



# VIDEO CASSETTE PLAYER VIDEO CASSETTE LINE RECORDER

SV-A17GV/SVK-A17GV  
SV-8A/SV-9AK  
SV-66H/SV-66HK  
SVR-77H



# **SERVICE** Manual

For mechanical disassembly and adjustment, refer to the "Mechanical Manual"  
(DX7-R/RC, DX8-R/RC → AC68-20316A).

## VIDEO CASSETTE PLAYER/VIDEO CASSETTE LINE RECORDER



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# 1. Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.
2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including : control knobs and compartment covers.
3. Make sure that there are no cabinet openings through which people--particularly children --might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (See Fig. 1) :  
Warning : 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 Publication UL1410, 59.7*).
5. With the unit completely reassembled, plug the AC line cord directly the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including : antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.
6. X-ray Limits :  
The picture tube is designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original.

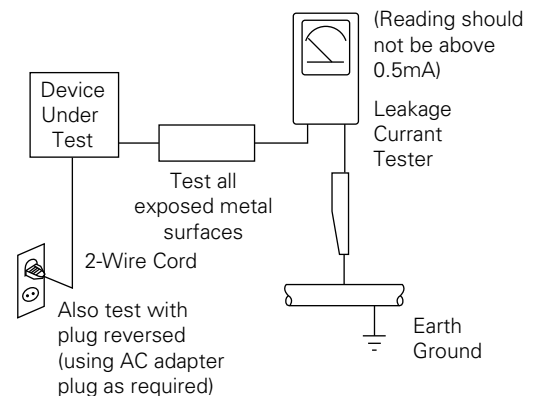




Fig. 1-1 AC Leakage Test

7. Antenna Cold Check :  
With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.
8. High Voltage Limit :  
High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits.  
  
Heed the high voltage limits. These include the *X-ray protection Specifications Label*, and the *Product Safety and X-ray Warning Note* on the service data schematic.
9. Some semiconductor ("solid state") devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
10. Immediately before handling sny semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging Wrist-strap device. (Be sure to remove it prior to applying power--this is an electric shock precaution.)

11. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.
12. Design Alteration Warning :  
Never alter or add to the mechanical or electrical design of this unit. Example : Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.
13. Hot Chassis Warning :  
Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.  
  
To confirm that the AC power plug is inserted correctly, do the following : Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.
14. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, *regardless of the AC plug polarity*. These units can be safely serviced *only* if an isolation transformer inserted between the receiver and the power source.
15. Never defeat any of the B+ voltage interlocks.  
Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
16. Always connect a test instrument's ground lead to the instrument chassis ground *before* connecting the positive lead; always remove the instrument's ground lead last.
17. Observe the original lead dress, especially near the following areas : Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.
18. Picture Tube Implosion Warning :  
The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.
19. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.
20. Product Safety Notice :  
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original—even if the replacement is rated for higher voltage, wattage, etc.  
  
Components that are critical for safety are indicated in the circuit diagram by shading, (  or  ).  
Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

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## 2. Reference Information

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### 2-1 Servicing Jigs and Special Tools

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#### 2-1-1 Servicing guide

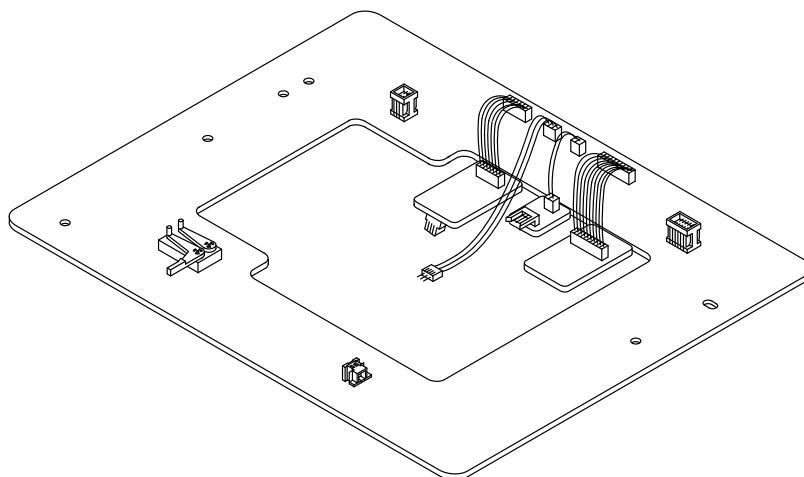
1. For this VCR chassis, the program switch and the sensors (start/end/reel) are located on the main PCB, not on the deck ass'y.
2. As long as the deck ass'y is connected to the main PCB, all repairs are possible.  
Important : In order to repair the main PCB without the deck ass'y connected, the X-5 chassis jig should be used.
3. To emulate the function of the sensors, insert diode (1N4148) at service option (D710) on the function PCB.
4. The X-5 chassis jig can be used for the following :
  - 1) When repairing or confirming the operation of the deck ass'y.
  - 2) When replacing or repairing the components located under the deck ass'y.
  - 3) When repairing the function PCB.
5. The X-5 chassis jig can not be used for the following :
  - 1) Repairing defects in the video section.
  - 2) Repairing defects in the audio section.
  - 3) If the defect is related to tape speed.

**Note :**

- 1) Repair may not be possible if there is external noise between the deck ass'y and main PCB.
- 2) If tape control signal is not connected to the jig, the VCR must be operated in SP mode.

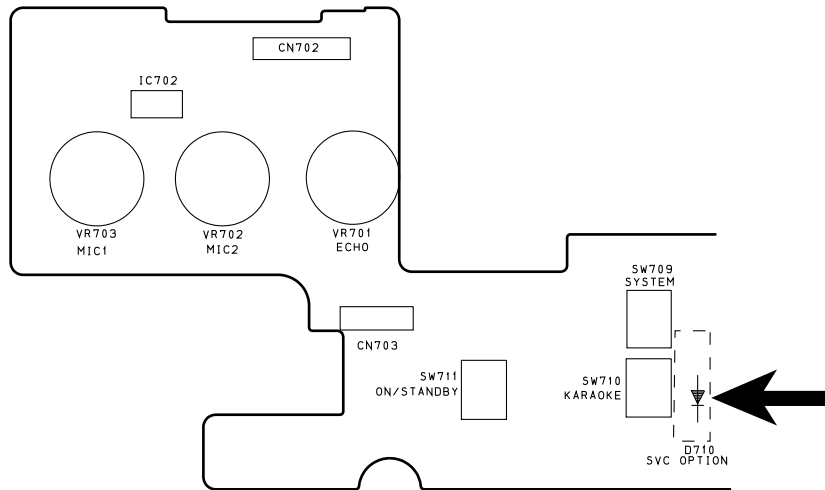
#### 2-1-2 Servicing Jig

Jig Item	Part No.	Use
X-5 Chassis Jig	68140-500-013	Connects the deck ass'y to the main PCB connecting cable.



### 2-1-4 How to Connect X-5 chassis jig

1. Unplug the power cord from AC outlet.
2. Remove the deck ass'y from main PCB (See Page 4-5 of service manual).
3. To emulate the function of the sensors, insert diode (1N4148) at service optionon (D710) on the function PCB. (see diagram below).

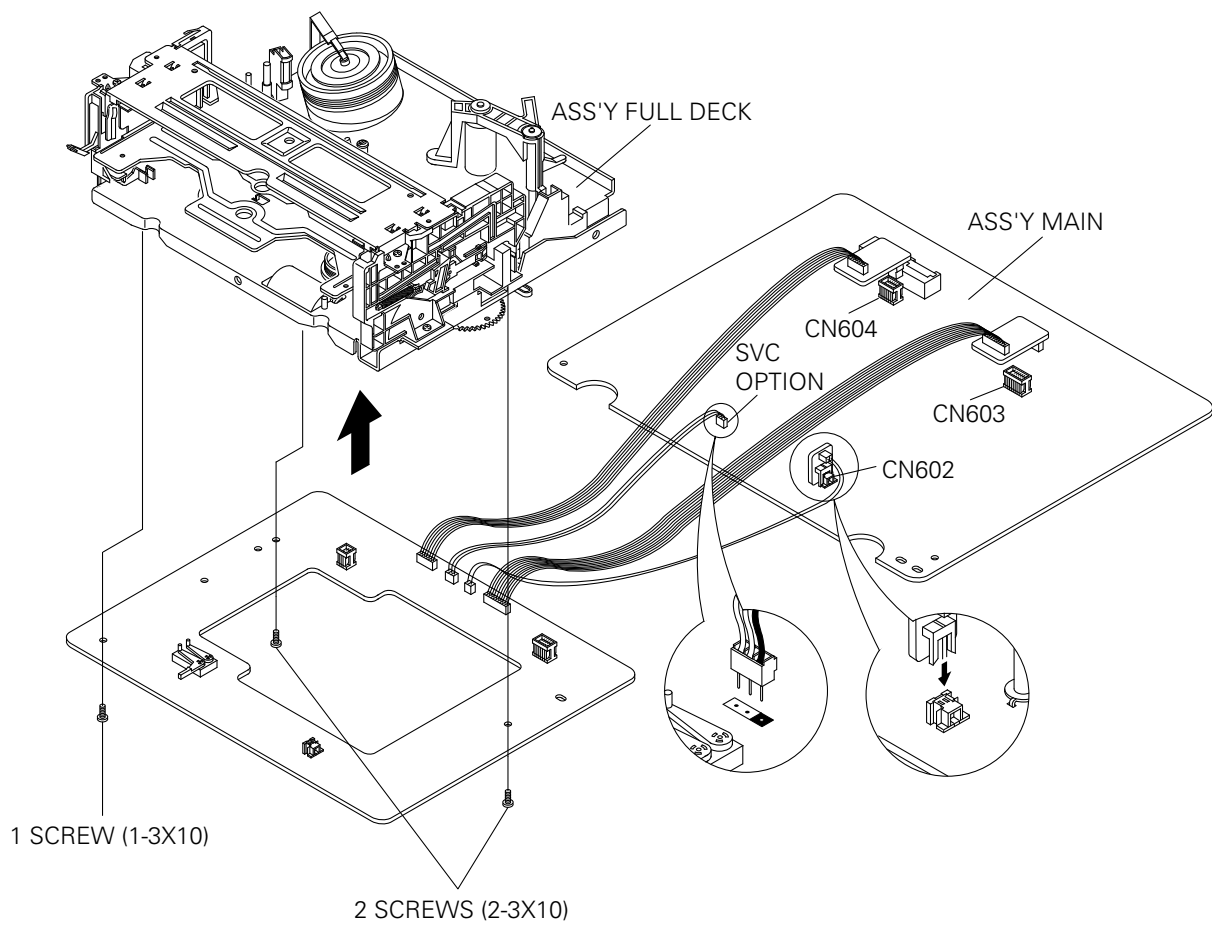
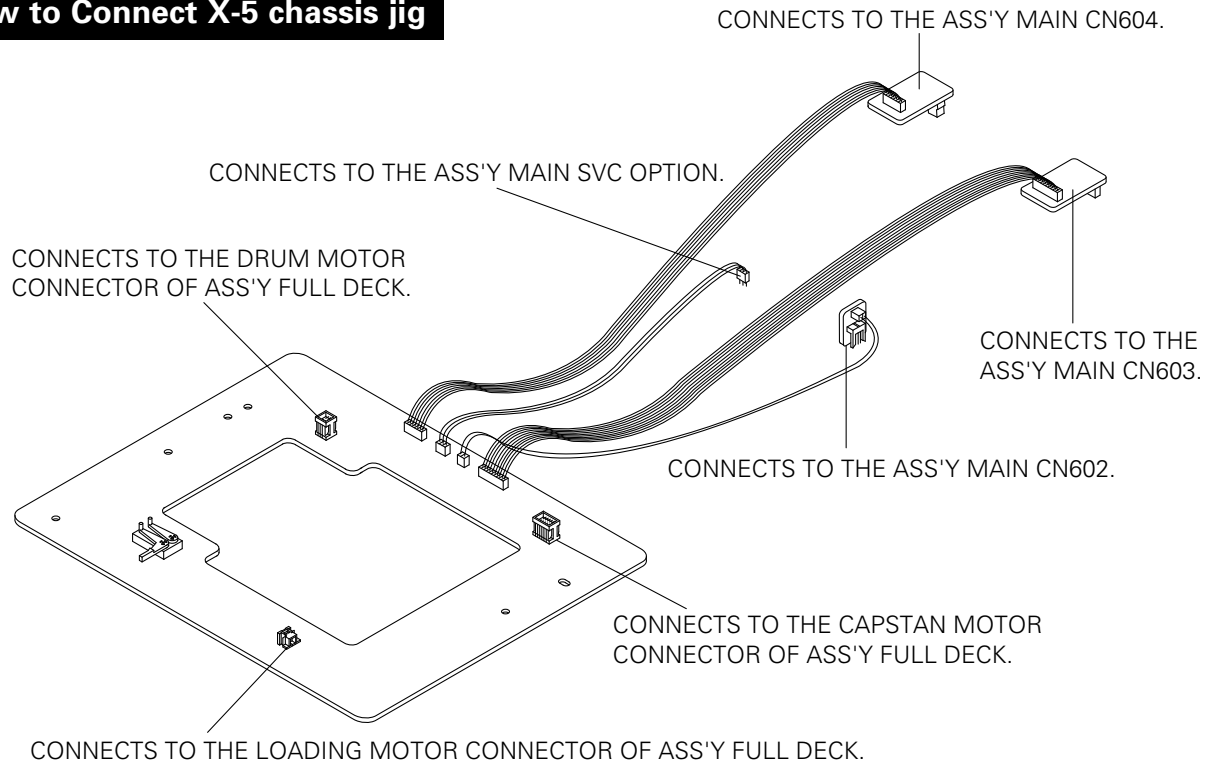


Function (Component side)

**Note :** After completing repairs, unplug and plug the power cord in order to reset.

4. Insert wafers of drum motor, capstan motor and loading motor on X-5 chassis jig into each of the connectors of deck ass'y, and then secure with three screws.
5. Solder the 3 leads of the jig cable to "CN605" on the main PCB.
6. Apply power to the function PCB.
7. Insert a test tape into the housing ass'y.
8. Simultaneously touch the start and end sensor LEDs on the PCB, so that the tape loads automatically. After the tape is loaded, all of the function buttons on the function PCB can be used.
9. If the test tape is ejected while the jig is in use, attempt to re-load the tape by simultaneously touching the start and end sensor LEDs. If the tape still does not load, unplug and plug the power cord to reset.

## How to Connect X-5 chassis jig



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## 3. Product Specifications and Comparison Chart

### 3-1 Product Specifications

Design and specifications are subject to change without notice.

Operation	Description
Format	VHS PAL standard
Video recording system	Video : 2 rotary heads, helical scanning system Luminance : FM azimuth recording Color : Down converted subcarrier phase shifted
Television system	CCIR Standard B/G, D/K
Color system	PAL, MESECAM, NT 3.58, NT 4.43, NT PB on PAL TV
Tape width	12.65 mm (1/2 inch)
Tape speed	(PAL) SP : 23.39 mm/sec, (NTSC) SP : 33..35 mm/sec
Recording/playback time	3 hours with E-240 Tape
F.F/REW time	About 3 min 30 sec with E-180
Heads	Video : 2 rotary heads Audio/Control : 1 stationary head Hi-Fi : 2 rotary heads Erase : 1 full track erase head
VIDEO	
Input Output Signal-to-noise ratio Horizontal resolution	0.5 to 2.0 Vp-p : 75 ohm unbalanced 1.0 Vp-p : 75 ohm unbalanced Better than 43 dB More than 240 lines
Audio	
Input Output Signal-to-noise ratio Frequency response	Line : -8 dBm, 50 Kohm unbalanced Line : -8 dBm, 1 Kohm unbalanced Hi-Fi : More than 68 dB min (IHF A filter) Normal : More than 42 dB min (IHF A filter) Hi-Fi : 20Hz - 20KHz Normal : 100Hz - 8KHz
Output channel	Channel 22 - 69 (preset ch36)
Power requirement	AC 100 - 240V 50/60 Hz
Power consumption	Approx. 17 watts
Operation temperature	41°F-104°F (5°C-40°C)
Operation humidity	10%-75%
Weight (net)	4.0 Kg
Dimensions (W x H x D)	380 x 90.5 x 322 mm

### 3-2 Comparison Chart

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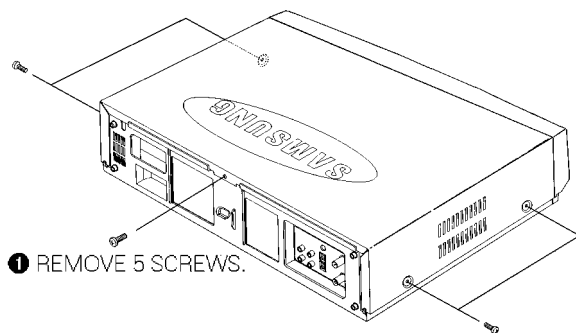
FUNCTION MODEL	KARAOKE
SV-A17GV	X
SVK-A17GV	O
SV-8A	X
SV-9AK	O
SV-66H	X
SV-66HK	O
SVR-77H	X

## 4. Disassembly and Reassembly

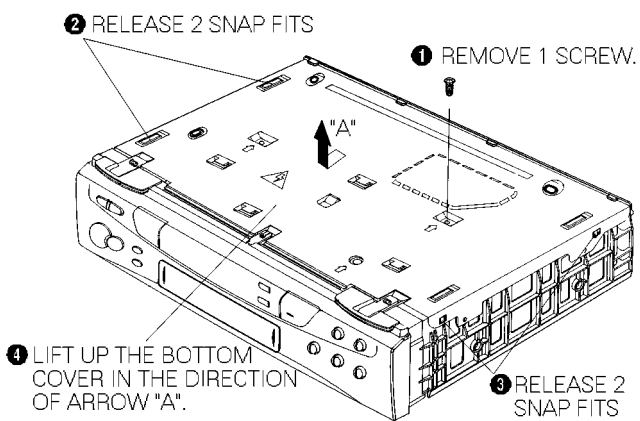
### 4-1 Cabinet and PCB

Disassemble in the order shown.  
Reassemble in reverse order.

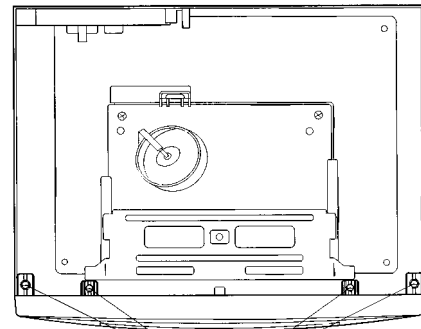
#### 4-1-1 Top cabinet removal



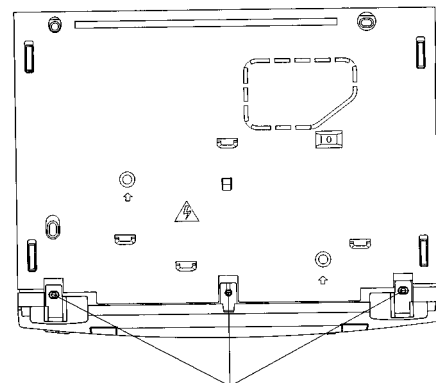
#### 4-1-2 Bottom cover removal



#### 4-1-3 Front panel removal



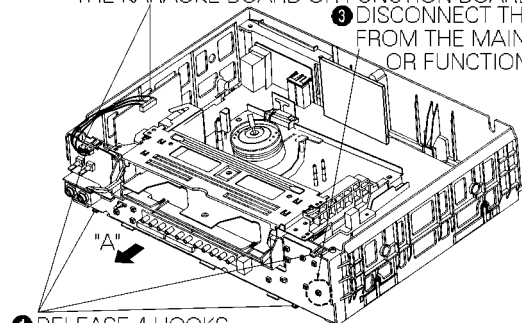
(Top view)



(Bottom view)

#### 4-1-4 Function-Timer PCB removal

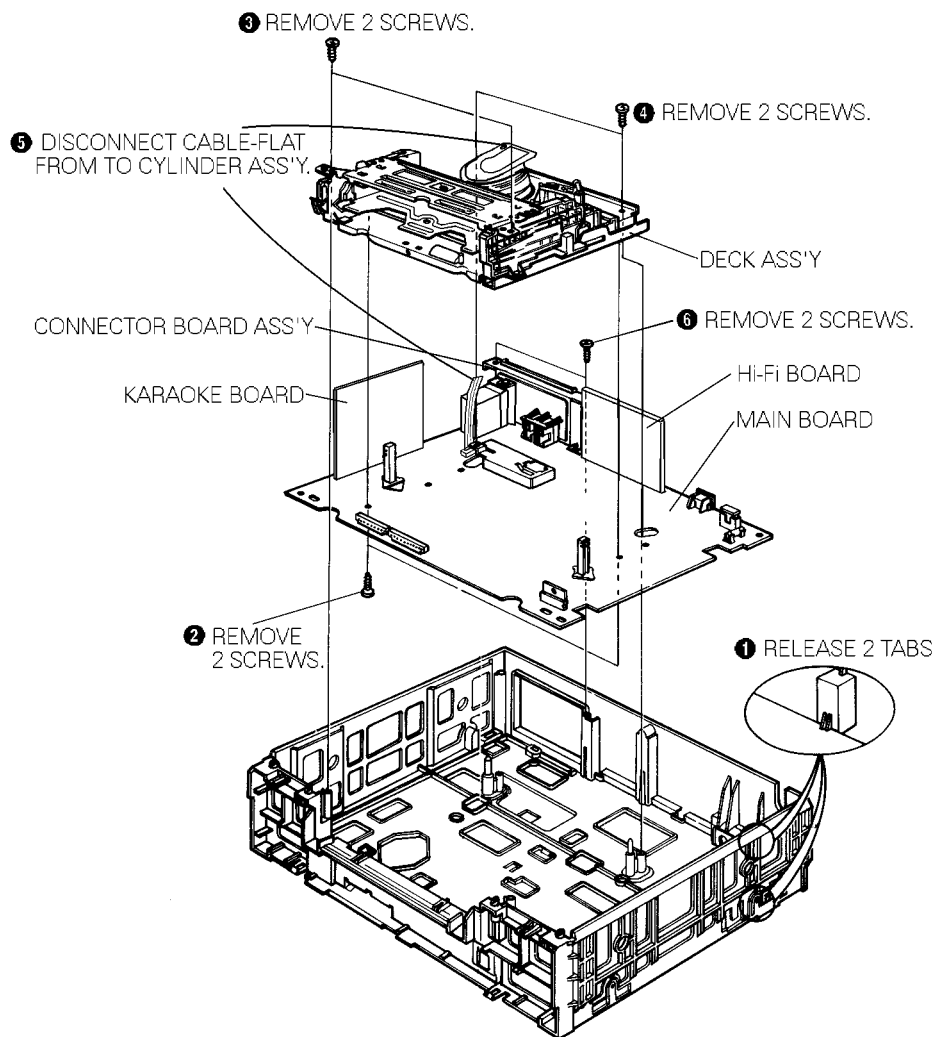
- ② DISCONNECT THE CN704 FROM THE KARAOKE BOARD OR FUNCTION BOARD.
- ③ DISCONNECT THE CN61A FROM THE MAIN BOARD OR FUNCTION BOARD.



**Note :** Take extreme care not to damage the PCB when removing it.

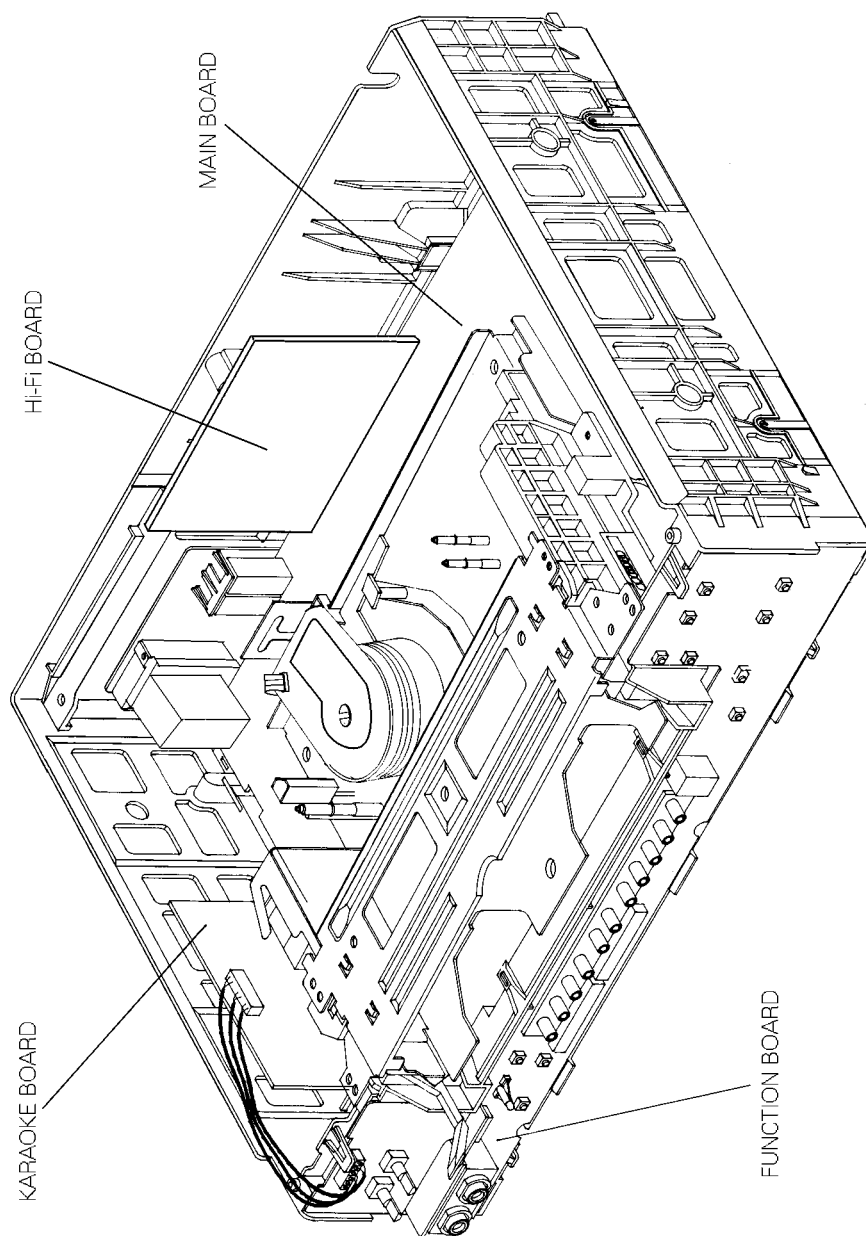
### 4-1-5 Chassis Removal

- Note :** 1. When removing chassis, take extreme care not to damage the main PCB front.  
2. When reinstalling the deck on the main PCB, take extreme care not to damage the sensor.



## 4-2 Circuit Board Locations

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## 5. Alignment and Adjustment

**Note :** After replacing the ass'y full deck, the ass'y main, the cylinder ass'y and the micom(IC601), the remote control ass'y can be used to adjust the "X-point (tracking center) adjustment" and "Head S/W point" adjustment.

### 5-1 Reference

#### 5-1-1 The type of remote control ass'y

1. Remote control ass'y (AC93-10039Y/69099-633-252) is specified as a service jig in the service manual of X-5/X-6(DX5-R/DX5-RC/DX6-R/DX6-RC) chassis. (See Fig. 5-1)
2. Normal remote control ass'y for X-7/X-8 (DX7-R/DX7-RC/DX8-R/DX8-RC) chassis. (See Fig. 5-2)

#### 5-1-2 How to identify between normal remote control ass'y and multi remote control ass'y for X-7/X-8 chassis (See Fig. 5-2)

1. The color of some buttons related to TV function are gold.
2. Audio button is added instead of the test button hidden behind of inlay.
3. The positions of some buttons are different.

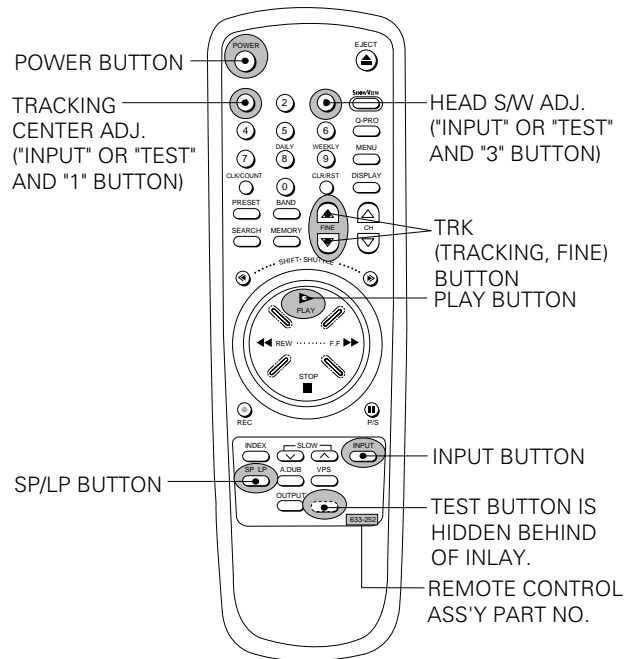


Fig. 5-1 Remote Control Ass'y Jig for X-5/X-6 Chassis (AC93-10039Y/69099-633-252)

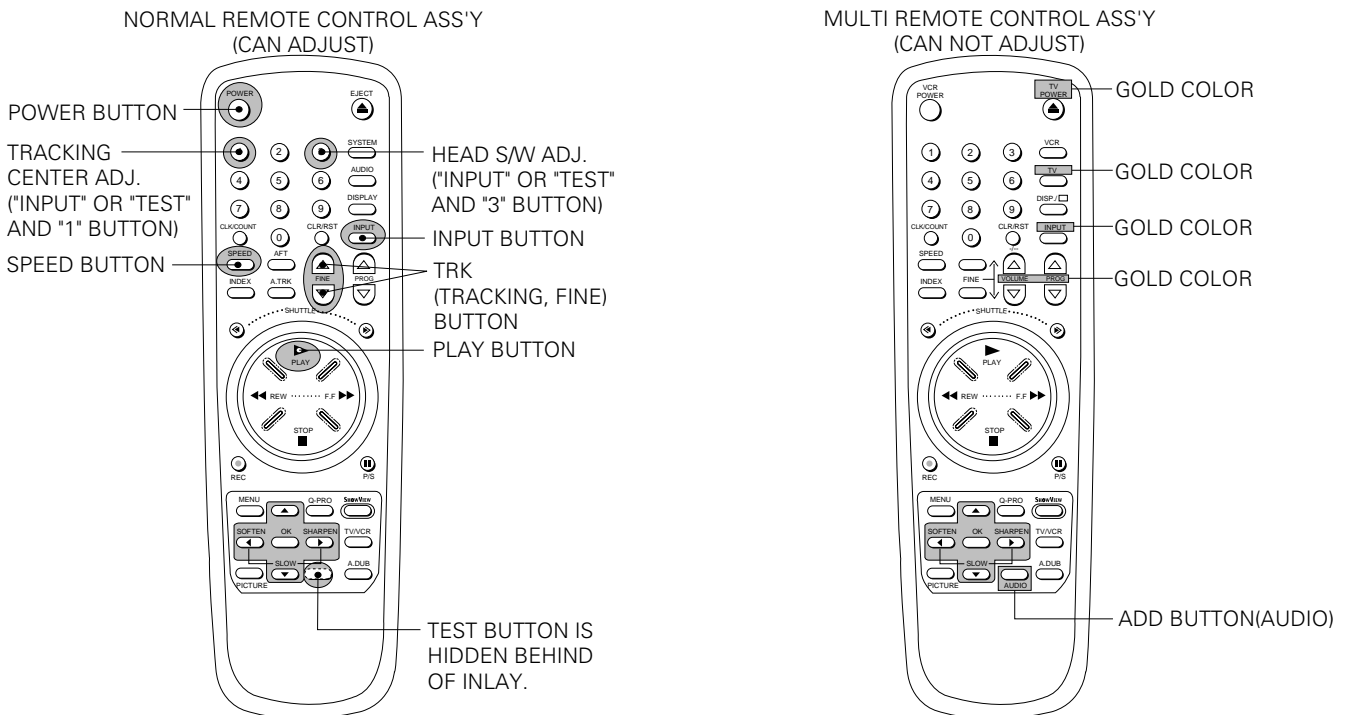


Fig. 5-2 Remote Control Ass'y for X-7/X-8 Chassis

## 5-2 Mechanical Adjustment

**Note :** Refer to the Mechanical Manual “DX7-R/DX7-RC/DX8-R/DX8-RC (AC68-20316A)” for the adjustment and confirmation of ass’y full deck.

### 5-2-1 The number and position of test point

Test point : TP02 (CTL Pulse)  
TP03 (H'D S/W -Trigger)  
TP04 (V. Envelope)  
TP05 (Audio out)

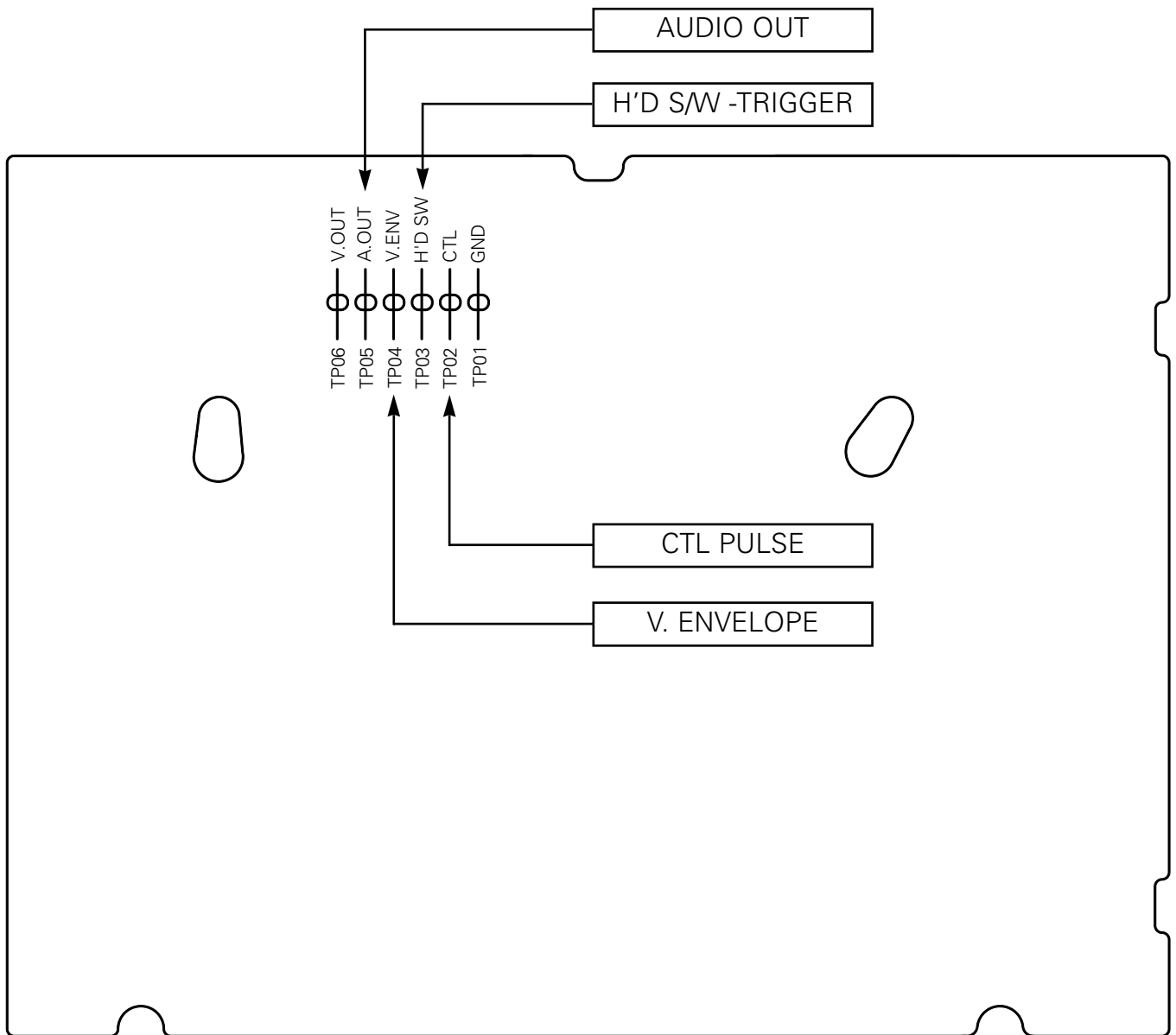


Fig. 5-3 The position of test point (Main PCB-Component side)

**5-2-2 X-Point(Tracking center) adjustment  
(See the 2-2-1 (d) AC HEAD  
POSITION(X-POINT) ADJUSTMENT  
on page 2-3 of the mechanical  
manual)**

5-2-2 (a) IF THE REMOTE CONTROL ASS'Y IS NOT AVAILABLE

1. Playback the colorbar alignment tape.
2. Connect CH-1 scope probe to "TP02" and CH-2 scope probe to "TP03". And then, trigger head switching pulse.
3. Set tracking preset to 11msec (2head : 2.7msec, 4, 6head : 11msec) using the "FINE(Tracking, TRK)" button ▲ / ▼ of the other remote control ass'y except the remote control ass'y jig for X-5/ X-6 chassis and the normal remote control ass'y for X-7/X-8 chassis.
4. Connect CH-1 scope probe to "TP02" and the CH-2 to "TP03" trigger on CH-1.
5. Insert the adjusting driver (+) into X-position adjusting gear. Adjust the driver in either direction for maximum envelope waveform.

**Note :** Since the adjusting gear unit may be damaged, do not adjust by force when adjusting the X-point using the adjusting driver (+). After turn the X-point adjusting screw (D) counterclockwise a little, perform the adjustment. After adjustment is completed, tighten the screw.

<Setting of scope>

- Volt/div. : CH-1 = 0.1V                      - Time/div. : 5msec  
                  CH-2 = 0.2V

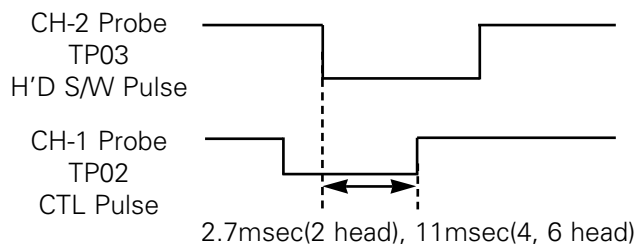


Fig. 5-4 Tracking preset adjustment

REMOTE BUTTONS	CONTROL PULSE REMOVE
TRACKING ▲ ← PUSH ▼	
TRACKING ▲ ▼ ← PUSH	

Fig. 5-5 Tracking preset adjustment

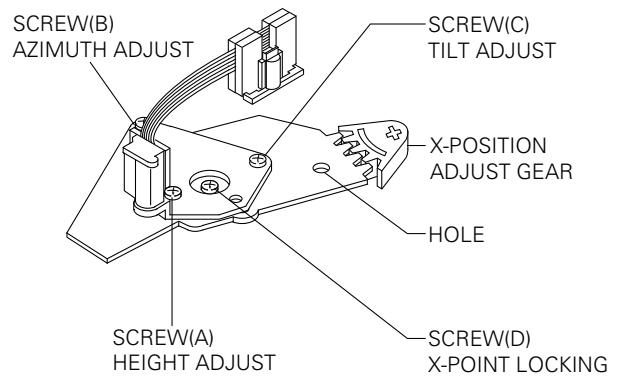


Fig. 5-6 Location of A/C Head adjustment screw

5-2-2 (b) IF THE REMOTE CONTROL ASS'Y (AC93-10039Y/69099-633-252) IS AVAILABLE

**Note :** How to use the "TEST" button.

1. Disattach the inlay of remote control ass'y. (See Fig. 5-1, 5-2 and 5-3)
2. Press the "TEST" button with the pincers and the precise driver as shown in Fig. 5-1, 5-2 and 5-3)

1. When using the "INPUT" button of remote control ass'y;

- 1) Simultaneously press the "INPUT" button and "1" button in PB mode. This will adjust the tracking center automatically.
- 2) Set the tracking preset using the "FINE(Tracking, TRK)" button of remote control.
- 3) After adjustment is completed, press the "POWER" button to release.

2. When using the "TEST" button of remote control ass'y ;

- 1) Simultaneously press the "TEST" button and "5" button in PB mode. This will adjust the tracking center automatically.
- 2) Set the tracking preset using the "FINE (Tracking, TRK) button of remote control.
- 3) After adjustment is completed, press the "POWER" button to release.

5-2-2 (b) IF THE NORMAL REMOTE CONTROL ASS'Y OF X-7/X-8(DX7-R/DX7-RC/DX8-R/DX8-RC) CHASSIS ("IS" CHASSIS AND "C" CHASSIS) IS AVAILABLE

**Note 1 :** Three kinds of remote control ass'y are used for X-7/X-8(DX7-R/DX7-RC/DX8-R/DX8-RC) chassis.

1. Three kinds of remote control ass'y are remote control ass'y of "C" chassis, normal remote control ass'y of "IS" chassis, and multi remote control ass'y of "IS" chassis.
2. All adjustments are adjusted by remote control ass'y of "C" chassis and normal remote control ass'y of "IS" chassis.
3. For the identification of remote control ass'y by chassis, See page 5-1 and page 5-2.

**Note 2 :** How to use the "TEST" button.

1. Disattach the inlay of remote control ass'y.  
(See Fig. 5-1, 5-2 and 5-3)
  2. Press the "TEST" button with the pincers and the precise driver as shown in Fig. 5-1, 5-2 and 5-3)
- 
1. When using the "INPUT" button of remote control ass'y;
    - 1) Simultaneously press the "INPUT" button and "1" button in PB mode.  
This will adjust the tracking center automatically.
    - 2) Set the tracking preset using the "FINE(Tracking, TRK)" button of remote control.
    - 3) After adjustment is completed, press the "POWER" button to release.
  2. When using the "TEST" button of remote control ass'y ;
    - 1) Simultaneously press the "TEST" button and "5" button in PB mode.  
This will adjust the tracking center automatically.
    - 2) Set the tracking preset using the "FINE (Tracking, TRK) button of remote control.
    - 3) After adjustment is completed, press the "POWER" button to release.

## 5-3 Electrical Adjustment

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### 5-3-1 Head S/W Adjustment

**Note :** Only remote control ass'y can adjust.

5-3-1 (a) IF REMOTE CONTROL ASS'Y  
(AC93-10039Y/69099-633-252) IS  
AVAILABLE

1. When using the "INPUT" button of remote control  
ass'y ;

- 1) Insert an SP tape into the housing ass'y.
- 2) Press the "PLAY" button.
- 3) Press the "INPUT" button and "3" button  
simultaneously.
- 4) This will adjust the head S/W point adjustment  
automatically.
- 5) After the adjustment is completed, press  
"POWER" button to release.

2. When using the "TEST" button of remote control  
ass'y ;

- 1) Insert an SP tape into the housing ass'y.
- 2) Press the "PLAY" button.
- 3) Press the "TEST" button and "SP/LP" button  
simultaneously.
- 4) This will adjust the head S/W point adjustment  
automatically.
- 5) After adjustment is completed, press the  
"POWER" button to release.

5-3-1 (b) IF NORMAL REMOTE CONTROL  
ASS'Y FOR X-7/X-8(DX7-R/DX7-RC/  
DX8-R/DX8-RC) CHASSIS ("IS"  
CHASSIS AND "C" CHASSIS) IS  
AVAILABLE

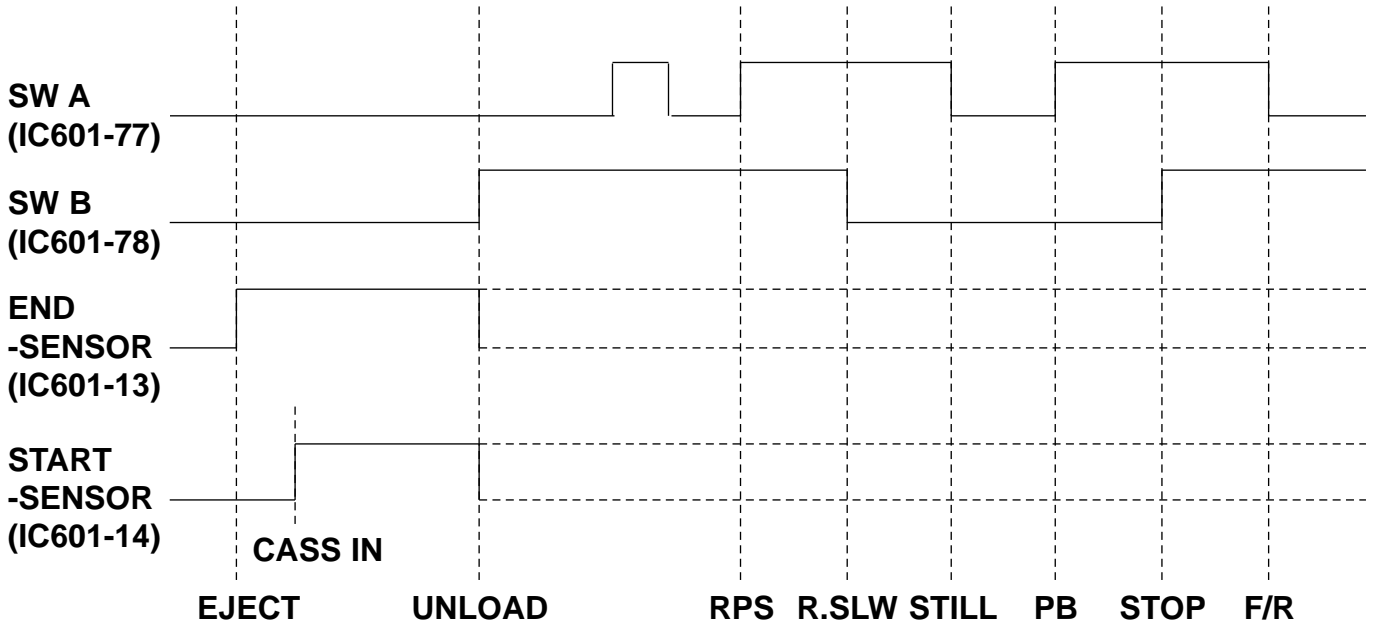
1. When using the "INPUT" button of remote control  
ass'y ;

- 1) Insert an SP tape into the housing ass'y.
- 2) Press the "PLAY" button.
- 3) Press the "INPUT" button and "3" button  
simultaneously.
- 4) This will adjust the head S/W point adjustment  
automatically.
- 5) After the adjustment is completed, press  
"POWER" button to release.

2. When using the "TEST" button of remote control  
ass'y ;

- 1) Insert an SP tape into the housing ass'y.
- 2) Press the "PLAY" button.
- 3) Press the "TEST" button and "SPEED" button  
simultaneously.
- 4) This will adjust the head S/W point adjustment  
automatically.
- 5) After adjustment is completed, press the  
"POWER" button to release.

### 5-4 Timing Chart of Program S/W



Position	Program S/W (SW601)				Action Mode
	E/S	S/S	SW A	SW B	
Eject	L	L	L	L	Eject
Cassette IN	H	L H	L	L	Cassette IN
Unload	-	-	L	L H	Unload
R. PS	-	-	L H	H	R. PS, Z-R. PS
R. Slow	-	-	H	H L	Pinch Roller off Position
Still	-	-	H L	L	Still, Slow, F-ADV
Play	-	-	L H	L	PB, T-Stop, REC, Pause, F. PS, Z-FPS
Stop	-	-	H	L H	Stop, Power off
FF/REW	-	-	H L	H	FF, REW

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## 6. Exploded View and Parts List

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<b>6-3 Mechanical Parts (Bottom Side)</b> - - - - -	<b>6-6</b>
<b>6-4 Housing Assembly</b> - - - - -	<b>6-8</b>

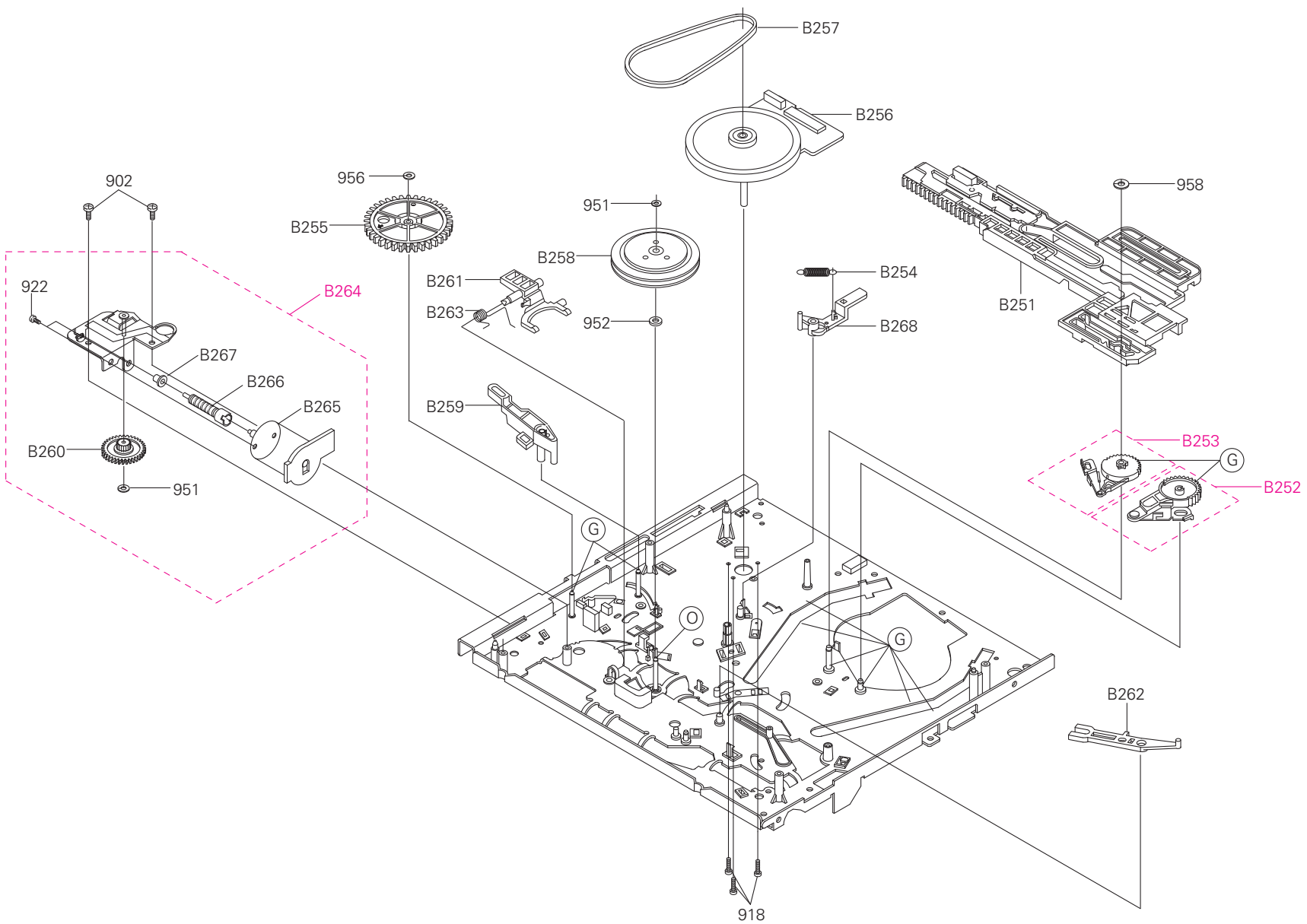


Loc. No	Part No	Description and Specification	Remark
-	DO NOT ORDER	ASSY-DECK (DX7-R)	(S.N.A)
1	AC98-11224J	ASSY-PANEL FRONT;SVK-A17GV/SAV,SMR, SV-9AK	TSEC LOCAL
	AC98-11224L	ASSY-PANEL FRONT;SV-A17GV/SAV,CIS, SV-8A, SVR-77H	TSEC LOCAL
	AC98-11224G	ASSY-PANEL FRONT;SVK-A17GV/TSE, SV-66HK	TSEC LOCAL
	AC98-11224F	ASSY-PANEL FRONT;SV-A17GV/TSE, SV-66H	TSEC LOCAL
21	AC64-50834E	DOOR-CASSETTE;SVK-A17GV/SAV,CIS, SV-9AK	TSEC LOCAL
	AC64-50834F	DOOR-CASSETTE;SV-A17GV/SAV,SMR, SV-8A, SVR-77H	TSEC LOCAL
	AC64-50834D	DOOR-CASSETTE;SV-A17GV/TSE, SV-66H	TSEC LOCAL
	AC64-50834C	DOOR-CASSETTE;SVK-A17GV/TSE, SV-66HK	TSEC LOCAL
22	AC61-62003A	SPRING;-;SUS304,(GE/RCA),-,-,-,-	TSEC LOCAL
108	AC61-11006A	CONNECTOR BOARD-ASSY;SVK-A17DV/TSEC,HIPS94,HB,T2	TSEC LOCAL
153	AC60-12126A	SCREW-BH;-;BH,-,4*12,FE,FZY,-,-,-	
155	AC60-12134A	SCREW-TAP BH;-;BH,-,2-4X16,-,FE	
157	AC60-10063A	SCREW-TAPTITE;BH,+,-,M3,L12,ZPC3,SWRCH18A	
601	DO NOT ORDER	ASSY-MAIN	(S.N.A)
602	AC93-10824F	ASSY-KARAOKE;SVK-A17GV (KARAOKE MODEL ONLY)	TSEC LOCAL
603	AC93-10824S	ASSY-HIFI;SVK-A17GV	TSEC LOCAL
661	AC39-10019A	POWER CORD;KKP-419C,H03VVH2-F,VDE/KEMA-KE	TSEC LOCAL
670	AC93-10824E	ASSY-F/TIMER;SVK-A17GV/SMR,TSE,SAVINA(KARAOKE)	TSEC LOCAL
	AC93-10824K	ASSY-F/TIMER;SV-A17GV/SMR,TSE,SAVINA,CIS(NO KARAOKE)	TSEC LOCAL
685	AC93-10824G	ASSY-MIC JACK;SVK-A17GV (KARAOKE MODEL ONLY)	TSEC LOCAL
CN61A	3809-001051	CABLE-FLAT;30V,80C,100MM,12P,1.25MM,UL289	
CN62A	3809-001048	CABLE-FLAT;30V,80C,110MM,6P,1.25MM,UL2896	
CN704	AC39-22017U	LEAD-CONNECTOR ASSY;5395,5264,6P,160M/M,1534#26	
LD601A	AC61-22345A	HOLDER-LED;POM,-,-,-,-,-	TSEC LOCAL
PT601A	AC61-22344A	HOLDER-PHOTO;POM,-,-,-,-,-	TSEC LOCAL
PT602A	AC61-22344A	HOLDER-PHOTO;POM,-,-,-,-,-	TSEC LOCAL
SC301	AC63-42222A	SHIELD-CASE P/AMP(AS;3516ET,T0.3,SIL,SV-80Z,-	TSEC LOCAL
SP601	AC61-22321A	HOLDER-TR;POM,-,-,-,-,-	TSEC LOCAL
SP602	AC61-22321A	HOLDER-TR;POM,-,-,-,-,-	TSEC LOCAL
	<b>ACCESSORY PART</b>		
	AC59-92003T	MICROPHONE;SDM-702,PI6.3MM 5MT 600OHM	TSEC LOCAL



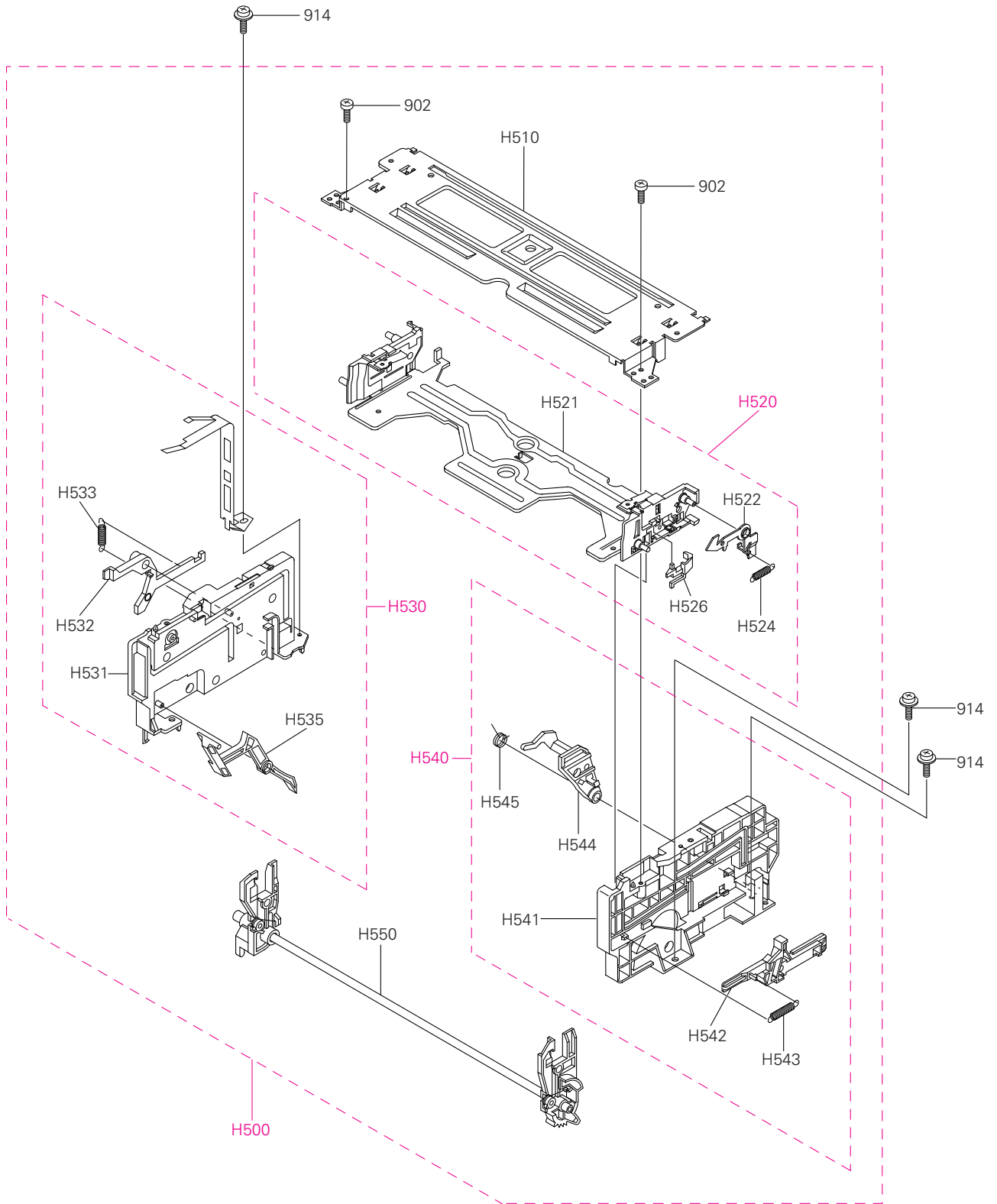
Loc. No	Part No	Description and Specification	Remark
901	AC60-10012A	SCREW-MACHINE;BH,+ ,M3,L8,-,FE,-,-,-	TSEC LOCAL
904	AC60-12125A	SCREW-PH;-,-,-,M3X6 TAP TITE,-,-,-,-,-	TSEC LOCAL
905	AC60-12096A	SCREW-MACHINE;FP,PH,-,M2.6,X10,SWRCH1-A,YEL	TSEC LOCAL
912	67094-604-710	SCREW-DAMPER;M2.0X7.0 SWCM 10(MFZN2-C)	TSEC LOCAL
919	AC60-10004A	SCREW-MACHINE;BH,+ ,M3,L8,ZPC,SWRCH18A,-,-,-	TSEC LOCAL
920	AC60-10007A	SCREW-TAPPING;BH,+ ,M2.6,L12,-,SWRCH18A,-,-,-	TSEC LOCAL
952	AC60-30018A	WASHER-PLAIN;PLAIN,M3.2,D6,T0.5,POLYSLIDER,	TSEC LOCAL
956	AC60-30007A	WASHER-SLIT;PLAIN,ID2.5,OD7,T0.5,SPC1,-,-	TSEC LOCAL
957	AC60-30008A	WASHER-SLIT;- ,ID3.5,OD9,T0.5,SPC1,-,-	TSEC LOCAL
T201	AC66-10023A	REEL-DISK L ASSY;POM,-,PACKAGE,X-5,-	TSEC LOCAL
T202	AC66-10022A	REEL-DISK R (ASSY);POM,-,PACKAGE,X-5,-	TSEC LOCAL
T203	AC66-30474A	BRAKE-SUB L;- ,PBT,-,-,-,X-5/IS	TSEC LOCAL
T204	AC66-30148A	BRAKE SUB R-ASSY;PBT,-,-,-,X5,-	TSEC LOCAL
T207	AC66-30475A	BRAKE-MAIN L ASS'Y;- ,POM+PELT,-,-,-,X-5/IS	TSEC LOCAL
T208	AC66-30476A	BRAKE-MAIN R ASS'Y;- ,POM+PELT,-,-,-,X-5/IS	TSEC LOCAL
T209	AC61-60112A	SPRING- BRAKE MAIN;ES,SUS304WPB,PI0.35,ID2.8,OD4.	TSEC LOCAL
T210	AC66-20073A	GEAR RELAY S-ASSY;- ,PEBAX,M0.5,M48,SP,X5,-	TSEC LOCAL
T211	AC66-20037A	GEAR- RELAY T;PEBAX7033,X-5,Z39,GEAR-SPUR,D1	TSEC LOCAL
T212	AC66-32209A	ARM-TENSION CKD;-,-,-,-,CKD,DX5-R,-	TSEC LOCAL
T216	AC61-60119A	SPRING TENSION;ES,SWPB,PI0.35,ID2.1,L33(OD3.8),-	TSEC LOCAL
T217	AC66-30470A	LEVER-REC S/W;- ,PBT #3300,T4.0,L32,-,(X-5/IS	TSEC LOCAL
T218	AC61-62017A	SPRING-SUB BRAKE L;ES,SUS304,PI0.23,D3.5,L14.8,-,	TSEC LOCAL
T219	AC33-10003P	HEAD- MAGNET F/E;MH131S,-,-,-,L51.05XW7.4XH12.3	TSEC LOCAL
T220	AC66-82051A	SLIDER-G/R ASSY(S);-,-,-,-,X-5	TSEC LOCAL
T221	AC66-82061A	SLIDER-G/R ASSY T;-,-,-,-,X-7(VW-31H)	TSEC LOCAL
T222	AC33-10002E	HEAD-CLEANER;-,-,-,-,X-5 <b>(OPTIONAL)</b>	TSEC LOCAL
T223	AC66-20065A	RACK-HOUSING;L74.29,POM M90-44,BLK,M1,3.14,	TSEC LOCAL
T224	AC33-10215A	HEAD-ACE ALL ASSY;- ,X-7,-,-,-	TSEC LOCAL
T225	AC66-82045A	SLIDER-PINCH;POM(M90-44),T2,L54.35,NAT,DX-5	TSEC LOCAL
T226	AC66-30014A	LEVER-REVIEW;ZYTEL(70G-43L),T3.8,-,PCD25.6,	TSEC LOCAL
T227	AC66-32216A	ARM REVIEW CKD;-,-,-,-,DX5-RV,-	TSEC LOCAL
T228	AC66-30013A	LEVER-PINCH CAM;PBT 6300T,-,L45,W9,X-5,-	TSEC LOCAL
T229	AC66-30003A	LEVER PINCH COUP;PBT 3300,T7.5,L45.25,-,-,X-5	TSEC LOCAL
T230	AC61-60116A	SPRING- PINCH COMP;TS,SWPB,PI1.0,D6,L38(OD8),-	TSEC LOCAL
T231	AC67-32002A	PRISM-LED;PMMA,D5,IF-850,-,-,-	TSEC LOCAL
T232	V1643-0025-00	SLIDER-PUSH;LUPOX 2150,T2,-,NTR,-	TSEC LOCAL
T233	AC61-62016A	SPRING-SLIDE PUSH;ES,SUS304WPB,PI0.55,D3.55,L24.	TSEC LOCAL
T234	AC59-92002G	UNIT-PINCH ROLLER CK;DX5-RV	
T236	AC66-10010A	IDLER-ASSY;PACKAGE,-,X-5,-	TSEC LOCAL
T237	V3383-0031-00	STOPPER-TAPE;POM M90-44,OD7,T1.5,NTR,X-5,- <b>(OPTIONAL)</b>	TSEC LOCAL
T238	AC61-60132A	SPRING ARM PINCH;CS,SUS304WPB,PI0.4,D7.1,OD7.9,	TSEC LOCAL
T239	AC66-30132A	LEVER JOG-ASSY;-,-,-,-,X5,- <b>(DX8-R/RC ONLY)</b>	TSEC LOCAL
T240	AC61-60505A	SPRING-REC S/W;- ,ES,SUS304 WPB,PI0.29,PI3.5,-	TSEC LOCAL
T300	AC96-10475J	ASSY-CYLINDER;- ,CX8-H4P/DLC	TSEC LOCAL

### 6-3 Mechanical Parts (Bottom Side)



Loc. No	Part No	Description and Specification	Remark
902	AC60-10051A	SCREW-TAPPING;BH,-,-,M3,L8,FZY	TSEC LOCAL
918	AC60-10006A	SCREW-MACHINE;BH,+I90,M2.6,L7,ZPC,SWRCH18A,-	TSEC LOCAL
922	67008-130-171	SCREW PH;+M3X3 FE FZY	TSEC LOCAL
951	AC60-30025A	WASHER-SLIT;- ,ID2.5,OD5.0,T0.5,POLY SLIDE,	TSEC LOCAL
952	AC60-30018A	WASHER-PLAIN;PLAIN,M3.2,D6,T0.5,POLYSLIDER,	TSEC LOCAL
956	AC60-30007A	WASHER-SLIT;PLAIN,ID2.5,OD7,T0.5,SPC1,-,-	TSEC LOCAL
958	AC60-30028A	WASHER-SLIT;- ,D2.5,D9.0,T0.5,NUMIRROR,-,-	TSEC LOCAL
B251	AC66-82042A	SILDER- MAIN;PBT2002K,T12.4,L206.2,NAT,DX-5	TSEC LOCAL
B252	AC66-20019A	GEAR-LOADING L ASSY;-,-,-,PACKAGE,-,X-5,-	TSEC LOCAL
B253	V1473-0105-00	GEAR LOADING R ASSY;-,-,-,-,X5,-	TSEC LOCAL
B254	AC61-60115A	SPRING-BRAKE CAPSTAN;ES,SUS304WPB,PI0.4,D22,L16.1(	TSEC LOCAL
B255	AC66-20003A	GEAR-MASTER;POM (M90-44),M 1,Z 60,SP,-,X-5	TSEC LOCAL
B256	AC31-12001R	MOTOR-D/D CAPSTAN;DMVCMC06A,-	TSEC LOCAL
B257	AC66-62008A	BELT-CAPSTAN;5CM-70 FR,W2 T2 L88.6,-,-,-,-,	
B258	AC66-20066A	CLUTCH-ASSY;-,-,-,-,X5,-	TSEC LOCAL
B259	V1533-0095-00	LEVER-SLIDER PINCH;PBT,T4,NAT,-,-,-	TSEC LOCAL
B260	AC66-20016A	GEAR- WORM WHEEL;POM SW-01,M0.55/M1,Z57/Z10,GEA	TSEC LOCAL
B261	AC66-30011A	LEVER- SHIFT;PBT2002K,T10.9,L35,-,-,-	TSEC LOCAL
B262	AC66-30012A	LEVER- IDELR CHANGE;PBT330,T3.3,L50,-,W6.0,-	TSEC LOCAL
B263	AC61-60111A	SPRING-LEVER SHIFT;TS,SWPB,PI0.7,D5.5,L13.8(OD6.9	TSEC LOCAL
B264	AC59-90001A	UNIT-LOADING ASSY;X-5,-,-	TSEC LOCAL
B265	66823-0060-00	MOTOR-LOADING ASSY;POM+RF370C X-5	TSEC LOCAL
B266	AC66-20039A	GEAR- WORM LO;PBT 2002K,-,-,-,D4.5,3,-	TSEC LOCAL
B267	AC61-20224A	HOLDER SHAFT;POM M90-44,T1.25,NAT,PI5XH5.5,	TSEC LOCAL
B268	AC66-30149A	BRAKE CAPSTAN-ASSY;POM,-,-,-,X5,-	TSEC LOCAL

## 6-4 Housing Assembly



Loc. No	Part No	Description and Specification	Remark
902	AC60-10051A	SCREW-TAPPING;BH,-,-,M3,L8,FZY	TSEC LOCAL
914	AC60-10067A	SCREW-TAPTITE;PWH,+,-,M3,L8,MFZN2-C,SWCH1018	TSEC LOCAL
H500	AC61-82005A	HOUSING-ASSY;-X7FL26280A,230X130X60,-,X-7	TSEC LOCAL
H510	AC61-10006A	CHASSIS- UPPER;SECC 20/20,-,T1.0,BLK,-,X5,-	TSEC LOCAL
H520	63322-0317-00	HOLDER-CASSETTE ASSY;-X5FL06080A,-,-,-,X-7(CODO)	TSEC LOCAL
H521	AC61-20083A	HOLDER-CASSETTE;-SECC T1.2,-,NAT,-,X-7(CODO)	TSEC LOCAL
H522	AC66-30018A	LEVER-LOCK R;SECC 20/20,T1.2,L44,W32,-,-	TSEC LOCAL
H524	AC61-60121A	SPRING-LEVER LOCK;ES,SUS304 WPB,PI0.2,D2.6,L9.9(	TSEC LOCAL
H526	AC66-30019A	LEVER-KEY CASSETTE;LUCEL N109-LD,T2.5,L20,W15.2,-	TSEC LOCAL
H530	62203-0105-00	CHASSIS-SIDE L(ASSY);ABS X5FL0505A X-5	TSEC LOCAL
H531	AC61-10004A	CHASSIS- SIDE L;ABS HF-380,-,T10,BLK,-,X5,BLK	TSEC LOCAL
H532	AC66-30004A	LEVER- LIGHT SHUTTER;LUCEL N109-LD,T2.5,L61.7,BLK,	TSEC LOCAL
H533	AC61-60142A	SPRING- LIGHT;ES,SUS304WPB,PI0.2,L11.4(OD3.7	TSEC LOCAL
H535	AC66-30017A	LEVER- DOOR;LUCELN109-LD,T5,L74.3,W21.1,-,	TSEC LOCAL
H540	62203-0104-00	CHASSIS-SIDE R(ASSY);ABS X5FL0505A X-5	TSEC LOCAL
H541	AC61-10003A	CHASSIS- SIDE R;ABS HF-380,-,T10,BLK,-,X5,BLK	TSEC LOCAL
H542	AC66-80008A	SLIDER DAMPER;LUCEL N109-LD,T4,L87,-,-,-	TSEC LOCAL
H543	AC61-60120A	SPRING-SLIDE DAMPER;ES,SUS 304WPB,PI0.4,D3.8,L25(O	TSEC LOCAL
H544	AC66-30016A	LEVER- LID OPENER;LUCEL N109-LD,T5.0,L34.7,W16.6	TSEC LOCAL
H545	AC61-60123A	SPRING-LID OPENER;TS,SWPB,PI0.55,D8.9,L15(OD10),	TSEC LOCAL
H550	61403-0073-00	SHAFT-ARM(ASSY);SUM24L X5FL0405A X-5	TSEC LOCAL

# MEMO

# 7. Electrical Parts List

Loc.No	Part No	Desc and Spec	Remark	Loc.No	Part No	Desc and Spec	Remark
<b>601</b>	<b>DO NOT ORDER</b>	<b>ASSY-MAIN</b>	<b>(S.N.A)</b>	Q1P05	0501-000610	TR-SMALL SIGNAL;KSA928A-Y,PNP,1W,TO-92L,TP,160	
<b>SMPS/POWER PARTS</b>				R1P01	2004-000571	R-METAL;220OHM,5%,1/4W,AA,TP,2.4X6.4MM	TSEC LOCAL
C1P02	2401-001915	C-AL;1UF,20%,50V,GP,TP,3X5,1MM	TSEC LOCAL	R1P02	2004-001096	R-METAL;560OHM,5%,1/4W,AA,TP,2.4X6.4MM	TSEC LOCAL
C1P04	2401-001912	C-AL;1UF,20%,50V,GP,BK,5X11MM,2MM	TSEC LOCAL	R1P03	2004-001096	R-METAL;560OHM,5%,1/4W,AA,TP,2.4X6.4MM	TSEC LOCAL
C1S01	2305-001021	△ C-FILM,MPEF;100NF,20%,275V,TP,17.5X7X13.5,	TSEC LOCAL	R1P04	2004-001096	R-METAL;560OHM,5%,1/4W,AA,TP,2.4X6.4MM	TSEC LOCAL
C1S02	2201-000934	△ C-CERAMIC,DISC;3.3NF,20%,400V,Y5P,TP,18X8,10	TSEC LOCAL	R1P05	2001-000761	R-CARBON;430OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C1S03	2201-000808	△ C-CERAMIC,DISC;2.2NF,10%,400V,Y5P,TP,12X7.5,7	TSEC LOCAL	R1P06	2001-000405	R-CARBON;180OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C1S11	2401-001682	△ C-AL;82UF,20%,400V,GP,BK,22X25,10MM	TSEC LOCAL	R1P07	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C1S12	2301-000140	C-FILM,PEF;10NF,10%,630V,BK,16.5X9.5X5.7X	TSEC LOCAL	R1P08	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C1S13	2201-000915	C-CERAMIC,DISC;100PF,10%,1KV,Y5P,TP,6X5,5	TSEC LOCAL	R1P09	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C1S18	2301-000224	C-FILM,PEF;22NF,5%,50V,TP,7.4X3.9X13MM,5M	TSEC LOCAL	R1P10	2001-000761	R-CARBON;430OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C1S19	2401-001912	C-AL;1UF,20%,50V,GP,BK,5X11MM,2MM	TSEC LOCAL	R1P11	2004-001096	R-METAL;560OHM,5%,1/4W,AA,TP,2.4X6.4MM	TSEC LOCAL
C1S20	2301-000224	C-FILM,PEF;22NF,5%,50V,TP,7.4X3.9X13MM,5M	TSEC LOCAL	R1S11	2006-000262	R-CEMENT;2.7OHM,10%,2W,CB,ST,7.5X11X20.	TSEC LOCAL
C1S21	2401-000970	C-AL;22UF,20%,50V,WT,TP,5X11,2MM	TSEC LOCAL	R1S12	2001-000076	R-CARBON;47KOHM,5%,1/4W,AA,TP,2.4X6.4MM	TSEC LOCAL
C1S30	2401-000385	C-AL;10UF,20%,100V,GP,-,6.3X11,2.5M	TSEC LOCAL	R1S13	2001-000076	R-CARBON;47KOHM,5%,1/4W,AA,TP,2.4X6.4MM	TSEC LOCAL
C1S32	2401-001998	C-AL;1000UF,20%,25V,GP,TP,10X20,5MM	TSEC LOCAL	R1S14	2001-000076	R-CARBON;47KOHM,5%,1/4W,AA,TP,2.4X6.4MM	TSEC LOCAL
C1S33	2401-000303	C-AL;100UF,20%,25V,GP,TP,6.3X11,2.5	TSEC LOCAL	R1S15	2001-000076	R-CARBON;47KOHM,5%,1/4W,AA,TP,2.4X6.4MM	TSEC LOCAL
C1S34	2401-001992	C-AL;2200UF,20%,10V,GP,TP,10X20MM,5	TSEC LOCAL	R1S17	2003-000273	R-METAL OXIDE;33KOHM,5%,2W,AA,TP,6X16MM	TSEC LOCAL
C1S35	2401-000303	C-AL;100UF,20%,25V,GP,TP,6.3X11,2.5	TSEC LOCAL	R1S21	2003-000273	R-METAL OXIDE;33KOHM,5%,2W,AA,TP,6X16MM	TSEC LOCAL
C1S36	2401-001583	C-AL;47UF,20%,50V,WT,TP,6.3X11,2.5M	TSEC LOCAL	R1S22	2003-000148	R-METAL OXIDE;100OHM,5%,2W,AE,TP,6X16MM	TSEC LOCAL
C1S37	2401-001355	C-AL;470UF,20%,10V,GP,-,8X11,5,5MM	TSEC LOCAL	R1S23	2001-000302	R-CARBON;10OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C1S38	2301-000129	C-FILM,PEF;100NF,5%,50V,TP,10X9X4.3X5,5MM	TSEC LOCAL	R1S30	2001-000515	R-CARBON;220OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C1S39	2301-000383	C-FILM,PEF;10NF,5%,50V,TP,6X7X3.2MM,5MM	TSEC LOCAL	R1S31	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
CN1S1	3711-000178	△ CONNECTOR-HEADER;1WALL,2P,1R,3.96MM,STRA	TSEC LOCAL	R1S32	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D1P01	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	TSEC LOCAL	R1S33	2004-000869	R-METAL;3KOHM,1%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D1P02	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	TSEC LOCAL	R1S34	2004-000459	R-METAL;2.2KOHM,1%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
D1P04	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	VA1S01	1405-000186	△ VARISTOR;470V,4500A,17X12MM,TP	TSEC LOCAL
D1P05	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	VA1S02	1405-000186	△ VARISTOR;470V,4500A,17X12MM,TP	TSEC LOCAL
D1S01	0402-0001009	△ DIODE-RECTIFIER;1SR139,600V,1A,MSR	TSEC LOCAL	ZD1P02	0403-000539	DIODE-ZENER;MTZ18C,18V,17.42-18.33V,500MW,	TSEC LOCAL
D1S02	0402-0001009	△ DIODE-RECTIFIER;1SR139,600V,1A,MSR	TSEC LOCAL	ZD1P03	0403-000563	DIODE-ZENER;MTZ9.1B,9.1V,8.57-9.01V,500MW,	TSEC LOCAL
D1S03	0402-0001009	△ DIODE-RECTIFIER;1SR139,600V,1A,MSR	TSEC LOCAL	ZD1P05	0403-000295	DIODE-ZENER;MTZ5.1B,5.1V,4.94-5.20V,500MW,	TSEC LOCAL
D1S04	0402-0001009	△ DIODE-RECTIFIER;1SR139,600V,1A,MSR	TSEC LOCAL	ZD1S11	0403-000539	DIODE-ZENER;MTZ18C,18V,17.42-18.33V,500MW,	TSEC LOCAL
D1S11	0402-000378	DIODE-RECTIFIER;EG01C,1000V,500MA,DO-41	TSEC LOCAL	ZD1S12	0403-000294	DIODE-ZENER;MTZ4.7B,4.7V,4.55-4.80V,500MW,	TSEC LOCAL
D1S12	0402-0001013	DIODE-RECTIFIER;1SR153-400,400V,800MA,DO-41	TSEC LOCAL	<b>SYSTEM CONTROL/SERVO PARTS</b>			
D1S30	0402-0001013	DIODE-RECTIFIER;1SR153-400,400V,800MA,DO-41	TSEC LOCAL	C601	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
D1S32	0402-0001069	DIODE-RECTIFIER;RL10Z,200V,2A,DO,TP	TSEC LOCAL	C602	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL
D1S33	0402-000431	DIODE-RECTIFIER;FML-M02S,200V,2.5A,TO-220F	TSEC LOCAL	C603	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL
D1S34	0402-0001013	DIODE-RECTIFIER;1SR153-400,400V,800MA,DO-41	TSEC LOCAL	C604	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
D1S35	0402-0001013	DIODE-RECTIFIER;1SR153-400,400V,800MA,DO-41	TSEC LOCAL	C605	2202-000791	C-CERAMIC,MLC-AXIAL;150PF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL
F1S01	A3065-0157	△ FUSE;FST 250V 1.6A 20MM SEMKO S505 C	TSEC LOCAL	C606	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
IC1P01	0403-000390	DIODE-ZENER;UZP33B,33V,31.4-34.6V,1W,DO-41	TSEC LOCAL	C607	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
IC1S11	B4161-0030	△ PHOTO-COUPLER;PS2561-1 ST DIP	TSEC LOCAL	C608	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL
IC1S12	1203-001049	△ IC-PWM CONTROLLER;1L0380,TO-220F,4P,10MIL,PLASTI	TSEC LOCAL	C609	2201-000646	C-CERAMIC,DISC;68NF,+80-20%,50V,Y5V,TP,12.5X4	TSEC LOCAL
IC1S31	AC14-12006D	△ IC;KA431Z,TO-92,TAPING	TSEC LOCAL	C610	2301-000471	C-FILM,PEF;68NF,5%,50V,TP,9X12X4.5MM,5MM	TSEC LOCAL
L1S02	A1151-0042	△ COIL-LINE FILTER;BSF-2120Z 25MH 3.2OHM	TSEC LOCAL	C6101	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25V,Y5V,TP,3.5X	TSEC LOCAL
L1S03	AC27-92001M	△ INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	TSEC LOCAL	C6102	2202-000781	C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL
L1S12	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	TSEC LOCAL	C6103	2202-000216	C-CERAMIC,MLC-AXIAL;27PF,5%,50V,SL,TP,3.5X19,-	TSEC LOCAL
L1S30	AC27-12001N	COIL-CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-,	TSEC LOCAL	C6104	2202-000216	C-CERAMIC,MLC-AXIAL;27PF,5%,50V,SL,TP,3.5X19,-	TSEC LOCAL
L1S31	AC27-12001N	COIL-CHOKE;10UH-15%,RA,K-30,Q80,150KHZ,-,	TSEC LOCAL	C6105	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
L1S32	AC27-92001M	INDUCTOR;70UH-M RT BFS3565R2F,-,-,-,-	TSEC LOCAL	C6106	2301-000392	C-FILM,PEF;15NF,5%,50V,TP,6.5X8.5X3.2MM,5	TSEC LOCAL
PT1S01	AC26-20120A	△ TRANS-SWITCHING;-;220V,UJ,CSA,-,1000UH,-,SV-D1	TSEC LOCAL	C6107	2202-000162	C-CERAMIC,MLC-AXIAL;15PF,5%,50V,SL,3.5X19,-,TP	TSEC LOCAL
Q1P01	0501-000616	TR-SMALL SIGNAL;KSC2328A-Y,PNP,1W,TO-92L,TP,160	TSEC LOCAL	C611	2201-000928	C-CERAMIC,DISC;2.7NF,20%,16V,Y5R,TP,3.5X1.9,-	TSEC LOCAL
Q1P02	0502-000213	TR-POWER;2SD1944,NPN,30W,TO-220FP,-,400	TSEC LOCAL	C6114	2202-000145	C-CERAMIC,MLC-AXIAL;120PF,10%,50V,Y5P,3.5X19,7.5	TSEC LOCAL
Q1P03	0504-000142	TR-DIGITAL;KSR2001,PNP,300MW,4.7K-4.7K,TO	TSEC LOCAL	C6116	2202-000205	C-CERAMIC,MLC-AXIAL;22PF,5%,50V,SL,1.9X3.5,-,TP	TSEC LOCAL
Q1P04	0504-000118	TR-DIGITAL;KSR1003,NPN,300MW,22K-22K,TO-9	TSEC LOCAL	C6117	2202-000205	C-CERAMIC,MLC-AXIAL;22PF,5%,50V,SL,1.9X3.5,-,TP	TSEC LOCAL

Electrical Parts List

Loc.No	Part No	Desc and Spec	Remark	Loc.No	Part No	Desc and Spec	Remark
C6119	2401-001511	C-AL;47UF,20%,16V,GP,-6X7,5	TSEC LOCAL	D6108	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	TSEC LOCAL
C6120	2202-000791	C-CERAMIC,MLC-AXIAL;150PF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL	D6120	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	TSEC LOCAL
C6120	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	IC601	AC09-10454W	IC-MCU;HD6433976RAF,C10G,100P,QFP,SV-	
C6122	2401-001952	C-AL;4.7UF,20%,50V,-,TP,6.3X7,5	TSEC LOCAL	IC602	AC14-12003K	IC;KA8301(N.M.);-	
C6123	2401-001511	C-AL;47UF,20%,16V,GP,-6X7,5	TSEC LOCAL	IC603	1201-000230	IC-OP AMP;6324,DIP,14P,-,QUAD,15/100MV,P	
C6124	2401-001325	C-AL;470NF,20%,50V,GP,TP,3X5,5	TSEC LOCAL	IC604	AC14-12006C	IC;KA7533,DIP,-	
C6126	2401-000419	C-AL;10UF,20%,16V,GP,-4X7,5	TSEC LOCAL	IC605	AC11-12001H	IC-EEPROM;24LC02B/P,DIP,-	
C613	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	IC606	AC14-12001G	IC;KA78L05,T,-	
C614	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	L601	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL
C615	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	L602	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL
C616	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL	L603	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL
C617	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL	L604	2701-000131	INDUCTOR-AXIAL;15UH,5%,2.4X3.4MM	TSEC LOCAL
C618	2202-000850	C-CERAMIC,MLC-AXIAL;2.2NF,30%,16V,Y5R,TP,3.5X19.9	TSEC LOCAL	L6101	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL
C619	2202-000781	C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL	L6103	2701-000117	INDUCTOR-AXIAL;10UH,5%,2.4X3.4MM	TSEC LOCAL
C620	2202-000781	C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL	LD601	0601-000495	LED-IR;ROUND,3MM,150MW,6V,950NM,BK	
C621	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	PT601	0604-000188	PHOTO-INTERRUPTER;TR,-,-,DIP-4,TR	
C622	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25V,Y5V,TP,3.5X	TSEC LOCAL	PT602	0604-000188	PHOTO-INTERRUPTER;TR,-,-,DIP-4,TR	
C623	2202-000162	C-CERAMIC,MLC-AXIAL;15PF,5%,50V,SL,3.5X19,-,TP	TSEC LOCAL	Q601	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-	
C624	2202-000162	C-CERAMIC,MLC-AXIAL;15PF,5%,50V,SL,3.5X19,-,TP	TSEC LOCAL	Q602	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-	
C625	2202-000162	C-CERAMIC,MLC-AXIAL;15PF,5%,50V,SL,3.5X19,-,TP	TSEC LOCAL	Q603	0501-000231	TR-SMALL SIGNAL;2SD1468SQ,NPN,300MW,TO-92S,TP,	
C626	2202-000162	C-CERAMIC,MLC-AXIAL;15PF,5%,50V,SL,3.5X19,-,TP	TSEC LOCAL	Q604	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120	
C627	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25V,Y5V,TP,3.5X	TSEC LOCAL	Q605	0504-000203	TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9	
C628	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25V,Y5V,TP,3.5X	TSEC LOCAL	Q606	0504-000203	TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9	
C629	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	Q6101	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-	
C630	2301-000129	C-FILM,PEF;100NF,5%,50V,TP,10X9X4.3X5,5MM	TSEC LOCAL	Q6102	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-	
C633	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	TSEC LOCAL	Q6106	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-	
C635	2401-001511	C-AL;47UF,20%,16V,GP,-6X7,5	TSEC LOCAL	Q6108	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120	
C636	2401-001978	C-AL;47UF,20%,25V,GP,TP,6.3X5,5	TSEC LOCAL	R601	2001-000832	R-CARBON;510OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C637	2401-001978	C-AL;47UF,20%,25V,GP,TP,6.3X5,5	TSEC LOCAL	R602	2001-000679	R-CARBON;36KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C638	2401-001915	C-AL;1UF,20%,50V,GP,TP,3X5,1MM	TSEC LOCAL	R604	2001-000010	R-CARBON;68KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C639	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	TSEC LOCAL	R608	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C640	2401-001511	C-AL;47UF,20%,16V,GP,-6X7,5	TSEC LOCAL	R610	2004-000218	R-METAL;10KOHM,1%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C641	2401-000753	C-AL;220NF,20%,50V,GP,TP,3X5,5	TSEC LOCAL	R6101	2001-000258	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C642	2401-000918	C-AL;22UF,20%,16V,GP,-6.3X7,5	TSEC LOCAL	R6102	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C643	2401-001036	C-AL;33UF,20%,16V,GP,TP,6.3X5,5	TSEC LOCAL	R6103	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C644	A1104-0611	C-ELEC;CE 04 -40/85 16V T 100-M SRE 3.5X5 10UF	TSEC LOCAL	R6104	2001-000773	R-CARBON;470KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C645	2401-001915	C-AL;1UF,20%,50V,GP,TP,3X5,1MM	TSEC LOCAL	R6105	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C647	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	R6106	2001-000435	R-CARBON;1MOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C650	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	R6107	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C651	2401-001511	C-AL;47UF,20%,16V,GP,-6X7,5	TSEC LOCAL	R6109	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C652	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	R6110	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
CN602	3711-002445	CONNECTOR-HEADER;BOX,2P,2R,1.5MM,STRAIGHT,SN		R6111	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
CN603	3711-003105	CONNECTOR-HEADER;BOX,10P,2R,2.0MM,STRAIGHT,SN		R6112	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
CN605	3708-001048	CONNECTOR-FPC/FC/PIC;12P,1.25MM,STRAIGHT,SN	TSEC LOCAL	R6113	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
CN607	3708-001165	CONNECTOR-FPC/FC/PIC;6P,1.25MM,STRAIGHT,SN		R6115	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D601	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	TSEC LOCAL	R6116	2001-001031	R-CARBON;91KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D602	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	R6117	2001-000850	R-CARBON;560KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
D604	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	R6119	61048-177-563	R-CARBON;RD 1/8 T 563-J	TSEC LOCAL
D605	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	TSEC LOCAL	R612	2004-000218	R-METAL;10KOHM,1%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D606	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	R6120	2001-000435	R-CARBON;1MOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D607	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	R6121	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D608	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	R6122	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D609	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	R6123	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D610	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	R6124	2001-000633	R-CARBON;30KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D6101	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	R6125	2001-000633	R-CARBON;30KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D6103	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	R6128	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D6104	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	R6129	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D6105	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	R6130	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D6106	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	R6131	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
D6107	0402-000127	DIODE-RECTIFIER;1N4002,100V,1A,DO-41	TSEC LOCAL	R6132	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL



Electrical Parts List

Loc.No	Part No	Desc and Spec	Remark	Loc.No	Part No	Desc and Spec	Remark
C350	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	C511	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
C351	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	C512	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
C352	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	TSEC LOCAL	C513	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
C353	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	CN301	3708-000391	CONNECTOR-FPC/FC/PC;10P,1.25MM,STRAIGHT,SN	
C355	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	CN3A01	3708-001053	CONNECTOR-FPC/FC/PC;7P,1.25MM,STRAIGHT,SN	TSEC LOCAL
C356	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	CN3A02	3711-000371	CONNECTOR-HEADER;-2P,1R,2MM,STRAIGHT,-	
C357	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	FL3A01	AC27-80100A	COIL-OSC;126QN-K5272YHC-K,-,AM	TSEC LOCAL
C358	2401-001912	C-AL;1UF,20%,50V,GP,BK,5X11MM,2MM	TSEC LOCAL	IC301	1204-001056	IC-SIGNAL PROCESSOR;SS11501M,QFP,80P,-,PLASTIC	
C359	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	IC302	AC14-12014L	IC-LINEAR;LA7411,DIP,PRE-AMP	
C360	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	IC303	1209-001024	IC-DELAY LINE;SS23378M,SOP,14P,225MIL,PLASTI	
C361	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	TSEC LOCAL	IC502	1204-001049	IC-SOUND;LA7256,DIP,24P,300MIL,PLASTIC,	
C362	2401-001912	C-AL;1UF,20%,50V,GP,BK,5X11MM,2MM	TSEC LOCAL	L301	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL
C363	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25V,Y5V,TP,3.5X	TSEC LOCAL	L303	2701-000206	INDUCTOR-AXIAL;56UH,5%,2.4X3.4MM	TSEC LOCAL
C364	2401-001912	C-AL;1UF,20%,50V,GP,BK,5X11MM,2MM	TSEC LOCAL	L304	2702-000176	INDUCTOR-RADIAL;56UH,5%,6X6.4MM	TSEC LOCAL
C366	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	L305	2701-000181	INDUCTOR-AXIAL;33UH,5%,2.4X3.4MM	TSEC LOCAL
C367	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	L308	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL
C368	2202-000854	C-CERAMIC,MLC-AXIAL;47NF,30%,50V,Y5R,TP,3.5X1.9.	TSEC LOCAL	L3A02	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL
C369	2401-001912	C-AL;1UF,20%,50V,GP,BK,5X11MM,2MM	TSEC LOCAL	L3A03	2702-000120	INDUCTOR-RADIAL;15MH,5%,6.2X7.4MM	TSEC LOCAL
C370	B1102-0113	C-FILM;CQ 922 P 100V 473-J CQ298PVT473J ECQV473J		L3A04	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL
C371	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	L501	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL
C372	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	Q302	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120	
C373	2301-000439	C-FILM,PEF;3NF,5%,50V,TP,5.5X7X3MM,5MM	TSEC LOCAL	Q303	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120	
C374	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	Q304	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-	
C375	2202-000162	C-CERAMIC,MLC-AXIAL;15PF,5%,50V,SL,3.5X19,-,TP	TSEC LOCAL	Q306	0504-000203	TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9	
C376	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL	Q307	0504-000203	TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9	
C377	2202-000781	C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y5P,TP,3.5X19,	TSEC LOCAL	Q308	0504-000203	TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9	
C380	2401-001905	C-AL;10UF,20%,16V,BP,BK,6X11MM,2.5M	TSEC LOCAL	Q309	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-	
C3A01	2401-001893	C-AL;100UF,20%,16V,GP,TP,6.3X7MM,5	TSEC LOCAL	Q310	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120	
C3A02	B1102-0113	C-FILM;CQ 922 P 100V 473-J CQ298PVT473J ECQV473J		Q312	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-	
C3A03	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5	TSEC LOCAL	Q3A01	0501-000231	TR-SMALL SIGNAL;2SD1468SQ,NPN,300MW,TO-92S,TP,	
C3A04	2301-000299	C-FILM,PEF;6.8NF,5%,100V,TP,5.8X12.5MM,5M	TSEC LOCAL	Q3A02	0501-000231	TR-SMALL SIGNAL;2SD1468SQ,NPN,300MW,TO-92S,TP,	
C3A05	2301-000445	C-FILM,PEF;4.7NF,5%,50V,TP,5.5X7X3MM,5MM	TSEC LOCAL	Q3A03	0501-000010	TR-SMALL SIGNAL;KSC1008-Y,NPN,80V,60V,700MA,80	
C3A06	2301-000408	C-FILM,PEF;2.7NF,5%,50V,TP,5.5X7X3MM,5MM	TSEC LOCAL	Q3A04	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120	
C3A07	2301-000400	C-FILM,PEF;1NF,10%,50V,TP,5.5X7X2.8MM,5MM	TSEC LOCAL	Q3A05	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-	
C3A08	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	TSEC LOCAL	Q3A06	0504-000203	TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9	
C3A09	2401-003122	C-AL;4.7UF,20%,50V,LL,TP,4X7,1.5	TSEC LOCAL	R302	2001-000302	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C3A10	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	TSEC LOCAL	R303	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C3A11	2401-000918	C-AL;22UF,20%,16V,GP,-,6.3X7,5	TSEC LOCAL	R305	2001-000258	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C3A12	2301-000381	C-FILM,PEF;10NF,5%,50V,TP,6.5X5.5X3MM,5MM	TSEC LOCAL	R306	61048-177-563	R-CARBON;RD 1/8 T 563-J	TSEC LOCAL
C3A15	2401-001912	C-AL;1UF,20%,50V,GP,BK,5X11MM,2MM	TSEC LOCAL	R307	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C3A16	2401-001912	C-AL;1UF,20%,50V,GP,BK,5X11MM,2MM	TSEC LOCAL	R309	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C3A17	2301-000464	C-FILM,PEF;6.8NF,5%,50V,TP,5.5X7X3MM,5MM	TSEC LOCAL	R310	2001-000613	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C3A18	2301-000464	C-FILM,PEF;6.8NF,5%,50V,TP,5.5X7X3MM,5MM	TSEC LOCAL	R311	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C3A19	2301-000314	C-FILM,PEF;8.2NF,5%,50V,6.5*3.0*5.5MM,5MM	TSEC LOCAL	R312	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C3A21	2401-000918	C-AL;22UF,20%,16V,GP,-,6.3X7,5	TSEC LOCAL	R313	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C3A22	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	TSEC LOCAL	R314	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C3A23	2401-001169	C-AL;33UF,20%,16V,GP,-,6.3X7,2.5MM	TSEC LOCAL	R315	2001-000613	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C3A25	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	R316	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C3A26	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	TSEC LOCAL	R317	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C3A27	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	TSEC LOCAL	R318	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C3A28	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	R319	2001-000005	R-CARBON;390OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C3A29	2301-000383	C-FILM,PEF;10NF,5%,50V,TP,6X7X3.2MM,5MM	TSEC LOCAL	R320	2001-000577	R-CARBON;2KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C3A30	2301-000392	C-FILM,PEF;15NF,5%,50V,TP,6.5X8.5X3.2MM,5	TSEC LOCAL	R321	2001-000005	R-CARBON;390OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C501	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	R322	2001-001015	R-CARBON;9.1KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C504	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	R323	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C505	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	R324	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C506	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	R325	2001-000003	R-CARBON;330OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C507	2401-001893	C-AL;100UF,20%,16V,GP,TP,6.3X7MM,5	TSEC LOCAL	R327	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C508	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	R328	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C509	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	R329	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL

Loc.No	Part No	Desc and Spec	Remark	Loc.No	Part No	Desc and Spec	Remark
R331	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	D401	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL
R332	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	D402	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL
R333	2001-000977	R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	D403	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL
R334	2001-000258	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	D404	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL
R335	2001-000319	R-CARBON;120KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	IC402	AC14-12001G	IC;KA78L05,T-	
R337	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	JC401	AC37-20001G	JACK-RCA;DPAE-,6P,HIFI,PI3.3	
R338	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	L402	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL
R339	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	L404	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL
R340	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	Q402	0504-000142	TR-DIGITAL;KSR2001,PNP,300MW,4.7K-4.7K,TO	
R341	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	Q403	0504-000203	TR-DIGITAL;KSR1004,NPN,300MW,47K-47K,TO-9	
R352	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	Q404	0501-000303	TR-SMALL SIGNAL;KSA733-Y,PNP,250MW,TO-92,-,120	
R399	2001-000003	R-CARBON;330OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	Q405	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-	
R3A02	2001-000405	R-CARBON;180OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	R411	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R3A03	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	R412	2001-001026	R-CARBON;910OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R3A04	2001-000258	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	R415	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R3A05	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	R417	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R3A06	2001-000449	R-CARBON;2.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	R419	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R3A07	2001-000458	R-CARBON;2.2OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	R420	2001-000969	R-CARBON;75OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R3A08	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	R421	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R3A09	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	R432	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R3A10	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	SW401	3408-000127	SWITCH-SLIDE;12V,100MA,-,-	
R3A11	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	U401	AD40-20100A	RF-MODULATOR;MDLM3E301A,G/I/K/L/M	
R3A12	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	<b>602</b>	<b>AC93-10824F</b>	<b>ASSY-KARAOKE;SVK-A17GV,SV-9AK,SV-66HK (KARAOKE ONLY)</b>	
R3A13	2001-000645	R-CARBON;330KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	C5101	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5	TSEC LOCAL
R3A15	2001-000331	R-CARBON;12KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C5102	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
R3A17	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	C5103	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	TSEC LOCAL
R3A19	2001-000221	R-CARBON;1.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	C5104	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	TSEC LOCAL
R3A22	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C5105	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	TSEC LOCAL
R3A24	2001-000454	R-CARBON;2.2MOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	C5106	2401-000459	C-AL;10UF,20%,35V,GP,TP,5X7,2MM	TSEC LOCAL
R3A25	2001-000890	R-CARBON;6.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	C5107	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
R3A27	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	C5108	2202-000781	C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL
R3A28	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C5109	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL
R3A29	2001-000006	R-CARBON;2.4KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	C5110	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL
R3A30	2001-000613	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	C5111	2401-001919	C-AL;2.2UF,20%,50V,-,TP,4X7MM,5	TSEC LOCAL
R3A31	2001-000613	R-CARBON;3.9KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	C5112	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL
R3A32	2001-000904	R-CARBON;620OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C5113	2401-001893	C-AL;100UF,20%,16V,GP,TP,6.3X7MM,5	TSEC LOCAL
R3A99	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	C5114	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
R501	2001-000258	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	C5115	2301-000445	C-FILM,PEF;4.7NF,5%,50V,TP,5.5X7X3MM,5MM	TSEC LOCAL
R502	2001-000924	R-CARBON;680OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C5116	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
R503	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C5117	2201-000800	C-CERAMIC,DISC;120PF,5%,50V,SL,TP,5X3,5	TSEC LOCAL
R504	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	C5118	2401-000918	C-AL;22UF,20%,16V,GP,-,6.3X7,5	TSEC LOCAL
R505	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	C5119	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
R506	2001-000009	R-CARBON;20KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C5120	2301-000424	C-FILM,PEF;3.3NF,5%,50V,TP,5.5X7X3MM,5MM	TSEC LOCAL
XT301	B1280-0169	CRYSTAL;4.433619MHZ HC-49/U-S 15PPM SERIES	TSEC LOCAL	C5121	2301-000392	C-FILM,PEF;15NF,5%,50V,TP,6.5X8.5X3.2MM,5	TSEC LOCAL
XT302	64539-012-009	CRYSTAL;3.579545 HC49U(8PF) TAPG	TSEC LOCAL	C5122	2401-001965	C-AL;470NF,20%,50V,-,BK,4X7MM,1.5MM	TSEC LOCAL
<b>I/O PARTS</b>				C5131	2401-001019	C-AL;3.3UF,20%,50V,GP,-,5X7,1.5MM	TSEC LOCAL
C401	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	C5132	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
C403	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	C5133	2401-000918	C-AL;22UF,20%,16V,GP,-,6.3X7,5	TSEC LOCAL
C404	2202-000780	C-CERAMIC,MLC-AXIAL;100NF,+80-20%,50V,Y5V,TP,3.5	TSEC LOCAL	C5134	2401-001965	C-AL;470NF,20%,50V,-,BK,4X7MM,1.5MM	TSEC LOCAL
C431	2401-001893	C-AL;100UF,20%,16V,GP,TP,6.3X7MM,5	TSEC LOCAL	C5135	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5	TSEC LOCAL
C432	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5	TSEC LOCAL	C5137	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
C432	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	TSEC LOCAL	C5138	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	TSEC LOCAL
C433	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	C5139	2401-001965	C-AL;470NF,20%,50V,-,BK,4X7MM,1.5MM	TSEC LOCAL
C440	2202-000781	C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL	CN5101	3711-001247	CONNECTOR-HEADER;NOWALL,12P,1R,2MM,-,P-BRONZE	
C441	2202-000781	C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL	CN5102	3711-001050	CONNECTOR-HEADER;BOX,6P,1R,2.5MM,ANGLE,SN	
C442	2202-000781	C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL	D5101	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL
C443	2202-000781	C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL	D5102	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL
C444	2202-000781	C-CERAMIC,MLC-AXIAL;100PF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL	D5103	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL
C446	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	IC5101	1204-001211	IC-ECHO;BU9253AS,DIP,18P,194ML,PLASTI	
C447	2401-001975	C-AL;47UF,20%,16V,GP,TP,5X11MM,5	TSEC LOCAL	IC5102	1201-000191	IC-OP AMP;4558,DIP,8P,300ML,DUAL,20V/MV	

Electrical Parts List

Loc.No	Part No	Desc and Spec	Remark	Loc.No	Part No	Desc and Spec	Remark
L5101	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL	C545	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	TSEC LOCAL
L5102	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL	C546	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	TSEC LOCAL
Q5101	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-		C547	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	TSEC LOCAL
Q5102	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-		C548	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	TSEC LOCAL
Q5103	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-		C549	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	TSEC LOCAL
Q5104	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-		C550	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	TSEC LOCAL
Q5105	0501-000398	TR-SMALL SIGNAL;KSC945,NPN,250MW,TO-92,TP,120-		C560	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	TSEC LOCAL
R5101	2001-000258	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C561	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	TSEC LOCAL
R5102	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C570	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM (KARAOKE OPTION)	TSEC LOCAL
R5103	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C571	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM (KARAOKE OPTION)	TSEC LOCAL
R5104	2001-000563	R-CARBON;27KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C572	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM (KARAOKE OPTION)	TSEC LOCAL
R5105	2001-000010	R-CARBON;68KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C573	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM (KARAOKE OPTION)	TSEC LOCAL
R5106	61048-177-563	R-CARBON;RD 1/8 T 563-J	TSEC LOCAL	C574	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM (KARAOKE OPTION)	TSEC LOCAL
R5107	2001-000007	R-CARBON;3KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C575	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM (KARAOKE OPTION)	TSEC LOCAL
R5108	2001-001031	R-CARBON;91KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C576	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM (KARAOKE OPTION)	TSEC LOCAL
R5109	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C577	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM (KARAOKE OPTION)	TSEC LOCAL
R5110	2001-000702	R-CARBON;39KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C578	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM (KARAOKE OPTION)	TSEC LOCAL
R5111	2001-000837	R-CARBON;51KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C579	2401-000778	C-AL;220UF,20%,10V,GP,-,6.3X11,2.5M	
R5112	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C580	2401-000918	C-AL;22UF,20%,16V,GP,-,6.3X7,5	TSEC LOCAL
R5113	2001-000009	R-CARBON;20KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	C590	2401-001511	C-AL;47UF,20%,16V,GP,-,6X7,5	TSEC LOCAL
R5114	2001-000977	R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	CN501	3711-002143	CONNECTOR-HEADER;NOWALL,14P,1R,2.0MM,ANGLE,SN	
R5115	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	CN502	3711-002143	CONNECTOR-HEADER;NOWALL,14P,1R,2.0MM,ANGLE,SN	
R5116	2001-000702	R-CARBON;39KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	IC501	1204-001162	IC-AUDIO PROCESSOR;TA1246F,QFP,48P,16MIL,PLASTIC	
R5117	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	IC503	AC14-12011B	IC;NJM2283D,DIP,BULK (KARAOKE OPTION)	
R5118	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	L504	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL
R5119	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	L505	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-,-	TSEC LOCAL
R5131	2001-000411	R-CARBON;18KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	R509	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R5132	2001-000454	R-CARBON;2.2MOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	R510	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R5133	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	R511	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R5140	2001-000331	R-CARBON;12KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	R512	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R5141	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	R513	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R5142	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	R514	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R5143	2001-000977	R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	R523	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R5144	2001-000534	R-CARBON;240OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	R524	2001-000766	R-CARBON;43KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R5145	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	R525	2001-000009	R-CARBON;20KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
R5146	2001-001015	R-CARBON;9.1KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL	R530	2001-000006	R-CARBON;2.4KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
R5147	2001-000411	R-CARBON;18KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	R531	2001-000977	R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
R5150	2001-000008	R-CARBON;15KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	R532	2001-000009	R-CARBON;20KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
<b>603</b>	<b>AC93-10824S</b>	<b>ASSY-HIFI</b>		R533	2001-000563	R-CARBON;27KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C515	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	TSEC LOCAL	R540	2001-000786	R-CARBON;47KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C516	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5	TSEC LOCAL	R541	2001-000577	R-CARBON;2KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C517	2401-000918	C-AL;22UF,20%,16V,GP,-,6.3X7,5	TSEC LOCAL	R542	2001-000633	R-CARBON;30KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C518	2401-001893	C-AL;100UF,20%,16V,GP,TP,6.3X7MM,5	TSEC LOCAL	R543	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C519	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	TSEC LOCAL	R544	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C520	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	TSEC LOCAL	R545	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C521	2301-000383	C-FILM,PEF;10NF,5%,50V,TP,6X7X3.2MM,5MM	TSEC LOCAL	R546	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C522	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	TSEC LOCAL	R547	2001-000435	R-CARBON;1MOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C523	2301-000383	C-FILM,PEF;10NF,5%,50V,TP,6X7X3.2MM,5MM	TSEC LOCAL	R591	2001-000958	R-CARBON;750OHM,5%,1/8W,AA (KARAOKE OPTION)	TSEC LOCAL
C524	2301-000383	C-FILM,PEF;10NF,5%,50V,TP,6X7X3.2MM,5MM	TSEC LOCAL	R592	2001-000958	R-CARBON;750OHM,5%,1/8W,AA (KARAOKE OPTION)	TSEC LOCAL
C525	2401-000918	C-AL;22UF,20%,16V,GP,-,6.3X7,5	TSEC LOCAL	<b>670</b>		<b>ASSY-F/TIMER</b>	
C526	2401-000918	C-AL;22UF,20%,16V,GP,-,6.3X7,5	TSEC LOCAL	C526	AC93-10824E	SVK-A17GV,SV-9AK,SV-66HK (KARAOKE ONLY)	
C533	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	C533	AC93-10824K	SV-A17GV,SV-8A,SV-66H,SVR-77H (NO KARAOKE ONLY)	
C534	2401-001893	C-AL;100UF,20%,16V,GP,TP,6.3X7MM,5	TSEC LOCAL	C701	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL
C537	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	C702	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
C538	2202-000825	C-CERAMIC,MLC-AXIAL;680PF,10%,50V,Y5P,TP,3.5X19,-	TSEC LOCAL	C703	2401-001893	C-AL;100UF,20%,16V,GP,TP,6.3X7MM,5	TSEC LOCAL
C539	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	TSEC LOCAL	C704	2202-000279	C-CERAMIC,MLC-AXIAL;47PF,5%,50V,SL,3.5X19,-,TP	TSEC LOCAL
C540	2301-000383	C-FILM,PEF;10NF,5%,50V,TP,6X7X3.2MM,5MM	TSEC LOCAL	C705	2202-000279	C-CERAMIC,MLC-AXIAL;47PF,5%,50V,SL,3.5X19,-,TP	TSEC LOCAL
C541	2401-001904	C-AL;10UF,20%,16V,-,TP,4X7MM,5	TSEC LOCAL	C706	2202-000279	C-CERAMIC,MLC-AXIAL;47PF,5%,50V,SL,3.5X19,-,TP	TSEC LOCAL
C543	2401-001893	C-AL;100UF,20%,16V,GP,TP,6.3X7MM,5	TSEC LOCAL	C707	2202-000807	C-CERAMIC,MLC-AXIAL;22NF,+80-20%,25V,Y5V,TP,3.5X	TSEC LOCAL
C544	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL	C708	2401-001893	C-AL;100UF,20%,16V,GP,TP,6.3X7MM,5	TSEC LOCAL

Loc.No	Part No	Desc and Spec	Remark	Loc.No	Part No	Desc and Spec	Remark
C709	2202-000850	C-CERAMIC,MLC-AXIAL;2.2NF,30 (KARAOEK OPTION)	TSEC LOCAL	R721	2001-000924	R-CARBON;680OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C710	2401-001952	C-AL;4.7UF,20%,50V,-,TP,6.3X7.5 (KARAOEK OPTION)	TSEC LOCAL	R722	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C711	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5 (KARAOEK OPTION)	TSEC LOCAL	R723	61048-177-563	R-CARBON;RD 1/8 T 563-J (KARAOEK OPTION)	TSEC LOCAL
C712	2401-001511	C-AL;4.7UF,20%,16V,GP,-,6X7.5 (KARAOEK OPTION)	TSEC LOCAL	R724	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA (KARAOEK OPTION)	TSEC LOCAL
C713	2401-001917	C-AL;1UF,20%,50V,-,TP,5X7MM,5 (KARAOEK OPTION)	TSEC LOCAL	R725	2001-000005	R-CARBON;390OHM,5%,1/8W,AA (KARAOEK OPTION)	TSEC LOCAL
C714	2202-000796	C-CERAMIC,MLC-AXIAL;1NF,10% (KARAOEK OPTION)	TSEC LOCAL	R730	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA, (KARAOEK OPTION)	TSEC LOCAL
C715	2202-000791	C-CERAMIC,MLC-AXIAL;150PF (KARAOEK OPTION)	TSEC LOCAL	R731	2001-000522	R-CARBON;22KOHM,5%,1/8W,AA, (KARAOEK OPTION)	TSEC LOCAL
C716	2401-000918	C-AL;22UF,20%,16V,GP,-,6.3X7.5 (KARAOEK OPTION)	TSEC LOCAL	R732	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA, (KARAOEK OPTION)	TSEC LOCAL
C717	2202-000780	C-CERAMIC,MLC-AXIAL;100NF (KARAOEK OPTION)	TSEC LOCAL	R733	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA, (KARAOEK OPTION)	TSEC LOCAL
C718	2202-000791	C-CERAMIC,MLC-AXIAL;150PF (KARAOEK OPTION)	TSEC LOCAL	R734	2001-000005	R-CARBON;390OHM,5%,1/8W,AA, (KARAOEK OPTION)	TSEC LOCAL
C719	2401-000918	C-AL;22UF,20%,16V,GP,-,6.3X7.5 (KARAOEK OPTION)	TSEC LOCAL	R735	2001-000802	R-CARBON;5.6KOHM,5%,1/8W,AA (KARAOEK OPTION)	TSEC LOCAL
C720	2401-001511	C-AL;4.7UF,20%,16V,GP,-,6X7.5 (KARAOEK OPTION)	TSEC LOCAL	R736	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C721	2401-001893	C-AL;100UF,20%,16V,GP,TP,6.3 (KARAOEK OPTION)	TSEC LOCAL	R737	2001-000376	R-CARBON;15OHM,5%,1/8W,AA,T (KARAOEK OPTION)	TSEC LOCAL
C722	2202-000780	C-CERAMIC,MLC-AXIAL;100NF (KARAOEK OPTION)	TSEC LOCAL	R740	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL
C723	2401-001952	C-AL;4.7UF,20%,50V,-,TP,6.3X7.5 (KARAOEK OPTION)	TSEC LOCAL	R741	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL
C724	2202-000243	C-CERAMIC,MLC-AXIAL;33PF,5%,50V,SL,3.5X19,-,TP	TSEC LOCAL	RM701	AC59-62001G	MODULE-REMOCON;TFMR5380,38KHZ,-,-,-	
C750	2401-001952	C-AL;4.7UF,20%,50V,-,TP,6.3X7.5	TSEC LOCAL	SW701	3404-001008	SWITCH-TACT;12V,20MA,160+50,6X7.9X3.5MM,D	
CN701	3708-001048	CONNECTOR-FPC/FC/PIC;12P,1.25MM,STRAIGHT,SN	TSEC LOCAL	SW702	3404-001008	SWITCH-TACT;12V,20MA,160+50,6X7.9X3.5MM,D	
CN703	3711-002592	CONNECTOR-HEADER;3WALL (KARAOEK OPTION)		SW703	3404-001008	SWITCH-TACT;12V,20MA,160+50,6X7.9X3.5MM,D	
D701	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	SW704	3404-001008	SWITCH-TACT;12V,20MA,160+50,6X7.9X3.5MM,D	
D702	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	SW705	3404-001008	SWITCH-TACT;12V,20MA,160+50,6X7.9X3.5MM,D	
D703	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	SW706	3404-001008	SWITCH-TACT;12V,20MA,160+50,6X7.9X3.5MM,D	
D704	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	SW708	3404-001008	SWITCH-TACT;12V,20MA,160+50,6X7.9X3.5MM,D	
D705	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	SW709	3404-001008	SWITCH-TACT;12V,20MA,160+50,6X7.9X3.5MM,D	
D706	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	SW710	3404-001008	SWITCH-TACT;12V,20MA,160+50 (KARAOEK OPTION)	
D707	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	SW711	3404-001008	SWITCH-TACT;12V,20MA,160+50,6X7.9X3.5MM,D	
D711	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	VR701	2101-000268	VR-ROTARY;5KOHM,20%,1/20W, (KARAOEK OPTION)	TSEC LOCAL
D712	0401-000101	DIODE-SWITCHING;1N4148,100V,200MA,500MW,4NS	TSEC LOCAL	VR702	2101-000268	VR-ROTARY;5KOHM,20%,1/20W, (KARAOEK OPTION)	TSEC LOCAL
D713	0401-000101	DIODE-SWITCHING;1N4148,100V (KARAOEK OPTION)	TSEC LOCAL	VR703	2101-000268	VR-ROTARY;5KOHM,20%,1/20W, (KARAOEK OPTION)	TSEC LOCAL
IC701	1003-001034	IC-VFD;UPD16312,QFP,44P,9.5MIL,-,9.5M		ZD701	0403-000555	DIODE-ZENER;MTZ30D,30V,29.02-30.51V,500MW,	TSEC LOCAL
IC702	1201-001123	IC-AUDIO AMP;7760,SOP,14P (KARAOEK OPTION)		685	AC93-10824G	ASSY-MIC JACK;SVK-A17GV,SV-9AK,SV-66HK (KARAOEK ONLY)	
L701	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST101K,-,-,-	TSEC LOCAL	C761	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5P,TP,3.5X19,-	TSEC LOCAL
L702	AC27-92001B	COIL-PEAKING AXIAL;BAL04ST (KARAOEK OPTION)	TSEC LOCAL	C762	2202-000850	C-CERAMIC,MLC-AXIAL;2.2NF,30%,16V,Y5R,TP,3.5X1.9	TSEC LOCAL
LD701	0601-000497	LED;ROUND,GRN,3MM,565NM	TSEC LOCAL	CN705	3710-000543	CONNECTOR-SOCKET;6P,1R,2.0MM,ANGLE,SN	
LD702	62309-110-340	LED;GL-3HD7/GL3HD8		JACK1	3722-000441	JACK-PHONE;1P/1C,P16.4,SN,BLK,-	TSEC LOCAL
LD703	0601-000497	LED;ROUND,GRN,3MM,565NM	TSEC LOCAL	JACK2	3722-000441	JACK-PHONE;1P/1C,P16.4,SN,BLK,-	TSEC LOCAL
LD704	0601-000497	LED;ROUND,GRN,3MM,565NM	TSEC LOCAL	R763	61048-177-563	R-CARBON;RD 1/8 T 563-J	TSEC LOCAL
LD705	0601-000497	LED;ROUND,GRN,3MM,565NM	TSEC LOCAL		AC59-10357A	REMOCON-ASSY;-NR-4534,-,34,SVK-C17GV,S,S	TSEC LOCAL
LD706	0601-000497	LED;ROUND,GRN,3MM,565NM	TSEC LOCAL		AC64-50898A	DOOR-BATTERY REMOCON;-ABS94,HB,T2.0,-,DIGRY	TSEC LOCAL
LD707	0601-000497	LED;ROUND,GRN,3MM,565NM	TSEC LOCAL	CT1	2401-001954	C-AL;4.7UF,20%,50V,GP,BK,5X11MM,5	TSEC LOCAL
R701	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	CT2	2203-000239	C-CERAMIC,CHIP;100PF,5%,50V,NPO,TP,2012,-	TSEC LOCAL
R702	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	CT3	2203-000239	C-CERAMIC,CHIP;100PF,5%,50V,NPO,TP,2012,-	TSEC LOCAL
R703	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	ICT1	AC09-12014C	IC-MCU;KS51810-76,QFP,V-PAL	TSEC LOCAL
R704	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	LDT1	A4150-0168	LED-IRREDARED;SI5312-H NTR 940NM/1.4V	TSEC LOCAL
R705	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	QT1	0501-000592	TR-SMALL SIGNAL;2SD1781K-QR,NPN,200MW,SOT-23	TSEC LOCAL
R706	2001-000362	R-CARBON;150OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	RT1	2007-000483	R-CHIP;10OHM,5%,1/10W,DA,TP,2012	TSEC LOCAL
R707	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL	XT1	64539-102-311	CERAMIC RESONATOR;CSB455EBL/KBR455BKTL	TSEC LOCAL
R708	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL				
R709	2001-000780	R-CARBON;470OHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL				
R710	2001-000734	R-CARBON;4.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	TSEC LOCAL				
R711	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL				
R712	61048-177-563	R-CARBON;RD 1/8 T 563-J	TSEC LOCAL				
R713	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL				
R714	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL				
R715	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL				
R716	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL				
R717	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL				
R718	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL				
R719	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL				
R720	2001-000660	R-CARBON;33KOHM,5%,1/8W,AA,TP,1.8X3.2MM	TSEC LOCAL				

# MEMO

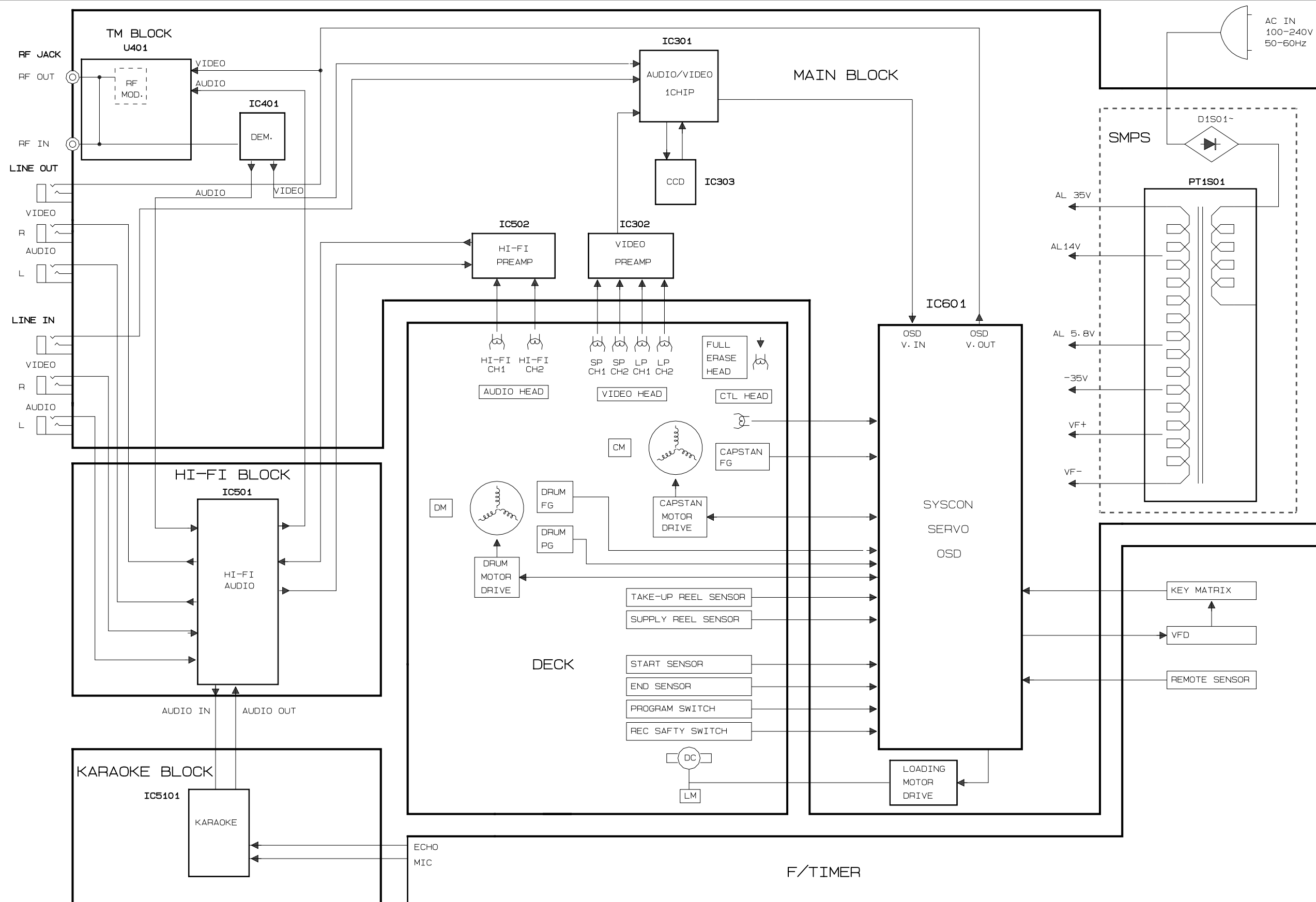
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## 8. Block Diagrams

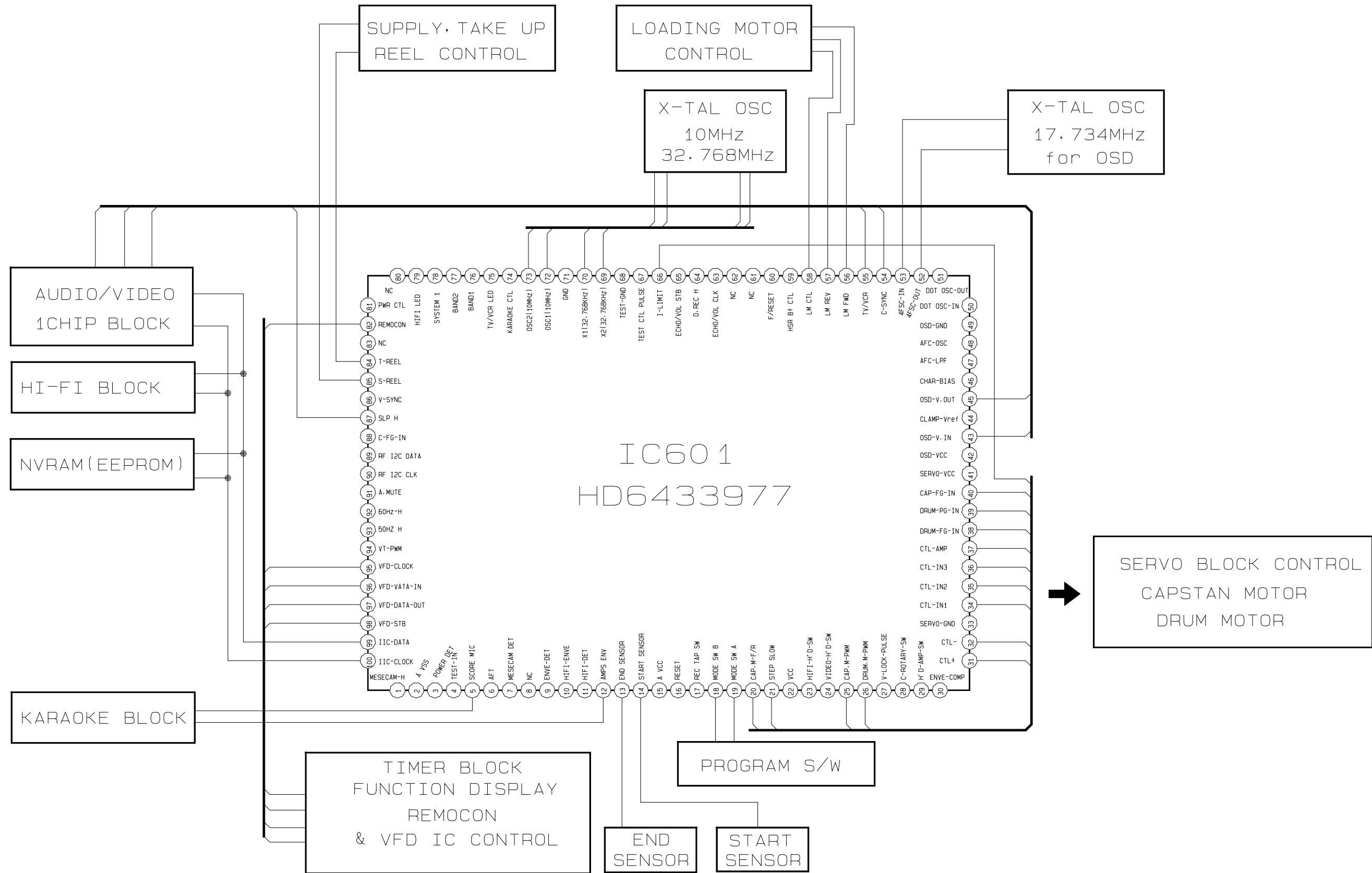
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	<b>Page</b>
<b>8-1 Overall Block Diagram</b> - - - - -	<b>8-2</b>
<b>8-2 System Control</b> - - - - -	<b>8-3</b>
<b>8-3 Video</b> - - - - -	<b>8-4</b>
<b>8-4 Hi-Fi Audio</b> - - - - -	<b>8-5</b>

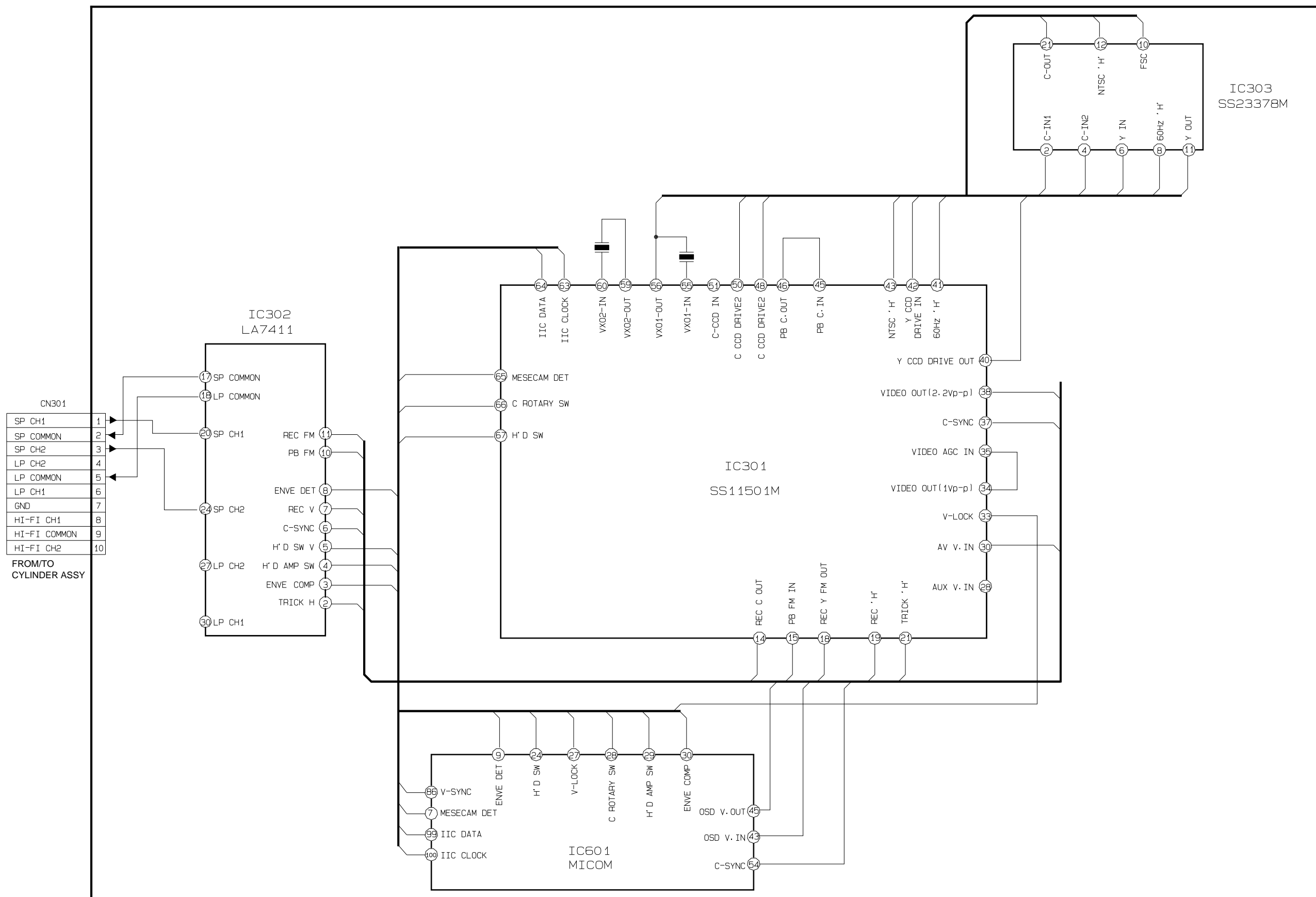
### 8-1 Overall Block Diagram



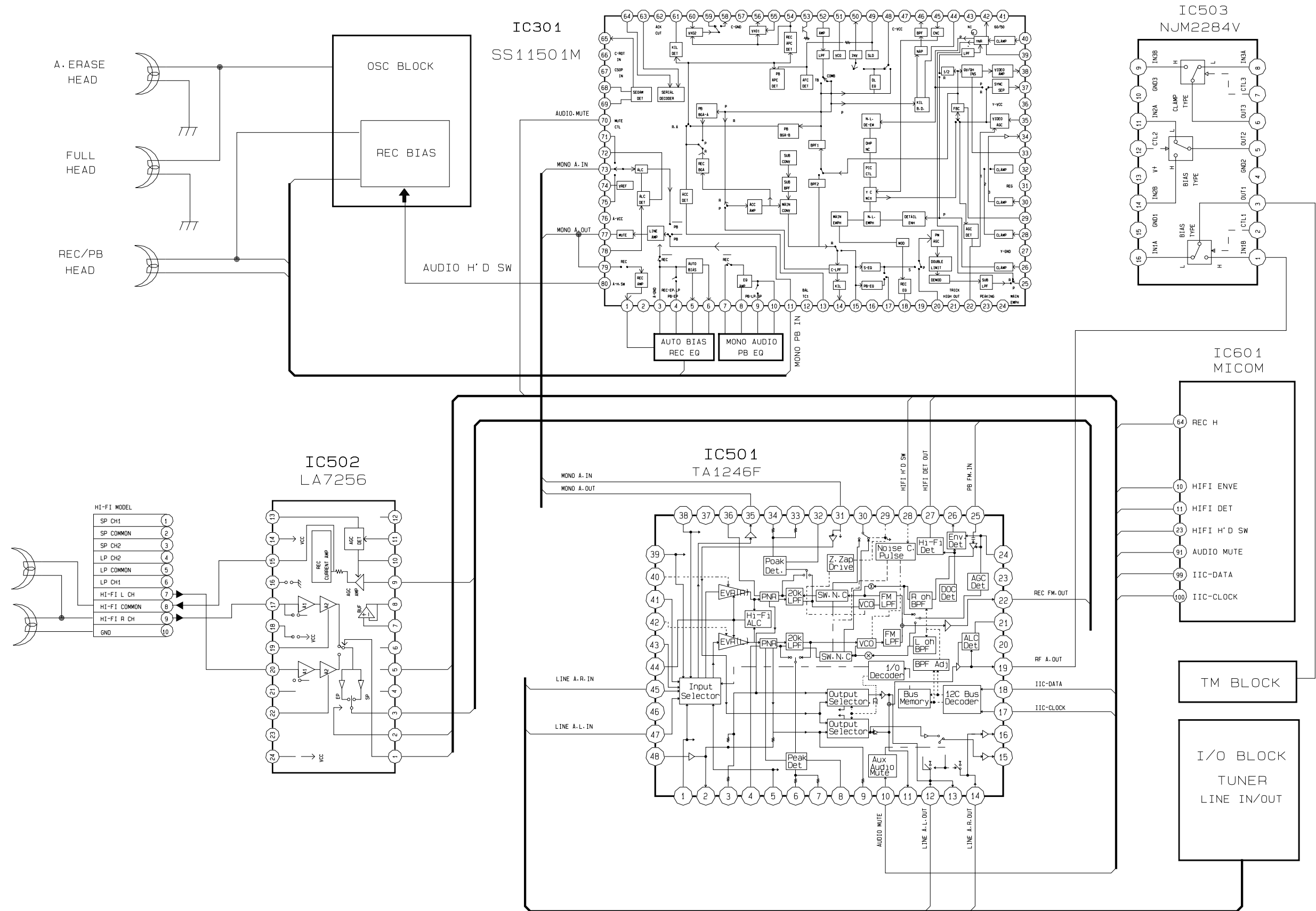
8-2 System Control



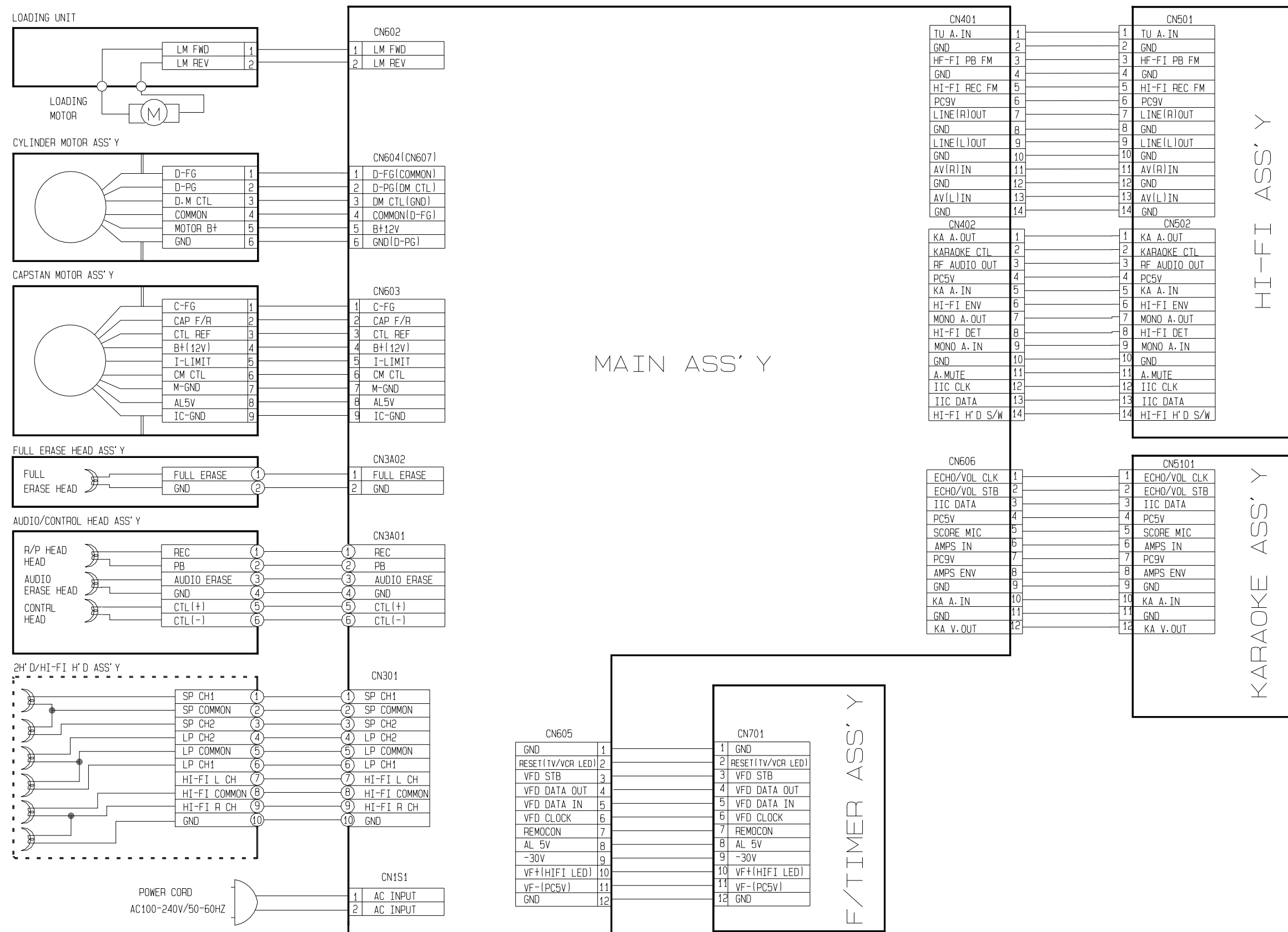
### 8-3 Video



### 8-4 Hi-Fi Audio



# 10. Wiring Diagram



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## 11. Schematic Diagrams

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	Page
◆ Block Identification of Main PCB .....	11-2
11-1 S.M.P.S/Power .....	11-3
11-2 System Control/Servo .....	11-4
11-3 Audio/Video .....	11-6
11-4 Hi-Fi .....	11-8
11-5 Karaoke .....	11-10
11-6 I/O .....	11-11
11-7 Function .....	11-12
11-8 Remote-Control .....	11-13

**Note**

For schematic Diagram  
 - Resistors are in ohms, 1/8W unless otherwise noted.  
 - Circled numbers refer to waveforms.


**Special note :**

Most semiconductor devices are electrostatically sensitive and therefore require the special handling techniques described under the "electrostatically sensitive (ES) devices" section of this service manual.

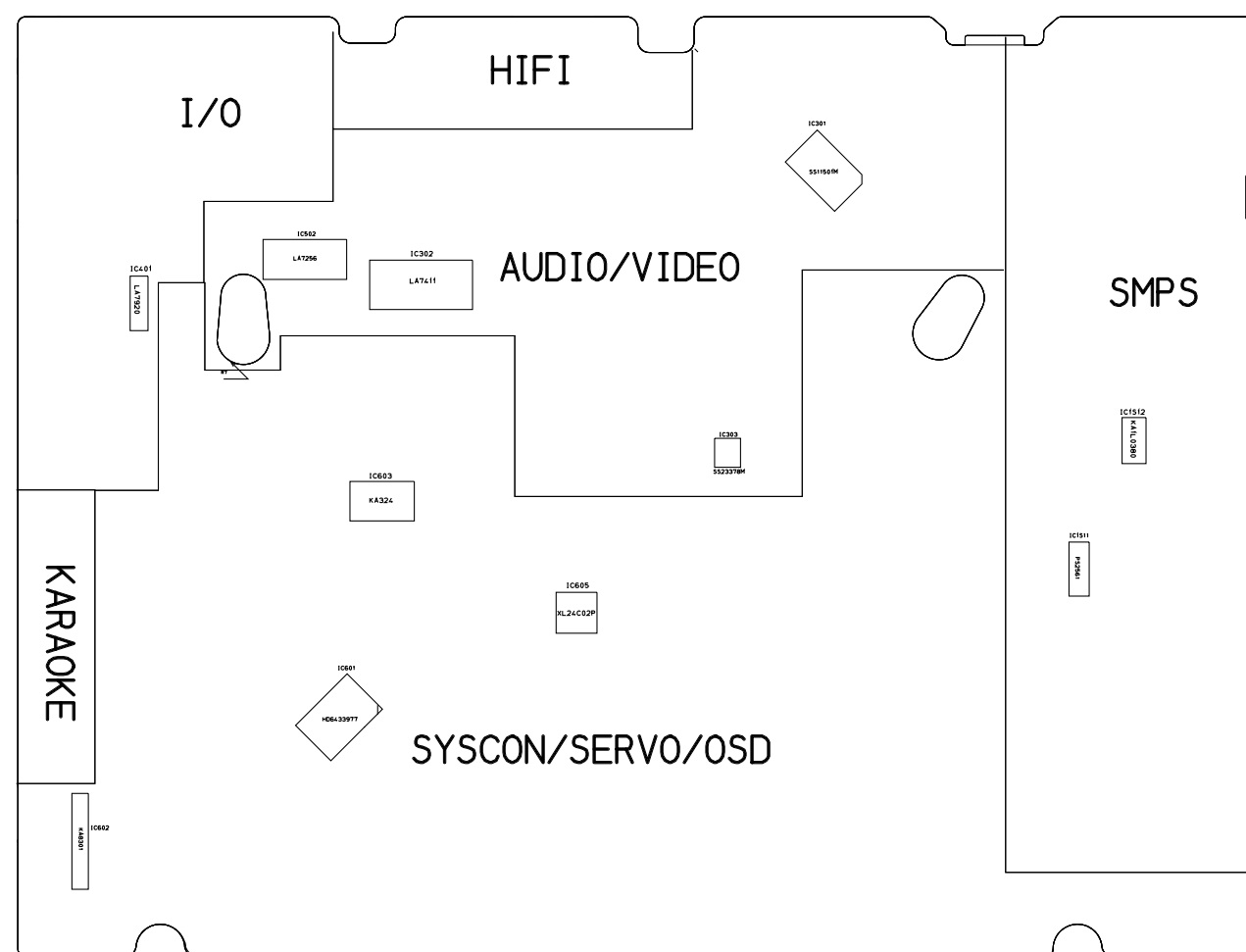
**Note :**

Do not use the part number shown on this drawing for ordering. The correct part number is shown in the parts list (may be slightly different or amended since this drawing was prepared).

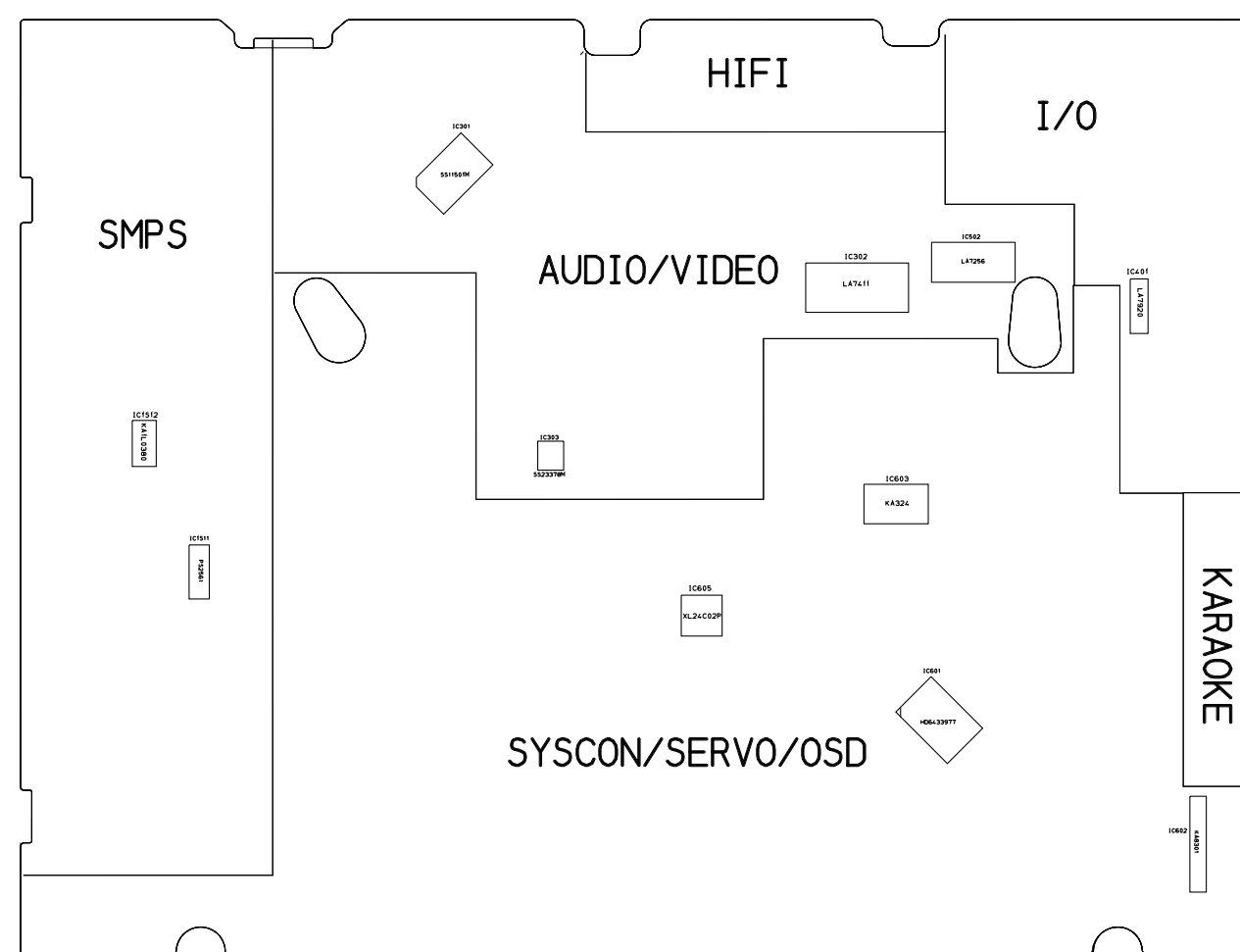
**Important safety notices :**

Components identified with the mark  have the special characteristics for safety. When replacing any of these components. Use only the same type.

◆ **Block Identification of Main PCB**

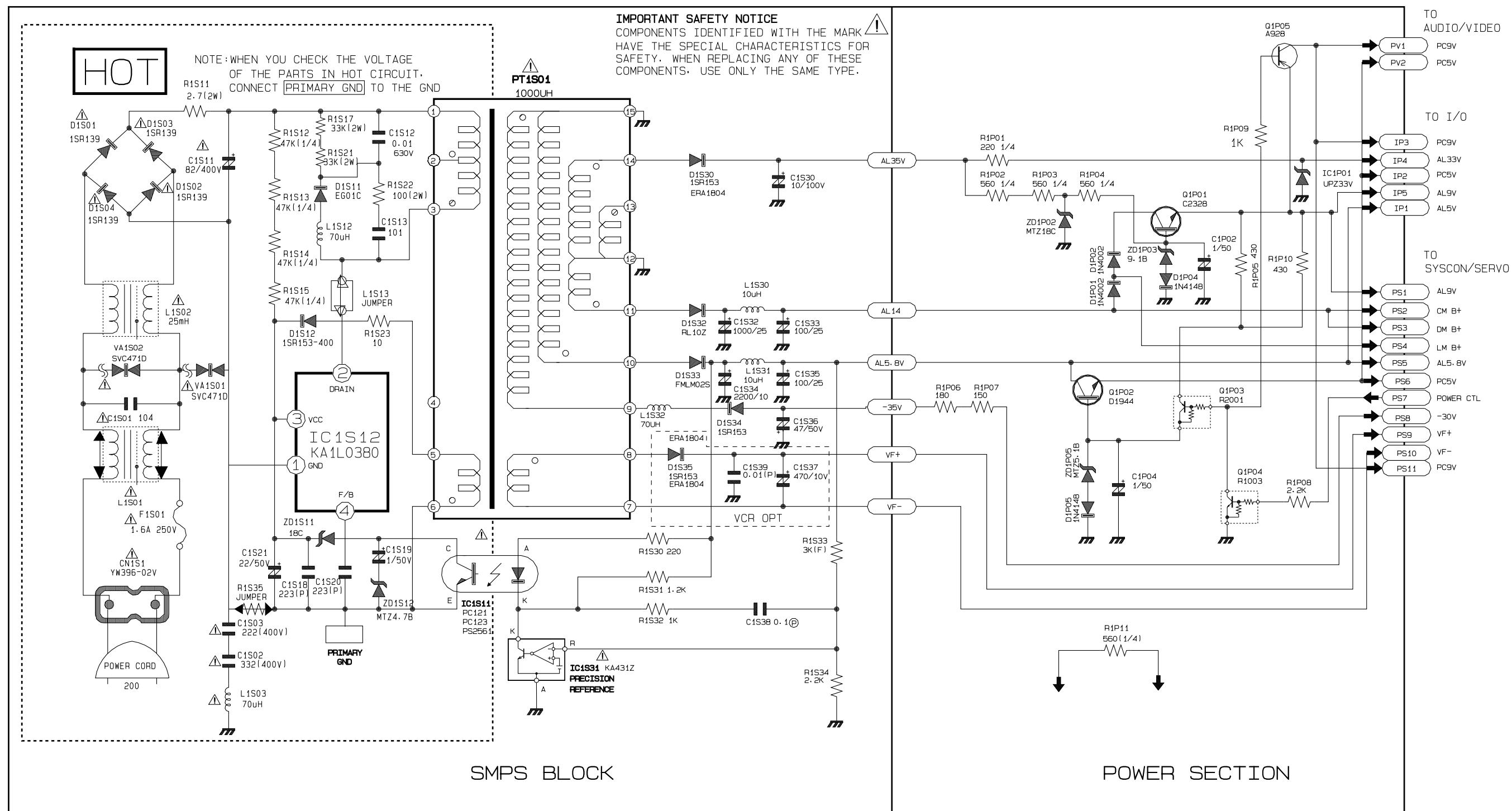


(Component Side)



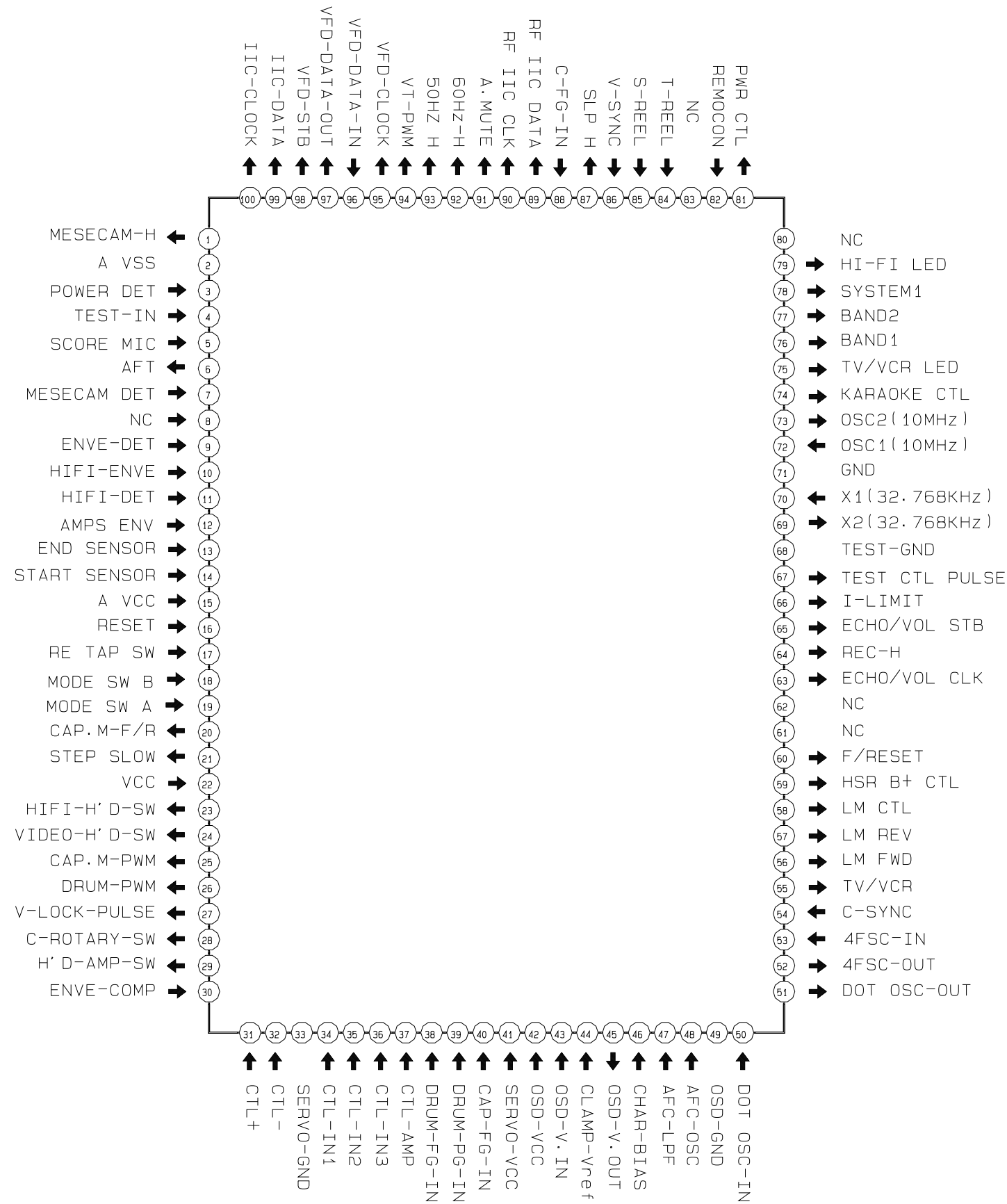
(Conductor Side)

11-1 S.M.P.S/POWER



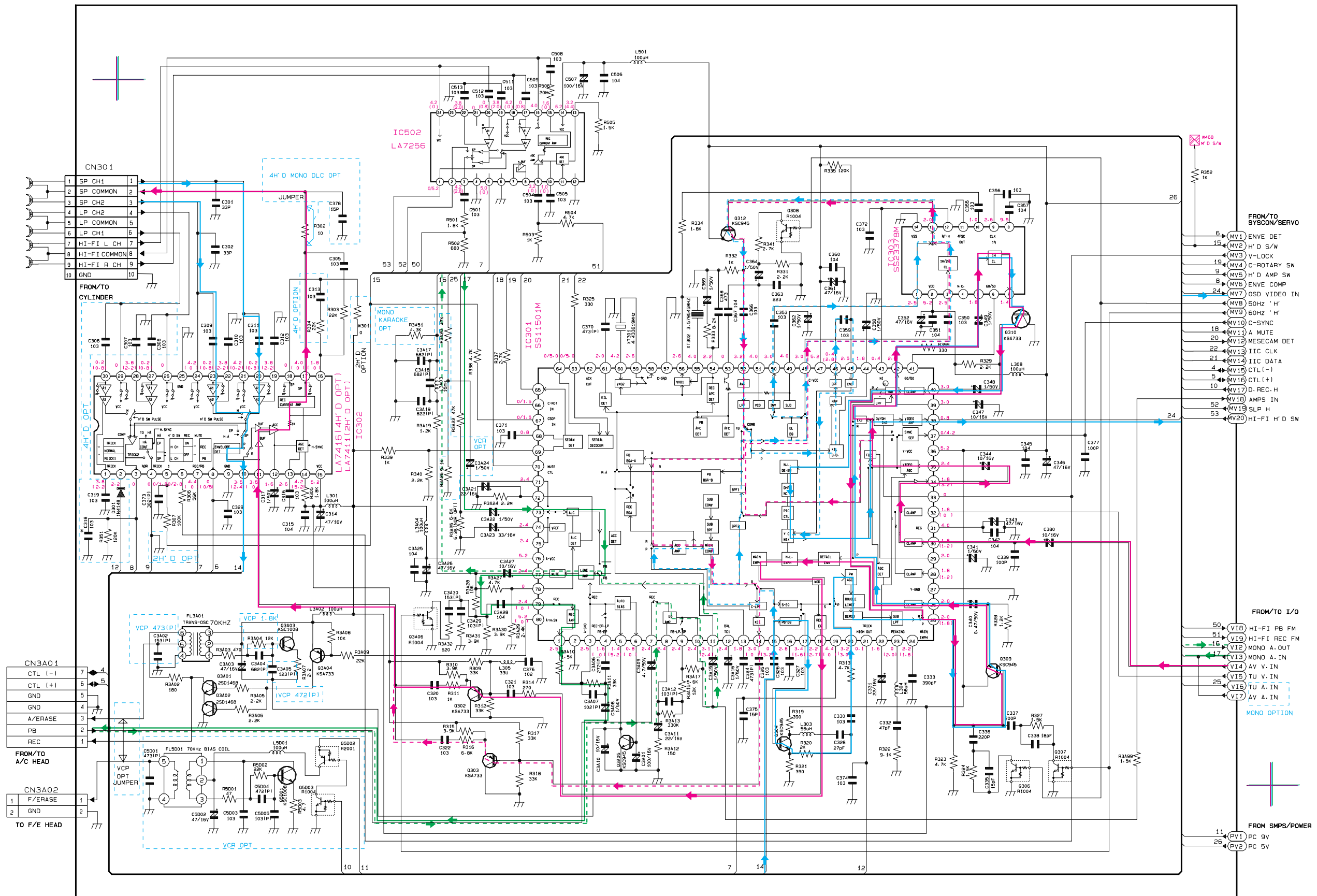


**IC601 HD6433976RAF**

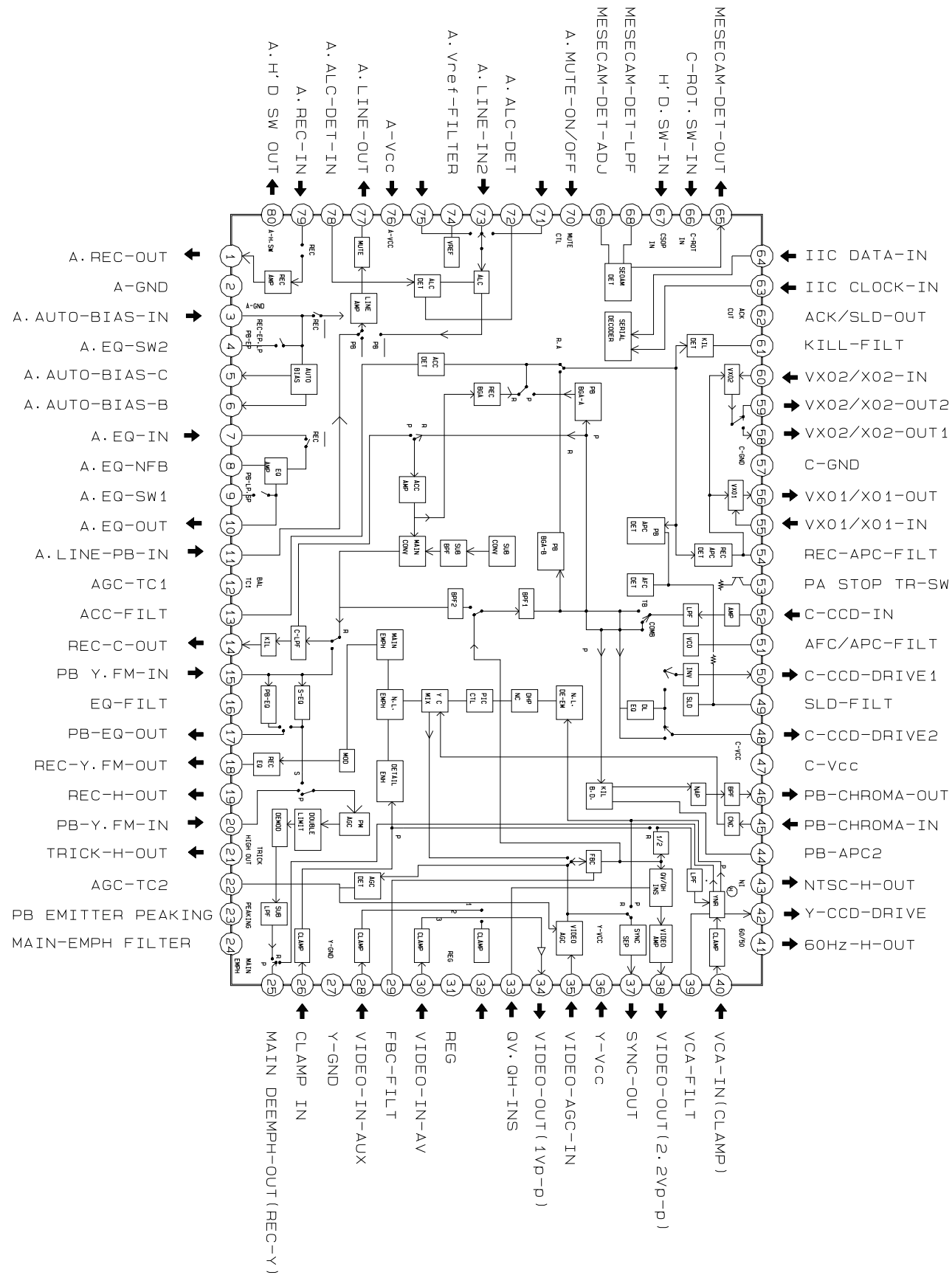


### 11-3 Audio/Video

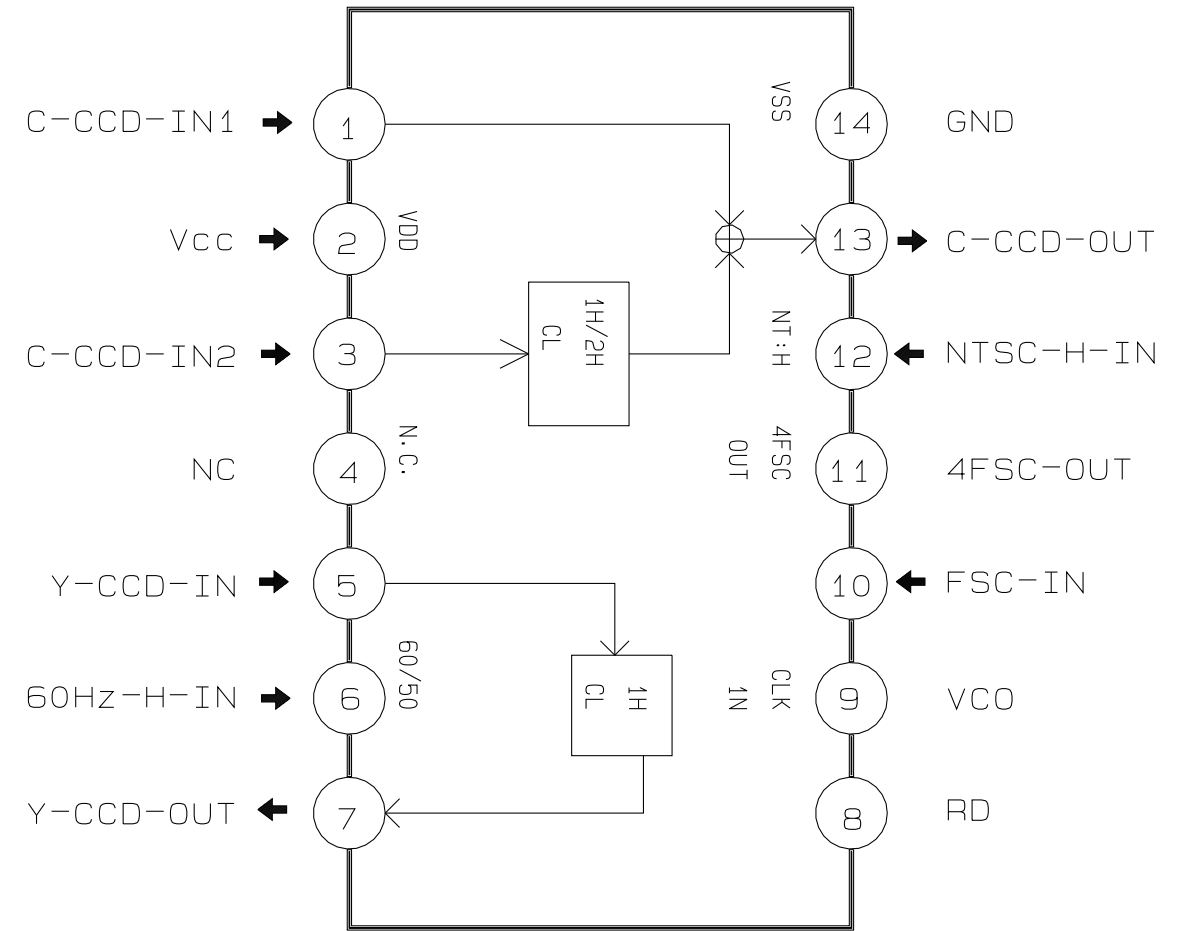
REC Y PROCESS       PB Y PROCESS       REC LINEAR AUDIO  
 REC C PROCESS       PB C PROCESS       PB LINEAR AUDIO



**IC301 SS11501M**

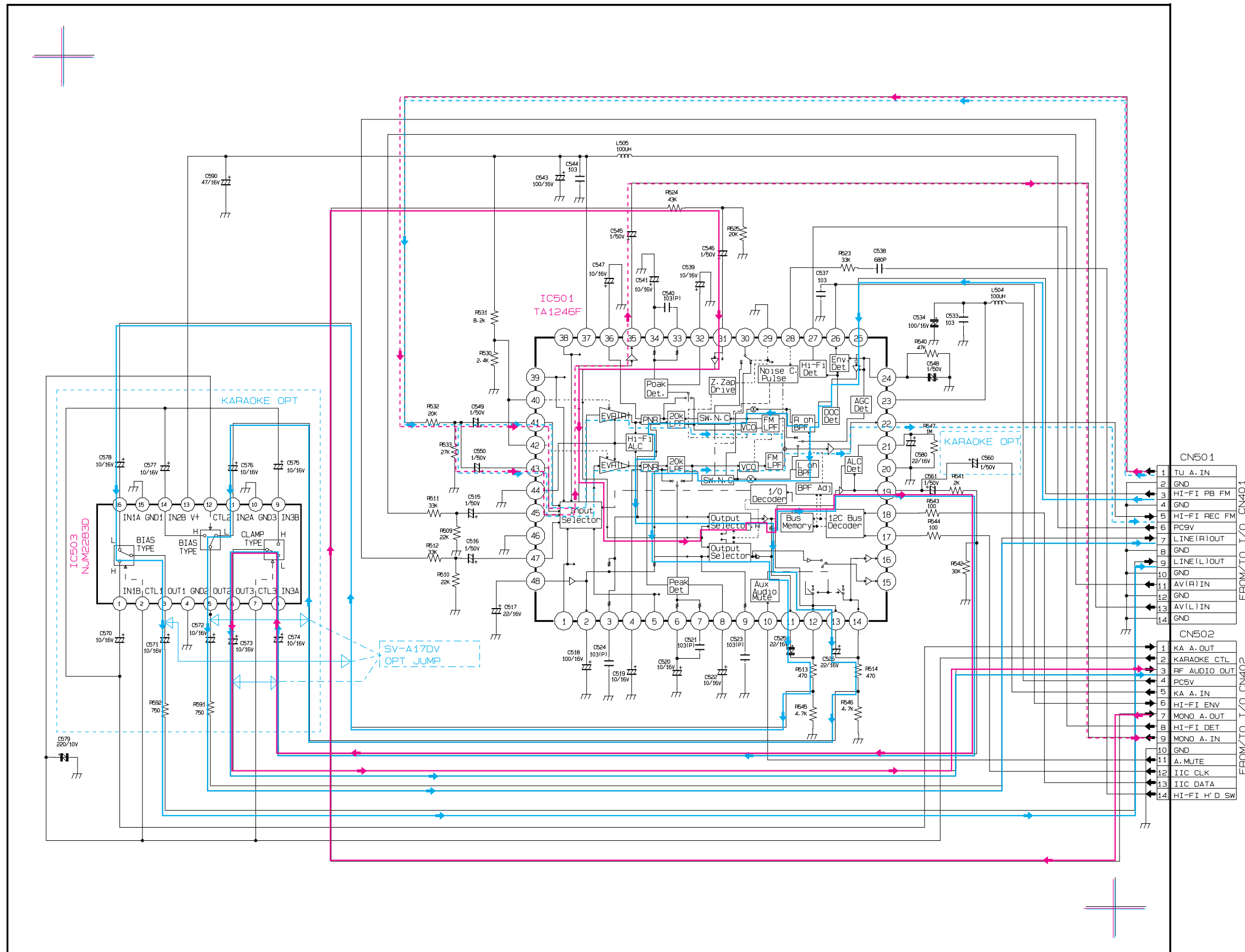


**IC303 SS23378M**

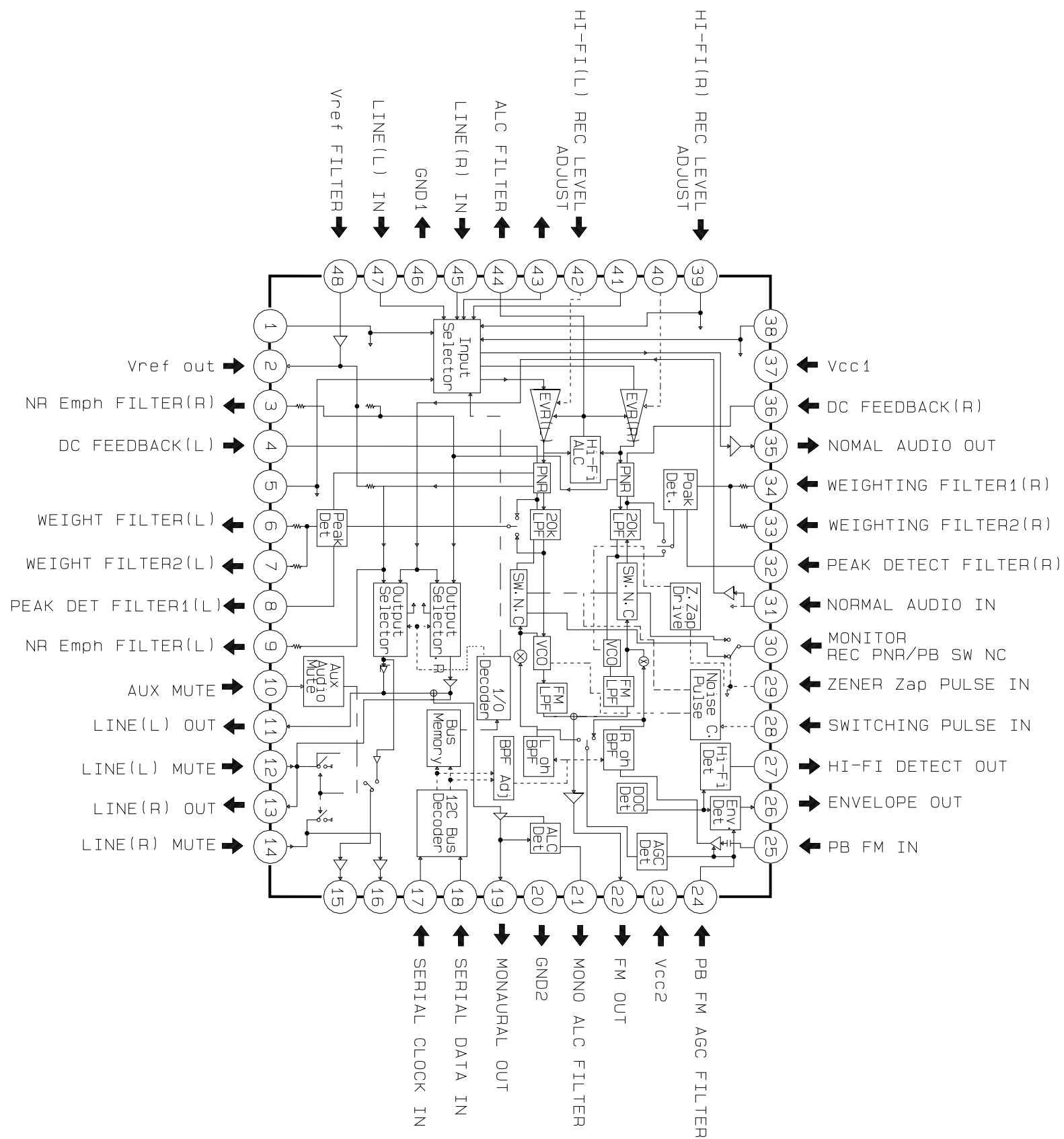


11-4 Hi-Fi

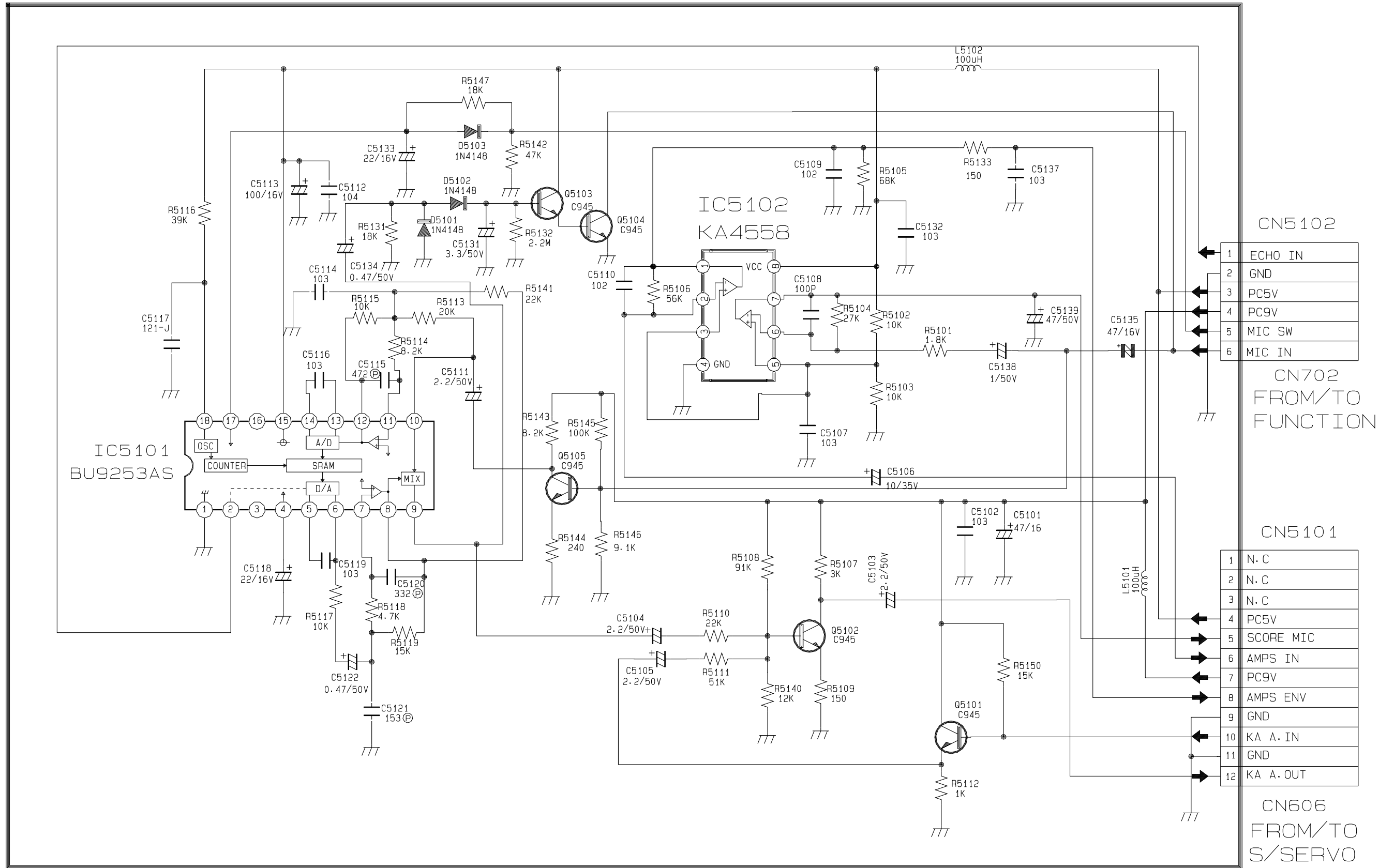
———— AUDIO PB (MONO)      ———— AUDIO PB (Hi-Fi)  
 - - - - - AUDIO REC (MONO)      - - - - - AUDIO REC (Hi-Fi)



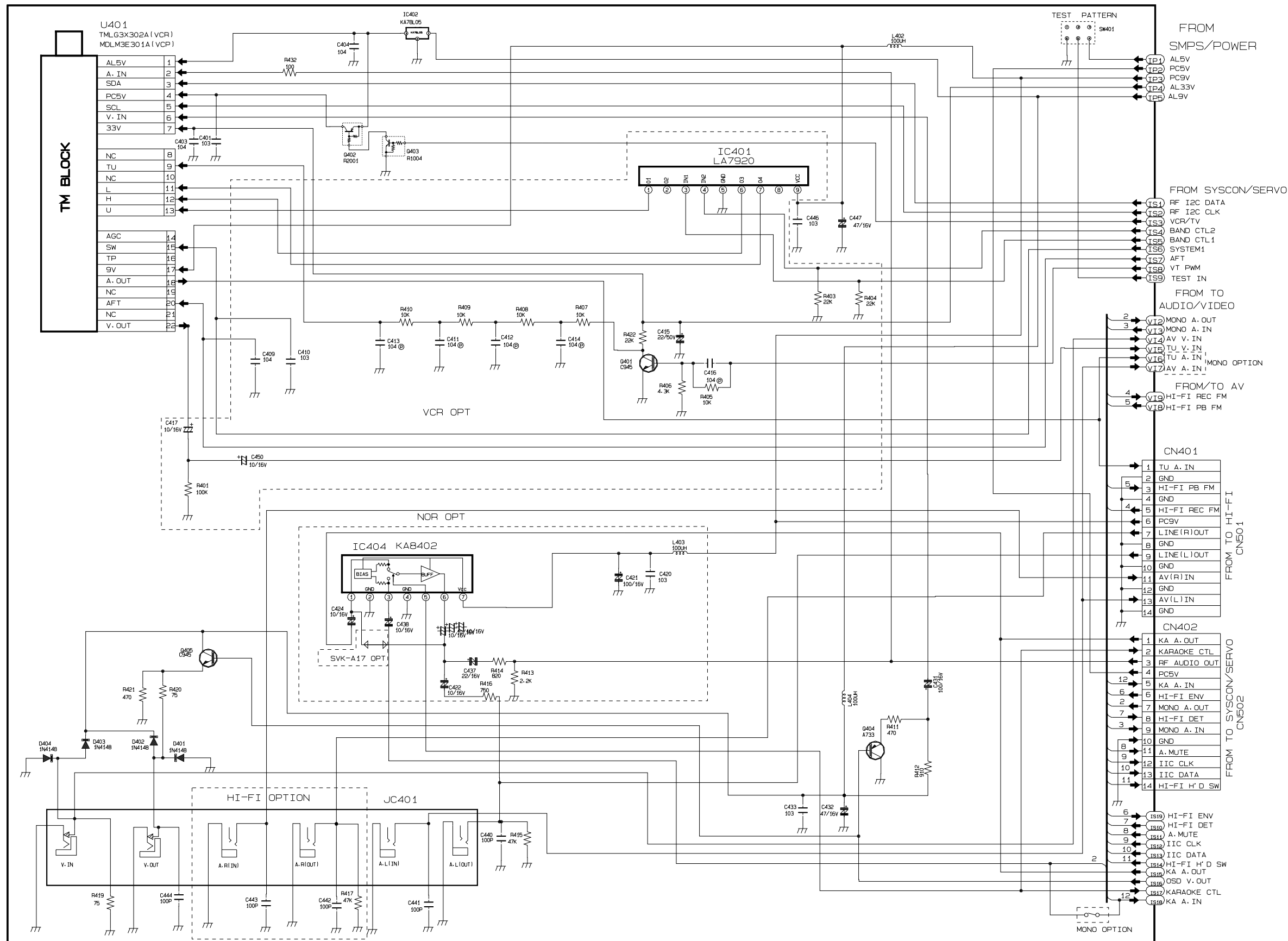
**IC501 TA1246F**



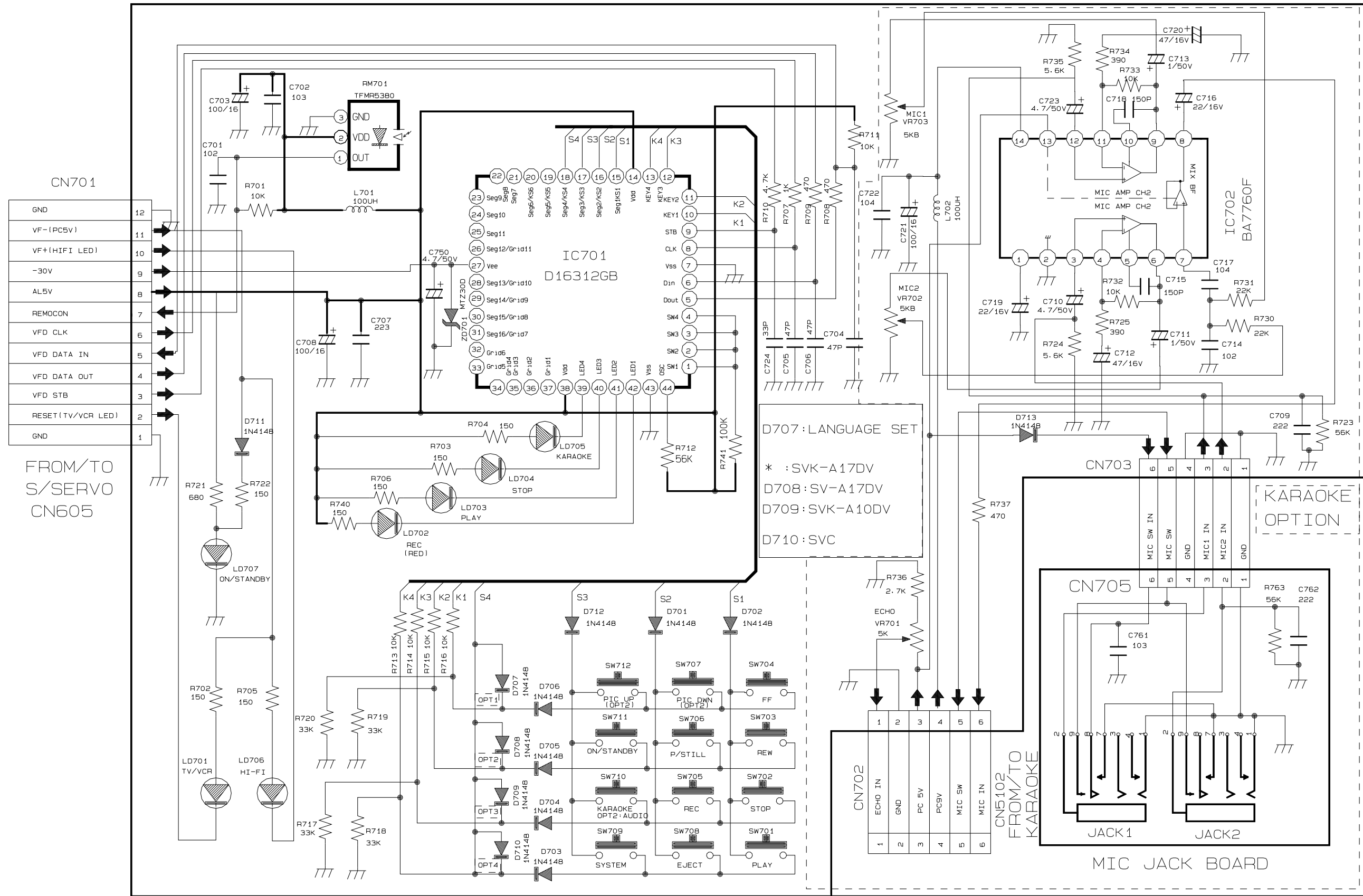
### 11-5 Karaoke



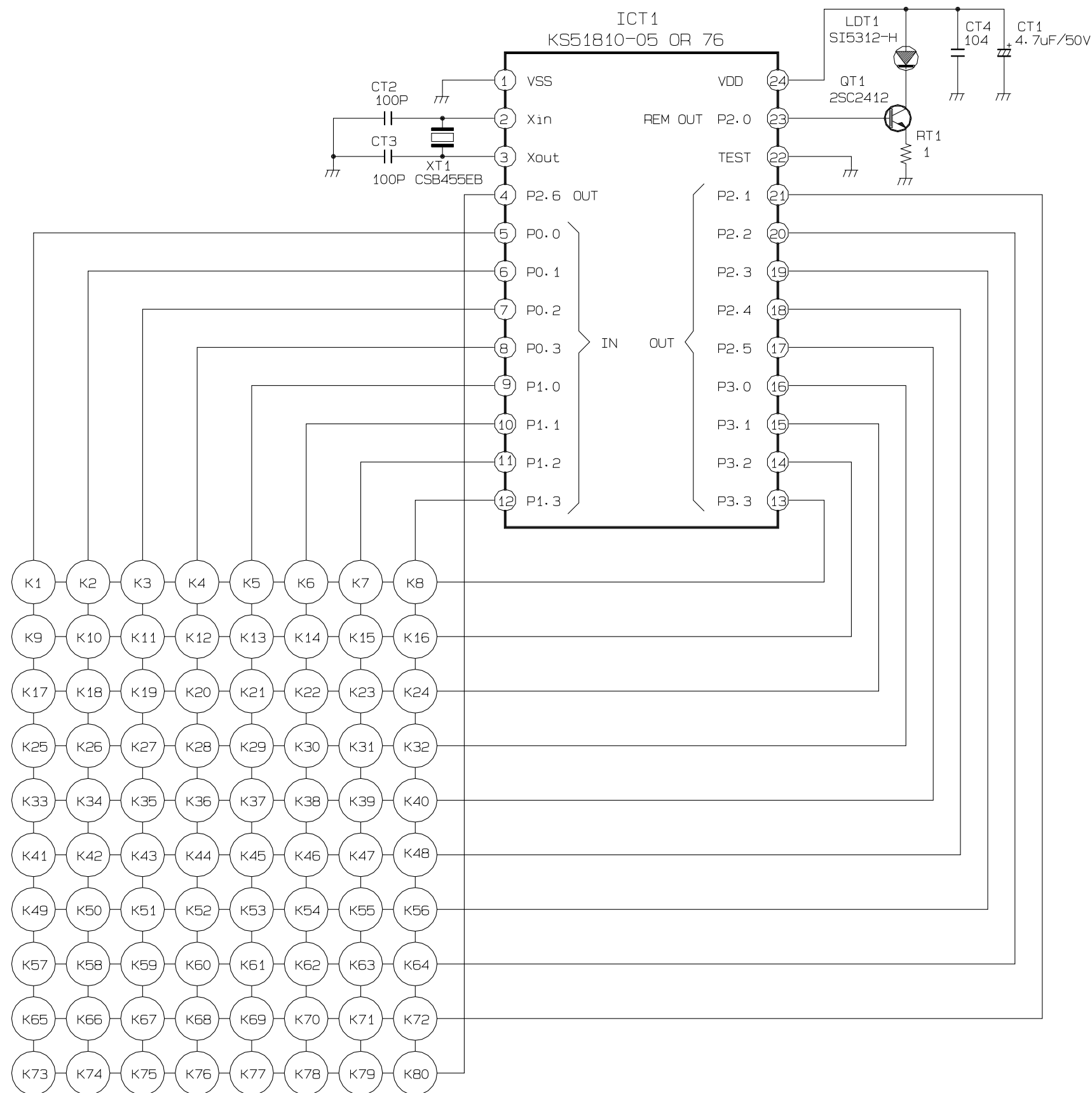
11-6 I/O



### 11-9 Function



### 11-11 Remote-Control



FUNCTION KEY			
K1	-	K41	REW
K2	TV/VCR	K42	PLAY
K3	POWER	K43	F.F
K4	REPEAT	K44	-
K5	-	K45	-
K6	ERASE	K46	-
K7	TEST (TEST ONLY)	K47	-
K8	INDEX	K48	-
K9	CH1 (LESSON)	K49	-
K10	CH 2 Δ	K50	CLEAR/RESET
K11	CH 3	K51	DISPLAY
K12	-	K52	MENU
K13	TRACKING UP	K53	SYSTEM (TEST ONLY)
K14	TRACKING DOWN	K54	-
K15	-	K55	-
K16	MARK	K56	-
K17	CH 4 ▷	K57	EJECT
K18	CH 5	K58	-
K19	CH 6 ◁	K59	AUDIO (OUTPUT SEL.)
K20	-	K60	-
K21	-	K61	-
K22	-	K62	-
K23	-	K63	PICTURE
K24	CLK/COUNTER (TEST ONLY)	K64	-
K25	CH 7	K65	-
K26	CH 8 ▽	K66	-
K27	CH 9	K67	-
K28	-	K68	-
K29	-	K69	-
K30	-	K70	-
K31	-	K71	SHUTTLE-
K32	-	K72	SHUTTLE+
K33	REC (OTR)	K73	-
K34	STOP	K74	CH 0
K35	P/STILL	K75	-
K36	SLOW-DOWN	K76	SLOW UP
K37	-	K77	-
K38	-	K78	-
K39	-	K79	SP/LP (TEST ONLY)
K40	-	K80	-