

Bill Of Material for D1V33 OK

Date: 15-Jan-10 Spencerhk

Item	Qty	Reference	Part Name	Manufacturer	Description	Price	Total
1	4	Q23-24 Q29-30	2AS970,BL	TOSHIBA	PNP LOW NOISE TRANSISTOR		Provided
2	4	Q21-22 Q27-28	2SC2240,BL	TOSHIBA	LOW NOISE NPN SILICON TRANSISTOR		Provided
3	4	Q2 Q7 Q42 Q47	2SJ74	TOSHIBA	P-CHANNEL,LOW NOISE JFET	not use	No Stock
4	4	Q50	2SJ148	Toshiba	MOSFET P CHAN TO-92	not use	No Stock
5	20	Q1 Q4-6 Q9-11 Q14-16 Q19-20 Q41-48	2SK170; BL	Toshiba	N-CHANNEL, LOW NOISE JFET		Provided
6	8	Q3, Q8, Q13, Q18 & Q37 Q38 Q39 Q40	2SK369; BL or 2SK363BL	Toshiba	N-CHANNEL, HIGH GAIN LOW NOISE JFET		Provided
7	4	Q25-26 Q31-32	2SK246; GR	Toshiba	N-CHANNEL, JFET		Provided
8	4	Q49	2SK982	Toshiba	MOSFET N CHANN TO-92	not use	No Stock
9	2	T1-2	51698-LF3	MIDCOM	MIDCOM 51698-LF3 SPDIF PULSE TRANSFORMER		Provided
10	3	U4 U11 U17	74HC86	Hitachi	QUADRUPLE 2-INPUT EXCLUSIVE-OR		Provided
11	46	D1-8 D37-44	BYV79E-100	PHILIPS	Ultra fast soft recovery rectifier 100V 14A	not use	Ask
12	16	D21-27 D29 D11-18	BYV27-150	PHILIPS	SOFT SCHOKY DIODE 150V 2A		Provided
13	4	C4 C15 C25 C36	10u 100V or above	Rifa or Wima	Film capacitor MKP	not use	No Stock
14	4	C10 C20 C31 C41	100u 25V	Panasonic FM	ALUMINUM ELECTROLYTIC CAP.		Provided
15	21	C82 C104 C106 C132 C134 C153 C155 C181 C183 C196 C199 C202 C209-210 C222 C230 C233 C235 C239 C241 C243 C177 C124 C140 C189 C149	100u 10V	Panasonic FC	ALUMINUM ELECTROLYTIC CAP.		Provided
16	8	C128 C100 C173	100u 10V	Panasonic FC	ALUMINUM ELECTROLYTIC CAP.		Provided
17	4	C52 C54 C70 C72	120u 50V	Panasonic FC	ALUMINUM ELECTROLYTIC CAP.		Provided
18	1	C205	220u 35V	Panasonic FC	ALUMINUM ELECTROLYTIC CAP.		Provided
19	20	C6 C17 C27 C38 C49-50 C67-68 C102 C120 C122 C130 C136 C138 C151 C169 C171 C179	12u 35V	Panasonic FC	ALUMINUM ELECTROLYTIC CAP.		Provided
20	4	C24 C35 C223 C229	2200u 16V	Panasonic FC	ALUMINUM ELECTROLYTIC CAP.		Provided
21	4	C84-85 C88-89	10u to 220u 25V	Muse BP	ALUMINUM ELECTROLYTIC CAP.	100u 25V BP	Provided
22	4	C45-46 C63-64	470u 25V	Panasonic FA	ALUMINUM ELECTROLYTIC CAP.		Provided
23	4	C110 C158-159 C109	470u 25V	Panasonic FA	ALUMINUM ELECTROLYTIC CAP.		Provided
24	4	C115-116 C164-165	470u 25V	Panasonic FA	ALUMINUM ELECTROLYTIC CAP.		Provided
25	2	C83 C86	5600u 35V	Panasonic Audio	ALUMINUM ELECTROLYTIC CAP.		Provided
26	4	C59-60 C77-78	560u 35V	Panasonic FC	ALUMINUM ELECTROLYTIC CAP.		Provided
27	5	C3 C14 C87 C90 C226	560u 35V	Panasonic FC	ALUMINUM ELECTROLYTIC CAP.		Provided
28	12	C11 C21 C32 C42 C142-145 C191-194	56u 35V	Panasonic FC	ALUMINUM ELECTROLYTIC CAP.		Provided
29	90	C1 C5 C12 C16 C22 C26 C33 C37 C47-48 C51 C53 C55-58 C65-66 C69 C71 C73-76 C79-81 C91-94 C99 C101 C103 C105 C107-108 C111-114 C117-119 C121 C123 C127 C129 C131 C133 C135 C137 C139 C141 C148 C150 C152 C154 C156-157 C160-163 C166-168 C170 C172 C176 C178 C180 C182 C184 C186 C188 C190 C195 C198 C201 C206 C212-213 C218 C221 C224 C232 C234 C238 C242	0.047u 50V 5%	Panasonic ECQ-V	RADIAL FILM CAPACITOR, MKT		Provided
30	16	C8 C19 C29 C40 C97 C98 C125 C126 C146 C147 C174 C175 C203-204 C211 C220	0.1u, 63/100V K	Wima or Epcos	RADIAL FILM CAPACITOR, MKT		Provided
31	4	C95-96 C225 C231	0.1u 160V K	Epcos	RADIAL FILM CAPACITOR, MKP		Provided
32	4	C7 C18 C28 C39	10nf, 50VJ	Nessei	RADIAL FILM CAPACITOR, MKT		Provided
33	2	C9 C30	150p, 5%	CDE	Silver Mica		Provided
34	4	C2 C13 C23 C34	2700pf, 5%	CDE	Silver Mica		Provided
35	1	C197	330pf,K	Murata	Axial FILM CAPACITOR, Ceramic		Provided
36	1	C200	47nf,J	Epcos	RADIAL FILM CAPACITOR, MKT		Provided
37	2	J3-4 J8 J17 J25 J27-29	2.5mm 40pin	China	GENERIC 2 PIN SIP HEADER .100		Provided
38	6	J12, J13, J14, J15, J18, J24	CON-SIP-2P	China	0.1 inch wire connector - 2 pin		Provided
39	1	J2 J5-7 J9 J20-22 J30-31	2.5mm 40pin	China	GENERIC 3 PIN SIP HEADER .100		Provided
40	3	J10-11 J16	CON-SIP-3P	China	0.1 inch wire connector - 3 pin		Provided
41	1	U15; use either item 41 or 42	CS8414	Crystal	Receiver IC 96kHz + Converter board & pins (\$20)	Buy separately	have stock
42	1	U15 replacement	DIR9001 converter	Ti	Receiver IC 96kHz (\$25 complete assembly)	Buy separately	have stock
43	5	D20 D31 D45-47	DIODE,1N4148	Semtech	100V 500mA diode		Provided
44	13	H1-13	HEATSINK_SMALL	China	630 x 600 x 1000 mil (L x W x H)		Provided
45	19	L2-20	47uH	China	Radial inductors 100mA type		Provided
46	1	L21	Bead	China	Inductor Bead		Provided
47	3	Q34 Q36 Q52	IRF610	IR	MOSFET N CHANN POWER 200V 1.8A		Provided
48	3	Q33 Q35 Q51	IRF9610	IR	MOSFET P CHAN 200V 1.8A		Provided
49	7	D9-10 D19 D28 D30 D32 D48	LED - Green or Red	China	LIGHT EMITTING DIODE		Provided
50	4	D33-36	LM336-5V	Fairchild	PROGRAMMABLE PRECISION POSITIVE VOLTAGE REGULATOR; ADJUSTABLE		Provided
51	5	U2 U5 U9 U12 U20	LM317T	ST or NS	NEGATIVE VOLTAGE REGULATOR;ADJUSTABLE		Provided
52	4	U3 U6 U10 U13	LM337T	ST or NS	Voltage Regulator		Provided
53	5	U18 U21-24	LT1117-5V	Linear or	20bit Digital to Analogy Converter (K - \$28)	Buy separately	have stock
54	4	U1 U7-8 U14	PCM63P	Burr Brown	Metal film resistor		Provided
55	2	R81-82	RES-2W,0.47R	Metal film	Metal film resistor		Provided
56	4	R57 R58 R75 R76	RES-1/4W,10R,	Metal film	Metal film resistor		Provided
57	29	R6 R15 R26 R36 R77-80 R85-87 R88 R92-94 R96 R99-104 R106-108 R110-111 R115-116	RES-1/4W,100,	Metal film	Metal film resistor		Provided
58	8	R5 R14 R25 R35 R117 R125 R158-159	RES-1/4W,100K,	Metal film	Metal film resistor		Provided

Item	Qty	Reference	Part Name	Manufacturer	Description	Price	Total
59	6	R7 R16 R27 R37 R155-156	RES-1/4W,100k,	Metal film	Metal film resistor		Provided
60	12	R41-42 R51-54 R59-60 R69-72	RES-1/4W,10k,	Metal film	Metal film resistor		Provided
61	4	R144-144	RES-1/4W,10k,	Metal film	Metal film resistor	not use	
62	1	R120	RES-1/4W,120R,	Metal film	Metal film resistor	100+22	Provided
63	6	R91 R121 R123 R128 R157	RES-1/4W,150,	Metal film	Metal film resistor		Provided
64	4	R47-48 R65-66	RES-1/4W,15k,	metal film	Metal film resistor		Provided
65	5	R55-56 R73-74 R114	RES-1/4W,1k,	Metal film	Metal film resistor		Provided
66	4	R4 R13 R24 R34	RES-1/2W,1k5,	Metal film	Carbon resistor or metal film (1/4W)		Provided
67	1	R153	RES-1/4W,2.7k,	Metal film	Metal film resistor	2k6+100	Provided
68	4	R3 R12 R23 R33	RES-1/4W,10R,	Metal film	Metal film resistor		Provided
69	4	R19 R30 R20 R40	RES-1/2W,22 to 47R	Metal film	Carbon resistor or metal film (1/4W)		Provided
70	2	R89 R124	RES-1/4W,2k2,	Metal film	Metal film resistor		Provided
71	8	R97-98 R105 R109 R112-113	RES-1/4W,300,	Metal film	Metal film resistor		Provided
72	4	R126-127	RES-1/4W,300,	Metal film	Metal film resistor		Provided
73	8	R148-151	RES-1/4W,22R,	Metal film	Metal film resistor		Provided
74	1	R28-29 R129-130 R133-134	RES-1/4W,330k,	Metal film	Metal film resistor	not use	
75	5	R137-138	RES-1/4W,330k,	Metal film	Metal film resistor		Provided
76	1	R90	RES-3W,470R,	PHILIPS	Metal film resistor		Provided
77	5	R118-119 R146-147 R161	RES-1/4W,4R7,	Metal film	Metal film resistor		Provided
78	6	R49-50 R67-68 R83-84	RES-1/4W,4k7,	Metal film	Metal film resistor		Provided
79	5	R45-46 R63-64 R154	RES-1/4W,5k1,	Metal film	Metal film resistor		Provided
80	1	R145	RES-1/4W,680R,	Metal film	Metal film resistor		Provided
81	4	K1-4	RLY-RY5W-K,	Takamisawa	5V relay 2P2T		Provided
82	1	U16	SM5842AP or APT	NPC	High Performance Digital Filter (AP - \$30, APT - \$35; all used part)	Buy separately	have stock
83	1	U16 Alternate part PMD100 + CBD	PMD100 + CBD	Pacific Audio	PMD100 HDCD decoder (\$35) + converter board kit (\$5)	Buy separately	ASK
84	4	R1 R10 R21 R31	100R	20 turns type	VARIABLE RESISTOR (TOP ADJUST		Provided
85	4	R8-9 R17-18	50k to 100k optional	20 turns type	VARIABLE RESISTOR (TOP ADJUST	not use	
86	8	R38-39 R131-132 R135-136	100k optional	20 turns type	VARIABLE RESISTOR (TOP ADJUST TYPE)	not use	
87	8	R139-140	100k optional	20 turns type	VARIABLE RESISTOR (TOP ADJUST		Provided
88	13	R2 R11 R22 R32 R43-44 R61-62	5k	20 turns type	VARIABLE RESISTOR (TOP ADJUST		Provided
89	6	J1 J12-15 J18-19 J23-24 J26	Jumper 2 pin	Green or Red	Jumper pin to short pin - 2.5mm		Provided
90	6	28 pins IC socket	2.5mm 40pin	IC socket	IC socket, round, gold plated		Provided
91	6	14 pins IC socket	2.5mm 40pin	IC socket	IC socket, round, gold plated		Provided
92	13	Heatsink kit - screw, spring washer, insulation, plastic washer	TO-220, M3	TO-220, M3	TO-220 insulation and M3 size		Provided
93	1	PCB - D1V33	PCB	2mm PCB	ROHS solder flash 2mm double size PCB		Provided
						Total	\$165.00

Detail of Jfets:

Grade	Part	Jfet	Idss	Qty
BL	K170	Q1/Q6/Q11/Q16 & Q43/Q44/Q47/Q48	8 to 10mA match	8
BL	K170	Q5/Q10/Q15/Q20 & Q41/Q42/Q45/Q46	Total >=15mA, match	8
BL	K369 / K363	Q3/Q8/Q13/Q18 & Q37/Q38/Q39/Q40	about 10mA or above match	8
	K170	Q4/Q9/Q14/Q19	9.0mA or above; match	4
GR	K246	Q25/Q26/Q31/Q32	~3mA; GR grade	4
				32

US to HKD ex rate
7.55

Recommended Transformers x 2

Farnell Part #	953-1718 or -2200	9V x 2, 30VA or 50VA 115V x 2 input
	953-0380	18V x 2, 50VA 115V x 2 input
Lite Audio	http://diyclub.biz/catalog/product_info.php?products_id=55	Model R26-10 18v x 2 + 9v x 2

Best Buy about \$20.1 not included

Example 1:	D1V33 kit	US\$165.00	
	DIR9001 converter	US\$25.00	
	SM5842AP	US\$30.00	
	PCM63P-K x 4	US\$112.00	
	S & H	US\$25.00	EMS speed post; Registered airmail \$10 less
	Paypal charge 4% of above	US\$14.28	
	Total	US\$371.28	HK\$2,803.16

Choice One

Example 2:	D1V33 kit	US\$165.00	
	DIR9001 converter	US\$25.00	
	SM5842APT	US\$35.00	
	PCM63P-K x 4	US\$112.00	
	S & H	US\$25.00	EMS speed post; Registered airmail \$10 less
	Paypal charge 4% of above	US\$14.48	
	Total	US\$376.48	HK\$2,842.42

Choice Two

Example 3:	D1V33 kit	US\$165.00	
	DIR9001 converter	US\$25.00	
	PMD100 + Complete Assembly	US\$40.00	
	PCM63P-K x 4	US\$112.00	
	S & H	US\$25.00	EMS speed post; Registered airmail \$10 less
	Paypal charge 4% of above	US\$14.68	
	Total	US\$381.68	HK\$2,881.68

Limited Stock

Example 4:	D1V33 kit	US\$165.00	
	DIR9001 converter	US\$25.00	
	SM5847AF + Complete Assembly	US\$40.00	
	PCM63P-K x 4	US\$112.00	
	S & H	US\$25.00	EMS speed post; Registered airmail \$10 less
	Paypal charge 4% of above	US\$14.68	
	Total	US\$381.68	HK\$2,881.68

Limited Stock