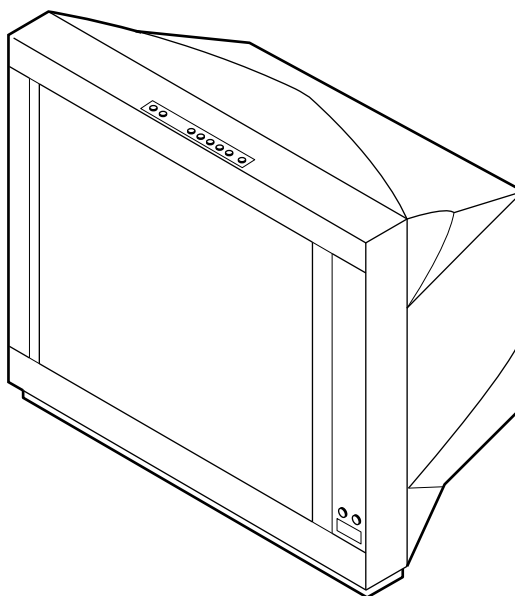
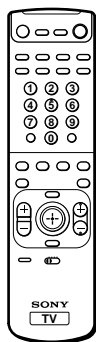


# SERVICE MANUAL

# AG3 CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>	<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>
<i>KV-ES34M81</i>	<i>RM-916</i>	<i>ME</i>	<i>SCC-P32D-A</i>				
<i>KV-ES34M91</i>	<i>RM-916</i>	<i>ME</i>	<i>SCC-P32E-A</i>				



TRINITRON® COLOR TV  
**SONY®**

## SPECIFICATIONS

		Note
<b>Power requirements</b>	110-240 V AC, 50/60 Hz	
<b>Power consumption (W)</b>	Indicated on the rear of the TV	
<b>Television system</b>	B/G, I, D/K, M	
<b>Color system</b>	PAL, PAL 60, SECAM, NTSC4.43, NTSC3.58	
<b>Stereo/Bilingual system</b>	NICAM Stereo / Bilingual B/G, I; A2 Stereo / Bilingual (German) B/G	Except KV-ES34M81
<b>Teletext language</b>	English, Arabic, French	
<b>Channel coverage</b>		
<b>B/G</b>	VHF: E2 to E12 / UHF: E21 to E69 / CATV: S01 to S03, S1 to S41	
<b>I</b>	UHF: B21 to B68 / CATV: S01 to S03, S1 to S41	
<b>D/K</b>	VHF: C1 to C12, R1 to R12 / UHF: C13 to C57, R21 to R60 CATV: S01 to S03, S1 to S41, Z1 to Z39	
<b>M</b>	VHF: A2 to A13 / UHF: A14 to A79 / CATV: A-8 to A-2, A to W+4, W+6 to W+84	
<b>⏏ (Antenna)</b>	75-ohm external terminal	
<b>Audio output (Speaker)</b>	15W + 15W	10% distortion
<b>Number of terminal</b>		
<b>📺 (Video)</b>	Input: 4    Output: 1	Phono jacks; 1 V <sub>p-p</sub> , 75 ohms
<b>🎵 (Audio)</b>	Input: 4    Output: 1	Phono jacks; 500 mVrms
<b>📺 (S Video)</b>	Input: 2	Y : 1 V <sub>p-p</sub> , 75 ohms, unbalanced, sync negative C : 0.286 V <sub>p-p</sub> , 75 ohms
<b>📺 (Component Video)</b>	Input: 1	Phono jacks Y : 1 V <sub>p-p</sub> , 75 ohms, sync negative C <sub>B</sub> : 0.7 V <sub>p-p</sub> , 75 ohms C <sub>R</sub> : 0.7 V <sub>p-p</sub> , 75 ohms Audio : 500 mVrms
<b>DIGITAL IN</b>	Input: 1	Phono jack; 0.5 V <sub>p-p</sub> , 75 ohms
<b>🎧 (Headphone)</b>	Output: 1	Stereo minijack
<b>Picture tube</b>	34 inch	
<b>Tube size (cm)</b>	86	Measured diagonally
<b>Screen size (cm)</b>	80	Measured diagonally
<b>Dimension (w/h/d, mm)</b>	859 × 650 × 573	
<b>Mass (kg)</b>	84	

Design and specifications are subject to change without notice.

### CAUTION

SHORT CIRCUIT THE ANODE OF THE PICTURE TUBE AND THE ANODE CAP TO THE METAL CHASSIS, CRT SHIELD, OR CARBON PAINTED ON THE CRT, AFTER REMOVING THE ANODE.

### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK  $\triangle$  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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## SELF DIAGNOSTIC FUNCTION

The units in this manual contain a self-diagnostic function. If an error occurs, the STANDBY/TIMER lamp will automatically begin to flash.

The number of times the lamp flashes translates to a probable source of the problem. A definition of the STANDBY/TIMER lamp flash indicators is listed in the instruction manual for the user's knowledge and reference. If an error symptom cannot be reproduced, the remote commander can be used to review the failure occurrence data stored in memory to reveal past problems and how often these problems occur.

### 1. DIAGNOSTIC TEST INDICATORS

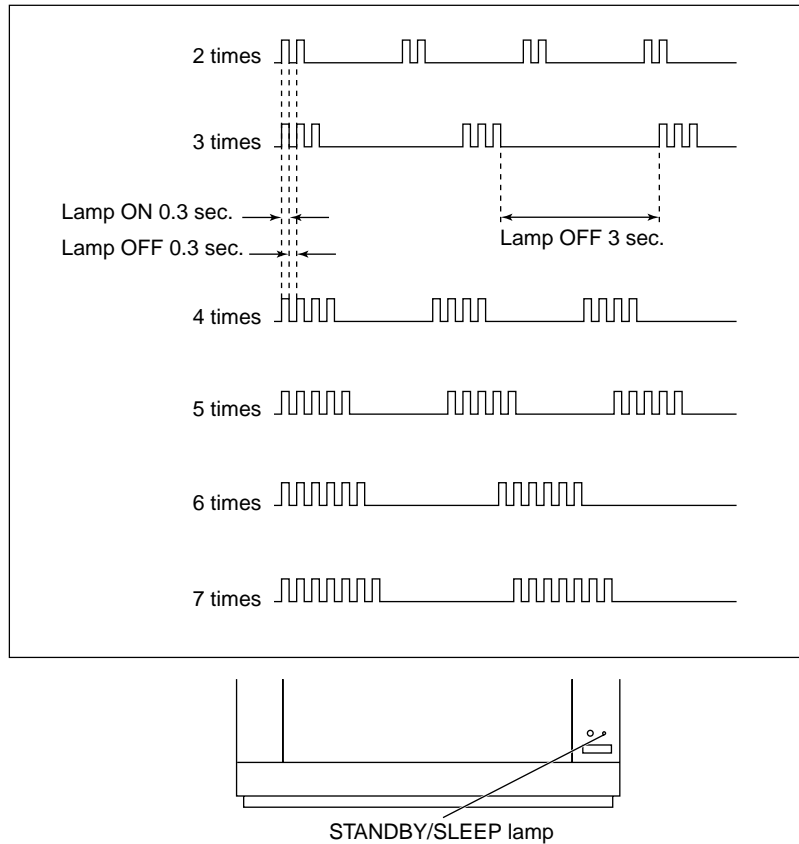
When an errors occurs, the STANDBY/TIMER lamp will flash a set number of times to indicate the possible cause of the problem. If there is more than one error, the lamp will identify the first of the problem areas.

Result for all of the following diagnostic items are displayed on screen. No error has occurred if the screen displays a "0".

Diagnostic Item Description	No. of times STANDBY/TIMER lamp flashes	Self-diagnostic display/Diagnostic result	Probable Cause Location	Detected Symptoms
• Power does not turn on	Does not light	—	<ul style="list-style-type: none"> <li>• Power cord is not plugged in.</li> <li>• Fuse is burned out F1601 (F1 Board)</li> </ul>	<ul style="list-style-type: none"> <li>• Power does not come on.</li> <li>• No power is supplied to the TV.</li> <li>• AC power supply is faulty.</li> </ul>
• +B overcurrent (OCP)	2 times	002:000 or 002:001~255	<ul style="list-style-type: none"> <li>• H.OUT Q6807 is shorted.</li> <li>• H.LIM Q6810 is shorted.</li> </ul>	<ul style="list-style-type: none"> <li>• Power does not come on.</li> <li>• Load on power line is shorted.</li> </ul>
• +B overvoltage (OVP)	3 times	003:000 or 003:001~255	<ul style="list-style-type: none"> <li>• PH 6602 faulty.</li> <li>• 10.5V is not supplied. (D board)</li> </ul>	<ul style="list-style-type: none"> <li>• Power does not come on.</li> </ul>
• Vertical deflection failure	4 times	004:000 or 004:001~255	<ul style="list-style-type: none"> <li>• V.OUT IC6800 faulty</li> <li>• D6816 faulty</li> <li>• D6817 faulty</li> <li>• D6824 faulty</li> <li>• R6852 open</li> <li>• R6851 open</li> </ul>	<ul style="list-style-type: none"> <li>• Vertical deflection pulse is stopped.</li> <li>• Vertical size is too small.</li> <li>• Vertical deflection stopped.</li> </ul>
• White balance failure (no PICTURE)	5 times	005:000 or 005:001~255	<ul style="list-style-type: none"> <li>• G2 is improperly adjusted. (Note 2)</li> <li>• CRT problem.</li> <li>• Video OUT IC9001, 9002, 9003 are faulty. (C board)</li> <li>• IC8306 (J board) and IC4301 (E board) are faulty.</li> <li>• No connection E board to C board.</li> </ul>	<ul style="list-style-type: none"> <li>• No raster is generated.</li> <li>• CRT cathode current detection reference pulse output is small.</li> </ul>
• Horizontal deflection failure	6 times	006:000 or 006:001~225	<ul style="list-style-type: none"> <li>• C6831 is open circuit.</li> <li>• CN6101 (D1 board) is disconnected.</li> </ul>	<ul style="list-style-type: none"> <li>• H pulse output is too high.</li> </ul>
• Audio Protection	7 times	007:000 or 007:001~225	<ul style="list-style-type: none"> <li>• Power supply fails.</li> <li>• IC1203, IC1204 faulty</li> </ul>	<ul style="list-style-type: none"> <li>• There is picture but speaker does not release sound.</li> </ul>
• Micro reset	—	101:00 or 101:001~225	<ul style="list-style-type: none"> <li>• Discharge CRT (C Board)</li> <li>• Static discharge</li> <li>• External noise</li> </ul>	<ul style="list-style-type: none"> <li>• Power is shut down shortly, after this return back to normal.</li> <li>• Detect Micro latch up.</li> </ul>

Note 1: Refer to screen (G2) Adjustment in section 4-5 of this manual.

## 2. DISPLAY OF STANDBY/TIMER LIGHT FLASH COUNT



<u>Diagnostic Item</u>	<u>Flash Count*</u>
+B overcurrent	2 times
+B overvoltage	3 times
V deflection stop	4 times
White balance failure	5 times
High voltage protector	6 times
Audio Protection	7 times

\* One flash count is not used for self-diagnostic.

## 3. STOPPING THE STANDBY/TIMER FLASH

Turn off the power switch on the TV main unit or unplug the power cord from the outlet to stop the STANDBY/TIMER lamp from flashing.

#### 4. SELF-DIAGNOSTIC SCREEN DISPLAY

For errors with symptoms such as “power sometimes shuts off” or “screen sometimes goes out” that cannot be confirmed, it is possible to bring up past occurrences of failure for confirmation on the screen:

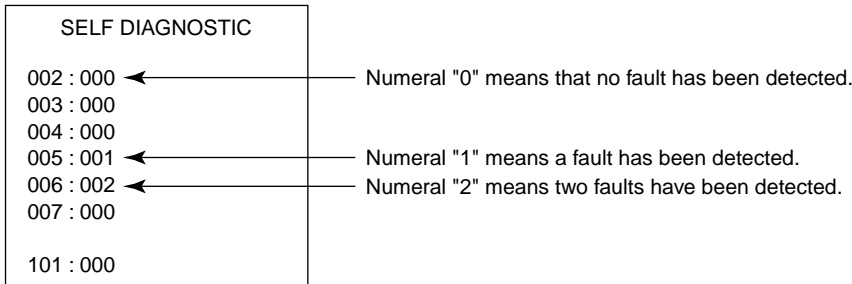
##### [To Bring Up Screen Test]

In standby mode, press buttons on the remote commander sequentially in rapid succession as shown below:

Screen display → channel [5] → Sound volume [ ] → Power ON  
↑

Note that this differs from entering the service mode (mode volume [+]).

##### Self-Diagnosis screen display



#### 5. HANDLING OF SELF-DIAGNOSTIC SCREEN DISPLAY

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen during repairs. When you have completed the repairs, clear the result display to “0”.

Unless the result display is cleared to “0”, the self-diagnostic function will not be able to detect subsequent faults after completion of the repairs.

##### [Clearing the result display]

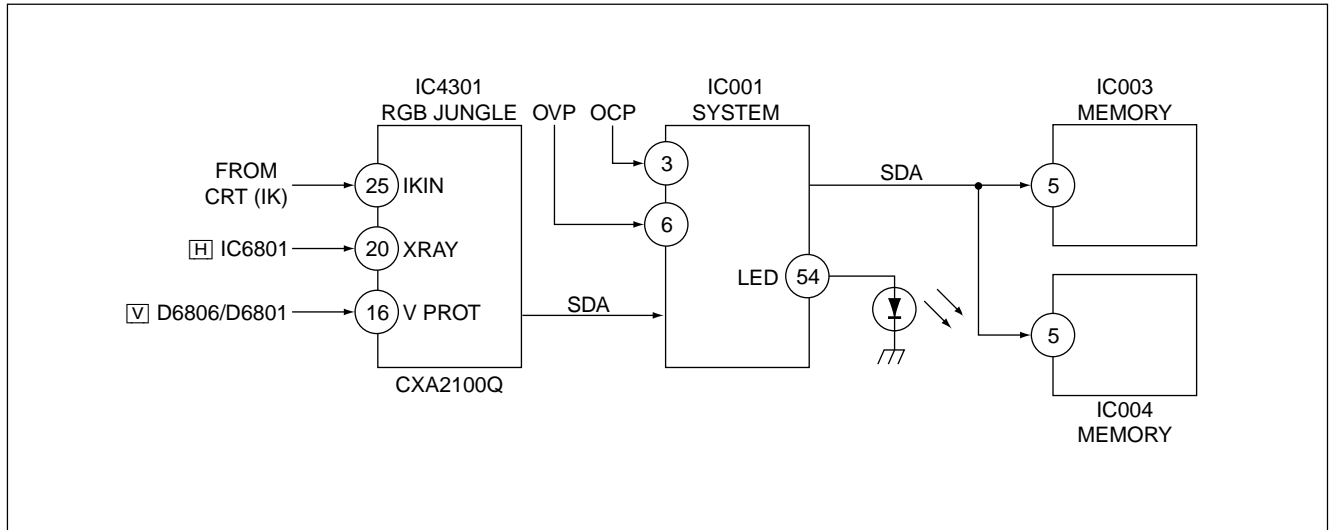
To clear the result display to “0”, press buttons on the remote commander sequentially as shown below when the diagnostic screen is being displayed.

Channel [8] → 0

##### [Quitting Self-diagnostic screen]

To quit the entire self-diagnostic screen, turn off the power switch on the remote commander or the main unit.

## 6. SELF-DIAGNOSTIC CIRCUIT



**+B overcurrent (OCP)**

Occurs when an overcurrent on the +B(135) line is detected by Q6610 and Q6609.  
If Q6610 and Q6609 go to ON, the voltage to the pin3 of IC001 go to UP.  
The unit will automatically turn off.

**+B overvoltage (OVP)**

Occurs when an overvoltage on the +B(135) line is detected by D6635, Q6611 and Q6612. If Q6611 and Q6612 go to ON, the voltage to pin6 of IC001 go to UP. The unit will automatically turn off.

**Vertical deflection failure**

Occurs when an absence of the vertical deflection pulse is detected by Q6811, Q6819, Q6820, Q6821 and D6801. Shut down the power supply.

**White balance failure**

If the RGB levels do not balance or become low level within 5 seconds.  
This error will be detected by IC4301.  
TV will stay on, but there will be no picture.

**High voltage protector of Horizontal Deflection**



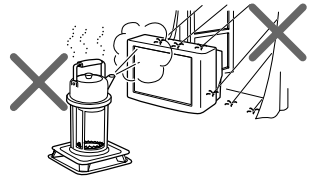
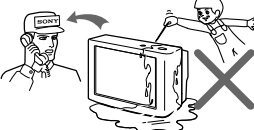
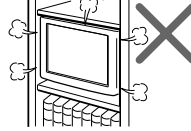
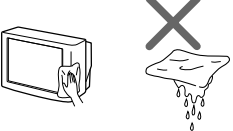



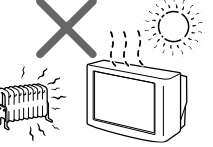
Occurs when an overvoltage of horizontal pulse is detected by D6809 and IC6801.  
If the voltage of 7 pin of IC6801 goes to High, the voltage to pin20 of IC4301 go to UP. The unit will automatically turn off.

The operating instructions mentioned here are partial abstracts from the Operating Instruction Manual. The page numbers of the Operating Instruction Manual remain as in the manual.

## SECTION 1 GENERAL

### WARNING

- Dangerously high voltages are present inside the TV.
- Operate the TV only between 110 – 240 V AC.

 <p>For your own safety, do not touch any part of the TV, the power cord and the antenna cable during lightning storms.</p>	 <p>Install the TV in a stable position. Do not allow children to climb onto it.</p>
 <p>To prevent fire or shock hazard, do not expose the TV to rain or moisture.</p>	 <p>Do not operate the TV if any liquid or solid object falls into it. Have it checked immediately by qualified personnel only.</p>
 <p>Do not install the TV in a confined space, such as a bookcase or built-in cabinet. Do not block the ventilation openings of the TV.</p>	 <p>Clean the TV with a dry and soft cloth. Do not use benzene, thinner, or any other chemicals to clean the TV. Do not scratch the picture tube.</p>
 <p>Pull the power cord out by the plug. Do not pull the power cord itself. Disconnect the TV if you are not going to use it for several days.</p>	 <p>Do not plug in too many appliances to the same power socket. Do not damage the power cord.</p>
 <p>Do not open the cabinet and the rear cover of the TV. Refer servicing to qualified personnel.</p>	 <p>Do not install the TV in hot, humid or excessively dusty places.</p>

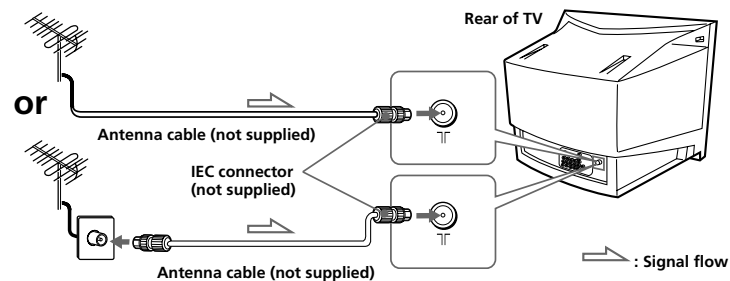
### Using Your New TV

## Getting Started

### Step 1

#### Connect the antenna


If you wish to connect a VCR, see the "Connecting a VCR" diagram below.

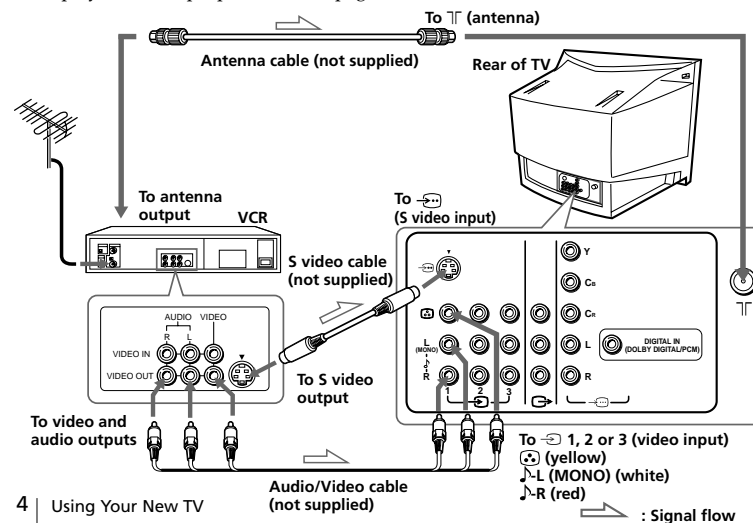


#### CAUTION

Do not connect the power cord until all other connections are complete; otherwise, a minimal current leakage through the antenna and/or other terminals to the ground could occur.

#### Connecting a VCR

To play a video tape, press  (see page 11).



4 Using Your New TV

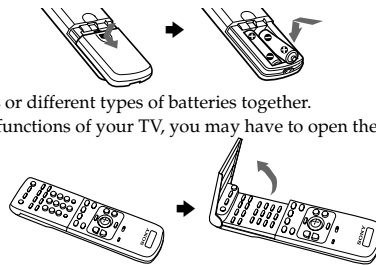


**Notes**

- If you connect a monaural VCR, connect the yellow plug to (yellow jack) and the black plug to L-L (MONO) (the white jack).
- If you connect a VCR to the T (antenna) terminal, preset the signal output from the VCR to the program number 0 on the TV.
- When both the (S video input) and (video input) are connected, the (S video input) is automatically selected. To view the video input to (video input), disconnect the S video cable.

**Step 2**

**Insert the batteries into the remote**

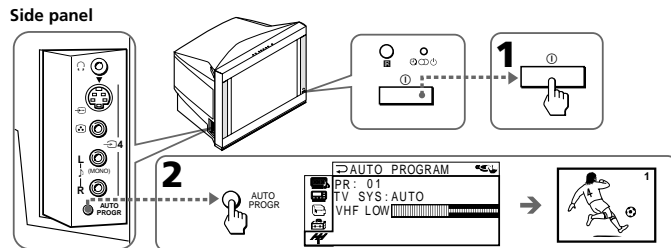


**Notes**

- Do not use old batteries or different types of batteries together.
- To operate some of the functions of your TV, you may have to open the remote control cover.

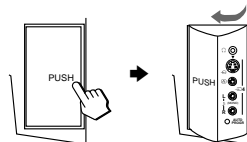
**Step 3**

**Preset the channels automatically**



**Notes**

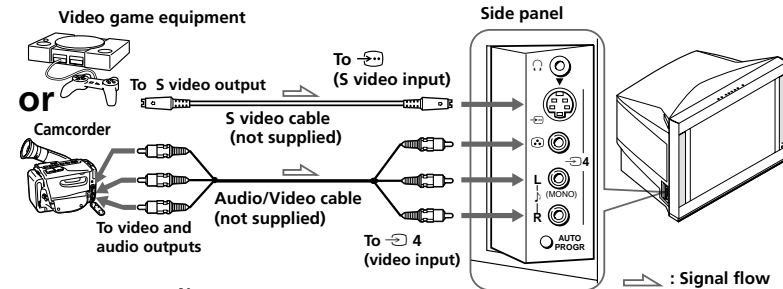
- To stop the automatic channel presetting, press MENU twice.
- If your TV has preset an unwanted channel or cannot preset a particular channel, then preset your TV manually (see page 43).
- To open the side panel of your TV, push on it until you hear a click, then it will open.



**Connecting optional components**

You can connect optional audio/video components, such as a VCR, multi disc player, camcorder, video game, or stereo system. To watch and operate the connected equipment, see pages 11 and 27.

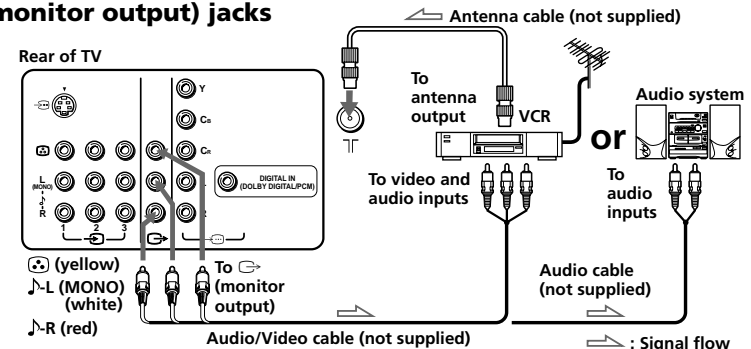
**Connecting a camcorder/video game equipment using the (video input) jacks**



**Notes**

- When connecting video game equipment, display the "FEATURE" menu and select "ON" for "GAME MODE" to adjust the picture setting that is suitable for video games (see page 38).
- You can also connect video equipment to the (video input) jacks at the rear of your TV.
- When both the (S video input) and (video input) are connected, the (S video input) is automatically selected. To view the video input to (video input), disconnect the S video cable.





**Connecting audio/video equipment using the (monitor output) jacks**

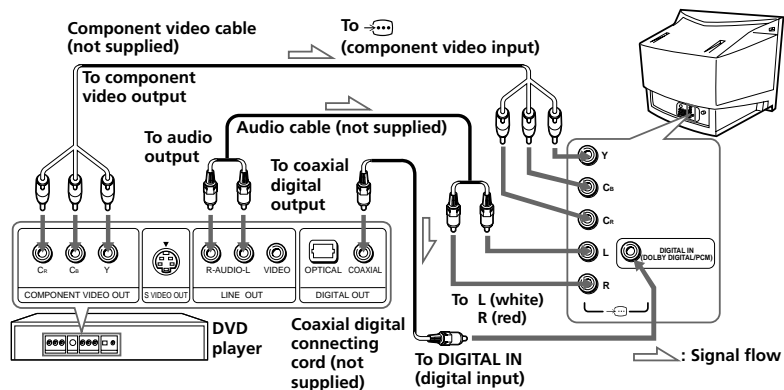


**Note**

- If you select "DVD" on your TV screen, no signal will be output at the (monitor output) jacks (see page 11).

## Connecting a DVD player to (component video input)




- 1 Using an audio cable, connect R and L under  (component video input) on your TV to the LINE OUT, AUDIO R and L output connectors on your DVD player.
- 2 Using a coaxial digital connecting cord, connect DIGITAL IN under  (component video input) on your TV to the DIGITAL OUT, COAXIAL output connector on your DVD player.
- 3 Using a component video cable, connect Y, C<sub>B</sub>, and C<sub>R</sub> under  (component video input) on your TV to the COMPONENT VIDEO OUT Y, C<sub>B</sub>, and C<sub>R</sub> output connectors on your DVD player.
- 4 Press  on the remote or the TV until "DVD" appears on the screen.



### Notes

- Some DVD player terminals may be labeled differently:



Connect	To (on the DVD player)
Y (green)	Y
C <sub>B</sub> (blue)	C <sub>B</sub> , B-Y or P <sub>B</sub>
C <sub>R</sub> (red)	C <sub>r</sub> , R-Y or P <sub>R</sub>

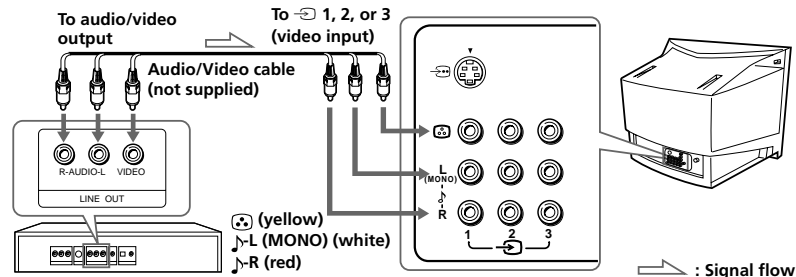
- When connecting to  (component video input) on your TV, you must connect Y, C<sub>B</sub>, and C<sub>R</sub> to receive the video signals, and at least connect DIGITAL IN to receive digital audio signals or connect L and R to receive analog audio signals (see page 34).
- When making connections to DIGITAL IN under  (component video input) on your TV, always set "DIGITAL IN: OFF" in the "A/V CONTROL" menu. After completing all connections, then set "DIGITAL IN: ON". If you set "DIGITAL IN: ON" while still making connections to  DIGITAL IN (component video input), a loud noise may suddenly come out from the speakers, affecting your hearing and causing damage to the speakers (see page 34).

Using Your New TV

## Connecting optional components (continued)

### Connecting a DVD player to (video input)

Connect  1, 2, or 3 (video input)  (audio/video) connectors on your TV to LINE OUT on your DVD player.



### Notes

- Since the high quality pictures on a DVD disc contain a lot of information, picture noise may appear. In this case, adjust the sharpness ("SHARP") under "PERSONAL ADJUST" in the "PICTURE MODE" menu (see page 33).
- Connect your DVD player directly to your TV. Connecting the DVD player through other video equipment will cause unwanted picture noise.

continued

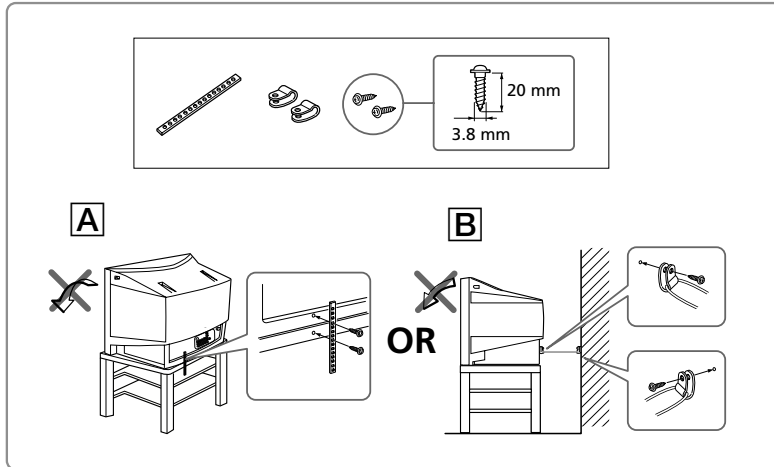
## Securing the TV

To prevent the TV from falling, secure the TV using one of the following methods:

- A** With the supplied screws, attach the stabilizer band to the TV stand and to the rear of the TV using the provided hole.

OR

- B** Pass a cord or chain through the clamps and secure them to the rear of the TV and a wall or pillar.

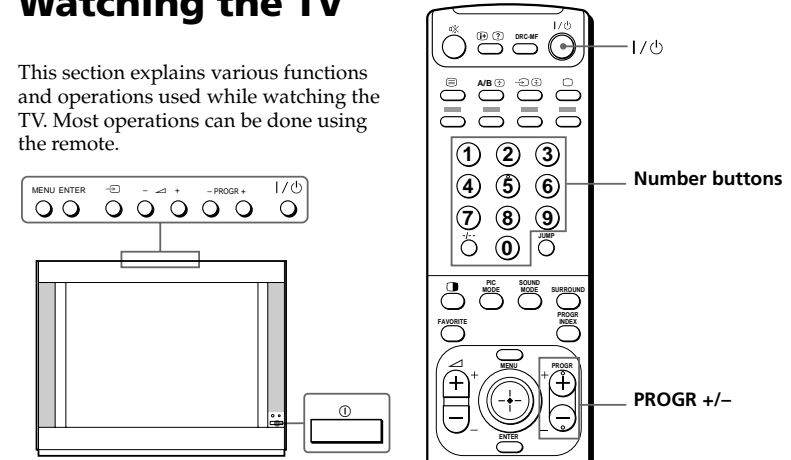


### Note

- Use only the supplied screws. Use of other screws may damage the TV.

## Watching the TV

This section explains various functions and operations used while watching the TV. Most operations can be done using the remote.



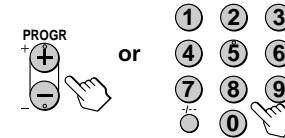
### 1 Press ① to turn on the TV.

When the TV is in standby mode (the indicator on the TV is lit red), press I/⏻ on the remote or on the TV.



### 2 Press PROGR +/- or the number buttons to select the TV channel.

For double digit numbers, press  $-/-$ , then the number (e.g., for 25, press  $-/-$ , then 2 and 5).



### Note

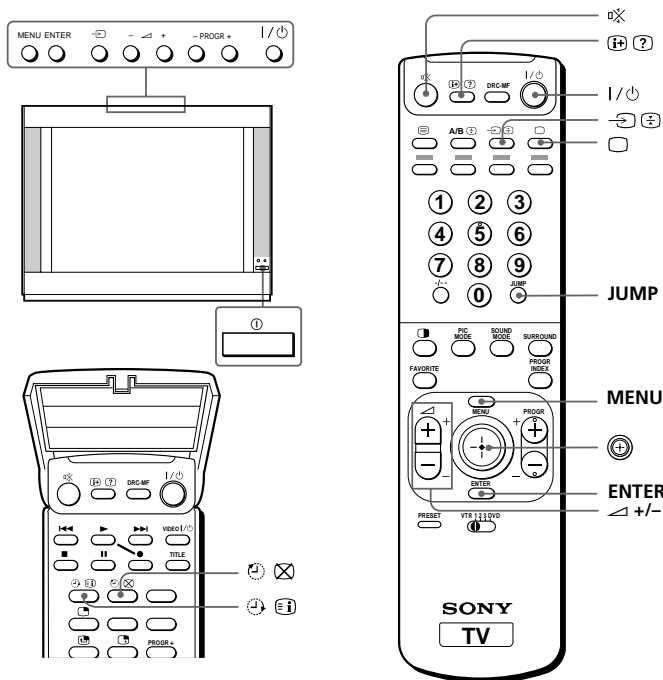
- When you turn on the TV, either the program number or video mode is displayed for approximately 40 seconds. The ECO MODE (🔌) icon will also appear if “ECO MODE” in the “FEATURE” menu is set “ON” (see page 38).

### To select a TV program quickly

- Press and hold PROGR +/-.
- Release PROGR +/- when the desired program number appears.

### Note

- When you select a TV program quickly, the picture may be disrupted. This does not indicate a malfunction.



### Additional tasks

To	Press
Turn off temporarily	I/O. The I/O indicator on the TV lights up red.
Turn off completely	① on the TV.
Adjust the volume	△+/-.
Mute the sound	⊘.
Watch the video input (VCR, camcorder, etc.)	⏮ (or ⏪ on the TV) to select "VIDEO 1", "VIDEO 2", "VIDEO 3", "VIDEO 4" or "DVD". To return to the TV screen, press □ (or ⏩ on the TV).
Jump back to the previous channel	JUMP.
Display the on-screen information*	ℹ.

\* Some picture/sound settings, and either the program number or video mode are displayed. The on-screen display for the picture/sound settings disappears after about 3 seconds.

continued

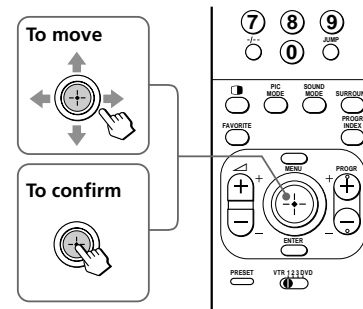
### Using Your New TV

### Watching the TV (continued)

#### Using the Remote Control Button Joystick (⊕)

You can select the menu item on the screen by moving ⊕ up, down, left or right (see page 31).

To confirm a selected item, press ⊕. You can also press ENTER on the remote to confirm a selected item.



#### Changing the menu language

You can change the menu language as well as the on-screen language. For details on how to use the menu, see "Introducing the menu system" on page 29.

- Press MENU.
- Move ⊕ up or down to select , then press ⊕.
- Make sure "LANGUAGE" is selected then press ⊕.
- Move ⊕ up or down to select the desired language (e.g., عربي), then press ⊕.

#### To return to the normal screen

Press MENU.

### Setting the Wake Up timer

- Press until the desired period of time appears. The Wake Up timer starts immediately after you have set it.
- Select the TV channel or video mode you want to wake up to.
- Press or set the Sleep timer if you want the TV to turn off automatically. The indicator on the TV lights up orange.

### To cancel the Wake Up timer

Press until “WAKE UP TIMER: OFF” appears, or turn off the TV’s main power.

**Note**

- If no buttons or controls are pressed for more than two hours after the TV is turned on using the Wake Up timer, the TV automatically goes into standby mode. To resume watching the TV, press any button or control on the TV or the remote.

### Setting the Sleep timer

- Press until the desired period of time appears. The Sleep timer starts immediately after you have set it.
- 

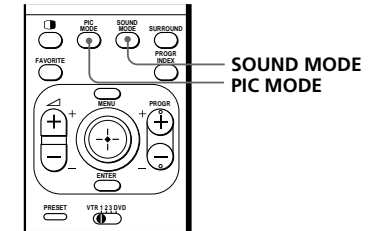
### To cancel the Sleep timer

Press until “SLEEP TIMER: OFF” appears, or turn the TV off.

## Advanced Operations

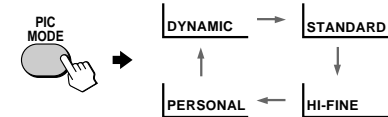
### Selecting the picture and sound modes

You can select picture and sound modes and adjust the setting to your preference in the “PERSONAL” option.



### Selecting the picture mode

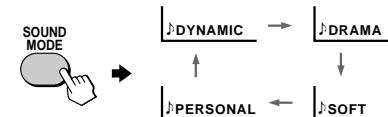
Press PIC MODE repeatedly until the desired picture mode is selected.



Select	To
“DYNAMIC”	receive high contrast pictures.
“STANDARD”	receive normal pictures.
“HI-FINE”	receive higher resolution pictures with mild contrast.
“PERSONAL”	receive the last adjusted picture setting from the “ADJUST” option in the “A/V CONTROL” menu (see page 33).

### Selecting the sound mode

Press SOUND MODE repeatedly until the desired sound mode is selected.



Select	To
“DYNAMIC”	listen to dynamic and clear sound that emphasizes both the low and high tones.
“DRAMA”	listen to sound that emphasizes voice and high tones.
“SOFT”	receive soft sound.
“PERSONAL”	receive the last adjusted sound setting from the “ADJUST” option in the “A/V CONTROL” menu (see page 33).

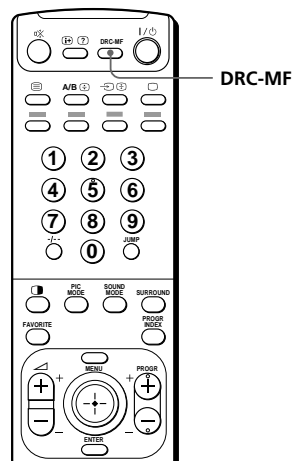
**Tip**

- You can also set the picture and sound modes using the menu (see “Changing the “A/V CONTROL” setting” on page 32).

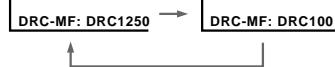
## Viewing higher quality pictures

### — “DRC-MF”

The Digital Reality Creation-Multi Function (DRC-MF) feature allows you to enjoy higher quality pictures on your TV. You can select “DRC1250” to watch super real (higher resolution) pictures, or “DRC100” to reduce flicker if necessary.



Press DRC-MF repeatedly until you receive the desired picture quality.




Select	To
“DRC1250”	select higher resolution pictures.
“DRC100”	reduce flicker on the screen.

#### Tip

- When the broadcast signal is weak, you may see some dots or noise on the TV screen. To reduce this interference, display the “A/V CONTROL” menu and select “ADJUST” in “PICTURE MODE”, then adjust “SHARP” to reduce the sharpness (see page 33).

#### Note

- The DRC-MF mode is not selectable when using the “PROGRAM INDEX” or “FAVORITE” channel feature, or when the “GAME MODE”, Picture-In-Picture (“PIP”), or “TWIN” mode is turned “ON”.

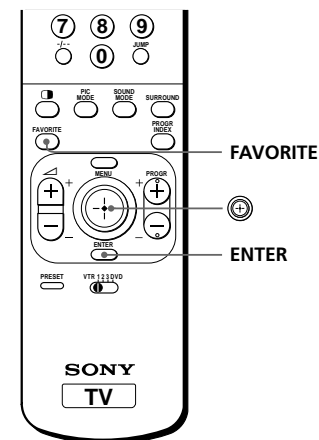
The DRC-MF logo (  ) and “DRC-MF” are trademarks of Sony Corporation.

## Viewing your favorite channels

### — “FAVORITE CH”

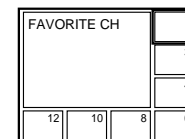
You can display seven favorite channels for quick and easy selection.

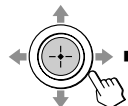

The last seven channels selected with the number buttons are displayed in “AUTO” mode. You can set up your own favorite channels in “MANUAL” mode under the “FAVORITE CH” menu (see “Changing the favorite channel setting” on page 41).

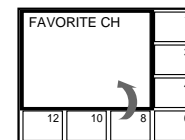
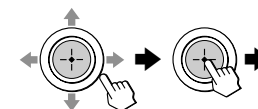


### Selecting a favorite channel

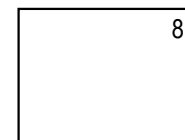
- 1 Press FAVORITE.



- 2 Move  up, down, left or right to select the desired channel (e.g. PR 8), then press .



- 3 Press  again.



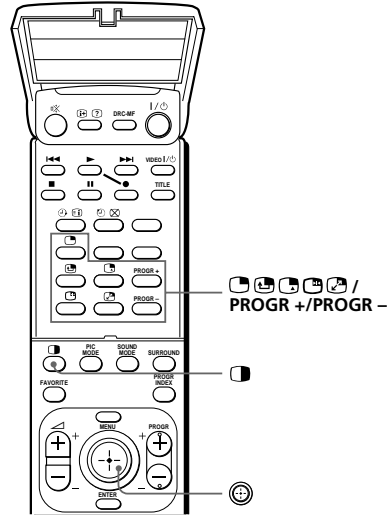
#### Note

- When you use your TV for the first time, seven preset channels appear.

## Watching two programs at the same time

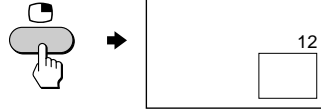
— “PIP”, “TWIN”

With the Picture-in-Picture (PIP) or TWIN pictures features, you can display a different TV program or video within or beside the main picture.



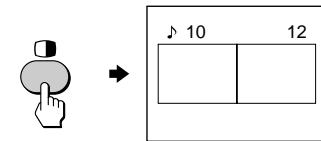
### Displaying the PIP screen

Press .





### Displaying TWIN pictures

Press .



### To return to the normal screen

Press  (when in the PIP screen) or  (when in the TWIN picture screen).



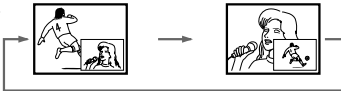


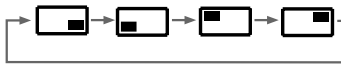




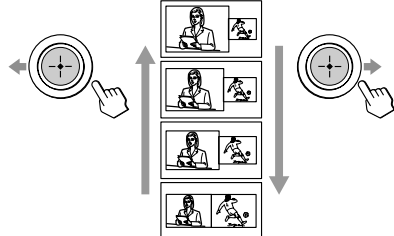
#### Tip

- You can also display the PIP screen or TWIN pictures using the menu (see “Changing the MULTI PICTURE setting” on page 35).



**continued**

## Watching two programs at the same time (continued)

### Additional PIP/TWIN pictures tasks

To	Press/Move
change a TV program in the PIP screen or in the right TWIN picture	Press PROGR + or PROGR -. For a video input, press  .
swap pictures between the main and PIP screens	Press  . 
freeze the PIP screen	Press  . To unfreeze the screen, press the button again.
change the position of the PIP screen	Press  . 
swap the right and left pictures of the TWIN pictures	Press  . 
change the screen size of the TWIN pictures	Move  left to increase the left screen size. Move  right to increase the right screen size. 

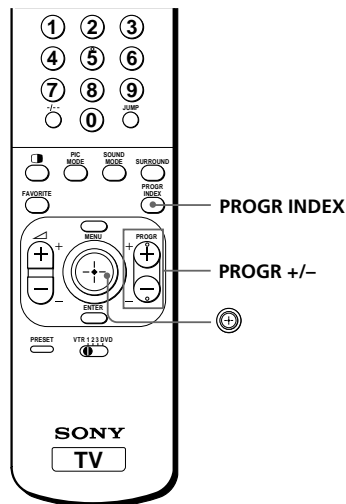
#### Notes

- The  button does not function in the TWIN pictures mode.
- When you display a video input on the PIP screen at a faster/slower speed, the picture may be disrupted depending on the VCR type.
- If you display different color systems on the main screen and the PIP screen, the size of the PIP screen may be different and the PIP picture may be disrupted. This does not indicate a malfunction of the TV.
- In the TWIN picture screen, you can only operate and hear the sound of the main left screen (♪ appears on the screen).
- When the  button is pressed, the TV screen flickers or goes blank for about one second before the TWIN pictures appear. This does not indicate a malfunction of the TV.

## Displaying multiple programs

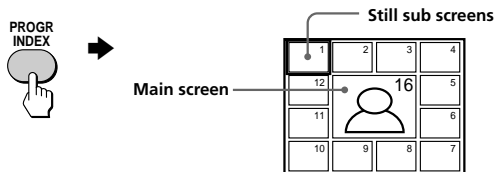
— “PROGRAM INDEX”

The PROGRAM INDEX feature displays all of the preset TV programs on twelve or seven sub screens for direct selection.

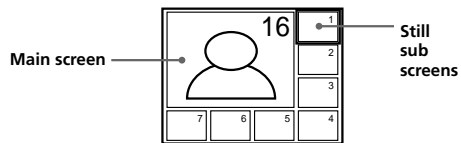


Press PROGR INDEX.

The first twelve preset programs appear one by one, clockwise from the upper left corner.



When the number of the preset TV programs is less than eight, the first seven preset programs appear one by one, clockwise from the upper right corner.



**Tip**

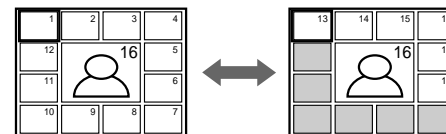
- When you press the PROGR INDEX button in the TWIN pictures mode, the left picture appears as the main screen of the PROGRAM INDEX mode.

## Displaying multiple programs (continued)

To view the next or the previous twelve preset programs

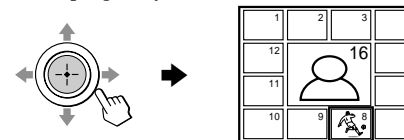
This works only when the number of the preset TV programs is more than twelve.

Press PROGR +/- on the remote or the TV.

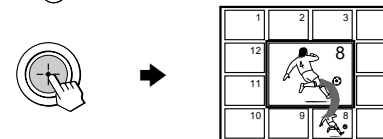


To select the desired program directly from the sub screens

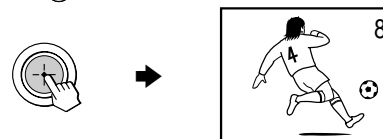
1 Move up, down, left or right to move the frame to the screen of the program you want to watch.



2 Press .



3 Press again.



**Tip**


- Pressing the number buttons directly displays the program.

continued



### To return to the normal screen

Press PROGR INDEX again, or:

- 1 Select "PROGRAM INDEX" from the "MULTI PICTURE" menu.
- 2 Press .

#### Tip

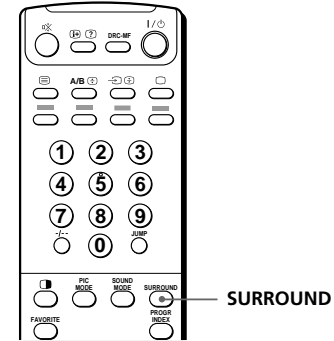
- You can also display multiple programs using the menu (see "Changing the MULTI PICTURE setting" on page 35).

#### Note

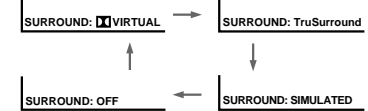
- When displaying multiple programs, only the sound of the main screen is heard.


## Listening with surround sound

The surround feature enables you to enjoy the sound effects of a concert hall or movie theater.







Press SURROUND repeatedly until you receive the desired surround sound.



Select	To
"  VIRTUAL"	listen to Dolby* Surround encoded sound.
"TruSurround"	listen to the surround sound that spreads out to the rear of a room.
"SIMULATED"	listen to monaural sound with a stereo-like effect.
"OFF"	turn off the surround sound.

#### Notes

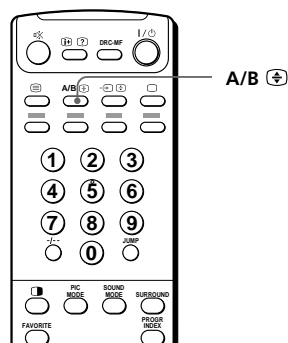
- The Virtual Dolby Surround of this model consists of Dolby Digital, Dolby Pro Logic and TruSurround.
- The " VIRTUAL" (Virtual Dolby Digital) is only available when receiving a Dolby Digital signal through the  DIGITAL IN (component video input) jack at the rear of your TV and "DIGITAL IN: ON" in the "A/V CONTROL" menu is selected (see pages 7 and 32).
- When using the  DIGITAL IN (component video input) jack at the rear of your TV, the available surround modes depend on the type of digital signal being received.
- SIMULATED uses SRS (MONO).

\* Manufactured under license from Dolby Laboratories Licensing Corporation. DOLBY, the double-D symbol  and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.


"TruSurround" is a trademark of SRS Labs, Inc. SRS and the SRS symbol are registered trademarks of SRS Labs, Inc. in the United States and selected foreign countries. SRS and TruSurround are incorporated under license from SRS Labs, Inc. and are protected under United States Patent Nos. 4,748,669 and 4,841,572 with numerous additional issued and pending foreign patents".

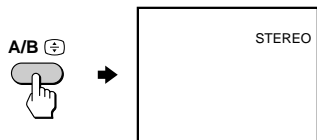
## Enjoying stereo or bilingual programs (KV-ES34M91 only)

You can enjoy stereo sound or bilingual programs of NICAM and A2 (German) stereo systems.



Press A/B repeatedly until you receive the sound you want.

The on-screen display changes to show the selected sound and the  indicator on the TV lights up red.



### When receiving a NICAM program

Broadcasting	On-screen display (Selected sound)
NICAM stereo	
NICAM bilingual	
NICAM monaural	

### Enjoying stereo or bilingual programs (continued)

#### When receiving an A2 (German) program

Broadcasting	On-screen display (Selected sound)
A2 (German) stereo	
A2 (German) bilingual	

#### Notes

- If the signal is very weak, the sound becomes monaural automatically.
- If the stereo sound is noisy when receiving a NICAM program, select "MONO". The sound becomes monaural, but the noise is reduced.

#### If the sound is distorted or noisy when receiving a monaural program through the (antenna) terminal

Press A/B repeatedly until "MONO" appears on the screen.

To cancel the monaural sound setting, press A/B again until "AUTO" appears on the screen.



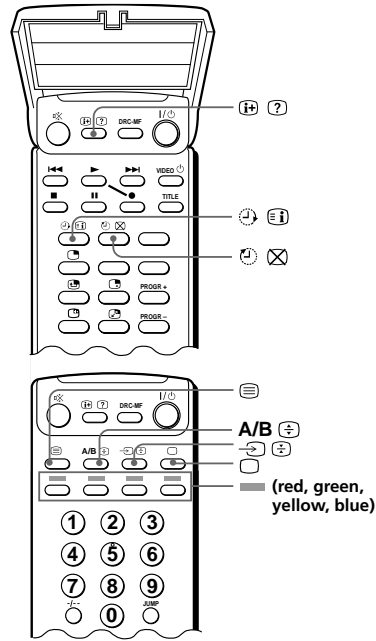
#### Notes

- The "MONO" or "AUTO" setting is memorized for each program position.
- You cannot receive a stereo broadcast signal when the TV is in the "MONO" setting. Normally, set the TV to "AUTO".

continued

## Viewing Teletext

Some TV stations broadcast an information service called Teletext which allows you to receive various information, such as stock market reports and news.

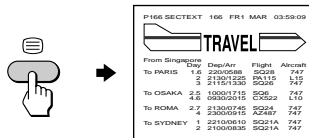


### Displaying Teletext

**1** Select a TV channel that carries the Teletext broadcast you want to watch.

**2** Press to display the text.

A Teletext page (normally the index page) is displayed. If there is no Teletext broadcast, "100?" is displayed at the top left corner of the screen after approximately 10 seconds.



### To turn off Teletext

Press .

continued

## Viewing Teletext (continued)

### Additional Teletext tasks

To	Do this
display a Teletext page on the TV picture	Press . Each time you press , the screen changes as follows: Teletext → Teletext and TV → TV.
check the contents of a Teletext service	Press . An overview of the Teletext contents, including page numbers, appears on the screen.
select a Teletext page	Press the number buttons to enter the three-digit page number of the desired Teletext page.* If you make a mistake, reenter the correct page number. To access the next or previous page, press PROG+ /-.
hold (pause) a Teletext page (stop the page from scrolling)	Press  to display the symbol "⏸" at the top left corner of the screen. To resume normal Teletext viewing, press  or .
reveal concealed information (e.g., an answer to a quiz)	Press . To conceal the information, press the button again.
enlarge the Teletext display	Press . Each time you press , the Teletext display changes as follows: Enlarge upper half → Enlarge lower half → Normal size.
stand by for a Teletext page while watching a TV program	1 Enter the Teletext page number that you want to refer to, then press .  2 When the page number is displayed, press  to show the text.

\* You can also select a Teletext page of any page number that appears in the colored column at the bottom of the screen using the corresponding color-coded button on the remote.

### Using FASTEXT

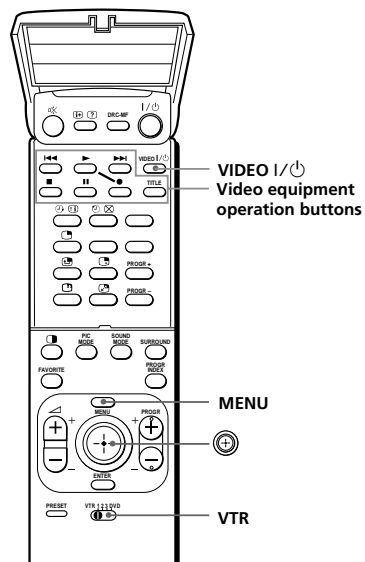
This feature allows you to quickly access a Teletext page that uses FASTEXT. When a FASTEXT program is broadcast, colored menus appear at the bottom of the screen. The color of each menu corresponds to the color-coded buttons on the remote (red , green , yellow , and blue ).

### To access a FASTEXT menu

Press the color-coded button on the remote corresponding to the menu you want. The menu page appears on the screen after a few seconds.

## Operating optional components

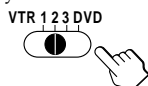
You can use the supplied remote to operate Sony video equipment such as Beta, 8 mm, VHS or DVD.



### Setting up the remote to work with other connected equipment

Switch VTR to select the desired equipment type (see the chart below).

For example, to operate a Sony 8 mm VCR:



To control	Select
DVD	DVD
VTR1 (Beta)	1
VTR2 (8 mm)	2
VTR3 (VHS)	3

#### Notes

- If your video equipment is furnished with a COMMAND MODE selector, set this selector to the same position as the VTR switch.
- If the equipment does not have a certain function, the corresponding button on the remote will not operate.

continued

### Operating optional components (continued)

#### Operating a VCR using the remote

To	Press
turn on/off	VIDEO I / ⏻
record	▶ while pressing ●
play	▶
stop	■
fast forward (▶▶)	▶▶
rewind the tape (◀◀)	◀◀
pause	
	Press again to resume normal playback.
search the picture forward (▶▶) or backward (◀◀)	▶▶ or ◀◀ during playback. Release to resume normal playback.

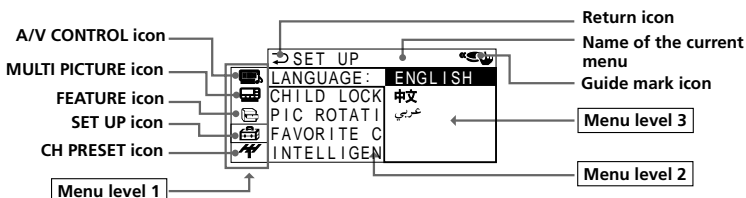
#### Operating a DVD player using the remote




To	Press
turn on/off	VIDEO I / ⏻
play	▶
stop	■
pause	
	Press again to resume normal playback.
step through different tracks of an audio disc	▶▶ to step forward or ◀◀ to step backward.
display the title menu	TITLE
display the menu	MENU while holding down ●
select the menu item	Move ● up, down, left or right while holding down ●

## Adjusting Your Setup (MENU)



### Introducing the menu system

The MENU button lets you open a menu and change the settings of your TV. The following is an overview of the menu system.



Level 1	Level 2	Level 3/Function
"A/V CONTROL" 	"DRC-MF"	Select the "DRC-MF" mode: "DRC1250" → "DRC100"
	"PICTURE MODE"  "ADJUST"	Select the picture mode: "DYNAMIC" → "STANDARD" → "HI-FINE" → "PERSONAL" → "ADJUST"
		Adjust the "PERSONAL" option: "PICTURE" → "COLOR" → "BRIGHT" → "HUE" → "SHARP"
	"SOUND MODE"  "ADJUST"	Select the sound mode: "DYNAMIC" → "DRAMA" → "SOFT" → "PERSONAL" → "ADJUST"
		Adjust the "PERSONAL" option: "BASS" → "TREBLE" → "BALANCE" → "BBE"*
"SURROUND"	Select the "SURROUND" mode: "VIRTUAL" → "TruSurround" → "SIMULATED" → "OFF"	
"MULTI PICTURE" 	"PIP"	Activate or deactivate the PIP feature.
	"PIP POSITION"	Change the position of the sub screen.
	"SWAP"	Swap the pictures between the main and sub screens.
	"TWIN"	Display a TV program or video beside the main screen.
	"PROGRAM INDEX"	Display all the preset TV programs at the same time.
"FEATURE" 	"WIDE MODE"	Activate or deactivate WIDE MODE feature.
	"ECO MODE"	Activate or deactivate ECO MODE feature.
	"GAME MODE"	Activate or deactivate GAME MODE feature.

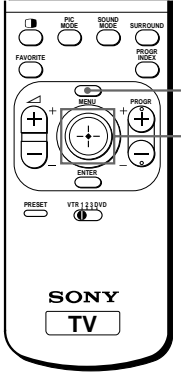
### Introducing the menu system (continued)

Level 1	Level 2	Level 3/Function
"SET UP" 	"LANGUAGE"	Change the menu language: "ENGLISH" → "中文" (Chinese) → "عربي" (Arabic)
	"CHILD LOCK"	Lock out specific channels.
	"PIC ROTATION"	Rotate the picture.
	"FAVORITE CH"	Set favorite channels.
	"INTELLIGENT VOL"	Adjust the volume automatically.
"CH PRESET" 	"AUTO PROGRAM"	Preset channels automatically.
	"MANUAL PROGRAM"	Preset channels manually.
	"SKIP"	Skip unwanted or unused program numbers.
	"TV SYS"	Select the TV system: "B/G" → "I" → "D/K" → "M"
	"COL SYS"	Select the color system: "AUTO" → "PAL" → "SECAM" → "NTSC3.58" → "NTSC4.43"

\* The BBE is manufactured by Sony Corporation under license from BBE Sound, Inc. It is covered by U.S. Patent No. 4,638,258 and No. 4,482,866. The word "BBE" and the BBE symbol are the trademarks of BBE Sound, Inc.

continued

## How to use the menu



**Press MENU to display the menu.**

**Move the button joystick (⊕) up, down, left or right to select the desired item.**

**Press the button joystick (⊕) to confirm the selection and/or go to the next level. You can also press ENTER on the remote to do this.**

or

**ENTER**

### Other menu operations

To	Press/Move
Adjust the setting value	Move ⊕ up, down, left or right.
Move to the next/previous menu level	Move ⊕ left or right.
Cancel the menu	Press MENU.

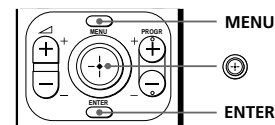
#### Tips

- If you want to exit from Menu level 2 to Menu level 1, move ⊕ up or down until the return icon (↶) is highlighted, then press ⊕ or ENTER.
- The MENU, ENTER, and ⏪ +/- buttons on the TV can also be used for the operations above.

#### Note

- If more than 60 seconds elapse between entries, the menu screen automatically disappears.

## Changing the "A/V CONTROL" setting



The "A/V CONTROL" menu allows you to adjust the picture and sound settings.

- 1 Press MENU.**
- 2 Move ⊕ up or down to select **⏪**, then press ⊕.**
- 3 Move ⊕ up or down to select either "DRC-MF", "PICTURE MODE", "SOUND MODE", "SURROUND", or "DIGITAL IN", then press ⊕.**
- 4 Move ⊕ up or down to select the desired option, then press ⊕.**

For	Select
"DRC-MF"	either "DRC1250" or "DRC100".
"PICTURE MODE"	either "DYNAMIC", "STANDARD", "HI-FINE", "PERSONAL"*, or "ADJUST".
"SOUND MODE"	either "DYNAMIC", "DRAMA", "SOFT", "PERSONAL"*, or "ADJUST".
"SURROUND"	either "DQ VIRTUAL", "TruSurround", "SIMULATED", or "OFF".
"DIGITAL IN"	either "ON" or "OFF".

\* When the "PERSONAL" mode is selected, the last adjusted picture/sound settings from the "ADJUST" option are received (see page 31).

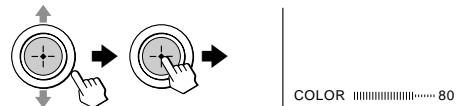
#### Tip

- For details on the options under the "DRC-MF", "PICTURE MODE"/ "SOUND MODE", "SURROUND" and "DIGITAL IN" modes, see pages 15, 14, 22 and 34 respectively.

### To return to the normal screen

Press MENU.

### Adjusting the "ADJUST" options under "PICTURE MODE"

**1** Move up or down to select the desired item (e.g., "COLOR"), then press . 

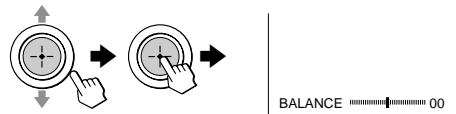
**2** Adjust the value according to the following table, then press .

For	Move  down or left to	Move  up or right to
"PICTURE"	decrease picture contrast	increase picture contrast
"COLOR"	decrease color intensity	increase color intensity
"BRIGHT"	darken the picture	brighten the picture
"HUE"*	increase red picture tones	increase green picture tones
"SHARP"	soften the picture	sharpen the picture

\* You can adjust "HUE" for the NTSC color system only.

**3** Repeat the above steps to adjust other items. The adjusted settings will be received when you select "PERSONAL".

### Adjusting the "ADJUST" options under "SOUND MODE"

**1** Move up or down to select the desired item (e.g., "BALANCE"), then press . 

**2** Adjust the value according to the following table, then press .

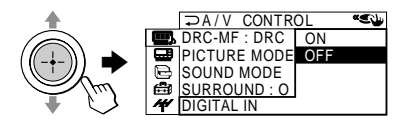
For	Move
"BASS"	down or left to decrease the bass, up or right to increase the bass.
"TREBLE"	down or left to decrease the treble, up or right to increase the treble.
"BALANCE"	down or left to increase the left speaker's volume, up or right to increase the right speaker's volume.
"BBE"	up or down to select "HIGH", "LOW", or "OFF". "BBE" can produce clear sound.

**3** Repeat the above steps to adjust other items. The adjusted settings will be received when you select "PERSONAL".

continued

### Changing the "A/V CONTROL" setting (continued)

#### Setting the "DIGITAL IN" options

**1** In the "DIGITAL IN" menu, move up or down to select the desired option (see table below). 

Select	To
"ON"	receive digital audio signal through  DIGITAL IN (component video input) jack.
"OFF"	receive analog audio signal through  L and R (component video input) jack.

**2** Press to confirm the selected option.



**Note**

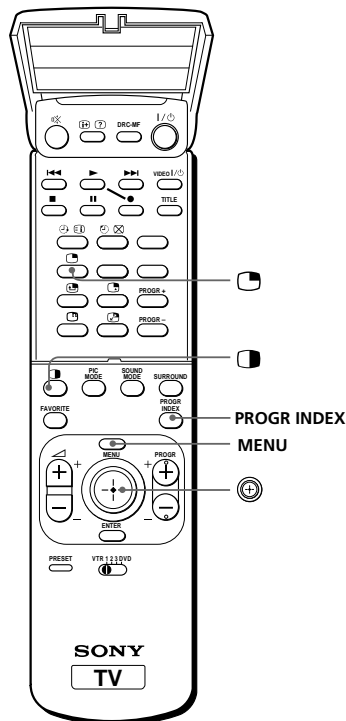
- Your TV can only receive Dolby Digital or Linear PCM format digital signals through the DIGITAL IN (component video input) jack (see page 7). Receiving any other format digital signal may cause unwanted noise or no sound from the speakers.

**Tip**

- For details on the menu system and how to use the menu, refer to "Introducing the menu system" on page 29.

## Changing the "MULTI PICTURE" setting

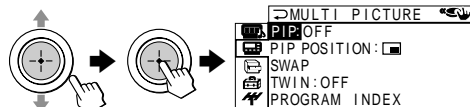
The "MULTI PICTURE" menu allows you to use the Picture-in-Picture (PIP), TWIN pictures, or PROGRAM INDEX features.



**1** Press MENU.

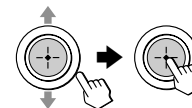


**2** Move  $\odot$  up or down to select  $\text{PIP}$ , then press  $\odot$ .

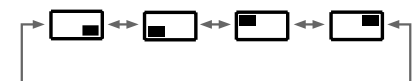


## Changing the "MULTI PICTURE" setting (continued)

**3** Move  $\odot$  up or down to select the desired option (see the table below), then press  $\odot$ .



Select	To
"PIP"	display the PIP screen within the main picture. Move $\odot$ up or down to select "ON", then press $\odot$ . To cancel, press $\text{OFF}$ or select "OFF", then press $\odot$ .
"PIP POSITION"	change the position of the PIP screen. Move $\odot$ up or down to select the desired position, then press $\odot$ .
"SWAP"	swap the main and PIP screens, or right and left pictures of the TWIN pictures.
"TWIN"	display a different TV program or video beside the main picture. Move $\odot$ up or down to select "ON", then press $\odot$ . To cancel, press $\text{OFF}$ or select "OFF", then press $\odot$ .
"PROGRAM INDEX"	view multiple programs on the sub-screens. To cancel, press PROGR INDEX.



## To return to the normal screen

Press MENU.

### Tip

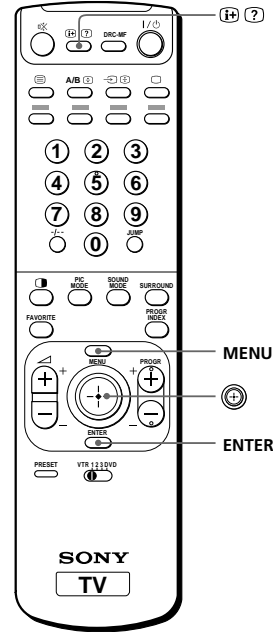
- For details on the menu system and how to use the menu, see "Introducing the menu system" on page 29.

continued

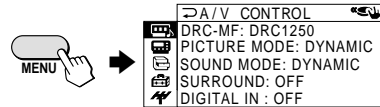


## Changing the "FEATURE" setting

The "FEATURE" menu allows you to change the size of the picture on the screen when receiving wide mode (16:9) picture signals. You can also adjust the picture setting that is suitable for viewing video games, and reduce the power consumption of your TV.



**1** Press MENU.

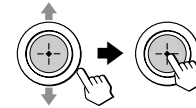


**2** Move up or down to select , then press .



## Changing the "FEATURE" setting (continued)

**3** Move up or down to select the desired option (see the table below), then press .



Select	To
"WIDE MODE"	change the size of the picture when receiving wide-mode (16:9) picture signal. Move  up or down to select "ON", then press .
	<p>To restore the normal picture size, select "OFF" then press .</p>
"ECO MODE"	reduce power consumption of your TV to save energy. Move  up or down to select "ON", then press .To cancel, select "OFF", then press .
"GAME MODE"	adjust the picture setting that is suitable to view video games. Move  up or down to select "ON", then press .To cancel, select "OFF", then press .

### Notes

- When you turn on "ECO MODE", the picture may become dimmer. Turning "ECO MODE" off will restore the picture to its original setting.
- "WIDE MODE" and "GAME MODE" is available only when receiving signals through the (video input), (S video input), or (component video input) jacks at the side and rear of your TV.
- If "ECO MODE" is on, the ECO MODE () icon will appear at the bottom right corner of the screen when you turn on the TV or when you press on the remote (see pages 10 and 11).

### To return to the normal screen

Press MENU.

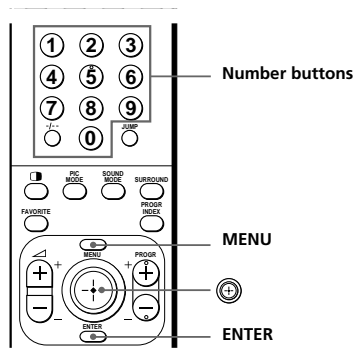
### Tip

- For details on the menu system and how to use the menu, see "Introducing the menu system" on page 29.

continued

## Changing the "SET UP" setting

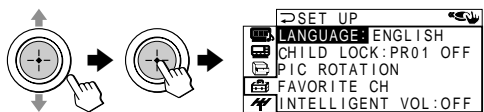
The "SET UP" menu allows you to: change the menu language, block channels, adjust the picture position, program your favorite channels, and adjust the volume automatically.



**1** Press MENU.



**2** Move up or down to select , then press .



**3** Move up or down to select the desired option, then press .



Select	To
"LANGUAGE"	change the menu language (see page 12).
"CHILD LOCK"	block channels (see page 40).
"PIC ROTATION"	adjust the picture position when it is not aligned with the TV screen. Move  up or right to adjust the position clockwise, then press .Move  down or left to adjust the position counterclockwise, then press .
"FAVORITE CH"	select your favorite channels (see pages 16 and 41).
"INTELLIGENT VOL"	adjust the volume of all TV programs automatically. Move  up or down to select "ON", then press .To cancel, select "OFF", then press .

### To return to the normal screen

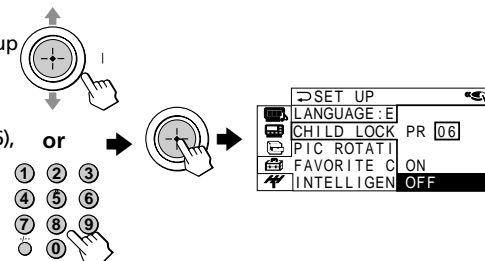
Press MENU.

continued

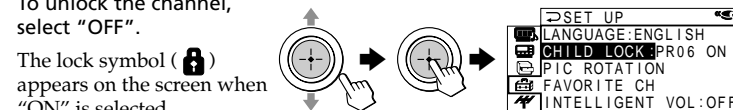
## Changing the "SET UP" setting (continued)

### Blocking channels ("CHILD LOCK")

**1** After selecting "CHILD LOCK", either move up or down, or press the number buttons (or PROGR +/-) to select the desired channel (e.g. PR 06), then press .



**2** Move up or down to select "ON", then press . To unlock the channel, select "OFF".



If a locked channel is selected, the lock symbol appears on the screen.



**3** Repeat steps 1 and 2 to lock other channels.


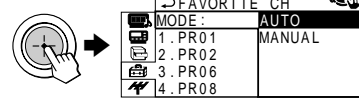


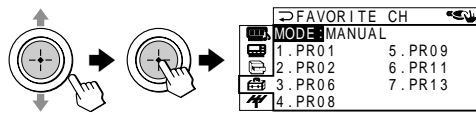


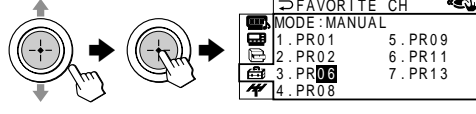


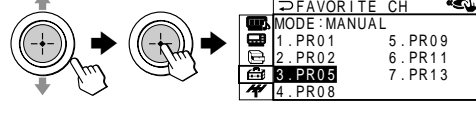
### To return to the normal screen

Press MENU.

#### Note

- If you preset a locked channel, that channel will be unlocked (see page 42).

## Changing the favorite channel setting

- After selecting "FAVORITE CH", make sure "MODE" is selected, then press .
 
- Move  up or down to select "MANUAL", then press .
 
- Move  up or down to select the program you want to change, then press .
 
- Move  up or down to change the number, then press .
 
- Repeat steps 3 and 4 to set other channels.

### To return to the normal screen

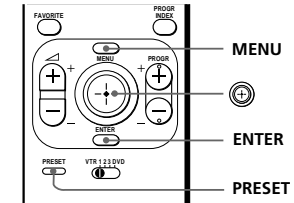
Press MENU.

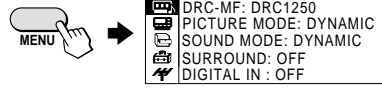



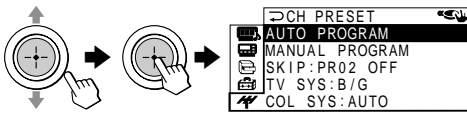



#### Note




- If you press the PROGR +/- buttons or number buttons in step 4 above, the TV will display the channel immediately.

## Changing the "CH PRESET" setting

The "CH PRESET" menu allows you to adjust the setup of your TV. For example, you can manually tune in a channel with a weak signal that fails to be tuned in by automatic presetting.



- Press MENU.
 
- Move  up or down to select , then press .
 
- Move  up or down to select the desired option, then press .
 

Select	To
"AUTO PROGRAM"	preset channels automatically.
"MANUAL PROGRAM"	preset channels manually. See "Presetting channels manually" on page 43.
"SKIP"	skip unwanted or unused channels. 1 Either move  up or down, or press the number buttons (or PROGR +/-) until the unused or unwanted channel number appears, then press  . 2 Select "ON", then press  . 3 To disable other channels, repeat steps 1 and 2. To restore the skipped channel, select "OFF" in step 2.
"TV SYS"	select the TV system.
"COL SYS"	select the color system. Normally, set this to "AUTO".

### To return to the normal screen


Press MENU.



#### Tip

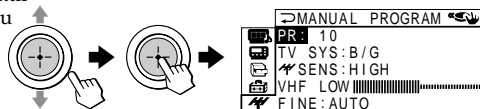
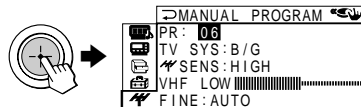
- For details on the menu system and how to use the menu, refer to "Introducing the menu system" on page 29.

## Presetting channels manually

**1** After selecting "MANUAL PROGRAM", select the program number to which you want to preset a channel.

(1) Make sure "PR" is selected, then press .



(2) Move  up or down until the program number you want to preset (e.g., program number "10") appears on the menu, then press .





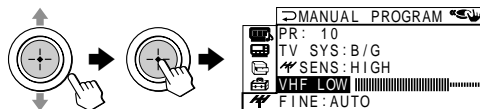
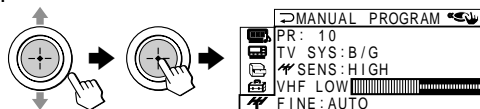
### Tips

- You can also select the "MANUAL PROGRAM" menu directly by pressing the PRESET button on the remote.
- You can also select the program number with the PROGR +/- or number buttons.



**2** Select the desired channel.



(1) Move  up or down to select either "VHF LOW", "VHF HIGH", or "UHF", then press .

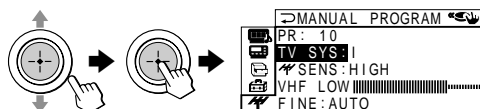
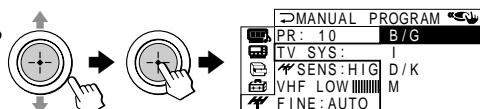
(2) Move  up or down until the desired channel's broadcast appears on the TV screen, then press .



**3** If the sound of the desired channel is abnormal, select the appropriate TV system.



(1) Move  up or down to select "TV SYS", then press .



(2) Move  up or down until the sound becomes normal, then press .





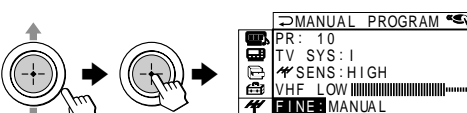
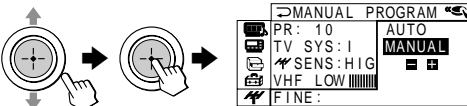
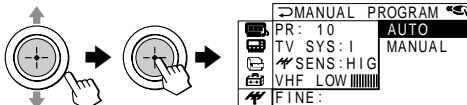
## Changing the "CH PRESET" setting (continued)

**4** If you are not satisfied with the picture and sound quality, you may be able to improve them by using the "FINE" tuning feature.



(1) Move  up or down to select "FINE", then press .

(2) Move  up or down to select "MANUAL", then press .

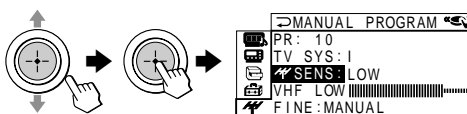
(3) Move  either up, down, left or right until the picture and sound quality are optimal, then press . The + or - icon on the menu flashes while tuning.



**5** If the TV signal is too strong and the picture is distorted, you can adjust the TV reception sensitivity.

(1) Move  up or down to select "SENS", then press .

(2) Move  up or down to select "LOW", then press .



### To return to the normal screen

Press MENU.

### Notes

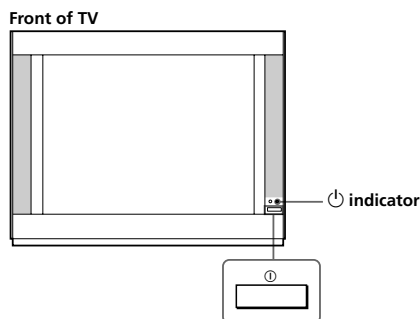
- The TV system ("TV SYS") and the TV reception sensitivity ("SENS") settings are memorized for each program number.
- If you preset a locked channel, that channel will be unlocked (see page 40).

continued

## Additional Information

### Self-diagnosis function

Your TV is equipped with a self-diagnosis function. If there is a problem with your TV, the ⏻ (standby) indicator flashes red. The number of times the ⏻ indicator flashes indicates the possible causes.






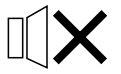






- 1** Check that the ⏻ indicator flashes red a number of times between 3-second intervals.
- 2** Count the number of times the ⏻ indicator flashes.
- 3** Press ⏻ (main power) to turn off your TV.
- 4** Inform your nearest Sony service center about the number of times the ⏻ indicator flashed.  
Be sure to note the model name and serial number located on the rear of your TV.

Additional Information

### Troubleshooting



If you have any problem while viewing your TV, please check the following troubleshooting guide. If the problem persists, contact your Sony dealer.


Symptom	Possible cause	Solutions	Page
	<ul style="list-style-type: none"> <li>The connection is loose or the cable is damaged.</li> </ul>	<ul style="list-style-type: none"> <li>Check the antenna cable and connection on the TV, VCR and at the wall.</li> </ul>	4
	<ul style="list-style-type: none"> <li>Channel presetting is inappropriate or incomplete.</li> </ul>	<ul style="list-style-type: none"> <li>Press the PRESET button to display the "MANUAL PROGRAM" menu and preset the channel again.</li> </ul>	43
	<ul style="list-style-type: none"> <li>The antenna type is inappropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Check the antenna type (VHF/UHF). Contact a Sony dealer for advice.</li> </ul>	-
	<ul style="list-style-type: none"> <li>The antenna direction needs adjustment.</li> </ul>	<ul style="list-style-type: none"> <li>Adjust the antenna direction. Contact a Sony dealer for advice.</li> </ul>	-
	<ul style="list-style-type: none"> <li>Signal transmission is low.</li> </ul>	<ul style="list-style-type: none"> <li>Try using a booster.</li> </ul>	-
	<ul style="list-style-type: none"> <li>Broadcast signals are too strong.</li> </ul>	<ul style="list-style-type: none"> <li>Press the PRESET button to display the "MANUAL PROGRAM" menu. Then, select "SENS: LOW".</li> <li>Turn off or disconnect the booster if it is in use.</li> </ul>	44
	<ul style="list-style-type: none"> <li>The TV system setting is inappropriate.</li> </ul>	<ul style="list-style-type: none"> <li>If the sound of all the channels are noisy, display the "CH PRESET" menu and select "AUTO PROGRAM" to preset the channels again.</li> </ul>	42
		<ul style="list-style-type: none"> <li>If the sound of some channels is noisy, select the channel, then display the "CH PRESET" menu and select the appropriate TV system ("TV SYS").</li> </ul>	43
	<ul style="list-style-type: none"> <li>The digital audio signal is inappropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Set "DIGITAL IN: OFF" in the "A/V CONTROL" menu and connect L and R (component video input) on your TV to receive analog audio signals.</li> </ul>	7, 34

Symptom	Possible cause	Solutions	Page
<b>No picture</b> 	<ul style="list-style-type: none"> <li>The power cord, antenna or VCR is not connected.</li> </ul>	<ul style="list-style-type: none"> <li>Check the power cord, antenna and the VCR connections.</li> </ul>	4
<b>No sound</b> 	<ul style="list-style-type: none"> <li>The TV is not turned on.</li> </ul>	<ul style="list-style-type: none"> <li>Press I/⏻ (power).</li> </ul>	10
<b>Good picture</b> 	<ul style="list-style-type: none"> <li>The volume level is too low.</li> </ul>	<ul style="list-style-type: none"> <li>Press ▲ + to increase the volume level.</li> </ul>	11
<b>No sound</b> 	<ul style="list-style-type: none"> <li>The sound is muted.</li> </ul>	<ul style="list-style-type: none"> <li>Press ⏻ to cancel the muting.</li> </ul>	11
	<ul style="list-style-type: none"> <li>The broadcast signal has a transmission problem.</li> </ul>	<ul style="list-style-type: none"> <li>Press A/B until a better sound is heard. (KV-ES34M91 only)</li> </ul>	23
	<ul style="list-style-type: none"> <li>The digital audio signal is inappropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Set "DIGITAL IN: OFF" in the "A/V CONTROL" menu and connect  L and R (component video input) on your TV to receive analog audio signals.</li> </ul>	7, 34
	<ul style="list-style-type: none"> <li>The "DIGITAL IN" setting in the "A/V CONTROL" menu is inappropriate.</li> </ul>	<ul style="list-style-type: none"> <li>When connecting to  (component video input) on your TV, set "DIGITAL IN: ON" to receive digital audio signals through  DIGITAL IN, or set "DIGITAL IN: OFF" to receive analog audio signals through  L and R.</li> </ul>	34
<b>Dotted lines or stripes</b> 	<ul style="list-style-type: none"> <li>There is local interference from cars, neon signs, hair dryers, power generators, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Do not use a hair dryer or other equipment near the TV.</li> <li>Adjust the antenna direction for minimum interference. Contact a Sony dealer for advice.</li> </ul>	-
<b>Double images or "ghosts"</b> 	<ul style="list-style-type: none"> <li>Broadcast signals are reflected by nearby mountains or buildings.</li> </ul>	<ul style="list-style-type: none"> <li>Use a highly directional antenna.</li> <li>Use the fine tuning ("FINE") function.</li> </ul>	-
	<ul style="list-style-type: none"> <li>The antenna direction needs adjustment.</li> </ul>	<ul style="list-style-type: none"> <li>Adjust the antenna direction. Contact a Sony dealer for advice.</li> </ul>	-
	<ul style="list-style-type: none"> <li>Use of a booster is inappropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Turn off or disconnect the booster if it is in use.</li> </ul>	-

continued

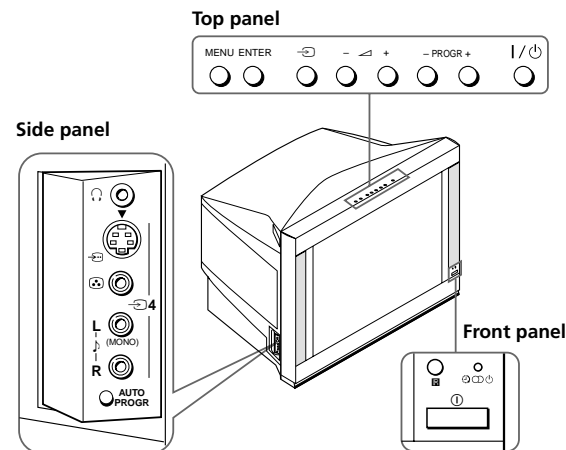
### Troubleshooting (continued)






Symptom	Possible cause	Solutions	Page
<b>No color</b> 	<ul style="list-style-type: none"> <li>The color level setting is too low.</li> </ul>	<ul style="list-style-type: none"> <li>Display the "A/V CONTROL" menu and select "ADJUST" of "PICTURE MODE", then adjust the "COLOR" level.</li> </ul>	33
	<ul style="list-style-type: none"> <li>The color system setting is inappropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Display the "CH PRESET" menu and check the color system ("COL SYS") setting (usually set this to "AUTO").</li> </ul>	42
	<ul style="list-style-type: none"> <li>The antenna direction needs adjustment.</li> </ul>	<ul style="list-style-type: none"> <li>Adjust the antenna direction. Contact a Sony dealer for advice.</li> </ul>	-
<b>Abnormal color patches</b> 	<ul style="list-style-type: none"> <li>The magnetic disturbance from external speakers or other equipment, or the direction of the earth's magnetic field may affect the TV.</li> </ul>	<ul style="list-style-type: none"> <li>Locate external speakers or other equipment away from the TV. Do not move the TV while the TV is turned on. Press ⏻ (main power) on the TV to turn off the TV for about five minutes, then turn it on again.</li> </ul>	-
<b>TV cannot receive stereo broadcast signal.</b> (KV-ES34M91 only)	<ul style="list-style-type: none"> <li>The stereo reception setting is inappropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Press A/B until "AUTO" appears on the screen.</li> </ul>	23
<b>Stereo broadcast sound switches on and off or is distorted.</b>	<ul style="list-style-type: none"> <li>The connection is loose or the cable is damaged.</li> </ul>	<ul style="list-style-type: none"> <li>Check the antenna cable and connection on the TV, VCR and on the wall.</li> </ul>	4
<b>OR</b> <b>The sound switches between stereo and monaural frequently.</b> (KV-ES34M91 only)	<ul style="list-style-type: none"> <li>The antenna direction needs adjustment.</li> </ul>	<ul style="list-style-type: none"> <li>Adjust the antenna direction. Contact a Sony dealer for advice.</li> </ul>	-
	<ul style="list-style-type: none"> <li>The broadcast signal has a transmission problem.</li> </ul>	<ul style="list-style-type: none"> <li>Press A/B until a better sound is heard.</li> </ul>	23
<b>"100?" appears at the top of the screen after approximately 10 seconds and there is no Teletext display.</b>	<ul style="list-style-type: none"> <li>The channel carries no Teletext broadcast.</li> </ul>	<p style="text-align: center;">—</p>	25
<b>Teletext display is incomplete (snowy picture or double images).</b>	<ul style="list-style-type: none"> <li>Connection is loose or the cable is damaged.</li> </ul>	<ul style="list-style-type: none"> <li>Check the antenna cable and connection on the TV, VCR, and at the wall.</li> </ul>	4
	<ul style="list-style-type: none"> <li>The antenna direction is inappropriate.</li> </ul>	<ul style="list-style-type: none"> <li>Adjust the antenna direction. Contact a Sony dealer for advice.</li> </ul>	-
	<ul style="list-style-type: none"> <li>Signal transmission is too low.</li> </ul>	<ul style="list-style-type: none"> <li>Try using a booster.</li> <li>Use the fine tuning (FINE) function.</li> </ul>	-
			44

Symptom	Possible cause	Solutions	Page
<b>Picture slant</b> 	<ul style="list-style-type: none"> <li>Terrestrial magnetism is affecting your TV set.</li> </ul>	<ul style="list-style-type: none"> <li>Display the "SET UP" menu and adjust "PIC ROTATION" so that the picture is aligned to the TV screen.</li> </ul>	39
<b>Lines moving across the TV screen.</b>	<ul style="list-style-type: none"> <li>There is interference from external sources, e.g., heavy machineries, nearby broadcast station.</li> </ul>	<ul style="list-style-type: none"> <li>Use the fine tuning ("FINE") function.</li> </ul>	44
<b>The indicator on your TV flashes red a number of times between 3-second intervals.</b>	<ul style="list-style-type: none"> <li>Your TV may need servicing.</li> </ul>	<ul style="list-style-type: none"> <li>Contact your nearest Sony service center.</li> </ul>	45
<b>TV cabinet creaks.</b>	<ul style="list-style-type: none"> <li>Changes in room temperature sometimes make the TV cabinet expand or contract, causing a noise. This does not indicate a malfunction.</li> </ul>	—	—
<b>A small "boom" sound is heard when the TV is turned on.</b>	<ul style="list-style-type: none"> <li>The TV's demagnetizing function is working. This does not indicate a malfunction.</li> </ul>	—	—
<b>Static discharge is felt when touching the TV cabinet.</b>	<ul style="list-style-type: none"> <li>This is the same static discharge that is felt when touching metal door handles or car doors especially when the air is dry, for example in winter. This does not indicate a malfunction.</li> </ul>	—	—

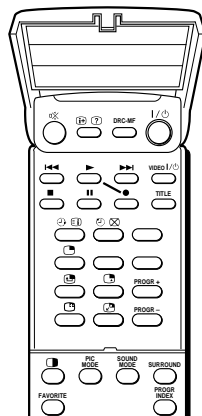
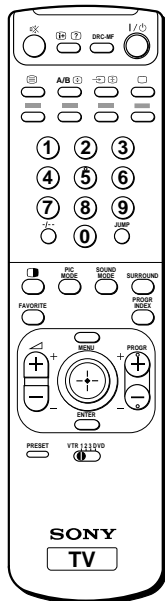
## Identifying parts and controls

### Front, top and side panels



Button	Function	Page
<b>Side panel</b>		
	Headphone jack.	—
AUTO PROGR	Preset channels automatically.	5
<b>Front panel</b>		
	Turn off completely or turn on the TV.	10
<b>Top panel</b>		
	Turn off temporarily or turn on the TV.	10
PROGR +/-	Select program number.	10
	Adjust volume.	11
	Select TV or video input.	11
ENTER	Confirm selected items.	31
MENU	Display the menu.	31

**Remote control**



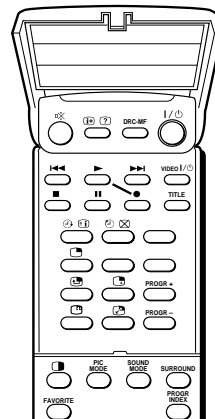
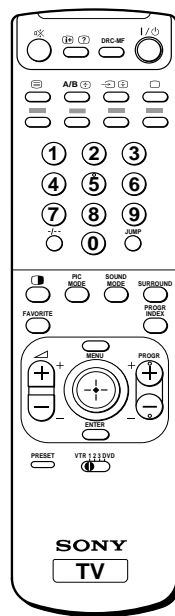
The names/symbols of buttons on the remote are indicated in different colors to represent the available functions.

Label color	Button function
White	For general TV operations
Green	For Teletext operations
Yellow	For PIP operations

Button	Function	Page
I / ⏻	Turn off temporarily or turn on the TV.	10
PROGR +/-	Select program number.	10
0 - 9, -/-	Input numbers.	10
ℹ	Display on-screen information.	11
⊘	Mute the sound.	11
⏪	Display the TV program.	11
⏩	Select TV or video input.	11
⏮ +/-	Adjust volume.	11
JUMP	Jump to previous channel.	11
<b>Timer operations</b>		
⌚	Set TV to turn on automatically.	13
⌚	Set TV to turn off automatically.	13
SOUND MODE	Select sound mode.	14
PIC MODE	Select picture mode.	14
DRC-MF	Select DRC-MF mode.	15
<b>Favorite Channel operations</b>		
FAVORITE	Display favorite channels.	16
Ⓞ	Select desired channel.	16
<b>PIP and Twin picture operations</b>		
Ⓜ	Display the PIP screen.	17
Ⓜ	Display TWIN pictures.	17
Ⓜ	Adjust Twin picture size.	18
PROGR +/-	Change program in PIP/ Twin picture.	18
Ⓜ	Select video input for PIP/ Twin picture.	18
Ⓜ	Swap main and PIP/ Twin picture.	18
Ⓜ	Freeze PIP screen.	18
Ⓜ	Adjust position of PIP screen.	18

continued

**Identifying parts and controls (continued)**

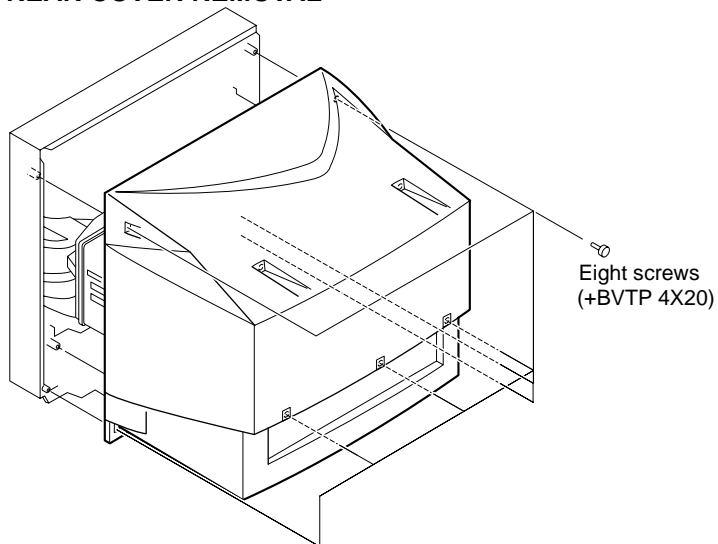


Button	Function	Page
<b>Program Index operations</b>		
PROGR INDEX	Display all preset TV programs.	19
PROGR +/-	View next/previous 12 TV programs.	20
Ⓞ	Select desired channel.	20
SURROUND	Select surround mode.	22
<b>Stereo/bilingual operations (KV-ES34M91 only)</b>		
A/B	Select stereo/bilingual mode.	23
<b>Teletext operations</b>		
Ⓜ	Display Teletext broadcast.	25
Ⓜ	Display Teletext service contents.	26
Ⓜ	Stop Teletext page from scrolling.	26
?	Reveal concealed information.	26
Ⓜ	Enlarge the Teletext display.	26
Ⓜ	Show TV screen while waiting for Teletext page.	26
0 - 9	Input Teletext page number.	26
PROGR +/-	Display the next or previous page.	26
Ⓜ (red, green, yellow, blue)	Access a FASTEXT menu.	26
<b>Optional components operations</b>		
VTR	Set up the remote.	27
VIDEO I / ⏻	Power.	28
TITLE	Display the title menu.	28
▶	Play.	28
▶▶	Fast forward/Search forward.	28
◀◀	Rewind/Search backward.	28
●	Record.	28
■	Stop.	28
⏸	Pause.	28
<b>Menu operations</b>		
MENU	Display the menu.	31
Ⓞ	Select, adjust and confirm selected items.	31
ENTER	Confirm selected items.	31
PRESET	Display "MANUAL PROGRAM" menu.	43

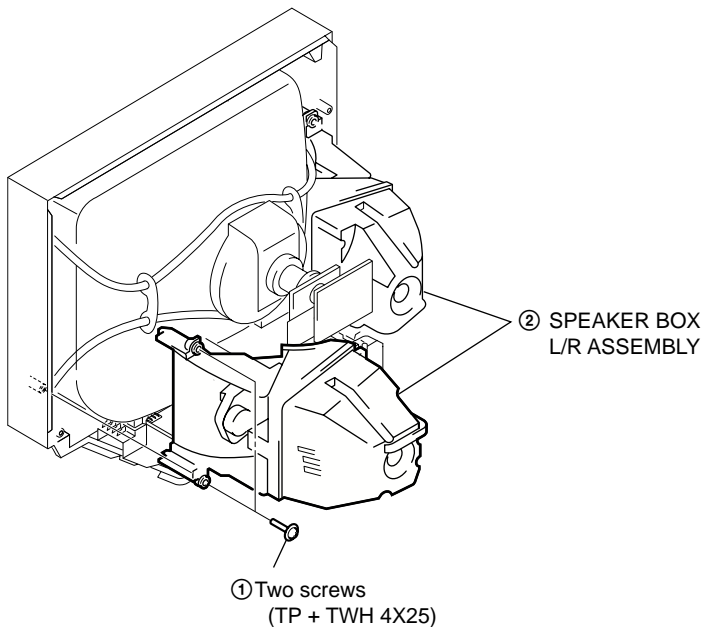


## SECTION 2 DISASSEMBLY

### 2-1. REAR COVER REMOVAL

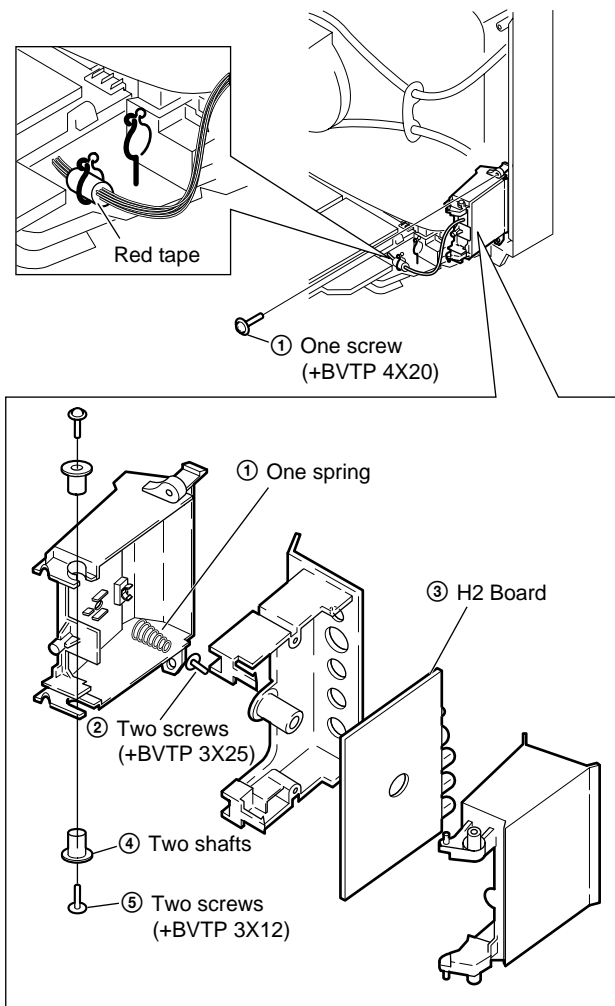


### 2-2. SPEAKER BOX REMOVAL

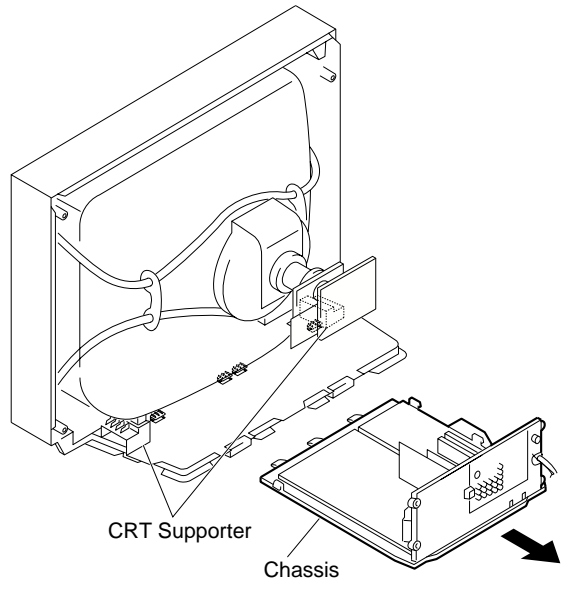


### 2-3. H2 BOARD REMOVAL

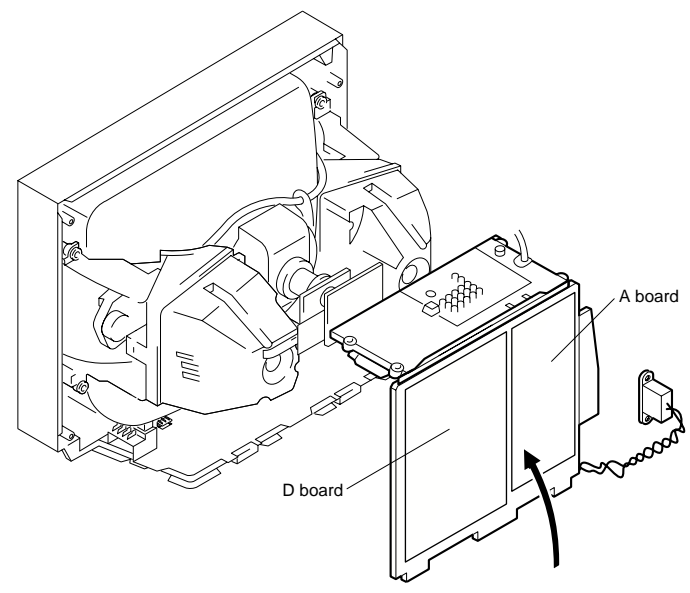
Caution: Please make sure that the red colour taped point is just placed with the purse lock when treating the leads to H2 board. If lead treatment is wrongly arranged, it will affect the door opening and closing malfunction.



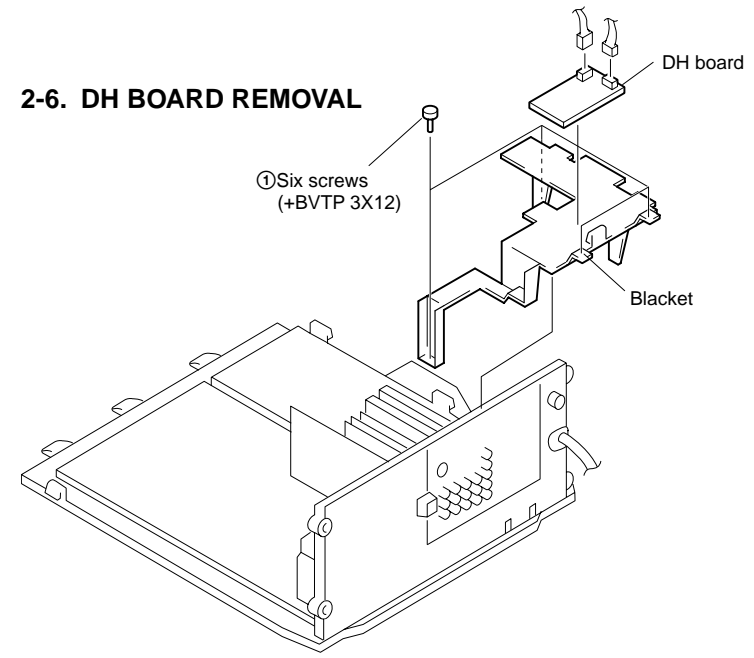
### 2-4. CHASSIS ASSY REMOVAL



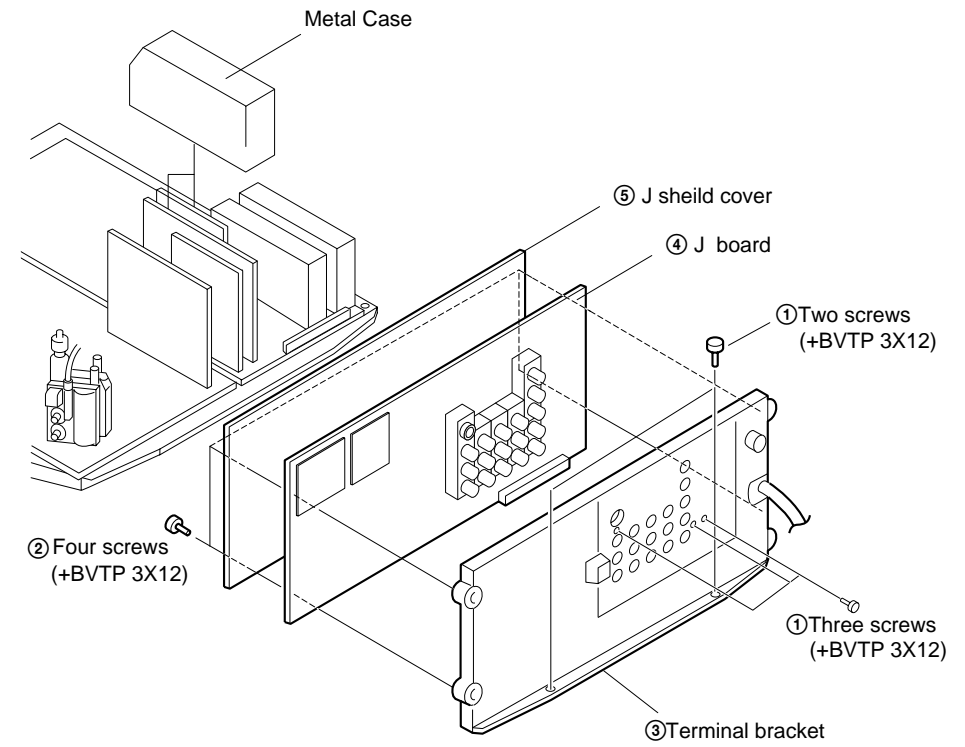
### 2-5. SERVICE POSITION



### 2-6. DH BOARD REMOVAL

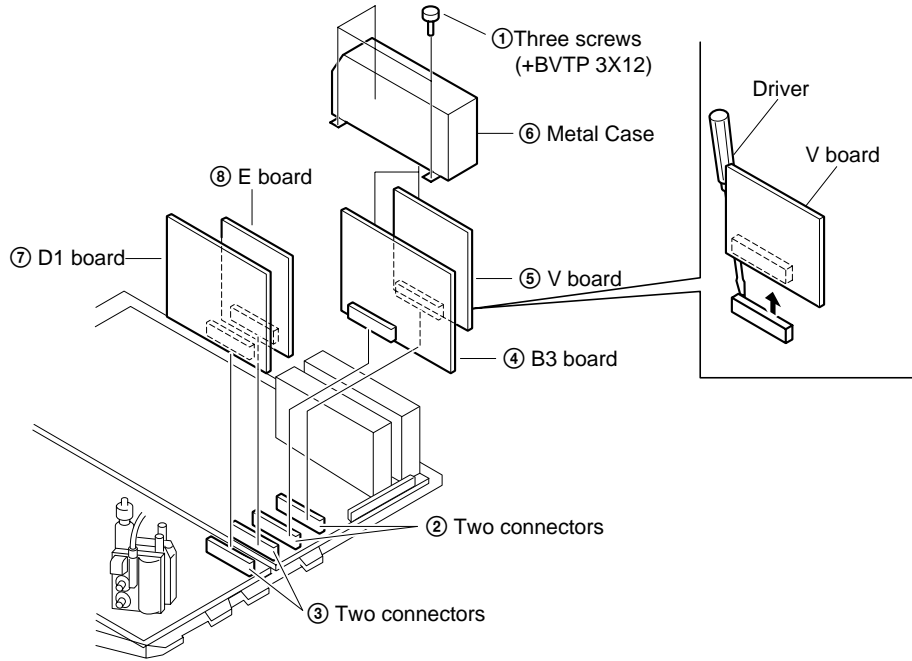


### 2-7. J BOARD REMOVAL

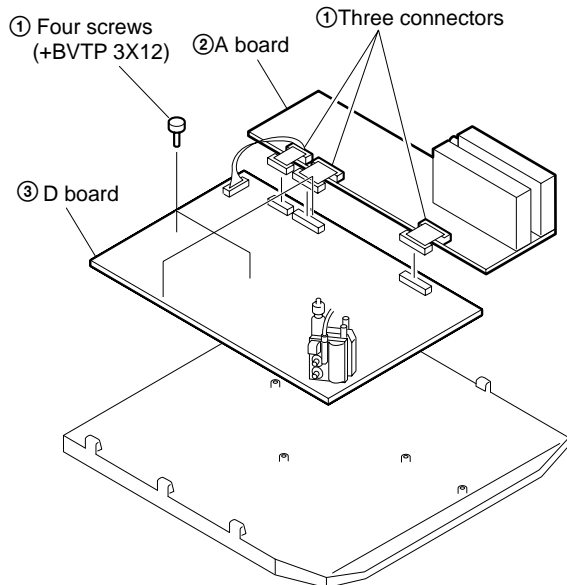


### 2-8. B3, D1 AND E BOARDS REMOVAL

NOTE: V board is not used for KV-ES34M80/ES34M90.

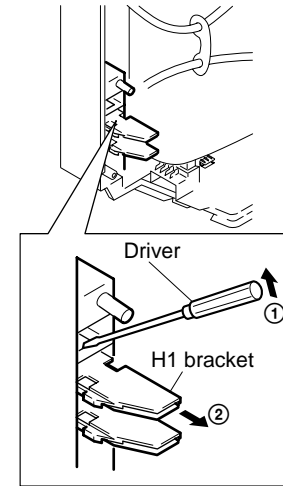


### 2-9. A AND D BOARDS REMOVAL



### 2-10. H1 BOARD REMOVAL

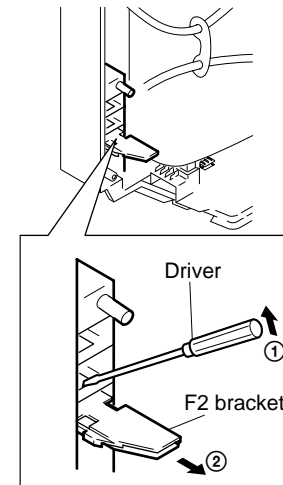
NOTE : Push the hook down using the tip of a screwdriver and at the same time pull the H1 bracket.



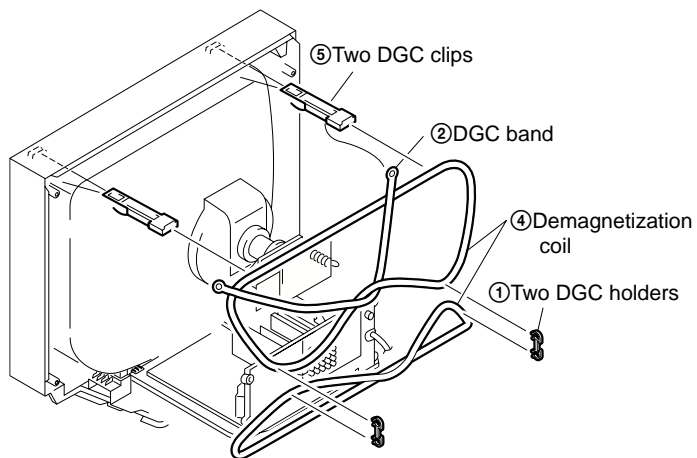
### 2-11. F2 BOARD REMOVAL

NOTE : To remove F2 board, firstly remove the H1 board. Then, push the hook down using the tip of a screwdriver and at the same time pull the F2 bracket.

Caution : When removing the F2 board, please turn off the main AC supply and disconnect the AC plug.

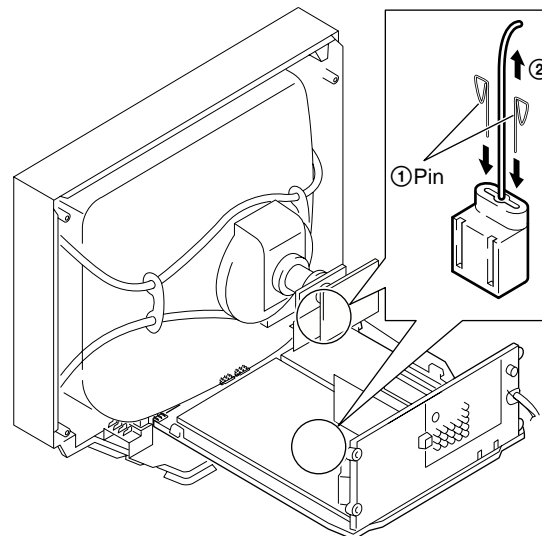


### 2-12. DEMAGNETIZATION COIL REMOVAL



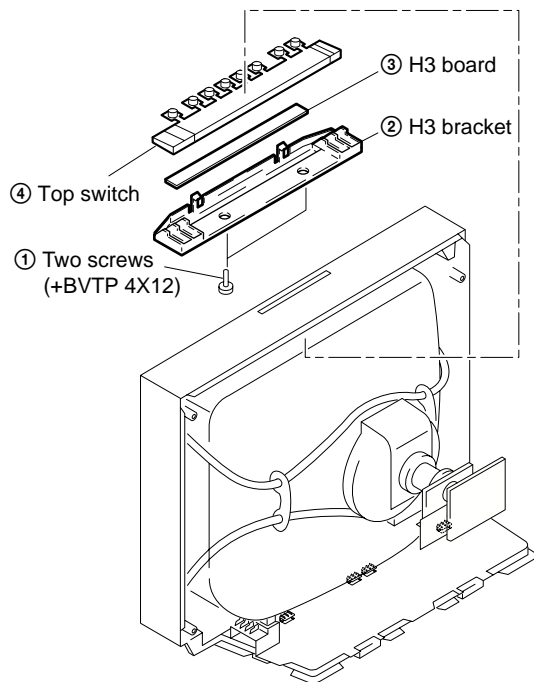
### 2-14. G2 LEAD REMOVAL

NOTE : Insert pin to both edge holes on socket and release the lock.



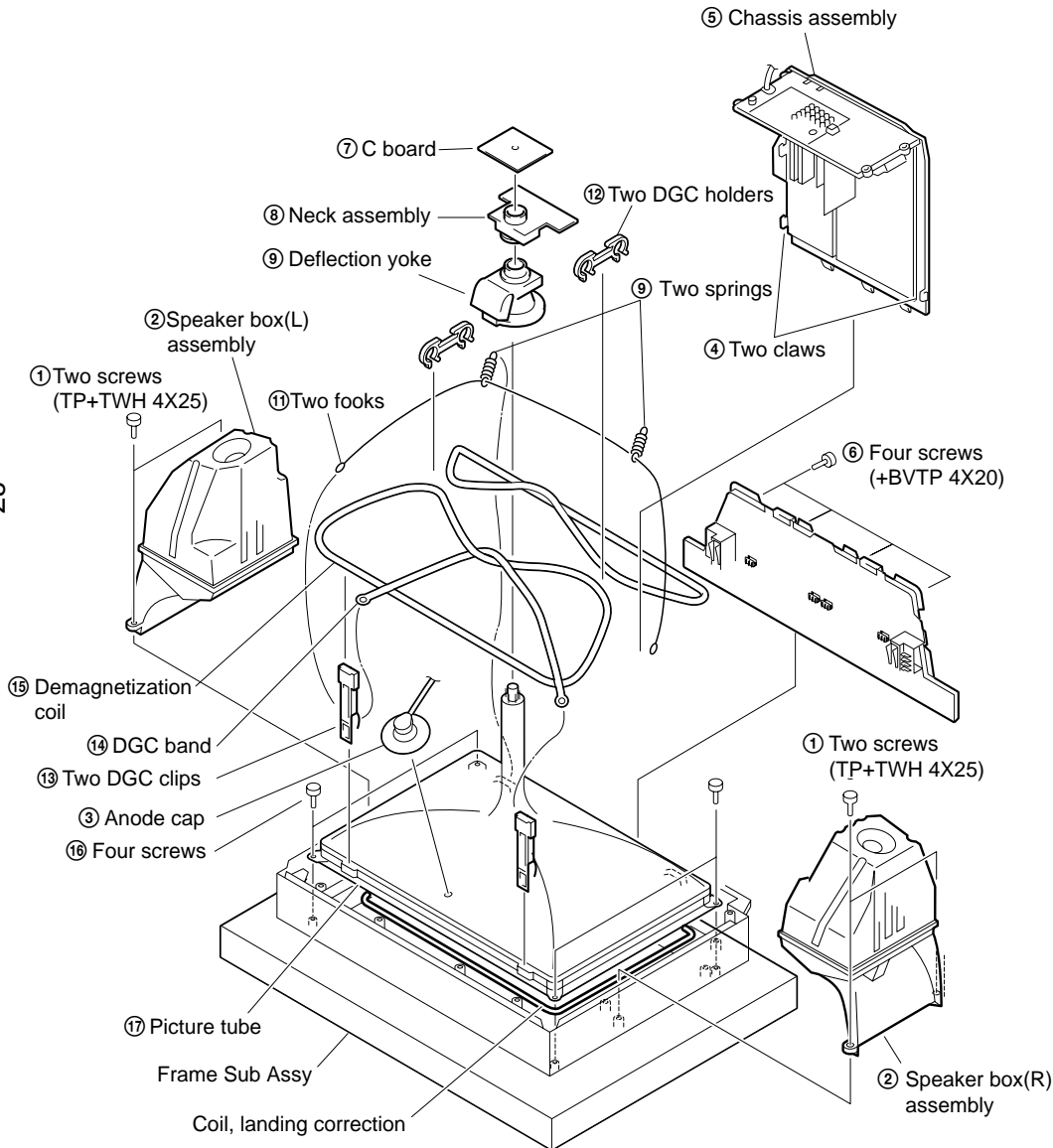
### 2-13. TOP SWITCH REMOVAL (H3 BOARD REMOVAL)

NOTE : To remove H3 board, the CRT has to be removed first.



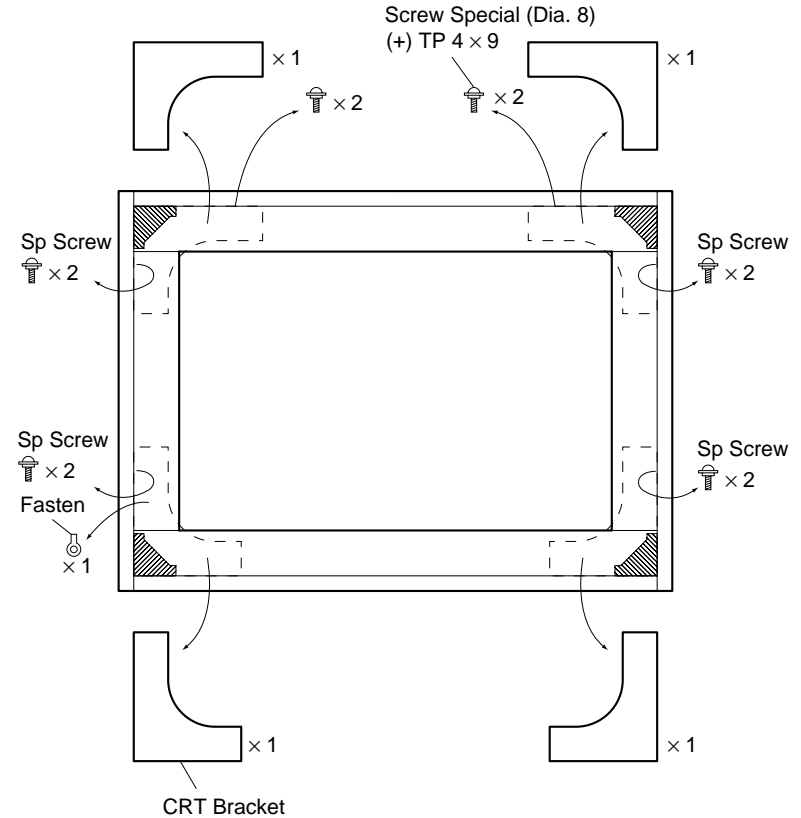
## 2-15. PICTURE TUBE REMOVAL

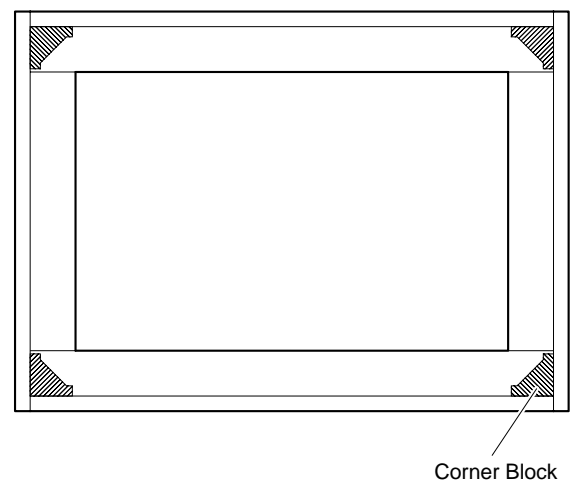
NOTE : i) Prior to picture tube removal, please remove the front cover first.  
 Caution : Aluminium frame is easily scratched if extra caution is not taken when handling it.



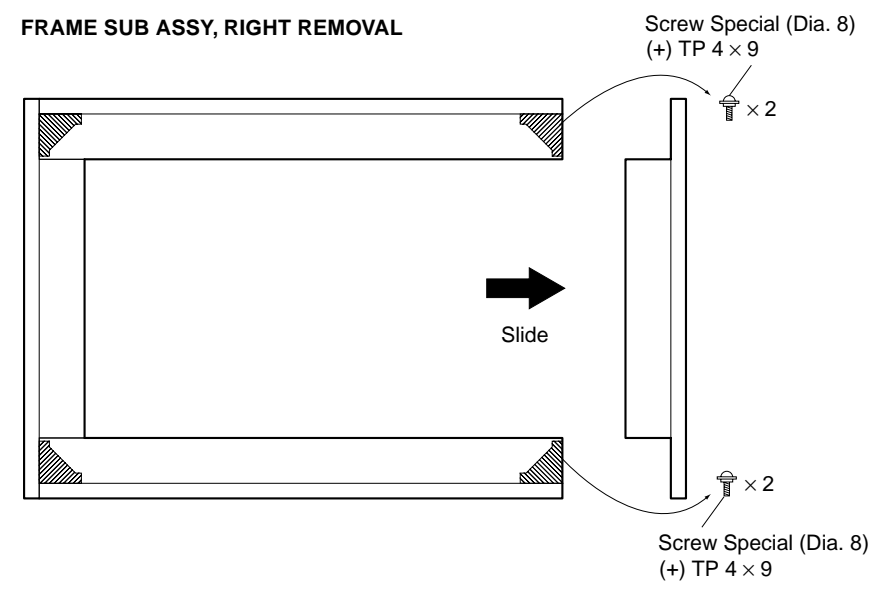
## 2-16. FRAME SUB-ASSY DISASSEMBLY

①

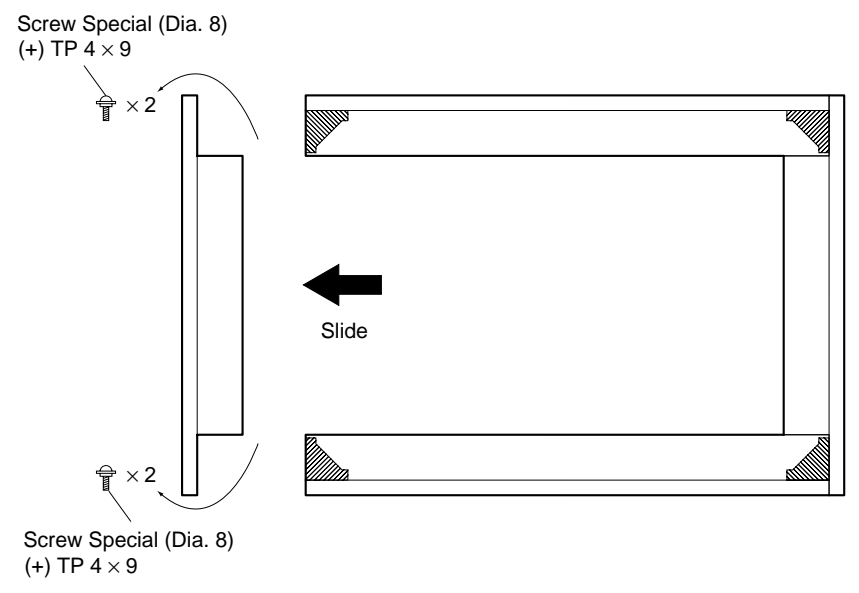




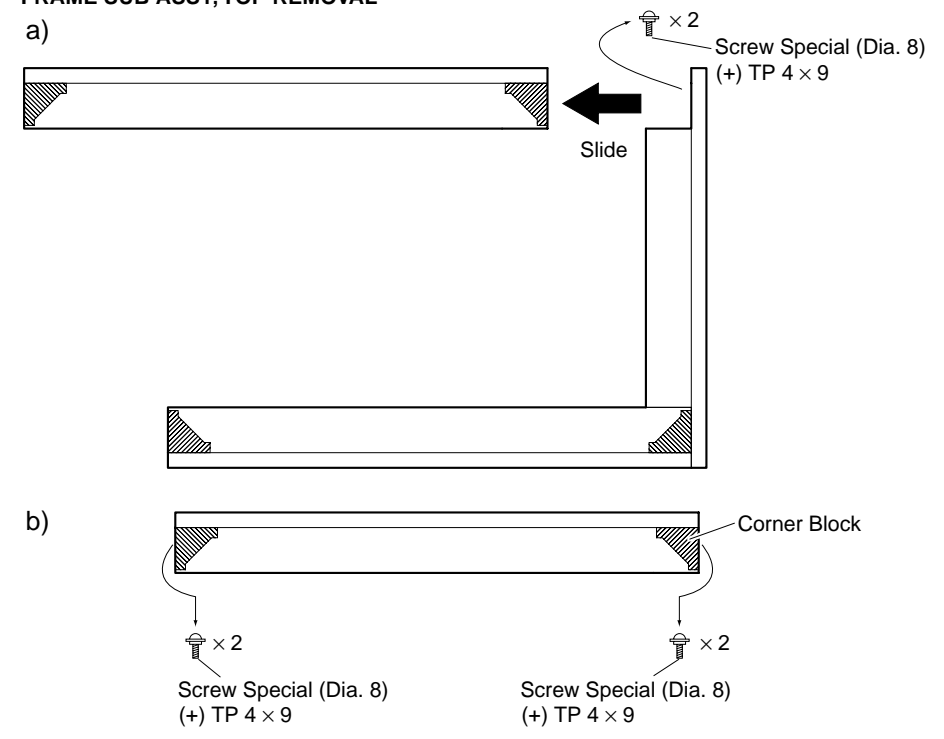
**FRAME SUB ASSY, RIGHT REMOVAL**



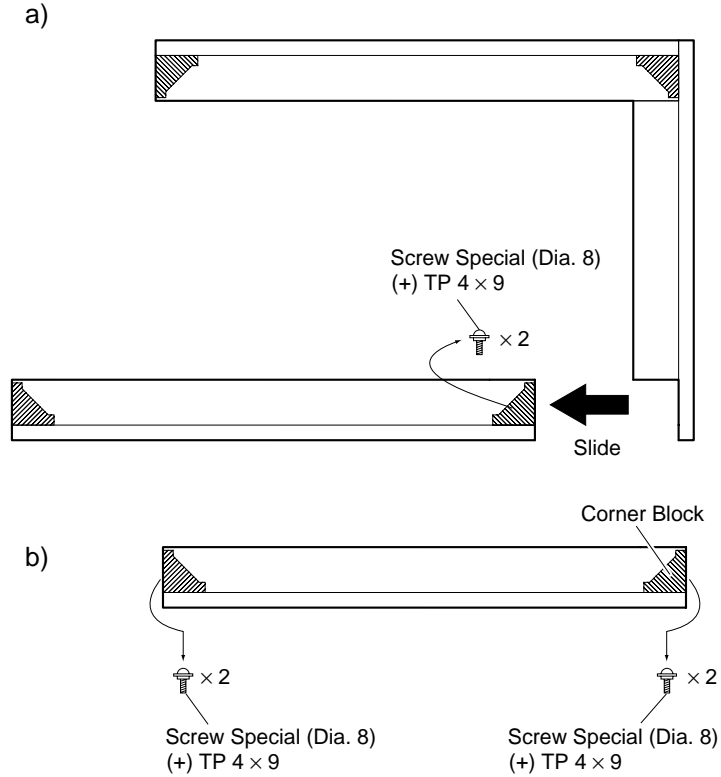
**FRAME SUB ASSY, LEFT REMOVAL**



**FRAME SUB ASSY, TOP REMOVAL**



**FRAME SUB ASSY, BOTTOM REMOVAL**

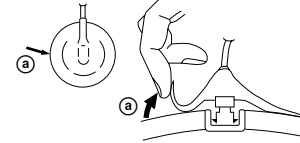


NOTE : When replacing the Frame Sub-Assy Top and Bottom, fix the original corner block to the new part.

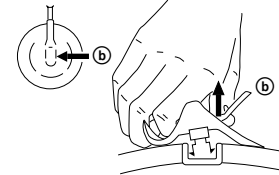
**•REMOVAL OF ANODE-CAP**

NOTE : After removing the anode, short circuit the anode of the picture tube and the anode cap to the metal chassis, CRT shield or carbon paint on the CRT.

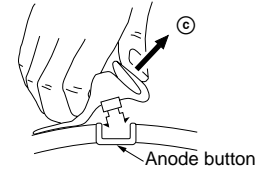
**•REMOVING PROCEDURES**



① Turn up one side of the rubber cap in the direction indicated by the arrow ①.



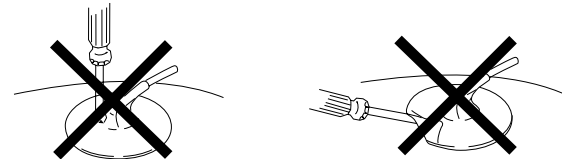
② Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ②.



③ When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling it up in the direction of the arrow ③.

**• HOW TO HANDLE AN ANODE-CAP**

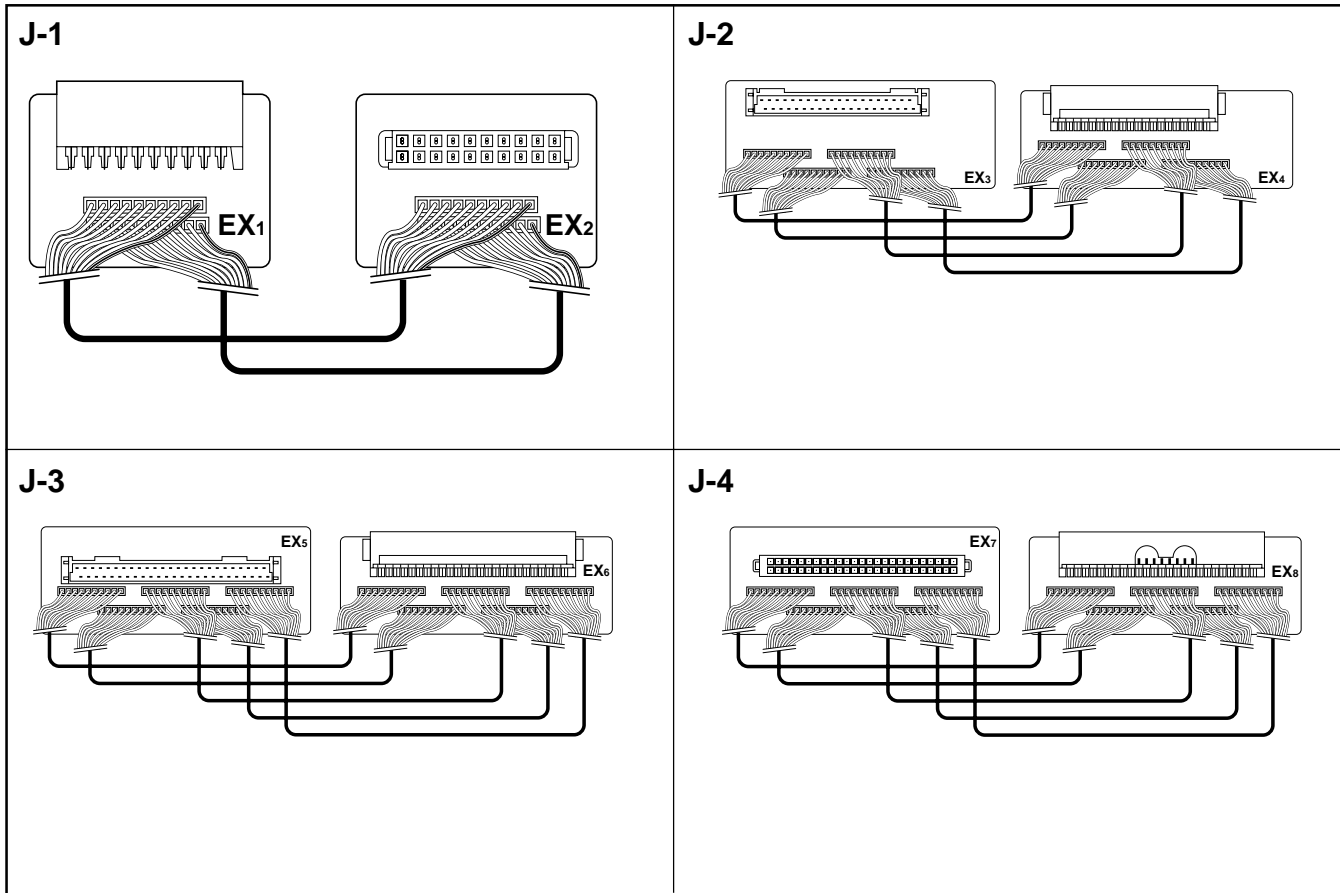
- ① Do not damage the surface of anode-caps with sharp shaped objects.
- ② Do not press the rubber too hard so as not to damage the inside of anode-cap. A metal fitting called the shatter-hook terminal is built into the rubber.
- ③ Do not turn the foot of rubber over too hard. The shatter-hook terminal will stick out or damage the rubber.



## SECTION 3 SERVICE JIG

### 3-1. JIGS REQUIRED FOR SERVICING

REF NO.	DESCRIPTION	PART NO.	REMARK
J-1	TOOL (20P), SERVICE	3-702-763-01	For A to V board extension
J-2	TOOL (40P), SERVICE	3-702-764-01	For A to E board extension
J-3	TOOL (50P-A), SERVICE	3-702-765-01	For A to B3 board extension
J-4	TOOL (50P-J), SERVICE	3-702-766-01	For A to J board extension For D to D1 board extension





## SECTION 4 SET-UP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switches should be set as follows unless otherwise noted:  
 PICTURE control ..... normal  
 BRIGHTNESS control ..... normal

Perform the adjustments in the following order :

1. Beam Landing
2. Convergence
3. Focus
4. White Balance

**Note :** Test Equipment Required.

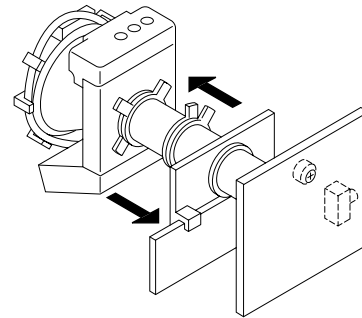
1. Color-bar/Pattern Generator
2. Degausser
3. Oscilloscope

**Preparation :**

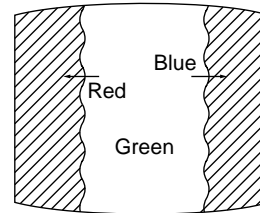
- In order to reduce the influence of geomagnetism on the set's picture tube, face it east or west.
- Switch on the set's power and degauss with the degausser.

**4-1. BEAM LANDING**

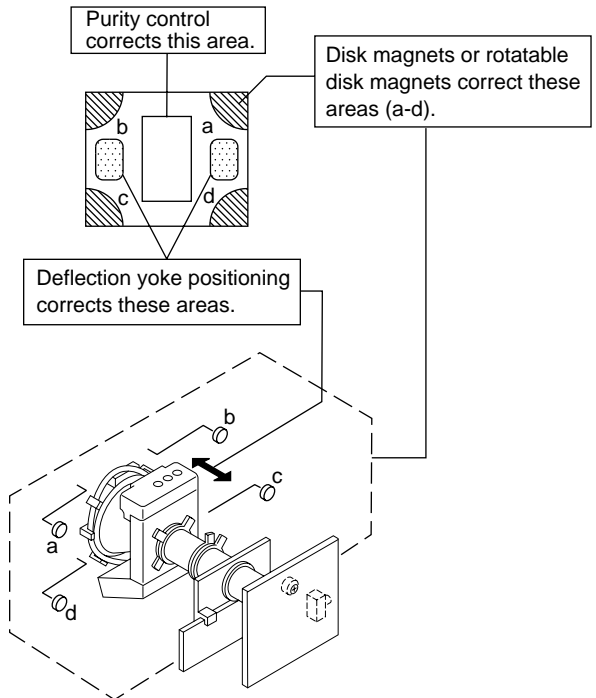
1. Input a white signal with the pattern generator.  
 Contrast } normal  
 Brightness }
2. Position neck assy as shown in Fig4-1.
3. Set the pattern generator raster signal to a green raster.
4. Move the deflection yoke to the rear and adjust with the purity control so that the green is at the center and the blue and the red take up equally sized areas on each side.  
 (See Figures 4-1 through 4-3.)
5. Move the deflection yoke forward and adjust so that the entire screen is green. (See Figure 4-2.)
6. Switch the raster signal to blue, then to green and verify the condition.
7. When the position of the deflection yoke has been decided, fasten the deflection yoke with the screws and DY spacers.
8. If the beam does not land correctly in all the corners, use a magnet to adjust it.  
 (See Figure 4-4.)



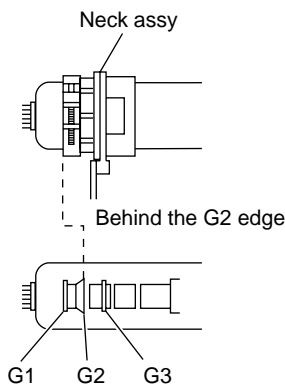
**Fig. 4-2**



**Fig. 4-3**



**Fig. 4-4**



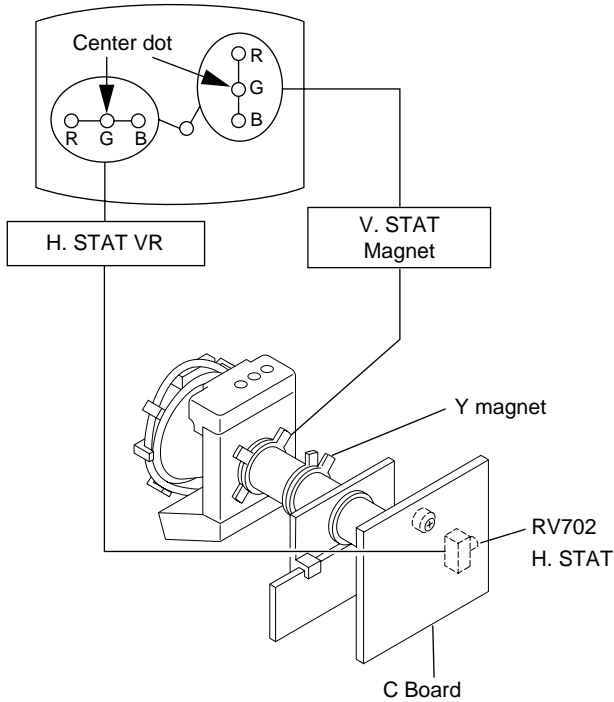
**Fig. 4-1**

## 4-2. CONVERGENCE ADJUSTMENT

### Preparation :

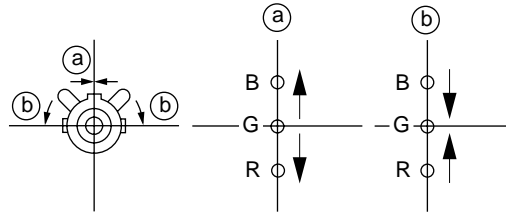
- Before starting this adjustment, adjust the focus, horizontal size and vertical size.
- Set the PICTURE and BRIGHTNESS 50%.
- Cross hatch / Dot pattern.

### (1) Horizontal and Vertical Static Convergence

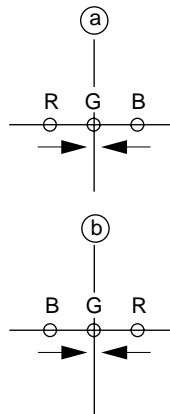


1. (Moving horizontally), adjust the H.STAT control so that the red, green and blue dots are on top of each other at the center of the screen.
2. (Moving vertically), adjust the V.STAT magnet so that the red, green and blue dots are on top of each other at the center of the screen.
3. Adjust Horizontal Trapezoid with "DAC 04 HTR" in Service Mode to make H-Trapezoid distortion best.
4. If the H.STAT variable resistor cannot bring the red, green and blue dots together at the center of the screen, adjust the horizontal convergence with the H.STAT variable resistor and the V.STAT magnet in the manner given below.  
(In this case, the H.STAT variable resistor and the V.STAT magnet influence each other, so be sure to perform adjustments while tracking.)

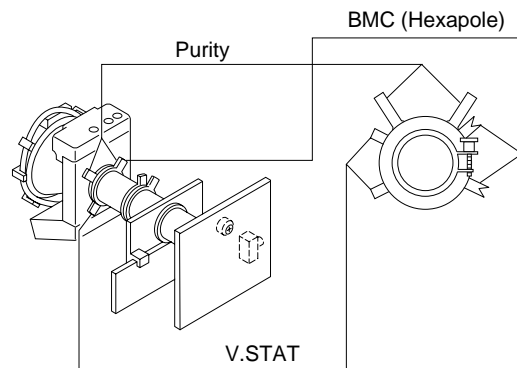
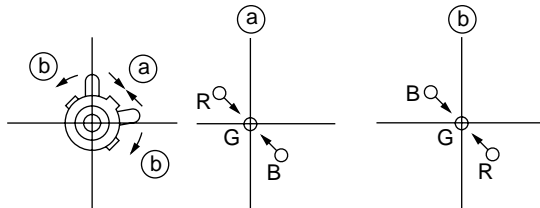
### ① V. STAT



### ② H. STAT VR

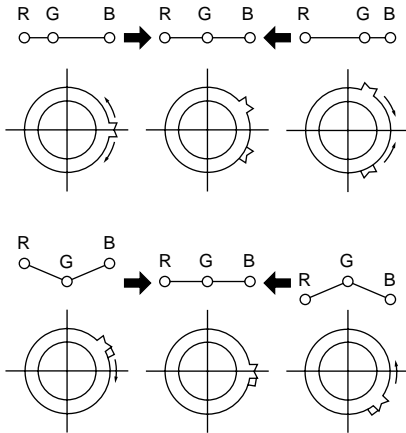


### ③



④ BMC (Hexapole) Magnet.

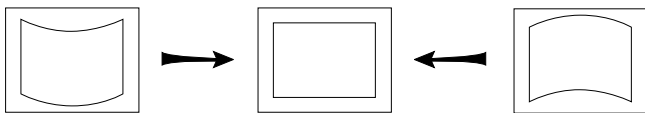
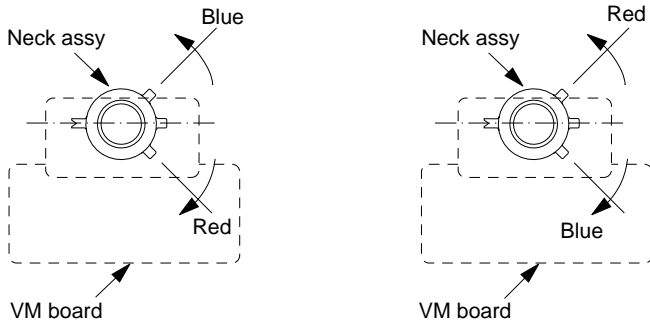
If the red, green and blue dots are not balanced or aligned, then use the BMC magnet to adjust in the manner described below.



⑤ Y separation axis correction magnet adjustment.

1. Receive the cross-hatch signal and adjust [PICTURE] to [MIN] and [BRIGHTNESS] to [STANDARD] .

2. Adjust the Y separation axis correction magnet on the neck assembly so that the horizontal lines at the top and bottom of the screen are straight.



**Note**

1. The Red and Blue magnets should be equally far from the horizontal center line.
2. Do not separate the Red and Blue magnets too far. (Less than 8 mm)

(2) Dynamic Convergence Adjustment

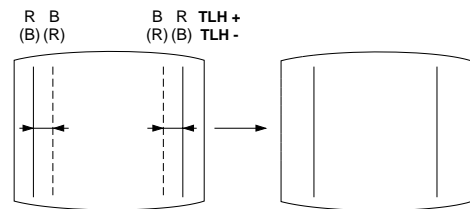
**Preparation:**

- Before starting this adjustment, adjust the horizontal static convergence and the vertical static convergence
- Set the PICTURE and BRIGHTNESS to normal.

1. Adjust TLH. (TLH correction piece)

- ① Receive the dot/hatch pattern signal and adjust picture quality by the menu.
- ② Correct horizontal mis-convergence of red and blue of both sides on the X axis.

When red is outside insert BMC magnet to right side (THL+) views from DY neck. And when blue is outside, insert it to left side (THL-) and take both sides.

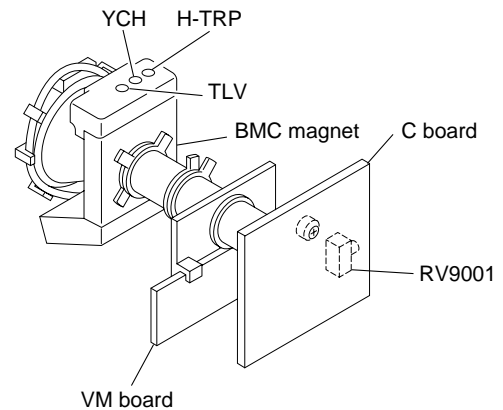


2. Adjust V TILT-TLV (TLV 34")

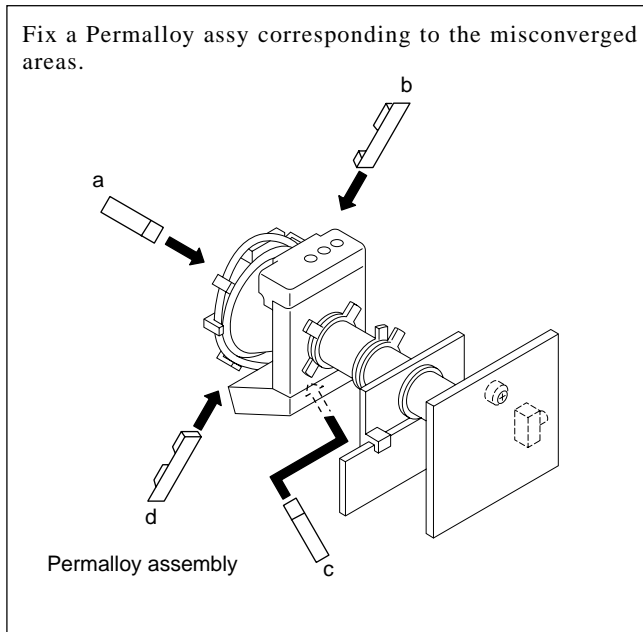
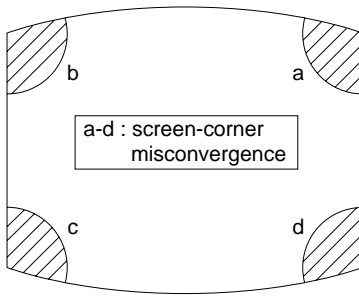
Correct the vertical mis-convergence of red and blue of vertically sides on the Y axis.

3. Adjust YCH.

Adjust horizontal mis-convergence of red and blue of vertically sides on the Y axis. Mentioned above steps 2 to 4 are adjusting respectively perform minuteness tracking.



(3) Screen-corner Convergence

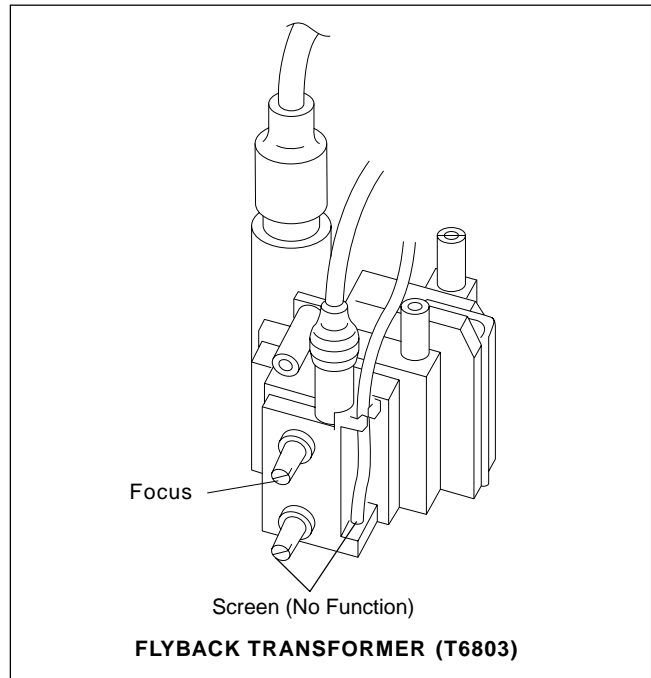


4-3. FOCUS ADJUSTMENT

**Note**

Focus adjustment should be completed before W/B adjustment.

- (1) Receive digital monoscope pattern.
- (2) Set "A/V CONTROL" to "STANDARD".
- (3) Adjust FOCUS VR so that the center of the screen becomes just focus.
- (4) Change the receiving signal to white pattern and blue back.
- (5) Confirm MAGENTA RING should not be over the limit sample. In case MAGENTA RING is over the limit sample, adjust FOCUS VR to take tracking of MAGENTA RING and FOCUS.



4-4. NECK ASSY TWIST ADJUSTMENT

- (1) Receive dot/hatch pattern.
- (2) Turn FOCUS VR fully counter-clockwise.
- (3) Confirm the dot shape at the screen center. (Fig. 4-4)
- (4) Resume FOCUS VR.

**Note**

In case of turning NECK ASSY, loosen the screw 3 turns. Do not move the position.

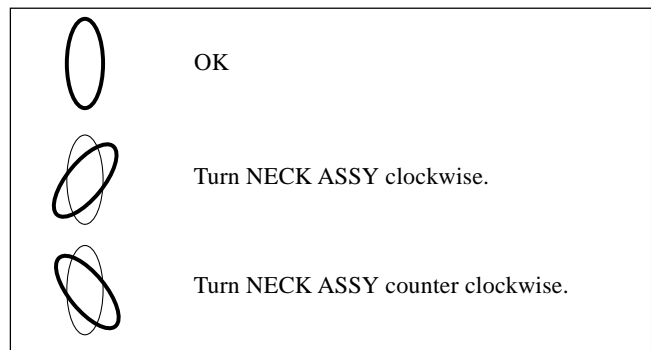
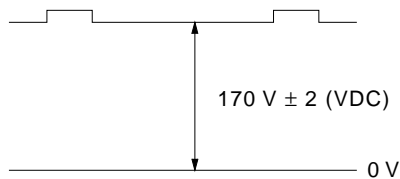


Fig. 4-4

## 4-5. G2 (SCREEN) AND WHITE BALANCE ADJUSTMENTS

### 1. G2 (SCREEN) ADJUSTMENT

- 1) Set the PICTURE and BRIGHTNESS to normal.
- 2) Put to VIDEO input mode without signals.
- 3) Connect R, G and B of the C board cathode to the oscilloscope.
- 4) Adjust BRIGHTNESS to obtain the cathode voltage to the value below.
- 5) Whilst watching the picture, adjust the screen VR (RV9002) located on the C board to the point just before the flyback return lines disappear (to the point before cut-off).



### 2. WHITE BALANCE ADJUSTMENT

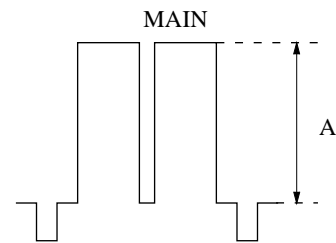
- 1) Set to Service Mode (Refer Section 5-1: ADJUSTMENTS WITH COMMANDER).
- 2) Input white raster signal.
- 3) Set the following condition.  
PICTURE minimum, BRIGHTNESS 50%
- 4) Select GCT (WHB 7) and BCT (WHB 8) with **[1]** and **[4]**, and adjust the level with **[3]** and **[6]** for the best white balance.
- 5) Set the PICTURE to maximum.
- 6) Select GDR (WHB 4) and BDR (WHB 5) with **[1]** and **[4]**, and adjust the level with **[3]** and **[6]** for the best white balance.
- 7) Write into the memory by pressing **[MUTING]** then **[0]**.

### 3. SUB PICTURE BRIGHTNESS ADJUSTMENT

- 1) Tune RF PAL white signal at program No. 1 and No. 2.
- 2) Select "TWIN PICTURE" mode.
- 3) Receive different RF PAL white signals in MAIN and Sub picture.
- 4) Adjust RV3300 on A PWB, so that the output from the 17 pin and 20 pin of the CN1180 becomes within the spec.

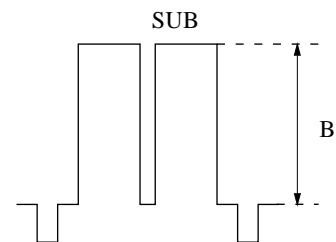
#### CVBS 1

17 pin



#### CVBS 2

20 pin



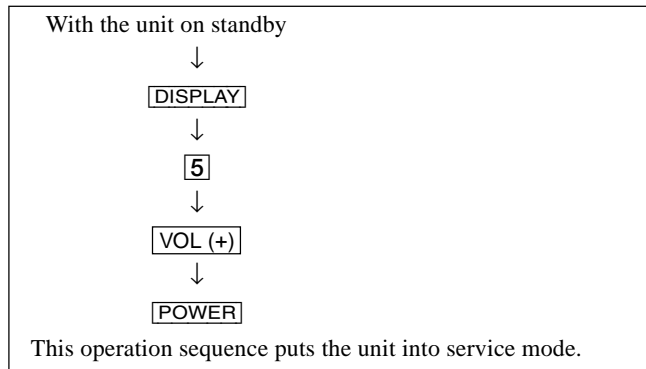
Spec:  $|A - B| \leq \pm 20\text{mV}$

## SECTION 5 CIRCUIT ADJUSTMENTS

### 5-1. ADJUSTMENTS WITH COMMANDER

Service adjustments are made with the RM-916 that comes with this unit.

#### a. ENTERING SERVICE MODE



#### b. METHOD OF CANCELLATION FROM SERVICE MODE

Set the standby condition (Press [POWER] button on the commander), then press [POWER] button again, hereupon it becomes TV mode.

#### c. METHOD OF WRITE INTO MEMORY

- 1) Set to Service Mode.
- 2) Press [1] (UP) and [4] (DOWN), select an item of adjustment.
- 3) Press [MUTING] button and it will indicate WRITE on the screen.
- 4) Press [0] button to write into memory.

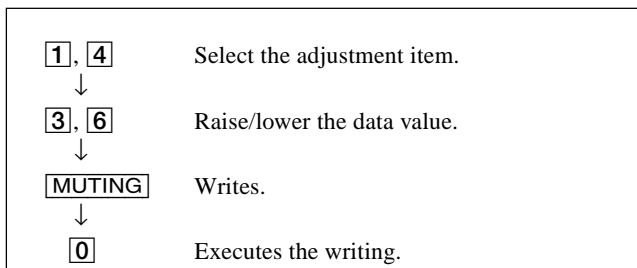
#### d. MEMORY WRITE CONFIRMATION METHOD

- 1) After adjustment, pull out the plug from AC outlet, and then plug into AC outlet again.
- 2) Turn the power switch ON and set to Service Mode.
- 3) Call the adjusted items again to confirm adjustments were made.

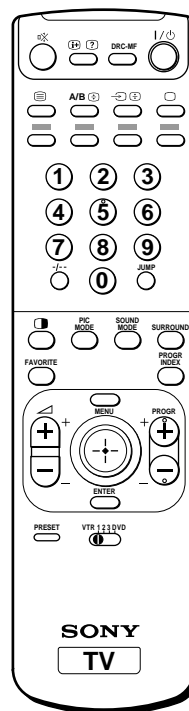
The screen display is :

Device Name	Item Name	Marking of virgin NVM			
	Item No	Data		Mode	
GEO	00	VSZ	29	■	SERVICE ■ 50
	0	013Q	1.2M	59	FF
		↑	↑		↑
	Suffix No (OEM Code)	Software version	Total Power-On time (hours)		

← PAL, SECAM : 50  
NTSC : 60



- [7], [0] All the data becomes the values in memory.
- [8], [0] All user control goes to the standard state.
- [5], [0] Service data initialization (Be sure not to use usually.)
- [DISPLAY], [0] Write 50Hz adjustment data to 60Hz, or vice versa.
- [2], [0] Copy and write all data.



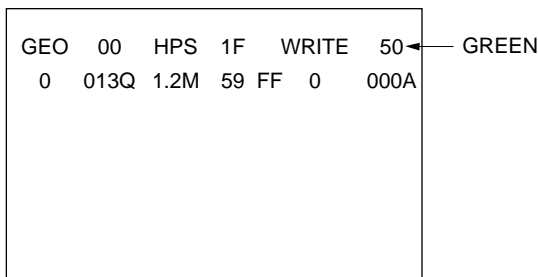
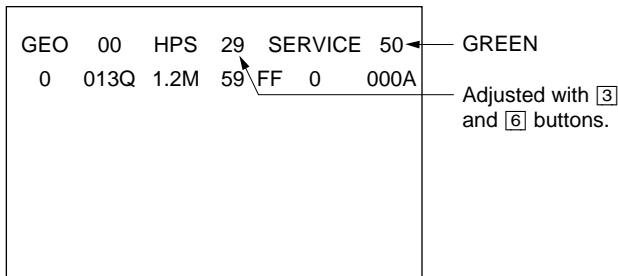
RM-916

## 5-2. ADJUSTMENT METHOD

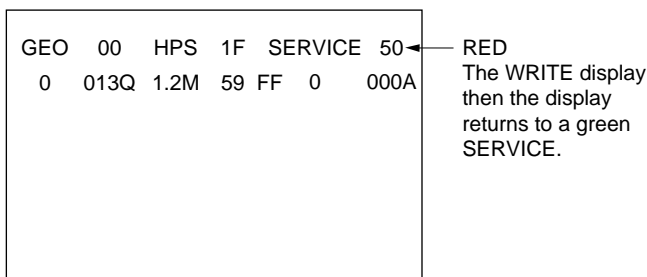
Item Number 00 of device GEO

This explanation uses H-Position as an example.

1. Select "GEO 00 VSZ" with the **[1]** and **[4]** buttons.
2. Raise/lower the data with the **[3]** and **[6]** buttons.
3. Select the optimum state. (The standard is 1F for PAL reception.)
4. Write with the **[MUTING]** button. (The display changes to WRITE.)
5. Execute the writing with the **[0]** button. (The WRITE display will be changed to red color while excuting, and back to SERVICE.)



Written with **[MUTING]**



Write executed with **[0]**

Use the same method for all Items. Use **[1]** and **[4]** to select the adjustment item, use **[3]** and **[6]** to adjust, write with **[MUTING]**, then execute the write with **[0]**.

- Note :**
1. In **[WRITE]**, the data for all items are written into memory together.
  2. For adjustment items that have different standard data between 50Hz or 60Hz, be sure to use the respective input signal after adjustment.
  3. Additional function to skip category (device) to category (device).

example:

```
GEO 00 HPS
  ↓
DAC 00 XXX
```

The buttons for the function above should be cursor +/-.

**SERVICE LIST ITEM**

TVG	Functionality		Function	50																60				Eco Mode				Device Name
	Category	No.		Name	DRC 1250	DRC 1250 V	PinP	PinP V	INDEX	TWIN	DRC 100	DRC 100 V	DRC 1250	60 V	PinP	PinP V	INDEX	TWIN	DRC 100	DRC 100 V	Eco On	Eco Off	Eco On V	Eco Off V				
GEO	00	VSZ	V SIZE	1D	17	1D	17	19	1D	1C	19	1E	19	1E	19	1E	1E	1E	1C							CXA2100AQ		
	01	VPS	V POSITION	22	21	22	21	22	1E	2D	23	20	22	20	22	20	1D	22	23									
	02	VLN	V LINEARITY	06	07	06	07			07	07	06	07	06	17			06	07									
	03	SCO	S CORRECTION	0A	07	0A	07			08	09	09	09	09	09			09	08									
	04	HSZ	H SIZE	1F	1F	1F	1F	1F	1F	1F	1F	20	20	20	20	20	20	21	21									
	05	HPS	H POSITION	3B	3A	3B	3A	3F	31	3B	3A	31	30	31	30	31	30	31	30									
	06	PAP	PIN AMP	33	2F	33	2F			30	32	34	32	34	32			37	33									
	07	UPN	UPPER CORNER PIN	26	28	26	28			22	27	25	2A	25	2A			24	24									
	08	LPN	LOWER CORNER PIN	23	21	23	21			23	24	23	24	23	24			24	24									
	09	TRZ	TRAPEZIUM	0A	09	0A	09	0A	08	05	08	08	19	08	09	09	06	07	07									
	0A	AGL	AFC ANGLE	08	09	08	09			08	09	0A	0A	0A	0A			0A	0A									
	0B	BOW	AFC BOW	08	09	08	09			08	08	09	08	09	08			08	09									
	0C	<b>LBL</b>	LEFT H BLANKING	11	11	11	11	11	11	11	11	1C	1C	1C	1C	1C	1C	1C	1C									
	0D	<b>RBL</b>	RIGHT H BLANKING	2C	2C	2C	2C	2C	2C	2C	2C	23	23	23	23	23	23	23	23									
	0E	<b>MPN</b>	MIDDLE PIN DISTORTION COMPENSATION	00	00							00	00															
	0F	<b>UVL</b>	UPPER V LINEARITY	00								00																
	10	<b>LVL</b>	LOWER V LINEARITY	00								00																
11	<b>HSP</b>	HORIZONTAL HIGH VOLTAGE COMPENSATION	00	00							00	00																
12	<b>VCP</b>	VERTICAL HIGH VOLTAGE COMPENSATION	00	00							00	00																
13	<b>VAS</b>	V ASPECT	2F	2F							2F	2F																
14	<b>VSC</b>	V SCROLL	1F								1F																	
15	<b>USC</b>	UNDER-SCAN MODE ON/OFF	00	01							00	01																
16	<b>VBW</b>	V BLANKING WIDTH CONTROL	00	03	00	03			00	00	00	00	00	00			00	00										
17	<b>AT1</b>	AKB REFERENCE TIMING	02	00	02	00			02	02	02	00	02	00			02	02										
DAC	00	HCT	H CENTER	4A							4A														MB88141			
	01	HLN	H LINEARITY	31	31	31	31			31	31	31	31	31	31			31	31									
	02	MDP	MIDDLE PIN	20	20	20	20			20	20	20	20	20	20			20	20									
	03	CCP	LOWER CORNER PIN	05	05	05	05			05	05	05	05	05	05			05	05									
	04	HTR	HORIZONTAL TRAPEZIUM	1F	1F	1F	1F			1F	1F	1F	1F	1F	1F			1F	1F									
	05	<b>DF</b>	DF ON/OFF SWITCH	01	01	01	01			01	01	01	01	01	01			01	01									
	06	<b>DPH</b>	DF PHASE	22	22	22	22			22	22	22	22	22	22			22	22									
	07	<b>QPH</b>	QP PHASE	12	12	12	12			12	12	12	12	12	12			12	12									
	08	<b>QAC</b>	QP AMPLITUDE	2F	2F	2F	2F			2F	2F	2F	2F	2F	2F			2F	2F									
	09	<b>QDC</b>	QP DC LEVEL	1E	1E	1E	1E			1E	1E	1E	1E	1E	1E			1E	1E									
	0A	<b>QDV</b>	QP V MODULATION	2D	2D	2D	2D			34	34	2A	2A	2A	2A			30	30									
0B	<b>QAV</b>	QP AMPLITUDE MODULATION	26	26	26	26			21	21	26	26	26	26			21	21										
0C	<b>ABC</b>	ABL D/A CONTROL																		00	00	7E	7E					



**SERVICE LIST ITEM**

TVG Category	Functionality		Function	Common	Device
	No.	Name			
WHB	00	<b>CBO</b>	DC OFFSET CANCELLER FOR CB1	0A	CXA2100AQ
	01	<b>CRO</b>	DC OFFSET CANCELLER FOR CR1	0A	
	02	SBR	SUB BRIGHTNESS CONTROL	22	
	03	<b>RDR</b>	R DRIVE	29	
	04	GDR	G DRIVE	25	
	05	BDR	B DRIVE	20	
	06	<b>RCT</b>	R CUTOFF	24	
	07	GCT	G CUTOFF	07	
	08	BCT	B CUTOFF	2F	
	09	<b>SBO</b>	SUB BRIGHTNESS OFFSET	20	
	0A	<b>RDO</b>	R DRIVE OFFSET	1C	
	0B	<b>GDO</b>	G DRIVE OFFSET	1F	
	0C	<b>BDO</b>	B DRIVE OFFSET	1B	
	0D	<b>RCO</b>	R CUTOFF OFFSET	1F	
	0E	<b>GCO</b>	G CUTOFF OFFSET	20	
	0F	<b>BCO</b>	B CUTOFF OFFSET	14	

**SERVICE LIST ITEM**

TVG	Functionality		Function																	Device Name		
	Category	No.		Name	Common	50			60			Twin	Index	Picture Mode				Eco Mode				
						TV	Video	DVD	TV	Video	DVD			Dynamic	Standard	Hi-Fine	Personal	Eco-OnNC	Eco-OffNC		Eco-OnVC	Eco-OffVC
SAJ	00	PIC	PICTURE CONTROL										3F	32	28						CXA2100AQ	
	01	BRT	BRIGHTNESS CONTROL										23	1F	1B							
	02	COL	COLOR CONTROL										2E	1F	1F							
	03	HUE	HUE CONTROL										1F	1F	1F							
	04	SHP	SHARPNESS CONTROL										22	1F	1D							
	05	VML	VM LEVEL										03	03	01	03						
	06	DYC	DYNAMIC COLOR ON/OFF										01	01	00	01						
	07	CTM	COLOR TEMPERATURE FOR DYNAMIC COLOR										00	00	00	00						
	08	CAX	COLOR MATRIX SPECIFICATION		02	02	02	00	00	00												
	09	GMA	GAMMA CORRECTION										02	02	03	02						
	0A	DCT	DC TRANSMISSION CONTROL										01	01	00	01						
	0B	DPL	AUTO PEDESTAL LEVEL CONTROL										02	01	00	01						
	0C	ABM	ABL MODE CONTROL										01	00	00	00						
	0D	ABT	ABL CURRENT DETECTION VTH CONTROL														02	00	02	00		
0E	CLO	COLOR OFFSET		09	08		09	09														
0F	CLW	COLOR STEP WIDTH TO THE CHANGE OF S/N	03																			
10	HUO	HUE OFFSET		08	08		09	09														
11	SHO	SHARPNESS OFFSET		14	17	0F	0C	0F	0F													
12	SHW	SHARPNESS STEP WIDTH TO THE CHANGE OF S/N	01																			
13	PIO	PICTURE OFFSET FOR TWIN/INDEX								07	07											
14	BRO	BRIGHTNESS OFFSET														07	07	07	07			
JGL	00	PON	RGB AND AKB REFERENCE PULSE OUTPUT ON/OFF	01																	CXA2100AQ	
	01	RGB	RGB OUTPUT SELECTION	07																		
	02	AGG	AGING MODE SELECTION	00																		
	03	DPS	Y/C DELAY LINE PASS MODE SWITCH	00																		
	04	BBT	RGB BOTTOM LIMITTER CONTROL	03																		
	05	LML	RGB AMPLITUDE LIMITTER CONTROL	00																		
	06	PAB	DC LEVEL FOR PEAK ABL	0F																		
	07	SCO	SUB PICTURE CONTROL	08																		
	08	LV2	RGB LEVEL FOR RGB2	07																		
	09	SF0	SHARPNESS CIRCUIT F0		01	01	01	01	01	01												
0A	PRO	PRE/OVER-SHOOT RATIO CONTROL		00	03	03	03	03	03													
0B	LTI	LUMINANCE TRANSIENT IMPROVEMENT										02	02	00	02							
0C	CTI	CHROMINANCE TRANSIENT IMPROVEMENT										01	01	00	01							

**SERVICE LIST ITEM**

TVG	Functionality		Function												Device Name	
	Category	No.		Name	Common	2D Comb	3D Comb	S-Input	Others	TV		Video		DVD		
										50	60	50	60	50		60
YCT	00	TNT	TINT ADJUSTMENT FOR NTSC							24	24	1F	1F			CXA2123Q
	01	PNG	PAL/NTSC GATE WIDTH	01												
	02	PNI	PAL/NTSC SENSITIVITY SW	00												
	03	SCL	SUB COLOR CONTROL							05	04	07	07			
	04	SCT	SUB CONTRAST CONTROL							08	07	08	07			
	05	SF0	SHARPNESS CENTER FREQUENCY CHANGING	02												
	06	SEQ	SHARPNESS EQUALIZER CHARACTERISTIC	03												
	07	SHG	SHARPNESS GAIN CONTROL							05	06	05	06	07	07	
	08	YOL	Y-OUTPUT LEVEL CONTROL	1F												
	09	BSP	BLACK STRETCH START POINT CHANGING	00												
	0A	COL	CB/CR OUTPUT LEVEL CONTROL	1A												
	0B	DCR	DC RESTORATION RATIO ADJUSTMENT	00												
	0C	BF0	BPF/TQF F0 ADJUSTMENT	01												
	0D	BFQ	BPF/TQF Q ADJUSTMENT	02												
	0E	FSW	BPF/TQF SWITCH	01												
	0F	SDT	SECAM DOUBLE TRAP SWITCH	01												
	10	LPF	Y/CB/CR LPF SWITCH	01												
	11	YDL	Y-DL TIME ADJUSTMENT		06	05	03	05								
	12	CMT	CB/CR OUTPUT MUTE SWITCH	00												
	13	BO1	CB OFFSET1 ADJUSTMENT (MAIN ROUTE)	07												
	14	RO1	CR OFFSET1 ADJUSTMENT	07												
	15	CDF	V COUNT DOWN FREQUENCY SWITCH	00												
	16	CDM	V COUNT DOWN JUDGE SWITCH	00												
	17	AFC	AFC SENSITIVITY SWITCH									00	00	00	00	
	18	MVM	MACROVISION MASK + AFC MASK	00												
	19	SRY	SECAM R-Y BLACK ADJUSTMENT	07												
1A	SBY	SECAM B-Y BLACK ADJUSTMENT	01													
1B	BEL	SECAM BELL/HPF SWITCHING	02													
1C	BLF	BELL F0 ADJUSTMENT	00													
1D	SVI	SECAM V-ID SWITCH	00													
1E	SGP	SECAM GATE POSITION ADJUSTMENT	00													
1F	SID	SECAM SENSITIVITY SWITCH	01													
20	SIH	SECAM INHIBITION SWITCH	00													
21	STP	Y BLACK LEVEL SETUP FOR PAL PLUS	00													
22	HVC	H-VCO TEMPERATURE CHARACTER CANCELLING	02													
23	3NR	3D NR OPERATION ON/OFF	01													
24	BW6	3D NR FOR 60Hz NON-BUST SIGNAL ON/OFF	01													
25	WSH	SHARPNESS GAIN STEP FOR NOISE REDUCTION	00													
26	WCO	DC RESTORATION RATIO ADJUSTMENT	00													

**SERVICE LIST ITEM**

TVG	Functionality		Function									Device Name		
	Category	No.		Name	Common	S-Input	Col Mode			TV			Video	
SECAM			NTSC				PAL	50	60	50	60			
SYC	00	TNT	TINT ADJUSTMENT FOR NTSC						21	21	20	20		CXA2123Q
	01	PNG	PAL/NTSC GATE WIDTH	01										
	02	PNI	PAL/NTSC SENSITIVITY SW	00										
	03	SCL	SUB COLOR CONTROL						06	06	09	09		
	04	SCT	SUB CONTRAST CONTROL						08	07	08	07		
	05	SF0	SHARPNESS CENTER FREQUENCY CHANGING	02										
	06	SEQ	SHARPNESS EQUALIZER CHARACTERISTIC	03										
	07	SHG	SHARPNESS GAIN CONTROL	07										
	08	YOL	Y-OUTPUT LEVEL CONTROL	1F										
	09	BSP	BLACK STRETCH START POINT CHANGING	00										
	0A	COL	CB/CR OUTPUT LEVEL CONTROL	3C										
	0B	DCR	DC RESTORATION RATIO ADJUSTMENT	00										
	0C	BF0	BPF/TQF F0 ADJUSTMENT	01										
	0D	BFQ	BPF/TQF Q ADJUSTMENT	02										
	0E	FSW	BPF/TQF SWITCH	01										
	0F	SDT	SECAM DOUBLE TRAP SWITCH	01										
	10	LPF	Y/CB/CR LPF SWITCH	01										
	11	YDL	Y-DL TIME ADJUSTMENT		05	03	02	03						
	12	NCM	1-H ADDITION SWITCH	01										
	13	CMT	CB/CR OUTPUT MUTE SWITCH	00										
	14	BO1	CB OFFSET1 ADJUSTMENT (MAIN ROUTE)	07										
	15	RO1	CR OFFSET1 ADJUSTMENT	07										
	16	CDF	V COUNT DOWN FREQUENCY SWITCH	00										
17	CDM	V COUNT DOWN JUDGE SWITCH	00											
18	AFC	AFC SENSITIVITY SWITCH								00	00	00		
19	MVM	MACROVISION MASK + AFC MASK	00											
1A	SRV	SECAM R-Y BLACK ADJUSTMENT	07											
1B	SBY	SECAM B-Y BLACK ADJUSTMENT	01											
1C	BEL	SECAM BELL/HPF SWITCHING	02											
1D	BLF	BELL F0 ADJUSTMENT	00											
1E	SVI	SECAM V-ID SWITCH	00											
1F	SGP	SECAM GATE POSITION ADJUSTMENT	00											
20	SID	SECAM SENSITIVITY SWITCH	01											
21	SIH	SECAM INHIBITION SWITCH	00											
22	STP	Y BLACK LEVEL SETUP FOR PAL PLUS	00											
23	HVC	H-VCO TEMPERATURE CHARACTER CANCELLING	02											

**SERVICE LIST ITEM**

TVG	Functionality		Function									Device Name	
	Category	No.		Name	Common	Sur VDD	Sur VDP	Sur TRS	Sur SIM	Sur Off	Dynamic		Drama
AP	00	<b>BAS</b>	BASS CONTROL							0B	08	07	TDA7315
	01	<b>TRE</b>	TREBLE CONTROL							0B	09	07	
	02	<b>LDN</b>	LOUDNESS ON/OFF	01									
DSP	00	<b>DUL</b>	DIR UNLOCK DETECTION MODE	00									TC9446F
	01	<b>DIM</b>	DIGITAL INPUT MODE	03									
	02	<b>TFM</b>	TRUSURROUND FRONT MINUS		5A	5A							
	03	<b>TFP</b>	TRUSURROUND FRONT PLUS		12	12							
	04	<b>TCE</b>	TRUSURROUND CENTER		40	40							
	05	<b>TS1</b>	TRUSURROUND SURROUND #1		20	E0							
	06	<b>TS2</b>	TRUSURROUND SURROUND #2		20	20							
	07	<b>TSP</b>	TRUSURROUND SURROUND PLUS		68	68							
	08	<b>TSM</b>	TRUSURROUND SURROUND MINUS		68	68							
	09	<b>LFE</b>	LOW FREQUENCY EFFECT	5A									
	0A	<b>BHL</b>	BBE EFFECT 1 FOR BBE HIGH		33	33	33	28	40				
	0B	<b>BHH</b>	BBE EFFECT 2 FOR BBE HIGH		30	30	30	28	38				
	0C	<b>BLL</b>	BBE EFFECT 1 FOR BBE LOW		2B	2B	2B	24	33				
	0D	<b>BLH</b>	BBE EFFECT 2 FOR BBE LOW		29	29	29	24	30				
	0E	<b>DLR</b>	DELAY SELECTION AT DSP RESET	07									
0F	<b>BBE</b>	BBE SELECTION							01	01	03		

TVG	Functionality		Function	Common	Device
	Category	No.			
MSP	00	<b>WST</b>	W/G STEREO THRESHOLD	15	MSP3415D
	01	<b>WBT</b>	W/G BILINGUAL THRESHOLD	EA	
	02	<b>WLL</b>	W/G MONOAUURAL THRESHOLD	05	
	03	<b>WAC</b>	W/G AGREEMENT COUNT	01	
	04	<b>WDL</b>	W/G SEARCH DELAY	30	
	05	<b>NDL</b>	NICAM SEARCH DELAY	20	
	06	<b>SDL</b>	STEREO STATUS READ DELAY	10	
	07	<b>AGC</b>	AGC SWITCH AUTO/CONSTANT	01	
	08	<b>REL</b>	AGC GAIN AT CONSTANT MODE	28	
	09	<b>CRM</b>	CARRIER MUTING ON/OFF	00	
	0A	<b>ACO</b>	AUDIO CLOCK ON/OFF	01	
	0B	<b>FP</b>	FM PRESCALE FOR NON-M SYSTEM	1B	
	0C	<b>FPM</b>	FM PRESCALE FOR M SYSTEM	32	
0D	<b>FH</b>	FM PRESCALE FOR HDEV	2D		
0E	<b>FHM</b>	FM PRESCALE FOR HDEV AND M	65		
0F	<b>WGP</b>	W/G PRESCALE	2A		
10	<b>NIP</b>	NICAM PRESCALE	6D		
11	<b>ERR</b>	AUTO FM SWITCH THRESHOLD	50		
12	<b>VOL</b>	LOUDSPEAKER GAIN 0700H TO 07FFH	6D		

**SERVICE LIST ITEM**

TVG	Functionality		Function	Common	Twin	TV	Video	Picture Mode				Device Name	
	Category	No.						Name	Dynamic	Standard	Hi-Fine		Personal
LTI	00	LDH	HISTOGRAM SEGMENT SELECTION	01								TDA9178	
	01	CFS	CONTOUR FILTER SELECTION	01									
	02	WLB	LETTERBOX WINDOW SWITCH	00									
	03	VDC	VIDEO DEPENDENT CORING					01	01	01	01		
	04	DEM	DEMONSTRATION MODE	00									
	05	CDP	LUMINANCE DELAY	04									
	06	OSP	VERRULE SMART PEAKING	00									
	07	WPO	WHITE POINT STRETCH OFF	00									
	08	DSK	SKIN TONE SWITCH					00	00	00	00		
	09	ASK	SKIN TONE ANGLE SELECTION	00									
	0A	WSK	SKIN TONE WIDTH SELECTION	00									
	0B	SSK	SKIN TONE SIZE SELECTION	00									
	0C	DGR	GREEN ENHANCEMENT SWITCH		00			01	01	00	01		
	0D	DGT	THRESHOLD OF GREEN ENHANCEMENT SWITCH	07									
	0E	GGR	GREEN ENHANCEMENT GAIN	00									
	0F	WGR	GREEN ENHANCEMENT WITDH	00									
	10	SGR	GREEN ENHANCEMENT SIZE	00									
	11	DBL	BLUE STRETCH SWITCH	00									
	12	GBL	BLUE STRETCH GAIN SELECTION	00									
	13	SBL	BLUE STRETCH SIZE SELECTION	00									
	14	CDS	COLOR DEPENDENT SHARPNESS					01	01	00	01		
	15	CST	THRESHOLD OF COLOR DEPENDENT SHARPNESS	07									
	16	CTI	COLOR TRANSIENT IMPROVEMENT					00	00	00	00		
	17	BON	BLACK OFFSET COMPENSATION					00	00	00	00		
	18	BTD	ADAPTIVE BLACK STRETCH					00	00	00	00		
	19	NLD	NON-LINEARITY AMPLIFIER		00			15	15	00	15		
1A	NLW	STEP WIDTH OF NON-LINEARITY AMPLIFIER	07										
1B	VGD	VARIABLE GAMMA		1F			1F	1F	1F	1F			
1C	VGW	STEP WITDH OF VARIABLE GAMMA	00										
1D	PKD	PEAKING AMPLITUDE					3F	30	0E	30			
1E	PKW	STEP WIDTH OF PEAKING AMPLITUDE	08										
1F	SPD	STEPNESS CORRECTION					00	00	00	00			
20	CRD	CORING LEVEL					16	16	00	16			
21	CRW	STEP WIDTH OF CORING LEVEL	09										
22	CRO	CORING LEVEL OFFSET FOR VIDEO MODE	01										
23	LWD	LINE WIDTH CORRECTION	1F										
24	SNM	S/N MODE UNDER UNREALIBLE S/N CONDITION	00										
25	SNC	S/N RATIO AVERAGE COUNTER			03	03							
26	FMC	FEATURE MODE MATCHING COUNTER	02										

**SERVICE LIST ITEM**

TVG	Functionality		Function	50					60					Device Name
	Category	No.		Name	Single DRC 1250	PinP	TWIN	INDEX	Single DRC 100	Single DRC 1250	PinP	TWIN	INDEX	
MID	00	HPH	HORIZONTAL ACTIVE DISPLAY AREA PHASE	52	52	92	8D	52	52	52	7E	78	52	MB94918
	01	VPH	VERTICAL ACTIVE DISPLAY AREA PHASE	1A	1A	24	20	0D	1D	1D	26	25	11	
	02	HSZ	HORIZONTAL ACTIVE DISPLAY AREA SIZE	7F	7F	7F	7F	7F	7F	7F	7F	7F	7F	
	03	VSZ	VERTICAL ACTIVE DISPLAY AREA SIZE	7F	7F	7F	7F	7F	7F	7F	7F	7F	7F	
	04	HPW	DISPLAY H-SYNC PLUS WIDTH	3F	3F	3F	3F	3F	3F	3F	3F	3F	3F	
	05	VPW	DISPLAY V-SYNC PLUS WIDTH	03	03	03	03	03	03	03	03	03	03	
	06	YDL	DISPLAY OUTPUT Y/C DELAY CORRECTION	00	00	00	00	00	00	00	00	00	00	
	07	MHP	MAIN PICTURE HORIZONTAL POSITION (SINGLE & PINP)	7F	7F			7F	7F	7F			7F	
	08	MVP	MAIN PICTURE VERTICAL POSITION (SINGLE & PINP)	7F	7F			7F	7F	7F			7F	
	09	MHS	MAIN PICTURE HORIZONTAL SIZE (SINGLE & PINP)	7F	7F			7F	7F	7F			7F	
	0A	MVS	MAIN PICTURE VERTICAL SIZE (SINGLE & PINP)	7F	7F			7F	7F	7F				
	0B	PHP	PINP SUB PICTURE HORIZONTAL POSITION		7F					7F				
	0C	PVP	PINP SUB PICTURE VERTICAL POSITION		7F					7F				
	0D	PHS	PINP SUB PICTURE HORIZONTAL SIZE		7F					7F				
	0E	PVS	PINP SUB PICTURE VERTICAL SIZE		7F					7F				
	0F	PHO	PINP SUB PICTURE HORIZONTAL POSITION OFFSET		7F					7F				
	10	PVO	PINP SUB PICTURE VERTICAL POSITION OFFSET		7F					7F				
	11	TMP	TWIN MAIN PICTURE HORIZONTAL POSITION			00					00			
	12	TSP	TWIN SUB PICTURE HORIZONTAL POSITION											
	13	TVP	TWIN MAIN & SUB PICTURE VERTICAL POSITION											
	14	THS	TWIN MAIN & SUB PICTURE HORIZONTAL SIZE											
	15	TVS	TWIN MAIN & SUB PICTURE VERTICAL SIZE											
	16	THO	TWIN MAIN & SUB PICTURE HORIZONTAL POSITION OFFSET											
	17	TVO	TWIN MAIN & SUB PICTURE VERTICAL POSITION OFFSET											
	18	XHS	INDEX SUB PICTURE HORIZONTAL SIZE											
	19	XVS	INDEX SUB PICTURE VERTICAL SIZE											
	1A	XHG	INDEX HORIZONTAL GAP WIDTH BETWEEN PICTURES											
	1B	XVG	INDEX VERTICAL GAP WIDTH BETWEEN PICTURES											
	1C	XHP	INDEX 1ST SUB PICTURES HORIZONTAL POSITION											
	1D	XVP	INDEX 1ST SUB PICTURES VERTICAL POSITION											
1E	DHP	DRC HORIZONTAL ACTIVE AREA POSITION	7F	7F	7F	7F	7F	7F	7F	7F	7F	7F		
1F	DHS	DRC HORIZONTAL ACTIVE PIXEL SIZE	7F	7F	7F	7F	7F	7F	7F	7F	7F	7F		

**SERVICE LIST ITEM**

TVG Category	Functionality		Function	50					60					Device Name
	No.	Name		Single DRC 1250	PinP	TWIN	INDEX	Single DRC 100	Single DRC 1250	PinP	TWIN	INDEX	Single DRC 100	
MID	20	DVP	DRC VERTICAL ACTIVE AREA LINE POSITION	1A	1A	3F	3F	1A	1A	1A	39	39	1A	MB94918
	21	DVS	DRC VERTICAL ACTIVE AREA LINE SIZE	7F	7F	7F	7F	7F	7F	7F	7F	7F	7F	
	22	VHP	VDO HORIZONTAL ACTIVE AREA POSITION		7F	7F	7F			7F	7F	7F		
	23	VHS	VDO HORIZONTAL ACTIVE AREA PIXEL SIZE		7F	7F	7F			7F	7F	7F		
	24	VEP	VDO VERTICAL ACTIVE AREA EVEN POSITION		1E	1E	1E			1B	1B	1B		
	25	VVS	VDO VERTICAL ACTIVE AREA LINE SIZE		7F	7F	7F			7F	7F	7F		
	26	VOP	VDO VERTICAL ACTIVE AREA ODD POSITION		00	00	00			00	00	00		
	27	CLT	VDO CLAMP PULSE OUTPUT TIMING		7F	7F	7F			7F	7F	7F		
	28	CLW	VDO CLAMP PULSE WIDTH		04	04	04			04	04	04		
	29	VYD	VDO ANALOG INPUT Y/C DELAY CORRECTION		00	00	00			00	00	00		
	2A	VCR	VDO CROMA SIGNAL ORDER		01	01	01			01	01	01		
2B	VDI	VDO DIGITAL ANALOG INPUT SELECTION		01	01	01			01	01	01			



**SERVICE LIST ITEM**

TVG	Functionality		Function	Device Name																				
	Category	No.		Name	Common	TV	Video	NR Mode				Picture Mode												
NRmode0			NRmode1					NRmode4	NRmode3	Dynamic	Standard	Hi-Fine	Personal											
3CM	00	FRZ	EXTERNAL MEMORY TEST BIT	00																				UPD64082
	01	NRM	NOISE REDUCTION OPERATION MODE	00																				
	02	YCO	Y/C SIGNAL OUTPUT SELECTION	0D																				
	03	SYC	SYSTEM CLOCK SELECTION	01																				
	04	STD	STANDARD/NON-STANDARD OPERATION SELECTION	00																				
	05	MSS	INTER-FRAME/INTER-LINE OPERATION SELECTION	00																				
	06	KIL	KILLER/NON-KILLER OPERATION SELECTION	03																				
	07	EAD	EXTERNAL Y-ADC SWITCH	00																				
	08	ECS	EXTERNAL C-SYNC INPUT SELECTION	01																				
	09	CPP	ADC INPUT LEVEL & CLUMP PULSE WIDTH SELECTION	02																				
	0A	PWR	ADC INPUT WIDTH SWITCH	00																				
	0B	HDP	HORIZONTAL PHASE ADJUSTMENT	05																				
	0C	CDL	C-SIGNAL ADJUSTMENT	04																				
	0D	DYC	DY DETECTION CORING LEVEL ADJUSTMENT					02	02	02	04													
	0E	DYG	DY DETECTION GAIN ADJUSTMENT					0A	0A	0A	0A													
	0F	DCC	DC DETECTION CORING LEVEL ADJUSTMENT					05	03	03	05													
	10	DCG	DC DETECTION GAIN ADJUSTMENT					05	0A	0A	05													
	11	YNR	YNR NON-LINEAR FILTER SETUP	01																				
	12	CNR	CNR NON-LINEAR FILTER SETUP	01																				
	13	WSC	NOISE DETECTION CORING ADJUSTMENT	01																				
	14	VTH	HYSTERESIS SELECTION FOR H-SYNC NON-STANDARD		01	01																		
	15	VTR	SENSITIVITY SELECTION FOR H-SYNC NON-STANDARD		01	01																		
	16	LDR	SENSITIVITY SELECTION FOR FRAME-SYNC NON-STANDARD		02	01																		
	17	VAP	GAIN ADJUSTMENT FOR VERTICAL SHAPE CORRECTION									03	00	00	00									
	18	VAI	VANISHING ADJUSTMENT FOR VERTICAL SHAPE CORRECTION									0C	00	00	00									
	19	TST	TEST BIT	00																				
	1A	YPF	CENTER FREQUENCY SELECTION FOR Y-PEAKING BPF									03	03	03	03									
	1B	YPG	GAIN ADJUSTMENT FOR Y-PEAKING BPF									0A	08	08	08									
	1C	VSE	LINE COMB FILTER SETUP	0A																				
	1D	CCN	C-SIGNAL SPLIT FILTER SWITCH	00																				
	1E	COS	C-SIGNAL DELAY SWITCH AT NOISE REDUCTION	00																				
	1F	SDC	DC DETECTION SENSITIVITY SWITCH	00																				

**SERVICE LIST ITEM**

TVG	Functionality		Function	Common	TV	Video	NR Mode				Picture Mode				Device Name	
	Category	No.					Name	NRmode0	NRmode1	NRmode4	NRmode3	Dynamic	Standard	Hi-Fine		Personal
3CM	20	<b>SDY</b>	DY DETECTION LOWER-LEVER SENSITIVITY SWITCH	01										UPD64082		
	21	<b>D2G</b>	D2 GAIN SELECTION	04												
	22	<b>YHC</b>	Y-SIGNAL HIGHER-LEVEL CORING SELECTION	00					00	00	00	00				
	23	<b>YHG</b>	Y-SIGNAL HIGHER-LEVEL GAIN SWITCH	00					00	00	00	00				
	24	<b>SHT</b>	NON-STANDARD DETECTION & H/V COUNTER TEST BITS	00												
	25	<b>CLK</b>	CLOCK TEST BITS	08												
	26	<b>PLL</b>	PLL FILTER SETUP	0D												
	27	<b>KRF</b>	KILLER DETECTION REFERENCE ADJUSTMENT	03												
	28	<b>HSL</b>	H-SYNC SLICE LEVEL ADJUSTMENT	0C												
	29	<b>VSL</b>	V-SYNC SLICE LEVEL ADJUSTMENT	08												
	2A	<b>BPS</b>	INTERNAL BURST GATE START POSITION ADJUSTMENT	04												
	2B	<b>BPW</b>	INTERNAL BURST GATE WIDTH ADJUSTMENT	0A												
	2C	<b>ADC</b>	ADC CLOCK DELAY SELECTION	03												
	2D	<b>APD</b>	ADC POWER-DOWN SWITCH	01												
	2E	<b>NSD</b>	NON-STANDARD DETECTION TEST BIT	01												
	2F	<b>SPD</b>	MEMORY POWER-DOWN SWITCH	02												
	30	<b>CNT</b>	CNR TEST BIT	00												
2CM	00	<b>APA</b>	2D COMB APACON ON/OFF						01	00	00	00	CXA2069Q			

TVG	Functionality		Function	Device		
	Category	No.		Name	50	60
DYC	00	<b>SBH</b>	H STATIC CONV1	1F	1F	CXA8070P
	01	<b>YBU</b>	H STATIC CONV2 UPPER	1F	1F	
	02	<b>YBL</b>	H STATIC CONV2 LOWER	1F	1F	
	03	<b>RSA</b>	H DYNAMIC CONV1 LEFT	1F	1F	
	04	<b>LSA</b>	H DYNAMIC CONV1 RIGHT	1F	1F	
	05	<b>LUB</b>	H DYNAMIC CONV2 TOP LEFT	1F	1F	
	06	<b>LLB</b>	H DYNAMIC CONV2 BOTTOM LEFT	1F	1F	
	07	<b>RUB</b>	H DYNAMIC CONV2 TOP RIGHT	1F	1F	
	08	<b>RLB</b>	H DYNAMIC CONV2 BOTTOM RIGHT	1F	1F	

## SERVICE LIST ITEM

TVG	Functionality		Function				Device
	Category	No.		Name	Common	50	
TXT	00	TXH	TELETEXT HORIZONTAL POSITION	4B			SAA5261
	01	TXV	TELETEXT VERTICAL POSITION	0E			
OPM	00	OSH	OSD H POSITION	12			CXP750096 OPTION-MISC
	01	FW1	OSD ODD/EVEN FIELD WINDOW SETUP #1	00			
	02	FW2	OSD ODD/EVEN FIELD WINDOW SETUP #2	03			
	03	OHO	OSD H POSITION OFFSET FOR INDEX	07			
	04	ICO	INDEX "VIDEO" OSD HORIZONTAL OFFSET (12+1INDEX)	01			
	05	ISO	INDEX SUB-SCREEN OSD HORIZONTAL OFFSET	02			
	06	IL1	INDEX SUB-SCREEN OSD 1ST LINE VERTICAL POSITION		1C	19	
	07	IVO	INDEX SUB-SCREEN OSD VERTICAL OFFSET		2F	22	
	08	COM	COMB OPERATION SELECTION	00			
	09	APC	APC SWITCH MUTE	01			
	0A	TSY	TV SYSTEM SELECTION UNDER SEARCHING WITH AUTO TV SYSTEM	00			
	0B	MUT	NO SIGNAL MUTE	00			
	0C	AFM	AUTO FM SWITCH	01			
	0D	TVO	V-ANGLE CORRECTION TO PICTURE ROTATION	03			
	0E	DBL	DISABLE BLUEBACK FUNCTION	01			
	0F	SSO	SPEED CH SEARCH SELECTION	01			
10	TRP	MPEG/JPEG NOISE REDUCTION FOR EACH INPUT	00				
OPB	00	OP1	OPTIONAL BITS 1(SEE THE SPECIFIED SHEET)	67			OPTION-BITS
	01	OP2	OPTIONAL BITS 2 (SEE THE SPECIFIED SHEET)	13			

**Abbreviation:**

- ECO = Eco Mode  
 VC = V-Compressed Mode  
 NC = Non-Compressed Mode  
 Sur = Surround  
 VDD = Virtual Dolby Digital  
 VDP = Virtual Dolby Prologic  
 TRS = Tru Surround  
 SIM = Simulated

**NOTE**

- ■ shaded items are fixed data.
- ■ no data.
- Standard data listed on the Adjustment Item Table are reference values, therefore it may be different for each model and for each mode.
- Note for Different Data: Those are the standard data values written on the microprocessor. Therefore, the data values of the modes and stored respectively in the memory.

In case of a device replacement, adjustment by rewriting the data value is necessary for some items.

**OPTION NOTE**

**COM** Comb Operation Selection 00 = automatic operation (depends on color system status),  
 01 = no comb operation,  
 02 = forced 2D-comb operation,  
 03 = forced 3D-comb operation

**TSY** TV System Selection for Auto TV System 00 = B/G, 01 = I, 10 = D/K, 11 = M

**SSO** Speed CH Search Selection 00 = normal, 01 = 4 times, 10 = 6 times, 11 = 8 times

**TRP** MPEG/JPEG Noise Reduction

Input	–	–	TV	Video 1	Video 2	Video 3	Video 4	DVD
-------	---	---	----	---------	---------	---------	---------	-----

**OP1 Items**

Item	TOP	NICAM	HDEV	Reserved	–	DVD Input	AV Input	
<b>KV-ES34M81</b>	1	1	1	0	0	1	1	1
<b>KV-ES34M91</b>	1	1	1	0	0	1	1	1

**AV Input** 00 = no AV Input, 01 = 1 AV Input, 10 = 3 AV Input, 11 = 4 AV Input

**OP2 Items**

Item	C-Text	Korean Stereo	Korean Mode	A-TVsys	US ST	SSV Model	OSD	Language
<b>KV-ES34M81</b>	0	0	0	1	0	0	1	1
<b>KV-ES34M91</b>	0	0	0	1	0	0	1	1

### 5-3. PICTURE QUALITY ADJUSTMENTS

#### -H-TRAPIZIUM ADJUSTMENT

1. Input a cross hatch/dot signal.
2. Adjust DAC 4 HTR to make H-Trapezoid distortion best.

#### SUB CONTRAST, SUB HUE, SUB COLOR

Adjustment condition

```
SAJ 00 PIC 3F
    06 DYC 0
    0E CLO 6
    10 HUU 7
    13 PIO 0

JGL 04 BBT 0
    05 LML 3
```

```
PICTURE QUALITY : HI-FINE
ECO MODE        : OFF
WIDE MODE       : OFF
DRC-MF          : DRC1250
```

#### INPUT SIGNAL

Video Color Bar (White and Color 75%)  
RF Color Bar (White and Color 75%)

#### MEASUREMENT POINT

VR ; R100 (the pin 6 of CN1100 at A board)  
VB ; B100 (the pin 7 of CN1100 at A board)

#### CAUTION

After the above Adjustment, these adjustment parameters must be recovered to the original condition.

#### Original condition

```
SAJ 00 PIC 28 HI-FINE
SAJ 06 DYC 0  HI-FINE
```

	50 TV	50 VIDEO	60 TV	60 VIDEO
OE CLO	9	8	9	9
10 HUU	8	8	9	9

```
13 PIO TWIN = 7
JGL 04 BBT 3
    05 LML 0
```

### 1. NTSC VIDEO INPUT

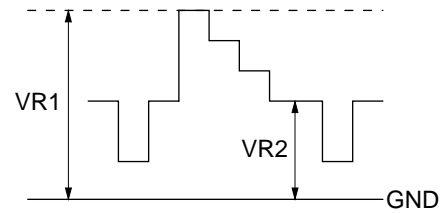
Input signal ; NTSC color bar, 75% to Video 1.  
[TWIN] mode, [Service] mode.

#### (i) SUB CONTRAST

```
Condition : SAJ 00 PIC 3F
            02 COL 0
            JGL 01 RGB 4
            SAJ 13 PIO 0
```

Adjusting parameter:

```
LEFT ; YCT 08 YOL
RIGHT ; SYC 08 YOL
```



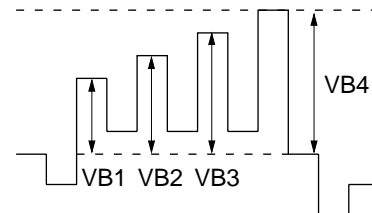
$$VR1 - VR2 = 1.85 \pm 0.07 (V_{p-p})$$

#### (ii) SUB HUE/SUB COL

```
Condition : SAJ 02 COL 1F
            JGL 01 RGB 7
            SAJ 10 HUU 7
```

Adjusting parameter:

```
LEFT ; YCT 0A COL
      YCT 00 TNT
RIGHT ; SYC 0A COL
      SYC 00 TNT
```



$$VB1 = VB4 \pm 70 \text{ mV}$$

$$VB2 = VB3 \pm 70 \text{ mV}$$

**2. NTSC RF INPUT**

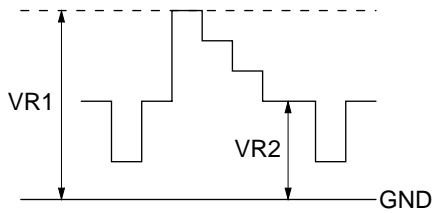
Input signal ; NTSC RF color bar, 75%.  
[TWIN] mode, [Service] mode.

(i) SUB CONTRAST

Condition : SAJ 00 PIC 3F  
                  02 COL 0  
                  JGL 01 RGB 4

Adjusting parameter:

LEFT ; YCT 04 SCT  
RIGHT ; SYC 04 SCT



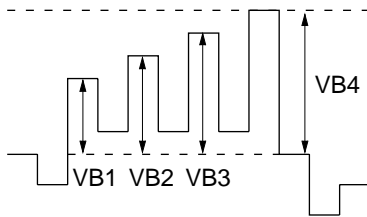
$VR1 - VR2 = 1.85 \pm 0.07 (V_{p-p})$

(ii) SUB HUE/SUB COL

Condition : SAJ 02 COL 1F  
                  JGL 01 RGB 7  
                  SAJ 10 HUO 7

Adjusting parameter:

LEFT ; YCT 03 SCL  
                  YCT 00 TNT  
RIGHT ; SYC 03 SCL  
                  SYC 00 TNT



$VB1 = VB4 \pm 70 \text{ mV}$

$VB2 = VB3 \pm 70 \text{ mV}$

**3. PAL RF INPUT**

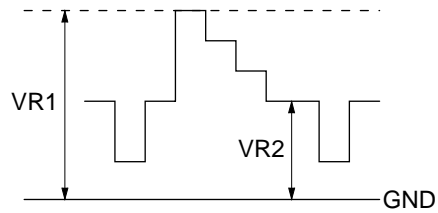
Input signal ; PAL RF color bar, 75%.  
[TWIN] mode, [Service] mode.

(i) SUB CONTRAST

Condition : SAJ 00 PIC 3F  
                  SAJ 02 COL 0  
                  JGL 01 RGB 4

Adjusting parameter:

LEFT ; YCT 04 SCT  
RIGHT ; SYC 04 SCT



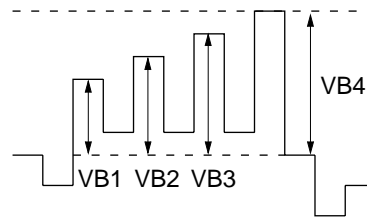
$VR1 - VR2 = 1.85 \pm 0.07 (V_{p-p})$

(ii) SUB HUE/SUB COL

Condition : SAJ 02 COL 1F  
                  JGL 01 RGB 7

Adjusting parameter:

LEFT ; YCT 03 SCL  
RIGHT ; SYC 03 SCL



$VB2 = VB3 = VB4 = \pm 70 \text{ mV}$

## 5-4. DEFLECTION ADJUSTMENTS

### FOR DRC 1250

1. Set to Service Mode.
2. Input a Pal cross hatch/dot signal.
3. Set the following condition.  
Picture Mode to **[DYNAMIC]**, Picture Rotation to **[+/-0]** and Eco Mode to OFF.
4. Set to DRC 1250 mode.
5. Using the **[1]** and **[4]** buttons select category GEO (Service Mode).
6. Select and adjust the following items to obtain optimum image. Raise/lower the data with the **[3]** and **[6]** buttons.

1	00	VSZ	V SIZE
2	04	HSZ	H SIZE
3	01	VPS	V POSITION
4	05	HPS	H POSITION
5	03	SCO	S CORRECTION
6	02	VLN	V LINEARITY
7	0B	BOW	AFC BOW
8	06	PAP	PIN AMP
9	07	UPN	UPPER CORNER PIN
10	08	LPN	LOWER CORNER PIN
11	09	TRZ	TRAPEZIUM

7. Using the **[1]** and **[4]** buttons select category DAC (Service Mode).
8. Select and ad List the following items to obtain optimum image. Raise/lower the data with the **[3]** and **[6]** buttons.

1	01	HLN	H LINEARITY
2	00	HCT	H CENTER

9. Select "GEO 04 HSZ" with the **[1]** and **[4]** buttons.
10. Confirm the H Size condition. If necessary, adjust the H SIZE to get a best condition.
11. Write into the memory by pressing **[MUTING]** then **[0]**.

### FOR DRC 100 MODE

12. Set to DRC 100 mode.
13. Repeat Step 5, Step 6 and Step 7.
14. Write "DAC 00 HCT DRC 100 Mode" as "DAC 00 HCT DRC 1250 Mode".  
Write "DAC 01 HLN DRC 100 Mode" as "DAC 01 HLN DRC 1250 Mode".

### FOR PIP MODE

15. Set to PIP mode.
16. Repeat Step 5 and Step 6.
17. Write into the memory by pressing **[MUTING]** then **[0]**.

### FOR TWIN MODE

18. Set to TWIN Mode.
19. Using the **[1]** and **[4]** buttons select category GEO (Service Mode).
20. Select and adjust the following items to obtain optimum image. Raise/lower the data with the **[3]** and **[6]** buttons.

1	01	VPS	V POSITION
2	05	HPS	H POSITION
3	06	PAP	PIN AMP
4	09	TRZ	TRAPEZIUM

21. Write into the memory by pressing **[MUTING]** then **[0]**.

### FOR INDEX MODE

22. Set to Index Mode.
23. Repeat Step 5 and Step 6.
24. Write into the memory by pressing **[MUTING]** then **[0]**.

### FOR WIDE MODE

25. Set to WIDE Mode.
26. Using the **[1]** and **[4]** buttons select category GEO (Service Mode).
27. Select and adjust the following items to obtain optimum image. Raise/lower the data with the **[3]** and **[6]** buttons.

1	00	VSZ	V SIZE
2	01	VPS	V POSITION
3	05	HPS	H POSITION
4	06	PAP	PIN AMP
5	09	TRZ	TRAPEZIUM

28. Input a NTSC cross hatch/dot signal and repeat all above steps.

### **5-5. A BOARD ADJUSTMENT AFTER IC003 (MEMORY) REPLACEMENT**

When replacing IC003 and IC004 (MEMORY), be sure to change IC001 ( $\mu$ -COM) to the following at the same time.

MODEL	IC001 ( $\mu$ -CON)
KV-ES34M81/ES34M91	CXP750096-013Q

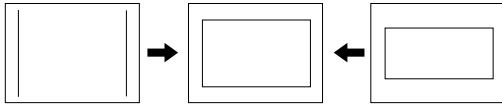
1. Enter to Service Mode.
2. Press commander buttons **[5]** and **[0]** (Data Initialize), and **[2]** and **[0]** (Data Copy) to initialize the data.
3. Call each item number and check if the respective screen shows the normal picture.  
In cases where items are not well adjusted, rectify the items with fine adjustment.  
Write the data per each item number (**[MUTING]** + **[0]**).
4. Select item numbers "OPB0" (OP1), "OPB1" (OP2) and respectively set the bit per model with command buttons **[3]** and **[6]**.
5. Press commander buttons **[8]** and **[0]** (Test Normal) to return to the data that was set on the shipment from the factory.  
(This will also cancel Service Mode.)



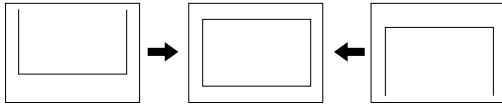
**5-6. PICTURE DISTORTION ADJUSTMENT (1)**

Item Number 00 – 0B

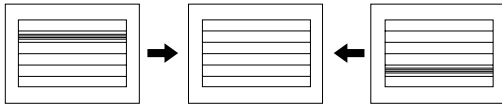
GEO 0 VSZ (V SIZE)



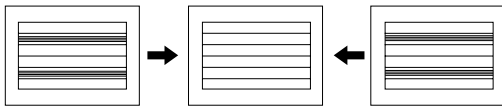
GEO 1 VPS (V POSITION)



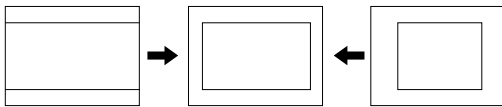
GEO 2 VLN (V LINEARITY)



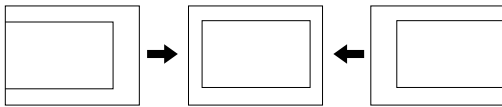
GEO 3 SCO (VERTICAL S-Correction)



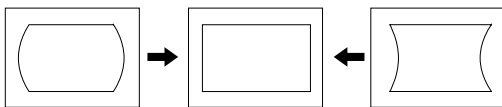
GEO 4 HSZ (H SIZE)



GEO 5 HPS (H POSITION)

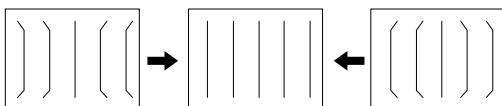


GEO 6 PAP (PIN AMP)

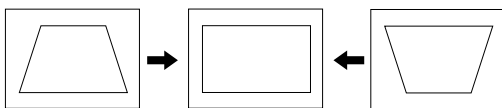


GEO 07 UPN (UPPER CORNER PIN)

GEO 08 LPN (LOWER CORNER PIN)



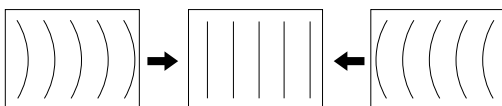
GEO 9 TRZ (TRAPEZIUM)



GEO 0A AGL (AFC.ANGLE)

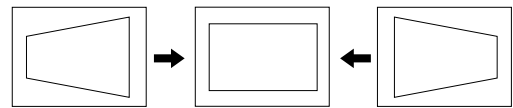


GEO 0B BOW (AFC.BOW)



**PICTURE DISTORTION ADJUSTMENT (2)**

H-TRAPEZOID (DAC 4 HTR)



**MEMO**

Dotted lines for writing



**MEMO**

A large area of dotted lines for writing, consisting of 32 horizontal rows of evenly spaced dots across the page.

**SECTION 6  
DIAGRAMS**

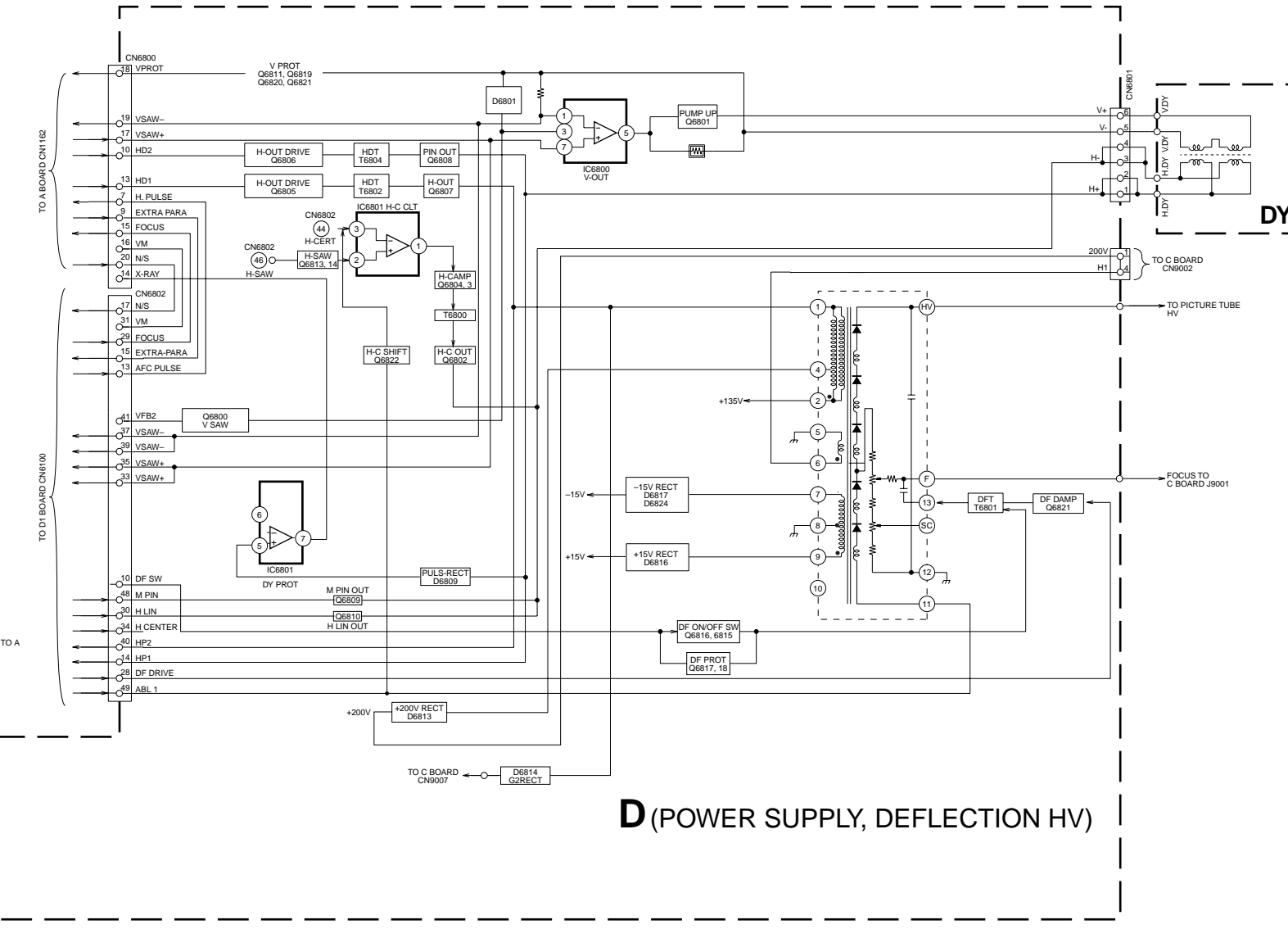
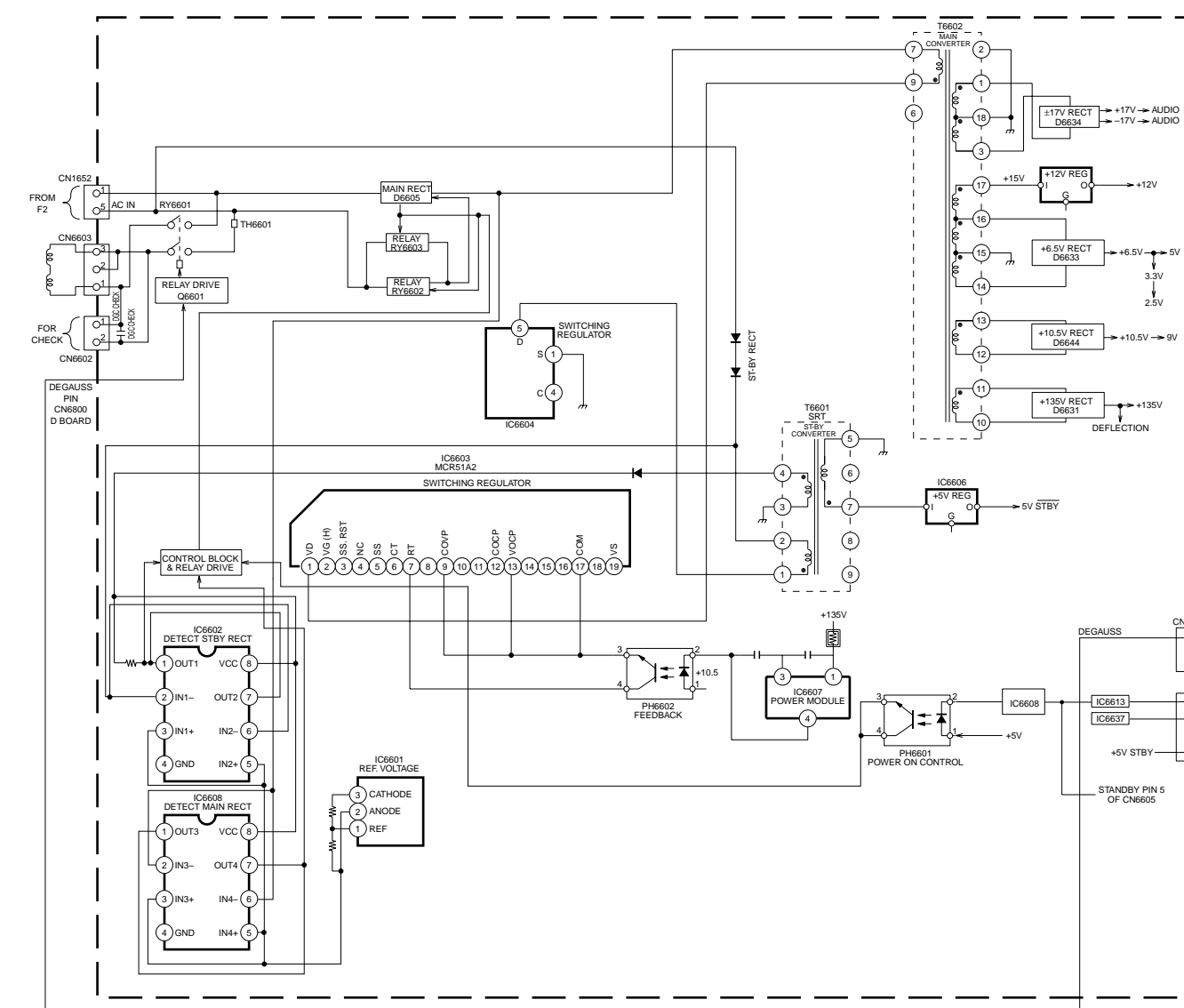
KV-ES34M81/ES34M91  
RM-916

KV-ES34M81/ES34M91  
RM-916

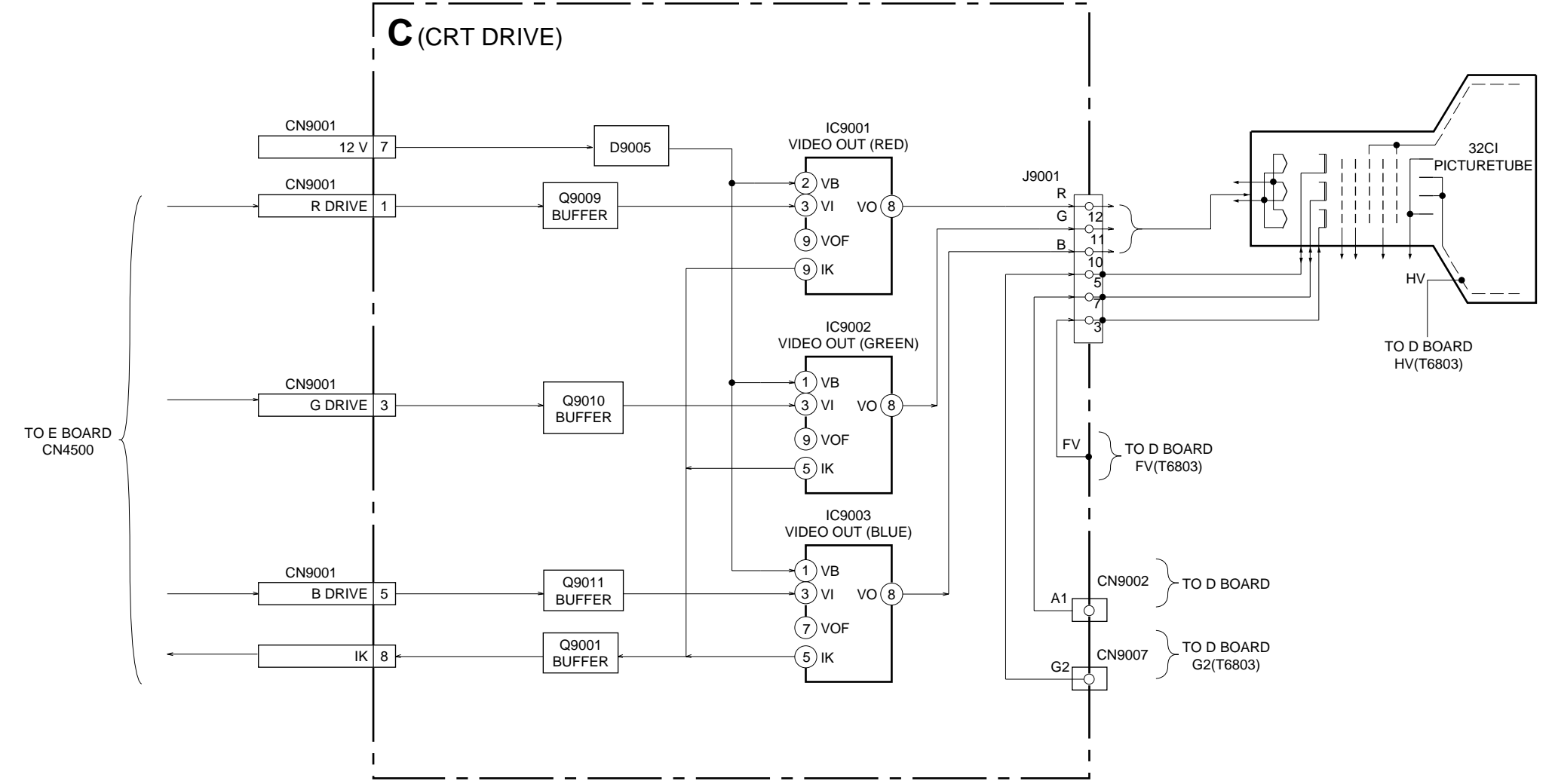
KV-ES34M81/ES34M91  
RM-916

KV-ES34M81/ES34M91  
RM-916

**6-1. BLOCK DIAGRAM**

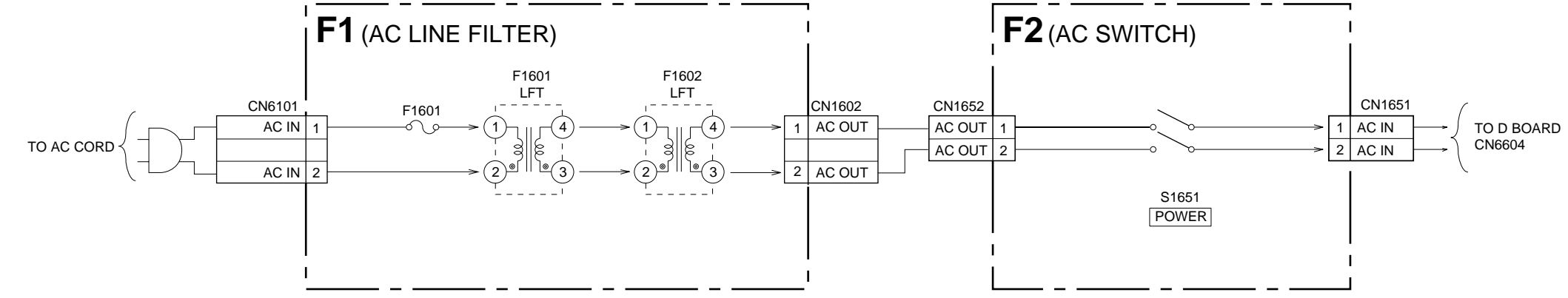


**D (POWER SUPPLY, DEFLECTION HV)**

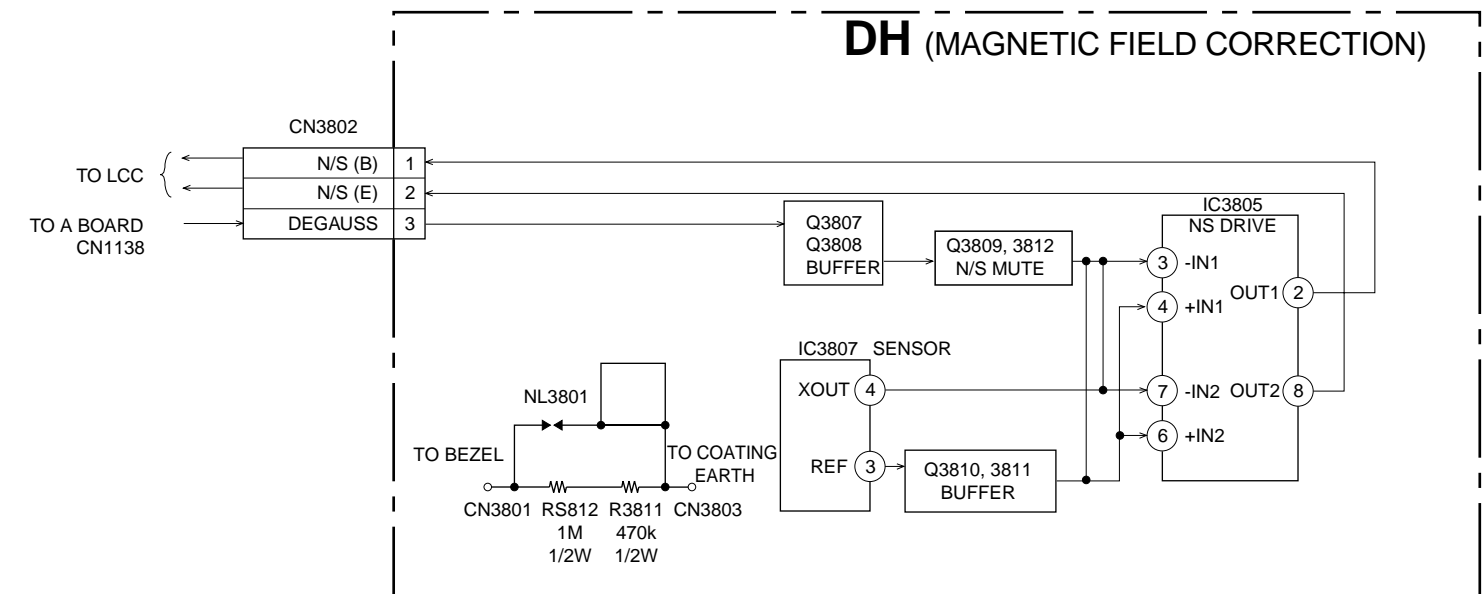


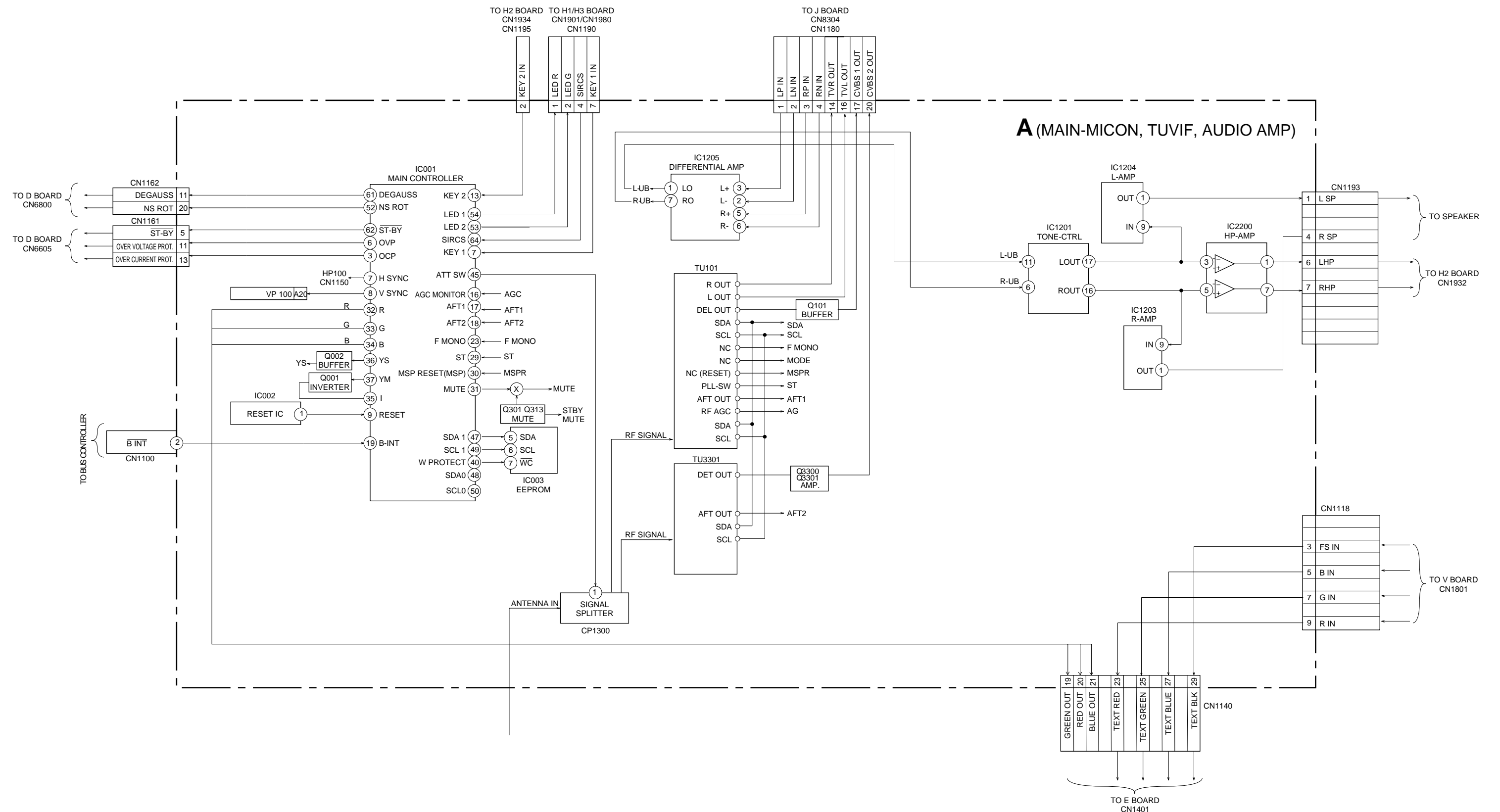
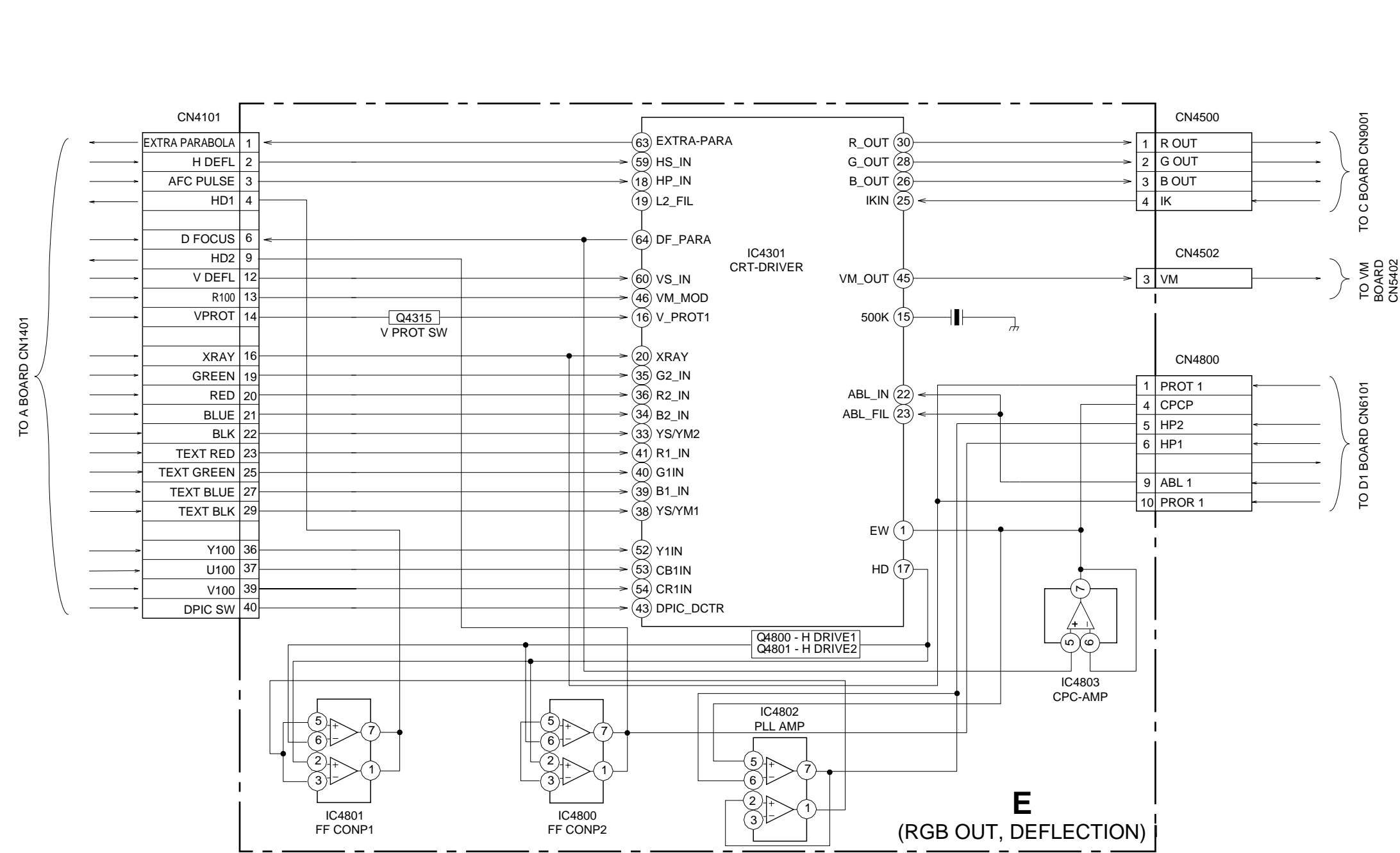
**F1 (AC LINE FILTER)**

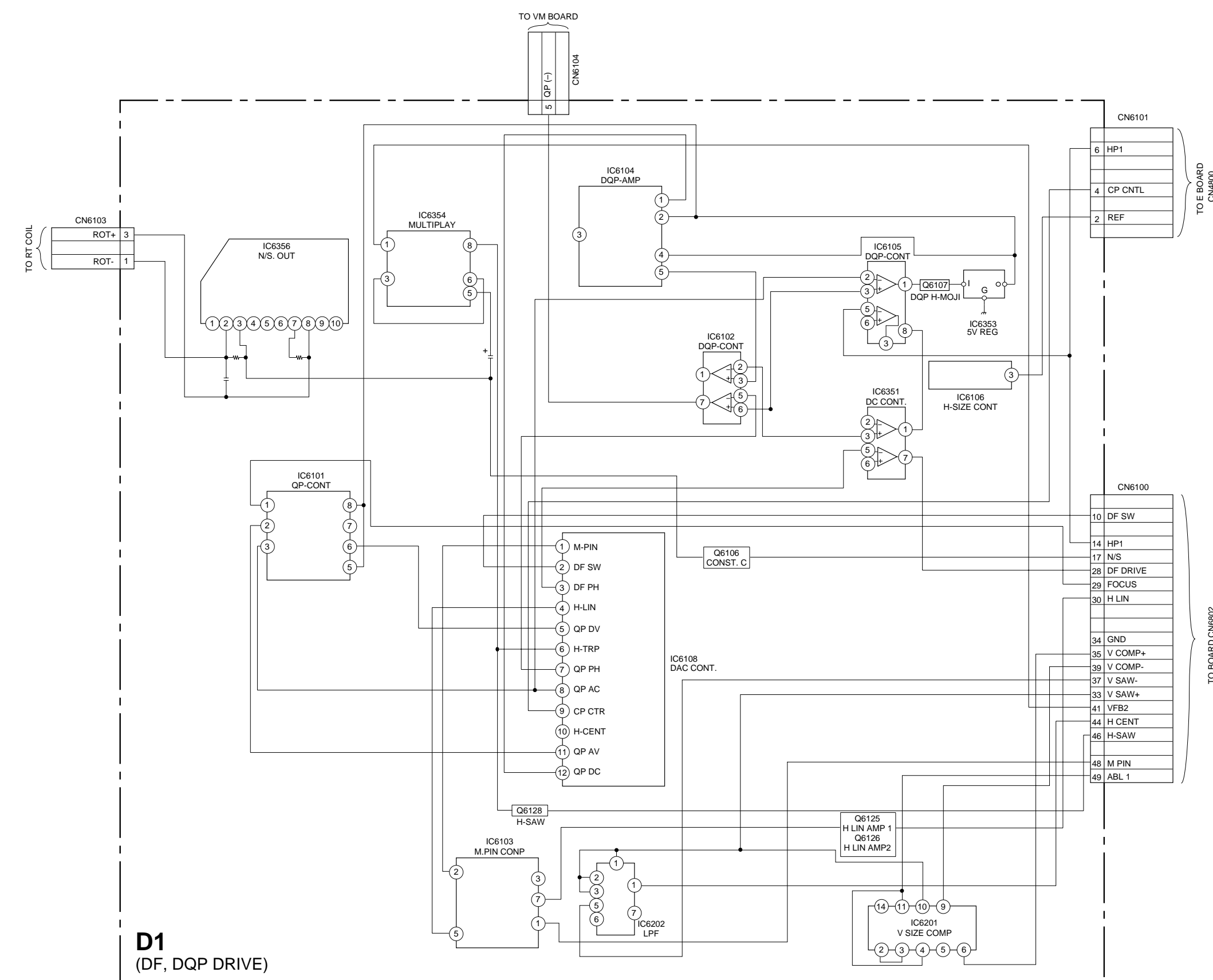
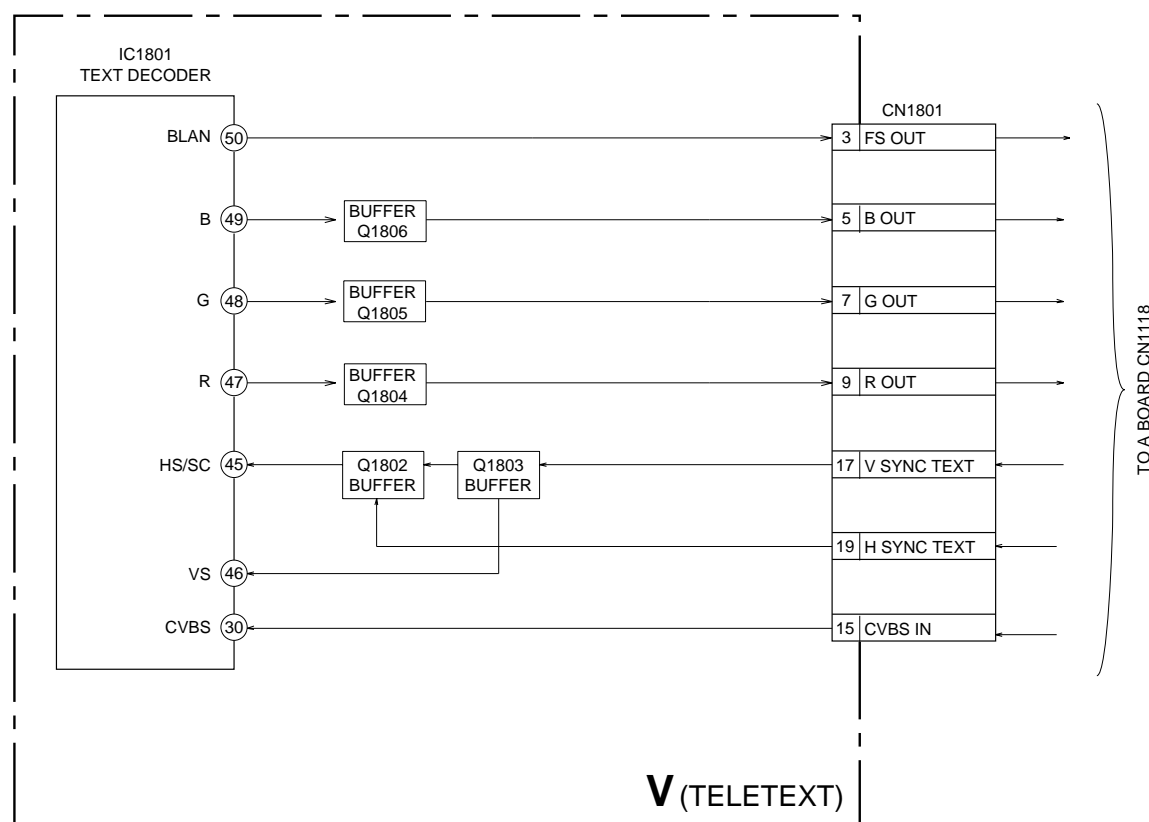
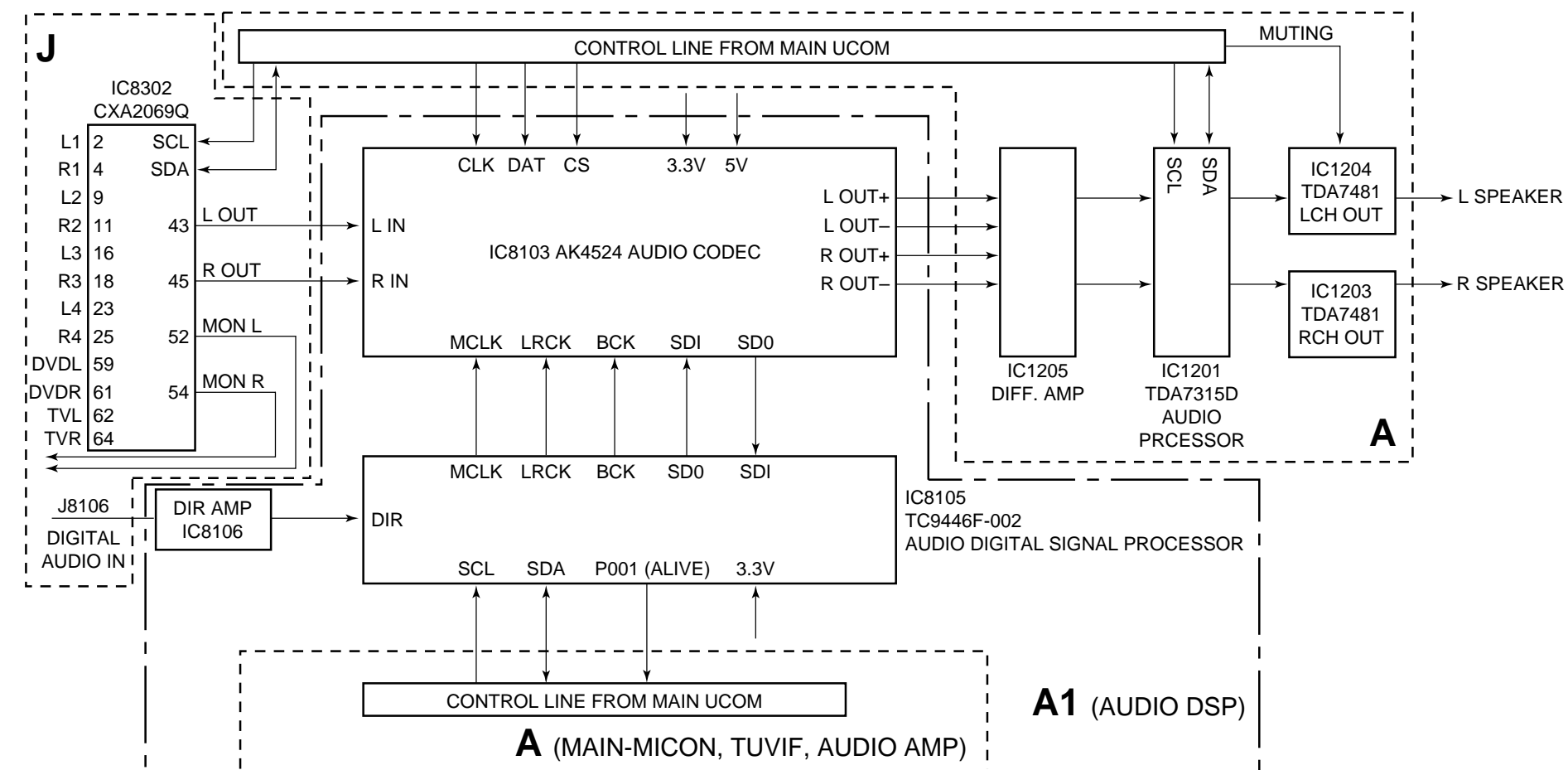
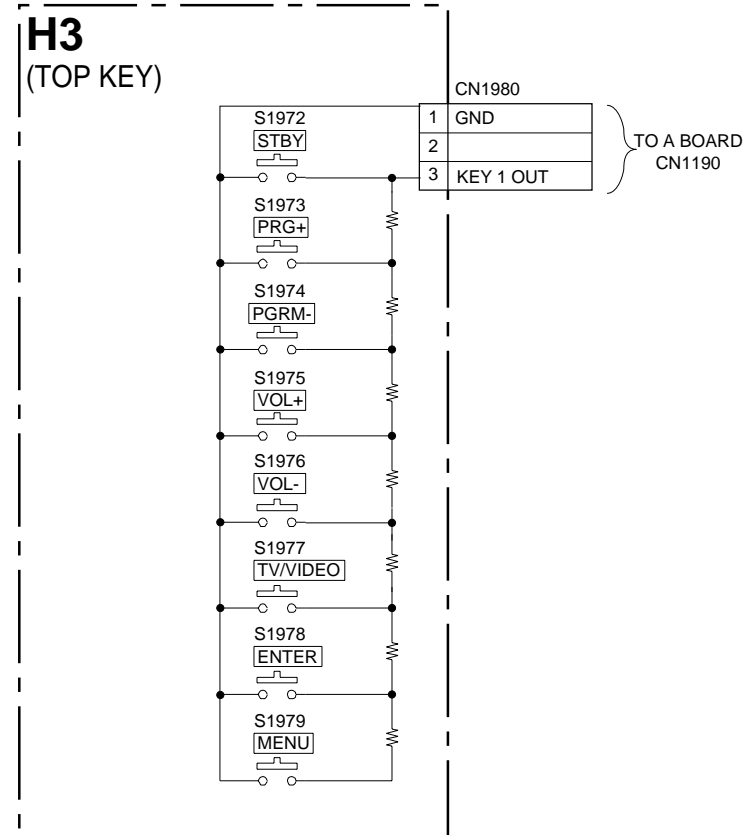
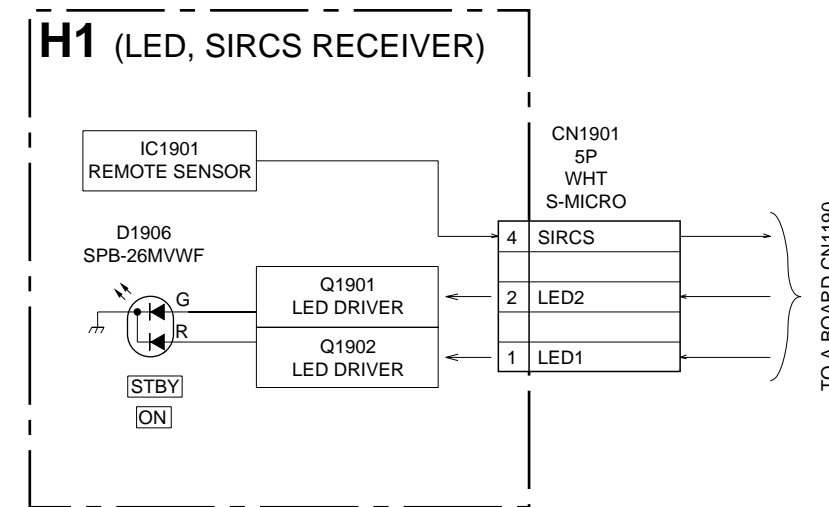
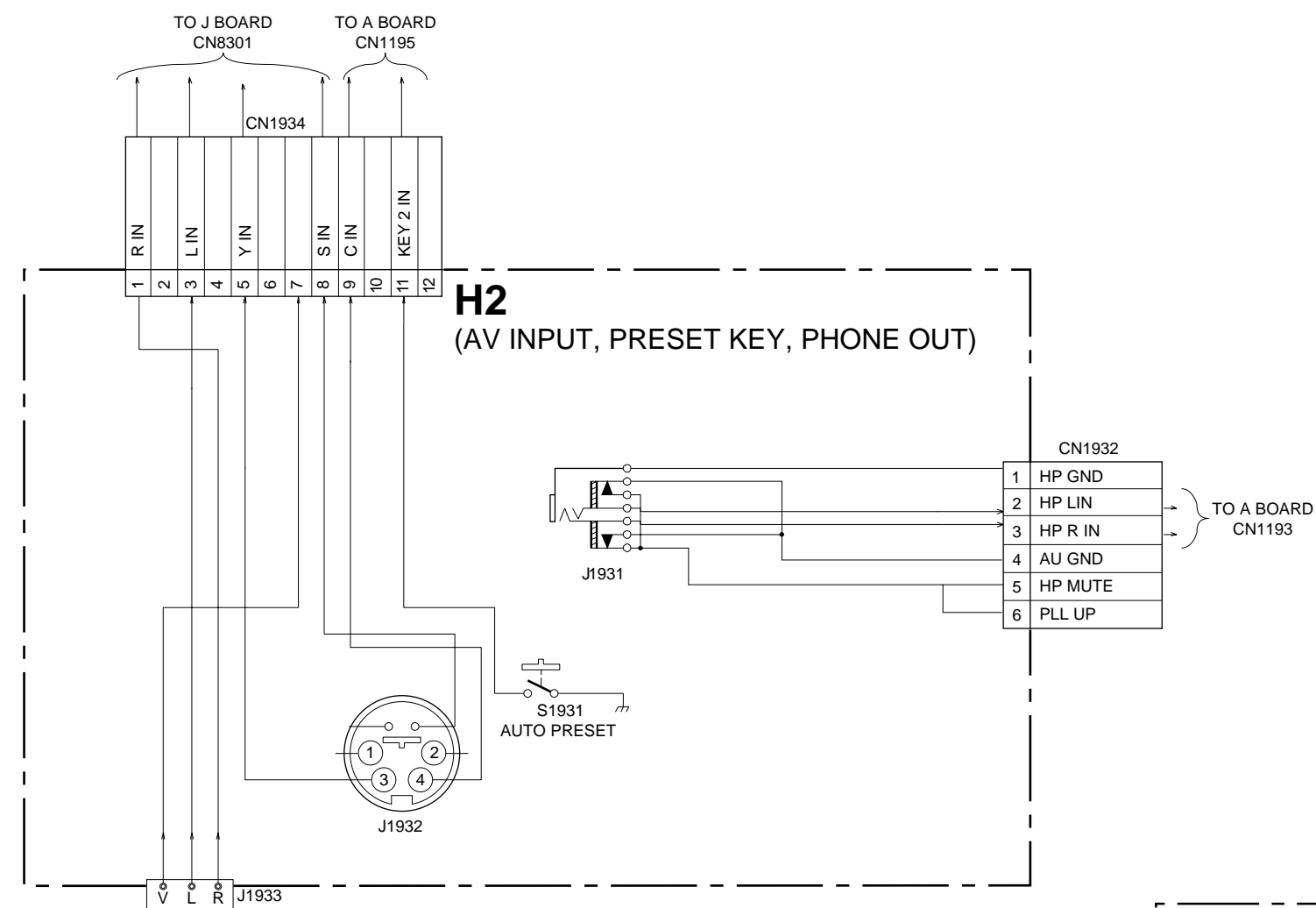
**F2 (AC SWITCH)**

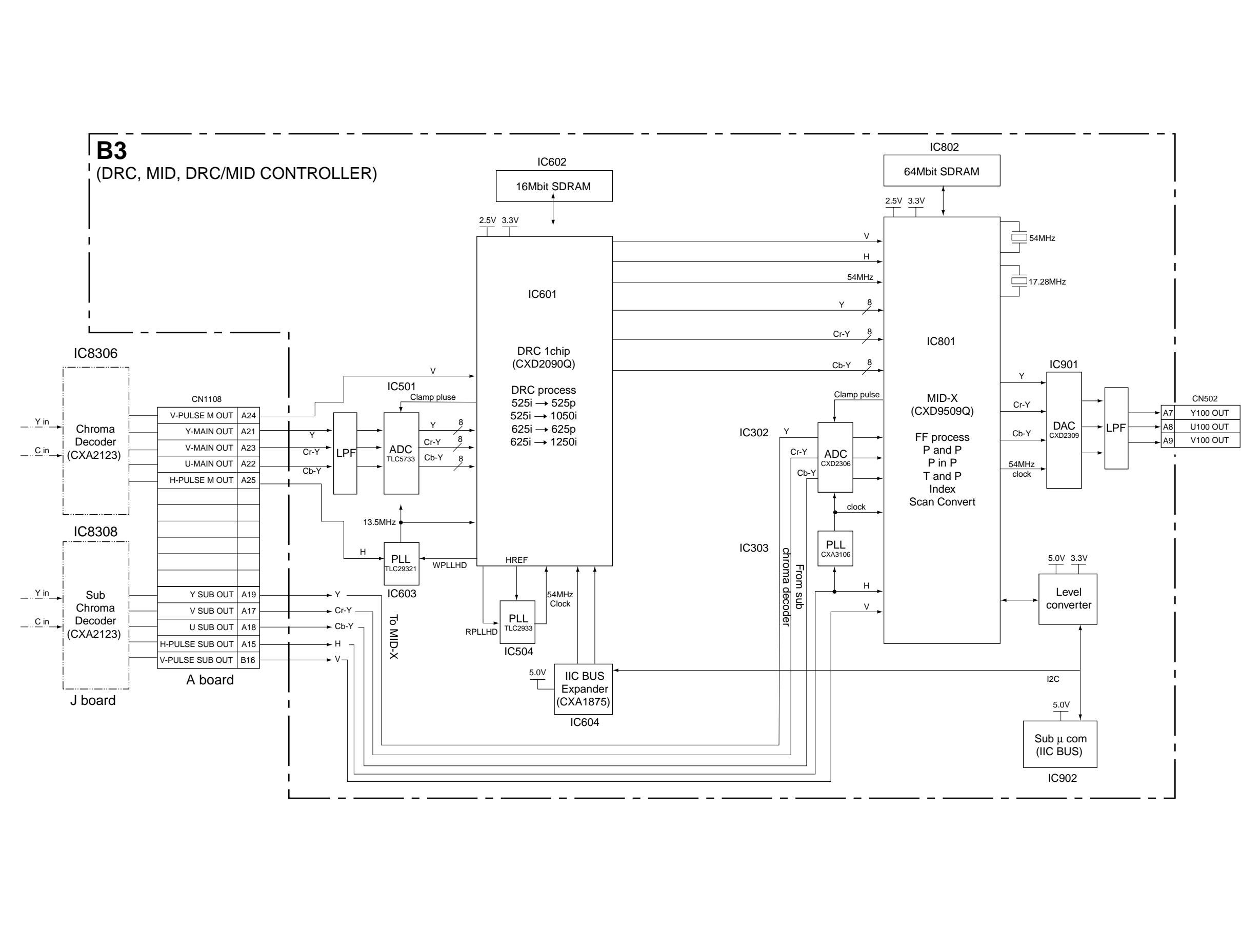
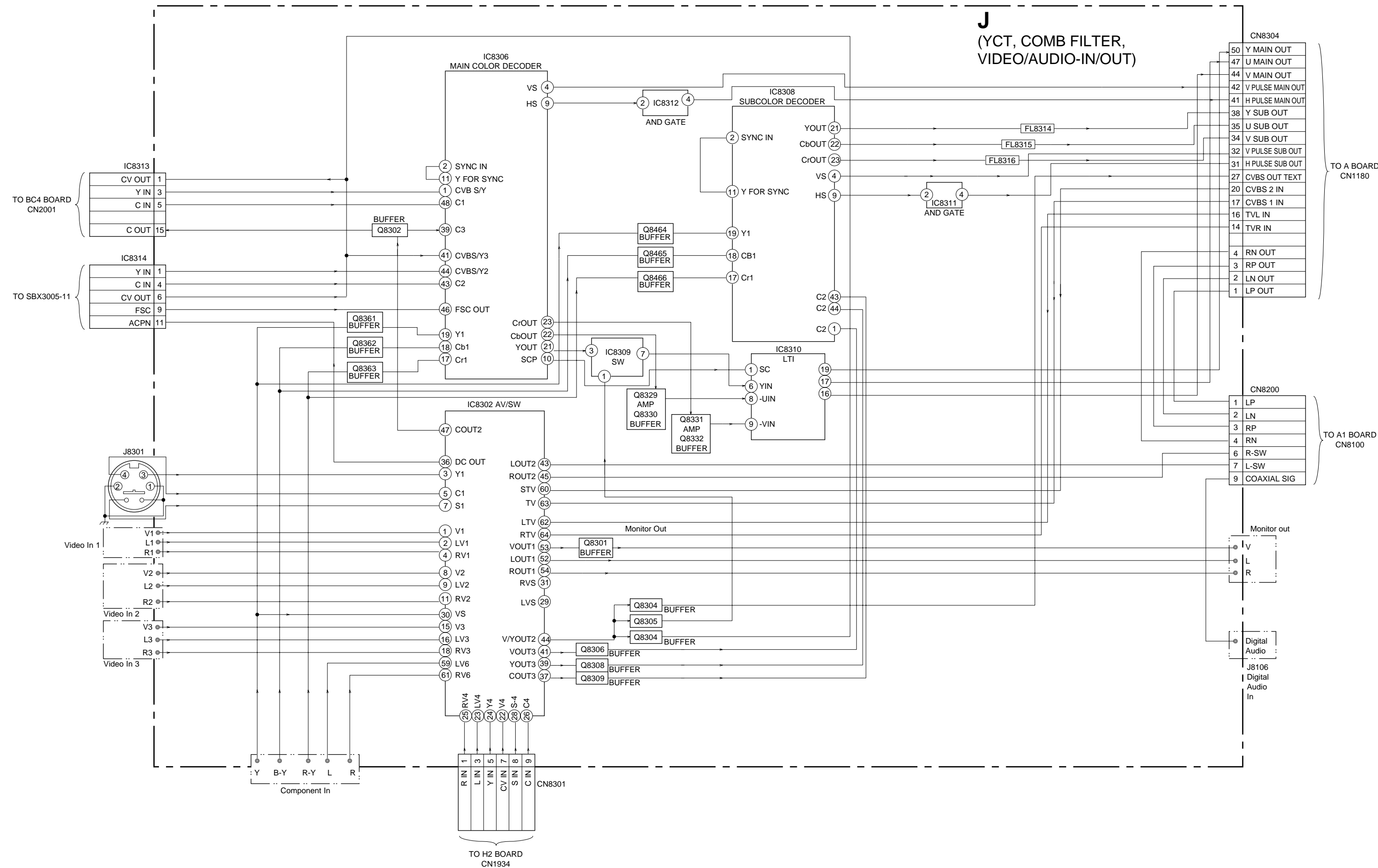


**DH (MAGNETIC FIELD CORRECTION)**

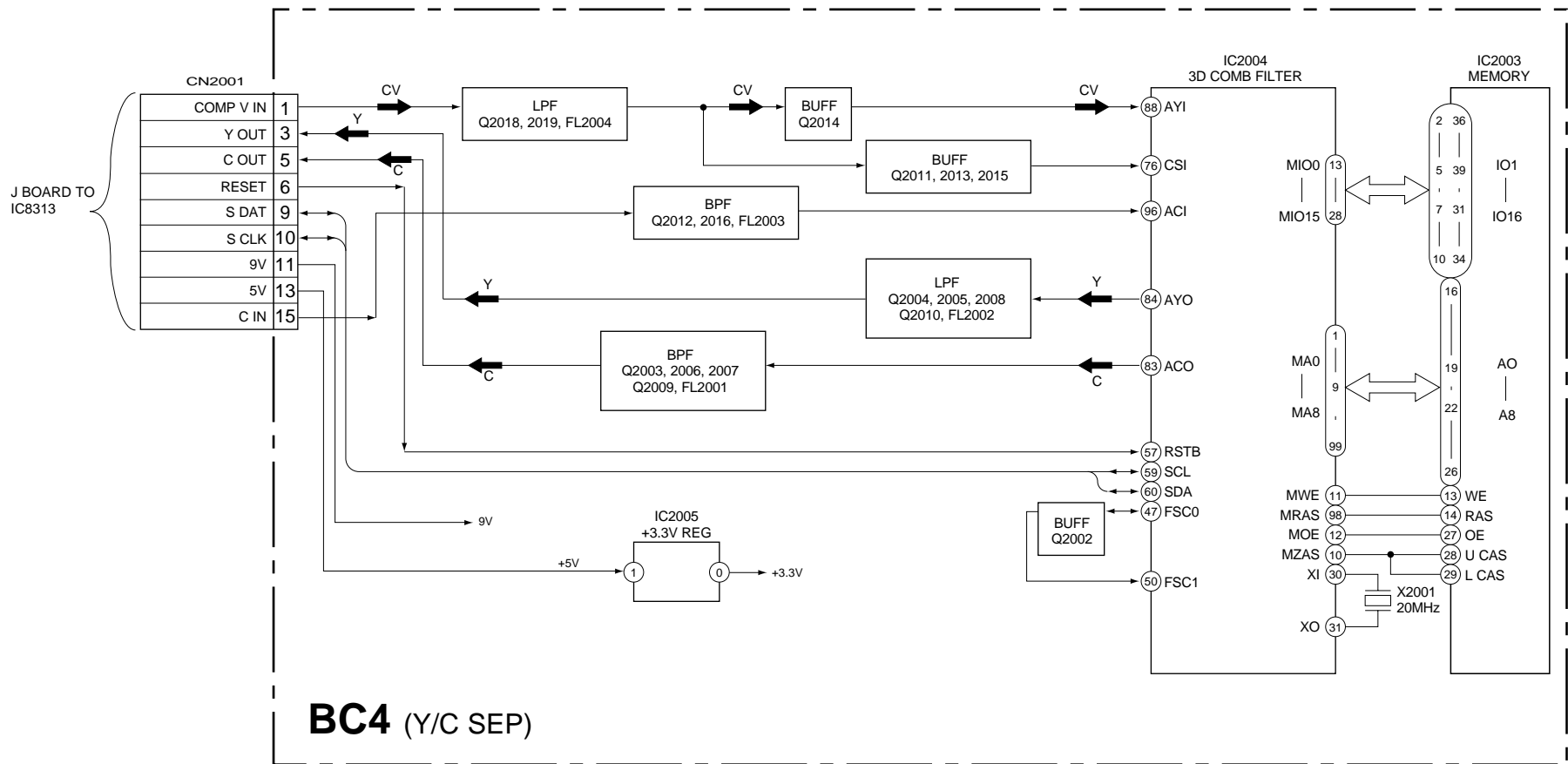


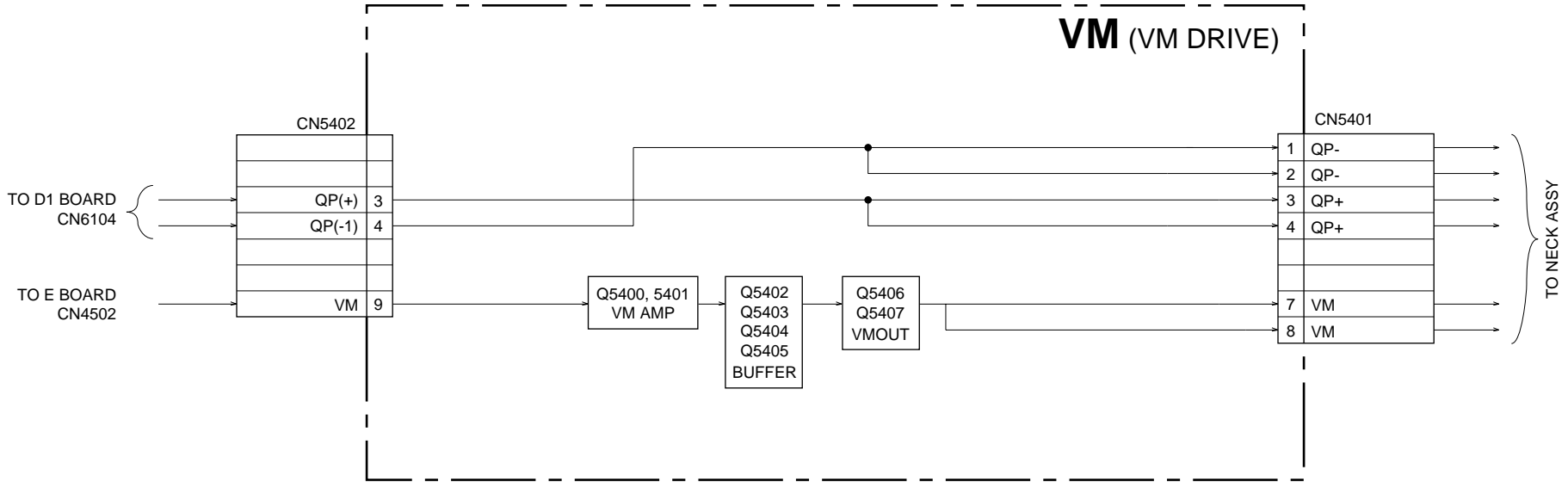




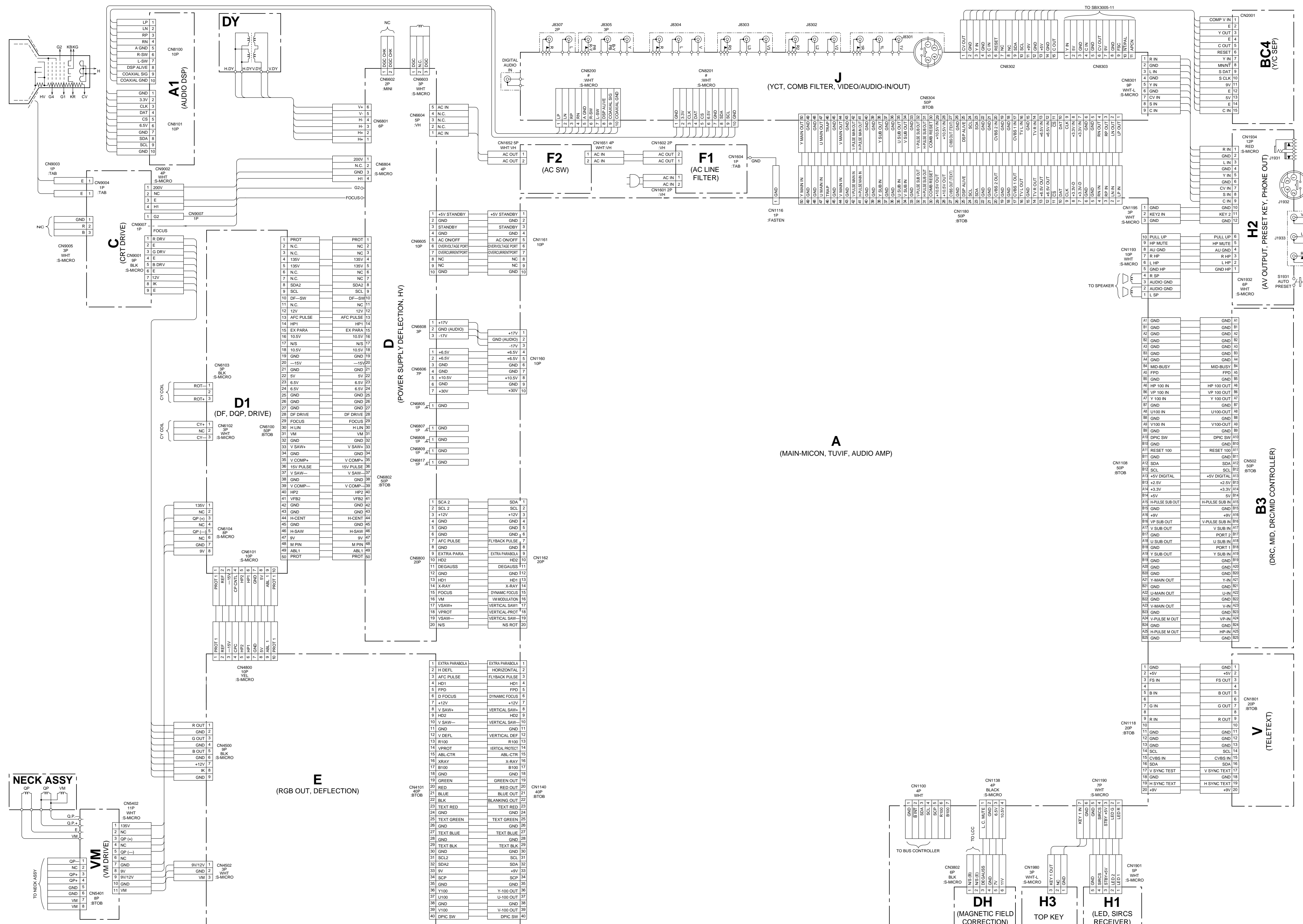




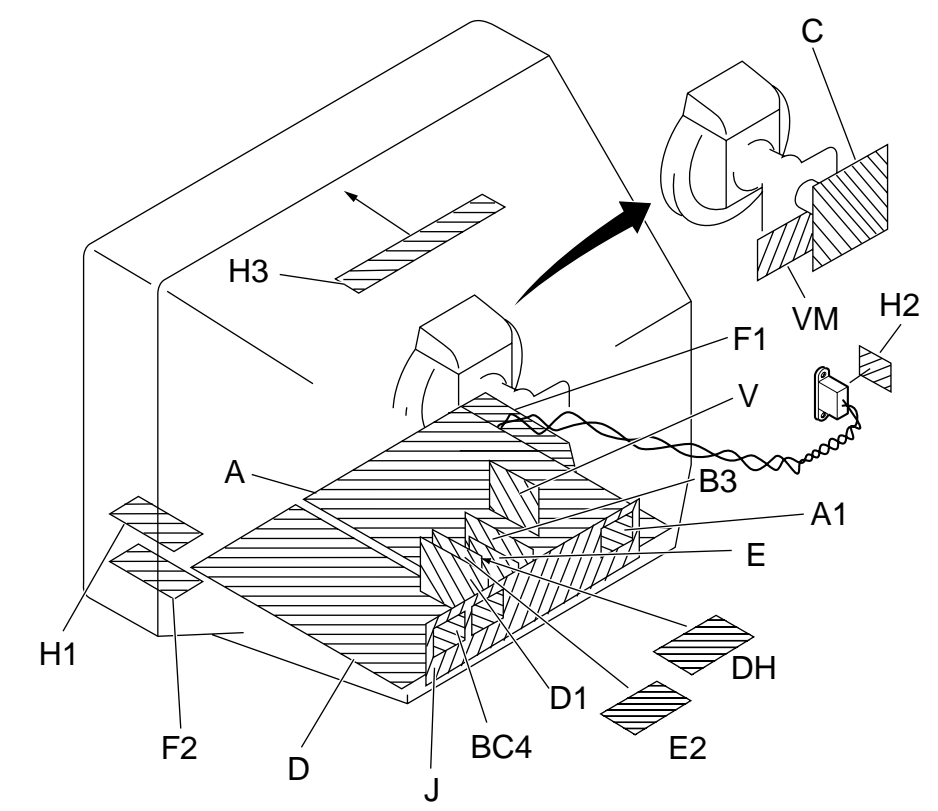




6-2. FRAME SCHEMATIC DIAGRAMS



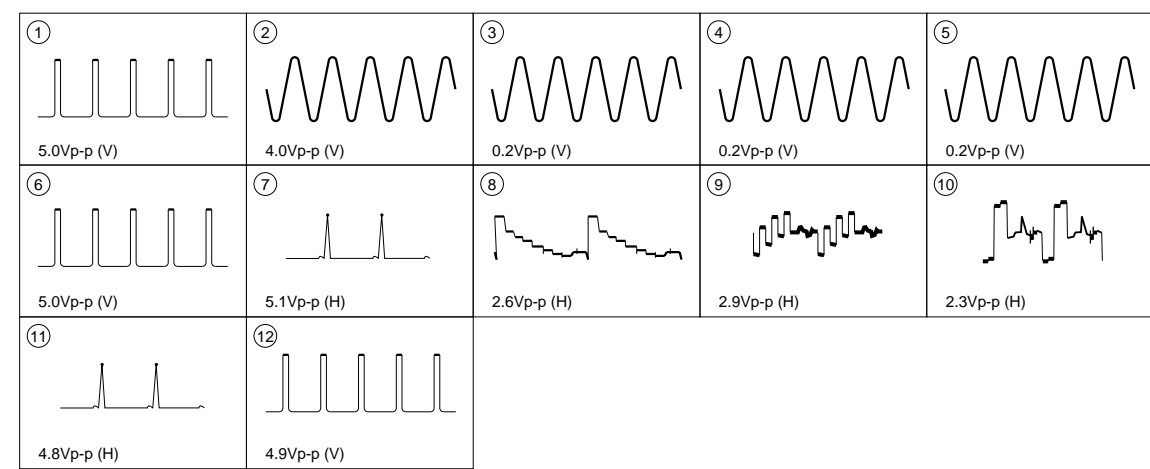
6-3. CIRCUIT BOARDS LOCATION



6-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

- Note:**
- All capacitors are in  $\mu\text{F}$  unless otherwise noted.
  - All electrolytic capacitors are rated at 50V unless otherwise noted.
  - All resistors are in ohms.
  - $k\Omega = 1000\Omega$ ,  $M\Omega = 1000k\Omega$
  - Indication of resistance which does not have rating electrical power is as follows.
  - Pitch: 5 mm
  - Rating electrical power 1/4W (CHIP: 1/10W)
  - $\Delta$  : nonflammable resistor.
  - $\square$  : internal component.
  - $\square$  : panel designation or adjustment for repair.
  - All variable and adjustable resistors have characteristic curve B unless otherwise noted.
  - Readings are taken with a color-bar signal input.
  - no mark : PAL
  - ( ) : SECAM
  - [ ] : NTSC 3.58
  - $\langle \rangle$  : NTSC 4.43
  - Readings are taken with a 10 MW digital multimeter.
  - Voltage are dc with respect to ground unless otherwise noted.
  - Voltage variations may be noted due to normal production tolerances.
  - All voltages are in V.
  - \* : Cannot be measured.
  - Circled numbers are waveform references.
  - : B + bus.
  - : B - bus.
  - $\Rightarrow$  : signal path.
- Reference information**
- RESISTOR
- :RN : METAL FILM
  - :RC : SOLID
  - :FPFD : NONFLAMMABLE CARBON
  - :FUUSE : NONFLAMMABLE FUSIBLE
  - :RS : NONFLAMMABLE METAL OXIDE
  - :RB : NONFLAMMABLE CEMENT
  - :RW : NONFLAMMABLE WIREWOUND
  - : \* : ADJUSTMENT RESISTOR
- COIL
- :LF-8L : MICRO INDUCTOR
- CAPACITOR
- :TA : TANTALUM
  - :PS : STYROL
  - :PP : POLYPROPYLENE
  - :PT : MYLAR
  - :MPS : METALIZED POLYESTER
  - :MPP : METALIZED POLYPROPYLENE
  - :ALB : BIPOLAR
  - :ALT : HIGH TEMPERATURE
  - :ALR : HIGH RIPPLE
- Note: The component identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.**

**A BOARD WAVEFORMS**

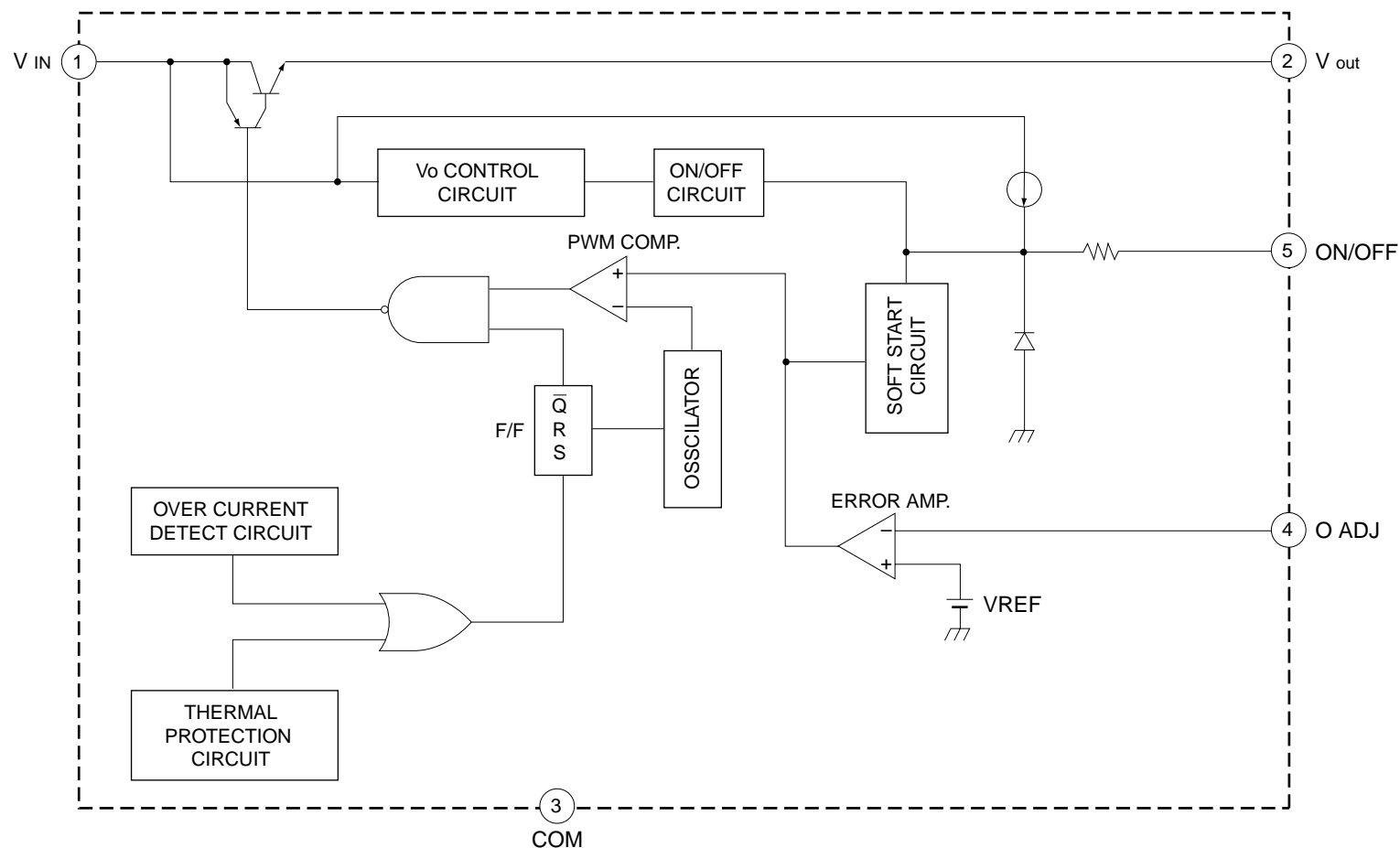


**A BOARD \* MARK LIST**

	KV-ES34M81	KV-ES34M91
JR109	0 : CHIP	#
TU101	BTF-LG434	BTF-WG442

Note: This parts indicated as "#" in this Circuit Diagram are not listed here, as they are not used for these models.

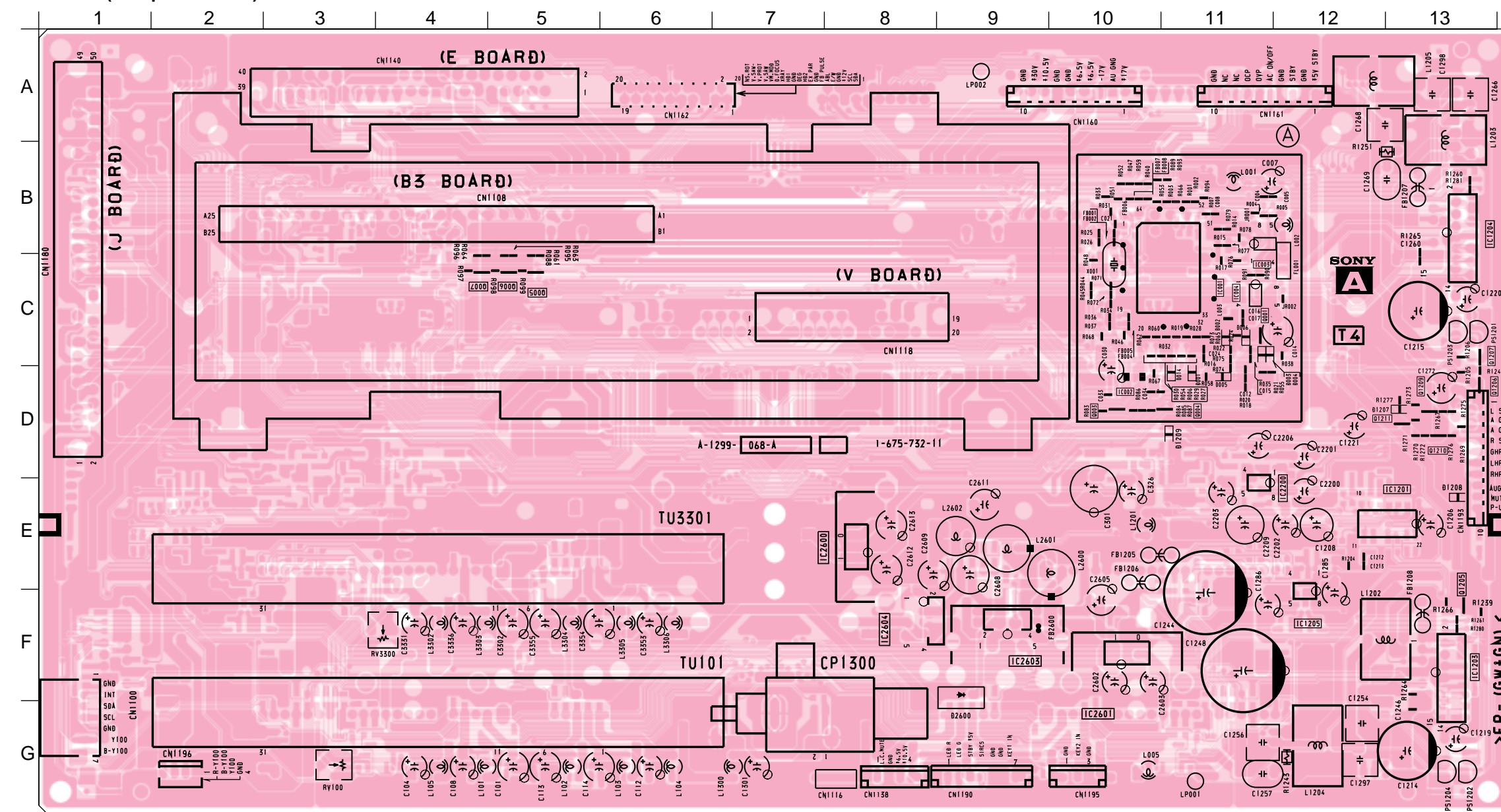
**A BOARD IC2603 PQICG2032FZ**



**PRINTED WIRING BOARDS**

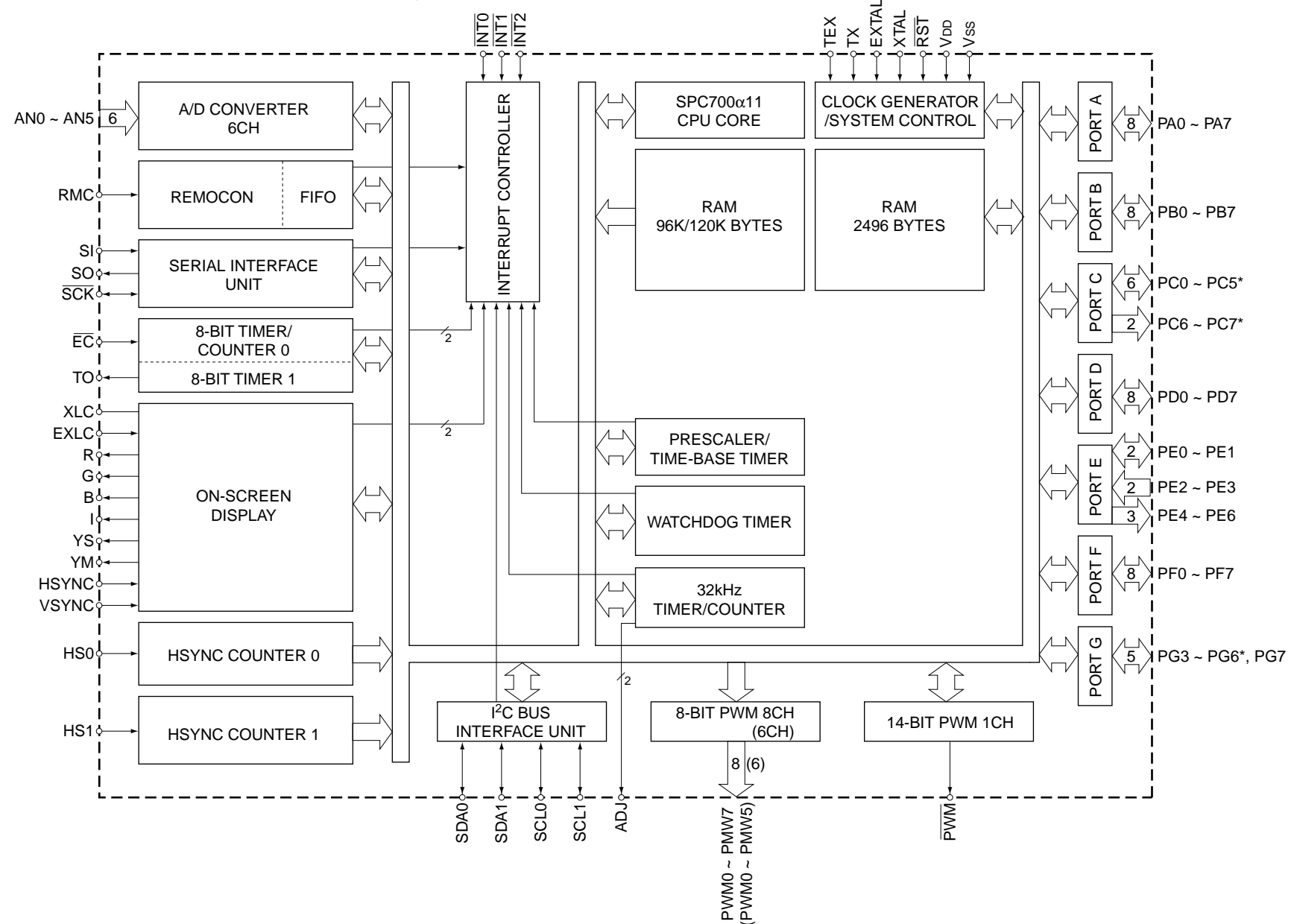
**A** [MAIN-MICON, TUVIF, AUDIO AMP]

**- A Board (Component Side) -**

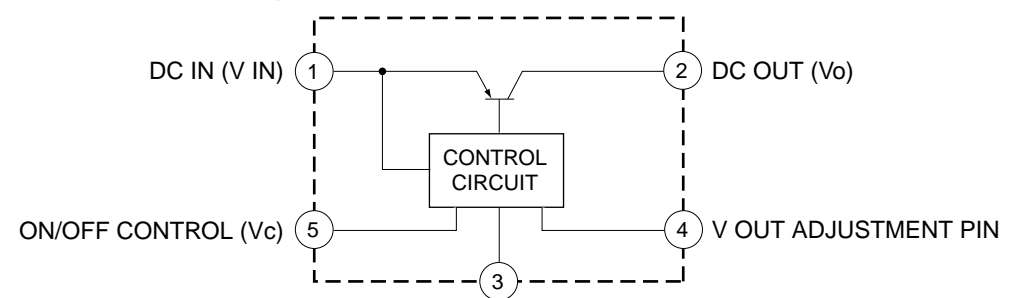


- Pattern from the side which enables seeing.
- Pattern from the rear side.

**A BOARD IC001 CXP750096-013Q**



**A BOARD IC2604 PQ5EV3**



**A BOARD (Component Side)**

IC	TRANSISTOR
IC001	B-9 Q1201 D-12
IC002	C-8 Q1206 D-13
IC003	A-8 Q1209 D-13
IC1201	E-13 Q1210 D-13
IC1203	F-13 Q1205 E-13
IC1204	B-13
IC1205	F-12
IC2200	E-12
IC2600	E-8
IC2601	G-10
IC2603	F-9
IC2604	F-8

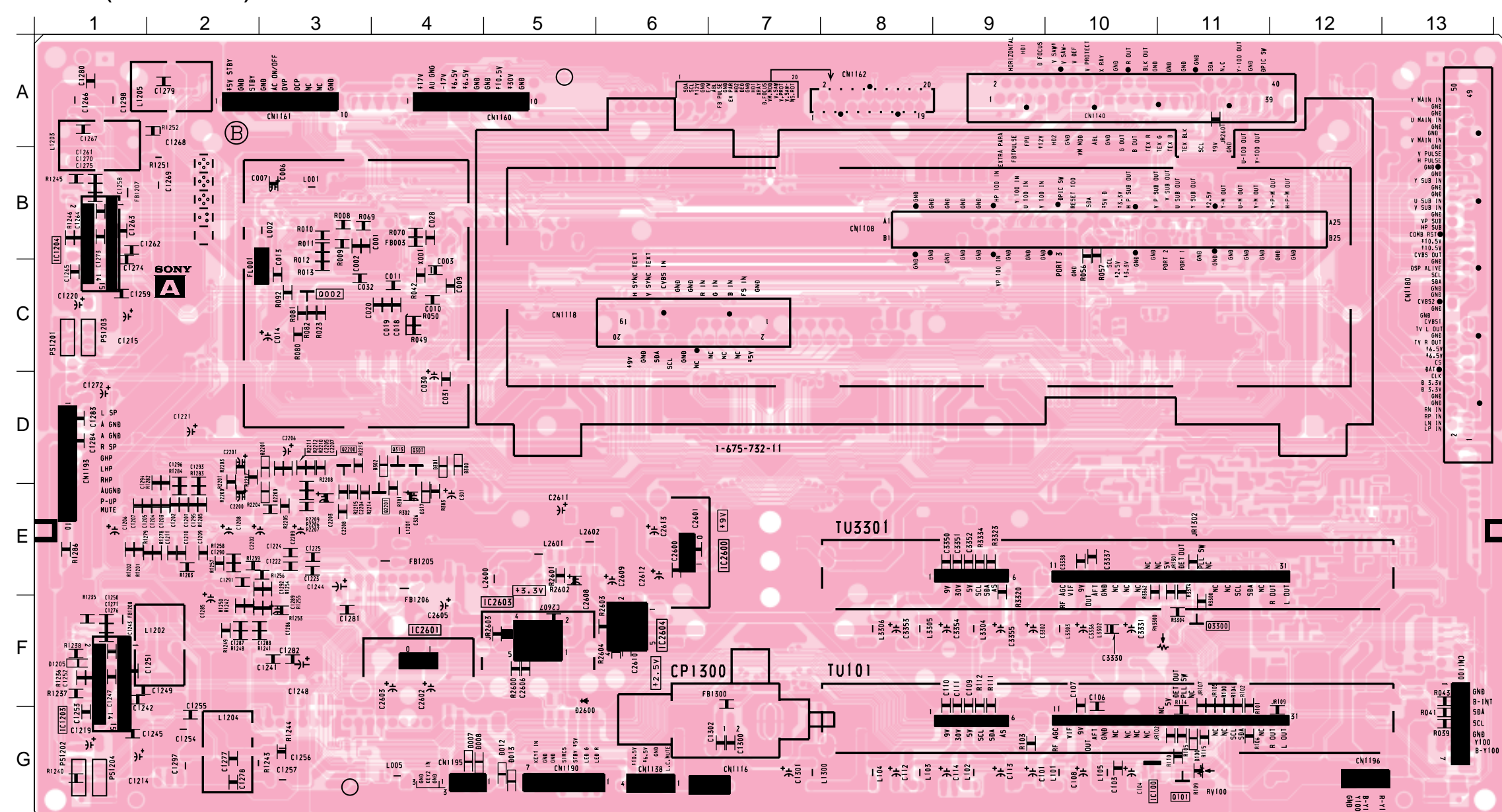
**A BOARD (Conductor Side)**

IC	DIODE
IC100	G-10 D300 A-9
IC901	I-13 D301 B-9
IC1203	G-1 D302 B-6
IC1204	B-1 D1205 F-1
IC2600	E-7 D2200 E-3
IC2601	F-4 D2201 D-3
IC2603	F-5
IC2604	F-6

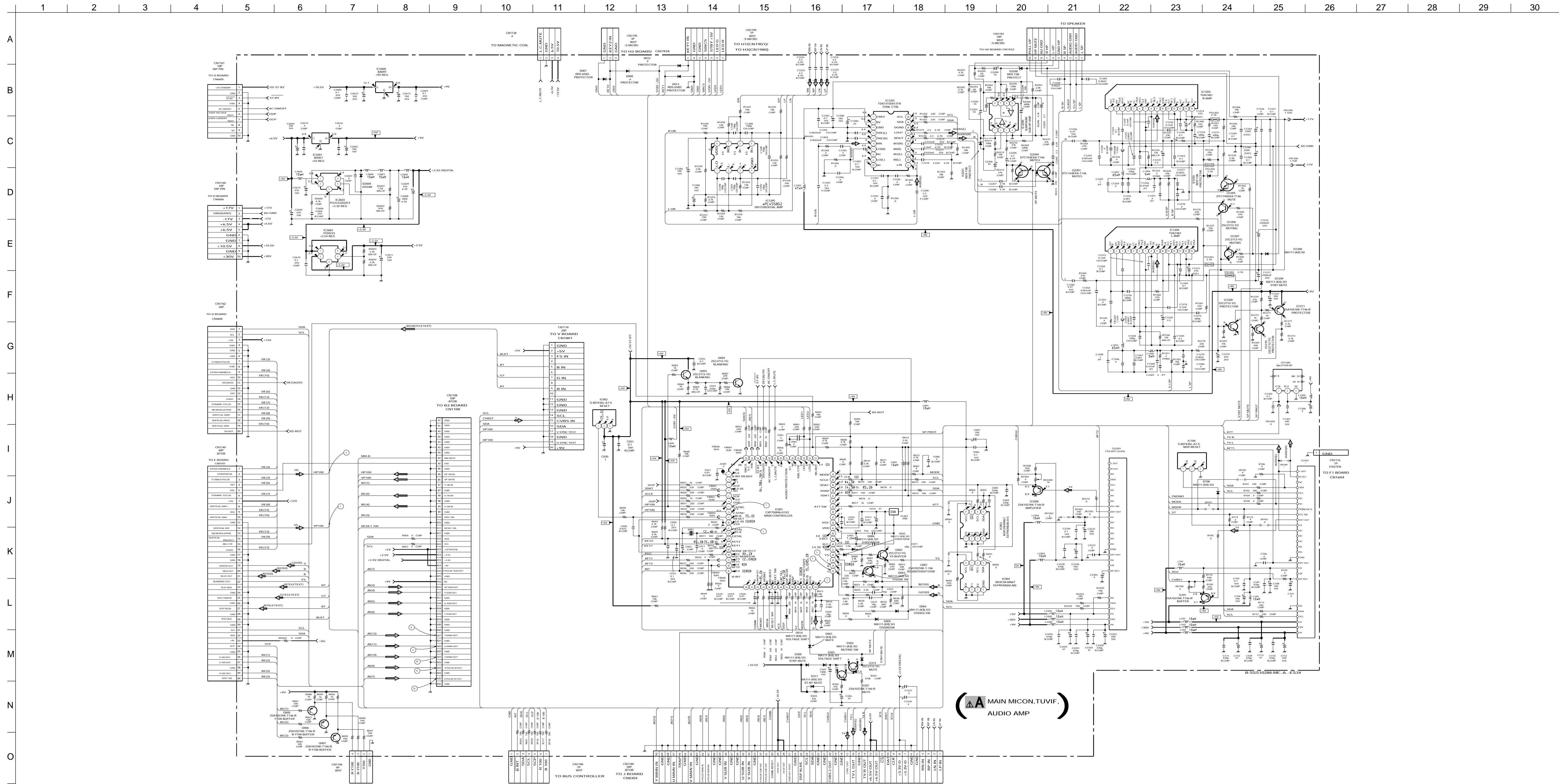
**TRANSISTOR**

Q101	G-11
Q301	D-4
Q313	D-4
Q902	I-13
Q2200	D-3
Q2201	E-4
Q3300	F-11

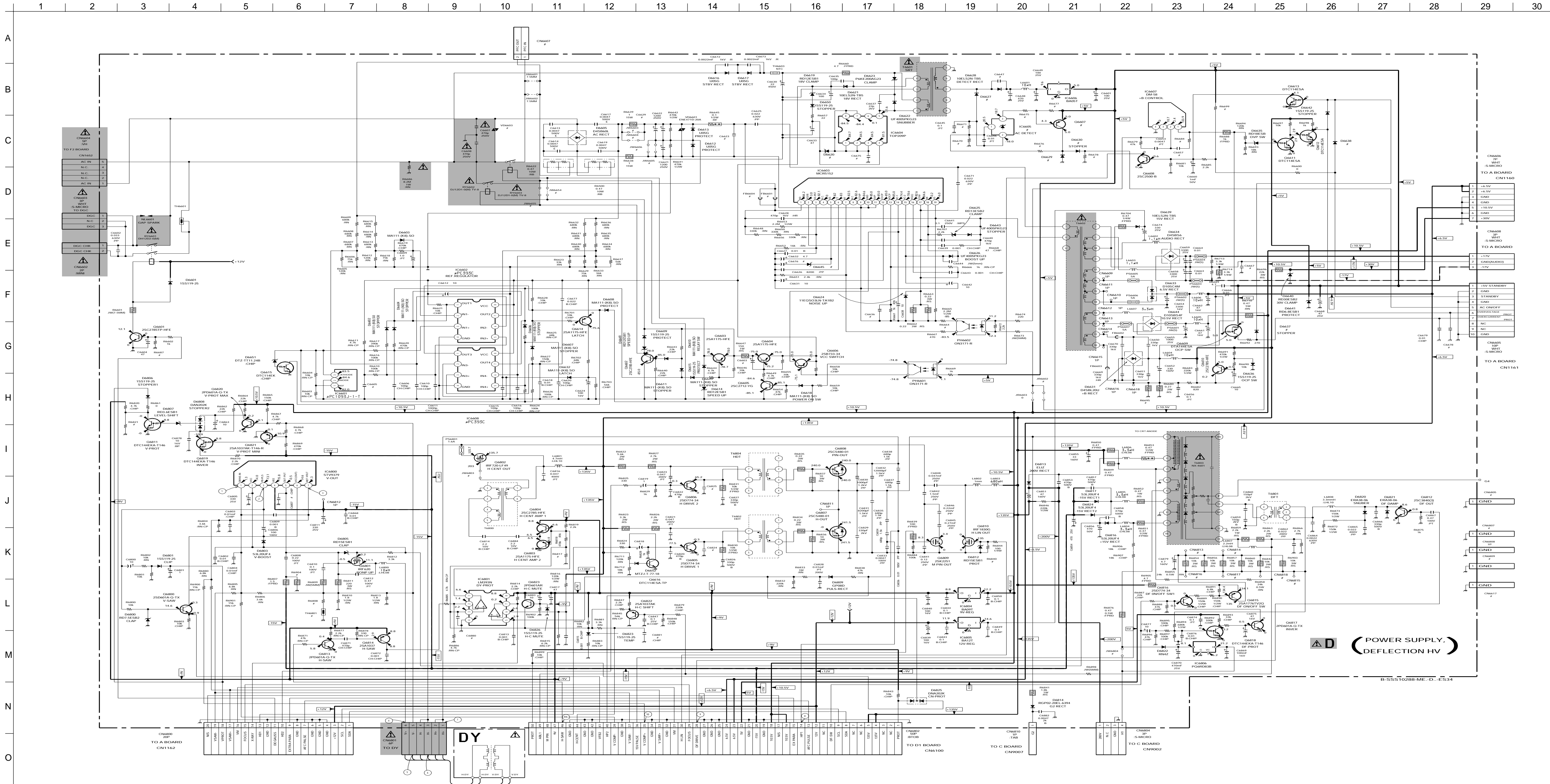
**- A Board (Conductor Side) -**

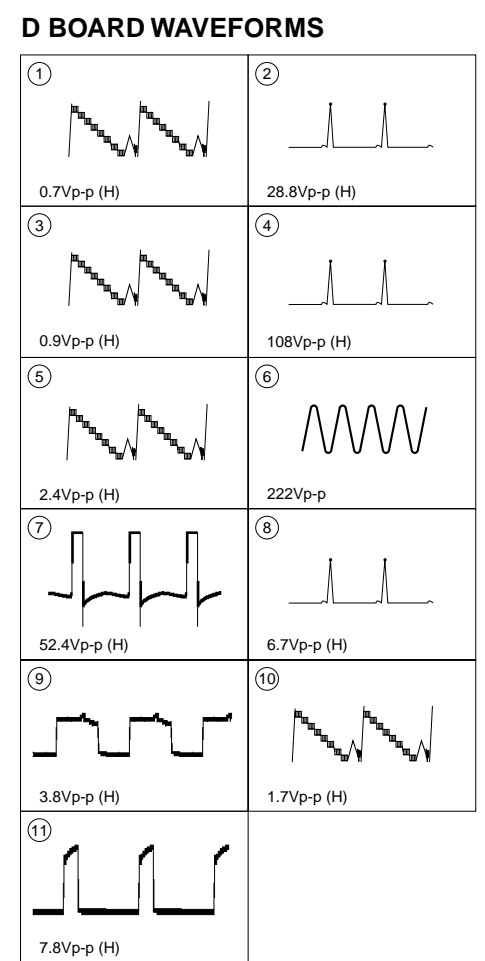
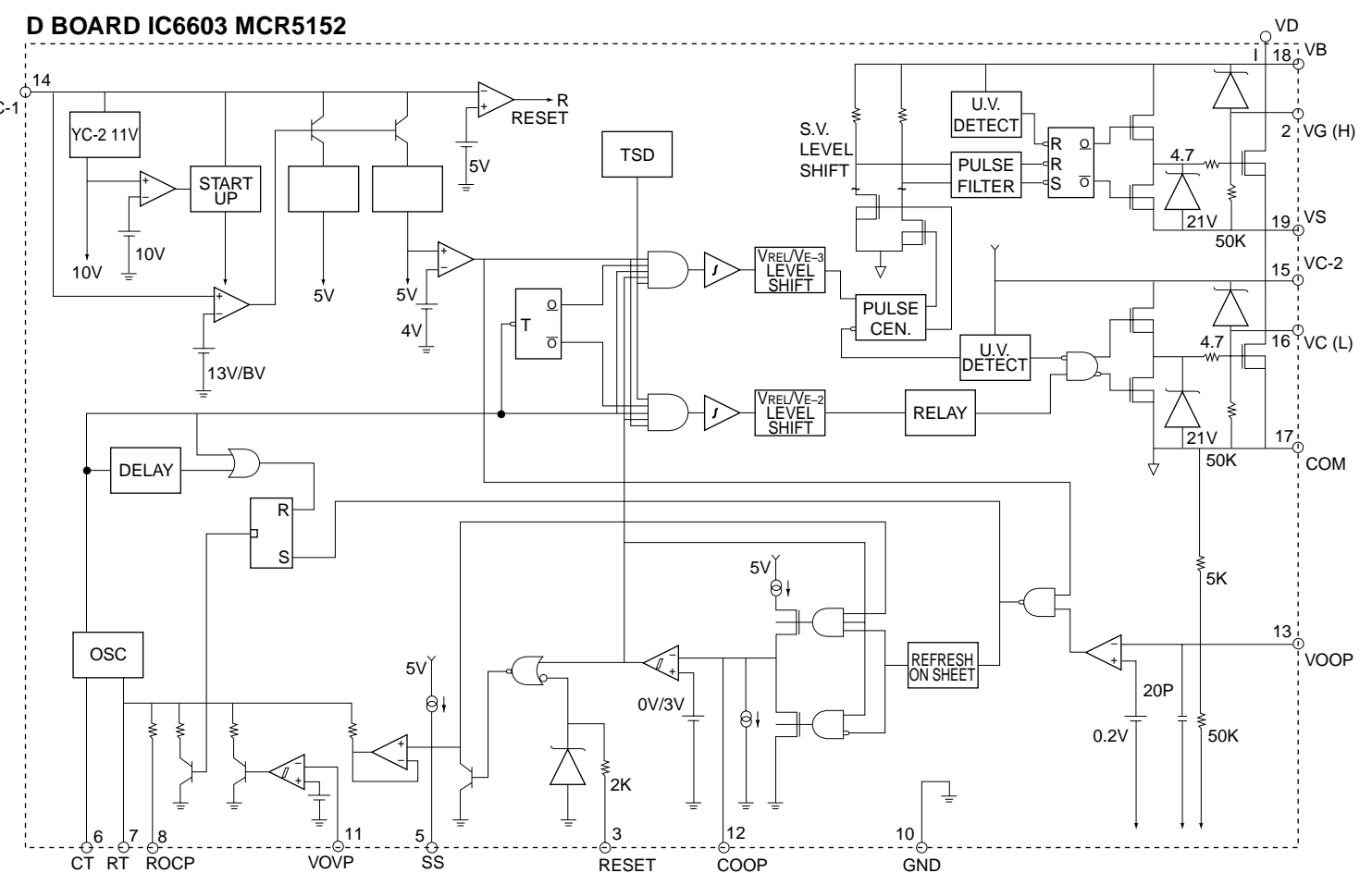


(1) Schematic Diagram of A Board



(2) Schematic Diagram of D Board

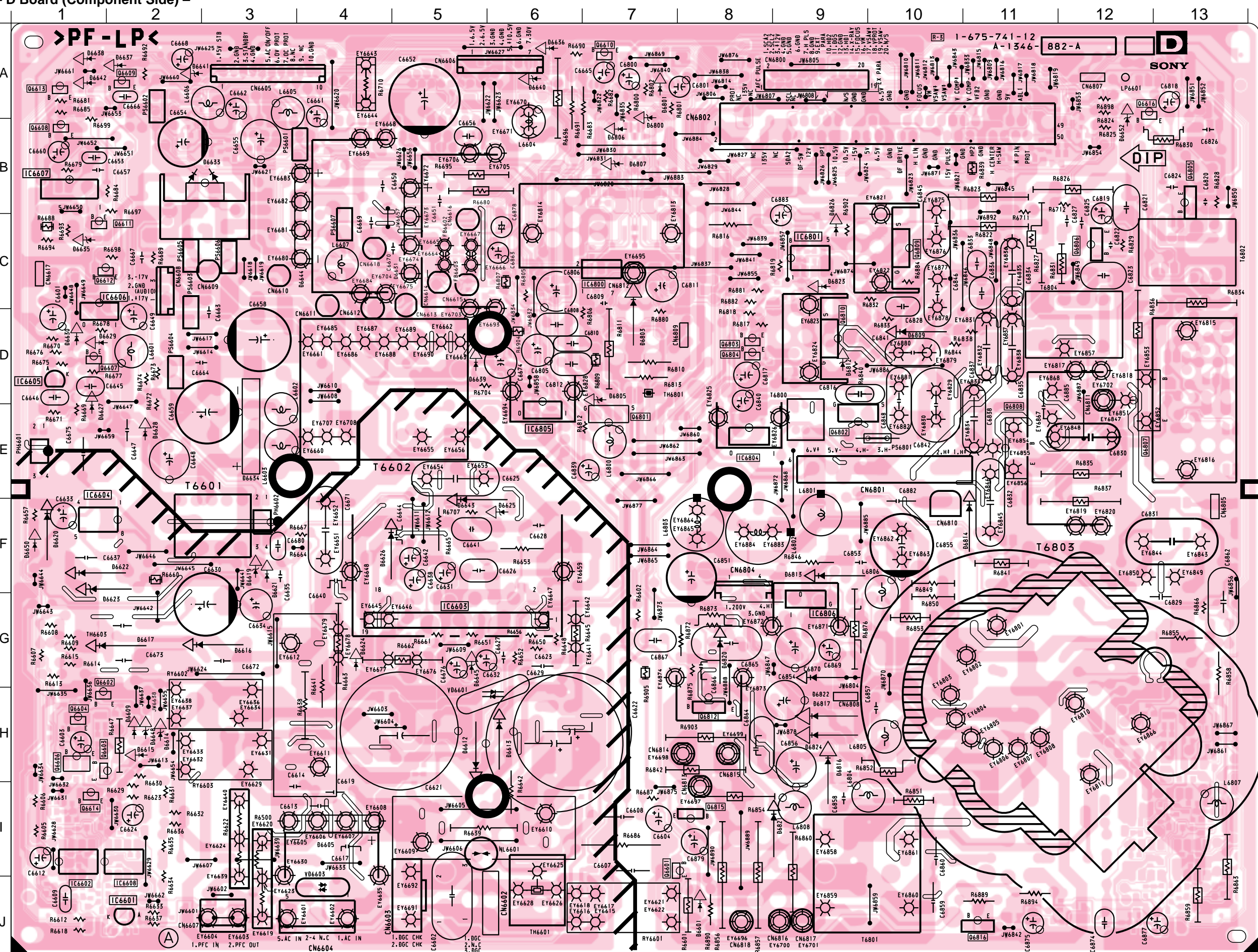




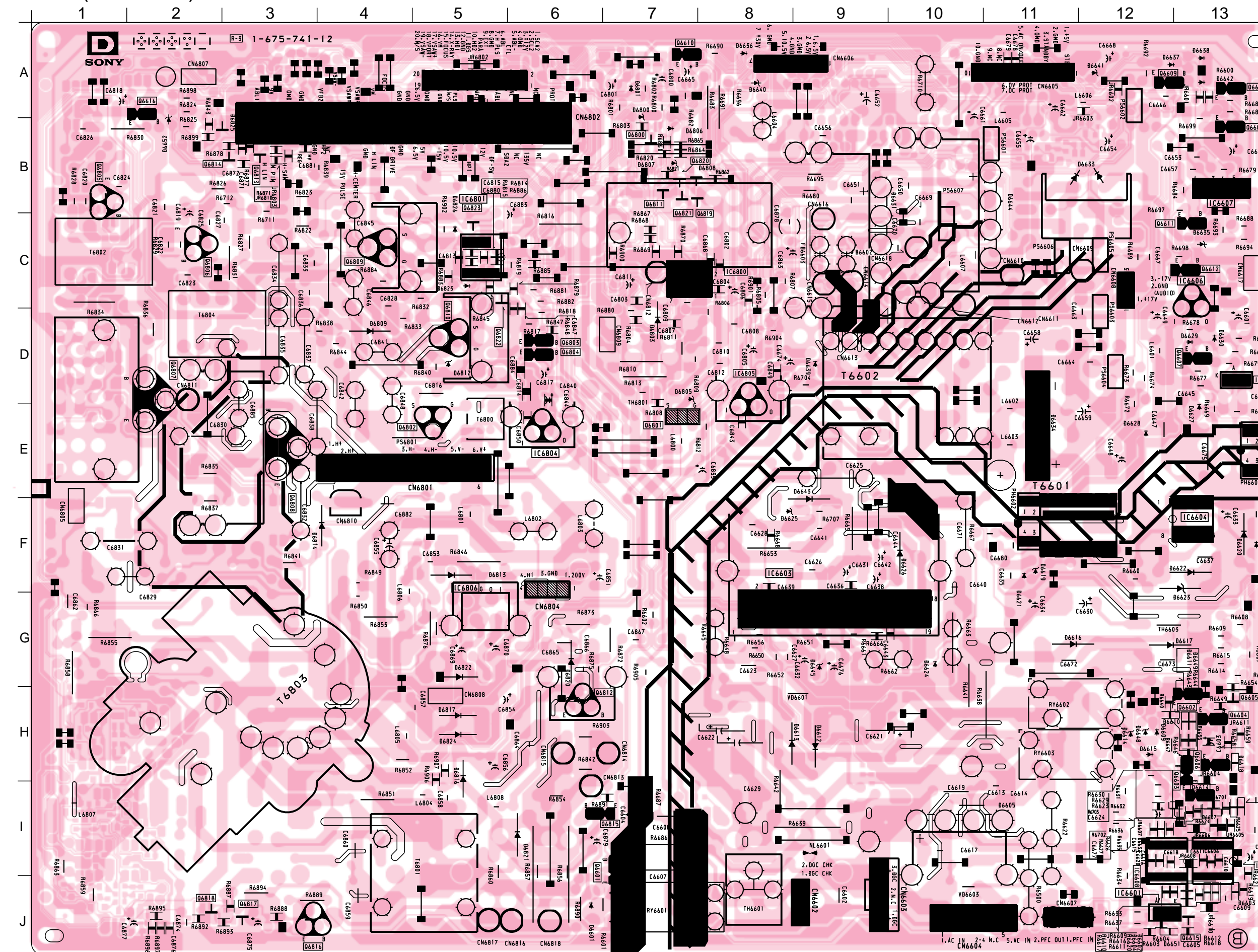
PRINTED WIRING BOARDS

**D** [POWER SUPPLY, DEFLECTION, HV]

- D Board (Component Side) -



- D Board (Conductor Side) -



D BOARD (Component Side)

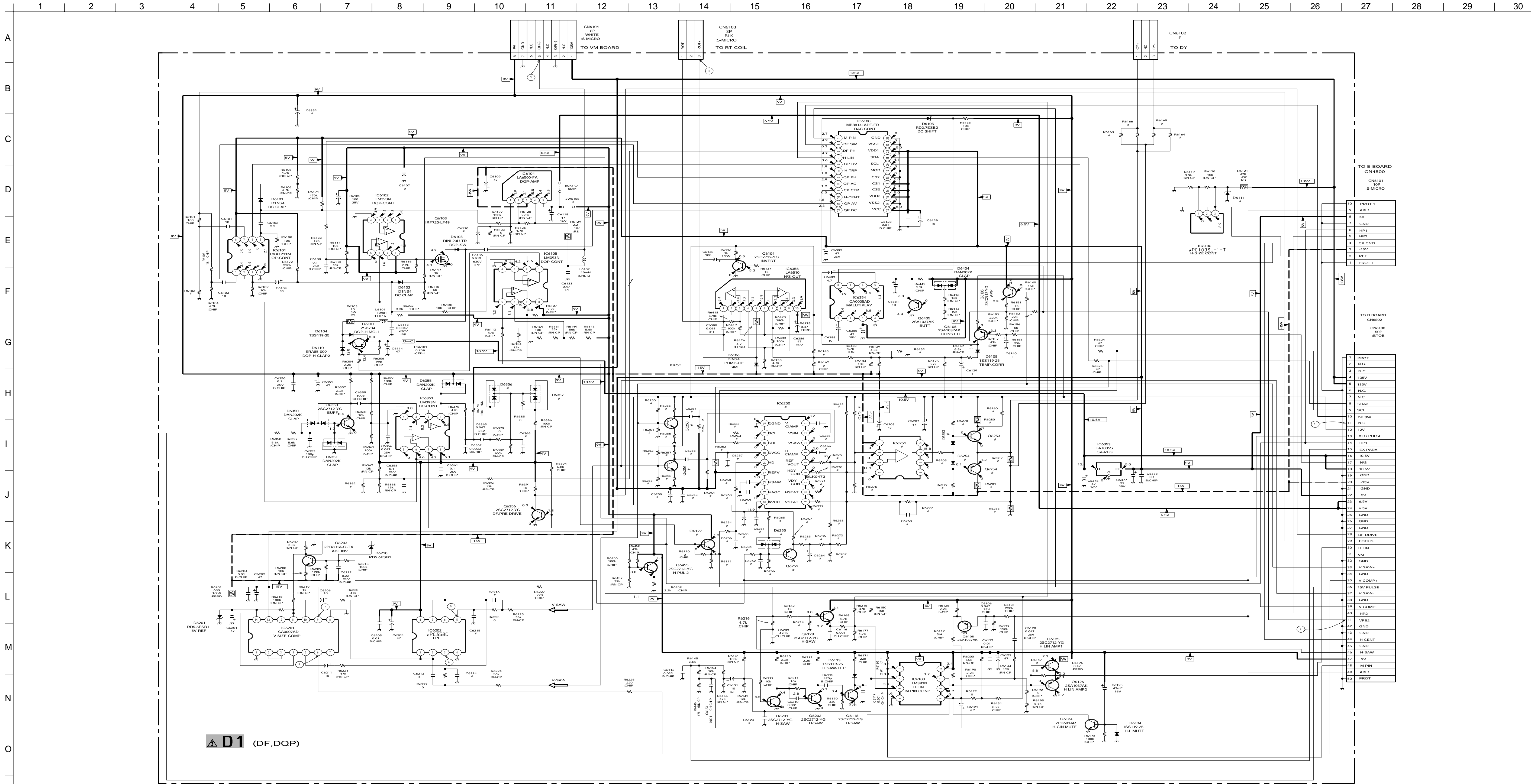
IC	DIODE	TRANSISTOR
IC6601 J-2	D6601 J-8	Q6601 1-8
IC6602 J-2	D6605 I-4	Q6602 G-2
IC6603 G-5	D6609 H-2	Q6603 H-2
IC6604 E-1	D6612 H-5	Q6604 H-1
IC6605 D-1	D6613 H-6	Q6606 H-1
IC6606 C-1	D6614 H-2	Q6607 D-2
IC6607 B-1	D6617 G-3	Q6608 B-1
IC6800 C-7	D6616 G-3	Q6609 A-2
IC6801 C-9	D6617 G-2	Q6610 A-7
IC6804 E-8	D6619 F-3	Q6611 C-2
IC6805 E-6	D6620 F-1	Q6612 C-1
IC6806 G-9	D6621 F-3	Q6613 A-1
	D6622 F-2	Q6614 A-1
	D6623 F-2	Q6615 C-1
	D6624 G-4	Q6616 A-6
	D6625 F-6	D6641 A-3
	D6626 F-4	
	D6627 E-1	
	D6628 E-2	
	D6629 D-2	
	D6630 D-1	
	D6631 C-5	
	D6633 B-3	
	D6634 E-3	
	D6635 C-1	
	D6636 A-6	
	D6637 A-2	
	D6638 D-1	
	D6639 D-5	
	D6640 A-6	
	D6641 A-3	
	D6642 A-1	
	D6643 G-5	
	D6644 H-2	
	D6645 G-5	
	D6648 H-2	
	D6650 F-1	
	D6800 B-7	
	D6801 A-7	
	D6802 E-7	
	D6805 E-7	
	D6806 B-7	
	D6807 B-7	
	D6809 D-10	
	D6812 D-9	
	D6813 F-9	
	D6814 H-13	
	D6816 I-9	
	D6817 H-9	
	D6820 H-8	
	D6821 I-9	
	D6822 G-9	
	D6823 C-9	
	D6824 H-10	
	D6826 C-9	
	D6805 B-12	
	D6806 C-12	
	D6807 B-12	
	D6808 E-11	
	D6809 C-10	
	D6810 D-10	
	D6811 G-9	
	D6812 H-9	
	D6813 H-9	
	D6814 H-12	
	D6815 I-12	
	D6816 I-11	

D BOARD (Conductor Side)

IC	DIODE	TRANSISTOR
Q6807 D-2	D6617 G-12	D6807 B-7
Q6808 E-3	D6619 F-11	D6808 B-8
Q6809 C-4	D6620 F-13	D6809 D-4
Q6810 D-5	D6621 G-11	D6812 D-5
Q6811 C-7	D6622 F-13	D6813 F-5
Q6812 H-6	D6624 G-10	D6814 F-4
Q6815 I-7	D6625 F-9	D6816 I-5
Q6816 J-3	D6626 F-10	D6817 H-5
Q6817 J-3	D6627 H-7	D6820 H-6
Q6818 J-3	D6628 E-12	D6821 I-6
Q6819 C-8	D6629 D-13	D6822 G-5
Q6820 B-7	D6630 D-13	D6824 H-5
Q6821 C-7	D6631 B-10	D6825 B-3
Q6822 D-5	D6632 I-13	D6826 C-5
Q6825 C-5	D6634 E-11	
	D6635 H-13	
	D6636 A-8	
	D6637 A-13	
	D6638 A-13	
	D6639 D-9	
	D6640 A-8	
	D6641 A-12	
	D6642 A-13	
	D6643 E-9	
	D6644 C-11	
	D6645 H-9	
	D6646 H-12	
	D6647 G-13	
	D6648 H-12	
	D6649 G-13	
	D6650 F-13	
	D6800 B-7	
	D6801 D-7	
	D6812 H-9	
	D6813 H-9	
	D6814 H-12	
	D6815 I-12	
	D6816 G-11	
	D6806 B-7	

- :Pattern from the side which enables seeing.
- :Pattern from the rear side.

(3) Schematic Diagram of D1 Board



**D1** (DF,DQP)

Schematic diagram  
D1 board

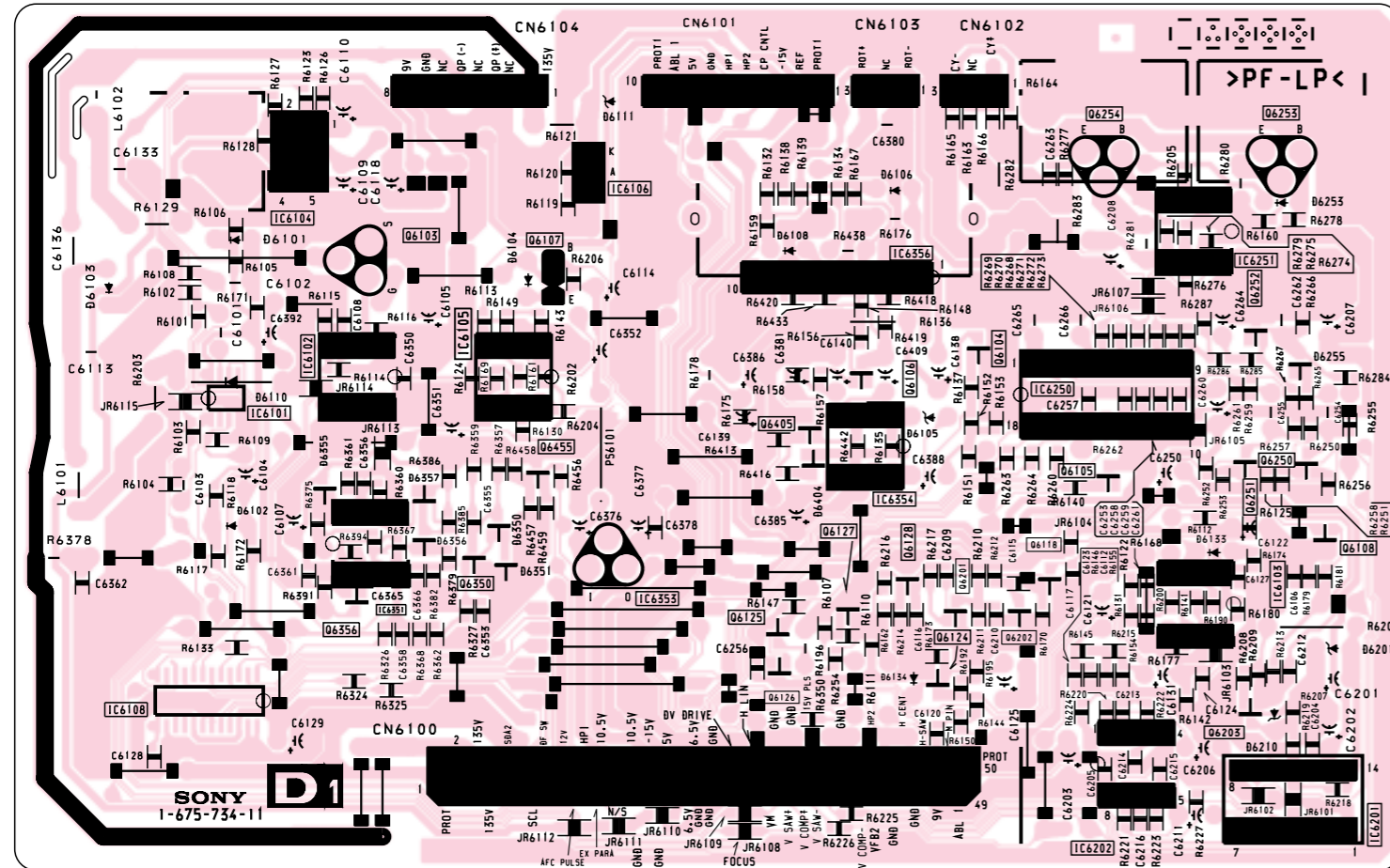
B-SSS10288-ME-D1-ES34



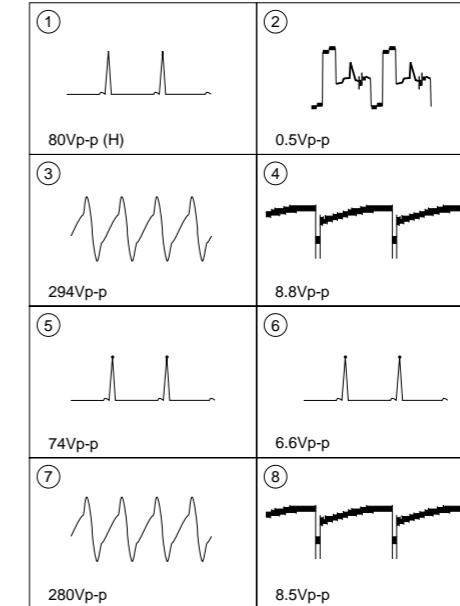
PRINTED WIRING BOARD

**D1** [DF, DQP DRIVE]

- D1 Board -



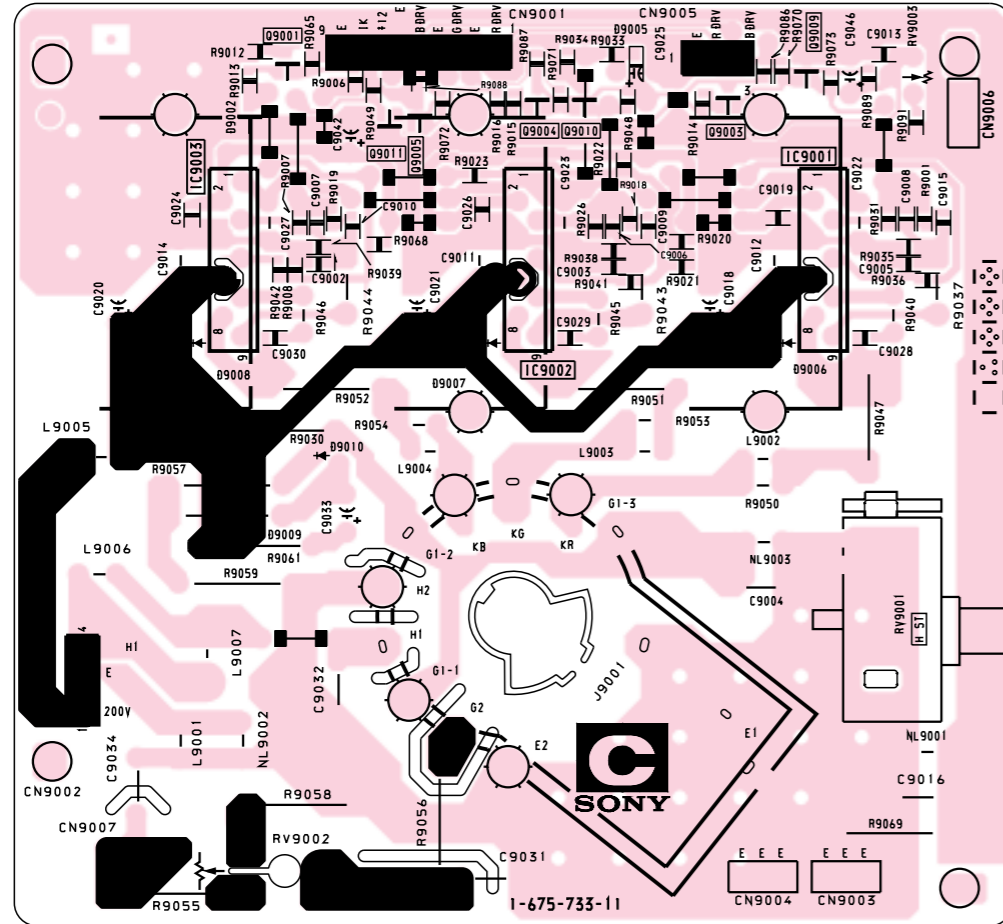
D1 BOARD WAVEFORMS



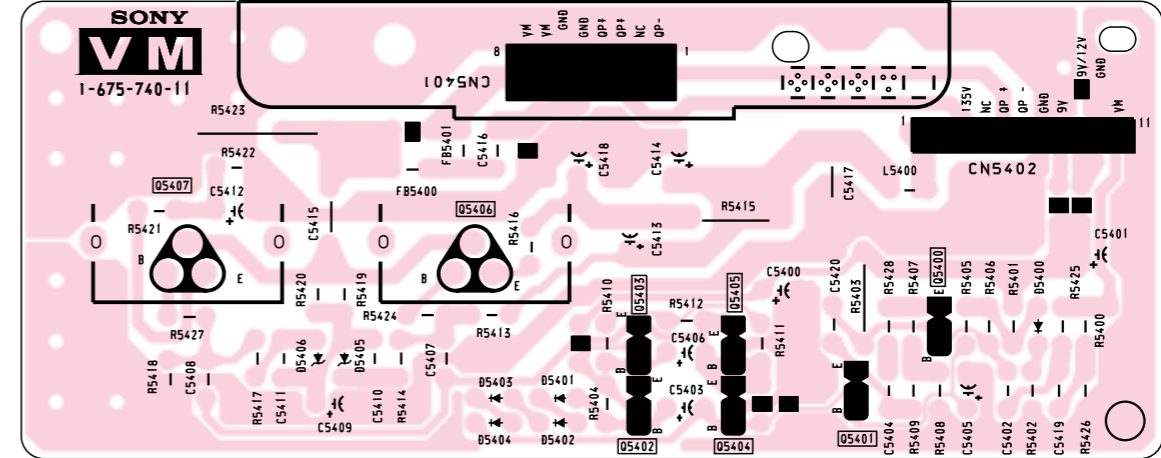
PRINTED WIRING BOARDS

**C** [CRT DRIVE]    **VM** [VM DRIVE]    **F1** [AC LINE FILTER]

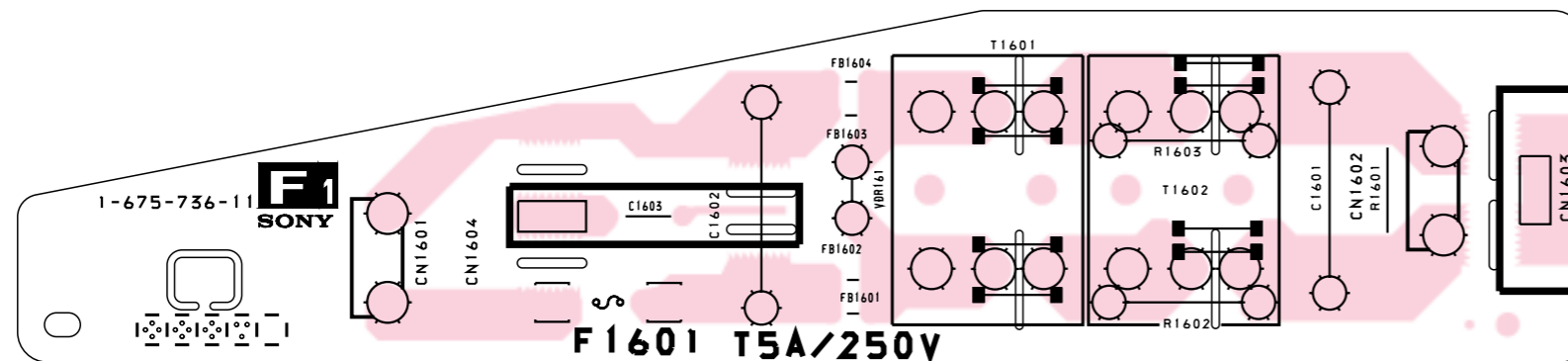
- C Board -



- VM Board -



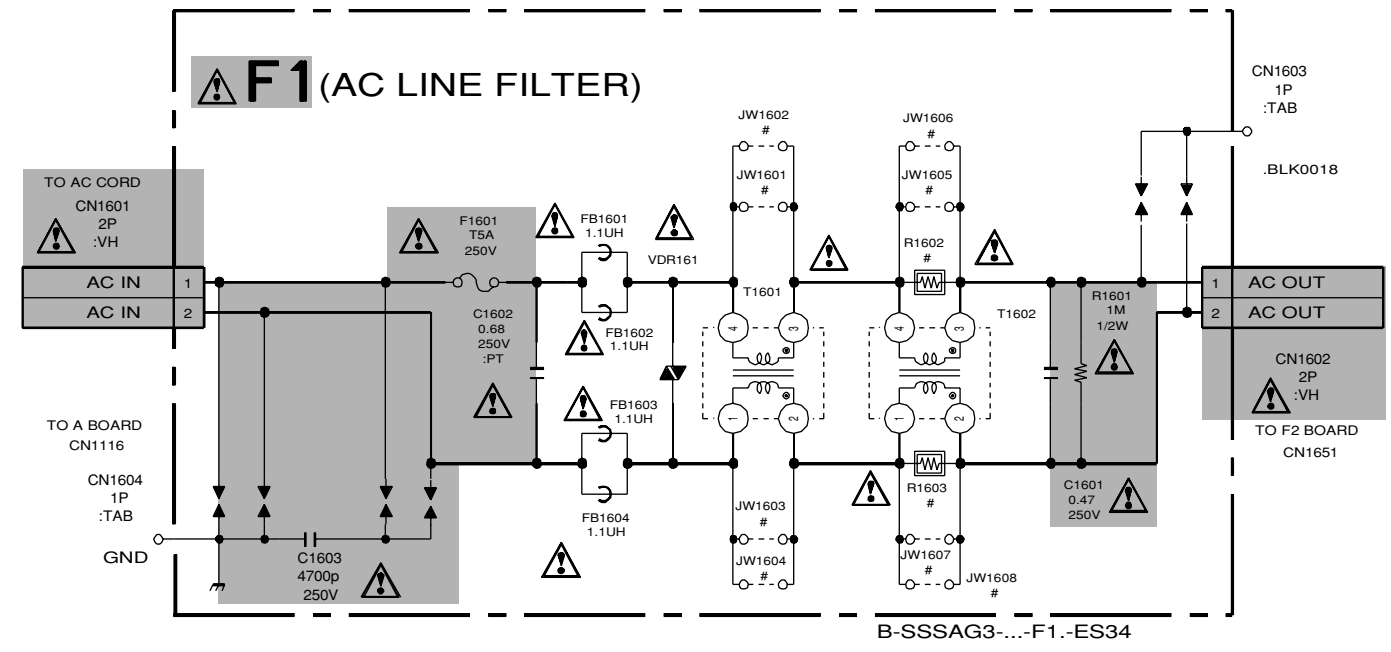
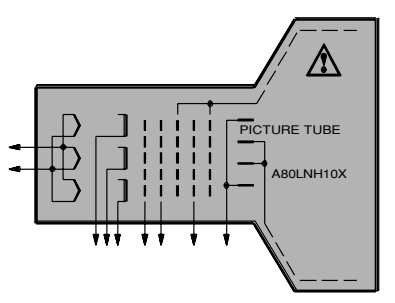
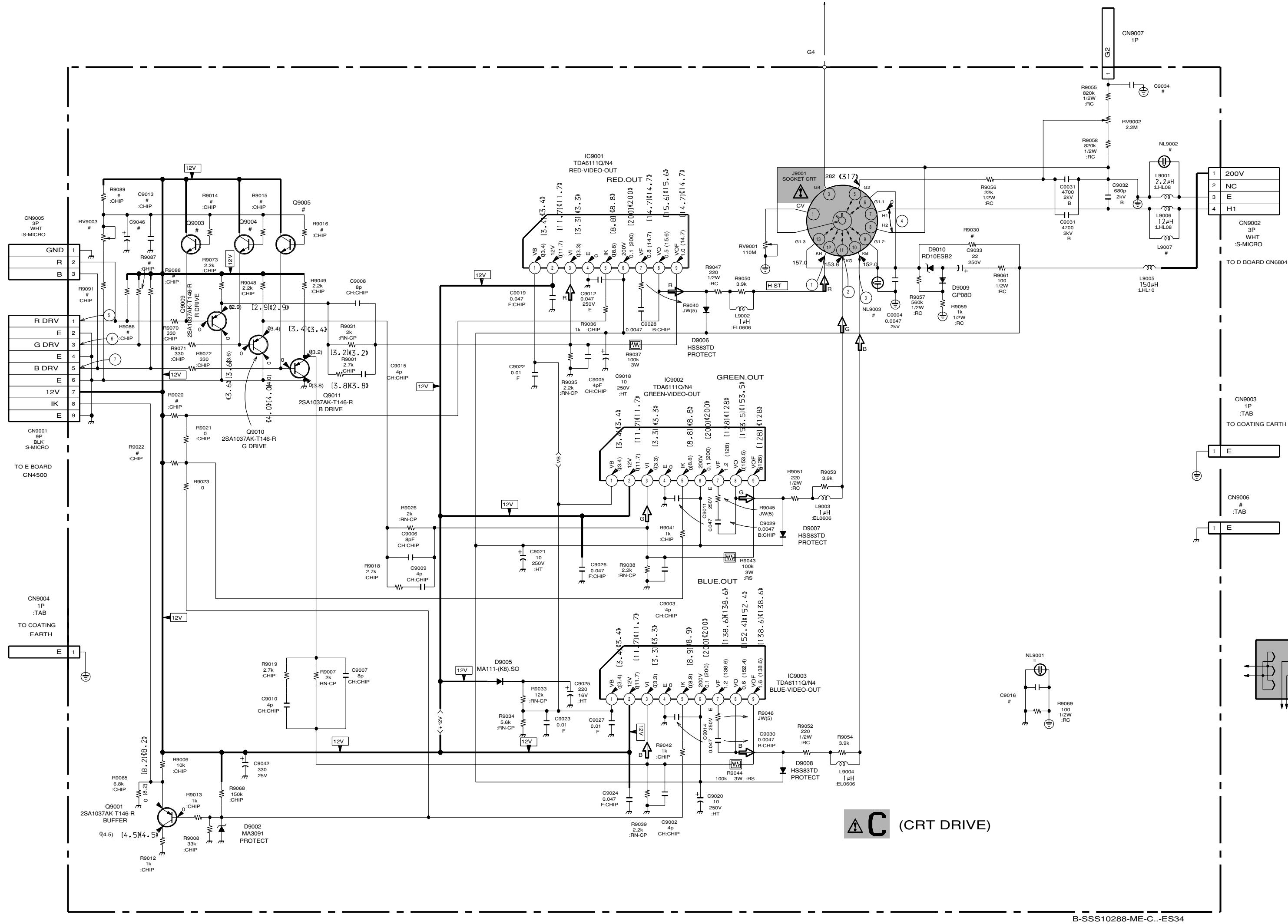
- F1 Board -



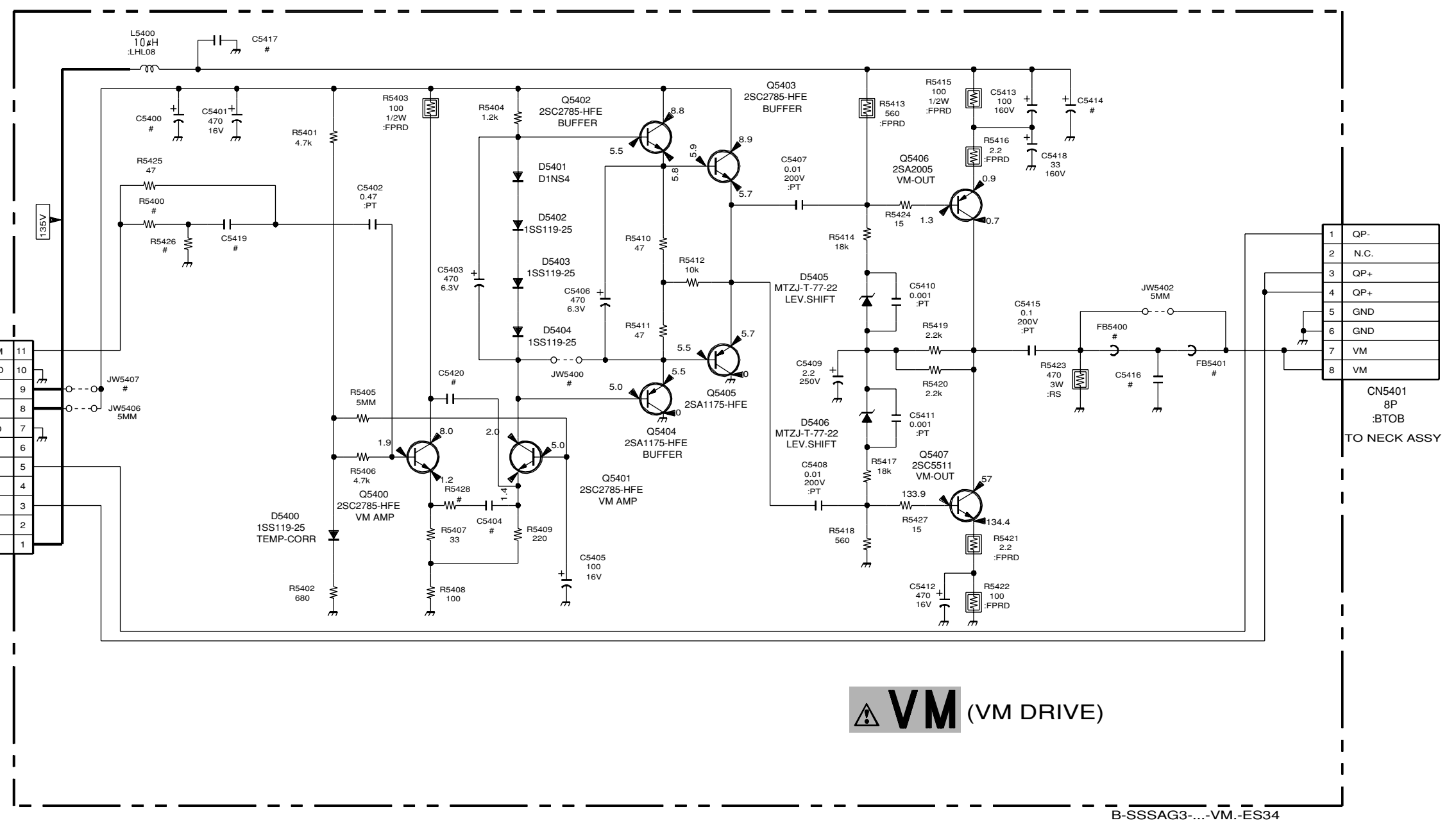
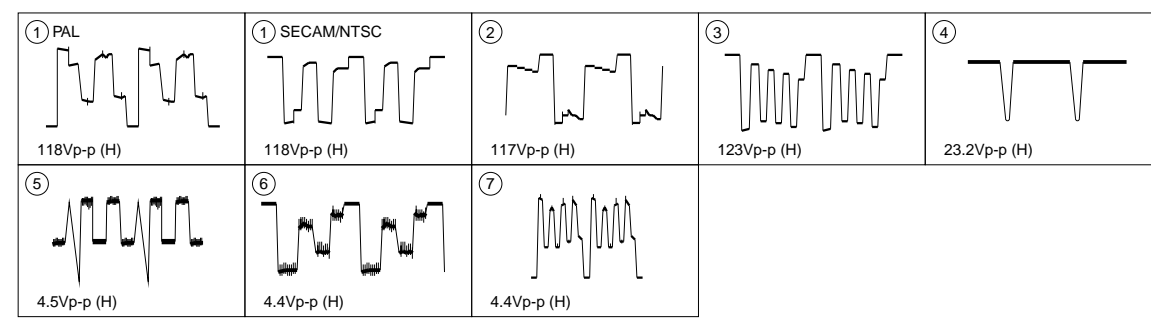
(4) Schematic Diagrams of C, F1 and VM Boards

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

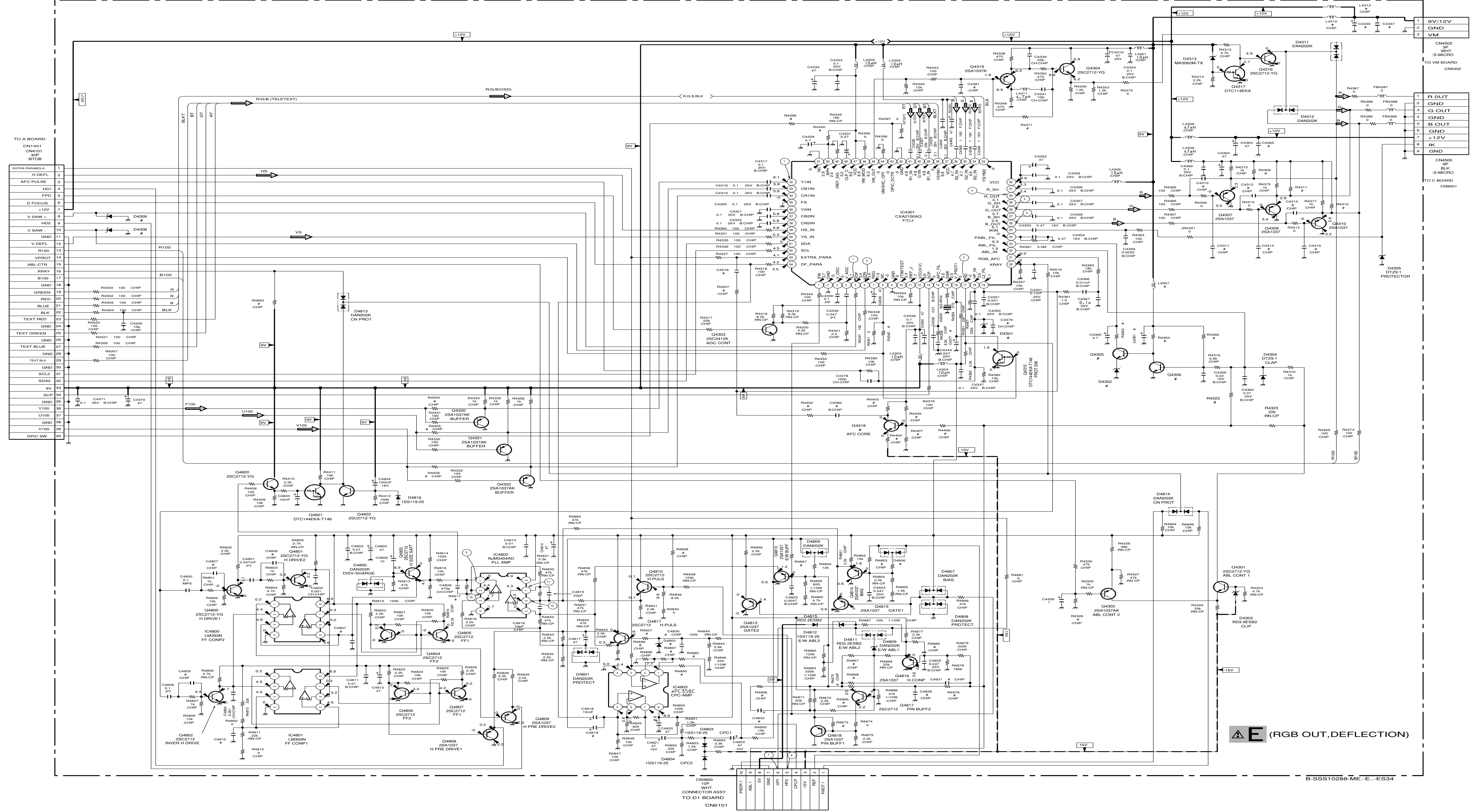
A  
B  
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I  
J  
K



C BOARD WAVEFORMS



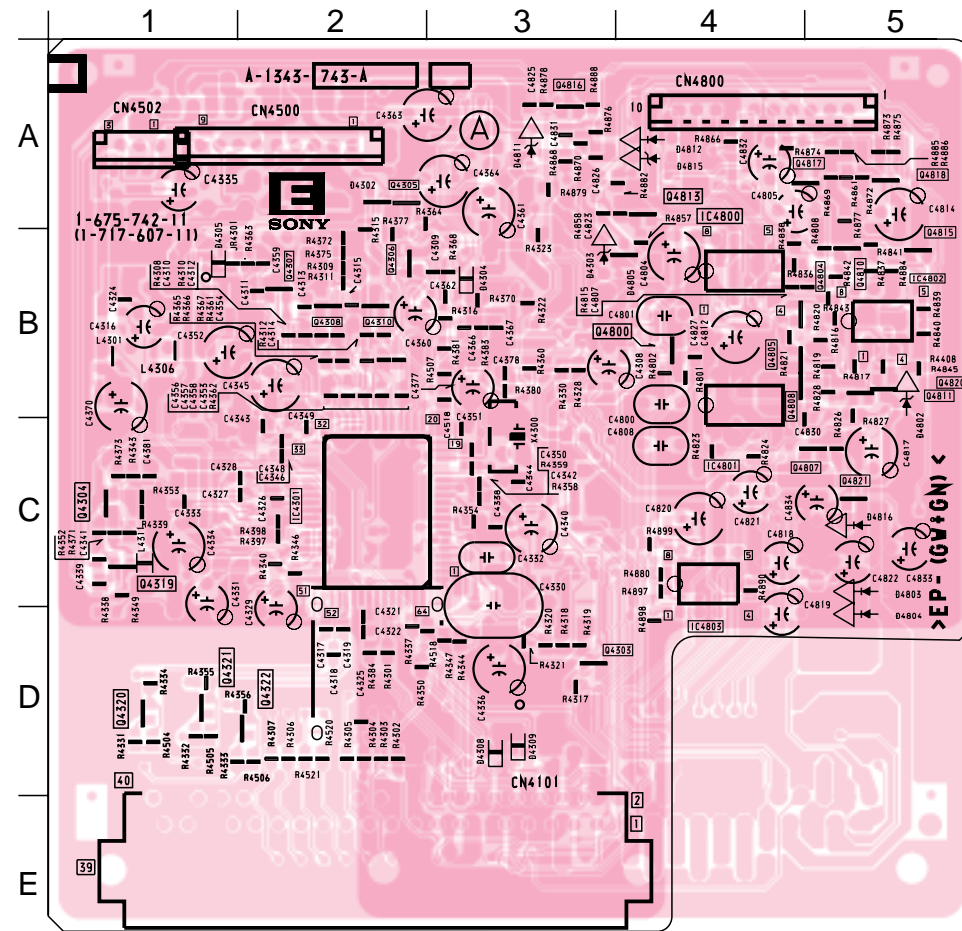
(5) Schematic Diagram of E Board



PRINTED WIRING BOARDS

**E** [RGB OUT, DEFLECTION]

- E Board (Component Side) -



- Pattern from the side which enables seeing.
- Pattern from the rear side.

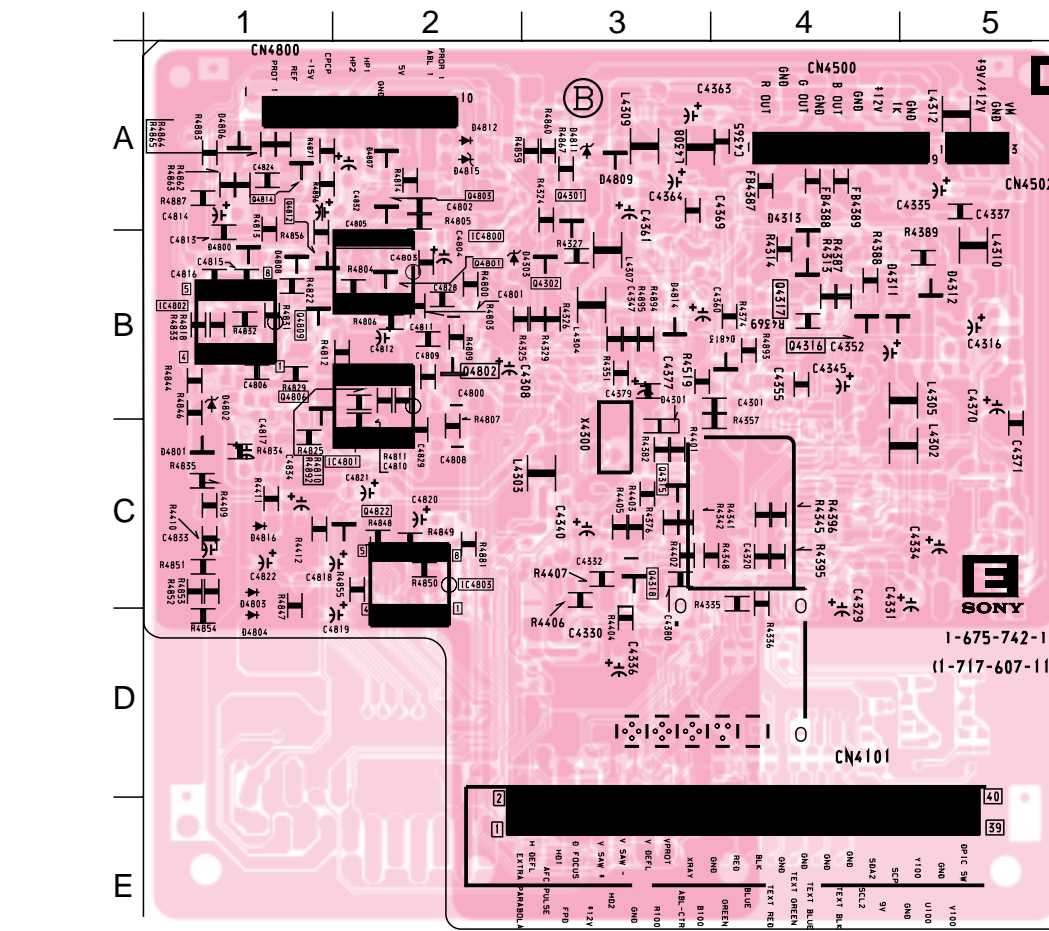
E BOARD (Component Side)

IC	Q4320 D-1	DIODE	
IC4301 C-2	Q4321 D-1	D4302 A-2	
IC4800 A-4	Q4322 D-2	D4303 B-3	
IC4801 C-4	Q4804 B-5	D4304 B-3	
IC4802 B-5	Q4805 B-4	D4305 B-12	
IC4803 D-4	Q4806 B-2	D4308 D-3	
TRANSISTOR	Q4807 C-5	D4309 D-3	
	Q4808 B-4	D4802 B-5	
	Q4810 B-5	D4805 B-4	
	Q4811 B-5	D4806 C-5	
	Q4813 A-4	D4811 A-3	
Q4303 D-4	Q4814 A-4	D4812 A-4	
Q4304 C-1	Q4815 B-5	D4815 A-4	
Q4305 A-2	Q4816 A-3		
Q4307 B-2	Q4817 A-5		
Q4308 B-2	Q4818 A-5		
Q4310 B-2	Q4819 A-5		
Q4319 C-1	Q4820 A-5		

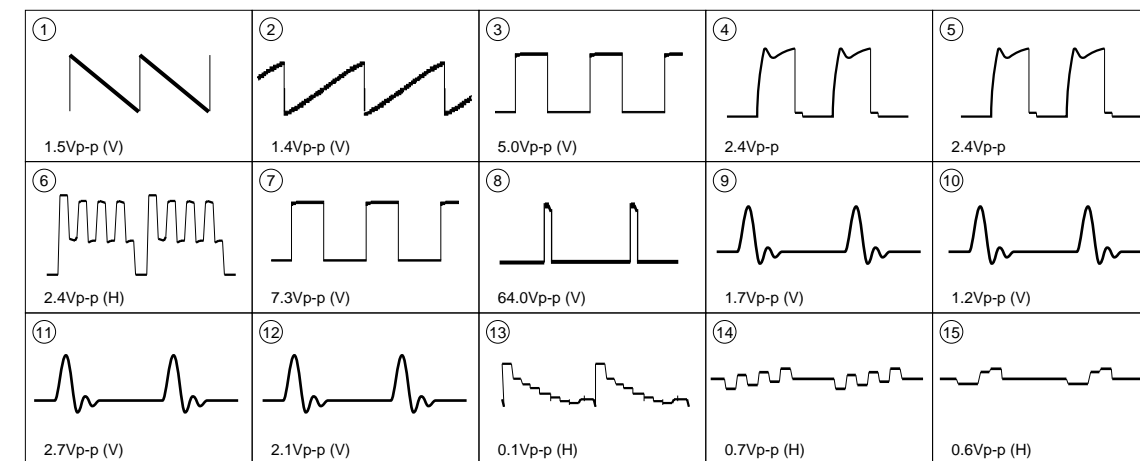
E BOARD (Conductor Side)

IC	Q4806 B-12	D4806 A-1
IC4800 B-2	Q4809 B-1	D4807 A-2
IC4801 C-2	Q4812 A-1	D4808 B-1
IC4802 B-1	Q4814 A-1	D4809 A-3
IC4803 C-2	DIODE	D4812 A-2
TRANSISTOR	D4301 C-3	D4813 B-4
	D4303 B-3	D4814 B-3
	D4311 B-5	D4815 A-2
Q4302 B-3	D4312 B-5	D4819 C-3
Q4315 C-3	D4313 A-4	
Q4316 B-4	D4800 B-1	
Q4317 B-4	D4801 C-1	
Q4318 D-3	D4802 B-1	
Q4801 B-2	D4803 C-1	
Q4802 B-2	D4804 C-1	

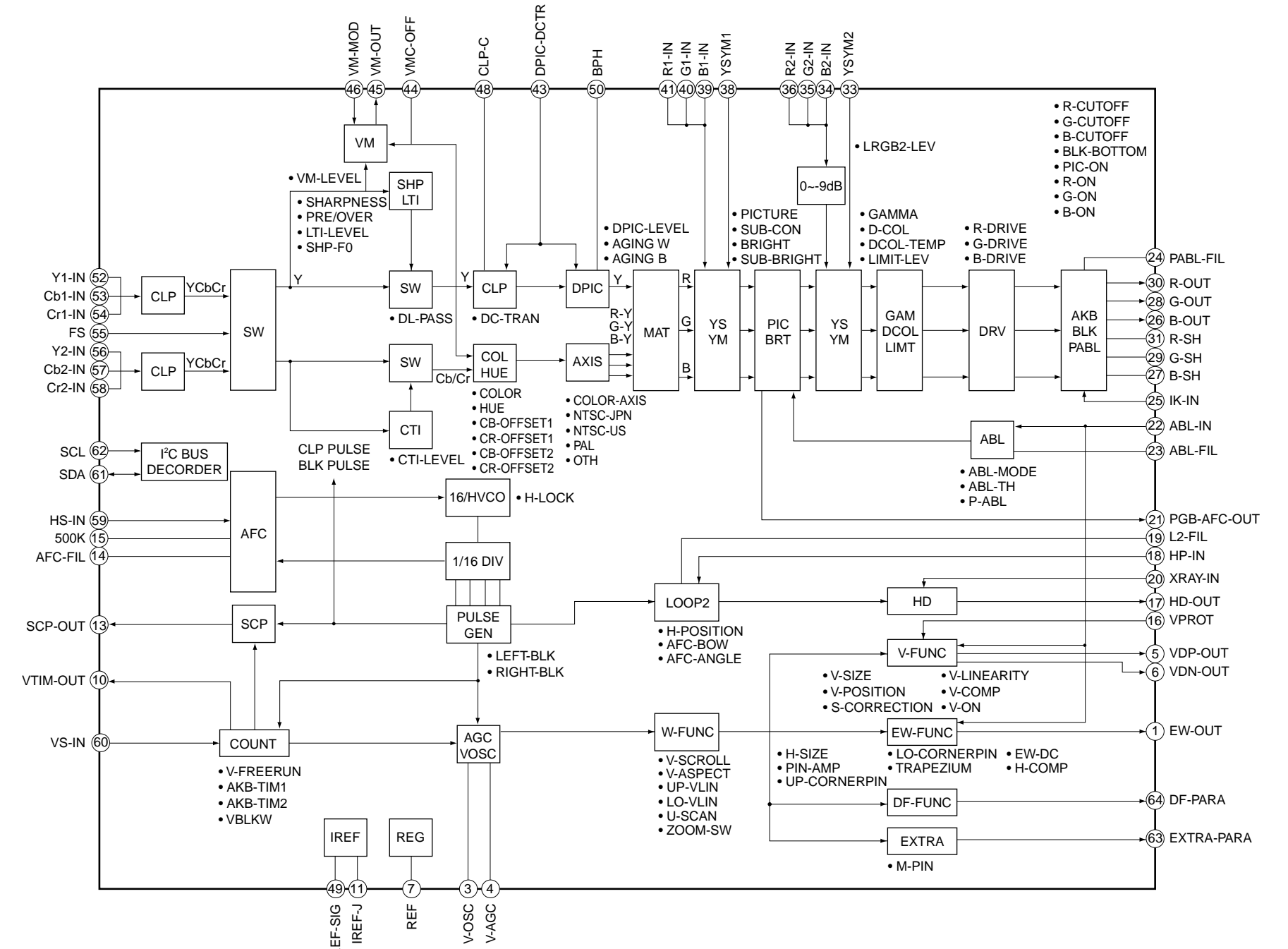
- E Board (Conductor Side) -



E BOARD WAVEFORMS



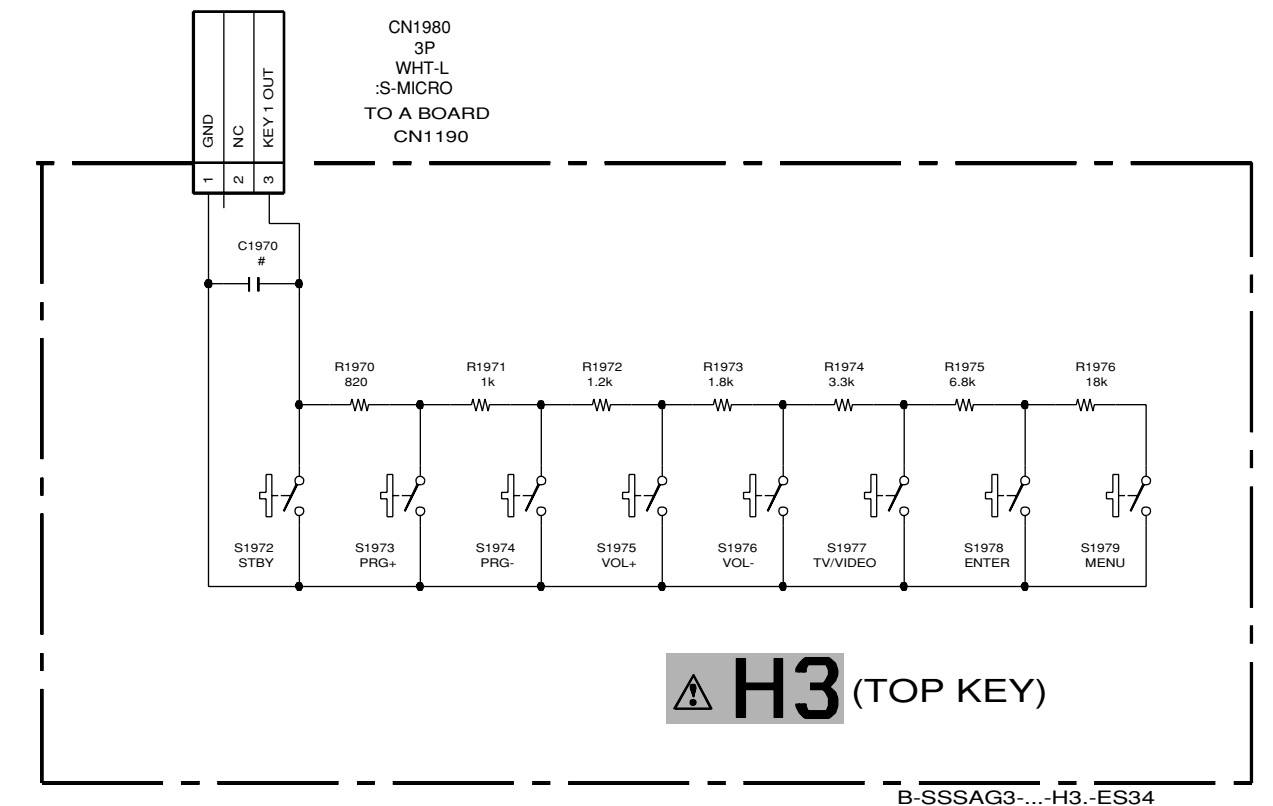
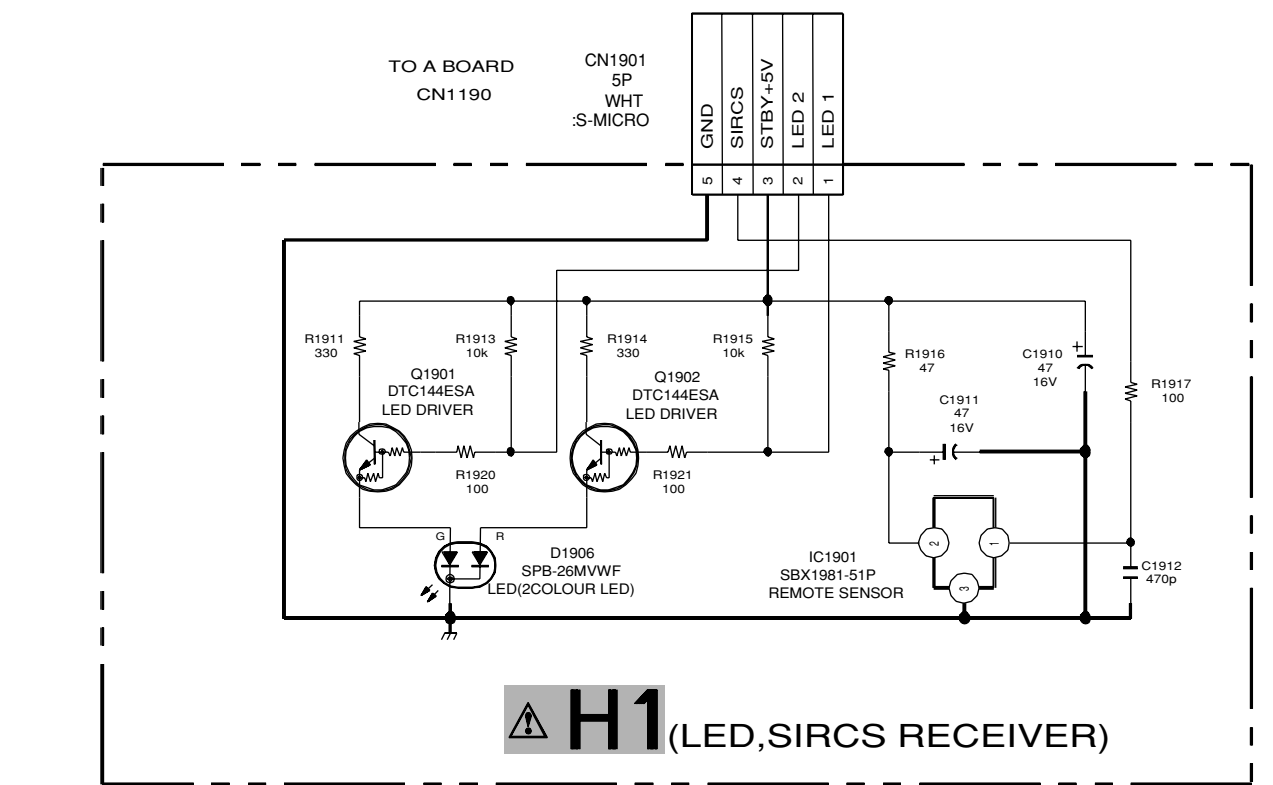
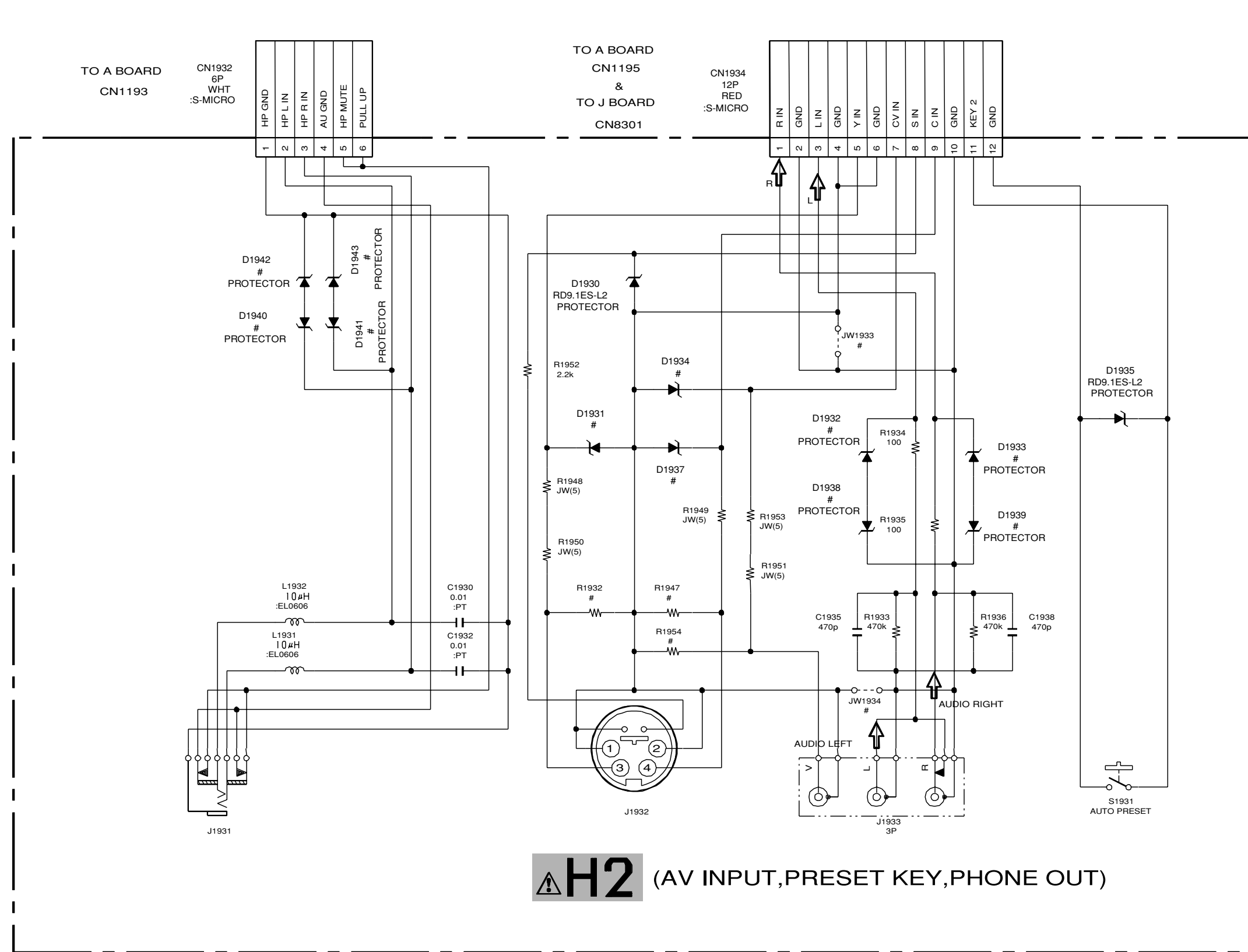
E Board IC4301 CXA2100AQ



(6) Schematic Diagrams of H1, H2 and H3 Boards

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

A  
B  
C  
D  
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G  
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J



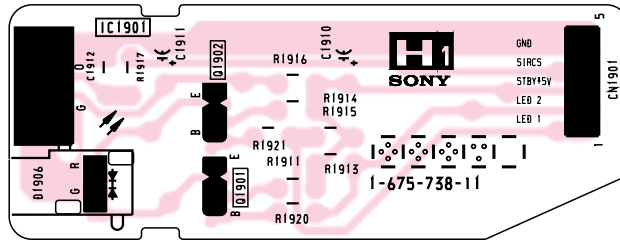
PRINTED WIRING BOARDS

**H1** [LED, SIRCS RECEIVER]

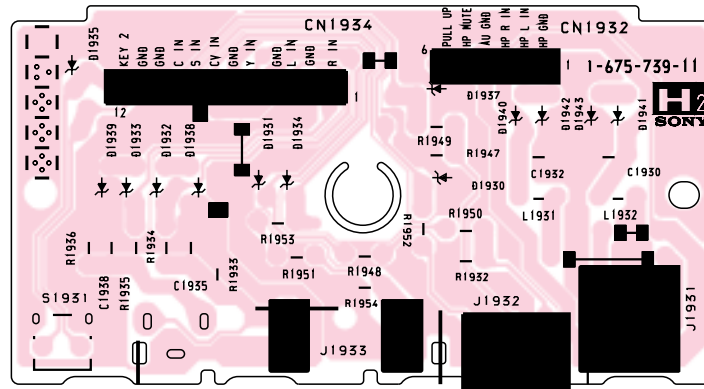
**H2** [AV INPUT, PRESET KEY, PHONE OUT]

**H3** [TOP KEY]

– H1 Board –



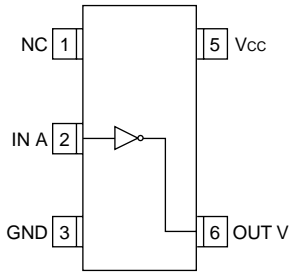
– H2 Board –



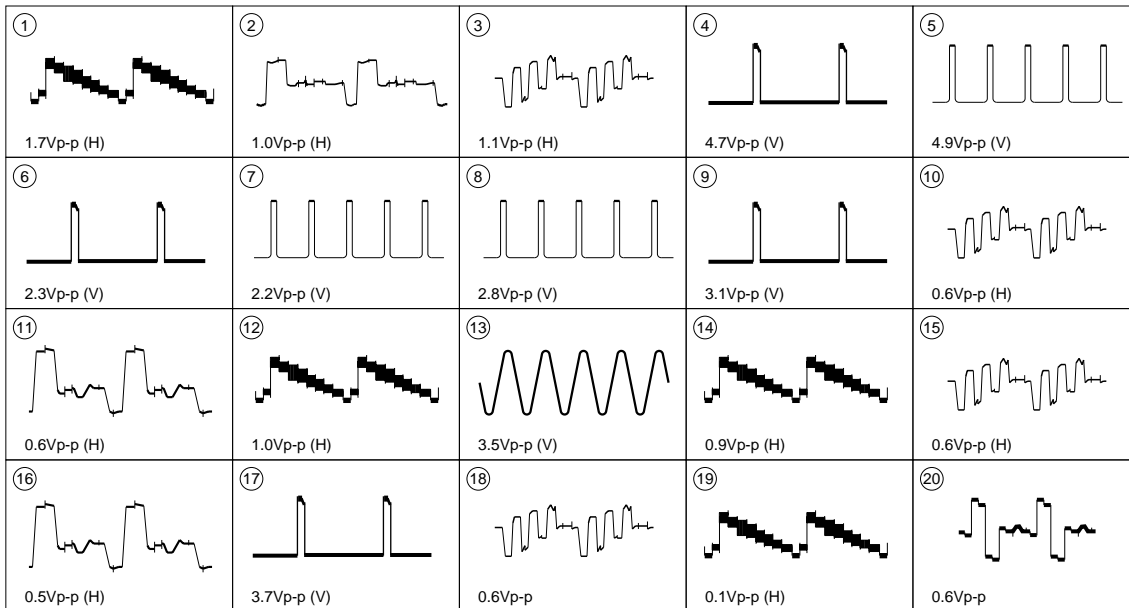
– H3 Board –



**B3 BOARD IC309, IC505, IC506 TC7SET04F (TE85R)**

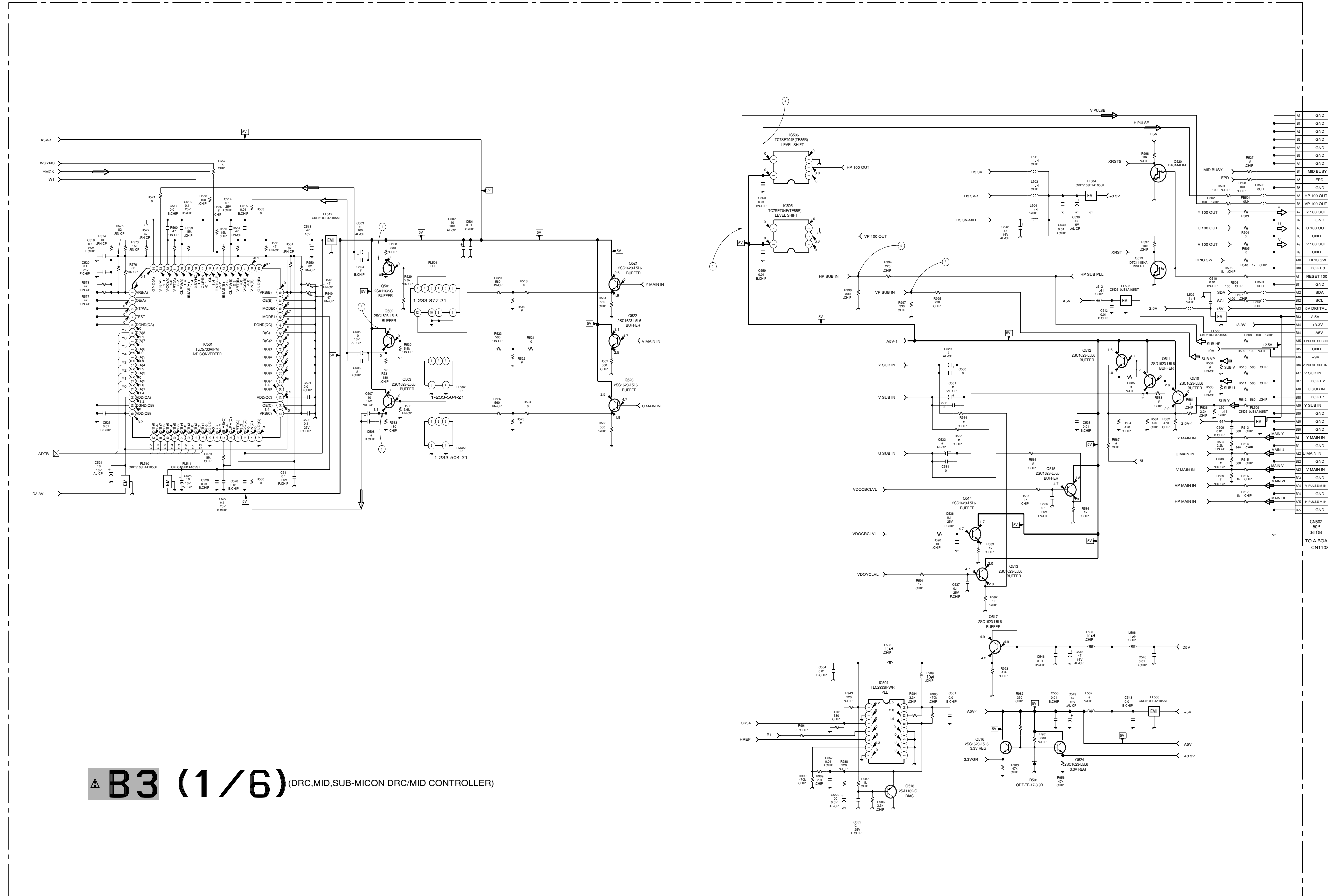


**B3 BOARD WAVEFORMS**

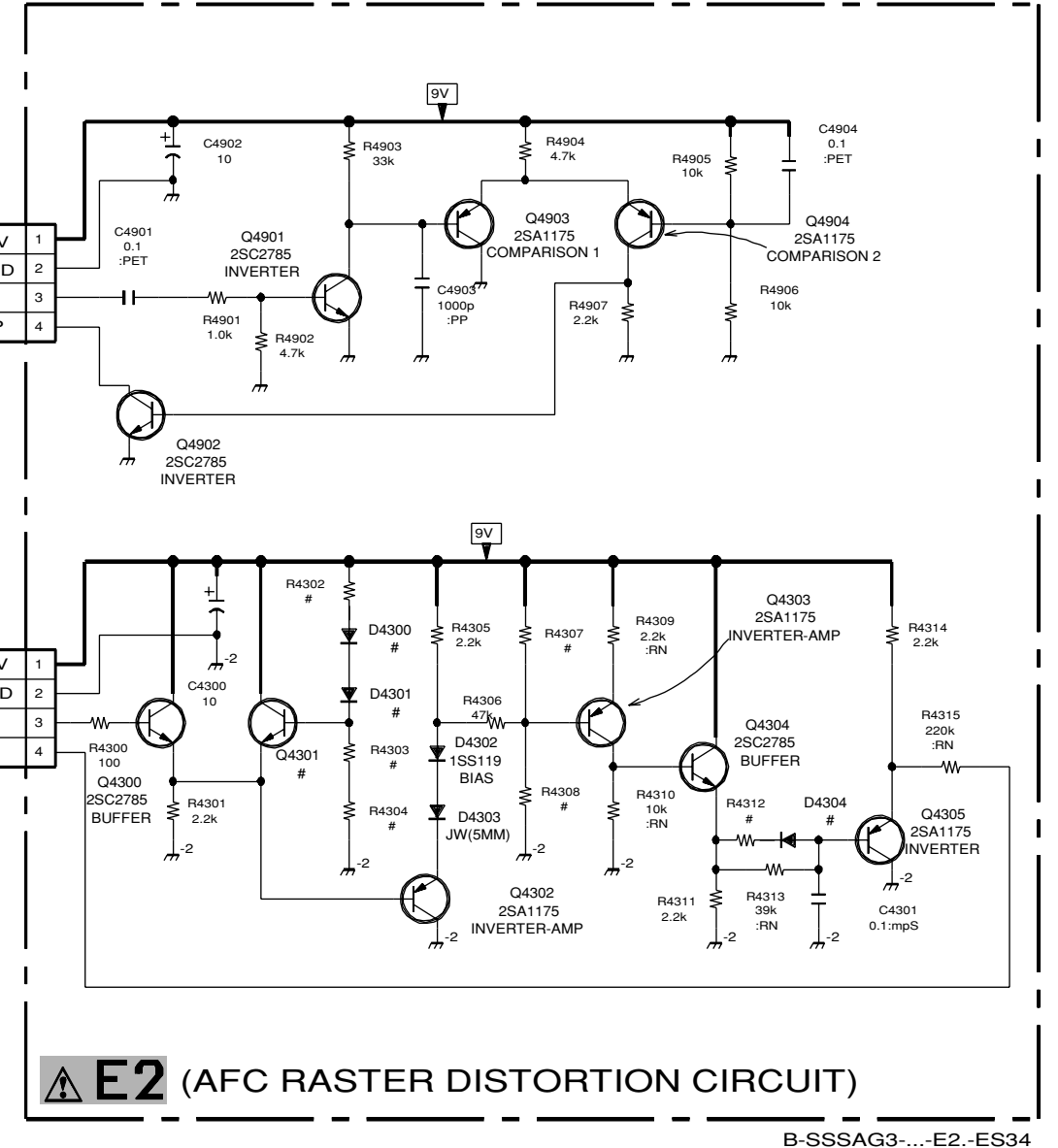




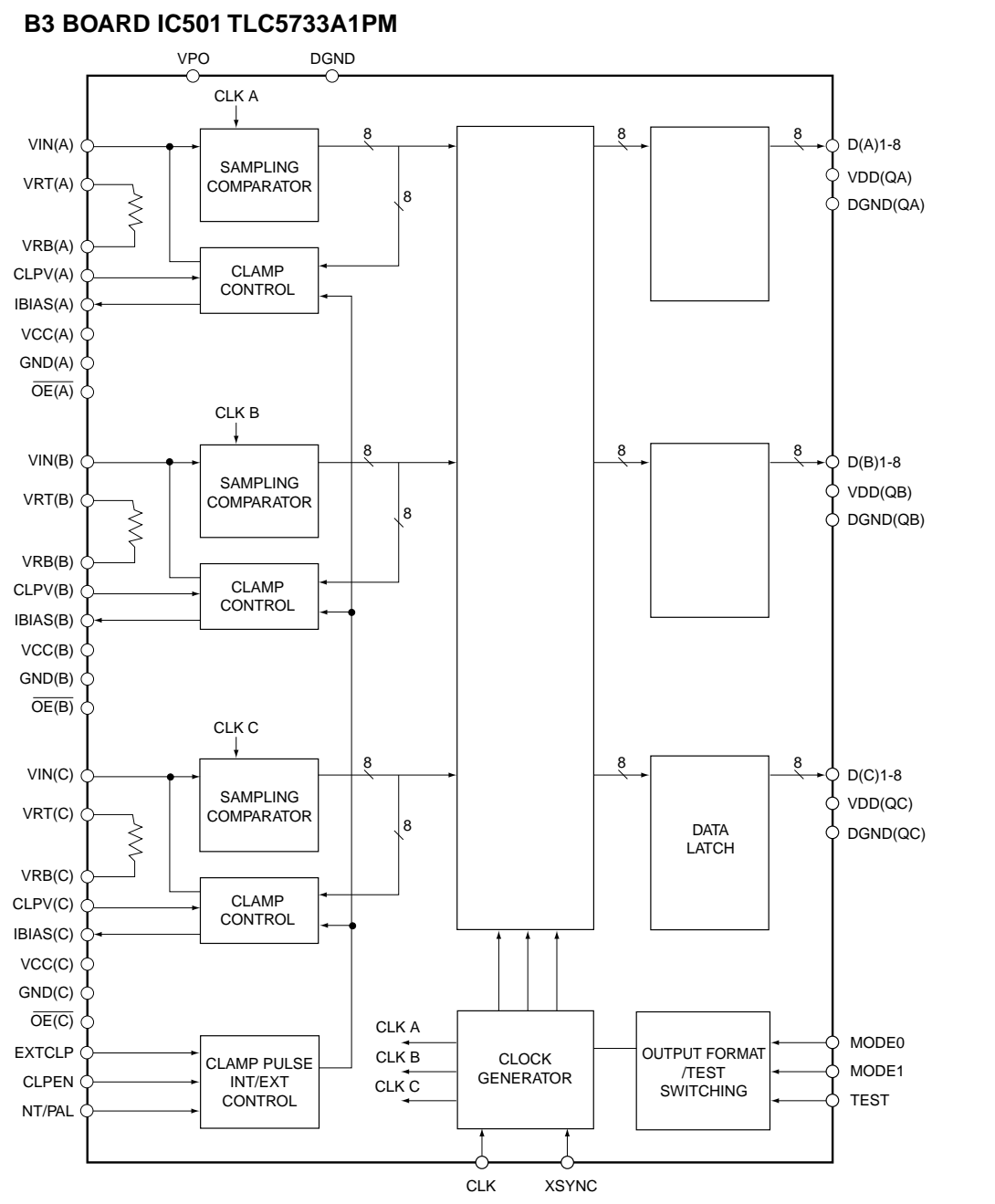
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**B3 (1/6)** (DRC,MID,SUB-MICON DRC/MID CONTROLLER)

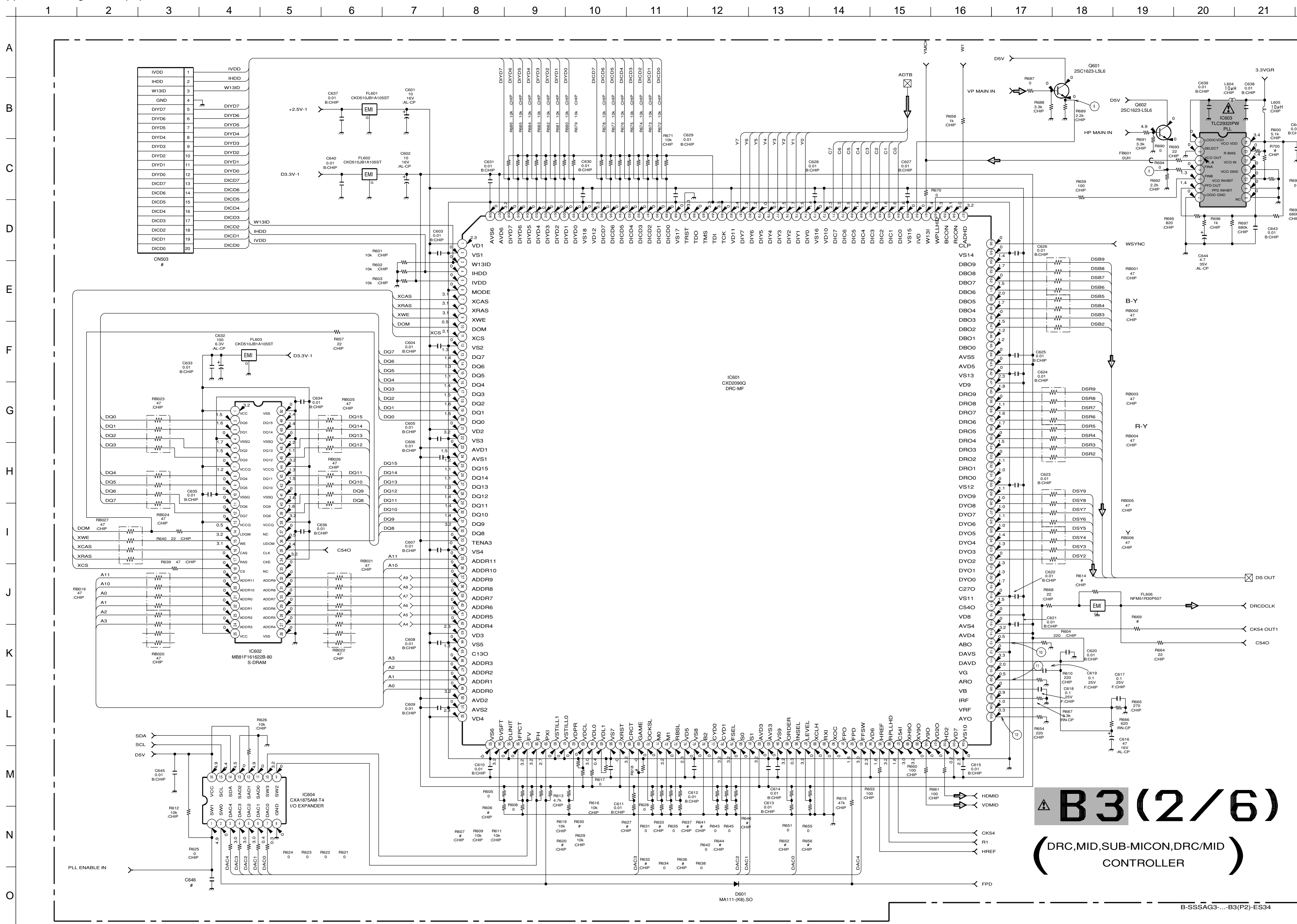


**E2 (AFC RASTER DISTORTION CIRCUIT)**  
B-SSSAG3...E2-ES34



**B3 BOARD IC501 TLC5733A1PM**

(8) Schematic Diagram of B3 (2/6) Board

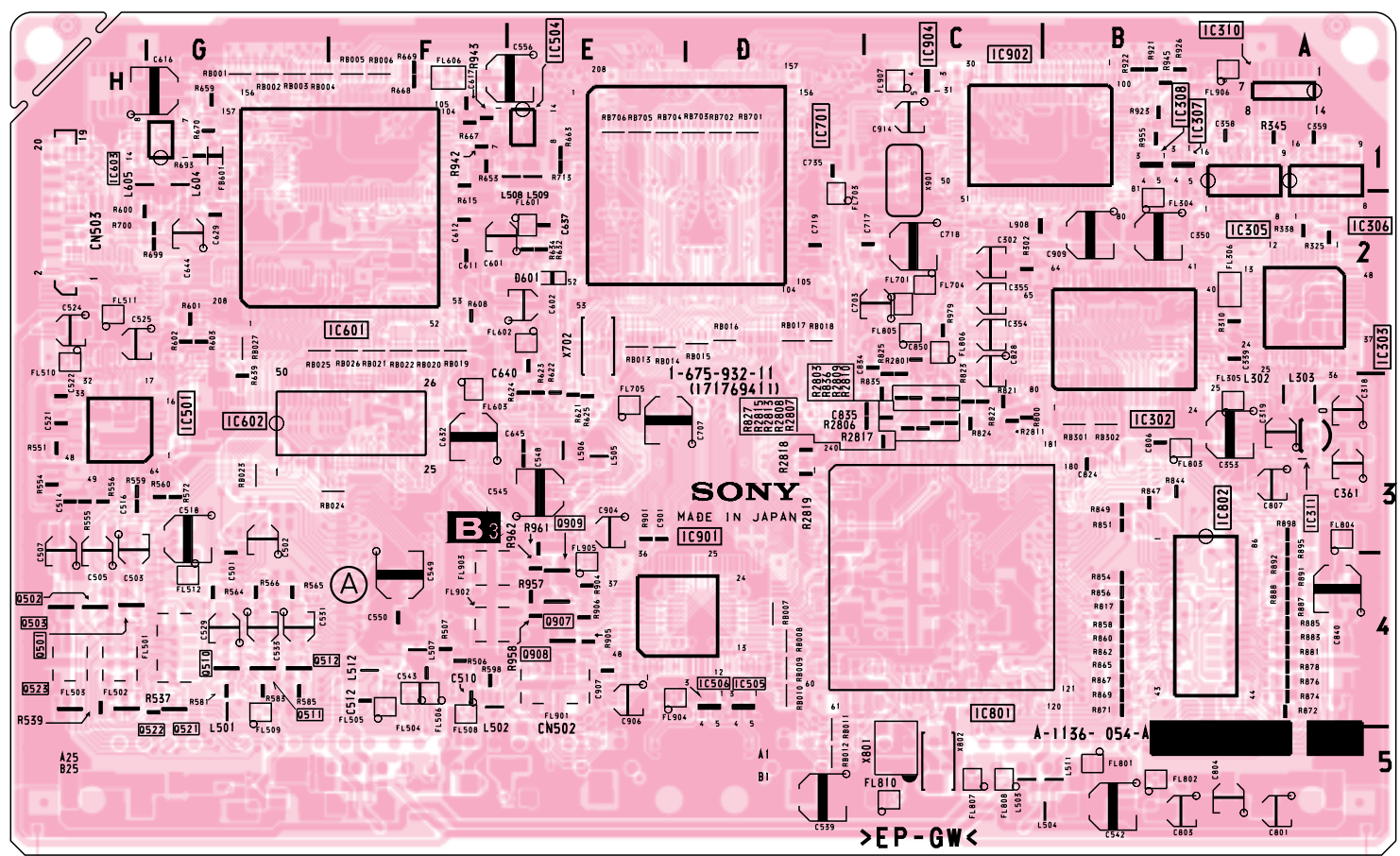


**B3 (2/6)**  
(DRC, MID, SUB-MICON, DRC/MID)  
CONTROLLER

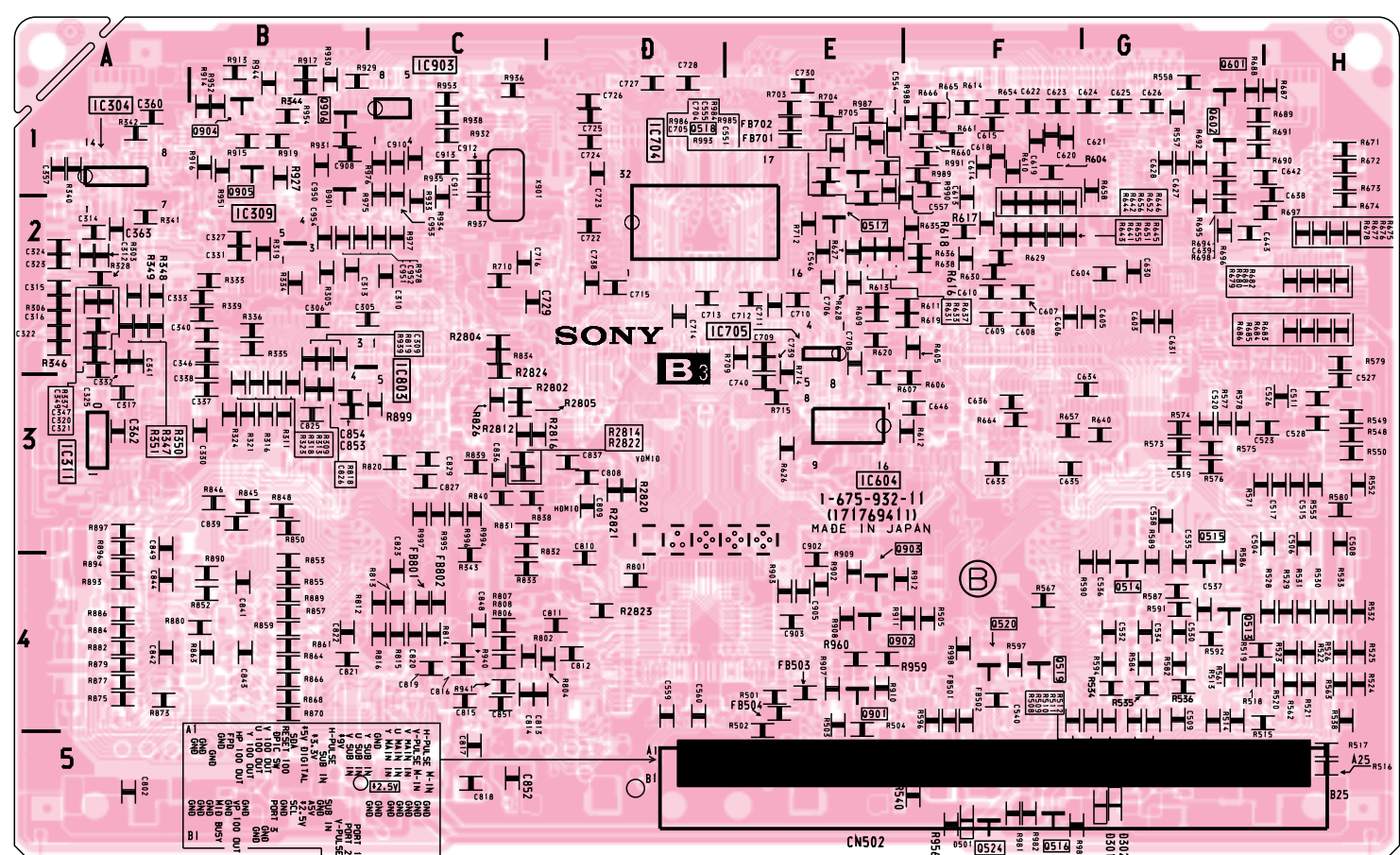
PRINTED WIRING BOARDS

**B3** [DRC, MID, SUB MICON, DRC/MID CONTROLLER]

- B3 Board (Component Side) -



- B3 Board (Conductor Side) -



B3 BOARD (Component Side)

IC	TRANSISTOR
IC302	C-7
IC303	B-8
IC305	B-7
IC306	B-8
IC307	A-7
IC308	A-7
IC310	C-3
IC311	C-8
IC501	C-1
IC504	A-4
IC505	D-5
IC506	D-4
IC601	I-8
IC602	H-6
IC603	D-8
IC701	A-5
IC801	E-6
IC802	C-7
IC901	I-13
IC902	A-6
IC904	A-6

B3 BOARD (Conductor Side)

IC	Q519	D-6
Q520	D-6	
Q521	A-1	Q524
Q522	B-2	Q601
Q523	C-1	Q602
Q524	C-5	Q601
Q525	A-4	Q902
Q526	A-4	Q903
Q527	B-4	Q903
Q528	C-3	Q904
Q529	A-3	Q905
Q530	A-2	Q906
Q531	A-2	

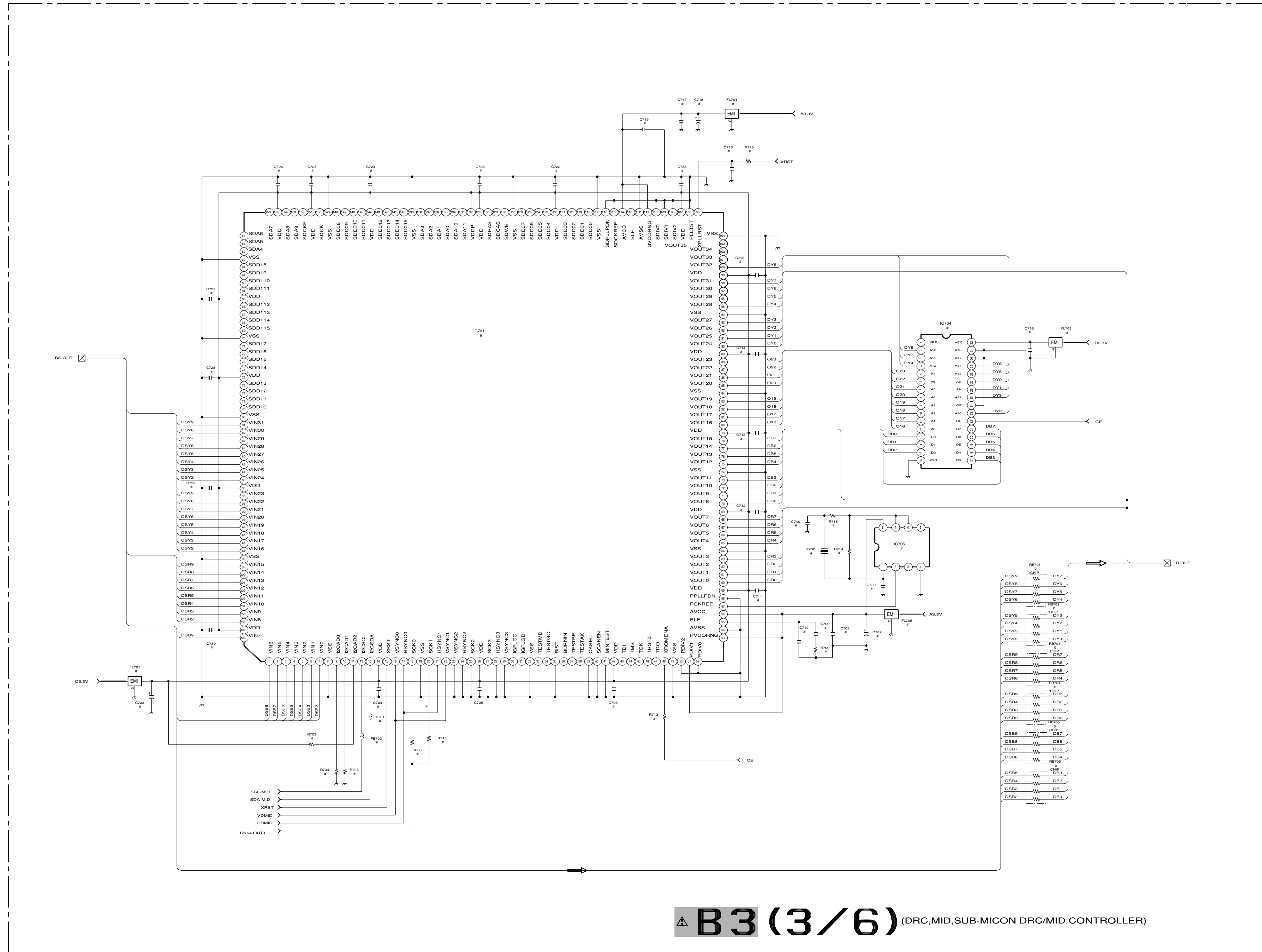
■ :Pattern from the side which enables seeing.  
□ :Pattern from the rear side.

TRANSISTOR		DIODE	
Q513	D-7	D301	A-7
Q514	D-7	D302	B-5
Q515	C-7	D303	B-5
Q516	E-6	D901	B-11
Q517	B-5		
Q518	A-4		

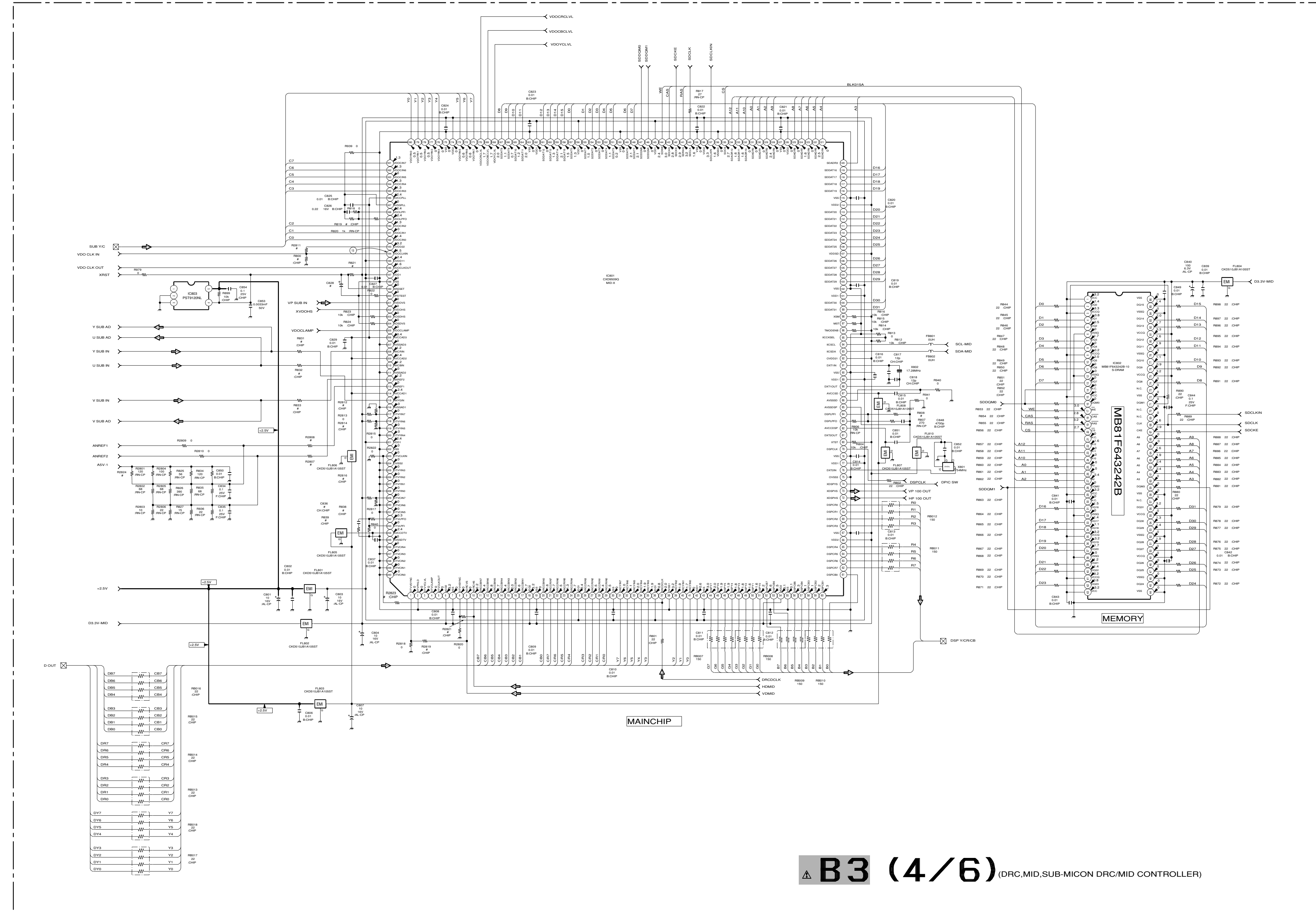
(9) Schematic Diagram of B3 (3/6) Board

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

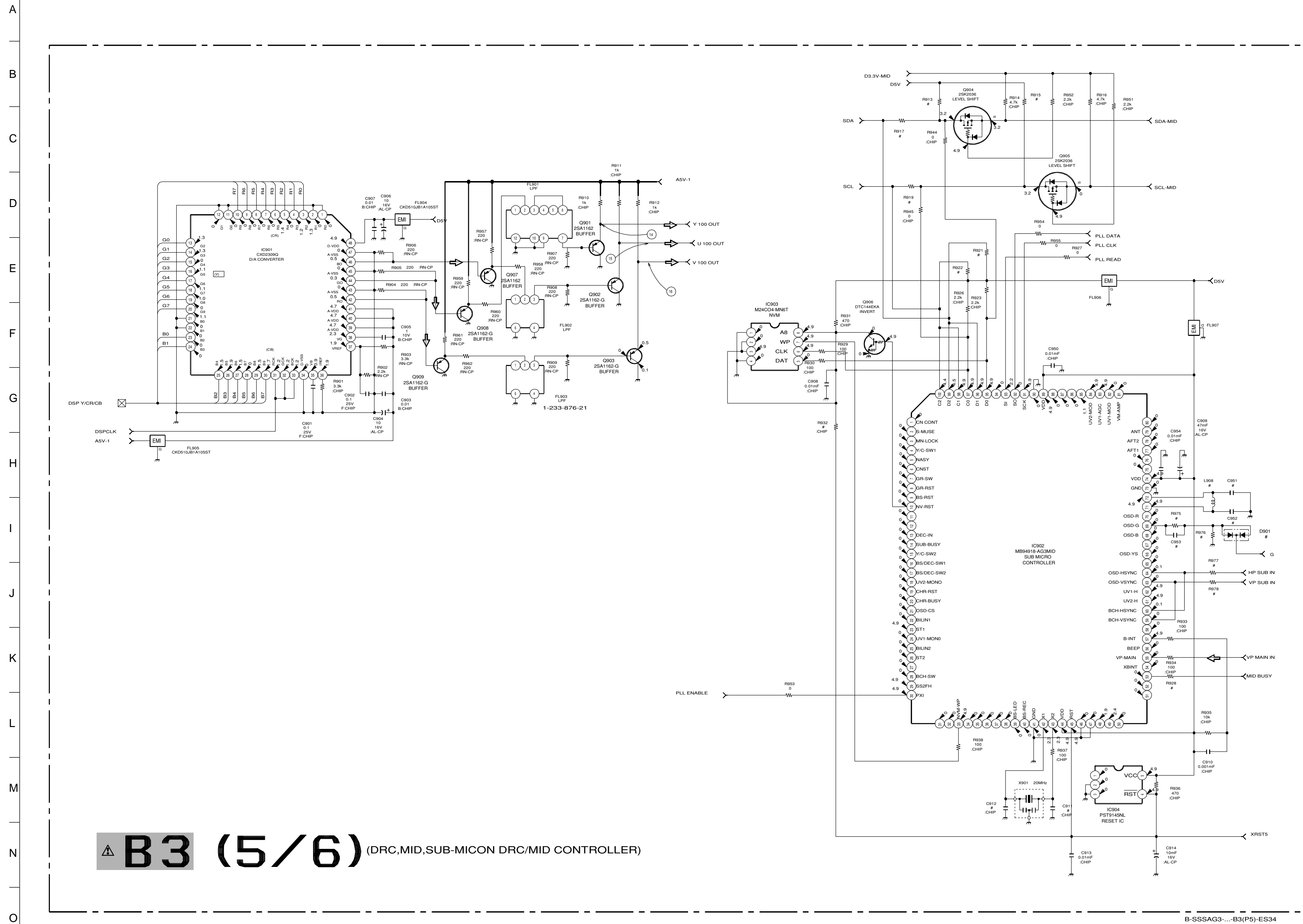
A  
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**B3 (3/6)** (DRC,MID,SUB-MICON DRC/MID CONTROLLER)

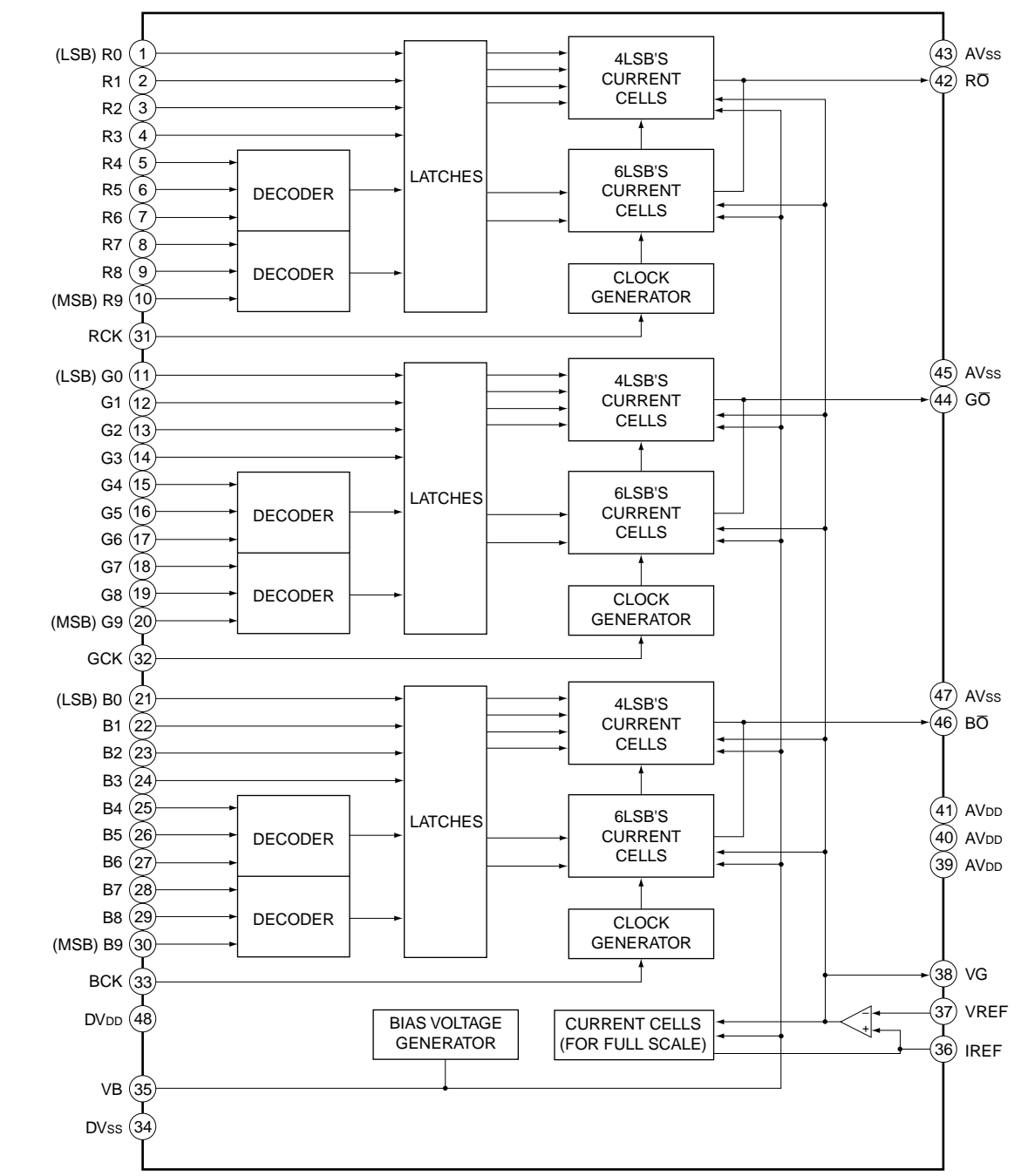


**B3 (4/6)** (DRC,MID,SUB-MICON DRC/MID CONTROLLER)

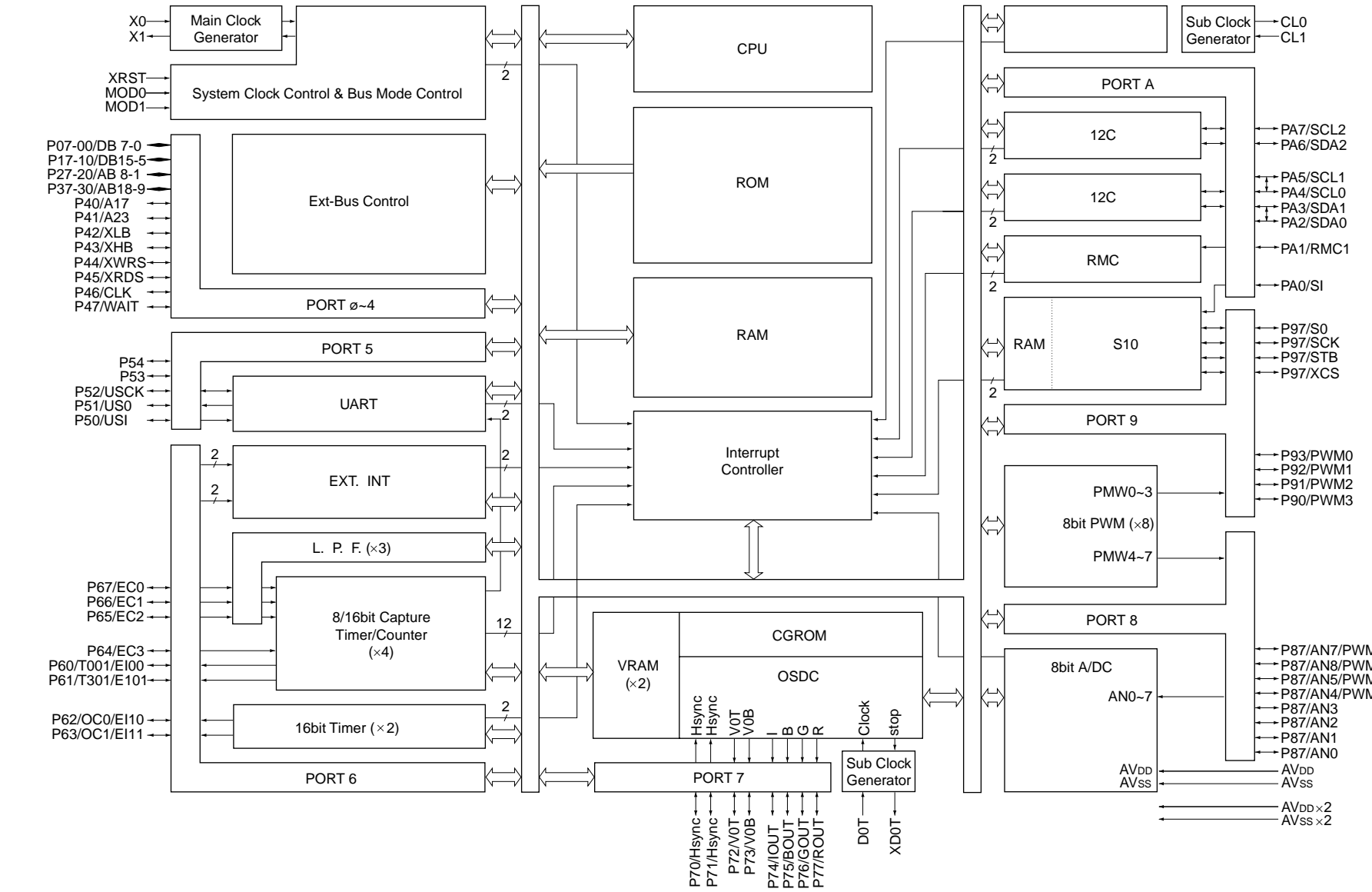


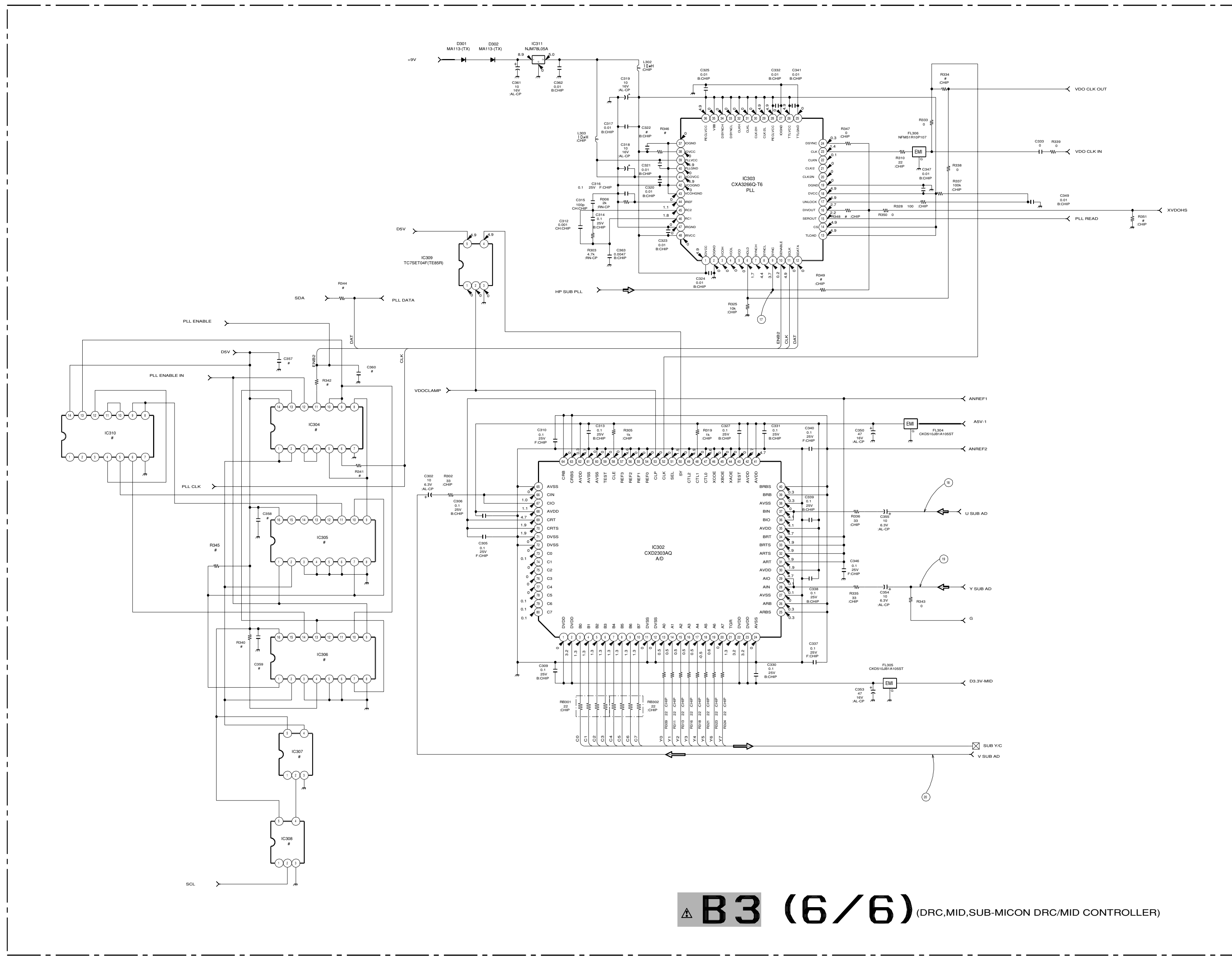
**B3 (5/6)** (DRC,MID,SUB-MICON DRC/MID CONTROLLER)

**B3 BOARD IC901 CXD2309Q**

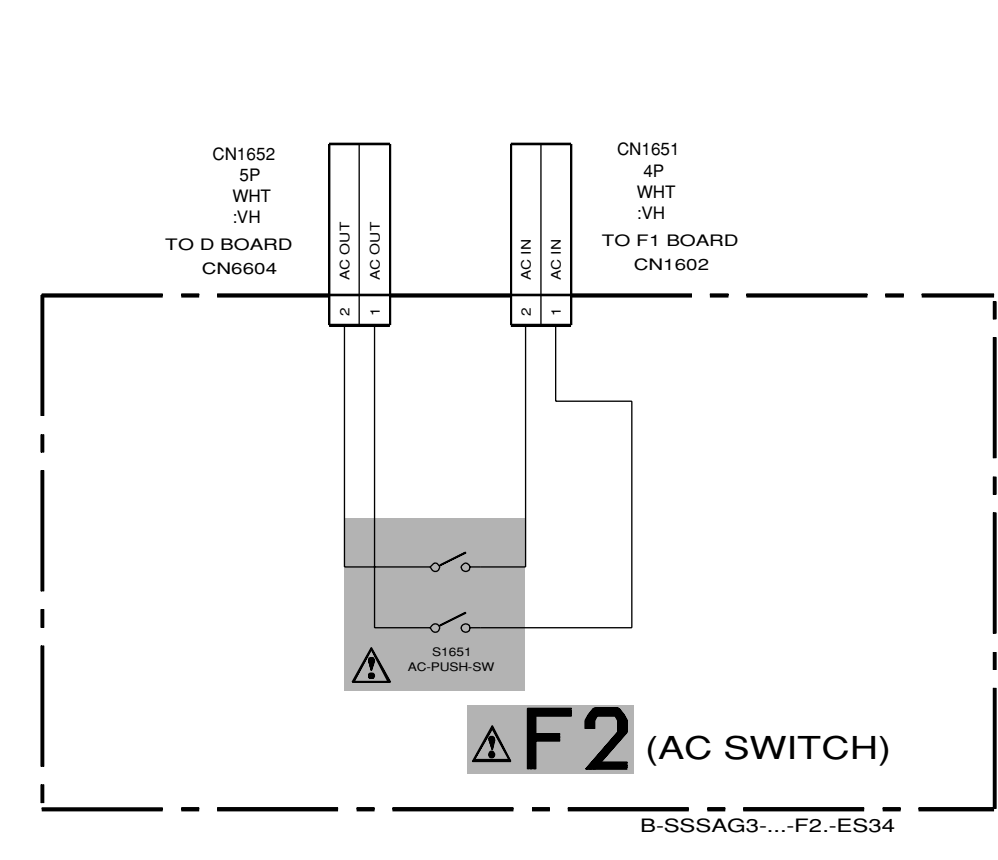


**B3 BOARD IC902 MB94918-AG3M1D**

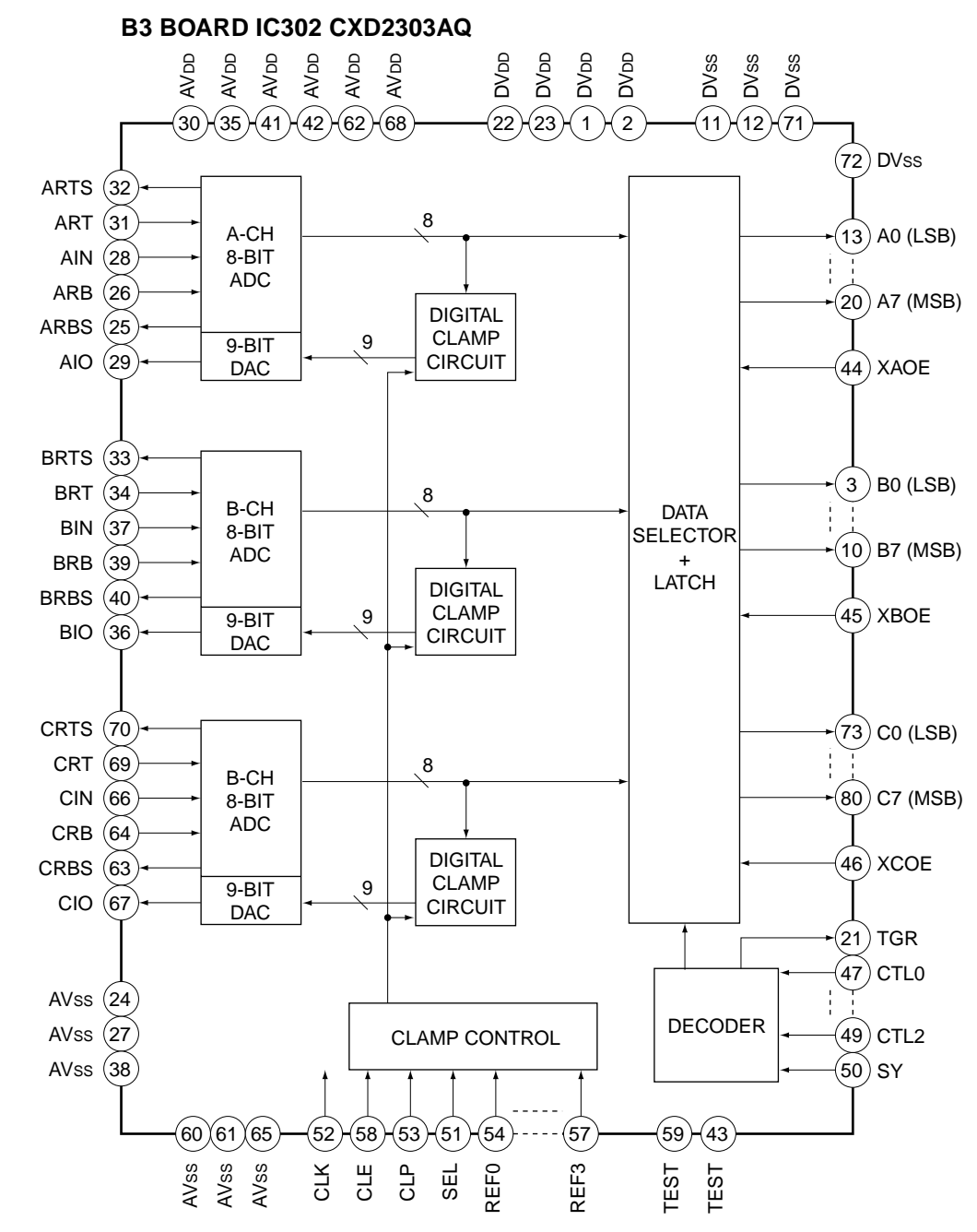
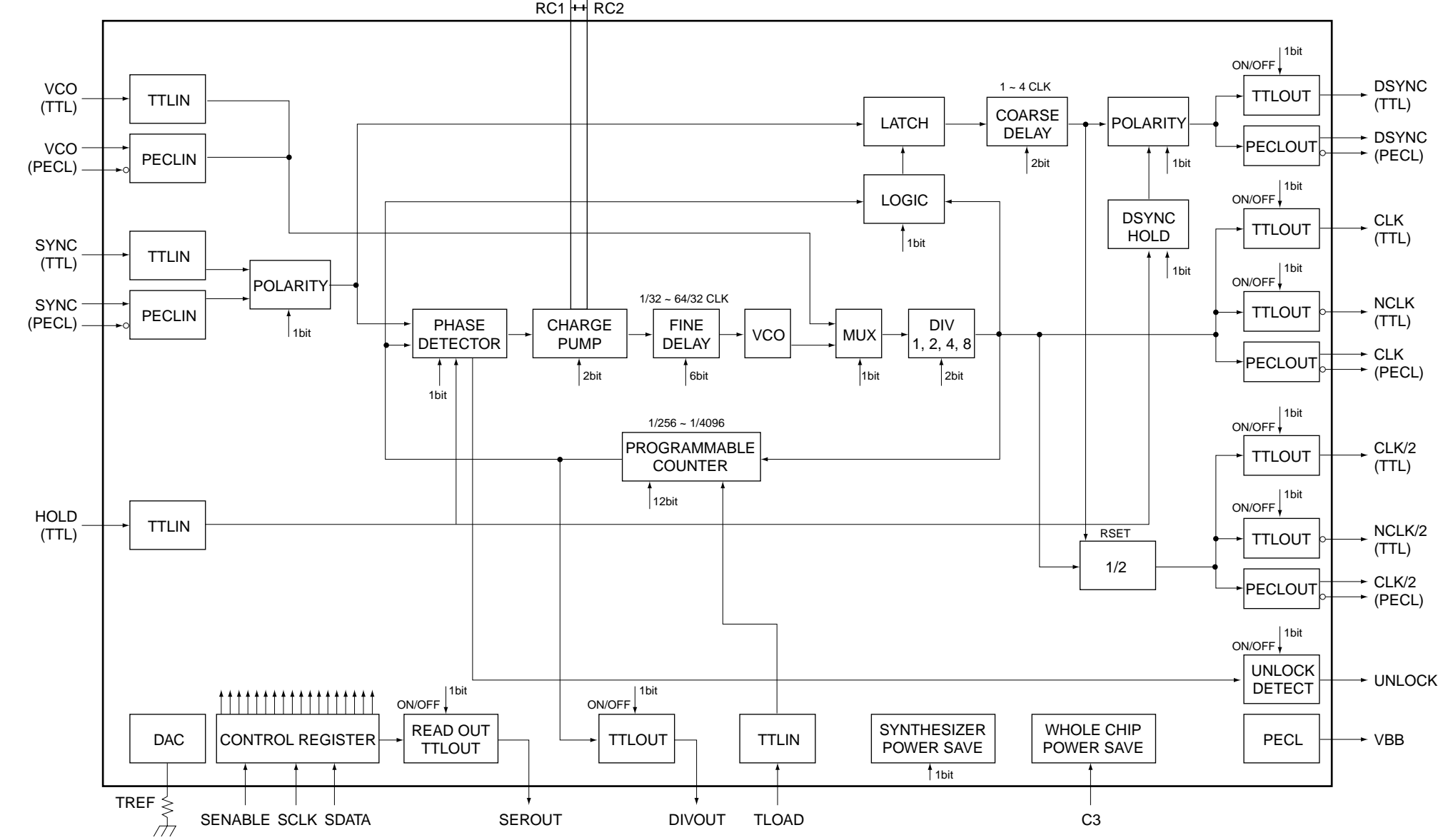




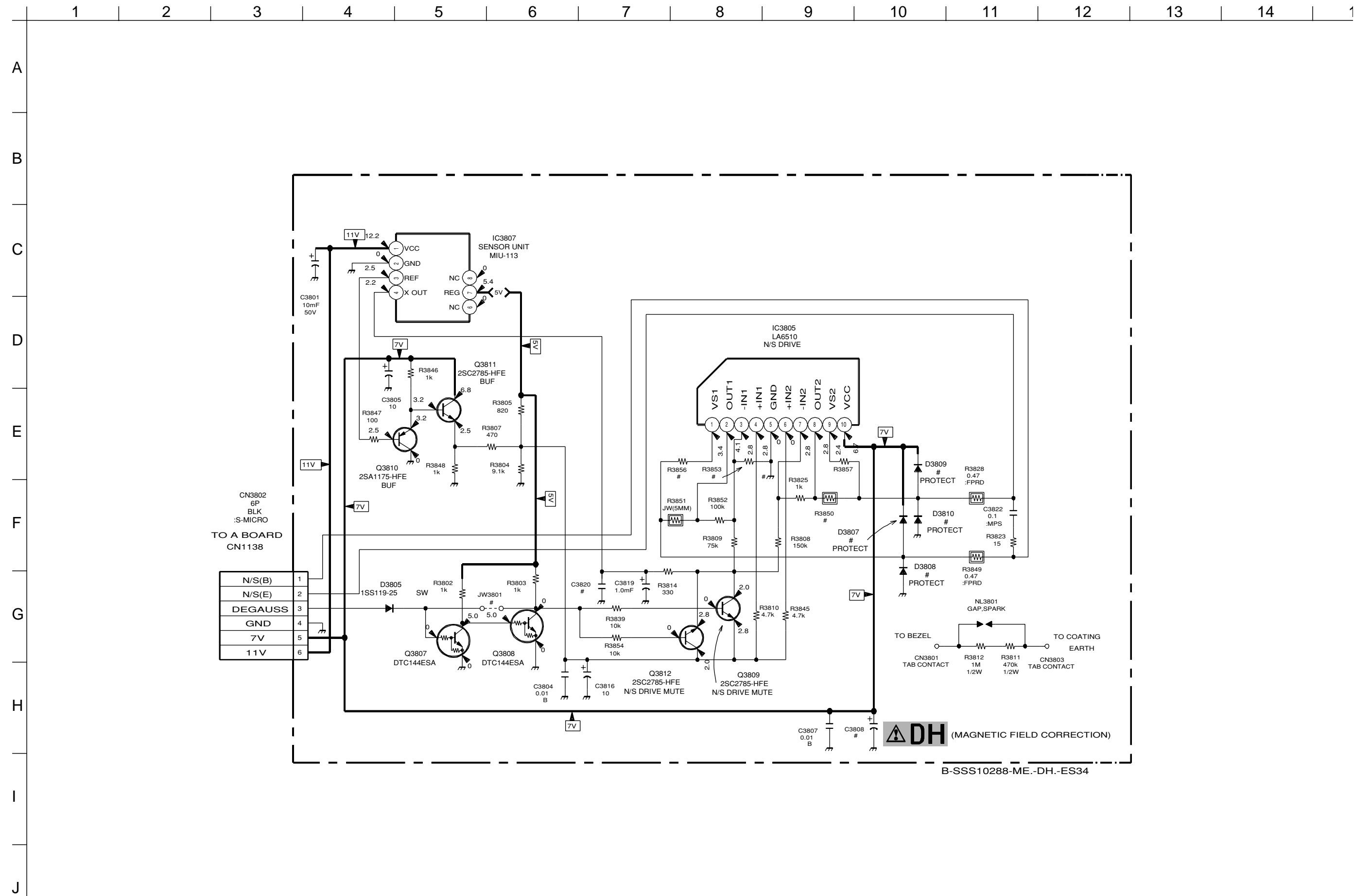
**B3 (6/6)** (DRC, MID, SUB-MICON DRC/MID CONTROLLER)



**B3 BOARD IC303 CXA3266Q-T6**



(13) Schematic Diagram of DH Board

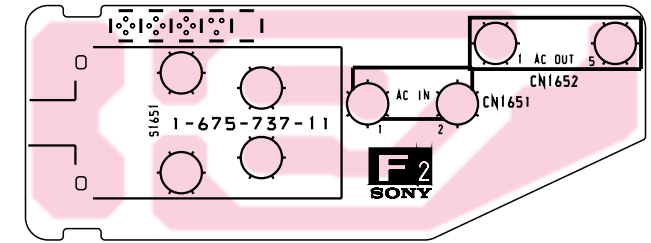


PRINTED WIRING BOARDS

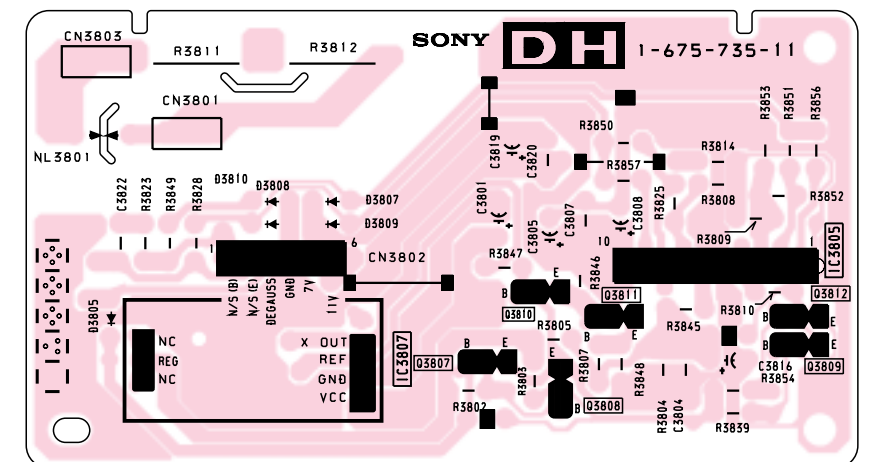
**F2** [AC SWITCH]

**DH** [MAGNETIC FIELD CORRECTION]

- F2 Board -



- DH Board -

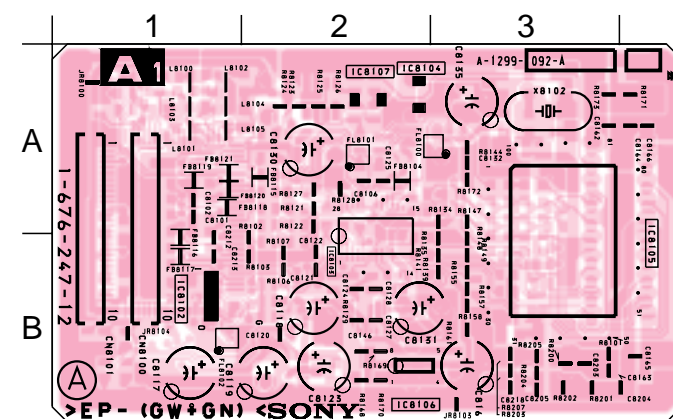


Schematic diagram  
← **DH** board

PRINTED WIRING BOARDS

**A1** [AUDIO DSP]

– A1 Board (Component Side) –

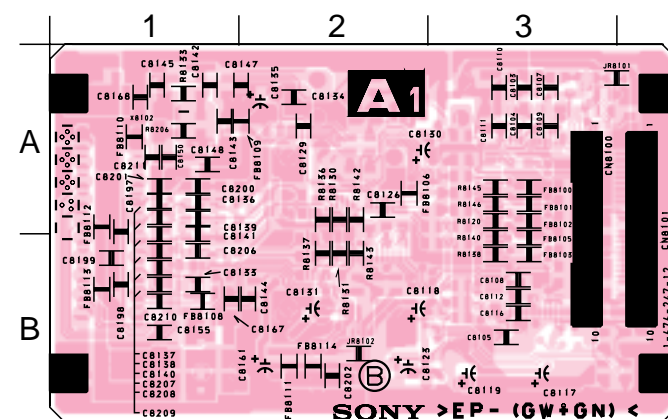


- :Pattern from the side which enables seeing.
- :Pattern from the rear side.

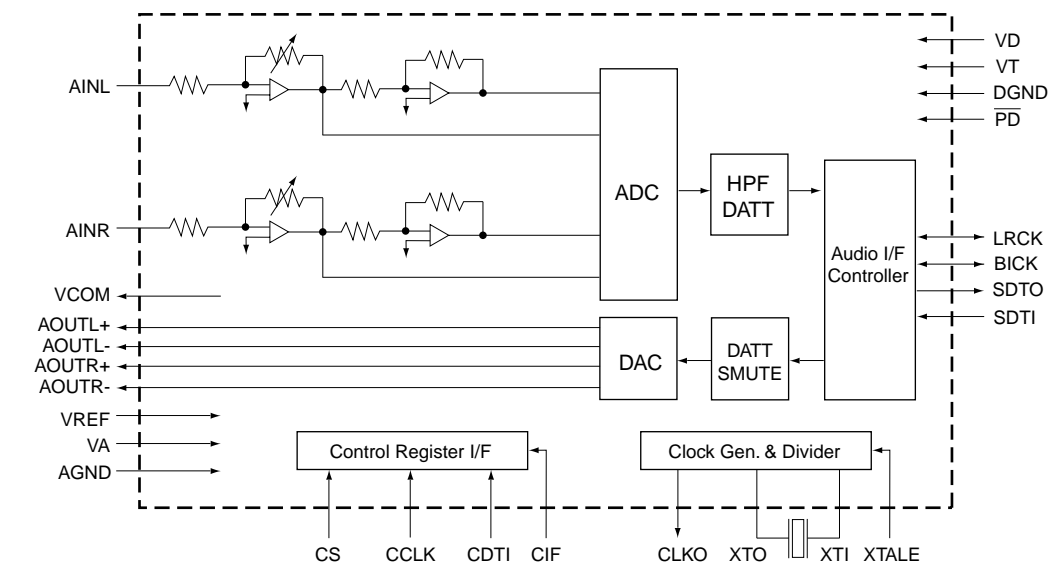
A1 BOARD (Component Side)

IC	
IC8102	B-1
IC8104	A-2
IC8105	B-4
IC8106	B-3
IC8108	B-1

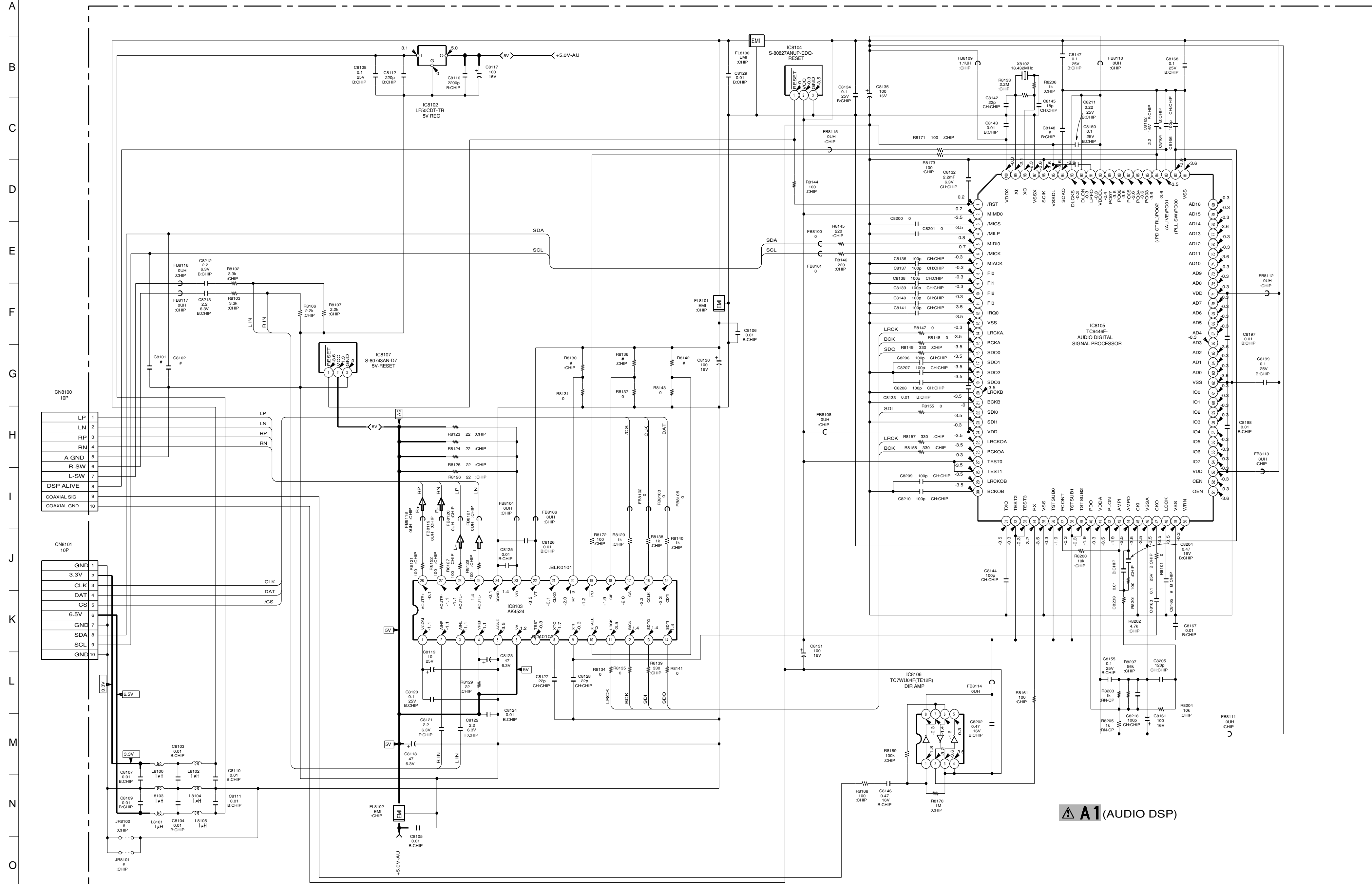
– A1 Board (Conductor Side) –



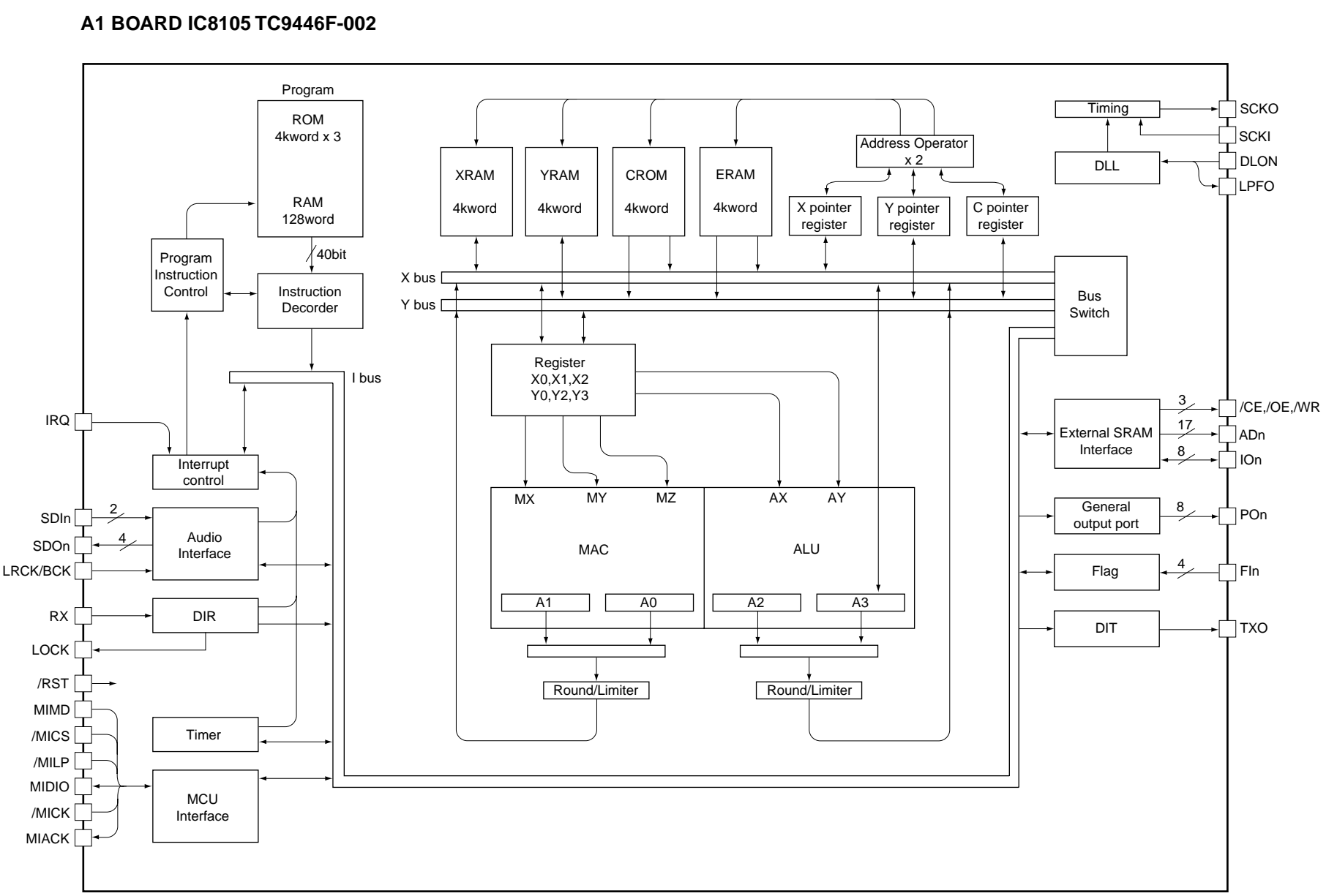
A1 Board IC8103 AK4524







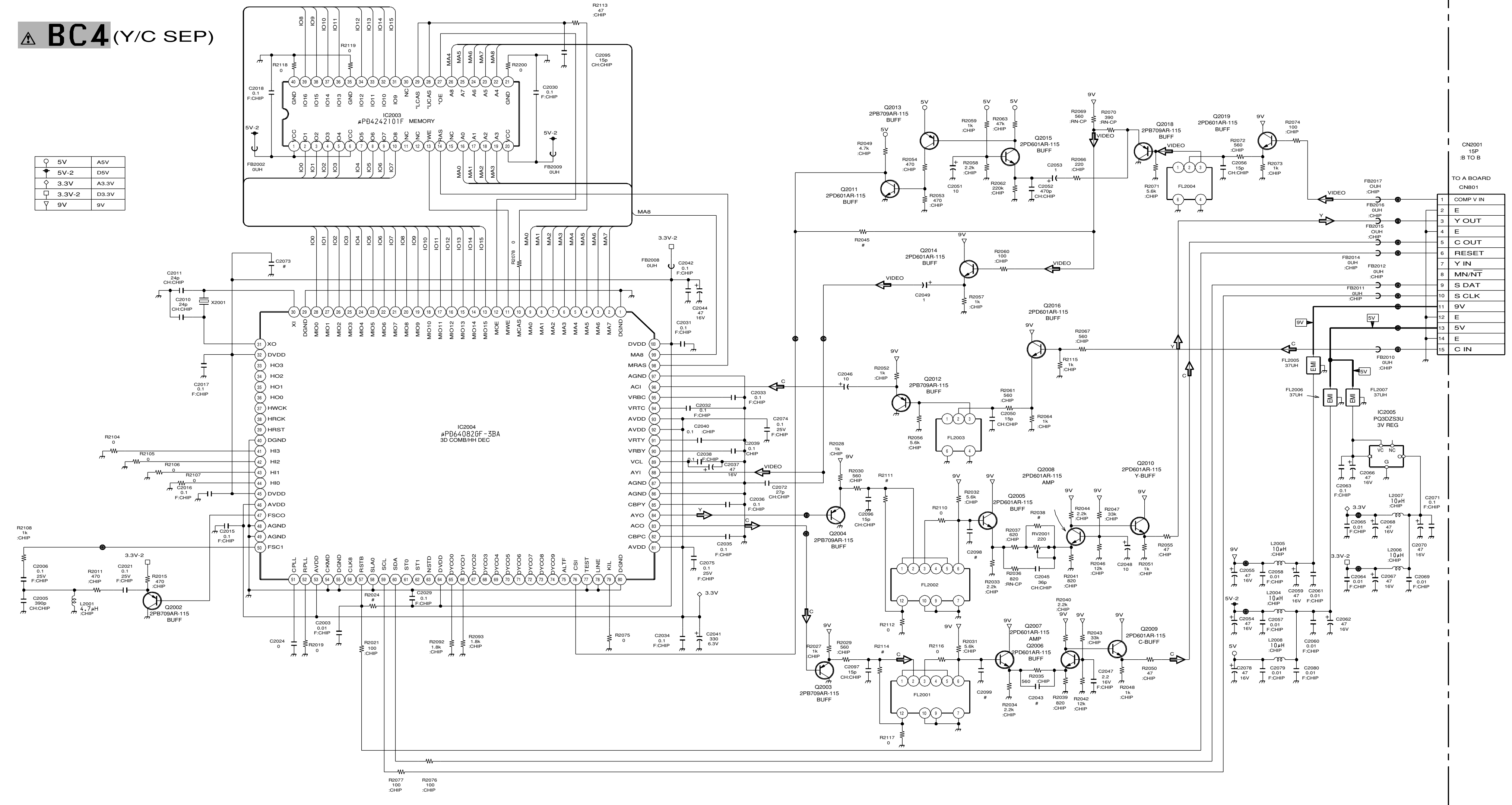
A1 (AUDIO DSP)



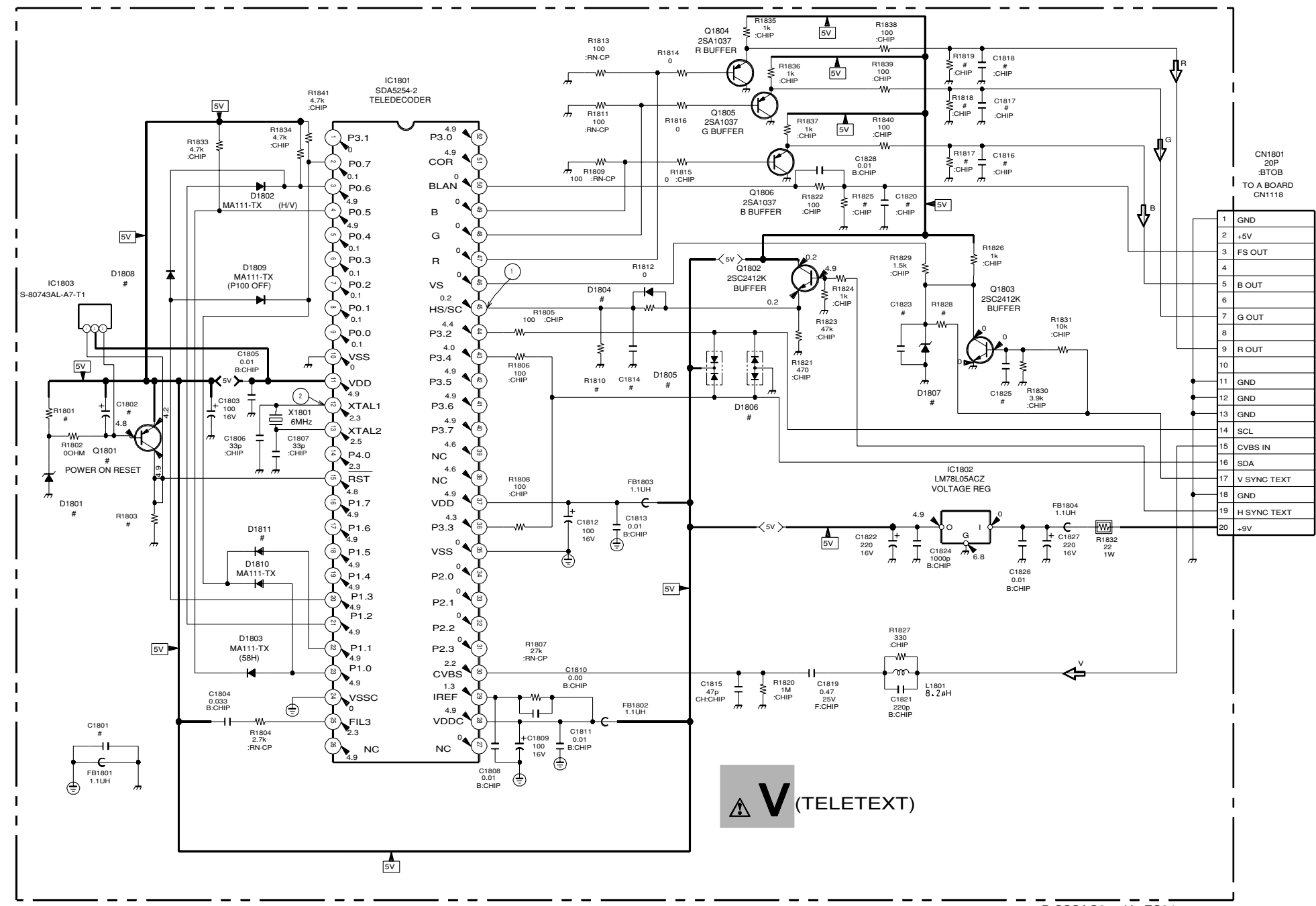
A  
B  
C  
D  
E  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O

# BC4 (Y/C SEP)

○	5V	ASV
◄	5V-2	DSV
◻	3.3V	AS.3V
▽	3.3V-2	DS.3V
▽	9V	9V



B-SSSAG3-...BC4-ES34



B-SSSAG3-...V-ES34

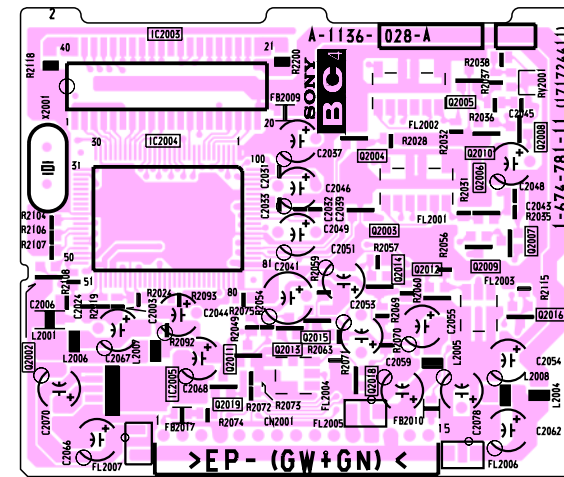
PRINTED WIRING BOARDS

**BC4** [Y/C SEP]

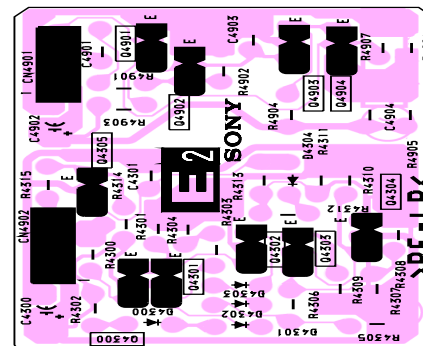
**E2** [AFC RASTER DISTORTION CIRCUIT]

**V** [TELE TEXT]

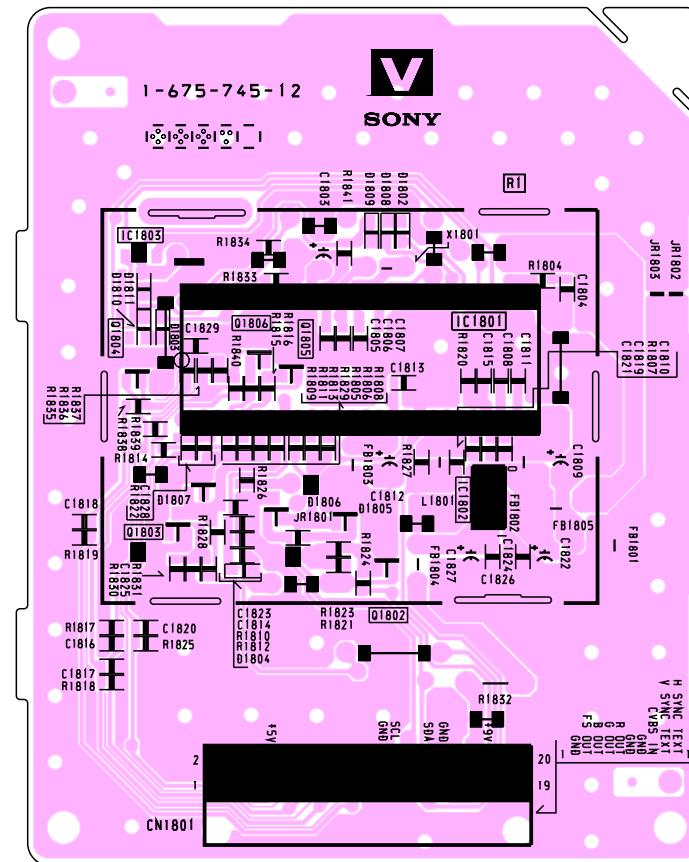
- BC4 Board -



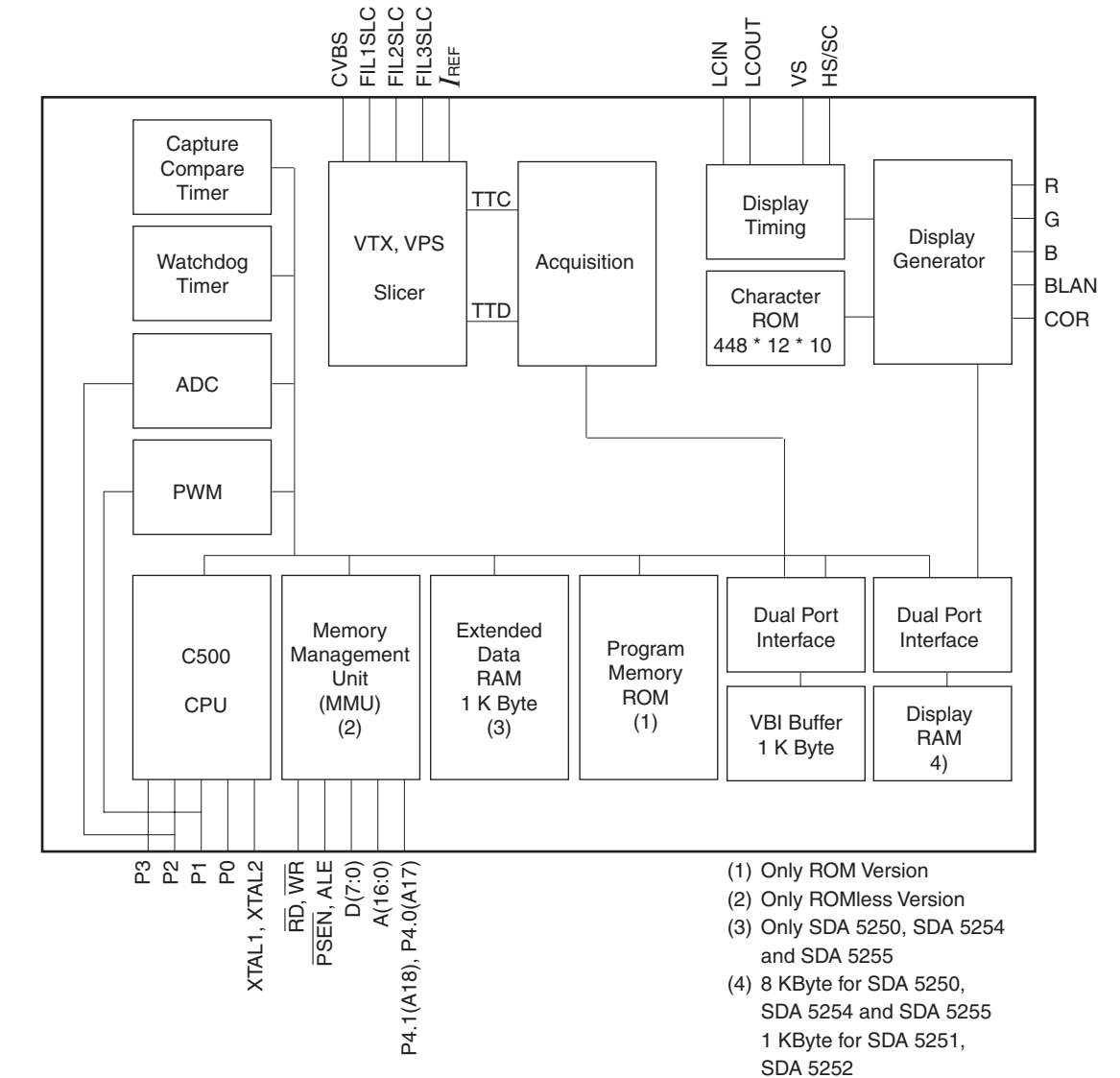
- E2 Board -



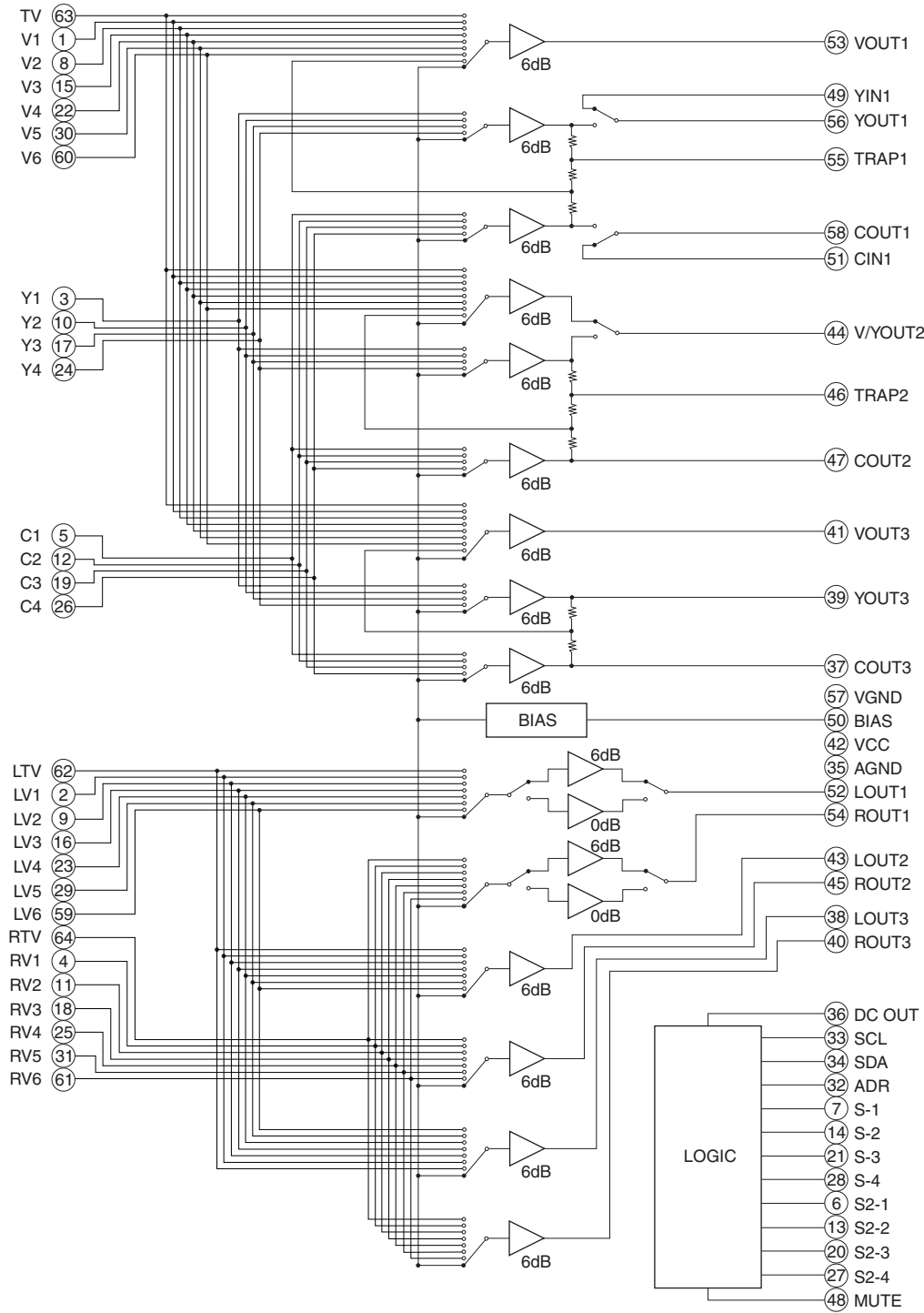
- V Board -



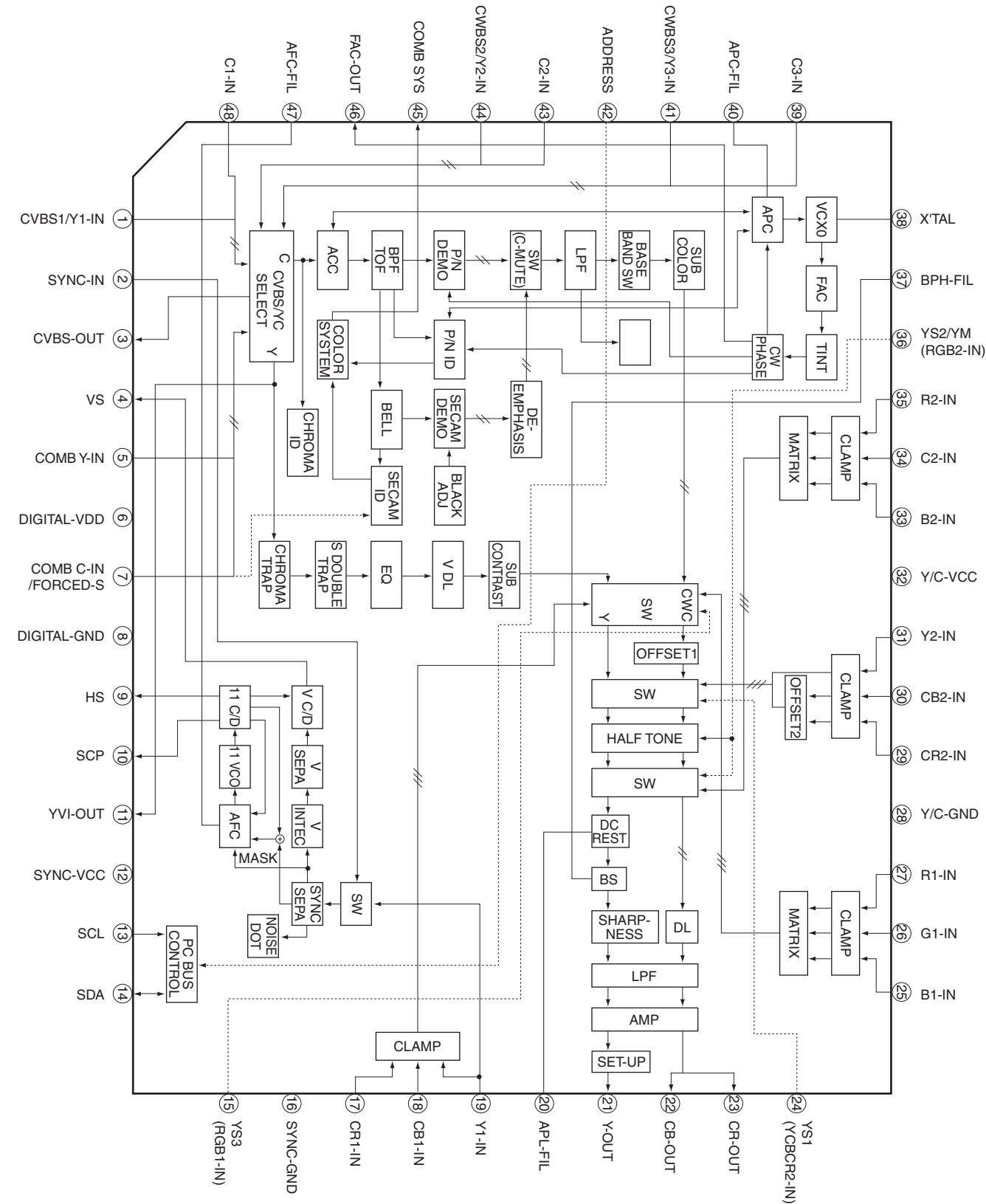
V Board IC1801 SDA5254-2B006



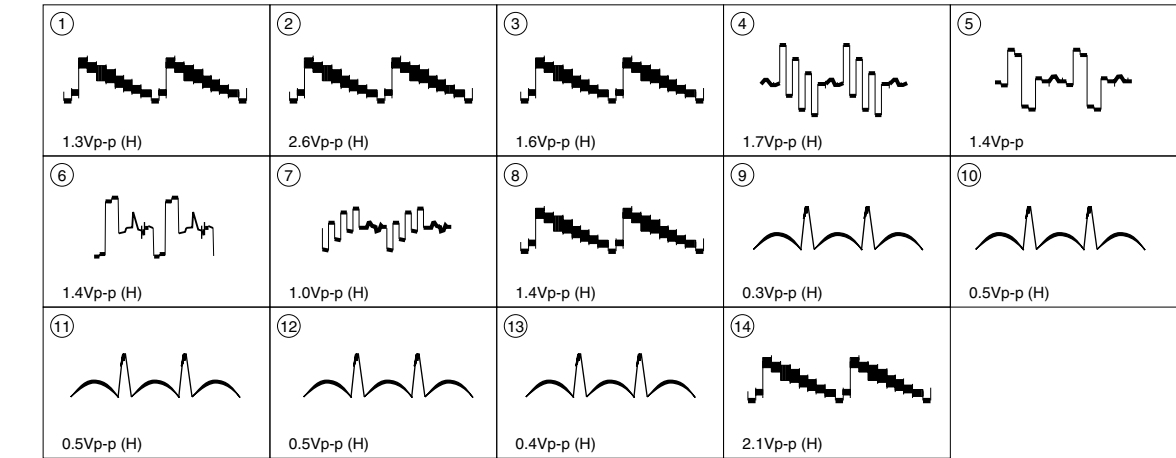
J Board IC8302 CXA2069Q

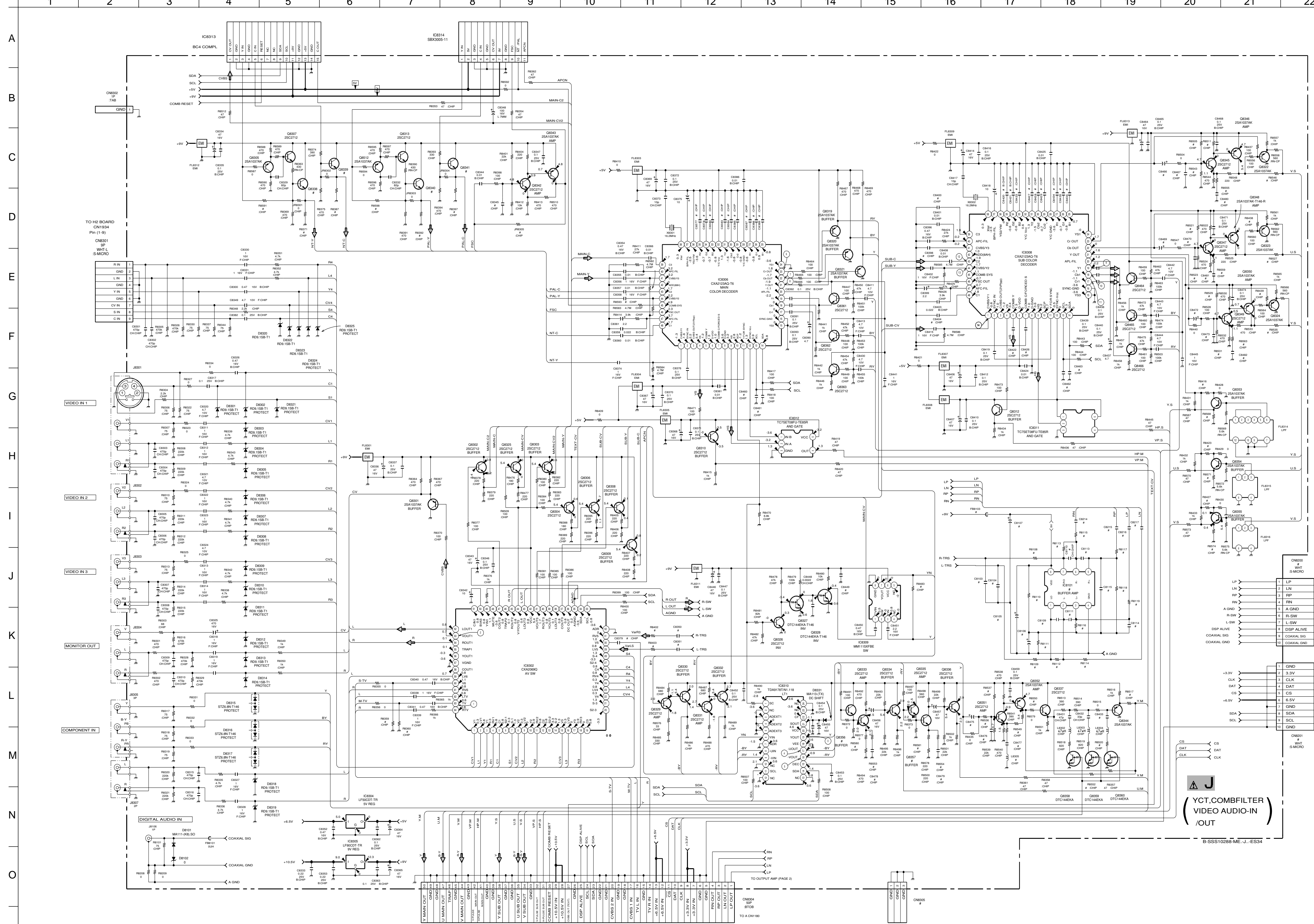


J Board IC8306 CXA2123AQ-T6



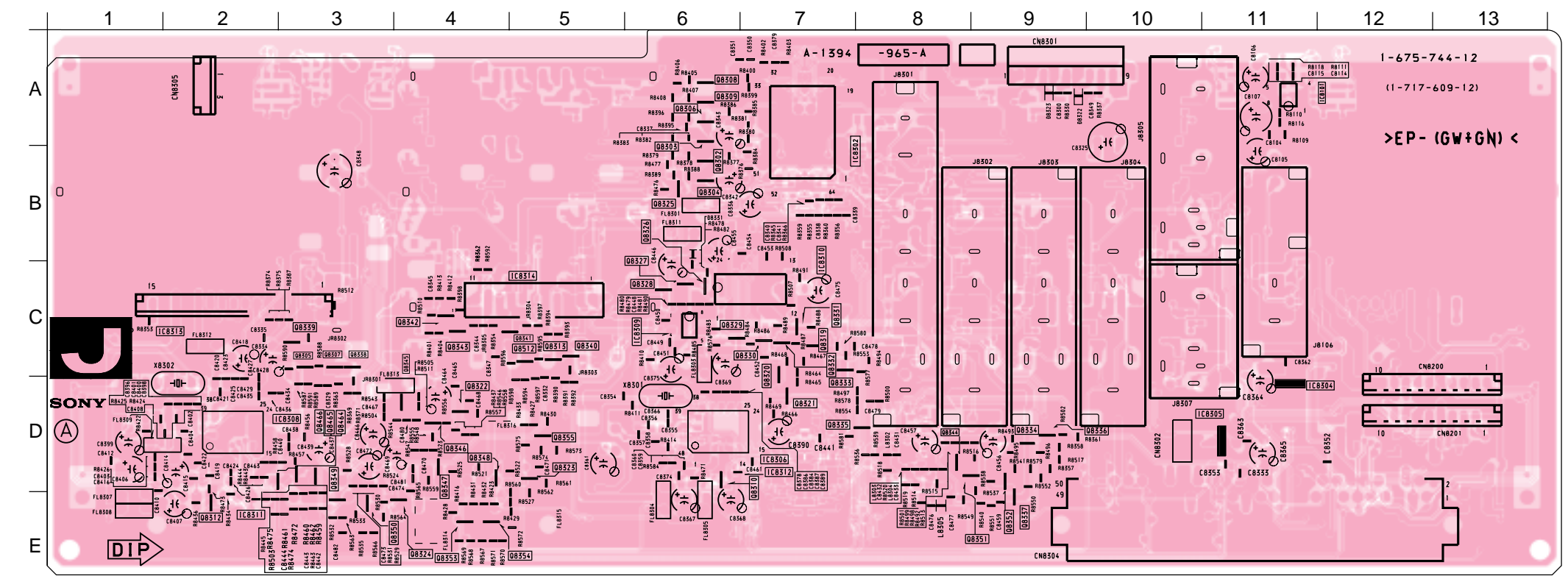
J BOARD WAVEFORMS



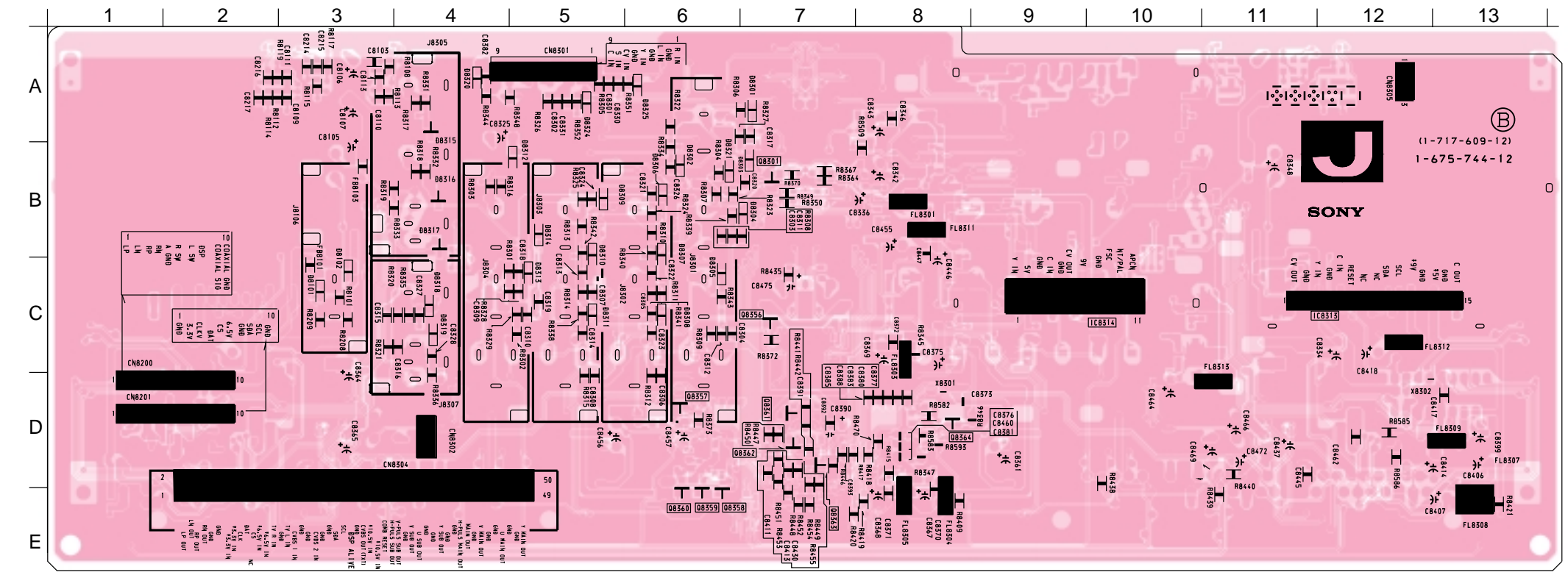


J [YCT, AUDIO DSP, COMB FILTER, VIDEO/AUDIO-IN/OUT]

- J Board (Component Side) -



- J Board (Conductor Side) -



J BOARD (Component Side)

IC	Q8307 C-3	Q8339 C-3
IC0302 A-8	Q8308 A-6	Q8340 C-5
IC8101 A-12	Q8310 D-7	Q8341 C-5
IC8102 E-13	Q8312 E-3	Q8342 C-4
IC8103 B-13	Q8313 C-5	Q8344 D-8
IC8105 A-13	Q8319 C-7	Q8345 C-3
IC8106 C-12	Q8320 C-7	Q8346 D-4
IC8107 D-12	Q8321 D-7	Q8347 D-4
IC8304 D-12	Q8322 D-4	Q8348 D-5
IC8305 D-11	Q8323 D-5	Q8349 E-3
IC8306 D-7	Q8324 D-4	Q8350 D-4
IC8308 D-2	Q8325 B-6	Q8351 D-9
IC8309 C-6	Q8326 B-6	Q8352 E-9
IC8310 B-7	Q8327 B-6	Q8353 E-5
IC8311 E-3	Q8328 C-6	Q8354 E-5
IC8312 D-7	Q8329 C-7	Q8355 D-5
IC8313 C-2	Q8330 C-7	
IC8314 B-5	Q8331 C-7	
TRANSISTOR	Q8332 C-7	
Q8302 A-6	Q8333 C-7	
Q8303 A-6	Q8334 D-9	
Q8304 B-6	Q8335 D-7	
Q8305 C-3	Q8336 D10	
Q8306 A-6	Q8337 E-9	
	Q8338 C-3	

J BOARD (Conductor Side)

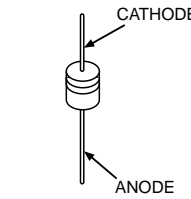
IC	D8302 B-6
IC8104 B-2	D8303 B-7
IC8313 C-12	D8305 C-6
IC8314 C-10	D8306 B-6
TRANSISTOR	D8307 B-6
Q8301 B-7	D8308 C-6
Q8356 C-7	D8309 B-6
Q8358 E-7	D8310 B-5
Q8359 E-6	D8311 C-5
Q8360 E-6	D8313 C-5
DIODE	D8314 B-4
D8101 C-3	D8315 A-4
D8102 C-3	D8316 B-4
D8301 A-4	D8317 B-4
	D8318 C-4
	D8319 C-4
	D8320 C-7
	D8321 B-6
	D8325 A-4

- :Pattern from the side which enables seeing.
- :Pattern from the rear side.

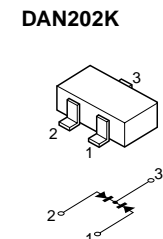
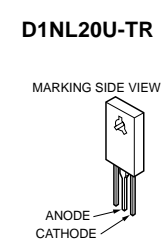
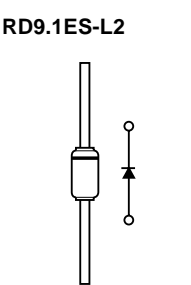
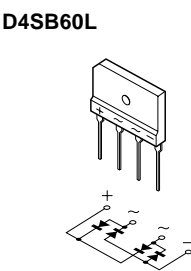
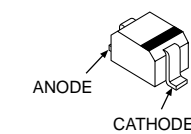
6-5. SEMICONDUCTORS

DIODE

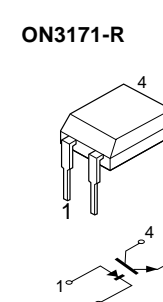
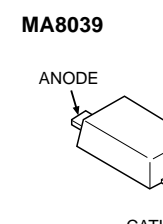
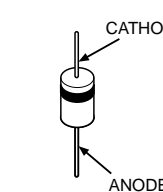
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ERA38-06  
ERA85-009  
RD10ESB2  
RD12ES-B2  
RD13ES-B2  
RD15ES-B2  
RD18ESB2  
RD2.2ES-B  
RD2.7ESB2  
RD22ESB  
RD3.6ES-B1  
RD3.9ES-B2  
RD30ESB2  
RD4.7ESB2  
RD5.6ES-B  
RD6.8ES-B2  
RD7.5ESB2  
1SS119-25



DTZ9.1  
MA111-(K8),S0  
MA113-(TX)  
RD3.0B2  
RD5.6SB3  
RD9.1S-B

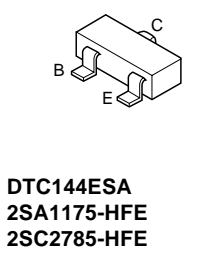


EL1Z  
GP08D  
HSS83TD  
RGP02-20EL-6394

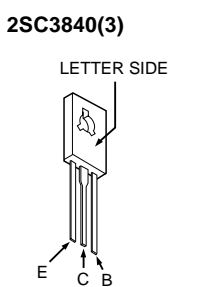
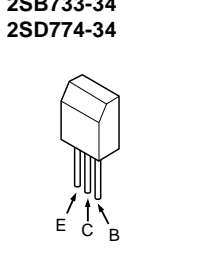
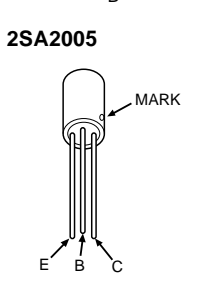


TRANSISTOR

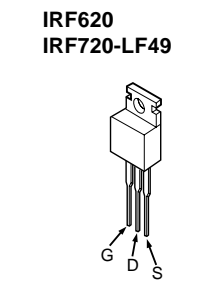
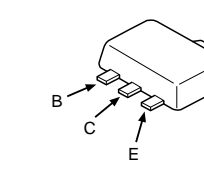
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2SA1776TV2Q  
2SC1623-LSL6  
2SC2712-YG  
2SD601A-Q-TX  
2SD601-Q-TX



DTC144ESA  
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2SC2785-HFE

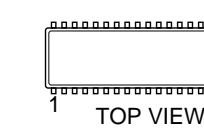


2SK2036(TE85L)  
2SK2251-01-F19

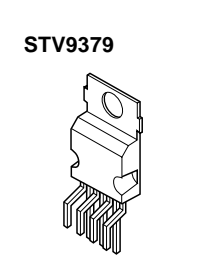
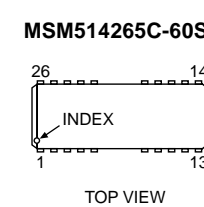
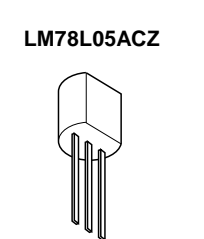
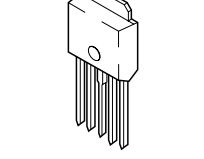


IC

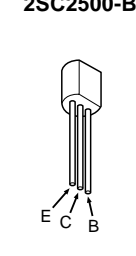
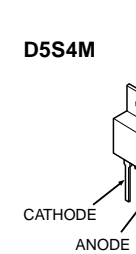
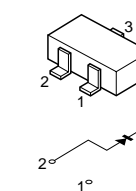
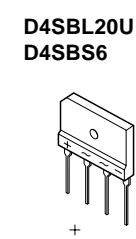
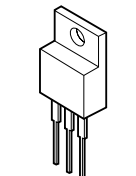
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TDA7481  
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Dual In-line Package  
Pin 6-98



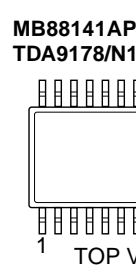
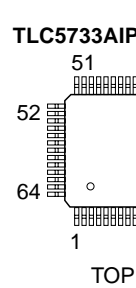
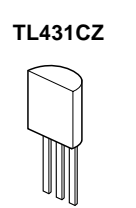
TA7805S



CA0005AD  
CA0007AD  
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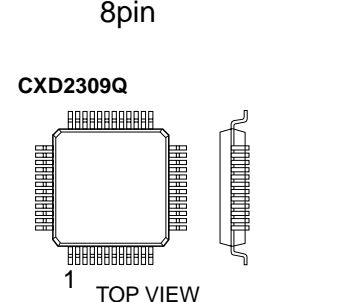
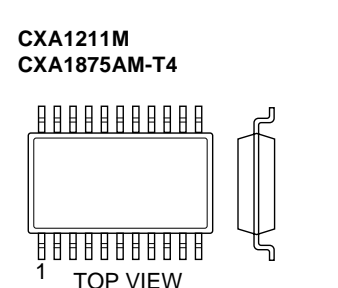
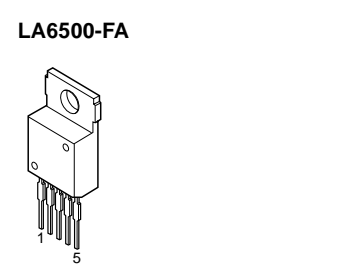
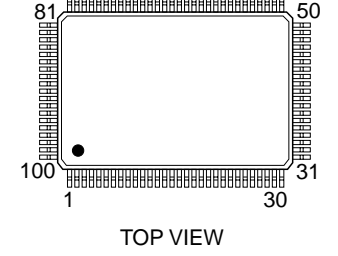


Dual In-line Package  
Pin 6-98



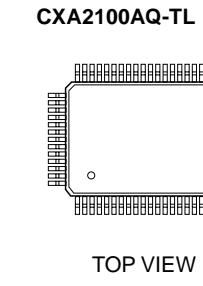
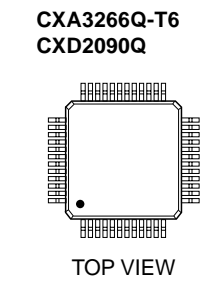
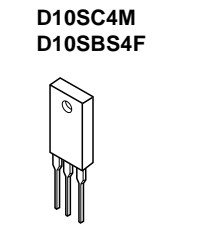
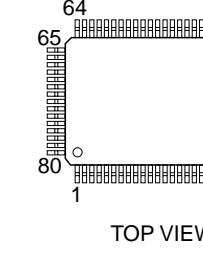
Small Outline L-leaded  
Package  
Pin 8-98

MB94918-AG3MID



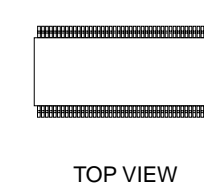
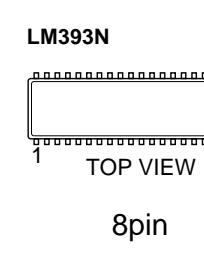
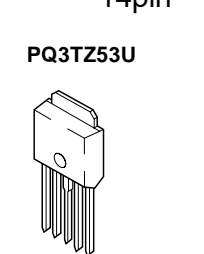
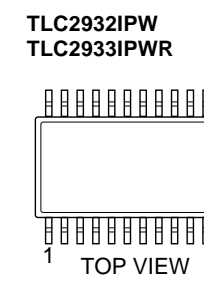
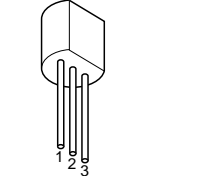
Quad Flat L-leaded  
Package  
Pin 20-996

CXD2303AQ



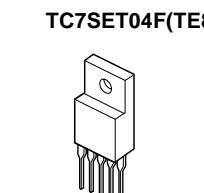
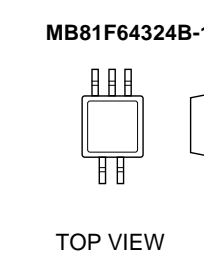
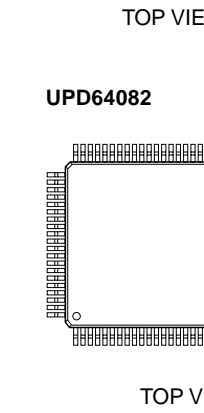
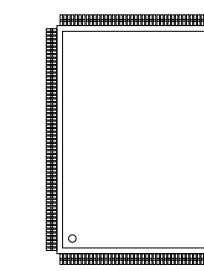
Quad Flat L-leaded  
Package  
Pin 20-996

UPC1093J-1-T



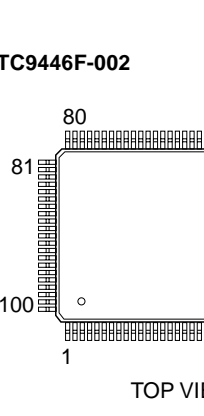
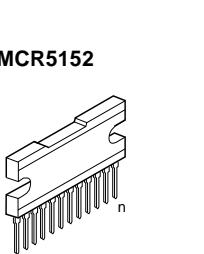
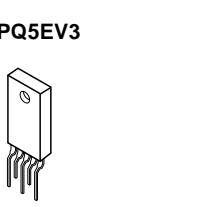
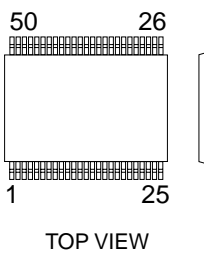
TOP VIEW

CXD9509Q



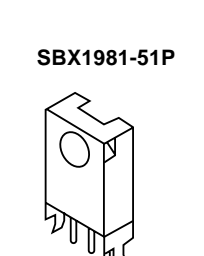
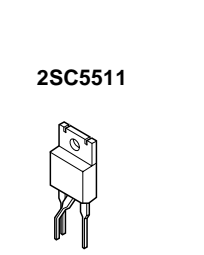
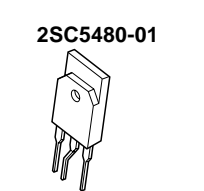
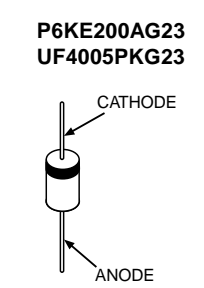
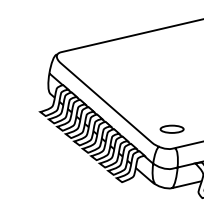
TOP VIEW

PQ1CG2032FZ



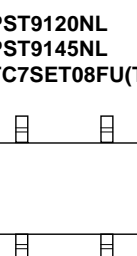
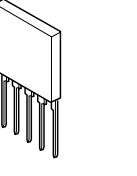
TOP VIEW

CXA2123AQ-T6



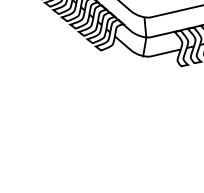
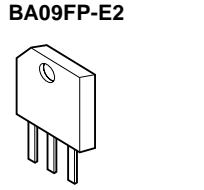
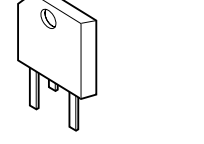
TOP VIEW

DM-58



TOP VIEW

BA05FP-E2  
BA05T



## SECTION 7 EXPLODED VIEWS

**NOTE:**

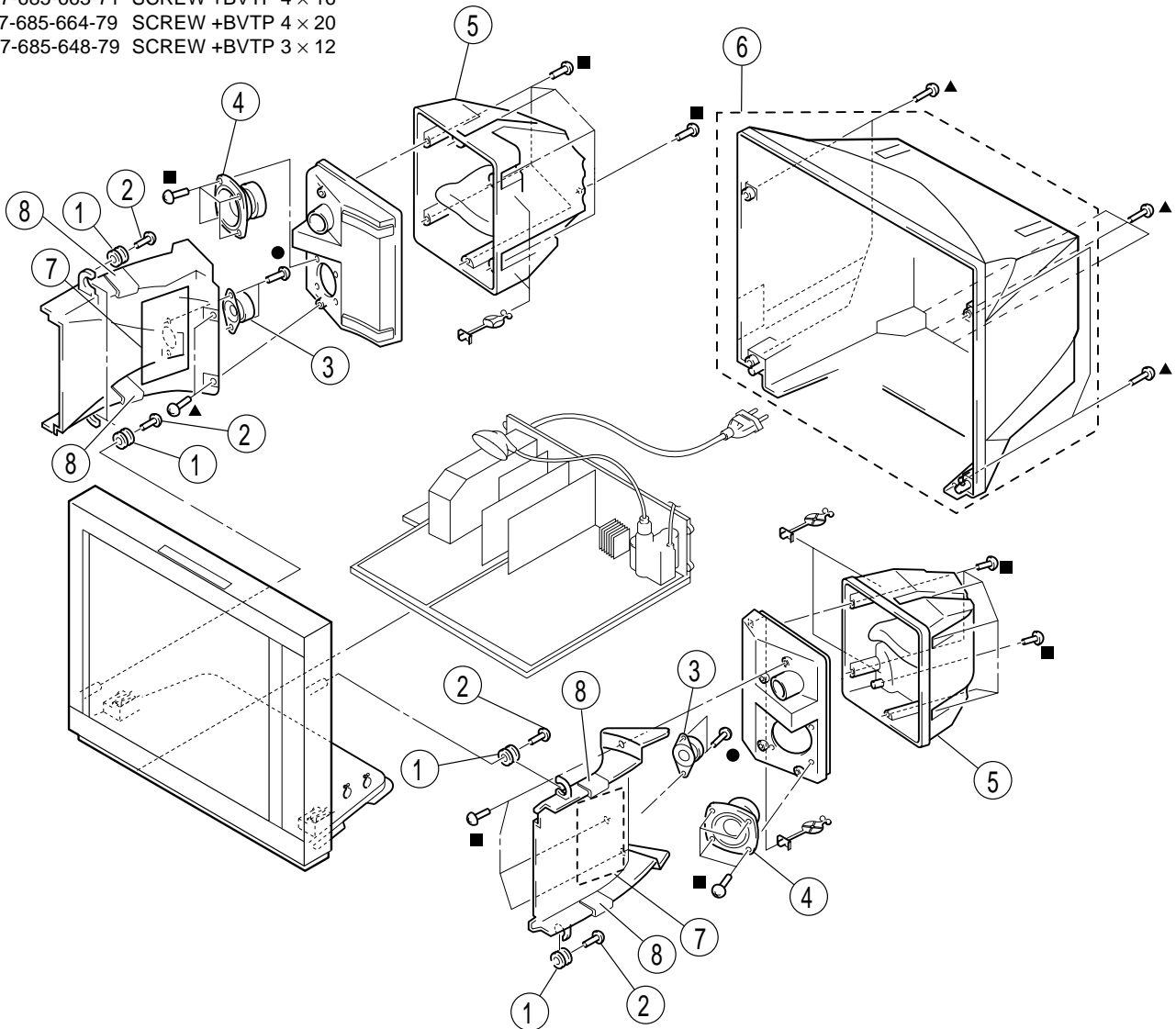
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark  $\triangle$  are critical for safety. Replace only with part number specified.

**CAUTION:** The aluminium frame must be connected to the ground with the ground cable from DH board. Failure to do so, may cause the user to suffer electric shock.

### 7-1. SPEAKER BRACKET

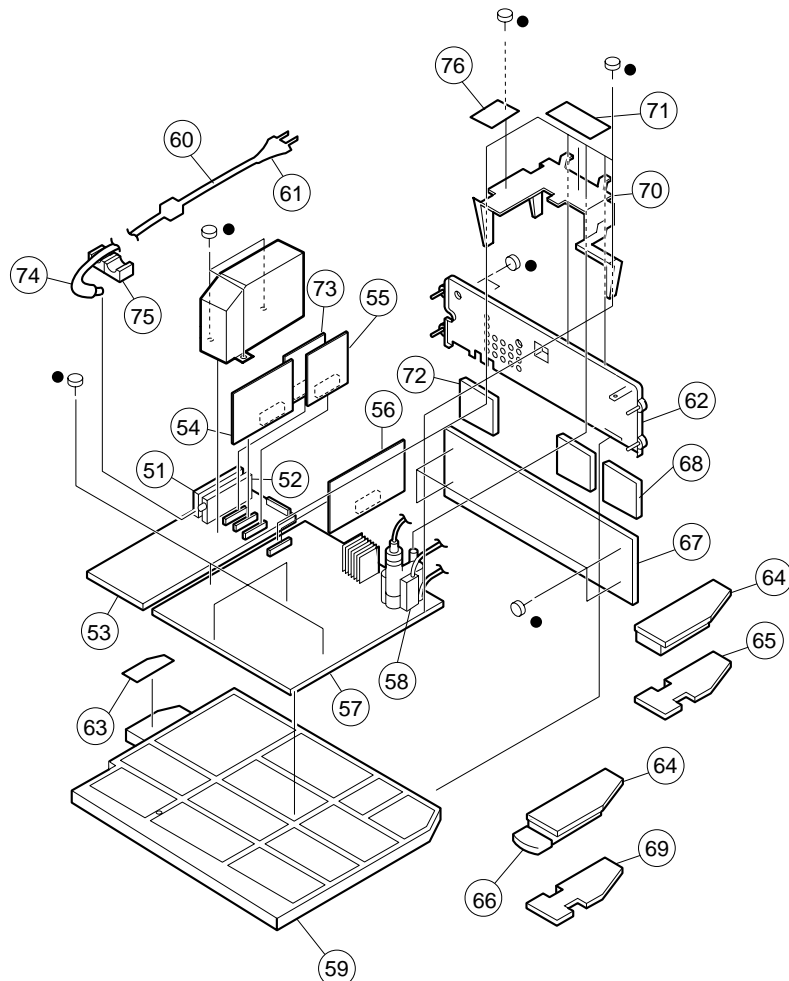
- : 7-685-663-71 SCREW +BVTP 4 × 16
- ▲: 7-685-664-79 SCREW +BVTP 4 × 20
- : 7-685-648-79 SCREW +BVTP 3 × 12



REF. NO.	PART NO.	DESCRIPTION	REMARK
1	4-374-745-11	CUSHION (A)	
2	4-064-929-02	SCREW, TP+TWH 4X25	
3	1-529-562-11	SPEAKER (7X4CM)	
4	1-505-473-11	SPEAKER (12CM)	
5	* 4-071-339-01	DUCT, SPEAKER	
6	▲ X-4036-879-2	COVER ASSY, REAR	
7	* 4-073-084-01	DUCT, CUSHION	
8	* 4-074-512-01	CUSHION (S), DGC	

## 7-2. CHASSIS

●: 7-685-648-79 SCREW +BVTP 3 × 12



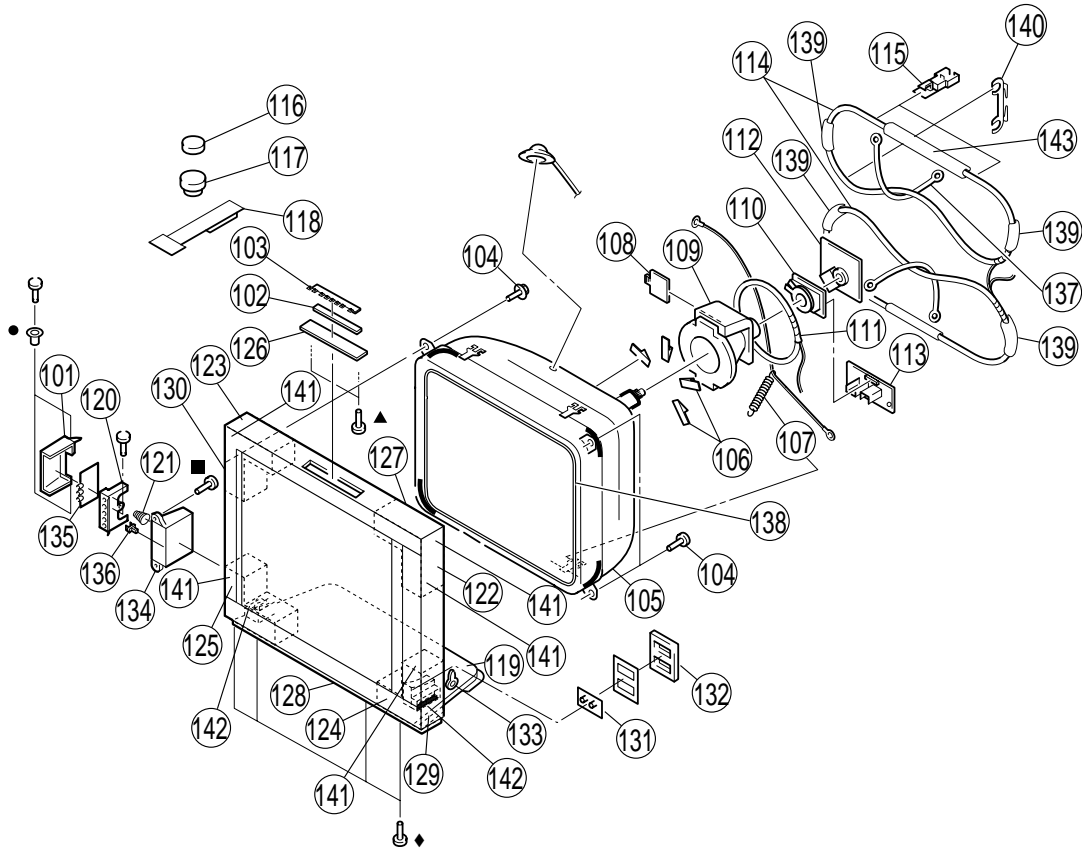
REF. NO.	PART NO.	DESCRIPTION	REMARK
51	8-598-450-10	TUNER, FSS BTF-LG434 (KV-ES34M81)	
	8-598-452-20	TUNER, FSS BTF-WG442 (KV-ES34M91)	
52	8-598-508-10	TUNER, FSS BTF-LG436	
53	* A-1299-162-B	A BOARD COMPLETE (KV-ES34M81)	
	* A-1299-157-B	A BOARD COMPLETE (KV-ES34M91)	
54	* A-1136-054-A	B3 BOARD COMPLETE	
55	* A-1343-778-C	E BOARD MOUNT	
56	* A-1343-777-A	D1 BOARD MOUNT	
57	* A-1346-902-B	D BOARD COMPLETE	
58	△ 1-453-326-11	TRANSFORMER ASSY, FLYBACK (NX-4601/J1J4)	
59	* 4-071-314-01	BRACKET, MAIN	
60	△ 4-022-115-00	HOLDER, AC CORD	
61	△ 1-791-439-11	CORD, POWER (WITH CONNECTOR)	

REF. NO.	PART NO.	DESCRIPTION	REMARK
62	* 4-071-315-01	BRACKET, TERMINAL	
63	* A-1241-402-A	F1 BOARD MOUNT	
64	* 4-071-307-02	HOLDER, F2/H1 BOARD	
65	* A-1372-728-A	H1 BOARD MOUNT	
66	4-071-305-03	BUTTON, POWER	
67	* A-1394-965-B	J BOARD COMPLETE	
68	* A-1136-069-A	BC4 BOARD COMPLETE	
69	* A-1241-403-A	F2 BOARD MOUNT	
70	* 4-071-316-01	SUPPORTER, PWB	
71	* A-1343-850-A	DH BOARD MOUNT	
72	* A-1299-092-A	A1 BOARD COMPLETE	
73	* A-1342-516-A	V BOARD MOUNT	
74	1-790-082-11	CABLE, RF	
75	1-543-827-31	CLAMP, SLEEVE FERRITE	
76	* A-1343-862-A	E2 BOARD MOUNT	



### 7-3. PICTURE TUBE

- : 7-685-648-71 SCREW +BVTP 3 × 12
- : 7-685-663-71 SCREW +BVTP 4 × 16
- ▲: 7-685-661-14 SCREW +BVTP 4 × 12
- ◆: 7-685-661-14 SCREW +BVTP 4 × 20



REF. NO.	PART NO.	DESCRIPTION	REMARK
101	4-071-308-01	DOOR, CONTROL	
102	* A-1372-730-A	H3 BOARD MOUNT	
103	4-071-312-03	BUTTON, TOP SW	
104	4-046-765-12	SCREW, TAPPING 7+CROWN WASHER	
105	▲ 8-735-062-05	PICTURE TUBE (A80LNH10X)	
106	4-046-600-01	SPACER, DY	
107	4-065-852-21	SPRING, EXTENSION	
108	2-163-920-01	PLATE, TLH CORRECTION	
109	▲ 8-451-500-31	DEFLECTION YOKE (Y34RSC2-M3)	
110	8-453-007-31	NA324-M3	
111	1-452-896-11	COIL, NA ROTATION (RT200)	
112	* A-1332-005-A	C BOARD MOUNT	
113	* A-1342-515-A	VM BOARD MOUNT	
114	▲ 1-419-293-11	COIL, DEGAUSSING	
115	4-067-221-02	CLIP, DGC	
116	1-452-032-00	MAGNET,DISC	
117	1-452-094-00	CIRCULAR DISC MAGNET B	
118	4-051-734-21	PIECE B(120), CONV. CORRECT	
119	* 4-071-334-01	COVER, FRONT	
120	* X-4037-280-1	HOLDER ASSY, CONTROL	
121	4-071-323-01	SPRING, CONE	
122	* 4-071-335-01	BRACKET (TR), CRT	

REF. NO.	PART NO.	DESCRIPTION	REMARK
123	* 4-071-336-01	BRACKET (TL), CRT	
124	* 4-071-337-01	BRACKET (BR), CRT	
125	* 4-071-338-01	BRACKET (BL), CRT	
126	* 4-071-311-02	HOLDER, H3	
127	X-4037-420-1	FRAME SUB ASSY, TOP	
128	X-4037-421-1	FRAME SUB ASSY, BOTTOM	
129	X-4037-422-1	FRAME SUB ASSY, RIGHT	
130	X-4037-423-1	FRAME SUB ASSY, LEFT	
131	* 4-071-306-01	LIGHT, GUIDE	
132	* 4-072-950-01	BRACKET, LIGHT GUIDE	
133	4-073-080-01	FASTEN	
134	* 4-071-310-04	BRACKET, SIDE	
135	* A-1372-729-A	H2 BOARD MOUNT	
136	4-047-464-01	CATCHER, PUSH	
137	4-067-455-01	BAND, DGC	
138	▲ 1-419-295-11	COIL, LANDING CORRECTION	
139	* 4-074-513-01	CUSHION (L), DGC	
140	* 4-054-297-01	HOLDER, DGC	
141	4-072-956-01	SCREW SPECIAL (DIA.8) (+TP4X9)	
142	* 4-071-673-01	SHEET, COVER	

## SECTION 8

## ELECTRICAL PARTS LIST

A

## NOTE:

The components identified by shading and mark  $\triangle$  are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

• Items marked " \* " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

• All resistors are in ohms  
• F : nonflammable

## CAPACITORS

• MF :  $\mu$ F, PF :  $\mu$  $\mu$ F

## COILS

• MMH : mH, UH :  $\mu$ H

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
* A-1299-162-B	A BOARD COMPLETE (KV-ES34M81)			C1206	1-126-965-11	ELECT	22UF 20.00% 50V
* A-1299-157-B	A BOARD COMPLETE (KV-ES34M91)	*****		C1207	1-107-725-11	CERAMIC CHIP	0.1UF 10.00% 16V
				C1208	1-126-023-11	ELECT	100UF 20.00% 16V
				C1209	1-164-505-11	CERAMIC CHIP	2.2UF 16V
* 1-555-110-00	CABLE, PIN			C1210	1-125-838-91	CERAMIC CHIP	2.2UF 10% 6.3V
4-382-854-11	SCREW (M3X10), P, SW (+)						
	<CAPACITOR>			C1211	1-163-989-11	CERAMIC CHIP	0.033UF 10.00% 25V
C004	1-163-001-11	CERAMIC CHIP	220PF 10.00% 50V	C1212	1-125-838-91	CERAMIC CHIP	2.2UF 10% 6.3V
C005	1-163-001-11	CERAMIC CHIP	220PF 10.00% 50V	C1213	1-163-989-11	CERAMIC CHIP	0.033UF 10.00% 25V
C006	1-107-725-11	CERAMIC CHIP	0.1UF 10.00% 16V	C1214	1-126-055-11	ELECT	470UF 20.00% 50V
C007	1-126-933-11	ELECT	100UF 20.00% 16V	C1215	1-126-055-11	ELECT	470UF 20.00% 50V
C009	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V				
C010	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	C1216	1-126-943-11	ELECT	2200UF 20.00% 25V
C012	1-163-227-11	CERAMIC CHIP	10PF 0.50PF 50V	C1217	1-126-943-11	ELECT	2200UF 20.00% 25V
C013	1-163-021-91	CERAMIC CHIP	0.01UF 10.00% 50V	C1219	1-126-961-11	ELECT	2.2UF 20.00% 50V
C014	1-126-967-11	ELECT	47UF 20.00% 50V	C1220	1-126-961-11	ELECT	2.2UF 20.00% 50V
C015	1-163-227-11	CERAMIC CHIP	10PF 0.50PF 50V	C1221	1-126-933-11	ELECT	100UF 20.00% 16V
C016	1-102-852-91	CERAMIC	47PF 5.00% 50V				
C017	1-102-525-11	CERAMIC	68PF 5.00% 50V	C1222	1-125-838-91	CERAMIC CHIP	2.2UF 10% 6.3V
C018	1-163-021-91	CERAMIC CHIP	0.01UF 10.00% 50V	C1223	1-125-838-91	CERAMIC CHIP	2.2UF 10% 6.3V
C019	1-163-021-91	CERAMIC CHIP	0.01UF 10.00% 50V	C1224	1-125-838-91	CERAMIC CHIP	2.2UF 10% 6.3V
C020	1-163-021-91	CERAMIC CHIP	0.01UF 10.00% 50V	C1225	1-125-838-91	CERAMIC CHIP	2.2UF 10% 6.3V
C021	1-163-021-91	CERAMIC CHIP	0.01UF 10.00% 50V	C1241	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
C024	1-163-227-11	CERAMIC CHIP	10PF 0.50PF 50V				
C028	1-163-037-11	CERAMIC CHIP	0.022UF 10.00% 50V	C1242	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
C030	1-126-960-11	ELECT	1UF 20.00% 50V	C1243	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
C031	1-107-725-11	CERAMIC CHIP	0.1UF 10.00% 16V	C1244	1-110-617-51	ELECT	2200UF 20.00% 50V
C032	1-163-021-91	CERAMIC CHIP	0.01UF 10.00% 50V	C1245	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
C033	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V	C1246	1-107-823-11	CERAMIC CHIP	0.47UF 10.00% 16V
C034	1-163-259-91	CERAMIC CHIP	220PF 5.00% 50V				
C103	1-107-725-11	CERAMIC CHIP	0.1UF 10.00% 16V	C1247	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
C104	1-126-933-11	ELECT	100UF 20.00% 16V	C1248	1-110-617-51	ELECT	2200UF 20.00% 50V
C107	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V	C1249	1-163-009-11	CERAMIC CHIP	0.001UF 10.00% 50V
C108	1-126-933-11	ELECT	100UF 20.00% 16V	C1251	1-163-017-00	CERAMIC CHIP	0.0047UF 10.00% 50V
C109	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V	C1252	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V
C110	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V				
C111	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V	C1253	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
C112	1-126-933-11	ELECT	100UF 20.00% 16V	C1255	1-163-009-11	CERAMIC CHIP	0.001UF 10.00% 50V
C113	1-126-967-11	ELECT	47UF 20.00% 50V	C1256	1-137-194-81	MYLAR	0.47UF 5.00% 50V
C114	1-126-967-11	ELECT	47UF 20.00% 50V	C1258	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
C301	1-126-767-11	ELECT	1000UF 20.00% 16V	C1259	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
C326	1-126-964-11	ELECT	10UF 20.00% 50V				
C1201	1-107-725-11	CERAMIC CHIP	0.1UF 10.00% 16V	C1260	1-107-823-11	CERAMIC CHIP	0.47UF 10.00% 16V
C1202	1-107-725-11	CERAMIC CHIP	0.1UF 10.00% 16V	C1262	1-163-009-11	CERAMIC CHIP	0.001UF 10.00% 50V
C1203	1-164-505-11	CERAMIC CHIP	2.2UF 16V	C1263	1-163-017-00	CERAMIC CHIP	0.0047UF 10.00% 50V
C1204	1-164-690-91	CERAMIC CHIP	0.0022UF 5.00% 50V	C1264	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V
C1205	1-164-690-91	CERAMIC CHIP	0.0022UF 5.00% 50V	C1265	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
				C1267	1-163-009-11	CERAMIC CHIP	0.001UF 10.00% 50V
				C1268	1-137-194-81	MYLAR	0.47UF 5.00% 50V
				C1270	1-163-007-11	CERAMIC CHIP	680PF 10.00% 50V
				C1271	1-163-007-11	CERAMIC CHIP	680PF 10.00% 50V
				C1272	1-126-941-11	ELECT	470UF 20.00% 25V
				C1273	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
				C1274	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V
				C1275	1-163-007-11	CERAMIC CHIP	680PF 10.00% 50V



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C1276	1-163-007-11	CERAMIC CHIP	680PF 10.00% 50V	CN1116	1-695-915-11	TAB (CONTACT)	
C1277	1-164-690-91	CERAMIC CHIP	0.0022UF 5.00% 50V	CN1118	1-793-493-11	CONNECTOR, BOARD TO BOARD 20P	
C1279	1-164-690-91	CERAMIC CHIP	0.0022UF 5.00% 50V	CN1138*	1-564-507-11	PLUG, CONNECTOR 4P	
C1281	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V	CN1140	1-793-494-11	CONNECTOR, BOARD TO BOARD 40P	
C1282	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V	CN1160*	1-564-513-11	PLUG, CONNECTOR 10P	
C1283	1-164-690-91	CERAMIC CHIP	0.0022UF 5.00% 50V	CN1162	1-900-903-64	CONNECTOR ASSY 20P	
C1284	1-164-690-91	CERAMIC CHIP	0.0022UF 5.00% 50V	CN1180	1-793-495-11	CONNECTOR, BOARD TO BOARD 50P	
C1285	1-126-933-11	ELECT	100UF 20.00% 16V	CN1190*	1-564-510-11	PLUG, CONNECTOR 7P	
C1286	1-126-933-11	ELECT	100UF 20.00% 16V	CN1193*	1-564-513-11	PLUG, CONNECTOR 10P	
C1287	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V	CN1195*	1-564-506-11	PLUG, CONNECTOR 3P	
C1288	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V	CN1196*	1-508-797-00	PIN, CONNECTOR 4P	
C1289	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V				
C1290	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V			<COMPOSITION CIRCUIT BLOCK>	
C1291	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V	CP1300	1-251-658-31	SPLITTER RF	
C1292	1-163-251-11	CERAMIC CHIP	100PF 5.00% 50V				
C1297	1-136-177-00	MYLAR	1UF 5.00% 50V			<DIODE>	
C1298	1-136-177-00	MYLAR	1UF 5.00% 50V	D001	8-719-073-01	DIODE MA111-TX	
C1301	1-126-933-11	ELECT	100UF 20.00% 16V	D002	8-719-073-01	DIODE MA111-TX	
C1302	1-115-339-11	CERAMIC CHIP	0.1UF 10.00% 50V	D003	8-719-073-01	DIODE MA111-TX	
C2200	1-126-964-11	ELECT	10UF 20.00% 50V	D004	8-719-073-01	DIODE MA111-TX	
C2201	1-126-964-11	ELECT	10UF 20.00% 50V	D005	8-719-073-01	DIODE MA111-TX	
C2202	1-126-964-11	ELECT	10UF 20.00% 50V	D006	8-719-073-01	DIODE MA111-TX	
C2203	1-126-963-11	ELECT	4.7UF 20.00% 50V	D007	8-719-158-18	DIODE RD5.6SB3-T1	
C2204	1-125-838-91	CERAMIC CHIP	2.2UF 10% 6.3V	D013	8-719-158-18	DIODE RD5.6SB3-T1	
C2205	1-125-838-91	CERAMIC CHIP	2.2UF 10% 6.3V	D014	8-719-073-01	DIODE MA111-TX	
C2206	1-126-964-11	ELECT	10UF 20.00% 50V	D100	8-719-073-01	DIODE MA111-TX	
C2207	1-216-065-91	RES-CHIP	4.7K 5% 1/10W	D300	8-719-073-01	DIODE MA111-TX	
C2208	1-216-065-91	RES-CHIP	4.7K 5% 1/10W	D301	8-719-073-01	DIODE MA111-TX	
C2209	1-126-968-11	ELECT	100UF 20.00% 50V	D302	8-719-073-01	DIODE MA111-TX	
C2600	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	D317	8-719-073-01	DIODE MA111-TX	
C2601	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V	D1205	8-719-158-35	DIODE RD9.1SB-T1	
C2602	1-126-933-11	ELECT	100UF 20.00% 16V	D1208	8-719-073-01	DIODE MA111-TX	
C2603	1-126-933-11	ELECT	100UF 20.00% 16V	D1209	8-719-073-01	DIODE MA111-TX	
C2605	1-126-925-11	ELECT	470UF 20.00% 10V	D2200	8-719-158-35	DIODE RD9.1SB-T1	
C2606	1-164-344-11	CERAMIC CHIP	0.068UF 10.00% 25V	D2201	8-719-158-35	DIODE RD9.1SB-T1	
C2608	1-126-916-11	ELECT	1000UF 20.00% 6.3V	D2600	8-719-500-70	DIODE D5S4M	
C2609	1-126-935-11	ELECT	470UF 20.00% 6.3V				
C2610	1-164-004-11	CERAMIC CHIP	0.1UF 10.00% 25V			<FERRITE BEAD>	
C2611	1-126-934-11	ELECT	220UF 20.00% 16V	FB001	1-414-233-22	INDUCTOR CHIP 0UH	
C2612	1-104-665-11	ELECT	100UF 20.00% 25V	FB002	1-414-233-22	INDUCTOR CHIP 0UH	
C2613	1-104-665-11	ELECT	100UF 20.00% 25V	FB003	1-414-233-22	INDUCTOR CHIP 0UH	
C2614	1-126-925-11	ELECT	470UF 20.00% 10V	FB004	1-414-233-22	INDUCTOR CHIP 0UH	
C3330	1-107-725-11	CERAMIC CHIP	0.1UF 10.00% 16V	FB005	1-414-233-22	INDUCTOR CHIP 0UH	
C3331	1-126-933-11	ELECT	100UF 20.00% 16V	FB006	1-414-233-22	INDUCTOR CHIP 0UH	
C3336	1-126-933-11	ELECT	100UF 20.00% 16V	FB007	1-414-233-22	INDUCTOR CHIP 0UH	
C3338	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V	FB008	1-414-233-22	INDUCTOR CHIP 0UH	
C3350	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V	FB1205	1-410-397-21	FERRITE 1.1UH	
C3351	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V	FB1206	1-410-397-21	FERRITE 1.1UH	
C3352	1-163-005-11	CERAMIC CHIP	470PF 10.00% 50V	FB1207	1-410-397-21	FERRITE 1.1UH	
C3353	1-126-933-11	ELECT	100UF 20.00% 16V	FB1208	1-410-397-21	FERRITE 1.1UH	
C3354	1-126-967-11	ELECT	47UF 20.00% 50V	FB1300	1-216-295-91	SHORT 0	
C3355	1-126-967-11	ELECT	47UF 20.00% 50V				
		<CONNECTOR>				<FILTER>	
CN1100*	1-560-218-00	PIN, CONNECTOR 7P		FL001	1-236-071-11	ENCAPSULATED COMPONENT	
CN1108	1-695-299-11	CONNECTOR, BOARD TO BOARD 50P					

A

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
		<IC>				<TRANSISTOR>	
IC001	8-752-910-27	IC CXP750096-013Q		Q001	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
IC002	8-759-042-02	IC S-80743AL-A7-T1		Q002	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
IC003	8-759-527-76	IC M24C08-MN6T		Q003	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
IC004	8-759-527-75	IC M24C04-MN6T		Q004	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
IC100	8-759-042-02	IC S-80743AL-A7-T1		Q005	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
IC1201	8-759-273-12	IC TDA7315D013TR		Q006	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
IC1203	8-759-553-45	IC TDA7481		Q007	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
IC1204	8-759-553-45	IC TDA7481		Q101	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
IC1205	8-759-100-96	IC UPC4558G2-T2		Q301	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
IC2200	8-759-745-64	IC NJM4560M-TE2		Q313	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
IC2600	8-759-394-36	IC BA09T		Q1205	1-801-806-11	TRANSISTOR DTC144EKA-T146	
IC2601	8-759-450-47	IC BA05T		Q1206	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
IC2603	8-759-640-19	IC PQ1CG2032FZ		Q1207	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
IC2604	8-759-644-37	IC PQ5EV3		Q1209	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
		<CHIP CONDUCTOR>		Q1210	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
JR001	1-216-295-91	SHORT	0	Q1211	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
JR002	1-216-295-91	SHORT	0	Q2200	1-801-806-11	TRANSISTOR DTC144EKA-T146	
JR107	1-216-295-91	SHORT	0	Q2201	1-801-806-11	TRANSISTOR DTC144EKA-T146	
JR109	1-216-295-91	SHORT	0 (KV-ES34M81 only)	Q3300	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
JR1301	1-216-295-91	SHORT	0			<RESISTOR>	
JR2601	1-216-295-91	SHORT	0	R001	1-216-033-00	RES-CHIP 220 5%	1/10W
		<COIL>		R002	1-216-033-00	RES-CHIP 220 5%	1/10W
L001	1-414-856-11	INDUCTOR	10UH	R003	1-216-049-91	RES-CHIP 1K 5%	1/10W
L002	1-414-856-11	INDUCTOR	10UH	R004	1-216-295-91	SHORT 0	
L003	1-414-751-11	INDUCTOR	1UH	R005	1-216-295-91	SHORT 0	
L005	1-414-856-11	INDUCTOR	10UH	R006	1-216-033-00	RES-CHIP 220 5%	1/10W
L101	1-414-856-11	INDUCTOR	10UH	R008	1-216-065-91	RES-CHIP 4.7K 5%	1/10W
L102	1-414-856-11	INDUCTOR	10UH	R010	1-216-061-00	RES-CHIP 3.3K 5%	1/10W
L103	1-414-856-11	INDUCTOR	10UH	R011	1-216-065-91	RES-CHIP 4.7K 5%	1/10W
L104	1-414-856-11	INDUCTOR	10UH	R012	1-216-061-00	RES-CHIP 3.3K 5%	1/10W
L105	1-414-856-11	INDUCTOR	10UH	R013	1-216-065-91	RES-CHIP 4.7K 5%	1/10W
L1201	1-414-187-11	INDUCTOR	47UH	R014	1-216-025-91	RES-CHIP 100 5%	1/10W
L1202	1-416-857-11	INDUCTOR	65UH	R015	1-216-025-91	RES-CHIP 100 5%	1/10W
L1203	1-416-857-11	INDUCTOR	65UH	R016	1-216-057-00	RES-CHIP 2.2K 5%	1/10W
L1204	1-416-966-11	INDUCTOR	0UH	R017	1-216-049-91	RES-CHIP 1K 5%	1/10W
L1205	1-416-966-11	INDUCTOR	0UH	R018	1-216-045-00	RES-CHIP 680 5%	1/10W
L1300	1-414-856-11	INDUCTOR	10UH	R019	1-216-049-91	RES-CHIP 1K 5%	1/10W
L2600	1-419-249-11	INDUCTOR	15UH	R020	1-216-057-00	RES-CHIP 2.2K 5%	1/10W
L2601	1-419-249-11	INDUCTOR	15UH	R021	1-216-295-91	SHORT 0	
L2602	1-412-525-31	INDUCTOR	10UH	R022	1-216-033-00	RES-CHIP 220 5%	1/10W
L2603	1-412-525-31	INDUCTOR	10UH	R023	1-216-025-91	RES-CHIP 100 5%	1/10W
L3302	1-414-856-11	INDUCTOR	10UH	R024	1-216-063-91	RES-CHIP 3.9K 5%	1/10W
L3303	1-414-856-11	INDUCTOR	10UH	R025	1-216-033-00	RES-CHIP 220 5%	1/10W
L3304	1-414-856-11	INDUCTOR	10UH	R026	1-216-033-00	RES-CHIP 220 5%	1/10W
L3305	1-414-856-11	INDUCTOR	10UH	R027	1-216-049-91	RES-CHIP 1K 5%	1/10W
L3306	1-414-856-11	INDUCTOR	10UH	R028	1-216-049-91	RES-CHIP 1K 5%	1/10W
		<IC LINK>		R029	1-216-049-91	RES-CHIP 1K 5%	1/10W
PS1201	1-532-686-21	LINK, IC 2.7A/150V		R031	1-216-033-00	RES-CHIP 220 5%	1/10W
PS1202	1-532-686-21	LINK, IC 2.7A/150V		R032	1-216-049-91	RES-CHIP 1K 5%	1/10W
PS1203	1-532-686-21	LINK, IC 2.7A/150V		R033	1-216-033-00	RES-CHIP 220 5%	1/10W
PS1204	1-532-686-21	LINK, IC 2.7A/150V		R035	1-216-057-00	RES-CHIP 2.2K 5%	1/10W
				R036	1-216-033-00	RES-CHIP 220 5%	1/10W
				R037	1-216-033-00	RES-CHIP 220 5%	1/10W
				R038	1-216-045-00	RES-CHIP 680 5%	1/10W
				R039	1-216-025-91	RES-CHIP 100 5%	1/10W



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R040	1-216-033-00	RES-CHIP	220 5% 1/10W	R101	1-216-025-91	RES-CHIP	100 5% 1/10W
R041	1-216-025-91	RES-CHIP	100 5% 1/10W	R102	1-216-025-91	RES-CHIP	100 5% 1/10W
R042	1-216-295-91	SHORT	0	R105	1-216-295-91	SHORT	0
R043	1-216-025-91	RES-CHIP	100 5% 1/10W	R109	1-216-041-00	RES-CHIP	470 5% 1/10W
R044	1-216-065-91	RES-CHIP	4.7K 5% 1/10W	R110	1-216-043-91	RES-CHIP	560 5% 1/10W
R045	1-216-065-91	RES-CHIP	4.7K 5% 1/10W	R111	1-216-025-91	RES-CHIP	100 5% 1/10W
R046	1-216-033-00	RES-CHIP	220 5% 1/10W	R112	1-216-025-91	RES-CHIP	100 5% 1/10W
R047	1-216-033-00	RES-CHIP	220 5% 1/10W	R116	1-216-025-91	RES-CHIP	100 5% 1/10W
R048	1-216-073-00	RES-CHIP	10K 5% 1/10W	R117	1-216-025-91	RES-CHIP	100 5% 1/10W
R051	1-216-049-91	RES-CHIP	1K 5% 1/10W	R118	1-216-025-91	RES-CHIP	100 5% 1/10W
R052	1-216-049-91	RES-CHIP	1K 5% 1/10W	R301	1-216-113-00	RES-CHIP	470K 5% 1/10W
R053	1-216-049-91	RES-CHIP	1K 5% 1/10W	R302	1-216-089-91	RES-CHIP	47K 5% 1/10W
R054	1-216-033-00	RES-CHIP	220 5% 1/10W	R303	1-216-089-91	RES-CHIP	47K 5% 1/10W
R055	1-216-295-91	SHORT	0	R1201	1-216-033-00	RES-CHIP	220 5% 1/10W
R056	1-216-295-91	SHORT	0	R1202	1-216-033-00	RES-CHIP	220 5% 1/10W
R057	1-216-295-91	SHORT	0	R1203	1-216-079-00	RES-CHIP	18K 5% 1/10W
R058	1-216-295-91	SHORT	0	R1204	1-216-079-00	RES-CHIP	18K 5% 1/10W
R059	1-216-033-00	RES-CHIP	220 5% 1/10W	R1205	1-216-089-91	RES-CHIP	47K 5% 1/10W
R060	1-216-033-00	RES-CHIP	220 5% 1/10W	R1206	1-216-089-91	RES-CHIP	47K 5% 1/10W
R061	1-216-025-91	RES-CHIP	100 5% 1/10W	R1236	1-208-808-11	METAL CHIP	12K 0.5% 1/10W
R062	1-216-049-91	RES-CHIP	1K 5% 1/10W	R1237	1-216-085-00	RES-CHIP	33K 5% 1/10W
R063	1-216-025-91	RES-CHIP	100 5% 1/10W	R1238	1-216-081-00	RES-CHIP	22K 5% 1/10W
R064	1-216-025-91	RES-CHIP	100 5% 1/10W	R1239	1-216-067-00	RES-CHIP	5.6K 5% 1/10W
R065	1-216-045-00	RES-CHIP	680 5% 1/10W	R1240	1-216-085-00	RES-CHIP	33K 5% 1/10W
R066	1-216-049-91	RES-CHIP	1K 5% 1/10W	R1241	1-216-073-00	RES-CHIP	10K 5% 1/10W
R067	1-216-073-00	RES-CHIP	10K 5% 1/10W	R1242	1-216-073-00	RES-CHIP	10K 5% 1/10W
R068	1-216-073-00	RES-CHIP	10K 5% 1/10W	R1244	1-216-073-00	RES-CHIP	10K 5% 1/10W
R069	1-216-065-91	RES-CHIP	4.7K 5% 1/10W	R1246	1-208-808-11	METAL CHIP	12K 0.5% 1/10W
R070	1-216-033-00	RES-CHIP	220 5% 1/10W	R1247	1-216-085-00	RES-CHIP	33K 5% 1/10W
R071	1-216-025-91	RES-CHIP	100 5% 1/10W	R1248	1-216-075-00	RES-CHIP	12K 5% 1/10W
R072	1-216-025-91	RES-CHIP	100 5% 1/10W	R1249	1-216-025-91	RES-CHIP	100 5% 1/10W
R073	1-216-055-00	RES-CHIP	1.8K 5% 1/10W	R1250	1-216-063-91	RES-CHIP	3.9K 5% 1/10W
R074	1-216-055-00	RES-CHIP	1.8K 5% 1/10W	R1252	1-216-073-00	RES-CHIP	10K 5% 1/10W
R075	1-216-055-00	RES-CHIP	1.8K 5% 1/10W	R1253	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
R076	1-216-295-91	SHORT	0	R1254	1-216-075-00	RES-CHIP	12K 5% 1/10W
R077	1-216-025-91	RES-CHIP	100 5% 1/10W	R1255	1-216-075-00	RES-CHIP	12K 5% 1/10W
R078	1-216-295-91	SHORT	0	R1256	1-216-073-00	RES-CHIP	10K 5% 1/10W
R079	1-216-025-91	RES-CHIP	100 5% 1/10W	R1257	1-216-025-91	RES-CHIP	100 5% 1/10W
R080	1-216-063-91	RES-CHIP	3.9K 5% 1/10W	R1258	1-216-075-00	RES-CHIP	12K 5% 1/10W
R081	1-216-025-91	RES-CHIP	100 5% 1/10W	R1259	1-216-073-00	RES-CHIP	10K 5% 1/10W
R082	1-216-041-00	RES-CHIP	470 5% 1/10W	R1260	1-216-029-00	RES-CHIP	150 5% 1/10W
R083	1-216-049-91	RES-CHIP	1K 5% 1/10W	R1261	1-216-029-00	RES-CHIP	150 5% 1/10W
R084	1-216-049-91	RES-CHIP	1K 5% 1/10W	R1264	1-216-041-00	RES-CHIP	470 5% 1/10W
R085	1-208-798-11	METAL CHIP	4.7K 0.5% 1/10W	R1265	1-216-041-00	RES-CHIP	470 5% 1/10W
R086	1-216-073-00	RES-CHIP	10K 5% 1/10W	R1266	1-216-049-91	RES-CHIP	1K 5% 1/10W
R087	1-216-033-00	RES-CHIP	220 5% 1/10W	R1267	1-216-077-91	RES-CHIP	15K 5% 1/10W
R088	1-216-049-91	RES-CHIP	1K 5% 1/10W	R1269	1-216-025-91	RES-CHIP	100 5% 1/10W
R089	1-216-049-91	RES-CHIP	1K 5% 1/10W	R1270	1-216-089-91	RES-CHIP	47K 5% 1/10W
R090	1-216-295-91	SHORT	0	R1271	1-216-049-91	RES-CHIP	1K 5% 1/10W
R091	1-216-295-91	SHORT	0	R1272	1-216-049-91	RES-CHIP	1K 5% 1/10W
R092	1-216-033-00	RES-CHIP	220 5% 1/10W	R1273	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
R093	1-216-073-00	RES-CHIP	10K 5% 1/10W	R1275	1-216-081-00	RES-CHIP	22K 5% 1/10W
R094	1-216-073-00	RES-CHIP	10K 5% 1/10W	R1276	1-216-081-00	RES-CHIP	22K 5% 1/10W
R095	1-216-049-91	RES-CHIP	1K 5% 1/10W	R1277	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
R096	1-216-049-91	RES-CHIP	1K 5% 1/10W	R1278	1-125-838-91	CERAMIC CHIP	2.2UF 10% 6.3V
R097	1-216-025-91	RES-CHIP	100 5% 1/10W	R1279	1-125-838-91	CERAMIC CHIP	2.2UF 10% 6.3V
R098	1-216-025-91	RES-CHIP	100 5% 1/10W	R1280	1-216-029-00	RES-CHIP	150 5% 1/10W
R099	1-216-025-91	RES-CHIP	100 5% 1/10W				

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R1281	1-216-029-00	RES-CHIP	150 5%				1/10W
R1283	1-216-295-91	SHORT	0	C8108	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
R1284	1-216-295-91	SHORT	0	C8109	1-163-021-91	CERAMIC CHIP	0.01MF 10% 50V
R1286	1-216-073-00	RES-CHIP	10K 5%	C8110	1-163-021-91	CERAMIC CHIP	0.01MF 10% 50V
R2200	1-216-021-00	RES-CHIP	68 5%	C8111	1-163-021-91	CERAMIC CHIP	0.01MF 10% 50V
				C8112	1-163-001-11	CERAMIC CHIP	220PF 10% 50V
R2201	1-216-065-91	RES-CHIP	4.7K 5%				
R2202	1-216-065-91	RES-CHIP	4.7K 5%	C8116	1-164-161-11	CERAMIC CHIP	0.0022MF 10% 50V
R2203	1-216-021-00	RES-CHIP	68 5%	C8117	1-126-382-11	ELECT	100MF 20% 16V
R2204	1-216-073-00	RES-CHIP	10K 5%	C8118	1-127-532-11	ELECT	47MF 20% 6.3V
R2205	1-216-097-91	RES-CHIP	100K 5%	C8119	1-126-795-11	ELECT	10MF 20% 25V
				C8120	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
R2206	1-216-117-00	RES-CHIP	680K 5%				
R2207	1-216-063-91	RES-CHIP	3.9K 5%	C8121	1-125-838-91	CERAMIC CHIP	2.2MF 10% 6.3V
R2208	1-216-065-91	RES-CHIP	4.7K 5%	C8122	1-125-838-91	CERAMIC CHIP	2.2MF 10% 6.3V
R2209	1-216-117-00	RES-CHIP	680K 5%	C8123	1-127-532-11	ELECT	47MF 20% 6.3V
R2210	1-216-089-91	RES-CHIP	47K 5%	C8124	1-163-021-91	CERAMIC CHIP	0.01MF 10% 50V
				C8125	1-163-021-91	CERAMIC CHIP	0.01MF 10% 50V
R2211	1-216-097-91	RES-CHIP	100K 5%				
R2212	1-216-073-00	RES-CHIP	10K 5%	C8126	1-163-021-91	CERAMIC CHIP	0.01MF 10% 50V
R2213	1-216-089-91	RES-CHIP	47K 5%	C8127	1-163-235-11	CERAMIC CHIP	22PF 5% 50V
R2214	1-216-089-91	RES-CHIP	47K 5%	C8128	1-163-235-11	CERAMIC CHIP	22PF 5% 50V
R2215	1-216-089-91	RES-CHIP	47K 5%	C8129	1-163-021-91	CERAMIC CHIP	0.01MF 10% 50V
				C8130	1-126-382-11	ELECT	100MF 20% 16V
R2600	1-216-065-91	RES-CHIP	4.7K 5%				
R2601	1-216-655-11	METAL CHIP	1.5K 0.5%	C8131	1-126-382-11	ELECT	100MF 20% 16V
R2602	1-208-781-11	METAL CHIP	910 0.5%	C8132	1-125-838-91	CERAMIC CHIP	2.2MF 10% 6.3V
R2603	1-208-790-11	METAL CHIP	2.2K 0.5%	C8133	1-163-021-91	CERAMIC CHIP	0.01MF 10% 50V
R2604	1-208-790-11	METAL CHIP	2.2K 0.5%	C8134	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
				C8135	1-126-382-11	ELECT	100MF 20% 16V
R3300	1-216-043-91	RES-CHIP	560 5%				
R3320	1-216-073-00	RES-CHIP	10K 5%	C8136	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
R3323	1-216-025-91	RES-CHIP	100 5%	C8137	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
R3334	1-216-025-91	RES-CHIP	100 5%	C8138	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
R3362	1-216-025-91	RES-CHIP	100 5%	C8139	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
				C8140	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
R3374	1-216-295-91	SHORT	0				
		<VARIABLE RESISTOR>		C8141	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
				C8142	1-163-235-11	CERAMIC CHIP	22PF 5% 50V
RV3300	1-238-597-11	RES, ADJ, CARBON 1K		C8143	1-163-021-91	CERAMIC CHIP	0.01MF 10% 50V
				C8144	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
		<TUNER>		C8145	1-163-233-11	CERAMIC CHIP	18PF 5% 50V
TU101	8-598-450-10	TUNER, FSS BTF-LG434 (KV-ES34M81)					
TU101	8-598-452-20	TUNER, FSS BTF-WG442 (KV-ES34M91)		C8146	1-107-823-11	CERAMIC CHIP	0.47MF 10% 16V
TU3301	8-598-508-10	TUNER, FSS BTF-LG436		C8147	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
				C8150	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
		<CRYSTAL>		C8155	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
				C8161	1-126-382-11	ELECT	100MF 20% 16V
X001	1-567-928-11	VIBLATOR, CERAMIC					
				C8162	1-164-505-11	CERAMIC CHIP	2.2MF 16V
				C8163	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
				C8166	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
				C8167	1-163-021-91	CERAMIC CHIP	0.01MF 10% 50V
				C8168	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
				C8197	1-163-021-91	CERAMIC CHIP	0.01MF 10% 50V
				C8198	1-163-021-91	CERAMIC CHIP	0.01MF 10% 50V
				C8199	1-164-004-11	CERAMIC CHIP	0.1MF 10% 25V
				C8200	1-216-295-91	SHORT	0
				C8201	1-216-295-91	SHORT	0
				C8202	1-107-823-11	CERAMIC CHIP	0.47MF 10% 16V
				C8203	1-163-021-91	CERAMIC CHIP	0.01MF 10% 50V
				C8204	1-107-823-11	CERAMIC CHIP	0.47MF 10% 16V
				C8205	1-163-253-11	CERAMIC CHIP	120PF 5% 50V
				C8206	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
				C8207	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
				C8208	1-163-251-11	CERAMIC CHIP	100PF 5% 50V

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\* A-1299-092-A A1 BOARD COMPLETE  
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&lt;CAPACITOR&gt;



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C8209	1-163-251-11	CERAMIC CHIP 100PF	5% 50V			<COIL>	
C8210	1-163-251-11	CERAMIC CHIP 100PF	5% 50V				
C8211	1-115-340-11	CERAMIC CHIP 0.22MF	10% 25V	L8100	1-412-026-11	INDUCTOR CHIP 1UH	
C8212	1-125-838-91	CERAMIC CHIP 2.2MF	10% 6.3V	L8101	1-412-026-11	INDUCTOR CHIP 1UH	
C8213	1-125-838-91	CERAMIC CHIP 2.2MF	10% 6.3V	L8102	1-412-026-11	INDUCTOR CHIP 1UH	
C8218	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	L8103	1-412-026-11	INDUCTOR CHIP 1UH	
		<CONNECTOR>		L8104	1-412-026-11	INDUCTOR CHIP 1UH	
CN8100	1-793-867-11	PIN, CONNECTOR (PC BORAD) 10P		L8105	1-412-026-11	INDUCTOR CHIP 1UH	
CN8101	1-793-867-11	PIN, CONNECTOR (PC BORAD) 10P				<RESISTOR>	
		<FERRITE BEAD>		R8101	1-216-295-91	SHORT	0
FB8100	1-216-295-91	SHORT	0	R8102	1-216-061-00	RES,CHIP	3.3K 5% 1/10W
FB8101	1-216-295-91	SHORT	0	R8103	1-216-061-00	RES,CHIP	3.3K 5% 1/10W
FB8102	1-216-295-91	SHORT	0	R8106	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
FB8103	1-216-295-91	SHORT	0	R8107	1-216-057-00	RES,CHIP	2.2K 5% 1/10W
FB8104	1-414-598-11	INDUCTOR CHIP 0UH		R8120	1-216-049-91	RES,CHIP	1K 5% 1/10W
FB8105	1-216-295-91	SHORT	0	R8121	1-216-025-91	RES,CHIP	100 5% 1/10W
FB8106	1-414-598-11	INDUCTOR CHIP 0UH		R8122	1-216-025-91	RES,CHIP	100 5% 1/10W
FB8108	1-414-598-11	INDUCTOR CHIP 0UH		R8123	1-216-009-91	RES,CHIP	22 5% 1/10W
FB8109	1-414-598-11	INDUCTOR CHIP 0UH		R8124	1-216-009-91	RES,CHIP	22 5% 1/10W
FB8110	1-414-598-11	INDUCTOR CHIP 0UH		R8125	1-216-009-91	RES,CHIP	22 5% 1/10W
FB8111	1-414-598-11	INDUCTOR CHIP 0UH		R8126	1-216-009-91	RES,CHIP	22 5% 1/10W
FB8112	1-414-598-11	INDUCTOR CHIP 0UH		R8127	1-216-025-91	RES,CHIP	100 5% 1/10W
FB8113	1-414-598-11	INDUCTOR CHIP 0UH		R8128	1-216-025-91	RES,CHIP	100 5% 1/10W
FB8114	1-414-598-11	INDUCTOR CHIP 0UH		R8129	1-216-009-91	RES,CHIP	22 5% 1/10W
FB8115	1-414-598-11	INDUCTOR CHIP 0UH		R8131	1-216-295-91	SHORT	0
FB8116	1-414-598-11	INDUCTOR CHIP 0UH		R8133	1-216-129-00	RES,CHIP	2.2M 5% 1/10W
FB8117	1-414-598-11	INDUCTOR CHIP 0UH		R8134	1-216-295-91	SHORT	0
FB8118	1-414-598-11	INDUCTOR CHIP 0UH		R8135	1-216-295-91	SHORT	0
FB8119	1-414-598-11	INDUCTOR CHIP 0UH		R8137	1-216-295-91	SHORT	0
FB8120	1-414-598-11	INDUCTOR CHIP 0UH		R8138	1-216-049-91	RES,CHIP	1K 5% 1/10W
FB8121	1-414-598-11	INDUCTOR CHIP 0UH		R8139	1-216-037-00	RES,CHIP	330 5% 1/10W
		<FILTER>		R8140	1-216-049-91	RES,CHIP	1K 5% 1/10W
FL8100	1-234-177-21	FILTER, CHIP EMI		R8141	1-216-295-91	SHORT	0
FL8101	1-234-177-21	FILTER, CHIP EMI		R8143	1-216-295-91	SHORT	0
FL8102	1-234-177-21	FILTER, CHIP EMI		R8144	1-216-025-91	RES,CHIP	100 5% 1/10W
		<IC>		R8145	1-216-033-00	RES,CHIP	220 5% 1/10W
IC8102	8-759-576-72	IC LF50CDT-TR		R8146	1-216-033-00	RES,CHIP	220 5% 1/10W
IC8103	8-759-579-68	IC AK4524		R8147	1-216-295-91	SHORT	0
IC8104	8-759-542-87	IC S-80827ANUP-EDQ-T2		R8148	1-216-295-91	SHORT	0
IC8105	8-759-651-20	IC TC9446F-002		R8149	1-216-037-00	RES,CHIP	330 5% 1/10W
IC8106	8-759-242-70	IC TC7WU04F		R8155	1-216-295-91	SHORT	0
IC8107	8-759-459-69	IC S-80743AN-D7		R8157	1-216-037-00	RES,CHIP	330 5% 1/10W
		<CHIP CONDUCTOR>		R8158	1-216-037-00	RES,CHIP	330 5% 1/10W
JR8102	1-216-295-91	SHORT	0	R8161	1-216-025-91	RES,CHIP	100 5% 1/10W
JR8103	1-216-295-91	SHORT	0	R8168	1-216-025-91	RES,CHIP	100 5% 1/10W
				R8169	1-216-097-91	RES,CHIP	100K 5% 1/10W
				R8170	1-216-121-91	RES,CHIP	1M 5% 1/10W
				R8171	1-216-025-91	RES,CHIP	100 5% 1/10W
				R8172	1-216-025-91	RES,CHIP	100 5% 1/10W
				R8173	1-216-025-91	RES,CHIP	100 5% 1/10W
				R8200	1-216-073-00	RES,CHIP	10K 5% 1/10W
				R8201	1-216-025-91	RES,CHIP	100 5% 1/10W
				R8202	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
				R8203	1-208-782-11	METAL CHIP	1K 0.50% 1/10W

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R8204	1-216-073-00	RES,CHIP 10K	5% 1/10W	C503	1-124-779-00	ELECT CHIP 10MF	20% 16V
R8205	1-208-782-11	METAL CHIP 1K	0.50% 1/10W	C505	1-124-779-00	ELECT CHIP 10MF	20% 16V
R8206	1-216-049-91	RES,CHIP 1K	5% 1/10W	C507	1-124-779-00	ELECT CHIP 10MF	20% 16V
R8207	1-216-091-00	RES,CHIP 56K	5% 1/10W	C509	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
		<CRYSTAL>		C510	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
X8102	1-781-041-11	VIBRATOR, CRYSTAL		C511	1-163-038-91	CERAMIC CHIP 0.1MF	25V
				C512	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
				C514	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
				C515	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
				C516	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
*****							
	* A-1136-054-A	B3 BOARD COMPLETE		C517	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
		*****		C518	1-126-204-11	ELECT CHIP 47MF	20% 16V
		<CAPACITOR>		C519	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C302	1-117-136-11	ELECT CHIP 10MF	20% 6.3V	C520	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C305	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C521	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C306	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C522	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C309	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C523	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C310	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C524	1-124-779-00	ELECT CHIP 10MF	20% 16V
C312	1-163-275-11	CERAMIC CHIP 0.001MF	5% 50V	C525	1-126-394-11	ELECT CHIP 10MF	20% 16V
C313	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C526	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C314	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V	C527	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C315	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C528	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C316	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C530	1-216-295-91	SHORT 0	
C317	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C532	1-216-295-91	SHORT 0	
C318	1-124-779-00	ELECT CHIP 10MF	20% 16V	C534	1-216-295-91	SHORT 0	
C319	1-126-394-11	ELECT CHIP 10MF	20% 16V	C535	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C320	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C536	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C321	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C537	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C323	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C538	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C324	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C539	1-126-204-11	ELECT CHIP 47MF	20% 16V
C325	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C540	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C327	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C542	1-126-204-11	ELECT CHIP 47MF	20% 16V
C330	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C543	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C331	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C545	1-126-396-11	ELECT CHIP 47MF	20% 16V
C332	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C546	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C333	1-216-295-91	SHORT 0		C548	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C337	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C549	1-126-204-11	ELECT CHIP 47MF	20% 16V
C338	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C550	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C339	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C551	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C340	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C554	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C341	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C555	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C346	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C556	1-126-392-11	ELECT CHIP 100MF	20% 6.3V
C347	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C557	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C349	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C559	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C350	1-126-396-11	ELECT CHIP 47MF	20% 16V	C560	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C353	1-126-204-11	ELECT CHIP 47MF	20% 16V	C601	1-126-394-11	ELECT CHIP 10MF	20% 16V
C354	1-117-136-11	ELECT CHIP 10MF	20% 6.3V	C602	1-126-394-11	ELECT CHIP 10MF	20% 16V
C355	1-117-136-11	ELECT CHIP 10MF	20% 6.3V	C603	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C361	1-124-779-00	ELECT CHIP 10MF	20% 16V	C604	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C362	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C605	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C363	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V	C606	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C501	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C607	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C502	1-124-779-00	ELECT CHIP 10MF	20% 16V	C608	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
				C609	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
				C610	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
				C611	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
				C612	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V





REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C613	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C829	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C614	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C834	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C615	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C835	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C616	1-126-396-11	ELECT CHIP 47MF	20% 16V	C837	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C617	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C839	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C618	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C840	1-126-206-11	ELECT CHIP 100MF	20% 6.3V
C619	1-163-038-91	CERAMIC CHIP 0.1MF	25V	C841	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C620	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C842	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C621	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C843	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C622	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C844	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C623	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C848	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C624	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C849	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C625	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C850	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C626	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C851	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C627	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C852	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C628	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C853	1-164-182-11	CERAMIC CHIP 0.0033MF	10% 50V
C629	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C854	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C630	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C901	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C631	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C902	1-163-038-91	CERAMIC CHIP 0.1MF	25V
C632	1-126-206-11	ELECT CHIP 100MF	20% 6.3V	C903	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C633	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C904	1-124-779-00	ELECT CHIP 10MF	20% 16V
C634	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C905	1-109-982-11	CERAMIC CHIP 1MF	10% 10V
C635	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C906	1-124-779-00	ELECT CHIP 10MF	20% 16V
C636	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C907	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C637	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C908	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C638	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C909	1-126-396-11	ELECT CHIP 47MF	20% 16V
C639	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C910	1-163-009-11	CERAMIC CHIP 0.001MF	10% 50V
C640	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C913	1-163-031-11	CERAMIC CHIP 0.01MF	50V
C642	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C914	1-126-394-11	ELECT CHIP 10MF	20% 16V
C643	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	C950	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C644	1-126-398-11	ELECT CHIP 4.7MF	20% 35V	C954	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V
C645	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V			<CONNECTOR>	
C801	1-124-779-00	ELECT CHIP 10MF	20% 16V	CN502	1-695-302-11	CONNECTOR, BOARD TO BOARD 50P	
C802	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V			<DIODE>	
C803	1-124-779-00	ELECT CHIP 10MF	20% 16V	D301	8-719-041-97	DIODE MA113-(TX)	
C804	1-124-779-00	ELECT CHIP 10MF	20% 16V	D302	8-719-041-97	DIODE MA113-(TX)	
C806	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	D501	8-719-422-12	DIODE MA8039	
C807	1-124-779-00	ELECT CHIP 10MF	20% 16V	D601	8-719-073-01	DIODE MA111-(K8).S0	
C808	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V			<FERRITE BEAD>	
C809	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	FB501	1-414-813-11	FERRITE 0UH	
C810	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	FB502	1-414-813-11	FERRITE 0UH	
C811	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	FB503	1-414-813-11	FERRITE 0UH	
C812	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	FB504	1-414-813-11	FERRITE 0UH	
C813	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	FB601	1-414-553-11	FERRITE 0UH	
C814	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	FB801	1-414-553-11	FERRITE 0UH	
C815	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V	FB802	1-414-553-11	FERRITE 0UH	
C816	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V			<FILTER>	
C817	1-163-229-11	CERAMIC CHIP 12PF	5% 50V	FL304	1-234-177-21	FILTER, CHIP EMI	
C818	1-163-229-11	CERAMIC CHIP 12PF	5% 50V	FL305	1-234-177-21	FILTER, CHIP EMI	
C819	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V				
C820	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V				
C821	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V				
C822	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V				
C823	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V				
C824	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V				
C825	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V				
C826	1-164-489-11	CERAMIC CHIP 0.22MF	10% 16V				
C827	1-163-021-91	CERAMIC CHIP 0.01MF	10% 50V				

**B3**

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
FL306	1-239-558-11	FILTER, CHIP EMI				<COIL>	
FL501	1-233-877-11	FILTER, LOW PASS		L302	1-412-029-11	INDUCTOR CHIP 10UH	
FL502	1-233-504-21	FILTER, LOW PASS		L303	1-412-029-11	INDUCTOR CHIP 10UH	
FL503	1-233-504-21	FILTER, LOW PASS		L501	1-412-026-11	INDUCTOR CHIP 1UH	
FL504	1-234-177-21	FILTER, CHIP EMI		L502	1-412-026-11	INDUCTOR CHIP 1UH	
FL505	1-234-177-21	FILTER, CHIP EMI		L503	1-412-026-11	INDUCTOR CHIP 1UH	
FL506	1-234-177-21	FILTER, CHIP EMI		L504	1-412-026-11	INDUCTOR CHIP 1UH	
FL508	1-234-177-21	FILTER, CHIP EMI		L505	1-412-029-11	INDUCTOR CHIP 10UH	
FL509	1-234-177-21	FILTER, CHIP EMI		L506	1-412-026-11	INDUCTOR CHIP 1UH	
FL510	1-234-177-21	FILTER, CHIP EMI		L508	1-412-029-11	INDUCTOR CHIP 10UH	
FL511	1-234-177-21	FILTER, CHIP EMI		L509	1-412-029-11	INDUCTOR CHIP 10UH	
FL512	1-234-177-21	FILTER, CHIP EMI		L511	1-412-026-11	INDUCTOR CHIP 1UH	
FL601	1-234-177-21	FILTER, CHIP EMI		L512	1-412-026-11	INDUCTOR CHIP 1UH	
FL602	1-234-177-21	FILTER, CHIP EMI		L604	1-412-029-11	INDUCTOR CHIP 10UH	
FL603	1-234-177-21	FILTER, CHIP EMI		L605	1-412-029-11	INDUCTOR CHIP 10UH	
FL606	1-239-560-11	FILTER, CHIP EMI				<TRANSISTOR>	
FL801	1-234-177-21	FILTER, CHIP EMI		Q501	8-729-216-22	TRANSISTOR 2SA1162-G	
FL802	1-234-177-21	FILTER, CHIP EMI		Q502	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL803	1-234-177-21	FILTER, CHIP EMI		Q503	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL804	1-234-177-21	FILTER, CHIP EMI		Q510	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL805	1-234-177-21	FILTER, CHIP EMI		Q511	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL806	1-234-177-21	FILTER, CHIP EMI		Q512	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL807	1-234-177-21	FILTER, CHIP EMI		Q513	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL808	1-234-177-21	FILTER, CHIP EMI		Q514	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL810	1-234-177-21	FILTER, CHIP EMI		Q515	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL901	1-233-878-11	FILTER, LOW PASS		Q516	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL902	1-233-876-11	FILTER, LOW PASS		Q517	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL903	1-233-876-11	FILTER, LOW PASS		Q518	8-729-216-22	TRANSISTOR 2SA1162-G	
FL904	1-234-177-21	FILTER, CHIP EMI		Q519	1-801-806-11	TRANSISTOR DTC144EKA-T146	
FL905	1-234-177-21	FILTER, CHIP EMI		Q520	1-801-806-11	TRANSISTOR DTC144EKA-T146	
FL906	1-234-177-21	FILTER, CHIP EMI		Q521	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
FL907	1-234-177-21	FILTER, CHIP EMI		Q522	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		<IC>		Q523	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC302	8-752-388-98	IC CXD2303AQ		Q524	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC303	8-752-088-27	IC CXA3266Q-T6		Q601	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC309	8-759-640-16	IC TC7SET04F(TE85R)		Q602	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
IC311	8-759-708-05	IC NJM78L05A		Q901	8-729-216-22	TRANSISTOR 2SA1162-G	
IC501	8-759-447-90	IC TLC5733AIPM		Q902	8-729-216-22	TRANSISTOR 2SA1162-G	
IC504	8-759-430-32	IC TLC2933IPWR		Q903	8-729-216-22	TRANSISTOR 2SA1162-G	
IC505	8-759-640-16	IC TC7SET04F(TE85R)		Q904	8-729-028-28	TRANSISTOR 2SK2036(TE85L)	
IC506	8-759-640-16	IC TC7SET04F(TE85R)		Q905	8-729-028-28	TRANSISTOR 2SK2036(TE85L)	
IC601	8-752-398-47	IC CXD2090Q		Q906	1-801-806-11	TRANSISTOR DTC144EKA-T146	
IC602	8-759-567-37	IC MB81F161622B-80FN		Q907	8-729-216-22	TRANSISTOR 2SA1162-G	
IC603 $\Delta$	8-759-268-00	IC TLC2932IPW-E20		Q908	8-729-216-22	TRANSISTOR 2SA1162-G	
IC604	8-752-072-94	IC CXA1875AM-T4		Q909	8-729-216-22	TRANSISTOR 2SA1162-G	
IC801	8-759-592-40	IC CXD9509Q				<RESISTOR>	
IC802	8-759-595-53	IC MB81F643242B-10FN		R302	1-216-013-00	RES,CHIP 33	5% 1/10W
IC803	8-759-460-29	IC PST9120NL		R303	1-216-667-11	METAL CHIP 4.7K	0.50% 1/10W
IC901	8-752-367-59	IC CXD2309Q		R305	1-216-049-91	RES,CHIP 1K	5% 1/10W
IC902	8-759-648-21	IC MB94918-APF-G-121-BND		R306	1-216-658-11	METAL CHIP 2K	0.50% 1/10W
IC903	8-759-527-75	IC M24C04-MN6T		R309	1-216-009-91	RES,CHIP 22	5% 1/10W
IC904	8-759-349-11	IC PST9145NL		R310	1-216-009-91	RES,CHIP 22	5% 1/10W
				R311	1-216-009-91	RES,CHIP 22	5% 1/10W
				R313	1-216-009-91	RES,CHIP 22	5% 1/10W



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R316	1-216-009-91	RES,CHIP	22 5% 1/10W	R557	1-216-049-91	RES,CHIP	1K 5% 1/10W
R318	1-216-009-91	RES,CHIP	22 5% 1/10W	R558	1-216-025-91	RES,CHIP	100 5% 1/10W
R319	1-216-049-91	RES,CHIP	1K 5% 1/10W	R559	1-216-077-91	RES,CHIP	15K 5% 1/10W
R321	1-216-009-91	RES,CHIP	22 5% 1/10W	R560	1-216-619-11	METAL CHIP	47 0.50% 1/10W
R323	1-216-009-91	RES,CHIP	22 5% 1/10W	R561	1-216-043-91	RES,CHIP	560 5% 1/10W
R324	1-216-009-91	RES,CHIP	22 5% 1/10W	R562	1-216-043-91	RES,CHIP	560 5% 1/10W
R325	1-216-073-00	RES,CHIP	10K 5% 1/10W	R563	1-216-043-91	RES,CHIP	560 5% 1/10W
R328	1-216-025-91	RES,CHIP	100 5% 1/10W	R571	1-216-295-91	SHORT	0
R333	1-216-295-91	SHORT	0	R572	1-216-619-11	METAL CHIP	47 0.50% 1/10W
R335	1-216-013-00	RES,CHIP	33 5% 1/10W	R573	1-216-679-11	METAL CHIP	15K 0.50% 1/10W
R336	1-216-013-00	RES,CHIP	33 5% 1/10W	R574	1-216-651-11	METAL CHIP	1K 0.50% 1/10W
R337	1-216-097-91	RES,CHIP	100K 5% 1/10W	R575	1-216-625-11	METAL CHIP	82 0.50% 1/10W
R338	1-216-295-91	SHORT	0	R576	1-216-625-11	METAL CHIP	82 0.50% 1/10W
R339	1-216-295-91	SHORT	0	R577	1-216-619-11	METAL CHIP	47 0.50% 1/10W
R343	1-216-295-91	SHORT	0	R578	1-216-619-11	METAL CHIP	47 0.50% 1/10W
R347	1-216-295-91	SHORT	0	R579	1-216-077-91	RES,CHIP	15K 5% 1/10W
R350	1-216-295-91	SHORT	0	R580	1-216-295-91	SHORT	0
R501	1-216-025-91	RES,CHIP	100 5% 1/10W	R582	1-216-041-00	RES,CHIP	470 5% 1/10W
R502	1-216-025-91	RES,CHIP	100 5% 1/10W	R584	1-216-041-00	RES,CHIP	470 5% 1/10W
R503	1-216-295-91	SHORT	0	R586	1-216-049-91	RES,CHIP	1K 5% 1/10W
R504	1-216-295-91	SHORT	0	R587	1-216-049-91	RES,CHIP	1K 5% 1/10W
R505	1-216-295-91	SHORT	0	R589	1-216-049-91	RES,CHIP	1K 5% 1/10W
R506	1-216-025-91	RES,CHIP	100 5% 1/10W	R590	1-216-049-91	RES,CHIP	1K 5% 1/10W
R507	1-216-025-91	RES,CHIP	100 5% 1/10W	R591	1-216-049-91	RES,CHIP	1K 5% 1/10W
R508	1-216-025-91	RES,CHIP	100 5% 1/10W	R592	1-216-049-91	RES,CHIP	1K 5% 1/10W
R509	1-216-025-91	RES,CHIP	100 5% 1/10W	R594	1-216-041-00	RES,CHIP	470 5% 1/10W
R510	1-216-043-91	RES,CHIP	560 5% 1/10W	R596	1-216-049-91	RES,CHIP	1K 5% 1/10W
R511	1-216-043-91	RES,CHIP	560 5% 1/10W	R597	1-216-073-00	RES,CHIP	10K 5% 1/10W
R512	1-216-043-91	RES,CHIP	560 5% 1/10W	R598	1-216-025-91	RES,CHIP	100 5% 1/10W
R513	1-216-043-91	RES,CHIP	560 5% 1/10W	R600	1-216-066-00	RES,CHIP	5.1K 5% 1/10W
R514	1-216-043-91	RES,CHIP	560 5% 1/10W	R601	1-216-073-00	RES,CHIP	10K 5% 1/10W
R515	1-216-043-91	RES,CHIP	560 5% 1/10W	R602	1-216-073-00	RES,CHIP	10K 5% 1/10W
R516	1-216-049-91	RES,CHIP	1K 5% 1/10W	R603	1-216-073-00	RES,CHIP	10K 5% 1/10W
R517	1-216-049-91	RES,CHIP	1K 5% 1/10W	R604	1-216-033-00	RES,CHIP	220 5% 1/10W
R518	1-216-295-91	SHORT	0	R605	1-216-295-91	SHORT	0
R520	1-216-645-11	METAL CHIP	560 0.50% 1/10W	R608	1-216-295-91	SHORT	0
R521	1-216-295-91	SHORT	0	R609	1-216-073-00	RES,CHIP	10K 5% 1/10W
R523	1-216-645-11	METAL CHIP	560 0.50% 1/10W	R610	1-216-033-00	RES,CHIP	220 5% 1/10W
R524	1-216-295-91	SHORT	0	R611	1-216-073-00	RES,CHIP	10K 5% 1/10W
R526	1-216-645-11	METAL CHIP	560 0.50% 1/10W	R612	1-216-073-00	RES,CHIP	10K 5% 1/10W
R528	1-216-037-00	RES,CHIP	330 5% 1/10W	R613	1-216-065-91	RES,CHIP	4.7K 5% 1/10W
R529	1-216-669-11	METAL CHIP	5.6K 0.50% 1/10W	R615	1-216-089-91	RES,CHIP	47K 5% 1/10W
R530	1-216-669-11	METAL CHIP	5.6K 0.50% 1/10W	R616	1-216-073-00	RES,CHIP	10K 5% 1/10W
R531	1-216-031-00	RES,CHIP	180 5% 1/10W	R617	1-216-295-91	SHORT	0
R532	1-216-669-11	METAL CHIP	5.6K 0.50% 1/10W	R619	1-216-073-00	RES,CHIP	10K 5% 1/10W
R533	1-216-031-00	RES,CHIP	180 5% 1/10W	R621	1-216-295-91	SHORT	0
R536	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R622	1-216-295-91	SHORT	0
R537	1-216-659-11	METAL CHIP	2.2K 0.50% 1/10W	R623	1-216-295-91	SHORT	0
R540	1-216-049-91	RES,CHIP	1K 5% 1/10W	R624	1-216-295-91	SHORT	0
R548	1-216-619-11	METAL CHIP	47 0.50% 1/10W	R625	1-216-295-91	SHORT	0
R549	1-216-619-11	METAL CHIP	47 0.50% 1/10W	R626	1-216-073-00	RES,CHIP	10K 5% 1/10W
R550	1-216-625-11	METAL CHIP	82 0.50% 1/10W	R628	1-216-295-91	SHORT	0
R551	1-216-625-11	METAL CHIP	82 0.50% 1/10W	R629	1-216-073-00	RES,CHIP	10K 5% 1/10W
R552	1-216-619-11	METAL CHIP	47 0.50% 1/10W	R631	1-216-295-91	SHORT	0
R553	1-216-295-91	SHORT	0	R634	1-216-295-91	SHORT	0
R554	1-216-619-11	METAL CHIP	47 0.50% 1/10W	R635	1-216-295-91	SHORT	0
R555	1-216-077-91	RES,CHIP	15K 5% 1/10W	R638	1-216-295-91	SHORT	0
				R639	1-216-017-91	RES,CHIP	47 5% 1/10W

B3

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R640	1-216-009-91	RES,CHIP	22 5% 1/10W	R816	1-216-073-00	RES,CHIP	10K 5% 1/10W
R642	1-216-295-91	SHORT	0	R817	1-216-613-11	METAL CHIP	27 0.50% 1/10W
R643	1-216-295-91	SHORT	0	R818	1-216-295-91	SHORT	0
R645	1-216-295-91	SHORT	0	R820	1-216-651-11	METAL CHIP	1K 0.50% 1/10W
R651	1-216-295-91	SHORT	0	R822	1-216-295-91	SHORT	0
R653	1-216-025-91	RES,CHIP	100 5% 1/10W	R823	1-216-073-00	RES,CHIP	10K 5% 1/10W
R654	1-216-033-00	RES,CHIP	220 5% 1/10W	R824	1-216-073-00	RES,CHIP	10K 5% 1/10W
R655	1-216-295-91	SHORT	0	R825	1-216-621-11	METAL CHIP	56 0.50% 1/10W
R657	1-216-009-91	RES,CHIP	22 5% 1/10W	R826	1-216-641-11	METAL CHIP	390 0.50% 1/10W
R658	1-216-049-91	RES,CHIP	1K 5% 1/10W	R827	1-216-607-11	METAL CHIP	15 0.50% 1/10W
R659	1-216-025-91	RES,CHIP	100 5% 1/10W	R834	1-216-629-11	METAL CHIP	120 0.50% 1/10W
R660	1-216-025-91	RES,CHIP	100 5% 1/10W	R835	1-216-623-11	METAL CHIP	68 0.50% 1/10W
R661	1-216-025-91	RES,CHIP	100 5% 1/10W	R836	1-216-611-11	METAL CHIP	22 0.50% 1/10W
R664	1-216-009-91	RES,CHIP	22 5% 1/10W	R840	1-216-295-91	SHORT	0
R665	1-216-035-00	RES,CHIP	270 5% 1/10W	R844	1-216-009-91	RES,CHIP	22 5% 1/10W
R666	1-216-646-11	METAL CHIP	620 0.50% 1/10W	R845	1-216-009-91	RES,CHIP	22 5% 1/10W
R667	1-216-663-11	METAL CHIP	3.3K 0.50% 1/10W	R846	1-216-009-91	RES,CHIP	22 5% 1/10W
R668	1-216-009-91	RES,CHIP	22 5% 1/10W	R847	1-216-009-91	RES,CHIP	22 5% 1/10W
R670	1-216-295-91	SHORT	0	R848	1-216-009-91	RES,CHIP	22 5% 1/10W
R671	1-216-073-00	RES,CHIP	10K 5% 1/10W	R849	1-216-009-91	RES,CHIP	22 5% 1/10W
R672	1-216-073-00	RES,CHIP	10K 5% 1/10W	R850	1-216-009-91	RES,CHIP	22 5% 1/10W
R673	1-216-073-00	RES,CHIP	10K 5% 1/10W	R851	1-216-009-91	RES,CHIP	22 5% 1/10W
R674	1-216-073-00	RES,CHIP	10K 5% 1/10W	R852	1-216-009-91	RES,CHIP	22 5% 1/10W
R675	1-216-073-00	RES,CHIP	10K 5% 1/10W	R853	1-216-009-91	RES,CHIP	22 5% 1/10W
R676	1-216-073-00	RES,CHIP	10K 5% 1/10W	R854	1-216-009-91	RES,CHIP	22 5% 1/10W
R677	1-216-073-00	RES,CHIP	10K 5% 1/10W	R855	1-216-009-91	RES,CHIP	22 5% 1/10W
R678	1-216-073-00	RES,CHIP	10K 5% 1/10W	R856	1-216-009-91	RES,CHIP	22 5% 1/10W
R679	1-216-073-00	RES,CHIP	10K 5% 1/10W	R857	1-216-009-91	RES,CHIP	22 5% 1/10W
R680	1-216-073-00	RES,CHIP	10K 5% 1/10W	R858	1-216-009-91	RES,CHIP	22 5% 1/10W
R681	1-216-073-00	RES,CHIP	10K 5% 1/10W	R859	1-216-009-91	RES,CHIP	22 5% 1/10W
R682	1-216-073-00	RES,CHIP	10K 5% 1/10W	R860	1-216-009-91	RES,CHIP	22 5% 1/10W
R683	1-216-073-00	RES,CHIP	10K 5% 1/10W	R861	1-216-009-91	RES,CHIP	22 5% 1/10W
R684	1-216-073-00	RES,CHIP	10K 5% 1/10W	R862	1-216-009-91	RES,CHIP	22 5% 1/10W
R685	1-216-073-00	RES,CHIP	10K 5% 1/10W	R863	1-216-009-91	RES,CHIP	22 5% 1/10W
R686	1-216-073-00	RES,CHIP	10K 5% 1/10W	R864	1-216-009-91	RES,CHIP	22 5% 1/10W
R687	1-216-295-91	SHORT	0	R865	1-216-009-91	RES,CHIP	22 5% 1/10W
R688	1-216-061-00	RES,CHIP	3.3K 5% 1/10W	R866	1-216-009-91	RES,CHIP	22 5% 1/10W
R689	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R867	1-216-009-91	RES,CHIP	22 5% 1/10W
R690	1-216-295-91	SHORT	0	R868	1-216-009-91	RES,CHIP	22 5% 1/10W
R691	1-216-061-00	RES,CHIP	3.3K 5% 1/10W	R869	1-216-009-91	RES,CHIP	22 5% 1/10W
R692	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R870	1-216-009-91	RES,CHIP	22 5% 1/10W
R693	1-216-009-91	RES,CHIP	22 5% 1/10W	R871	1-216-009-91	RES,CHIP	22 5% 1/10W
R694	1-216-295-91	SHORT	0	R872	1-216-009-91	RES,CHIP	22 5% 1/10W
R695	1-216-047-91	RES,CHIP	820 5% 1/10W	R873	1-216-009-91	RES,CHIP	22 5% 1/10W
R696	1-216-049-91	RES,CHIP	1K 5% 1/10W	R874	1-216-009-91	RES,CHIP	22 5% 1/10W
R697	1-216-117-00	RES,CHIP	680K 5% 1/10W	R875	1-216-009-91	RES,CHIP	22 5% 1/10W
R698	1-216-117-00	RES,CHIP	680K 5% 1/10W	R876	1-216-009-91	RES,CHIP	22 5% 1/10W
R699	1-216-295-91	SHORT	0	R877	1-216-009-91	RES,CHIP	22 5% 1/10W
R801	1-216-009-91	RES,CHIP	22 5% 1/10W	R878	1-216-009-91	RES,CHIP	22 5% 1/10W
R802	1-216-009-91	RES,CHIP	22 5% 1/10W	R879	1-216-009-91	RES,CHIP	22 5% 1/10W
R804	1-216-073-00	RES,CHIP	10K 5% 1/10W	R880	1-216-009-91	RES,CHIP	22 5% 1/10W
R806	1-216-675-91	METAL CHIP	10K 0.50% 1/10W	R881	1-216-009-91	RES,CHIP	22 5% 1/10W
R807	1-216-637-11	METAL CHIP	270 0.50% 1/10W	R882	1-216-009-91	RES,CHIP	22 5% 1/10W
R812	1-216-073-00	RES,CHIP	10K 5% 1/10W	R883	1-216-009-91	RES,CHIP	22 5% 1/10W
R813	1-216-295-91	SHORT	0	R884	1-216-009-91	RES,CHIP	22 5% 1/10W
R814	1-216-073-00	RES,CHIP	10K 5% 1/10W	R885	1-216-009-91	RES,CHIP	22 5% 1/10W
R815	1-216-073-00	RES,CHIP	10K 5% 1/10W	R886	1-216-009-91	RES,CHIP	22 5% 1/10W
				R887	1-216-009-91	RES,CHIP	22 5% 1/10W



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R888	1-216-009-91	RES,CHIP	22 5% 1/10W	R979	1-216-295-91	SHORT	0
R889	1-216-009-91	RES,CHIP	22 5% 1/10W	R981	1-216-037-00	RES,CHIP	330 5% 1/10W
R890	1-216-009-91	RES,CHIP	22 5% 1/10W	R982	1-216-037-00	RES,CHIP	330 5% 1/10W
R891	1-216-009-91	RES,CHIP	22 5% 1/10W	R983	1-216-089-91	RES,CHIP	47K 5% 1/10W
R892	1-216-009-91	RES,CHIP	22 5% 1/10W	R984	1-216-061-00	RES,CHIP	3.3K 5% 1/10W
R893	1-216-009-91	RES,CHIP	22 5% 1/10W	R985	1-216-113-00	RES,CHIP	470K 5% 1/10W
R894	1-216-009-91	RES,CHIP	22 5% 1/10W	R986	1-216-061-00	RES,CHIP	3.3K 5% 1/10W
R895	1-216-009-91	RES,CHIP	22 5% 1/10W	R987	1-216-049-91	RES,CHIP	1K 5% 1/10W
R896	1-216-009-91	RES,CHIP	22 5% 1/10W	R988	1-216-033-00	RES,CHIP	220 5% 1/10W
R897	1-216-009-91	RES,CHIP	22 5% 1/10W	R989	1-216-081-00	RES,CHIP	22K 5% 1/10W
R898	1-216-009-91	RES,CHIP	22 5% 1/10W	R990	1-216-113-00	RES,CHIP	470K 5% 1/10W
R899	1-216-073-00	RES,CHIP	10K 5% 1/10W	R991	1-216-295-91	SHORT	0
R901	1-216-061-00	RES,CHIP	3.3K 5% 1/10W	R993	1-216-089-91	RES,CHIP	47K 5% 1/10W
R902	1-216-659-11	METAL CHIP	2.2K 0.50% 1/10W	R994	1-216-033-00	RES,CHIP	220 5% 1/10W
R903	1-216-663-11	METAL CHIP	3.3K 0.50% 1/10W	R995	1-216-033-00	RES,CHIP	220 5% 1/10W
R904	1-216-635-11	METAL CHIP	220 0.50% 1/10W	R996	1-216-037-00	RES,CHIP	330 5% 1/10W
R905	1-216-635-11	METAL CHIP	220 0.50% 1/10W	R997	1-216-037-00	RES,CHIP	330 5% 1/10W
R906	1-216-635-11	METAL CHIP	220 0.50% 1/10W	R998	1-216-073-00	RES,CHIP	10K 5% 1/10W
R907	1-216-635-11	METAL CHIP	220 0.50% 1/10W	R2801	1-216-629-11	METAL CHIP	120 0.50% 1/10W
R908	1-216-635-11	METAL CHIP	220 0.50% 1/10W	R2802	1-216-623-11	METAL CHIP	68 0.50% 1/10W
R909	1-216-635-11	METAL CHIP	220 0.50% 1/10W	R2803	1-216-603-11	METAL CHIP	10 0.50% 1/10W
R910	1-216-049-91	RES,CHIP	1K 5% 1/10W	R2804	1-216-627-11	METAL CHIP	100 0.50% 1/10W
R911	1-216-049-91	RES,CHIP	1K 5% 1/10W	R2805	1-216-623-11	METAL CHIP	68 0.50% 1/10W
R912	1-216-049-91	RES,CHIP	1K 5% 1/10W	R2806	1-216-611-11	METAL CHIP	22 0.50% 1/10W
R914	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R2809	1-216-295-91	SHORT	0
R916	1-216-065-91	RES,CHIP	4.7K 5% 1/10W	R2810	1-216-295-91	SHORT	0
R923	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R2813	1-216-295-91	SHORT	0
R926	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	R2815	1-216-295-91	SHORT	0
R927	1-216-295-91	SHORT	0	R2817	1-216-295-91	SHORT	0
R929	1-216-025-91	RES,CHIP	100 5% 1/10W	R2818	1-216-295-91	SHORT	0
R930	1-216-025-91	RES,CHIP	100 5% 1/10W	R2820	1-216-295-91	SHORT	0
R931	1-216-041-00	RES,CHIP	470 5% 1/10W	R2822	1-216-295-91	SHORT	0
R933	1-216-025-91	RES,CHIP	100 5% 1/10W	RB001	1-239-409-11	NETWORK RESISTOR (CHIP)	47
R934	1-216-025-91	RES,CHIP	100 5% 1/10W	RB002	1-239-409-11	NETWORK RESISTOR (CHIP)	47
R935	1-216-073-00	RES,CHIP	10K 5% 1/10W	RB003	1-239-409-11	NETWORK RESISTOR (CHIP)	47
R936	1-216-041-00	RES,CHIP	470 5% 1/10W	RB004	1-239-409-11	NETWORK RESISTOR (CHIP)	47
R937	1-216-025-91	RES,CHIP	100 5% 1/10W	RB005	1-239-409-11	NETWORK RESISTOR (CHIP)	47
R938	1-216-025-91	RES,CHIP	100 5% 1/10W	RB006	1-239-409-11	NETWORK RESISTOR (CHIP)	47
R939	1-216-295-91	SHORT	0	RB007	1-239-414-11	NETWORK RESISTOR (CHIP)	150
R940	1-216-295-91	SHORT	0	RB008	1-239-414-11	NETWORK RESISTOR (CHIP)	150
R941	1-216-295-91	SHORT	0	RB009	1-239-414-11	NETWORK RESISTOR (CHIP)	150
R942	1-216-037-00	RES,CHIP	330 5% 1/10W	RB010	1-239-414-11	NETWORK RESISTOR (CHIP)	150
R943	1-216-033-00	RES,CHIP	220 5% 1/10W	RB011	1-239-414-11	NETWORK RESISTOR (CHIP)	150
R944	1-216-295-91	SHORT	0	RB012	1-239-414-11	NETWORK RESISTOR (CHIP)	150
R945	1-216-295-91	SHORT	0	RB013	1-239-621-11	NETWORK RESISTOR (CHIP)	22
R951	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	RB014	1-239-621-11	NETWORK RESISTOR (CHIP)	22
R952	1-216-057-00	RES,CHIP	2.2K 5% 1/10W	RB015	1-239-621-11	NETWORK RESISTOR (CHIP)	22
R953	1-216-295-91	SHORT	0	RB016	1-239-621-11	NETWORK RESISTOR (CHIP)	22
R954	1-216-295-91	SHORT	0	RB017	1-239-621-11	NETWORK RESISTOR (CHIP)	22
R955	1-216-295-91	SHORT	0	RB018	1-239-621-11	NETWORK RESISTOR (CHIP)	22
R956	1-216-089-91	RES,CHIP	47K 5% 1/10W	RB019	1-239-409-11	NETWORK RESISTOR (CHIP)	47
R957	1-216-635-11	METAL CHIP	220 0.50% 1/10W	RB020	1-239-409-11	NETWORK RESISTOR (CHIP)	47
R958	1-216-635-11	METAL CHIP	220 0.50% 1/10W	RB021	1-239-409-11	NETWORK RESISTOR (CHIP)	47
R959	1-216-635-11	METAL CHIP	220 0.50% 1/10W	RB022	1-239-409-11	NETWORK RESISTOR (CHIP)	47
R960	1-216-635-11	METAL CHIP	220 0.50% 1/10W	RB023	1-239-409-11	NETWORK RESISTOR (CHIP)	47
R961	1-216-635-11	METAL CHIP	220 0.50% 1/10W	RB024	1-239-409-11	NETWORK RESISTOR (CHIP)	47
R962	1-216-635-11	METAL CHIP	220 0.50% 1/10W	RB025	1-239-409-11	NETWORK RESISTOR (CHIP)	47

**B3****BC4**

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
RB026	1-239-409-11	NETWORK RESISTOR (CHIP) 47		C2051	1-126-964-11	ELECT 10MF	20% 50V
RB027	1-239-409-11	NETWORK RESISTOR (CHIP) 47		C2052	1-163-133-00	CERAMIC CHIP 470PF	5% 50V
RB301	1-239-621-11	NETWORK RESISTOR (CHIP) 22		C2053	1-126-960-11	ELECT 1MF	20% 50V
RB302	1-239-621-11	NETWORK RESISTOR (CHIP) 22					
RB701	1-239-711-91	NETWORK RESISTOR (CHIP) 0		C2054	1-104-664-11	ELECT 47MF	20% 16V
				C2055	1-104-664-11	ELECT 47MF	20% 16V
RB702	1-239-711-91	NETWORK RESISTOR (CHIP) 0		C2056	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
RB703	1-239-711-91	NETWORK RESISTOR (CHIP) 0		C2057	1-163-031-11	CERAMIC CHIP 0.01MF	50V
RB704	1-239-711-91	NETWORK RESISTOR (CHIP) 0		C2058	1-163-031-11	CERAMIC CHIP 0.01MF	50V
RB705	1-239-711-91	NETWORK RESISTOR (CHIP) 0					
RB706	1-239-711-91	NETWORK RESISTOR (CHIP) 0		C2059	1-104-664-11	ELECT 47MF	20% 16V
				C2060	1-163-031-11	CERAMIC CHIP 0.01MF	50V
		<CRYSTAL>		C2061	1-163-031-11	CERAMIC CHIP 0.01MF	50V
X801	1-781-649-21	OSCILLATOR, CRYSTAL		C2062	1-104-664-11	ELECT 47MF	20% 16V
X802	1-781-650-21	VIBRATOR, CRYSTAL		C2063	1-165-319-11	CERAMIC CHIP 0.1MF	50V
X901	1-760-014-11	VIBRATOR, CERAMIC					
				C2064	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C2065	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C2066	1-104-664-11	ELECT 47MF	20% 16V
				C2067	1-104-664-11	ELECT 47MF	20% 16V
				C2068	1-104-664-11	ELECT 47MF	20% 16V
				C2069	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C2070	1-104-664-11	ELECT 47MF	20% 16V
				C2071	1-165-319-11	CERAMIC CHIP 0.1MF	50V
				C2072	1-163-237-11	CERAMIC CHIP 27PF	5% 50V
				C2074	1-163-038-91	CERAMIC CHIP 0.1MF	25V
				C2075	1-163-038-91	CERAMIC CHIP 0.1MF	25V
				C2078	1-104-664-11	ELECT 47MF	20% 16V
				C2079	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C2080	1-163-031-11	CERAMIC CHIP 0.01MF	50V
				C2095	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
				C2096	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
				C2097	1-163-231-11	CERAMIC CHIP 15PF	5% 50V
						<CONNECTOR>	
				CN2001*	1-793-685-11	PIN, CONNECTOR (PC BOARD) 15P	
						<FERRITE BEAD>	
				FB2002	1-414-234-22	INDUCTOR CHIP 0UH	
				FB2008	1-414-234-22	INDUCTOR CHIP 0UH	
				FB2009	1-414-234-22	INDUCTOR CHIP 0UH	
				FB2010	1-414-234-22	INDUCTOR CHIP 0UH	
				FB2011	1-414-234-22	INDUCTOR CHIP 0UH	
				FB2012	1-414-234-22	INDUCTOR CHIP 0UH	
				FB2014	1-414-234-22	INDUCTOR CHIP 0UH	
				FB2015	1-414-234-22	INDUCTOR CHIP 0UH	
				FB2016	1-414-234-22	INDUCTOR CHIP 0UH	
				FB2017	1-414-234-22	INDUCTOR CHIP 0UH	
						<FILTER>	
				FL2001	1-239-848-11	FILTER, LOW PASS	
				FL2002	1-239-848-11	FILTER, LOW PASS	
				FL2003	1-239-848-11	FILTER, LOW PASS	
				FL2004	1-239-848-11	FILTER, LOW PASS	
				FL2005	1-233-512-21	FERRITE 37UH	
				FL2006	1-233-512-21	FERRITE 37UH	
				FL2007	1-233-512-21	FERRITE 37UH	
C2003	1-163-031-11	CERAMIC CHIP 0.01MF	50V				
C2005	1-163-131-00	CERAMIC CHIP 390PF	5% 50V				
C2006	1-163-038-91	CERAMIC CHIP 0.1MF	25V				
C2010	1-163-102-00	CERAMIC CHIP 24PF	5% 50V				
C2011	1-163-102-00	CERAMIC CHIP 24PF	5% 50V				
C2015	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2016	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2017	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2018	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2021	1-163-038-91	CERAMIC CHIP 0.1MF	25V				
C2024	1-216-295-91	SHORT 0					
C2029	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2030	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2031	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2032	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2033	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2034	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2035	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2036	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2037	1-104-664-11	ELECT 47MF	20% 16V				
C2038	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2039	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2040	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2041	1-126-924-11	ELECT 330MF	20% 6.3V				
C2042	1-165-319-11	CERAMIC CHIP 0.1MF	50V				
C2044	1-104-664-11	ELECT 47MF	20% 16V				
C2045	1-163-106-00	CERAMIC CHIP 36PF	5% 50V				
C2046	1-126-964-11	ELECT 10MF	20% 50V				
C2047	1-164-505-11	CERAMIC CHIP 2.2MF	16V				
C2048	1-126-964-11	ELECT 10MF	20% 50V				
C2049	1-126-960-11	ELECT 1MF	20% 50V				
C2050	1-163-231-11	CERAMIC CHIP 15PF	5% 50V				



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
		<IC>					
IC2003	8-759-568-27	IC MSM514265C-60JSDR1		R2047	1-216-085-00	RES,CHIP 33K	5% 1/10W
IC2004	8-759-594-44	IC UPD64082GF-3BA		R2048	1-216-049-91	RES,CHIP 1K	5% 1/10W
IC2005	8-759-431-14	IC PQ3TZ53U		R2049	1-216-065-91	RES,CHIP 4.7K	5% 1/10W
		<COIL>					
L2001	1-410-200-31	INDUCTOR CHIP 4.7UH		R2050	1-216-017-91	RES,CHIP 47	5% 1/10W
L2004	1-412-058-11	INDUCTOR CHIP 10UH		R2051	1-216-049-91	RES,CHIP 1K	5% 1/10W
L2005	1-412-058-11	INDUCTOR CHIP 10UH		R2052	1-216-049-91	RES,CHIP 1K	5% 1/10W
L2006	1-412-058-11	INDUCTOR CHIP 10UH		R2053	1-216-041-00	RES,CHIP 470	5% 1/10W
L2007	1-412-058-11	INDUCTOR CHIP 10UH		R2054	1-216-041-00	RES,CHIP 470	5% 1/10W
		<TRANSISTOR>					
Q2002	8-729-216-22	TRANSISTOR 2SA1162-G		R2055	1-216-017-91	RES,CHIP 47	5% 1/10W
Q2003	8-729-216-22	TRANSISTOR 2SA1162-G		R2056	1-216-067-00	RES,CHIP 5.6K	5% 1/10W
Q2004	8-729-216-22	TRANSISTOR 2SA1162-G		R2057	1-216-049-91	RES,CHIP 1K	5% 1/10W
Q2005	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R2058	1-216-057-00	RES,CHIP 2.2K	5% 1/10W
Q2006	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R2059	1-216-049-91	RES,CHIP 1K	5% 1/10W
Q2007	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R2060	1-216-025-91	RES,CHIP 100	5% 1/10W
Q2008	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R2061	1-216-043-91	RES,CHIP 560	5% 1/10W
Q2009	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R2062	1-216-105-91	RES,CHIP 220K	5% 1/10W
Q2010	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R2063	1-216-089-91	RES,CHIP 47K	5% 1/10W
Q2011	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R2064	1-216-049-91	RES,CHIP 1K	5% 1/10W
Q2012	8-729-216-22	TRANSISTOR 2SA1162-G		R2066	1-216-033-00	RES,CHIP 220	5% 1/10W
Q2013	8-729-216-22	TRANSISTOR 2SA1162-G		R2067	1-216-043-91	RES,CHIP 560	5% 1/10W
Q2014	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R2069	1-216-645-11	METAL CHIP 560	0.50% 1/10W
Q2015	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R2070	1-216-641-11	METAL CHIP 390	0.50% 1/10W
Q2016	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R2071	1-216-067-00	RES,CHIP 5.6K	5% 1/10W
Q2018	8-729-216-22	TRANSISTOR 2SA1162-G		R2072	1-216-043-91	RES,CHIP 560	5% 1/10W
Q2019	8-729-422-33	TRANSISTOR 2SD601A-Q-TX		R2073	1-216-049-91	RES,CHIP 1K	5% 1/10W
		<RESISTOR>		R2074	1-216-025-91	RES,CHIP 100	5% 1/10W
R2011	1-216-041-00	RES,CHIP 470	5% 1/10W	R2075	1-216-295-91	SHORT 0	
R2015	1-216-041-00	RES,CHIP 470	5% 1/10W	R2076	1-216-025-91	RES,CHIP 100	5% 1/10W
R2019	1-216-295-91	SHORT 0		R2077	1-216-025-91	RES,CHIP 100	5% 1/10W
R2021	1-216-025-91	RES,CHIP 100	5% 1/10W	R2078	1-216-295-91	SHORT 0	
R2027	1-216-049-91	RES,CHIP 1K	5% 1/10W	R2092	1-216-055-00	RES,CHIP 1.8K	5% 1/10W
R2028	1-216-049-91	RES,CHIP 1K	5% 1/10W	R2093	1-216-055-00	RES,CHIP 1.8K	5% 1/10W
R2029	1-216-043-91	RES,CHIP 560	5% 1/10W	R2104	1-216-295-91	SHORT 0	
R2030	1-216-043-91	RES,CHIP 560	5% 1/10W	R2105	1-216-295-91	SHORT 0	
R2031	1-216-067-00	RES,CHIP 5.6K	5% 1/10W	R2106	1-216-295-91	SHORT 0	
R2032	1-216-067-00	RES,CHIP 5.6K	5% 1/10W	R2107	1-216-295-91	SHORT 0	
R2033	1-216-057-00	RES,CHIP 2.2K	5% 1/10W	R2108	1-216-049-91	RES,CHIP 1K	5% 1/10W
R2034	1-216-057-00	RES,CHIP 2.2K	5% 1/10W	R2110	1-216-295-91	SHORT 0	
R2035	1-216-043-91	RES,CHIP 560	5% 1/10W	R2112	1-216-295-91	SHORT 0	
R2036	1-216-649-11	METAL CHIP 820	0.50% 1/10W	R2113	1-216-017-91	RES,CHIP 47	5% 1/10W
R2037	1-216-044-00	RES,CHIP 620	5% 1/10W	R2115	1-216-049-91	RES,CHIP 1K	5% 1/10W
R2039	1-216-047-91	RES,CHIP 820	5% 1/10W	R2116	1-216-295-91	SHORT 0	
R2040	1-216-057-00	RES,CHIP 2.2K	5% 1/10W	R2117	1-216-295-91	SHORT 0	
R2041	1-216-047-91	RES,CHIP 820	5% 1/10W	R2118	1-216-296-91	SHORT 0	
R2042	1-216-075-00	RES,CHIP 12K	5% 1/10W	R2119	1-216-296-91	SHORT 0	
R2043	1-216-085-00	RES,CHIP 33K	5% 1/10W	R2200	1-216-296-91	SHORT 0	
R2044	1-216-057-00	RES,CHIP 2.2K	5% 1/10W			<VARIABLE RESISTOR>	
R2046	1-216-075-00	RES,CHIP 12K	5% 1/10W	RV2001	1-223-271-21	RES, ADJ, CERMET 220	
						<CRYSTAL>	
				X2001	1-767-606-11	VIBRATOR, CRYSTAL	

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The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.



REF. NO.	PART NO.	DESCRIPTION	REMARK
* A-1332-005-A	C BOARD MOUNT	*****	
4-382-854-11	SCREW (M3X10), P, SW (+)		
	<CAPACITOR>		
C9002	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C9003	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C9004	1-162-114-00	CERAMIC 0.0047MF	2KV
C9005	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C9006	1-163-091-00	CERAMIC CHIP 8PF	0.25PF 50V
C9007	1-163-091-00	CERAMIC CHIP 8PF	0.25PF 50V
C9008	1-163-091-00	CERAMIC CHIP 8PF	0.25PF 50V
C9009	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C9010	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C9011	1-136-207-11	MYLAR 0.047MF	10% 250V
C9012	1-136-207-11	MYLAR 0.047MF	10% 250V
C9014	1-136-207-11	MYLAR 0.047MF	10% 250V
C9015	1-163-087-00	CERAMIC CHIP 4PF	0.25PF 50V
C9018	1-107-961-91	ELECT 10MF	20% 250V
C9019	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C9020	1-107-961-91	ELECT 10MF	20% 250V
C9021	1-107-961-91	ELECT 10MF	20% 250V
C9022	1-101-004-00	CERAMIC 0.01MF	50V
C9023	1-101-004-00	CERAMIC 0.01MF	50V
C9024	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C9025	1-104-653-11	ELECT 220MF	20% 16V
C9026	1-163-035-00	CERAMIC CHIP 0.047MF	50V
C9027	1-101-004-00	CERAMIC 0.01MF	50V
C9028	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C9029	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C9030	1-163-017-00	CERAMIC CHIP 0.0047MF	10% 50V
C9031	1-162-114-00	CERAMIC 0.0047MF	2KV
C9032	1-162-116-00	CERAMIC 680PF	10% 2KV
C9033	1-107-662-11	ELECT 22MF	20% 250V
C9042	1-126-940-11	ELECT 330MF	20% 25V
	<CONNECTOR>		
CN9001*	1-564-512-11	PLUG, CONNECTOR 9P	
CN9002	1-691-765-11	PLUG (MICRO CONNECTOR) 3P	
CN9003	1-695-915-11	TAB (CONTACT)	
CN9004	1-695-915-11	TAB (CONTACT)	
CN9005*	1-564-506-11	PLUG, CONNECTOR 3P	
CN9007	1-785-879-11	CONNECTOR, ONE TOUCH	
	<DIODE>		
D9002	8-719-400-75	DIODE MA3091	
D9005	8-719-073-01	DIODE MA111-(K8).S0	
D9006	8-719-051-85	DIODE HSS83TD	
D9007	8-719-051-85	DIODE HSS83TD	
D9008	8-719-051-85	DIODE HSS83TD	
D9009	8-719-908-03	DIODE GP08D	
D9010	8-719-110-17	DIODE RD10ESB2	

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<IC>	
IC9001	8-759-360-83	IC TDA6111Q/N4	
IC9002	8-759-360-83	IC TDA6111Q/N4	
IC9003	8-759-360-83	IC TDA6111Q/N4	
		<JACK>	
J9001	$\Delta$ 1-540-071-22	SOCKET, CRT	
		<COIL>	
L9001	1-414-158-11	INDUCTOR	2.2UH
L9002	1-408-591-11	INDUCTOR	1UH
L9003	1-408-591-11	INDUCTOR	1UH
L9004	1-408-591-11	INDUCTOR	1UH
L9005	1-406-666-21	INDUCTOR	150UH
L9006	1-412-526-11	INDUCTOR	12UH
		<NEON LAMP>	
NL9001	1-519-526-11	LAMP, NEON	
		<TRANSISTOR>	
Q9001	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q9009	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q9010	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
Q9011	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R	
		<RESISTOR>	
R9001	1-216-059-00	RES,CHIP	2.7K 5% 1/10W
R9006	1-216-073-00	RES,CHIP	10K 5% 1/10W
R9007	1-208-789-11	METAL CHIP	2K 0.50% 1/10W
R9008	1-216-085-00	RES,CHIP	33K 5% 1/10W
R9012	1-216-049-91	RES,CHIP	1K 5% 1/10W
R9013	1-216-049-91	RES,CHIP	1K 5% 1/10W
R9018	1-216-059-00	RES,CHIP	2.7K 5% 1/10W
R9019	1-216-059-00	RES,CHIP	2.7K 5% 1/10W
R9021	1-216-295-91	SHORT	0
R9023	1-216-295-91	SHORT	0
R9026	1-208-789-11	METAL CHIP	2K 0.50% 1/10W
R9031	1-208-789-11	METAL CHIP	2K 0.50% 1/10W
R9033	1-208-808-11	METAL CHIP	12K 0.50% 1/10W
R9034	1-208-800-11	METAL CHIP	5.6K 0.50% 1/10W
R9035	1-208-790-11	METAL CHIP	2.2K 0.50% 1/10W
R9036	1-216-049-91	RES,CHIP	1K 5% 1/10W
R9037	1-240-233-71	METAL OXIDE	100 5% 3W
R9038	1-208-790-11	METAL CHIP	2.2K 0.50% 1/10W
R9039	1-208-790-11	METAL CHIP	2.2K 0.50% 1/10W
R9041	1-216-049-91	RES,CHIP	1K 5% 1/10W
R9042	1-216-049-91	RES,CHIP	1K 5% 1/10W
R9043	1-240-233-71	METAL OXIDE	100 5% 3W
R9044	1-240-233-71	METAL OXIDE	100 5% 3W
R9047	1-202-557-00	SOLID	220 20% 1/2W
R9048	1-216-057-00	RES,CHIP	2.2K 5% 1/10W



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REF. NO.	PART NO.	DESCRIPTION	REMARK			REF. NO.	PART NO.	DESCRIPTION	REMARK		
R9049	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	C6624	1-126-933-11	ELECT	100UF	20.00%	16V
R9050	1-249-424-11	CARBON	3.9K	5%	1/4W	C6625	1-129-718-00	FILM	0.022UF	5.00%	630V
R9051	1-202-557-00	SOLID	220	20%	1/2W	C6626	1-130-029-00	FILM	8200PF	2.00%	50V
R9052	1-202-557-00	SOLID	220	20%	1/2W	C6627	1-102-129-00	CERAMIC	0.01UF	10.00%	50V
R9053	1-249-424-11	CARBON	3.9K	5%	1/4W	C6628	1-104-330-91	CERAMIC	470PF	10.00%	1KV
R9054	1-249-424-11	CARBON	3.9K	5%	1/4W	C6630	1-107-680-91	ELECT	22UF	20.00%	450V
R9055	1-202-884-11	SOLID	820K	20%	1/2W	C6631	1-126-964-11	ELECT	10UF	20.00%	50V
R9056	1-202-813-00	SOLID	22K	10%	1/2W	C6632	1-126-963-11	ELECT	4.7UF	20.00%	50V
R9057	1-202-847-00	SOLID	560K	20%	1/2W	C6633	1-126-967-11	ELECT	47UF	20.00%	50V
R9058	1-202-884-11	SOLID	820K	20%	1/2W	C6634	1-126-968-11	ELECT	100UF	20.00%	50V
R9059	1-202-818-00	SOLID	1K	20%	1/2W	C6635	1-102-973-00	CERAMIC	100PF	5.00%	50V
R9061	1-202-549-00	SOLID	100	20%	1/2W	C6637	1-109-879-11	CERAMIC	22PF	5.00%	2KV
R9065	1-216-069-00	RES,CHIP	6.8K	5%	1/10W	C6638	1-126-964-11	ELECT	10UF	20.00%	50V
R9068	1-216-101-00	RES,CHIP	150K	5%	1/10W	C6639	1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V
R9069	1-202-549-00	SOLID	100	20%	1/2W	C6640	1-104-330-91	CERAMIC	470PF	10.00%	1KV
R9070	1-216-037-00	RES,CHIP	330	5%	1/10W	C6641	1-104-341-11	MYLAR	0.1UF	10.00%	250V
R9071	1-216-037-00	RES,CHIP	330	5%	1/10W	C6642	1-126-964-11	ELECT	10UF	20.00%	50V
R9072	1-216-037-00	RES,CHIP	330	5%	1/10W	C6643	1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V
R9073	1-216-057-00	RES,CHIP	2.2K	5%	1/10W	C6648	1-126-941-11	ELECT	470UF	20.00%	25V
		<VARIABLE RESISTOR>				C6649	1-104-665-11	ELECT	100UF	20.00%	25V
RV9001	1-241-714-11	RES, ADJ, METAL FILM 110M				C6650	1-162-115-00	CERAMIC	330PF	10.00%	1KV
RV9002	1-230-641-11	RES, ADJ, METAL GLAZE 2.2M				C6651	1-162-115-00	CERAMIC	330PF	10.00%	1KV
*****											
	* A-1346-902-B	D BOARD COMPLETE				C6652	1-110-626-11	ELECT	330UF	20.00%	160V
		*****				C6653	1-137-368-11	MYLAR	0.0047UF	5.00%	50V
	1-803-614-11	VARISTOR				C6654	1-126-936-11	ELECT	3300UF	20.00%	16V
	* 4-363-146-00	HEAT SINK, V.OUT				C6655	1-126-942-61	ELECT	1000UF	20.00%	25V
	4-382-854-11	SCREW (M3X10), P, SW (+)				C6656	1-136-165-00	MYLAR	0.1UF	5.00%	50V
	4-382-854-21	SCREW (M3X14), P, SW (+)				C6658	1-126-944-11	ELECT	3300UF	20.00%	25V
		<CAPACITOR>				C6659	1-126-944-11	ELECT	3300UF	20.00%	25V
C6601	1-104-665-11	ELECT	100UF	20.00%	25V	C6660	1-126-960-11	ELECT	1UF	20.00%	50V
C6602	1-129-720-00	FILM	0.033UF	5.00%	630V	C6661	1-104-664-11	ELECT	47UF	20.00%	16V
C6604	1-126-967-11	ELECT	47UF	20.00%	50V	C6662	1-104-664-11	ELECT	47UF	20.00%	16V
C6606	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V	C6663	1-102-129-00	CERAMIC	0.01UF	10.00%	50V
C6607 $\triangle$	1-119-886-51	CERAMIC	470PF	10.00%	250V	C6664	1-102-129-00	CERAMIC	0.01UF	10.00%	50V
C6608 $\triangle$	1-119-886-51	CERAMIC	470PF	10.00%	250V	C6665	1-126-964-11	ELECT	10UF	20.00%	50V
C6609	1-136-177-00	MYLAR	1UF	5.00%	50V	C6666	1-137-370-11	MYLAR	0.01UF	5.00%	50V
C6610	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V	C6668	1-104-664-11	ELECT	47UF	20.00%	25V
C6611	1-163-275-11	CERAMIC CHIP	0.001UF	5.00%	50V	C6669	1-162-115-00	CERAMIC	330PF	10.00%	1KV
C6612	1-126-964-11	ELECT	10UF	20.00%	50V	C6670	1-162-115-00	CERAMIC	330PF	10.00%	1KV
C6613	1-161-830-00	CERAMIC	0.0047UF	99%	500V	C6671	1-129-718-00	FILM	0.022UF	5.00%	630V
C6614	1-161-830-00	CERAMIC	0.0047UF		500V	C6672	1-104-331-11	CERAMIC	0.0022UF	10.00%	1KV
C6615	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V	C6673	1-104-331-11	CERAMIC	0.0022UF	10.00%	1KV
C6616	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V	C6674	1-128-527-11	ELECT	330UF	20.00%	25V
C6617	1-161-830-00	CERAMIC	0.0047UF		500V	C6677	1-163-037-11	CERAMIC CHIP	0.022UF	10.00%	50V
C6618	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V	C6679	1-107-823-11	CERAMIC CHIP	0.47UF	10.00%	16V
C6619	1-161-830-00	CERAMIC	0.0047UF	99%	500V	C6680	1-136-157-00	MYLAR	0.022UF	5.00%	50V
C6620	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V	C6800	1-126-964-11	ELECT	10UF	20.00%	50V
C6621	1-131-940-11	ELECT	1200UF	20%	250V	C6801	1-126-960-11	ELECT	1UF	20.00%	50V
C6622	1-131-940-11	ELECT	1200UF	20%	250V	C6802	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V
						C6803	1-102-129-00	CERAMIC	0.01UF	10.00%	50V
						C6804	1-102-129-00	CERAMIC	0.01UF	10.00%	50V
						C6805	1-111-087-11	ELECT	330UF	20.00%	25V
						C6806	1-107-933-11	ELECT	100UF	20.00%	100V
						C6808	1-106-228-00	MYLAR	0.22UF	10.00%	100V
						C6809	1-102-074-00	CERAMIC	0.001UF	10.00%	50V
						C6810	1-106-220-00	MYLAR	0.1UF	10.00%	100V
						C6811	1-111-087-11	ELECT	330UF	20.00%	25V

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REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
C6812	1-130-785-11	MYLAR	0.47UF	10.00% 100V	C6875	1-104-664-11	ELECT	47UF	20.00% 16V
C6813	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V	C6876	1-163-021-91	CERAMIC CHIP	0.01UF	10.00% 50V
C6814	1-115-565-11	CERAMIC CHIP	2.2UF	10.00% 10V	C6877	1-126-964-11	ELECT	10UF	20.00% 50V
C6815	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V	C6878	1-126-320-11	ELECT	10UF	20.00% 16V
C6816	1-136-207-11	MYLAR	0.047UF	5% 400V	C6879	1-107-960-11	ELECT	4.7UF	20.00% 160V
C6817	1-126-967-11	ELECT	47UF	20.00% 50V	C6882	1-104-574-11	CERAMIC	0.0047UF	10.00% 2KV
C6818	1-126-960-11	ELECT	1UF	20.00% 50V	C6883	1-126-964-11	ELECT	10UF	20.00% 50V
C6819	1-126-960-11	ELECT	1UF	20.00% 50V	C6884	1-115-565-11	CERAMIC CHIP	2.2UF	10.00% 10V
C6820	1-102-114-00	CERAMIC	470PF	10.00% 50V			<CONNECTOR>		
C6821	1-106-383-00	MYLAR	0.047UF	10.00% 200V	CN6602*	$\Delta$ 1-508-786-13	PIN, CONNECTOR (5MM PITCH) 2P		
C6822	1-102-114-00	CERAMIC	470PF	10.00% 50V	CN6603*	$\Delta$ 1-573-963-11	PIN, CONNECTOR (PC BOARD) 3P		
C6823	1-106-383-00	MYLAR	0.047UF	10.00% 200V	CN6604*	$\Delta$ 1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P		
C6826	1-102-030-00	CERAMIC	330PF	10.00% 500V	CN6605*	1-564-513-11	PLUG, CONNECTOR 10P		
C6827	1-102-030-00	CERAMIC	330PF	10.00% 500V	CN6606*	1-564-510-11	PLUG, CONNECTOR 7P		
C6828	1-107-364-11	MYLAR	0.01UF	10.00% 200V	CN6608*	1-564-506-11	PLUG, CONNECTOR 3P		
C6829	1-162-115-00	CERAMIC	330PF	10.00% 2KV	CN6609*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P		
C6830	1-117-619-11	FILM	1000PF	3.00% 1.2KV	CN6610*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P		
C6831	1-117-838-21	FILM	8200PF	3.00% 1.5KV	CN6611*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P		
C6832	1-117-842-21	FILM	12000PF	3.00% 1.5KV	CN6612*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P		
C6833	1-136-287-11	FILM	0.0047UF	5.00% 100V	CN6613*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P		
C6834	1-125-893-11	FILM	680PF	3.00% 1.5KV	CN6614*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P		
C6835	1-125-893-11	FILM	680PF	3.00% 1.5KV	CN6615*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P		
C6836	1-137-150-11	FILM	0.01UF	5.00% 100V	CN6616*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P		
C6837	1-125-893-11	FILM	680PF	3.00% 1.5KV	CN6618*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P		
C6838	1-125-893-11	FILM	680PF	3.00% 1.5KV	CN6800	1-785-802-11	PIN, CONNECTOR (WITH PWB) 20P		
C6839	1-126-933-11	ELECT	100UF	20.00% 16V	CN6801*	$\Delta$ 1-785-270-12	PIN, DY CONNECTOR (PC BOARD)		
C6840	1-126-933-11	ELECT	100UF	20.00% 16V	CN6802	1-793-495-11	CONNECTOR, BOARD TO BOARD 50P		
C6841	1-117-660-81	FILM	0.12UF	5.00% 250V	CN6810	1-785-879-11	CONNECTOR, ONE TOUCH		
C6842	1-117-673-11	FILM	1.5UF	5.00% 250V	CN6811*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P		
C6843	1-115-339-11	CERAMIC CHIP	0.1UF	10.00% 50V	CN6812*	1-508-784-21	PIN, CONNECTOR (5MM PITCH) 1P		
C6844	1-115-339-11	CERAMIC CHIP	0.1UF	10.00% 50V			<DIODE>		
C6845	1-117-664-11	FILM	0.27UF	5.00% 250V	D6601	8-719-911-19	DIODE ISS119-25TD		
C6846	1-115-514-11	FILM	0.22UF	5.00% 250V	D6602	8-719-073-01	DIODE MA111-TX		
C6847	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	D6603	8-719-073-01	DIODE MA111-TX		
C6848	1-113-979-51	FILM	0.047UF	5% 250V	D6604	8-719-073-01	DIODE MA111-TX		
C6849	1-115-339-11	CERAMIC CHIP	0.1UF	10.00% 50V	D6605	8-719-510-53	DIODE D4SB60L		
C6850	1-115-339-11	CERAMIC CHIP	0.1UF	10.00% 50V	D6606	8-719-073-01	DIODE MA111-TX		
C6851	1-107-639-11	ELECT	47UF	20.00% 160V	D6607	8-719-073-01	DIODE MA111-TX		
C6853	1-102-228-00	CERAMIC	470PF	10.00% 500V	D6608	8-719-073-01	DIODE MA111-TX		
C6854	1-126-941-11	ELECT	470UF	20.00% 25V	D6609	8-719-911-19	DIODE ISS119-25TD		
C6855	1-123-024-21	ELECT	33UF	160V	D6610	8-719-073-01	DIODE MA111-TX		
C6856	1-126-971-11	ELECT	470UF	20.00% 50V	D6611	8-719-073-01	DIODE MA111-TX		
C6857	1-102-228-00	CERAMIC	470PF	10.00% 500V	D6612	8-719-911-55	DIODE ERC04-06S		
C6858	1-102-228-00	CERAMIC	470PF	10.00% 500V	D6613	8-719-911-55	DIODE ERC04-06S		
C6859	1-162-129-00	CERAMIC	150PF	10.00% 2KV	D6614	8-719-110-30	DIODE RD12ES-T1B		
C6860	1-162-129-00	CERAMIC	150PF	10.00% 2KV	D6615	8-719-911-19	DIODE ISS119-25TD		
C6862	1-130-202-00	FILM	0.022UF	5.00% 200V	D6616	8-719-911-55	DIODE ERC04-06S		
C6863	1-107-906-11	ELECT	10UF	20.00% 50V	D6617	8-719-911-55	DIODE ERC04-06S		
C6864	1-129-898-00	FILM	0.0022UF	5.00% 630V	D6618	8-719-073-01	DIODE MA111-TX		
C6865	1-130-202-00	FILM	0.022UF	5.00% 400V	D6619	8-719-110-30	DIODE RD12ES-T1B		
C6866	1-102-030-00	CERAMIC	330PF	10.00% 500V	D6621	8-719-063-73	DIODE DINL20U-TR		
C6867	1-130-785-11	MYLAR	0.47UF	10.00% 100V	D6622	8-719-979-64	DIODE UF4005PKG23		
C6868	1-163-021-91	CERAMIC CHIP	0.01UF	10.00% 50V	D6623	8-719-059-23	DIODE P6KE200AG23		
C6869	1-128-526-11	ELECT	100UF	20.00% 16V					
C6870	1-128-528-11	ELECT	470UF	20.00% 25V					
C6871	1-163-133-00	CERAMIC CHIP	470PF	5.00% 50V					
C6872	1-163-275-11	CERAMIC CHIP	0.001UF	5.00% 50V					
C6874	1-136-165-00	MYLAR	0.1UF	5.00% 50V					



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
D6624	8-719-510-02	DIODE D1NS4-TR		IC6801	8-759-450-95	IC LM393N	
D6625	8-719-110-36	DIODE RD13ES-T1B		IC6804	8-759-394-36	IC BA09T	
D6626	8-719-979-64	DIODE UF4005PKG23					
D6628	8-719-063-73	DIODE D1NL20U-TR		IC6805	8-759-394-35	IC BA12T	
D6631	8-719-050-18	DIODE D4SBL20U		IC6806	8-749-013-76	IC PQ6RD83B	
D6632	8-719-073-01	DIODE MA111-TX					
D6633	8-719-510-12	DIODE D10SC4M-F				<CHIP CONDUCTOR>	
D6634	8-719-060-88	DIODE D4SBS6					
D6635	8-719-110-47	DIODE RD18ES-T1B		JR6601	1-216-295-91	SHORT	0
D6636	8-719-911-19	DIODE 1SS119-25TD		JR6603	1-216-295-91	SHORT	0
D6639	8-719-063-73	DIODE D1NL20U-TR		JR6604	1-216-296-91	SHORT	0
D6640	8-719-110-72	DIODE RD30ES-T1B		JR6605	1-216-296-91	SHORT	0
D6641	8-719-109-96	DIODE RD6.8ES-T1B		JR6606	1-216-296-91	SHORT	0
D6642	8-719-911-19	DIODE 1SS119-25TD		JR6607	1-216-295-91	SHORT	0
D6643	8-719-979-64	DIODE UF4005PKG23		JR6608	1-216-296-91	SHORT	0
D6644	8-719-052-92	DIODE D10SBS4F		JR6609	1-216-295-91	SHORT	0
D6648	8-719-110-30	DIODE RD12ES-T1B		JR6610	1-216-296-91	SHORT	0
D6649	8-719-073-01	DIODE MA111-TX		JR6611	1-216-295-91	SHORT	0
D6650	8-719-911-19	DIODE 1SS119-25TD		JR6802	1-216-296-91	SHORT	0
D6651	8-719-977-95	DIODE RD5.6SB2-T1		JR6803	1-216-295-91	SHORT	0
D6652	8-719-110-47	DIODE RD18ES-T1B		JR6810	1-216-295-91	SHORT	0
D6800	8-719-110-03	DIODE RD7.5ES-T1B					
D6801	8-719-911-19	DIODE 1SS119-25TD				<COIL>	
D6803	8-719-510-73	DIODE S3L20UF4		L6601	1-412-525-31	INDUCTOR	10UH
D6805	8-719-110-39	DIODE RD15ES-T1B		L6602	1-410-397-21	FERRITE	1.1UH
D6806	8-719-911-19	DIODE 1SS119-25TD		L6603	1-410-397-21	FERRITE	1.1UH
D6807	8-719-109-68	DIODE RD3.6ES-T1B		L6604	1-412-525-31	INDUCTOR	10UH
D6808	8-719-914-43	DIODE DAN202K-T-146		L6605	1-412-525-31	INDUCTOR	10UH
D6809	8-719-908-03	DIODE GP08DPKG23		L6606	1-412-525-31	INDUCTOR	10UH
D6812	8-719-110-39	DIODE RD15ES-T1B		L6607	1-412-519-11	INDUCTOR	3.3UH
D6813	8-719-302-06	DIODE EU2-V1		L6800	1-412-525-31	INDUCTOR	10UH
D6814	8-719-018-82	DIODE RGP02-20EL-6394		L6801	1-406-675-11	INDUCTOR	4.7MH
D6816	8-719-510-73	DIODE S3L20UF4		L6802	1-416-775-21	INDUCTOR	1MH
D6817	8-719-510-73	DIODE S3L20UF4		L6803	1-406-982-11	INDUCTOR	680UH
D6820	8-719-970-87	DIODE ERA38-06TP1		L6804	1-412-519-11	INDUCTOR	3.3UH
D6821	8-719-970-87	DIODE ERA38-06TP1		L6805	1-412-519-11	INDUCTOR	3.3UH
D6822	8-719-067-18	DIODE RN4Z		L6806	1-412-519-11	INDUCTOR	3.3UH
D6823	8-719-911-19	DIODE 1SS119-25TD		L6807	1-412-552-11	INDUCTOR	2.2MH
D6824	8-719-510-73	DIODE S3L20UF4		L6808	1-406-674-11	INDUCTOR	3.3MH
D6825	8-719-914-43	DIODE DAN202K-T-146					
D6826	8-719-911-19	DIODE 1SS119-25TD				<PHOTO COUPLER>	
		<FERRITE BEAD>		PH6601	8-749-924-35	PHOTO COUPLER ON3171-R	
FB6602	1-239-358-21	FILTER, NOISE		PH6602	8-749-924-35	PHOTO COUPLER ON3171-R	
FB6603	1-239-358-21	FILTER, NOISE					
		<IC>				<IC LINK>	
IC6601	8-759-198-31	IC UPC1093J-1-T		PS6605	1-533-597-41	LINK, IC	
IC6602	8-759-103-93	IC UPC393C		PS6606	1-533-597-41	LINK, IC	
IC6603	8-749-016-66	IC MCR5152		PS6607	1-533-597-41	LINK, IC	
IC6604	8-759-468-89	IC TOP209P		PS6801	1-532-841-21	LINK, IC	
IC6606	8-759-450-47	IC BA05T				<TRANSISTOR>	
IC6607	8-749-012-13	IC DM-58		Q6601	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
IC6608	8-759-103-93	IC UPC393C		Q6602	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
IC6800	8-759-192-71	IC STV9379		Q6603	8-729-119-76	TRANSISTOR 2SA1175TP-HFE	

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
Q6604	8-729-119-76	TRANSISTOR 2SA1175TP-HFE		R6618	1-215-466-00	METAL	75K 1% 1/4W
Q6605	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R6619	1-216-113-00	RES-CHIP	470K 5% 1/10W
Q6606	8-729-140-93	TRANSISTOR 2SB734-T-4		R6620	1-208-846-11	METAL CHIP	470K 0.5% 1/10W
Q6608	8-729-200-21	TRANSISTOR 2SC2500-B		R6621	1-216-073-00	RES-CHIP	10K 5% 1/10W
Q6609	8-729-029-56	TRANSISTOR DTA144ESA-TP		R6622	1-220-797-11	CEMENTED	0.47 5% 10W
Q6610	8-729-119-78	TRANSISTOR 2SC2785TP-HFE		R6623	1-215-457-00	METAL	33K 1% 1/4W
Q6611	8-729-029-66	TRANSISTOR DTC114ESA-TP		R6624	1-208-830-11	METAL CHIP	100K 0.5% 1/10W
Q6612	8-729-029-66	TRANSISTOR DTC114ESA-TP		R6625	1-208-826-11	METAL CHIP	68K 0.5% 1/10W
Q6613	8-729-030-02	TRANSISTOR DTC144ESA-TP		R6626	1-208-830-11	METAL CHIP	100K 0.5% 1/10W
Q6614	8-729-119-76	TRANSISTOR 2SA1175TP-HFE		R6627	1-208-834-11	METAL CHIP	150K 0.5% 1/10W
Q6615	8-729-900-53	TRANSISTOR DTC114EKA-T146		R6628	1-216-073-00	RES-CHIP	10K 5% 1/10W
Q6616	8-729-029-66	TRANSISTOR DTC114ESA-TP		R6629	1-215-466-00	METAL	75K 1% 1/4W
Q6800	8-729-422-33	TRANSISTOR 2PD601AR-115		R6630	1-215-489-00	METAL	680K 1% 1/4W
Q6801	8-729-039-68	TRANSISTOR IRF620		R6631	1-215-489-00	METAL	680K 1% 1/4W
Q6802	8-729-046-33	TRANSISTOR IRF720-LF49		R6632	1-215-489-00	METAL	680K 1% 1/4W
Q6803	8-729-119-76	TRANSISTOR 2SA1175TP-HFE		R6633	1-215-458-00	METAL	36K 1% 1/4W
Q6804	8-729-119-78	TRANSISTOR 2SC2785TP-HFE		R6634	1-215-489-00	METAL	680K 1% 1/4W
Q6805	8-729-140-96	TRANSISTOR 2SC3209-L		R6635	1-215-489-00	METAL	680K 1% 1/4W
Q6806	8-729-140-96	TRANSISTOR 2SC3209-L		R6636	1-215-489-00	METAL	680K 1% 1/4W
Q6807	8-729-046-18	TRANSISTOR 2SC5480-01		R6637	1-215-463-00	METAL	56K 1% 1/4W
Q6808	8-729-046-18	TRANSISTOR 2SC5480-01		R6638	1-240-876-11	CEMENTED	1 5% 15W
Q6809	8-729-038-83	TRANSISTOR 2SK2251-01-F19		R6639	1-240-876-11	CEMENTED	1 5% 15W
Q6810	8-729-047-60	TRANSISTOR IRF1830G-LF49		R6640	1-216-081-00	RES-CHIP	22K 5% 1/10W
Q6811	1-801-806-11	TRANSISTOR DTC144EKA-T146		R6641	1-260-131-11	CARBON	470K 5% 1/2W
Q6812	8-729-043-95	TRANSISTOR 2SC3840K		R6642	1-260-131-11	CARBON	470K 5% 1/2W
Q6813	8-729-422-33	TRANSISTOR 2PD601AR-115		R6643	1-216-081-00	RES-CHIP	22K 5% 1/10W
Q6814	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R6644	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
Q6815	8-729-045-65	TRANSISTOR 2SA1776TV2Q		R6645	1-202-933-61	FUSIBLE	0.1 10% 1/2W
Q6816	8-729-140-96	TRANSISTOR 2SC3209-L		R6646	1-216-073-00	RES-CHIP	10K 5% 1/10W
Q6817	8-729-422-33	TRANSISTOR 2PD601AR-115		R6647	1-215-864-00	METAL OXIDE	150 5% 1W
Q6818	1-801-806-11	TRANSISTOR DTC144EKA-T146		R6648	1-215-481-00	METAL	330K 1% 1/4W
Q6819	1-801-806-11	TRANSISTOR DTC144EKA-T146		R6649	1-216-065-91	RES-CHIP	4.7K 5% 1/10W
Q6820	8-729-422-33	TRANSISTOR 2PD601AR-115		R6650	1-215-481-00	METAL	330K 1% 1/4W
Q6821	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R6651	1-215-430-00	METAL	2.4K 1% 1/4W
Q6822	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R6652	1-215-450-00	METAL	16K 1% 1/4W
Q6823	8-729-422-33	TRANSISTOR 2PD601AR-115		R6653	1-219-776-11	CARBON	2.2M 10% 1/2W
		<RESISTOR>		R6654	1-216-089-91	RES-CHIP	47K 5% 1/10W
R6500	1-220-797-11	CEMENTED	0.47 5% 10W	R6655	1-216-073-00	RES-CHIP	10K 5% 1/10W
R6600	1-216-295-91	SHORT	0	R6656	1-215-481-00	METAL	330K 1% 1/4W
R6602	1-249-417-11	CARBON	1K 5% 1/4W	R6657	1-247-791-91	CARBON	22 5% 1/4W
R6603	1-208-806-11	METAL CHIP	10K 0.5% 1/10W	R6658	1-216-073-00	RES-CHIP	10K 5% 1/10W
R6604	1-208-806-11	METAL CHIP	10K 0.5% 1/10W	R6659	1-216-073-00	RES-CHIP	10K 5% 1/10W
R6605	1-215-471-00	METAL	120K 1% 1/4W	R6660	1-249-389-11	CARBON	4.7 5% 1/4W
R6606	1-215-466-00	METAL	75K 1% 1/4W	R6661	1-215-421-00	METAL	1K 1% 1/4W
R6607	1-215-489-00	METAL	680K 1% 1/4W	R6662	1-216-381-11	METAL OXIDE	0.22 5% 3W
R6608	1-215-489-00	METAL	680K 1% 1/4W	R6663	1-216-381-11	METAL OXIDE	0.22 5% 3W
R6609	1-215-489-00	METAL	680K 1% 1/4W	R6665	1-219-776-11	CARBON	2.2M 10% 1/2W
R6610	1-208-830-11	METAL CHIP	100K 0.5% 1/10W	R6666	1-208-782-11	METAL CHIP	1K 0.5% 1/10W
R6611	1-208-798-11	METAL CHIP	4.7K 0.5% 1/10W	R6667	1-249-413-11	CARBON	470 5% 1/4W
R6612	1-215-471-00	METAL	120K 1% 1/4W	R6668	1-216-017-91	RES-CHIP	47 5% 1/10W
R6613	1-215-489-00	METAL	680K 1% 1/4W	R6669	1-249-417-11	CARBON	1K 5% 1/4W
R6614	1-215-489-00	METAL	680K 1% 1/4W	R6672	1-249-421-11	CARBON	2.2K 5% 1/4W
R6615	1-215-489-00	METAL	680K 1% 1/4W	R6674	1-249-415-11	CARBON	680 5% 1/4W
R6616	1-208-830-11	METAL CHIP	100K 0.5% 1/10W	R6679	1-249-437-11	CARBON	47K 5% 1/4W
R6617	1-208-844-11	METAL CHIP	390K 0.5% 1/10W	R6680	1-216-362-11	METAL OXIDE	0.27 5% 2W
				R6681	1-249-429-11	CARBON	10K 5% 1/4W
				R6682	1-249-416-11	CARBON	820 5% 1/4W

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK				
R6683	1-260-127-11	CARBON	220K	5%	1/2W	R6838	1-215-461-00	METAL	47K	1%	1/4W
R6685	1-249-421-11	CARBON	2.2K	5%	1/4W	R6839	1-249-405-11	CARBON	100	5%	1/4W
R6686 $\Delta$	1-218-265-11	METAL	8.2M	5%	1W	R6841	1-216-434-11	METAL OXIDE	1.8K	5%	1W
R6688	1-249-417-11	CARBON	1K	5%	1/4W	R6842	1-215-923-00	METAL OXIDE	10K	5%	3W
R6689	1-249-389-11	CARBON	4.7	5%	1/4W	R6843	1-216-073-00	RES-CHIP	10K	5%	1/10W
R6690	1-249-429-11	CARBON	10K	5%	1/4W	R6844	1-247-807-31	CARBON	100	5%	1/4W
R6691	1-260-131-11	CARBON	470K	5%	1/2W	R6845	1-208-824-11	METAL CHIP	56K	0.5%	1/10W
R6692	1-249-410-11	CARBON	270	5%	1/4W	R6846	1-260-127-11	CARBON	220K	5%	1/2W
R6693	1-215-451-00	METAL	18K	1%	1/4W	R6847	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R6694	1-215-471-00	METAL	120K	1%	1/4W	R6848	1-216-101-00	RES-CHIP	150K	5%	1/10W
R6696	1-215-925-11	METAL OXIDE	22K	5%	3W	R6849	1-249-443-11	CARBON	0.47	5%	1/4W
R6697	1-249-429-11	CARBON	10K	5%	1/4W	R6850	1-249-443-11	CARBON	0.47	5%	1/4W
R6698	1-249-417-11	CARBON	1K	5%	1/4W	R6851	1-260-288-11	CARBON	0.47	5%	1/2W
R6701	1-216-073-00	RES-CHIP	10K	5%	1/10W	R6852	1-216-345-11	METAL OXIDE	0.47	5%	1W
R6702	1-216-093-91	RES-CHIP	68K	5%	1/10W	R6853	1-260-288-11	CARBON	0.47	5%	1/2W
R6703	1-216-091-00	RES-CHIP	56K	5%	1/10W	R6854	1-215-923-00	METAL OXIDE	10K	5%	3W
R6704	1-249-377-11	CARBON	0.47	5%	1/4W	R6855	1-214-898-81	METAL	24K	1%	1/2W
R6707	1-249-421-11	CARBON	2.2K	5%	1/4W	R6856	1-215-923-00	METAL OXIDE	10K	5%	3W
R6710	1-217-158-00	METAL	0.47	10%	5W	R6857	1-215-923-00	METAL OXIDE	10K	5%	3W
R6711	1-215-471-00	METAL	120K	1%	1/4W	R6858	1-214-898-81	METAL	24K	1%	1/2W
R6712	1-215-451-00	METAL	18K	1%	1/4W	R6859	1-215-871-11	METAL OXIDE	2.2K	5%	1W
R6713	1-249-423-11	CARBON	3.3K	5%	1/4W	R6860	1-215-923-00	METAL OXIDE	10K	5%	3W
R6714	1-249-423-11	CARBON	3.3K	5%	1/4W	R6861	1-216-295-91	SHORT	0		
R6715	1-249-429-11	CARBON	10K	5%	1/4W	R6862	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6800	1-249-429-11	CARBON	10K	5%	1/4W	R6863	1-215-894-11	METAL OXIDE	2.2K	5%	2W
R6801	1-249-429-11	CARBON	10K	5%	1/4W	R6864	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6802	1-249-429-11	CARBON	10K	5%	1/4W	R6865	1-216-101-00	RES-CHIP	150K	5%	1/10W
R6803	1-216-073-00	RES-CHIP	10K	5%	1/10W	R6866	1-215-431-00	METAL	2.7K	1%	1/4W
R6804	1-208-795-11	METAL CHIP	3.6K	0.5%	1/10W	R6867	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R6805	1-215-441-00	METAL	6.8K	1%	1/4W	R6868	1-216-065-91	RES-CHIP	4.7K	5%	1/10W
R6806	1-215-434-00	METAL	3.6K	1%	1/4W	R6869	1-216-113-00	RES-CHIP	470K	5%	1/10W
R6807	1-249-383-11	CARBON	1.5	5%	1/4W	R6870	1-216-057-00	RES-CHIP	2.2K	5%	1/10W
R6810	1-214-798-21	METAL	1.8	1%	1/2W	R6871	1-208-822-11	METAL CHIP	47K	0.5%	1/10W
R6811	1-215-913-11	METAL OXIDE	220	5%	3W	R6872	1-260-125-11	CARBON	150K	5%	1/2W
R6812	1-247-843-11	CARBON	3.3K	5%	1/4W	R6873	1-260-125-11	CARBON	150K	5%	1/2W
R6813	1-214-798-21	METAL	1.8	1%	1/2W	R6875	1-249-417-11	CARBON	1K	5%	1/4W
R6814	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R6876	1-260-288-11	CARBON	0.47	5%	1/2W
R6815	1-208-801-11	METAL CHIP	6.2K	0.5%	1/10W	R6877	1-208-790-11	METAL CHIP	2.2K	0.5%	1/10W
R6816	1-214-915-00	METAL	120K	1%	1/2W	R6878	1-208-770-11	METAL CHIP	330	0.5%	1/10W
R6818	1-215-485-00	METAL	470K	1%	1/4W	R6879	1-216-105-91	RES-CHIP	220K	5%	1/10W
R6819	1-249-421-11	CARBON	2.2K	5%	1/4W	R6880	1-215-441-00	METAL	6.8K	1%	1/4W
R6820	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R6881	1-215-447-00	METAL	12K	1%	1/4W
R6822	1-216-461-00	METAL OXIDE	5.6K	5%	2W	R6882	1-215-456-00	METAL	30K	1%	1/4W
R6823	1-215-895-11	METAL OXIDE	3.3K	5%	2W	R6883	1-208-806-11	METAL CHIP	10K	0.5%	1/10W
R6824	1-249-411-11	CARBON	330	5%	1/4W	R6884	1-249-441-11	CARBON	100K	5%	1/4W
R6825	1-249-411-11	CARBON	330	5%	1/4W	R6885	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R6826	1-215-894-11	METAL OXIDE	2.2K	5%	2W	R6886	1-208-798-11	METAL CHIP	4.7K	0.5%	1/10W
R6827	1-216-459-00	METAL OXIDE	2.7K	5%	2W	R6887	1-216-081-00	RES-CHIP	22K	5%	1/10W
R6828	1-249-417-11	CARBON	1K	5%	1/4W	R6888	1-216-089-91	RES-CHIP	47K	5%	1/10W
R6829	1-249-417-11	CARBON	1K	5%	1/4W	R6889	1-260-125-11	CARBON	150K	5%	1/2W
R6830	1-247-764-11	CARBON	10K	5%	1/2W	R6890	1-260-125-11	CARBON	150K	5%	1/2W
R6831	1-247-764-11	CARBON	10K	5%	1/2W	R6891	1-216-069-00	RES-CHIP	6.8K	5%	1/10W
R6832	1-215-477-00	METAL	220K	1%	1/4W	R6892	1-216-097-91	RES-CHIP	100K	5%	1/10W
R6833	1-215-493-00	METAL	1M	1%	1/4W	R6893	1-216-085-00	RES-CHIP	33K	5%	1/10W
R6834	1-216-381-11	METAL OXIDE	0.22	5%	3W	R6894	1-260-133-11	CARBON	680K	5%	1/2W
R6835	1-216-381-11	METAL OXIDE	0.22	5%	3W	R6895	1-216-097-91	RES-CHIP	100K	5%	1/10W
R6836	1-215-905-11	METAL OXIDE	10	5%	3W	R6896	1-216-089-91	RES-CHIP	47K	5%	1/10W
R6837	1-215-905-11	METAL OXIDE	10	5%	3W						

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**D** **DH** **E**

REF. NO.	PART NO.	DESCRIPTION	REMARK
R6897	1-216-097-91	RES-CHIP 100K	5% 1/10W
R6899	1-216-073-00	RES-CHIP 10K	5% 1/10W
R6900	1-208-810-11	METAL CHIP 15K	0.5% 1/10W
R6901	1-208-810-11	METAL CHIP 15K	0.5% 1/10W
R6902	1-249-441-11	CARBON 100K	5% 1/4W
R6903	1-215-923-00	METAL OXIDE 10K	5% 3W
R6905	1-249-389-11	CARBON 4.7	5% 1/4W
R6906	1-216-079-00	RES-CHIP 18K	5% 1/10W
R6907	1-216-079-00	RES-CHIP 18K	5% 1/10W
<RELAY>			
RY6601 $\Delta$	1-515-840-12	RELAY	
RY6602 $\Delta$	1-755-357-11	RELAY, AC POWER	
RY6603 $\Delta$	1-755-357-11	RELAY, AC POWER	
<TRANSFORMER>			
T6601 $\Delta$	1-431-732-12	TRANSFORMER, CONVERTER (SRT)	
T6602 $\Delta$	1-435-081-11	TRANSFORMER, CONVERTER (PIT)	
T6800	1-429-741-11	TRANSFORMER, DRIVE	
T6801	1-433-934-11	TRANSFORMER, FERRITE (DFT)	
T6802	1-433-489-11	TRANSFORMER, FERRITE (HDT)	
T6803 $\Delta$	1-453-326-11	FBT ASSY NX-4601/J1J4	
T6804	1-433-489-11	TRANSFORMER, FERRITE (HDT)	
<THERMISTOR>			
TH6601	1-803-540-11	THERMISTOR	
TH6603	1-803-586-11	THERMISTOR, NTC	
*****			
A-1343-850-A	DH BOARD MOUNTED *****		
<CAPACITOR>			
C3801	1-126-964-11	ELECT 10UF	20.00% 50V
C3804	1-102-129-00	CERAMIC 0.01UF	10.00% 50V
C3805	1-126-964-11	ELECT 10UF	20.00% 50V
C3807	1-102-129-00	CERAMIC 0.01UF	10.00% 50V
C3816	1-126-964-11	ELECT 10UF	20.00% 50V
C3819	1-126-960-11	ELECT 1UF	20.00% 50V
C3822	1-136-165-00	MYLAR 0.1UF	5.00% 50V
<CONNECTOR>			
CN3801	1-695-915-11	TAB (CONTACT)	
CN3802*	1-564-509-11	PLUG, CONNECTOR 6P	
CN3803	1-695-915-11	TAB (CONTACT)	
<DIODE>			
D3805	8-719-911-19	DIODE 1SS119-25TD	
D3805	8-719-991-33	DIODE 1SS133T-77	

REF. NO.	PART NO.	DESCRIPTION	REMARK
<IC>			
IC3805	8-759-822-38	IC LA6510	
IC3807	1-418-597-11	SENSOR UNIT, MAGNETIC	
<NEON LAMP>			
NL3801	1-576-414-21	GAP, SPARK	
<TRANSISTOR>			
Q3807	8-729-030-02	TRANSISTOR DTC144ES-TP	
Q3808	8-729-030-02	TRANSISTOR DTC144ES-TP	
Q3809	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q3810	8-729-119-76	TRANSISTOR 2SA1175TP-HFE	
Q3811	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q3812	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
<RESISTOR>			
R3802	1-249-417-11	CARBON 1K	5% 1/4W
R3803	1-249-417-11	CARBON 1K	5% 1/4W
R3804	1-215-444-00	METAL 9.1K	1% 1/4W
R3805	1-249-416-11	CARBON 820	5% 1/4W
R3807	1-215-413-00	METAL 470	1% 1/4W
R3808	1-247-883-00	CARBON 150K	5% 1/4W
R3809	1-247-876-11	CARBON 75K	5% 1/4W
R3810	1-249-425-11	CARBON 4.7K	5% 1/4W
R3811	1-219-510-11	CARBON 470K	5% 1/2W
R3812	1-219-759-11	CARBON 1M	5% 1/2W
R3814	1-249-411-11	CARBON 330	5% 1/4W
R3823	1-249-395-11	CARBON 15	5% 1/4W
R3825	1-249-417-11	CARBON 1K	5% 1/4W
R3828	1-249-377-11	CARBON 0.47	5% 1/4W
R3839	1-249-429-11	CARBON 10K	5% 1/4W
R3845	1-249-425-11	CARBON 4.7K	5% 1/4W
R3846	1-249-417-11	CARBON 1K	5% 1/4W
R3847	1-247-807-31	CARBON 100	5% 1/4W
R3848	1-249-417-11	CARBON 1K	5% 1/4W
R3849	1-249-377-11	CARBON 0.47	5% 1/4W
R3852	1-249-441-11	CARBON 100K	5% 1/4W
R3854	1-249-429-11	CARBON 10K	5% 1/4W
*****			
* A-1343-778-C	E BOARD MOUNTED *****		
<CAPACITOR>			
C4301	1-164-004-11	CERAMIC CHIP 0.1MF	10% 25V
C4308	1-126-960-11	ELECT 1UF	20.00% 50V
C4309	1-164-489-11	CERAMIC CHIP 0.22UF	10.00% 16V
C4316	1-104-664-11	ELECT 47UF	20.00% 25V
C4317	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C4318	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C4319	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V



REF. NO.	PART NO.	DESCRIPTION		REMARK	REF. NO.	PART NO.	DESCRIPTION		REMARK
C4320	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	C4813	1-163-021-91	CERAMIC CHIP	0.01UF	10.00% 50V
C4321	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	C4814	1-126-967-11	ELECT	47UF	20.00% 50V
C4322	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	C4817	1-126-967-11	ELECT	47UF	20.00% 50V
C4324	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	C4818	1-107-906-11	ELECT	10UF	20.00% 50V
C4325	1-163-093-00	CERAMIC CHIP	10PF	5.00% 50V	C4820	1-107-909-11	ELECT	47UF	20.00% 50V
C4326	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	C4821	1-107-909-11	ELECT	47UF	20.00% 16V
C4327	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	C4822	1-107-909-11	ELECT	47UF	20.00% 16V
C4328	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	C4823	1-163-017-00	CERAMIC CHIP	0.0047UF	10.00% 50V
C4329	1-126-963-11	ELECT	4.7UF	20.00% 50V	C4824	1-163-809-11	CERAMIC CHIP	0.047UF	10.00% 25V
C4330	1-136-244-11	FILM	0.1UF	5.00% 50V	C4825	1-163-809-11	CERAMIC CHIP	0.047UF	10.00% 25V
C4331	1-126-959-11	ELECT	0.47UF	20.00% 50V	C4833	1-126-964-11	ELECT	10UF	20.00% 50V
C4332	1-136-161-00	MYLAR	0.047UF	5.00% 50V	C4834	1-126-933-11	ELECT	100UF	20.00% 16V
C4333	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	C4835	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C4334	1-126-967-11	ELECT	47UF	20.00% 50V	C4836	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V
C4336	1-126-967-11	ELECT	47UF	20.00% 50V	C4837	1-163-275-11	CERAMIC CHIP	0.001UF	5.00% 50V
C4338	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V			<CONNECTOR>		
C4339	1-163-235-11	CERAMIC CHIP	22PF	5.00% 50V	CN4101	1-793-497-11	CONNECTOR, BOARD TO BOARD	40P	
C4340	1-126-967-11	ELECT	47UF	20.00% 50V	CN4500*	1-564-512-11	PLUG, CONNECTOR	9P	
C4341	1-163-227-11	CERAMIC CHIP	10PF	0.50PF 50V	CN4502*	1-564-506-11	PLUG, CONNECTOR	3P	
C4342	1-163-021-91	CERAMIC CHIP	0.01UF	10.00% 50V			<DIODE>		
C4343	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	D4304	8-719-042-28	DIODE HZU9.1BTRF		
C4344	1-163-809-11	CERAMIC CHIP	0.047UF	10.00% 25V	D4305	8-719-042-28	DIODE HZU9.1BTRF		
C4345	1-126-967-11	ELECT	47UF	20.00% 50V	D4311	8-719-914-43	DIODE DAN202K-T-146		
C4346	1-164-346-11	CERAMIC CHIP	1UF	16V	D4312	8-719-914-43	DIODE DAN202K-T-146		
C4347	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	D4313	8-719-401-63	DIODE MA3062M-TX		
C4348	1-164-346-11	CERAMIC CHIP	1UF	16V	D4314	8-719-914-43	DIODE DAN202K-T-146		
C4349	1-164-346-11	CERAMIC CHIP	1UF	16V	D4800	8-719-914-43	DIODE DAN202K-T-146		
C4350	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	D4801	8-719-914-43	DIODE DAN202K-T-146		
C4351	1-163-009-11	CERAMIC CHIP	0.001UF	10.00% 50V	D4802	8-719-109-81	DIODE RD4.7ES-T1B2		
C4352	1-126-967-11	ELECT	47UF	20.00% 50V	D4803	8-719-911-19	DIODE 1SS119-25TD		
C4353	1-107-823-11	CERAMIC CHIP	0.47UF	10.00% 16V	D4804	8-719-911-19	DIODE 1SS119-25TD		
C4354	1-107-823-11	CERAMIC CHIP	0.47UF	10.00% 16V	D4807	8-719-914-43	DIODE DAN202K-T-146		
C4355	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	D4808	8-719-914-43	DIODE DAN202K-T-146		
C4356	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	D4809	8-719-914-43	DIODE DAN202K-T-146		
C4357	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	D4812	8-719-911-19	DIODE 1SS119-25TD		
C4358	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	D4813	8-719-914-43	DIODE DAN202K-T-146		
C4359	1-164-161-11	CERAMIC CHIP	0.0022UF	10.00% 50V	D4814	8-719-914-43	DIODE DAN202K-T-146		
C4360	1-126-963-11	ELECT	4.7UF	20.00% 50V	D4815	8-719-109-54	DIODE RD2.2ES-T1B2		
C4362	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	D4816	8-719-911-19	DIODE 1SS119-25TD		
C4363	1-126-967-11	ELECT	47UF	20.00% 50V			<FERRITE BEAD>		
C4364	1-126-967-11	ELECT	47UF	20.00% 50V	FB4387	1-216-295-91	SHORT	0	
C4366	1-104-760-11	CERAMIC CHIP	0.047UF	10.00% 50V	FB4388	1-216-295-91	SHORT	0	
C4367	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	FB4389	1-216-295-91	SHORT	0	
C4369	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V			<IC>		
C4370	1-126-967-11	ELECT	47UF	20.00% 50V	IC4301	8-752-090-87	IC CXA2100AQ		
C4371	1-164-004-11	CERAMIC CHIP	0.1UF	10.00% 25V	IC4800	8-759-450-95	IC LM393N		
C4378	1-163-251-11	CERAMIC CHIP	100PF	5.00% 50V	IC4801	8-759-450-95	IC LM393N		
C4800	1-136-165-00	MYLAR	0.1UF	5.00% 50V	IC4802	8-759-638-79	IC NJM3404AD-W		
C4801	1-136-161-00	MYLAR	0.047UF	5.00% 50V	IC4803	8-759-700-42	IC NJM2904D		
C4802	1-163-275-11	CERAMIC CHIP	0.001UF	5.00% 50V					
C4803	1-163-021-91	CERAMIC CHIP	0.01UF	10.00% 50V					
C4804	1-126-967-11	ELECT	47UF	20.00% 50V					
C4805	1-126-964-11	ELECT	10UF	20.00% 50V					
C4806	1-163-133-00	CERAMIC CHIP	470PF	5.00% 50V					
C4808	1-136-165-00	MYLAR	0.1UF	5.00% 50V					
C4809	1-163-275-11	CERAMIC CHIP	0.001UF	5.00% 50V					
C4811	1-163-021-91	CERAMIC CHIP	0.01UF	10.00% 50V					
C4812	1-126-967-11	ELECT	47UF	20.00% 50V					

E

REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
		<CHIP CONDUCTOR>				<RESISTOR>	
JR4301	1-216-295-91	SHORT 0		R4302	1-216-025-91	RES-CHIP 100	5% 1/10W
		<COIL>		R4303	1-216-025-91	RES-CHIP 100	5% 1/10W
L4301	1-412-029-11	INDUCTOR CHIP 10UH		R4304	1-216-025-91	RES-CHIP 100	5% 1/10W
L4302	1-412-029-11	INDUCTOR CHIP 10UH		R4307	1-216-025-91	RES-CHIP 100	5% 1/10W
L4303	1-412-029-11	INDUCTOR CHIP 10UH		R4308	1-216-295-91	SHORT 0	
L4304	1-412-029-11	INDUCTOR CHIP 10UH		R4312	1-216-295-91	SHORT 0	
L4305	1-412-029-11	INDUCTOR CHIP 10UH		R4316	1-216-069-00	RES-CHIP 6.8K	5% 1/10W
L4306	1-412-029-11	INDUCTOR CHIP 10UH		R4317	1-216-081-00	RES-CHIP 22K	5% 1/10W
L4308	1-412-031-11	INDUCTOR CHIP 47UH		R4318	1-208-804-11	METAL CHIP 8.2K	0.5% 1/10W
L4309	1-412-031-11	INDUCTOR CHIP 47UH		R4319	1-208-804-11	METAL CHIP 8.2K	0.5% 1/10W
L4311	1-412-002-31	INDUCTOR CHIP 4.7UH		R4320	1-208-790-11	METAL CHIP 2.2K	0.5% 1/10W
		<TRANSISTOR>		R4321	1-216-298-00	RES-CHIP 2.2	5% 1/10W
Q4301	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4323	1-208-814-91	METAL CHIP 22K	0.5% 1/10W
Q4302	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4324	1-208-798-11	METAL CHIP 4.7K	0.5% 1/10W
Q4303	8-729-120-28	TRANSISTOR 2SC2412K-T-146-R		R4325	1-208-818-11	METAL CHIP 33K	0.5% 1/10W
Q4304	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4326	1-208-826-11	METAL CHIP 68K	0.5% 1/10W
Q4307	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4327	1-208-822-11	METAL CHIP 47K	0.5% 1/10W
Q4308	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4329	1-208-782-11	METAL CHIP 1K	0.5% 1/10W
Q4310	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4330	1-216-089-91	RES-CHIP 47K	5% 1/10W
Q4315	1-801-806-11	TRANSISTOR DTC144EKA-T146		R4331	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4316	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4332	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4317	8-729-900-53	TRANSISTOR DTC114EKA-T146		R4333	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4319	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4334	1-216-049-91	RES-CHIP 1K	5% 1/10W
Q4320	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4335	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4321	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4336	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4322	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4337	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4800	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4338	1-216-041-00	RES-CHIP 470	5% 1/10W
Q4801	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4339	1-216-051-00	RES-CHIP 1.2K	5% 1/10W
Q4802	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4341	1-216-295-91	SHORT 0	
Q4803	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4343	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4804	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4344	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4805	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4345	1-216-075-00	RES-CHIP 12K	5% 1/10W
Q4806	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4346	1-208-812-11	METAL CHIP 18K	0.5% 1/10W
Q4807	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4347	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4808	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4348	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4809	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4349	1-216-041-00	RES-CHIP 470	5% 1/10W
Q4810	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4350	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4811	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4351	1-216-081-00	RES-CHIP 22K	5% 1/10W
Q4812	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4352	1-216-041-00	RES-CHIP 470	5% 1/10W
Q4813	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4353	1-216-051-00	RES-CHIP 1.2K	5% 1/10W
Q4814	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4354	1-208-806-11	METAL CHIP 10K	0.5% 1/10W
Q4815	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4355	1-216-049-91	RES-CHIP 1K	5% 1/10W
Q4816	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4356	1-216-049-91	RES-CHIP 1K	5% 1/10W
Q4817	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4357	1-216-073-00	RES-CHIP 10K	5% 1/10W
Q4818	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4358	1-216-071-00	RES-CHIP 8.2K	5% 1/10W
Q4820	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4359	1-216-041-00	RES-CHIP 470	5% 1/10W
Q4821	1-801-806-11	TRANSISTOR DTC144EKA-T146		R4360	1-216-057-00	RES-CHIP 2.2K	5% 1/10W
Q4822	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4361	1-216-133-00	RES-CHIP 3.3M	5% 1/10W
Q4823	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4363	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4824	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR		R4365	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4825	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4366	1-216-025-91	RES-CHIP 100	5% 1/10W
Q4826	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L		R4367	1-216-025-91	RES-CHIP 100	5% 1/10W
				R4369	1-216-025-91	RES-CHIP 100	5% 1/10W
				R4370	1-216-049-91	RES-CHIP 1K	5% 1/10W
				R4372	1-216-049-91	RES-CHIP 1K	5% 1/10W





REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R4373	1-216-295-91	SHORT	0	R4833	1-208-822-11	METAL CHIP	47K 0.5% 1/10W
R4374	1-216-025-91	RES-CHIP	100 5%	R4834	1-208-790-11	METAL CHIP	2.2K 0.5% 1/10W
R4375	1-216-049-91	RES-CHIP	1K 5%	R4835	1-208-790-11	METAL CHIP	2.2K 0.5% 1/10W
R4376	1-216-025-91	RES-CHIP	100 5%	R4836	1-208-822-11	METAL CHIP	47K 0.5% 1/10W
R4377	1-216-049-91	RES-CHIP	1K 5%	R4837	1-208-822-11	METAL CHIP	47K 0.5% 1/10W
R4380	1-216-073-00	RES-CHIP	10K 5%	R4838	1-208-830-11	METAL CHIP	100K 0.5% 1/10W
R4381	1-208-854-11	METAL CHIP	1M 0.5%	R4839	1-208-802-11	METAL CHIP	6.8K 0.5% 1/10W
R4382	1-216-073-00	RES-CHIP	10K 5%	R4840	1-216-295-91	SHORT	0
R4383	1-216-079-00	RES-CHIP	18K 5%	R4841	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
R4384	1-216-025-91	RES-CHIP	100 5%	R4842	1-208-822-11	METAL CHIP	47K 0.5% 1/10W
R4387	1-216-295-91	SHORT	0	R4843	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
R4388	1-216-295-91	SHORT	0	R4844	1-208-798-11	METAL CHIP	4.7K 0.5% 1/10W
R4389	1-216-295-91	SHORT	0	R4845	1-208-830-11	METAL CHIP	100K 0.5% 1/10W
R4395	1-216-295-91	SHORT	0	R4846	1-216-295-91	SHORT	0
R4396	1-216-295-91	SHORT	0	R4847	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4397	1-216-295-91	SHORT	0	R4848	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4399	1-247-807-31	CARBON	100 5%	R4849	1-216-095-00	RES-CHIP	82K 5% 1/10W
R4401	1-216-105-91	RES-CHIP	220K 5%	R4850	1-216-097-91	RES-CHIP	100K 5% 1/10W
R4408	1-216-025-91	RES-CHIP	100 5%	R4851	1-216-053-00	RES-CHIP	1.5K 5% 1/10W
R4409	1-216-073-00	RES-CHIP	10K 5%	R4852	1-216-081-00	RES-CHIP	22K 5% 1/10W
R4410	1-216-057-00	RES-CHIP	2.2K 5%	R4853	1-216-053-00	RES-CHIP	1.5K 5% 1/10W
R4411	1-216-073-00	RES-CHIP	10K 5%	R4854	1-216-061-00	RES-CHIP	3.3K 5% 1/10W
R4412	1-216-097-91	RES-CHIP	100K 5%	R4855	1-216-077-91	RES-CHIP	15K 5% 1/10W
R4518	1-216-025-91	RES-CHIP	100 5%	R4856	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
R4519	1-216-073-00	RES-CHIP	10K 5%	R4857	1-208-810-11	METAL CHIP	15K 0.5% 1/10W
R4520	1-216-025-91	RES-CHIP	100 5%	R4859	1-208-792-11	METAL CHIP	2.7K 0.5% 1/10W
R4521	1-216-025-91	RES-CHIP	100 5%	R4860	1-208-792-11	METAL CHIP	2.7K 0.5% 1/10W
R4800	1-216-057-00	RES-CHIP	2.2K 5%	R4861	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
R4801	1-216-049-91	RES-CHIP	1K 5%	R4862	1-208-810-11	METAL CHIP	15K 0.5% 1/10W
R4802	1-216-073-00	RES-CHIP	10K 5%	R4864	1-208-784-11	METAL CHIP	1.2K 0.5% 1/10W
R4803	1-216-049-91	RES-CHIP	1K 5%	R4865	1-208-782-11	METAL CHIP	1K 0.5% 1/10W
R4804	1-216-065-91	RES-CHIP	4.7K 5%	R4866	1-216-089-91	RES-CHIP	47K 5% 1/10W
R4805	1-208-792-11	METAL CHIP	2.7K 0.5%	R4869	1-208-814-91	METAL CHIP	22K 0.5% 1/10W
R4806	1-208-792-11	METAL CHIP	2.7K 0.5%	R4871	1-208-830-11	METAL CHIP	100K 0.5% 1/10W
R4807	1-216-049-91	RES-CHIP	1K 5%	R4872	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
R4809	1-216-073-00	RES-CHIP	10K 5%	R4874	1-216-295-91	SHORT	0
R4810	1-208-814-91	METAL CHIP	22K 0.5%	R4875	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
R4811	1-208-814-91	METAL CHIP	22K 0.5%	R4877	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
R4812	1-216-295-91	SHORT	0	R4878	1-208-836-11	METAL CHIP	180K 0.5% 1/10W
R4813	1-216-089-91	RES-CHIP	47K 5%	R4879	1-216-105-91	RES-CHIP	220K 5% 1/10W
R4814	1-208-830-11	METAL CHIP	100K 0.5%	R4881	1-216-295-91	SHORT	0
R4815	1-208-830-11	METAL CHIP	100K 0.5%	R4882	1-208-834-11	METAL CHIP	150K 0.5% 1/10W
R4816	1-216-073-00	RES-CHIP	10K 5%	R4883	1-208-842-11	METAL CHIP	330K 0.5% 1/10W
R4817	1-208-854-11	METAL CHIP	1M 0.5%	R4884	1-208-822-11	METAL CHIP	47K 0.5% 1/10W
R4818	1-216-057-00	RES-CHIP	2.2K 5%	R4887	1-208-814-91	METAL CHIP	22K 0.5% 1/10W
R4819	1-216-057-00	RES-CHIP	2.2K 5%	R4892	1-216-295-91	SHORT	0
R4820	1-216-073-00	RES-CHIP	10K 5%	R4894	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4821	1-216-073-00	RES-CHIP	10K 5%	R4895	1-216-073-00	RES-CHIP	10K 5% 1/10W
R4822	1-216-057-00	RES-CHIP	2.2K 5%	R4897	1-208-788-11	METAL CHIP	1.8K 0.5% 1/10W
R4823	1-216-057-00	RES-CHIP	2.2K 5%	R4898	1-208-798-11	METAL CHIP	4.7K 0.5% 1/10W
R4824	1-216-073-00	RES-CHIP	10K 5%	R4899	1-216-025-91	RES-CHIP	100 5% 1/10W
R4825	1-216-073-00	RES-CHIP	10K 5%			<CRYSTAL>	
R4826	1-216-057-00	RES-CHIP	2.2K 5%	X4300	1-767-127-11	VIBRATOR, CERAMIC	
R4827	1-216-295-91	SHORT	0				
R4828	1-216-057-00	RES-CHIP	2.2K 5%				
R4829	1-216-057-00	RES-CHIP	2.2K 5%				
R4831	1-208-794-11	METAL CHIP	3.3K 0.5%				
R4832	1-208-822-11	METAL CHIP	47K 0.5%				

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E2

F1

The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.

REF. NO.	PART NO.	DESCRIPTION	REMARK
	A-1343-862-A	E2 BOARD MOUNTED *****	
	1-678-034-11	PWB, E2	
	1-718-468-11	PWB, E2 COMBINED	
		<CAPACITOR>	
C4300	1-126-964-11	ELECT 10UF	20.00% 50V
C4301	1-136-165-00	MYLAR 0.1UF	5.00% 50V
C4901	1-130-495-00	MYLAR 0.1UF	5.00% 50V
C4902	1-126-964-11	ELECT 10UF	20.00% 50V
C4903	1-136-479-11	FILM 0.001UF	5.00% 50V
C4904	1-130-495-00	MYLAR 0.1UF	5.00% 50V
		<CONNECTOR>	
CN4901*	1-564-507-11	PLUG, CONNECTOR 4P	
CN4902*	1-564-507-11	PLUG, CONNECTOR 4P	
		<DIODE>	
D4302	8-719-911-19	DIODE 1SS119-25TD	
D4303	8-719-109-72	DIODE RD3.9ES-T1B	
		<TRANSISTOR>	
Q4300	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q4302	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q4303	8-729-119-76	TRANSISTOR 2SA1175TP-HFE	
Q4304	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q4305	8-729-119-76	TRANSISTOR 2SA1175TP-HFE	
Q4901	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q4902	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q4903	8-729-119-76	TRANSISTOR 2SA1175TP-HFE	
Q4904	8-729-119-76	TRANSISTOR 2SA1175TP-HFE	
		<RESISTOR>	
R4300	1-247-807-31	CARBON 100	5% 1/4W
R4301	1-216-025-91	RES-CHIP 100	5% 1/10W
R4305	1-216-025-91	RES-CHIP 100	5% 1/10W
R4306	1-216-025-91	RES-CHIP 100	5% 1/10W
R4309	1-215-429-00	METAL 2.2K	1% 1/4W
R4310	1-216-295-91	SHORT 0	
R4311	1-249-421-11	CARBON 2.2K	5% 1/4W
R4313	1-216-065-91	RES-CHIP 4.7K	5% 1/10W
R4314	1-216-057-00	RES-CHIP 2.2K	5% 1/10W
R4315	1-215-477-00	METAL 220K	1% 1/4W
R4901	1-249-417-11	CARBON 1K	5% 1/4W
R4902	1-249-425-11	CARBON 4.7K	5% 1/4W
R4903	1-249-435-11	CARBON 33K	5% 1/4W
R4904	1-249-425-11	CARBON 4.7K	5% 1/4W
R4905	1-249-429-11	CARBON 10K	5% 1/4W

REF. NO.	PART NO.	DESCRIPTION	REMARK
R4906	1-249-429-11	CARBON 10K	5% 1/4W
R4907	1-249-421-11	CARBON 2.2K	5% 1/4W
R4908	1-216-049-91	RES-CHIP 1K	5% 1/10W
R4909	1-216-065-91	RES-CHIP 4.7K	5% 1/10W
R4910	1-216-065-91	RES-CHIP 4.7K	5% 1/10W
R4911	1-208-818-11	METAL CHIP 33K	0.5% 1/10W
R4912	1-208-806-11	METAL CHIP 10K	0.5% 1/10W
R4913	1-208-806-11	METAL CHIP 10K	0.5% 1/10W
R4914	1-216-057-00	RES-CHIP 2.2K	5% 1/10W
		*****	
	* A-1241-402-A	F1 BOARD MOUNT *****	
	1-533-223-11	HOLDER, FUSE	
	* 4-374-846-01	COVER, CAPACITOR, CAP TYPE	
		<CAPACITOR>	
C1601 $\Delta$	1-104-708-11	MYLAR 0.47MF	20% 250V
C1602 $\Delta$	1-109-835-11	MYLAR 0.68MF	20% 250V
C1603 $\Delta$	1-117-703-51	CERAMIC 0.0047MF	99% 250V
		<CONNECTOR>	
CN1601*	$\Delta$ 1-580-843-11	PIN, CONNECTOR (POWER)	
CN1602*	$\Delta$ 1-580-843-11	PIN, CONNECTOR (POWER)	
CN1603	1-695-915-11	TAB (CONTACT)	
CN1604	1-695-915-11	TAB (CONTACT)	
		<FUSE>	
F1601 $\Delta$	1-532-299-11	FUSE, TIME-LAG 5A/250V	
		<FERRITE BEAD>	
FB1601	1-410-397-21	FERRITE 1.1UH	
FB1602	1-410-397-21	FERRITE 1.1UH	
FB1603	1-410-397-21	FERRITE 1.1UH	
FB1604	1-410-397-21	FERRITE 1.1UH	
		<RESISTOR>	
R1601 $\Delta$	1-202-885-91	SOLID 1M	10% 1/2W
		<TRANSFORMER>	
T1601	1-433-900-11	TRANSFORMER, LINE FILTER	
T1602	1-433-900-11	TRANSFORMER, LINE FILTER	
		<VARISTOR>	
VDR161	1-803-830-31	VARISTOR (ERZV14D621)	

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The components identified by shading and mark  $\Delta$  are critical for safety. Replace only with part number specified.



REF. NO.	PART NO.	DESCRIPTION	REMARK
	* A-1241-403-A	F2 BOARD MOUNT *****	
		<CONNECTOR>	
CN1651 *	1-580-843-11	PIN, CONNECTOR (POWER)	
CN1652 *	1-691-291-11	PIN, CONNECTOR (PC BOARD) 5P	
		<SWITCH>	
S1651 $\Delta$	1-571-433-31	SWITCH, PUSH (AC POWER)	
*****			
	* A-1372-728-A	H1 BOARD MOUNT *****	
	* 4-055-304-01	HOLDER, LED	
		<CAPACITOR>	
C1910	1-104-664-11	ELECT 47MF 20% 16V	
C1911	1-104-664-11	ELECT 47MF 20% 16V	
C1912	1-102-824-00	CERAMIC 470PF 5% 50V	
		<CONNECTOR>	
CN1901 *	1-564-520-11	PLUG, CONNECTOR 5P	
		<DIODE>	
D1906	8-719-045-19	DIODE SPB-26MVWF	
		<IC>	
IC1901	8-742-134-00	HYB IC SBX1981-51P	
		<TRANSISTOR>	
Q1901	8-729-030-02	TRANSISTOR DTC144ESA	
Q1902	8-729-030-02	TRANSISTOR DTC144ESA	
		<RESISTOR>	
R1911	1-249-411-11	CARBON 330 5% 1/4W	
R1913	1-249-429-11	CARBON 10K 5% 1/4W	
R1914	1-249-411-11	CARBON 330 5% 1/4W	
R1915	1-249-429-11	CARBON 10K 5% 1/4W	
R1916	1-249-401-11	CARBON 47 5% 1/4W	
R1917	1-247-807-31	CARBON 100 5% 1/4W	
R1920	1-247-807-31	CARBON 100 5% 1/4W	
R1921	1-247-807-31	CARBON 100 5% 1/4W	
*****			

REF. NO.	PART NO.	DESCRIPTION	REMARK
	* A-1372-729-A	H2 BOARD MOUNT *****	
		<CAPACITOR>	
C1930	1-136-153-00	MYLAR 0.01MF 5% 50V	
C1932	1-136-153-00	MYLAR 0.01MF 5% 50V	
C1935	1-102-824-00	CERAMIC 470PF 5% 50V	
C1938	1-102-824-00	CERAMIC 470PF 5% 50V	
		<CONNECTOR>	
CN1932 *	1-564-509-11	PLUG, CONNECTOR 6P	
CN1934 *	1-564-515-11	PLUG, CONNECTOR 12P	
		<DIODE>	
D1930	8-719-121-26	DIODE RD9.1ESL2	
D1935	8-719-121-26	DIODE RD9.1ESL2	
		<JACK>	
J1931	1-770-786-11	JACK	
J1932	1-537-744-11	TERMINAL, S	
J1933	1-770-329-11	JACK, PIN 3P	
		<COIL>	
L1931	1-408-603-31	INDUCTOR 10UH	
L1932	1-408-603-31	INDUCTOR 10UH	
		<RESISTOR>	
R1933	1-247-895-91	CARBON 470K 5% 1/4W	
R1934	1-247-807-31	CARBON 100 5% 1/4W	
R1935	1-247-807-31	CARBON 100 5% 1/4W	
R1936	1-247-895-91	CARBON 470K 5% 1/4W	
R1952	1-249-421-11	CARBON 2.2K 5% 1/4W	
		<SWITCH>	
S1931	1-692-431-21	SWITCH, TACTILE	
*****			
	* A-1372-730-A	H3 BOARD MOUNT *****	
		<CONNECTOR>	
CN1980 *	1-564-518-11	PLUG, CONNECTOR 3P	
		<RESISTOR>	
R1970	1-249-416-11	CARBON 820 5% 1/4W	
R1971	1-247-831-91	CARBON 1K 5% 1/4W	
R1972	1-249-418-11	CARBON 1.2K 5% 1/4W	

H3

J

REF. NO.	PART NO.	DESCRIPTION	REMARK
R1973	1-249-420-11	CARBON 1.8K	5% 1/4W
R1974	1-247-843-11	CARBON 3.3K	5% 1/4W
R1975	1-249-427-11	CARBON 6.8K	5% 1/4W
R1976	1-249-432-11	CARBON 18K	5% 1/4W
<SWITCH>			
S1972	1-572-198-11	SWITCH, KEYBOARD	
S1973	1-572-198-11	SWITCH, KEYBOARD	
S1974	1-572-198-11	SWITCH, KEYBOARD	
S1975	1-572-198-11	SWITCH, KEYBOARD	
S1976	1-572-198-11	SWITCH, KEYBOARD	
S1977	1-572-198-11	SWITCH, KEYBOARD	
S1978	1-572-198-11	SWITCH, KEYBOARD	
S1979	1-572-198-11	SWITCH, KEYBOARD	
*****			
* A-1394-965-B	J BOARD COMPLETE		
*****			
3-350-679-01	WASHER, FIBER		
<CAPACITOR>			
C8300	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C8301	1-163-133-00	CERAMIC CHIP 470PF	5.00% 50V
C8302	1-163-133-00	CERAMIC CHIP 470PF	5.00% 50V
C8303	1-163-133-00	CERAMIC CHIP 470PF	5.00% 50V
C8304	1-163-133-00	CERAMIC CHIP 470PF	5.00% 50V
C8305	1-163-133-00	CERAMIC CHIP 470PF	5.00% 50V
C8306	1-163-133-00	CERAMIC CHIP 470PF	5.00% 50V
C8307	1-163-133-00	CERAMIC CHIP 470PF	5.00% 50V
C8308	1-163-133-00	CERAMIC CHIP 470PF	5.00% 50V
C8309	1-163-133-00	CERAMIC CHIP 470PF	5.00% 50V
C8310	1-163-133-00	CERAMIC CHIP 470PF	5.00% 50V
C8311	1-164-346-11	CERAMIC CHIP 1UF	16V
C8312	1-164-346-11	CERAMIC CHIP 1UF	16V
C8313	1-164-346-11	CERAMIC CHIP 1UF	16V
C8314	1-164-346-11	CERAMIC CHIP 1UF	16V
C8315	1-163-133-00	CERAMIC CHIP 470PF	5.00% 50V
C8316	1-163-133-00	CERAMIC CHIP 470PF	5.00% 50V
C8317	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8318	1-164-346-11	CERAMIC CHIP 1UF	16V
C8319	1-164-346-11	CERAMIC CHIP 1UF	16V
C8320	1-117-720-11	CERAMIC CHIP 4.7UF	10V
C8321	1-117-720-11	CERAMIC CHIP 4.7UF	10V
C8322	1-164-346-11	CERAMIC CHIP 1UF	16V
C8323	1-164-346-11	CERAMIC CHIP 1UF	16V
C8324	1-117-720-11	CERAMIC CHIP 4.7UF	10V
C8325	1-126-935-11	ELECT 470UF	20.00% 16V
C8326	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C8327	1-164-346-11	CERAMIC CHIP 1UF	16V
C8328	1-164-346-11	CERAMIC CHIP 1UF	16V
C8329	1-163-249-11	CERAMIC CHIP 82PF	5.00% 50V

REF. NO.	PART NO.	DESCRIPTION	REMARK
C8330	1-164-346-11	CERAMIC CHIP 1UF	16V
C8331	1-164-346-11	CERAMIC CHIP 1UF	16V
C8332	1-163-249-11	CERAMIC CHIP 82PF	5.00% 50V
C8333	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C8334	1-104-664-11	ELECT 47UF	20.00% 16V
C8335	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8336	1-104-664-11	ELECT 47UF	20.00% 16V
C8337	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8338	1-164-346-11	CERAMIC CHIP 1UF	16V
C8339	1-164-346-11	CERAMIC CHIP 1UF	16V
C8340	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C8341	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C8342	1-126-964-11	ELECT 10UF	20.00% 50V
C8343	1-104-664-11	ELECT 47UF	20.00% 16V
C8344	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8346	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8347	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8348	1-126-968-11	ELECT 100UF	20.00% 16V
C8349	1-117-720-11	CERAMIC CHIP 4.7UF	10V
C8352	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C8353	1-115-340-11	CERAMIC CHIP 0.22UF	10.00% 25V
C8354	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C8355	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8356	1-164-346-11	CERAMIC CHIP 1UF	16V
C8357	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8358	1-164-346-11	CERAMIC CHIP 1UF	16V
C8359	1-163-037-11	CERAMIC CHIP 0.022UF	10.00% 50V
C8360	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8361	1-126-961-11	ELECT 2.2UF	20.00% 50V
C8362	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8363	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8364	1-104-664-11	ELECT 47UF	20.00% 16V
C8365	1-104-664-11	ELECT 47UF	20.00% 16V
C8366	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8367	1-104-664-11	ELECT 47UF	20.00% 16V
C8368	1-104-664-11	ELECT 47UF	20.00% 16V
C8369	1-104-664-11	ELECT 47UF	20.00% 16V
C8370	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8371	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8372	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8373	1-163-227-11	CERAMIC CHIP 10PF	0.50PF 50V
C8374	1-164-346-11	CERAMIC CHIP 1UF	16V
C8375	1-126-964-11	ELECT 10UF	20.00% 50V
C8376	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8381	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8382	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8386	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8390	1-126-963-11	ELECT 4.7UF	20.00% 50V
C8391	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8392	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8393	1-164-004-11	CERAMIC CHIP 0.1UF	10.00% 25V
C8396	1-107-823-11	CERAMIC CHIP 0.47UF	10.00% 16V
C8399	1-126-961-11	ELECT 2.2UF	20.00% 50V
C8401	1-163-021-91	CERAMIC CHIP 0.01UF	10.00% 50V
C8402	1-164-346-11	CERAMIC CHIP 1UF	16V
C8403	1-163-037-11	CERAMIC CHIP 0.022UF	10.00% 50V
C8406	1-104-664-11	ELECT 47UF	20.00% 16V



REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
C8407	1-104-664-11	ELECT	47UF	20.00%	16V		
C8408	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V		
C8410	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8411	1-117-720-11	CERAMIC CHIP	4.7UF		10V		
C8412	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8413	1-117-720-11	CERAMIC CHIP	4.7UF		10V		
C8414	1-104-664-11	ELECT	47UF	20.00%	16V		
C8415	1-164-346-11	CERAMIC CHIP	1UF		16V		
C8416	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8417	1-163-227-11	CERAMIC CHIP	10PF	0.50PF	50V		
C8418	1-126-964-11	ELECT	10UF	20.00%	50V		
C8419	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8424	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V		
C8425	1-163-021-91	CERAMIC CHIP	0.01UF	10.00%	50V		
C8430	1-117-720-11	CERAMIC CHIP	4.7UF		10V		
C8431	1-163-243-11	CERAMIC CHIP	47PF	5.00%	50V		
C8432	1-163-239-11	CERAMIC CHIP	33PF	5.00%	50V		
C8437	1-126-963-11	ELECT	4.7UF	20.00%	50V		
C8438	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8439	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8440	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8441	1-164-346-11	CERAMIC CHIP	1UF		16V		
C8442	1-117-720-11	CERAMIC CHIP	4.7UF		10V		
C8443	1-117-720-11	CERAMIC CHIP	4.7UF		10V		
C8444	1-117-720-11	CERAMIC CHIP	4.7UF		10V		
C8445	1-164-346-11	CERAMIC CHIP	1UF		16V		
C8446	1-104-664-11	ELECT	47UF	20.00%	16V		
C8447	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8448	1-164-690-91	CERAMIC CHIP	0.0022UF	5.00%	50V		
C8450	1-107-823-11	CERAMIC CHIP	0.47UF	10.00%	16V		
C8451	1-164-505-11	CERAMIC CHIP	2.2UF		16V		
C8452	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8453	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8454	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8455	1-104-664-11	ELECT	47UF	20.00%	16V		
C8456	1-104-664-11	ELECT	47UF	20.00%	16V		
C8457	1-104-664-11	ELECT	47UF	20.00%	16V		
C8459	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8464	1-104-664-11	ELECT	47UF	20.00%	16V		
C8465	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8466	1-247-807-31	CARBON	100	5%	1/4W		
C8468	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8469	1-247-807-31	CARBON	100	5%	1/4W		
C8471	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
C8474	1-164-004-11	CERAMIC CHIP	0.1UF	10.00%	25V		
		<CONNECTOR>					
CN8301 *	1-564-524-11	PLUG, CONNECTOR 9P					
CN8302	1-695-915-11	TAB (CONTACT)					
CN8304	1-793-498-11	CONNECTOR, BOARD TO BOARD 50P					
		<DIODE>					
D8101	8-719-073-01	DIODE MA111-TX					
D8102	1-216-295-91	SHORT	0				
D8301	8-719-158-35	DIODE RD9.1SB-T1					
D8302	8-719-158-35	DIODE RD9.1SB-T1					
D8303	8-719-158-35	DIODE RD9.1SB-T1					
D8304	8-719-158-35	DIODE RD9.1SB-T1					
D8305	8-719-158-35	DIODE RD9.1SB-T1					
D8306	8-719-158-35	DIODE RD9.1SB-T1					
D8307	8-719-158-35	DIODE RD9.1SB-T1					
D8308	8-719-158-35	DIODE RD9.1SB-T1					
D8309	8-719-158-35	DIODE RD9.1SB-T1					
D8310	8-719-158-35	DIODE RD9.1SB-T1					
D8311	8-719-158-35	DIODE RD9.1SB-T1					
D8312	8-719-158-35	DIODE RD9.1SB-T1					
D8313	8-719-158-35	DIODE RD9.1SB-T1					
D8314	8-719-158-35	DIODE RD9.1SB-T1					
D8315	8-719-067-40	DIODE STZ6.8N-T146					
D8316	8-719-067-40	DIODE STZ6.8N-T146					
D8317	8-719-067-40	DIODE STZ6.8N-T146					
D8318	8-719-158-35	DIODE RD9.1SB-T1					
D8319	8-719-158-35	DIODE RD9.1SB-T1					
D8320	8-719-158-35	DIODE RD9.1SB-T1					
D8321	8-719-158-35	DIODE RD9.1SB-T1					
D8322	8-719-158-35	DIODE RD9.1SB-T1					
D8323	8-719-158-35	DIODE RD9.1SB-T1					
D8324	8-719-158-35	DIODE RD9.1SB-T1					
D8325	8-719-158-35	DIODE RD9.1SB-T1					
D8331	8-719-041-97	DIODE MA113-(TX)					
		<FERRITE BEAD>					
FB8101	1-414-598-11	INDUCTOR CHIP 0UH					
		<FILTER>					
FL8301	1-236-071-11	ENCAPSULATED COMPONENT					
FL8303	1-236-071-11	ENCAPSULATED COMPONENT					
FL8304	1-236-071-11	ENCAPSULATED COMPONENT					
FL8305	1-236-071-11	ENCAPSULATED COMPONENT					
FL8307	1-236-071-11	ENCAPSULATED COMPONENT					
FL8308	1-236-071-11	ENCAPSULATED COMPONENT					
FL8309	1-236-071-11	ENCAPSULATED COMPONENT					
FL8311	1-236-071-11	ENCAPSULATED COMPONENT					
FL8312	1-236-071-11	ENCAPSULATED COMPONENT					
FL8313	1-236-071-11	ENCAPSULATED COMPONENT					
FL8314	1-233-877-11	FILTER, LOW PASS					
FL8315	1-233-504-21	FILTER, LOW PASS					
FL8316	1-233-504-21	FILTER, LOW PASS					
		<IC>					
IC8302	8-752-080-04	IC CXA2069Q					
IC8304	8-759-576-72	IC LF50CDT-TR					
IC8305	8-759-576-74	IC LF90CDT-TR					
IC8306	8-752-094-47	IC CXA2123AQ-T6					
IC8308	8-752-094-47	IC CXA2123AQ-T6					
IC8309	8-759-337-26	IC MM1115XFBE					
IC8310	8-759-572-04	IC TDA9178T/N1.118					
IC8311	8-759-485-79	IC TC7SET08FU(TE85R)					
IC8312	8-759-485-79	IC TC7SET08FU(TE85R)					
IC8314	8-742-175-00	HYB IC SBX3005-11					

J

REF. NO.	PART NO.	DESCRIPTION	REMARK
		<JACK>	
J8106	1-793-787-11	JACK BLOCK, PIN 1P	
J8301	1-774-748-11	TERMINAL BLOCK, S	
J8302	1-774-746-11	JACK BLOCK, PIN	
J8303	1-774-746-11	JACK BLOCK, PIN	
J8304	1-774-746-11	JACK BLOCK, PIN	
J8305	1-695-444-11	PIN JACK BLOCK 3P	
J8307	1-565-838-11	JACK BLOCK, PIN 2P	
		<CHIP CONDUCTOR>	
JR8301	1-216-295-91	SHORT	0
JR8302	1-216-295-91	SHORT	0
JR8303	1-216-295-91	SHORT	0
JR8304	1-216-295-91	SHORT	0
		<COIL>	
L8302	1-414-196-41	INDUCTOR	47UH
L8303	1-414-196-41	INDUCTOR	47UH
L8304	1-414-196-41	INDUCTOR	47UH
		<TRANSISTOR>	
Q8301	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8302	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8303	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8304	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8305	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8306	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8307	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8308	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8309	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8310	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8312	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8313	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8319	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8320	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8321	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8322	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8323	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8324	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8326	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8327	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q8328	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q8329	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8330	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8331	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8332	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8333	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8334	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8335	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8336	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8337	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8342	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8343	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8344	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	

REF. NO.	PART NO.	DESCRIPTION	REMARK
Q8345	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8346	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8347	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8348	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8349	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8350	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8351	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8352	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8353	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8354	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8355	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8358	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q8359	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q8360	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q8361	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8362	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8363	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8364	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
Q8464	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8465	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8466	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L	
Q8512	8-729-026-49	TRANSISTOR 2SA1037AK-T146-QR	
		<RESISTOR>	
R8101	1-216-022-00	RES-CHIP	75 5% 1/10W
R8208	1-216-295-91	SHORT	0
R8209	1-216-295-91	SHORT	0
R8301	1-216-041-00	RES-CHIP	470 5% 1/10W
R8302	1-216-041-00	RES-CHIP	470 5% 1/10W
R8303	1-216-021-00	RES-CHIP	68 5% 1/10W
R8304	1-216-057-00	RES-CHIP	2.2K 5% 1/10W
R8305	1-216-113-00	RES-CHIP	470K 5% 1/10W
R8306	1-216-022-00	RES-CHIP	75 5% 1/10W
R8307	1-216-022-00	RES-CHIP	75 5% 1/10W
R8308	1-216-105-91	RES-CHIP	220K 5% 1/10W
R8309	1-216-105-91	RES-CHIP	220K 5% 1/10W
R8310	1-216-022-00	RES-CHIP	75 5% 1/10W
R8311	1-216-105-91	RES-CHIP	220K 5% 1/10W
R8312	1-216-105-91	RES-CHIP	220K 5% 1/10W
R8313	1-216-022-00	RES-CHIP	75 5% 1/10W
R8314	1-216-105-91	RES-CHIP	220K 5% 1/10W
R8315	1-216-105-91	RES-CHIP	220K 5% 1/10W
R8316	1-216-113-00	RES-CHIP	470K 5% 1/10W
R8317	1-216-022-00	RES-CHIP	75 5% 1/10W
R8318	1-216-022-00	RES-CHIP	75 5% 1/10W
R8319	1-216-022-00	RES-CHIP	75 5% 1/10W
R8320	1-216-105-91	RES-CHIP	220K 5% 1/10W
R8321	1-216-105-91	RES-CHIP	220K 5% 1/10W
R8322	1-216-022-00	RES-CHIP	75 5% 1/10W
R8323	1-216-295-91	SHORT	0
R8324	1-216-295-91	SHORT	0
R8325	1-216-295-91	SHORT	0
R8326	1-216-113-00	RES-CHIP	470K 5% 1/10W
R8327	1-216-295-91	SHORT	0
R8328	1-216-113-00	RES-CHIP	470K 5% 1/10W
R8329	1-216-113-00	RES-CHIP	470K 5% 1/10W



REF. NO.	PART NO.	DESCRIPTION			REMARK	REF. NO.	PART NO.	DESCRIPTION			REMARK
R8330	1-216-022-00	RES-CHIP	75	5%	1/10W	R8394	1-216-041-00	RES-CHIP	470	5%	1/10W
R8331	1-216-295-91	SHORT	0			R8395	1-216-033-00	RES-CHIP	220	5%	1/10W
R8332	1-216-295-91	SHORT	0			R8396	1-216-033-00	RES-CHIP	220	5%	1/10W
R8333	1-216-295-91	SHORT	0			R8398	1-216-025-91	RES-CHIP	100	5%	1/10W
R8334	1-216-295-91	SHORT	0			R8399	1-216-025-91	RES-CHIP	100	5%	1/10W
R8335	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R8400	1-216-025-91	RES-CHIP	100	5%	1/10W
R8336	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R8401	1-216-081-00	RES-CHIP	22K	5%	1/10W
R8337	1-216-022-00	RES-CHIP	75	5%	1/10W	R8404	1-216-033-00	RES-CHIP	220	5%	1/10W
R8338	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R8405	1-216-033-00	RES-CHIP	220	5%	1/10W
R8339	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R8406	1-216-033-00	RES-CHIP	220	5%	1/10W
R8340	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R8407	1-216-033-00	RES-CHIP	220	5%	1/10W
R8341	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R8408	1-216-033-00	RES-CHIP	220	5%	1/10W
R8342	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R8409	1-216-295-91	SHORT	0		
R8343	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R8410	1-216-295-91	SHORT	0		
R8344	1-216-022-00	RES-CHIP	75	5%	1/10W	R8411	1-216-083-00	RES-CHIP	27K	5%	1/10W
R8345	1-216-033-00	RES-CHIP	220	5%	1/10W	R8412	1-216-073-00	RES-CHIP	10K	5%	1/10W
R8346	1-216-031-00	RES-CHIP	180	5%	1/10W	R8413	1-216-041-00	RES-CHIP	470	5%	1/10W
R8347	1-216-025-91	RES-CHIP	100	5%	1/10W	R8414	1-208-796-11	METAL CHIP	3.9K	0.5%	1/10W
R8348	1-216-057-00	RES-CHIP	2.2K	5%	1/10W	R8415	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8349	1-216-049-91	RES-CHIP	1K	5%	1/10W	R8417	1-216-025-91	RES-CHIP	100	5%	1/10W
R8350	1-216-049-91	RES-CHIP	1K	5%	1/10W	R8418	1-216-025-91	RES-CHIP	100	5%	1/10W
R8351	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R8419	1-216-017-91	RES-CHIP	47	5%	1/10W
R8352	1-216-065-91	RES-CHIP	4.7K	5%	1/10W	R8420	1-216-017-91	RES-CHIP	47	5%	1/10W
R8353	1-216-017-91	RES-CHIP	47	5%	1/10W	R8421	1-216-295-91	SHORT	0		
R8354	1-216-017-91	RES-CHIP	47	5%	1/10W	R8422	1-216-295-91	SHORT	0		
R8355	1-216-295-91	SHORT	0			R8424	1-216-083-00	RES-CHIP	27K	5%	1/10W
R8356	1-216-295-91	SHORT	0			R8425	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8357	1-216-017-91	RES-CHIP	47	5%	1/10W	R8426	1-208-796-11	METAL CHIP	3.9K	0.5%	1/10W
R8358	1-216-017-91	RES-CHIP	47	5%	1/10W	R8428	1-216-295-91	SHORT	0		
R8361	1-216-017-91	RES-CHIP	47	5%	1/10W	R8429	1-216-295-91	SHORT	0		
R8362	1-216-017-91	RES-CHIP	47	5%	1/10W	R8430	1-216-295-91	SHORT	0		
R8363	1-208-773-11	METAL CHIP	430	0.5%	1/10W	R8431	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8364	1-216-041-00	RES-CHIP	470	5%	1/10W	R8432	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8365	1-216-049-91	RES-CHIP	1K	5%	1/10W	R8433	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8366	1-216-049-91	RES-CHIP	1K	5%	1/10W	R8434	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8367	1-216-041-00	RES-CHIP	470	5%	1/10W	R8435	1-216-295-91	SHORT	0		
R8369	1-216-041-00	RES-CHIP	470	5%	1/10W	R8436	1-216-017-91	RES-CHIP	47	5%	1/10W
R8370	1-216-025-91	RES-CHIP	100	5%	1/10W	R8440	1-216-295-91	SHORT	0		
R8372	1-216-295-91	SHORT	0			R8441	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8373	1-216-295-91	SHORT	0			R8442	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8374	1-216-039-00	RES-CHIP	390	5%	1/10W	R8443	1-216-025-91	RES-CHIP	100	5%	1/10W
R8375	1-216-041-00	RES-CHIP	470	5%	1/10W	R8444	1-216-025-91	RES-CHIP	100	5%	1/10W
R8376	1-216-049-91	RES-CHIP	1K	5%	1/10W	R8445	1-216-017-91	RES-CHIP	47	5%	1/10W
R8377	1-216-025-91	RES-CHIP	100	5%	1/10W	R8446	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8378	1-216-033-00	RES-CHIP	220	5%	1/10W	R8447	1-216-025-91	RES-CHIP	100	5%	1/10W
R8379	1-216-033-00	RES-CHIP	220	5%	1/10W	R8448	1-216-025-91	RES-CHIP	100	5%	1/10W
R8380	1-216-025-91	RES-CHIP	100	5%	1/10W	R8449	1-216-025-91	RES-CHIP	100	5%	1/10W
R8381	1-216-025-91	RES-CHIP	100	5%	1/10W	R8450	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8382	1-216-033-00	RES-CHIP	220	5%	1/10W	R8451	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8383	1-216-033-00	RES-CHIP	220	5%	1/10W	R8452	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8384	1-216-025-91	RES-CHIP	100	5%	1/10W	R8453	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8385	1-216-025-91	RES-CHIP	100	5%	1/10W	R8454	1-216-089-91	RES-CHIP	47K	5%	1/10W
R8386	1-216-025-91	RES-CHIP	100	5%	1/10W	R8455	1-216-097-91	RES-CHIP	100K	5%	1/10W
R8388	1-216-031-00	RES-CHIP	180	5%	1/10W	R8456	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8389	1-216-033-00	RES-CHIP	220	5%	1/10W	R8457	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8390	1-208-773-11	METAL CHIP	430	0.5%	1/10W	R8458	1-216-049-91	RES-CHIP	1K	5%	1/10W
R8391	1-216-041-00	RES-CHIP	470	5%	1/10W	R8459	1-216-025-91	RES-CHIP	100	5%	1/10W
R8393	1-216-037-00	RES-CHIP	330	5%	1/10W	R8460	1-216-025-91	RES-CHIP	100	5%	1/10W

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REF. NO.	PART NO.	DESCRIPTION	REMARK	REF. NO.	PART NO.	DESCRIPTION	REMARK
R8461	1-216-025-91	RES-CHIP	100 5% 1/10W	R8532	1-216-041-00	RES-CHIP	470 5% 1/10W
R8462	1-216-089-91	RES-CHIP	47K 5% 1/10W	R8533	1-216-041-00	RES-CHIP	470 5% 1/10W
R8463	1-216-097-91	RES-CHIP	100K 5% 1/10W	R8536	1-216-025-91	RES-CHIP	100 5% 1/10W
R8464	1-216-025-91	RES-CHIP	100 5% 1/10W	R8538	1-216-041-00	RES-CHIP	470 5% 1/10W
R8465	1-216-025-91	RES-CHIP	100 5% 1/10W	R8540	1-216-041-00	RES-CHIP	470 5% 1/10W
R8466	1-216-025-91	RES-CHIP	100 5% 1/10W	R8541	1-216-039-00	RES-CHIP	390 5% 1/10W
R8467	1-216-041-00	RES-CHIP	470 5% 1/10W	R8544	1-216-041-00	RES-CHIP	470 5% 1/10W
R8468	1-216-041-00	RES-CHIP	470 5% 1/10W	R8547	1-216-295-91	SHORT	0
R8469	1-216-041-00	RES-CHIP	470 5% 1/10W	R8548	1-216-033-00	RES-CHIP	220 5% 1/10W
R8470	1-216-069-00	RES-CHIP	6.8K 5% 1/10W	R8551	1-216-049-91	RES-CHIP	1K 5% 1/10W
R8471	1-216-025-91	RES-CHIP	100 5% 1/10W	R8556	1-216-025-91	RES-CHIP	100 5% 1/10W
R8472	1-216-089-91	RES-CHIP	47K 5% 1/10W	R8557	1-216-049-91	RES-CHIP	1K 5% 1/10W
R8473	1-216-025-91	RES-CHIP	100 5% 1/10W	R8558	1-208-776-11	METAL CHIP	560 0.5% 1/10W
R8474	1-216-097-91	RES-CHIP	100K 5% 1/10W	R8560	1-216-025-91	RES-CHIP	100 5% 1/10W
R8475	1-216-089-91	RES-CHIP	47K 5% 1/10W	R8561	1-216-049-91	RES-CHIP	1K 5% 1/10W
R8478	1-216-089-91	RES-CHIP	47K 5% 1/10W	R8562	1-208-776-11	METAL CHIP	560 0.5% 1/10W
R8479	1-216-097-91	RES-CHIP	100K 5% 1/10W	R8564	1-216-025-91	RES-CHIP	100 5% 1/10W
R8480	1-216-073-00	RES-CHIP	10K 5% 1/10W	R8565	1-216-049-91	RES-CHIP	1K 5% 1/10W
R8481	1-216-095-00	RES-CHIP	82K 5% 1/10W	R8566	1-208-776-11	METAL CHIP	560 0.5% 1/10W
R8482	1-216-089-91	RES-CHIP	47K 5% 1/10W	R8567	1-216-017-91	RES-CHIP	47 5% 1/10W
R8484	1-216-045-00	RES-CHIP	680 5% 1/10W	R8569	1-208-800-11	METAL CHIP	5.6K 0.5% 1/10W
R8485	1-216-037-00	RES-CHIP	330 5% 1/10W	R8570	1-216-017-91	RES-CHIP	47 5% 1/10W
R8486	1-216-049-91	RES-CHIP	1K 5% 1/10W	R8572	1-208-800-11	METAL CHIP	5.6K 0.5% 1/10W
R8487	1-216-045-00	RES-CHIP	680 5% 1/10W	R8573	1-216-017-91	RES-CHIP	47 5% 1/10W
R8488	1-216-041-00	RES-CHIP	470 5% 1/10W	R8575	1-208-800-11	METAL CHIP	5.6K 0.5% 1/10W
R8489	1-216-049-91	RES-CHIP	1K 5% 1/10W	R8576	1-216-013-00	RES-CHIP	33 5% 1/10W
R8490	1-216-049-91	RES-CHIP	1K 5% 1/10W	R8577	1-216-295-91	SHORT	0
R8491	1-216-025-91	RES-CHIP	100 5% 1/10W	R8578	1-216-033-00	RES-CHIP	220 5% 1/10W
R8492	1-216-041-00	RES-CHIP	470 5% 1/10W	R8579	1-216-295-91	SHORT	0
R8493	1-216-081-00	RES-CHIP	22K 5% 1/10W	R8582	1-208-291-11	RES-CHIP	4.7M 5% 1/10W
R8494	1-216-041-00	RES-CHIP	470 5% 1/10W	R8583	1-208-291-11	RES-CHIP	4.7M 5% 1/10W
R8495	1-216-081-00	RES-CHIP	22K 5% 1/10W	R8584	1-208-291-11	RES-CHIP	4.7M 5% 1/10W
R8496	1-216-049-91	RES-CHIP	1K 5% 1/10W	R8585	1-208-291-11	RES-CHIP	4.7M 5% 1/10W
R8497	1-216-025-91	RES-CHIP	100 5% 1/10W	R8586	1-208-291-11	RES-CHIP	4.7M 5% 1/10W
R8498	1-216-043-91	RES-CHIP	560 5% 1/10W	R8587	1-216-295-91	SHORT	0
R8499	1-216-081-00	RES-CHIP	22K 5% 1/10W	R8588	1-216-041-00	RES-CHIP	470 5% 1/10W
R8500	1-216-033-00	RES-CHIP	220 5% 1/10W	R8589	1-216-041-00	RES-CHIP	470 5% 1/10W
R8501	1-216-081-00	RES-CHIP	22K 5% 1/10W	R8590	1-216-041-00	RES-CHIP	470 5% 1/10W
R8502	1-216-049-91	RES-CHIP	1K 5% 1/10W	R8592	1-216-295-91	SHORT	0
R8503	1-216-097-91	RES-CHIP	100K 5% 1/10W	R8594	1-216-295-91	SHORT	0
R8504	1-216-295-91	SHORT	0	R8595	1-216-041-00	RES-CHIP	470 5% 1/10W
R8507	1-216-025-91	RES-CHIP	100 5% 1/10W	R8596	1-216-041-00	RES-CHIP	470 5% 1/10W
R8508	1-216-025-91	RES-CHIP	100 5% 1/10W	R8597	1-216-041-00	RES-CHIP	470 5% 1/10W
R8510	1-216-041-00	RES-CHIP	470 5% 1/10W				
R8511	1-216-041-00	RES-CHIP	470 5% 1/10W			<CRYSTAL>	
R8512	1-216-017-91	RES-CHIP	47 5% 1/10W				
R8513	1-216-039-00	RES-CHIP	390 5% 1/10W	X8301	1-781-612-11	VIBRATOR, CRYSTAL	
R8514	1-216-039-00	RES-CHIP	390 5% 1/10W	X8302	1-781-612-11	VIBRATOR, CRYSTAL	
R8515	1-216-295-91	SHORT	0				
R8516	1-216-049-91	RES-CHIP	1K 5% 1/10W				
R8518	1-216-047-91	RES-CHIP	820 5% 1/10W				
R8519	1-216-047-91	RES-CHIP	820 5% 1/10W				
R8522	1-216-041-00	RES-CHIP	470 5% 1/10W				
R8524	1-216-041-00	RES-CHIP	470 5% 1/10W				
R8525	1-216-033-00	RES-CHIP	220 5% 1/10W				
R8528	1-216-025-91	RES-CHIP	100 5% 1/10W				
R8530	1-216-041-00	RES-CHIP	470 5% 1/10W				

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REF. NO.	PART NO.	DESCRIPTION	REMARK		
	* A-1342-516-A	V BOARD MOUNT	*****		
<CAPACITOR>					
C1803	1-104-665-11	ELECT	100MF	20%	16V
C1804	1-163-989-11	CERAMIC CHIP	0.033MF	10%	25V
C1805	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1806	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C1807	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C1808	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1809	1-104-665-11	ELECT	100MF	20%	16V
C1810	1-163-009-11	CERAMIC CHIP	0.001MF	10%	50V
C1811	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1812	1-104-665-11	ELECT	100MF	20%	16V
C1813	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1815	1-163-243-11	CERAMIC CHIP	47PF	5%	50V
C1819	1-164-005-11	CERAMIC CHIP	0.47MF		25V
C1821	1-163-001-11	CERAMIC CHIP	220PF	10%	50V
C1822	1-104-666-11	ELECT	220MF	20%	16V
C1824	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1826	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1827	1-104-666-11	ELECT	220MF	20%	16V
C1828	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
C1829	1-163-021-91	CERAMIC CHIP	0.01MF	10%	50V
<CONNECTOR>					
CN1801	1-793-496-11	CONNECTOR, BOARD TO BOARD 20P			
<DIODE>					
D1802	8-719-073-01	DIODE MA111-(K8).S0			
D1803	8-719-073-01	DIODE MA111-(K8).S0			
D1809	8-719-073-01	DIODE MA111-(K8).S0			
D1810	8-719-073-01	DIODE MA111-(K8).S0			
<FERRITE BEAD>					
FB1801	1-410-397-21	FERRITE	1.1UH		
FB1802	1-410-397-21	FERRITE	1.1UH		
FB1803	1-410-397-21	FERRITE	1.1UH		
FB1804	1-410-397-21	FERRITE	1.1UH		
FB1805	1-410-397-21	FERRITE	1.1UH		
<IC>					
IC1801	8-759-652-13	IC SDA5254-2B006			
IC1802	8-759-239-14	IC TA78L05S			
IC1803	8-759-042-02	IC S-80743AL-A7-S			
<COIL>					
L1801	1-408-602-31	INDUCTOR	8.2UH		
<TRANSISTOR>					
Q1802	8-729-230-49	TRANSISTOR 2SC2712-YG			
Q1803	8-729-230-49	TRANSISTOR 2SC2712-YG			

REF. NO.	PART NO.	DESCRIPTION	REMARK		
Q1804	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q1805	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
Q1806	8-729-026-49	TRANSISTOR 2SA1037AK-T146-R			
<RESISTOR>					
R1804	1-208-792-11	METAL CHIP	2.7K	0.50%	1/10W
R1805	1-216-025-91	RES,CHIP	100	5%	1/10W
R1806	1-216-025-91	RES,CHIP	100	5%	1/10W
R1807	1-208-816-11	METAL CHIP	27K	0.50%	1/10W
R1808	1-216-025-91	RES,CHIP	100	5%	1/10W
R1809	1-208-758-11	METAL CHIP	100	0.50%	1/10W
R1811	1-208-758-11	METAL CHIP	100	0.50%	1/10W
R1812	1-216-295-91	SHORT	0		
R1813	1-208-758-11	METAL CHIP	100	0.50%	1/10W
R1814	1-216-295-91	SHORT	0		
R1815	1-216-295-91	SHORT	0		
R1816	1-216-295-91	SHORT	0		
R1820	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1821	1-216-041-00	RES,CHIP	470	5%	1/10W
R1822	1-216-025-91	RES,CHIP	100	5%	1/10W
R1823	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1824	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1825	1-216-041-00	RES,CHIP	470	5%	1/10W
R1826	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1827	1-216-037-00	RES,CHIP	330	5%	1/10W
R1829	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1830	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1831	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1832	1-215-859-00	METAL OXIDE	22	5%	1W F
R1833	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1834	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1835	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1836	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1837	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1838	1-216-025-91	RES,CHIP	100	5%	1/10W
R1839	1-216-025-91	RES,CHIP	100	5%	1/10W
R1840	1-216-025-91	RES,CHIP	100	5%	1/10W
R1841	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
<CRYSTAL>					
X1801	1-781-685-21	VIBRATOR, CRYSTAL			
*****					
	* A-1342-515-A	VM BOARD MOUNT	*****		
	4-382-854-11	SCREW (M3X10), P, SW (+)			
<CAPACITOR>					
C5401	1-126-935-11	ELECT	470MF	20%	16V
C5402	1-137-194-81	MYLAR	0.47MF	5%	50V
C5403	1-126-935-11	ELECT	470MF	20%	6.3V
C5405	1-126-933-11	ELECT	100MF	20%	16V
C5406	1-126-935-11	ELECT	470MF	20%	6.3V



REF. NO.	PART NO.	DESCRIPTION	REMARK
C5407	1-107-364-11	MYLAR 0.01MF 10%	200V
C5408	1-107-364-11	MYLAR 0.01MF 10%	200V
C5409	1-107-649-11	ELECT 2.2MF 20%	250V
C5410	1-130-471-00	MYLAR 0.001MF 5%	50V
C5411	1-130-471-00	MYLAR 0.001MF 5%	50V
C5412	1-126-935-11	ELECT 470MF 20%	16V
C5413	1-107-648-91	ELECT 100MF 20%	160V
C5415	1-104-999-11	MYLAR 0.1MF 10%	200V
C5418	1-107-638-11	ELECT 33MF 20%	160V
<CONNECTOR>			
CN5401 *	1-770-723-11	CONNECTOR, BOARD TO BOARD 8P	
CN5402	1-764-334-11	PLUG, CONNECTOR 11P	
<DIODE>			
D5400	8-719-911-19	DIODE 1SS119-25	
D5401	8-719-510-02	DIODE D1NS4	
D5402	8-719-911-19	DIODE 1SS119-25	
D5403	8-719-911-19	DIODE 1SS119-25	
D5404	8-719-911-19	DIODE 1SS119-25	
D5405	8-719-110-56	DIODE RD22ESB1	
D5406	8-719-110-56	DIODE RD22ESB1	
<COIL>			
L5400	1-412-525-31	INDUCTOR 10UH	
<TRANSISTOR>			
Q5400	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q5401	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q5402	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q5403	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q5404	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q5405	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q5406	8-729-045-05	TRANSISTOR 2SA2005	
Q5407	8-729-045-04	TRANSISTOR 2SC5511	
<RESISTOR>			
R5401	1-249-425-11	CARBON 4.7K 5%	1/4W
R5402	1-249-415-11	CARBON 680 5%	1/4W
R5403	1-247-739-11	CARBON 100 5%	1/2W F
R5404	1-249-418-11	CARBON 1.2K 5%	1/4W
R5406	1-249-425-11	CARBON 4.7K 5%	1/4W
R5407	1-249-399-11	CARBON 33 5%	1/4W
R5408	1-247-807-31	CARBON 100 5%	1/4W
R5409	1-247-815-91	CARBON 220 5%	1/4W
R5410	1-249-401-11	CARBON 47 5%	1/4W
R5411	1-249-401-11	CARBON 47 5%	1/4W
R5412	1-249-429-11	CARBON 10K 5%	1/4W
R5413	1-249-414-11	CARBON 560 5%	1/4W F
R5414	1-249-432-11	CARBON 18K 5%	1/4W
R5415	1-247-739-11	CARBON 100 5%	1/2W F
R5416	1-249-385-11	CARBON 2.2 5%	1/4W F

REF. NO.	PART NO.	DESCRIPTION	REMARK
R5417	1-249-432-11	CARBON 18K 5%	1/4W
R5418	1-249-414-11	CARBON 560 5%	1/4W
R5419	1-249-421-11	CARBON 2.2K 5%	1/4W
R5420	1-249-421-11	CARBON 2.2K 5%	1/4W
R5421	1-249-385-11	CARBON 2.2 5%	1/4W F
R5422	1-249-405-11	CARBON 100 5%	1/4W F
R5423	1-215-915-11	METAL OXIDE 470 5%	3W F
R5424	1-249-395-11	CARBON 15 5%	1/4W
R5425	1-249-401-11	CARBON 47 5%	1/4W
R5427	1-249-395-11	CARBON 15 5%	1/4W

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MISCELANEOUS

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△ 1-419-293-11 COIL, DEGAUSSING

△ 1-419-295-11 COIL, LANDING CORRECTION

1-452-094-00 CIRCULAR DISC MAGNET B

1-452-032-00 MAGNET,DISC

1-452-896-11 COIL, NA ROTATION (RT200)

1-505-473-11 SPEAKER (12CM)

1-529-562-11 SPEAKER (7X4CM)

1-543-827-31 CLAMP, SLEEVE FERRITE

1-569-008-21 ADAPTOR, CONVERSION 2P

1-769-175-21 CABLE, ANTENNA (WITH FILTER)

1-790-082-11 CABLE, RF

△ 1-791-439-11 CORD, POWER (WITH CONNECTOR)

△ 8-451-500-31 DEFLECTION YOKE (Y34RSC2-M3)

8-453-007-31 NA324-M3

△ 8-735-062-05 PICTURE TUBE (A80LNH10X)

1-900-251-82 LEAD ASSY, G2

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ACCESSORIES AND PACKING MATERIALS

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A-1028-255-A PACKING GROUP (KV-ES34M81)

A-1028-257-A PACKING GROUP (KV-ES34M91)

1-569-008-21 ADAPTOR, CONVERSION 2P

1-769-175-21 CABLE, ANTENNA (WITH FILTER)

3-701-910-00 SCREW, SPECIAL (DIA. 3.8X20)

3-867-756-21 MANUAL, INSTRUCTION

3-867-756-31 MANUAL, INSTRUCTION

\* 4-067-103-11 TRAY

\* 4-073-255-01 INDIVIDUAL CARTON

\* 4-074-690-01 CUSHION (UPPER)(ASSY)

\* 4-074-691-01 CUSHION (LOWER)(ASSY)

\* 4-384-101-21 BAG, PROTECTION

4-392-004-11 CLIP

4-392-003-01 BAND, HOLD

\* 4-396-077-01 JOINT

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<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>	<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>
		REMOTE COMMANDER *****					
1-418-566-11		REMOTE COMMANDER (RM-916)					
4-074-721-01		BATTERY COVER, REMOTE COMMANDER					

# SUPPLEMENT-1

# AG3 CHASSIS

<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>	<u>MODEL</u>	<u>COMMANDER</u>	<u>DEST.</u>	<u>CHASSIS NO.</u>
<i>KV-ES34M81</i>	<i>RM-916</i>	<i>ME</i>	<i>SCC-P32D-A</i>				
<i>KV-ES34M91</i>	<i>RM-916</i>	<i>ME</i>	<i>SCC-P32E-A</i>				

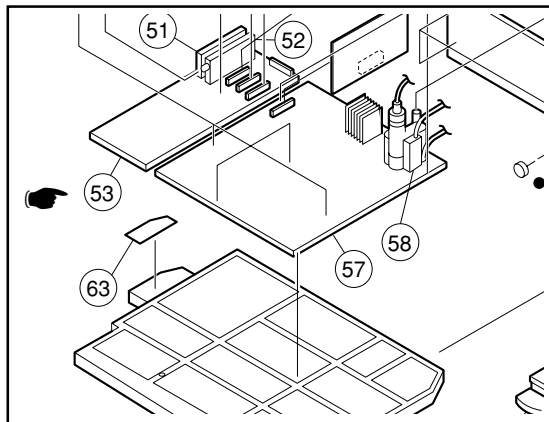
**SUBJECT : PART CHANGE**

File this supplement with the Service Manual.

Note: The changes apply to model KV-ES34M81 (ME) only.

## SECTION 7 : EXPLODED VIEWS

### 7-2. CHASSIS



<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>
53	*A-1299-162-H	A BOARD COMPLETE	(KV-ES34M81)

## SECTION 8 : ELECTRICAL PARTS LIST

<u>REF. NO.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>	<u>REMARK</u>
	*A-1299-162-H	A BOARD COMPLETE	(KV-ES34M81)

**Sony Corporation**  
**Sony Technology Malaysia Sdn. Bhd.**  
**Visual Products General Area**

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