AKAI

PORTABLE RADIO CASSETTE RECORDER AND CD/VCD/MP3 PLAYER WITH REMOTE

Model:
AJ-CV3400

SERVICE MANUAL

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AKAI

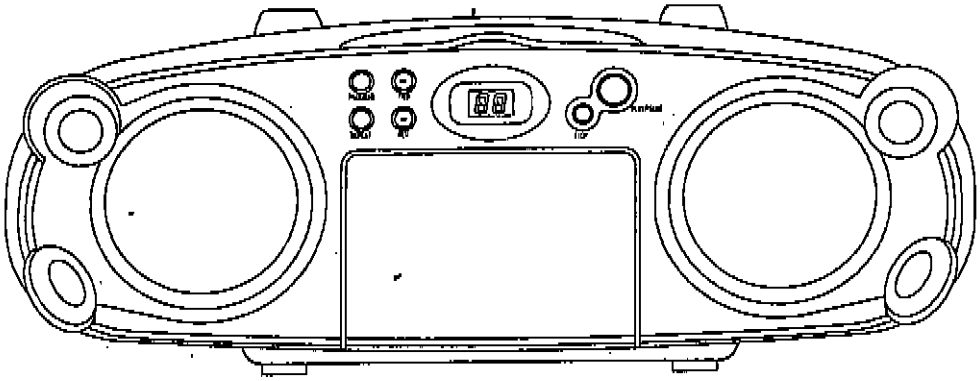
SERVICE MANUAL

MODEL

AJ-CV3400

CAUTION: Before servicing the chassis, read the "Important service safety information" section on page 2 of this manual.

PORTABLE RADIO CASSETTE RECORDER AND CD / VCD / MP3 PLAYER WITH REMOTE CONTROL



MAJOR SPECIFICATION

RADIO	AM	FM
Frequency Range	522~1620KHz	88.5~108MHz
IF	455KHz	10.7MHz
Antenna	Ferrite Bar	75Ω Telescope Antenna

POWER SUPPLY

AC 230V50Hz

DC 12V UM-1 / R20 / Size: "D" 1.5V x 8 Batteries

SPEAKER

4 Ω / Channel x 2

AUDIO POWER OUTPUT

1.5W / Channel x 2 10%THD

VIDEO SYSTEM

MPEG 1.0, 2.0, 3.0

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SERVICE PUBLICATION

30 MAY 2003

IMPORTANT SERVICE SAFETY INFROMATION

1. SAFETY PRECAUTIONS

Before returning a unit to the customer, always make a safety check of the entire unit, including, but not limited to the following items:

a. Be sure that no built-in protective devices are defective and/or have been defected during servicing.
   1) Protective shields are provided to protect both the technician and the customer. Correctly replace all missing protective shields including any removed for service convenience.
   2) When reinstalling the chassis and/or other assemblies in the cabinet, be sure to put back in place all protective devices, including, but not limited to, nonmetallic control knobs, insulating fish papers, adjustment and compartment covers/shields and isolation resistors capacitor reworks. Go not operate this unit or permit it to be operated without all protective devices correctly installed and functioning.

b. Be sure that there are no cabinet opening through which an adult or child maight be able to insert their fingers and contact a hazardous voltages such openings include, but are not limited to, excessively wide cabinet ventilation slots, and an improperly fitted and/or incorrectly secured cabinet back cover.

c. Leakage current hot check- with the unit completely reassembled, plug the AC line cord directly into a 230V AC outlet. (Do not use an isolation transformer during this test.) Use a leakage current tester or a metering system that complies with American National Standards institute (ANSI) C101.1 "Leakage Current for Appliances" and Underwriters Laboratories (UL) 1410,(50.7). With the unit AC switch first in the ON position and then in the OFF position, measure from a known each ground (metal water pipe, conduit, etc) to all exposed metal parts of the unit (antennas, handle bracket, metal cabinet, screw heads, metallic over trays, control shaft, etc), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 0.5 milliamp. Reverse the unit power cord plug in the outlet and repeat test. ANY MEASUFREMENTS NOT WITHIN THE LIMITS SPECIFIED HERENIN INDICATE A POYENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE UNIT TO THE CUSTOMER.

d. Insulation Resistance Test Cold Check

   Unplug the power supply cord and connect a jumper wire between the two prongs of the plug.

   Turn on the power switch of the unit.

   Measure the resistance with an ohmmeter between the jumpered AC plug and each exposed metallic cabinet part on the unit, such as screw heads, antenna, control shafts, handle brackets, etc. When the exposed metallic part has a return path to the chassis, the reading should be between 1 and 5.2 megohme. When there is no return path to the chassis, the reading must be "infinito" if it is not within the limits specified, there is the possibility of a shock hazard, and the unit must be repaired and rechecked before it is returned to the customer.

2. PRODUCT SAFETY NOTICE

Some electrical and mechanical parts have special safety related characteristics which are often not evident from visual inspection, nor can the protection they giver necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characterization are identified by a ⚠ on schematic and

parts list..Use of a substitute replacement that does not have the same safety characterisistics as the recommend replacement part might create shock, fire, and/or other hazards. Product Safety is under review continuously and new instructions are issued when over appropriate.

3. SERVICING PRECAUTIONS

CAUTION : Before servicing the unit covered by this service manual and its supplements, read

Read and follow the SAFTY PRECAUTIONS on this page. NOTE: if unforeseen circumstances create a conflict between the following servicing precautions and any of the safety precautions, always follow the safety precautions. Remember: Safety First.

General Servicing Precautions:

a. Always unplug the unite AC power cord from the AC power source before:

(1) removing or reinstalling any component, circuit board, module, or any other unit assembly.

(2) Disconnecting or reconnecting any unit electrical plug or other electrical connection.

(3) Connecting a last substitute in parallel with an electrolytic capacitor in the unit.

Caution: A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.

b. Do not defeat any plug/socket B+ voltage interlocks with which the unit covered by this Service manual might be equipped.

c. Do not apply AC power to this unit and / or any of its electrical assemblies unless all solid --State device heat sinks are correctly installed.

d. Always connect a lost unit instrument's ground lead to the unit's chassis ground before Connecting the test instrument's positive lead. Always remove the test instrument's ground Lead last.

4. LASER PRECAUTIONS

WARNING]

1) When servicing, (in case it is necessary to confirm laser beam emission) be sure not to place your eyes any closer than 1 tf or 30cm from the surface of the objective lens On the optical pickup block.

HANDLING THE LASER PICK UP

2. Laser diodes are extremely susceplible to damage from state electricity. Even if a Static discharge does not ruin the diode. It can shorten its life or cause it to work Improperly. When replacing the pickup, use a conductive mat on the floor and desk And desk and wear a wristband connected to ground through a 1 M ohm resistor to protect the laser diode from static damage. If the lens should get dusty, blow off the dust carefully from the object.

3. There are no adjustable parts in the pickup assembly. If it is defective replace the whole pickup assembly.

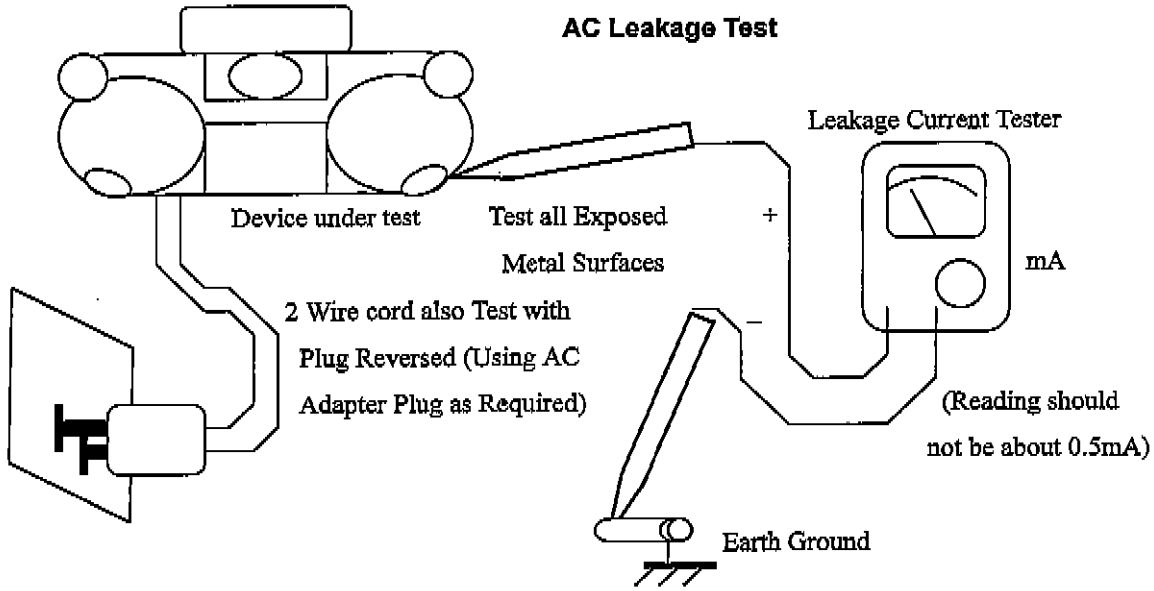
CAUTION:

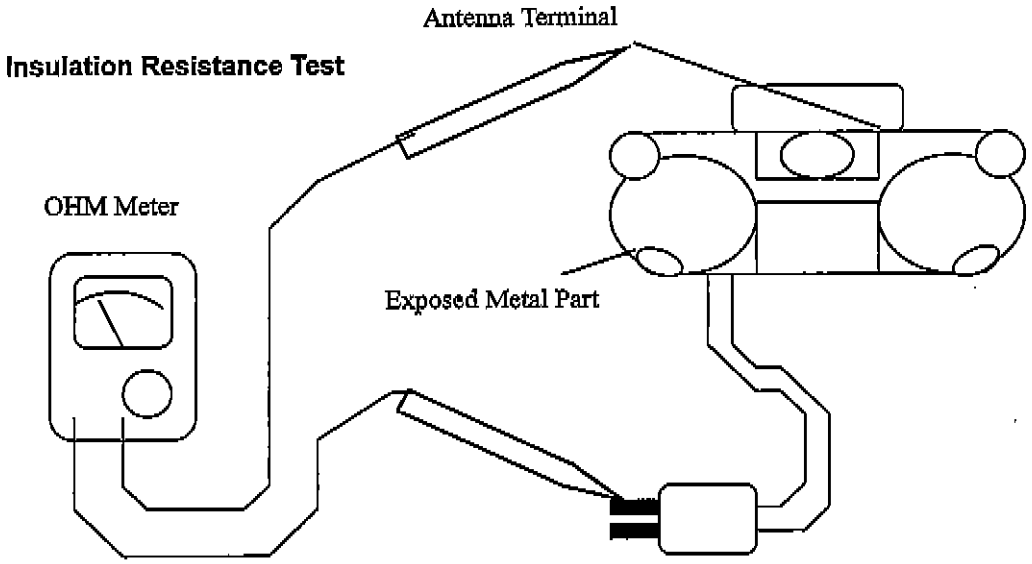
USE OF CONTROLS, ADJUSTMENTS OR PERFORMANCE OF PROCEDURES HEREIN MAY RESULT IN

HAZARDOUS RADIATION EXPOSURE.

DANGER:

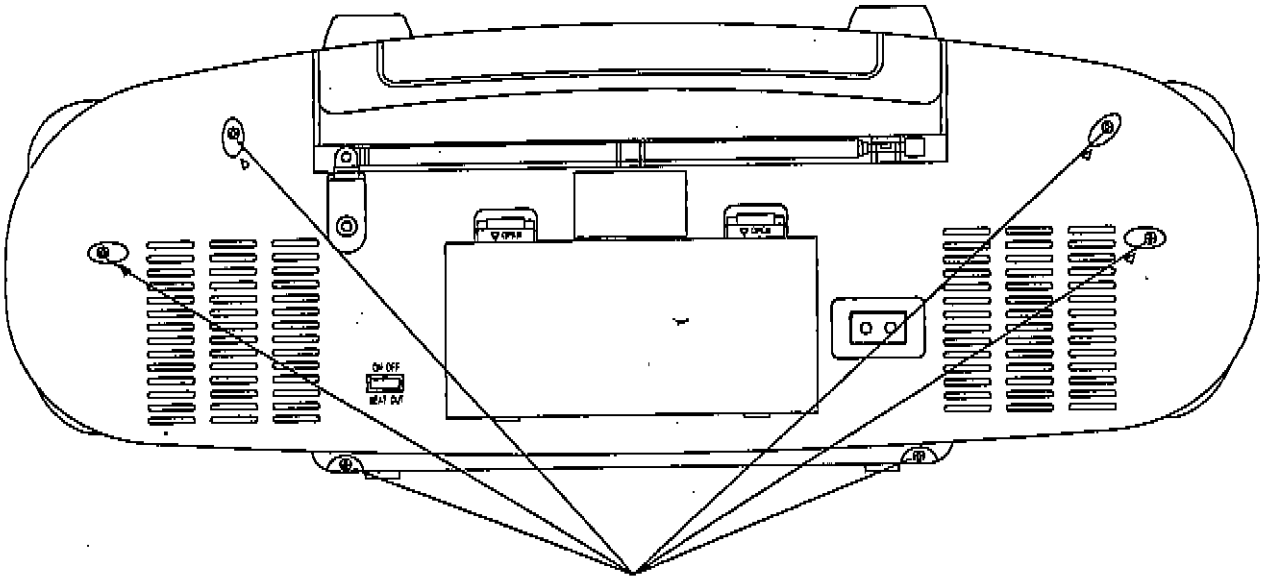
IF INTERLOCK FAILS OR IS DEFEATED, THE LASER LIGHT IS ABLE TO FUNCTION. THE LASER IS INVISIBLE, AVOID DIRECT EXPOSURE TO BEAM.





DISASSEMBLY INSTRUCTIONS

1, Rotate the unit to expose the back side.
2, Remove the 6 pcs. screws as shown following.



6 pcs. SCREWS : TA/BH 3 x 20

ALIGNMENT PROCEDURES

AM IF. ALIGNMENT

1, Set the FUNCTION switch to "RADIO" position.
2, Set the BAND switch to "AM" position.
3, Connect a SWEEPSCOPE OUTPUT to AM standard radiating loop antenna and match the direction for built-in ferrite bar of AM antenna.
4, Connect a SWEEPSCOPE INPUT to pin 13 or 14 of IC1 through a 1uf capacitor and GND.

STEP	SET SIGNAL	SET DIAL	ADJUST	ADJUST FOR
1	455KHz	LOW-END OF BAND	T101(IFT,YELLOW)	CENTER & MAXIMUM OUTPUT

AM RF. ALIGNMENT

1, Connect a RF GENERATOR to the standard radiating loop antenna.
2, Connect a SCOPE and VTVM across the speaker output

STEP	SET SIGNAL	SET DIAL	ADJUST	ADJUST FOR
1	522KHz	LOW-END OF BAND	L105 (AM OSC)	MAXIMUM OUT[UT
2	1620KHz	HIGH-END OF BAND	PVC2 (TRIMMER)	MAXIMUM OUT[UT
3	REPEAT	STEP 1 & 2	TO MAXIMUM	
4	612KHz	NEAR 612KHz	L104 (AM SENS COIL)	MAXIMUM OUT[UT
5	1404KHz	NEAR 1404KHz	PVC1 (TRIMMER)	MAXIMUM OUT[UT
	REPEAT	STEP 4 & 5	TO MAXIMUM	

FM IF. ALIGNMENT

1, Set the BAND switch to "FM" position.
2, Connect a SWEEPSCOPE OUTPUT to pin 23 of IC1 through a 20pf capacitor and GND.
3, Connect a SWEEPSCOPE INPUT to pin 13 or 14 of IC1 through a 1uf capacitor and GND.

STEP	SET SIGNAL	SET DIAL	ADJUST	ADJUST FOR
1	10.7MHz		T102 (FM DISCRI.)	WITH 10.7MHz AT ZERO CROSSOVER & MAKE THE "S" CURVE TO FINER.
2	REPEAT	STEP 1 TO FINEL		

FM RF. ALIGNMENT

1, Connect a RF GENERATOR to the terminal of FM telescope antenna and GND.
2, Connect a SCOPE and VTVM across the speaker output.

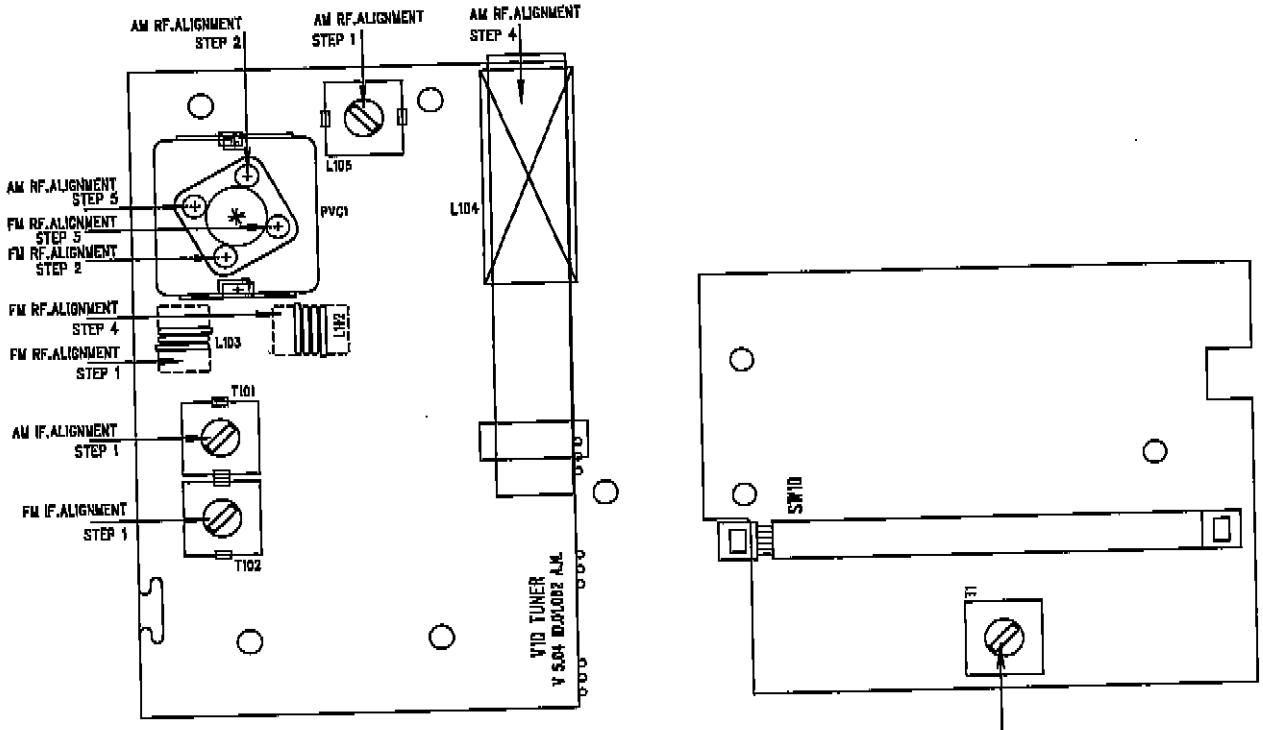
STEP	SET SIGNAL	SET DIAL	ADJUST	ADJUST FOR
1	87.5MHz	LOW-END OF BAND	L103 (FM OSC)	MAXIMUM OUT[UT
2	108MHz	HIGH-END OF BAND	PVC4 (TRIMMER)	MAXIMUM OUT[UT
3	REPEAT	STEP 1 & 2	TO MAXIMUM	
4	90.1MHz	NEAR 90.1MHz	L102 (FM SENS COIL)	MAXIMUM OUT[UT
5	106.1MHz	NEAR 106.1MHz	PVC3 (TRIMMER)	MAXIMUM OUT[UT
6	REPEAT	STEP 4 & 5	TO MAXIMUM	

CASSETTE PARTS ALIGNMENT

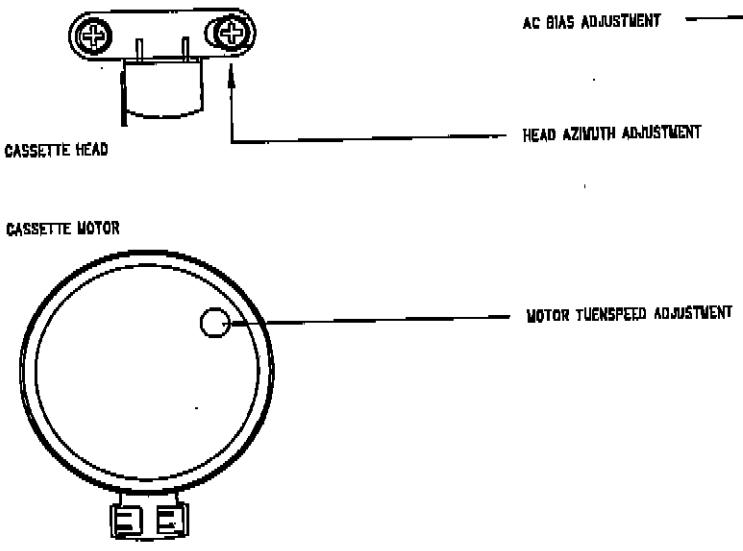
1, AC BIAS: Adjust T401 to make the bias oscillate frequency to 48+/-1KHz.
2, MOTOR TURNSPEED: Adjust the screw at motor back side to make the output signal near 3KHz while play the 3KHz standard tape. It used frequency meter connected output.
3, HEAD AZIMUTH: Adjust the screw of head azimuth to make the 6.3KHz signal to maximum. It play the 6.3KHz standard tape and used VTVM connected output.

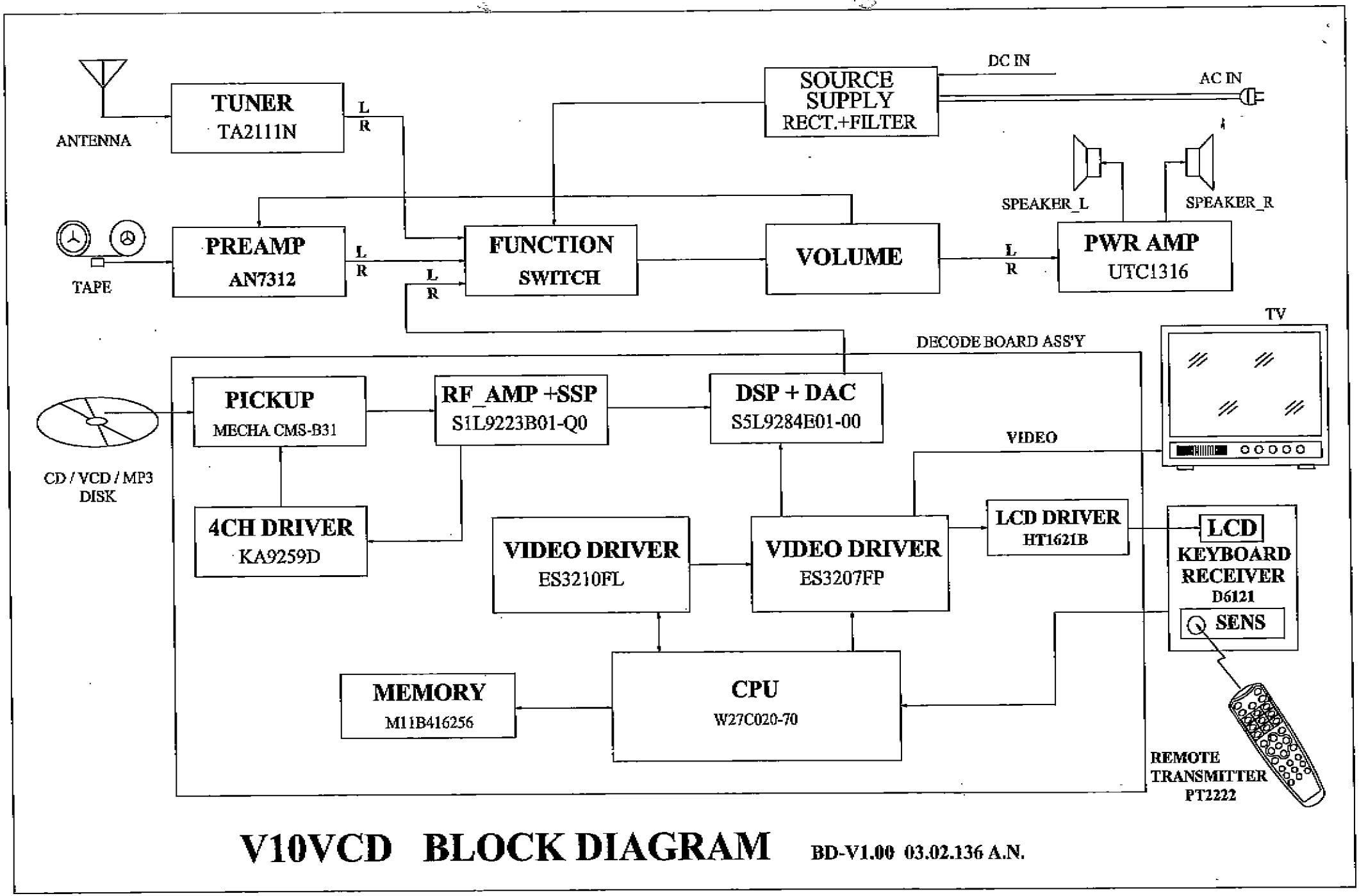
ADJUSTMENT LOCATIONS

TUNER ALINMENT



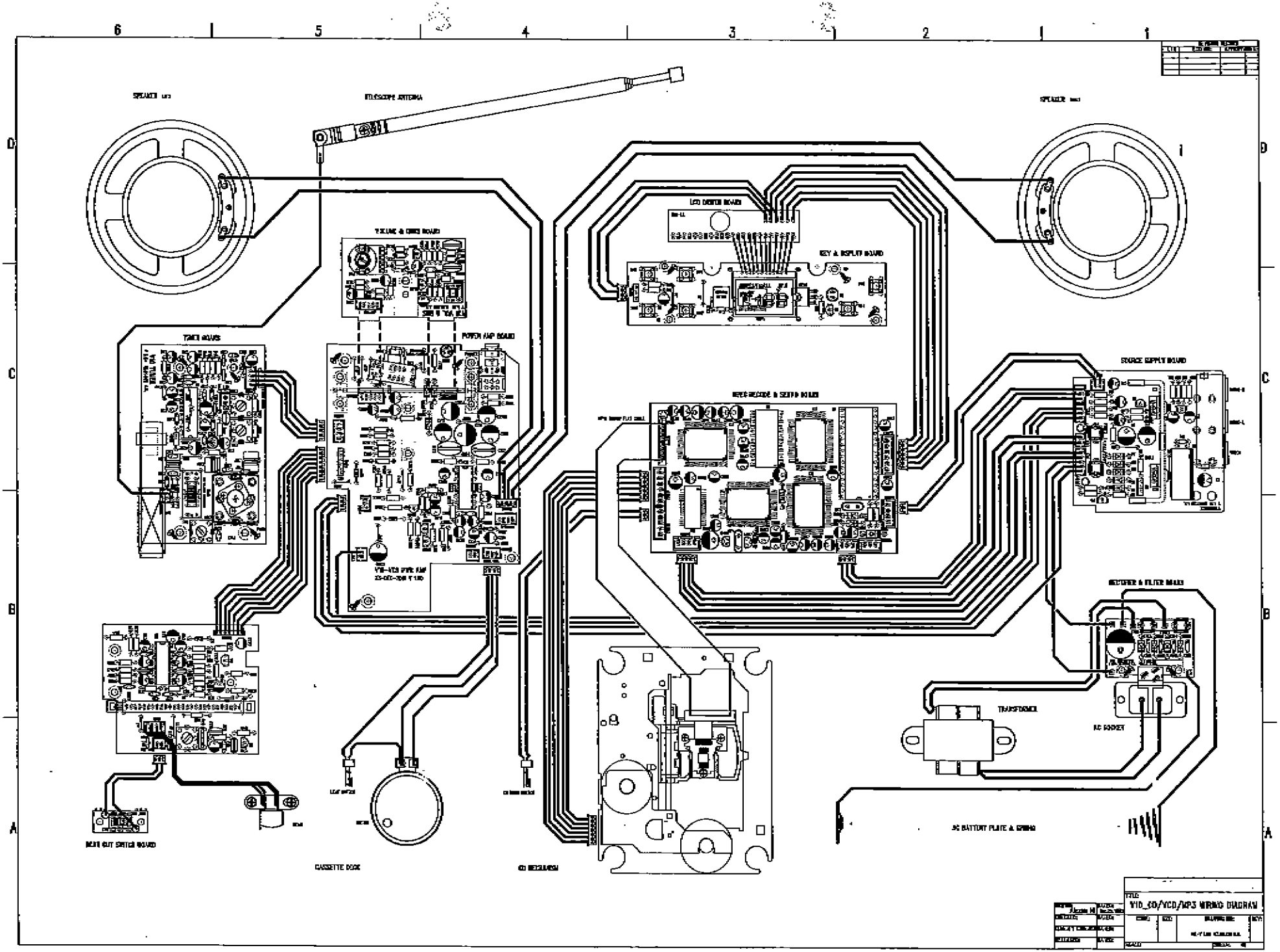
CASSETTE PARTS ALIGNMENT





V10VCD BLOCK DIAGRAM

BD-V1.00 03.02.136 A.N.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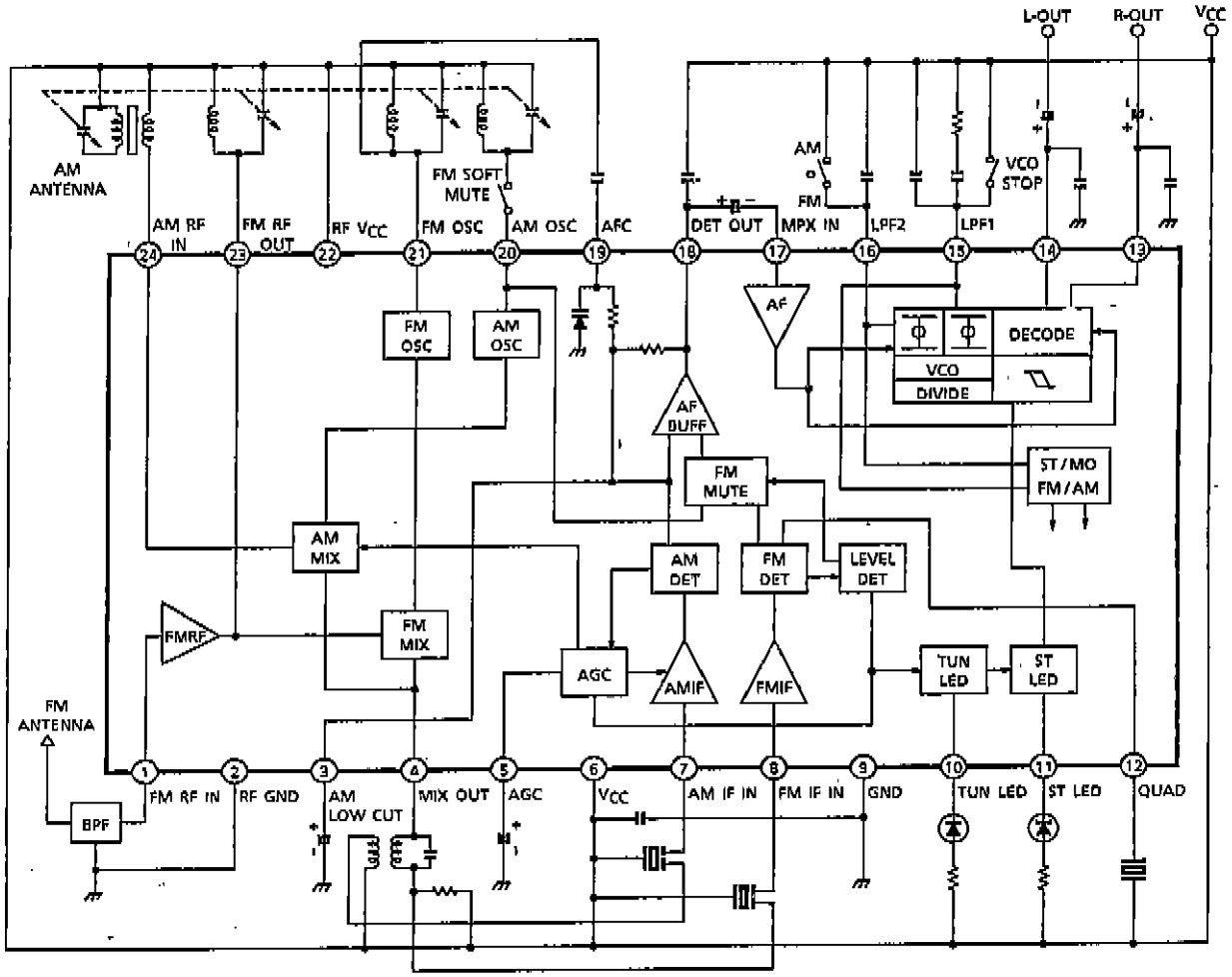
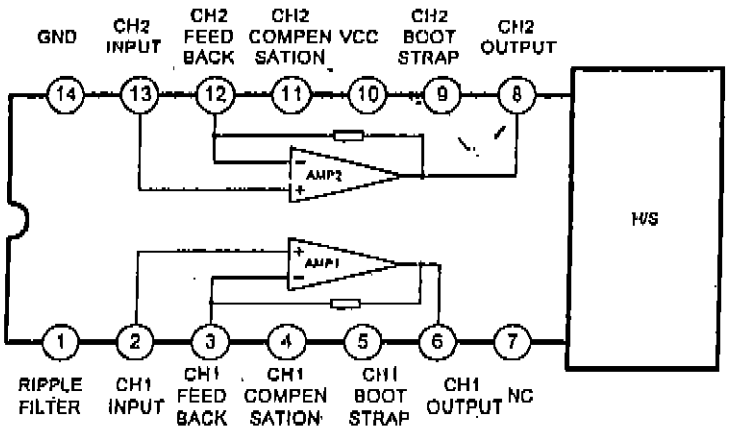
SPEAKER
TELESCOPIC ANTENNA
SPEAKER
TUNER & CRCS BOARD
LCD DISPLAY BOARD
KEY & DISPLAY BOARD
TUNER BOARD
POWER AMP BOARD
SOURCE SUPPLY BOARD
MPEG DECODE & SERVO BOARD
RECEIVER & FILTER BOARD
TRANSFORMER
AC SOCKET
AC BATTERY PLATE & STRING
CASSETTE DOOR
CD MECHANISM
REMOTE OUT SWITCH BOARD
TITLE:
V10_CD/VCD/MP3 WIRING DIAGRAM

IC BLOCK DIAGRAM

1, TN2111N (TUNER)

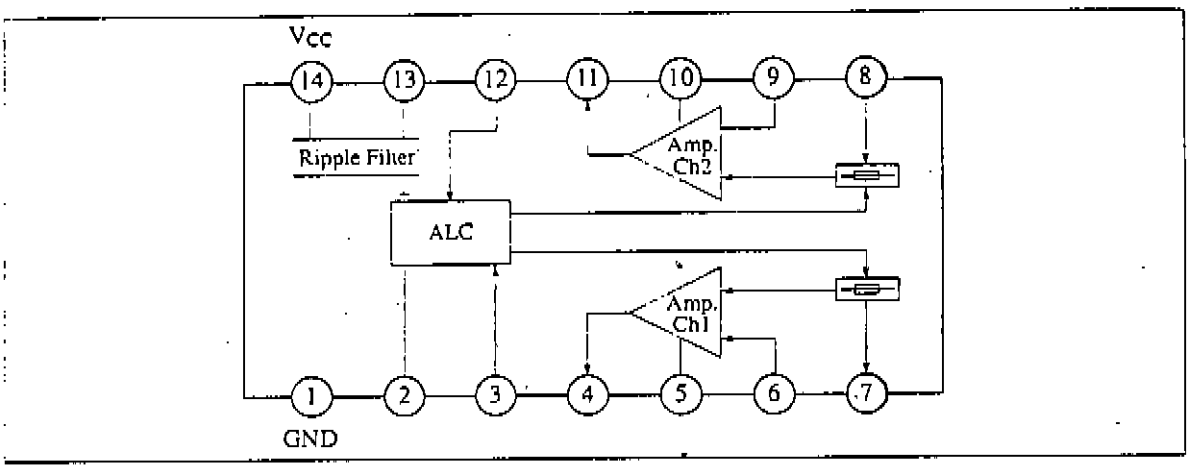


2, UTC1316 (POWER AMP)

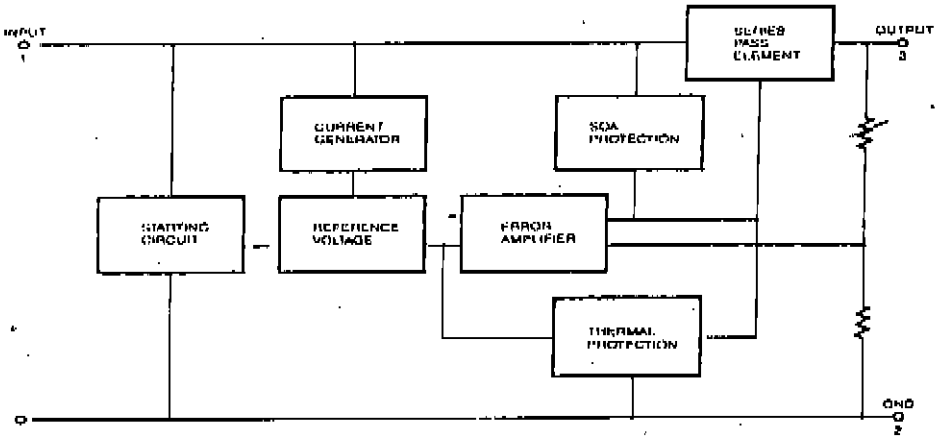


IC BLOCK DIAGRAM

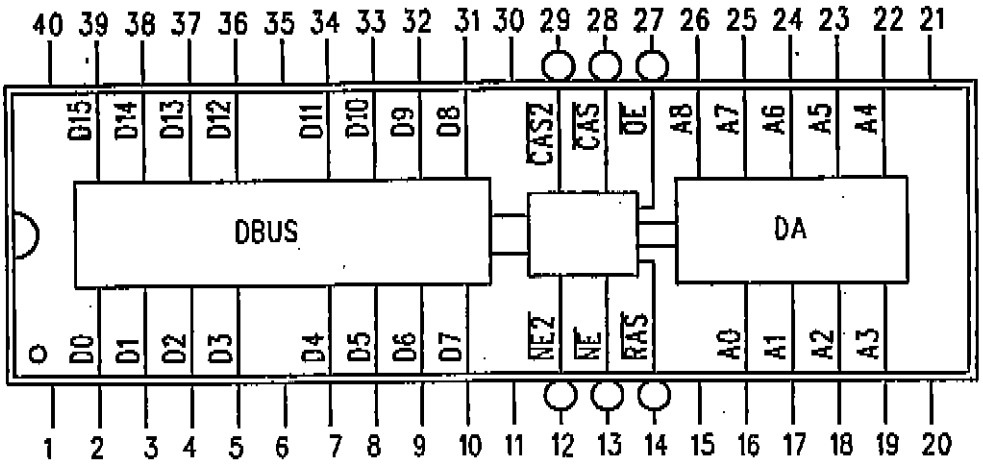
3, AN7312 (PREAMP)



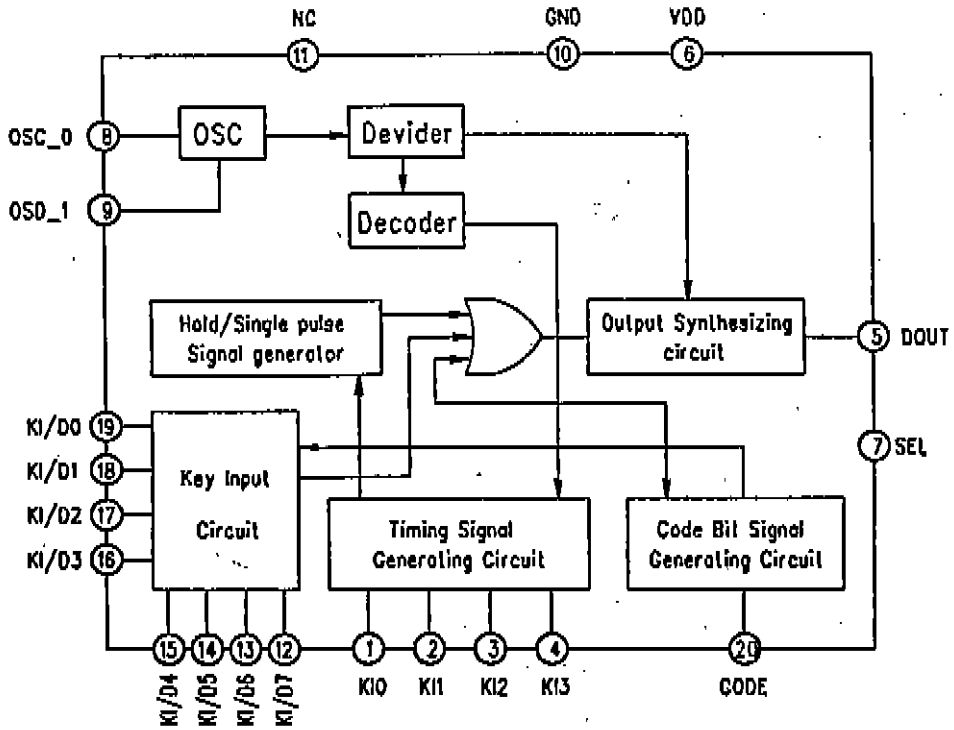
4, KA7808 (REGULATOR)



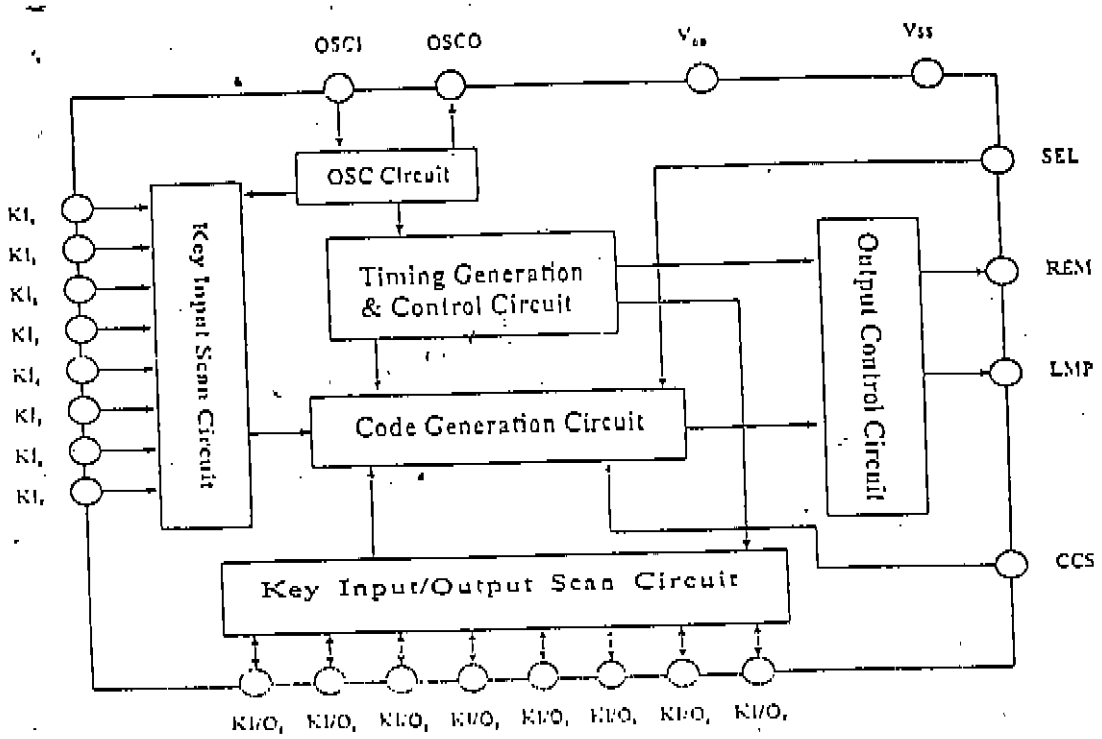
11, M11B41625A (MEMORY)



12, D6121 (REMOTE RECEIVER)

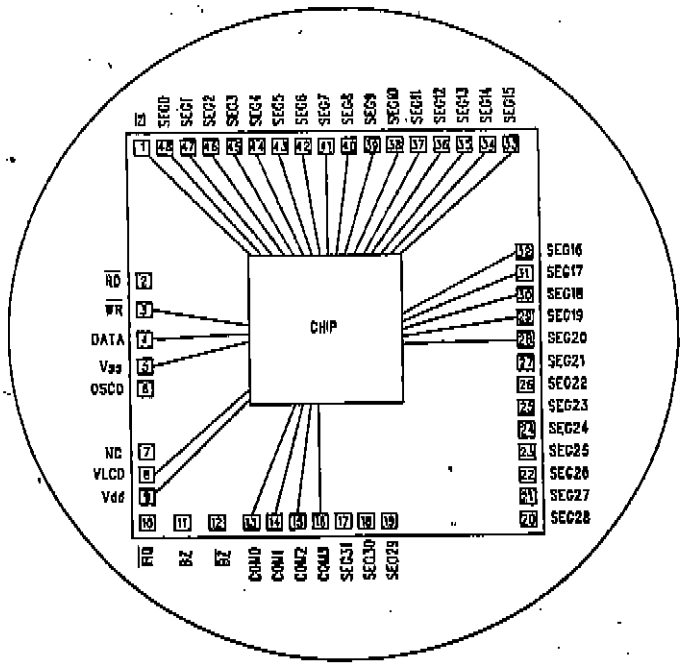


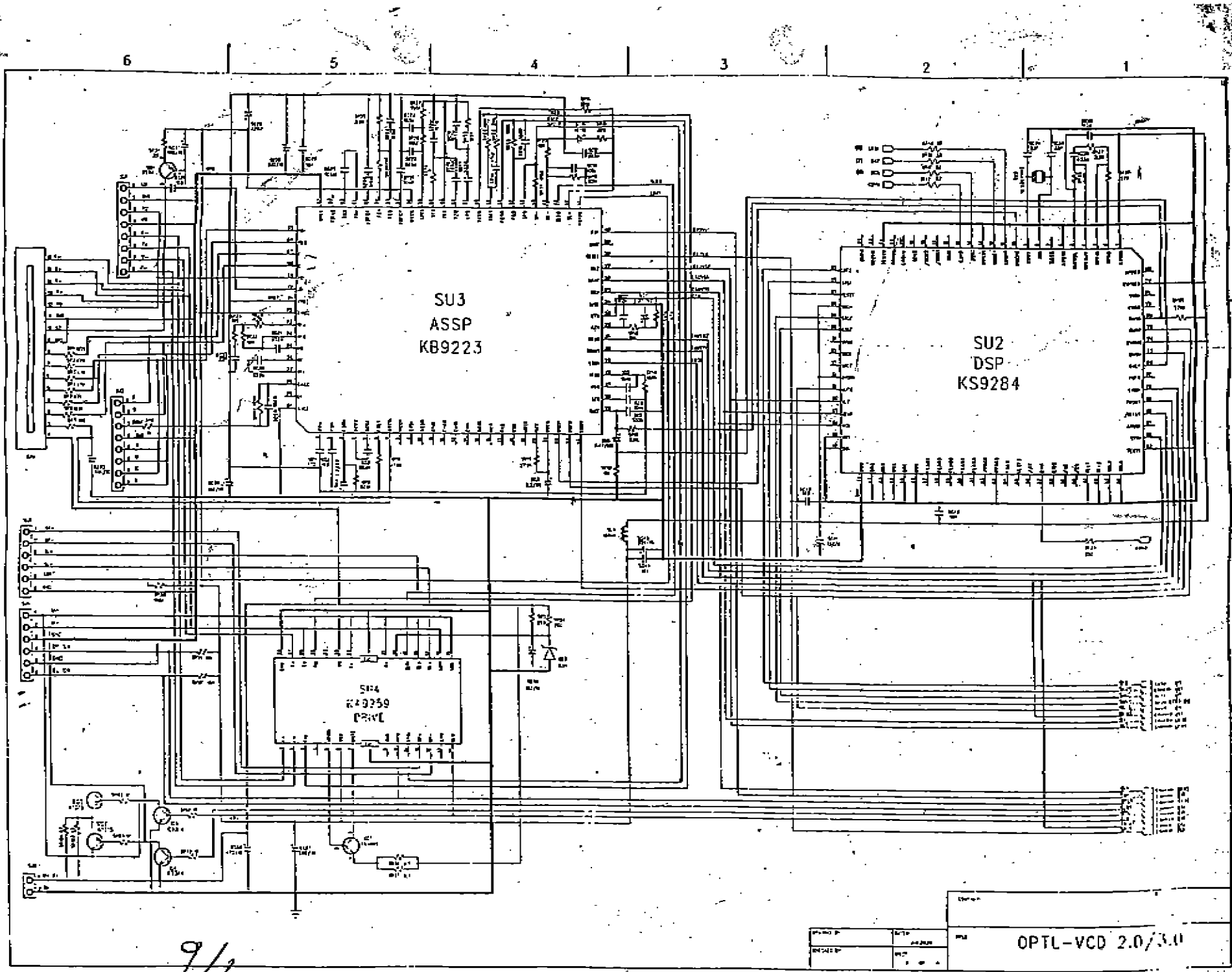
13, PT2222 (REMOTE TRANSMITTER)

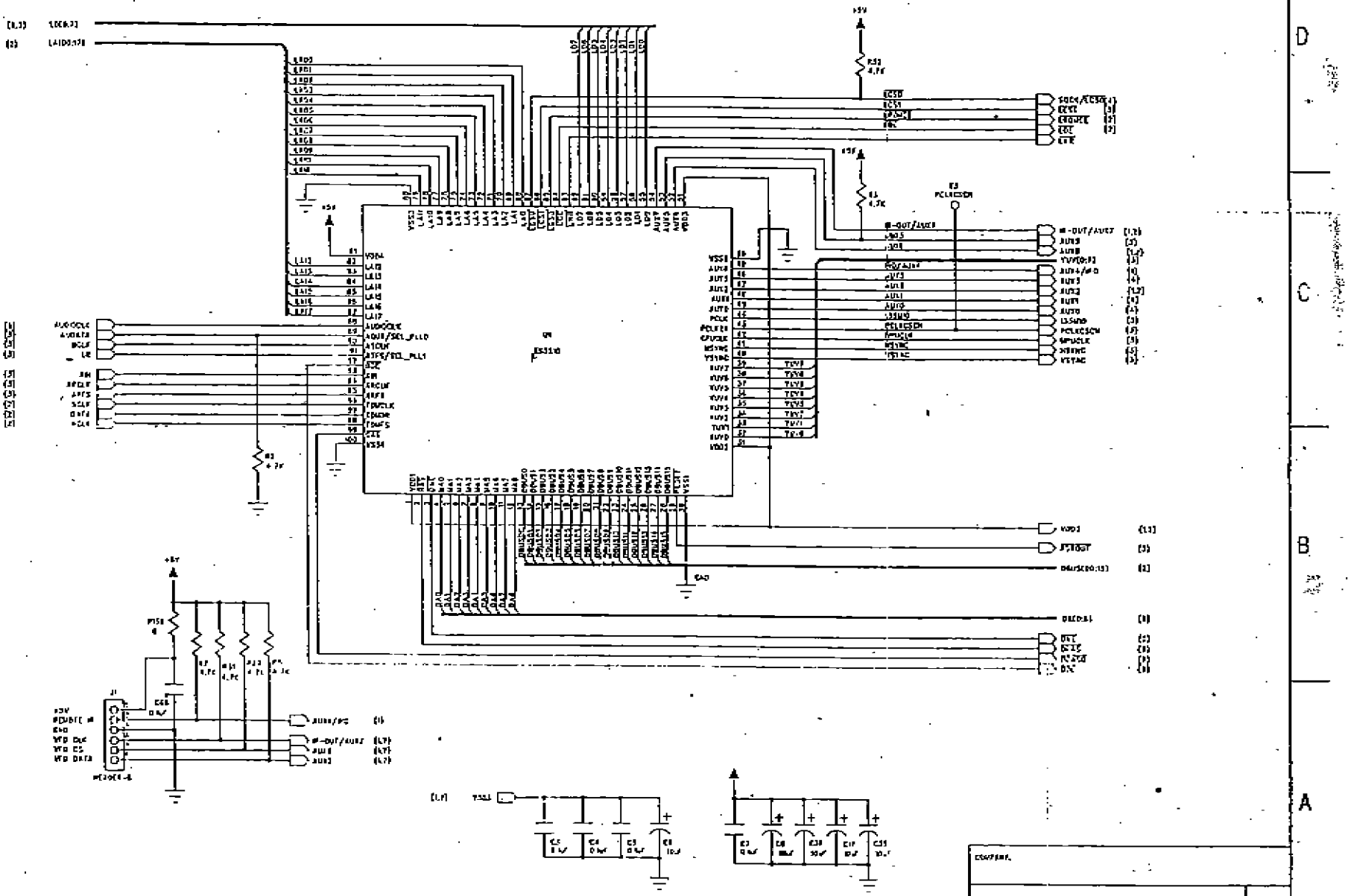


14, HT1621B (LCD DRIVER)

[This IC is COB]




SU3
ASSP
KB9223
SU2
DSP
KS9284
OPTL-VCD 2.0/3.0



COMPANY	
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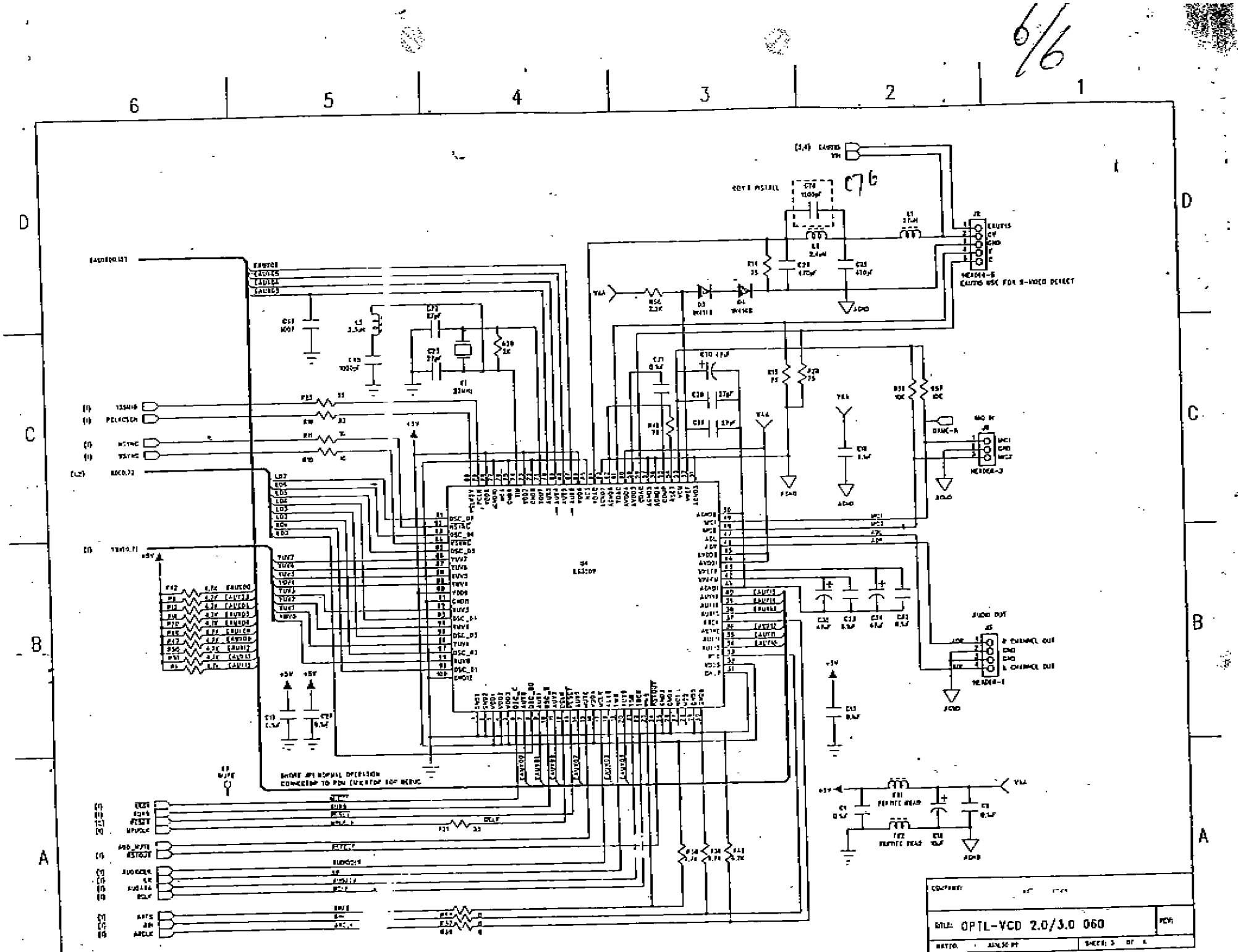
REV:	


6/6
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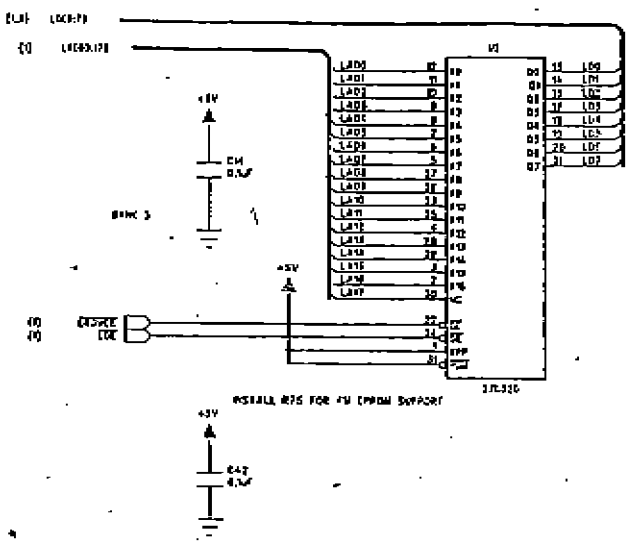
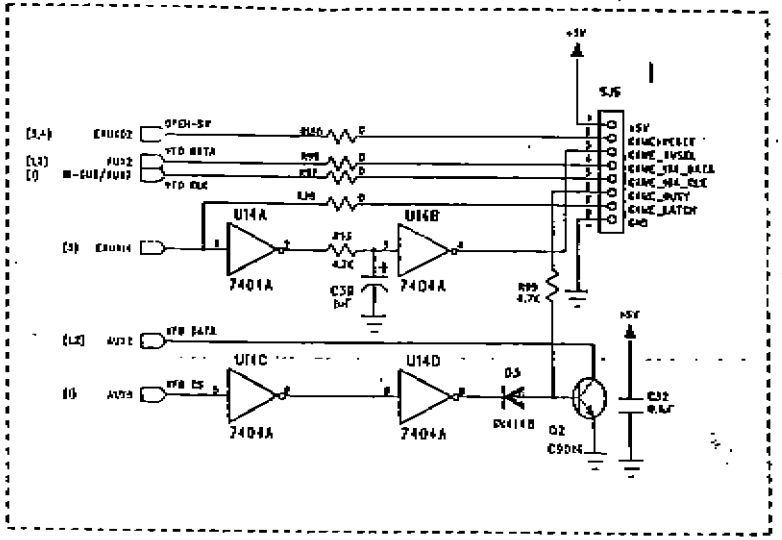
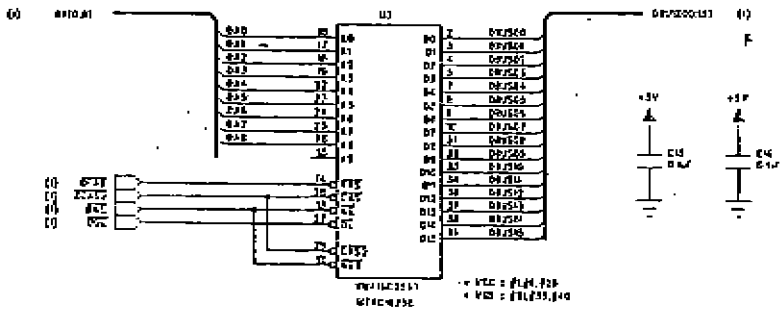
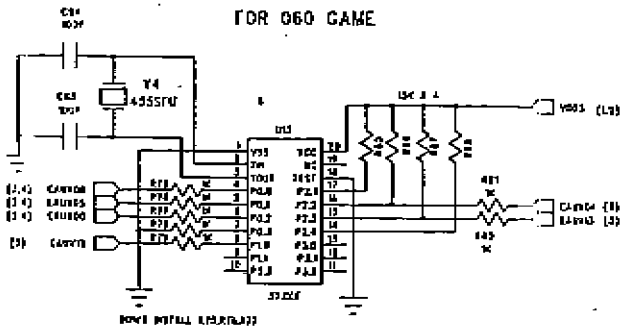
C76
OPTL-VCD 2.0/3.0 060

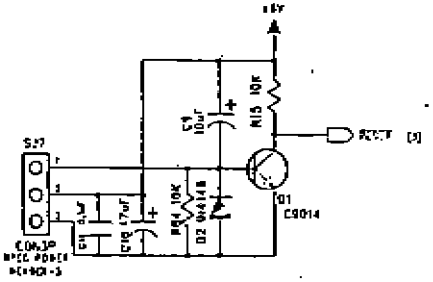


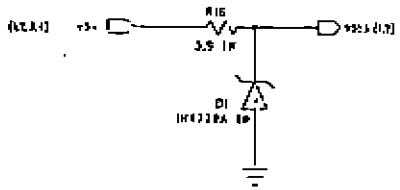


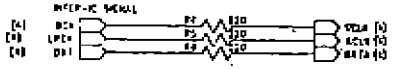


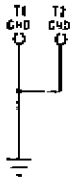
FOR 060 GAME











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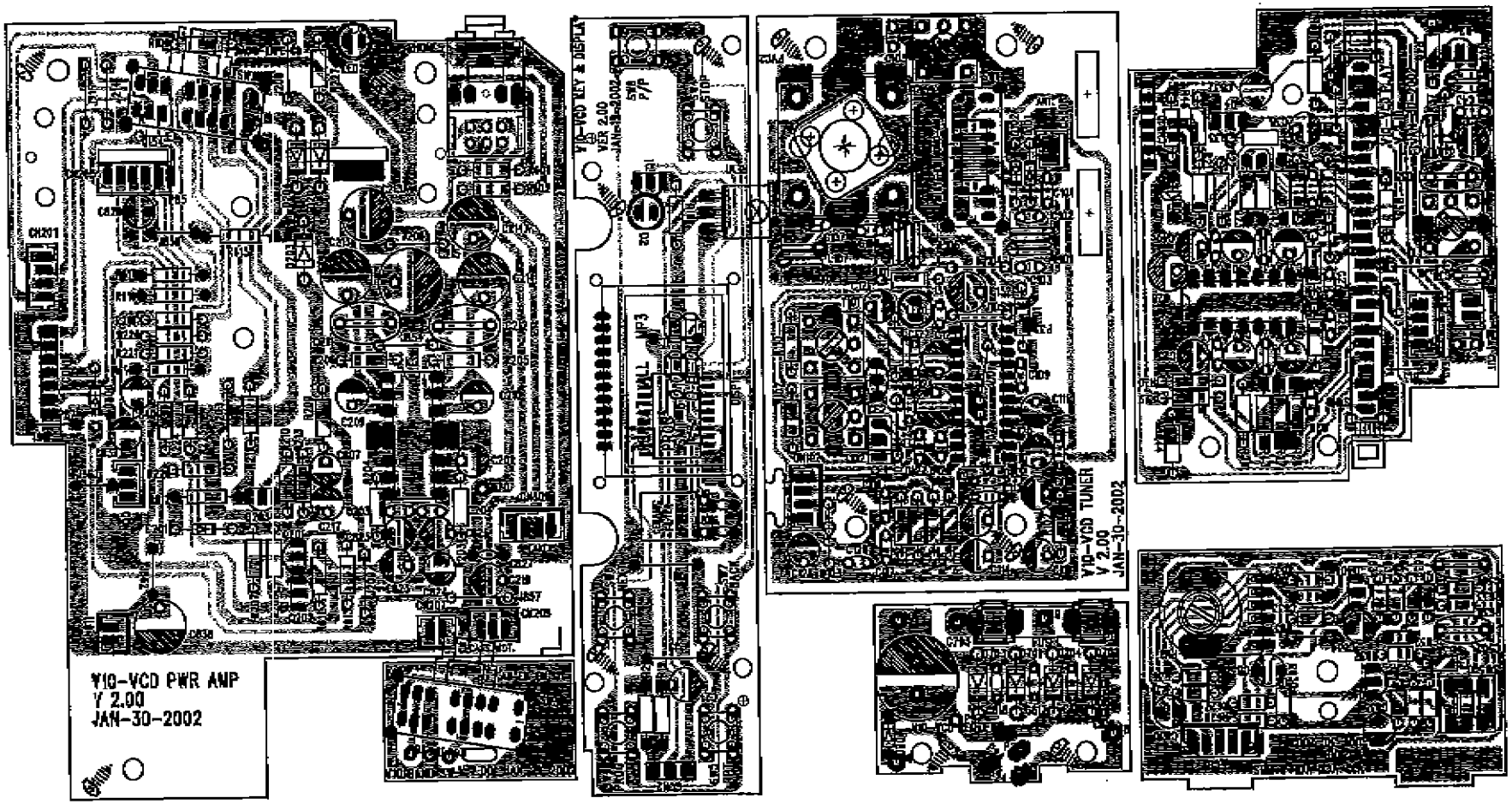
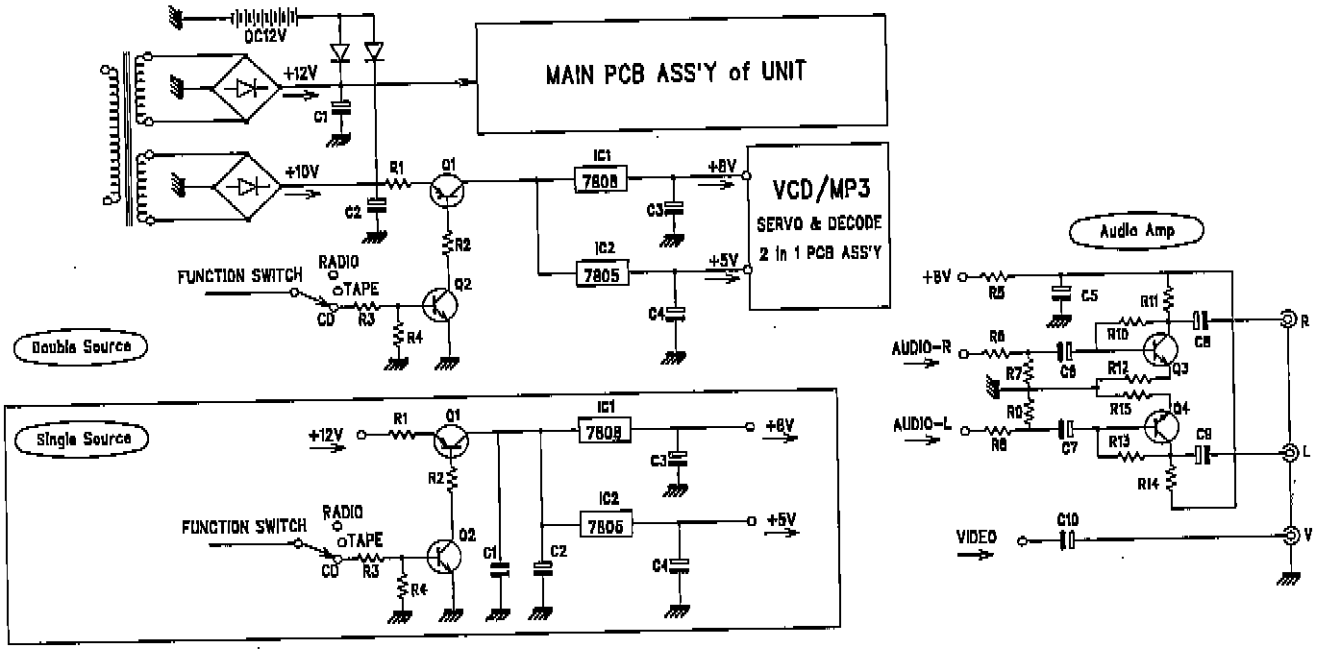
DRAWN:	SHEET: 1 OF 1


Y10-VCD PWR AMP
V 2.00
JAN-30-2002
Y10-VCD KEY & DISPLA
VER 2.00
Y10-VCD TUNER
V 2.00
JAN-30-2002

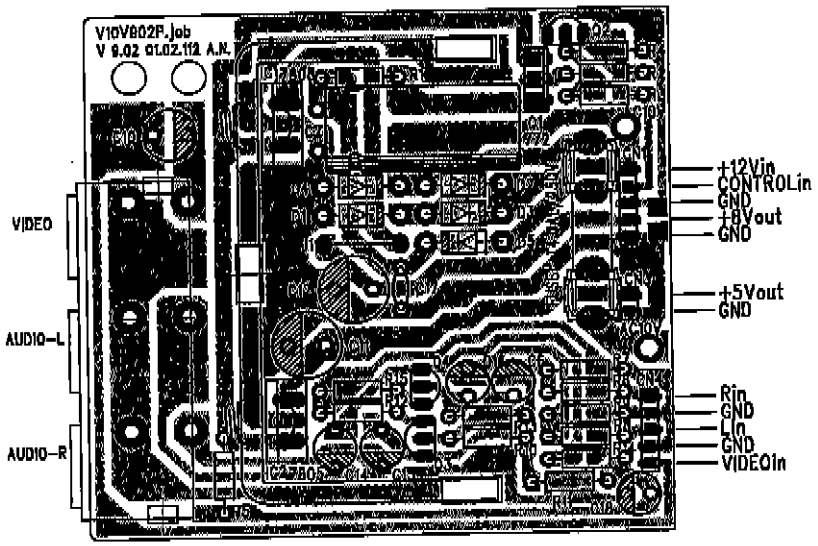


V10VCD_SOURCE_SCH_PCB

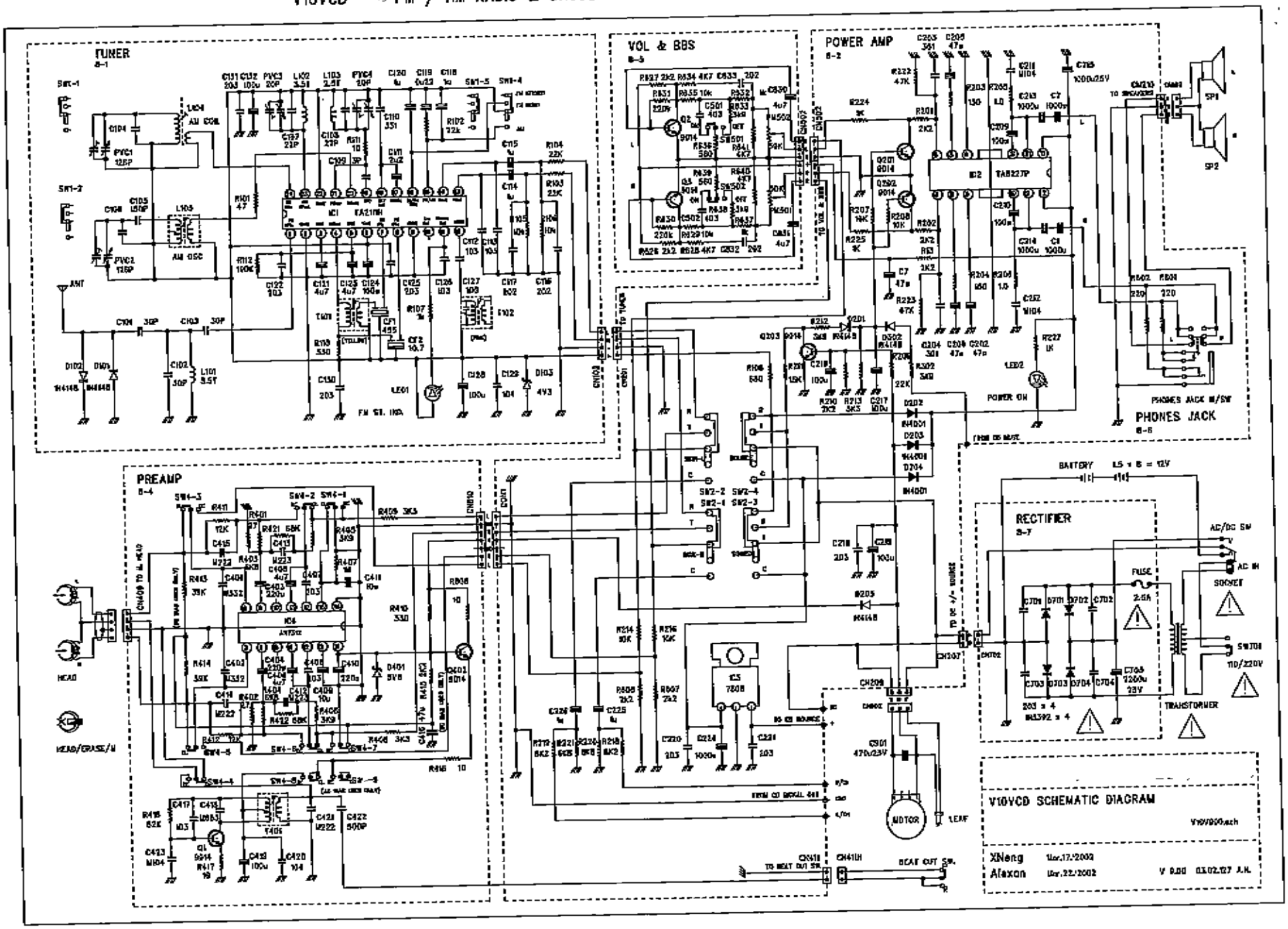
V10V902P.job

V 0.02 01.02.112 A.N.

Jan.17.'2002



V10VCD FM / AM RADIO & CASSETTE RECORDER WITH CD PLAYER



ESS Technology, Inc.

ES3207
Video CD/DVD Companion Chip
Product Brief

DESCRIPTION

The ES3207 Video CD/DVD Companion Chip provides an optimal system design for a Video CD player or a DVD player.

The ES3207, which is an enhanced version of the pin-compatible ES3205, integrates most of the required analog discrete components into a simple, cost-effective solution and interfaces directly to the ES3210 (Video CD) or ES3308 (DVD). No glue logic or external microcontroller is required.

The ES3207 features include a high-quality NTSC/PAL Digital Video Encoder (DVE), echo, echo reverb, 3DSound, surround sound, video and audio DACs, and a PLL clock synthesizer. There are three 9-bit video DACs (one for composite video output and two for S-video outputs) and two 16-bit sigma-delta audio DACs for interfacing with current sound systems.

The DVE generates composite and S-video analog signals. Color Space Conversions (CSC) are provided to match the input data to the required output format, then the data is filtered to meet the selected video standards. In addition, the ES3207 is equipped with a remote control interface for power on/off, microphone ports, auxiliary ports, and an interface for accessing internal registers.

Figure 1 shows a block diagram of a typical stand-alone system using the ES3210 Video CD Processor Chip or the ES3308 MPEG2 Audio/Video Decoder Chip and an ES3207 Video CD Companion Chip.

FEATURES

- Multi-standard TV encoder:
  - CCIR601 non-square operation
  - NTSC/PAL formats
  - Master video mode
  - 8-bit interface for YCrCb (4:2:2) input format
  - Simultaneous composite and S-video output
  - Interlaced operation
- Audio DACs:
  - Two 16-bit sigma-delta DACs
  - Accepts I²S format data
  - Programmable functions
- 3DSound and surround sound
- Remote control interface for power on/off
- Digitally controlled echo with up to 168 ms delay
- Vocal reverb for theater acoustical effects
- Dual microphone input
- Clock synthesizer (PLL):
  - Based on 27 MHz crystal input
  - Generates required clocks for video encoder, audio DAC, echo and surround sound, and video processor
- Device Serial Communication (DSC) port for command issued/register access
- Power management
- 100-Pin PQFP
- Single 5 V power supply

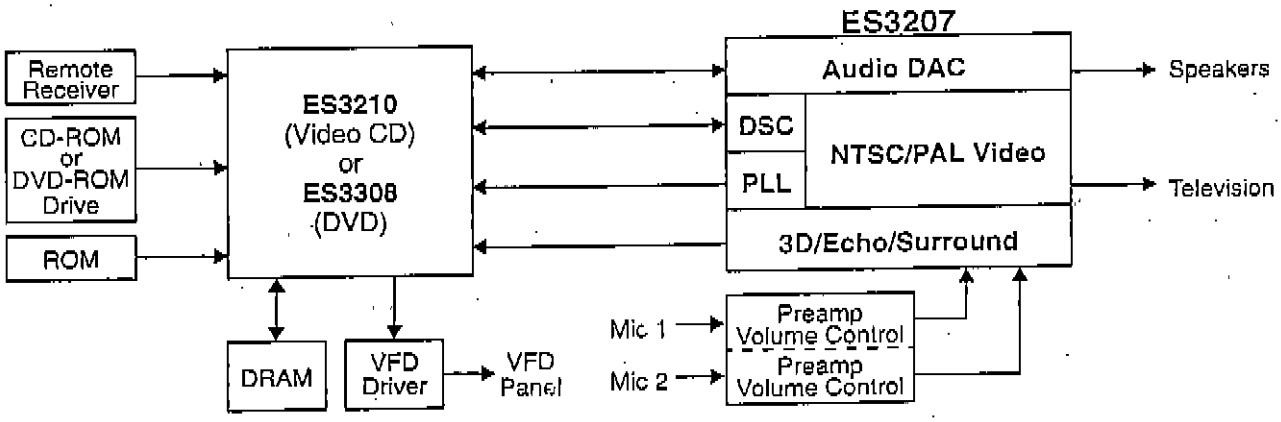
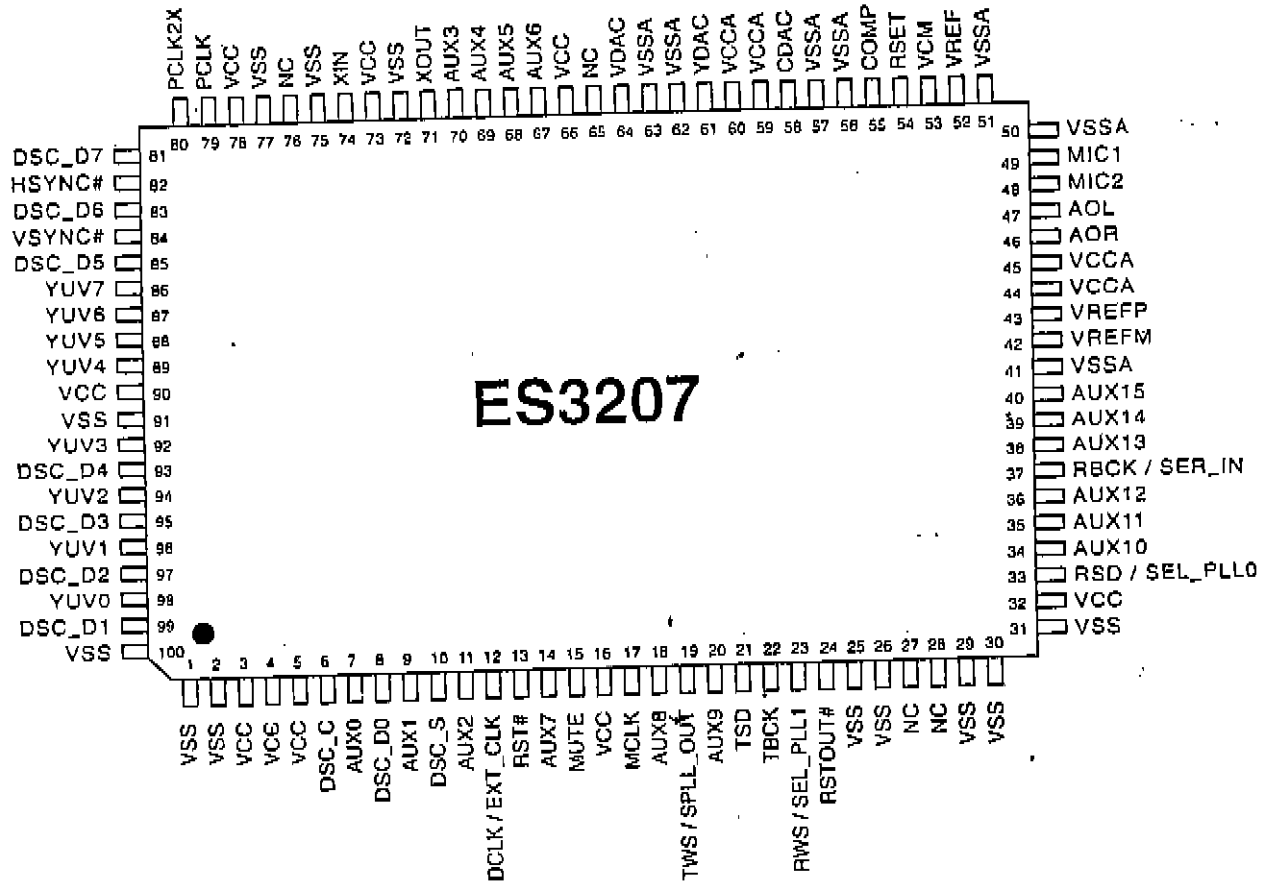


Figure 1 ES3207 Video CD Companion Chip System Block Diagram

PINOUT



PIN DESCRIPTION

Name	Number	I/O	Definition
VSS	1:2,25:26,29:31,72,75, 77,91,100	I	Ground. 地
VCC	3:5,16,32,66,73,78,90	I	Voltage supply, 5 V. 电源供给，5V
DSC_C	6	I	Clock for programming to access internal registers. 为编程设计访问内部寄存器的时钟
AUX[15:0]	40:38,36:34,20,18,14, 67:70,11,9,7	I/O	Auxiliary control pins. 辅助控制脚
DSC_D[7:0]	81,83,85,93,95,97,99,8	I/O	Data for programming to access internal registers. 为编程设计访问内部寄存器的数据
DSC_S	10	I	Strobe for programming to access internal registers 为编程
DCLK	12	O	Dual-purpose pin. DCLK is the MPEG decoder clock. 双用途脚. DCLK是MPEG解码器时
EXT_CLK		I	EXT_CLK is the external clock. EXT_CLK is an input during bypass PLL mode. 外部
RST#	13	I	Video reset (active-low). 视频信号重置（低电平有效）。
MUTE	15	O	Audio mute. 音频信号静噪，
MCLK	17	I	Audio master clock. 音频信号主时钟
TWS	19	I	Dual-purpose pin. TWS is the transmit audio frame sync. 双用途脚. TWS是发送音频
SPLL_OUT		O	SPLL_OUT is the select PLL output. SPLL_OUT是 PLL 输出选择

ES3210 PINOUT

Figure 1 shows the ES3210 device pinout.

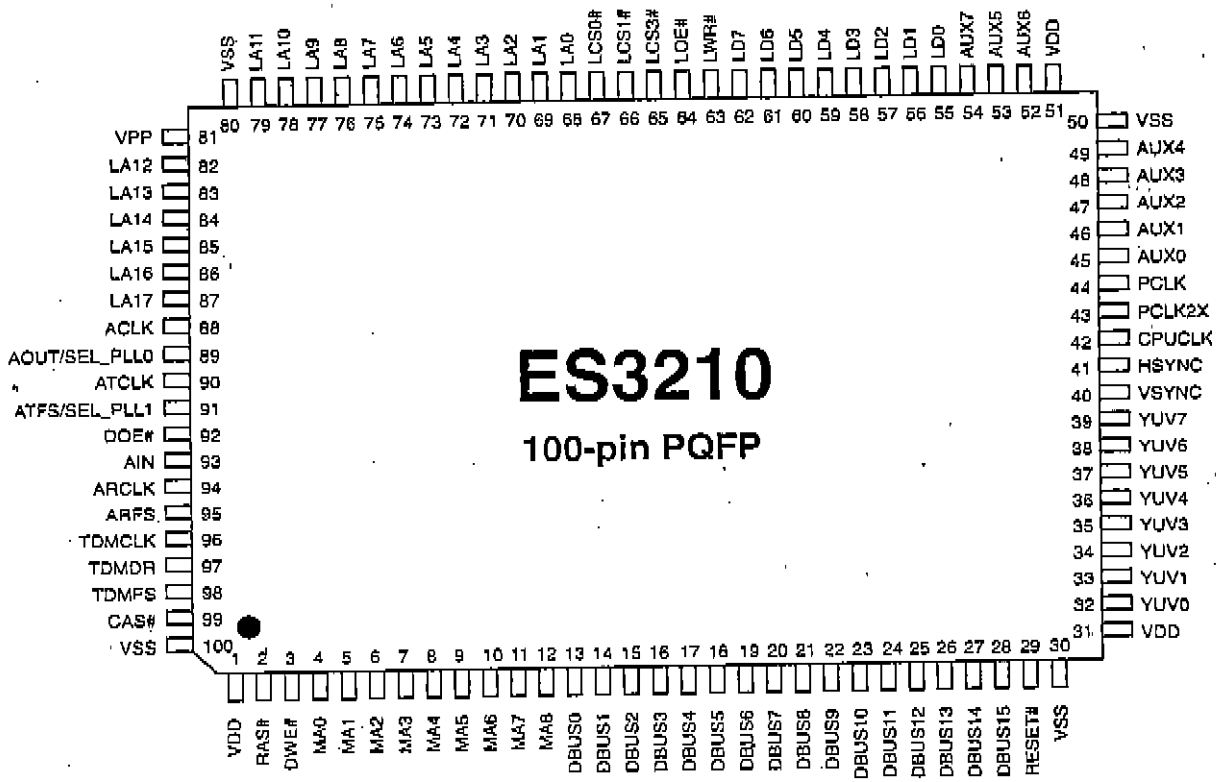


Figure 1 ES3210 Pinout Diagram

ES3210 PIN DESCRIPTION ES3210 引脚功能内容

Table 1 lists the ES3210 pin descriptions.

Table 1 ES3210 Pin Description

Name	Number	I/O*	Definition
VDD	1, 31, 51	I	Voltage supply for 3.3V.
RAS#	2	O	DRAM row address strobe (active low).
DWE#	3	O	DRAM write enable (active low).
MA[8:0]	12:4	O	DRAM multiplexed row and column address bus.
DBUS[15:0]	28:13	I/O	DRAM data bus I/O [15:0].
RESET#	29	I	System reset (active low).
VSS	30, 50, 80, 100	I	Ground.
YUV[7:0]	39:32	O	YUV[7:0] pixel output data.
VSYNC	40	I/O	Vertical sync for screen video interface, programmable for rising or falling edge.
HSYNC	41	I/O	Horizontal sync for screen video interface, programmable for rising or falling edge.
CPUCLK	42	I	RISC and system clock input. CPUCLK is used only if SEL_PLL[1:0] = 00.
PCLK2X	43	I/O	Pixel clock; two times the actual pixel clock for screen video interface.

AKAI

PARTS LIST

File No.:: AL-3-E-665 A0

FM:88~108MHz

AM:540~1600KHz

Date: 27-01-2002 /24/02/2002

REF NO: AL-EP00133

Model No: V10-VCD (AJ-CV3400)

Item	Part N0	Description		Qty	Location
1	IC-0822701	IC:	TA 8227N	1	
2	IC-0780802		KA 7808 (SAM SOUNG)	1	
3	IC-0780502		KA 7805	1	
4	IC-0731203		AN 7312	1	
5	IC-0612104		SL sc 6121-002	1	
6	IC-0211101		TA2111N	1	
7	PVC-126200	PVC:	126PF/20PF < DF433DF04-A04 >	1	
8	PCB-V10VCD-000I	PCB:	V10-VCD TUNER V2.00	1	
9	PCB-V10VCD-0002		V10-VCD PLAY V2.00	1	
10	PCB-V10VCD-0003		V10-VCD KEY、DISPLAY V2.00	1	
11	PCB-V10VCD-0004		V10-VCD RECTIFIER V2.00	1	
12	PCB-V10VCD-0005		V10-VCD PWR AMP V2.00	1	
13	PCB-V10VCD0006		V10-VCD VOL、BBS V2.00	1	
14	PCB-V10VCD-0007		V10-VCD BAND SW V2.00	1	
15	PCB-V10VCD-0008		V10-VCD V902P	1	
16	CFI-001070	Filter:	10.7MHz <Red>	1	
17	CFI-045500		455KHz (2-Lead)	1	
18	CFI-046500		465KHz	1	
19	ANT-V10VCD-1000	AM COIL:	120:10T<3+1>Φ11.5mm(Green-Red-Black) L=60mm (White)L=100mm	1	
20	FMC-52122	FM COIL:	5mm21/2T Φ0.75mm	1	
21	FMC-4503122		4.5mm31/2T Φ0.75mm	2	
22	AIF-100102	IFT:	AM<Red>: <10mm> 100: 10T	1	
23	AIF-157151		AM<Yellow>: <10mm> 157:15T	1	
24	FIF-000070		FM<Pink>: <10mm> 7T	1	
25			<AC Bias,Gray>: <10mm> 227:27:4T	1	
26	TRS-090140	Tramsistor:	9014	9	
27	TRS-080500		8050	2	
28	TRS-00772		772	1	
29	ZEN-0068	Zener:	6.8V	1	
30	ZEN-0039		3.9V	1	
31	DIO-041480	Diode:	IN 4148	4	
32	DIO-040010		IN 4001	5	
33	DIO-053920		IN 5392	8	
34	BSW-430197	Switch:	Function SK 43D01 GM9	2	
35			LCD Driver L-1345	1	

36			VCD Decode Ass'y	1	
37	BSW-120198		Switch: SS12 F22G9	1	
38	BSW-920199—		R-P Switch PS-92D01	1	
39			TACT 5mm	6	
40	BSW-920610		BBS Switch PS-22E06	1	
41			CD Door Switch LF-323	1	
42			CD Door Lock	1	
43			RCA Socket (3section) Yellow.White.Red	1	
44	JAK-000003		Phones Jack (EJ3507-202)	1	
45			AC Socket	1	
46	LCD-291202	LCD:	<29.1x20.2mm> <VCD>	1	
47			Infrared Receiver	1	
48	LED0032	LED:	Φ3mm Red	2	
[illegible]			Φ3mm Transmit Diode	1	
50	VOL-V105001	Volume:	B50K——V10	1	
51	BAR-108001	Ferrite Bar:	10x80mm	1	
52	BAR-103002	Bar holder:	10x30mm	2	
53	MCP-002220	Mylar Cap:	222K<0.0022uf>	4	
54	MCP-001530		153K<0.01uf>	2	
55	MCP-003320		332K<0.0033uf>	2	
56	MCP-003330		333K<0.033uf>	2	
57	MCP-001040		104K<0.1uf>	2	
58	MCP-004720		472K<0.0047uf>	1	
59	MCP-006830		683K<0.068uf>	1	
60	CCP-00030	Ceramic Cap:	3pf	1	
61	CCP-00220		22pf	1	
[illegible]	CCP-00250		25pf	2	
63	CCP-00300		30pf	3	
64	CCP-01020		102pf	1	
65	CCP-01500		150pf	1	
66	CCP-02700		270pf	2	
67	CCP-03000		300pf	4	
68	CCP-05000		500pf	1	
69	CCP-02030		203<0.2uf>	11	
70	CCP-01030		103<0.1uf>	1	
71	CCP-01040		104<0.1uf>	4	
72	ECP-000224	Elect Cap:	0.22uf/50V	1	
73	ECP-003302		3.3uf/16V	2	
74	ECP-004704		4.7uf/50V	8	
75	ECP-001004		1uf/50V	9	
76	ECP-000103		10uf/25V	3	

77	ECP-000222	22uf/16V	1	
78	ECP-000472	47uf/16v	7	
79	ECP-010002	100uf/16v	6	
80	ECP-022003	220uf/25v	1	Motor x1
81	ECP-022002	220uf/16v	3	
82	ECP-047002	470uf/16v	1	
83	ECP-100001	1000uf/10v	4	
84	ECP-100003	1000uf/25v	1	
85	ECP-220003	2200uf/25v	2	
86	RES- A-000101	1/4WResistor: 1 OHM	2	
87	RES- A-000681	6.8 OHM	1	
88	RES- A-001001	10 OHM	6	Buzzer x2
89	RES-A-0012001	12 OHM	1	
90	RES-A-003301	33 OHM	4	
91	RES-A-010001	100 OHM	1	
92	RES- A-027001	270 OHM	2	
93	RES-A-022001	220 OHM	2	
94	RES-A-033001	330 OHM	3	
95	RES-A-068001	680 OHM	4	
96	RES-A-082001	820 OHM	1	
97	RES-A-000012	1K	4	
98	RES-A-000222	2.2K	7	
99	RES-A-000272	2.7K	1	
100	RES-A-000332	3.3K	3	
101	RES-A-000392	3.9K	3	
102	RES-A-000472	4.7K	2	
103	RES-A-000562	5.6K	2	
104	RES-A-000682	6.8K	2	
105	RES-A-000822	8.2K	2	
106	RES-A-001002	10K	4	
107	RES-A-001202	12K	2	
108	RES-A-001502	15K	1	
109	RES-A-001802	18K	2	
110	RES-A-002202	22K	4	
111	RES-A-006802	68K	3	
112	RES-A-000103	1M OHM	1	
113	RES-A-015002	150K	3	
114	RES-B-012001	1/8WResistor: 120 OHM	2	
115	RES-B-082001	820 OHM	2	
116	RES-B-000102	1K OHM	2	
117	RES-B-000751	7.5K OHM	2	

118	RES-B-000271		2.7K OHM	2	
119	RES-B-001001		10K OHM	2	
120	RES-B-002201		22K OHM	2	
121	RES-B-015001		150K OHM	2	
122	SCR-02605-01	Screw:	MS/PH 2.6x5	1	PVC Wheel x1
123	SCR-02003-08		TT 2x3	3	Preamp PCB Bracket x3
124	SCR-03016-02		TA/PH 3x16	7	Rear Cabinet x7
125	SCR-03008-07		MS/BH 3x8	1	FM Antenna x1
126	SCR-02608-02		TA/PH 2.6x8	19	Tunner PCB x4 VOL PCB Bracket x7 CD Key PCB x4 Tuner PCB Holder x2 Rectifier x2
127	SCR-03008-02		TA/PH 3x8	11	Main PCB x3 CD Door gear holder x1 Decode&Servo Pcb x4 Preamp PCB x3
128	SCR-02606-03		TA/WH 2.6x6	2	CD Knobx2
	SCR-02608-06		TA/BH 2.6x8	2	Front Cabinet Bracket x2
130	SCR-02006-02		TA/PH 2x6	1	CD Magnet holder x1
131	SCR-03010-02		TA/PH 3x10	7	Cass door gear holder x1 Deck x4 Front Cabinet Bracket x2
132	SCR-03006-02		TA/PH 3x6	2	Switch SS12 F22G6 x2
133	SCR-02610-06		TA/BH 2.6x10	12	Speaker grille holder x8 Front Cabinet holder x4
134	SCR-03006-01		MS/PH 3x6	2	7805x1 7808x1
135	SCR-02010-02		TA/PH 2x10	1	CD Door Switch x1
136	SCR-03014-03		TA/WH 3x14	1	CD Deck
137	SCR-03012-0.3		TA/WH 3x12	2	Tramsforuer x2
138	SCR-03012-02		TA/PH 3x12	2	AC Socket
139	SCR-02608-03		TA/WH 2.6x8	2	Cass door cover x2
	SCR-03010-03		TA/WH 3x10	9	SPx4 Regulator source PCB x2 CD Deck x3
141	SCR-02610-04		TA/KH 2.6x10	4	CD Deck Bracket x2 RCA Plug x2
142	SCR-02308-03		TA/WH 2.3x8 <Head Φ5mm>	1	Pointer Switch x1
143	SCR-02308-03		TA/WH 2.3x8 <Head Φ8mm>	2	Band Switch x2
144	SPR-V10VCD0024-07	Spring:	V10 Cass door spring	1	
145			V10 CD door spring	1	
146			V10 Battery Plate "+"	1	
147			V10 Battery Plate "-"	1	
148			V10 Battery Plate "+ -""A"	1	
149			V10 Battery Plate "+ -""B"	1	
150			V10 Battery Plate "+ -""C"	1	
151			Fuse holder	4	
152	FUS-0052001	Fuse:	5x20mm<T1.6A>	1	
153	FUS-0052002		5x20mm<T2.5A>	1	Regulator source PCB x1
154	HES0822701	Heat sink:	V10 Heat sinkTA8227	1	

155	HES0000002	Power source heat sink	1	
156	ANT-V10-VCD00002	FM Antenna Soldering Plate:	1	
157	SPK-V10-VCD83T	Speaker Grille: 8 OHM 3W Φ45 3.5" (C&T Brand)Circle	2	
158	ETF-014801	Transformer: EI48x30	1	(Follows the produce order)
159	SPG-V10-VCD012R	Speaker Grille: R	1	
160	SPG-V10-VCD012L	L	1	
161	SPG-V10-VCD012LS	L(Small)	1	
162	SPG-V10-VCD012RS	R(Small)	1	
163	BUZ-160000	Buzzer Φ16MM	2	
164	PTE-V10-VCD-0204	LCD Window plastic Plate	1	
165	ANT-V10-VCD00003	FM telescope antenna: V10	1	
166	CAS-03001	Deck: Motor12V STEREO head :L=30MM Recording Plate Erase head:6PA	1	
167	CAS-03002	CD Mechanism: S4M SUNG CMS-B31V	1	
	MAG-V10-VCD0005	Magnet: Φ30xΦ16x5mm	1	
169	MAG-V10-VCD0006	Magnet ring: Φ13mmxΦ7.8mmx6mm	1	
170	CDA-071740201	CD antishock rubber: Red TY-717<40°>	2	
171	CDA-071730401	Green TY-717<30°>	2	
172	CDA-01152502	Food Φ11.5mmx2.5mm	4	
173	WAF-2002	Wafer(2.0mm) 2PIN	4	
174	WAF-2003	3PIN	2	
175	WAF-2004	4PIN	3	
176	WAF-2007	7PIN	1	
177	SIN-2026	Single housing With Wire(2.0mm) 26# <UL>		
178	SHW-202630002	Single housing With Wire 2PIN Red L=300MM	2	FM Antenna x1 PWR PCB to Source PCB x1
179	SHW-202650005	Single housing With Wire 5PIN Red、Black L=170MM	1	CD door Switch x1
		Single housing With Wire 26# 〈2.5mm〉		
181	SHW-252620002	2PIN Red、Black L=200MM	1	Regulator source to Decode PCB 5Vx1
182	SHW-252623002	2PIN Red、White L=230MM	1	Regulator source to Decode PCB 8Vx1
183	SHW-252635003/41003	6PIN Red、Yellow、White L=350mm Black、Drange、Green L=410mm	1	Keyboard PCB x1
184		Single housing With Shield: 〈2.5mm〉		
185	SHS-2515003	3PIN L=150MM	1	PWR PCB to Decode PCBx1
186	SHS-2512005	5PIN L=120MM	1	PWR PCB to Regulator PCBx1
187		Single housing With Shield: 〈2.0mm〉		
188	SHS-2030003	3PIN L=300MM	1	PWR PCB to Sowrce PCB x1
189		Single housing With Wire (2.0mm) 26#: UL		
190	SHS-20263000228	Single housing With Wire 2PIN Red、Brown L=250MM	1	Rectifier PCB to Main PCB x1
191	SHS-20263500228	Single housing With Wire 2PIN Red、Brown L=350MM	1	开关SS12F22GM9x1
192	SHS-2026210/35003239	Single housing With Wire 3PIN Red、Black L=210MM OrangeL=350mm	1	Deck Motor x1
193	SHS-2026250042189	Single housing With Wire 4PIN Red、Yellow、Brown、Orange L=250MM	1	Tuner PCB x1

194	SHS-2026120/420047312	Single housing With Wire 4PIN White、Black L=120mm Yellow、Red L=420mm	1	SPx1
195	SHS-202613007179582A	Single housing With Wire 7PIN Yellow、White、Orange、Green、Brown 、Red、Blue L=130MM	1	
196	90°W2006	90° 6PIN<2.0MM>	1	Premp PCB x1
197	WIR-260502	Wire 26# <UL> 50MM Red	3	Stereo LED x1 Keyboard TCB x1 Band switch x1
198	WIR-260503	50MM Black	3	Stereo LED x1 Keyboard TCB x1 Band switch x1
199	WIR-260504	50MM Green	1	Band switch x1
200	WIR-261809	180MM Orange	1	Deck switch to Motor x1
201	WIR-261202	120MM Red	1	Battery "+"to AC Socket x1
202	WIR-263203	320MM Black	1	Battery "+"to AC Soure PCB x1
203	WIR-263809	380MM Orange	1	AC Socket to source PCB x1
204	WIR-260601	60MM Yellow	1	Fly wire x1
205	WIR-321202	Wire 32# <UL> 120MM Red	2	Buzzer x2
206	WIR-321203	120MM Black	2	Buzzer x2
207		Double housing with wire (2.0mm) <UL>		
208	DHW2015006	Double housing 6PIN L=150MM	1	CD Servo PCB to CD Motor
209		Housing with Flat Cable (Pitch =1.0mm)		
210	HFC1022016	16PIN CD Pickup Flat Cable L=220MM	1	CD Pick up x1
211	HEA-2014004	Head Wire : (2.0mm) <UL> Single housing With Shield: L=140	1	Head Wire x1
212	SPR-V10VCD0024-07	Eyelet: 2x4	8	
213	CAF-V10-VCD00-01	Plastic Parts: Front Cabinet	1	
214	CAB-V10-VCD00-01	Rear Cabinet	1	
215	CAF-V10-VCD00-02	Front Cabinet Cover	1	
216	CBD-V10-VCD00	Battery Door	1	
217	CAD-V10-VCD0002	Cassette Door	1	
218	CAD-V10-VCD1101	Cassette Door Holder V10	1	
219	CDB-V10-VCD-1101	CD Brack	1	
220	CDB-V10-VCD-0002	CD Door Lock	1	
221	COM-V10-VCD111-01	Cass.Door.Gear <V10>	1	
222	COM-V10-VCD111-02	Cass.Door.Holder <V10>	1	
223	KNB-V10-VCD007L	Cass.Knob.Cover.Brack (Left)	1	
224	KNB-V10-VCD007R	Cass.Knob.Cover.Brack (Right)	1	
225	SPG-V10-VCD04R	Speaker Grille electroplate Bracket (Right)	1	
226	SPG-V10-VCD04L	Speaker Grille electroplate Bracket (Left)	1	
227	USG-V10-VCD05L	Upper Speaker Grille electroplate Bracket Cover (Left)	1	
228	LSG-V10-VCD06L	Lower Speaker Grille electroplate Bracket Cover (Left)	1	
229	USG-V10-VCD05R	Upper Speaker Grille electroplate Bracket Cover (Right)	1	
230	LSG-V10-VCD06R	Lower Speaker Grille electroplate Bracket Cover (Right)	1	
231	PPB-V10-VCD	Preamp PCB Bracket	1	
232	CDD-V10-VCD0001	CD Door	1	

233	CDD-V10-VCD0002	CD Door Gear <V10>	1	
234	CDD-V10-VCD0003	CD Door Gear Holder <V10>	1	
235	HAN-V10-VCD-00	Handle	1	
236	KNB-V10-VCD001	Cass.Knob	6Pcs/1set	
237	KNB-V10-VCD006	Cass.Knob Cover	1	
238	CDF-V10-VCD0001	CD Function Knob	1	
239	CDF-V10-VCD0002	CD Play Knob	1	
240	CDD-V10-VCD0004	CD Switch Bracket	1	
241	LCD-V10-VCD0001	LCD	1	
242	LCD-V10-VCD0002	LCD Electroplate Bracket	1	
243	CDF-V10-VCD0003	CD Play Knob Electroplate Bracket	1	
244	COM-V10-VCD0003LA	Speak Clip (Left A)	1	
245	COM-V10-VCD0003LB	Speak Clip (Left B)	1	
246	COM-V10-VCD0003RA	Speak Clip (Right A)	1	
247	COM-V10-VCD0003RB	Speak Clip (Right B)	1	
248	KNB-V10-VCD008	DBBS Knob	1	
249	KNB-V10-VCD-0003	Volume Knob	1	
250	KNB-V10-VCD-0004	Dial Knob	1	
251	KNB-V10-VCD-0002	Function Knob	1	
252	KNB-V10-VCD-0002	Band Knob	1	
253	POT-V10-VCD0001	Pointer Knob	1	
254	POT-V10-VCD0002	Pointer Bracket	1	
255	GER-V10-VCD0001	Tuning Gear	1	
256	GER-V10-VCD0002	PVC Gear	1	
257	VOP-V10-VCD00A	Volume PCB Bracket <A>	1	
258	VOP-V10-VCD00B	Volume PCB Bracket <B>	2	
259	LEN-V10-VCD0001	Dial Lens	1	
260	MAG-V10-VCD0001	Magnet holder	1	
261	RPB-V10-VCD00	Recording Press Plate Bracket	1	
262	POT-V10-VCD0003	Pointer Press Plate Bracket	2	
263	MAG-V10-VCD0002	Magnet Ring Bracket	1	
264	MAG-V10-VCD0003	CD Magnet holder	1	
265	MAG-V10-VCD0004	Magnet Cover	1	
266	COM-V10-VCD0004	Voltage Select Switch Cover	1	
267	COM-V10-VCD0005	Dustproof Cover (SAM SUNG)	1	
268	COM-V10-VCD0006	AC Socket Cover	1	
269	COM-V10-VCD0007	Pickup Flat Calde Holder	1	
270	POF-V10VCD-1001	Package: Polyfoam:"L"	1	
271	POF-V10VCD-1002	"R"	1	
272	GIB-V10-VCD04	Gift Box	1	
273	CTN-V10-VCD-04-01	Carton	1	

274	INS-V10-VCD-04-01	Instruction Book	1	
275	LAB-V10-VCD-02	Laser Label	1	
276	PTE-V10-VCD-0104	Rear Plate (Rating Label)	1	
277	WIR-900002	AC Line Cord	1	
278	LAB-V10-VCD-07	CD Bracket Paper	1	
279	PBG-V10VCD-0701	Poly Bag	1	
280	BST-03001015	Black Silk Tape L300MMxW10MMxT0.15MM	1	
281	PYP00110	Pyrocondensation pipe: Φ1MMx10MM	1	
282	LAB-V10-VCD-08	Caution Label	1	
283	WAS-03101	Ferba Washer: 3x10x1mm	3	CD Machanism x3
284	BPP-V10-VCD	Black Poly Plate (VCD High Fregnency Audio Plug)	1	
285	NEW-003080	Nylon enlace wire: 3MMx80mm	7	
286	PAS900070	Packege Strip: L900mmxW70mm	1	
		Addition Parts as follows if 110V/220V		
288	WIR201302	Wire: 20# 130MM<Red>	1	
289	SCR-03008-02	Screw TA/PH 3x8	2	
290	COM-V10-VCD-0009	110V/220V Select Switch	1	
291	COM-V10-VCD-0008	Switch Cover	1	
292				
293				

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