603	3		R358		
129	R52		180R 5% 50mW 0603	-		R358		
130	R53		180R 5% 50mW 0603	-		R358		
131	R54		6k8 5% 50mW 0603	-		R362		
132	R55		47k 5% 50mW 0603	-		R364		
133	R56		10k 5% 50mW 0603	-		R363		
134	R57		not fitted 0603	-		-		
135	R58		2k2 5% 50mW 0603	-		R361		
136	R59		2k2 5% 50mW 0603	-		R361		
137	R60		470R 5% 50mW 0603	2		R359		
138	R61		470R 5% 50mW 0603	-		R359		
139								
140								
141								
142	U1		MIC4417BM4 4 PIN SOT143-M4	1		N149		
143	U2		MAX4122EUK 5 PIN SOIC I/O OP AMP	1		N153		
144	U3		MAX274 28 PIN ACTIVE FILTER	1		N148		
145	U4		MIC6211BM5 5 PIN SOIC OP AMP	2		N147		
146	U5		74HC164 SOIC	1		M174		
147	U6		LM2936MP5 Reg 5V sot 223	1		J225		
148	U7		74HC74PW TSSOP	1		M202		
149	U8		MIC6211BM5 5 PIN SOIC OP AMP	-		N147		
150	U9		PIC12F629-I/SN	1		M00077-xx		8 pin SOIC M207 programmed with SS00077. See D00600 for latest issue

Item	Ident	M.I.	Description	Qty	Units	Part No	Var	Remarks
151	U10		78M15CDT reg 15V sot 252	1		J226		SOT252 or DPAK
152	U11		PIC16F87-20ISS	1		M00074-xx		20 pin SSOP M205 programmed with SS00074. See D00600 for latest issue
153								
154			<u>Through hole and other components</u>					
155								
156	HS1		wire heatsink 1 mm	60	mm	W260		See assembly D01564
157	HS2		wire heatsink 1 mm	80	mm	W260		See assembly D01564
158								
159	U12		horn piezo	1		E144		
160			horn contacts	1		D01486		
161								
162	X1		7.392 MHz HC49U-4	1		X109		
163								
164	L3		Rx coil	1		D00668-2		As Pr100
165			glue	A/R		F158		
166								
167			<u>Other components - Reference only</u>					
168								
169	J1		Connector					Ref only. Fitted at later stage
170	L4		Tx Coil					Ref only. Fitted at later stage
171								