

Item	Qty	Reference	Part	ORCAD Footprint
1	2	C4,C7	220uf	RC100\200+
2	11	C5,C6,C21,C24,C28,C29, C30,C31,C32,C33,C34	.1uf	AC100\125
3	5	C8,C9,C10,C11,C12	1uf	RC100\200+
4	2	C13,C14	27pf	AC100\125
5	1	C15	10uf	RC100\200+
6	4	C16,C17,C18,C19	.001UF	AC100\125
7	2	C22,C23	.22UF	AC100\125
8	1	C25	.1UF	AC200\125
9	2	C26,C27	1000UF	CYL/D.725/LS.300/.040
10	9	D4,D5,D7,D9,D11,D14,D15, D16,D21	1N4007	H_DIODE
11	4	D6,D8,D10,D12	DIODE ZENER1	H_DIODE
12	4	D13,D17,D18,D19	LED	LED
13	1	D20	1N914	H_DIODE
14	4	D22,D23,D24,D25	BYV27/20	H_DIODE LARGE
15	2	JP5,JP9	HEADER 2	5_08_T_BLOCK2
16	2	JP6,JP8	HEADER 2	3_81_T_BLOCK2
17	1	JP11	HEADER 5X2	J\10P
18	1	JP12	HEADER 10	3_81_T_BLOCK10
19	1	JP13	HEADER 3	MOLEX\3P\100
20	3	J4,J5,J6	CON2	SOLDER PADS
21	4	Q2,Q3,Q4,Q5	MOSFET N	TO220FET GDS
22	2	R1,R21	1K	AC100\100
23	2	R2,R3	4.7K	AC100\100
24	4	R4,R6,R8,R10	22	AC100\100
25	4	R5,R7,R9,R11	270	AC100\100
26	4	R13,R15,R16,R27	10K	AC100\100
27	3	R14,R23,R24	470	AC100\100
28	5	R17,R28,R29,R30,R31	.1, 5W	CURRENT SHUNT
29	1	R18	100	AC100\100
30	3	R19,R33,R34	1.2K	AC100\100
31	1	R20	3.3K	AC100\100
32	1	R22	5K POT	TRIMPOT
33	1	R25	560	AC100\100
34	1	R26	22K	AC100\100
35	1	R32	1.8K, 2W	AC450\220
36	1	U1	UHU CONTROLLER	DIP20
37	1	U6	AT90S2313	DIP8
38	1	U8	HCPL2231	DIP8
39	1	U9	MAX232	DIP16
40	1	U10	DS1233	TO-92A
41	1	U11	TL082	DIP8
42	1	U12	74HC14	DIP14
43	1	U13,U14	4013	DIP14
44	2	U15	IR2184	DIP8
45	1	Y1	LM7805	TO220AB
			24Mhz	CRYSTAL