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