

DAEWOO
DAEWOO ELECTRONICS EUROPE, GmbH



Service Manual

MICRO COMPONENT SYSTEM

TR-654AG



DAT H.K. LIMITED

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PRODUCT DESCRIPTION

FEATURES:

- TOP LOADING CD PLAYER WITH PROGRAMMABLE CD MEMORIES
- CD/CD-R/MP3 DISC COMPATIBLE
- AM/FM/FM STEREO ANALOGUE TUNING RADIO
- AUTO-STOP CASSETTE RECORDER WITH ONE TOUCH RECORDING
- AUTOMATIC LEVEL CONTROL FOR RECORDING
- STEREO HEADPHONE JACK
- DBBS BASS BOOST SYSTEM
- SOFT EJECT CASSETTE DOOR
- OUTPUT POWER:4W×2RMS
- TELESCOPIC ANTENNA
- REMOTE CONTROL FOR CD/MP3

SPECIFICATION:

- POWER SUPPLY:AC127/60Hz
- DIMENSIONS:MAIN UNIT:136(L)X174(W)X225(H)mm

PRODUCT SPECIFICATION

TEST CONDITION:

1.POWER SUPPLY VOLTAGE:AC 127V,60HZ

2.STANDARD MODULATION:1000HZ,30%MOD

3.REFERENCE OUTPUT:50mw

4.RESISTIVE LOAD:4 OHM

AM FM TAPE VCD MAX OUTPUT POWER

MODEL:TR-654AG

NO.	TEST ITEMS	FREQ/TAPE	UNIT	NORMAL	LIMIT
1	FRERQUENCY RANGE		KHz	520	+/-15
			KHz	1630	+/-20
2	INTERMEDIATE FREQUENCY		KHz	455	+/-5
3	DIAL DEVIATION	600KHz	KHz	/	/
		1000KHz	KHz	/	/
		1400KHz	KHz	/	/
4	MAX SENSITIVITY	600KHz	dB/M	50	60
		1000KHz	dB/M	50	60
		1400KHz	dB/M	50	60
5	USEADLE SENSITIVITY 20dB S/N	600KHz	dB/M	55	68
		1000KHz	dB/M	55	68
		1400KHz	dB/M	55	68
6	S/N RATIO @5mV	1000KHz	dB	35	30
8	ACA 10KHz	1000KHz	dB	20	10
9	IF REJECTION	600KHz	dB	39	30
		1000KHz	dB		
		1400KHz	dB		
10	IMAGE REJECTION	1400KHz	dB	35	25
11	A .G .C figur of merit @ 100mV	1000KHz	dB	38	30
12	OVERLOAD DISTORTION@100mV 80% MOD	1000KHz	%	4	8
13	DISTORTION 30% MOD 74dB INPUT	1000KHz	%	2	5
14	HUM/NOISE OUTPUT @VOL.MIN	1000KHz	mV	4	8
15	FEDELITY-6dB @5AMV		Hz	80-3000	150-2200
17	WHISTLE(5mV/M) @2ND	KHz	%	/	/
	@3RD	KHz	%	/	/
18	VR.MAX.DISTORTION		%		25
16	POWER OUTPUT@10% T.H.D	1000KHz	W	2.8	2.5
19	MAX OUTPUT POWER	1000KHz	W	3.5	2.8

PRODUCT SPECIFICATION

TEST CONDITION:

- 1.POWER SUPPLY VOLTAGE:AC 127V,60HZ
- 2.STANDARD MODULATION:1000HZ,22.5KHz Deviation(MPX75KHz DEV)
- 3.REFERENCE OUTPUT:50mw
- 4.RESISTIVE LOAD:4 OHM
- 5.L+R=45%, L-R=45%, PILOT=10%

FUNCTION:FM

MODEL:TR-654AG

NO.	TEST ITEMS	FREQ	UNIT	NORMAL	LIMIT
1	TUNING RANGE		MHz	87.5	+/-0.5
			MHz	108.5	+/-0.5
2	INTERMEDIATE FREQUENCY		MHz	10.7	+/-0.3
3	DIAL CALIBRATION	88MHz	KHz	/	/
		100MHz	KHz	/	/
		106MHz	KHz	/	/
4	MAX SENSITIVITY	90MHz	dB	15	24
		98MHz	dB	15	24
		106MHz	dB	15	24
5	USEADLE SENSITIVITY 30dB S/N	90MHz	dB	20	26
		98MHz	dB	19	26
		106MHz	dB	19	26
6	S/N RATIO @1mV	98MHz	dB	38	30
7	HUM MODULATION 100dB INPUT	98MHz	dB	/	/
8	(-3dB)LIMITING SENSITIVITY	98MHz	dB	24	30
9	AFC HOLDING RANGE -3dB	98MHz	KHz	/	/
10	IF REJECTION	90MHz	dB	55	40
11	IMAGE REJECTION	106MHz	dB	28	20
12	AM SUPPRESSION AT 60dB INPIT	98MHz	dB	38	30
13	OVERLOAD CAPACITY 75KHz DEV	98MHz	dB		/
14	T.H.D.22.5KHz AT 60dB INPUT	98MHz	%	1	3
15	HUM/NOISE OUTPUT @VOL.MIN.		mV	5	10
16	FREQ.RESPONSE -6dB 50us PRE-AMP		Hz	80-5.5K	150-3K
17	SEPARATION 100Hz		dB	/	/
	1KHz		dB	30	22
	10KHz		dB	/	/
18	POW OUTPUT @ 10% T.H.D	98MHz	W	2.8	2.5
19	MAX OUTPUT POWER	98MHz	W	3.5	2.8
20	STEREO INDICATOR SENSITIVITY		dB	18	30

PRODUCT SPECIFICATION

TEST CONDITION:

1.POWER SUPPLY VOLTAGE:AC 127V,60HZ

2.STANDARD MODULATION:

3.REFERENCE OUTPUT:50mw

4.RESISTIVE LOAD:4 OHM

FUNCTION: TAPE

MODEL:TR-654AG

NO.	TEST ITEMS	TAPE	UNIT	NORMAL	LIMIT
1	TAPE SPEED	MTT-111	%	±/-1	±3/-2
2	WOW & FLUTTER WRMS	MTT-111	%	0.25	0.4
3	DISTORTION	MTT-118	%	1	3
4	S/N RATIO (UNWEIGHTED)	MTT-112BN	dB	35	30
5	HUM&NOISE @VOL MIN AC220V		mV	5	10
6	HUM&NOISE @VOL MAN AC220V		mV	40	65
7	FREQUENCY RESPOWER P.B.	125Hz	dB	±/-3	±/-6
		1KHz	dB	0	0
		6.3KHz	dB	±/-3	±/-6
8	10% THD OUTPUT POWER(Max Vol)	MTT-118N	W	2.8	2.5
9	MAXIMUM OUTPUT POWER	MTT-112BN	W	3.5	2.8
10	S/N RECORDING/P.B at 1KHz	Normal	dB	25	20
		Metal	dB		
		Cro2	dB		
11	ERASE RATIO AT 1KHz	Normal	dB	35	20
		Metal	dB		
		Cro2	dB		
12	REC /P.B.LEVEL AT 1K	Normal	dB	±/-3	±/-6
		Metal	dB		
		Cro2	dB		
13	VR.MAX.DISTORTION		%	20	25
14	CHANNEL SEPARATION	1KHZ	dB	35	22

PRODUCT SPECIFICATION

TEST CONDITION:

1.POWER SUPPLY VOLTAGE:AC 127V,60HZ

2.STANDARD MODULATION:

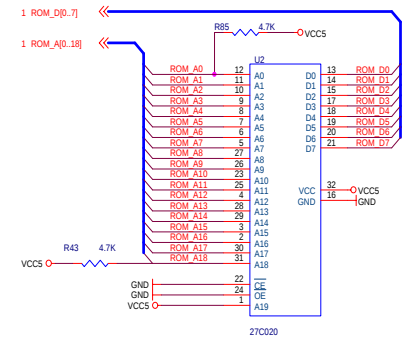
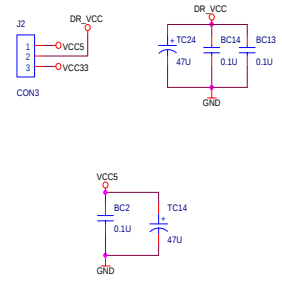
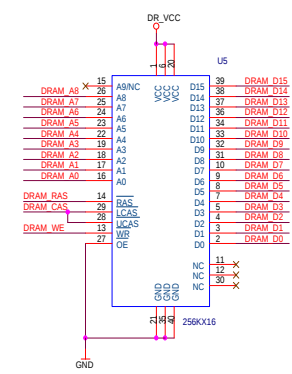
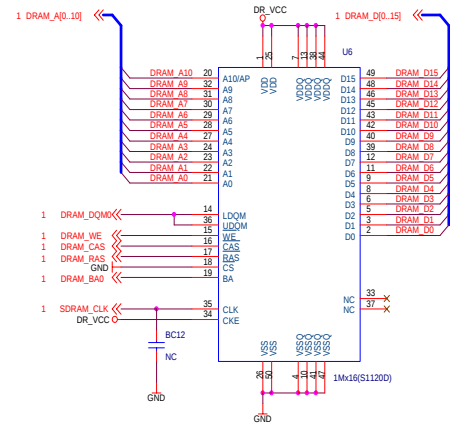
3.REFERENCE OUTPUT:50mw

4.RESISTIVE LOAD:4 OHM

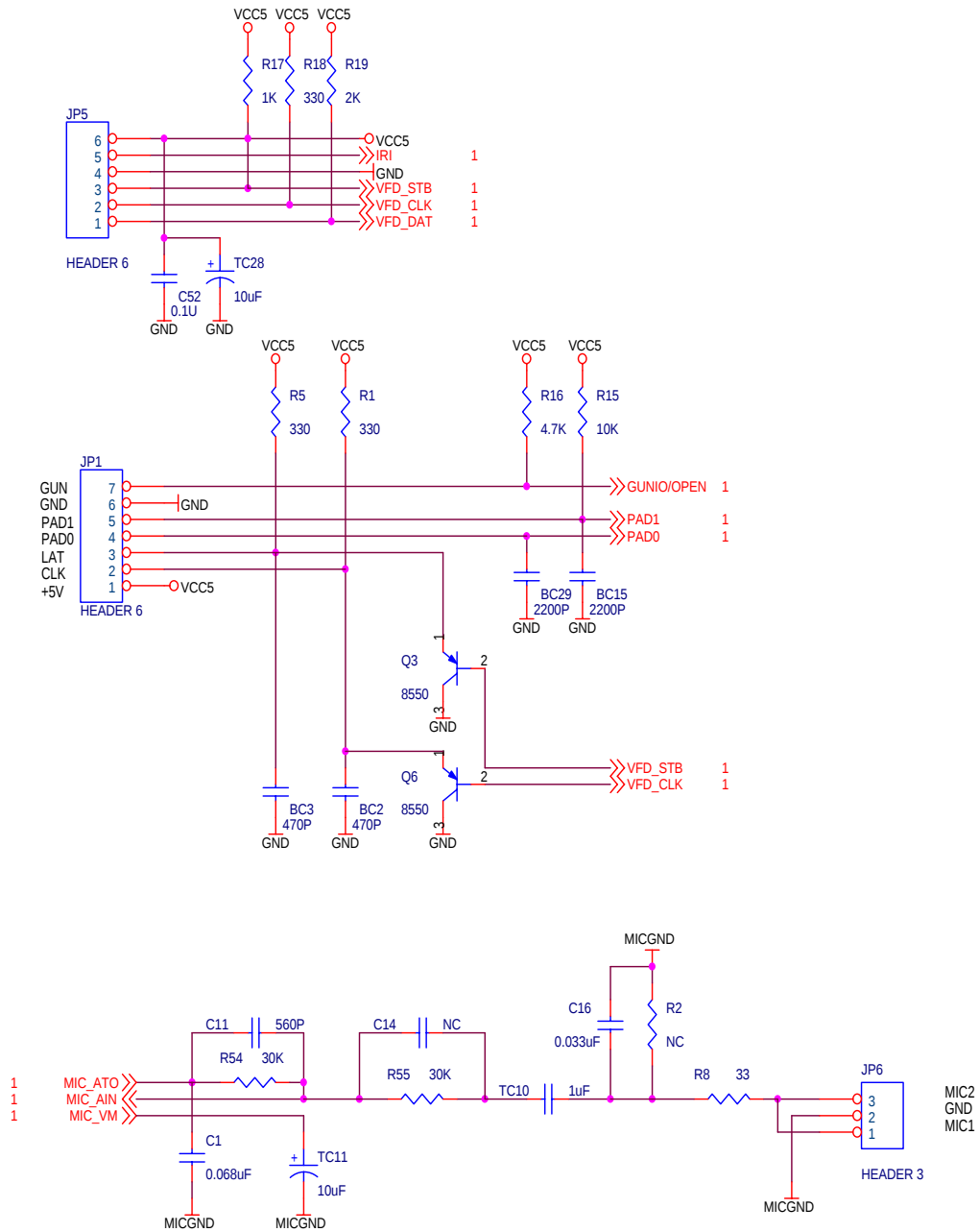
FUNCTION:MP3

MODEL:TR-654AG

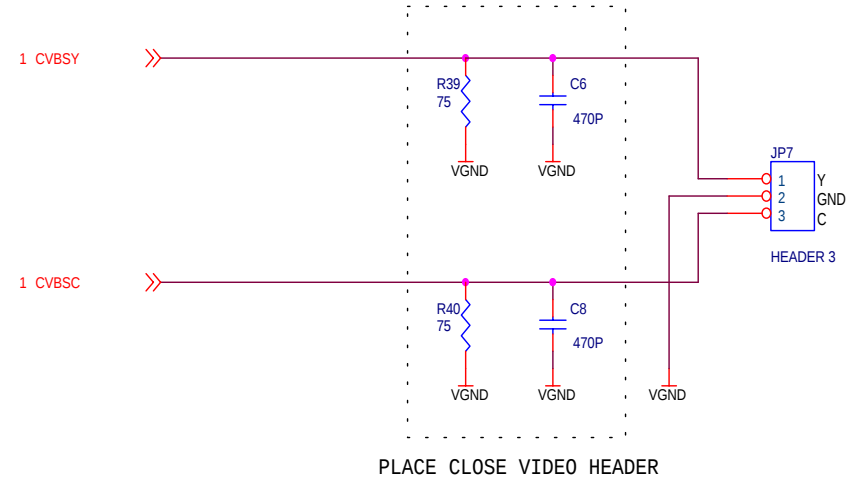
NO.	TEST ITEMS	TAPE	UNIT	NORMAL	LIMIT
1	S/N RATIO(WITH JIS-A) TCD-784	1KHZ	dB	50	45
2	CHANNEL SEPARATION TCD-784	1KHZ	dB	35	30
3	CHANNEL BALANCE TCD-784	1KHZ	dB	±/-1	±/-3
4	DISTORTION TCD-784	1KHZ	%	1	3
5	VR.MAX.DISTORTION(2首) TCD-784		%	20	25
6	10% THD OUTPUT POWER	TCD-784	W	2.8	2.5
7	MAXIMUM OUTPUT POWER	TCD-784	W	3	2.8
8	DYNAMIC RANGE	1KHZ	dB	/	/
9	VCD IN FREQUENCY RESPONSE 1K=0dB	1KHz	dB	0	0
		20Hz	dB	/	/
		100HZ	dB	0	±/-6
		10K	dB	0	±/-6
		20K	dB	/	/
10	FF/FB MUTE LEVEL	1KHZ	dB	15	10
11	HUN & NOISE VOL.MIN		mV	1	5
	VOL.MAX		mV	5	10
12	INTERRUPTION WITHOUT NOISE	SBC-444A	um	800	700
13	BLACK DOT WITHOUT NOISE	SBC-444A	um	600	600
14	FINGERPRINT WITHOUT NOISE	SBC-444A	um	65	65
15	ECCENTERICITY WITHOUT NOISE	TCD-712	um		140 (±/-15)
16	ACCESSS OPERATION TIME	PHILIPS NR5A	SEC	3	5
		PHILIPS NR5A	SEC	7	10
17	AUDIO BALANCE FM 60dB/M INPUT	75KHZ DEV	dB	0	±/-5
	AM 74dB/M INPUT	80% MOD	dB	0	±/-5
	TAPE PLAY(MTT-112BN 0dB)		dB	0	0
	VCD.PLAY(TCD 784 1KHZ 0dB)		dB	0	±/-5
	RECOR/PLAY BACK(FM 1KHZ I/P)	75KHZ DEV	dB	0	±/-5
18	BASS BOOST EFFECT<BASS BOOST FROM OFF TO NO>	100Hz	dB	8	6



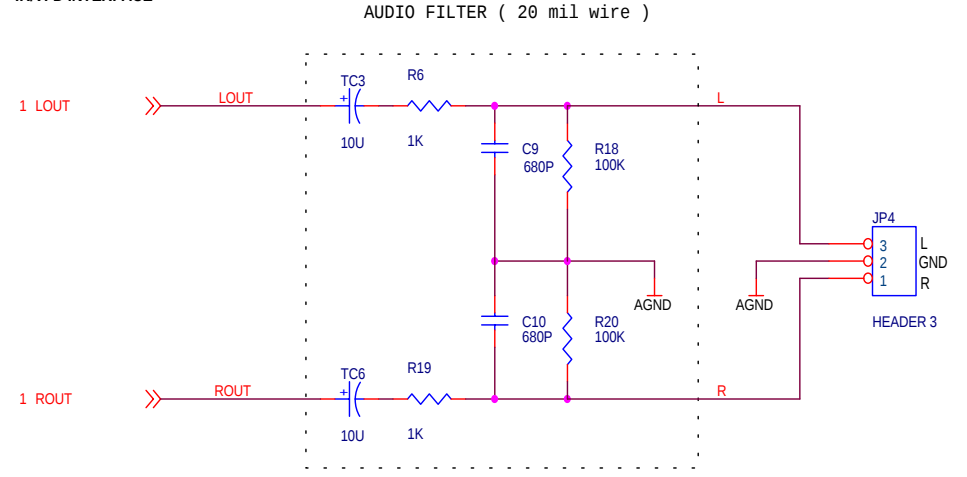
SAMTEK SEMICON DEVICES H.K.LTD.			
Rev	DRAM & ROM		
Size	Document Number	Nov	
B	SAMTEK 9294 DEMO BOARD	2	
Date:	Wednesday, October 22, 2003	Sheet	2 of 5



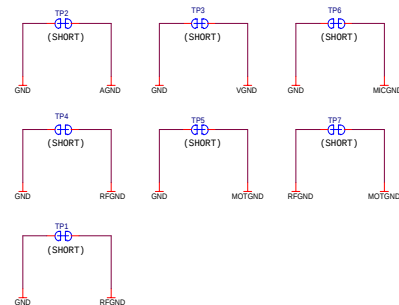
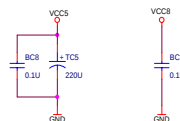
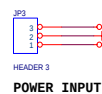
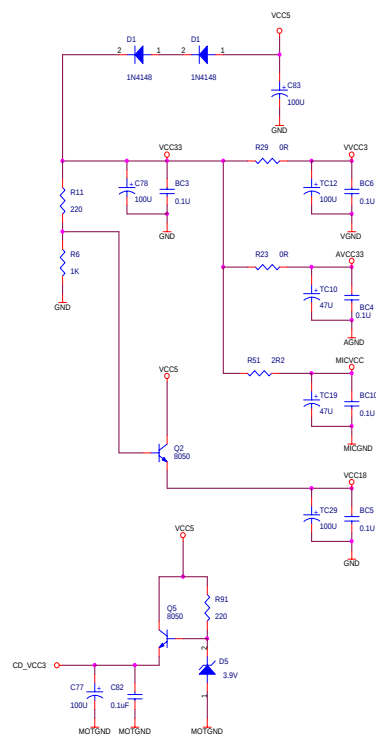
Before Resistir need 20 mil wire



IR/VFD INTERFACE



SAMTEK SEMICON DEVICES H.K.LTD.		
Title		
VIDEO/AUDIO OUTPUT & UI		
Size	Document Number	Rev
B	SAMTEK 9294 DEMO BOARD	2
Date:	Wednesday, October 22, 2003	Sheet 3 of 5

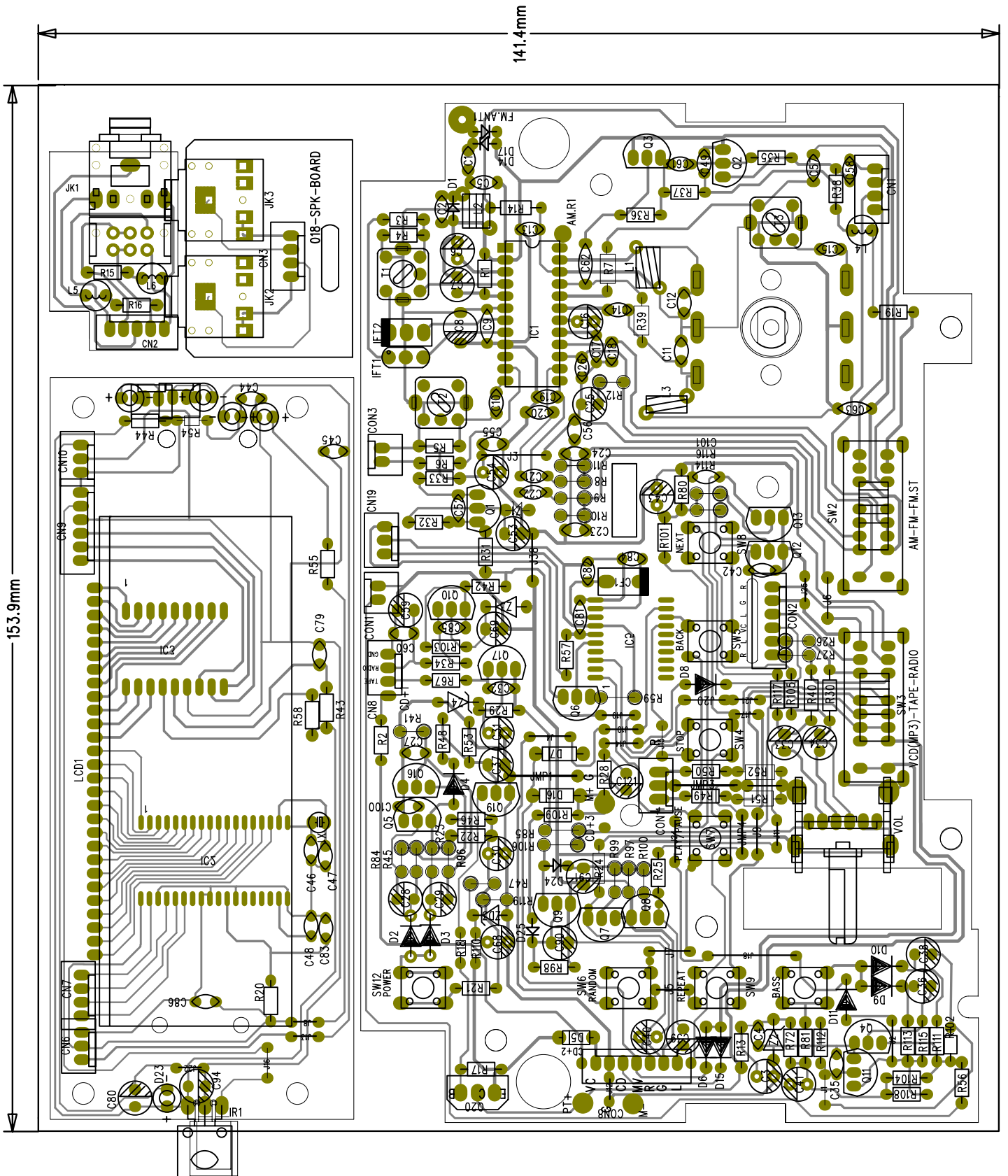


SAMTEK SEMICON DEVICES H.K.LTD.			
File	POWER		
Size	Document Number	Rev	
B	SAMTEK 9294 DEMO BOARD	2	
Date	Wednesday, October 22, 2003	Sheet	4 of 5

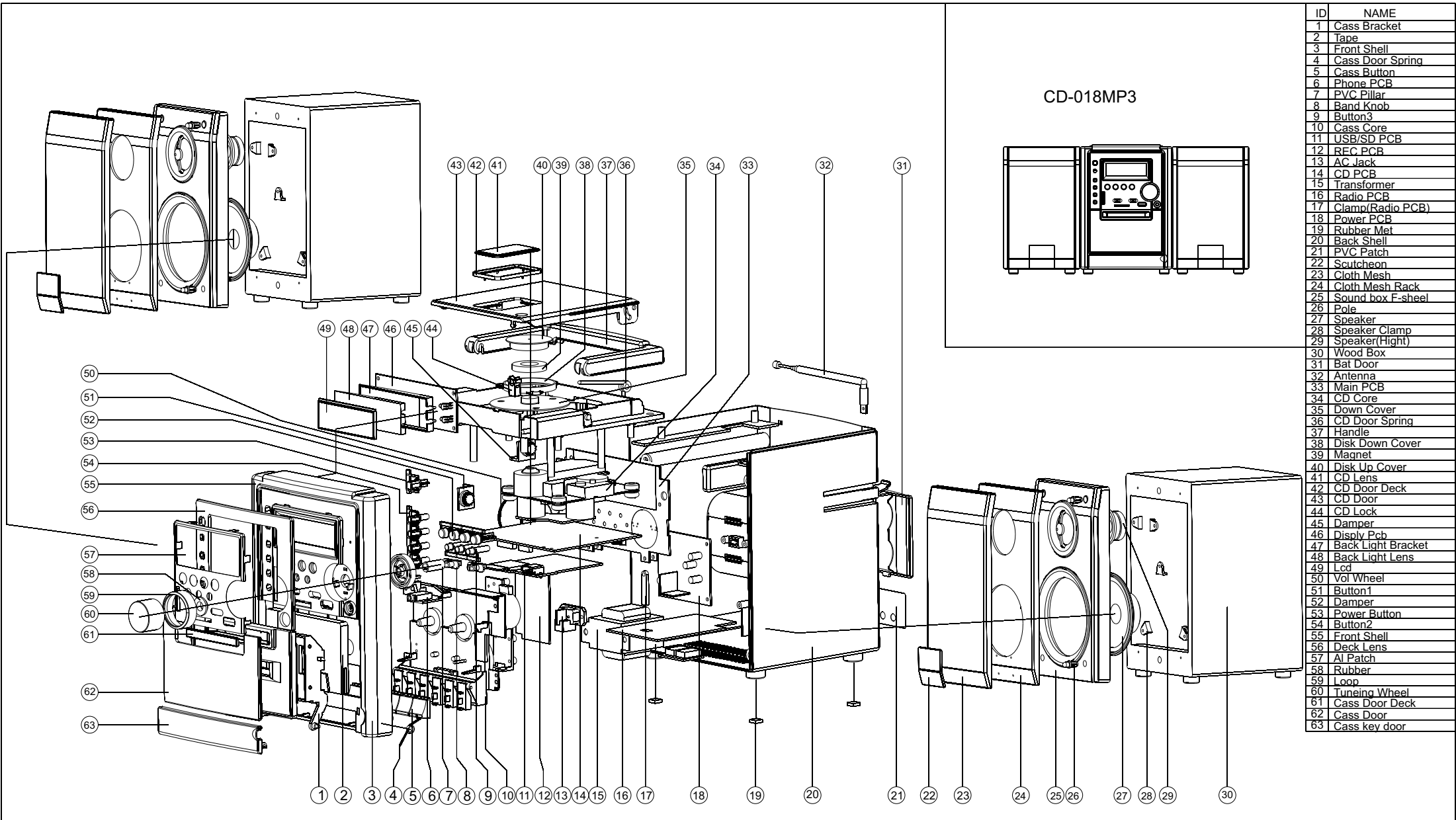
R30,R39 = 82K

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9.PART LIST

Item No	description	Specification	QTY	Unit	Location
M01-201-MP3018	inserted part of CD-018		1	pcs	
M01-301-MP3018	mainboard/recording board of CD-018		1	pcs	
P02-035-0241	P.C.B	018-VCD/MP3-01 MAIN BOARD 150*136.6MM	1	pcs	
P02-016-0004	audi on	9018H NPN	2	pcs	Q2. Q3
P02-010-0006	constant voltage diode	3.9v, 1/2w	1	pcs	Z1
P02-010-0001	constant voltage diode	5.1v, 1/2w	1	pcs	ZD3
P02-010-0002	constant voltage diode	5.6v,1/2w	2	pcs	Z2. Z3
P02-010-0005	DIODE	in4148	12	pcs	D1.D14.D17.D9.D10.D11. D8.D4.D2.D3.D25.D24
P02-009-0001	FM coil	dia5mm*41/2T(0.7mm)	1	pcs	L2
P02-009-0006	FM coil	dia4.5mm*31/2T/(0.7mm)	1	pcs	L1
P02-009-0003	FM coil	dia4.5mm*21/2T/(0.7mm)	1	pcs	L3
P02-008-0001	inductance	15UH 4*6MM	1	pcs	L4
P02-001-0001	RESISTOR	1/8w,1 ohm	1	pcs	R14
P02-086-0002	COPPER WIRE	DIA: 0 . 5 X 10mm	2	PCS	R39
P02-001-0002	RESISTOR	1/8w 10 ohm	6	pcs	R19.R34.R33.R72.R59.R67
P02-001-0003	RESISTOR	1/8W 22 ohm	2	pcs	R85.R42
P02-001-0004	RESISTOR	1/8W 47 ohm	2	pcs	R31.R7
P02-001-0006	RESISTOR	1/8W 100 ohm	3	pcs	R3.R47.R57
P02-001-0009	RESISTOR	1/8W 220 ohm	2	pcs	R28.R56
P02-001-0010	RESISTOR	1/8W 330 ohm	2	pcs	R4.R38
P02-001-0011	RESISTOR	1/8W 560 ohm	4	pcs	R103.R13.R6.R29
P02-001-0050	RESISTOR	1/8W 1k ohm	10	pcs	R18.R22.R46.R24.R25. R32.R104.R108.R37.R21
P02-001-0013	RESISTOR	1/8W 2.2k ohm	4	pcs	R110.R40.R30.R98
P02-001-0014	RESISTOR	1/8W 3.3k ohm	1	pcs	R97
P02-086-0003	COPPER WIRE	DIA: 0 . 5 X 7.5mm	6	PCS	
p02-001-0015	RESISTOR	1/8W 4.7k ohm	5	pcs	R117.R105.R12.R80.R119
p02-001-0016	RESISTOR	1/8W 5.6k ohm	3	pcs	R5.R51.R52
p02-001-0017	RESISTOR	1/8W 6.8k ohm	2	pcs	R8.R9
p02-001-0018	RESISTOR	1/8W 10k ohm	13	pcs	R84.R48.R106.R99.R100. R10.R11.R115.R101.R81. R101.R41.R96
p02-001-0020	RESISTOR	1/8W 22k ohm	3	pcs	R109.R49.R50
P02-001-0021	RESISTOR	1/8w 39k ohm	1	pcs	R1
P02-001-0109	RESISTOR	1/8w 47k ohm	5	pcs	R45.R23.R53.R113.R111
P02-001-0023	RESISTOR	1/4w 100k ohm	4	pcs	R17.R112.R35.R36
p02-004-0017	CERAMIC CAPACITOR	3pf	2	pcs	C62.C14
p02-004-0002	CERAMIC CAPACITOR	5pf	1	pcs	C61
P02-086-0010	COPPER WIRE	DIA: 0 . 5 X 6mm	5	PCS	
p02-004-0003	CERAMIC CAPACITOR	18pf	1	pcs	C11
p02-004-0004	CERAMIC CAPACITOR	22pf NP0±5%	1	pcs	C10
P02-004-0005	CERAMIC CAPACITOR	30pf	4	pcs	C1.C2.C5.C58
P02-004-0007	CERAMIC CAPACITOR	100pf	1	pcs	C57
P02-004-0008	CERAMIC CAPACITOR	150PF	1	pcs	C15

9.1 PART LIST

Item No	description	Specification	QTY	Unit	Location
P02-004-0010	CERAMIC CAPACITOR	102pf	1	pcs	C17
P02-004-0020	CERAMIC CAPACITOR	222pf	2	pcs	C23.C24
P02-004-0012	CERAMIC CAPACITOR	103PF	1	PCS	C26
P02-004-0013	CERAMIC CAPACITOR	1.53PF	2	PCS	C19.C20
P02-004-0015	CERAMIC CAPACITOR	403PF	3	PCS	C32.C85. C52
P02-086-0004	COPPER WIRE	DIA: 0 . 5 X 5mm	6	PCS	
P02-004-0031	CERAMIC CAPACITOR	473PF	2	PCS	C42.C101
P02-004-0016	CERAMIC CAPACITOR	104PF	15	PCS	C27.C60.C4.C35.C21.C22.C56.C55.C18.C9.C13.C49.C81.C63
P02-002-0001	ELECT. CAPACITOR	0.47uf 50v(5*11mm)	1	pcs	C6
P02-002-0002	ELECT. CAPACITOR	1uf 50v(5*11mm)	10	pcs	C28.C29.C39.C40.C33.C34.C36.C38.C25.C16
P02-002-0004	ELECT. CAPACITOR	4.7uf 50v(5*11mm)	3	pcs	C7.sound box2
P02-002-0007	ELECT. CAPACITOR	47uf 16v(5*11mm)	4	pcs	C30.C90.C91.C41
P02-002-0008	ELECT. CAPACITOR	100uf 10v(5*11mm)	10	pcs	C68.C31.C69.C59.C3.C53.C54.C8.C43.C37
P02-002-0017	ELECT. CAPACITOR	100uf 16v(5*11mm)	1	pcs	C121
P02-043-0002	PCB eye sheet	2*4MM	1	pcs	
P02-011-0008	IC	TYD6221	1	pcs	IC6
P02-011-0003	IC	SP2111N	1	pcs	IC1
P02-004-0019	CERAMIC CAPACITOR	15PF	1	PCS	C12
P02-004-0011	CERAMIC CAPACITOR	270PF	1	PCS	C82.C84
P02-002-0010	ELECT. CAPACITOR	220uf 25v8*12mm)	1	pcs	MOTOR OF MECHANISM
P02-010-0018	constant voltage diode	4.3v, 1/2w	1	pcs	Z4
P02-010-0020	COMMUTE diode	IN4004	5	pcs	D5.D6.D7.D15.D16
P02-001-0043	RESISTOR	1/8w,82k ohm	2	pcs	R26.R27
P02-001-0075	RESISTOR	1/8w,1 ohm	1	pcs	
P02-016-0005	AUDION	B772 PNP	1	pcs	Q20
P02-016-0003	AUDION	S8050D(EBC) NPN	4	PCS	Q1.Q10.Q17.Q19
P02-016-0002	AUDION	S9014C NPN	10	PCS	Q5.Q16.Q9.Q7.Q8.Q11.Q4.Q12.Q13.Q6
M01-3012-VCD56			1	PCS	
P02-035-0002			1	PCS	
P02-001-0020	RESISTOR	1/8w,22K ohm	4	pcs	R43.R62.R65.R70
P02-001-0022	RESISTOR	1/8w,33k ohm	2	pcs	R73.R74
P02-001-0024	RESISTOR	1/8w,150k ohm	2	pcs	R39.R68
P02-086-0004	COPPER WIRE	DIA: 0 . 5 X 5mm	1	PCS	
P02-010-0011	constant voltage diode	6.8v, 1/2w	1	pcs	Z6
P02-010-0005	DIODE	IN4148	1	pcs	D201
P02-002-0002	ELECT. CAPACITOR	1uf 50v(5*11mm)	2	pcs	C94.C97
P02-002-0005	ELECT. CAPACITOR	10uf 25v(5*11mm)	2	pcs	C96.C100
P02-002-0007	ELECT. CAPACITOR	47uf 16v(5*11mm)	1	pcs	C95
P02-002-0008	ELECT. CAPACITOR	100uf 10v(5*11mm)	3	pcs	C98.C99.C102
P02-011-0002	IC	AN7312	1	pcs	IC5
P02-004-0020	CERAMIC CAPACITOR	222PF	2	PCS	C106.C107

9.2 PART LIST

Item No	description	Specification	QTY	Unit	Location
P02-004-0014	CERAMIC CAPACITOR	203PF	3	PCS	C108.C109.C116
P02-004-0016	CERAMIC CAPACITOR	104PF	1	PCS	C110
P02-003-0001	MYLAR CAPACITOR	222k(0.002uf)	2	pcs	C111 C112
P02-003-0002	MYLAR CAPACITOR	223k	2	pcs	C113 C114
P02-032-0004	SOCKET	6PIN 2.00MM curly	1	PCS	CN14
P02-001-0025	RESISTOR	1/8w,1 M ohm	2	pcs	R78
P02-001-0003	RESISTOR	1/8w,22 ohm	2	pcs	R66.R69
P02-001-0007	RESISTOR	1/8w,120 ohm	1	pcs	R60
P02-001-0012	RESISTOR	1/8w,1.5 k ohm	1	pcs	R76
P02-001-0013	RESISTOR	1/8w,2.2K ohm	2	pcs	R44.R61
P02-001-0016	RESISTOR	1/8W, 5.6K OHM	2	PCS	R63.R77
P02-001-0017	RESISTOR	1/8W, 6.8K OHM	2	PCS	R64.R75
P02-001-0052	RESISTOR	1/8W,12K OHM	2	PCS	R71.R72
M01-302-MP3018	POWER pcb parts		1	pcs	
P02-035-0240	PCB	VCD018B-02-B1 POWER BOARD 107-69MM	1	PCS	
P02-001-0076	RESISTOR	1/8W, 390 OHM	1	PCS	R83
P02-001-0050	RESISTOR	1/8W, 1K OHM	2	PCS	R91.R92
P02-001-0013	RESISTOR	1/8W, 2.2K OHM	1	PCS	R93
P02-001-0014	RESISTOR	1/8W, 3.3K OHM	1	PCS	R82
P02-001-0018	RESISTOR	1/8W, 10K OHM	2	pcs	R88.R89
P02-004-0010	CERAMIC CAPACITOR	102pf	2	pcs	C92.C93
P02-004-0014	CERAMIC CAPACITOR	203pf	8	pcs	C44.C45.C50.C51.C64.C65.C66.C67
P02-004-0015	CERAMIC CAPACITOR	403pf	2	pcs	C70.C75
P02-002-0013	ELECT. CAPACITOR	0.22uf 50v(5*11m)	2	pcs	C117.C118
P02-004-0002	ELECT. CAPACITOR	1uf 50v(5*11m)	4	pcs	C87.C88.C121.C122
P02-011-0060	I.C.	TA8227	1	pcs	IC2
P02-002-0008	ELECT. CAPACITOR	100UF 10V(5*11MM)	3	pcs	C103.C104.C105
P02-002-0017	ELECT. CAPACITOR	100UF 16V(5*11MM)	4	pcs	C72.C115.C116.C73.C115.C1
P02-002-0016	ELECT. CAPACITOR	220UF 16V(6*11MM)	1	pcs	C89
P02-002-0027	ELECT. CAPACITOR	470UF 16V(8*12MM)	2	pcs	C119.C120
P02-002-0012	ELECT. CAPACITOR	1000UF 25V(10*20MM)	1	pcs	C78
P02-002-0020	ELECT. CAPACITOR	2200UF 25V(13*21MM)	2	pcs	C76.C77
P02-002-0007	ELECT. CAPACITOR	47UF 16V(5*11MM)	2	pcs	C71.C74
P02-032-0004	SOCKET	3PIN 2.00M vertical	1	PCS	CN14
P02-016-0010	AUDION	D882 NPN 2A	2	pcs	D14.D15
P02-010-0020	commute diode	IN4004	11	PCS	D12.D13.D27.D28.D29.D30.D31.D32.D34.D35.D36
P02-010-0003	constant voltage diode	8.2V 1/2w	1	pcs	ZD1
P02-010-0002	constant voltage diode	5.6V 1/2w	1	pcs	ZD2
P02-001-0002	RESISTOR	1/8W 10 OHM	1	pcs	R90
P02-001-0008	RESISTOR	1/8W 150 OHM	2	pcs	R86.R87
P02-001-0010	RESISTOR	1/8W 330 OHM	1	pcs	R94

9.3 PART LIST

Item No	description	Specification	QTY	Unit	Location
M01-303-MP3018	MP3-018 LCD pcb parts		1	pcs	
P02-023-0001	lighting diode	dia 3mm,red 3v =30mm	1	pcs	LED3
P02-002-0072	ELECT. CAPACITOR	100UF 10V(4*7MM)	1	pcs	C80
P02-001-0006	RESISTOR	1/8W 100 OHM	1	pcs	R54
P02-001-0002	RESISTOR	1/8W 10 OHM	2	pcs	R44.R43
P02-001-0005	RESISTOR	1/8W 56 OHM	1	pcs	R55
P02-001-0010	RESISTOR	1/8W 330 OHM	3	PCS	R58
P02-001-0015	RESISTOR	1/8W 4.7K OHM	1	PCS	R20
P02-088-0002	emissive pipe	DIA.3MM	1	PCS	
P02-088-0001	remote RECEIVER	7.6*7.2*5.2MM 5V	1	PCS	IR1
P02-023-0004	lighting diode	dia 3mm,Green 3v L=28mm	1	pcs	LED3
P02-011-0004	IC	SC3610D	1	pcs	IC3
P02-011-0009	IC	1621	1	PCS	IC4
P02-006-0001	crystal monofier	32.768MHZ,2LEADS,3*8MM	1	PCS	X1
P02-004-0005	CERAMIC CAPACITOR	30pf	2	pcs	C46.C47
P02-004-0016	CERAMIC CAPACITOR	104pf	4	pcs	C48.C86.C83.C79
P02-002-0006	ELECT. CAPACITOR	47UF 16V(4*7MM)	1	pcs	C94
M01-304-MP3018	MP3-018 EARPHONE pcb parts		1	pcs	
P02-001-0008	RESISTOR	1/8W 150 OHM	2	PCS	R15.R16
P02-007-0004	I.F.I	100:10T RED,DIA 7MM, (7*7*11MM)	1	pcs	T3
P02-007-0002	I.F.I	pink 7T ,DIA 7MM (6MM)	1	pcs	T2
P02-032-0007	SOCKET	vertical,2.00mm,5pin,	1	pcs	cn9
P02-032-0013	SOCKET	vertical,2.00mm,8pin,	1	pcs	cn10
P02-008-0005	magnetic inductance	22UH 3.5*3MM 3T5	2	pcs	L5.L6
P02-032-0009	SOCKET	vertical,2.00mm,4pin,	1	pcs	cn11
P02-086-0002	COPPER WIRE	dia:0.5*10mm	1	pcs	
P02-086-0003	COPPER WIRE	dia:0.5*7.5mm	6	pcs	
P02-086-0010	COPPER WIRE	dia:0.5*6mm	5	pcs	
P02-086-0004	COPPER WIRE	dia:0.5*5mm	3	pcs	
P02-005-0001	FM CERAMIC filter	L10,7A(MHZ) 3LEG	1	pcs	IFT1
P02-006-0003	oscillator	455E(KHZ) 2LEG	1	PCS	CF1
P02-005-0002	AM CERAMIC filter	455b(Kmhz) 3 LEG	1	pcs	IFT2
P02-007-0018	I.F.I	YELLOW 157:15 DIA (7*7*6MM)	1	pcs	T1
M01-202-MP3018	MP3-018 accessory parts		1	pcs	
P02-023-0009	LED 3 COLOR	DIA.5MM L=25MM 3V L5R085B20G21Y4M	1	pcs	LED2
P03-053-0007	radiator	#CD11	1	pcs	IC1
P02-019-0011	rolling potentiometer	WHO122-02 #CD18B CR9 CD16	1	pcs	
P02-022-0002	LCD display	#VCD828 translucent 28PIN	1	pcs	
P02-030-0007	the speaker wire	dia:3.5mm,1m	2	pcs	
P02-029-0015	PVC WIRE	100mm.black 26#	2	pcs	speaker box (-) to athorn (-) x2
P02-029-0014	PVC WIRE	100mm,red 26#	3	pcs	battery sheet(+) to AC socket1, speaker box (+) to althorn capacitance 2
P02-029-0001	PVC WIRE	150mm,red 26#	1	pcs	motor + o mainboard

9.4 PART LIST

Item No	description	Specification	QTY	Unit	Location
P02-029-0003	PVC WIRE	150mm,black 26#	1	pcs	battery sheet(-) to audio PCB
P02-029-0004	PVC WIRE	200mm,yellow 26#	3	pcs	the switch to motor 1; to mainboard, ac socket to audio PCB
P02-029-0042	PVC WIRE	300mm,yellow26#	1	pcs	FM antenna
P02-013-0008	PVC adjustive capacitance	CBM-443DF-1DF-4(88R)	1	pcs	PVC
P02-029-0069	PVC WIRE	150mm,black 20#	1	pcs	AC socket
P02-028-0070	SINGLE color crossing line	2pin, 28# 2.0MM L=200MM red/black	1	pcs	CD PCB to Motor of CD mechanism
P02-028-0067	SINGLE color crossing line	2pin, 26# 2.5mm L=250MM white/black	1	pcs	+8V
P02-028-0254	SINGLE color crossing line	4pin, 26# 2.0mm L=150mm brown/red/yellow/green	1	pcs	power board to SPK board
P02-028-0181	SINGLE color crossing line	9pin, 28# red/yellow/green/grey/brown/white/black/blue/purple	1	pcs	power board to phone board
P02-028-0223	shielding wire	3p dia1.8mm, l50mm	1	pcs	
P02-028-0091	lens corssing line	16P FCC 1.0mm	1	pcs	CD lens
P02-028-0048	grey crossing line	3P 2.00mm L=100mm	1	pcs	EARPHONE pcb
P02-028-0304	grey crossing line	4pin 2.0mm L=200mm	1	pcs	MOTHER BOARD TO FORNAL PANL
P02-032-0057	earphone jack	dia:3.5mm, stearo	1	pcs	jk1
p02-028-0130	singl grey crossing line	6p 2.0mm L=100mm	1	PCS	main board to record board
p02-028-0217	SINGLE color crossing line	6p 28# 2.5m red/brown/yellow/white/green/grey	1	pcs	lcd board to vcd board
p02-028-0185	SINGLE color crossing line	2p #26 2.5mm red/black L=250mm	1	pcs	+5v
p02-028-0239	SINGLE color crossing line	8P 2.0mm L=250mm	1	pcs	power board to main
p02-028-0100	double color crossing line	6pin, 28#(2.0mm) red/brown/brown/brown/brown/brown/	1	pcs	cd机芯TO VCD BOARD
P02-032-0021	earphone jack	dia 3.5mm	1	pcs	
P02-015-0007	brand switch	ss43d01GM13	2	pcs	
P02-029-0005	PVC WIRE	26# L=200mm black	1	pcs	马达(-)至主机板
P02-037-0002	AM coil	120:20T(3+1)4WIRE*MM DIA.11MM	1	PCS	
P02-039-0002	the bracket of AM magnet (flat)	5*13*55MM(flat)	1	PCS	
P02-038-0001	AM magnet (flat)	5*13*55MM(2013#)	1	PCS	
P03-053-0004	radiator(FIVE pole)	59*41MM 7805/7808 VCD21	1	PCS	Q14
P02-015-0003	touching switch	TACT 6*6*5MM	8	pcs	SW1.SW4.SW5.SW6.SW7.SW8.SW9.SW12
M01-203-MP3018	CD-018 ASSEMBLEING parts		1	PCS	
M01-305-CD018	FRONT cabinet(Cd-018)		1	PCS	
M01-326-CD018	FRONT panel of speaker box		2	PCS	
P05-070-0001	HIPS plastic	475 grey	0.111*2	kg	
P05-070-0002	HIPS plastic	475 black	0.153	kg	
M01-324-CD018	THE BRACKET OF CLOTH GRILL(Cd-018)		2	PCS	
P05-070-0001	HIPS plastic	475 grey	0.066	kg	
M01-325-CD018	THE BRAND (Cd-018)		2	PCS	
P05-070-0001	HIPS plastic	475 BLACK	0.006	kg	
M01-320-CD17	THE RISISTANCE GEAR (Cd-018)		1	PCS	

9.5 PART LIST

Item No	description	Specification	QTY	Unit	Location
P05-069-0001	ABS plastic	black	0.0015	kg	
M01-321-CD17	THE BASE OF RISISTANCE GEAR (Cd-18)		1	PCS	
P05-069-0001	ABS plastic	black	0.0025	kg	
M01-321-CD018	POWER KNOB (Cd-018)		1	PCS	
P05-069-0003	ABS plastic	ABS-757 raw material	0.001	kg	
M01-316-CD018	VOLUME KNOB (Cd-018)		1	PCS	
P05-069-0003	ABS plastic	ABS-757 raw material	0.003	kg	
M01-318-CD018	BUTTON A(Cd-018)		1	PCS	
P05-069-0003	ABS plastic	ABS-757 raw material	0.004	kg	
M01-319-CD018	BUTTON B(Cd-018)		1	PCS	
P05-069-0003	ABS plastic	ABS-757 raw material	0.003	kg	
M01-315-CD018	BUTTON C(Cd-018)		1	PCS	
P05-069-0003	ABS plastic	ABS-757 raw material	0.003	kg	
M01-304-CD17	BLACK CABINET(CD17)		1	PCS	
M01-308-CD018	cassette door lens (CD018)		1	PCS	
P05-072-0002	Gp plastic	GP-33, from taiwan	0.024	kg	
P05-070-0001	HIPS plastic	475 grey	0.49	kg	
M01-336-CD838	the bracket of BACKGROUND lens(CD838)		1	PCS	
P05-070-0001	HIPS plastic	475 grey	0.0055	kg	
M01-359-CD21	palstic pion(CD21)		4	PCS	
P05-069-0001	ABS plastic	black	0.001	kg	
M01-357-CD21	the bracket of cripper		1	PCS	
P05-069-0001	ABS plastic	black	0.003	kg	
M01-358-CD21	the bottom part of cripper		1	PCS	
P05-069-0001	ABS plastic	black	0.004	kg	
M01-365-CD21	THE BASE OF RISISTANCE GEAR(CD21)		1	PCS	
P05-070-0002	HIPS plastic	475 black	0.0014	kg	
M01-342--CD21	THE RISISTANCE GEAR (CD21)		1	PCS	
P05-069-0001	ABS plastic	black	0.0015	kg	
M01-CD DISC BRA	press disc bracket		1	PCS	
P05-069-0001	ABS plastic	black	0.0025	kg	
M01-339-CD838	anti-dirt cover(CD18)		1	PCS	
P05-069-0001	ABS plastic	black	0.003	kg	
M01-RECORDING po	recording PCB bracket		1	PCS	
P05-069-0001	ABS plastic	black	0.002	kg	
M01-305-CD17	CD BASE OF CD MECHANISM(CD17)		1	PCS	
P02-030-0008	pricked wire	L=40MM	6	pcs	
P02-012-0021	double channel cassette mechanism #CD18	vertical L=30MM	1	pcs	
P05-070-0001	HIPS plastic	475 grey	0.087	kg	
P02-012-0004	CD mechanism	samsung brand	1	pcs	

9.6 PART LIST

Item No	description	Specification	QTY	Unit	Location
P02-083-0006	adaptor #VCD20/17	EI48*23.5(horizontal) input:110/220VAC output:1200MA/10VAC	1	pcs	
P02-015-0004	sheet switch	LS323	1	pcs	
P02-015-0005	changing swtich	110V/220V	1	pcs	
P02-025-0008	speaker	3.5 inch/4 Ohm/5W/45 magentic	2	pcs	
P02-025-0003	althorn speaker	1.5 inch/80hm/5W/32 magentic	2	pcs	
P02-054-0001	FM antenna solding sheet #CD10	long	1	pcs	
P03-042-0003	screw	2.6*8 PA	4	pcs	
M01-306-CD018	CD DOOR (CD18)		1	PCS	
P03-042-0005	screw	3.0*6 PA	2	pcs	
P03-042-0001	screw	3.0*8 PA	17	pcs	
P05-070-0002	HIPS plastic	BLack	0.055	kg	
P03-042-0009	screw	3.0*10 PA	9	pcs	
P03-042-0004	screw	2.0*10 PA	1	pcs	
P03-042-0010	screw	2.0*4 PB	1	pcs	
P03-042-0024	screw	2.0*6 KB	3	pcs	
P03-042-0020	screw	3.0*10 PWA(P5MM W7MM)	3	pcs	
P03-042-0018	screw	3.0*12 PWA(P5MM W7MM)	2	pcs	
P03-042-0013	screw	3.0*8 PM	3	pcs	
P03-042-0002	screw	3.0*12 PA	22	pcs	
M01-308-CD017	the handle(CD17)		1	PCS	
P03-042-0012	screw	2*3 PM(3.6MM)	2	pcs	
P03-042-0019	screw	3.0*8 PWA (P5MM W7MM)	10	pcs	
P05-069-0002	ABS plastic	grey	0.037	kg	
P03-047-0004	cassette spring(CD838)	dia 0.8MM steel spring	1	pcs	
P03-047-0009	CD door spring(CD10)	dia 1.2MM steel spring	1	pcs	
P03-095-0006	aluminum sheet	silver. PII/usb	1	pcs	
P03-048-0004	positive batteris spring(CD21)	dia 1.0MM steel spring	1	pcs	
P03-048-0005	- batteris spring(CD21)	dia 1.0MM steel spring	1	pcs	
P03-047-0006	"+"&-" batteries spring A (CD21)	dia 1.0MM steel spring	1	pcs	
P03-047-0007	+&- batteries spring B (CD21)	dia 1.0MM steel spring	1	pcs	
P03-047-0008	+&- batteries spring C (CD21)	dia 1.1MM steel spring	1	pcs	
M01-309-CD17	the batteris door (CD17)		1	PCS	
P07-085-0042	the cloths of grill	grey	2	pcs	
P03-041-0005	antenna CD17	114.0MM	1	pcs	
P05-070-0001	HIPS plastic	475 grey	0.026	kg	
P03-015-0019	open knob switch(CD18)	pr-5	1	pcs	
P02-084-0001	magnet	dia.30*16.3*5.0	1	pcs	
P07-087-0001	CD mechanism anti-shock rubber	30 degree(red)	2	pcs	
P07-087-0002	CD mechanism anti -shock rubber	40 degree(green color)	2	pcs	
M01-345-CD17	speaker's FIX plastic base (CD17)		8	pcs	

9.7 PART LIST

Item No	description	Specification	QTY	Unit	Location
P05-070-0001	HIPS plastic	475 grey	0.0015	kg	
M01-312-CD018	the voulme/tone KNOB (Cd-18)		1	pcs	
P05-069-0003	ABS plastic	ABS-757 raw material	0.005	kg	
M01-313-CD018	THE RING OF VOLUME KNOB (Cd-018)		1	pcs	
P05-069-0003	ABS plastic	ABS-757 raw material	0.003	kg	
P02-032-0023	AC power socket	AC-001/AS-203S	1	pcs	
M01-323-CD018	cassette knobs(CD018)		1	SET	
P02-076-0002	RUBBER	10*10*5MMM	1	pcs	
P05-069-0003	ABS plastic	ABS-757 raw material	0.007	kg	
M01-315-CD018	PVC pole		1	PCS	
P05-069-0003	ABS plastic	ABS-757 raw material	0.001	kg	
M01-311-CD018	cassette door deck part(CD018)		2	PCS	
P05-069-0003	ABS plastic	ABS-757 raw material	0.002	kg	
P03-042-0011	screw	2.6*4 KM(D=4MM)	2	pcs	
P03-042-0060	screw	2.6*4 PM	1	pcs	
M01-307-CD018	description lens(CD018)		1	PCS	
P05-072-0002	Gp plastic	GP-33, from taiwan	0.055	kg	
M01-309-CD018	cd door lens(CD018)		1	PCS	
P05-072-0002	Gp plastic	GP-33, from taiwan	0.005	kg	
M01-310-CD018	description ring(CD018)		1	PCS	
P05-069-0003	ABS plastic	ABS-757 raw material	0.002	kg	
M01-322-CD018	cassette button(CD018)		1	PCS	
M01-317-CD018	band switch(CD018)		2	PCS	
P05-069-0003	ABS plastic	ABS-757 raw material	0.001	kg	
P05-069-0003	ABS plastic	ABS-757 raw material	0.009	kg	
M01-306-CD	SPEAKER FIX pion(CD018)		10	PCS	
P05-069-0001	ABS plastic	black	0.001	kg	
M01-336-cd828	BACKGROUND lens(CD828)		1	PCS	
P05-072-0002	Gp plastic	GP-33, from taiwan	0.012	kg	
M01-347-CD19	THE BACE OF CLOTH GRILL		8	PCS	
P05-069-0003	ABS plastic	ABS-757 raw material	0.00042	kg	
M01-334-CD838	THE trachea fo wooden speaker (only use for wooden speaker)		2	PCS	
P05-070-0002	HIPS plastic	475 black	0.052	kg	
M01-326-CD18	radio PCB fixing bracket		1	PCS	
P05-069-0001	ABS plastic	black	0.001	kg	
P02-036-0001	mpeg board(SANSUNG)	MP3/VCD 9294	1	pcs	
p07-080-0020	wooden speaker (018)	same as customer requirement	2	PCS	
M01-307-CD18	cassette door bracket		1	PCS	
P05-070-0002	HIPS plastic	475 black	0.023	kg	
M01-327-CD018	cassette door(CD018)		1	PCS	

9.8 PART LIST

Item No	description	Specification	QTY	Unit	Location
P05-070-0002	HIPS plastic	475 black	0.034	kg	
M01-204-MP3018	CD-18 packing parts		1	PCS	
P02-030-0015	AC cable	VDE approved 0.75MM, round pin, brazile standard plug/1.8M	1	pcs	
P04-064-0007	the ploybag of speaker line	150*65mm	2	pcs	
P04-064-0006	the ploybag of unit	370*480MM	3	pcs	
P04-064-0003	AC cable/ bag	80*300MM	1	pcs	
P04-064-0004	Manual Bag(CD18)	155*250MM	1	pcs	
P04-089-0005	the belt tape	0.05*7*80 CM	1	pcs	
P04-056-0005	rating label	44*24*0.1MM	1	pcs	
M01-100-(MP3)	MP3 remote controller		1	pcs	
P04-064-0002	RC Bag(CD18)	75*150MM	1	pcs	
P04-060-0098	manual(CD18)		1	pcs	
P07-077-0003	rubber boot	8.0*8.0*2.0MM	12	pcs	
P04-065-0009	PVC label	47.5*31.5*0.3mm	1	pcs	
P04-058-0020	cartoon box(CD18)	592(L)*307(W)*554(H)MM 6.0 thickness	0.5	pcs	
P04-059-0027	giftbox(CD18)	293(L)*289(W)*178(H)MM 2.0 thickness	1	pcs	
P04-056-0001	QC pass label		4	pcs	
P04-062-0008	ployfoam #CD18		1	set	
P04-056-0002	Laser label		1	pcs	
P04-063-0014	anti-shock paper of optical pick-up(CD)	9.0*4.9*0.3MM	1	pcs	