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1: KVA CONTROL BOARD

2: 102254/BOM SCHEMATIC : 102304D

3: Tuesday, October 26, 1999

Revised: April 25, 2000

4:

5: TEL COMMUNICATIONS

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6: LOS ANGELES, CA90065

7:

8: Bill Of Materials

9:

10: Item	Quantity	Reference	Descript.	Value	Size	P/N	Mfg.
11:							
12:							
13: 1	1	C1	ELEC CAP	220uF/35V		A2-203	
14: 2	7	C14,C18,C20,C42	CER CAP	.1uF	~		
15:		C28,C34,C37					
16: 3	5	C2,C3,C27,C30,C36	ELEC CAP	10uF/35V		NACE100M35V5X5.5	
17: 4	12	C4,C5,C6,C7,C8,C22,	CER CAP	1nF	~		
18:		C23,C24,C25,C33,C39,C41					
19: 5	1	C9	CER CAP	1.0nF	~		
20: 6	1	C10	ELEC CAP	.33uF/50V		NACER3350V4X5.5	
21: 7	1	C11	ELEC CAP	1.0uF/50V		NACEW10M50V4X5.5	
22: 8	5	C12,C15,C21,C31,C38	CER CAP	.01uF	~		
23: 9	1	C13	ELEC CAP	100uF/16V		NACE101M16V6.3X5.5	
24: 10	1	C16	ELEC CAP	3.3uF/50V		NACE3R3M50V4X5.5	
25: 11	1	C17	ELEC CAP	220uF/16V		NACE221M16V6.3X8	
26: 12	1	C19	ELEC CAP	330uF/6.3V		NACE331M6.3V6.3X8	
27: 13	1	C29	ELEC CAP	47uF/50V		NACE470M50V6.3X8	
28: 14	1	C32	CER CAP	5.1pF	~		
29: 15	1	C35	CER CAP	.027uF	1210		
30: 17	1	C40	CER CAP	100pF	~		
31: 18	1	D1	TRANSORB			1.5SMC18AT3 Mot	
32: 19	2	D2	RED LED,T1			(in S1)	
33: 20							
34: 21	2	D4	GRN LED,T1			(in S5)	
35: 22	1	D9AB	BICOLOR,T1			(in S2)	
36: 23	2	D5,D6	SCHOTKY			MBRS130LT3 Mot	
37: 23	2	D7,D8	DIODE			1N4148,SM equiv.	
38: 25	1	D10	DIODE, ZENER			CMPZ5231B	
39: 26	1	J1	HEADER 2			53253-0210 MOLEX	
40: 27	1	J2	MODULAR 8P			GM-SMT-S-88 KYCON	
41: 28	1	J3	HEADER 6			53253-0610 MOLEX	
42: 29	1	J4	HEADER 4			53253-0410 MOLEX	
43: 30	1	J6	HEADER 8			53253-0810 MOLEX	
44: 31	1	L1	INDUCTOR	100uH		DO3316P-104 Coilcraft	
45: 32	2	Q1,Q8	FET TRANS			MTD5P06E	
46: 33	7	Q2,Q3,Q4,Q5,Q6,Q9,Q10	TRANS NPN			MMBT4401	
47: 34	5	Q7,Q11,Q12,Q13,Q14	TRANS PNP			MMBT4403	
48: 35	17	R1,R3,R5,R9,R12,	RES	10K	~		
49:		R14,R18,R19,R29,R30,					
50:		R33,R35,R43,R44,					
51:		R47,R48,R51					
52: 36	10	R2,R6,R11,R13,R20	RES	100K	~		
53:		R31,R40,R53,R55,R57					
54: 37	3	R4,R37,R41	RES	1.0K	~		
55: 38	1	R7	RES	30K	~		
56: 39	1	R10	RES	47K	~		
57: 40	1	R15	RES	27K	~		
58: 41	4	R16,R26,R45,R46	RES	180	~		
59: 42	1	R21	RES	330	~		
60: 43	1	R32	RES	100	~		
61: 44	1	R22	RES	220	~		
62: 45	1	R23	RES	1	~		
63: 46	1	R24	RES	10	~		
64: 47	1	R25	RES	2.2	~		
65: 48	1	R27	RES	.39	~		
66: 49	1	R34	RES	2.0K	~		
67:							
68:							
69:							
70:							
71:							

PARTS LISTS

FCC ID: BBD3-KVC8A

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72:							
73:	50	1	R36	RES	0.10	1220	RL1220SR10F GARRET/TFT
74:	51	1	R38	RES	20K	~	
75:	52	4	R8,R17,R28,R39	RES	470	~	
76:	53	1	R42	RES	75	~	
77:	54	1	R49	RES	220K	~	
78:	55	1	R50	RES	1.0M	~	
79:	56	1	R52	RES	1.5M	~	
80:	57	1	R54	RES	180K	~	
81:	58	1	R56	RES	18K	~	
82:	59	1	R58	RES	82K	~	
83:	60	1	R59	RES	5.1K		
84:	61	1	S1 PWR	PB SW	RED	-	97-350.037 + 97-951.2 EAO
85:	62	1	S2 CHARGE	PB SW	BICOLOR	-	97-081.007 + 97-951.9 EAO
86:	63	1	S3 MON	PB SW	YEL,NO LED	-	97-350.037 + 97-951.4 EAO
87:	64	1	S4 AUX	PB SW	WHT,NO LED	-	97-350.037 + 97-951.9 EAO
88:	65	1	S5 RPT	PB SW	GRN	-	97-350.037 + 97-951.5 EAO
89:	66	1	U1	CMOS IC		SOIC	CD4001BD
90:	67	1	U2	OPAMP		SOIC	LF353M
91:	68	2	U3,U4	CMOS IC		SOIC	CD4013BD
92:	69	1	U5	AUD AMP			TDA2003H (Horiz. Mount)
93:	70	1	U6	V REG		SO	MC78L05ACD
94:	71	1	U7	I SENSE IC		SSO	MAX4172ESA
95:	72	1	U8	BAT CHG		SOIC	BQ2000SN UNITRODE
96:	73	1	U9	CMOS IC		SOIC	CD4011BD
97:	74	1	-	PC BOARD			102262
98:	NOTES:						
99:	1) ALL CHIP PARTS WITH SIZE SHOWN AS ~ ARE 1206.						
100:	2) ELECTROLYTIC CAPACITORS ARE NIC, (GARRET) SERIES NACE OR EQUIV.						
101:	3) MOLEX MATCHING HOUSINGS ARE 51065-0XX0, X=# OF PINS						
102:	RECEPTACLES (PINS) ARE 50212-8100, LOOSE, OR 50212-8000, REEL (FOR WIRE 26-30 AWG)						
103:	CRIMP TOOL REQUIRED.						