

# Service Manual

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ORDER NO.DSD0403001C8

# Service Manual

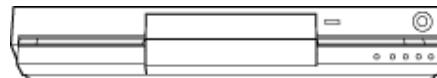
DVD Video Recorder

- DMR-E53EG
- DMR-E55EB
- DMR-E55EG
- DMR-E55EBL
- DMR-E55EP

Colour

(K).....Black Type

(S).....Silver Type



Notes: The part of DVD Drive (VXY1794/VXY1855)  
is listed separately.  
Please refer ORDER No. RAM0402001C0

## Specifications

Power supply	AC220-240 V, 50 Hz		E53EG,E55EG
Power consumption	29 W		VHF: CH E2 - CH E12, CH A - CH H2 (For Italy)
Recording system	DVD video recording format (DVD-RAM), DVD video format (DVD-R)		UHF: CH 21 - CH 69
Optical pick-up	System with 1 lens, 2 integration units (658 nm wavelength for DVDs, 795 nm wavelength for CDs)		CATV: CH S01- CH S05(S1- S3), CH S1- CH S20(M1- U10), CH S21- CH S41
Recordable discs	<ul style="list-style-type: none"><li>• 12 cm 4.7 GB DVD-RAM discs</li><li>• 12 cm 9.4 GB DVD-RAM discs</li><li>• 8 cm 2.8 GB DVD-RAM discs</li><li>• 8 cm 1.4 GB DVD-R discs (for General Ver. 2.0)</li><li>• 12 cm 4.7 GB DVD-R discs (for General Ver. 2.0)</li><li>• 12 cm 1.4 GB DVD-R discs</li></ul>		VHF: CH 2- CH 10 UHF: CH 21 - CH 69 CATV: CH B- CH Q(100.5 - 299.5MHz), CH S21- CH S41 (299.25 - 467.25MHz)

	<ul style="list-style-type: none"> <li>• 12 cm 4.7 GB DVD-R discs (for General Ver. 2.0)</li> <li>• 12 cm 4.7 GB DVD-R discs (for General Ver 2.0/ 4X-SPEED DVD-R Revision 1.0)</li> </ul>		(299.25 - 467.25MHz)
Recording time	Max. 8 hours (using 4.7 GB disc) XP: 60 minutes SP: 120 minutes LP: 240 minutes EP: 360 minutes or 480 minutes	Antenna reception system	E55EB,E55EBL
Region number	Region No.2		PAL-I VHF: CH 4 - CH 13, CH A - CH J (For E55EBL) UHF: CH 21 - CH 68
Discs played	<ul style="list-style-type: none"> <li>• 12 cm 4.7 GB DVD-RAM discs</li> <li>• 12 cm 9.4 GB DVD-RAM discs</li> <li>• 8 cm 2.8 GB DVD-RAM discs</li> <li>• 8 cm 1.4 GB DVD-R discs (for General Ver. 2.0)</li> <li>• 12 cm 4.7 GB DVD-R discs (for General Ver. 2.0)</li> <li>• 12 cm 4.7 GB DVD-R discs (for General Ver 2.0/ 4X-SPEED DVD-R Revision 1.0)</li> <li>• DVD-VIDEO discs</li> <li>• DVD-Audio discs</li> <li>• CD-Audio discs (CD-DA)</li> <li>• Video CD discs</li> <li>• CD-R/ CD-RW discs (CD-DA, Video CD, MP3 formatted discs)</li> </ul>		E55EP(PAL-BGH,I,DK),(SECAM-BG,DK) OIRT(DK) CCIR(BGH) South Africa (PAL-I) RF Converter Output E55EB Except E55EB
Video system			VHF: CH R1- CH R12 UHF: CH 21 - CH 69 CATV: CH 44MHz - 470MHz VHF: CH E2-CH E12 UHF: CH 21 - CH 69 CATV: CH S01-S05, M1-M10, U1-U10, S21-S41 VHF: CH 4- CH 13 UHF: CH 21 - CH 68
TV system	E53EG,E55EG E55EP	Analog Input	UHF: CH 21 - CH 68, 71 ± 3dBuV 75Ω Not provided
Recording system	E53EG Except E53G	Analog Output	AV1/AV2(21pin x 2), AV3/AV4(pin jack x 2) Standard input: 0.5 Vrms Full scale: 2.0 Vrms at 1KHz Input impedance: More than 10KΩ
Video Input	Video In: (SECAM/PAL /NTSC)  S-Video In: (SECAM/PAL /NTSC)  RGB In(PAL):	Number of channels	AV1/AV2(21pin x 2), LINE(pin jack x 1) Standard output: 0.5 Vrms Full scale: 2.0 Vrms at 1KHz Output impedance: Less than 1.0KΩ
Video Output	AV1/AV2(21pin x 2), 1.0Vp-p ; 75Ω  AV2(21pin), AV3/AV4(S connector x 2) Y:1.0Vp-p ; 75Ω, C:0.3Vp-p ; 75Ω  AV2(21pin ) 0.7Vp-p ; 75Ω	Digital Output	Recording: 2 channels Playback: 2 channels
	Operating temperature	Digital Audio Optical Output Connector (PCM,Dolby Digital,DTS,MPEG)	
	Dimensions	Approx. 430 (W) x 79 (H) x 274 (D) mm [Approx. 16 15/16" (W) x 3 1/8" (H) x 10 13/16" (D)] (excluding protrusions)	
	Mass	Approx. 3.5 kg (7.71 lbs)	
	Operating humidity range	5°C - 40°C (41 F - 104 F)	
	Clock unit	10 %-80 % RH (no condensation)	
	LASER Specification (Class I LASER Product)	Quartz-controlled 12-hour digital display	
	Component video out: (NTSC)	Wave length	795 nm, 658 nm
	Y: 1.0Vp-p ; 75Ω(pin jack) PB: 0.7Vp-p ; 75Ω(pin jack) PR: 0.7Vp-p ; 75Ω(pin jack)	Laser power	No hazardous radiation is emitted with the safety protection.

(NTSC 480P/480I) (PAL 576P/576I)	PB: 0.7Vp-p ; 75Ω(pin jack) PR: 0.7Vp-p ; 75Ω(pin jack)	Laser power	No hazardous radiation is emitted with the safety protection.
		Power consumption in standby mode	approx. 3.0 W

**Notes : Mass and dimensions are approximate.  
Specifications are subject to change without notice.**

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**⚠ WARNING**

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

# Panasonic

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# 1 Safety precautions

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## 1.1 General guidelines

[1.1.1 Leakage current cold check](#)

[1.1.2 Leakage current hot check \(See Figure 1.\)](#)

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# 1.1 General guidelines

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1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

[1.1.1 Leakage current cold check](#)

[1.1.2 Leakage current hot check \(See Figure 1 .\)](#)

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## 1.1.1 Leakage current cold check

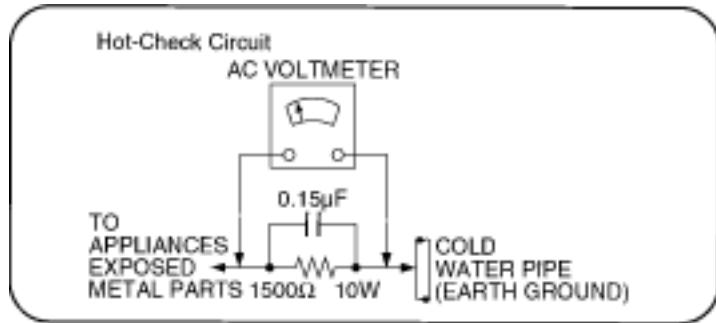
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1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between  $1M\Omega$  and  $5.2M\Omega$ .

When the exposed metal does not have a return path to the chassis, the reading must be

...

Figure 1



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## **1.1.2 Leakage current hot check (See Figure 1 .)**

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1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a  $1.5k\Omega$ , 10 watts resistor, in parallel with a  $0.15 \mu F$  capacitors, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1 .
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS. A leakage current tester (Simpson Model 229 or equivalent) may be used to make the hot checks, leakage current must not exceed 1/2 milliampere. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

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## 2 Prevention of Electrostatic Discharge (ESD) to Electrostatic Sensitive (ES) Devices

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Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatic Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistor-sandsemiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by electrostatic discharge (ESD).

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any ESD on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging ESD wrist strap, whichshould be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified as "anti-static (ESD protected)" can generate electrical charge sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparableconductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

### Caution

Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).

**IMPORTANT SAFETY NOTICE**

There are special components used in this equipment which are important for safety. These parts are marked by  in the schematic diagrams, Exploded Views and replacement parts list. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire, or other hazards. Do not modify the original design without permission of manufacturer.

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# 3 Precaution of Laser Diode

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## CAUTION:

This product utilizes a laser diode with the unit turned "on", invisible laser radiation is emitted from the pickup lens.

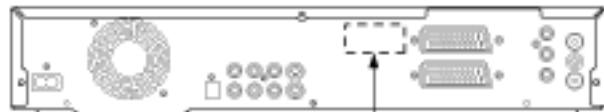
Wave length: 795 nm/658 nm

Maximum output radiation power from pickup: 100 µ

W/VDE

Laser radiation from the pickup lens is safety level, but be sure the followings:

1. Do not disassemble the optical pickup unit, since radiation from exposed laser diode is dangerous.
2. Do not adjust the variable resistor on the pickup unit. It was already adjusted.
3. Do not look at the focus lens using optical instruments.
4. Recommend not to look at pickup lens for a long time.



LUOKAN 1 LASERLAITE  
KLASS 1 LASER APPARAT

CLASS 1  
LASER PRODUCT

## ACHTUNG:

Dieses Produkt enthält eine Laserdiode.

Im eingeschalteten Zustand wird unsichtbare Leserstrahlung von der Lasereinheit abgestrahlt.

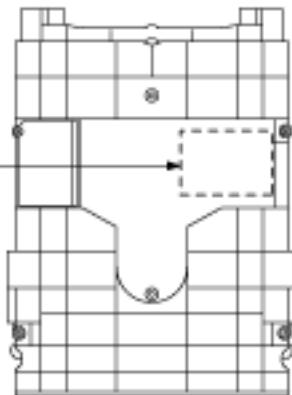
Wellenlänge: 795 nm/658 nm

Maximale Strahlungsleistung der Lasereinheit: 100 µ

W/VDE

Die Strahlung der Lasereinheit ungefährlich, wenn folgende Punkte beachtet werden:

1. Die Lasereinheit nicht zerlegen, da die Strahlung an der freigelegten Laserdiode gefährlich ist.
2. Den werkseitig justierten Einstellregler der Lasereinheit nicht verstellen.
3. Nicht mit optischen Instrumenten in die Fokussierlinien blicken.
4. Nicht über längere Zeit in die Fokussierlinien blicken.



## CAUTION!

THIS PRODUCT UTILIZES A LASER.

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

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# 4 Handling the Lead-free Solder

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## 4.1 About lead free solder (PbF)

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# 4.1 About lead free solder (PbF)

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## Distinction of PbF P.C.B.:

P.C.B.s (manufactured) using lead free solder will have a PbF stamp on the P.C.B.

## Caution:

- Pb free solder has a higher melting point than standard solder; Typically the melting point is 50 - 70°F (30 - 40°C) higher. Please use a high temperature soldering iron. In case of the soldering iron with temperature control, please set it to  $700 \pm 20^{\circ}\text{F}$  ( $370 \pm 10^{\circ}\text{C}$ ).
- Pb free solder will tend to splash when heated too high (about  $1100^{\circ}\text{F}/600^{\circ}\text{C}$ ).
- When soldering or unsoldering, please completely remove all of the solder on the pins or solder area, and be sure to heat the soldering points with the Pb free solder until it melts enough.

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# 5 Each Buttons

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# **6 Taking out the Disc from RAM-Drive Unit when the Disc cannot be ejected by OPEN/ CLOSE button**

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## 6.1 Forcible Disc Eject

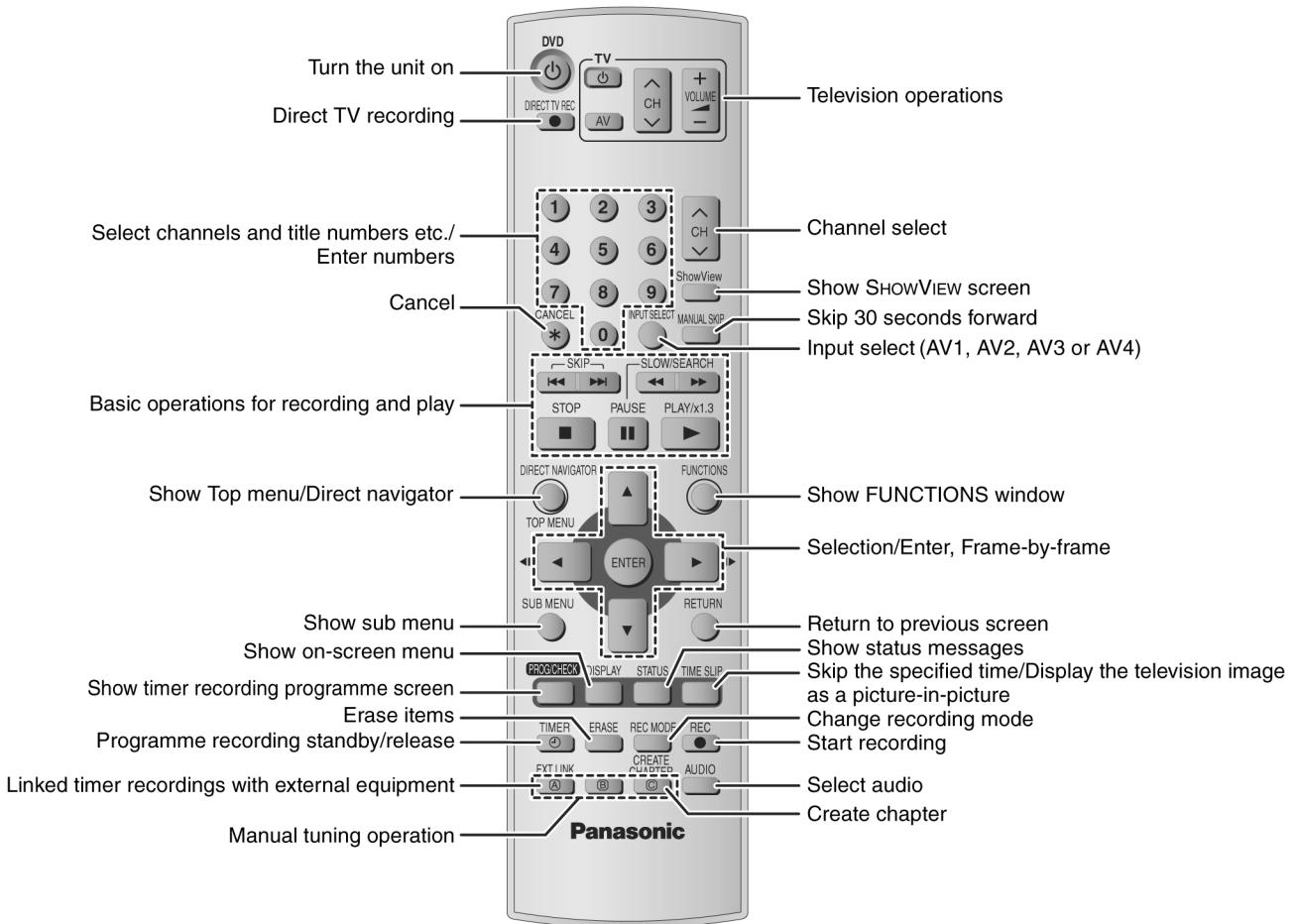
6.1.1 When the power can be turned off.

6.1.2 When the power can not be turned off.

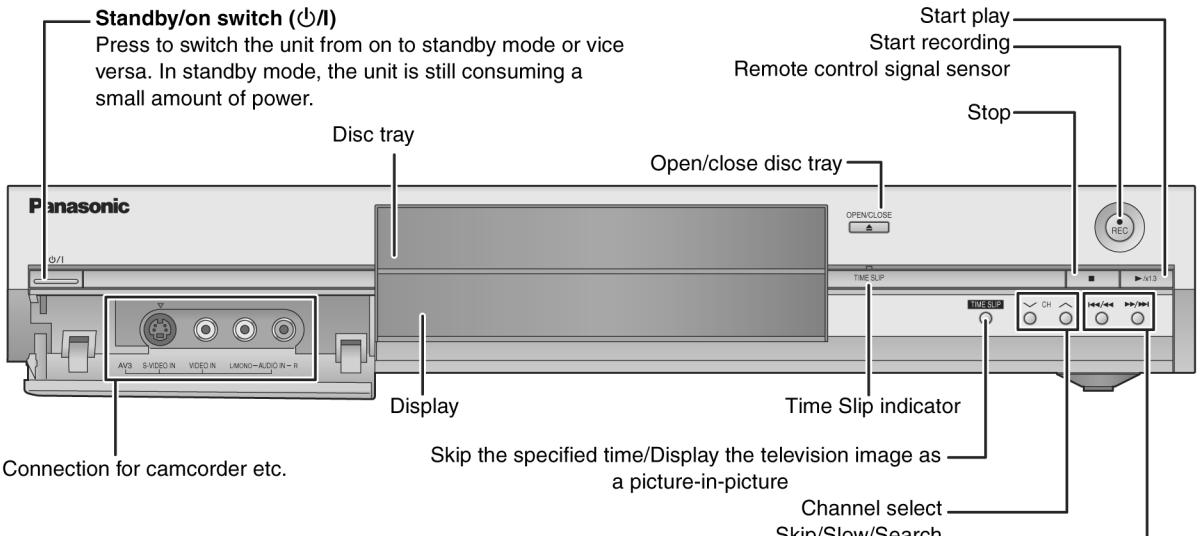
6.2 When the Forcible Disc Eject can not be done.

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# Remote control



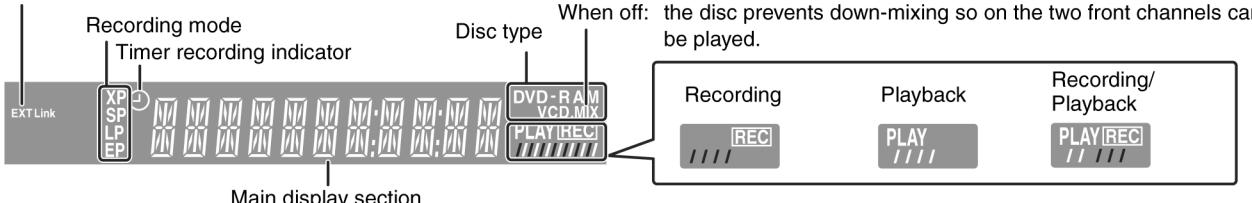
# Main unit



Rear panel terminals

# The unit's display

Linked timer recordings with external equipment indicator



# **6.1 Forcible Disc Eject**

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[6.1.1 When the power can be turned off.](#)

[6.1.2 When the power can not be turned off.](#)

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## **6.1.1 When the power can be turned off.**

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1. Turn off the power and press [STOP] [CH UP] keys on the front panel simultaneously for 5 seconds.

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## **6.1.2 When the power can not be turned off.**

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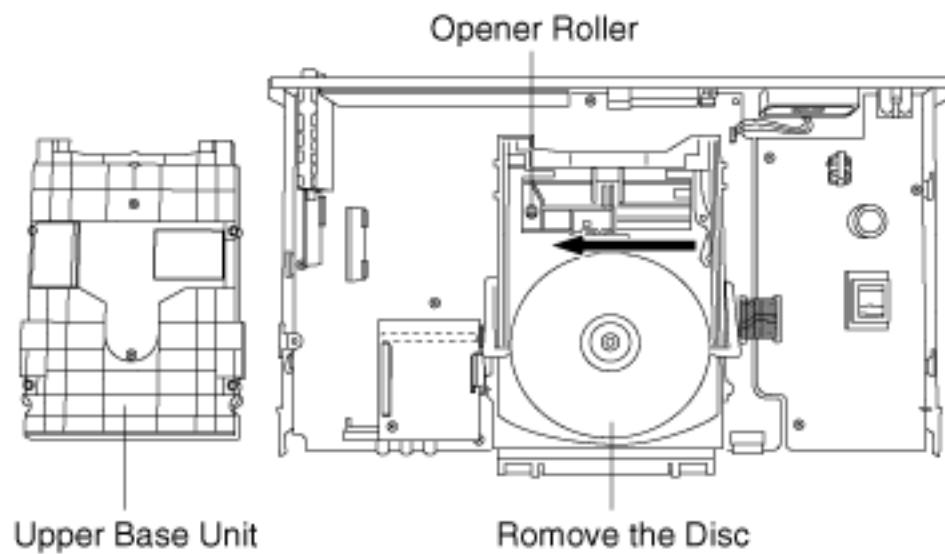
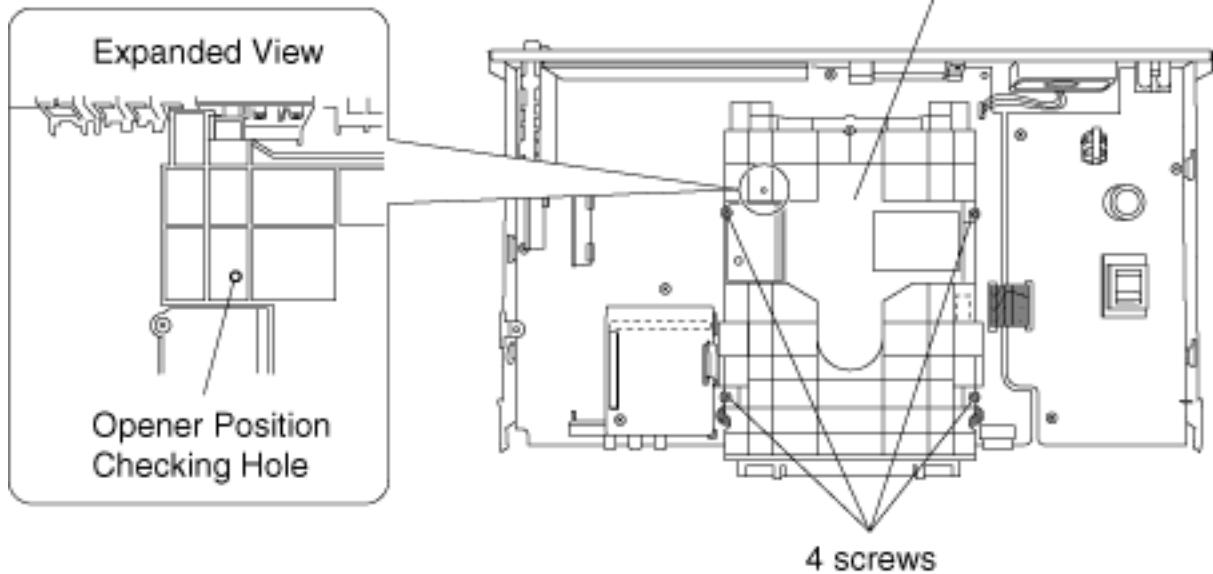
1. Press [POWER] key on the front panel for over 10 seconds to turn off the power forcibly, and press [STOP] [CH UP] keys on the front panel simultaneously for 5 seconds.

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## **6.2 When the Forcible Disc Eject can not be done.**

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1. Turn off the power and pull out AC cord.
2. Remove the Top Case.
3. Remove the Front Panel.
4. Remove 4 screws and Upper Base Unit from DVD-RAM Drive.
5. Take out the disc and put the Opener Roller on fully position for direction of Arrow.
6. Put the Upper Base Unit so that the Opener Roller is inserted into the groove.
7. Check center of Opener Roller is seen through the Opener position Checking Hole, and tighten 4 screws.



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# 7 Service Explorer

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Confirm “RAM-Drive Last Error” in Service Mode

Execute Service Mode

1. Press [STOP], [TIME SLIP] and [OPEN/CLOSE] simultaneously for 5 seconds when P-off.

FL Display:



\*After finishing display “(7). Factor of Drive Error occurring”, press [0] [2] ~[9] [9] keys of the Remote Controller so that 99 memories can be displayed as maximum.

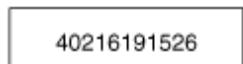
2. Press [4] [2] keys of remote controller.

Example of FL Display:

- (1) Error Number is displayed for 5 seconds.



- (2) Time when the error has occurred is displayed for 5 seconds.



The error has occurred at 2004(year)/Feb.(month)/16(day)/19(hour):15(minute):26(second)

- (3) Last Drive Error (1/2) is displayed for 5 seconds.

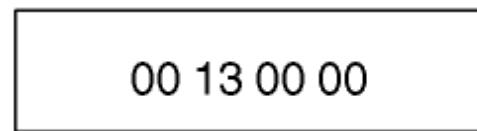


**When above error codes are displayed, confirm operation with Panasonic RAM disc or Panasonic DVD-R disc.**

**\*If the operation is OK, judge the error is due to media.**

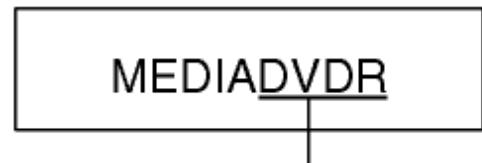
**\*If the operation is NG and symptom as BLOCK NOISES and so on that are particular symptom of Digital appears, judge the error is due to RAM-Drive or Digital PCB.**

(4) Last Drive Error (2/2) is displayed for 5 seconds.



**\*This error code is unnecessary for service.**

(5) Error occurring Disc type is displayed for 5 seconds.



**Disc type**

**\*The error disc cannot be specified, display as "DVD".**

(6) Disc Maker's ID is displayed for 5 seconds.



Example of Disc Maker's ID:

**DVD-R Disc**

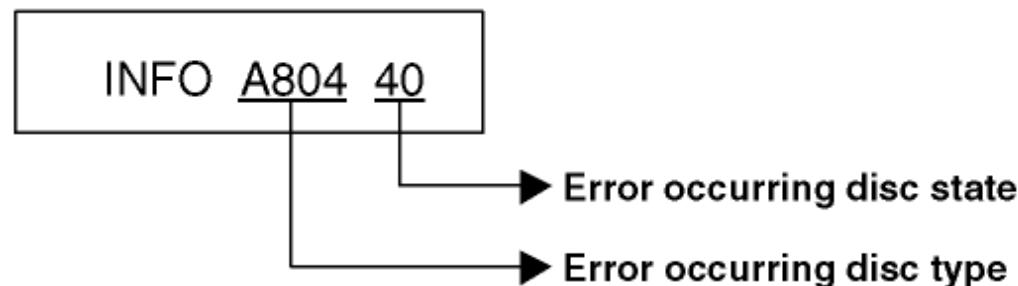
No.	FL Display (Disc Maker's ID)	Disc Maker	Country
1	MEI	Panasonic	Japan
2	PVC	Pioneer	Japan
3	MCC	Mitsubishi Chemical Corporation	Japan
4	TDK	TDK	Japan
5	MXL	Maxell	Japan
6	MCI	MITUI CHEMICALS	Japan
7	JVC	Victor JVC	Japan
8	TAIYOYUDEN	Taiyo yuden	Japan
	TYG		
9	GSC	Giga Storage	Taiwan
10	PRODISC	Prodisc	Taiwan
11	PRINCO	PRINCO	Taiwan
12	RITEK	RITEK	Taiwan
13	OPTDISC	OPTDISC	Taiwan
14	LEAD DATA	LEAD DATA	Taiwan
15	CMC	CMC	Taiwan
16	AUVISTAR	AUVISTAR	Taiwan
17	ACER	Acer	Taiwan
18	VIVASTAR	VIVASTAR	Switzerland
19	LGE	LG Electronics	Korea

**DVD-RAM Disc**

No.	FL Display (Disc Maker's ID)	Disc Maker	Country
1	MEI	Panasonic	
2	MATSUSHITA	Panasonic	Japan
3	MXL	Maxell	Japan
4	PRODISC	Prodisc	Taiwan

5	OPTDISC	OPTDISC	Taiwan
6	CMC	CMC	Taiwan

\*Since an display is arbitrarily set up by the disk producer side, the above-mentioned display may be changed. Please make it reference as an example of a display.(7)  
Factor of Drive Error occurring is left displayed



#### Error Occurring Disc Type

FL Display	Disc Type
00	DVD-ROM/Video
01	Audio-CD
02	2.6GB DVD-RAM
03	4.7GB DVD-RAM
04	DVD-R

#### Error Occurring Disc State

FL Displays (Hexadecimal)	Description			
	Disc distinction state	Cartridge disc state	Cartridge disc state	Disc size
00	OK	With cartridge	Has not been opened yet.	12 cm
10	OK	With cartridge	Has not been opened yet.	8 cm
20	OK	With cartridge	Has been opened.	12 cm
30	OK	With cartridge	Has been opened.	8 cm
40	OK	Bare	Has not been opened yet.	12 cm
50	OK	Bare	Has not been opened yet.	8 cm
60	OK	Bare	Has been opened.	12 cm
70	OK	Bare	Has been opened.	8 cm
80	NG	With cartridge	Has not been opened yet.	12 cm
90	NG	With cartridge	Has not been opened yet.	8 cm
A0	NG	With cartridge	Has been opened.	12 cm
B0	NG	With cartridge	Has been opened.	8 cm
C0	NG	Bare	Has not been opened yet.	12 cm
D0	NG	Bare	Has not been opened yet.	8 cm
E0	NG	Bare	Has been opened.	12 cm
F0	NG	Bare	Has been opened.	8 cm

# **8 Self-Diagnosis and Special Mode Setting**

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[8.3 Service Modes](#)

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# 8.1 Self-Diagnosis Functions

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Self-Diagnosis Function provides information for errors to service personnel by “Self-Diagnosis Display” when any error has occurred.

U14, H\*\* and F\*\* are stored in memory and held.

Display on FL will be cancelled when the power is turned off or AC input is turned off during self-diagnosis display is ON.

Error Code	Diagnosis contents	Description	Monitor Display	FL display
U12	Remote control code error	Display appears when main unit and remote controller codes are not matched.	No display	<div style="border: 1px solid black; padding: 5px; text-align: center;">REMOTE DVD*</div> <p>“*” is remote controller code of the main unit. Display for 5 seconds.</p>
U14	Abnormal inner temperature detected	Display appears when the drive temperature exceeds 70°C. The power is turned off forcibly. For 30 minutes after this, all key entries are disabled. (Fan motor operates at the highest speed for the first 5 minutes. For the remaining 25 minutes, fan motor is also stopped.) The event is saved in memory as well.	No display	<div style="border: 1px solid black; padding: 5px; text-align: center;">U14</div> <p>“U14” is displayed for 30 minutes.</p>
U99	Hang-up	Displayed when communication error has occurred between Main microprocessor and Timer microprocessor.	No display	<div style="border: 1px solid black; padding: 5px; text-align: center;">U99</div> <p>Displayed is left until the [POWER] key is pressed.</p>

H01	Inoperative fan motor	Display appears when inoperative fan motor is detected after powered on. The power is turned off when detecting.	No display	<div style="border: 1px solid black; padding: 5px; text-align: center;">H01</div> Displayed is left.
F00	No error information	Initial setting for error code in memory (Error code Initialization is possible with error code initialization and main unit initialization.)	No display	<div style="border: 1px solid black; padding: 5px; text-align: center;">F00</div> Displayed is left.
F01	Drive hardware error	Display appears when drive unit error is detected. The event is saved in memory.	No display	<div style="border: 1px solid black; padding: 5px; text-align: center;">F01</div> Displayed is left.
F12	Initialization error when main microprocessor is started up for program recording	Display appears when initialization error is detected after starting up main microprocessor for program recording. The event is saved in memory. The power is turned off when detecting.	No display	<div style="border: 1px solid black; padding: 5px; text-align: center;">F12</div> Displayed is left.
UNSUPPORT	Unsupported disc error	*An unsupported format disc was played, although the drive starts normally. *The data format is not supported, although the media type is supported. *Exceptionally incase of the disc is dirty.	<span style="color: blue;">"This disc is incompatible."</span>	<div style="border: 1px solid black; padding: 5px; text-align: center;">UNSUPPORT</div> Display for 5 seconds.
NO READ	Disc read error	*A disc is flawed or dirty. *A poor quality failed to start. *The track information could not be read.	<span style="color: blue;">"Cannot read. Please check the disc."</span>	<div style="border: 1px solid black; padding: 5px; text-align: center;">NOREAD</div>
HARD ERR	Drive error	The drive detected a hard error.	<span style="color: blue;">"DVD drive error."</span>	Display for 5 seconds. <div style="border: 1px solid black; padding: 5px; text-align: center;">HARD ERR</div>

SELF CHECK	Restoration operation	Since the power cord fell out during a power failure or operation, it is under restoration operation. *It will OK, if a display disappears automatically. If a display does not disappear, there is the possibility that defective Digital P.C. B. / RAM drive.	No display	<b>SELF CHECK</b>
Full Program	16 programs are already set.	16 programs are already set.	No display	<b>PROG FULL</b>

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## 8.2 Special Modes Setting

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Item		FL display	Key operation
Mode name	Description		Front Key
TEST Mode	*All the main unit's parameters (include tuner) are initialized.	TEST AV1	Press [SKIP (REV)], [TIME SLIP] and [OPEN/CLOSE] keys simultaneously for five seconds when power is off.
Service Mode	Setting every kind of modes for servicing. *Details are described in " <a href="#">8. 3. Service Mode</a> ".	SERVICE MODE	When the power is off, press [STOP], [TIME SLIP] and [OPEN/CLOSE] keys simultaneously for 5 seconds.
Rating password	The audiovisual level setting password is initialized to "Level 8".	INIT	Open the tray, and press [SKIP (REV)] and [SKIP (FWD)] simultaneously for five seconds.
Forced disc eject	Removing a disc that cannot be ejected. The tray will open and unit will shift to P-off mode. *When Timer REC is ON or EXT-LINK is ON, execute " Forced disc eject " after releasing TimerREC or EXT-LINK. *This command is not effective during "Child lock" is ON.	The display before execution leaves.  *****	When the power is off, press [STOP] and [CH UP] keys simultaneously for five seconds.
Child lock/unlock	Set or release "Child Lock".	X HOLD	Press [ENTER] and [RETURN] by remote controller simultaneously until [X-HOLD] is displayed.

NTSC/PAL system select	To switch PAL/ NTSC alternately.	The display before execution leaves.  *****	When the power is on (E-E mode), press [STOP] and [OPEN/CLOSE] simultaneously for five seconds.
Forced power-off	When the power button is not effective while power is ON, turn off the power forcibly. *When Timer REC is ON or EXT-LINK is ON, execute "Forced Power-off" after releasing Timer RECor EXT-LINK. Action: The tray will open, and the power will turn off.	Display in P-off mode.	Press [Power] key over than 10 seconds.
Aging	Perform sequence of modes as * Aging Description shown below continually.	Display following the then mode.	When the power is ON, press [CH DOWN], TIME SLIP] and [OPEN / CLOSE] simultaneously for over five seconds and less than 10 seconds. *The [REC MODE] should be set to EP or LP. *When the unit has hung-up because of pressing keys for over 10 seconds, once turn off the power, and re-execute this command. "When releasing Aging mode, press [POWER] key.
Demonstration lock/unlock	Ejection of the disc is prohibited. The lock setting is effective until unlocking the tray and not released by "Main unit initialization" of service mode.	*When lock the tray.  LOCK  "LOCK" is displayed for 3 seconds.  *When unlock the tray.  UNLOCK  "UNLOCK" is displayed for 3 seconds.	When the power is on, press [STOP] and [POWER] keys simultaneously for five seconds.  When the power is on, press [STOP] and [POWER] keys simultaneously for five seconds.

		<p>*When press OPEN/CLOSE key while the tray being locked.</p>  <p>Display “LOCK” for 3 seconds.</p>	<p>Press [OPEN/CLOSE] key while the tray being locked.</p>
ATP re-execution	Re-execute ATP.	<p>Display at ATP executing.</p> 	<p>When the power is on (E-E mode), press [CH UP] and [CH DOWN] simultaneously for five seconds.</p>
Progressive initialization	The progressive setting is initialized to Interlace.	<p>The display before execution leaves.</p> 	<p>When the power is on (E-E mode), press [STOP] and [TIME SLIP] simultaneously for five seconds.</p>

## Aging Contents (Example):

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## 8.3 Service Modes

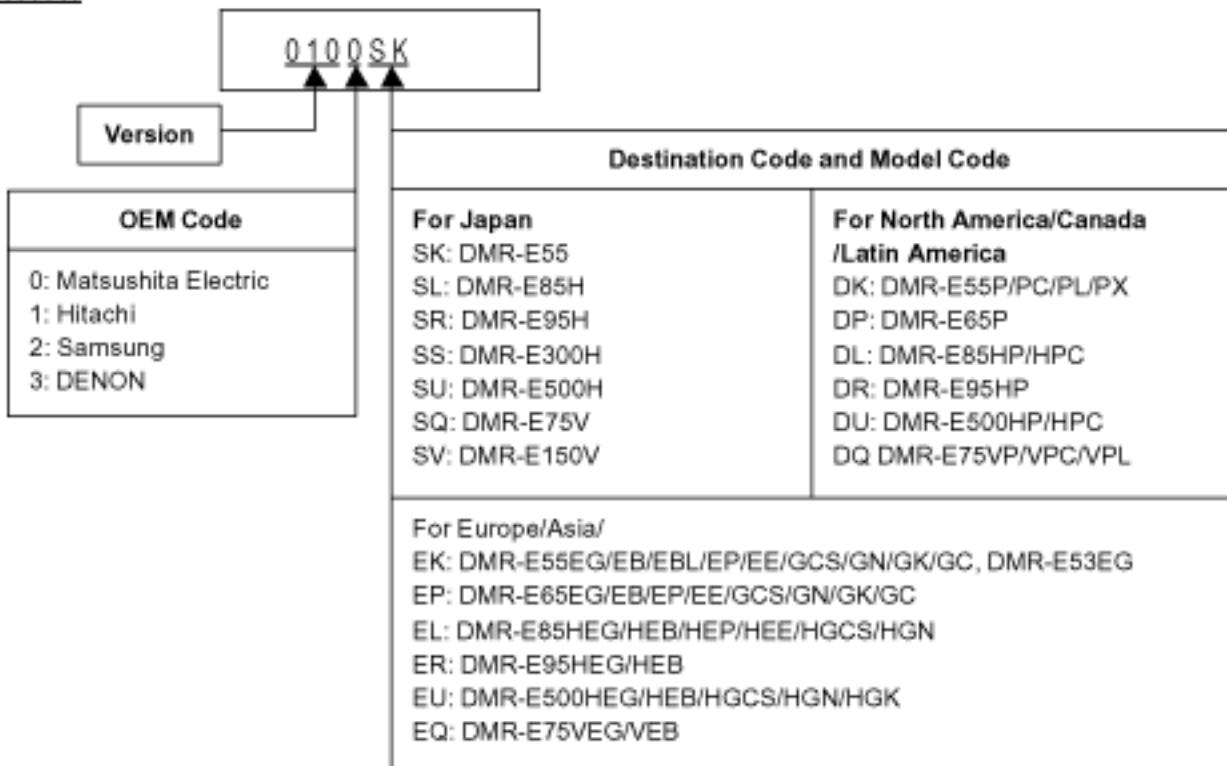
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Service mode setting: While the power is off, press TIME SLIP, STOP and OPEN / CLOSE simultaneously for five seconds.

Item		FL display	Key operation (Remote controller key)
Mode name	Description		
Release Items	Item of Service Mode executing is cancelled.	SERVICE MODE	Press [0] [0] or [Return] in service mode.
Error Code Display	Last Error Code of U14/H/F held by Timer is displayed on FL. *Details are described in “ <a href="#">8. 1. Self-Diagnosis Functions</a> ”.	 *♦ shows U/H/F. □□ shows number.	Press [0] [1] in service mode
ROM Version Display	Region code, MAIN firm version, TIMER firm version and DRIVE firmware versions are displayed on FL for five seconds per each version in order, but ROM version will be left displayed.	REGION*  MAIN *****  TIMER*****  DRIVE ****  ROM * ***	“  *,” are version displays.

Version Display of Main Microprocessor

Example of FL Display



Version Display of Timer Microprocessor

Example of FL Display



White Picture Output

White picture is output as component Output from AV Decoder.  
\*White picture (Saturation rate : 100%)  
\*It is enable to switch Interlace/Progressive by "I/Pswitch: [1] [4]"

\*Initial mode is "Interlace".

WHIT I

Press [1] [1] in service mode.

Switch Interlace/Progressive

WHIT P

Press [1] [4] in White Picture Output mode.  
\*I/P are switched alternately.

Magenta Picture Output

Magenta picture is output with Component Output from AV Decoder.  
\*Magenta picture (Saturation rate: 100%)  
\*It is enable to switch Interlace/Progressive by "I/Pswitch: [1] [4]"

\*Initial mode is "Interlace".

MAGE I

Press [1] [2] in service mode.

		<p>Switch Interlace/Progressive</p> <div style="text-align: center; border: 1px solid black; padding: 5px; margin-top: 10px;">MAGE P</div>	<p>Press [1] [4] in Magenta Picture Output mode. *I/P are switched alternately.</p>
RTSC Return in XP (A & V)	AV1 input signal is encoded (XP), decoded (XP) and output decoded signal to external without DISC recording and DISC playback.	<p>Initial mode: EE2/ Interlace/ XP/ Audio 48kHz</p> <div style="text-align: center; border: 1px solid black; padding: 5px; margin-top: 10px;">EE2 I XP 48</div>	<p>Press [1] [3] in service mode.</p>
		<p>Switch Interlace/Progressive</p> <div style="text-align: center; border: 1px solid black; padding: 5px; margin-top: 10px;">EE2 P XP 48</div>	<p>Press [1] [4] in RTSC Return XP mode. *I/P are switched alternately.</p>
		<p>Audio 44.1 kHz/ 48 kHz Switch</p> <div style="text-align: center; border: 1px solid black; padding: 5px; margin-top: 10px;">EE2 P XP 44</div>	<p>Press [2] [4] in RTSC Return XP mode. *48 kHz / 44.1 kHz are switched alternately.</p>
I/P Switch	<p>Switch Interlace and Progressive in EE mode. *Initial setting is “Interlace”. *This command is effective during executing “White Picture Output”, “MagentaPicture Output” and “RTSC Return in XP (A &amp; V)” modes.</p>	<p>Initial mode is Interlace</p> <div style="text-align: center; border: 1px solid black; padding: 5px; margin-top: 10px;">SERVICE I</div> <p>Switch Interlace/Progressive</p> <div style="text-align: center; border: 1px solid black; padding: 5px; margin-top: 10px;">SERVICE P</div>	<p>Press [1] [4] in I/P Switch mode. *I/P are switched alternately.</p>
Audio Mute (XTMUTE)	Check whether mute is applied normally by the timer microprocessor.	TIMER MUTE	Press [2] [1] in service mode.
Audio Mute (XDMUTE)	Check whether mute is applied normally by the Digital P.C.B. (GLUE IC).	MAIN MUTE	Press [2] [2] in service mode.

Audio Pattern Output	<p>The audio pattern stored in the internal memory is output          (Lch: 1kHz/-18dB)          (Rch: 400Hz/-18dB)          *Audio sound clock switching operation of DAC can be confirmed by sub command [2] [4].</p>	<p>Initial mode (Audio 48kHz)</p>	<p>Press [2] [3] in service mode.</p>
		<p>Audio 44.1kHz/48kHz switching</p>	<p>Press [2] [4] in Audio Pattern Output mode.          *48 kHz / 44.1 kHz are switched alternately.</p>
Laser Used Time Indiction	<p>Check laser used time (hours) of drive.</p>	<p>•(*****) is the used time display in hour.          •Laser used time ofDVD/ CD in Playback/ Recording mode is counted.</p>	<p>Press [4] [1] in service mode.</p>
Delete the Laser Used Time	<p>Laser used time stored in the memory of the unit is deleted.</p>		<p>Press [9] [5] in service mode.</p>
RAM Drive Last Error	<p>RAM Drive error code display.          *For details about the drive error code, refer to the Service Manual for the specific RAM Drive.          *Details are described in “<a href="#">7. Service Explorer</a>”.</p>	<p>1. Error Number is displayed for 5 seconds.</p> <p>2. Time when the error has occurred is displayed for 5 seconds.</p> <p>Y: Year          MM: Month          DD: Day          hh: Hour          mm: Minute          ss: Second</p> <p>3. Last Drive Error (1/2) is displayed for 5 seconds.</p> <p>4. Last Drive Error (2/2) is displayed for 5 seconds.</p>	<p>Press [4] [2] in service mode.          Then press [0] [1] ~ [9] [9], the past 99 errors are displayed.</p>

		*****	
	5. Error occurring Disc type is displayed for 5 seconds.	MEDIA*****	Incase that the supplier cannot be identified, display is black out.
	6. Disc Maker ID is displayed for 5 seconds.	*****	
	7. Factor of Drive Error occurring is left displayed	INFO*****	
Delete the Last Drive Error	Delete the Last Drive Error information stored on the DVD RAM-Drive.	CLR DRIVE	Press [9] [6] in service mode.
Turn on all FL/LEDs	All segments of FL and all LEDs are turned on.	All segments are turned on.	Press [5] [1] in service mode.
PB HIGH Signal Output	8 pin of AV 1 Jack (PB HIGH terminal) is High (approx. 11V DC).	PB8 HIGH	Press [5] [2] in service mode.
PB MIDDLE Signal Output	8 pin of AV 1 Jack (PB HIGH terminal) is Middle (approx. 5.5V DC).	PB8 MIDDLE	Press [5] [3] in service mode.
Front connection inspection	Press all front keys and check the connection between Main P.C.B. and Front P.C.B.	 (1) Each time a key is pressed, segment turned on increases one by one. (2) Total number of keys that have been pressed.	Press [5] [4] in service mode.

Production Date Display	Display the date when the unit was produced.	<div style="text-align: center; border: 1px solid black; padding: 5px;">PD YYYYMMDD</div> <p>YYY: Year MM: Month DD: Day</p>	Press [6] [1] in service mode.
Display the accumulated working time	Display the accumulated unit's working time.  (Indicating unit: Second)	<div style="text-align: center; border: 1px solid black; padding: 5px;">*****</div>	Press [6] [4] in service mode.
Display the Error History	Display the Error History stored on the unit.	<div style="text-align: center; border: 1px solid black; padding: 5px;">FTREC***</div> <p>Display reason of error for 5 seconds..</p> <div style="text-align: center; border: 1px solid black; padding: 5px;">YYMMDDHHMM</div> <p>YY: Year MM: Month DD: Day HH: Hour MM: Minute</p> <p>Display the time when the error has occurred for 5 seconds..</p> <div style="text-align: center; border: 1px solid black; padding: 5px;">*****</div> <p>(Indicating unit: Second)</p>	Press [6] [5] in service mode. Then press [0] [1] ~ [1] [9], the past 19 error histories are displayed.
Delete the Error History	Delete Error History information stored on the unit.	<div style="text-align: center; border: 1px solid black; padding: 5px;">CLR FTREC</div>	Press [9] [7] in service mode.
AV4(V)/AV1(RGB) I/O Setting	Set input to AV4(V) and set output to AV1(RGB) for I/O checking	<div style="text-align: center; border: 1px solid black; padding: 5px;">AV4V-AV1RGB</div>	Press [8] [0] in service mode.

AV2(Y/C)/AV1(V) I/O Setting	Set input to AV2(Y/C) and set output to AV1(V) for I/O checking	<b>AV2YC-AV1V</b>	Press [8] [1] in service mode.
AV2(V)/AV1(Y/C) I/O Setting	Set input to AV2(V) and set output to AV1(Y/C) for I/O checking	<b>AV2V-AV1 YC</b>	Press [8] [2] in service mode.
AV2(RGB)/AV1(V) I/O Setting	Set input to AV2(RGB) and set output to AV1(V) for I/O checking	<b>AV2RGB-AV1V</b>	Press [8] [3] in service mode.
P50 (H) Output	Timer Microprocessor IC7501-22 output High signal for AV1-pin 10 passing through inverter (approx. 0V DC at AV1-pin 10).	<b>P50 HIGHOUT</b>  When OK.  <b>P50 HIGH OK</b>  When NG.  <b>P50 HIGH NG</b>	Press [8] [4] in service mode.
P50 (L) Output	Timer Microprocessor IC7501-22 output Low signal for AV1-pin 10 passing through inverter (approx. 4.4 V DC at AV1-pin 10).	<b>P50 LOW OUT</b>  When OK.  <b>P50 LOW OK</b>  When NG.  <b>P50 LOW NG</b>	Press [8] [5] in service mode.

Tray OPEN/CLOSE Test	The RAM drive tray is opened and closed repeatedly.	<div style="text-align: center;">NO***** “*” is number of open/close cycle times.</div>	Press [9] [1] in service mode *When releasing this mode, press the [POWER] button on Front Panel more than 10 seconds.
Error code initialization	Initialization of the last error code held by timer (Write in F00)	<div style="text-align: center;">CLR E-CODE</div>	Press [9] [8] in service mode.
Initialize Service	Last Drive Error, Error history and Error Codes stored on the unit are initialized to factory setting.	<div style="text-align: center;">CLR SERV</div>	Press [9] [9] in service mode.
Finishing service mode	Release Service Mode.	Display in STOP (E-E) mode. <div style="text-align: center;">*****</div>	Press power button on the front panel in service mode.

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# 9 Assembling and Disassembling

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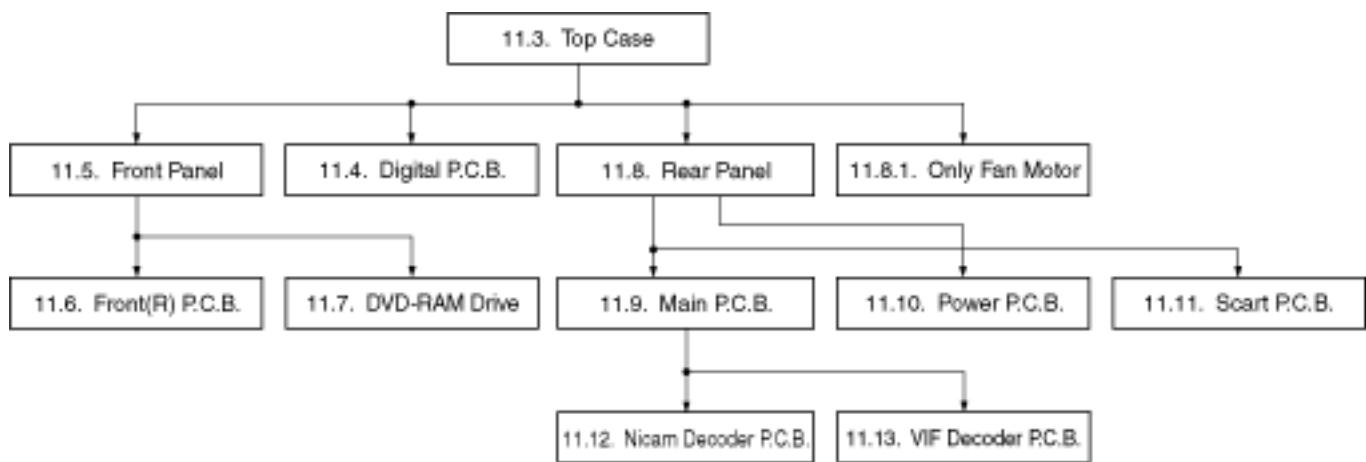
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# 9.1 Disassembly Flow Chart

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The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.

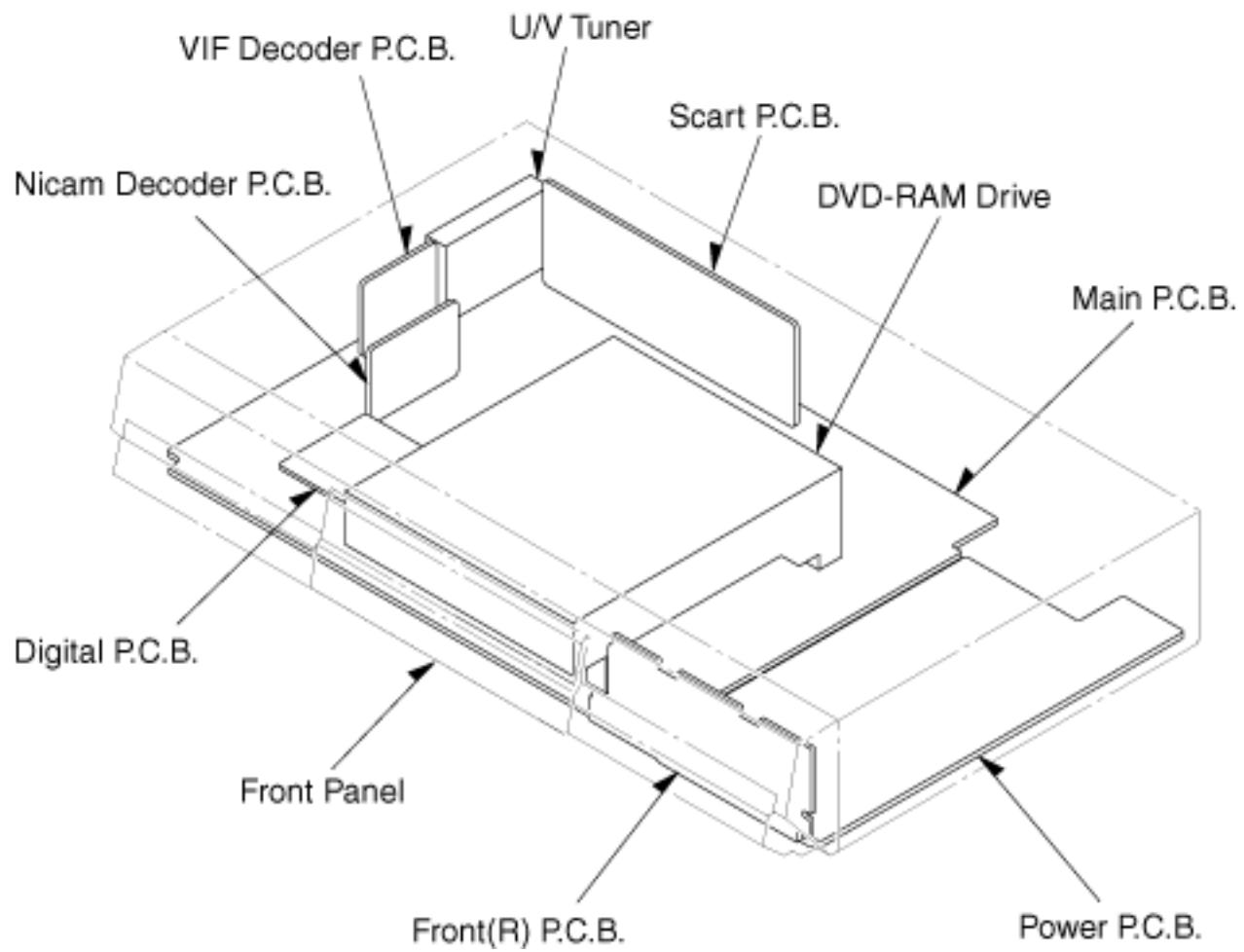
To assemble the unit, reverse the steps shown in the chart below.



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## 9.2 P.C.B. Positions

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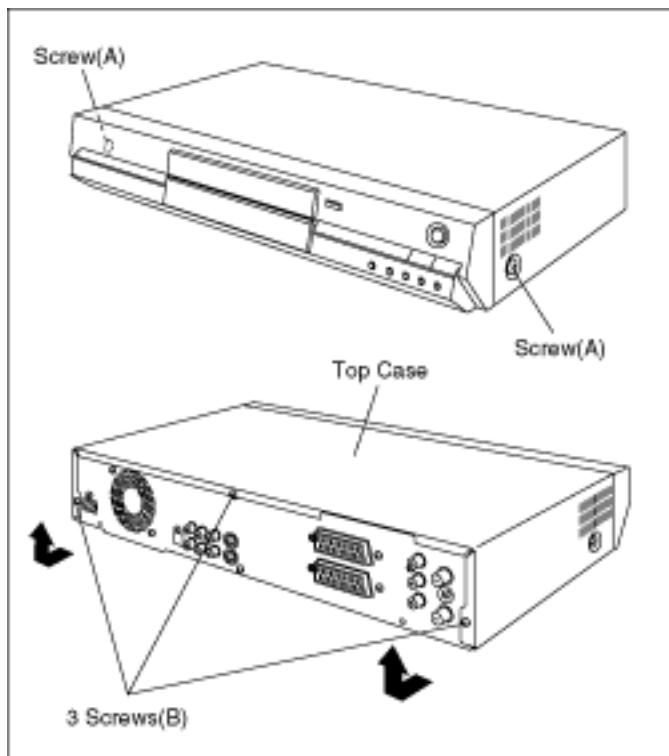


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## 9.3 Top Case

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1. Remove the 2 screws (A) and 3 screws (B).
2. Open the both ends at rear side of the Top Case a little and lift the Top Case in the direction of the arrows.

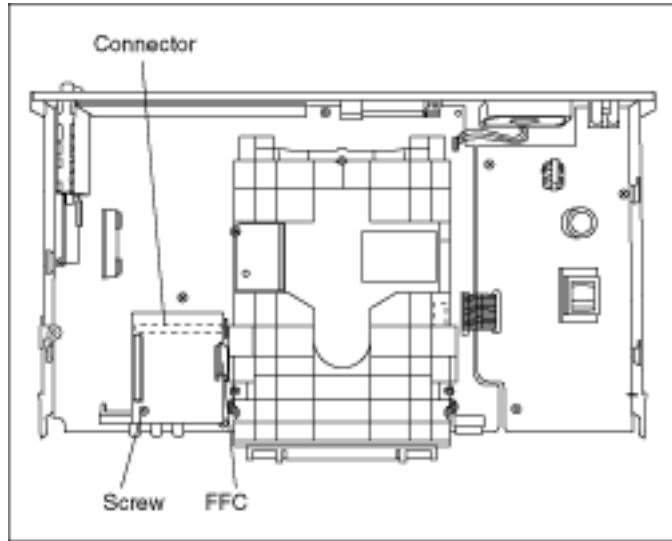


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## 9.4 Digital P.C.B.

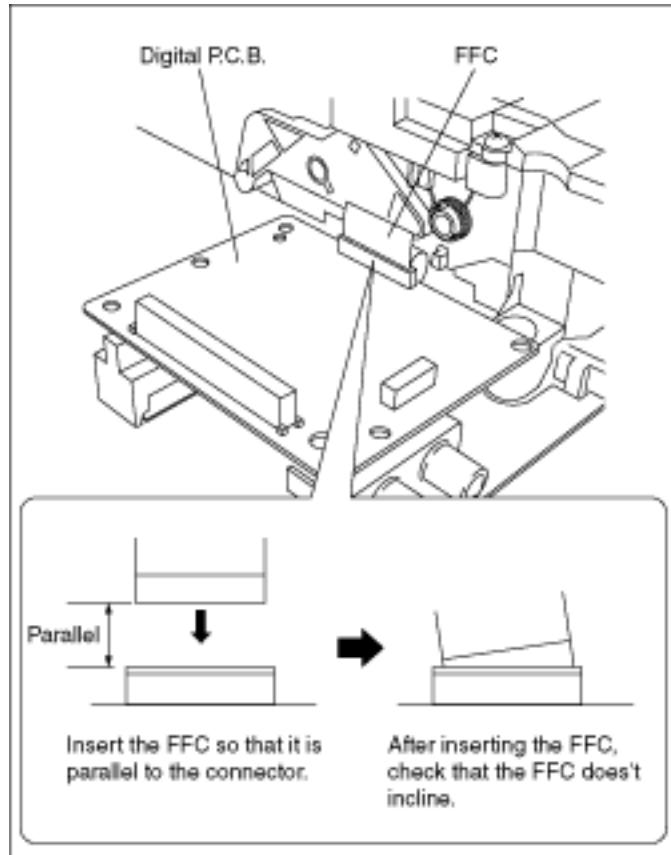
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1. Remove the FFC and a Screw.
2. Lift up Digital P.C.B. slightly so to disconnect Connector to remove Digital P.C.B.



### CAUTION:

When replacing Digital P.C.B., pay attention as below.

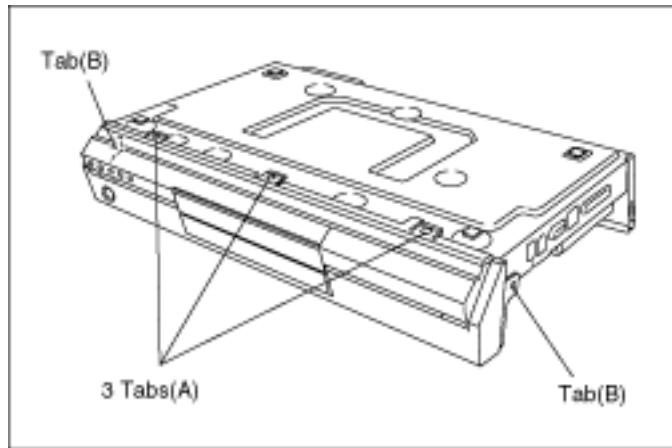


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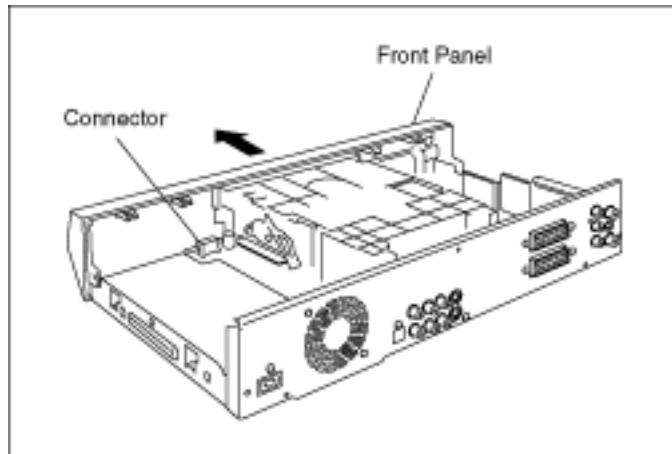
# 9.5 Front Panel

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1. Remove 3 tabs (A) and 2 tabs (B) in this order. (The tab (A) and (B) should be removed at the same time, respectively.)



2. Move the front panel to front side straight and slowly so to remove it with Connector.

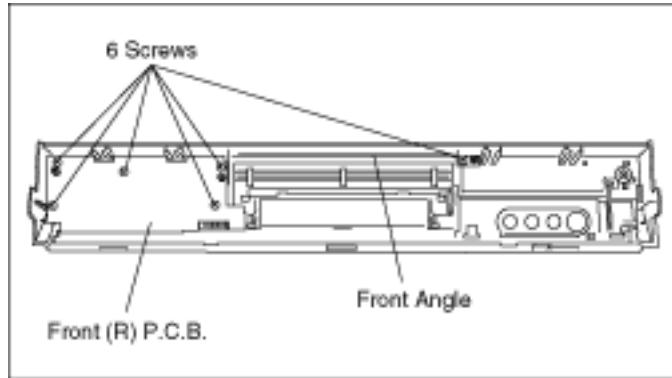


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## 9.6 Front (R) P.C.B.

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1. Remove 6 screws and Front Angle.

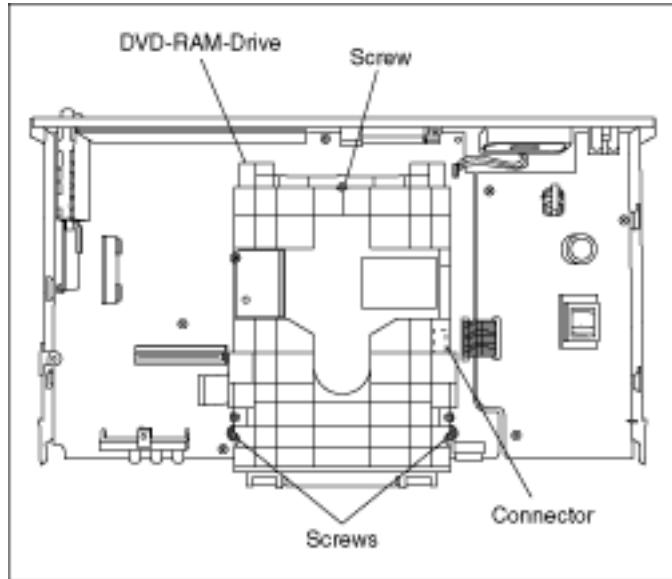


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## 9.7 DVD-RAM Drive

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1. Remove 3 Screws.
2. Pull out DVD-RAM Drive vertically so to remove it with Connector.

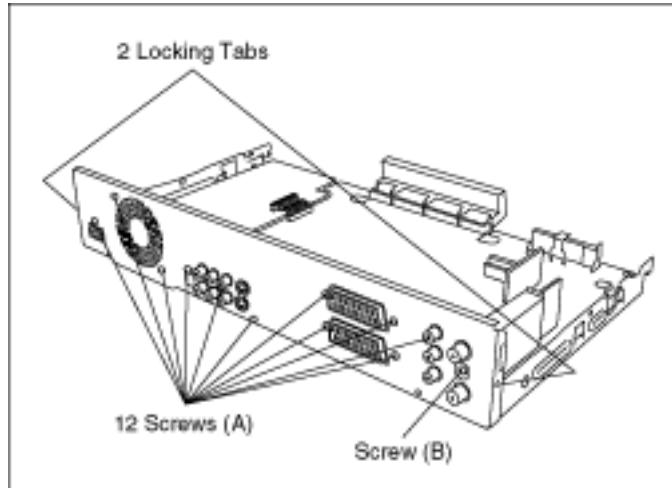


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# 9.8 Rear Panel

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1. Remove the 12 screws (A) and screw (B).
2. Unlock 2 Locking Tabs to remove Rear Panel.



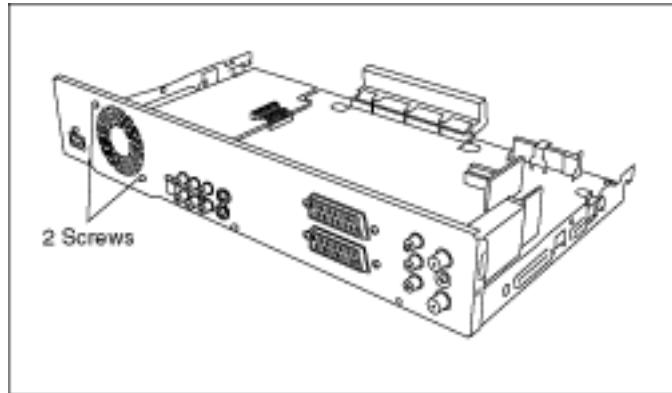
## 9.8.1 Only Fan Motor

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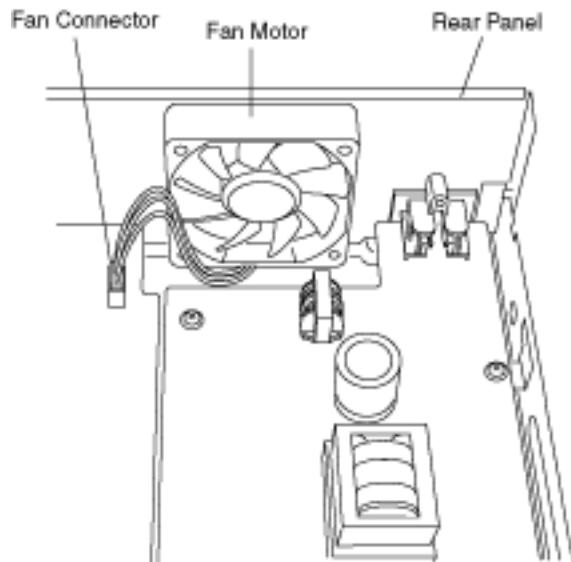
## 9.8.1 Only Fan Motor

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1. Remove the 2 screws.



2. Remove Fan Connector to remove Fan Motor.

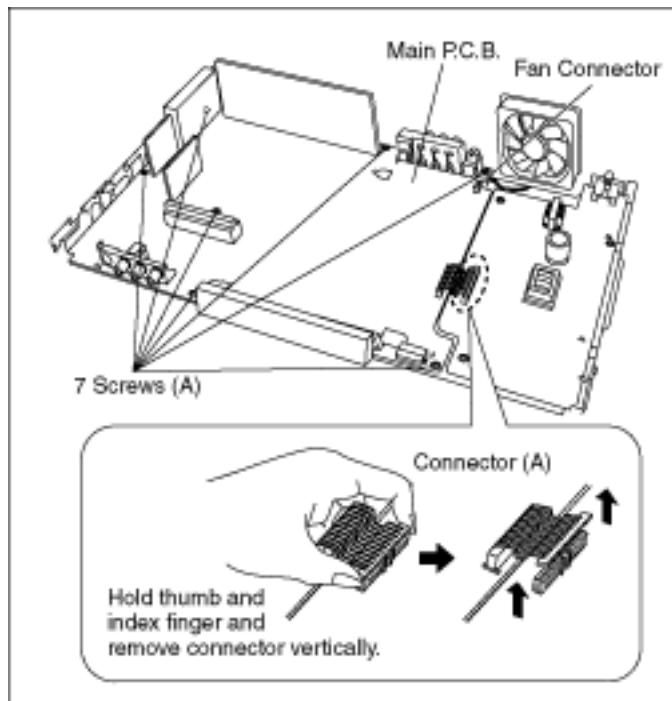


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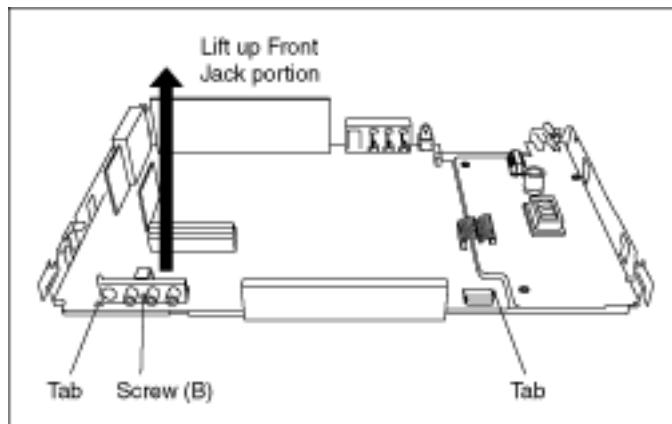
## 9.9 Main P.C.B.

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1. Remove the 7 screws (A), Connector (A) and Fan Connector.



2. Remove a Screw (B) and lift up Front Jack portion of Main P.C.B. slightly so to unlock Tab to remove Main P.C.B..

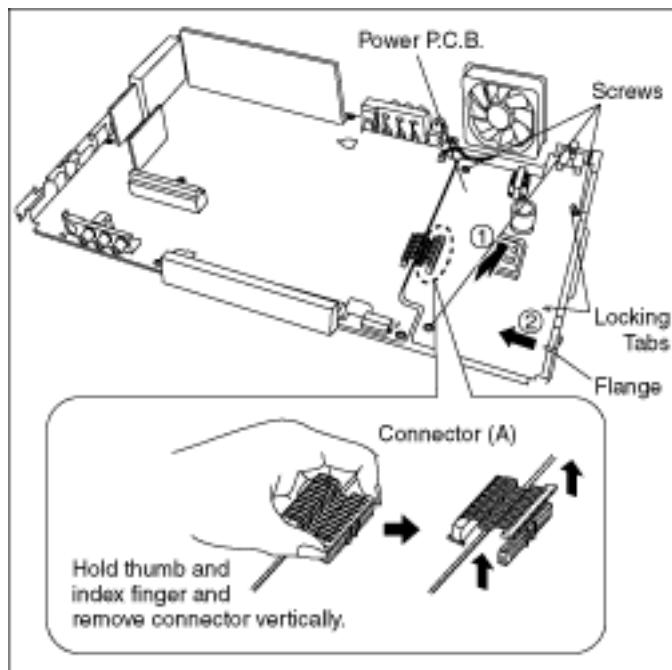


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# 9.10 Power P.C.B.

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1. Remove 3 Screws and Connector (A).
2. Lift up Power P.C.B. a little so to unlock 2 Tabs and slide Power P.C.B. so to unlock Flange to remove Power P.C.B.

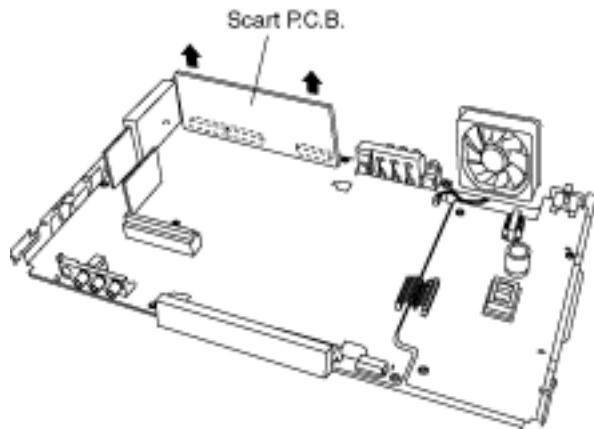


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## 9.11 The Scart P.C.B.

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1. Pull out the Scart P.C.B. in the direction of the arrow.



Note:

At first disconnect the connector on one side, and pull out the Scart P.C.B.

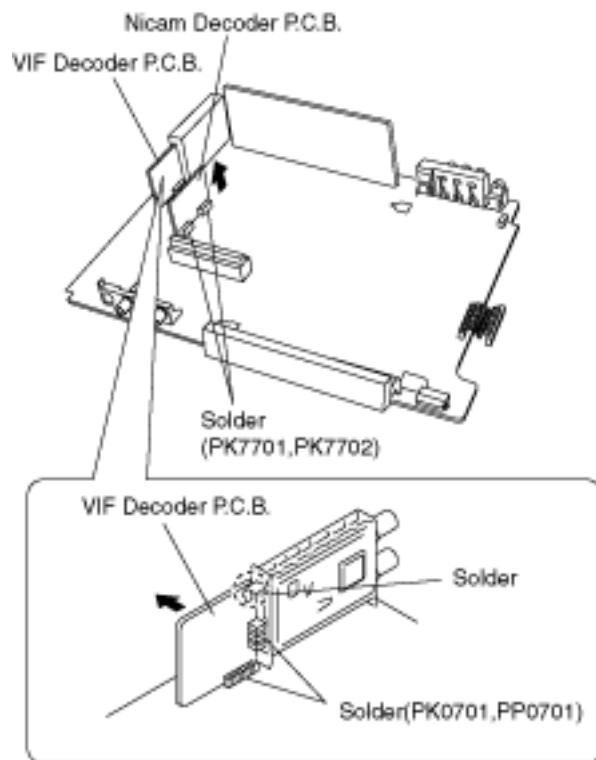


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## 9.12 VIF Decoder P.C.B. and Nicam Decoder P.C.B.

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1. Remove the solders.
2. Pull out the VIF Decoder P.C.B. and Nicam Decoder P.C.B.



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# 10 Service Fixture and Tools

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Part Number	Description	Compatibility
RFKZ0125	Extension FFC (Digital P.C.B. - DVD-RAM Drive / 40 Pin)	Same as E50 series
RFKZ0168	Extension Cable (Main P.C.B. - Fan / 3 Pin)	Same as E50 series
RFKZ0197	Extension Cable (Main P.C.B. - DVD-RAM Drive / 8 Pin)	New
RFKZ0214	Extension Cable (MainP.C.B. - Digital P.C.B. / 88 Pin)	New
RFKZ0215	Extension Cable (MainP.C.B. - Front (R) P.C.B. / 12 Pin)	New
RFKZ0216	Extension Cable (MainP.C.B. - Power P.C.B. / 23 Pin)	New

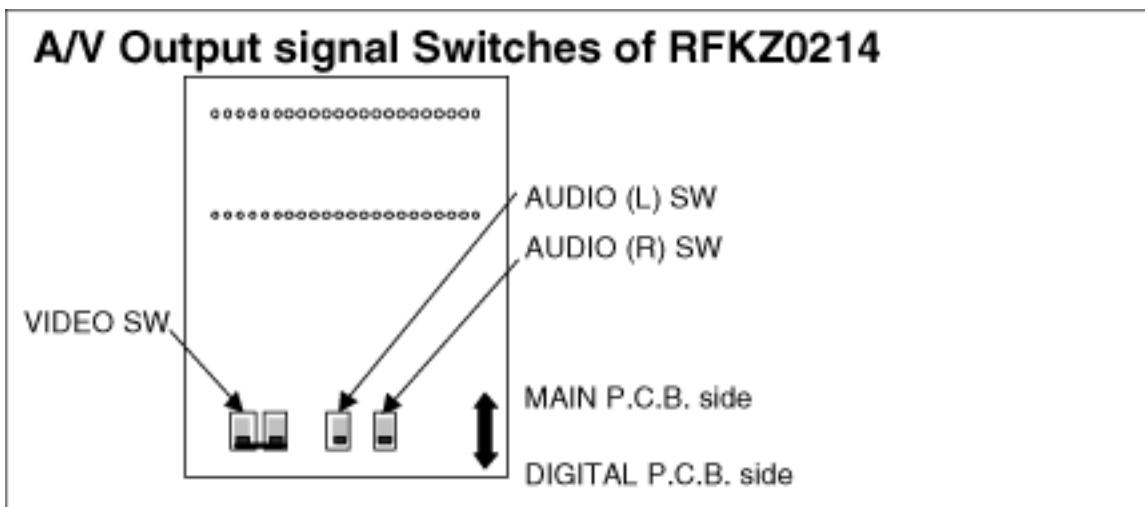
**NOTE:**

Extension Cable RFKZ0214 has A/V Output Signal switches.

Output signals can be switched from MAIN P.C.B. side or DIGITAL P.C.B. side.

When check MAIN P.C.B., turn switches to MAIN PCB side.

When check DIGITAL P.C.B., turn switches to DIGITAL P.C.B. side.



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# 11 Service Positions

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Note:

For description of the disassembling procedure, see the section 9.

[11.1 Checking and Repairing of Power P.C.B.](#)

[11.2 Checking and Repairing of Main P.C.B.](#)

[11.3 Checking and Repairing of Digital P.C.B.](#)

[11.4 Checking and Repairing of DVD-RAM Drive](#)

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# 11.1 Checking and Repairing of Power P.C.B.

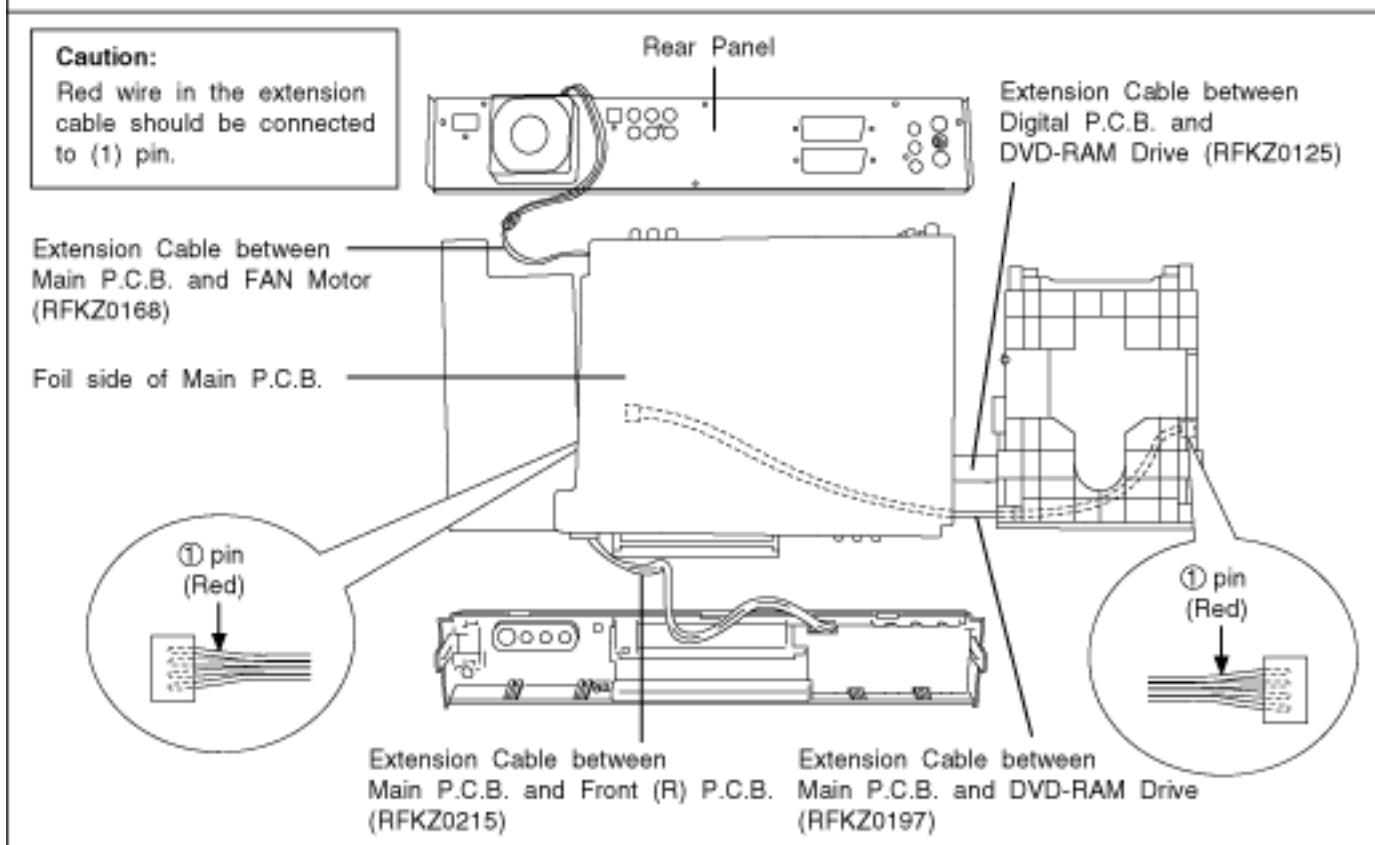
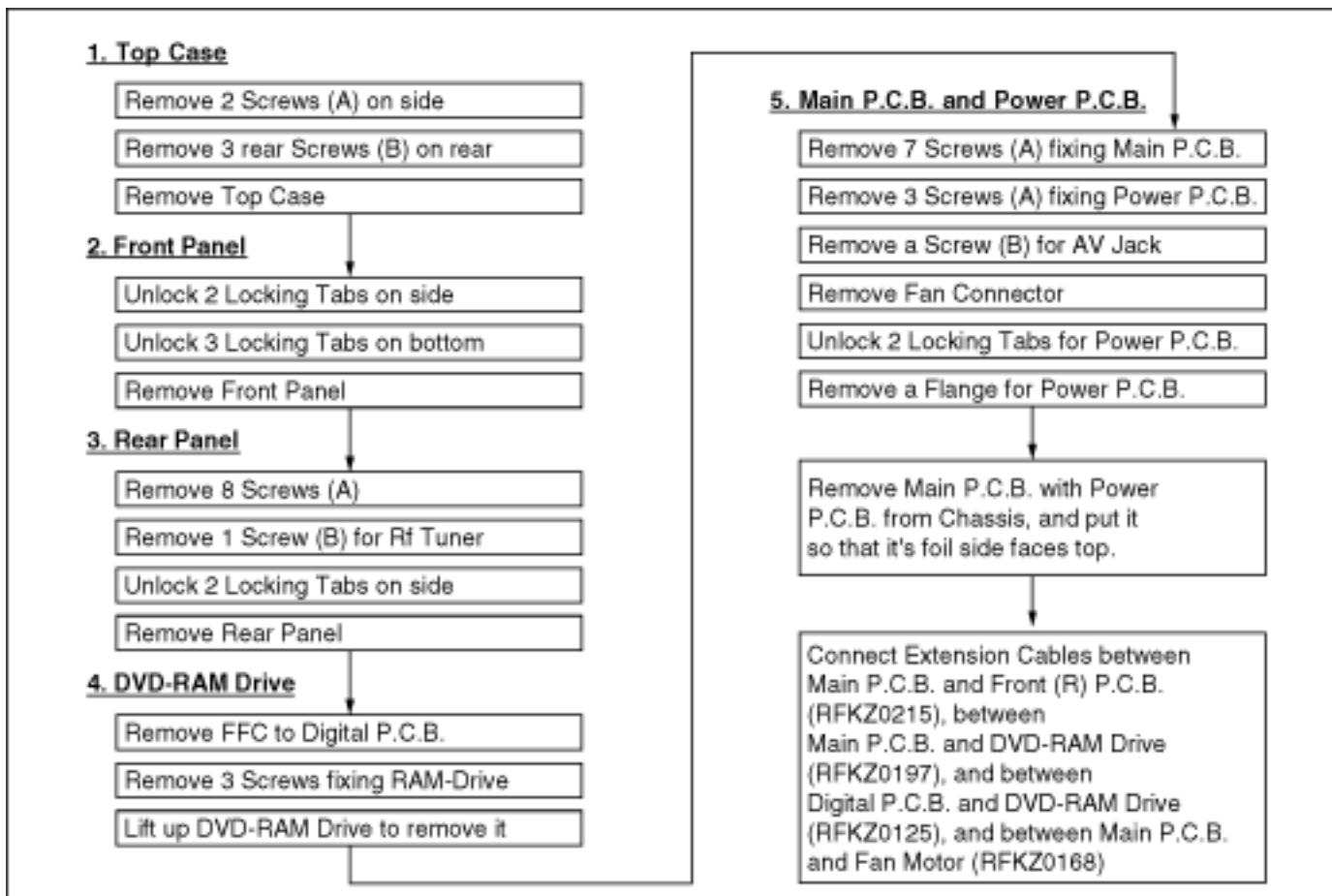
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<p><b>1. Top Case</b></p> <p>Remove 2 Screws (A) on side</p> <p>Remove 3 rear Screws (B) on rear</p> <p>Remove Top Case</p> <p><b>2. Front Panel</b></p> <p>Unlock 2 Locking Tabs on side</p> <p>Unlock 3 Locking Tabs on bottom</p> <p>Remove Front Panel</p> <p><b>3. Power P.C.B.</b></p> <p>Remove 1 Screw for AC Inlet fixing</p> <p>Remove 3 Screws fixing Power P.C.B.</p> <p>Remove Connector to Main P.C.B.</p> <p>Unlock 2 Locking Tabs and a Flange</p> <p>Remove Power P.C.B.</p> <p>Connect Extension Cables between Main P.C.B. and Power P.C.B. (RFKZ0216), and between Main P.C.B. and Front (R) P.C.B. (RFKZ0215)</p> <p>Put Power P.C.B. on insulation sheet so that it's foil side faces top.</p>	<p><b>Caution:</b> Red wire in the extension cable should be connected to (1) pin.</p> <p>Insulation sheet</p> <p>Extension Cable between Main P.C.B. and Power P.C.B. (RFKZ0216)</p> <p>Foil side of Power P.C.B.</p> <p>Extension Cable between Main P.C.B. and Front (R) P.C.B. (RFKZ0215)</p>
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# 11.2 Checking and Repairing of Main P.C.B.

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Extension Cable between  
Main P.C.B. and Front (R) P.C.B.  
(RFKZ0215)

Extension Cable between  
Main P.C.B. and DVD-RAM Drive  
(RFKZ0197)

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# 11.3 Checking and Repairing of Digital P.C.B.

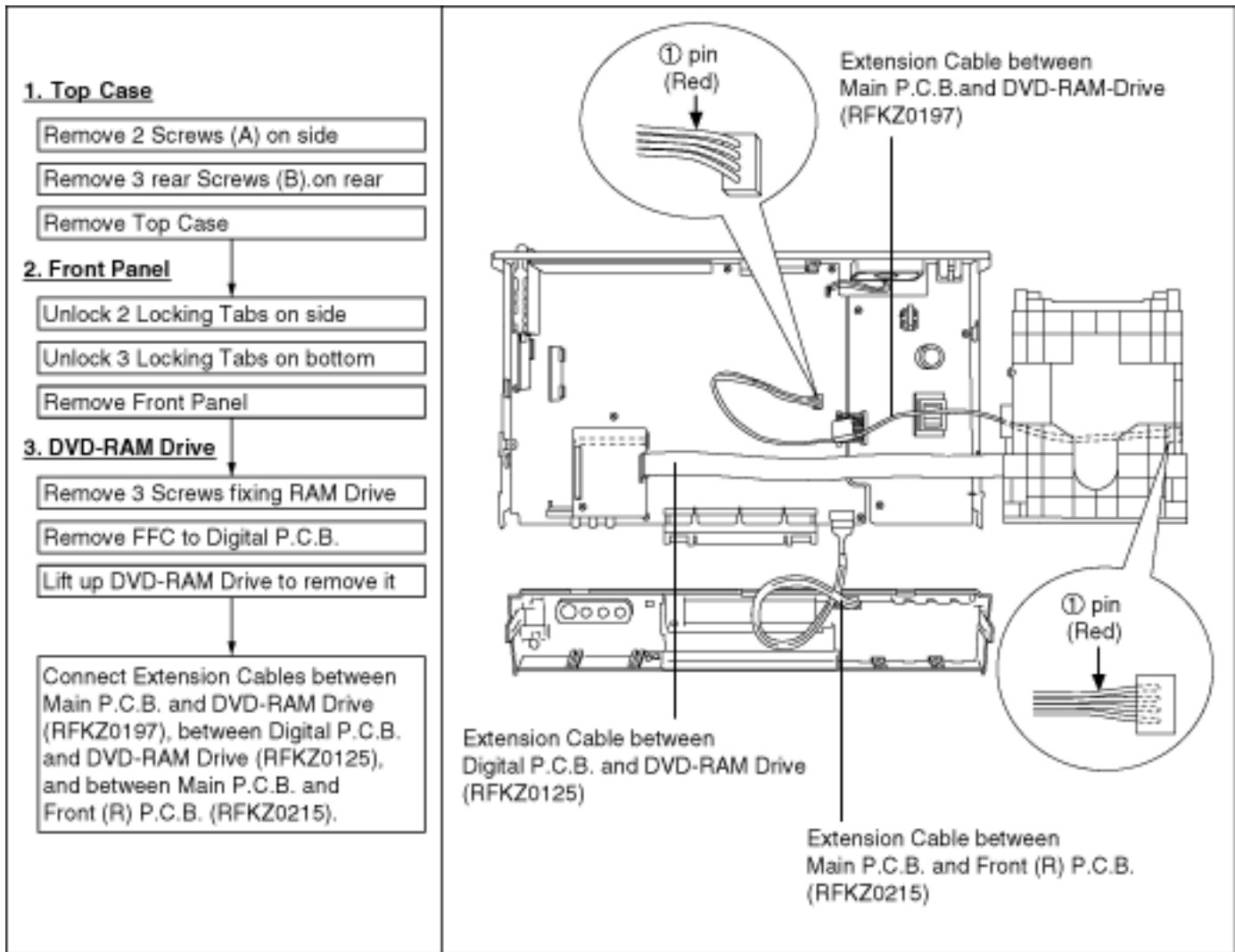
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<p><b>1. Top Case</b></p> <p>Remove 2 Screws (A) on side</p> <p>Remove 3 rear Screws (B) on rear</p> <p>Remove Top Case</p> <p><b>2. Digital P.C.B.</b></p> <p>Remove FFC to RAM-Drive</p> <p>Remove a Screw fixing Digital P.C.B.</p> <p>Lift up Digital P.C.B. to remove it</p> <p>Connect Extension Cables between Main P.C.B. and Digital P.C.B. (RFKZ0214), and between Digital P.C.B. and DVD-RAM Drive (RFKZ0125).</p>	<p>Extension Cable between Main P.C.B. and Digital P.C.B. (RFKZ0214)</p> <p><b>Caution:</b> Red wire in the extension cable should be connected to (1) pin.</p> <p>Red Wire</p> <p>Digital P.C.B.</p> <p>Extension Cable between Digital P.C.B. and DVD-RAM Drive (RFKZ0125)</p>
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# 11.4 Checking and Repairing of DVD-RAM Drive

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# 12 Adjustment Procedures

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[12.1 After replacing the RAM Drive with new one](#)

[12.2 When the unit does not operate normally after replacing the Timer Microprocessor with new one](#)

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# 12.1 After replacing the RAM Drive with new one

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After replacing of RAM drive unit, TEST mode is not necessary. Please confirm operation for RAM drive.

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## 12.2 When the unit does not operate normally after replacing the Timer Microprocessor with new one

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in order to transmit the

Step	Operation	Descriptions
1	While power is ON, short IC7508-4 pin (RESET) and the GND.	“RESET (L)” is transmitted to the reset terminal of Timer Microprocessor (IC7501-11 pin), then the unit operates normally.

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# 13 Standard Inspection Specifications after Making Repairs

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After making repairs, we recommend performing the following inspection, to check normal operation.

No.	Procedure	Item to Check
1	Turn on the power, and confirm items pointed out.	Items pointed out should reappear.
2	Insert RAM disc.	The Panasonic RAM disc should be recognized.
3	Enter the EE (TU IN / AV IN - AV OUT) mode.	No abnormality should be seen in the picture, sound or operation.
4	Perform auto recording and playback for one minute using the RAM disc.	No abnormality should be seen in the picture, sound or operation.
5	If a problem is caused by a VCD, DVD-R, DVD-Video, Audio-CD, or MP3, playback the test disc.	No abnormality should be seen in the picture, sound or operation.
6	After checking and making repairs, upgrade the firmware to the latest version.	Make sure that [FIRM_SUCCESS] appears in the FL displays. *[UNSUPPORT] display means the unit is already updated to newest same version. Then version up is not necessary.
7	Transfer [9][9] in the service mode setting, and initialize the service settings (return various settings and error information to their default values. The laser time is not included in this initialization).	Make sure that [CLR SERV] appears in the FL display. After checking it, turn the power off.
8	When replacing of RAM drive, transfer [9] [5] in the service mode setting to delete Laser used time.	Make sure that [CLR LASER] appears in the FL display. After that, turn power off.

Use the following checklist to establish the judgement criteria for the picture and sound.

Item	Contents	Check	Item	Contents	Check
Picture	Block noise		Sound	Distorted sound	
	Crosscut noise			Noise (static, background noise, etc.)	
	Dot noise			The sound level is too low.	
	Picture disruption			The sound level is too high.	
	Not bright enough			The sound level changes.	
	Too bright				
	Flickering color				
	Color fading				

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# 14 Voltage and Waveform Chart

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Note)

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard.

Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

[14.1 Power P.C.B.](#)

[14.2 Main P.C.B.](#)

[14.3 Nicam Decoder P.C.B.](#)

[14.4 Scart P.C.B.](#)

[14.5 Front \(R\) P.C.B.](#)

[14.6 P9001 Connector](#)

[14.7 Waveform Chart](#)

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# **14.1 Power P.C.B.**

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## 14.2 Main P.C.B.

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# **14.3 Nicam Decoder P.C.B.**

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# 14.4 Scart P.C.B.

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# 14.5 Front (R) P.C.B.

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# 14.6 P9001 Connector

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# 14.7 Waveform Chart

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Note:

The waveforms are measured with PAL colour bar signal.



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Ref No.	IC7502														
MODE	61	62	63	64											
REC	-25.5	-25.5	-25.5	-28.8											
PLAY	-25.5	-25.5	-25.5	-28.8											
STOP	-25.6	-25.5	-25.6	-28.9											
Ref No.	IC7503					IC7504					IC7505				
MODE	1	2	3	4	5	1	2	3	4	5	6	7	8		
REC	5.0	5.2	0	0	0	0	0	0	0	4.1	4.5	4.9	4.9		
PLAY	4.9	5.2	0	0	0	0	0	0	0	4.1	4.5	4.9	4.9		
STOP	4.9	5.2	0	0	0	0	0	0	0	4.2	4.5	4.9	4.9		
Ref No.	IC7506							IC7508							
MODE	1	2	3	4	5	6	7	8	1	2	3	4	5		
REC	0.4	0	0	0	0	0	0	13.5	0	0	0	4.9	4.9		
PLAY	0.4	0	0	0	0	0	0	13.5	0	0	0	4.9	4.9		
STOP	0.4	0	0	0	0	0	0	13.6	0	0	0	4.9	4.9		
Ref No.	Q3006			Q3007			Q3009			Q3010			Q4004		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
REC	1.8	0	1.2	1.8	0	1.1	1.7	0	1.0	1.7	0	1.0	5.2	-0.8	5.2
PLAY	1.8	0	1.2	1.8	0	1.2	1.7	0	1.0	1.7	0	1.0	5.2	-0.8	5.2
STOP	1.8	0	1.2	1.8	0	1.2	1.7	0	1.0	1.7	0	1.0	5.2	5.1	4.5
Ref No.	Q4006			Q4007			Q4008			Q4009			Q7401		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
REC	0	0	-0.1	0	0	-0.4	0	0	-0.1	0	0	-0.4	0	12.1	0
PLAY	0	0	-0.2	0	0	-0.5	0	0	-0.1	0	0	-0.5	0	12.1	0.1
STOP	0	0	0.7	0	0	0.7	0	0	0.7	0	0	0.7	0	12.1	0.1
Ref No.	Q7402			Q7404			Q7405			Q7406			Q7503		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
REC	2.9	0	2.3	1.3	5.0	1.9	1.3	5.0	1.9	1.3	5.0	1.9	0	3.7	-1.0
PLAY	2.9	0	2.3	1.3	5.0	1.9	1.3	5.0	1.9	1.3	5.0	1.9	0	3.5	-1.0
STOP	2.9	0	2.2	1.3	5.0	1.9	1.3	5.0	1.9	1.3	5.0	1.9	0	3.5	-1.0
Ref No.	Q7505			Q7506			Q7507			Q7508			Q7511		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
REC	2.5	0	1.9	2.0	5.0	1.6	2.5	0	1.9	2.0	5.0	1.6	0	4.9	0
PLAY	2.5	0	1.9	2.0	5.0	1.6	2.5	0	1.9	2.0	5.0	1.6	0	4.9	0
STOP	1.6	0	0.9	1.1	5.0	1.6	1.7	0	1.0	1.1	5.0	1.6	0	4.9	0
Ref No.	Q7512			Q7513			Q7517			Q7518			QR3002		
MODE	1	2	3	E	C	B	E	C	B	E	C	B	E	C	B
REC	0.4	13.5	0	-20.2	-20.2	-19.5	0	0	0.6	0	4.3	0	0	2.8	0
PLAY	0.4	13.5	0	-20.2	-20.2	-19.5	0	0	0.6	0	4.3	0	0	2.8	0
STOP	0.4	13.6	0	-20.3	-20.3	-19.6	0	0	0.6	0	4.3	0	0	2.8	0
Ref No.	QR3003			QR4002			QR4003			QR4004			QR4005		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
REC	0	2.8	0	0	0	4.9	0	0	2.5	0	5.2	0	0	5.2	0
PLAY	0	2.8	0	0	0	4.9	0	0	2.5	0	5.2	0	0	5.2	0
STOP	0	2.8	0	0	0	4.9	0	2.9	0	0	0	2.9	0	0	0
Ref No.	QR4012			QR4041			QR7402			QR7403			QR7404		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
REC	5.2	0	5.1	0	3.3	0	0	4.7	0	0	0	4.7	12.1	-0.3	12.0
PLAY	5.2	0	5.1	0	3.3	0	0	4.7	0	0	0.1	4.7	12.1	12.1	0.1
STOP	5.2	0	5.1	0	3.3	0	0	4.7	0	0	0.1	4.7	12.1	-0.3	12.0
Ref No.	QR7405			QR7406			QR7407			QR7501			QR7502		
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B
REC	0	12.0	0	0	0.1	0	0	0	0.1	4.9	0	4.9	0	0	2.3
PLAY	0	0.1	4.9	0	0	0.1	0	0	0.1	4.9	0	4.9	0	0	2.3
STOP	0	12.0	0	0	0	0	0	0	0	4.9	0	4.9	0	0	2.3
Ref No.	QR7503			QR7505			QR7507								
MODE	E	C	B	E	C	B	E	C	B						
REC	0	1.0	0	0	4.9	0	4.9	4.8	0						
PLAY	0	1.0	0	0	4.9	0	4.9	4.9	0						
STOP	0	1.0	0	0	4.9	0	4.9	4.9	0						

Ref No.	IC7301																			
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
REC	2.5	2.5	5.0	0	0	4.9	0	0	0	0.2	0	0.1	0	1.6	1.5	0	0	2.0	0	0
PLAY	2.5	2.5	5.0	0	0	4.9	0	0	0	0.3	0	0.3	0	1.6	1.5	0	0	2.0	0	0
STOP	2.5	2.5	5.0	0	0	4.9	0	0	0	0.3	0	0.2	0	1.6	1.5	0	0	2.0	0	0

Ref No.	IC7301																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	3.3	0	2.0	2.0	2.0	4.9	0	5.0	4.5	4.2	0.3	0.2	0.2	0.2	5.0	0	4.9	2.5	2.5	2.5
PLAY	3.3	0	2.0	2.0	2.0	4.9	0	5.0	4.5	4.2	0.3	0	0.2	0.2	5.0	0	4.9	2.5	2.5	2.5
STOP	3.3	0	2.0	2.0	2.0	4.9	0	5.0	4.5	4.2	0.3	0.3	0.3	0.2	5.0	0	4.9	2.5	2.5	2.5

Ref No.	IC3901																					
MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
REC	5.6	5.6	0	0	1.2	0	2.2	0	0	5.6	5.6	5.0	1.8	12.1	5.6	5.6	0	1.8	3.6	0		
PLAY	5.6	5.6	0	0	1.2	0	2.2	0	0	5.6	5.6	5.0	1.8	12.1	5.6	5.6	0	1.8	3.6	11.6		
STOP	5.6	5.6	0	0	1.2	0	2.2	0	0	5.6	5.6	5.0	1.8	12.1	5.6	5.6	0	1.8	3.6	0		
Ref No.	IC3901																					
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40		
REC	4.2	4.5	1.8	5.0	2.0	2.0	0	1.8	5.0	4.9	4.9	0	5.6	5.6	0	5.6	5.6	0	4.9	4.9		
PLAY	4.2	4.5	1.8	5.0	2.0	2.0	0	1.8	5.0	4.9	4.9	0	5.6	5.6	0.2	5.6	5.6	0	4.9	4.9		
STOP	4.2	4.5	1.8	5.0	2.0	2.0	0	1.8	5.0	4.9	4.9	0	5.6	5.6	0	5.6	5.6	0	4.9	4.9		
Ref No.	IC3901																					
MODE	41	42	43	44																		
REC	0	4.9	4.9	0																		
PLAY	0	4.9	4.9	0																		
STOP	0	4.9	4.9	0																		
Ref No.	Q3901			Q3905			Q3906			Q3908			Q3909									
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	
REC	2.1	5.0	2.7	0	0	0	5.0	0	5.0	5.0	-0.6	5.0	0	0	0	0	0	0	-0.2	0	0	-0.2
PLAY	2.1	5.0	2.7	0	0	0	5.0	0	5.0	5.0	-0.6	5.0	0	0	0	0	0	0	-0.2	0	0	-0.2
STOP	2.1	5.0	2.7	0	0	0	5.0	0	5.0	5.0	-0.6	5.0	0	0	0	0	0	0	-0.3	0	0	-0.3
Ref No.	Q3910			QR3908			QR3909			QR3913												
MODE	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	E	C	B	
REC	0	0	0	0	3.6	0	0	5.0	0	0	5.0	0	0	5.0	0	0	5.0	0	0	5.0	0	
PLAY	0	0	0	0	0	3.6	0	5.0	0	0	5.0	0	0	5.0	0.2	0	5.0	0.2	0	5.0	0.2	
STOP	0	0	-0.1	0	0	3.6	0	5.0	0	0	5.0	0	0	5.0	0	0	5.0	0	0	5.0	0	

Ref No.	QR7801		
MODE	E	C	B
REC	0	3.5	0
PLAY	0	3.5	0
STOP	0	3.5	0

Ref No.	P9001																			
	MODE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
REC	2.1	1.3	0	0	1.3	2.1	0	0	1.3	0	0	0	1.3	0	3.5	0	0	1.5	5.0	0
PLAY	2.1	1.3	0	0	1.3	2.1	0	0	1.3	0	0	0	1.3	0	3.5	0	0	1.5	5.0	0
STOP	2.1	0.9	0	0	1.3	2.1	0	0	1.3	0	0	0	1.3	0	3.5	0	0	1.5	5.0	0

Ref No.	P9001																			
MODE	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
REC	5.0	1.2	3.5	0	3.5	1.2	4.9	0	4.9	1.0	4.9	0	4.9	1.0	5.0	0	4.9	3.4	4.9	0
PLAY	5.0	1.2	3.5	0	3.5	1.2	4.9	0	4.9	1.0	4.9	0	4.9	1.0	5.0	0	4.9	3.2	4.9	0
STOP	5.0	1.2	3.5	0	3.5	1.2	4.9	0	4.9	1.0	4.9	0	4.9	1.0	5.0	0	4.9	3.4	4.9	0

Ref No.	P9001																			
MODE	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
REC	0.1	3.5	0	0	3.5	0	3.2	2.5	0	2.5	0	0	0	0	0	0	0	2.5	0	0
PLAY	0.1	3.5	0	0	3.5	0	3.2	2.5	0	2.5	0	0	0	0	0	0	0	2.5	0	0
STOP	0.1	2.5	0	0	2.5	0	2.2	2.5	0	2.5	0	0	0	0	0	0	0	2.5	0	0

STOP	0.1	3.5	0	0	3.5	0	3.2	2.5	0	2.5	0	0	0	0	0	0	2.5	0	0	
Ref No.	P9001																			
MODE	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
REC	0	2.5	0	0	0.3	0	0	5.0	5.0	2.5	0	1.7	0	3.5	3.3	3.5	0	1.5	5.0	1.5
PLAY	0	2.5	0	0	0.3	0	0	5.0	5.0	2.5	0	1.7	0	3.5	3.3	3.5	0	1.5	5.0	1.5

# 15 Abbreviations

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INITIAL/LOGO		ABBREVIATIONS
A	A0~UP ACLK AD0~UP ADATA ALE AMUTE AREQ ARF ASI ASO ASYNC	ADDRESS AUDIO CLOCK ADDRESS BUS AUDIO PES PACKET DATA ADDRESS LATCH ENABLE AUDIO MUTE AUDIO PES PACKET REQUEST AUDIO RF SERVO AMP INVERTED INPUT SERVO AMPOUTPUT AUDIO WORD DISTINCTION SYNC
B	BCK BCKIN BDO BLKCK BOTTOM BYP BYTCK	BIT CLOCK (PCM) BIT CLOCK INPUT BLACK DROP OUT SUB CODE BLOCK CLOCK CAP. FOR BOTTOM HOLD BYPATH BYTE CLOCK
C	CAV CBDO CD CDSCK CDSRDATA CDRF CDV CHNDATA CKSL CLV COFTR CPA CPCS CPDT CPUADR CPUADT CPUIRQ CPRD CPWR CS CSYNCIN CSYNCOUT	CONSTANT ANGULAR VELOCITY CAP. BLACK DROP OUT COMPACT DISC CD SERIAL DATA CLOCK CD SERIAL DATA CD RF (EFM) SIGNAL COMPACT DISC-VIDEO CHANNEL DATA SYSTEM CLOCKSELECT CONSTANT LINEAR VELOCITY CAP. OFF TRACK CPU ADDRESS CPU CHIP SELECT CPU DATA CPU ADDRESS LATCH CPU ADDRESS DATA BUS CPU INTERRUPT REQUEST CPU READ ENABLE CPU WRITE ENABLE CHIPSELECT COMPOSITE SYNC IN COMPOSITE SYNC OUT

D	DACCK DEEMP DEMPH DIG0~UP DIN DMSRCK DMUTE DO DOUT0~UP DRF DRPOUT DREQ DRESP DSC DSLFB DVD	D/A CONVERTER CLOCK DEEMPHASIS BIT ON/OFF DEEMPHASIS SWITCHING FL DIGIT OUTPUT DATA INPUT DM SERIAL DATA READ CLOCK DIGITAL MUTE CONTROL DROP OUT DATAOUTPUT DATA SLICE RF (BIAS) DROP OUT SIGNAL DATA REQUEST DATA RESPONSE DIGITAL SERVO CONTROLLER DATA SLICE LOOP FILTER DIGITAL VIDEO DISC
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INITIAL/LOGO		ABBREVIATIONS
E	EC ECR  ENCSEL ETMCLK ETSCLK	ERROR TORQUE CONTROL ERROR TORQUE CONTROL REFERENCE ENCODER SELECT EXTERNAL M CLOCK (81MHz/40.5MHz) EXTERNAL S CLOCK (54MHz)
F	FBAL FCLK FE FFI FEO FG FSC FSCK	FOCUS BALANCE FRAME CLOCK FOCUS ERROR FOCUS ERROR AMP INVERTED INPUT FOCUS ERROR AMP OUTPUT FREQUENCY GENERATOR FREQUENCY SUB CARRIER FS (384 OVER SAMPLING) CLOCK
G	GND	COMMON GROUNDING (EARTH)
H	HA0~UP HD0~UP HINT HRXW	HOST ADDRESS HOST DATA HOST INTERRUPT HOST READ/WRITE
I	IECOUT IPFRAG IREF ISEL	IEC958 FORMAT DATA OUTPUT INTERPOLATION FLAG I (CURRENT) REFERENCE INTERFACE MODE SELECT
L	LDON LPC LRCK	LASER DIODE CONTROL LASER POWER CONTROL L CH/R CH DISTINCTION CLOCK

M	MA0~UP MCK MCKI MCLK MDATA MDQ0~UP MDQM MLD MPEG	MEMORY ADDRESS MEMORY CLOCK MEMORY CLOCK INPUT MEMORY SERIAL COMMAND CLOCK MEMORY SERIAL COMMAND DATA MEMORY DATA INPUT/OUTPUT MEMORY DATA I/O MASK MEMORY SERIAL COMMAND LOAD MOVING PICTURE EXPERTS GROUP
O	ODC OFTR OSCI OSCO OSD	OPTICAL DISC CONTROLLER OFF TRACKING OSCILLATOR INPUT OSCILLATOR OUTPUT ON SCREEN DISPLAY
P	P1~UP PCD PCK PDVD PEAK PLLCLK PLLOK PWMCTL PWMDA PWMOA, B	PORT CD TRACKING PHASE DIFFERENCE PLL CLOCK DVD TRACKING PHASE DIFFERENCE CAP. FOR PEAK HOLD CHANNEL PLL CLOCK PLL LOCK PWM OUTPUT CONTROL PULSE WAVE MOTOR DRIVEA PULSE WAVE MOTOR OUT A, B

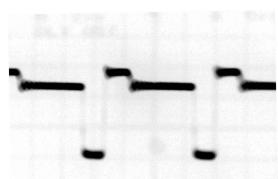
INITIAL/LOGO		ABBREVIATIONS
R	RE RFENV RFO RS RSEL RST RSV	READ ENABLE RF ENVELOPE RF PHASE DIFFERENCE OUTPUT (CD-ROM) REGISTER SELECT RF POLARITY SELECT RESET RESERVE
S	SBI0, 1 SBO0 SBT0, 1 SCK SCKR SCL SCLK SDA SEG0~UP SELCLK SEN SIN1, 2 SOUT1, 2 SPDI SPDO SPEN SPRCLK SPWCLK SQCK	SERIAL DATA INPUT SERIAL DATA OUTPUT SERIAL CLOCK SERIAL DATA CLOCK AUDIO SERIAL CLOCK RECEIVER SERIAL CLOCK SERIAL CLOCK SERIAL DATA FL SEGMENT OUTPUT SELECTCLOCK SERIAL PORT ENABLE SERIAL DATA IN SERIAL DATA OUT SERIAL PORT DATA INPUT SERIAL PORT DATA OUTPUT SERIAL PORT R/W ENABLE SERIAL PORT READ CLOCK SERIAL PORT WRITE CLOCK SUB CODE Q CLOCK

SQCX	SUBCODE Q DATA READ CLOCK	
SRDATA	SERIAL DATA	
SRMADR	SRAM ADDRESS BUS	
SRMDT0~7	SRAM DATA BUS 0~7	
SS	START/STOP	
STAT	STATUS	
STCLK	STREAM DATA CLOCK	
STD0~UP	STREAM DATA	
STENABLE	STREAM DATA INPUT ENABLE	
STSEL	STREAM DATA POLARITY SELECT	
STVALID	STREAM DATA VALIDITY	
SUBC	SUB CODE SERIAL	
SBCK	SUB CODE CLOCK	
SUBQ	SUB CODE Q DATA	
SYSCLK	SYSTEM CLOCK	
T	TE TIBAL TID TIN TIP TIS TPSN TPSO TPSP TRCRS TRON TRSON	TRACKING ERROR BALANCE CONTROL BALANCE OUTPUT 1 BALANCE INPUT BALANCE INPUT BALANCE OUTPUT 2 OP AMP INPUT OP AMP OUTPUT OP AMP INVERTED INPUT TRACK CROSS SIGNAL TRACKING ON TRAVERSE SERVO ON

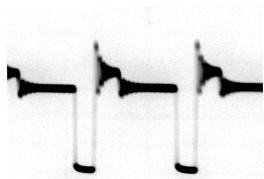
INITIAL/LOGO		ABBREVIATIONS
V	VBLANK VCC  VCDCONT  VDD VFB VREF VSS	V BLANKING COLLECTOR POWER SUPPLY VOLTAGE VIDEO CD CONTROL (TRACKING BALANCE) DRAIN POWER SUPPLY VOLTAGE VIDEO FEED BACK VOLTAGE REFERENCE SOURCE POWER SUPPLY VOLTAGE
W	WAIT WDCK WEH WSR	BUS CYCLE WAIT WORD CLOCK WRITE ENABLE HIGH WORD SELECT RECEIVER

X	X`TAL XALE XAREQ XCDROM XCS XCCSYNC XDS XHSYNCO XHINT XI XINT XMW XO XRE XSRMCE XSRMOE XSRMWE XVCS XVDS XVSYNCO	X ADDRESS LATCH ENABLE X AUDIO DATA REQUEST X CD ROM CHIP SELECT X CHIP SELECT X COMPOSITE SYNC X DATA STROBE X HORIZONTAL SYNC OUTPUT XH INTERRUPTREQUEST X` TAL OSCILLATOR INPUT X INTERRUPT X MEMORY WRITE ENABLE X` TAL OSCILLATOR OUTPUT X READ ENABLE X SRAM CHIP ENABLE X SRAM OUTPUT ENABLE X SRAM WRITE ENABLE X V-DEC CHIPSELECT X V-DEC CONTROL BUS STROBE X VERTICAL SYNC OUTPUT
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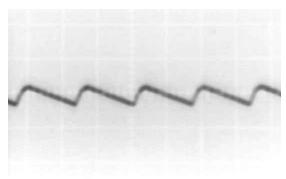
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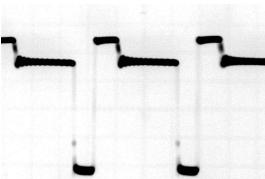
T001-B1 STOP  
60Vp-p (5 μ sec.div)



T001-P1 STOP  
500Vp-p (5 μ sec.div)



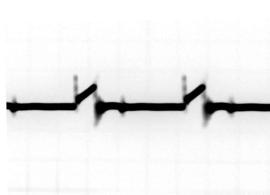
T001-P2 STOP  
20Vp-p (5m sec.div)



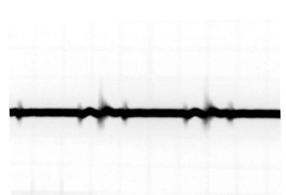
T001-S3 STOP  
50Vp-p (5 μ sec.div)



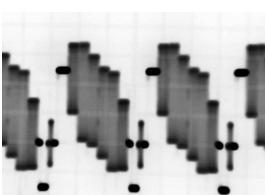
T001-S2,S4 STOP  
24Vp-p (5 μ sec.div)



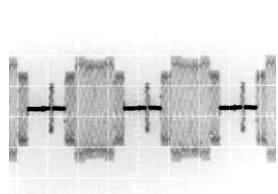
IC001-2 STOP  
1.0Vp-p (5 μ sec.div)



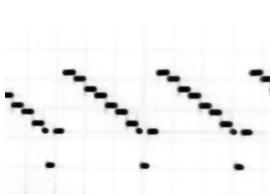
IC001-4 STOP  
1.0Vp-p (5 μ sec.div)



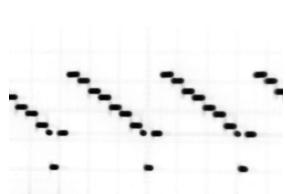
P7402-2 REC/PLAY  
1.0Vp-p (20 μ sec.div)



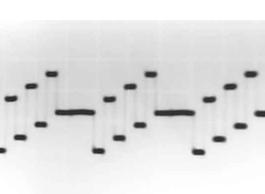
P7402-18 REC/PLAY  
0.8Vp-p (20 μ sec.div)



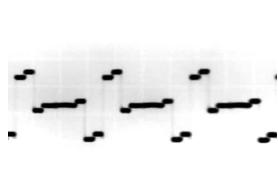
P7402-22 REC/PLAY  
1.0Vp-p (20 μ sec.div)



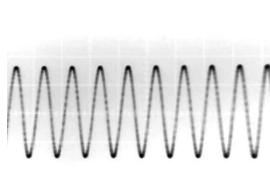
P7402-26 REC/PLAY  
1.0Vp-p (20 μ sec.div)



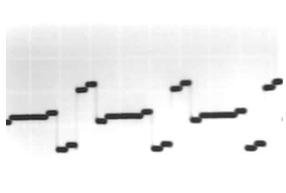
P7402-30 REC/PLAY  
0.6Vp-p (20 μ sec.div)



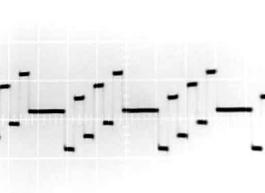
P7402-34 REC/PLAY  
0.6Vp-p (20 μ sec.div)



P7402-48,50 REC/PLAY  
0.8Vp-p (1m sec.div)



PP7401-16 REC/PLAY  
1.2Vp-p (20 μ sec.div)



PP7401-18 REC/PLAY  
1.2Vp-p (20 μ sec.div)



PP7401-20 REC/PLAY  
2.0Vp-p (20 μ sec.div)

# 16 Block Diagram

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[16.5 Digital Block Diagram](#)

[16.6 Digital Block IC Pin Terminal Chart \(TC1-18\)](#)

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# 16.1 Power Supply Block Diagram

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# 16.2 Analog Video Block Diagram

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# 16.3 Analog Audio Block Diagram

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# 16.4 Timer Block Diagram

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# 16.5 Digital Block Diagram

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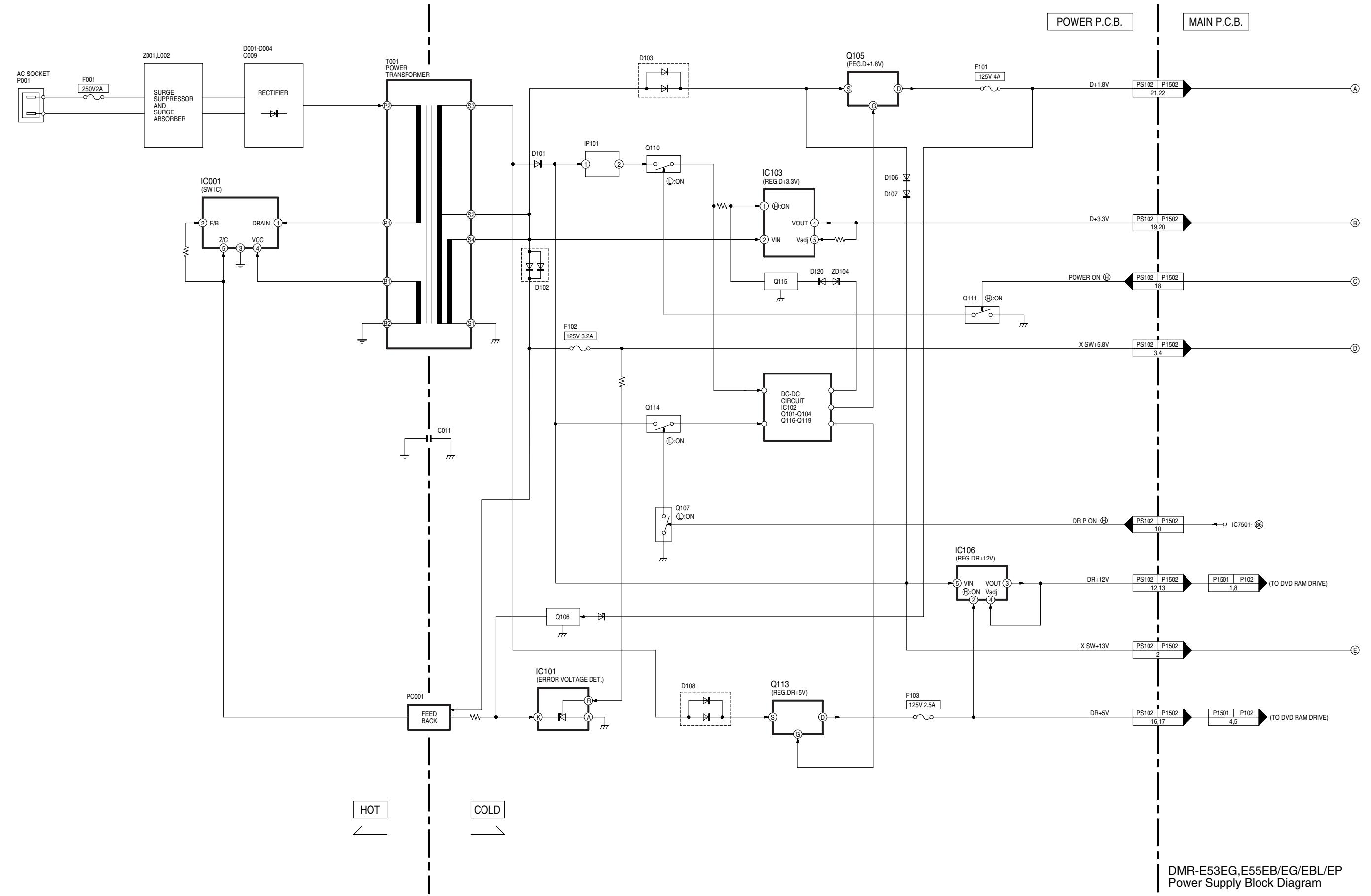
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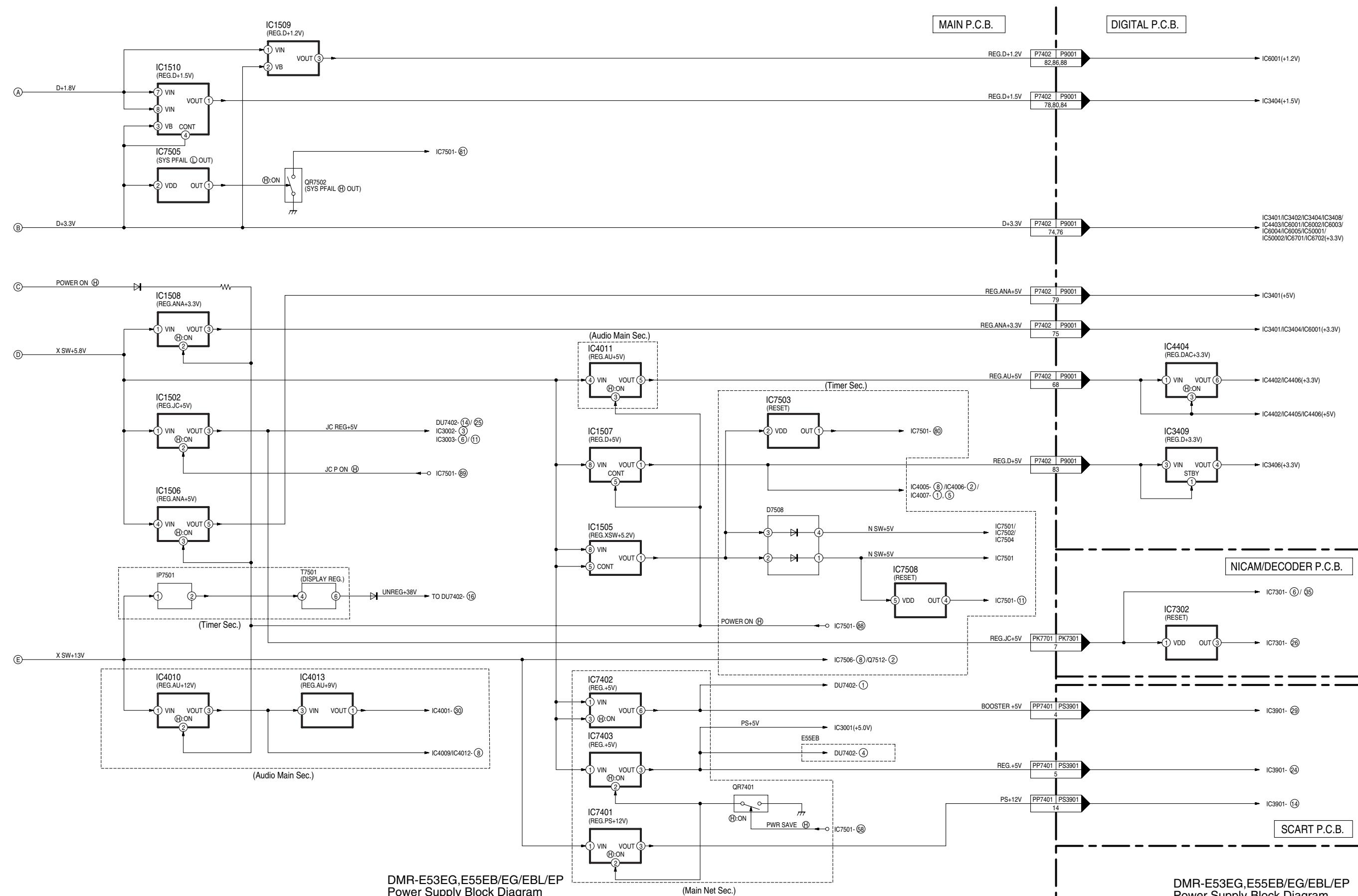
# 16.6 Digital Block IC Pin Terminal Chart (TC1-18)

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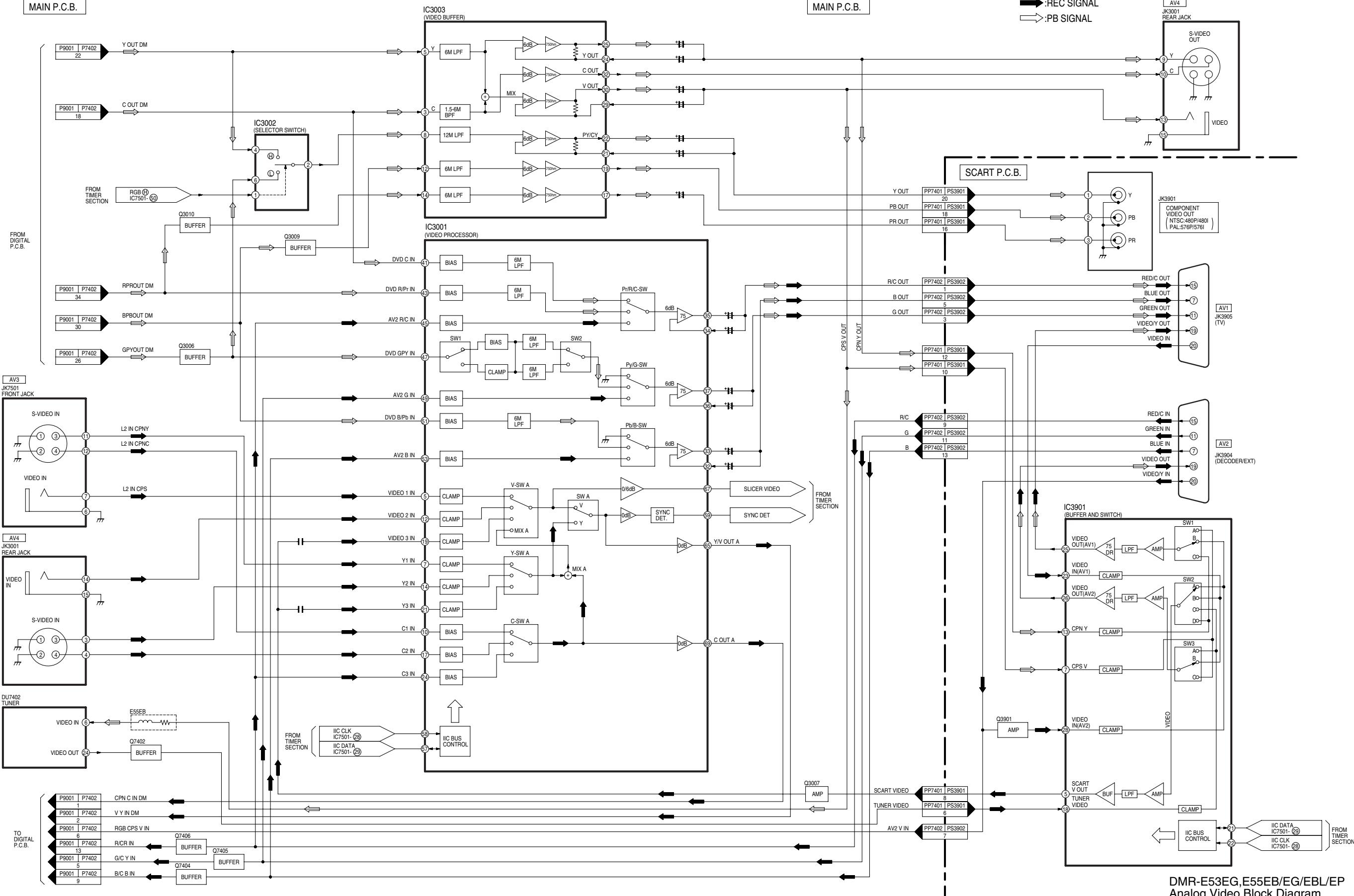


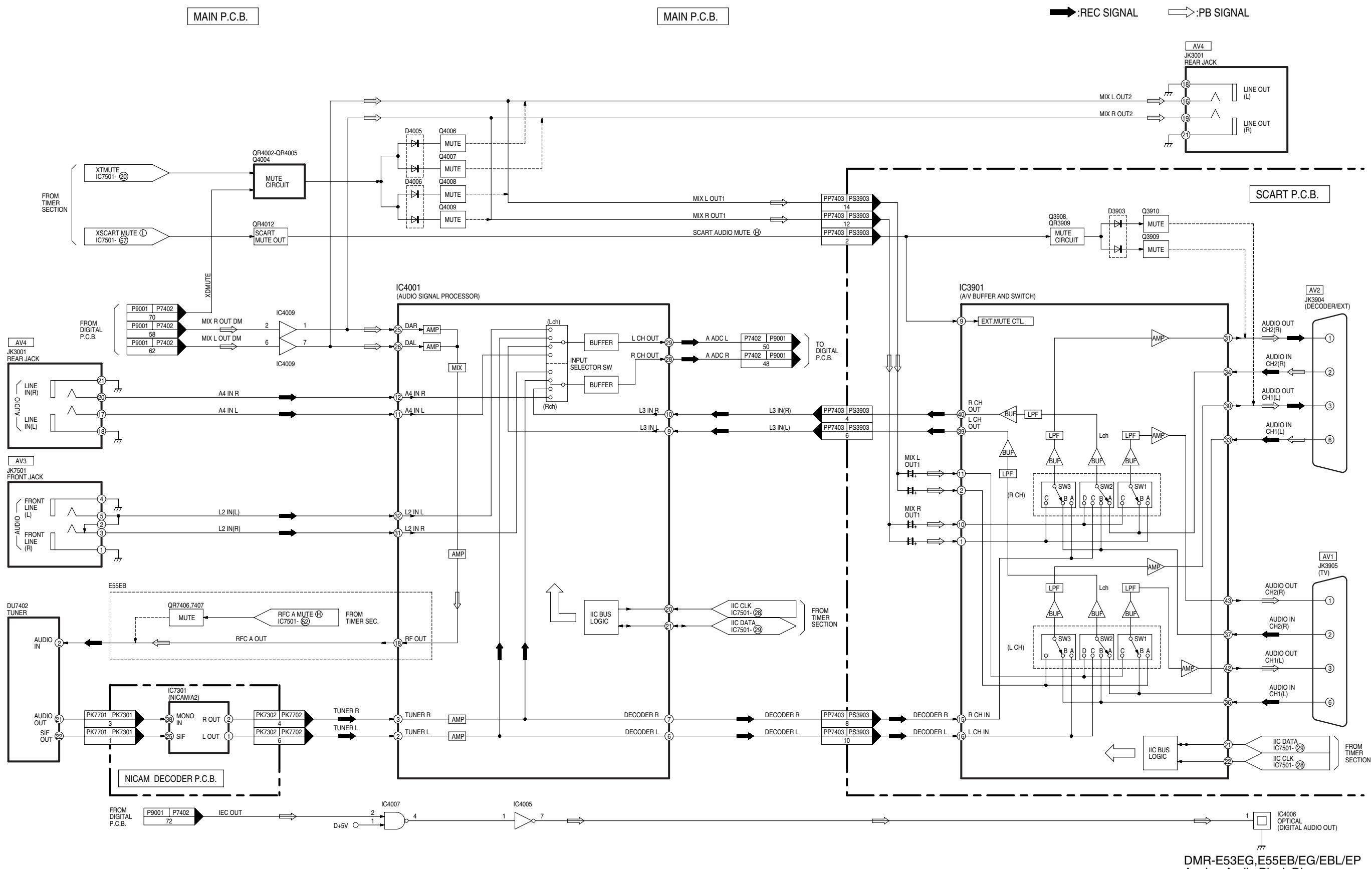


MAIN P.C.B.

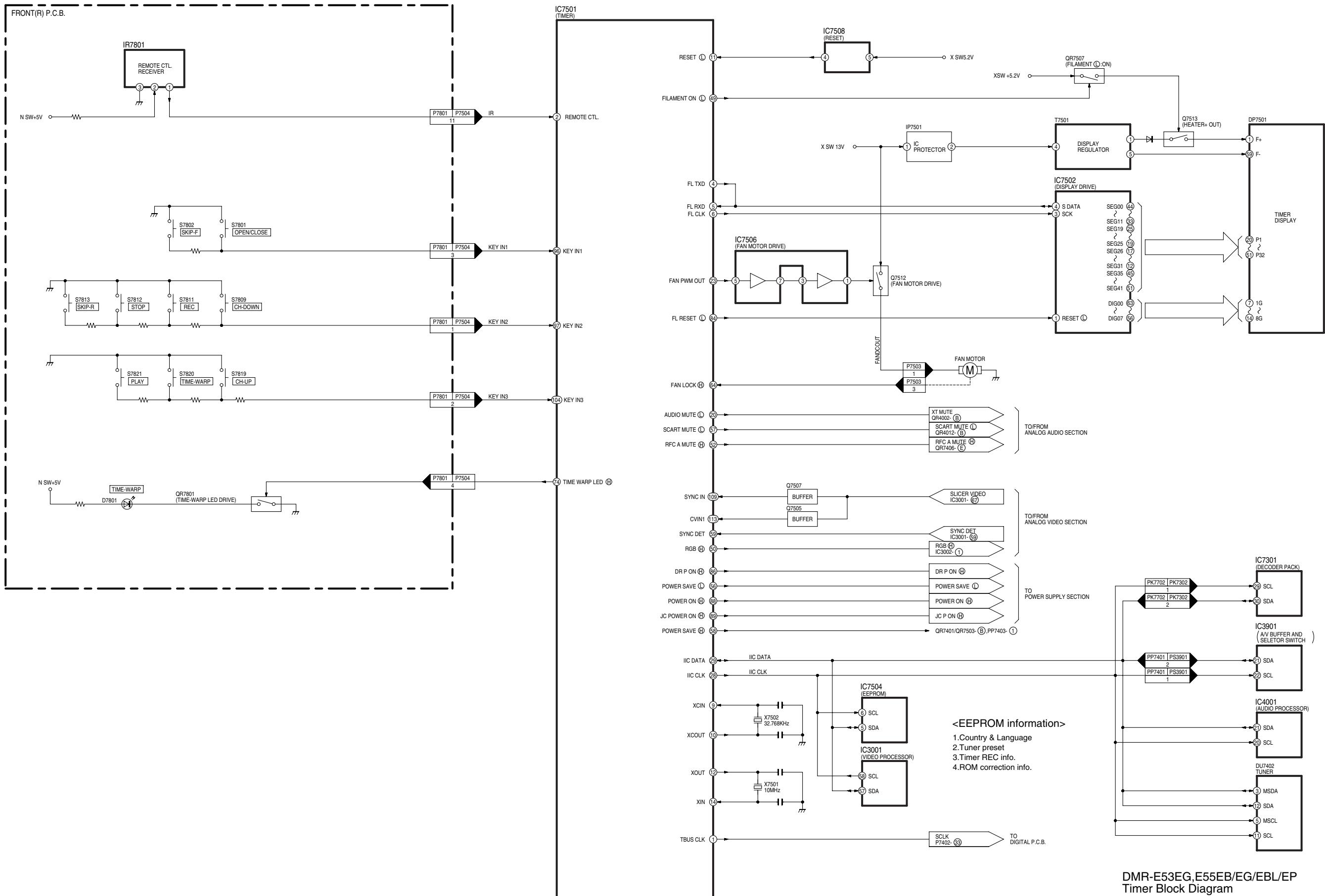
MAIN P.C.B.

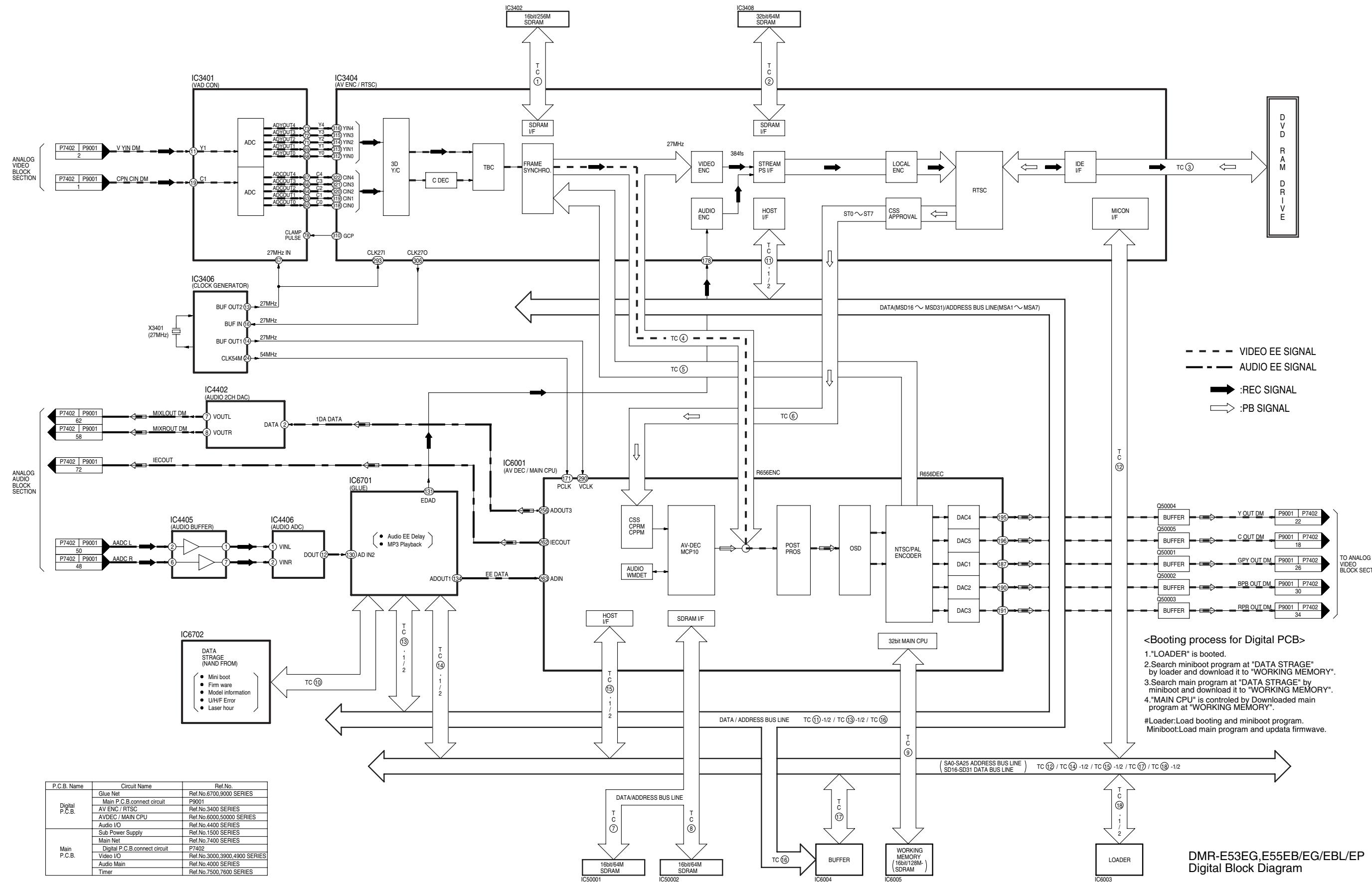
→ :REC SIGNAL  
↔ :PB SIGNAL





## DMR-E53EG,E55EB/EG/EBL/EP Analog Audio Block Diagram





# 17 Schematic Diagram

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[17.1 Interconnection Schematic Diagram](#)

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[17.3 Sub Power Supply Section \(Main P.C.B. \(1 / 5\)\) Schematic Diagram \(P\)](#)

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[17.16 Front \(R\) Schematic Diagram](#)

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## IC Pin Terminal Chart ( TC 1 - TC 6 )

TC	IC3404 / AVENC&RTSC		SIGNAL NAME		IC3402 / SDRAM	
	Port Name	Pin No			Pin No	Port Name
1	ARDQ0	334	MADQB0	2	DQ0	
	ARDQ1	335	MADQB1	4	DQ1	
	ARDQ2	336	MADQB2	5	DQ2	
	ARDQ3	2	MADQB3	7	DQ3	
	ARDQ4	4	MADQB4	8	DQ4	
	ARDQ5	5	MADQB5	10	DQ5	
	ARDQ6	7	MADQB6	11	DQ6	
	ARDQ7	9	MADQB7	13	DQ7	
	ARDQ8	16	MADQB8	42	DQ8	
	ARDQ9	17	MADQB9	44	DQ9	
	ARDQ10	19	MADQB10	45	DQ10	
	ARDQ11	20	MADQB11	47	DQ11	
	ARDQ12	22	MADQB12	48	DQ12	
	ARDQ13	23	MADQB13	50	DQ13	
	ARDQ14	25	MADQB14	51	DQ14	
	ARDQ15	26	MADQB15	53	DQ15	
	ARA0	28	MAB0	23	A0	
	ARA1	29	MAB1	24	A1	
	ARA2	31	MAB2	25	A2	
	ARA3	32	MAB3	26	A3	
	ARA4	34	MAB4	29	A4	
	ARA5	35	MAB5	30	A5	
	ARA6	37	MAB6	31	A6	
	ARA7	38	MAB7	32	A7	
	ARA8	41	MAB8	33	A8	
	ARA9	42	MAB9	34	A9	
	ARA10	44	MAB10	35	A10	
	ARA11	45	MAB11	22	A11	
	ARA12	47	MAB12	36	A12	

IC Pin Terminal Chart ( TC7 - TC10 )

TC	IC3404 / AV ENC&RTSC		SIGNAL NAME	IC3408 / SDRAM	
	Port Name	Pin No		Pin No	Port Name
2	MDQ0	88	MDQA0	2	DQ0
	MDQ1	89	MDQA1	4	DQ1
	MDQ2	91	MDQA2	5	DQ2
	MDQ3	92	MDQA3	7	DQ3
	MDQ4	93	MDQA4	8	DQ4
	MDQ5	95	MDQA5	10	DQ5
	MDQ6	96	MDQA6	11	DQ6
	MDQ7	97	MDQA7	13	DQ7
	MDQ8	99	MDQA8	74	DQ8
	MDQ9	100	MDQA9	76	DQ9
	MDQ10	101	MDQA10	77	DQ10
	MDQ11	103	MDQA11	79	DQ11
	MDQ12	104	MDQA12	80	DQ12
	MDQ13	105	MDQA13	82	DQ13
	MDQ14	108	MDQA14	83	DQ14
	MDQ15	109	MDQA15	85	DQ15
	MDQ16	115	MDQA16	31	DQ16
	MDQ17	116	MDQA17	33	DQ17
	MDQ18	118	MDQA18	34	DQ18
	MDQ19	119	MDQA19	36	DQ19
	MDQ20	120	MDQA20	37	DQ20
	MDQ21	122	MDQA21	39	DQ21
	MDQ22	123	MDQA22	40	DQ22
	MDQ23	124	MDQA23	42	DQ23
	MDQ24	127	MDQA24	45	DQ24
	MDQ25	128	MDQA25	47	DQ25
	MDQ26	129	MDQA26	48	DQ26
	MDQ27	131	MDQA27	50	DQ27
	MDQ28	132	MDQA28	51	DQ28
	MDQ29	133	MDQA29	53	DQ29
	MDQ30	135	MDQA30	54	DQ30
	MDQ31	136	MDQA31	56	DQ31
	MA0	147	MAA0	25	A0
	MA1	148	MAA1	26	A1
	MA2	149	MAA2	27	A2
	MA3	152	MAA3	60	A3
	MA4	153	MAA4	61	A4
	MA5	154	MAA5	62	A5
	MA6	156	MAA6	63	A6
	MA7	157	MAA7	64	A7
	MA8	158	MAA8	65	A8
	MA9	160	MAA9	66	A9
	MA10	161	MAA10	24	A10

TC	IC6001 / AV DEC&MAIN CPU		SIGNAL NAME		IC50002 / SDRAM	
	Port Name	Pin No			Pin No	Port Nam
8	MDQM16	292	DQ16	2	DQ0	
	MDQM17	295	DQ17	4	DQ1	
	MDQM18	297	DQ18	5	DQ2	
	MDQM19	299	DQ19	7	DQ3	
	MDQM20	302	DQ20	8	DQ4	
	MDQM21	304	DQ21	10	DQ5	
	MDQM22	308	DQ22	11	DQ6	
	MDQM23	310	DQ23	13	DQ7	
	MDQM24	309	DQ24	42	DQ8	
	MDQM25	305	DQ25	44	DQ9	
	MDQM26	303	DQ26	45	DQ10	
	MDQM27	301	DQ27	47	DQ11	
	MDQM28	298	DQ28	48	DQ12	
	MDQM29	296	DQ29	50	DQ13	
	MDQM30	293	DQ30	51	DQ14	
	MDQM31	291	DQ31	53	DQ15	
	MAM0	317	A0	23	A0	
	MAM1	320	A1	24	A1	
	MAM2	322	A2	25	A2	
	MAM3	328	A3	26	A3	
	MAM4	330	A4	29	A4	
	MAM5	332	A5	30	A5	
	MAM6	331	A6	31	A6	
	MAM7	329	A7	32	A7	
	MAM8	323	A8	33	A8	
	MAM9	321	A9	34	A9	
	MAM10	318	A10	22	A10	
	MAM11	316	A11	35	A11	

## SA0 - SA25 ADDRESS BUS LINE (TC12, TC14-1, TC15-1, TC17, TC18-1)

TC	12		14-1		15-1		17		18-1	
	IC3404 / AVENC&RTSC		IC6701 / GLUE		IC6001 / AVDEC&MAIN CPU		IC6004 / BUFFER		IC6003 / LOADER	
SIGNAL NAME	Pin No	Port Name	Pin No	Port Name	Pin No	Port Name	Pin No	Port Name	Pin No	Port Name
SA0	-	-	-	-	28	SA0	-	-	-	-
SA1	-	-	-	-	27	SA1	2	1A1	25	A0
SA2	-	-	-	-	26	SA2	4	1A2	24	A1
SA3	-	-	-	-	25	SA3	6	1A3	23	A2
SA4	-	-	-	-	24	SA4	8	1A4	22	A3
SA5	186	HA4	6	ADRL5	22	SA5	-	-	21	A4
SA6	187	HA5	5	ADRL6	20	SA6	-	-	20	A5
SA7	188	HA6	4	ADRL7	19	SA7	-	-	19	A6
SA8	189	HA7	-	-	18	SA8	-	-	18	A7
SA9	191	HA8	-	-	17	SA9	-	-	8	A8
SA10	192	HA9	-	-	16	SA10	-	-	7	A9
SA11	194	HA10	-	-	15	SA11	-	-	6	A10
SA12	195	HA11	-	-	14	SA12	-	-	5	A11
SA13	-	-	-	-	12	SA13	-	-	4	A12
SA14	-	-	-	-	11	SA14	-	-	3	A13
SA15	-	-	-	-	10	SA15	-	-	2	A14
SA16	-	-	-	-	9	SA16	-	-	1	A15
SA17	-	-	-	-	8	SA17	-	-	48	A16
SA18	-	-	-	-	7	SA18	-	-	17	A17
SA19	-	-	-	-	6	SA19	-	-	16	A18
SA20	-	-	-	-	3	SA20	-	-	-	-
SA21	-	-	-	-	2	SA21	-	-	-	-
SA22	-	-	12	ADR22	1	SA22	-	-	-	-
SA23	-	-	13	ADRHO	363	SA23	-	-	-	-
SA24	-	-	14	ADRHI	362	SA24	-	-	-	-
SA25	-	-	15	ADRHZ	361	SA25	-	-	-	-

## SD16 - SD31 DATA BUS LINE (TC14-2, TC15-2, TC18-2)

TC	14-2		15-2		18-2	
	IC6701 / GLUE		IC6001 / AVDEC&MAIN CPU		IC6003 / LOADER	
SIGNAL NAME	Pin No	Port Name	Pin No	Port Name	Pin No	Port Name
SD16	50	LDTI0	67	SD16	29	I/O0
SD17	49	LDTI1	66	SD17	31	I/O1
SD18	47	LDTI2	65	SD18	33	I/O2
SD19	45	LDTI3	64	SD19	35	I/O3
SD20	43	LDTI4	63	SD20	38	I/O4
SD21	42	LDTI5	62	SD21	40	I/O5
SD22	40	LDTI6	61	SD22	42	I/O6
SD23	36	LDTI7	59	SD23	44	I/O7
SD24	35	LDTI8	58	SD24	30	I/O8
SD25	34	LDTI9	57	SD25	32	I/O9
SD26	33	LDTI10	56	SD26	34	I/O10
SD27	31	LDTI11	55	SD27	36	I/O11
SD28	29	LDTI12	54	SD28	39	I/O12
SD29	28	LDTI13	53	SD29	41	I/O13
SD30	27	LDTI14	51	SD30	43	I/O14
SD31	26	LDTI15	50	SD31	45	I/O15

## MSD16 - MSD31 DATA BUS LINE (TC11-1, TC13-1)

TC	11-1		13-1	
	IC3404 / AVENC&RTSC		IC6701 / GLUE	
SIGNAL NAME	Pin No	Port Name	Pin No	Port Name
MSD16	203	HD0	74	LDEV0
MSD17	204	HD1	73	LDEV1
MSD18	206	HD2	72	LDEV2
MSD19	207	HD3	71	LDEV3
MSD20	209	HD4	69	LDEV4
MSD21	210	HD5	68	LDEV5
MSD22	212	HD6	67	LDEV6
MSD23	213	HD7	64	LDEV7
MSD24	215	HD8	63	LDEV8
MSD25	216	HD9	61	LDEV9
MSD26	217	HD10	60	LDEV10
MSD27	218	HD11	59	LDEV11
MSD28	220	HD12	56	LDEV12
MSD29	221	HD13	54	LDEV13
MSD30	223	HD14	53	LDEV14
MSD31	224	HD15	52	LDEV15

## MSA1 - MSA4 ADDRESS BUS LINE (TC11, TC13-2, TC16)

TC	11		13-2		16	
	IC3404/AVENC&RTSC		IC6701/GLUE		IC6004/BUFFER	
SIGNAL NAME	Pin No	Port Name	Pin No	Port Name	Pin No	Port Name
MSA1	107	HA0	10	ADRL1	18	1Y1
MSA2	106	HA1	9	ADRL2	16	1Y2
MSA3	105	HA2	8	ADRL3	14	1Y3
MSA4	104	HA3	7	ADRL4	12	1Y4

# 17.1 Interconnection Schematic Diagram

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## 17.2 Main Power Supply Schematic Diagram

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# **17.3 Sub Power Supply Section (Main P.C.B. (1/5)) Schematic Diagram (P)**

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# **17.4 Main Net Section (Main P.C.B. (2/ 5))**

## **Schematic Diagram (M)**

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# **17.5 Video I/ O Section (Main P.C.B. (3/ 5))**

## **Schematic Diagram (V)**

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# **17.6 Audio Main Section (Main P.C.B. (4/ 5))**

## **Schematic Diagram (A)**

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# 17.7 Timer Section (Main P.C.B. (5/ 5)) Schematic Diagram (T)

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[TOP](#) [PREVIOUS](#) [NEXT](#)

# **17.8 Glue Net Section (Digital P.C.B. (1/ 4))**

## **Schematic Diagram (GN)**

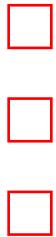
[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

# 17.9 AV Encoder/ Real Time Stream Control (RTSC) Section (Digital P.C.B. (2/ 4)) Schematic Diagram (EN)

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# **17.10 AV Decoder/ Main CPU Section (Digital P.C. B. (3/ 4)) Schematic Diagram (MC)**

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# **17.11 Audio I/ O Section (Digital P.C.B. (4/ 4))**

## **Schematic Diagram (AI)**

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# 17.12 VIF Decoder Schematic Diagram (For DMR-E55EB/ EBL/ EP)

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# 17.13 VIF Decoder Schematic Diagram (For DMR-E53EG and DMR-E55EG)

[TOP](#) [PREVIOUS](#) [NEXT](#)



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# 17.14 Nicam Decoder Schematic Diagram

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[TOP](#) [PREVIOUS](#) [NEXT](#)

# 17.15 Scart Schematic Diagram

[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

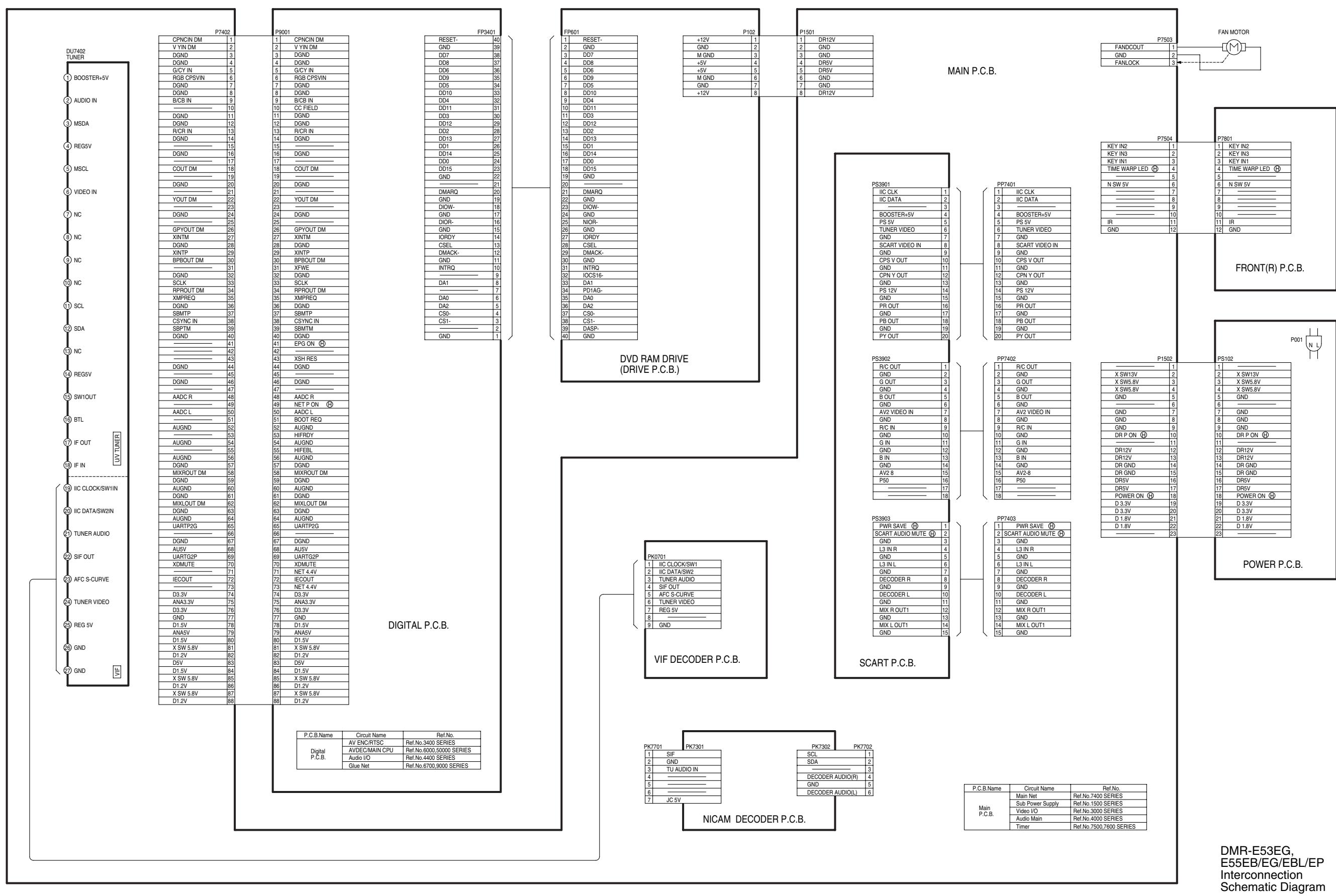
# 17.16 Front (R) Schematic Diagram

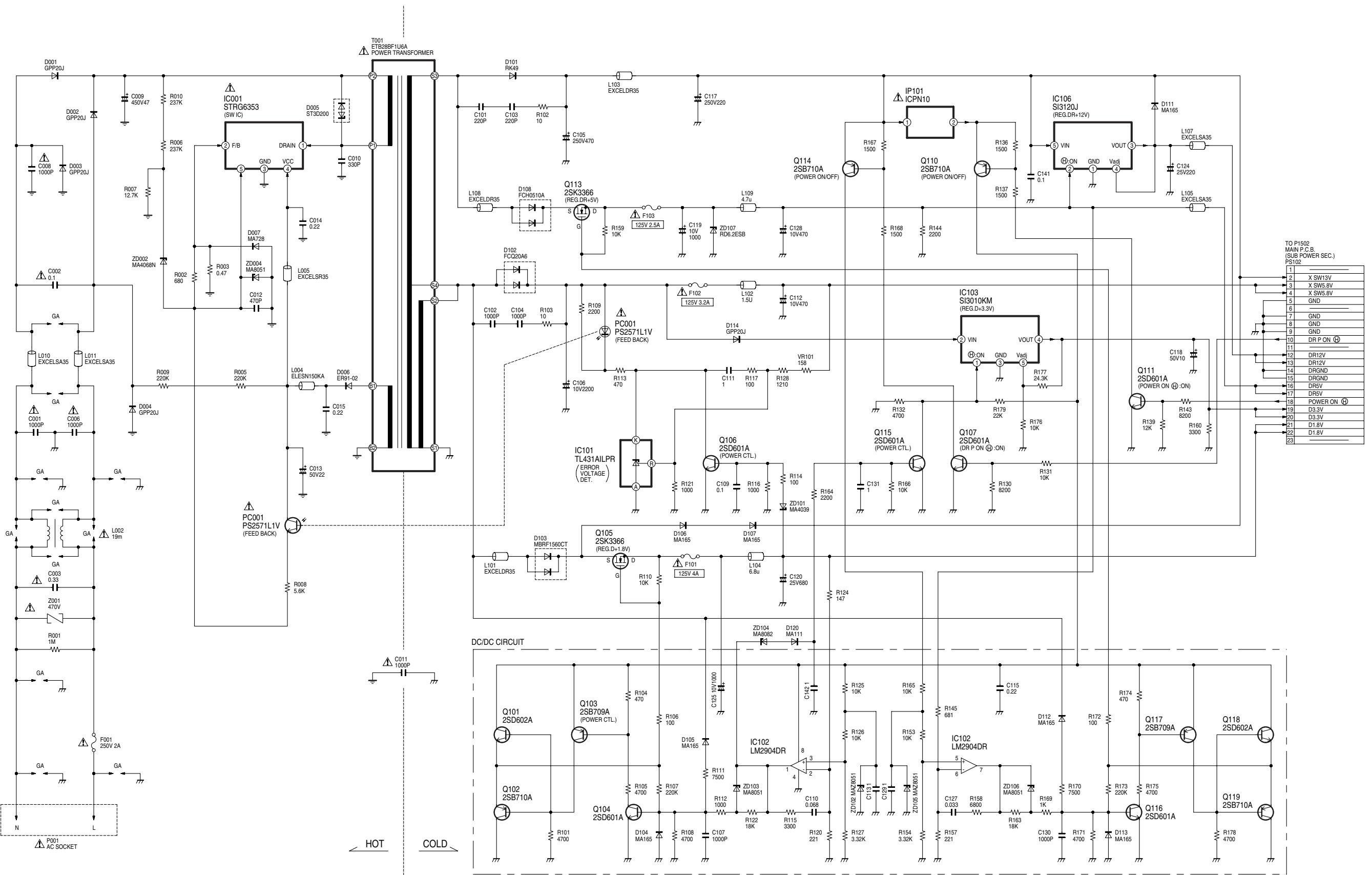
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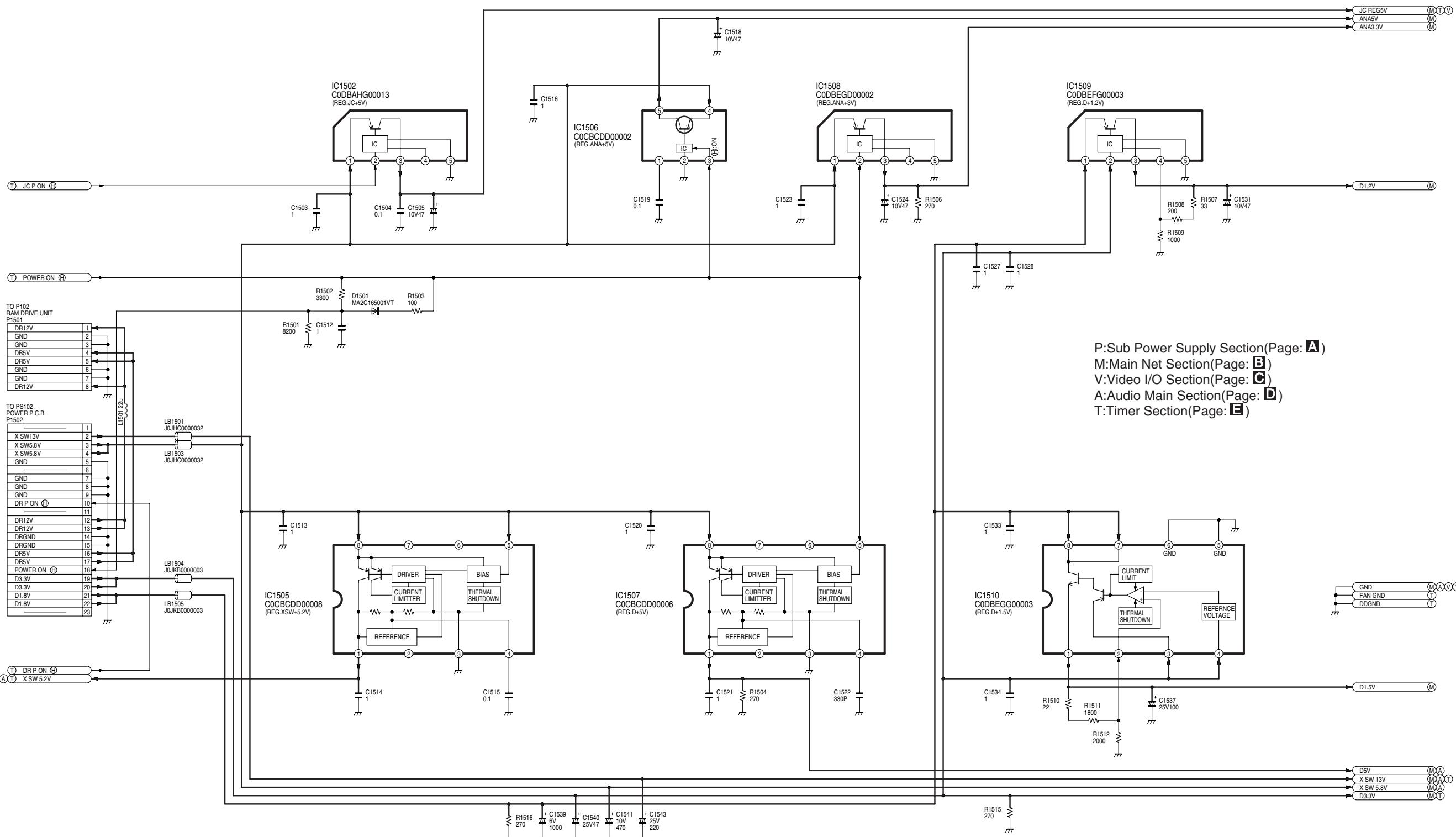
[TOP](#) [PREVIOUS](#) [NEXT](#)

G  
F  
E  
D  
C  
B  
A



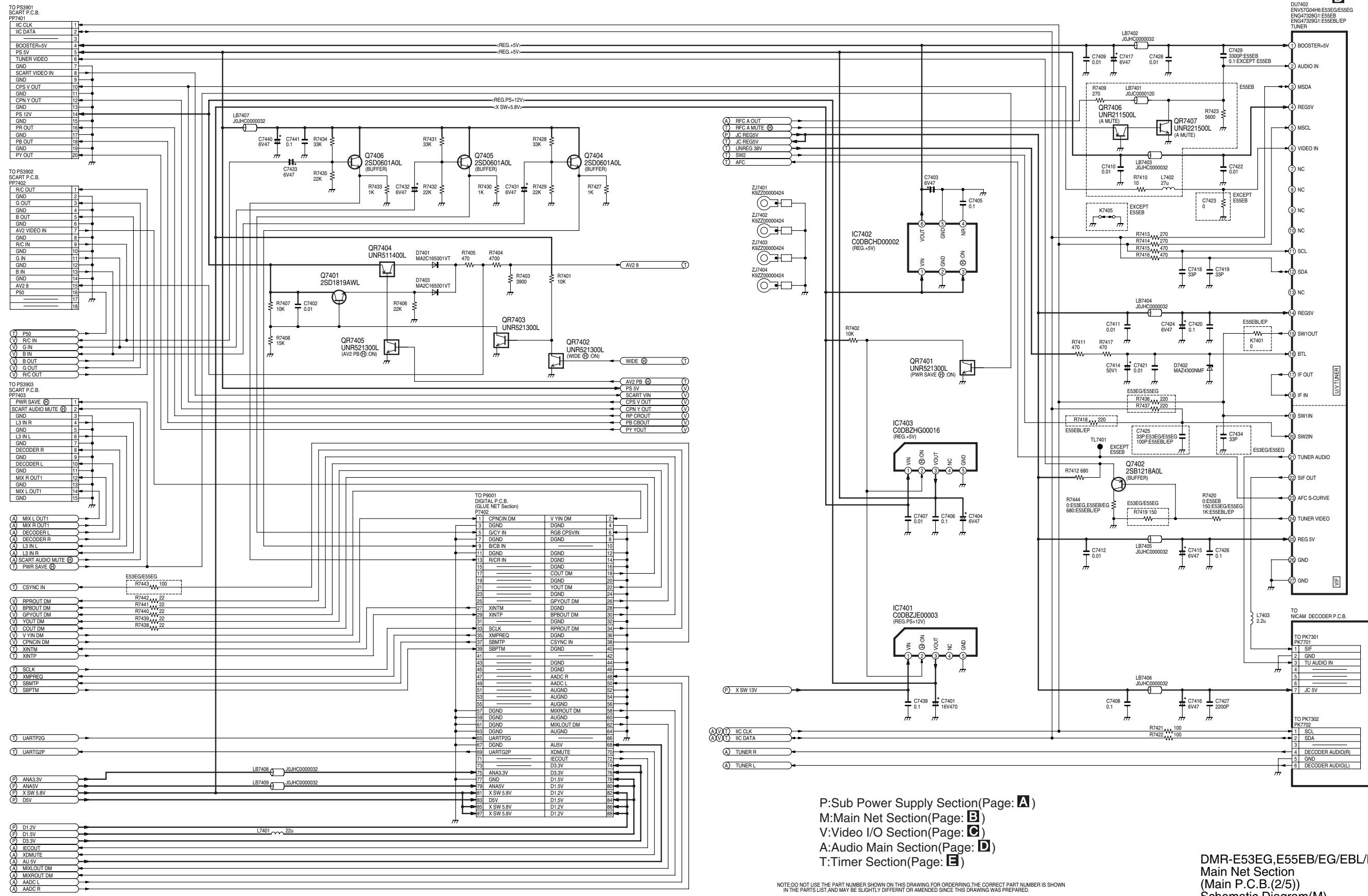


**DMR-E53EG, E55EB/EG/EBL/EP**  
Main Power Supply  
Schematic Diagram



P:Sub Power Supply Section(Page: A)  
M:Main Net Section(Page: B)  
V:Video I/O Section(Page: C)  
A:Audio Main Section(Page: D)  
T:Timer Section(Page: E)

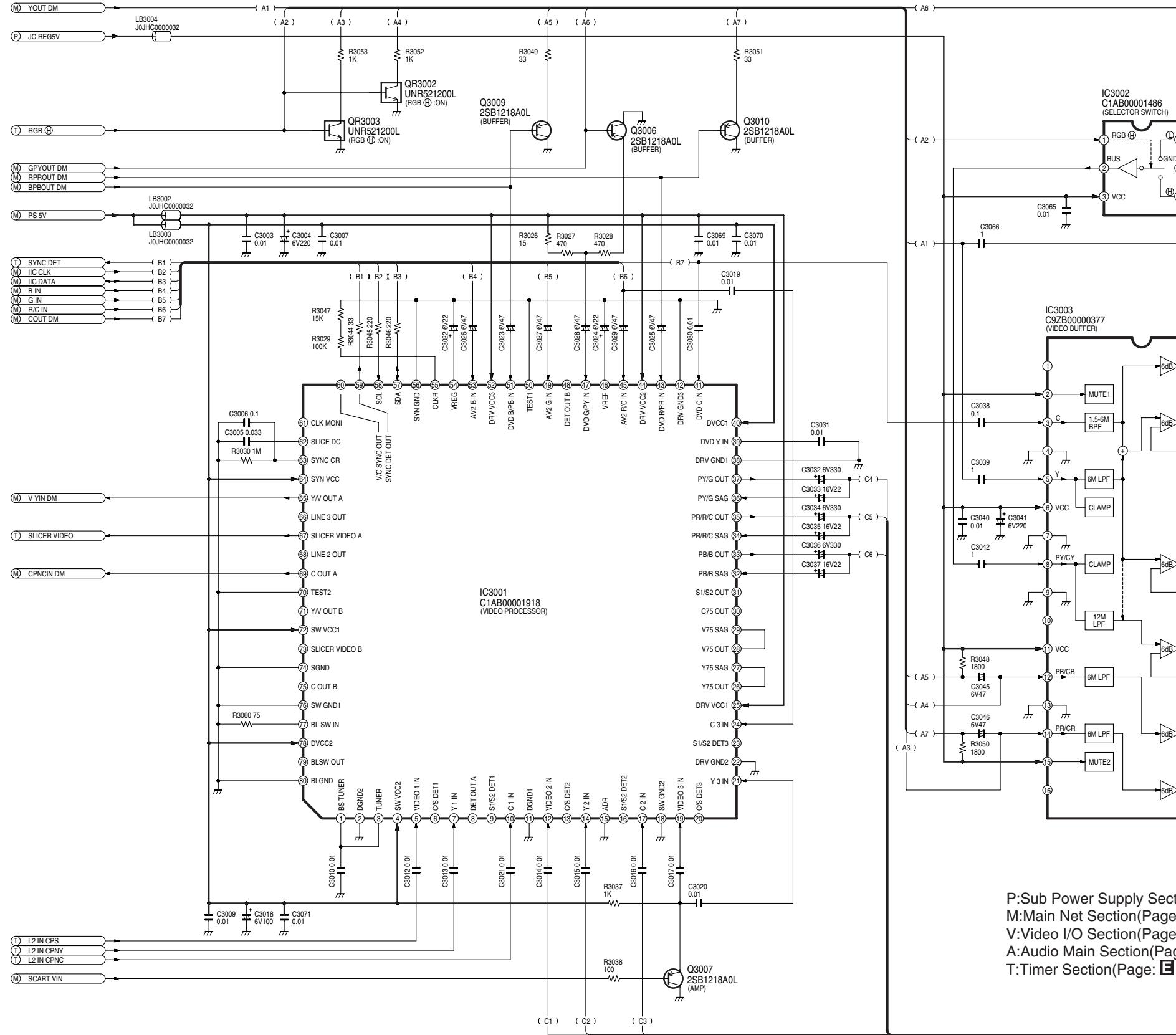
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

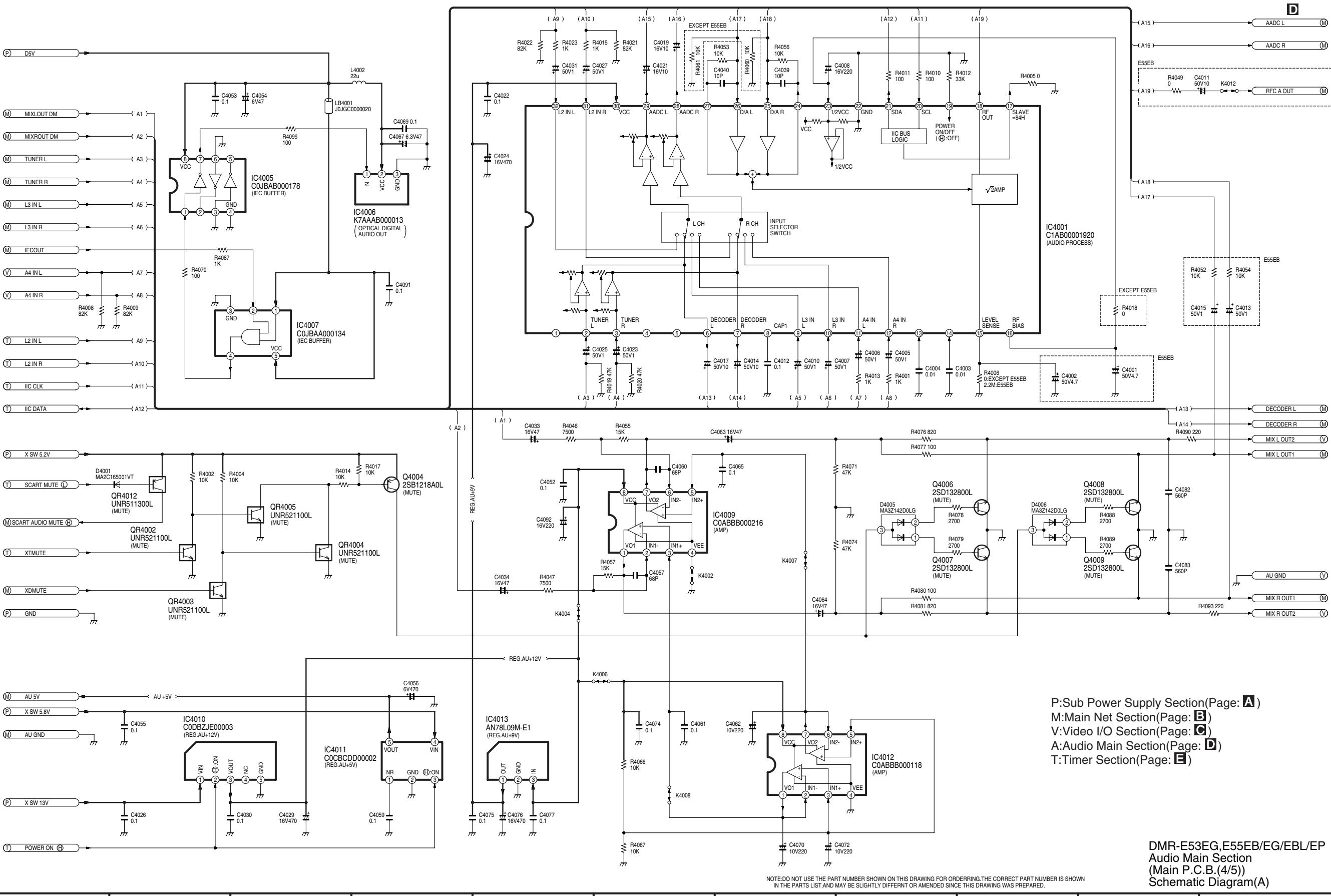


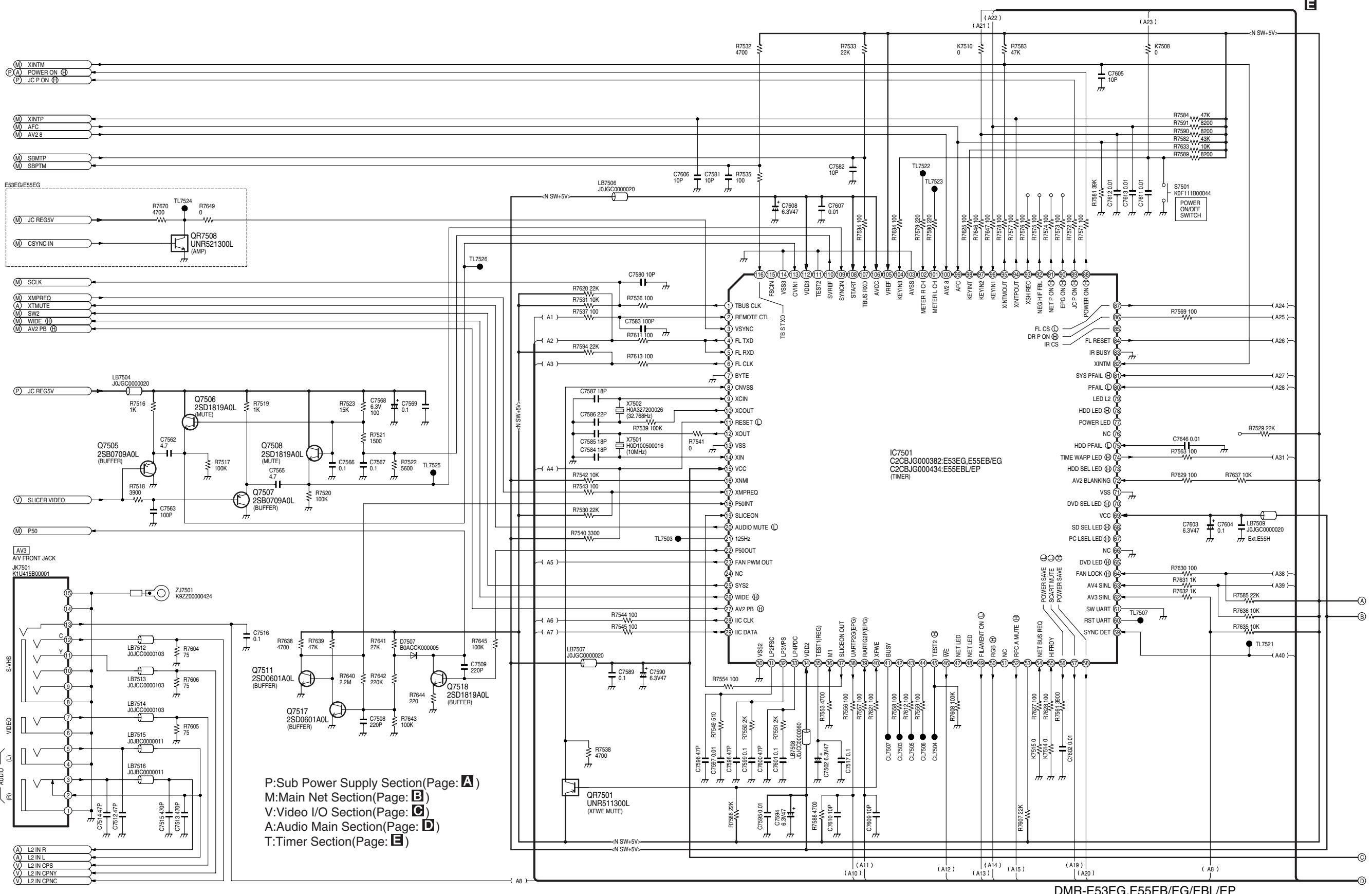
P:Sub Power Supply Section(Page: **A**)  
M:Main Net Section(Page: **B**)  
V:Video I/O Section(Page: **C**)  
A:Audio Main Section(Page: **D**)  
T:Timer Section(Page: **E**)

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

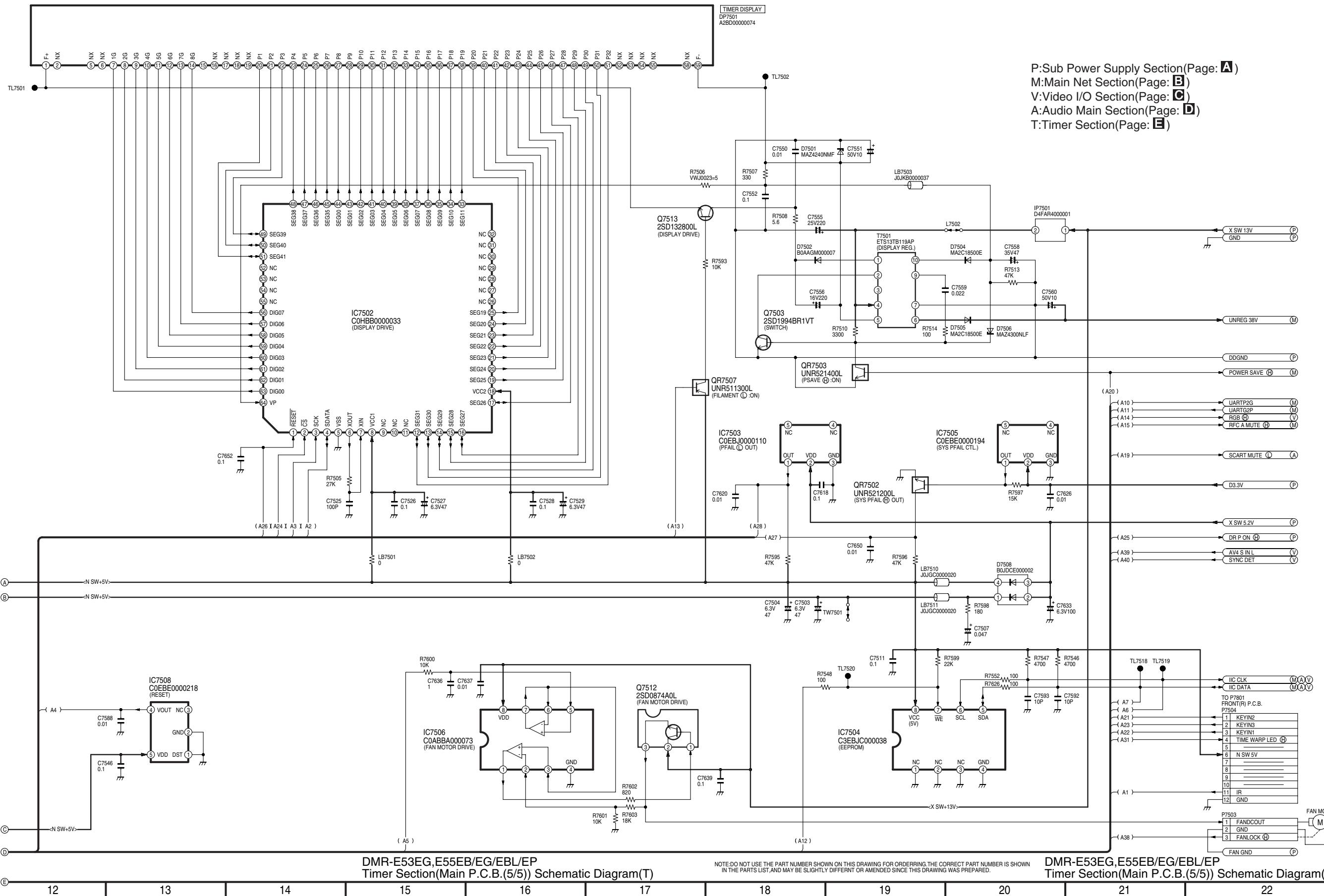
**DMR-E53EG,E55EB/EG/EBL/EP  
Main Net Section  
(Main P.C.B.(2/5))  
Schematic Diagram(M)**

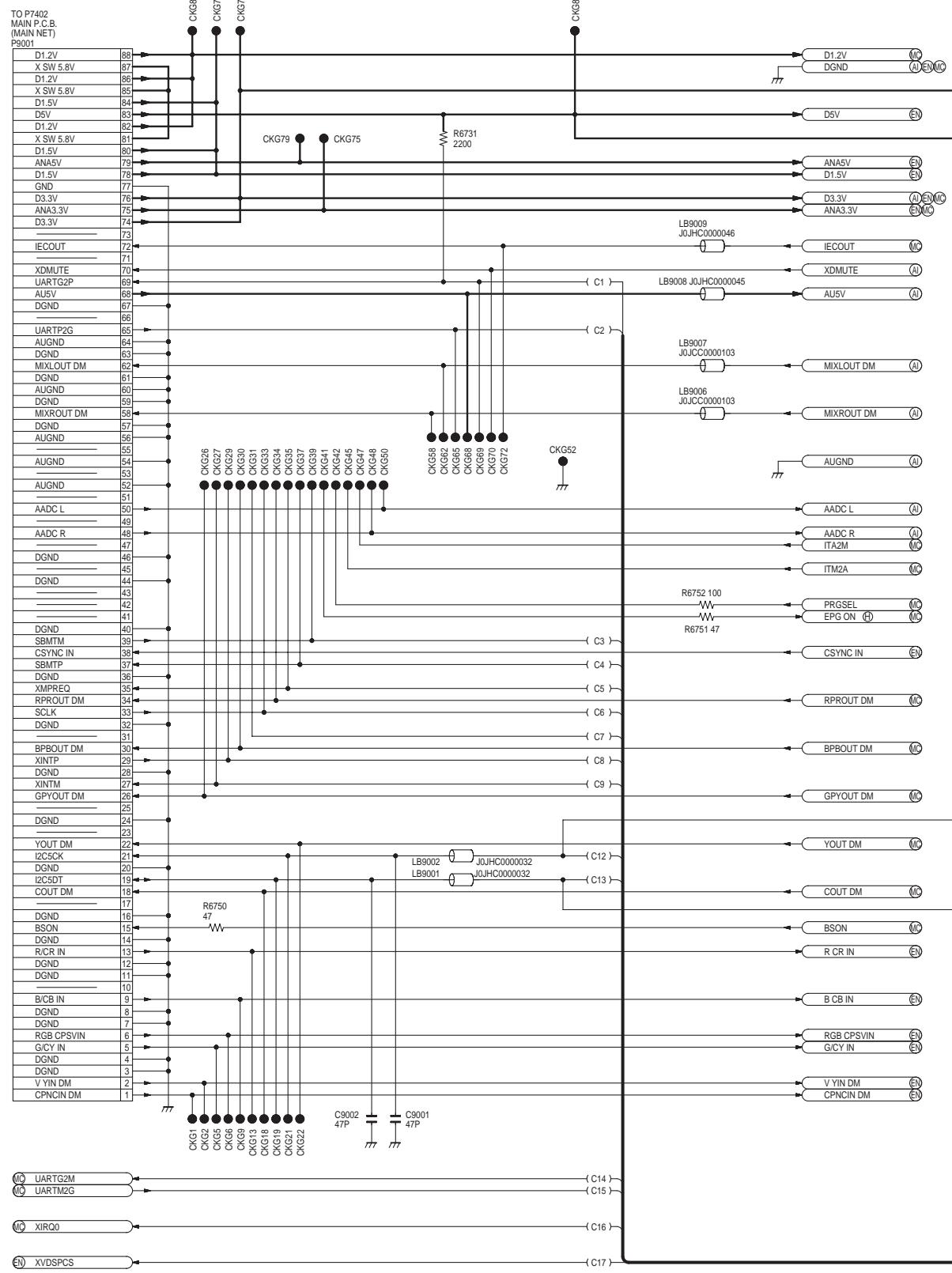




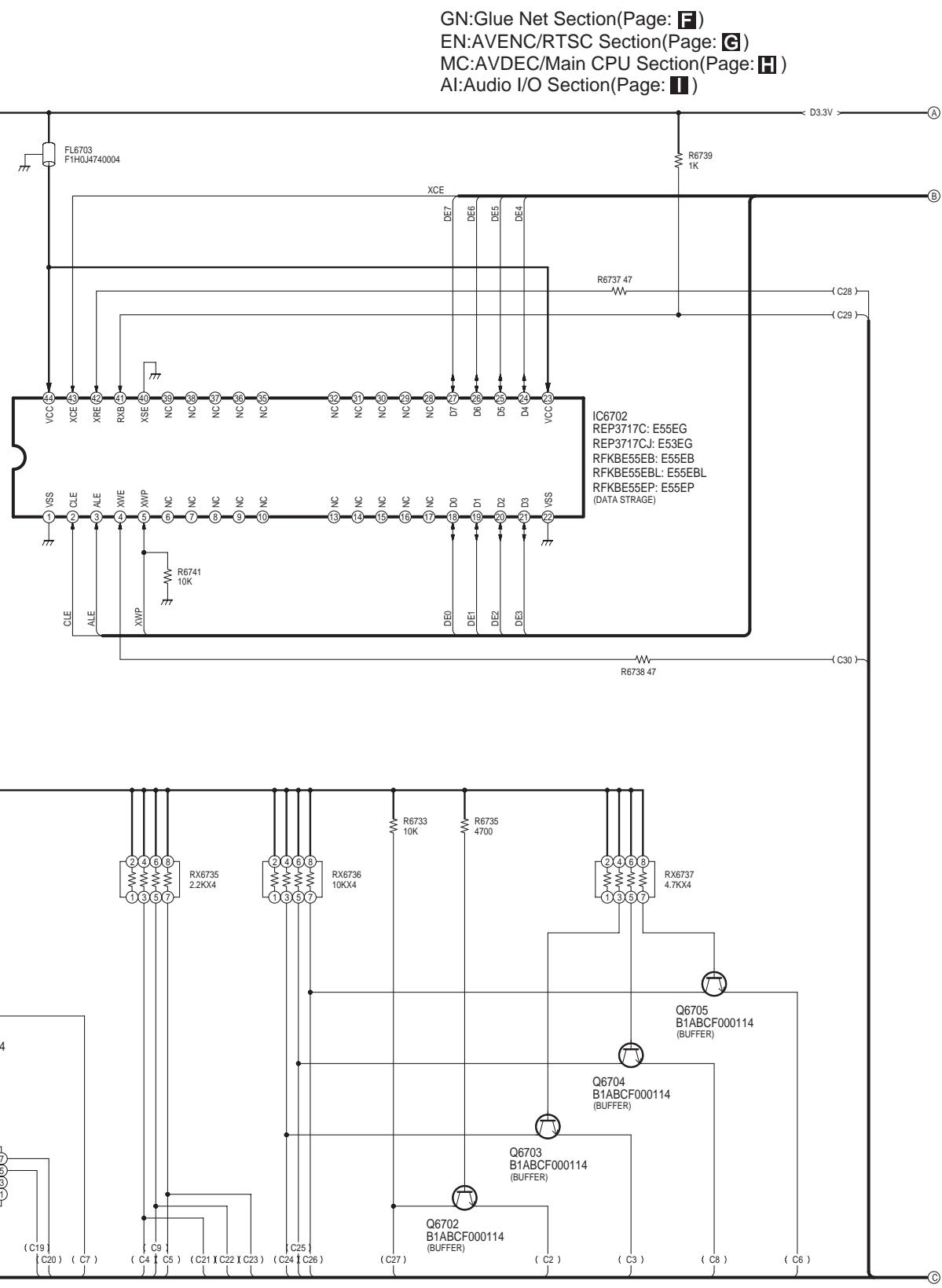


P:Sub Power Supply Section(Page: **A**)  
M:Main Net Section(Page: **B**)  
V:Video I/O Section(Page: **C**)  
A:Audio Main Section(Page: **D**)  
T:Timer Section(Page: **E**)

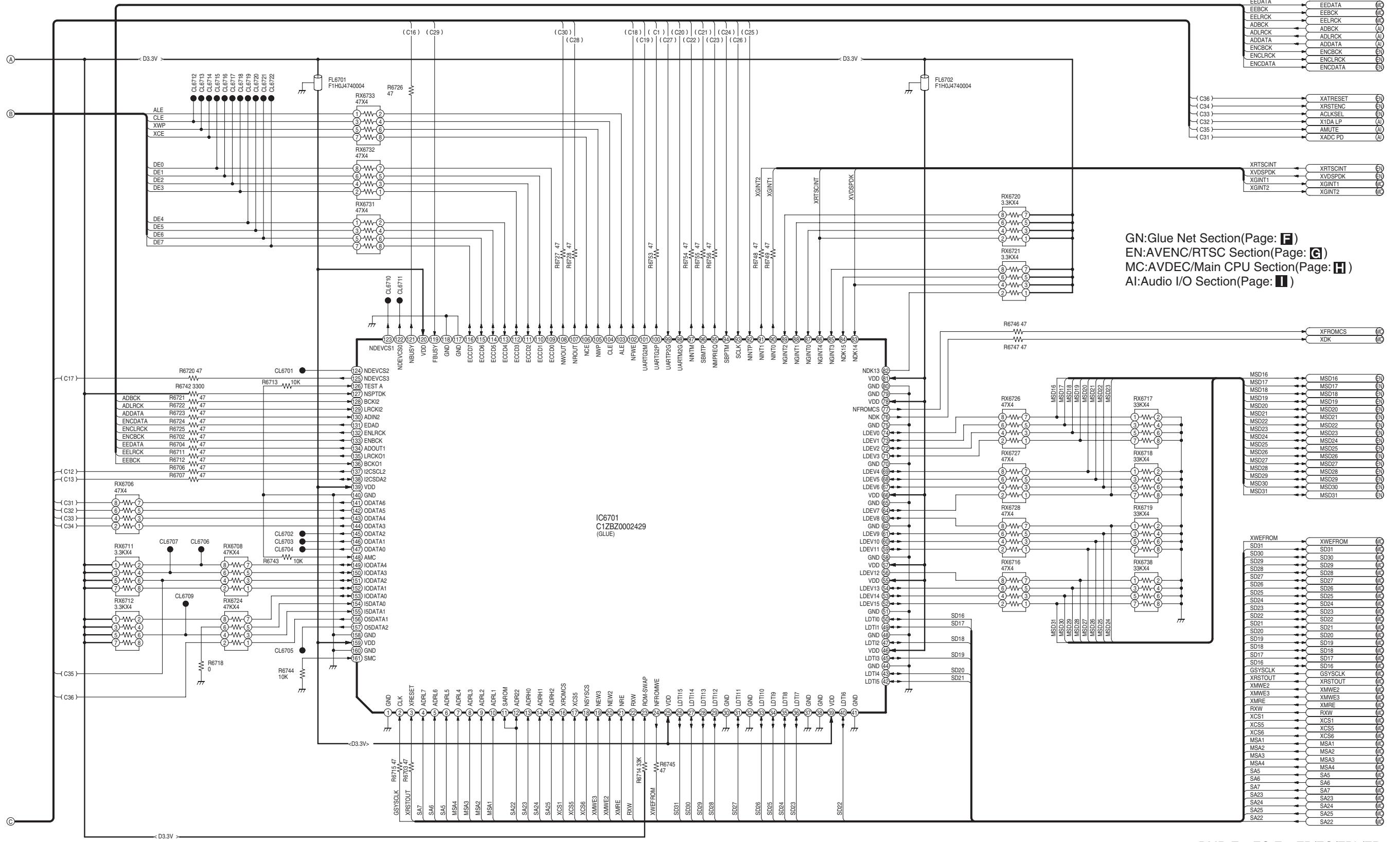




GN:Glue Net Section(Page: F)  
EN:AVENC/RTSC Section(Page: G)  
MC:AVDEC/Main CPU Section(Page: H)  
AI:Audio I/O Section(Page: I)



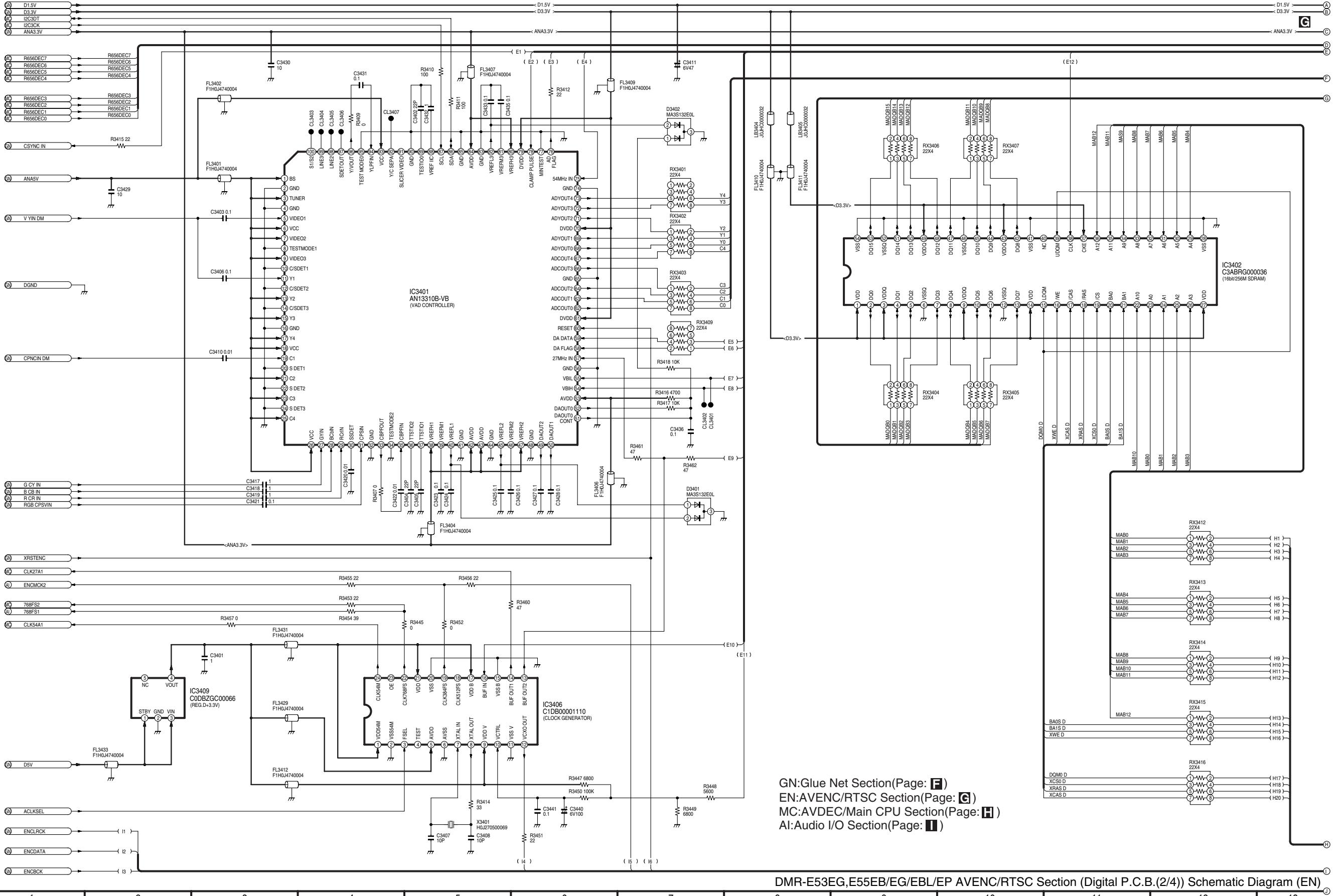
DMR-E53EG,E55EB/EG/EBL/EP  
Glue Net Section (Digital P.C.B.(1/4))  
Schematic Diagram (GN)

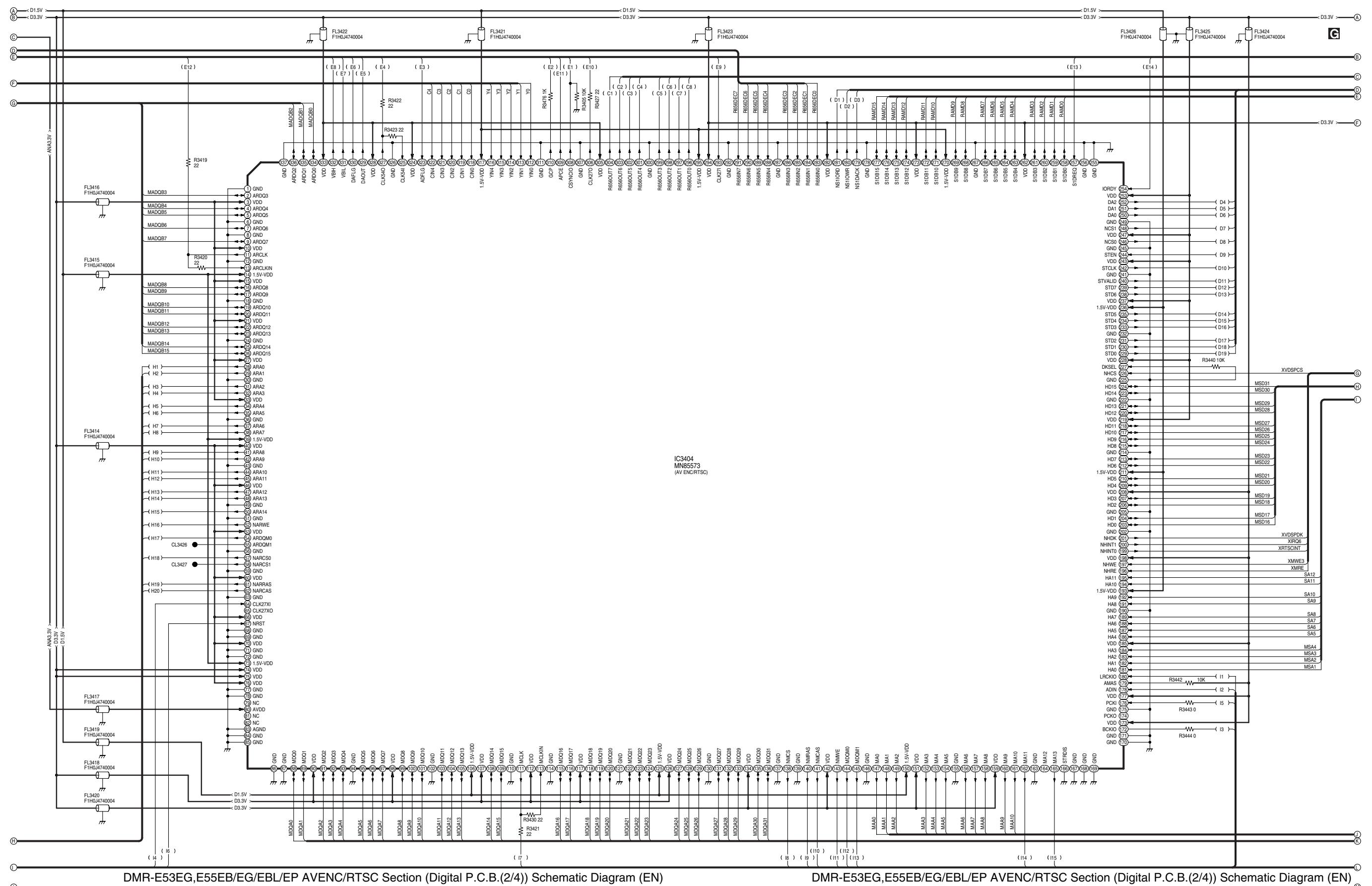


**DMR-E53EG,E55EB/EG/EBL/EP  
Glue Net Section (Digital P.C.B.(1/4))  
Schematic Diagram (GN)**

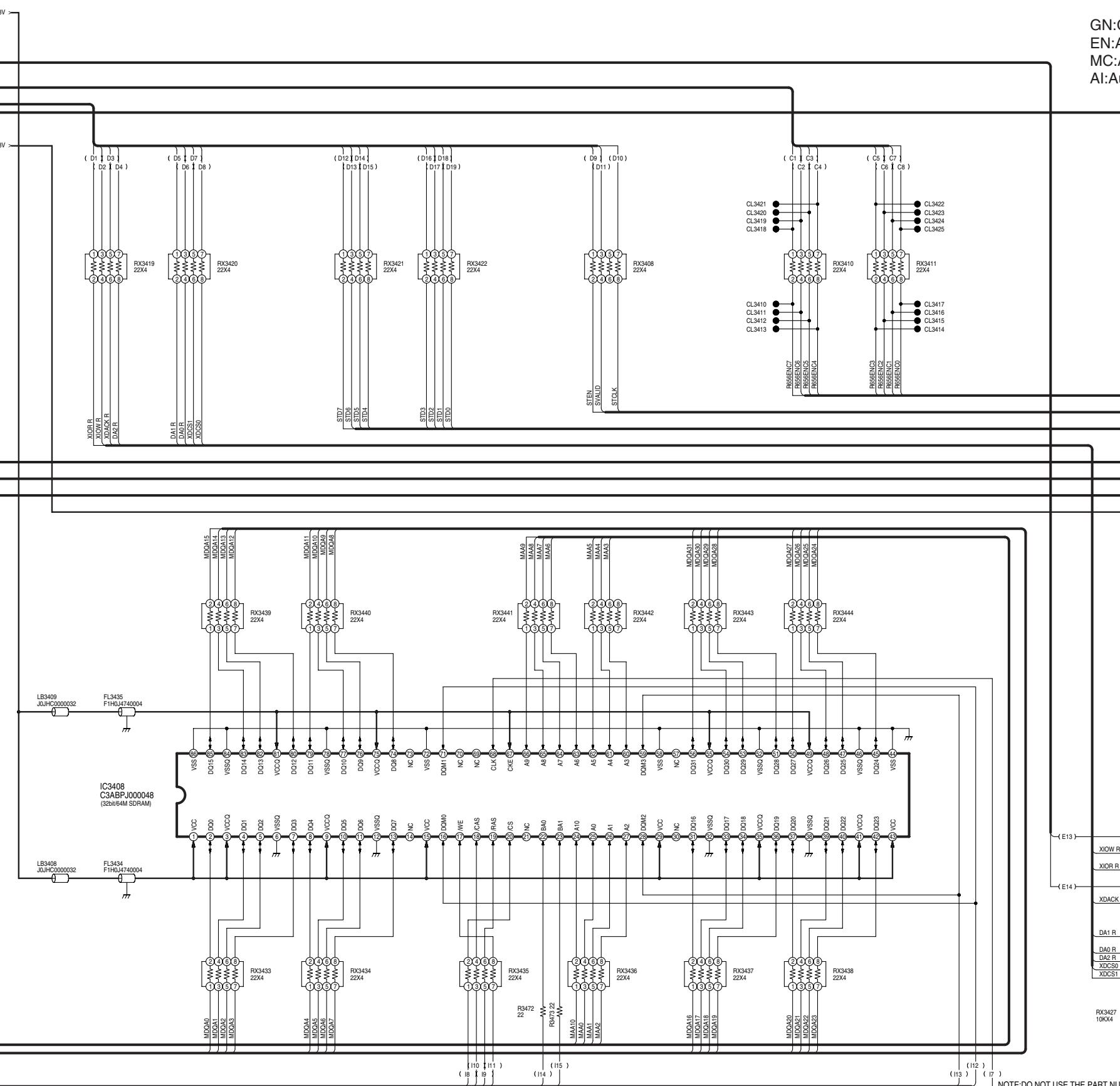
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

**DMR-E53EG,E55EB/EG/EBL/EP  
Glue Net Section (Digital P.C.B.(1/4))  
Schematic Diagram (GN)**



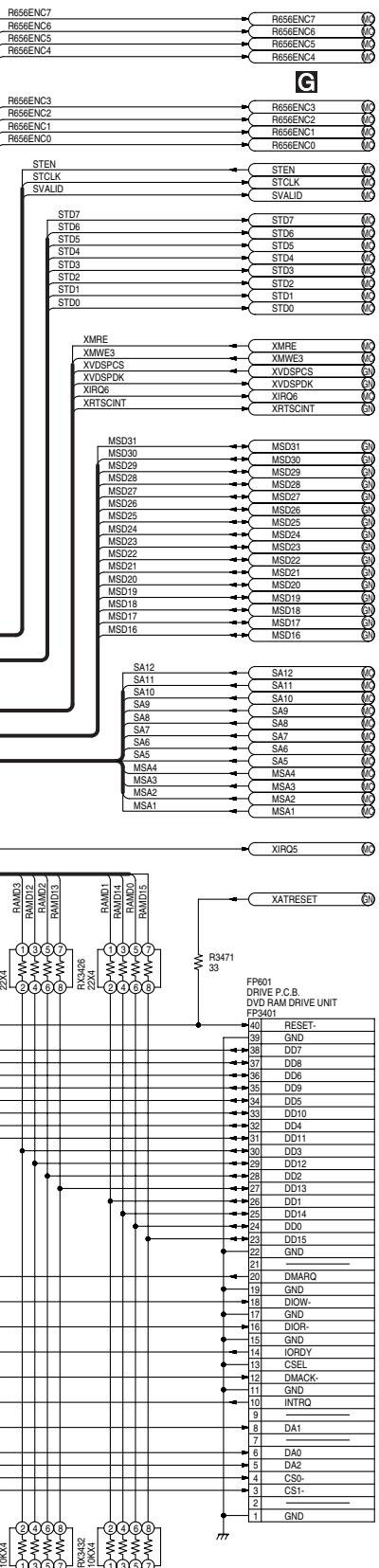


GN:Glue Net Section(Page: F)  
 EN:AVENC/RTSC Section(Page: G)  
 MC:AVDEC/Main CPU Section(Page: H)  
 AI:Audio I/O Section(Page: I)

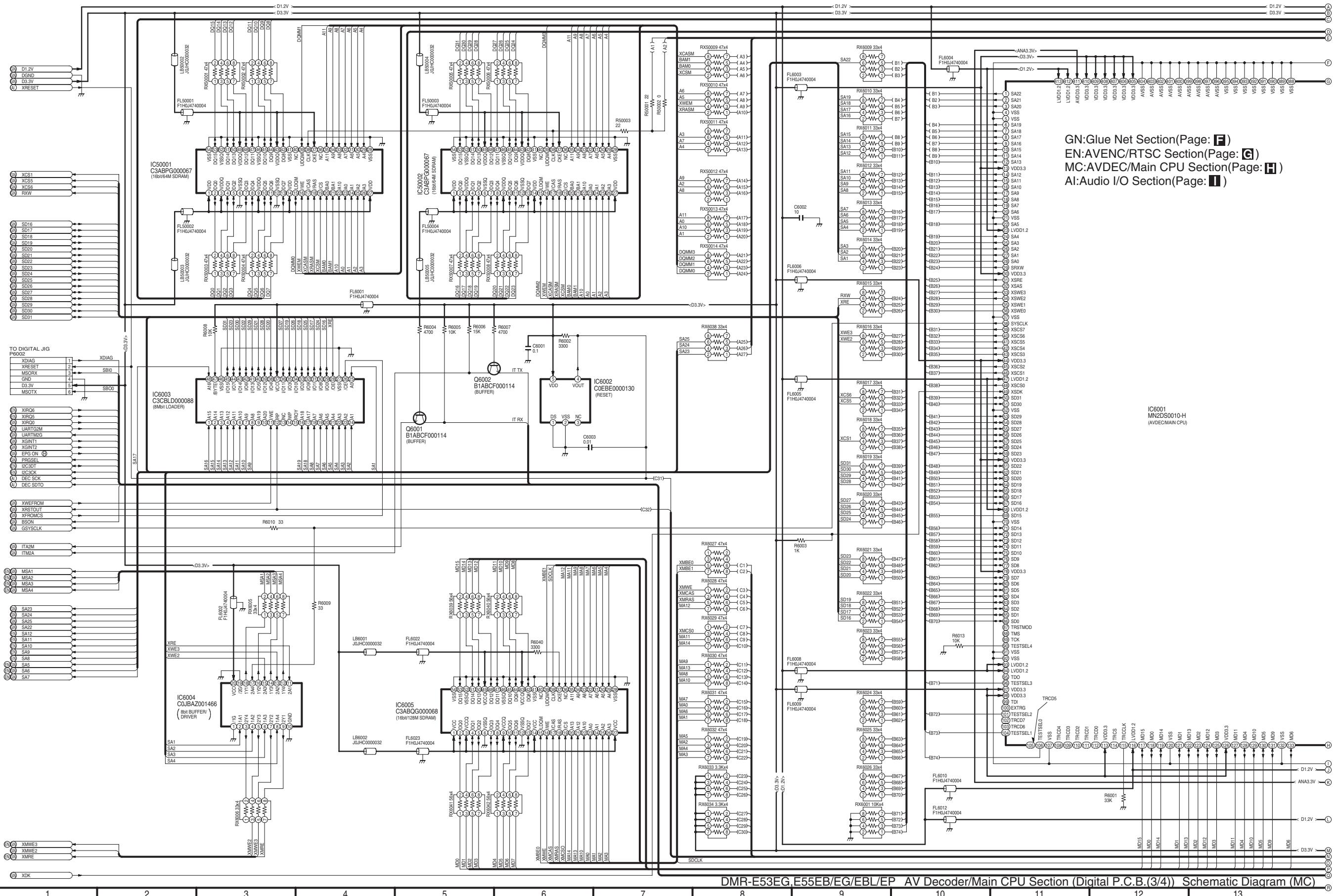


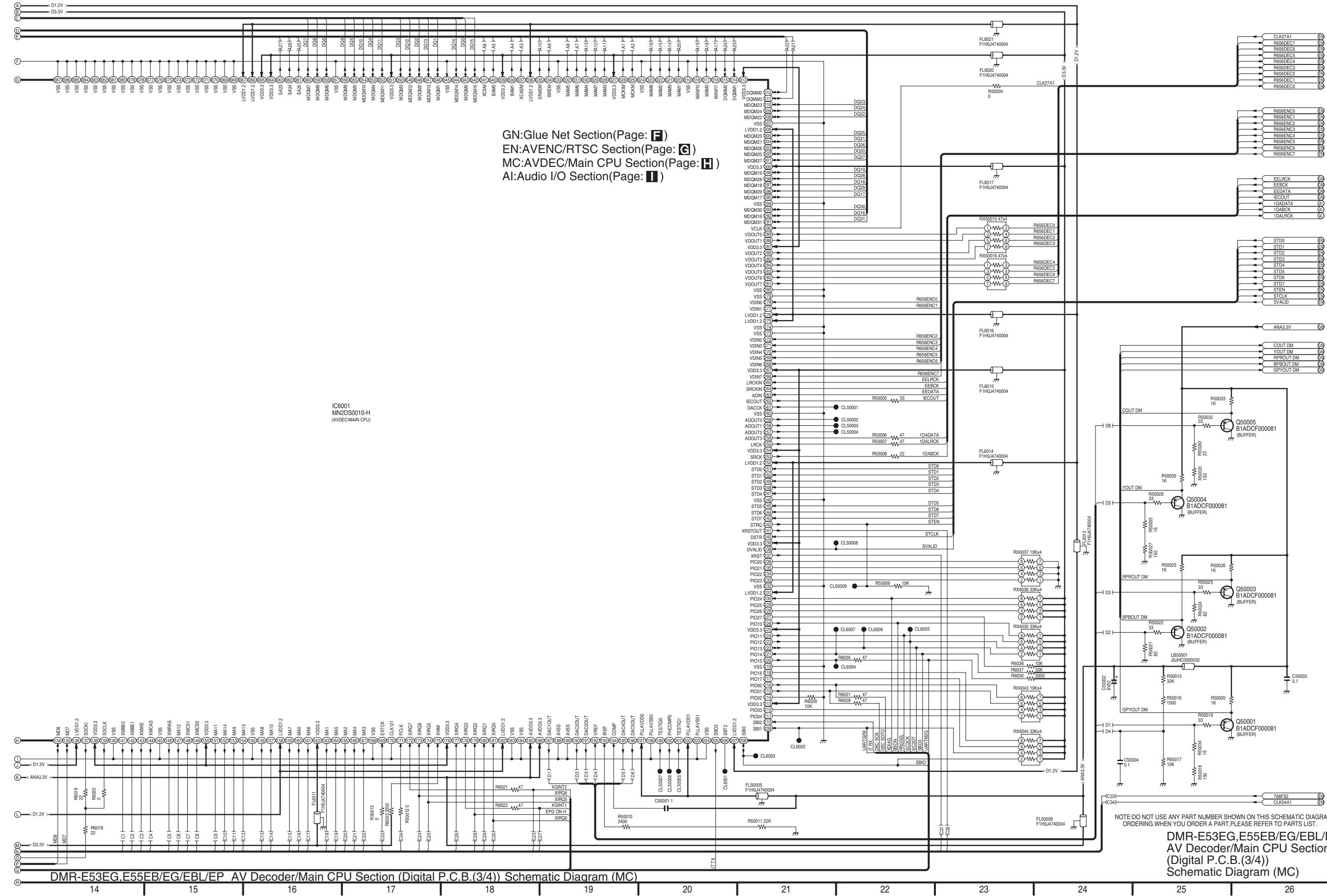
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.  
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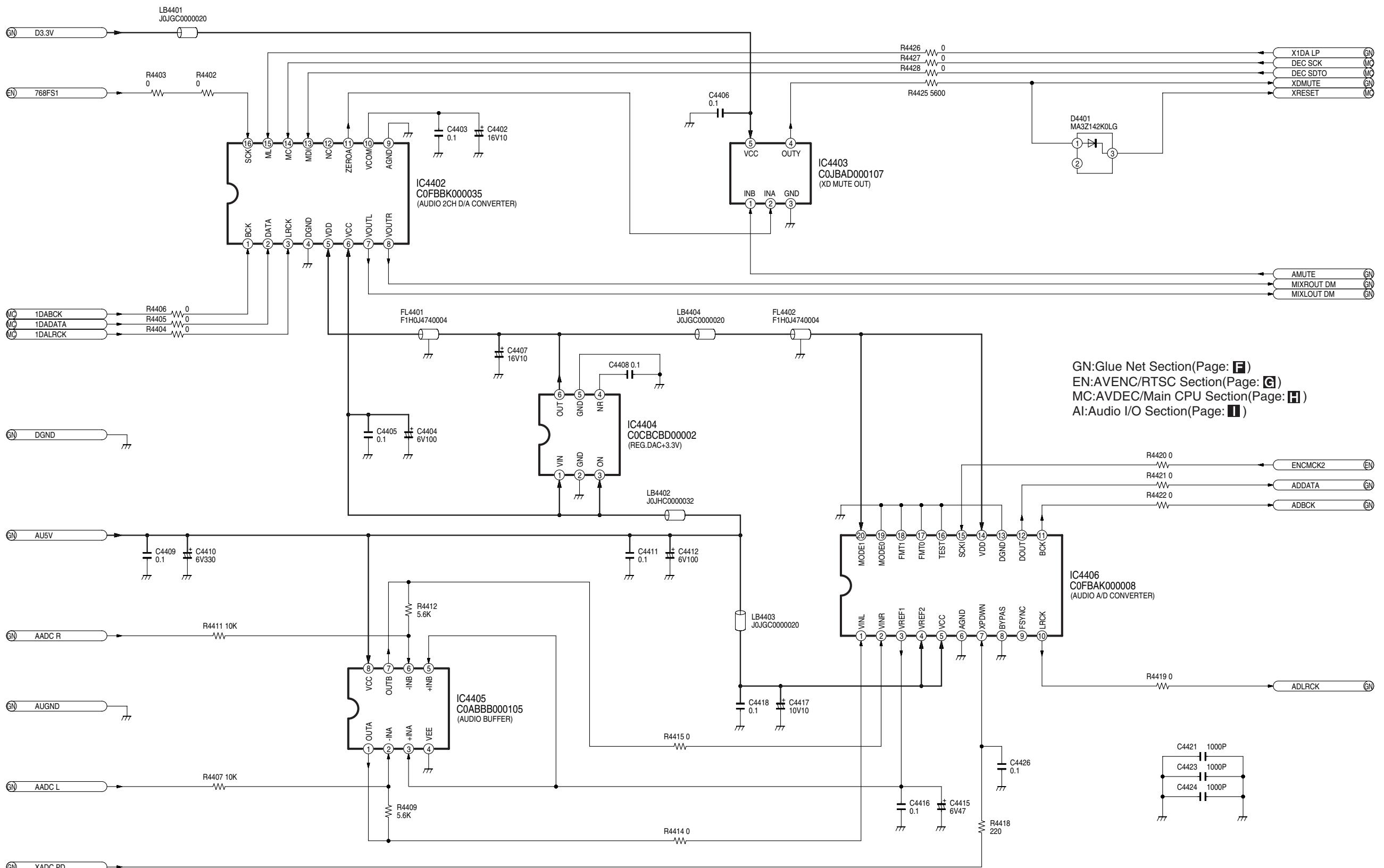
DMR-E53EG,E55EB/EG/EBL/EP  
 AVENC/RTSC Section (Digital P.C.B.(2/4))  
 Schematic Diagram (EN)



40	RESET-
39	GND
38	DD7
37	DD8
36	DD6
35	DD9
34	DD5
33	DD10
32	DD4
31	DD11
30	DD3
29	DD12
28	DD2
27	DD13
26	DD1
25	DD14
24	DD0
23	DD15
22	GND
21	DRIVE P.C.B.
20	DVD RAM DRIVE UNIT
19	FP3401
18	RAM0
17	GND
16	DIOW
15	GND
14	IORDY
13	CSEL
12	DMACK
11	GND
10	INTRO
9	DA1
8	DA0
7	DA2
6	C50-
5	C51-
4	C50
3	C51
2	GND
1	GND



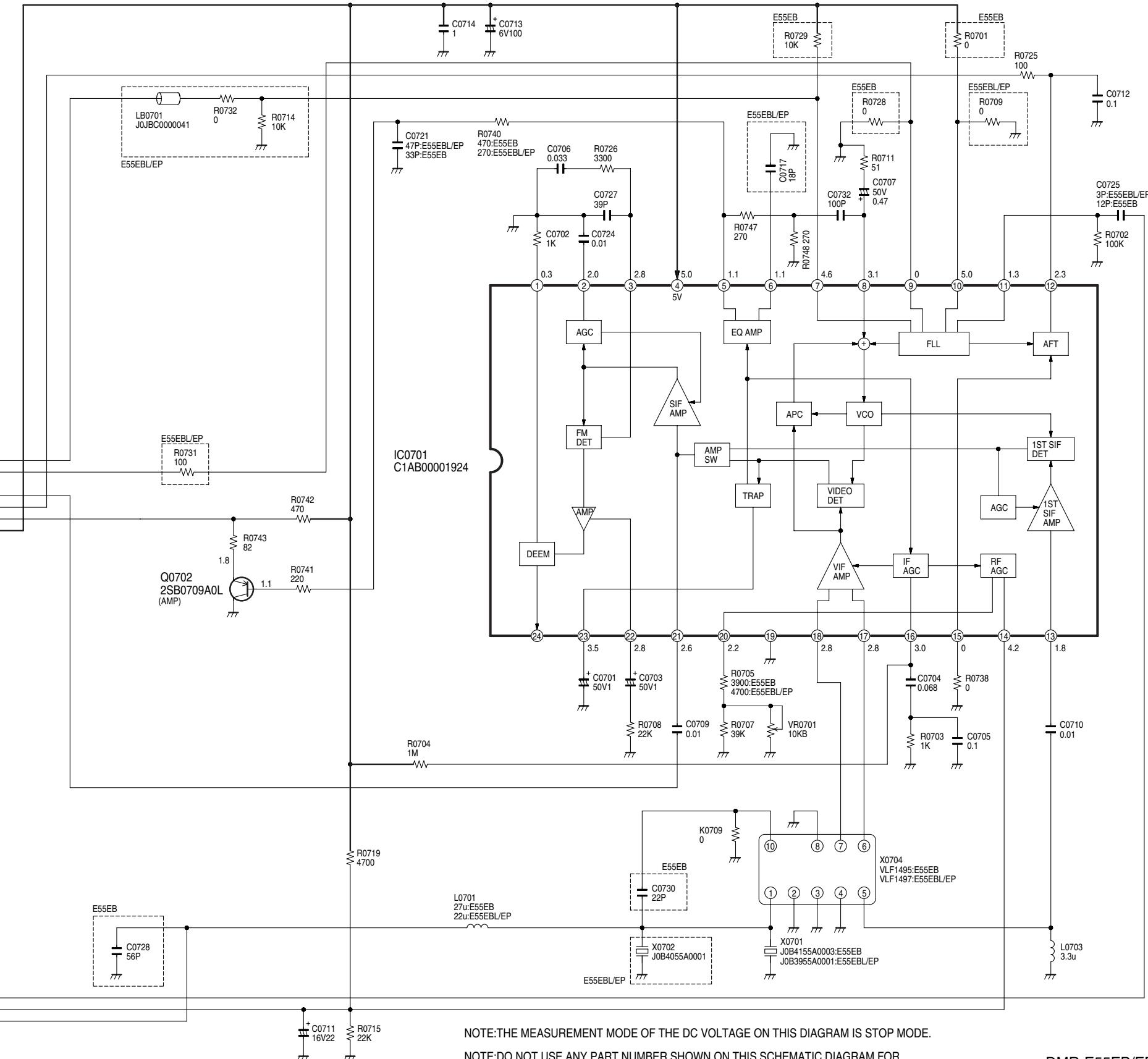




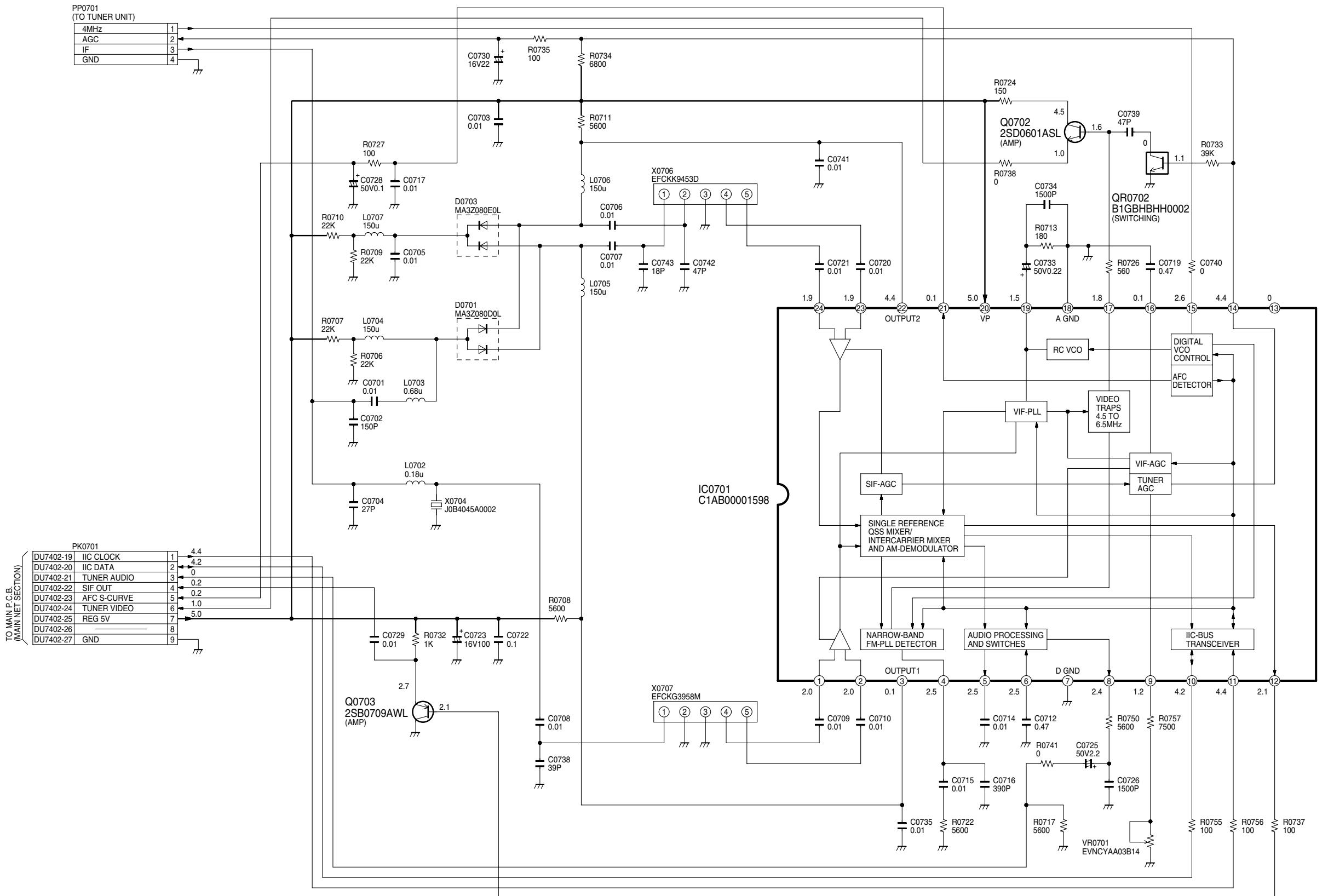
DMR-E53EG,E55EB/EG/EBL/EP  
Audio I/O Section (Digital P.C.B.(4/4))  
Schematic Diagram (AI)

TO MAIN PCB  
(MAIN NET SECTION)

PP0701 (TO TUNER UNIT)
4MHz
AGC
IF
GND



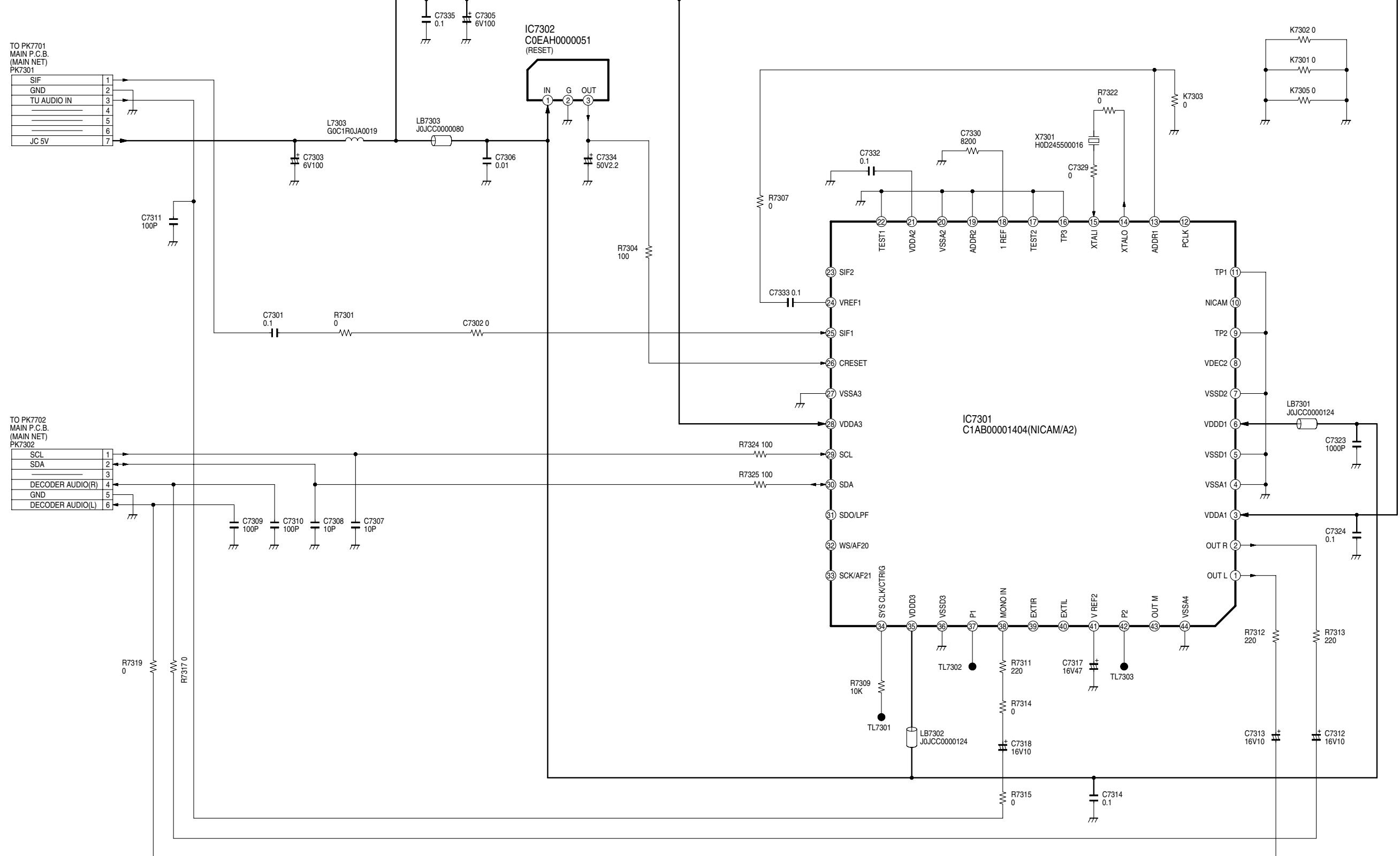
DMR-E55EB/EBL/EP  
VIF Decoder Schematic Diagram



NOTE:THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE

NOTE:DO NOT USE PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

# DMR-E53EG/E55EG VIF Decoder Schematic Diagram



NOTE:  
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM  
FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

TO PP7401  
MAIN P.C.B.  
(MAIN NET SEC.)  
PS3901

IIC CLK	1	→ (B1)
IIC DATA	2	→ (B2)
	3	
BOOSTER+5V	4	→ (B3)
PS 5V	5	→ (B4)
TUNER VIDEO	6	→ (B5)
GND	7	→ (B6)
SCART VIDEO IN	8	→ (B7)
GND	9	→ (B8)
CPS V OUT	10	→ (B9)
GND	11	→ (B10)
CPN Y OUT	12	→ (B11)
GND	13	→ (B12)
PS 12V	14	→ (B13)
GND	15	→ (B14)
PR OUT	16	→ (B15)
GND	17	→ (B16)
PB OUT	18	→ (B17)
GND	19	→ (B18)
PY OUT	20	→ (B19)

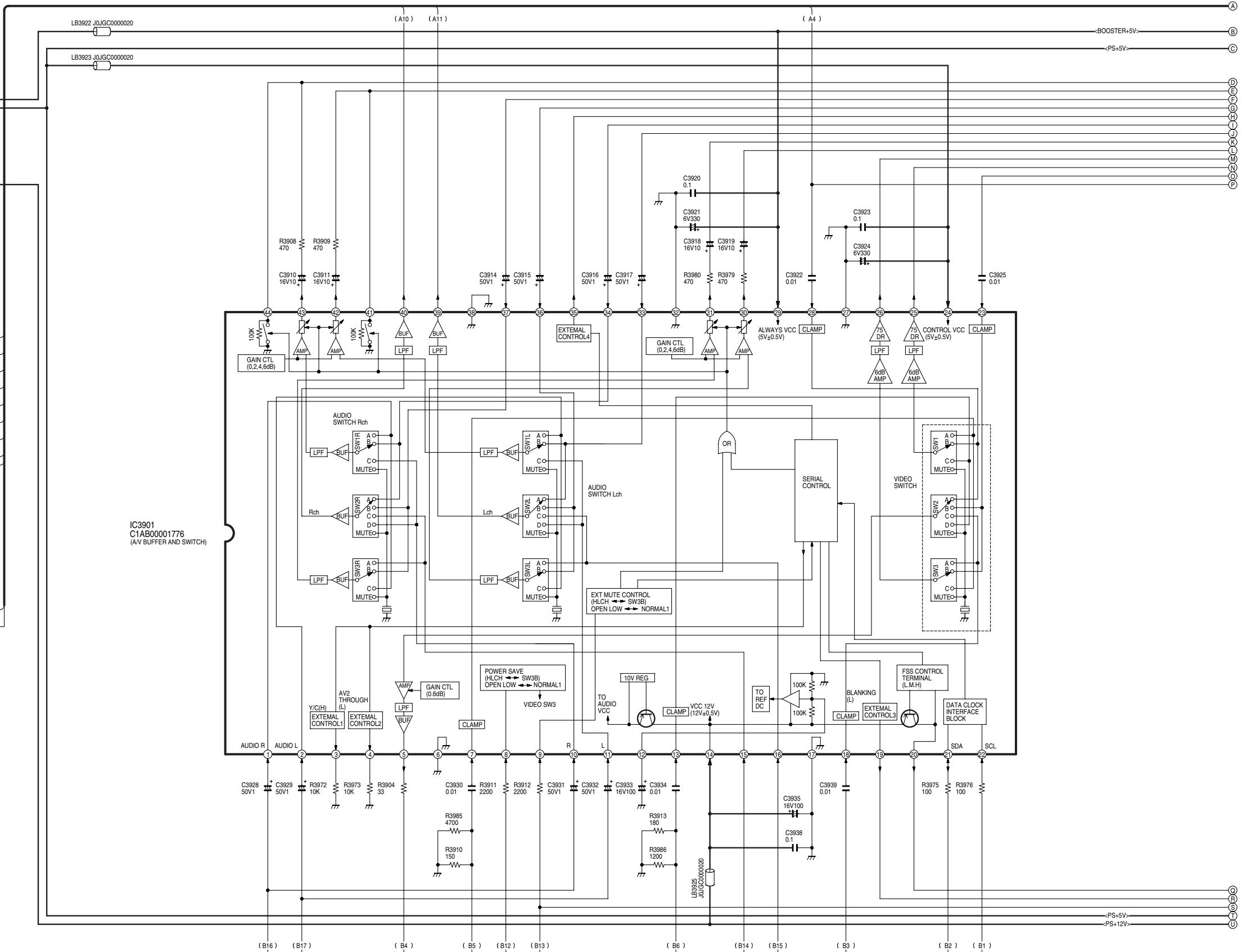
TO PP7402  
MAIN P.C.B.  
(MAIN NET SEC.)  
PS3902

R/C OUT	1	→ (A1)
GND	2	→ (A2)
G OUT	3	→ (A3)
GND	4	→ (A4)
B OUT	5	→ (A5)
GND	6	→ (A6)
AV2 VIDEO IN	7	→ (A7)
GND	8	→ (A8)
R/C IN	9	→ (A9)
GND	10	→ (A10)
G IN	11	→ (A11)
GND	12	→ (A12)
B IN	13	→ (A13)
GND	14	→ (A14)
AV2 8	15	→ (A15)
P50	16	→ (A16)
	17	→ (A17)
	18	→ (A18)

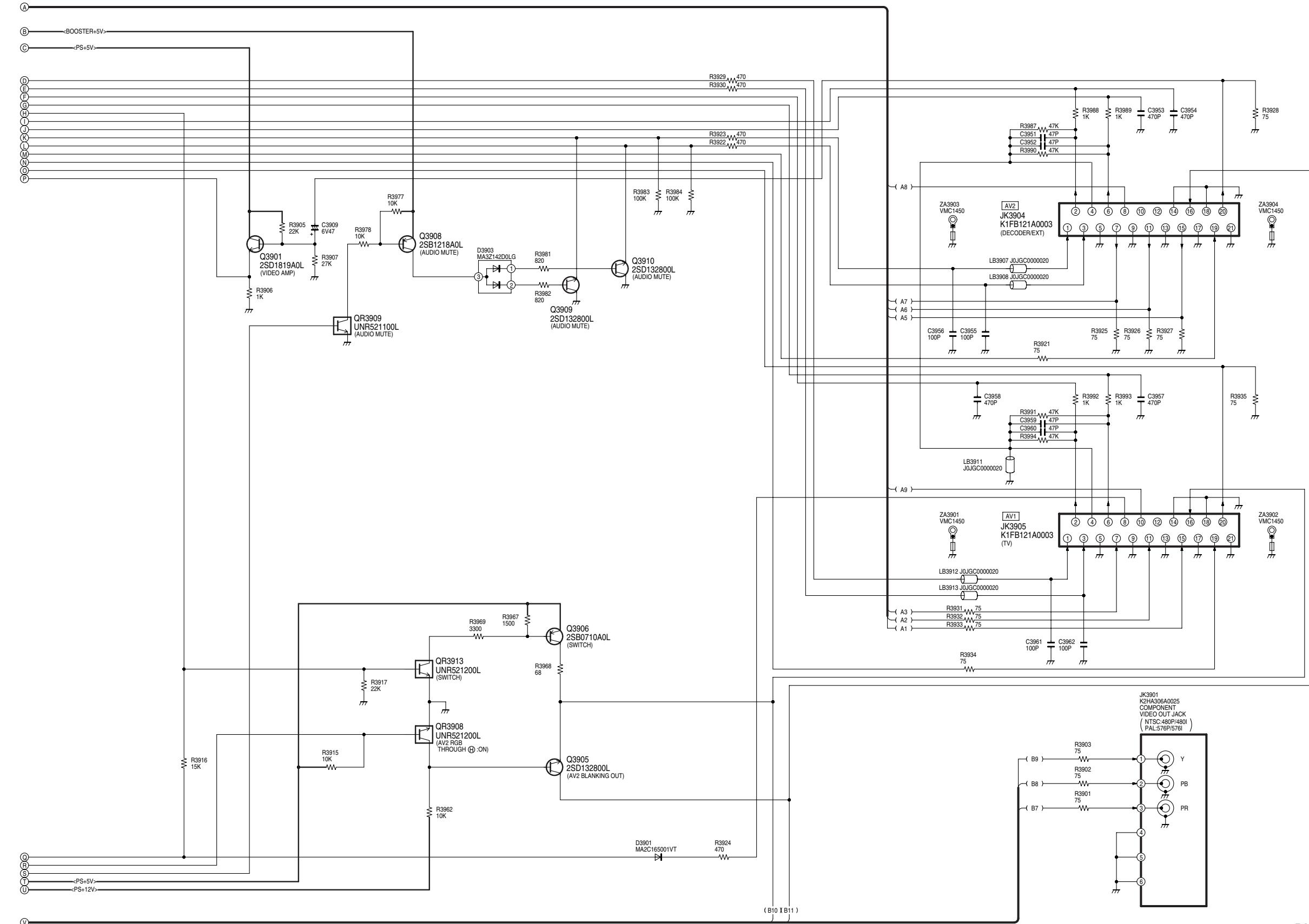
TO PP7403  
MAIN P.C.B.  
(MAIN NET SEC.)  
PS3903

PWR SAVE (H)	1	→ (B12)
SCART AUDIO MUTE (D)	2	→ (B13)
GND	3	→ (B14)
L3 IN R	4	→ (B15)
GND	5	→ (B16)
L3 IN L	6	→ (B17)
GND	7	→ (B18)
DECODER R	8	→ (B19)
GND	9	→ (B20)
DECODER L	10	→ (B21)
GND	11	→ (B22)
MIX R OUT1	12	→ (B23)
GND	13	→ (B24)
MIX L OUT1	14	→ (B25)
GND	15	→ (B26)

IC3901  
C1AB00001776  
(A/V BUFFER AND SWITCH)



DMR-E53EG,E55EB/EG/EBL/EP  
Scart Schematic Diagram



AV2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

AV1
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E53EG, E55EB/EG/EBL/EP  
Scart Schematic Diagram

# 18 Print Circuit Board

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[18.1 Power P.C.B.](#)

[18.2 Main P.C.B.](#)

[18.2.1 Main P.C.B. \(1 / 4 Section\)](#)

[18.2.2 Main P.C.B. \(2 / 4 Section\)](#)

[18.2.3 Main P.C.B. \(3 / 4 Section\)](#)

[18.2.4 Main P.C.B. \(4 / 4 Section\)](#)

[18.2.5 Main P.C.B. Address Information](#)

[18.3 Digital P.C.B.](#)

[18.3.1 Digital P.C.B. \(Component Side\)](#)

[18.3.2 Digital P.C.B. \(Foil Side\)](#)

[18.3.3 Digital P.C.B. Address Information](#)

[18.4 VIF Decoder P.C.B. \(For DMR-E55EB / EBL / EP\)](#)

[18.5 VIF Decoder P.C.B. \(For DMR-E53EG and DMR-E55EG\)](#)

[18.6 Nicam Decoder P.C.B.](#)

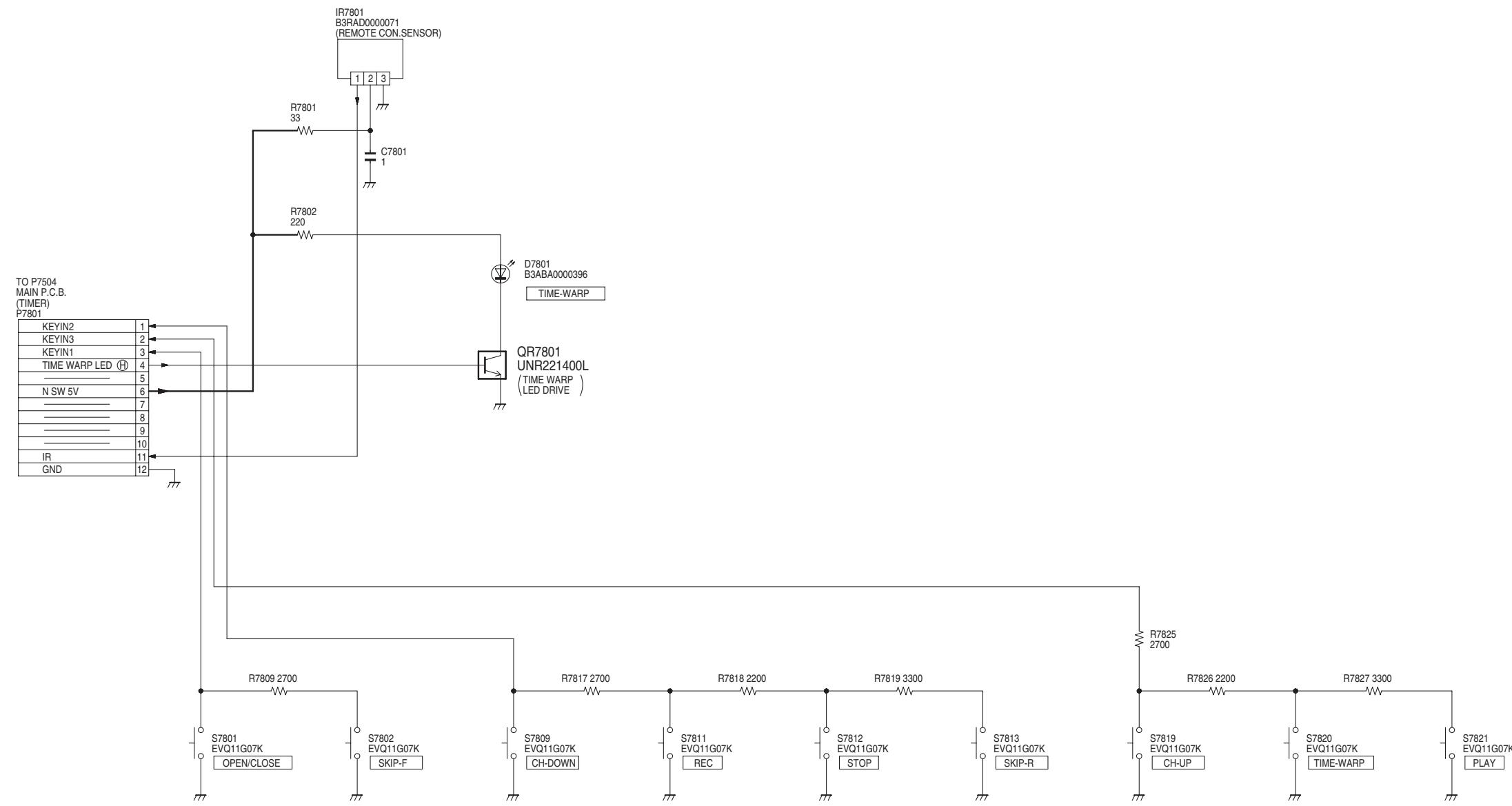
[18.7 Scart P.C.B.](#)

[18.7.1 Scart P.C.B. \(Section 1 / 2\)](#)

[18.7.2 Scart P.C.B. \(Section 2 / 2\)](#)

[18.8 Front \(R\) P.C.B.](#)

[TOP](#) [PREVIOUS](#) [NEXT](#)



NOTE: DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST, AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E53EG,E55EB/EG/EBL/EP  
Front (R)  
Schematic Diagram

# **18.1 Power P.C.B.**

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# **18.2 Main P.C.B.**

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[18.2.1 Main P.C.B. \(1 / 4 Section\)](#)

[18.2.2 Main P.C.B. \(2 / 4 Section\)](#)

[18.2.3 Main P.C.B. \(3 / 4 Section\)](#)

[18.2.4 Main P.C.B. \(4 / 4 Section\)](#)

[18.2.5 Main P.C.B. Address Information](#)

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## **18.2.1 Main P.C.B. (1/ 4 Section)**

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## **18.2.2 Main P.C.B. (2/ 4 Section)**

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## **18.2.3 Main P.C.B. (3/ 4 Section)**

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## **18.2.4 Main P.C.B. (4/ 4 Section)**

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## 18.2.5 Main P.C.B. Address Information

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# **18.3 Digital P.C.B.**

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[18.3.1 Digital P.C.B. \(Component Side\)](#)

[18.3.2 Digital P.C.B. \(Foil Side\)](#)

[18.3.3 Digital P.C.B. Address Information](#)

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## **18.3.1 Digital P.C.B. (Component Side)**

[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

## **18.3.2 Digital P.C.B. (Foil Side)**

[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

## **18.3.3 Digital P.C.B. Address Information**

[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

# **18.4 VIF Decoder P.C.B. (For DMR-E55EB/ EBL/ EP)**

[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

# **18.5 VIF Decoder P.C.B. (For DMR-E53EG and DMR-E55EG)**

[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

# **18.6 Nicam Decoder P.C.B.**

[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

# **18.7 Scart P.C.B.**

[TOP](#) [PREVIOUS](#) [NEXT](#)

[18.7.1 Scart P.C.B. \(Section 1 / 2\)](#)

[18.7.2 Scart P.C.B. \(Section 2 / 2\)](#)

[TOP](#) [PREVIOUS](#) [NEXT](#)

## **18.7.1 Scart P.C.B. (Section 1/ 2)**

[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

## **18.7.2 Scart P.C.B. (Section 2/ 2)**

[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

# **18.8 Front (R) P.C.B.**

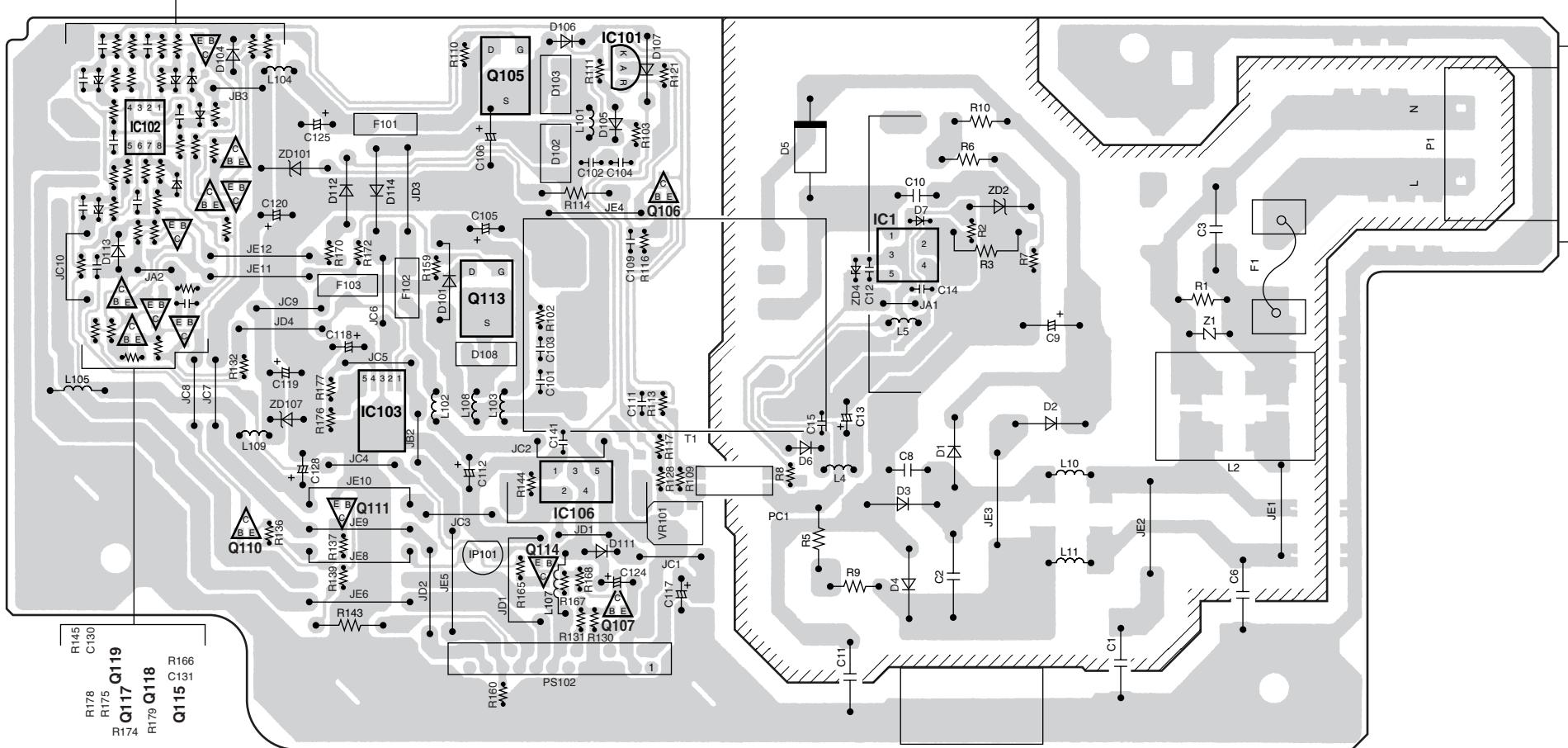
[TOP](#) [PREVIOUS](#) [NEXT](#)



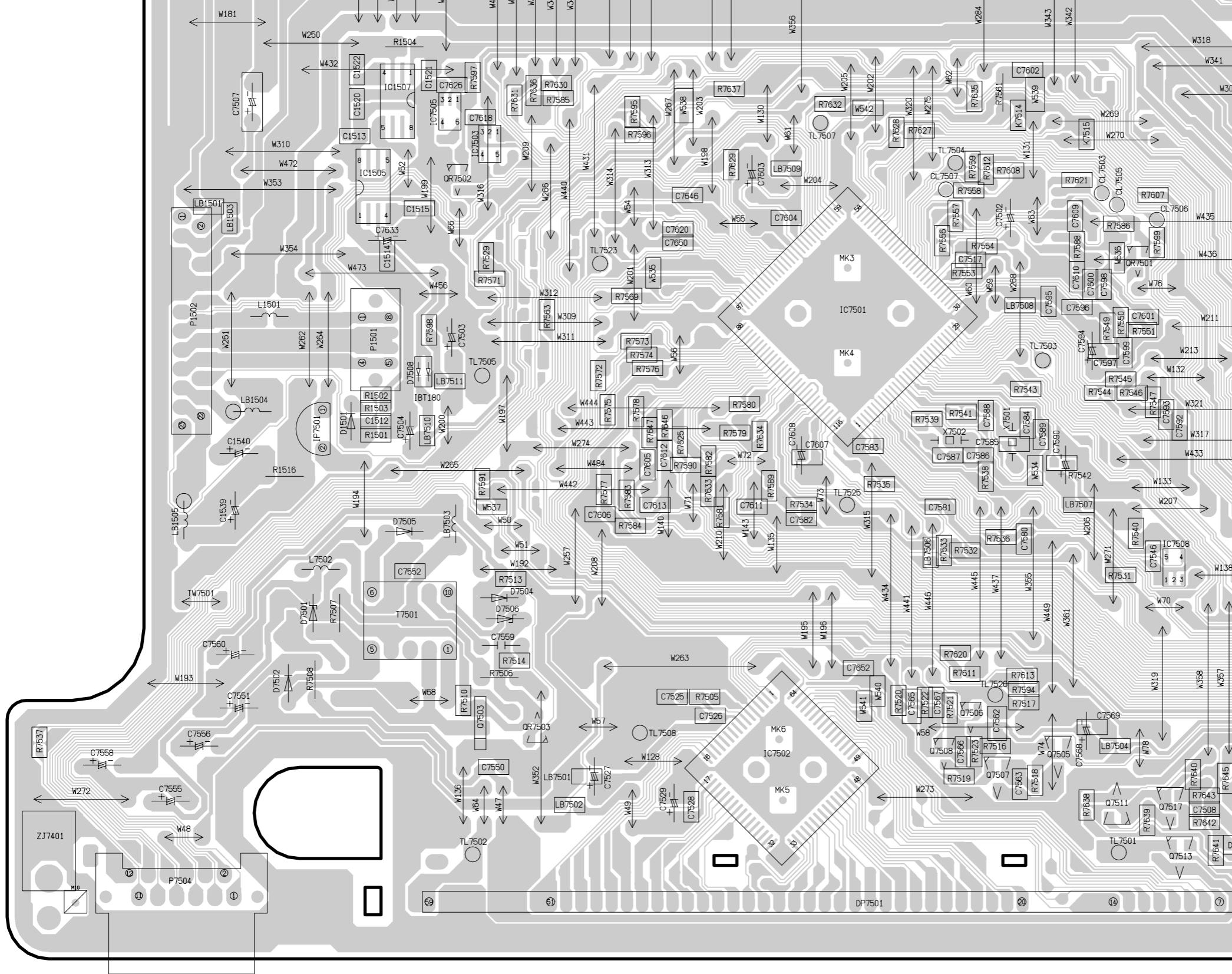
[TOP](#) [PREVIOUS](#) [NEXT](#)

# **Power P.C.B.**

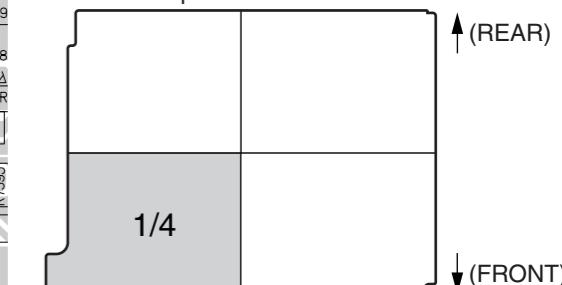
Power P.C.B.															
Integrated Circuit		Connector		Z1	C-6	L105	C-1	C103	C-3	Resistor		R115	D-2	R159	C-3
IC1	C-5	P1	D-7	ZD2	C-5	L107	B-3	C104	C-3	R1	C-6	R116	C-4	R160	A-3
IC101	D-3	PS102	A-3	ZD4	C-4	L108	B-3	C105	C-3	R2	C-5	R117	B-4	R163	C-2
IC102	D-2	Diode	ZD101		C-2	L109	B-2	C106	D-3	R3	C-5	R120	D-2	R164	D-2
IC103	B-3	D1	B-5	ZD102	D-1	Fuse	C107		D-1	R5	B-4	R121	D-4	R165	B-3
IC106	B-3	D2	B-5	ZD103	D-2	F1	C109	C-6	C-4	R6	C-5	R122	D-2	R166	C-2
Transistor		D3	B-5	ZD104	D-2	F101	D-3	C110	D-2	R7	C-5	R124	D-2	R167	B-3
Q101	C-2	D4	B-5	ZD105	C-1	F102	C-3	C111	B-4	R8	B-4	R125	D-1	R168	B-3
Q102	C-2	D5	D-4	ZD106	C-2	F103	C-2	C112	B-3	R9	B-4	R126	D-1	R169	C-2
Q103	C-2	D6	B-4	ZD107	B-2	Capacitor		C113	D-1	R10	D-5	R127	D-2	R170	C-2
Q104	D-2	D7	C-5	IC Protector		C1	A-5	C115	D-1	R101	C-2	R128	B-4	R171	C-2
Q105	D-3	D101	C-3	IP101	B-3	C2	B-5	C117	B-4	R102	C-3	R130	B-3	R172	C-2
Q106	C-4	D102	C-3	Transformer		C3	C-6	C118	C-2	R103	D-4	R131	B-3	R173	C-2
Q107	B-3	D103	D-3	T1	C-4	C6	D-6	C119	C-2	R104	C-2	R132	C-2	R174	C-2
Q110	B-2	D104	D-2	Coil		C8	B-5	C120	C-2	R105	D-2	R136	B-2	R175	C-1
Q111	B-2	D105	D-3	L2	D-6	C9	C-5	C124	B-3	R106	D-2	R137	B-2	R176	B-2
Q113	C-3	D106	D-3	L4	B-4	C10	C-5	C125	D-2	R107	D-2	R139	B-2	R177	C-2
Q114	B-3	D107	D-4	L5	C-5	C11	A-4	C127	C-2	R108	D-1	R143	B-2	R178	C-1
Q115	C-2	D108	C-3	L10	B-5	C12	C-5	C128	B-2	R109	B-4	R144	B-3	R179	C-2
Q116	C-2	D111	B-3	L11	B-5	C13	B-4	C129	C-1	R110	D-3	R145	C-1	VR101	B-4
Q117	C-2	D112	C-2	L101	D-3	C14	C-5	C130	C-1	R111	D-3	R153	C-2		
Q118	C-2	D113	C-1	L102	B-3	C15	B-4	C131	C-2	R112	D-2	R154	C-1		
Q119	C-1	D114	C-3	L103	B-3	C101	C-3	C141	B-3	R113	B-4	R157	C-1		
PC1	B-4	D120	D-2	L104	D-2	C102	C-3	C142	D-2	R114	C-3	R158	C-2		



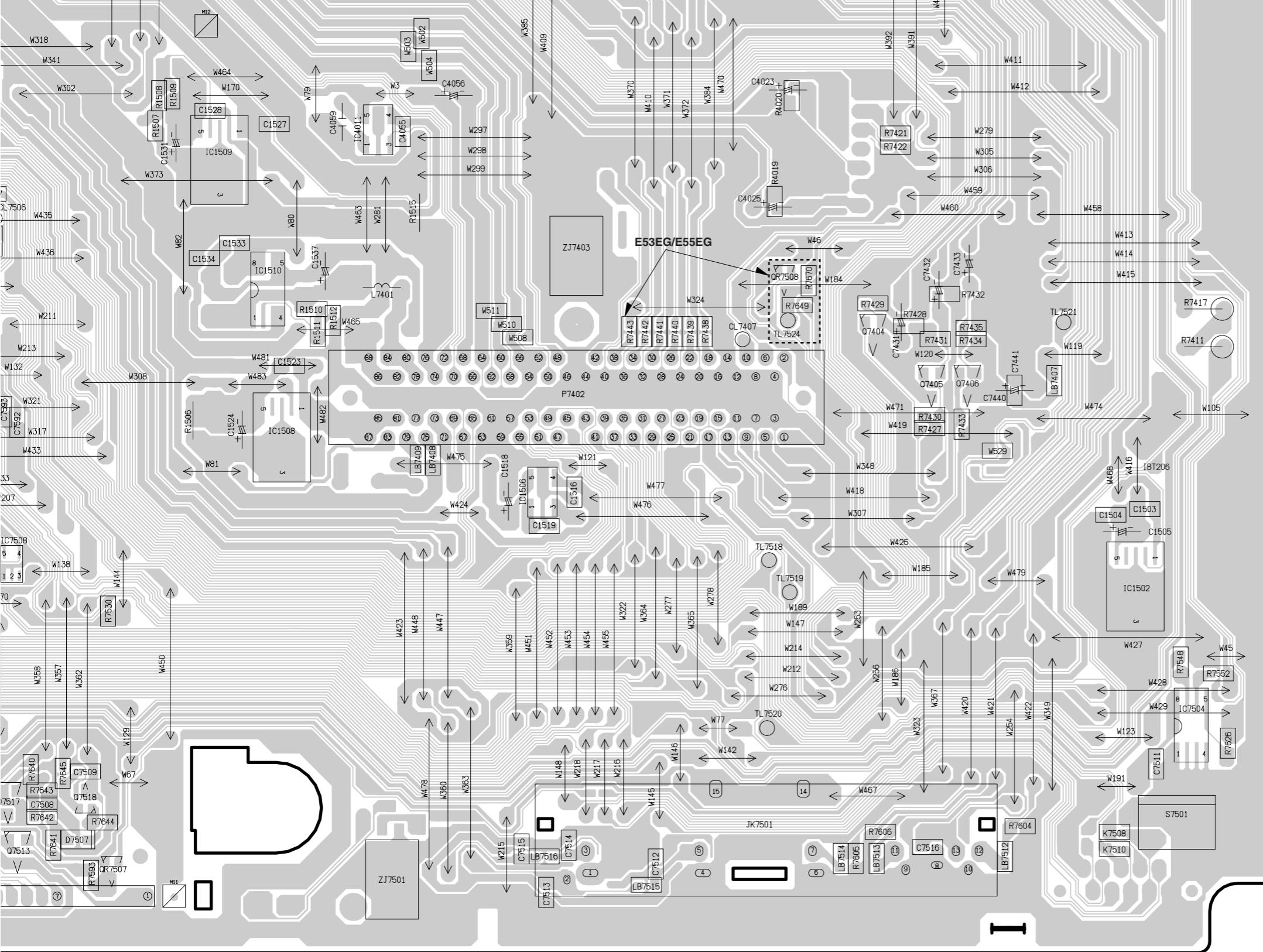
DMR-E53EG, E55EB/EG/EBL/EP  
Power P.C.B.  
(ETXMM506E4F)



Location Map



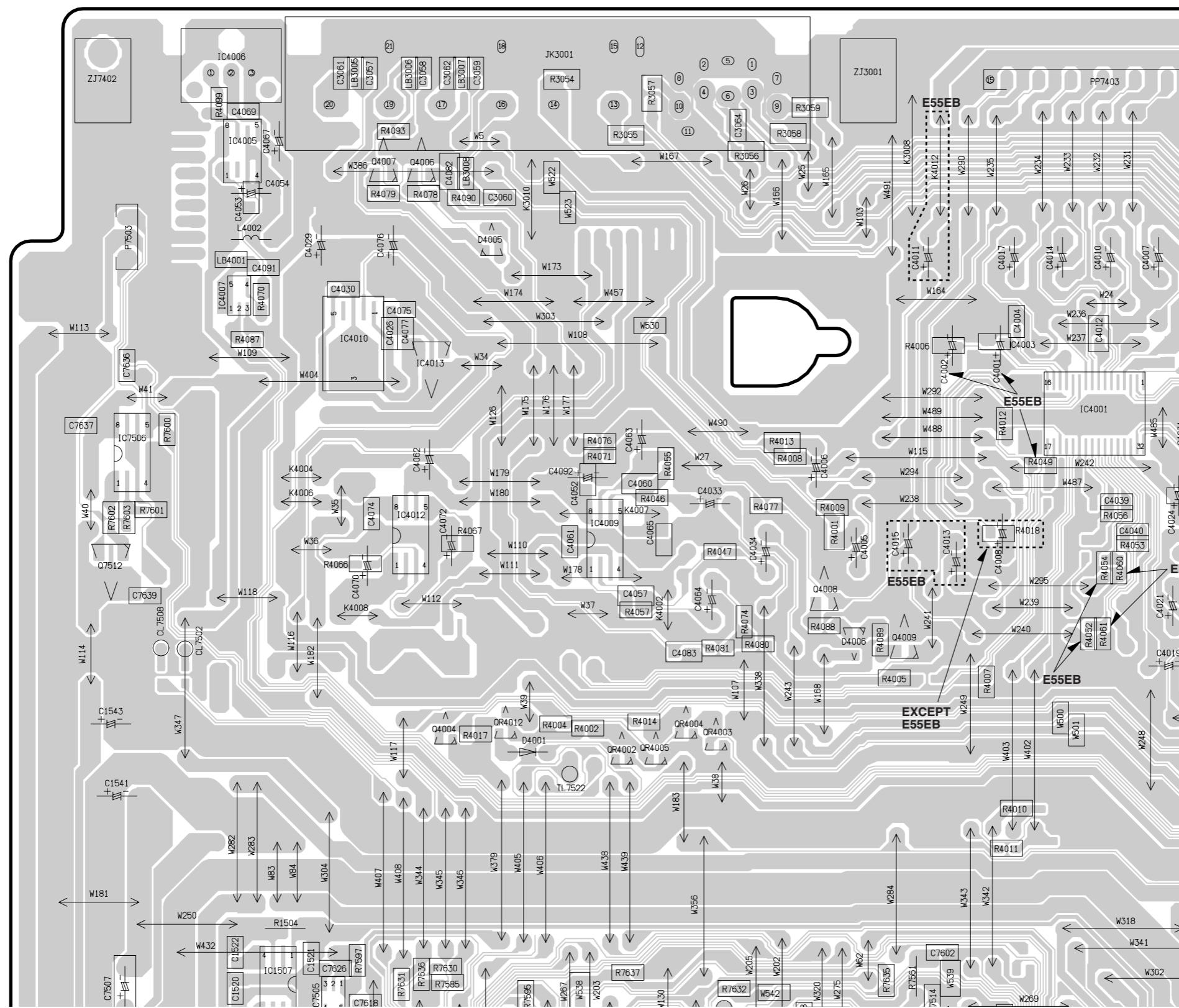
DMR-E53EG, E55EB/EG/EBL/EP  
Main P.C.B.  
REP3664A: E53EG, E55EG  
REP3664B: E55EB  
REP3664J : E55EBL/EP  
(1/4 Section)



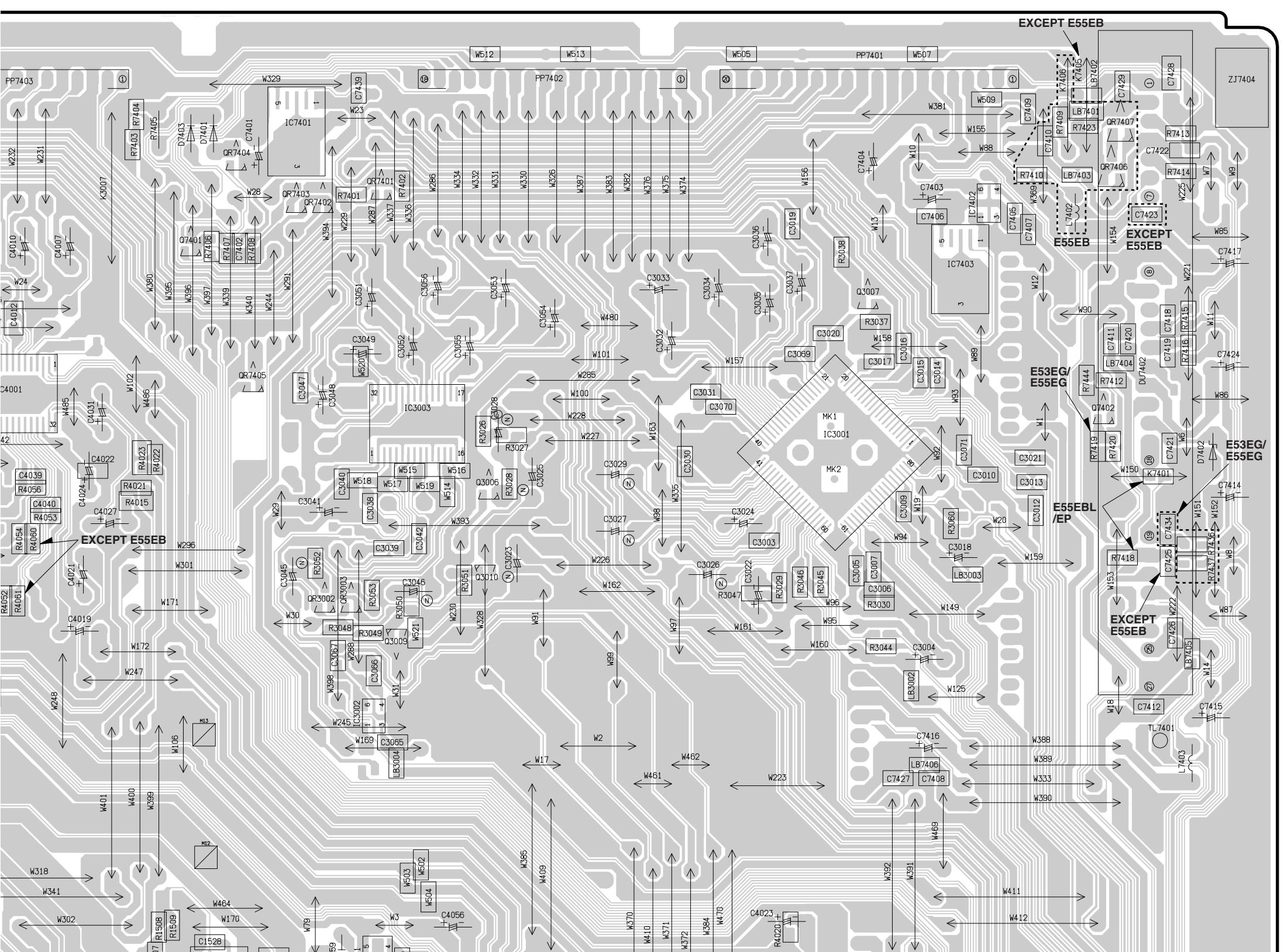
## Location Map

DMR-E53EG, E55EB/EG/EBL/EP  
Main P.C.B.  
REP3664A: E53EG, E55EG  
REP3664B: E55EB  
REP3664J : E55EBL/EP  
(2/4 Section)

# Main P.C.B.



DMR-E53EG, E55EB/EG/EBL/EP  
Main P.C.B.  
REP3664A: E53EG, E55EG  
REP3664B: E55EB  
REP3664J : E55EBL/EP  
(3/4 Section)

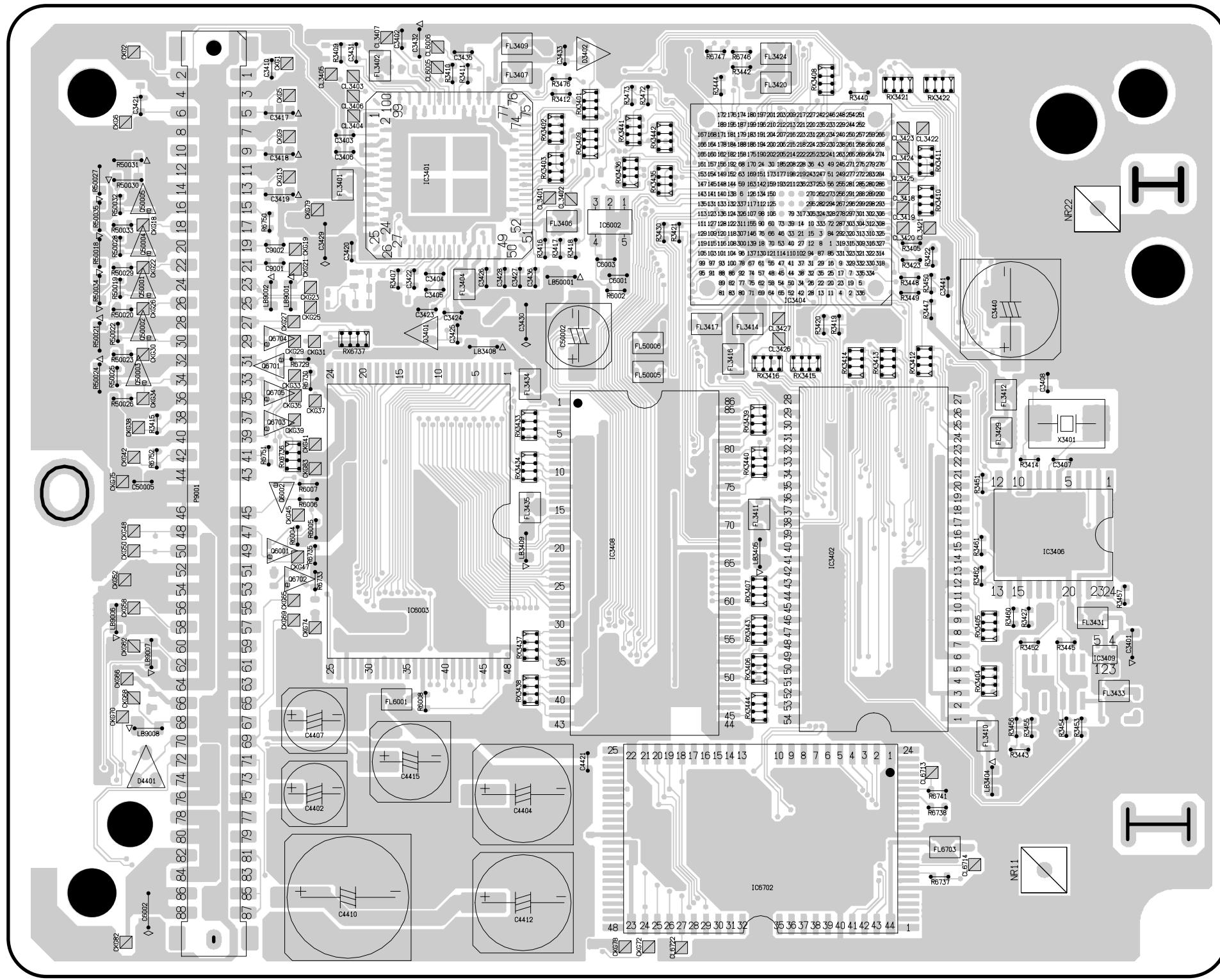


## Location Map

DMR-E53EG, E55EB/EG/EBL/EP  
Main P.C.B.  
REP3664A: E53EG, E55EG  
REP3664B: E55EB  
REP3664J : E55EBL/EP  
(4/4 Section)

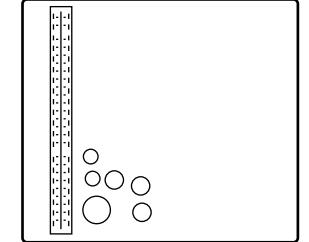
Main P.C.B.																									
Integrated Circuit		QR7405	E-5	Coil		C1541	D-1	C4004	E-4	C7417	E-8	C7594	C-4	R3060	E-7	R7418	D-8	R7558	C-4	R7646	B-3				
IC1502	B-8	QR7406	F-8	L1501	C-2	C1543	D-1	C4005	E-4	C7418	E-8	C7595	C-4	R4001	E-4	R7419	E-8	R7559	C-4	R7647	B-3				
IC1505	C-2	QR7407	F-8	L4002	E-2	C3003	E-7	C4006	E-3	C7419	E-8	C7596	C-4	R4002	D-3	R7420	E-8	R7561	C-4	R7649	C-7				
IC1506	B-6	QR7501	C-4	L7401	C-5	C3004	D-7	C4007	E-4	C7420	E-8	C7597	C-4	R4004	D-3	R7421	C-7	R7563	C-2	R7670	C-7				
IC1507	C-2	QR7502	C-2	L7402	F-7	C3005	D-7	C4008	E-4	C7421	E-8	C7598	C-4	R4005	D-4	R7422	C-7	R7569	C-3	K7508	A-8				
IC1508	B-5	QR7503	A-2	L7403	D-8	C3006	D-7	C4010	E-4	C7422	F-8	C7599	C-4	R4006	E-4	R7423	F-7	R7571	C-2	K7510	A-8				
IC1509	C-5	QR7507	A-5	L7502	B-2	C3007	D-7	C4011	E-4	C7423	F-8	C7600	C-4	R4007	D-4	R7427	B-7	R7572	C-3	K7514	C-4				
IC1510	C-5	QR7508	C-7	LB1501	C-1	C3009	E-7	C4012	E-4	C7424	E-8	C7601	C-4	R4008	E-3	R7428	C-7	R7573	C-3	K7515	C-4				
I3001	E-7	Test Point		LB1503	C-1	C3010	E-7	C4013	E-4	C7425	D-8	C7602	C-4	R4009	E-4	R7429	C-7	R7574	C-3	Transformer					
I3002	D-5	CL7407	C-6	LB1504	B-1	C3012	E-7	C4014	E-4	C7426	D-8	C7603	C-3	R4010	D-4	R7430	B-7	R7575	B-3	T7501	B-2				
I3003	E-5	CL7502	D-2	LB1505	B-1	C3013	E-7	C4015	E-4	C7427	D-7	C7604	C-3	R4011	D-4	R7431	C-7	R7576	C-3						
I4001	E-4	CL7503	C-4	LB3002	D-7	C3014	E-7	C4017	E-4	C7428	F-8	C7605	B-3	R4012	E-4	R7432	C-7	R7577	B-3						
I4005	F-2	CL7505	C-4	LB3003	D-7	C3015	E-7	C4019	D-4	C7429	F-8	C7606	B-3	R4013	E-3	R7433	B-7	R7578	B-3						
I4006	F-2	CL7506	C-4	LB3004	D-5	C3016	E-7	C4021	D-4	C7431	C-7	C7607	B-3	R4014	D-3	R7434	C-7	R7579	B-3						
I4007	E-2	CL7507	C-4	LB3005	F-2	C3017	E-7	C4022	E-4	C7432	C-7	C7608	B-3	R4015	E-5	R7435	C-7	R7580	B-3						
I4009	E-3	CL7508	D-2	LB3006	F-2	C3018	D-7	C4023	C-7	C7433	C-7	C7609	C-4	R4017	D-2	R7436	E-8	R7581	B-3						
I4010	E-2	TL7401	D-8	LB3007	F-2	C3019	E-7	C4024	E-4	C7434	E-8	C7610	C-4	R4018	E-4	R7437	D-8	R7582	B-3						
I4011	C-5	TL7501	A-4	LB3008	F-2	C3020	E-7	C4025	C-7	C7439	F-5	C7611	B-3	R4019	C-7	R7438	C-6	R7583	B-3						
I4012	E-2	TL7502	A-2	LB4001	E-2	C3021	E-7	C4026	E-2	C7440	B-7	C7612	B-3	R4020	C-7	R7439	C-6	R7584	B-3						
I4013	E-2	TL7503	C-4	LB7401	F-7	C3022	D-6	C4027	E-5	C7441	B-7	C7613	B-3	R4021	E-5	R7440	C-6	R7585	C-2						
I7401	F-5	TL7504	C-4	LB7402	F-7	C3023	D-6	C4029	E-2	C7502	C-4	C7618	C-2	R4022	E-5	R7441	C-6	R7586	C-4						
I7402	F-7	TL7505	C-2	LB7403	F-7	C3024	E-6	C4030	E-2	C7503	C-2	C7620	C-3	R4023	E-5	R7442	C-6	R7588	C-4						
I7403	E-7	TL7507	C-3	LB7404	E-8	C3025	E-6	C4031	E-4	C7504	B-2	C7626	C-2	R4046	E-3	R7443	C-6	R7589	B-3						
I7501	C-3	TL7508	A-3	LB7405	D-8	C3026	D-6	C4033	E-3	C7507	C-1	C7633	C-2	R4047	E-3	R7444	E-7	R7590	B-3						
I7502	A-3	TL7518	B-7	LB7406	D-7	C3027	E-6	C4034	E-3	C7508	A-4	C7636	E-2	R4049	E-4	R7505	B-3	R7591	B-2						
I7503	C-2	TL7519	B-7	LB7407	B-7	C3028	E-6	C4039	E-4	C7509	A-4	C7637	E-1	R4052	D-4	R7506	B-2	R7593	A-4						
I7504	A-8	TL7520	A-6	LB7408	B-6	C3029	E-6	C4040	E-4	C7511	A-8	C7639	D-2	R4053	E-4	R7507	B-2	R7594	B-4						
I7505	C-2	TL7521	C-7	LB7409	B-5	C3030	E-6	C4052	E-3	C7512	A-6	C7646	C-3	R4054	E-4	R7508	B-2	R7595	C-3						
I7506	E-2	TL7522	D-3	LB7501	A-2	C3031	E-6	C4053	F-2	C7513	A-6	C7650	C-3	R4055	E-3	R7510	B-2	R7596	C-3						
I7508	B-4	TL7523	C-3	LB7502	A-2	C3032	E-6	C4054	F-2	C7514	A-6	C7652	B-3	R4056	E-4	R7513	B-2	R7597	C-2						
Transistor		TL7524	C-7	LB7503	B-2	C3033	E-6	C4055	C-5	C7515	A-6	Resistor		R4057	D-3	R7514	B-2	R7598	C-2						
Q3006	E-6	TL7525	B-3	LB7504	A-4	C3034	E-6	C4056	C-6	C7516	A-7	R1501	B-2	R4060	E-4	R7516	A-4	R7599	C-4						
Q3007	E-7	TL7526	B-4	LB7506	B-4	C3035	E-7	C4057	D-3	C7517	C-4	R1502	B-2	R4061	D-4	R7517	A-4	R7600	E-2						
Q3009	D-5	TW7501	B-1	LB7507	B-4	C3036	E-7	C4059	C-5	C7525	B-3	R1503	B-2	R4066	E-2	R7518	A-4	R7601	E-2						
Connector		LB7508	C-4	C3037	E-7	C4060	E-3	C7526	B-3	R1504	D-2	R4067	E-2	R7519	A-4	R7602	E-1								
Q4004	D-2	P1501	C-2	LB7509	C-3	C3038	E-5	C4061	E-3	C7527	A-2	R1506	B-5	R4070	E-2	R7520	B-3	R7603	E-2						
Q4006	F-2	P1502	C-1	LB7510	B-2	C3039	D-5	C4062	E-2	C7528	A-3	R1507	C-5	R4071	E-3	R7521	B-4	R7604	A-7						
Q4007	F-2	P7402	B-6	LB7511	C-2	C3040	E-5	C4063	E-3	C7529	A-3	R1508	C-5	R4074	D-3	R7522	B-4	R7605	A-7						
Q4008	D-3	P7503	E-1	LB7512	A-7	C3041	E-5	C4064	D-3	C7546	B-4	R1509	C-5	R4076	E-3	R7523	A-4	R7606	A-7						
Q4009	D-4	P7504	A-1	LB7513	A-7	C3042	E-5	C4065	E-3	C7550	A-2	R1510	C-5	R4077	E-3	R7529	C-2	R7607	C-4						
Q7401	E-5	PP7401	F-7	LB7514	A-7	C3045	D-5	C4067	F-2	C7551	B-1	R1511	C-5	R4078	F-2	R7530	B-5	R7608	C-4						
Q7402	E-8	PP7402	F-6	LB7515	A-6	C3046	D-5	C4069	F-2	C7552	B-2	R1512	C-5	R4079	F-2	R7531	B-4	R7611	B-4						
Q7404	C-7	PP7403	F-4	LB7516	A-6	C3047	E-5	C4070	E-2	C7555	A-1	R1515	C-5	R4080	D-3	R7532	B-4	R7612	C-4						
Q7405	B-7	JK3001	F-3	JK7501	A-6	C3048	E-5	C4072	E-2	C7556	A-1	R1516	B-2	R4081	D-3	R7533	B-4	R7613	B-4						
Q7406	B-7	Diode		C1503	B-8	C3049	E-5	C4074	E-2	C7558	A-1	R3026	E-6	R4087	E-2	R7534	B-3	R7620	B-4						
Q7503	A-2	Diode		C1504	B-8	C3051	E-5	C4075	E-2	C7559	B-2	R3027	E-6	R4088	D-3	R7535	B-3	R7621	C-4						
Q7505	A-4	D1501	B-2	C1512	B-2	C3053	E-6	C4077	E-2	C7562	A-4	R3029	D-7	R4090	F-2	R7537	A-1	R7626	A-8						
Q7506	A-4	D4001	D-3	C1513	C-2	C3054	E-6	C4082	F-2	C7563	A-4	R3030	D-7	R4093	F-2	R7538	B-4	R7627	C-3						
Q7507	A-4	D4005	E-3	C1514	C-2	C3055	E-6	C4083	D-3	C7565	B-3	R3037	E-7	R4099	F-2	R7539	B-4	R7628	C-3						
Q7508	A-4	D4006	D-4	C1515	C-2	C3056	E-6	C4091	E-2	C7566	A-4	R3038	E-7	R7401	F-5	R7540	B-4	R7629	C-3						
Q7511	A-4	D4041	F-5	C1515	B-6	C3057	F-2	C4092	E-3	C7567	B-4	R3044	D-7	R7402	F-5	R7541	B-4	R7630	C-2						
Q7512	E-1	D7402	E-8	C1516	B-6	C3058	F-2	C7401	F-5	C7568	A-4	R3045	D-7	R7403	F-5	R7542	B-4	R7631	C-2						
Q7513	A-4	D7403	F-5	C1518	B-6	C3059	F-2	C7402	E-5	C7569	A-4	R3046	D-7	R7404	F-5	R7543	B-4	R7632	C-3						
Q7517	A-4	D7501	B-2	C1519	B-6	C3060	F-3	C7403	F-7	C7580	B-4	R3047	D-6	R7405	F-5	R7544	B-4	R7633	B-3						
Q7518	A-4	D7502	B-2	C1520	C-2	C3061	F-2	C7404	F-7	C7581	B-4	R3048	D-5	R7406	E-5	R7545	C-4	R7634	B-3						
Transistor-resistor		D7504	B-2	C1521	C-2	C3062	F-2	C7405	E-7	C7582	B-3	R3049	D-5	R7407	E-5	R7546	B-4	R7635	C-4						
QR3002	D-5	D7505	B-2	C1522	C-2	C3063	F-3	C7406	E-7	C7583	B-3	R3050	D-5	R7408	E-5	R7547	B-4	R7636	C-2						
QR3003	D-5	D7506	B-2	C1523	C-5	C3064	F-3	C7407	E-7	C7584	B-4	R3051	D-6	R7409	F-7	R7548	B-8	R7637	C-3						
QR4002	D-3	D7507	A-4	C1524	B-5	C3065	D-5	C7407	E-7	C7585	B-4	R3052	D-5	R7410	F-7	R7549	C-4	R7638	A-4						
QR4003	D-3	D7508	C-2	C1527	C-5	C3066	D-5</td																		

## Digital P.C.B.



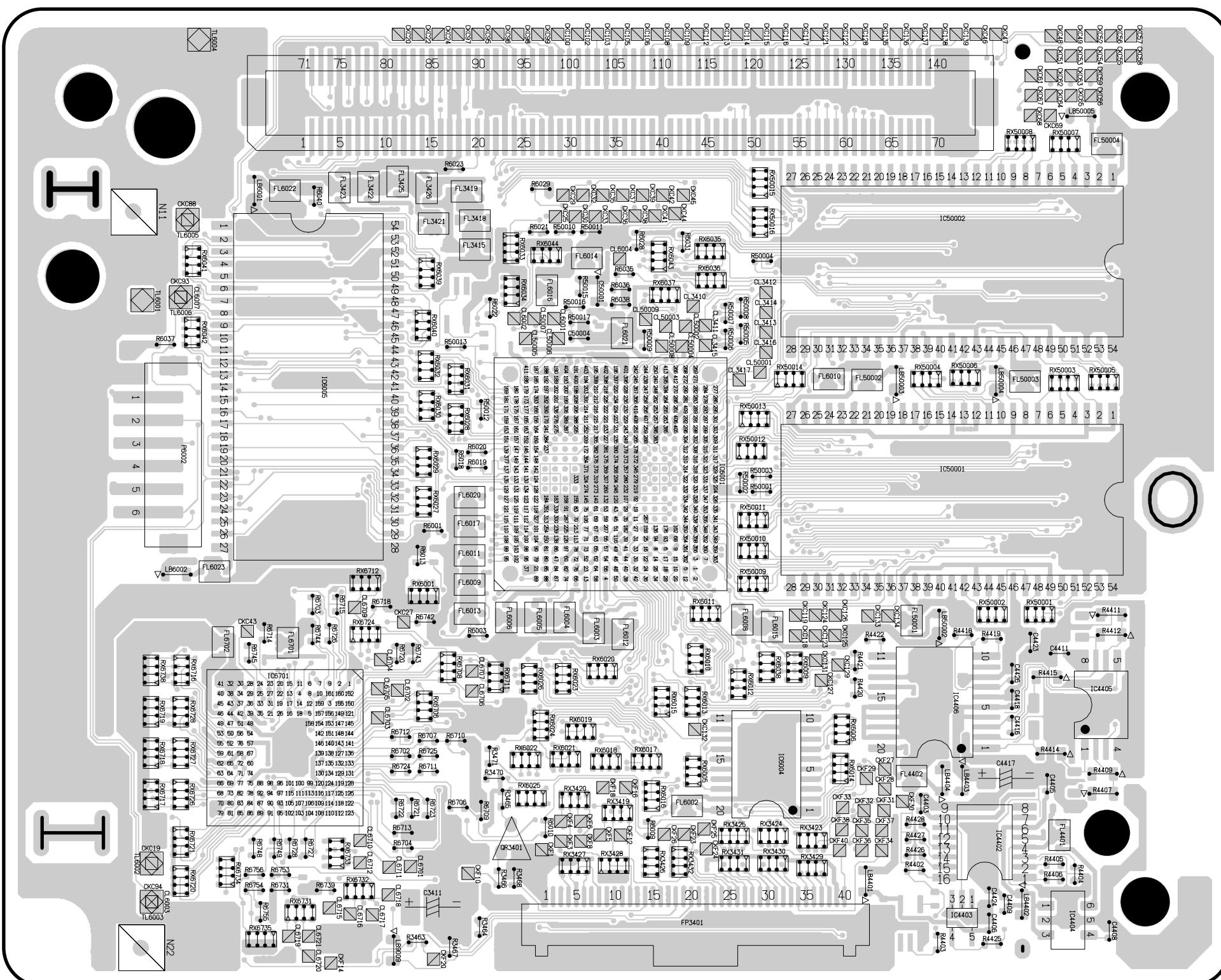
(COMPONENT SIDE)

OVERVIEW



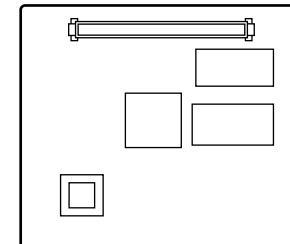
DMR-E53EG, E55EB/EG/EBL/EP  
Digital P.C.B. (Component side)  
REP3717CJ: E53EG  
REP3717C: E55EG  
RFKBE55EB: E55EB  
RFKBE55EBL: E55EBL  
RFKBE55EP: E55EP

## Digital P.C.B.



(FOIL SIDE)

OVERVIEW

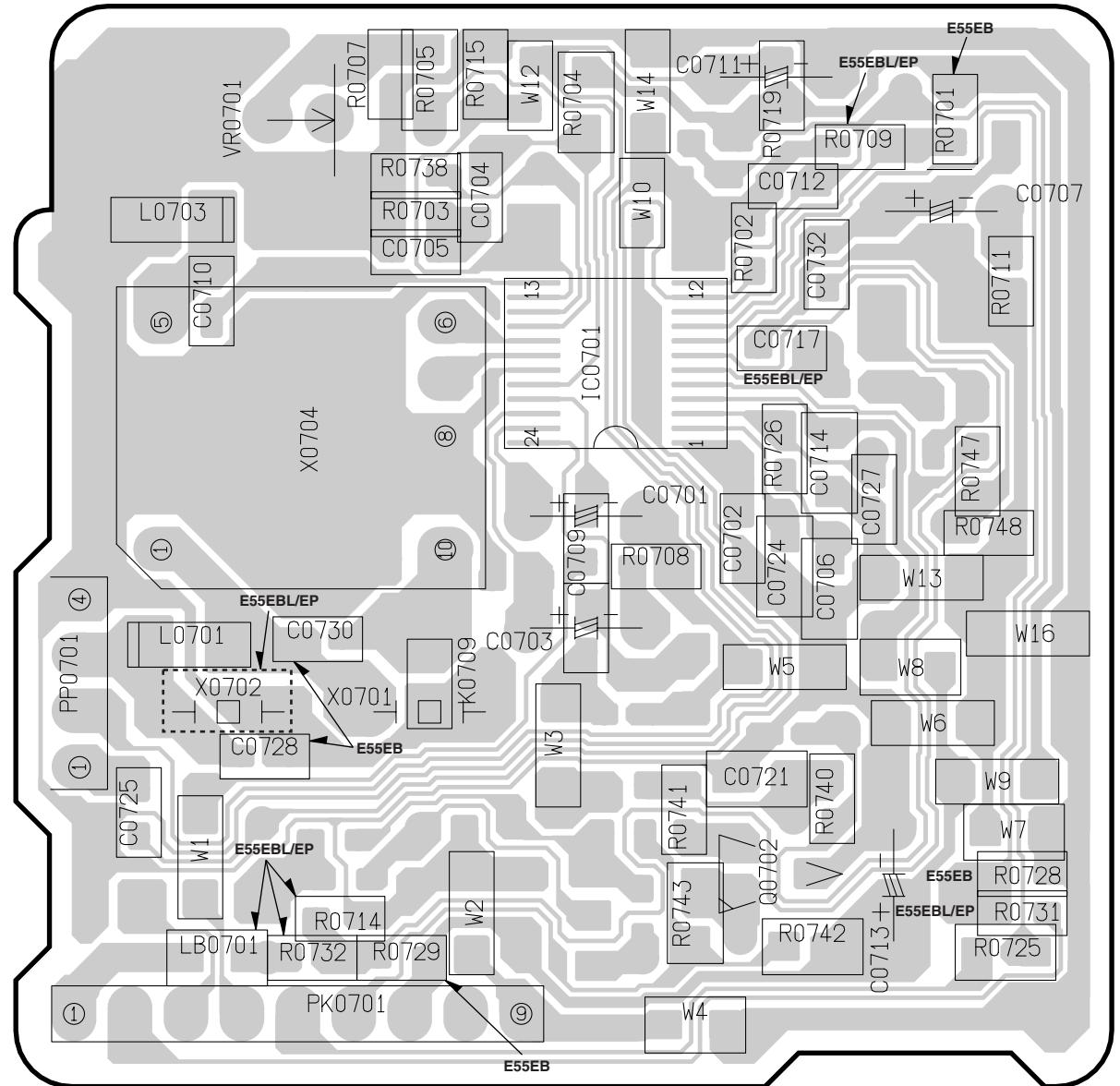


DMR-E53EG, E55EB/EG/EBL/EP  
Digital P.C.B. (Foil side)  
REP3717CJ: E53EG  
REP3717C: E55EG  
RFKBE55EB: E55EB  
RFKBE55EBL: E55EBL  
RFKBE55EP: E55EP

1 2 3 4 5

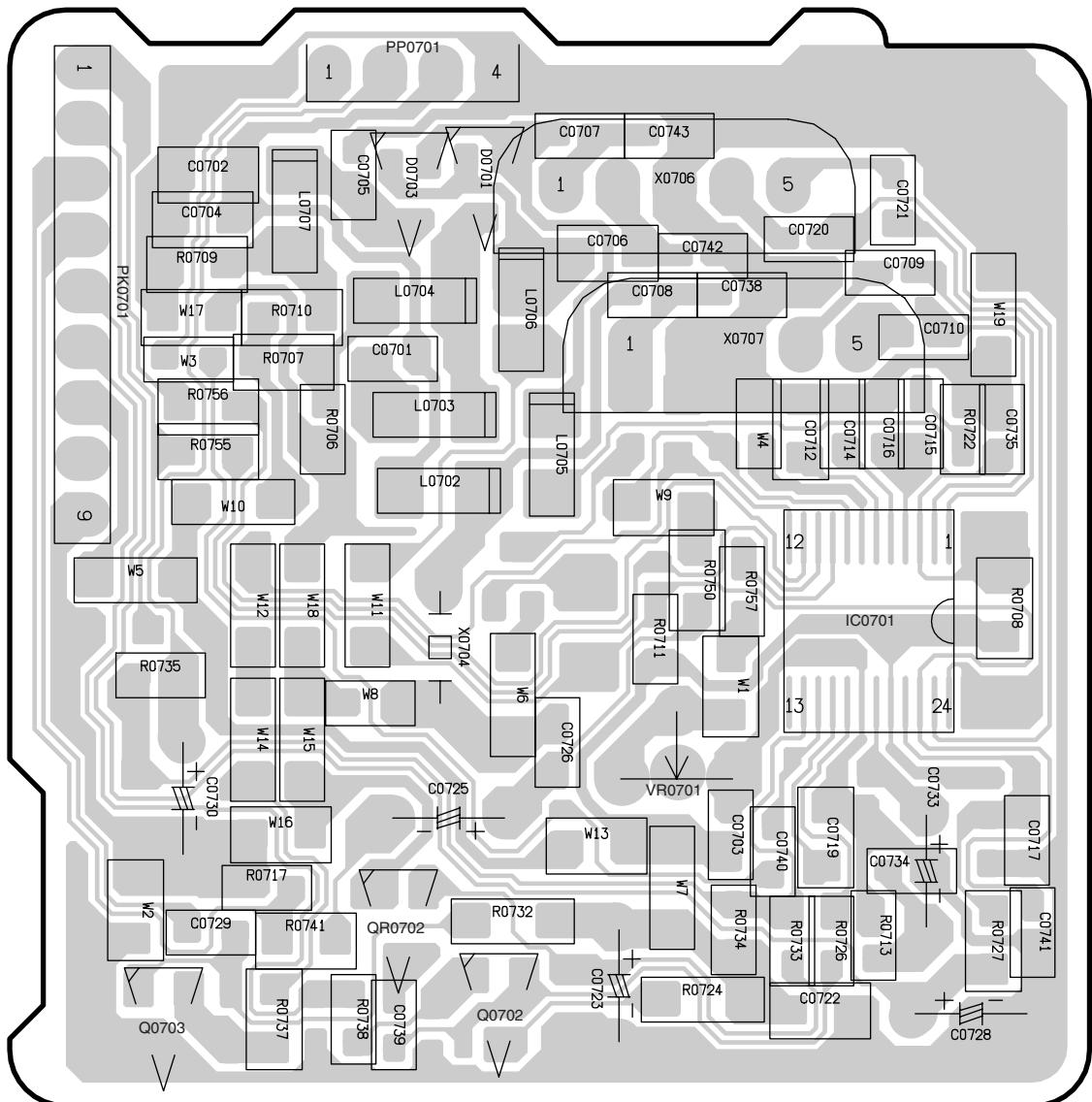
Integrated Circuit		Digital P.C.B.																																	
IC3401	C-2	C	CKC88	C-1	F	CKG22	C-1	C	CL6714	A-4	C	FL3429	C-4	C	C4415	A-2	C	R4420	B-4	F	R50002	B-3	F	RX6010	B-3	F									
IC3402	B-4	C	CKC93	C-1	F	CKG23	C-2	C	CL6715	A-2	F	FL3431	B-4	C	C4416	B-4	F	R4421	B-4	F	R50003	B-3	F	RX6011	B-3	F									
IC3404	C-3	C	CKC94	A-1	F	CKG25	C-2	C	CL6716	A-2	F	FL3433	B-4	C	C4417	A-4	F	R4422	B-4	F	R50004	C-3	F	RX6012	B-3	F									
IC3406	B-4	C	CKC95	D-2	F	CKG26	C-1	C	CL6717	A-2	F	FL3434	C-2	C	C4418	B-4	F	R4425	A-4	F	R50005	C-3	F	RX6013	B-3	F									
IC3408	B-3	C	CKC96	D-2	F	CKG27	C-2	C	CL6718	A-2	F	FL3435	B-2	C	C4421	A-3	C	R4426	A-4	F	R50006	C-3	F	RX6014	A-4	F									
IC3409	B-4	C	CKC97	D-2	F	CKG29	C-2	C	CL6719	A-2	F	FL4401	A-4	F	C4423	B-4	F	R4427	A-4	F	R50007	C-3	F	RX6015	B-3	F									
IC4402	A-4	F	CKC99	D-3	F	CKG31	C-2	C	CL6721	A-2	F	FL6001	B-2	C	C4426	B-4	F	R6001	B-2	F	R50009	C-3	F	RX6017	A-3	F									
IC4403	A-4	F	CKC100	D-3	F	CKG33	C-2	C	CL6722	A-3	C	FL6002	A-3	C	C6001	C-3	C	R6002	C-3	C	R50010	C-3	F	RX6018	A-3	F									
IC4404	A-4	F	CKC102	D-3	F	CKG34	C-1	C	CL50001	C-3	F	FL6003	B-3	F	C6002	A-1	C	R6003	B-2	F	R50011	C-3	F	RX6019	B-3	F									
IC4405	B-4	F	CKC103	D-3	F	CKG35	C-2	C	CL50002	C-3	F	FL6004	B-3	F	C6003	C-3	C	R6004	B-2	C	R50012	C-2	F	RX6020	B-3	F									
IC4406	B-4	F	CKC105	D-3	F	CKG37	C-2	C	CL50003	C-3	F	FL6005	B-3	F	C9001	C-2	C	R6005	B-2	C	R50013	C-2	F	RX6021	A-3	F									
IC6001	B-3	F	CKC106	D-3	F	CKG38	C-1	C	CL50004	C-3	F	FL6006	B-2	F	C9002	C-2	C	R6006	B-2	C	R50015	C-3	F	RX6022	A-3	F									
IC6002	C-3	C	CKC108	D-3	F	CKG39	C-2	C	CL50005	C-3	F	FL6008	B-3	F	C50001	C-3	F	R6007	B-2	C	R50016	C-3	F	RX6023	B-3	F									
IC6003	B-2	C	CKC109	D-3	F	CKG41	C-2	C	CL50006	C-3	F	FL6009	B-2	F	C50002	C-3	C	R6008	B-2	C	R50017	C-3	F	RX6024	B-3	F									
IC6004	A-3	F	CKC112	D-3	F	CKG42	B-1	C	CL50007	C-3	F	FL6010	C-4	F	C50004	C-3	F	R6009	A-3	F	R50018	C-1	C	RX6025	A-3	F									
IC6005	C-2	F	CKC113	D-3	F	CKG45	B-2	C	CL50008	C-3	F	FL6011	B-2	F	C50005	B-1	C	R6010	A-3	F	R50019	C-1	C	RX6026	B-3	F									
IC6701	B-2	F	CKC114	D-3	F	CKG47	B-2	C	CL50009	C-3	F	FL6012	B-3	F	Resistor		R6013	B-2	F	R50020	C-1	C	RX6027	B-2	F										
IC6702	A-3	C	CKC115	D-3	F	CKG48	B-1	C	TL6001	C-1	F	FL6013	B-2	F	R3405	C-4	C	R6018	B-2	F	R50021	C-1	C	RX6028	C-2	F									
IC50001	B-4	F	CKC116	D-3	F	CKG50	B-1	C	TL6002	A-1	F	FL6014	C-3	F	R3407	C-2	C	R6019	B-2	F	R50022	C-1	C	RX6029	B-2	F									
IC50002	C-4	F	CKC117	D-3	F	CKG52	B-1	C	TL6003	A-1	F	FL6015	B-3	F	R3409	D-2	C	R6020	C-2	F	R50023	C-1	C	RX6030	C-2	F									
Transistor		CKC118		B-3	F	CKG58	B-1	C	TL6004	D-1	F	FL6016	C-3	F	R3410	D-2	C	R6021	C-2	F	R50024	C-1	C	RX6031	C-2	F									
Q6001	B-2	C	CKC119	B-3	F	CKG62	B-1	C	TL6005	C-1	F	FL6017	B-2	F	R3411	D-2	C	R6022	C-2	F	R50025	C-1	C	RX6032	C-2	F									
Q6002	B-2	C	CKC121	D-4	F	CKG65	B-2	C	TL6006	C-1	F	Connector		FL6020	B-2	F	R3412	D-3	C	R6023	C-2	F	R50026	C-1	C	RX6033	C-2	F							
Q6701	C-2	C	CKC122	D-4	F	CKG66	B-1	C	FP3401		A-3	F	FL6021	C-3	F	R3414	B-4	C	R6028	C-3	F	R50027	C-1	C	RX6034	C-2	F								
Q6702	B-2	C	CKC123	B-4	F	CKG68	B-1	C	P6002	C-1	F	FL6022	C-2	F	R3415	C-1	C	R6029	C-3	F	R50028	C-1	C	RX6035	C-3	F									
Q6703	C-2	C	CKC124	B-4	F	CKG69	B-2	C	P6003	B-1	F	FL6023	B-1	F	R3416	C-3	C	R6031	C-3	F	R50029	C-1	C	RX6036	C-3	F									
Q6704	C-2	C	CKC125	B-4	F	CKG70	B-1	C	P9001	B-1	C	FL6024	B-2	F	R3417	C-3	C	R6035	C-3	F	R50030	C-1	C	RX6037	C-3	F									
Q6705	C-2	C	CKC126	B-4	F	CKG72	A-3	C	D3401		C-2	C	FL6025	B-1	F	R3418	C-3	C	R6036	C-3	F	R50031	D-1	C	RX6038	B-3	F								
Q50001	C-1	C	CKC127	B-4	F	CKG74	B-2	C	D3402	D-3	C	FL6026	B-4	F	R3419	C-4	C	R6037	C-1	F	R50032	C-1	C	RX6039	C-2	F									
Q50002	C-1	C	CKC128	D-4	F	CKG75	B-1	C	D3403	C-3	C	FL6027	B-4	F	R3420	C-3	C	R6038	C-3	F	R50033	C-1	C	RX6040	C-2	F									
Q50003	C-1	C	CKC129	B-4	F	CKG78	A-3	C	D4401	A-1	C	FL6028	C-4	F	Crystal Oscillator		FL6029	B-1	F	R3421	C-3	C	R6040	C-2	F	R50034	C-1	C	RX6041	C-1	F				
Q50004	C-1	C	CKC131	B-4	F	CKG79	C-2	C	X3401	C-4	C	FL6029	C-4	F	R3422	C-4	C	FL6030	A-2	F	R50035	C-1	C	RX6042	C-1	F									
Q50005	C-1	C	CKC132	B-3	F	CKG82	A-1	C	X3402	C-4	C	FL6030	D-5	F	R3423	C-4	C	FL6031	B-2	F	RX3401	D-3	C	RX6043	C-3	F									
Transistor-resistor	CKC133		B-4	F	CKG83	B-2	C	Coil		FL6031	C-3	C	FL6032	C-3	C	R3427	B-4	C	FL6034	A-2	F	RX3402	D-3	C	RX6044	C-3	F								
QR3401	A-2	F	CKC134	B-4	F	CL3401	C-3	C	LB3404	A-4	C	FL6034	C-3	C	R3430	C-3	C	R6706	A-2	F	RX3403	C-3	C	RX6706	B-2	F									
Test Point	CKC135		D-4	F	CL3402	C-3	C	LB3405	B-3	C	Capacitor		FL6034	D-4	C	R6707	B-2	F	RX3404	B-4	C	RX6708	B-2	F											
CKC19	A-1	F	CKC136	D-4	F	CL3403	D-2	C	LB3408	C-2	C	C3401	B-5	C	R3442	D-3	C	R6709	A-2	F	RX3405	B-4	C	RX6711	B-2	F									
CKC20	D-2	F	CKC137	D-4	F	CL3404	D-2	C	LB3409	B-2	C	C3402	D-2	C	R3443	A-4	C	R6710	B-2	F	RX3406	B-3	C	RX6712	B-2	F									
CKC22	D-2	F	CKC138	D-4	F	CL3405	D-2	C	LB4401	A-4	F	C3403	D-2	C	R3444	D-3	C	R6711	A-2	F	RX3407	B-3	C	RX6716	B-1	F									
CKC24	D-2	F	CKC139	D-4	F	CL3406	D-2	C	LB4402	A-4	F	C3404	C-2	C	R3445	B-4	C	R6712	B-2	F	RX3408	D-4	C	RX6717	A-1	F									
CKC25	C-3	F	CKF1	A-3	F	CL3407	D-2	C	LB4403	A-4	F	C3405	C-2	C	R3447	C-4	C	R6713	A-2	F	RX3409	D-3	C	RX6718	A-1	F									
CKC27	B-2	F	CKF3	A-3	F	CL3410	C-3	F	LB6001	C-2	F	C3406	B-4	C	R3448	C-4	C	R6714	B-2	F	RX3410	C-4	C	RX6719	B-1	F									
CKC29	C-3	F	CKF4	A-3	F	CL3411	C-3	F	LB6002	B-1	F	C3407	B-4	C	R3449	C-4	C	R6715	B-2	F	RX3411	D-4	C	RX6720	A-1	F									
CKC30	C-3	F	CKF5	A-3	F	CL3412	C-3	F	LB6002	B-1	F	C3408	C-4	C	R3450	C-4	C	R6716	B-2	F	RX3412	C-4	C	RX6721	A-1	F									
CKC32	C-3	F	CKF6	A-3	F	CL3413	C-3	F	LB9001	C-2	C	C3410	D-2	C	R3451	B-4	C	R6720	B-2	F	RX3413	C-4	C	RX6724	B-2	F									
CKC33	C-3	F	CKF8	A-3	F	CL3414	C-3	F	LB9006	B-1	C	C3411	D-2	C	R3452	B-4	C	R6721	A-2	F	RX3414	C-4	C	RX6726	A-1	F									
CKC35	C-3	F	CKF10	A-2	F	CL3415	C-3	F	LB9007	B-1	C	C3412	D-2	C	R3453	B-4	C	R6722	A-2	F	RX3415	C-3	C	RX6728	B-1	F									
CKC36	C-3	F	CKF12	A-2	F	CL3416</td																													

## **VIF Decoder P.C.B.**



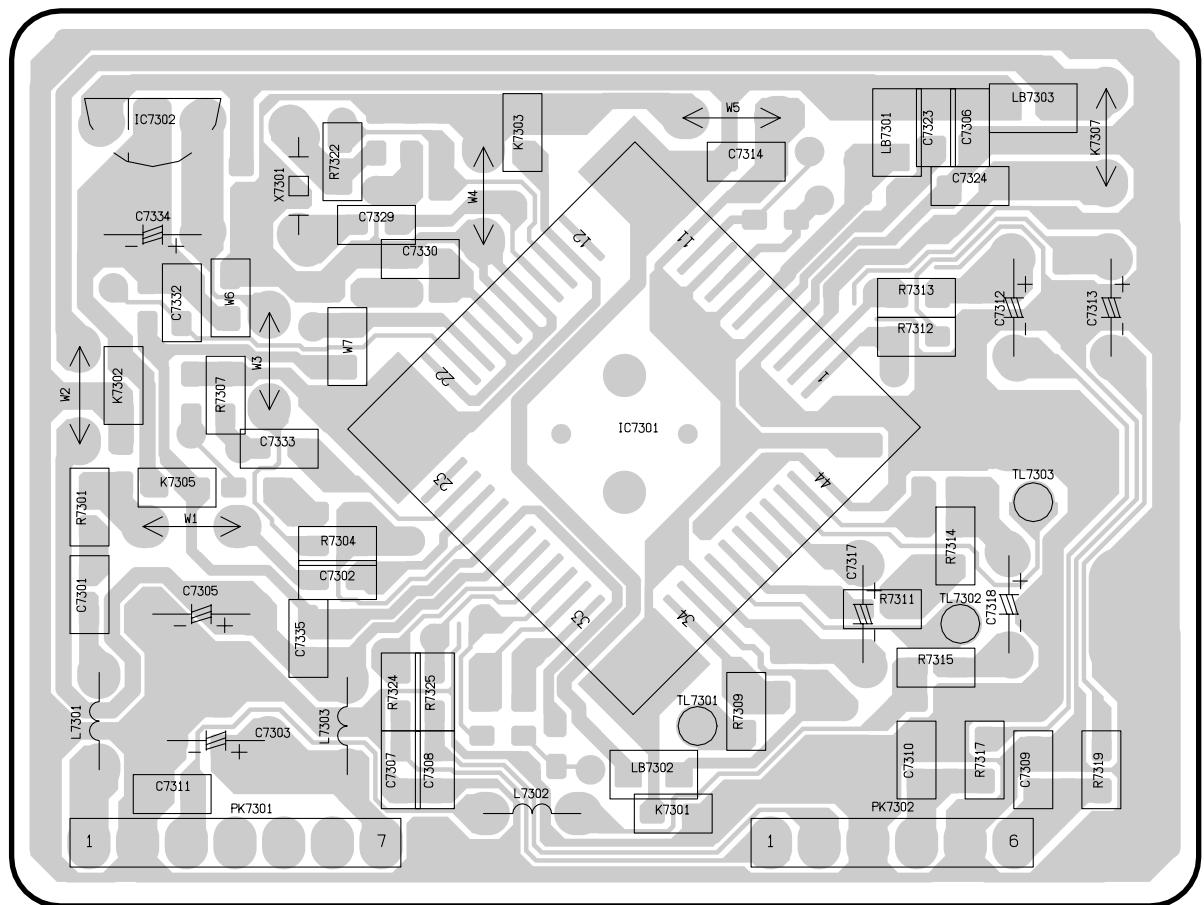
DMR-E55EB/EBL/EP  
VIF Decoder P.C.B.  
VEP07A71M: E55EB  
VEP07A71N: E55EBL/EP

## VIF Decoder P.C.B.



DMR-E53EG/E55EG  
VIF Decoder P.C.B. (VEP07A47B)

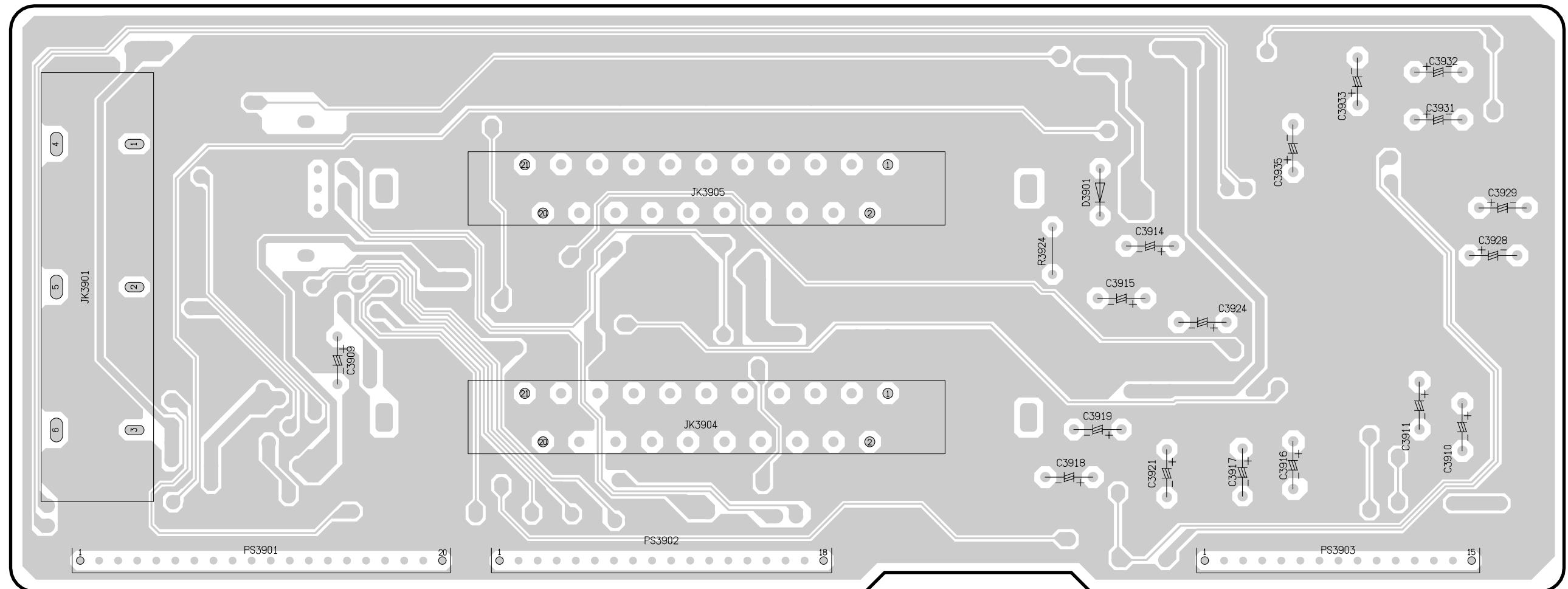
## Nicam Decoder P.C.B.



DMR-E53EG, E55EB/EG/EBL/EP  
Nicam Decoder P.C.B. (VEP07A51A)

Scart P.C.B.(Component Side)			
Diode	Capacitor		
D3901	C-7	C3916 A-8	
Connector		C3917 A-8	
JK3901	B-1	C3918 A-7	
JK3904	B-5	C3919 B-7	
JK3905	C-5	C3921 A-7	
PS3901	A-2	C3924 B-7	
PS3902	A-4	C3928 C-9	
PS3903	A-8	C3929 C-9	
Capacitor		C3931 C-9	
C3909	B-3	C3932 D-9	
C3910	B-9	C3933 D-8	
C3911	B-9	C3935 C-8	
C3914	C-7	Resistor	
C3915	B-7	R3924 C-7	

Scart P.C.B.

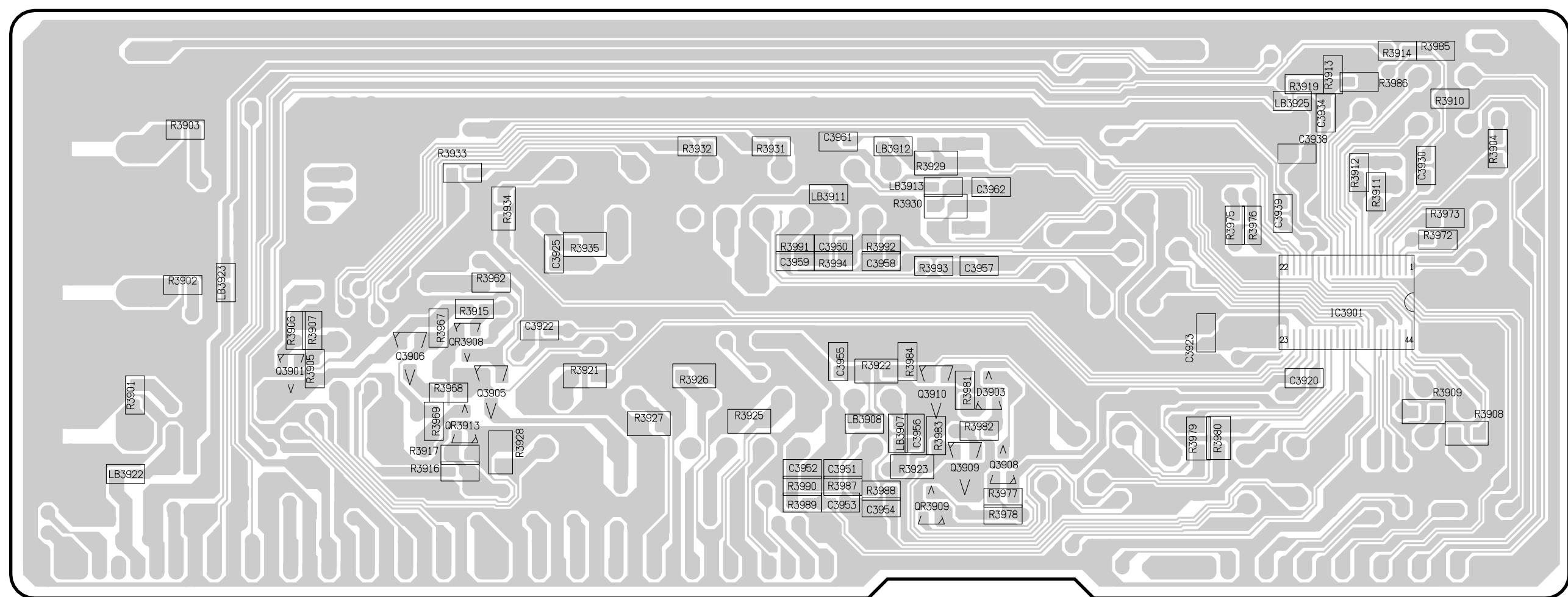


(COMPONENT SIDE)

DMR-E53EG, E55EB/EG/EBL/EP  
Scart P.C.B. (Component Side)  
(REP3682A)

Scart P.C.B.(Foil Side)															
Integrated Circuit		Coil		C3934	C-8	Resistor		R3916	B-3	R3935	C-4	R3983	B-6	R3984	B-6
IC3901	B-8	LB3907	B-6	C3938	C-8	R3901	B-1	R3917	B-3	R3962	C-3	R3984	B-6		
		LB3908	B-5	C3939	C-8	R3902	C-2	R3919	D-8	R3967	B-3	R3985	D-9		
		LB3911	C-5	C3951	B-5	R3903	C-2	R3921	B-4	R3968	B-3	R3986	D-8		
		LB3912	C-6	C3952	B-5	R3904	C-9	R3922	B-6	R3969	B-3	R3987	A-5		
		LB3913	C-6	C3953	A-5	R3905	B-2	R3923	B-6	R3972	C-9	R3988	A-6		
		LB3922	B-1	C3954	A-6	R3906	B-2	R3925	B-5	R3973	C-9	R3989	A-5		
		LB3923	C-2	C3955	B-5	R3907	B-2	R3926	B-5	R3975	C-7	R3990	A-5		
		LB3925	D-8	C3956	B-6	R3908	B-9	R3927	B-4	R3976	C-8	R3991	C-5		
				C3957	C-6	R3909	B-9	R3928	B-3	R3977	A-6	R3992	C-6		
				C3958	C-6	R3910	D-9	R3929	C-6	R3978	A-6	R3993	C-6		
				C3959	C-5	R3911	C-8	R3930	C-6	R3979	B-7	R3994	C-5		
				C3960	C-5	R3912	C-8	R3932	C-5	R3980	B-7				
				C3961	C-5	R3914	D-8	R3933	C-3	R3981	B-6				
				C3962	C-6	R3915	B-3	R3934	C-4	R3982	B-6				

Scart P.C.B.



(FOIL SIDE)

DMR-E53EG, E55EB/EG/EBL/EP  
Scart P.C.B. (Foil Side)  
(REP3682A)

# 19 Exploded Views

[TOP](#) [PREVIOUS](#) [NEXT](#)

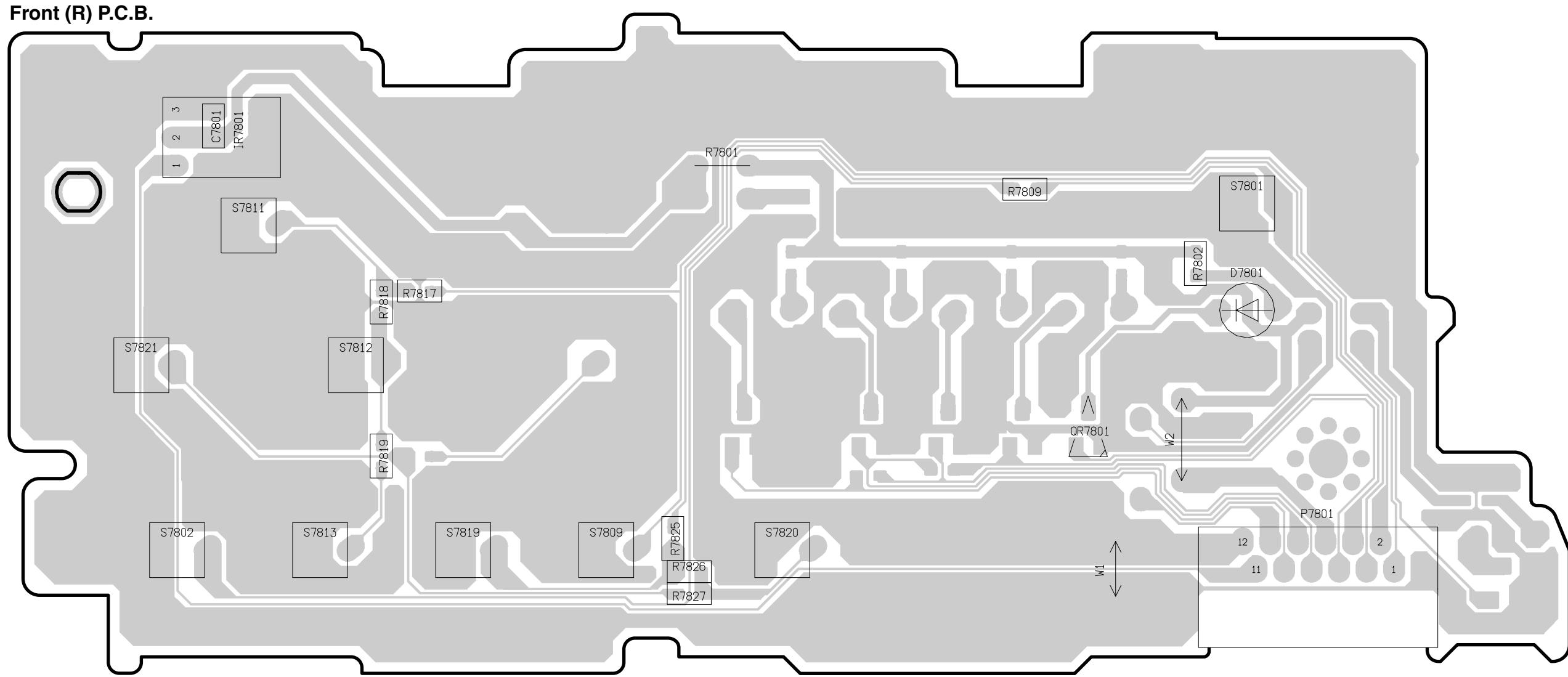
[19.1 Casing Parts & Mechanism Section 1](#)

[19.2 Casing Parts & Mechanism Section 2](#)

[19.3 Packing & Accessories Section](#)

[TOP](#) [PREVIOUS](#) [NEXT](#)

**Front (R) P.C.B.**



DMR-E53EG, E55EB/EG/EBL/EP  
Front (R) P.C.B.  
(REP3713A)

# 19.1 Casing Parts& Mechanism Section 1

[TOP](#) [PREVIOUS](#) [NEXT](#)



[TOP](#) [PREVIOUS](#) [NEXT](#)

## 19.2 Casing Parts& Mechanism Section 2

[TOP](#) [PREVIOUS](#) [NEXT](#)



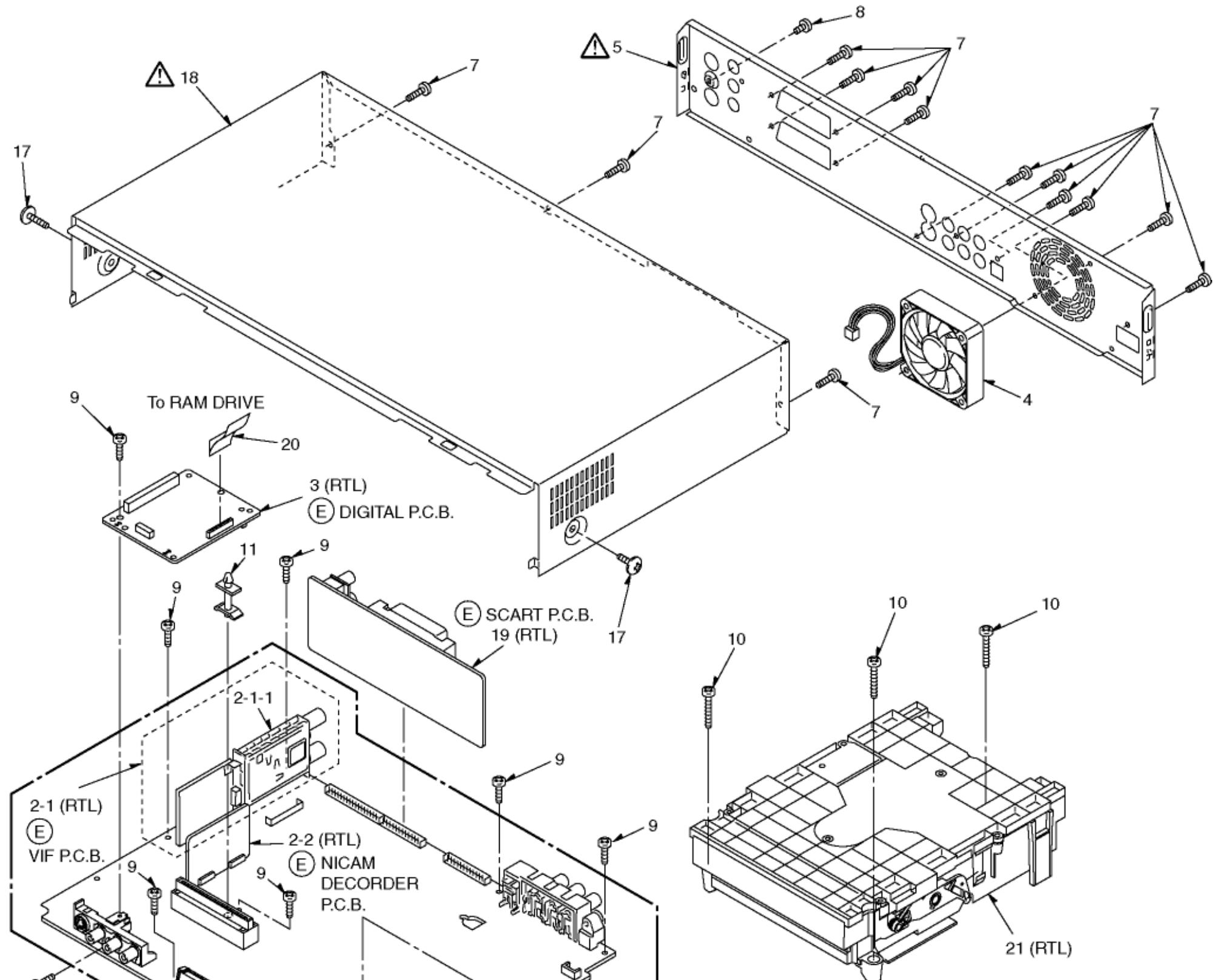
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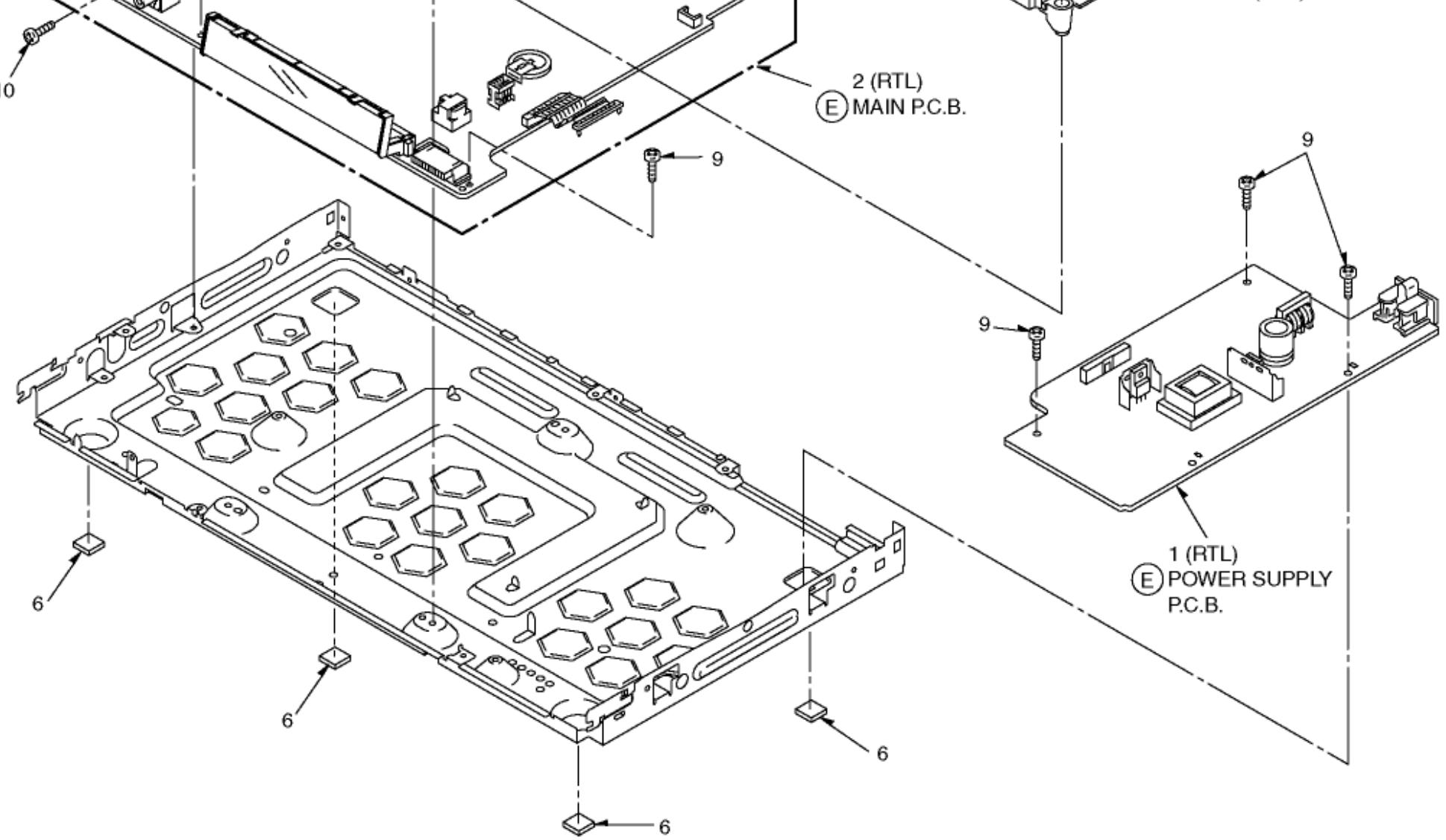
# 19.3 Packing& Accessories Section

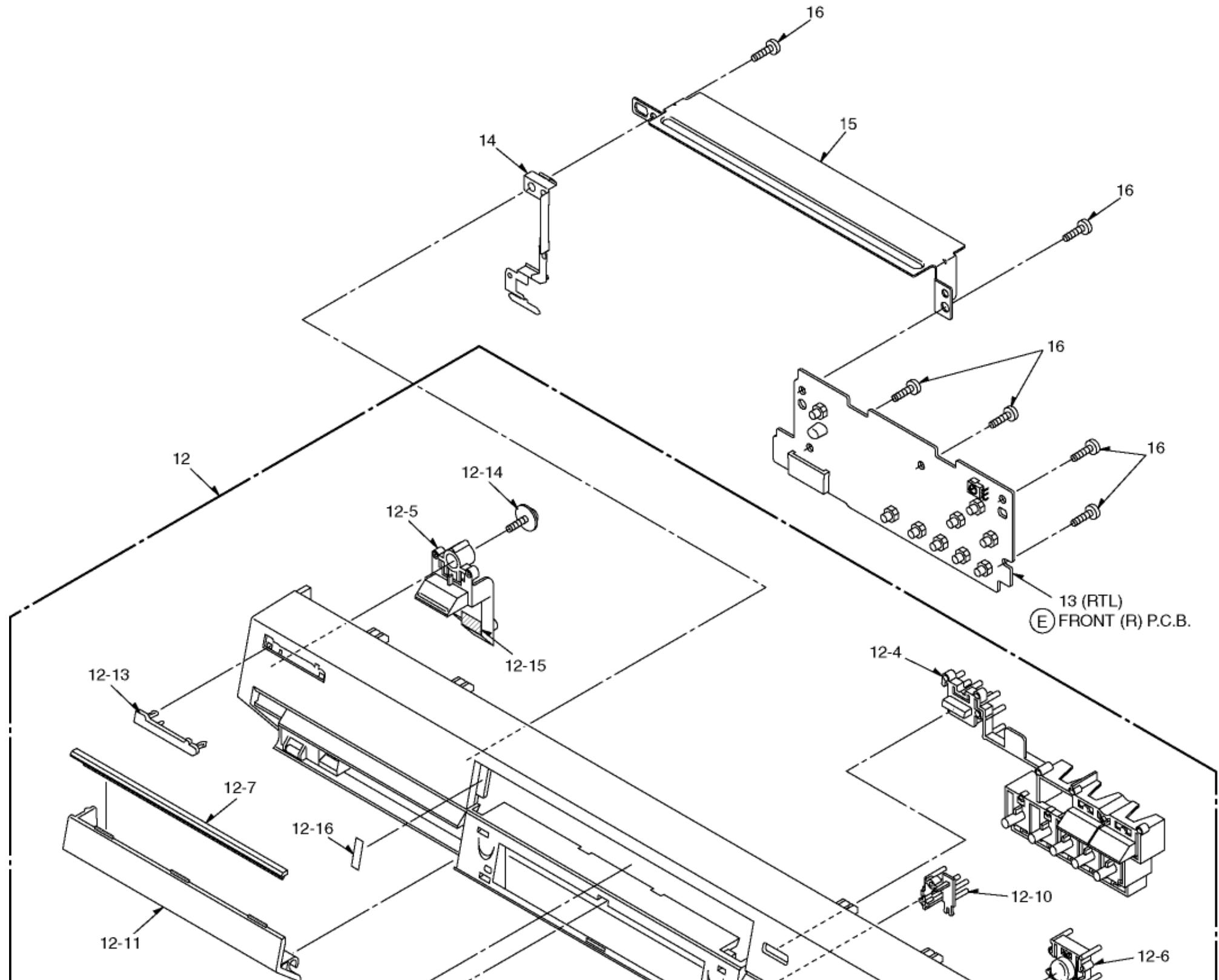
[TOP](#) [PREVIOUS](#) [NEXT](#)

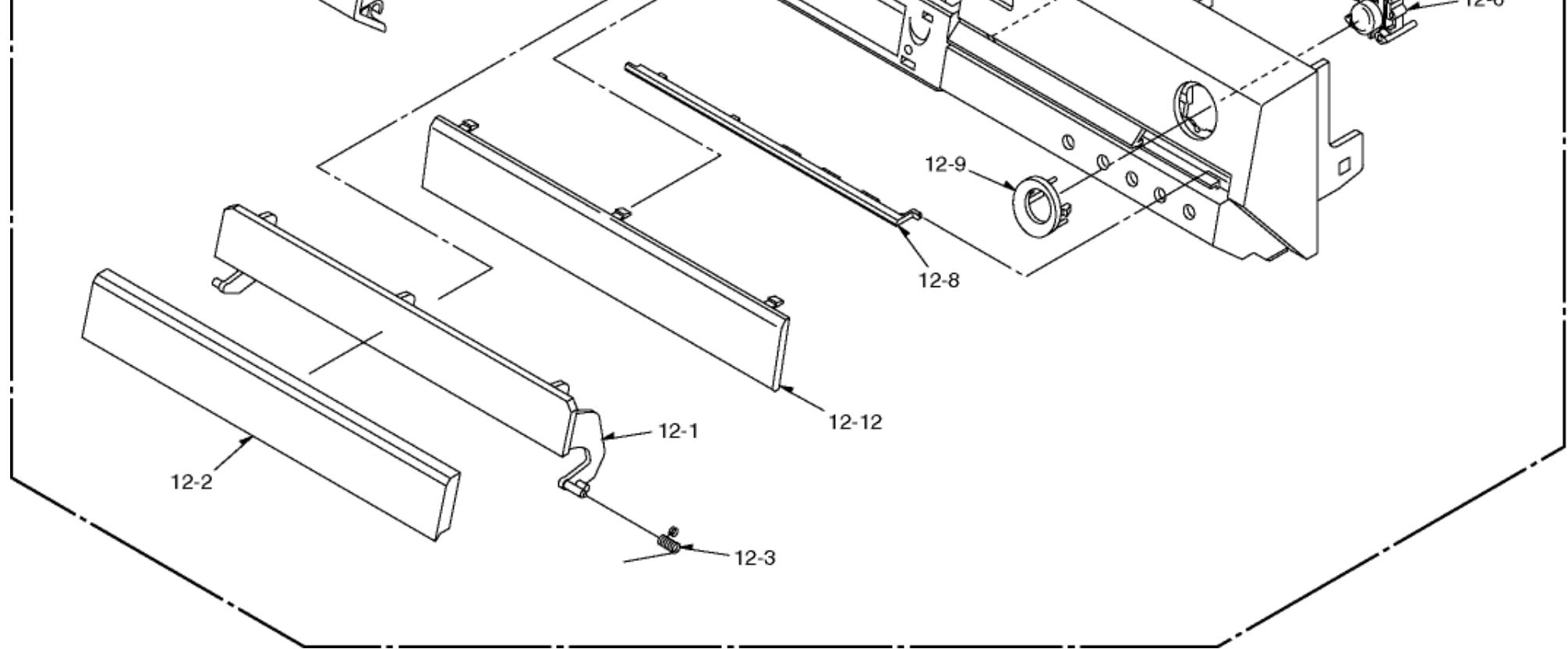


[TOP](#) [PREVIOUS](#) [NEXT](#)









# 20 Replacement Parts List

[TOP](#) [PREVIOUS](#) [NEXT](#)

## Notes:

\*Important safety notice:

Components identified by  mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufactures specified parts shown in the parts list.

\*Warning: This product uses a laser diode. Refer to caution statements.

\*Capacity values are in microfarads (  $\mu$  F) unless specified otherwise, P=Pico-farads (pF), F=Farads (F).

\*Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M=1,000k (OHM).

\*The marking (RTL) indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.

\*“<IA>”-“<IF>”, marks in Remarks indicate languages of instruction manuals. [<IA>: English/Spanish,

<IB>: German/Italian, <IC>:French/Netherlands, <ID>: Swedish/Danish, <IE>: English, <IF>: Polish]

\*All parts except parts mentioned [AVC-SPC] in the Remarks column are supplied from PAVCG.

Parts mentioned [AVC-SPC] are supplied from PAVC-CSG (AVC-SPC).

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	01	CASING/ACCESSORY/PACKING		
1	ETXMM506E4F	POWER SUPPLY P.C.B.	1	(RTL) 
2	REP3664A	MAIN P.C.B.	1	(RTL)EG,E53

2	REP3664B	MAIN P.C.B.	1	(RTL)EB
2	REP3664J	MAIN P.C.B.	1	(RTL)EBL,EP
<u>2-1</u>	VEP07A47B	VIF P.C.B.	1	(RTL)EG,E53
2-1	VEP07A71M	VIF P.C.B.	1	(RTL)EB
2-1	VEP07A71N	VIF P.C.B.	1	(RTL)EBL,EP
<u>2-1-1</u>	VMP4471	VIF ANGLE	1	
<u>2-2</u>	VEP07A51A	NICOM DECODER P.C.B.	1	(RTL)
<u>3</u>	REP3717C	DIGITAL P.C.B.	1	EG
3	RFKBE55EB	DIGITAL P.C.B.	1	EB
3	RFKBE55EBL	DIGITAL P.C.B.	1	EBL
3	RFKBE55EP	DIGITAL P.C.B.	1	EP
3	REP3717CJ	DIGITAL P.C.B.	1	E53
<u>4</u>	L6FAKCCE0002	FAN MOTOR	1	
<u>5</u>	RGR0347C-G	REAR PANEL	1	EG 
5	RGR0347C-J	REAR PANEL	1	EB 
5	RGR0347C-K	REAR PANEL	1	EBL 
5	RGR0347C1S	REAR PANEL	1	EP 
5	RGR0347C1Z	REAR PANEL	1	E53 
<u>6</u>	RKA0166-T	LEG RUBBER	4	
7	XTBS3+8JFZ1	SCREW	12	EG
7	XTBS3+8JFZ1	SCREW	14	EB,EBL,EP,E53
8	XSN3+4FZ	SCREW	1	
9	RHD30111	SCREW	11	
10	RHD30115	SCREW	5	
<u>11</u>	VMX1922	PCB SPACER	1	
<u>12</u>	RYP1224B-KJ	FRONT PANEL ASS'Y1	1	EGK
12	RYP1224B-S	FRONT PANEL ASS'Y1	1	EP
12	RYP1224B-SJ	FRONT PANEL ASS'Y1	1	EGS
12	RYP1224C-S	FRONT PANEL ASS'Y1	1	EB,EBL
12	RYP1224F-S	FRONT PANEL ASS'Y1	1	E53
<u>12-1</u>	RKF0690-K	TRAY DOOR	1	
<u>12-2</u>	RGK1777-Q	TRAY ORNAMENT	1	
<u>12-3</u>	VMB3410	BLINDER SPRING	1	

<u>12-4</u>	RGU2290A-K	OPERATION BUTTON	1	(K)
12-4	RGU2290A-S	OPERATION BUTTON	1	(S)
<u>12-5</u>	RGU2289-K	POWER BUTTON	1	(K)
12-5	RGU2289-S	POWER BUTTON	1	(S)
<u>12-6</u>	RGU2291A-Q	REC BUTTON	1	
<u>12-7</u>	RGK1774-S	FRONT ORNAMENT(L)	1	
<u>12-8</u>	RGK1775-S	FRONT ORNAMENT(R)	1	
<u>12-9</u>	RGK1773-S	REC BUTTON RING	1	
<u>12-10</u>	RGL0658-Q	PANEL LIGHT	1	
<u>12-11</u>	RKF0689B-K	PANEL DOOR	1	(K)
12-11	RKF0689B-S	PANEL DOOR	1	(S)
<u>12-12</u>	RGK1776-Q	FL ORNAMENT	1	
<u>12-13</u>	VGB0560	PANASONIC BADGE	1	
12-14	RHD26016	SCREW	1	
<u>12-15</u>	RMX0299	DAMPER SHEET	1	
<u>12-16</u>	RMX0302	DOOR DAMPER	1	
<u>13</u>	REP3713A	FRONT(R) P.C.B.	1	(RTL)
<u>14</u>	RMC0595	EARTH PLATE	1	
<u>15</u>	RMA1778	FRONT ANGLE	1	
16	XTBS26+10J	SCREW	6	
17	RHD30113	SCREW	2	(S)
17	RHD30113-K	SCREW	2	(K)
<u>18</u>	RKM0508-KJ	TOP COVER	1	(K) 
18	RKM0508-SJ	TOP COVER	1	(S) 
<u>19</u>	REP3682A	SCART P.C.B.	1	(RTL)
<u>20</u>	VWJ1724	FFC(42P)	1	
<u>21</u>	VXY1855	RAM DRIVE UNIT	1	(RTL)<AVC-SPC> COMPATIBLE WITH VXY1794
<u>A1</u>	EUR7720KB0	REMOTE CONTROL ASS'Y	1	EB,EBL
A1	EUR7720KA0	REMOTE CONTROL ASS'Y	1	EG,EP,E53
<u>A1-1</u>	UR77EC2003A	BATTERY COVER	1	
<u>A2</u>	K2KA6CA00001	AV CORD	1	

<u>A3</u>	RJA0044-3C	AC CORD	1	EB,EBL
A3	RJA0043-1C	AC CORD	1	EG,EP,E53
<u>A4</u>	K1TWACC00001	RF COAXIAL CABLE	1	
<u>A5</u>	VPK2246	ACCESSORY BOX	1	
<u>A6</u>	RQF5516	FAN BAG ASS'Y	1	EG,E53
A6	RQF5521	FAN BAG ASS'Y	1	EB,EBL
A6	RQF5524	FAN BAG ASS'Y	1	EP
<u>A6-1</u>	RQT7535-E	OPERATING INSTRUCTIONS	1	<IA>EG,E53
A6-1	RQT7536-D	OPERATING INSTRUCTIONS	1	<IB>EG,E53
A6-1	RQT7537-H	OPERATING INSTRUCTIONS	1	<IC>EG,E53
A6-1	RQT7538-J	OPERATING INSTRUCTIONS	1	<ID>EG,E53
A6-1	RQT7540-B	OPERATING INSTRUCTIONS	1	<IE>EB,EBL
A6-1	RQT7541-R	OPERATING INSTRUCTIONS	1	<IF>EP
<u>A6-4</u>	XZB24X37C04X	POLYETHYLENE BAG(F.B)	1	
<u>A7</u>	RPQ1594	PAD	1	
<u>PC1</u>	RPG6989	PACKING CASE	1	EB,EBL
PC1	RPG6991	PACKING CASE	1	EP
PC1	RPG7187	PACKING CASE	1	E53
PC1	RPGD0012	PACKING CASE	1	EGS
PC1	RPGD0013	PACKING CASE	1	EGK
<u>PC2</u>	RPND0005A	CUSHION(L)	1	
<u>PC3</u>	RPND0005B	CUSHION(R)	1	
<u>PC4</u>	VZZ0025-A	POLYETHYLENE BAG(UNIT)	1	
	02	REP3664A/B/J		(MAIN P.C.B.)
C1503	F1H1A105A028	10V 1U	1	
C1504	F1H1C104A042	16V 0.1U	1	
C1505	F2A1A470A388	10V 47U	1	
C1512	F1H0J1050012	6.3V 1U	1	
C1513	F1H1A105A028	10V 1U	1	
C1514	F1H0J1050012	6.3V 1U	1	

C1515	F1H1C104A042	16V 0.1U	1	
C1516	F1H1A105A028	10V 1U	1	
C1518	F2A1A470A388	10V 47U	1	
C1519	F1H1C104A042	16V 0.1U	1	
C1520	F1H1A105A028	10V 1U	1	
C1521	F1H0J1050012	6.3V 1U	1	
C1522	ECJ1VC1H331J	50V 330P	1	
C1523	F1H1A105A028	10V 1U	1	
C1524	F2A1A470A388	10V 47U	1	
C1527,28	F1H0J1050012	6.3V 1U	2	
C1531	F2A1A470A388	10V 47U	1	
C1533,34	F1H0J1050012	6.3V 1U	2	
C1537	F2A1E1010067	25V 100U	1	
C1539	F2A0J102A256	6.3V 1000U	1	
C1540	F2A1E4700048	25V 47U	1	
C1541	F2A1A471A211	10V 470U	1	
C1543	F2A1E221A210	25V 220U	1	
C3003	F1H1H1030006	50V 0.01U	1	
C3004	ECEA0JKA221B	6.3V 220U	1	
C3005	F1H1C333A041	16V 0.033U	1	
C3006	F1H1C104A042	16V 0.1U	1	
C3007	F1H1H1030006	50V 0.01U	1	
C3009,10	F1H1H1030006	50V 0.01U	2	
C3012-17	F1H1H1030006	50V 0.01U	6	
C3018	ECEA0JKA101B	6.3V 100U	1	
C3019-21	F1H1H1030006	50V 0.01U	3	
C3022	ECEA0JKA220B	6.3V 22U	1	
C3023	ECEA0JKN470B	6.3V 47U	1	
C3024	ECEA0JKA220B	6.3V 22U	1	
C3025-29	ECEA0JKN470B	6.3V 47U	5	
C3030,31	F1H1H1030006	50V 0.01U	2	
C3032	ECEA0JKA331Q	6.3V 330U	1	
C3033	ECEA1CKA220B	16V 22U	1	
C3034	ECEA0JKA331Q	6.3V 330U	1	

C3035	ECEA1CKA220B	16V 22U	1	
C3036	ECEA0JKA331Q	6.3V 330U	1	
C3037	ECEA1CKA220B	16V 22U	1	
C3038	F1H1C104A042	16V 0.1U	1	
C3039	F1H0J1050012	6.3V 1U	1	
C3040	F1H1H1030006	50V 0.01U	1	
C3041	ECEA0JKA221B	6.3V 220U	1	
C3042	F1H0J1050012	6.3V 1U	1	
C3045,46	ECEA0JKN470B	6.3V 47U	2	
C3047	F1H1C104A042	16V 0.1U	1	
C3048	F2A0J102A016	6.3V 1000U	1	
C3049	ECEA0JKA101B	6.3V 100U	1	
C3051	F2A0J102A016	6.3V 1000U	1	
C3052	ECEA0JKA101B	6.3V 100U	1	
C3053	F2A0J102A016	6.3V 1000U	1	
C3054	ECEA0JKA101B	6.3V 100U	1	
C3055,56	ECEA0JKA331Q	6.3V 330U	2	
C3057-60	ECJ1VC1H471J	50V 470P	4	
C3061,62	F1H1H4700004	50V 47P	2	
C3064	F1H1C104A042	16V 0.1U	1	
C3065	F1H1H1030006	50V 0.01U	1	
C3066,67	F1H0J1050012	6.3V 1U	2	
C3069-71	F1H1H1030006	50V 0.01U	3	
C4001,02	F2A1H4R7A236	50V 4.7U	2	EB
C4003,04	F1H1H1030006	50V 0.01U	2	
C4005-07	F2A1H1R0A236	50V 1U	3	
C4008	F2A1C221A019	16V 220U	1	
C4010	F2A1H1R0A236	50V 1U	1	
C4011	F2A1H100A236	50V 10U	1	EB
C4012	ECJ2VB1E104K	25V 0.1U	1	
C4012	F1J1E104A081	25V 0.1U	1	EB,EBL,EP,E53
C4013	F2A1H1R0A236	50V 1U	1	EB
C4014	F2A1H100A236	50V 10U	1	
C4015	F2A1H1R0A236	50V 1U	1	EB

C4017	F2A1H100A236	50V 10U	1	
C4019	F2A1C100A019	16V 10U	1	
C4021	F2A1C100A019	16V 10U	1	
C4022	F1H1C104A042	16V 0.1U	1	
C4023	F2A1H1R0A236	50V 1U	1	
C4024	F2A1C471A236	16V 470U	1	
C4025	F2A1H1R0A236	50V 1U	1	
C4026	F1H1C104A008	16V 0.1U	1	
C4027	F2A1H1R0A236	50V 1U	1	
C4029	F2A1C471A236	16V 470U	1	
C4030	F1H1C104A008	16V 0.1U	1	
C4031	F2A1H1R0A236	50V 1U	1	
C4033,34	F2A1C4700011	16V 47U	2	
C4039,40	ECJ1VC1H100D	50V 10P	2	
C4052	F1H1C104A008	16V 0.1U	1	
C4053	F1H1C104A042	16V 0.1U	1	
C4054	F2A0J470A179	6.3V 47U	1	
C4055	F1H1C104A008	16V 0.1U	1	
C4056	F2A0J471A247	6.3V 470U	1	
C4057	F1J1H680A025	50V 68P	1	
C4059	ECQV1H104JL3	50V 0.1U	1	
C4060	F1J1H680A025	50V 68P	1	
C4061	F1H1C104A008	16V 0.1U	1	
C4062	F2A1A221A206	10V 220U	1	
C4063,64	F2A1C4700011	16V 47U	2	
C4065	F1H1C104A008	16V 0.1U	1	
C4067	F2A0J470A179	6.3V 47U	1	
C4069	F1H1C104A008	16V 0.1U	1	
C4070	F2A1A221A206	10V 220U	1	
C4072	F2A1A221A206	10V 220U	1	
C4074,75	F1H1C104A008	16V 0.1U	2	
C4076	F2A1C471A236	16V 470U	1	
C4077	F1H1C104A008	16V 0.1U	1	
C4082,83	ECJ2VC1H561J	50V 560P	2	

C4091	F1H1C104A008	16V 0.1U	1	
C4092	F2A1C221A019	16V 220U	1	
C7401	F2A1C471A236	16V 470U	1	
C7402	F1H1H1030006	50V 0.01U	1	
C7403	ECEA0JKA470B	6.3V 47U	1	EG
C7403	F2A0J470A179	6.3V 47U	1	EB,EBL,EP,E53
C7404	ECEA0JKA470B	6.3V 47U	1	
C7405,06	F1H1C104A042	16V 0.1U	2	
C7407	F1H1H1030006	50V 0.01U	1	
C7408	F1H1C104A042	16V 0.1U	1	
C7409	F1H1H1030006	50V 0.01U	1	
C7410	F1H1H1030006	50V 0.01U	1	EB
C7411,12	F1H1H1030006	50V 0.01U	2	
C7414	ECEA1HKA010B	50V 1U	1	
C7415-17	ECEA0JKA470B	6.3V 47U	3	
C7418,19	F1H1H330A736	50V 33P	2	
C7420	F1H1C104A042	16V 0.1U	1	
C7421,22	F1H1H1030006	50V 0.01U	2	
C7423	ERJ3GEY0R00V	1/10W 0	1	EG,EBL,EP,E53
C7424	ECEA0JKA470B	6.3V 47U	1	
C7425	F1H1H1010005	50V 100P	1	EBL,EP
C7425	F1H1H330A736	50V 33P	1	EG,E53
C7426	F1H1C104A042	16V 0.1U	1	
C7427	F1H1H222A219	50V 2200P	1	
C7428	ECJ2VB1E103K	25V 0.01U	1	
C7428	F1J1H1030007	50V 0.01U	1	EB,EBL,EP,E53
C7429	ECJ1VB1H332K	50V 3300P	1	EB
C7429	F1H1C104A042	16V 0.1U	1	EG,EBL,EP,E53
C7429	F1H1H332A219	50V 3300P	1	EB
C7431-33	ECEA0JKA470B	6.3V 47U	3	
C7434	F1H1H330A736	50V 33P	1	EG,E53
C7439	F1H1C104A042	16V 0.1U	1	
C7440	ECEA0JKA470B	6.3V 47U	1	
C7441	F1H1C104A042	16V 0.1U	1	

C7502-04	F2A0J470A012	6.3V 47U	3	
C7507	F4D55473A005	CAPACITOR	1	
C7508,09	ECJ1VC1H221J	50V 220P	2	
C7511	F1H1C104A008	16V 0.1U	1	
C7512	F1H1H4700004	50V 47P	1	
C7513	ECJ1VC1H471J	50V 470P	1	
C7514	F1H1H4700004	50V 47P	1	
C7515	ECJ1VC1H471J	50V 470P	1	
C7516,17	F1H1C104A042	16V 0.1U	2	
C7525	F1H1H1010005	50V 100P	1	
C7526	F1H1C104A042	16V 0.1U	1	
C7527	F2A0J470A012	6.3V 47U	1	
C7528	F1H1C104A008	16V 0.1U	1	
C7529	F2A0J470A012	6.3V 47U	1	
C7546	F1H1C104A042	16V 0.1U	1	
C7550	F1H1H1030006	50V 0.01U	1	
C7551	F2A1H100A248	50V 10U	1	
C7552	ECJ1VF1H104Z	50V 0.1U	1	
C7555	F2A1E221A210	25V 220U	1	
C7556	F2A1C221A243	16V 220U	1	
C7558	F2A1V470A190	35V 47U	1	
C7559	ECQB1H223KF3	50V 0.022U	1	
C7560	F2A1H100A248	50V 10U	1	
C7562	F1J0J475A008	6.3V 4.7U	1	
C7563	F1H1H1010005	50V 100P	1	
C7565	F1J0J475A008	6.3V 4.7U	1	
C7566,67	F1H1C104A042	16V 0.1U	2	
C7568	F2A0J101A012	6.3V 100U	1	
C7569	F1H1C104A008	16V 0.1U	1	
C7580-82	ECJ1VC1H100D	50V 10P	3	
C7583	F1H1H1010005	50V 100P	1	
C7584,85	ECJ1VC1H180J	50V 18P	2	
C7586	ECJ1VC1H220J	50V 22P	1	
C7587	ECJ1VC1H180J	50V 18P	1	

C7588	F1H1H1030006	50V 0.01U	1	
C7589	F1H1C104A008	16V 0.1U	1	
C7590	F2A0J470A012	6.3V 47U	1	
C7592,93	ECJ1VC1H100D	50V 10P	2	
C7594	F2A0J470A012	6.3V 47U	1	
C7595	F1H1H1030006	50V 0.01U	1	
C7596	F1H1H4700004	50V 47P	1	
C7597	F1H1H1030006	50V 0.01U	1	
C7598	F1H1H4700004	50V 47P	1	
C7599	F1H1C104A042	16V 0.1U	1	
C7600	F1H1H4700004	50V 47P	1	
C7601	F1H1C104A042	16V 0.1U	1	
C7602	F1H1H1030006	50V 0.01U	1	
C7603	F2A0J470A012	6.3V 47U	1	
C7604	F1H1C104A042	16V 0.1U	1	
C7605,06	ECJ1VC1H100D	50V 10P	2	
C7607	F1H1H1030006	50V 0.01U	1	
C7608	F2A0J470A012	6.3V 47U	1	
C7609,10	ECJ1VC1H100D	50V 10P	2	
C7611-13	F1H1H1030006	50V 0.01U	3	
C7618	F1H1C104A042	16V 0.1U	1	
C7620	F1H1H1030006	50V 0.01U	1	
C7626	F1H1H1030006	50V 0.01U	1	
C7633	F2A0J101A012	6.3V 100U	1	
C7636	F1H0J1050012	6.3V 1U	1	
C7637	F1H1H1030006	50V 0.01U	1	
C7639	F1H1C104A008	16V 0.1U	1	
C7646	F1H1H1030006	50V 0.01U	1	
C7650	F1H1H1030006	50V 0.01U	1	
C7652	F1H1C104A042	16V 0.1U	1	
D1501	B0EADD000002	DIODE	1	
D4001	B0EADD000002	DIODE	1	
D4005,06	MA3Z142D0LG	DIODE	2	

D7401	B0EADD000002	DIODE	1	
D7402	MAZ4300NMF	DIODE	1	
D7403	B0EADD000002	DIODE	1	
D7501	MAZ4240NMF	DIODE	1	
D7502	B0AAGM000007	DIODE	1	
D7504,05	MA2C18500E	DIODE	2	
D7506	MAZ4300NLF	DIODE	1	
D7507	B0ACCK000005	DIODE	1	
D7508	B0JDCE000002	DIODE	1	
DP7501	A2BD00000074	FL DISPLAY TUBE	1	
DU7402	ENG47328G1Y	TUNER	1	EB
DU7402	ENG47329G1Y	TUNER	1	EBL,EP
DU7402	ENV57G04H6	TUNER PACK	1	EG,E53
IC1502	C0DBAHG00013	IC	1	
IC1505	C0CBCDD00008	IC	1	
IC1506	C0CBCDD00002	IC	1	
IC1507	C0CBCDD00006	IC	1	
IC1508	C0DBEGD00002	IC	1	
IC1509	C0DBEFG00003	IC	1	
IC1510	C0DBEGG00003	IC	1	
IC3001	C1AB00001918	IC	1	EB,EG,EP,E53
IC3001	C1AB00001979	IC	1	EBL
IC3002	C1AB00001486	IC	1	
IC3003	C9ZB00000377	IC	1	
IC4001	C1AB00001920	IC	1	
IC4005	C0JBAB000178	IC	1	
IC4006	K7AAAB000013	IC	1	
IC4007	C0JBAA000134	IC	1	
IC4009	C0ABBB000216	IC	1	
IC4010	C0DBZJE00003	IC	1	
IC4011	C0CBCDD00002	IC	1	
IC4012	C0ABBB000118	IC	1	

IC4013	AN78L09M-E1	IC	1	
IC7401	C0DBZJE00003	IC	1	
IC7402	C0DBCHD00002	IC	1	
IC7403	C0DBZHGX00016	IC	1	
IC7501	C2CBJG000382	IC	1	EG
IC7501	C2CBJG000434	IC	1	EB,EBL,EP,E53
IC7502	C0HBB0000033	IC	1	
IC7503	C0EBJ0000110	IC	1	
IC7504	C3EBJC000038	IC	1	
IC7505	C0EBE0000194	IC	1	
IC7506	C0ABBA000073	IC	1	
IC7508	C0EBE0000218	IC	1	
IP7501	D4FAR4000001	IC PROTECTOR	1	
JK3001	K1U822B00003	JACK,AV IN/OUT	1	
JK7501	K1U415B00001	JACK,AV3	1	
K7401	ERJ3GEY0R00V	1/10W 0	1	EBL,EP
K7508	ERJ3GEY0R00V	1/10W 0	1	
K7510	ERJ3GEY0R00V	1/10W 0	1	
K7511	ERJ3GEY0R00V	1/10W 0	1	EB,EBL,EP,E53
K7514,15	ERJ3GEY0R00V	1/10W 0	2	
L1501	G0A220G00018	COIL 22UH	1	
L4002	ELESN220KA	COIL 22UH	1	
L7401	G0A220G00018	COIL 22UH	1	
L7402	G0C270JA0019	COIL 27UH	1	EB
L7403	G0C2R2JA0019	COIL 2.2UH	1	
LB1501	J0JHC0000032	COIL	1	
LB1503	J0JHC0000032	COIL	1	
LB1504,05	J0JKB0000003	COIL	2	
LB3002-04	J0JHC0000032	COIL	3	
LB3005	J0JBC0000011	COIL	1	

LB3006	J0JGC0000020	COIL	1	
LB3007	J0JBC0000011	COIL	1	
LB3008	J0JGC0000020	COIL	1	
LB4001	J0JGC0000020	COIL	1	
LB7401	J0JCC0000120	COIL	1	EB
LB7402	J0JHC0000032	COIL	1	
LB7403	J0JHC0000032	COIL	1	EB
LB7404-09	J0JHC0000032	COIL	6	
LB7501,02	ERJ3GEY0R00V	1/10W 0	2	
LB7503	J0JKB0000037	COIL	1	
LB7504	J0JGC0000020	COIL	1	
LB7506,07	J0JGC0000020	COIL	2	
LB7508	J0JCC0000060	COIL	1	
LB7509-11	J0JGC0000020	COIL	3	
LB7512-14	J0JCC0000103	COIL	3	
LB7515,16	J0JBC0000011	COIL	2	
P1501	K1KA08A00427	CONNECTOR(8P)	1	
P1502	K1KA23A00003	CONNECTOR(23P)	1	
P7402	K1KA88A00002	CONNECTOR(88P)	1	
P7503	K1KA03A00173	CONNECTOR(3P)	1	
P7504	K1KB12B00049	CONNECTOR(12P)	1	
PP7401	K1KA20A00203	CONNECTOR(20P)	1	
PP7402	K1KA18A00041	CONNECTOR(18P)	1	
PP7403	K1KA15A00064	CONNECTOR(15P)	1	
PP7501	K1KA08A00163	CONNECTOR(8P)	1	EG
PP7502	K1KA12A00136	CONNECTOR(12P)	1	EG
Q3006,07	2SB1218A0L	TRANSISTOR	2	
Q3009,10	2SB1218A0L	TRANSISTOR	2	
Q4004	2SB1218A0L	TRANSISTOR	1	
Q4006-09	2SD132800L	TRANSISTOR	4	
Q7401	2SD1819ARL	TRANSISTOR	1	
Q7402	2SB1218A0L	TRANSISTOR	1	

Q7404-06	2SD0601ARN	TRANSISTOR	3	
Q7503	2SD1994BR1VT	TRANSISTOR	1	
Q7505	2SB0709ARL	TRANSISTOR	1	
Q7506	2SD1819ARL	TRANSISTOR	1	
Q7507	2SB0709ARL	TRANSISTOR	1	
Q7508	2SD1819ARL	TRANSISTOR	1	
Q7511	2SD0601ARN	TRANSISTOR	1	
Q7512	2SD0874A0L	TRANSISTOR	1	
Q7513	2SD132800L	TRANSISTOR	1	EG
Q7517	2SD0601ARN	TRANSISTOR	1	
Q7518	2SD1819ARL	TRANSISTOR	1	
QR3002,03	UNR521200L	TRANSISTOR	2	
QR4002-05	UNR521100L	TRANSISTOR	4	
QR4012	UNR511300L	TRANSISTOR	1	
QR7401-03	UNR521300L	TRANSISTOR	3	
QR7404	UNR511400L	TRANSISTOR	1	
QR7405	UNR521300L	TRANSISTOR	1	
QR7406	UNR211500L	TRANSISTOR	1	EB
QR7407	UNR221500L	TRANSISTOR	1	EB
QR7501	UNR511300L	TRANSISTOR	1	
QR7502	UNR521200L	TRANSISTOR	1	
QR7503	UNR521400L	TRANSISTOR	1	
QR7507	UNR511300L	TRANSISTOR	1	EG
QR7508	UNR521300L	TRANSISTOR	1	EG,E53
R1501	ERJ3GEYJ822V	1/10W 8.2K	1	
R1502	ERJ3GEYJ332V	1/10W 3.3K	1	
R1503	ERJ3GEYJ101V	1/10W 100	1	
R1503	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R1504	ERDS2TJ271T	1/4W 270	1	
R1506	ERDS2TJ271T	1/4W 270	1	
R1507	ERJ3RED330V	1/16W 33	1	
R1508	ERJ3RBD201V	1/16W 200	1	
R1509	ERJ3RBD102V	1/16W 1K	1	

R1510	ERJ3RED220V	1/16W 22	1	
R1511	ERJ3RBD182V	1/16W 1.8K	1	
R1512	ERJ3RBD202V	1/16W 2K	1	
R1515,16	ERDS2TJ271T	1/4W 270	2	
R3026	ERJ3RED150V	1/16W 15	1	
R3027,28	ERJ3RBD471V	1/16W 470	2	
R3029	ERJ3RBD104V	1/16W 100K	1	
R3030	ERJ3GEYJ105V	1/10W 1M	1	
R3034,35	ERJ3GEY0R00V	1/10W 0	2	EBL,EP
R3037	ERJ3GEYJ102V	1/10W 1K	1	
R3038	ERJ3GEYJ101V	1/10W 100	1	
R3038	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R3044	ERJ3GEYJ330V	1/10W 33	1	
R3045,46	ERJ3GEYJ221V	1/10W 220	2	
R3047	ERJ3RBD153V	1/16W 15K	1	
R3048	ERJ3RBD182V	1/16W 1.8K	1	
R3049	ERJ3RED330V	1/16W 33	1	
R3050	ERJ3RBD182V	1/16W 1.8K	1	
R3051	ERJ3RED330V	1/16W 33	1	
R3052,53	ERJ3GEYJ102V	1/10W 1K	2	
R3054-59	ERJ6GEYJ750V	1/8W 75	6	
R3060	ERJ3GEYJ750V	1/10W 75	1	
R4001	ERJ6GEYJ102V	1/8W 1K	1	
R4002	ERJ3GEYJ103V	1/10W 10K	1	
R4004	ERJ3GEYJ103V	1/10W 10K	1	
R4005,06	ERJ3GEY0R00V	1/10W 0	2	EG,EBL,EP,E53
R4006	ERJ3GEYJ225V	1/10W 2.2M	1	EB
R4007	ERJ3GEY0R00V	1/10W 0	1	
R4008,09	ERJ3GEYJ823V	1/10W 82K	2	
R4010	ERJ3GEYJ101V	1/10W 100	1	
R4010	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R4011	ERJ3GEYJ101V	1/10W 100	1	
R4011	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R4012	ERJ3GEYJ333V	1/10W 33K	1	

R4013	ERJ6GEYJ102V	1/8W 1K	1	
R4014	ERJ3GEYJ103V	1/10W 10K	1	
R4015	ERJ6GEYJ102V	1/8W 1K	1	
R4017	ERJ3GEYJ103V	1/10W 10K	1	
R4018	ERJ3GEY0R00V	1/10W 0	1	EG,EBL,EP,E53
R4019,20	ERJ3GEYJ473V	1/10W 47K	2	
R4021,22	ERJ3GEYJ823V	1/10W 82K	2	
R4023	ERJ6GEYJ102V	1/8W 1K	1	
R4046,47	D0HB752ZA002	1/10W 7.5K	2	
R4049	ERJ3GEY0R00V	1/10W 0	1	EB
R4052	D0HB103ZA002	1/10W 10K	1	EB
R4053	D0HB103ZA002	1/10W 10K	1	
R4054	D0HB103ZA002	1/10W 10K	1	EB
R4055	D0HB153ZA002	1/10W 15K	1	
R4056	D0HB103ZA002	1/10W 10K	1	
R4057	D0HB153ZA002	1/10W 15K	1	
R4060,61	ERJ3GEYJ103V	1/10W 10K	2	EG,EBL,EP,E53
R4066,67	D0HB103ZA002	1/10W 10K	2	
R4070	ERJ3GEYJ101V	1/10W 100	1	
R4070	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R4071	ERJ3GEYJ473V	1/10W 47K	1	
R4074	ERJ3GEYJ473V	1/10W 47K	1	
R4076	ERJ3GEYJ821V	1/10W 820	1	
R4077	ERJ3GEYJ101V	1/10W 100	1	
R4077	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R4078,79	ERJ3GEYJ272V	1/10W 2.7K	2	
R4080	ERJ3GEYJ101V	1/10W 100	1	
R4080	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R4081	ERJ3GEYJ821V	1/10W 820	1	
R4087	ERJ3GEYJ102V	1/10W 1K	1	
R4088,89	ERJ3GEYJ272V	1/10W 2.7K	2	
R4090	ERJ3GEYJ221V	1/10W 220	1	
R4093	ERJ3GEYJ221V	1/10W 220	1	
R4099	ERJ3GEYJ101V	1/10W 100	1	

R4099	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7401,02	ERJ3GEYJ103V	1/10W 10K	2	
R7403	ERJ3GEYJ392V	1/10W 3.9K	1	
R7404	ERJ3GEYJ472V	1/10W 4.7K	1	
R7405	ERDS2TJ471T	1/4W 470	1	
R7406	ERJ3GEYJ223V	1/10W 22K	1	
R7407	ERJ3GEYJ103V	1/10W 10K	1	
R7408	ERJ3GEYJ153V	1/10W 15K	1	
R7409	ERJ3GEYJ271V	1/10W 270	1	EB
R7410	ERJ3GEYJ100V	1/10W 10	1	EB
R7411	ERG2SJ471E	2W 470	1	
R7412	ERJ3GEYJ681V	1/10W 680	1	
R7413,14	ERJ3GEYJ271V	1/10W 270	2	
R7415,16	ERJ3GEYJ471V	1/10W 470	2	
R7417	ERG2SJ471E	2W 470	1	
R7418	ERJ3GEYJ221V	1/10W 220	1	EBL,EP
R7419	ERJ3GEYJ151V	1/10W 150	1	EG,E53
R7420	ERJ3GEY0R00V	1/10W 0	1	EB
R7420	ERJ3GEYJ102V	1/10W 1K	1	EBL,EP
R7420	ERJ3GEYJ151V	1/10W 150	1	EG,E53
R7421	ERJ3GEYJ101V	1/10W 100	1	
R7421	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7422	ERJ3GEYJ101V	1/10W 100	1	
R7422	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7423	ERJ3GEYJ562V	1/10W 5.6K	1	EB
R7427	ERJ3GEYJ102V	1/10W 1K	1	
R7428	ERJ3GEYJ333V	1/10W 33K	1	
R7429	ERJ3GEYJ223V	1/10W 22K	1	
R7430	ERJ3GEYJ102V	1/10W 1K	1	
R7431	ERJ3GEYJ333V	1/10W 33K	1	
R7432	ERJ3GEYJ223V	1/10W 22K	1	
R7433	ERJ3GEYJ102V	1/10W 1K	1	
R7434	ERJ3GEYJ333V	1/10W 33K	1	
R7435	ERJ3GEYJ223V	1/10W 22K	1	

R7436,37	ERJ3GEYJ221V	1/10W 220	2	EG,E53
R7438-42	ERJ3GEYJ220V	1/10W 22	5	
R7443	ERJ3GEYJ101V	1/10W 100	1	EG,E53
R7443	ERJ3GEYJ101Z	1/10W 100	1	E53
R7444	ERJ3GEY0R00V	1/10W 0	1	EB,EG,E53
R7444	ERJ3GEYJ681V	1/10W 680	1	EBL,EP
R7505	ERJ3RBD273V	1/16W 27K	1	
R7507	ERDS2TJ331T	1/4W 330	1	
R7508	ERDS2TJ5R6T	1/4W 5.6	1	
R7510	ERJ3GEYJ332V	1/10W 3.3K	1	
R7513	ERJ3GEYJ473V	1/10W 47K	1	
R7514	ERJ3GEYJ101V	1/10W 100	1	
R7514	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7516	ERJ3GEYJ102V	1/10W 1K	1	
R7517	ERJ3GEYJ104V	1/10W 100K	1	
R7518	ERJ3GEYJ392V	1/10W 3.9K	1	
R7519	ERJ3GEYJ102V	1/10W 1K	1	
R7520	ERJ3GEYJ104V	1/10W 100K	1	
R7521	ERJ3GEYG152V	1/10W 1.5K	1	
R7522	ERJ3GEYG562V	1/10W 5.6K	1	
R7523	ERJ3GEYG153V	1/10W 15K	1	
R7529,30	ERJ3GEYJ223V	1/10W 22K	2	
R7531	ERJ3GEYJ103V	1/10W 10K	1	
R7532	ERJ3GEYJ472V	1/10W 4.7K	1	
R7533	ERJ3GEYJ223V	1/10W 22K	1	
R7534	ERJ3GEYJ101V	1/10W 100	1	
R7534	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7535	ERJ3GEYJ101V	1/10W 100	1	
R7535	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7536	ERJ3GEYJ101V	1/10W 100	1	
R7536	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7537	ERJ3GEYJ101V	1/10W 100	1	
R7537	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7538	ERJ3GEYJ472V	1/10W 4.7K	1	

R7539	ERJ3GEYJ104V	1/10W 100K	1	
R7540	ERJ3GEYJ332V	1/10W 3.3K	1	
R7541	ERJ3GEY0R00V	1/10W 0	1	
R7542	ERJ3GEYJ103V	1/10W 10K	1	
R7543	ERJ3GEYJ101V	1/10W 100	1	
R7543	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7544	ERJ3GEYJ101V	1/10W 100	1	
R7544	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7545	ERJ3GEYJ101V	1/10W 100	1	
R7545	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7546,47	ERJ3GEYJ472V	1/10W 4.7K	2	
R7548	ERJ3GEYJ101V	1/10W 100	1	
R7548	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7549	ERJ3GEYJ511V	1/10W 510	1	
R7550,51	ERJ3GEYJ202V	1/10W 2K	2	
R7552	ERJ3GEYJ101V	1/10W 100	1	
R7552	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7553	ERJ3GEYJ472V	1/10W 4.7K	1	
R7554	ERJ3GEYJ101V	1/10W 100	1	
R7554	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7556	ERJ3GEYJ101V	1/10W 100	1	
R7556	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7557	ERJ3GEYJ101V	1/10W 100	1	
R7557	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7558	ERJ3GEYJ101V	1/10W 100	1	
R7558	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7559	ERJ3GEYJ101V	1/10W 100	1	
R7559	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7561	ERDS2TJ392T	1/4W 3.9K	1	
R7563	ERJ3GEYJ101V	1/10W 100	1	
R7563	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7569	ERJ3GEYJ101V	1/10W 100	1	
R7569	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7571	ERJ3GEYJ101V	1/10W 100	1	

R7571	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7572	ERJ3GEYJ101V	1/10W 100	1	
R7572	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7573	ERJ3GEYJ101V	1/10W 100	1	
R7573	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7574	ERJ3GEYJ101V	1/10W 100	1	
R7574	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7575	ERJ3GEYJ101V	1/10W 100	1	
R7575	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7576	ERJ3GEYJ101V	1/10W 100	1	
R7576	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7577	ERJ3GEYJ101V	1/10W 100	1	
R7577	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7578	ERJ3GEYJ101V	1/10W 100	1	
R7578	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7579,80	ERJ3GEYJ221V	1/10W 220	2	
R7581	ERJ3GEYG393V	1/10W 39K	1	
R7582	ERJ3GEYG433V	1/10W 43K	1	
R7583,84	ERJ3GEYJ473V	1/10W 47K	2	
R7585,86	ERJ3GEYJ223V	1/10W 22K	2	
R7588	ERJ3GEYJ472V	1/10W 4.7K	1	
R7589-91	ERJ3RBD822V	1/16W 8.2K	3	
R7593	ERJ3GEYJ103V	1/10W 10K	1	EG
R7594	ERJ3GEYJ223V	1/10W 22K	1	
R7595,96	ERJ3GEYJ473V	1/10W 47K	2	
R7597	ERJ3GEYJ153V	1/10W 15K	1	
R7598	ERJ3GEYJ181V	1/10W 180	1	
R7599	ERJ3GEYJ223V	1/10W 22K	1	
R7600,01	ERJ3GEYJ103V	1/10W 10K	2	
R7602	ERJ3GEYJ821V	1/10W 820	1	
R7603	ERJ3GEYJ183V	1/10W 18K	1	
R7604-06	ERJ3GEYJ750V	1/10W 75	3	
R7607	ERJ3GEYJ223V	1/10W 22K	1	
R7608	ERJ3GEYJ104V	1/10W 100K	1	

R7611	ERJ3GEYJ101V	1/10W 100	1	
R7611	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7612	ERJ3GEYJ101V	1/10W 100	1	
R7612	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7613	ERJ3GEYJ101V	1/10W 100	1	
R7613	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7620	ERJ3GEYJ223V	1/10W 22K	1	
R7621	ERJ3GEYJ101V	1/10W 100	1	
R7621	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7625	ERJ3GEYJ101V	1/10W 100	1	
R7625	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7626	ERJ3GEYJ101V	1/10W 100	1	
R7626	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7627	ERJ3GEYJ101V	1/10W 100	1	
R7627	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7628	ERJ3GEYJ101V	1/10W 100	1	
R7628	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7629	ERJ3GEYJ101V	1/10W 100	1	
R7629	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7630	ERJ3GEYJ101V	1/10W 100	1	
R7630	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7631,32	ERJ3GEYJ102V	1/10W 1K	2	
R7633	ERJ3RBD103V	1/16W 10K	1	
R7634	ERJ3GEYJ101V	1/10W 100	1	
R7634	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7635-37	ERJ3GEYJ103V	1/10W 10K	3	
R7638	ERJ3GEYJ472V	1/10W 4.7K	1	
R7639	ERJ3GEYJ473V	1/10W 47K	1	
R7640	ERJ3GEYJ225V	1/10W 2.2M	1	
R7641	ERJ3GEYJ273V	1/10W 27K	1	
R7642	ERJ3GEYJ224V	1/10W 220K	1	
R7643	ERJ3GEYJ104V	1/10W 100K	1	
R7644	ERJ3GEYJ221V	1/10W 220	1	
R7645	ERJ3GEYJ104V	1/10W 100K	1	

R7646	ERJ3GEYJ101V	1/10W 100	1	
R7646	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7647	ERJ3GEYJ101V	1/10W 100	1	
R7647	ERJ3GEYJ101Z	1/10W 100	1	EB,EBL,EP,E53
R7649	ERJ3GEY0R00V	1/10W 0	1	EG,E53
R7670	ERJ3GEYJ472V	1/10W 4.7K	1	EG,E53
S7501	K0F111B00044	SWITCH,POWER	1	
T7501	ETS13TB119AP	TRANSFORMER	1	
W500-05	ERJ3GEY0R00V	1/10W 0	6	
W507-23	ERJ3GEY0R00V	1/10W 0	17	
W529,30	ERJ3GEY0R00V	1/10W 0	2	
W534-37	ERJ3GEY0R00V	1/10W 0	4	
W538,39	ERJ6GEY0R00Z	1/8W 0	2	
W540-42	ERJ3GEY0R00V	1/10W 0	3	
X7501	H0D100500016	CRYSTAL OSCILLATOR	1	
X7502	H0A327200026	OSCILLATOR	1	
ZJ3001	K9ZZ00000424	EARTH ANGLE	1	
ZJ7401-04	K9ZZ00000424	EARTH ANGLE	4	
ZJ7501	K9ZZ00000424	EARTH ANGLE	1	
	03	VEP07A47B/VEP07A71M/N		(VIF P.C.B.)
C0701	ECEA1HKA010B	50V 1U	1	EB,EBL,EP
C0701	F1H1H1030007	50V 0.01U	1	EG,E53
C0702	ECJ2VC1H151J	50V 150P	1	EG,E53
C0702	ERJ3GEYJ102V	1/10W 1K	1	EB,EBL,EP
C0703	ECEA1HKA010B	50V 1U	1	EB,EBL,EP
C0703	F1H1H1030007	50V 0.01U	1	EG,E53
C0704	ECJ1VB1E683K	25V 0.0683U	1	EB,EBL,EP
C0704	ECJ2VC1H270J	50V 27P	1	EG,E53

C0705	F1H1E104A050	25V 0.1U	1	EB,EBL,EP
C0705	F1H1H1030007	50V 0.01U	1	EG,E53
C0706	ECJ2VB1H333K	50V 0.033U	1	EB,EBL,EP
C0706	ECJ2VF1H103Z	50V 0.01U	1	EG,E53
C0707	ECEA1HKAR47B	50V 0.47U	1	EB,EBL,EP
C0707,08	F1H1H1030007	50V 0.01U	2	EG,E53
C0709,10	F1H1H1030007	50V 0.01U	2	
C0711	ECEA1CKA220B	16V 22U	1	EB,EBL,EP
C0712	F1H1C104A008	16V 0.1U	1	EB,EBL,EP
C0712	F1J1C4740012	16V 0.47U	1	EG,E53
C0713	ECEA0JKA101B	6.3V 100U	1	EB,EBL,EP
C0714	F1H1H1030007	50V 0.01U	1	EG,E53
C0714	F1J1C1050030	16V 1U	1	EB,EBL,EP
C0715	F1H1H1030007	50V 0.01U	1	EG,E53
C0716	ECJ1VC1H391J	50V 390P	1	EG,E53
C0717	ECJ1VC1H180J	50V 18P	1	EBL,EP
C0717	F1H1H1030007	50V 0.01U	1	EG,E53
C0719	F1J1C4740012	16V 0.47U	1	EG,E53
C0720	F1H1H1030007	50V 0.01U	1	EG,E53
C0721	ECJ2VC1H330J	50V 33P	1	EB
C0721	ECJ2VC1H470J	50V 47P	1	EBL,EP
C0721	F1H1H1030007	50V 0.01U	1	EG,E53
C0722	F1J1H1040007	50V 0.1U	1	EG,E53
C0723	ECEA1CKA101B	16V 100U	1	EG,E53
C0724	ECJ2VF1H103Z	50V 0.01U	1	EB,EBL,EP
C0725	ECEA1HKA2R2B	50V 2.2U	1	EG,E53
C0725	ECJ1VC1H030C	50V 3P	1	EBL,EP
C0725	F1H1H120A230	50V 12P	1	EB
C0726	ECJ1VB1H152K	50V 1500P	1	EG,E53
C0727	ECJ1VC1H390J	50V 39P	1	EB,EBL,EP
C0728	ECEA1HKA0R1B	50V 0.1U	1	EG,E53
C0728	ECJ1VC1H560J	50V 56P	1	EB
C0729	F1H1H1030007	50V 0.01U	1	EG,E53
C0730	ECEA1CKA220B	16V 22U	1	EG,E53

C0730	ECJ1VC1H220J	50V 22P	1	EB
C0732	F1H1H1010005	50V 100P	1	EB,EBL,EP
C0733	ECEA1HKAR22B	50V 22U	1	EG,E53
C0734	ECJ1VB1H152K	50V 1500P	1	EG,E53
C0735	F1H1H1030007	50V 0.01U	1	EG,E53
C0738	ECJ1VC1H390J	50V 39P	1	EG,E53
C0739	F1H1H470A230	50V 47P	1	EG,E53
C0740	ERJ3GEY0R00V	1/10W 0	1	EG,E53
C0741	F1H1H1030007	50V 0.01U	1	EG,E53
C0742	F1H1H4700004	50V 47P	1	EG,E53
C0743	ECJ1VC1H180J	50V 18P	1	EG,E53
D0701	MA3Z080D0L	DIODE	1	EG,E53
D0703	MA3Z080E0L	DIODE	1	EG,E53
IC0701	C1AB00001598	IC	1	EG,E53
IC0701	C1AB00001924	IC	1	EB,EBL,EP
K0709	ERJ3GEY0R00V	1/10W 0	1	EB,EBL,EP
L0701	ELJNAR22JF	COIL 22UH	1	EBL,EP
L0701	ELJNAR27JF	COIL 27UH	1	EB
L0702	ELJNAR18JF	COIL 18UH	1	EG,E53
L0703	ELJNA3R3JF	COIL	1	EB,EBL,EP
L0703	ELJNAR68JF	COIL 68UH	1	EG,E53
L0704-07	ELJFA151KF	COIL 150UH	4	EG,E53
LB0701	J0JBC0000041	COIL	1	EBL,EP
PK0701	K1MR09A00028	CONNECTOR(9P)	1	
PP0701	K1KA04B00135	CONNECTOR(4P)	1	
Q0702	2SB0709ARL	TRANSISTOR	1	EB,EBL,EP
Q0702	2SD0601ASL	TRANSISTOR	1	EG,E53

Q0703	2SB0709ARL	TRANSISTOR	1	EG,E53
QR0702	B1GBHBHH0002	TRANSISTOR	1	EG,E53
R0701	ERJ3GEY0R00V	1/10W 0	1	EB
R0702	ERJ3GEYJ104V	1/10W 100K	1	EB,EBL,EP
R0703	ERJ3GEYJ102V	1/10W 1K	1	EB,EBL,EP
R0704	ERJ6GEYJ105V	1/8W 1M	1	EB,EBL,EP
R0705	ERJ6GEYJ392V	1/8W 3.9K	1	EB
R0705	ERJ6GEYJ472V	1/8W 4.7K	1	EBL,EP
R0706	ERJ3GEYJ223V	1/10W 22K	1	EG,E53
R0707	ERJ3GEYJ393V	1/10W 39K	1	EB,EBL,EP
R0707	ERJ6GEYJ223V	1/8W 22K	1	EG,E53
R0708	ERJ3GEYJ223V	1/10W 22K	1	EB,EBL,EP
R0708	ERJ6GEYJ562V	1/8W 5.6K	1	EG,E53
R0709	ERJ3GEY0R00V	1/10W 0	1	EBL,EP
R0709,10	ERJ6GEYJ223V	1/8W 22K	2	EG,E53
R0711	ERJ3GEYJ510V	1/10W 51	1	EB,EBL,EP
R0711	ERJ3GEYJ562V	1/10W 5.6K	1	EG,E53
R0713	ERJ3GEYG181V	1/10W 180	1	EG,E53
R0714	ERJ3GEYJ103V	1/10W 10K	1	EBL,EP
R0715	ERJ3GEYJ223V	1/10W 22K	1	EB,EBL,EP
R0717	ERJ3GEYG562V	1/10W 5.6K	1	EG,E53
R0719	ERJ3GEYJ472V	1/10W 4.7K	1	EB,EBL,EP
R0722	ERJ3GEYJ562V	1/10W 5.6K	1	EG,E53
R0724	ERJ8GEYJ151V	1/4W 150	1	EG,E53
R0725	ERJ6GEYJ101Z	1/8W 100	1	EB,EBL,EP
R0726	ERJ3GEYJ332V	1/10W 3.3K	1	EB,EBL,EP
R0726	ERJ3GEYJ561V	1/10W 560	1	EG,E53
R0727	ERJ6GEYJ101Z	1/8W 100	1	EG,E53
R0728	ERJ3GEY0R00V	1/10W 0	1	EB
R0729	ERJ3GEYJ103V	1/10W 10K	1	EB
R0731	ERJ3GEYJ101V	1/10W 100	1	EBL,EP
R0732	ERJ3GEY0R00V	1/10W 0	1	EBL,EP
R0732	ERJ8GEYJ102V	1/4W 1K	1	EG,E53

R0733	ERJ3GEYG393V	1/10W 39K	1	EG,E53
R0734	ERJ3GEYG682V	1/10W 6.8K	1	EG,E53
R0735	ERJ3GEYJ101V	1/10W 100	1	EG,E53
R0737	ERJ6GEYJ101Z	1/8W 100	1	EG,E53
R0738	ERJ3GEY0R00V	1/10W 0	1	
R0740	ERJ3GEYJ271V	1/10W 270	1	EBL,EP
R0740	ERJ3GEYJ471V	1/10W 470	1	EB
R0741	ERJ3GEYJ221V	1/10W 220	1	EB,EBL,EP
R0741	ERJ6GEY0R00Z	1/8W 0	1	EG,E53
R0742	ERJ6GEYJ471V	1/8W 470	1	EB,EBL,EP
R0743	ERJ6GEYJ820V	1/8W 82	1	EB,EBL,EP
R0747,48	ERJ3GEYJ271V	1/10W 270	2	EB,EBL,EP
R0750	ERJ6GEYG562V	1/8W 5.6K	1	EG,E53
R0755,56	ERJ6GEYJ101Z	1/8W 100	2	EG,E53
R0757	ERJ3GEYJ752V	1/10W 7.5K	1	EG,E53
VR0701	EVNCYAA03B14	V.R.	1	
W1	ERJ6GEY0R00Z	1/8W 0	1	EG,E53
W1	ERJ8GEY0R00V	1/4W 0	1	EB,EBL,EP
W2	ERJ6GEY0R00Z	1/8W 0	1	EG,E53
W2	ERJ8GEY0R00V	1/4W 0	1	EB,EBL,EP
W3	ERJ3GEY0R00V	1/10W 0	1	EG,E53
W3	ERJ8GEY0R00V	1/4W 0	1	EB,EBL,EP
W4	ERJ3GEY0R00V	1/10W 0	1	EG,E53
W4	ERJ6GEY0R00Z	1/8W 0	1	EB,EBL,EP
W5,W6	ERJ8GEY0R00V	1/4W 0	2	
W7	ERJ6GEY0R00Z	1/8W 0	1	EB,EBL,EP
W7	ERJ8GEY0R00V	1/4W 0	1	EG,E53
W8	ERJ6GEY0R00Z	1/8W 0	1	
W9	ERJ6GEY0R00Z	1/8W 0	1	EG,E53
W9	ERJ8GEY0R00V	1/4W 0	1	EB,EBL,EP
W10	ERJ3GEY0R00V	1/10W 0	1	EB,EBL,EP
W10,11	ERJ8GEY0R00V	1/4W 0	2	EG,E53
W12	ERJ3GEY0R00V	1/10W 0	1	EB,EBL,EP

W12	ERJ8GEY0R00V	1/4W 0	1	EG,E53
W13	ERJ6GEY0R00Z	1/8W 0	1	EG,E53
W13	ERJ8GEY0R00V	1/4W 0	1	EB,EBL,EP
W14	ERJ8GEY0R00V	1/4W 0	1	
W15	ERJ8GEY0R00V	1/4W 0	1	EG,E53
W16	ERJ6GEY0R00Z	1/8W 0	1	EG,E53
W16	ERJ8GEY0R00V	1/4W 0	1	EB,EBL,EP
W17	ERJ6GEY0R00Z	1/8W 0	1	EG,E53
W18,19	ERJ8GEY0R00V	1/4W 0	2	EG,E53
X0701	J0B3955A0001	CRISTAL OSCILLATOR	1	EBL,EP
X0701	J0B4155A0003	CRISTAL OSCILLATOR	1	EB
X0702	J0B4055A0001	CRISTAL OSCILLATOR	1	EBL,EP
X0704	J0B4045A0002	CRYSTAL OSCILLATOR	1	EG,E53
X0704	VLF1495	CRYSTAL OSCILLATOR	1	EB
X0704	VLF1497	FILTER	1	EBL,EP
X0706	EFCKK9453D	CAPACITOR	1	EG,E53
X0707	EFCKG3958M	CAPACITOR	1	EG,E53
ZA0701	VMP4471-1	ANGLE	1	EB,EBL,EP
	04	VEP07A51A		(NICOM DECORDER P.C.B.)
C7301	F1H1C104A008	16V 0.1U	1	
C7302	ERJ3GEY0R00V	1/10W 0	1	
C7303	ECEA0JKA101B	6.3V 100U	1	
C7305	ECEA0JKA101B	6.3V 100U	1	
C7306	F1H1H103A220	50V 0.01U	1	
C7307,08	ECJ1VC1H100D	50V 10P	2	
C7309-11	F1H1H1010005	50V 100P	3	
C7312,13	ECEA1CKA100B	16V 10U	2	
C7314	F1H1C104A008	16V 0.1U	1	
C7317	ECEA1CKA470B	16V 47U	1	
C7318	ECEA1CKA100B	16V 10U	1	
C7323	ECJ1VC1H102J	50V 1000P	1	

C7324	F1H1C104A008	16V 0.1U	1	
C7329	ERJ3GEY0R00V	1/10W 0	1	
C7330	ERJ3GEYJ822V	1/10W 8.2K	1	
C7332	F1H1C104A008	16V 0.1U	1	
C7333	F1H1C104A042	16V 0.1U	1	
C7334	ECEA1HKA2R2B	50V 2.2U	1	
C7335	F1H1C104A008	16V 0.1U	1	
IC7301	C1AB00001404	IC	1	
IC7302	C0EAH0000051	IC	1	
K7301-03	ERJ3GEY0R00V	1/10W 0	3	
K7305	ERJ3GEY0R00V	1/10W 0	1	
L7303	G0C1R0JA0019	COIL 1UH	1	
LB7301,02	J0JCC0000124	COIL	2	
LB7303	J0JCC0000080	COIL	1	
PK7301	K1MM07B00002	CONNECTOR(7P)	1	
PK7302	K1MM06B00002	CONNECTOR(6P)	1	
R7301	ERJ3GEY0R00V	1/10W 0	1	
R7304	ERJ3GEYJ101V	1/10W 100	1	
R7307	ERJ3GEY0R00V	1/10W 0	1	
R7309	ERJ3GEYJ103V	1/10W 10K	1	
R7311	ERJ3GEYJ221V	1/10W 220	1	
R7312,13	ERJ3GEYG221V	1/10W 220	2	
R7314,15	ERJ3GEY0R00V	1/10W 0	2	
R7317	ERJ3GEY0R00V	1/10W 0	1	
R7319	ERJ3GEY0R00V	1/10W 0	1	
R7322	ERJ3GEY0R00V	1/10W 0	1	
R7324,25	ERJ3GEYJ101V	1/10W 100	2	
W6,W7	ERJ3GEY0R00V	1/10W 0	2	

X7301	H0D245500016	CRYSTAL OSCILLATOR	1	
	05	REP3682A	(SCART P.C.B.)	
C3909	ECEA0JKA470B	6.3V 47U	1	
C3910,11	ECA1CAK100XB	16V 10U	2	
C3914-17	ECA1HAK010XB	50V 1U	4	
C3918,19	ECA1CAK100XB	16V 10U	2	
C3920	F1H1C104A042	16V 0.1U	1	
C3921	ECA0JAK331XQ	6.3V 330U	1	
C3922	F1H1H1030006	50V 0.01U	1	
C3923	F1H1C104A042	16V 0.1U	1	
C3924	ECA0JAK331XQ	6.3V 330U	1	
C3925	F1H1H1030006	50V 0.01U	1	
C3928,29	ECA1HAK010XB	50V 1U	2	
C3930	F1H1H1030006	50V 0.01U	1	
C3931,32	ECA1HAK010XB	50V 1U	2	
C3933	ECA1CAK101XB	16V 100U	1	
C3934	F1H1H1030006	50V 0.01U	1	
C3935	ECA1CAK101XB	16V 100U	1	
C3938	F1H1C104A008	16V 0.1U	1	
C3939	F1H1H1030006	50V 0.01U	1	
C3951,52	F1H1H4700004	50V 47P	2	
C3953,54	ECJ1VC1H471J	50V 470P	2	
C3955,56	F1H1H1010005	50V 100P	2	
C3957,58	ECJ1VC1H471J	50V 470P	2	
C3959,60	F1H1H4700004	50V 47P	2	
C3961,62	F1H1H1010005	50V 100P	2	
D3901	B0EADD000002	DIODE	1	
D3903	MA3Z142D0LG	DIODE	1	
IC3901	C1AB00001776	IC	1	

JK3901	K2HA306A0025	JACK,L1,L3	1	
JK3904	K1FB121A0003	JACK,L2	1	
JK3905	K1FB121A0003	JACK,AV1	1	
LB3907,08	J0JGC0000020	COIL	2	
LB3911-13	J0JGC0000020	COIL	3	
LB3922,23	J0JGC0000020	COIL	2	
LB3925	J0JGC0000020	COIL	1	
PS3901	K1KB20B00027	CONNECTOR(20P)	1	
PS3902	K1KB18B00012	CONNECTOR(18P)	1	
PS3903	K1KB15B00013	CONNECTOR(15P)	1	
Q3901	2SD1819ARL	TRANSISTOR	1	
Q3905	2SD132800L	TRANSISTOR	1	
Q3906	2SB0710ARL	TRANSISTOR	1	
Q3908	2SB1218A0L	TRANSISTOR	1	
Q3909,10	2SD132800L	TRANSISTOR	2	
QR3908	UNR521200L	TRANSISTOR	1	
QR3909	UNR521100L	TRANSISTOR	1	
QR3913	UNR521200L	TRANSISTOR	1	
R3901-03	ERJ3RED750V	1/16W 75	3	
R3904	ERJ3GEYJ330V	1/10W 33	1	
R3905	ERJ3GEYJ223V	1/10W 22K	1	
R3906	ERJ3GEYJ102V	1/10W 1K	1	
R3907	ERJ3GEYJ273V	1/10W 27K	1	
R3908,09	ERJ6GEYJ471V	1/8W 470	2	
R3910	ERJ3RBD151V	1/16W 150	1	
R3911,12	D0GB222JA002	1/10W 2.2K	2	
R3913	ERJ3RBD181V	1/16W 180	1	
R3914	ERJ3RBD151V	1/16W 150	1	
R3915	ERJ3GEYJ103V	1/10W 10K	1	
R3916	ERJ3GEYJ153V	1/10W 15K	1	

R3917	ERJ3GEYJ223V	1/10W 22K	1	
R3919	ERJ3RBD151V	1/16W 150	1	
R3921	ERJ6GEYG750V	1/8W 75	1	
R3922,23	ERJ6GEYJ471V	1/8W 470	2	
R3924	ERDS2TJ471T	1/4W 470	1	
R3925-28	ERJ6GEYG750V	1/8W 75	4	
R3929,30	ERJ6GEYJ471V	1/8W 470	2	
R3931-33	ERJ3RED750V	1/16W 75	3	
R3934,35	ERJ6GEYG750V	1/8W 75	2	
R3962	ERJ3GEYJ103V	1/10W 10K	1	
R3967	ERJ3GEYJ152V	1/10W 1.5K	1	
R3968	ERJ3GEYJ680V	1/10W 68	1	
R3969	ERJ3GEYJ332V	1/10W 3.3K	1	
R3972,73	ERJ3GEYJ103V	1/10W 10K	2	
R3975	ERJ3GEYJ101V	1/10W 100	1	EG
R3975	ERJ3GEYJ101Z	1/10W 100	1	
R3976	ERJ3GEYJ101V	1/10W 100	1	EG
R3976	ERJ3GEYJ101Z	1/10W 100	1	
R3977,78	ERJ3GEYJ103V	1/10W 10K	2	
R3979,80	ERJ6GEYJ471V	1/8W 470	2	
R3981,82	ERJ3GEYJ821V	1/10W 820	2	
R3983,84	ERJ3GEYJ104V	1/10W 100K	2	
R3985	ERJ3RBD472V	1/16W 4.7K	1	
R3986	ERJ3RBD122V	1/16W 1.2K	1	
R3987	ERJ3GEYJ473V	1/10W 47K	1	
R3988,89	ERJ3GEYJ102V	1/10W 1K	2	
R3990,91	ERJ3GEYJ473V	1/10W 47K	2	
R3992,93	ERJ3GEYJ102V	1/10W 1K	2	
R3994	ERJ3GEYJ473V	1/10W 47K	1	
ZA3901-04	VMC1450	EARTH PLATE	4	
	06	REP3717C/CJ/RFKBE55EB/EBL/EP		(DIGITAL P.C.B.)
C3401	ECJ1VB0J105K	6.3V 1U	1	<AVC-SPC>

C3402	ECJ0EC1H220J	50V 22P	1	<AVC-SPC>
C3403	ECJ0EB1A104K	10V 0.1U	1	<AVC-SPC>
C3404,05	ECJ0EC1H220J	50V 22P	2	<AVC-SPC>
C3406	ECJ0EB1A104K	10V 0.1U	1	<AVC-SPC>
C3407,08	ECJ0EC1H100D	50V 10P	2	<AVC-SPC>
C3410	ECJ0EB1C103K	16V 0.01U	1	<AVC-SPC>
C3411	ECST0JX476R	6.3V 47U	1	<AVC-SPC>
C3417-19	ECJ1VB0J105K	6.3V 1U	3	<AVC-SPC>
C3420	ECJ0EB1C103K	16V 0.01U	1	<AVC-SPC>
C3421	ECJ0EB1A104K	10V 0.1U	1	<AVC-SPC>
C3422	ECJ0EB1C103K	16V 0.01U	1	<AVC-SPC>
C3423-28	ECJ0EB1A104K	10V 0.1U	6	<AVC-SPC>
C3429	ECJ2FB0J106M	6.3V 1U	1	E53 <AVC-SPC>
C3429	F1J0J106A013	6.3V 10U	1	EB,EG,EP,EBL <AVC-SPC>
C3430	ECJ2FB0J106M	6.3V 1U	1	E53 <AVC-SPC>
C3430	F1J0J106A013	6.3V 10U	1	EB,EG,EP,EBL <AVC-SPC>
C3431	ECJ0EB1A104K	10V 0.1U	1	<AVC-SPC>
C3432	ECJ1VB0J105K	6.3V 1U	1	<AVC-SPC>
C3433	ECJ0EB1A104K	10V 0.1U	1	<AVC-SPC>
C3435,36	ECJ0EB1A104K	10V 0.1U	2	<AVC-SPC>
C3440	EEEHB0J101P	6.3V 100P	1	<AVC-SPC>
C3441	ECJ0EB1A104K	10V 0.1U	1	<AVC-SPC>
C4402	EEEHB1C100R	16V 10P	1	<AVC-SPC>
C4403	ECJ0EF1C104Z	16V 0.1U	1	<AVC-SPC>
C4404	EEEHB0J101P	6.3V 100P	1	<AVC-SPC>
C4405,06	ECJ0EF1C104Z	16V 0.1U	2	<AVC-SPC>
C4407	EEEHB1C100R	16V 10P	1	<AVC-SPC>
C4408,09	ECJ0EF1C104Z	16V 0.1U	2	<AVC-SPC>
C4410	F2H0J331A016	6.3V 330U	1	<AVC-SPC>
C4411	ECJ0EF1C104Z	16V 0.1U	1	<AVC-SPC>
C4412	EEEHB0J101P	6.3V 100P	1	<AVC-SPC>
C4415	EEEHB0J470R	6.3V 47P	1	<AVC-SPC>
C4416	ECJ0EF1C104Z	16V 0.1U	1	<AVC-SPC>
C4417	ECST1AY106R	10V 10U	1	<AVC-SPC>

C4418	ECJ0EF1C104Z	16V 0.1U	1	<AVC-SPC>
C4421	ECJ0EB1E102K	25V 1000P	1	<AVC-SPC>
C4423,24	ECJ0EB1E102K	25V 1000P	2	<AVC-SPC>
C4426	ECJ0EF1C104Z	16V 0.1U	1	<AVC-SPC>
C6001	ECJ0EF1C104Z	16V 0.1U	1	<AVC-SPC>
C6002	ECJ2FB0J106M	6.3V 1U	1	E53 <AVC-SPC>
C6002	F1J0J106A013	6.3V 10U	1	EB,EG,EP,EBL <AVC-SPC>
C6003	ECJ0EB1C103K	16V 0.01U	1	<AVC-SPC>
C9001,02	ECJ0EC1H470J	50V 47P	2	<AVC-SPC>
C50001	ECJ1VB0J105K	6.3V 1U	1	<AVC-SPC>
C50002	EEEHB0J220R	6.3V 22P	1	<AVC-SPC>
C50004,05	ECJ0EB1A104K	10V 0.1U	2	<AVC-SPC>
D3401,02	MA3S132E0L	DIODE	2	<AVC-SPC>
D4401	MA3Z142K0LG	DIODE	1	<AVC-SPC>
FL3401,02	F1H0J4740004	FILTER	2	<AVC-SPC>
FL3404	F1H0J4740004	FILTER	1	<AVC-SPC>
FL3406,07	F1H0J4740004	FILTER	2	<AVC-SPC>
FL3409-12	F1H0J4740004	FILTER	4	<AVC-SPC>
FL3414-26	F1H0J4740004	FILTER	13	<AVC-SPC>
FL3429	F1H0J4740004	FILTER	1	<AVC-SPC>
FL3431	F1H0J4740004	FILTER	1	<AVC-SPC>
FL3433-35	F1H0J4740004	FILTER	3	<AVC-SPC>
FL4401,02	F1H0J4740004	FILTER	2	<AVC-SPC>
FL6001-06	F1H0J4740004	FILTER	6	<AVC-SPC>
FL6008-17	F1H0J4740004	FILTER	10	<AVC-SPC>
FL6020-23	F1H0J4740004	FILTER	4	<AVC-SPC>
FL6701-03	F1H0J4740004	FILTER	3	<AVC-SPC>
FL50001-06	F1H0J4740004	FILTER	6	<AVC-SPC>
FP3401	K1MN40A00022	CONNECTOR(40P)	1	<AVC-SPC>
IC3401	AN13310B-VB	IC	1	<AVC-SPC>
IC3402	C3ABRG000036	IC	1	<AVC-SPC>

IC3404	MN85573R	IC	1	<AVC-SPC>
IC3406	C1DB00001110	IC	1	<AVC-SPC>
IC3408	C3ABPJ000048	IC	1	<AVC-SPC>
IC3409	C0DBZGC00066	IC	1	<AVC-SPC>
IC4402	C0FBBK000035	IC	1	<AVC-SPC>
IC4403	C0JBAD000107	IC	1	<AVC-SPC>
IC4404	C0CBCBD00002	IC	1	<AVC-SPC>
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IC4406	C0FBANK00008	IC	1	<AVC-SPC>
IC6001	MN2DS0011-HR	IC	1	<AVC-SPC>
IC6002	C0EBE0000130	IC	1	<AVC-SPC>
IC6003	C3CBLD000088	IC	1	<AVC-SPC>
IC6004	74LVC244APWL	IC	1	C0JBAZ001466 <AVC-SPC>
IC6005	C3ABQG000068	IC	1	<AVC-SPC>
IC6701	C1ZBZ0002429	IC	1	<AVC-SPC>
IC6702	REP3717C	DIGITAL P.C.B.	1	EG
IC6702	REP3717CJ	DIGITAL P.C.B.	1	E53
IC6702	RFKBE55EB	DIGITAL P.C.B.	1	EB
IC6702	RFKBE55EBL	DIGITAL P.C.B.	1	EBL
IC6702	RFKBE55EP	DIGITAL P.C.B.	1	EP
IC50001	C3ABPG000067	IC	1	E53 <AVC-SPC>
IC50001	C3ABPG000133	IC	1	EB,EG,EP,EBL <AVC-SPC>
IC50002	C3ABPG000067	IC	1	E53 <AVC-SPC>
IC50002	C3ABPG000133	IC	1	EB,EG,EP,EBL <AVC-SPC>
LB3404,05	J0JHC0000032	COIL	2	<AVC-SPC>
LB3408,09	J0JHC0000032	COIL	2	<AVC-SPC>
LB4401	J0JGC0000020	COIL	1	<AVC-SPC>
LB4402	J0JHC0000032	COIL	1	<AVC-SPC>
LB4403,04	J0JGC0000020	COIL	2	<AVC-SPC>
LB6001,02	J0JHC0000032	COIL	2	<AVC-SPC>
LB9001,02	J0JHC0000032	COIL	2	<AVC-SPC>
LB9006,07	J0JCC0000103	COIL	2	<AVC-SPC>
LB9008	J0JHC0000045	COIL	1	<AVC-SPC>

LB9009	J0JHC0000046	COIL	1	<AVC-SPC>
LB50001-05	J0JHC0000032	COIL	5	<AVC-SPC>
P6002	K1KA06A00394	CONNECTOR(6P)	1	<AVC-SPC>
P9001	K1KB88A00002	CONNECTOR(88P)	1	<AVC-SPC>
Q6001,02	B1ABCF000114	TRANSISTOR	2	<AVC-SPC>
Q6701-05	B1ABCF000114	TRANSISTOR	5	<AVC-SPC>
Q50001-05	B1ADCF000081	TRANSISTOR	5	<AVC-SPC>
QR3401	UNR521L00L	TRANSISTOR	1	<AVC-SPC>
R3405	ERJ2GEJ103	1/16W 10K	1	<AVC-SPC>
R3407	ERJ2GE0R00X	1/16W 0	1	<AVC-SPC>
R3409	ERJ2GE0R00X	1/16W 0	1	<AVC-SPC>
R3410,11	ERJ2GEJ101	1/16W 100	2	<AVC-SPC>
R3412	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X <AVC-SPC>
R3414	ERJ2GEJ330X	1/16W 33	1	<AVC-SPC>
R3415	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X <AVC-SPC>
R3416	ERJ2GEJ472X	1/16W 4.7K	1	ERJ2RMJ472X <AVC-SPC>
R3417,18	ERJ2GEJ103	1/16W 10K	2	<AVC-SPC>
R3419-23	ERJ2GEJ220X	1/16W 22	5	ERJ2RMJ220X <AVC-SPC>
R3427	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X <AVC-SPC>
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R3443-45	ERJ2GE0R00X	1/16W 0	3	<AVC-SPC>
R3447	ERJ2RHD682	1/16W 6.8K	1	<AVC-SPC>
R3448	ERJ2GEJ562X	1/16W 5.6K	1	<AVC-SPC>
R3449	ERJ2RHD682	1/16W 6.8K	1	<AVC-SPC>
R3450	ERJ2GEJ104	1/16W 100K	1	<AVC-SPC>
R3451	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X <AVC-SPC>
R3452	ERJ2GE0R00X	1/16W 0	1	<AVC-SPC>
R3453	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X <AVC-SPC>
R3454	ERJ2GEJ390X	1/16W 39	1	ERJ2RMJ390X <AVC-SPC>

R3455,56	ERJ2GEJ220X	1/16W 22	2	ERJ2RMJ220X <AVC-SPC>
R3457	ERJ2GE0R00X	1/16W 0	1	<AVC-SPC>
R3460-62	ERJ2GEJ470	1/16W 47	3	<AVC-SPC>
R3463	ERJ2GEJ820X	1/16W 82	1	<AVC-SPC>
R3464	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X <AVC-SPC>
R3465	ERJ2GEJ332X	1/16W 3.3K	1	ERJ2RMJ332X <AVC-SPC>
R3466	ERJ2GEJ820X	1/16W 82	1	<AVC-SPC>
R3467	ERJ2GEJ562X	1/16W 5.6K	1	<AVC-SPC>
R3468	ERJ2GEJ103	1/16W 10K	1	<AVC-SPC>
R3470	ERJ2GEJ103	1/16W 10K	1	<AVC-SPC>
R3471	ERJ2GEJ330X	1/16W 33	1	<AVC-SPC>
R3472,73	ERJ2GEJ220X	1/16W 22	2	ERJ2RMJ220X <AVC-SPC>
R3476	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X <AVC-SPC>
R4402-06	ERJ2GE0R00X	1/16W 0	5	<AVC-SPC>
R4407	JAR0816P103D	1/16W 10K	1	D0HB103ZA002 <AVC-SPC>
R4409	JAR0816P562D	1/16W 5.6K	1	D0HB562ZA002 <AVC-SPC>
R4411	JAR0816P103D	1/16W 10K	1	D0HB103ZA002 <AVC-SPC>
R4412	JAR0816P562D	1/16W 5.6K	1	D0HB562ZA002 <AVC-SPC>
R4414,15	ERJ3GEY0R00V	1/10W 0	2	<AVC-SPC>
R4418	ERJ2GEJ221	1/16W 220	1	<AVC-SPC>
R4419-22	ERJ2GE0R00X	1/16W 0	4	<AVC-SPC>
R4425	ERJ2GEJ562X	1/16W 5.6K	1	<AVC-SPC>
R4426-28	ERJ2GE0R00X	1/16W 0	3	<AVC-SPC>
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R6009,10	ERJ2GEJ330X	1/16W 33	2	<AVC-SPC>
R6013	ERJ2GEJ103	1/16W 10K	1	<AVC-SPC>
R6018,19	ERJ2GEJ220X	1/16W 22	2	ERJ2RMJ220X <AVC-SPC>

R6020	ERJ2GE0R00X	1/16W 0	1	<AVC-SPC>
R6021,22	ERJ2GEJ470	1/16W 47	2	<AVC-SPC>
R6023	ERJ2GEJ332X	1/16W 3.3K	1	ERJ2RMJ332X <AVC-SPC>
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R6031	ERJ2GEJ470	1/16W 47	1	<AVC-SPC>
R6035	ERJ2GEJ470	1/16W 47	1	<AVC-SPC>
R6036	ERJ2GEJ332X	1/16W 3.3K	1	ERJ2RMJ332X <AVC-SPC>
R6037	ERJ2GEJ333X	1/16W 33K	1	ERJ2RMJ333X <AVC-SPC>
R6038	ERJ2GEJ103	1/16W 10K	1	<AVC-SPC>
R6040	ERJ2GEJ332X	1/16W 3.3K	1	ERJ2RMJ332X <AVC-SPC>
R6702-04	ERJ2GEJ470	1/16W 47	3	<AVC-SPC>
R6706,07	ERJ2GEJ470	1/16W 47	2	<AVC-SPC>
R6709,10	ERJ2GEJ332X	1/16W 3.3K	2	ERJ2RMJ332X <AVC-SPC>
R6711,12	ERJ2GEJ470	1/16W 47	2	<AVC-SPC>
R6713	ERJ2GEJ103	1/16W 10K	1	<AVC-SPC>
R6714	ERJ2GEJ333X	1/16W 33K	1	ERJ2RMJ333X <AVC-SPC>
R6715	ERJ2GEJ470	1/16W 47	1	<AVC-SPC>
R6718	ERJ2GE0R00X	1/16W 0	1	<AVC-SPC>
R6720-28	ERJ2GEJ470	1/16W 47	9	<AVC-SPC>
R6729	ERJ2GEJ104	1/16W 100K	1	<AVC-SPC>
R6730	ERJ2GEJ103	1/16W 10K	1	<AVC-SPC>
R6731	ERJ2GEJ222X	1/16W 22K	1	ERJ2RMJ222X <AVC-SPC>
R6733	ERJ2GEJ103	1/16W 10K	1	<AVC-SPC>
R6735	ERJ2GEJ472X	1/16W 4.7K	1	ERJ2RMJ472X <AVC-SPC>
R6737,38	ERJ2GEJ470	1/16W 47	2	<AVC-SPC>
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R6743,44	ERJ2GEJ103	1/16W 10K	2	<AVC-SPC>
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R6752	ERJ2GEJ101	1/16W 100	1	<AVC-SPC>
R6753-56	ERJ2GEJ470	1/16W 47	4	<AVC-SPC>
R50001	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X <AVC-SPC>

R50002	ERJ2GE0R00X	1/16W 0	1	<AVC-SPC>
R50003	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X <AVC-SPC>
R50004	ERJ2GE0R00X	1/16W 0	1	<AVC-SPC>
R50005	ERJ2GEJ330X	1/16W 33	1	<AVC-SPC>
R50006,07	ERJ2GEJ470	1/16W 47	2	<AVC-SPC>
R50008	ERJ2GEJ220X	1/16W 22	1	ERJ2RMJ220X <AVC-SPC>
R50009	ERJ2GEJ103	1/16W 10K	1	<AVC-SPC>
R50010	ERJ2RHD242	1/16W 2.4K	1	<AVC-SPC>
R50011	ERJ2RHD223X	1/16W 22K	1	<AVC-SPC>
R50012,13	ERJ2GE0R00X	1/16W 0	2	<AVC-SPC>
R50015	ERJ2RHD333	1/16W 33K	1	<AVC-SPC>
R50016	ERJ2RHD152	1/16W 1.5K	1	<AVC-SPC>
R50017	ERJ2RHD153	1/16W 15K	1	<AVC-SPC>
R50018	ERJ3RBD151	1/16W 150	1	<AVC-SPC>
R50019	ERJ2GEJ330X	1/16W 33	1	<AVC-SPC>
R50020	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X <AVC-SPC>
R50021	ERJ3RED820	1/16W 82	1	<AVC-SPC>
R50022	ERJ2GEJ330X	1/16W 33	1	<AVC-SPC>
R50023	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X <AVC-SPC>
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R50025	ERJ2GEJ330X	1/16W 33	1	<AVC-SPC>
R50026	ERJ2GEJ102X	1/16W 1K	1	ERJ2RMJ102X <AVC-SPC>
R50027	ERJ3RBD151	1/16W 150	1	<AVC-SPC>
R50028	ERJ2GEJ330X	1/16W 33	1	<AVC-SPC>
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R50032	ERJ2GEJ330X	1/16W 33	1	<AVC-SPC>
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RX3419-26	D1H82204A024	RESISTOR-RESISTOR	8	<AVC-SPC>
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RX6005,06	D1H83304A024	RESISTOR-RESISTOR	2	<AVC-SPC>
RX6009-26	D1H83304A024	RESISTOR-RESISTOR	18	<AVC-SPC>
RX6027-32	D1H84704A024	RESISTOR-RESISTOR	6	<AVC-SPC>
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RX6035,36	D1H83334A024	RESISTOR-RESISTOR	2	<AVC-SPC>
RX6037	D1H81034A024	RESISTOR-RESISTOR	1	<AVC-SPC>
RX6038	D1H83304A024	RESISTOR-RESISTOR	1	<AVC-SPC>
RX6039-42	D1H85604A024	RESISTOR-RESISTOR	4	<AVC-SPC>
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RX6044	D1H83334A024	RESISTOR-RESISTOR	1	<AVC-SPC>
RX6706	D1H84704A024	RESISTOR-RESISTOR	1	<AVC-SPC>
RX6708	D1H84704A024	RESISTOR-RESISTOR	1	<AVC-SPC>
RX6711,12	D1H83324A013	RESISTOR-RESISTOR	2	<AVC-SPC>
RX6716	D1H84704A024	RESISTOR-RESISTOR	1	<AVC-SPC>
RX6717-19	D1H83334A024	RESISTOR-RESISTOR	3	<AVC-SPC>
RX6720,21	D1H83324A013	RESISTOR-RESISTOR	2	<AVC-SPC>
RX6724	D1H84704A024	RESISTOR-RESISTOR	1	<AVC-SPC>
RX6726-28	D1H84704A024	RESISTOR-RESISTOR	3	<AVC-SPC>
RX6731-34	D1H84704A024	RESISTOR-RESISTOR	4	<AVC-SPC>
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RX6736	D1H81034A024	RESISTOR-RESISTOR	1	<AVC-SPC>
RX6737	D1H84724A024	RESISTOR-RESISTOR	1	<AVC-SPC>
RX6738	D1H83334A024	RESISTOR-RESISTOR	1	<AVC-SPC>
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C001	ECKENA102ME	1000P	1	
C002	ECQU2A104ML	0.1U	1	
C003	ECQU2A334ML	0.33	1	

C006	ECKENA102ME	1000P	1	
C008	KH102M	1000P	1	
C009	KMM2W470JZ	450V 47	1	
C010	RR3DD331K	2KV 330P	1	
C011	ECKENA102ME	1000P	1	
C012	MBC471J5	50V 470P	1	
C013	KMG1H220	50V 22U	1	
C014	MBB224K2	25V 0.22	1	
C015	MBB224K5	50V 0.22	1	
C101	KBR221K2E	250V 220P	1	
C102	ECUV1H102KBN	50V 1000P	1	ECJ2VB1H102K
C103	KBR221K2E	250V 220P	1	
C104	ECUV1H102KBN	50V 1000P	1	ECJ2VB1H102K
C105	KY1E471	25V 470	1	
C106	KY1A222	10V 2200	1	
C107	MBC102J5	50V 1000P	1	
C109	MBB104K2	25V 0.1U	1	
C110	MBB683K5	55V 0.068	1	
C111	MBB105K1	16V 1U	1	
C112	KY1A471	10V 470U	1	
C113	MBB105K1	16V 1U	1	
C115	MBB224K5	50V 0.22	1	
C117	KY1E221	25V 220U	1	
C118	KMG1H100	50V 10	1	
C119	ECA1AHG102	10V 1000U	1	
C120	KY1E681L	25V 680	1	
C124	KY1E221	25V 220U	1	
C125	ECA1AHG102	10V 1000U	1	
C127	ECJ2XB1H333K	50V 0.033	1	
C128	KY1A471	10V 470U	1	
C129	MBB105K1	16V 1U	1	
C130	MBC102J5	50V 1000P	1	
C131	MBB105K1	16V 1U	1	
C141	MBB104K2	25V 0.1U	1	

C142	MBB105K1	16V 1U	1	
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D006	AL01Z	DIODE	1	B0HAMM000077
D007	MA2J72800L	DIODE	1	MA2J728
D101	RK49	DIODE	1	B0JAPK000005
D102	FCQ20A6	DIODE	1	
D103	BRF1560	DIODE	1	
D104-07	MA165TA5	DIODE	4	MA2C16500E
D108	FCH05A10	DIODE	1	
D111-13	MA165TA5	DIODE	3	MA2C16500E
D114	GPP20J	DIODE	1	
D120	MA2J11100L	DIODE	1	
F001	19181-2A	FUSE	1	
F101	SBM40	FUSE	1	
F102	SBM32	FUSE	1	
F103	SBM25	FUSE	1	
IC001	STRG6353	IC	1	
IC101	TL431AILPR	IC	1	
IC102	LM2904DR	IC	1	
IC103	SI3010KM	IC	1	
IC106	SI3120J	IC	1	
IP101	ICPN10	IC PROTECTOR	1	
L002	ELF15N005A	COIL	1	
L004	ELESN150KA	COIL	1	
L005	EXCELSR35	COIL	1	
L010,11	EXCELSA35	COIL	2	
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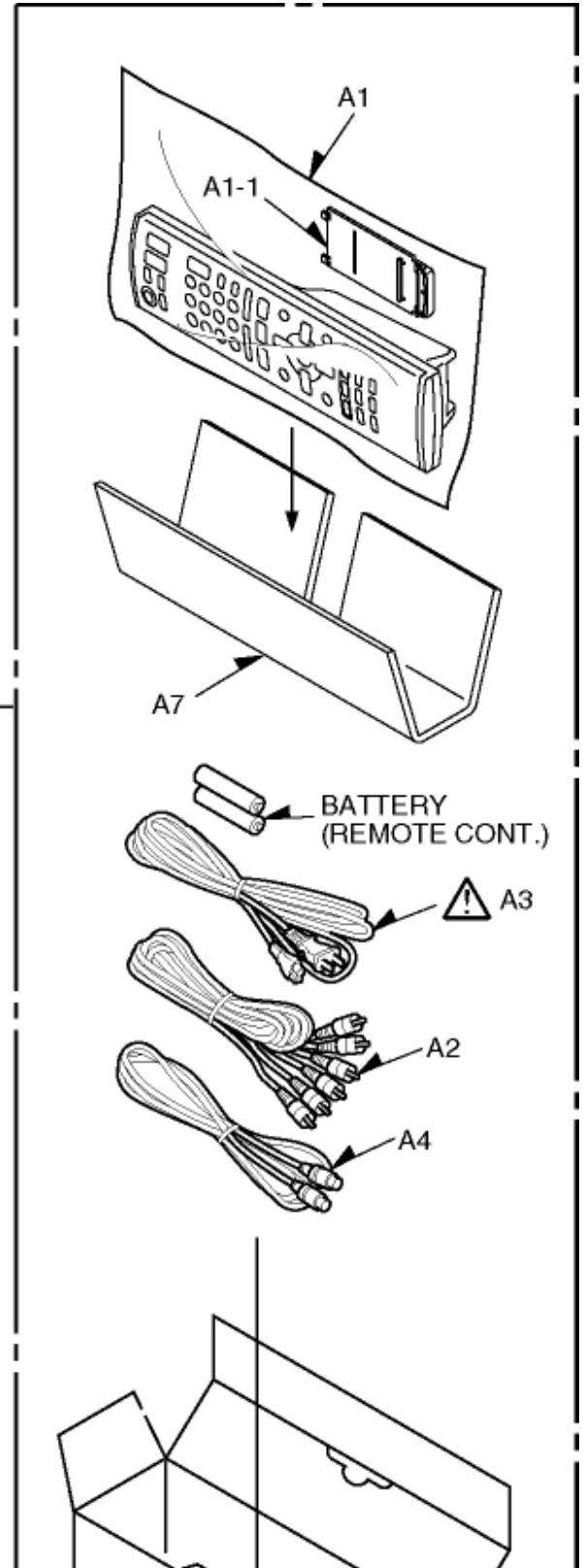
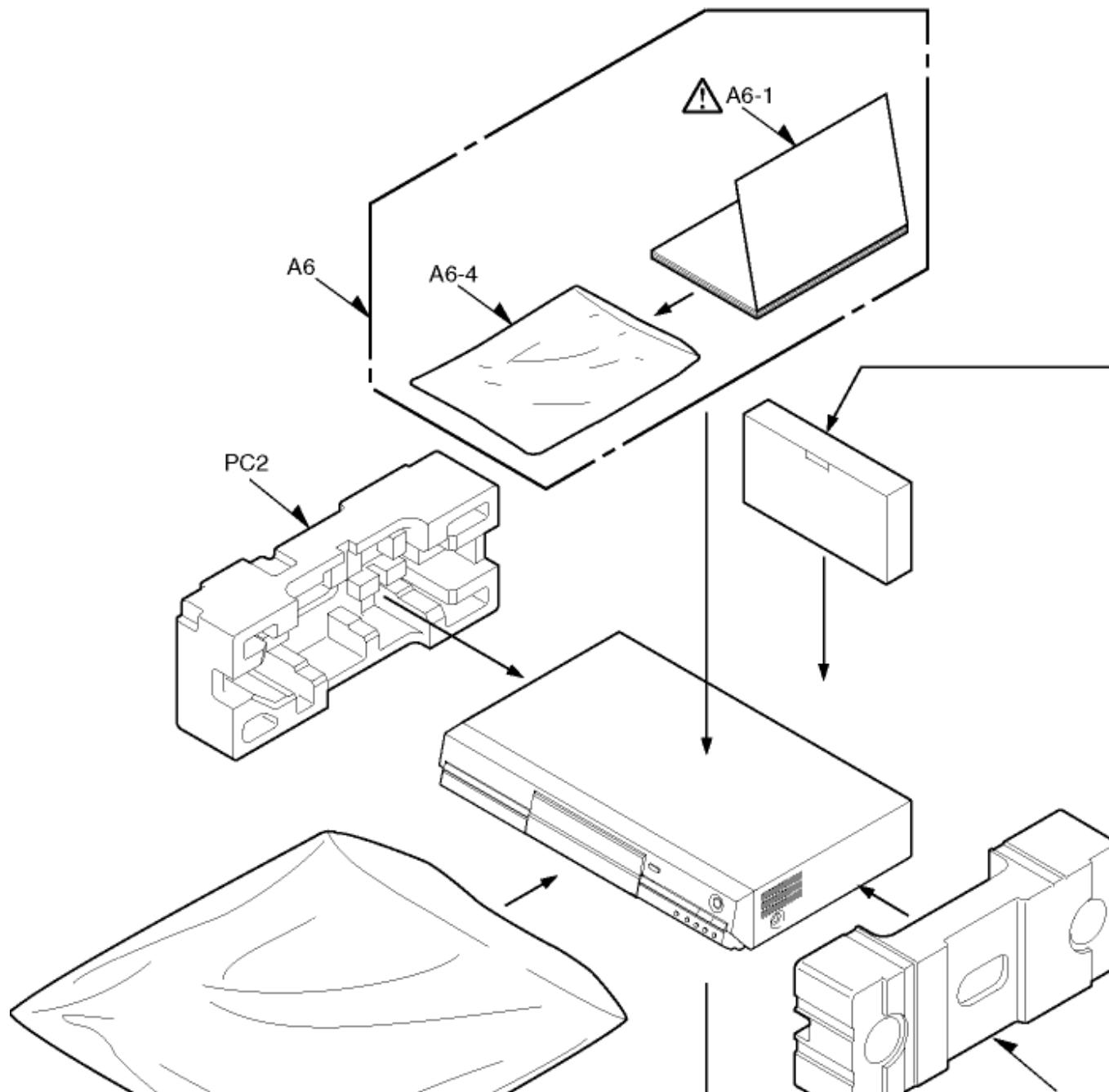
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L107	EXCELSA35	COIL	1	
L108	EXCELDR35	COIL	1	
L109	LHLZ4R7M	COIL	1	
P001	M2023	AC INLET	1	⚠
PC001	PS2571L1	PHOTO COUPLER	1	⚠
PS102	TWGP23XA1	CONNECTOR(23P)	1	
Q101	2SD602A-R	TRANSISTOR	1	2SD0602AR
Q102	2SB710AQRSTX	TRANSISTOR	1	2SB0710A
Q103	2SB0709ARL	TRANSISTOR	1	
Q104	2SD601A-R	TRANSISTOR	1	2SD0601AR
Q105	2SK3366	TRANSISTOR	1	
Q106,07	2SD601A-R	TRANSISTOR	2	2SD0601AR
Q110	2SB710AQRSTX	TRANSISTOR	1	2SB0710A
Q111	2SD601A-R	TRANSISTOR	1	2SD0601AR
Q113	2SK3366	TRANSISTOR	1	
Q114	2SB710AQRSTX	TRANSISTOR	1	2SB0710A
Q115,16	2SD601A-R	TRANSISTOR	2	2SD0601AR
Q117	2SB0709ARL	TRANSISTOR	1	
Q118	2SD602A-R	TRANSISTOR	1	2SD0602AR
Q119	2SB710AQRSTX	TRANSISTOR	1	2SB0710A
R001	ERDS1FJ105	0.5W 1M	1	
R002	CR10J681	0.1W 680	1	
R003	ERX1SZGR47	1W 0.47	1	
R005	ERDS2FJ224	1/4W 220K	1	
R006	ER0S2TKF2373	0.25W 237K	1	
R007	CR10F1272	0.1W 12.7K	1	
R008	CR10J562	0.1W 5.6K	1	
R009	ERDS2FJ224	1/4W 220K	1	

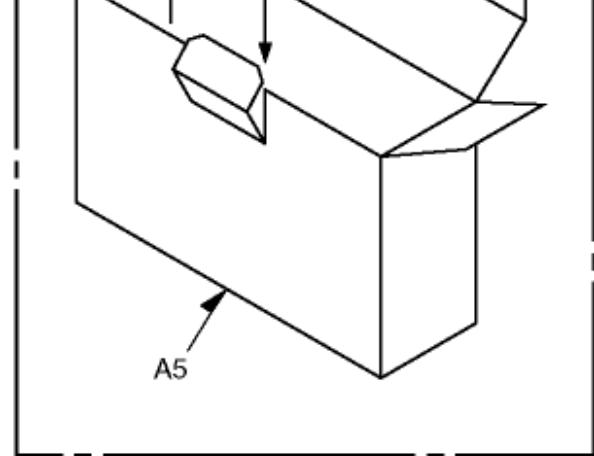
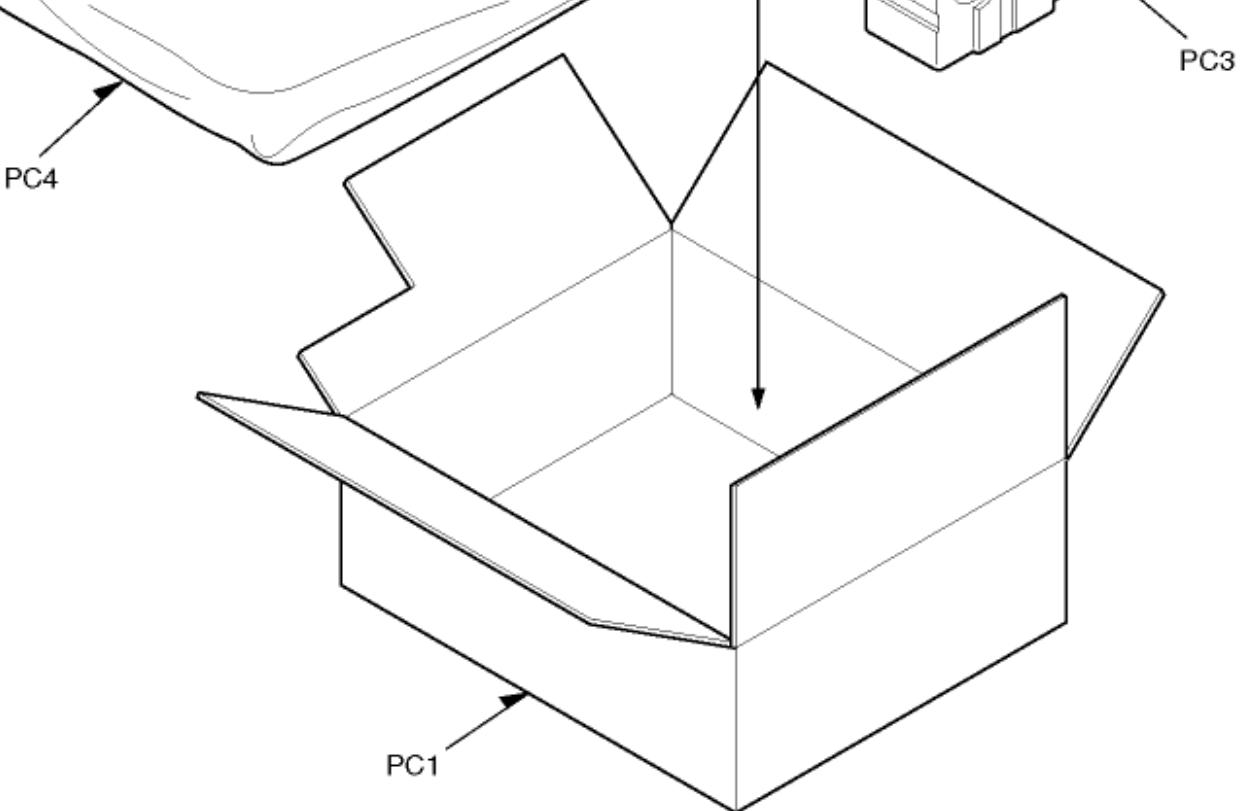
R010	ER0S2TKF2373	0.25W 237K	1	
R101	CR10J472	0.1W 4.7K	1	
R102,03	CR10J100	0.1W 10	2	
R104	CR10J471	0.1W 470	1	
R105	CR10J472	0.1W 4.7K	1	
R106	ERJ6GEYJ101V	1/8W 100	1	
R107	CR10J224	0.1W 220K	1	
R108	CR10J472	0.1W 4.7K	1	
R109	CR10J222	0.1W 2.2K	1	
R110	CR10J103	0.1W 10K	1	
R111	CR10J752	0.1W 7.5K	1	
R112	CR10J102	0.1W 1K	1	
R113	CR10J471	0.1W 470	1	
R114	ERDS2FJ101	1/4W 100	1	
R115	CR10J332	0.1W 3.3K	1	
R116	CR10J102	0.1W 1K	1	
R117	ERJ6GEYJ101V	1/8W 100	1	
R120	CR10F2210	0.1W 221	1	
R121	CR10F1001	0.1W 1K	1	
R122	CR10J183	0.1W 18K	1	
R124	CR10F1470	0.1W 147	1	
R125	CR10J103	0.1W 10K	1	
R126	CR10F1002	0.1W 10K	1	
R127	CR10F3321	0.1W 3.32K	1	
R128	CR10F1211	0.1W 1.21K	1	
R130	CR10J822	0.1W 8.2K	1	
R131	CR10J103	0.1W 10K	1	
R132	CR10J472	0.1W 4.7K	1	
R136,37	CR10J152	0.1W 1.5K	2	
R139	CR10J123	0.1W 12K	1	
R143	ERDS2FJ822	1/4W 8.2K	1	
R144	CR10J222	0.1W 2.2K	1	
R145	CR10F6810	0.1W 681	1	
R153	CR10F1002	0.1W 10K	1	

R154	CR10F3321	0.1W 3.32K	1	
R157	CR10F2210	0.1W 221	1	
R158	CR10J682	0.1W 6.8K	1	
R159	CR10J103	0.1W 10K	1	
R160	CR10J332	0.1W 3.3K	1	
R163	CR10J183	0.1W 18K	1	
R164	CR10J222	0.1W 2.2K	1	
R165,66	CR10J103	0.1W 10K	2	
R167,68	CR10J152	0.1W 1.5K	2	
R169	CR10J102	0.1W 1K	1	
R170	CR10J752	0.1W 7.5K	1	
R171	CR10J472	0.1W 4.7K	1	
R172	ERJ6GEYJ101V	1/8W 100	1	
R173	CR10J224	0.1W 220K	1	
R174	CR10J471	0.1W 470	1	
R175	CR10J472	0.1W 4.7K	1	
R176	CR10F1002	0.1W 10K	1	
R177	CR10F2432	0.1W 24.3K	1	
R178	CR10J472	0.1W 4.7K	1	
R179	CR10J223	0.1W 22K	1	
T001	ETB28BF1U6A	TRANSFORMER	1	⚠
VR101	ER0S2TKF1580	0.25W 158	1	
Z001	ERZVGAD471	VARISTOR	1	⚠
ZD002	MA4068N	DIODE	1	
ZD004	MA8051	DIODE	1	
ZD101	MA4039M	DIODE	1	MAZ40390M
ZD102	MAZ8051	DIODE	1	
ZD103	MA8051	DIODE	1	
ZD104	MA8082	DIODE	1	
ZD105	MAZ8051	DIODE	1	
ZD106	MA8051	DIODE	1	

ZD107	RD6.2ESB	DIODE	1	
	08	REP3713A		(FRONT(R) P.C.B.)
C7801	F1H1A105A004	10V 1U	1	
D7801	B3ABA0000396	DIODE	1	
IR7801	B3RAD0000071	REMOTE SENSOR	1	
P7801	K1KA12B00136	CONNECTOR(12P)	1	
QR7801	UNR221400L	TRANSISTOR	1	
R7801	ERDS2TJ330T	1/4W 33	1	
R7802	ERJ3GEYJ221V	1/10W 220	1	
R7809	ERJ3RBD272V	1/16W 2.7K	1	
R7817	ERJ3RBD272V	1/16W 2.7K	1	
R7818	ERJ3RBD222V	1/16W 2.2K	1	
R7819	ERJ3RBD332V	1/16W 3.3K	1	
R7825	ERJ3RBD272V	1/16W 2.7K	1	
R7826	ERJ3RBD222V	1/16W 2.2K	1	
R7827	ERJ3RBD332V	1/16W 3.3K	1	
S7801	EVQ11G07K	SWITCH,OPEN/CLOSE	1	
S7802	EVQ11G07K	SWITCH,SKIP-F	1	
S7809	EVQ11G07K	SWITCH,CH-DOWN	1	
S7811	EVQ11G07K	SWITCH,REC	1	
S7812	EVQ11G07K	SWITCH,STOP	1	
S7813	EVQ11G07K	SWITCH,SKIP-R	1	
S7819	EVQ11G07K	SWITCH,CH-UP	1	
S7820	EVQ11G07K	SWITCH,TIME WARP	1	
S7821	EVQ11G07K	SWITCH,PLAY	1	


[TOP](#) [PREVIOUS](#) [NEXT](#)





# 21 Schematic Diagram for printing with A4

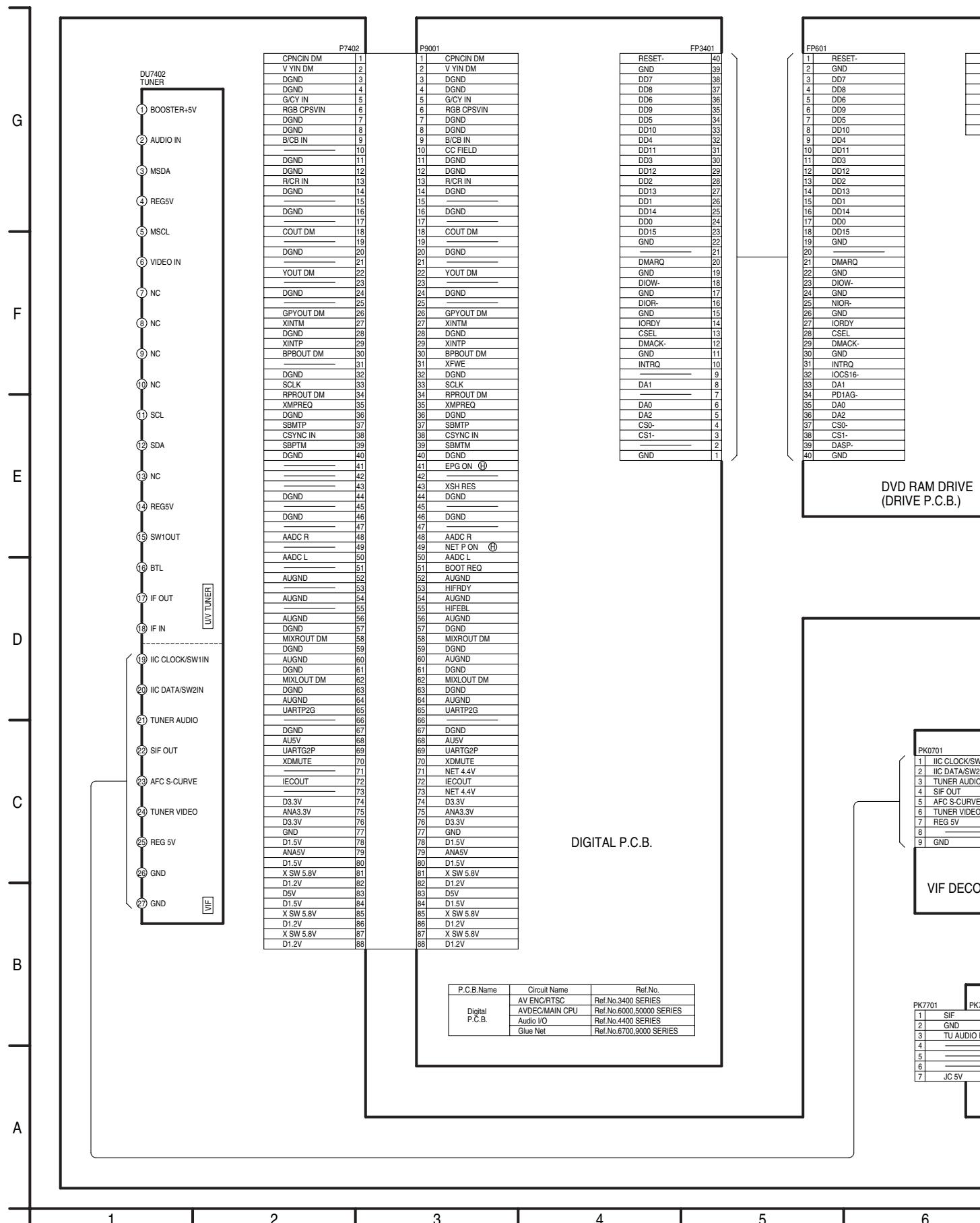
[TOP](#) [PREVIOUS](#)

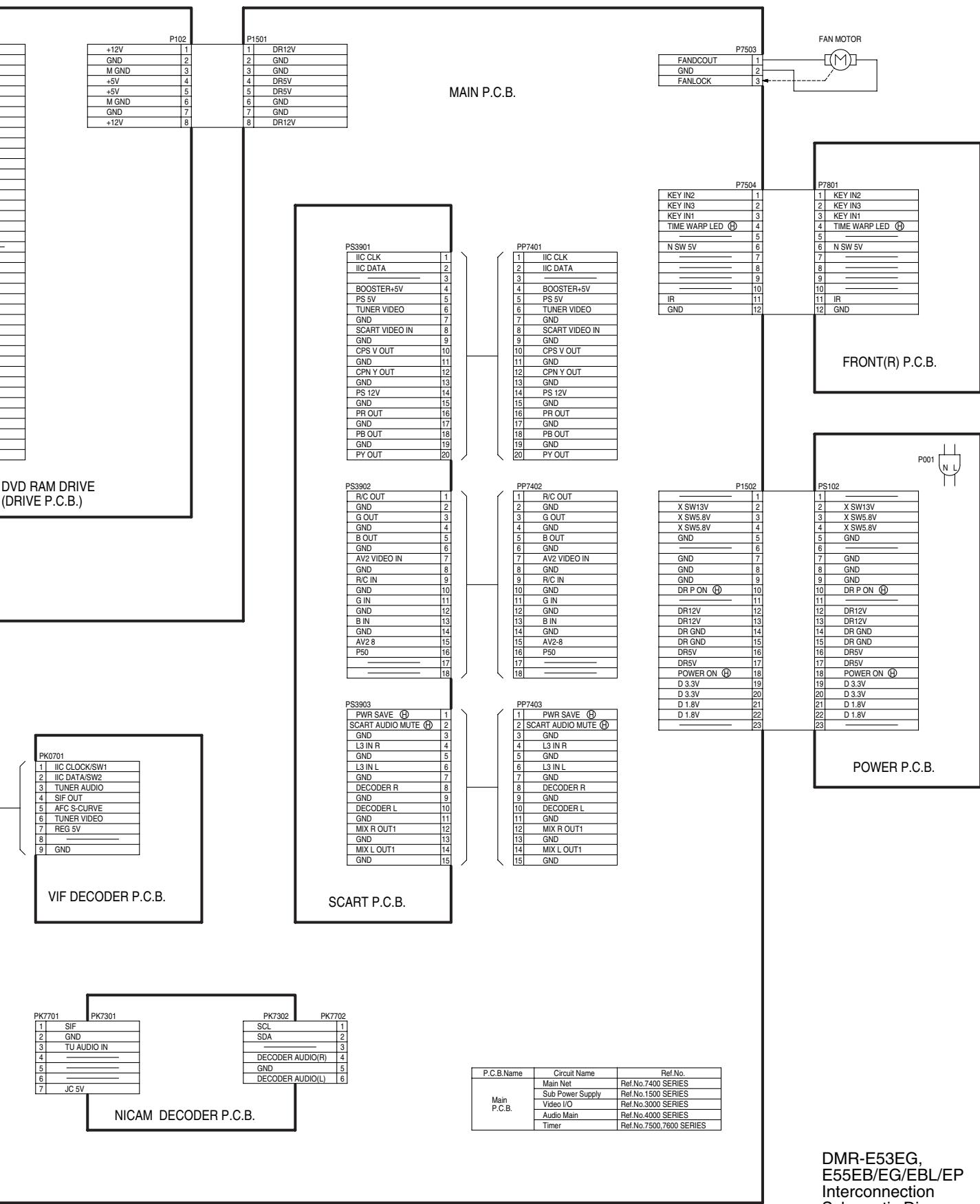


[TOP](#) [PREVIOUS](#)

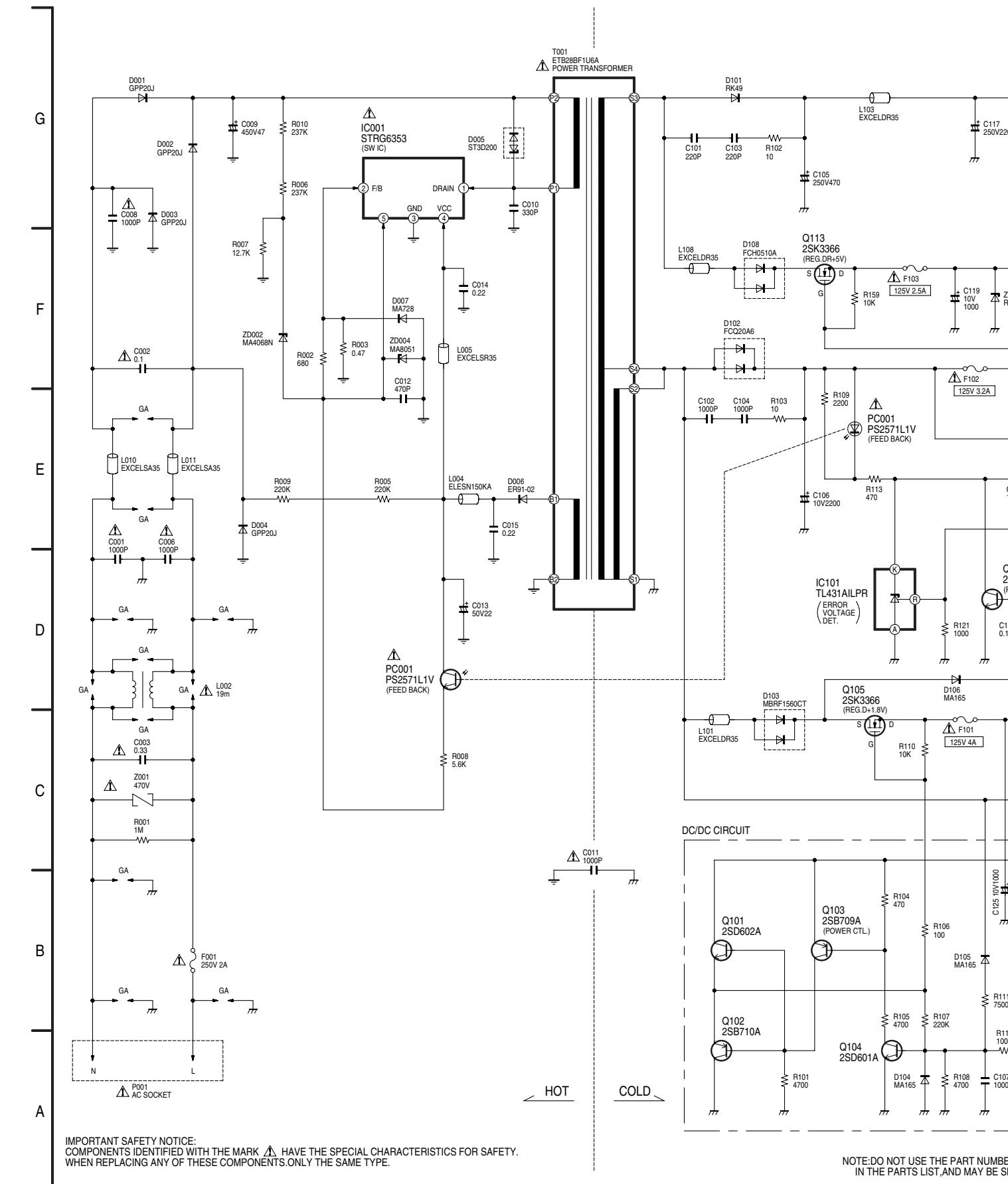
# 17 Schematic Diagram

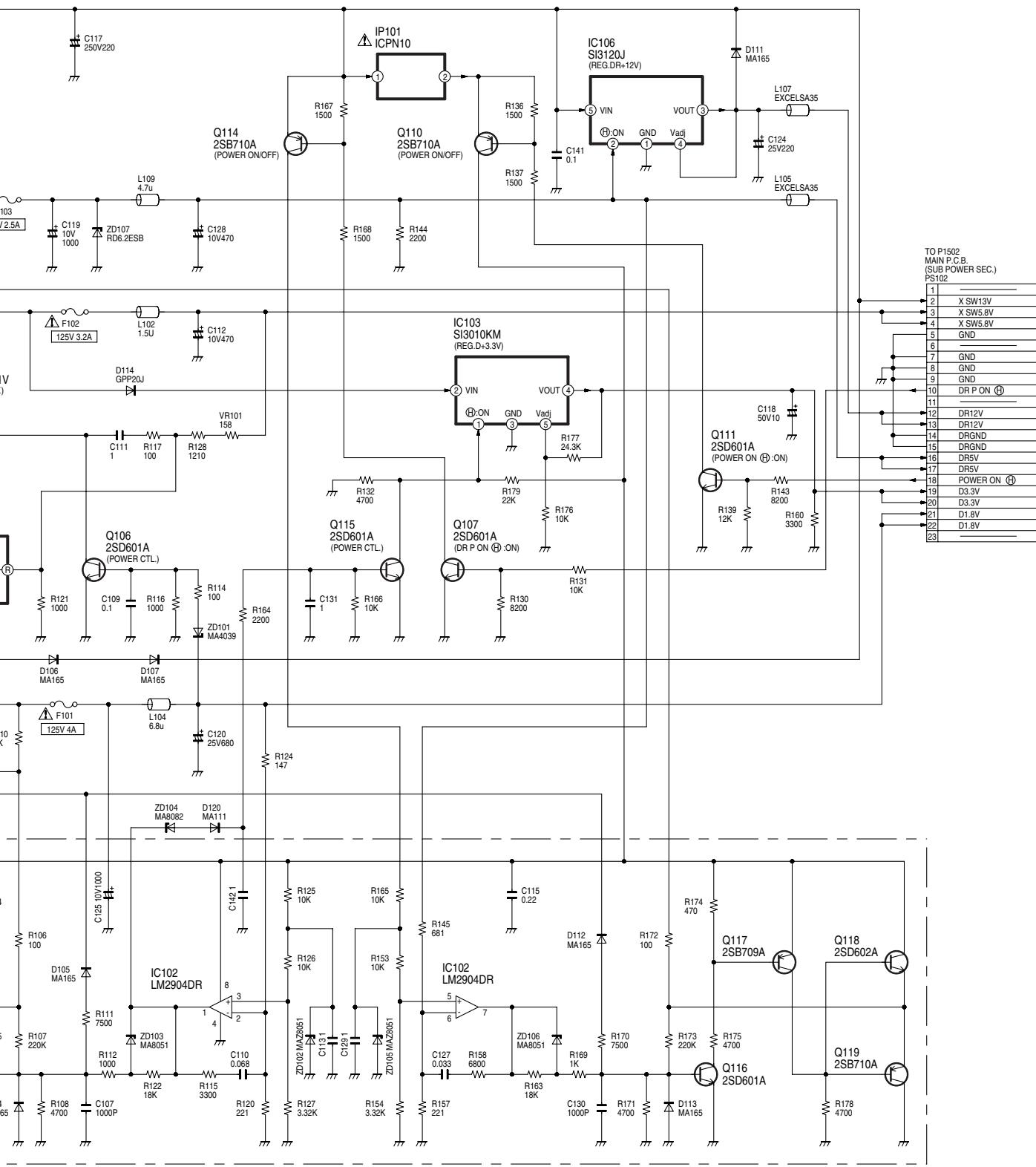
## 17.1. Interconnection Schematic Diagram





## 17.2. Main Power Supply Schematic Diagram

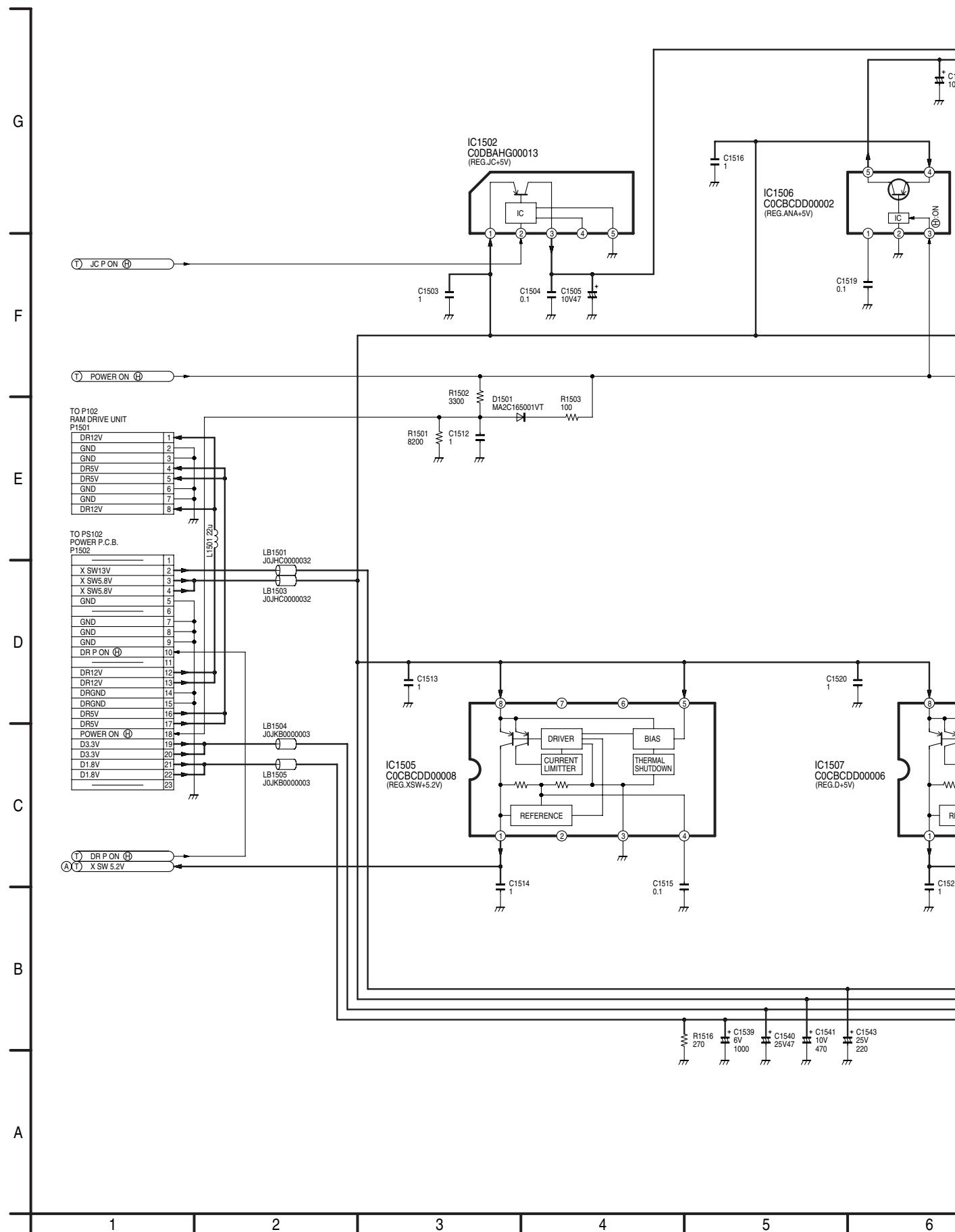




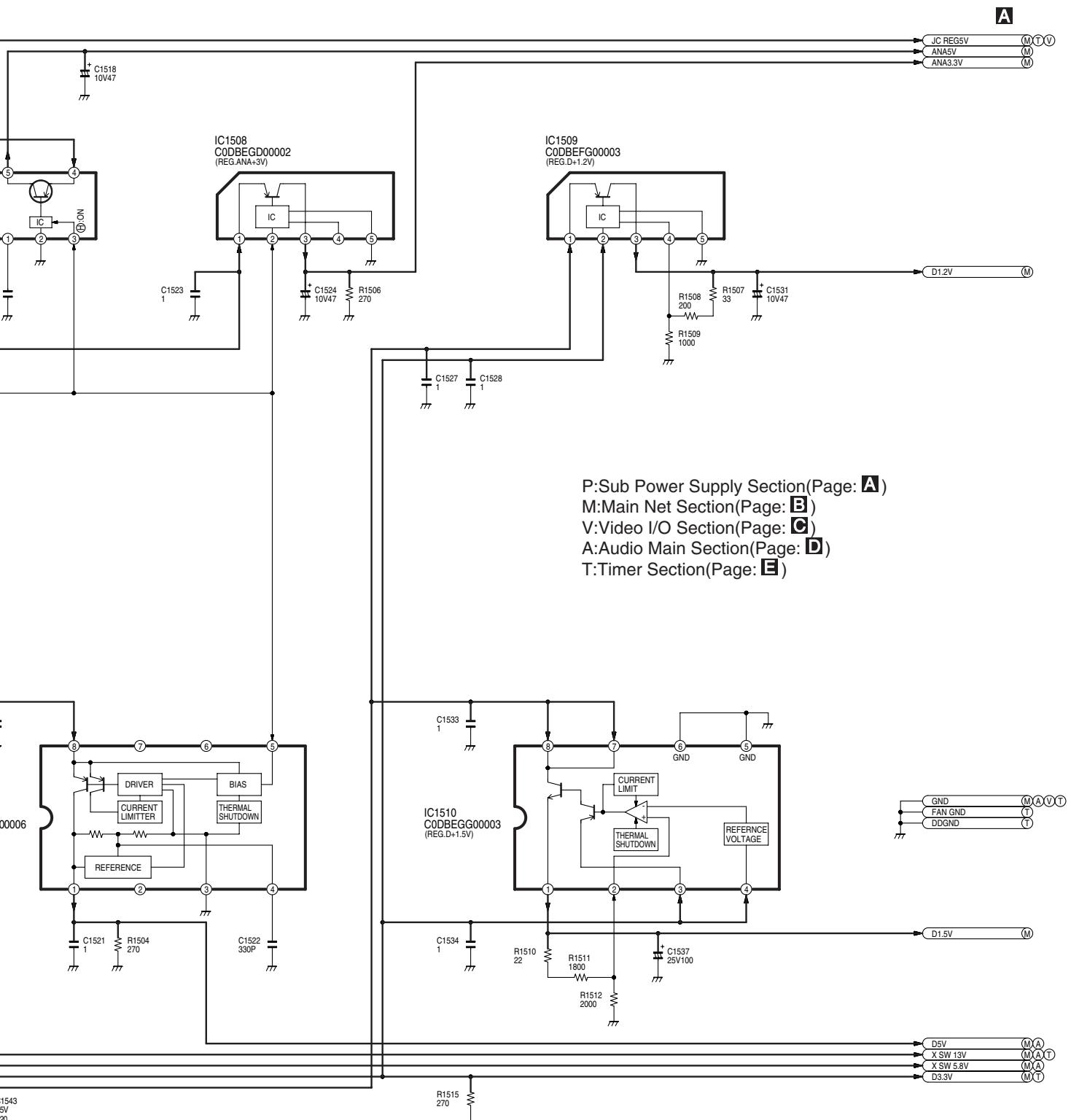
USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THIS LIST, AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E53EG, E55EB/EG/EBL/EP  
Main Power Supply  
Schematic Diagram

### **17.3. Sub Power Supply Section (Main P.C.B. (1/5)) Schematic Diagram (P)**



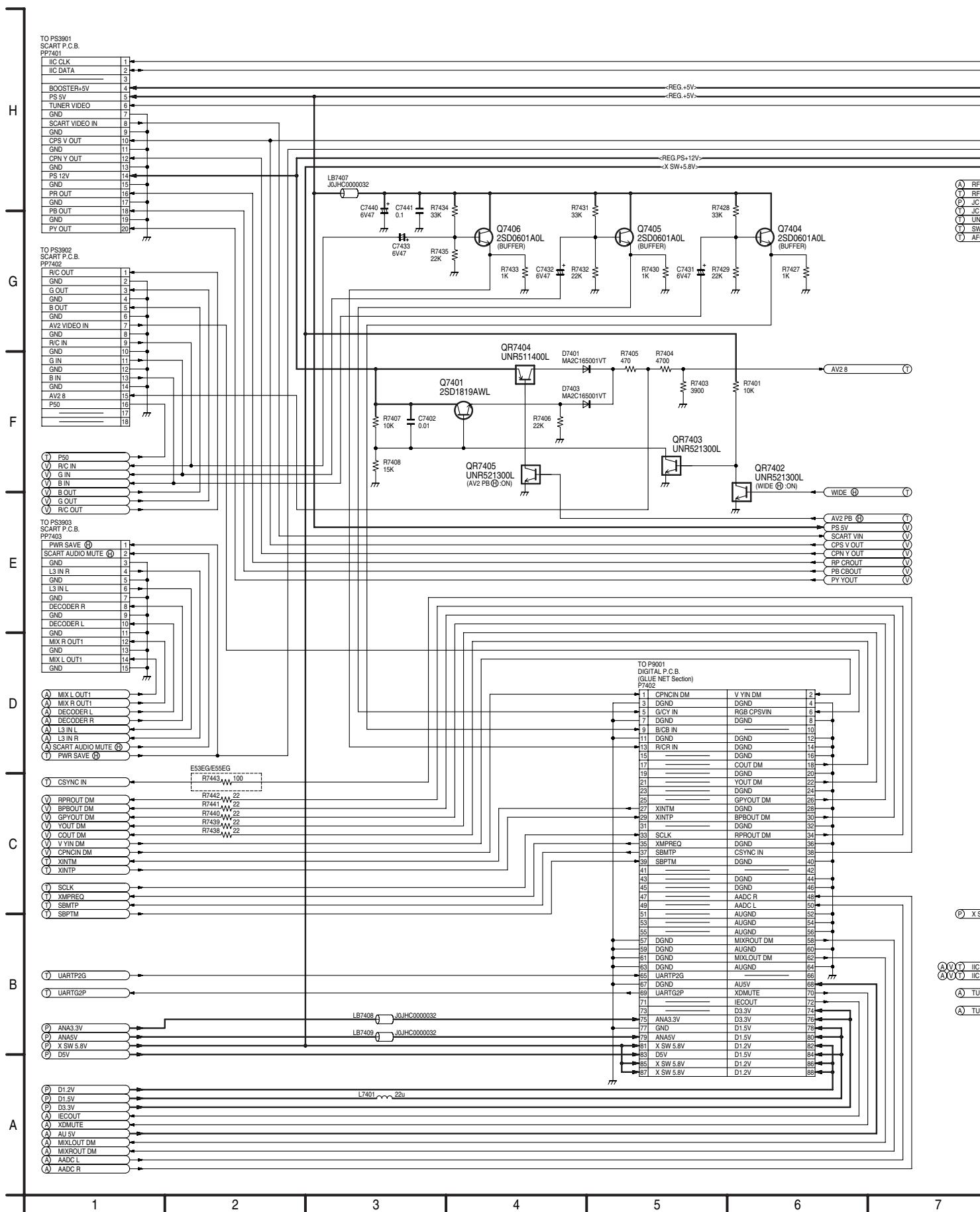
(P)

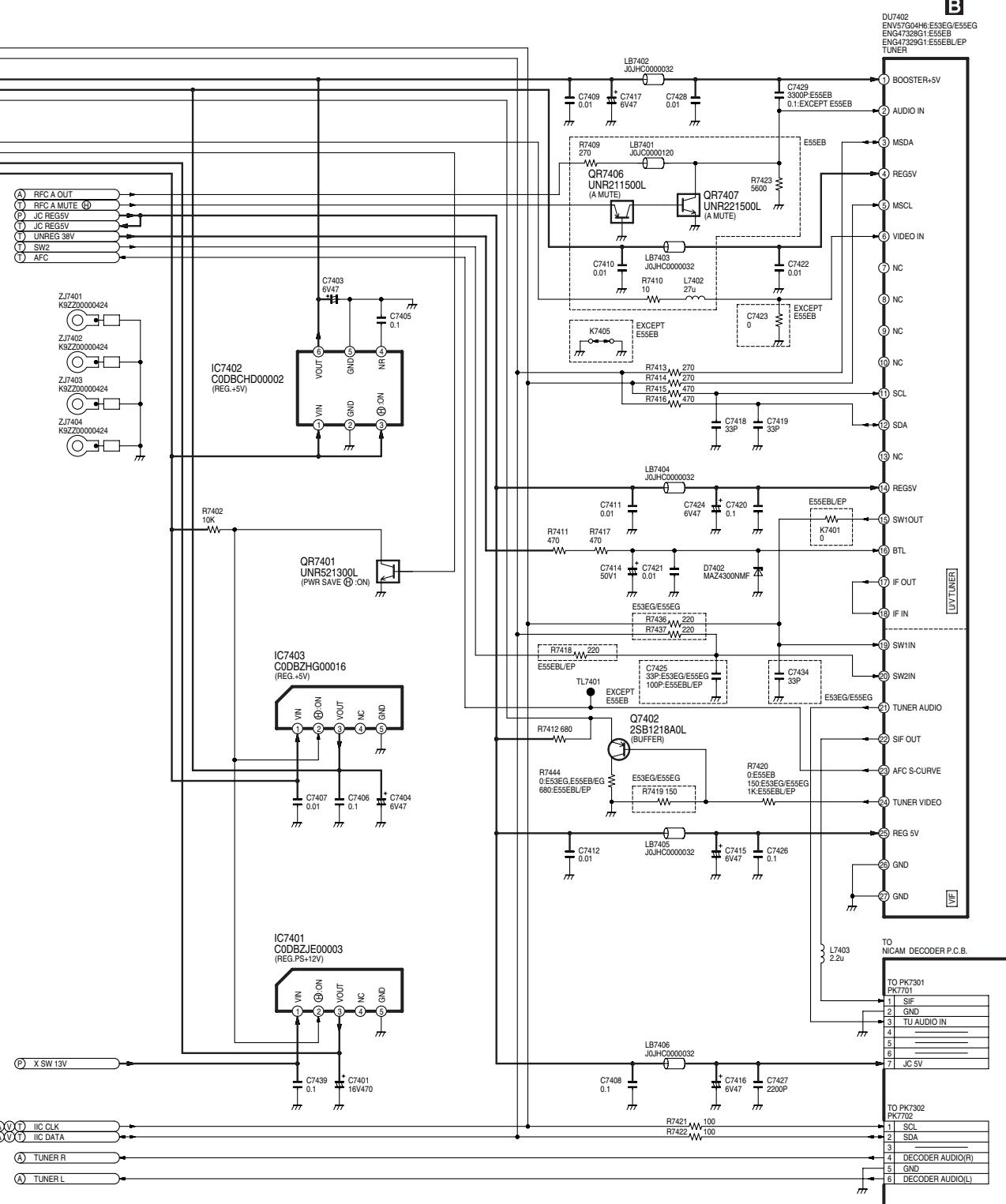


DMR-E53EG,E55EB/EG/EBL/EP  
Sub Power Supply Section  
(Main P.C.B.(1/5))  
Schematic Diagram(P)

NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN  
IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

#### **17.4. Main Net Section (Main P.C.B. (2/5)) Schematic Diagram (M)**





P:Sub Power Supply Section(Page: A)

M:Main Net Section(Page: B)

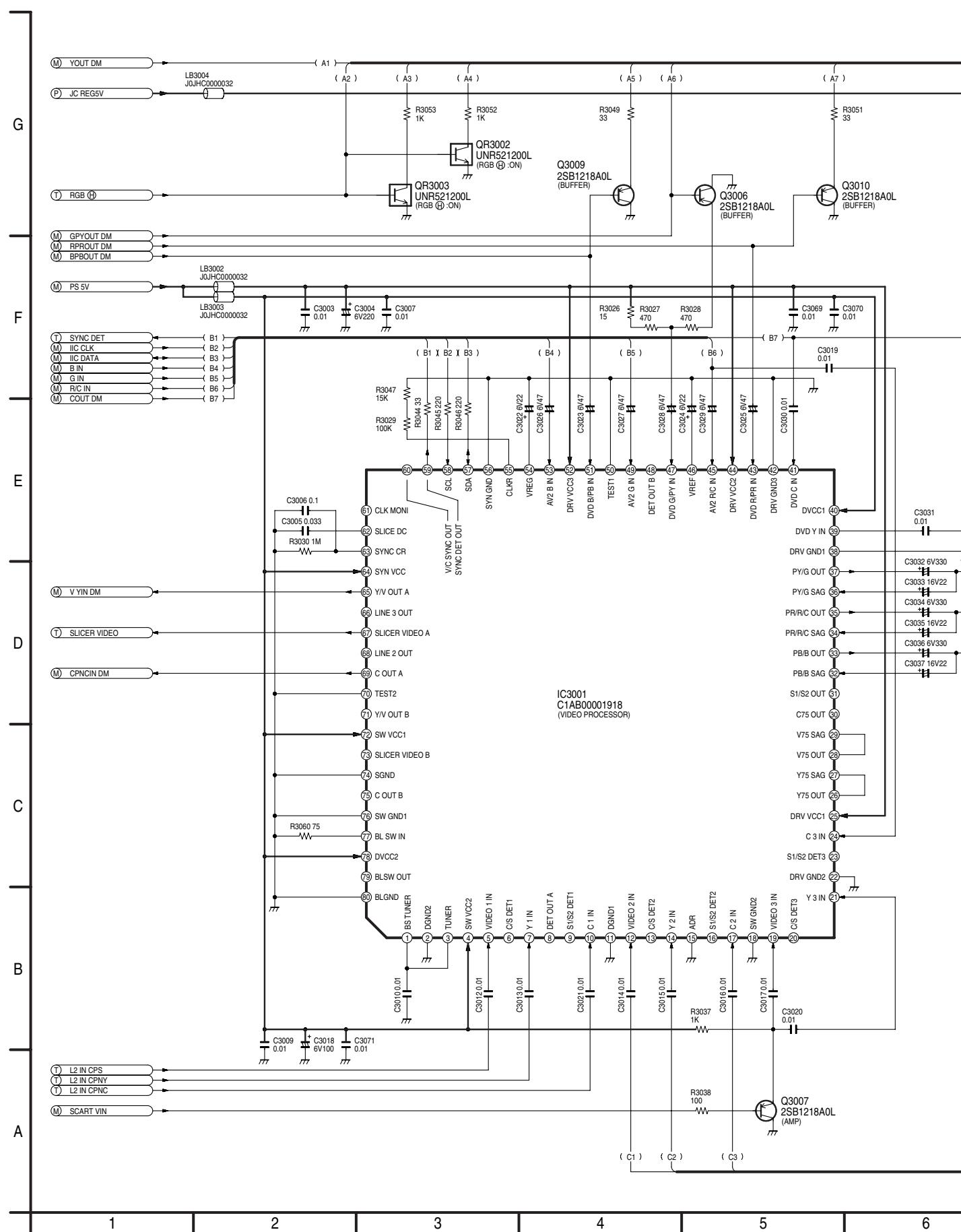
V:Video I/O Section(Page: C)

A:Audio Main Section(Page: D)

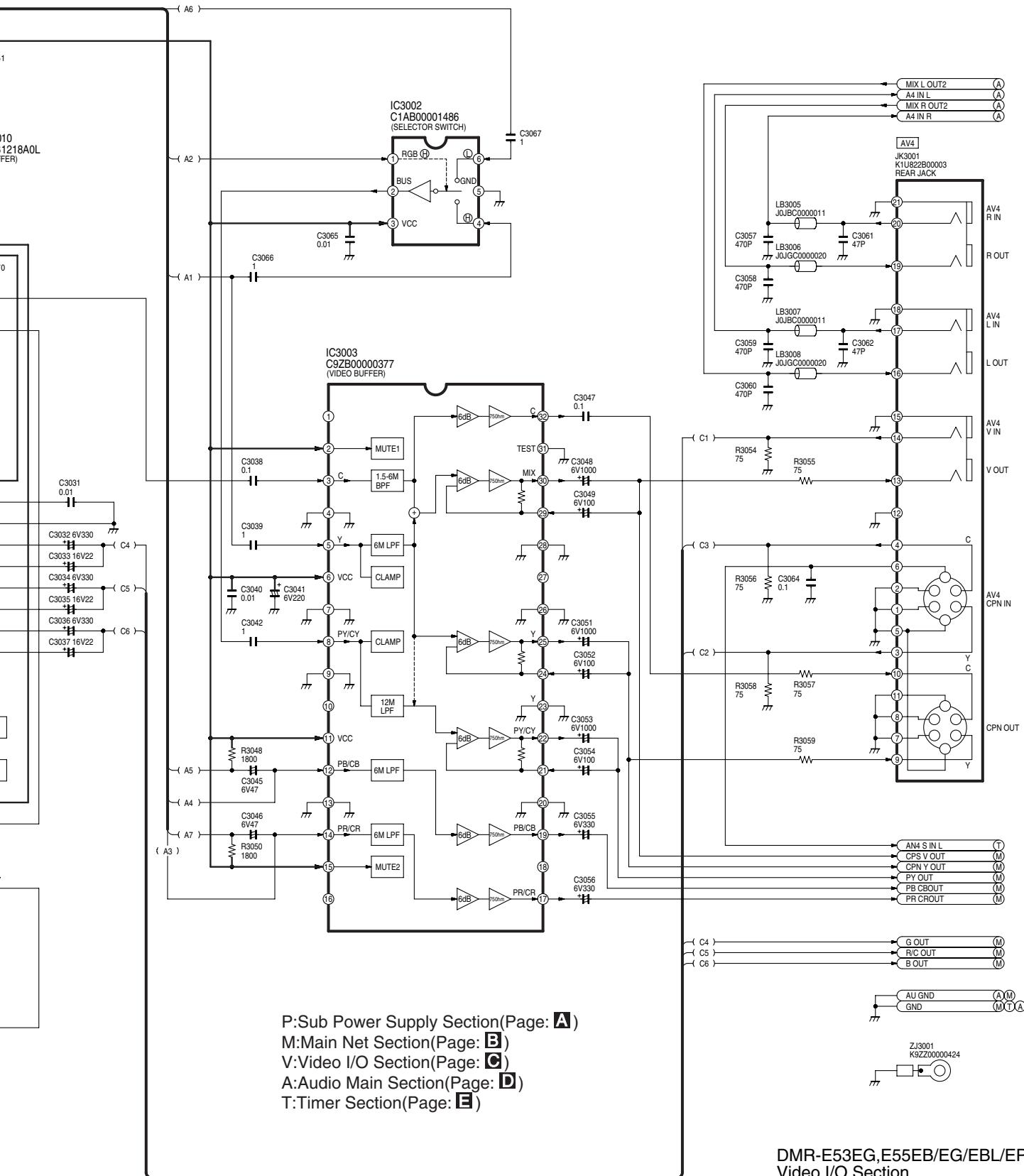
T:Timer Section(Page: E)

DMR-E53EG,E55EB/EG/EBL/EP  
Main Net Section  
(Main P.C.B.(2/5))  
Schematic Diagram(M)

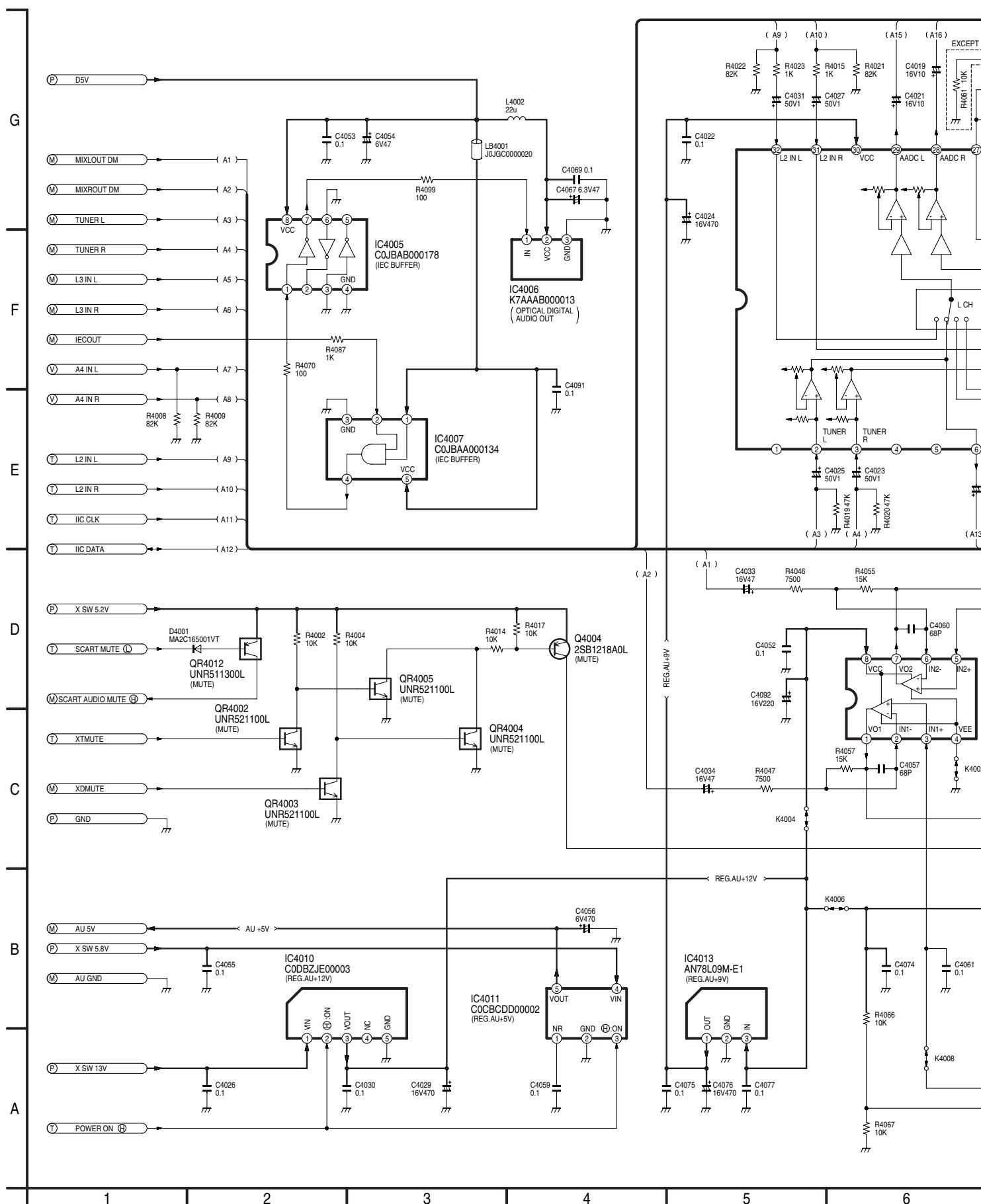
## 17.5. Video I/O Section (Main P.C.B. (3/5)) Schematic Diagram (V)

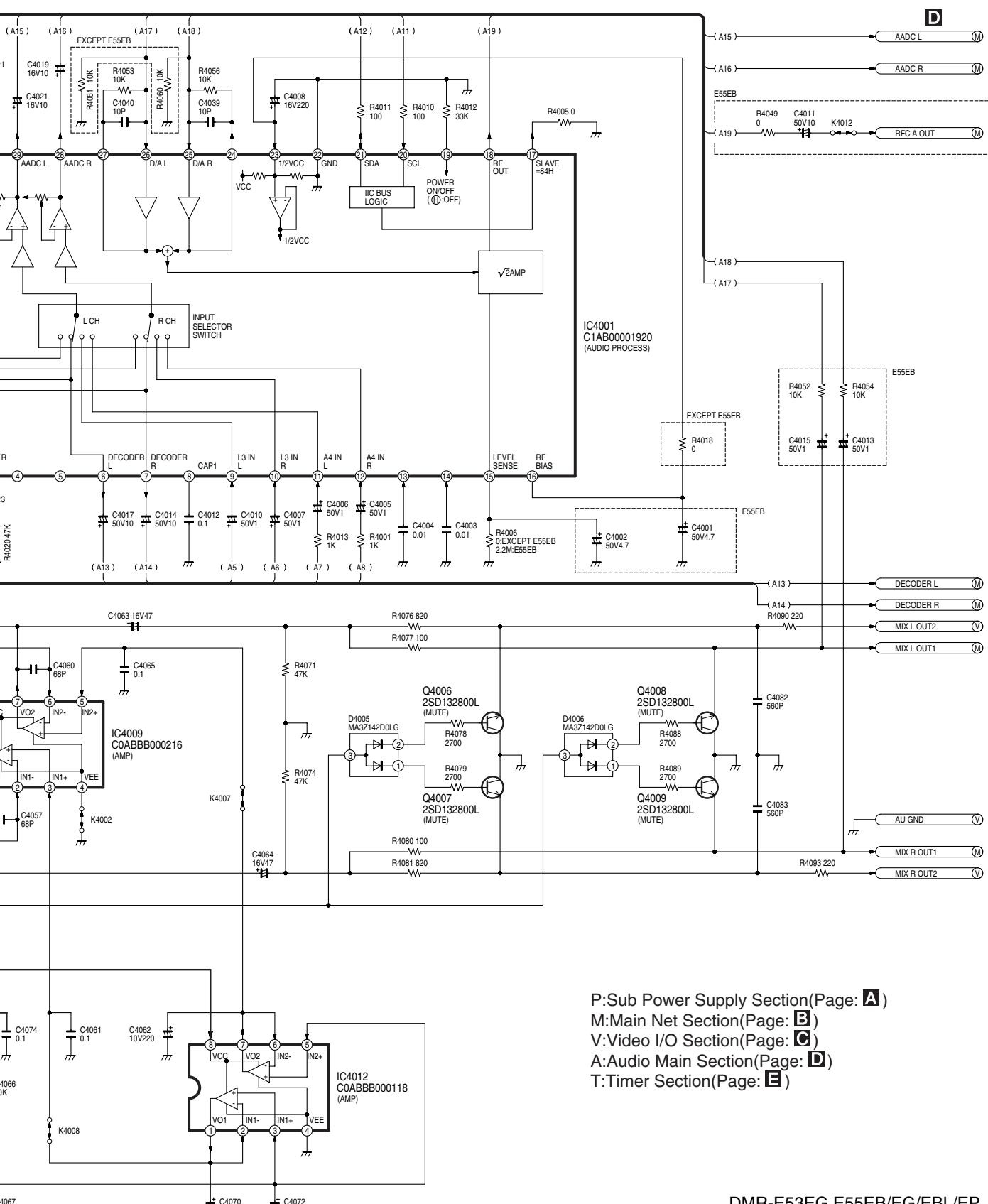


C



## **17.6. Audio Main Section (Main P.C.B. (4/5)) Schematic Diagram (A)**





P:Sub Power Supply Section(Page: **A**)

M:Main Net Section(Page: **B**)

V:Video I/O Section(Page: **C**)

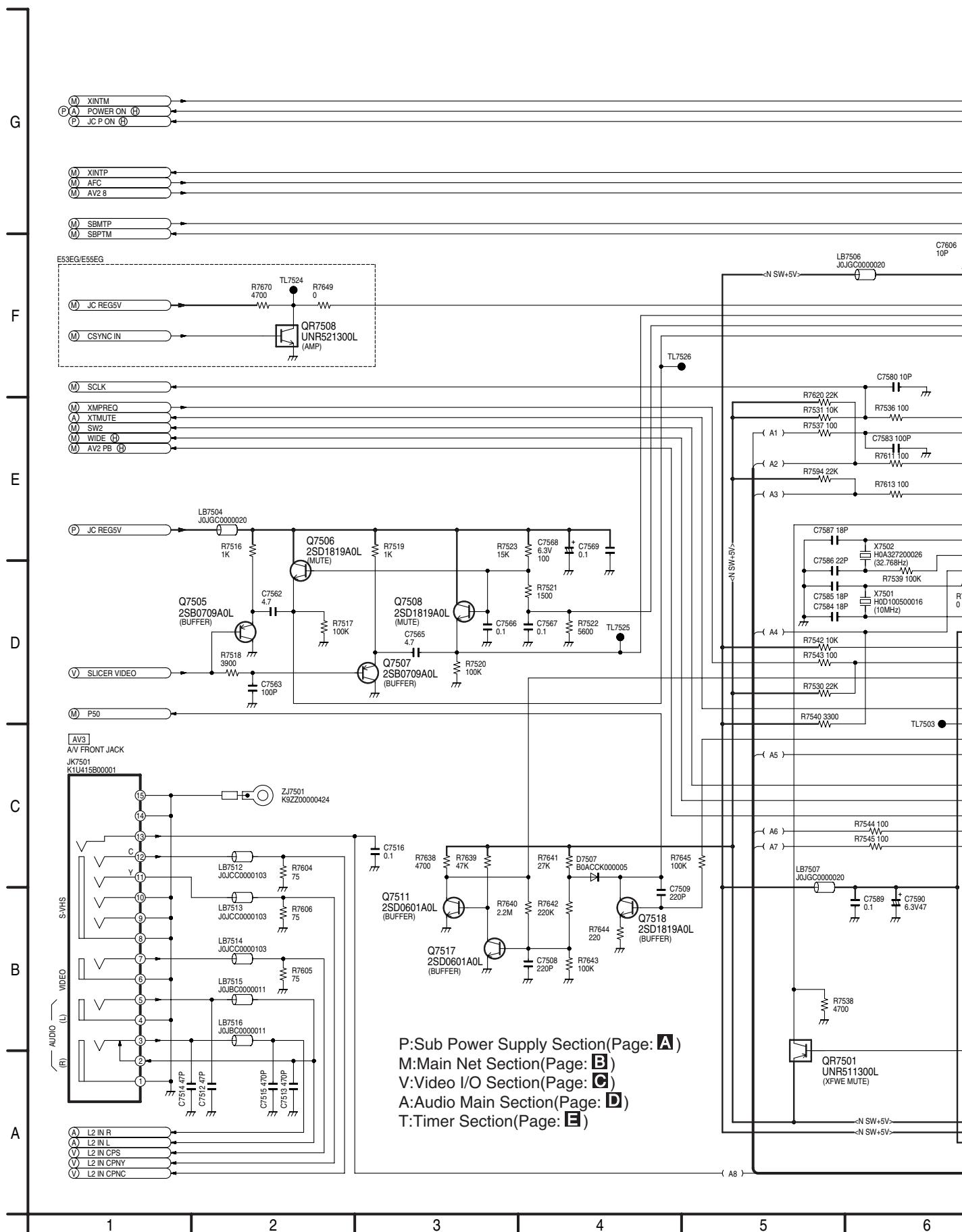
A:Audio Main Section(Page: **D**)

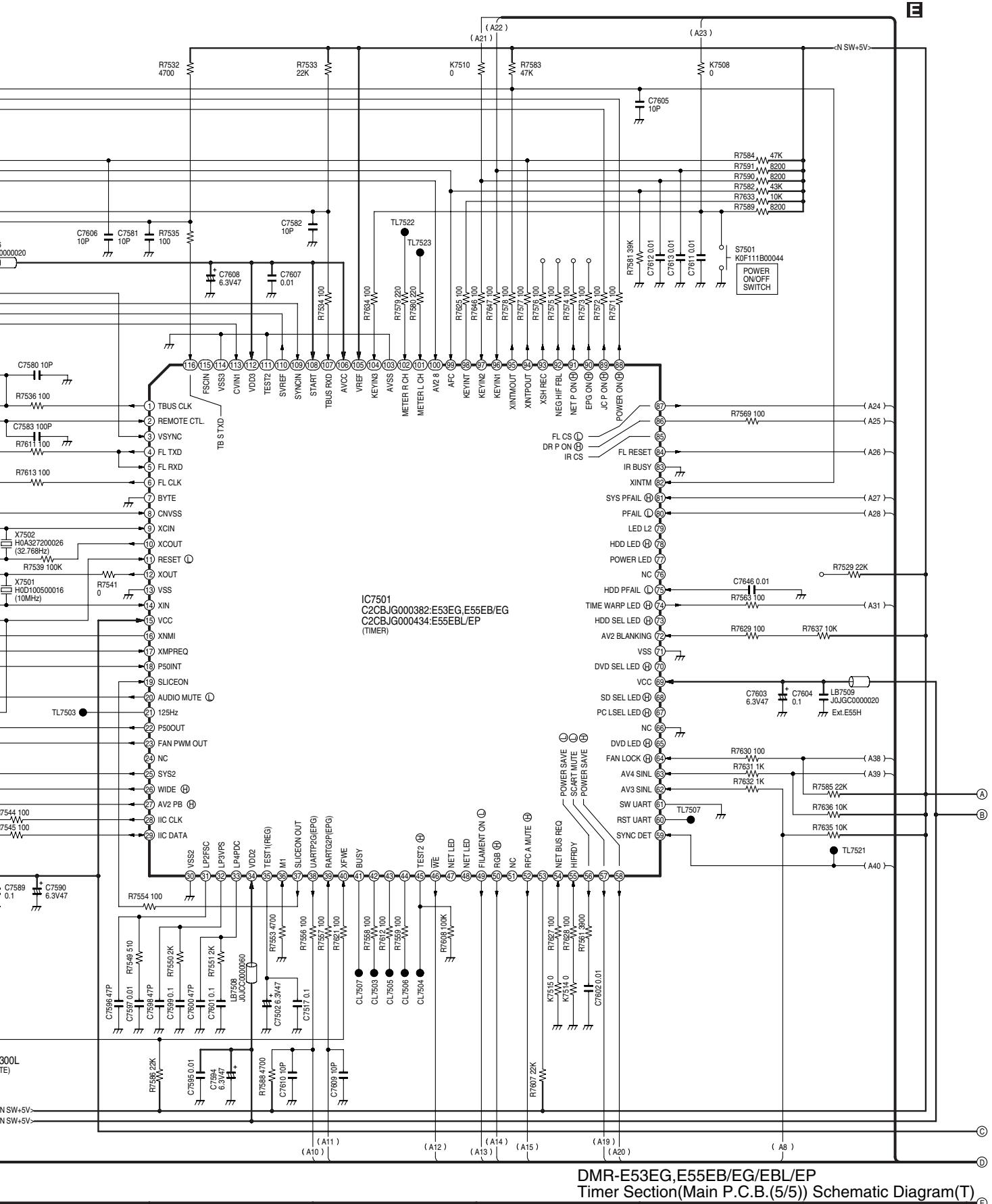
T:Timer Section(Page: **E**)

**DMR-E53EG,E55EB/EG/EBL/EP**  
Audio Main Section  
(Main P.C.B.(4/5))  
Schematic Diagram(**A**)

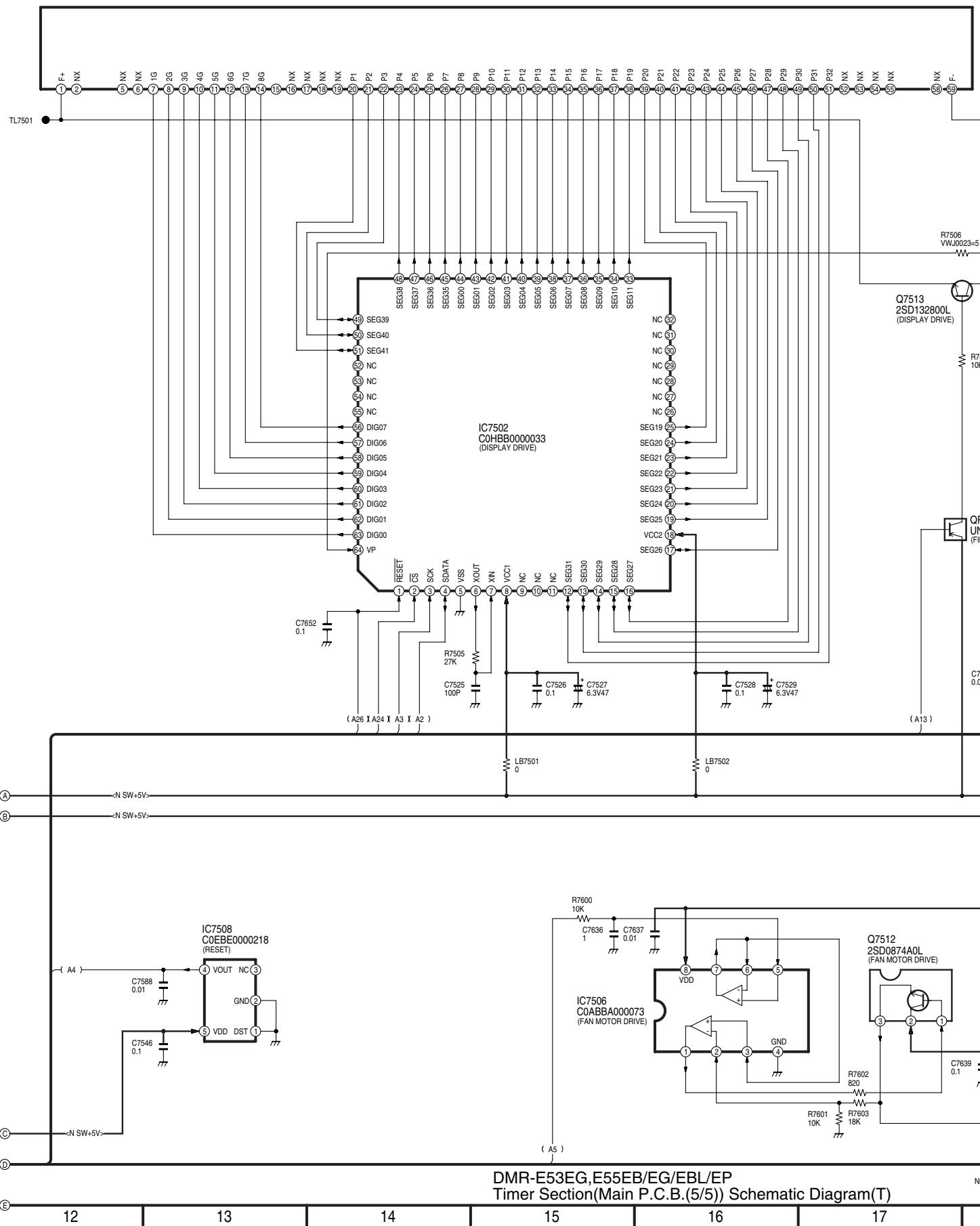
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING.THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

## 17.7. Timer Section (Main P.C.B. (5/5)) Schematic Diagram (T)





## DMR-E53EG,E55EB/EG/EBL/EP Timer Section(Main P.C.B.(5/5)) Schematic Diagram(T)



E

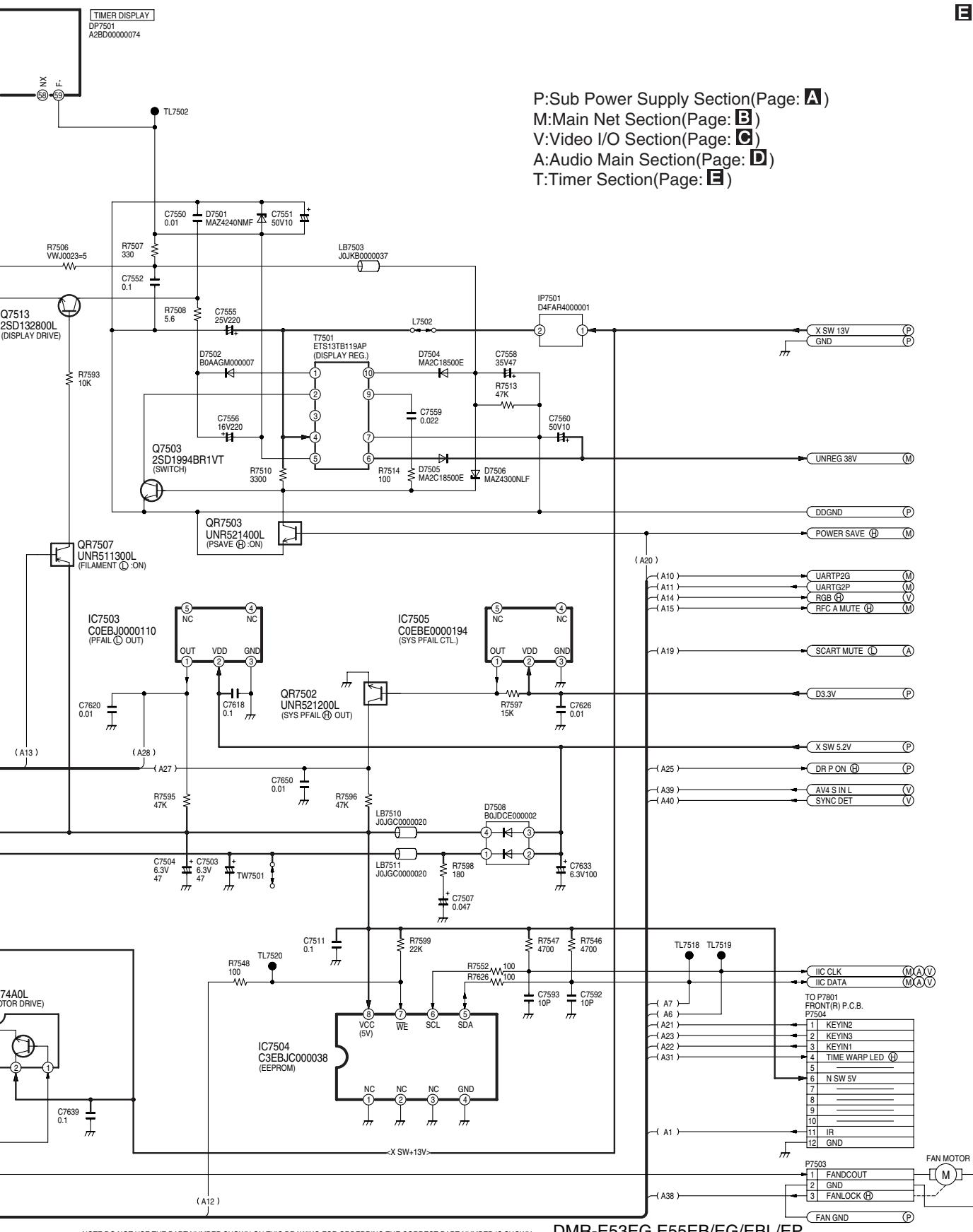
P:Sub Power Supply Section(Page: A)

M:Main Net Section(Page: B)

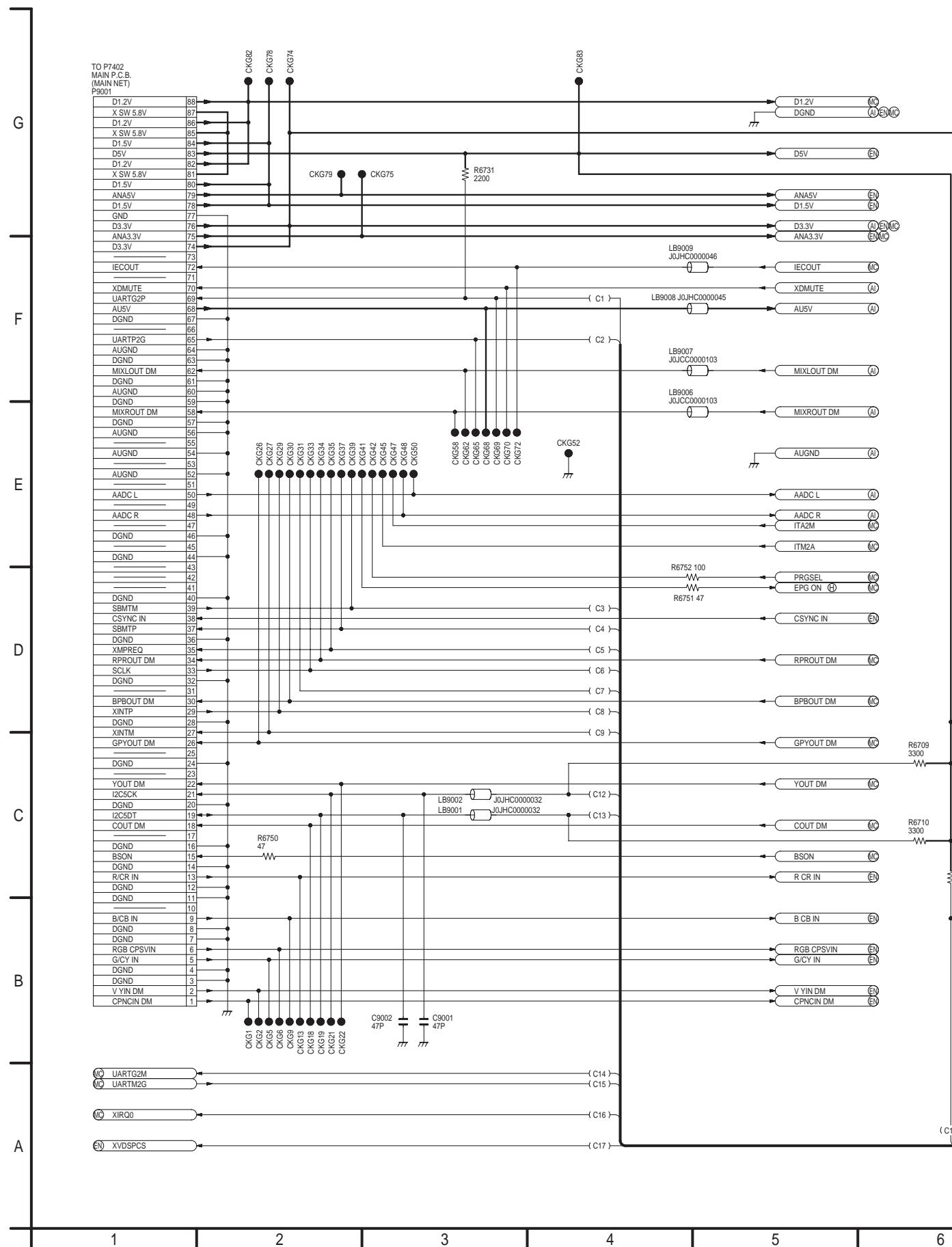
V:Video I/O Section(Page: C)

A:Audio Main Section(Page: D)

T:Timer Section(Page: E)

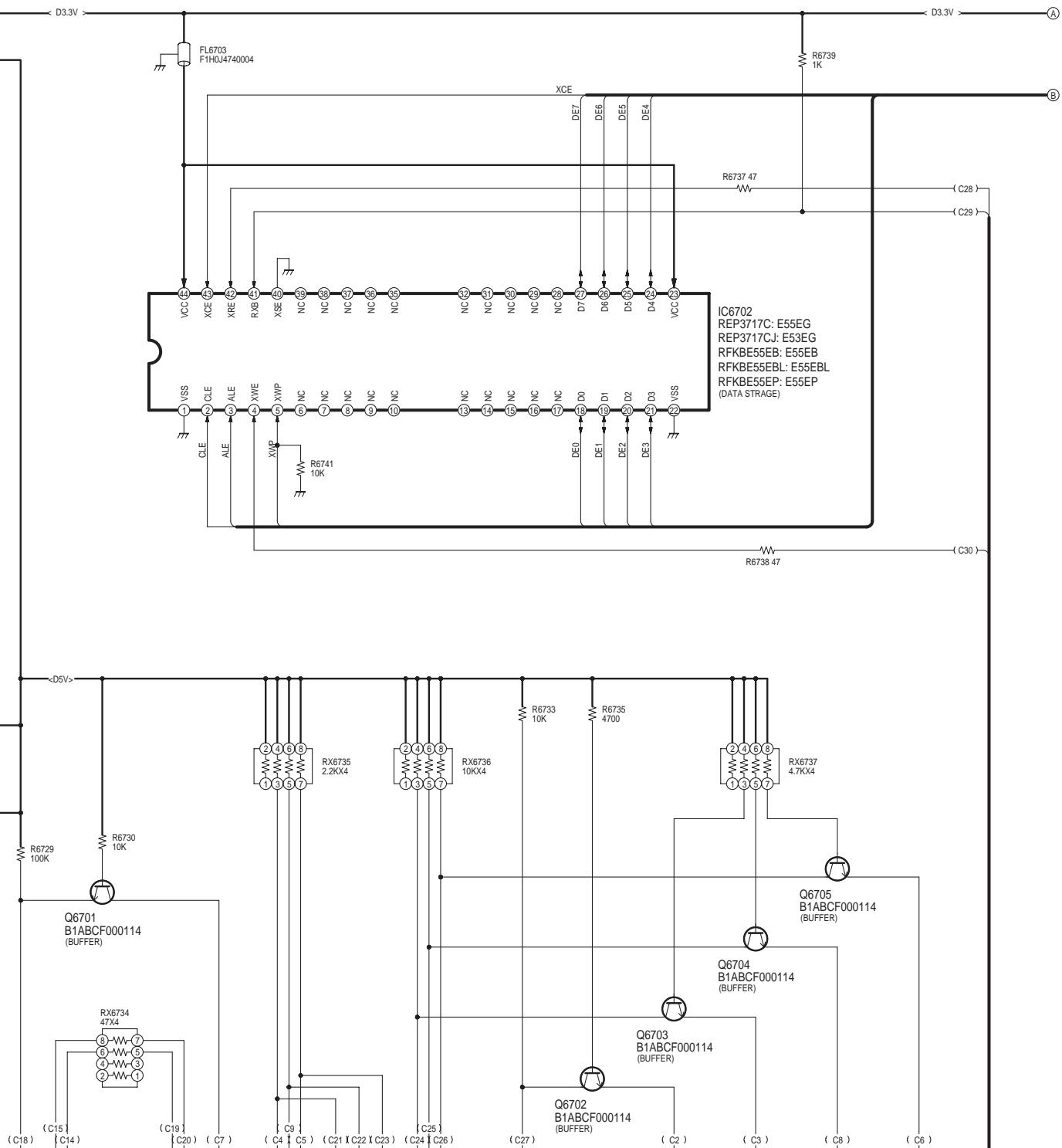
DMR-E53EG, E55EB/EG/EBL/EP  
Timer Section(Main P.C.B.(5/5)) Schematic Diagram(T)

## 17.8. Glue Net Section (Digital P.C.B. (1/4)) Schematic Diagram (GN)

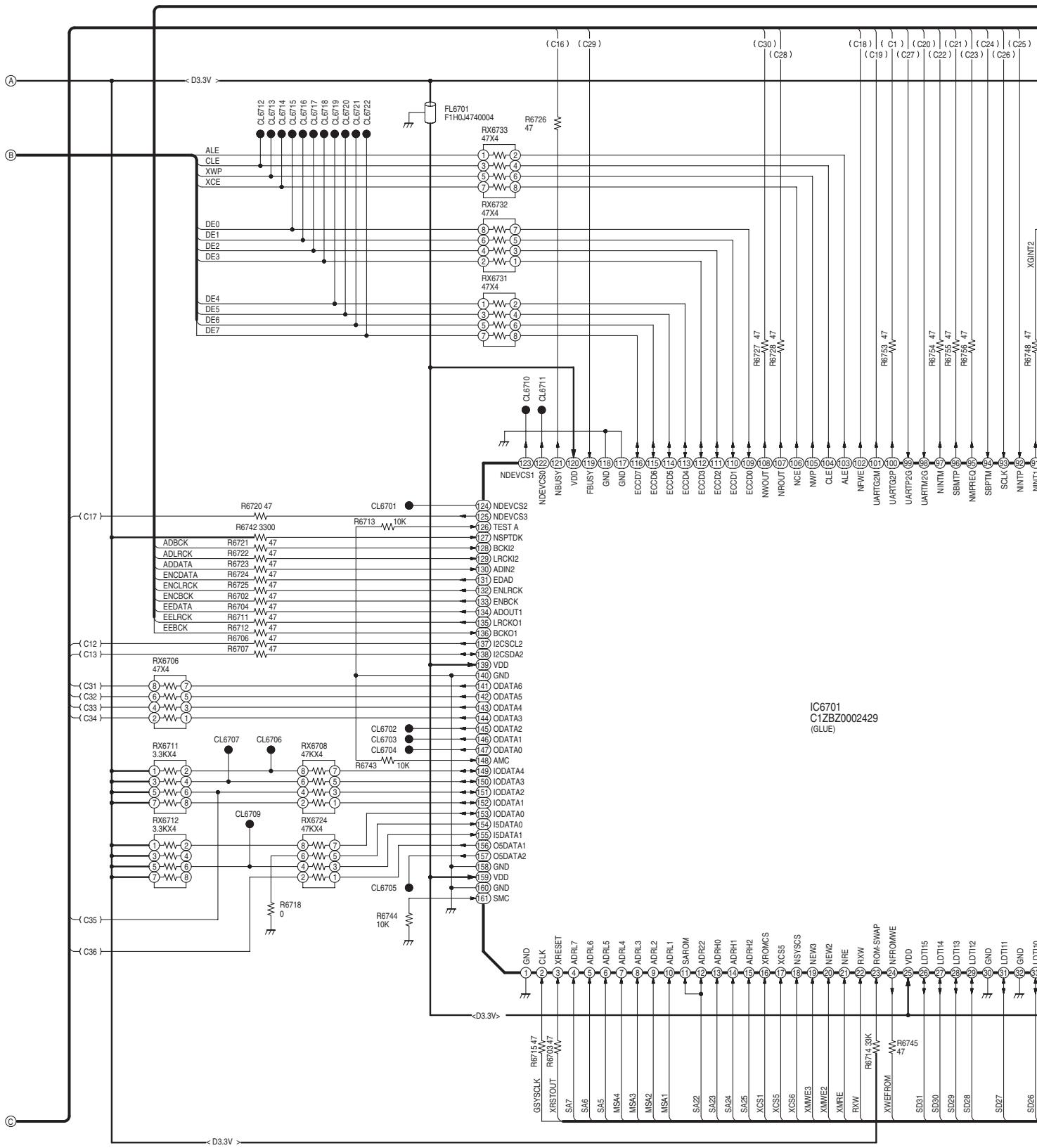


F

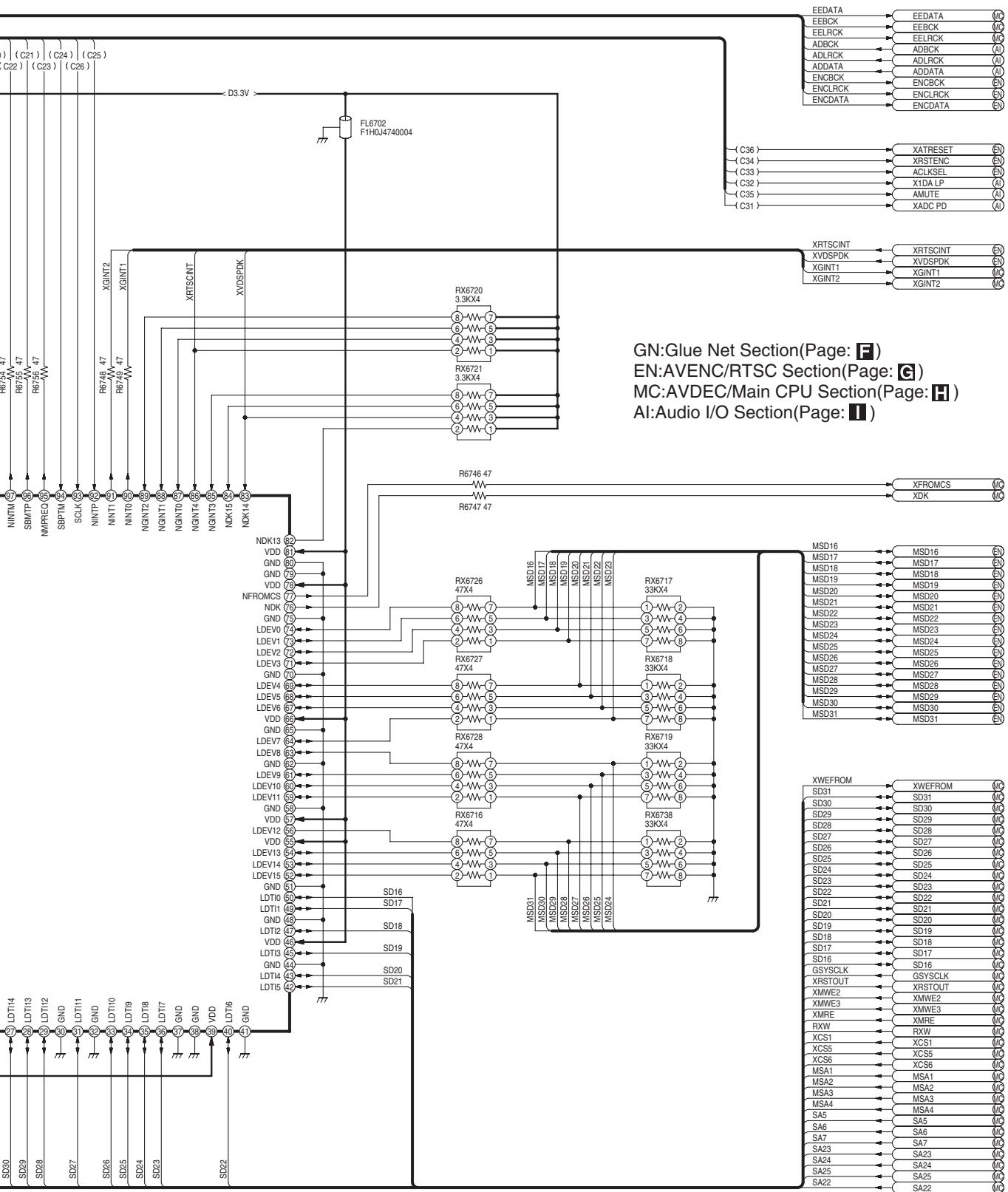
GN:Glue Net Section(Page: F)  
EN:AVENC/RTSC Section(Page: G)  
MC:AVDEC/Main CPU Section(Page: H)  
AI:Audio I/O Section(Page: I)



DMR-E53EG,E55EB/EP  
Glue Net Section (Digital P.C.B.(1/4))  
Schematic Diagram (GN)



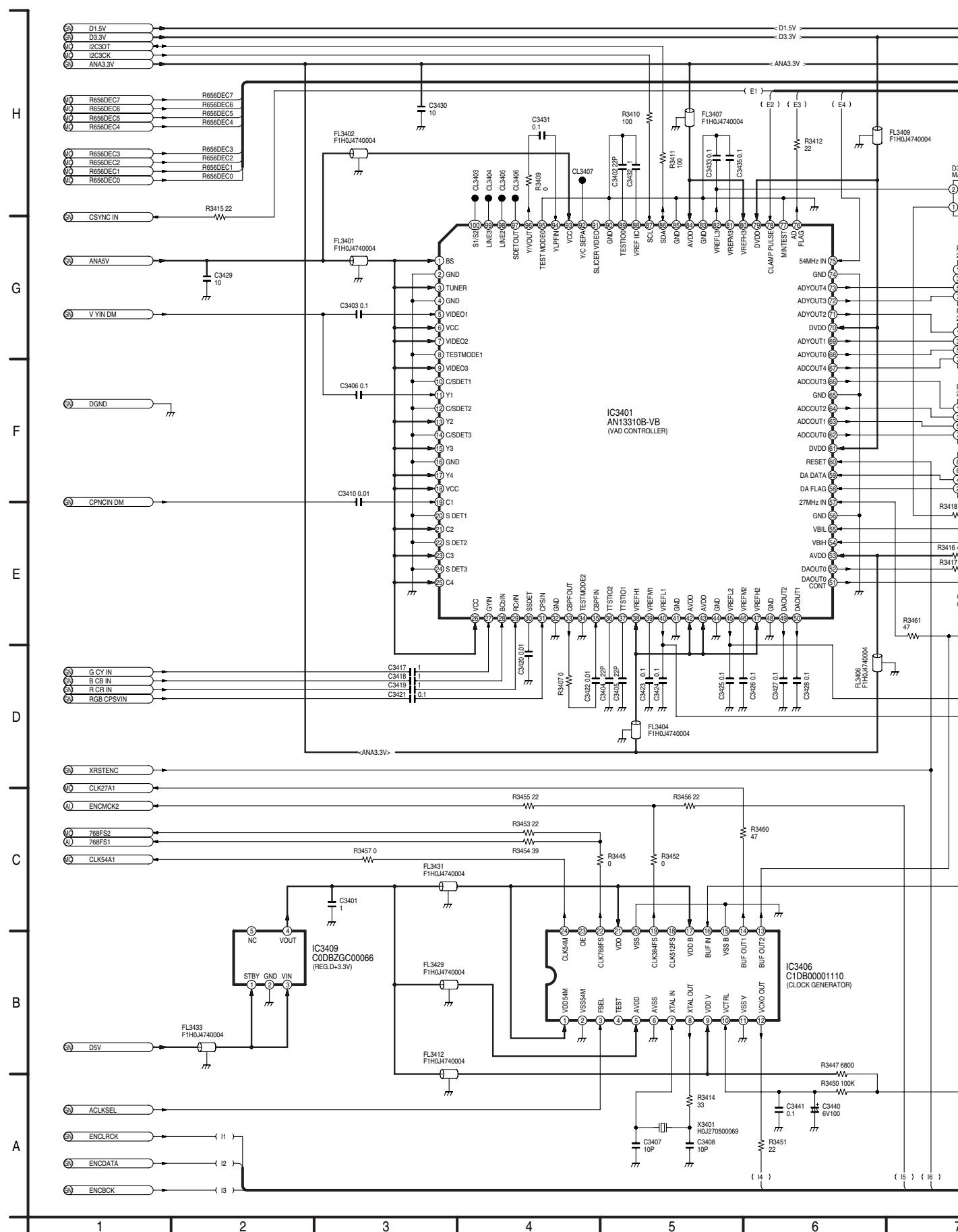
F



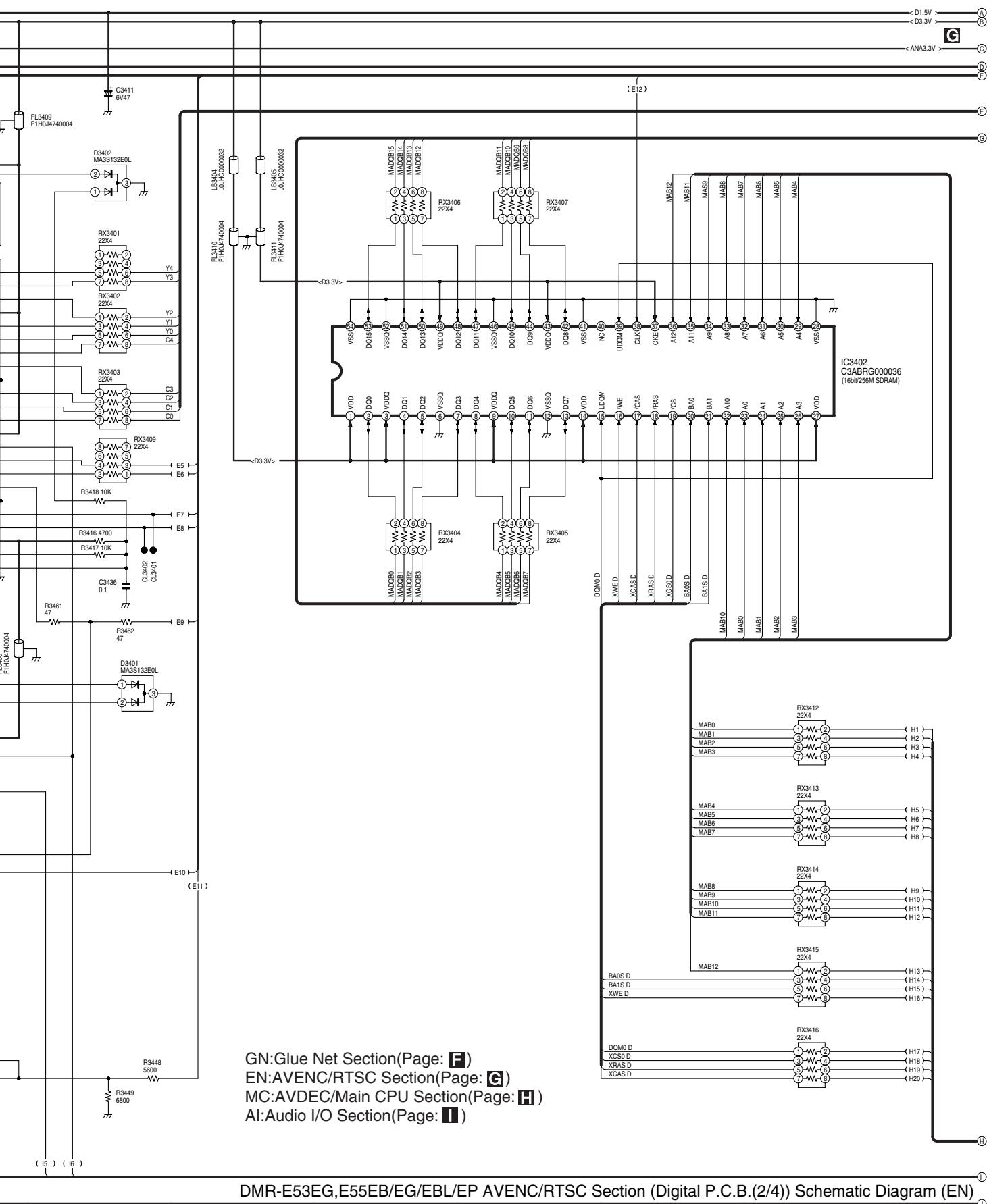
NOTE:DO NOT USE THE PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN IN THE PARTS LIST,AND MAY BE SLIGHTLY DIFFERNT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

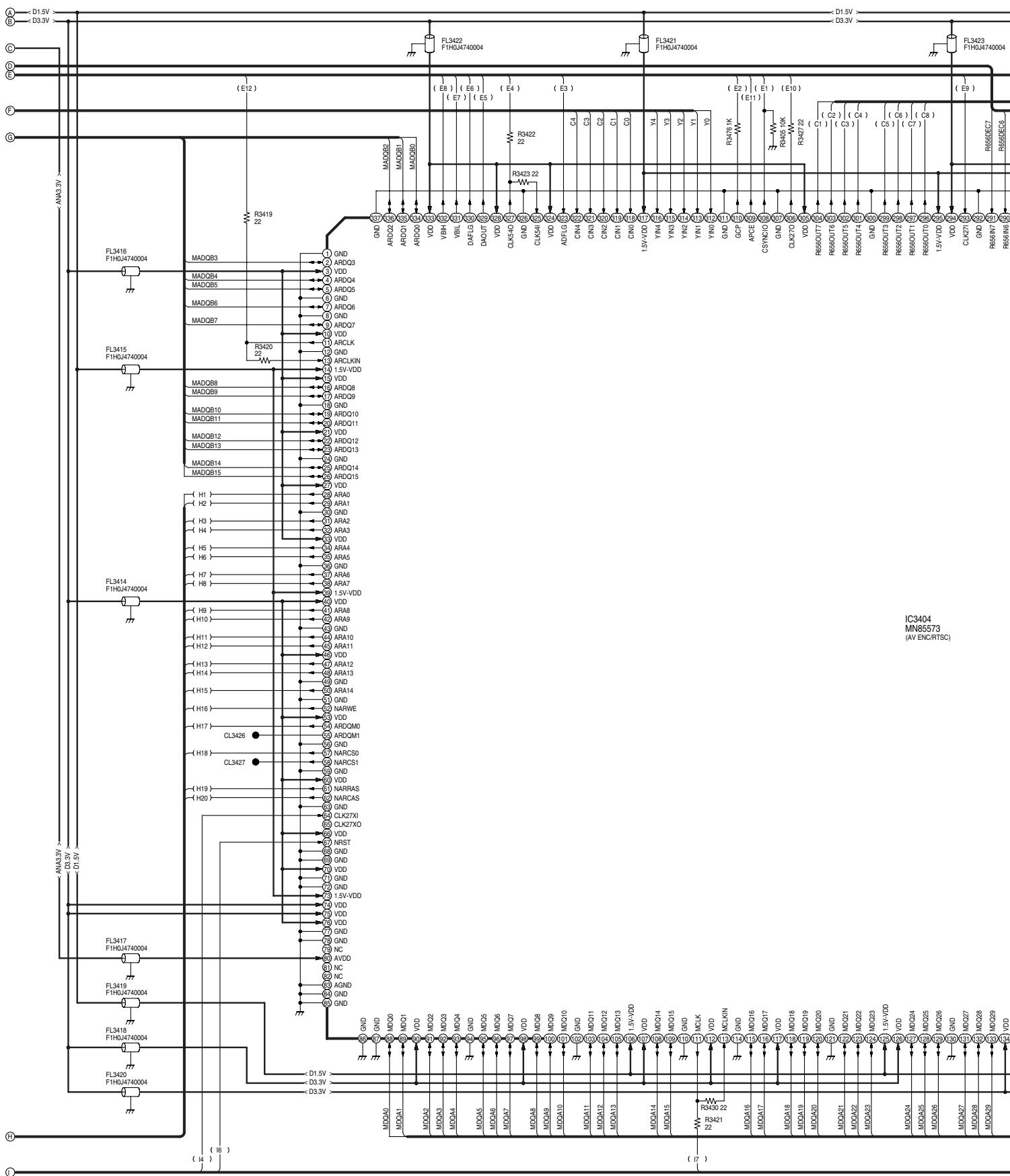
**DMR-E53EG,E55EB/EG/EBL/EP  
Glue Net Section (Digital P.C.B.(1/4))  
Schematic Diagram (GN)**

### 17.9. AV Encoder/Real Time Stream Control (RTSC) Section (Digital P.C.B. (2/4))

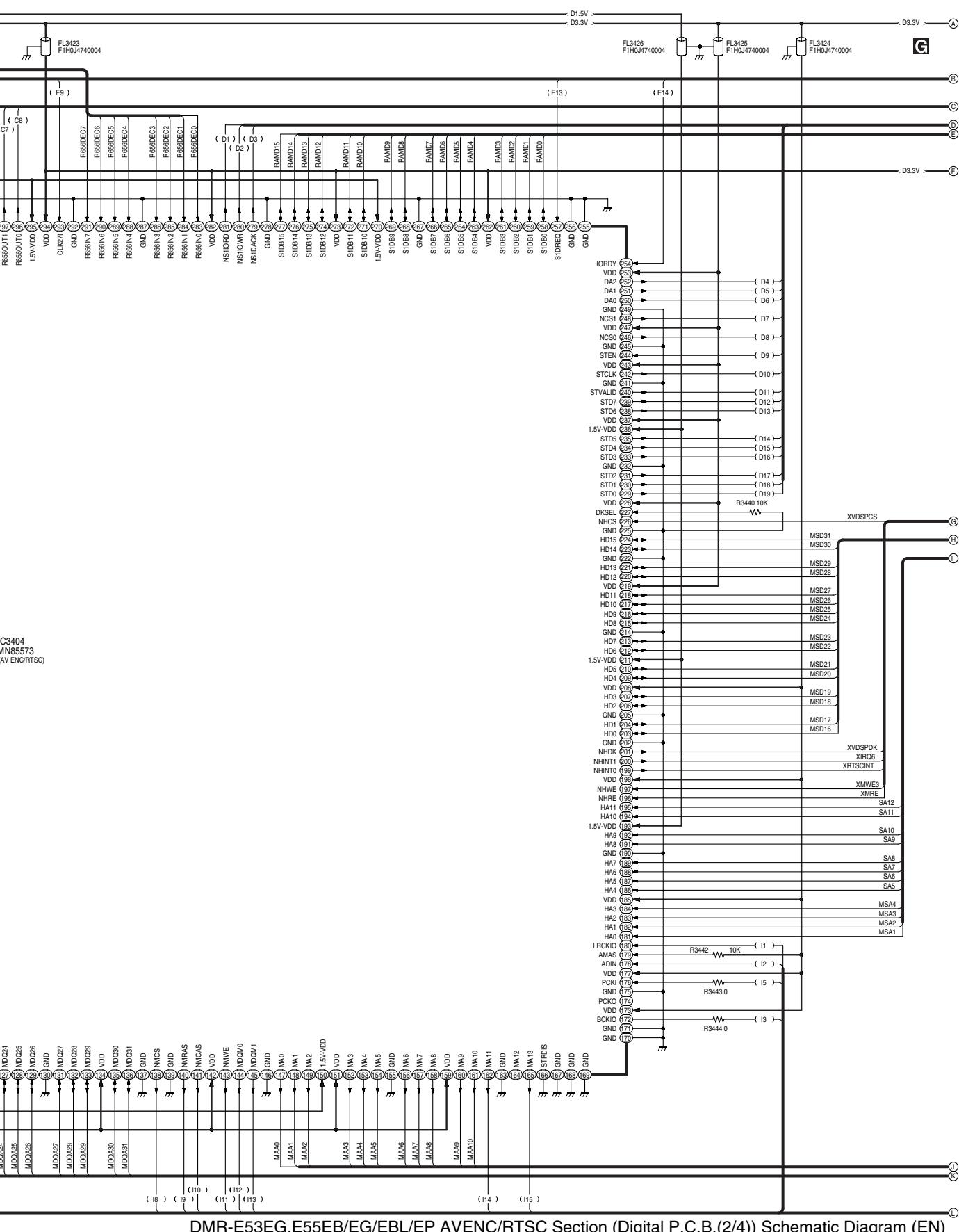


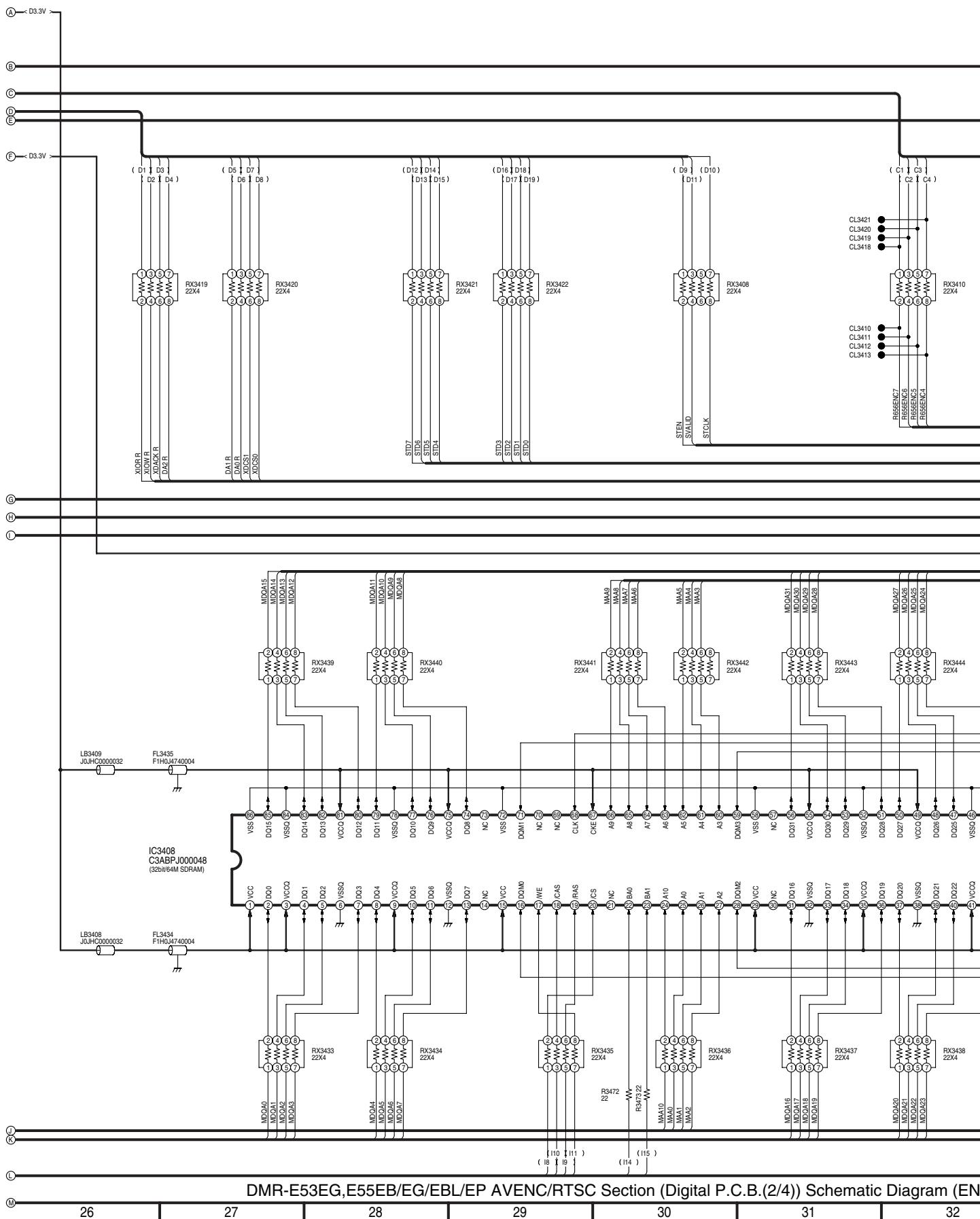
## B. (2/4)) Schematic Diagram (EN)





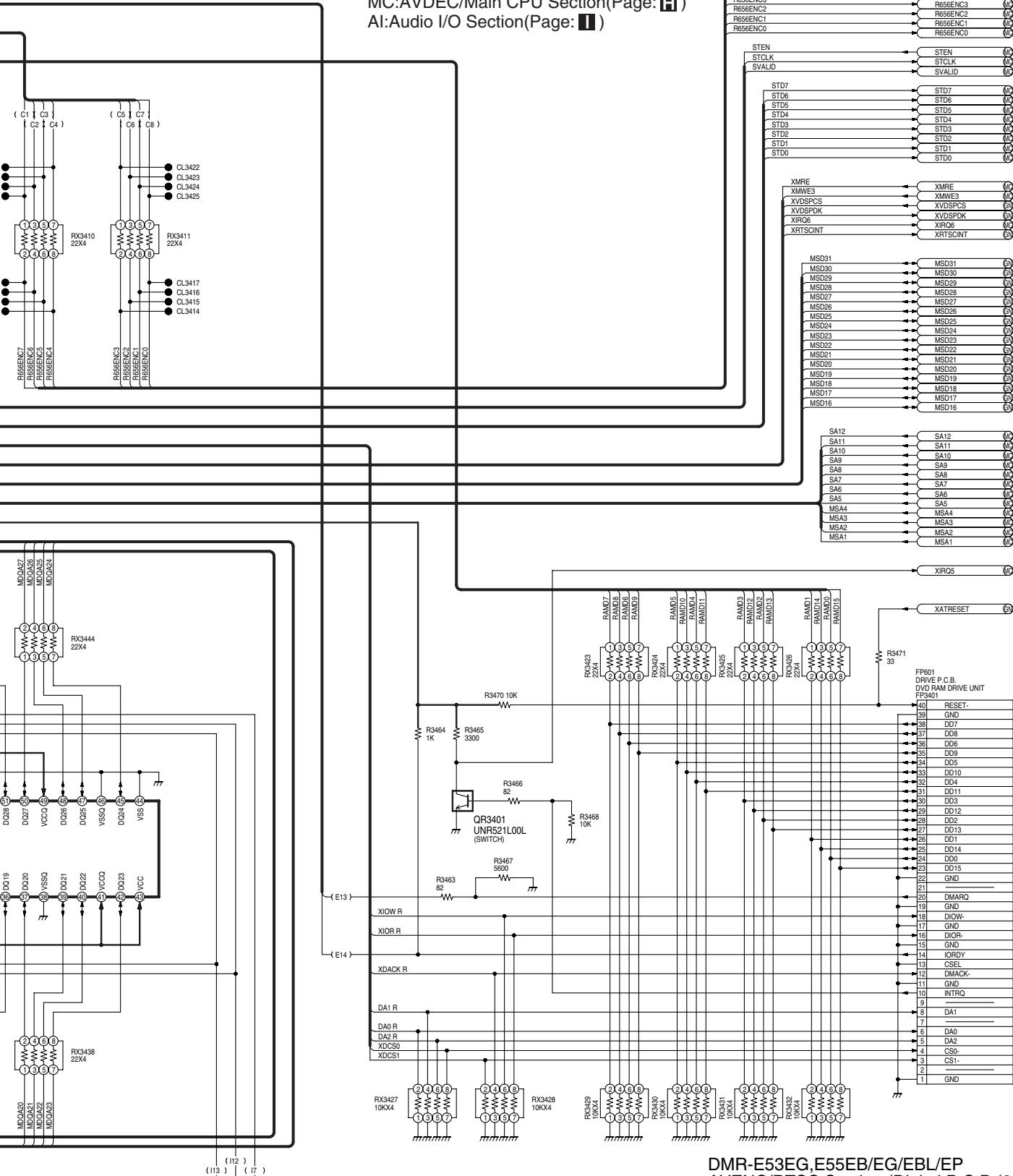
DMR-E53EG,E55EB/EG/EBL/EP AVENC/RTSC Section (Digital P.C.B.(2/4)) Schematic Diagram (EN)





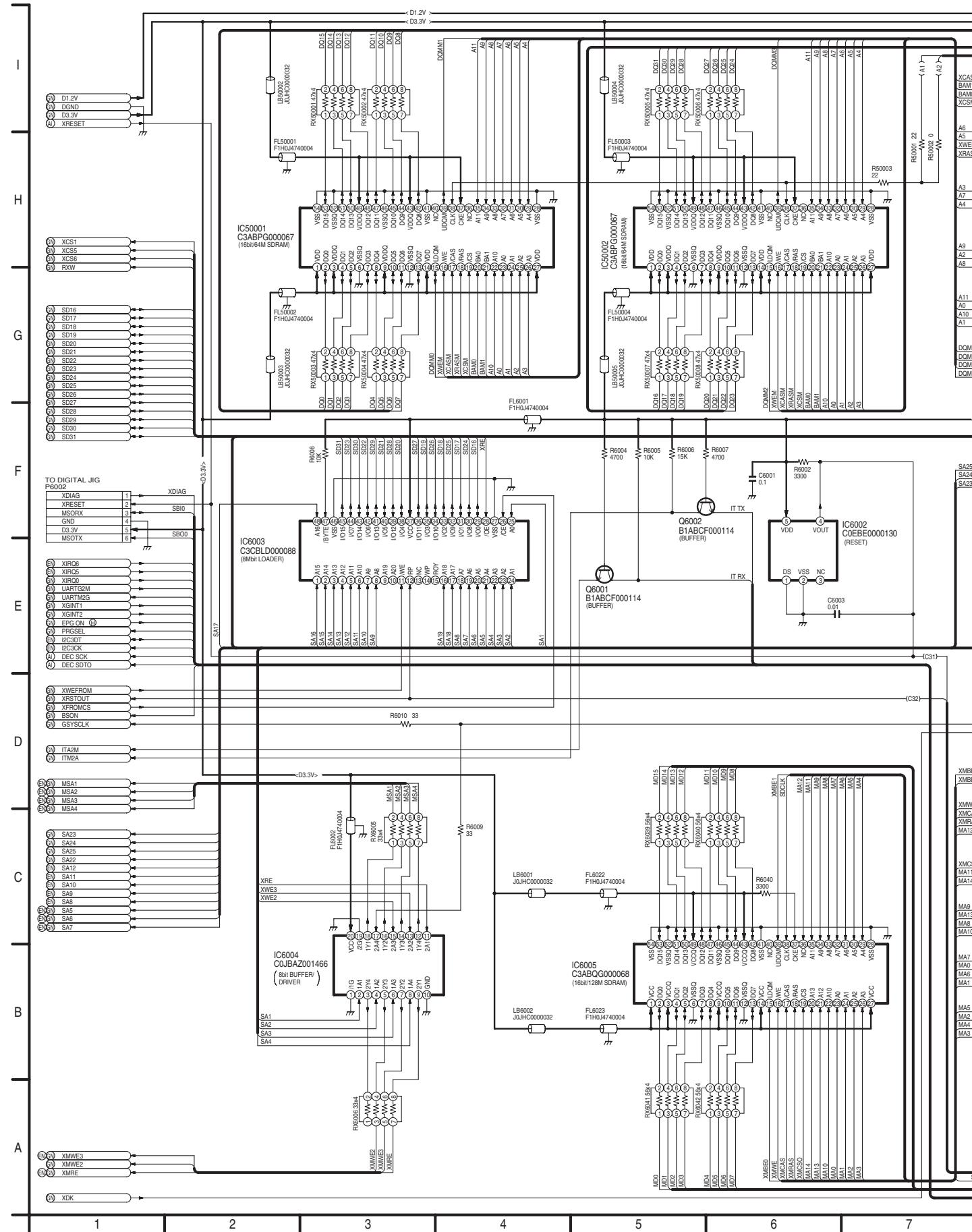
DMR-E53EG,E55EB/EG/EBL/EP AVENC/RTSC Section (Digital P.C.B.(2/4)) Schematic Diagram (EN)

GN:Glue Net Section(Page: **F**)  
EN:AVENC/RTSC Section(Page: **G**)  
MC:AVDEC/Main CPU Section(Page: **H**)  
AI:Audio I/O Section(Page: **I**)

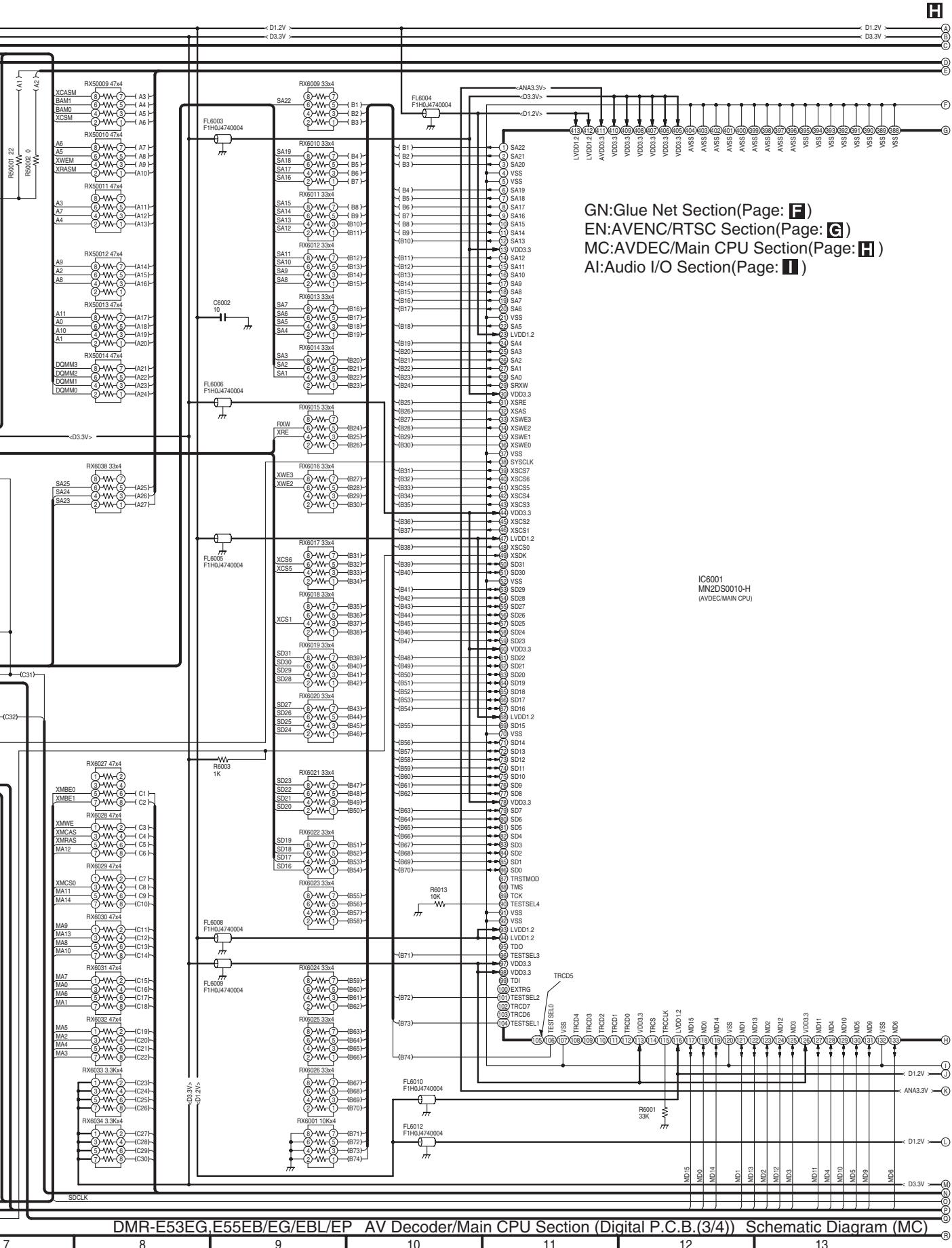


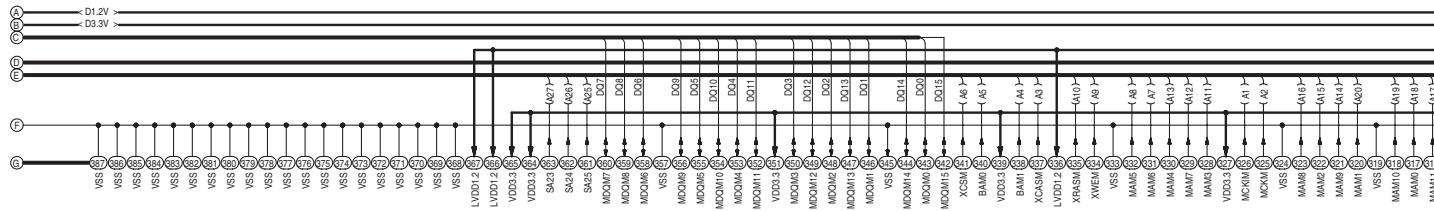
**DMR-E53EG,E55EB/EG/EBL/EP  
AVENC/RTSC Section (Digital P.C.B.(2/4))  
Schematic Diagram (EN)**

#### **17.10. AV Decoder/Main CPU Section (Digital P.C.B. (3/4)) Schematic Diagram (MC)**



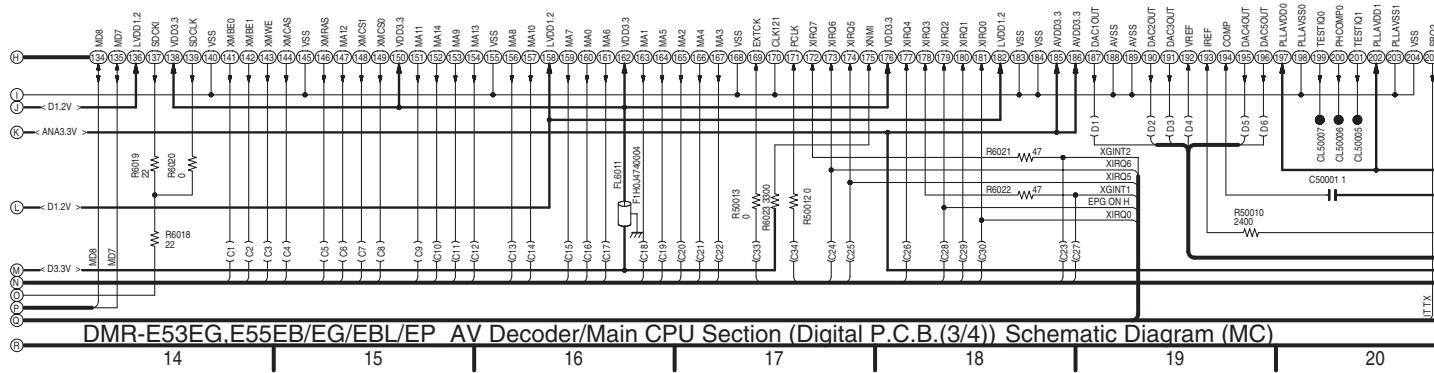
# n (MC)



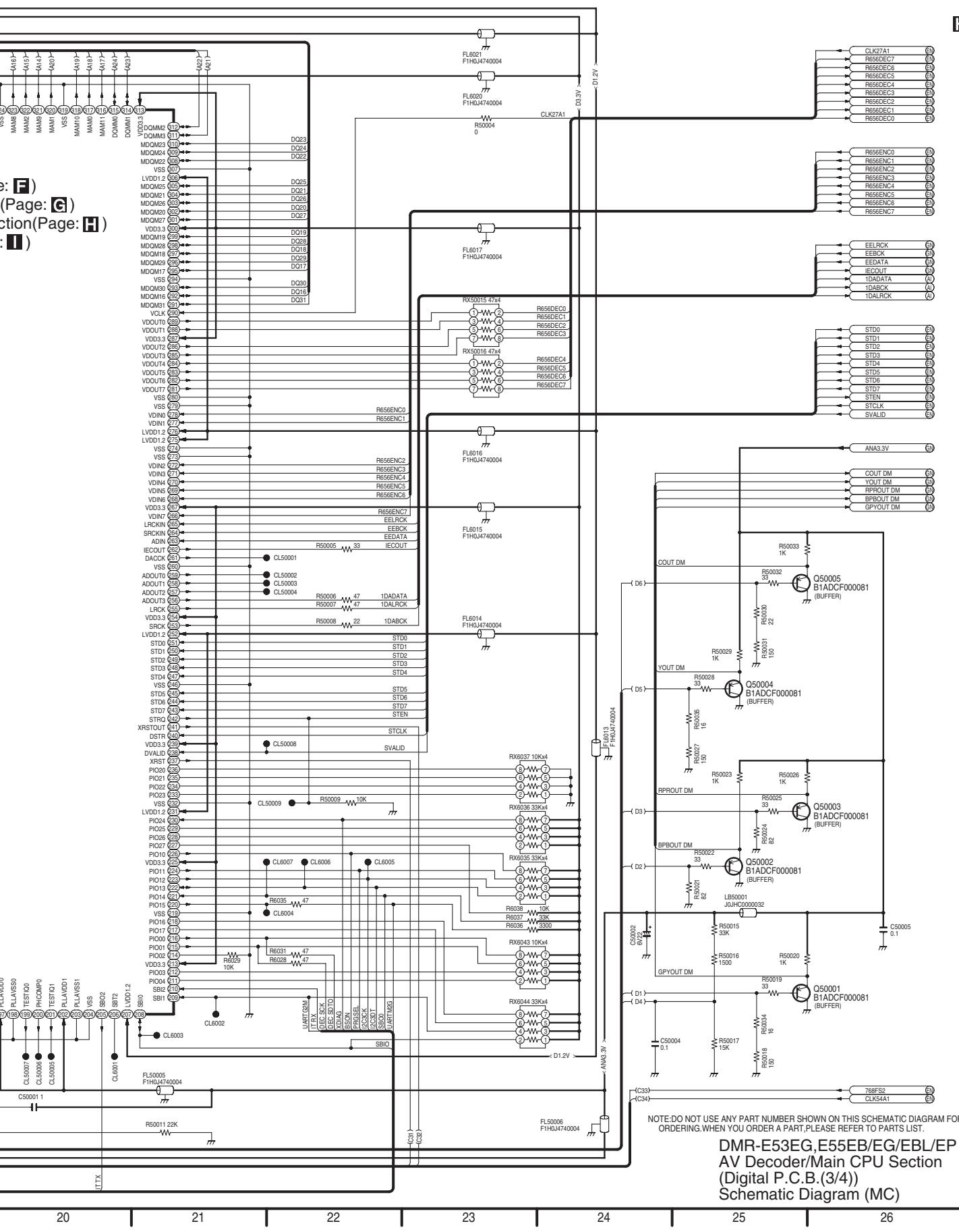


GN:Glue Net Section(Page: **F**)  
 EN:AVENC/RTSC Section(Page: **G**)  
 MC:AVDEC/Main CPU Section(Page: **H**)  
 AI:Audio I/O Section(Page: **I**)

IC6001  
 MN2DS0010-H  
 (AVDEC/MAIN CPU)



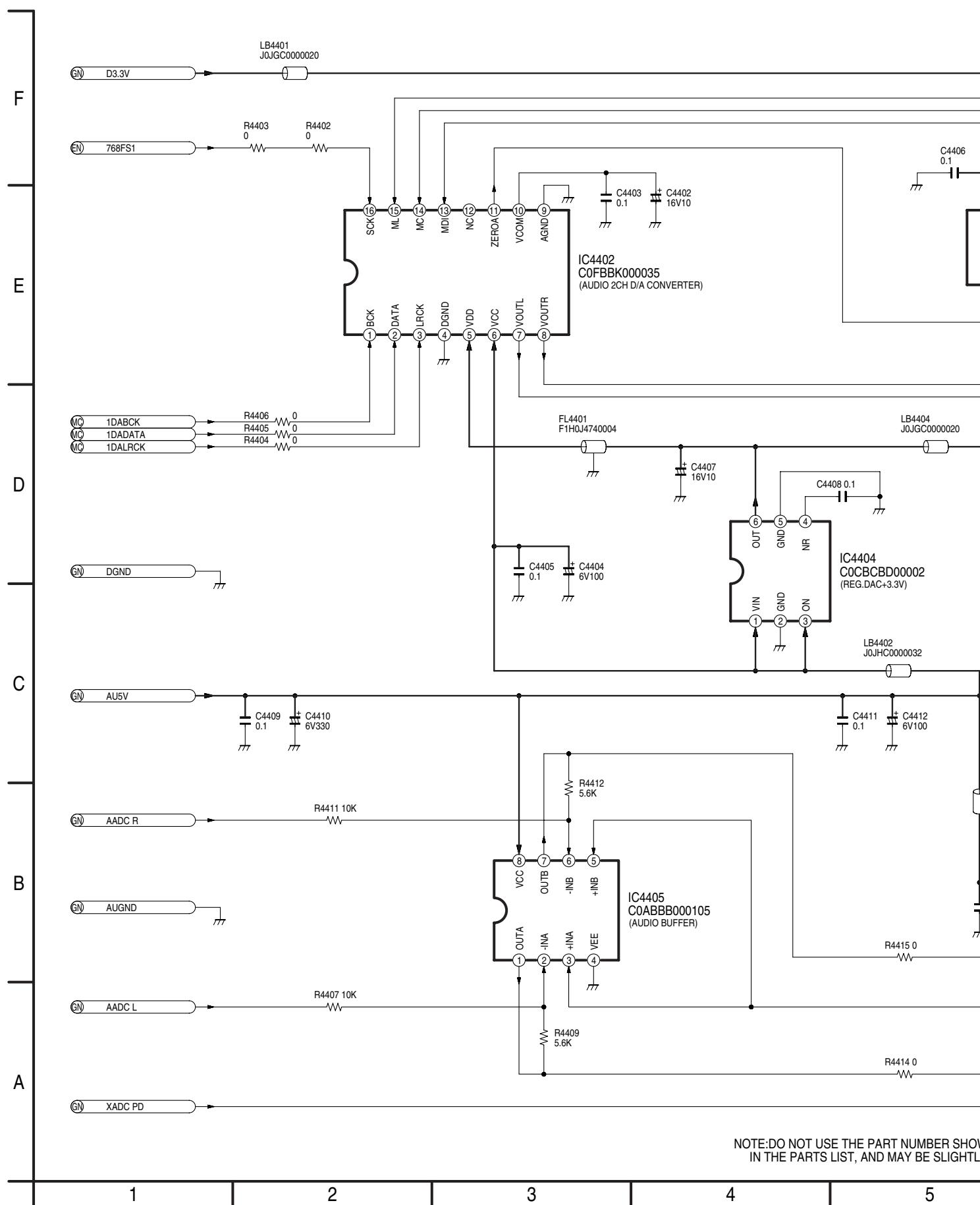
e: **F**)  
(Page: **G**)  
ction(Page: **H**)  
: **I**)

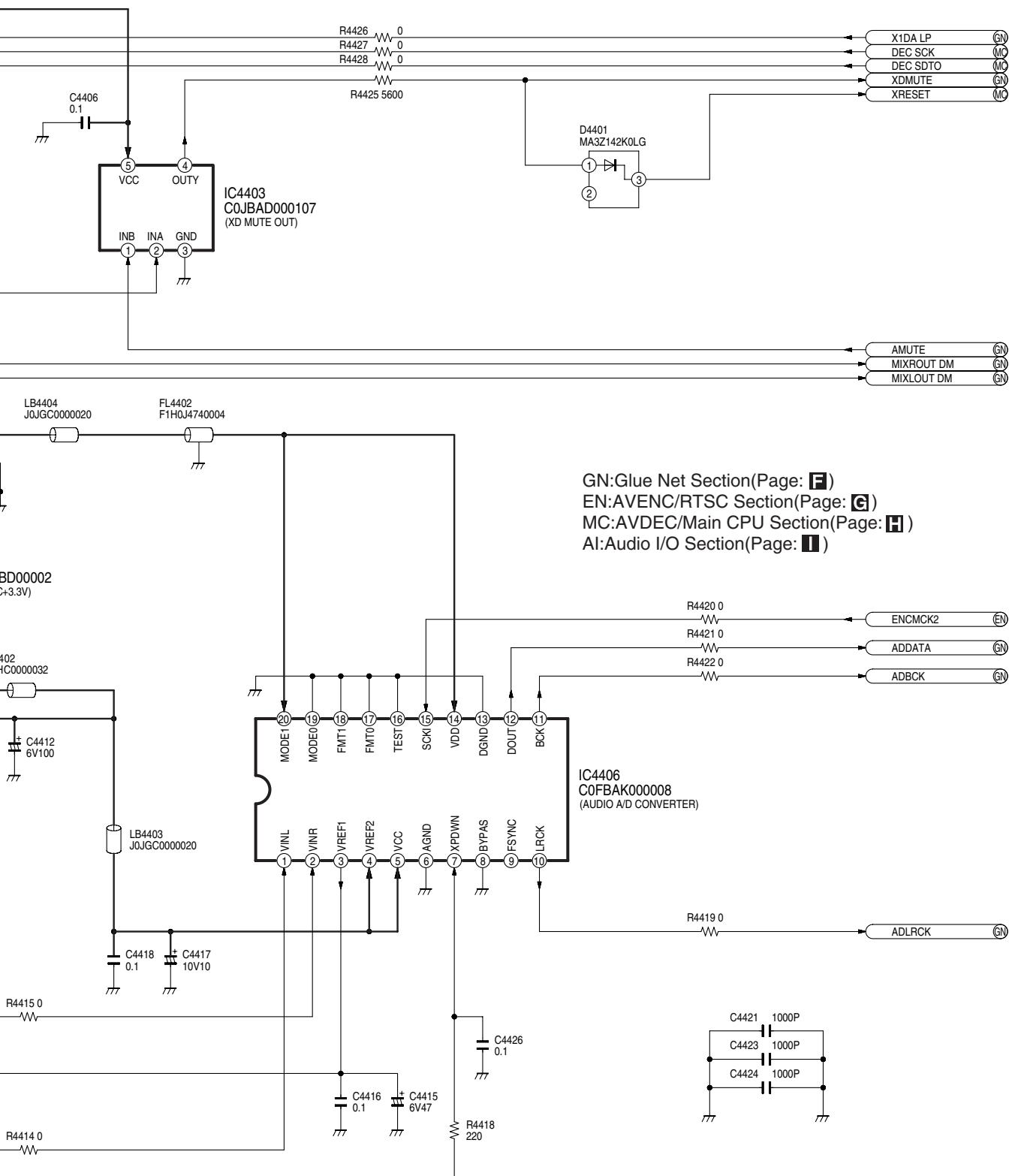


**NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.**

**DMR-E53EG,E55EB/EG/EBL/EP  
AV Decoder/Main CPU Section  
(Digital P.C.B.(3/4))  
Schematic Diagram (MC)**

## 17.11. Audio I/O Section (Digital P.C.B. (4/4)) Schematic Diagram (AI)

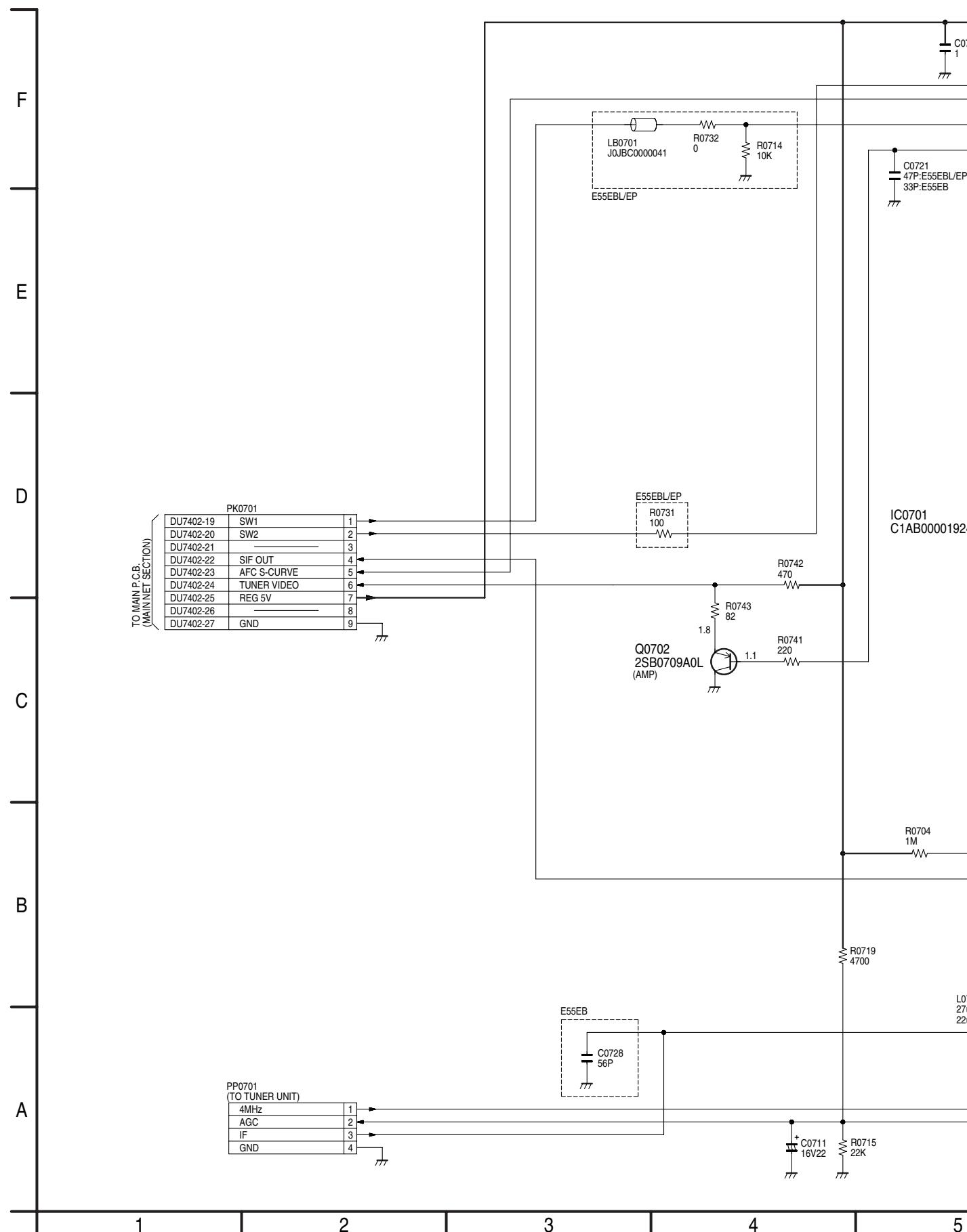


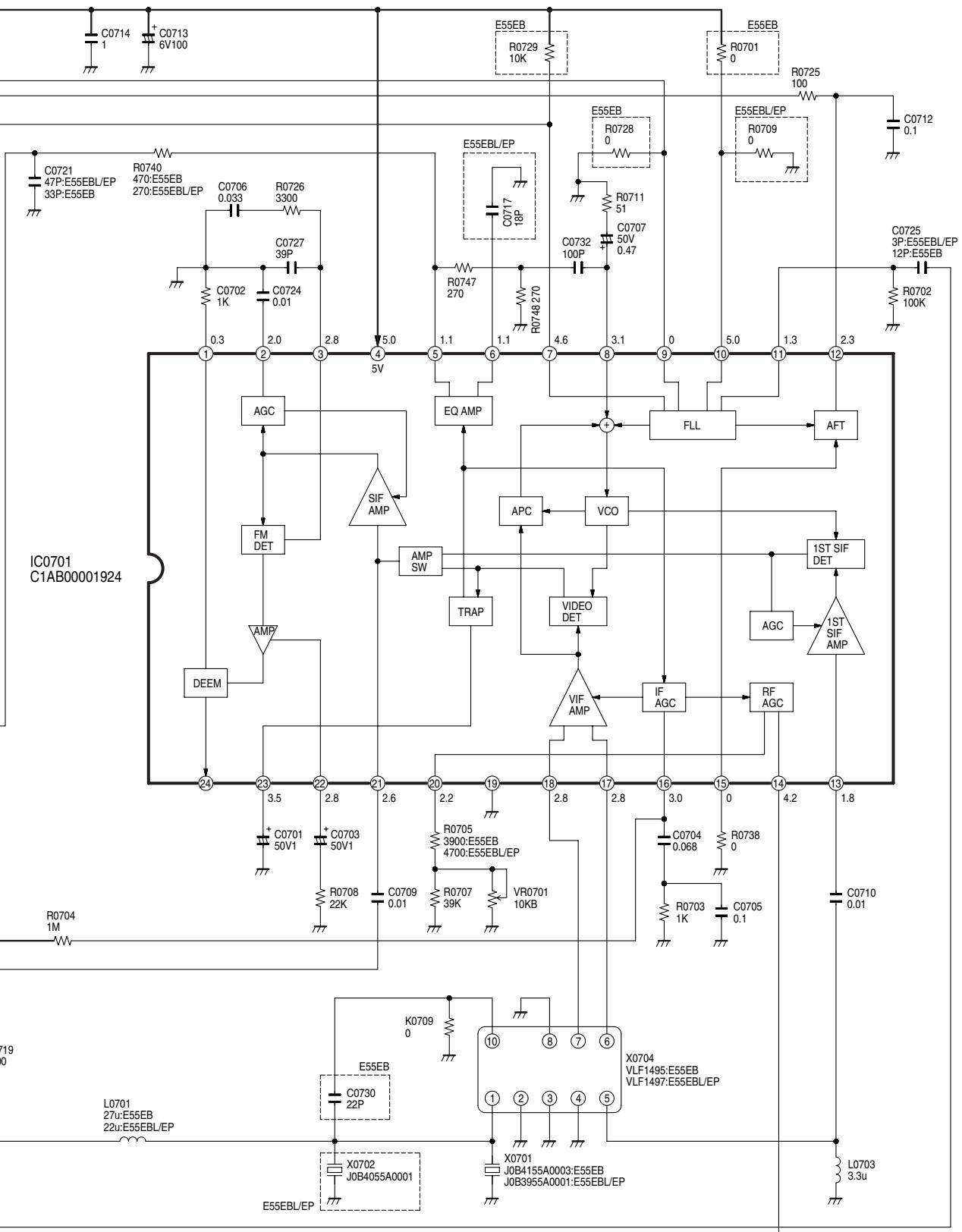


PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN  
MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E53EG,E55EB/EG/EBL/EP  
Audio I/O Section (Digital P.C.B.(4/4))  
Schematic Diagram (AI)

## 17.12. VIF Decoder Schematic Diagram (For DMR-E55EB/EBL/EP)



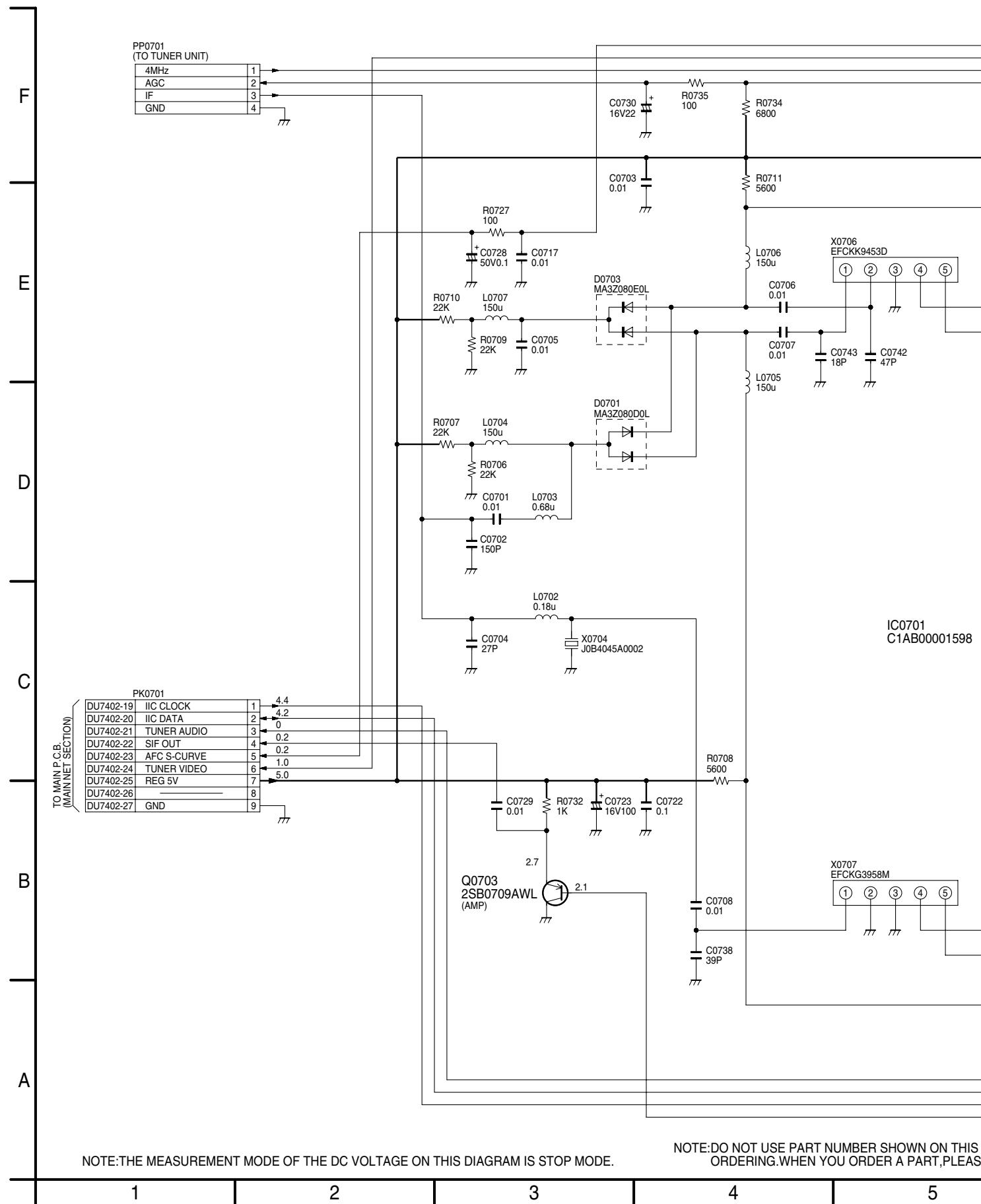


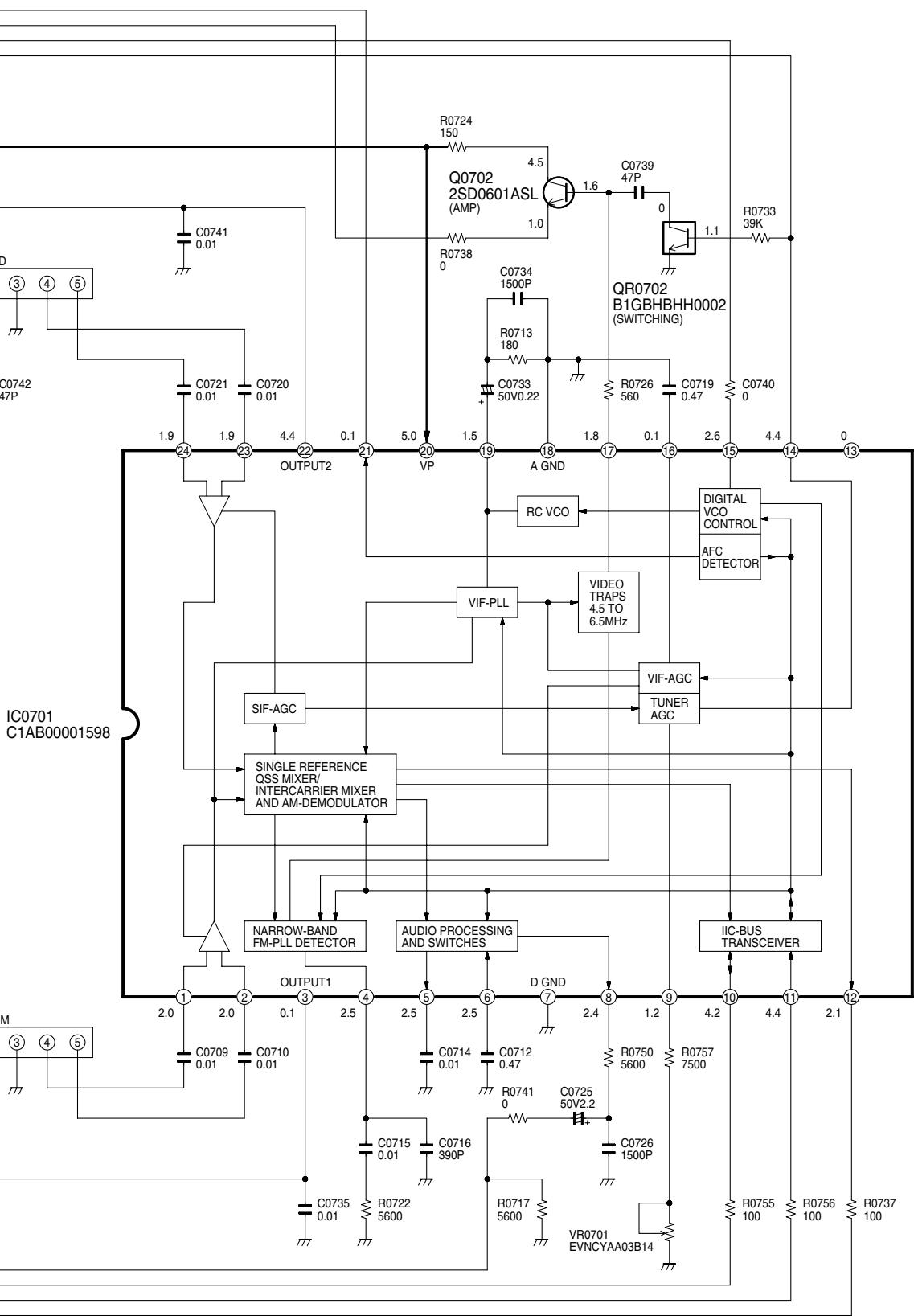
NOTE: THE MEASUREMENT MODE OF THE DC VOLTAGE ON THIS DIAGRAM IS STOP MODE.

NOTE:DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM FOR ORDERING.WHEN YOU ORDER A PART,PLEASE REFER TO PARTS LIST.

## DMR-E55EB/EBL/EP VIF Decoder Schematic Diagram

## 17.13. VIF Decoder Schematic Diagram (For DMR-E53EG and DMR-E55EG)

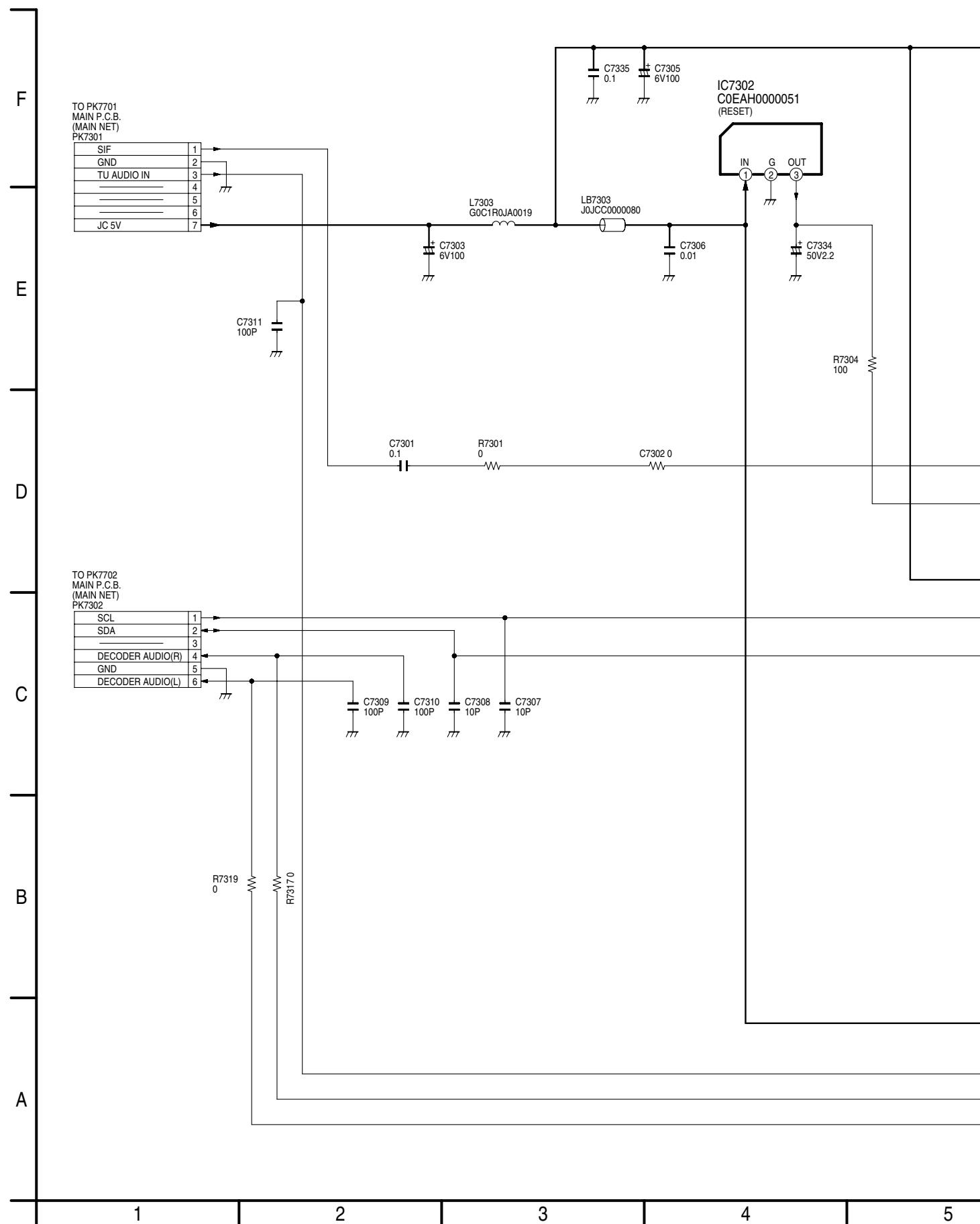


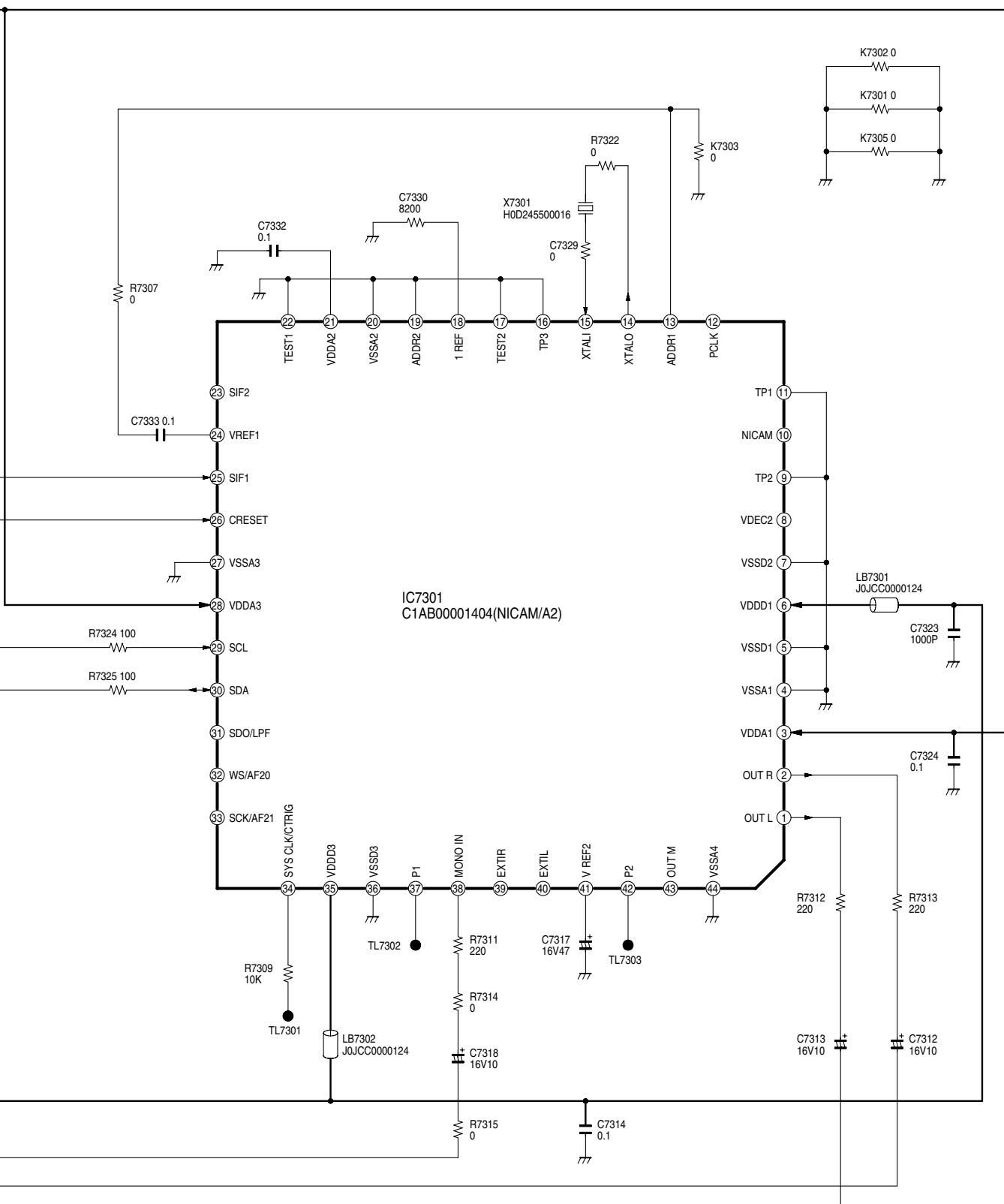


DMR-E53EG/E55EG  
VIF Decoder  
Schematic Diagram

SHOWN ON THIS SCHEMATIC DIAGRAM FOR  
A PART, PLEASE REFER TO PARTS LIST.

## 17.14. Nicam Decoder Schematic Diagram

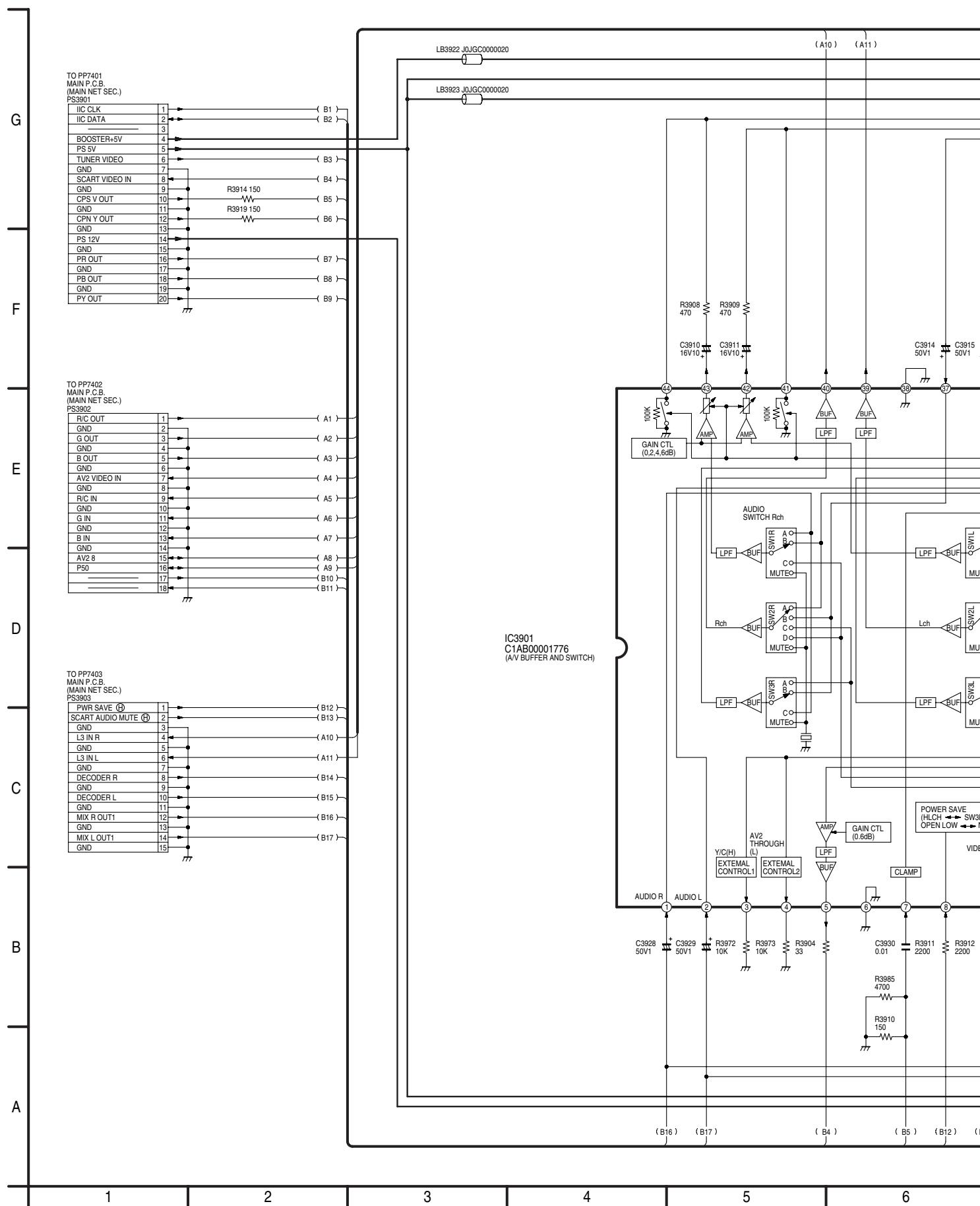


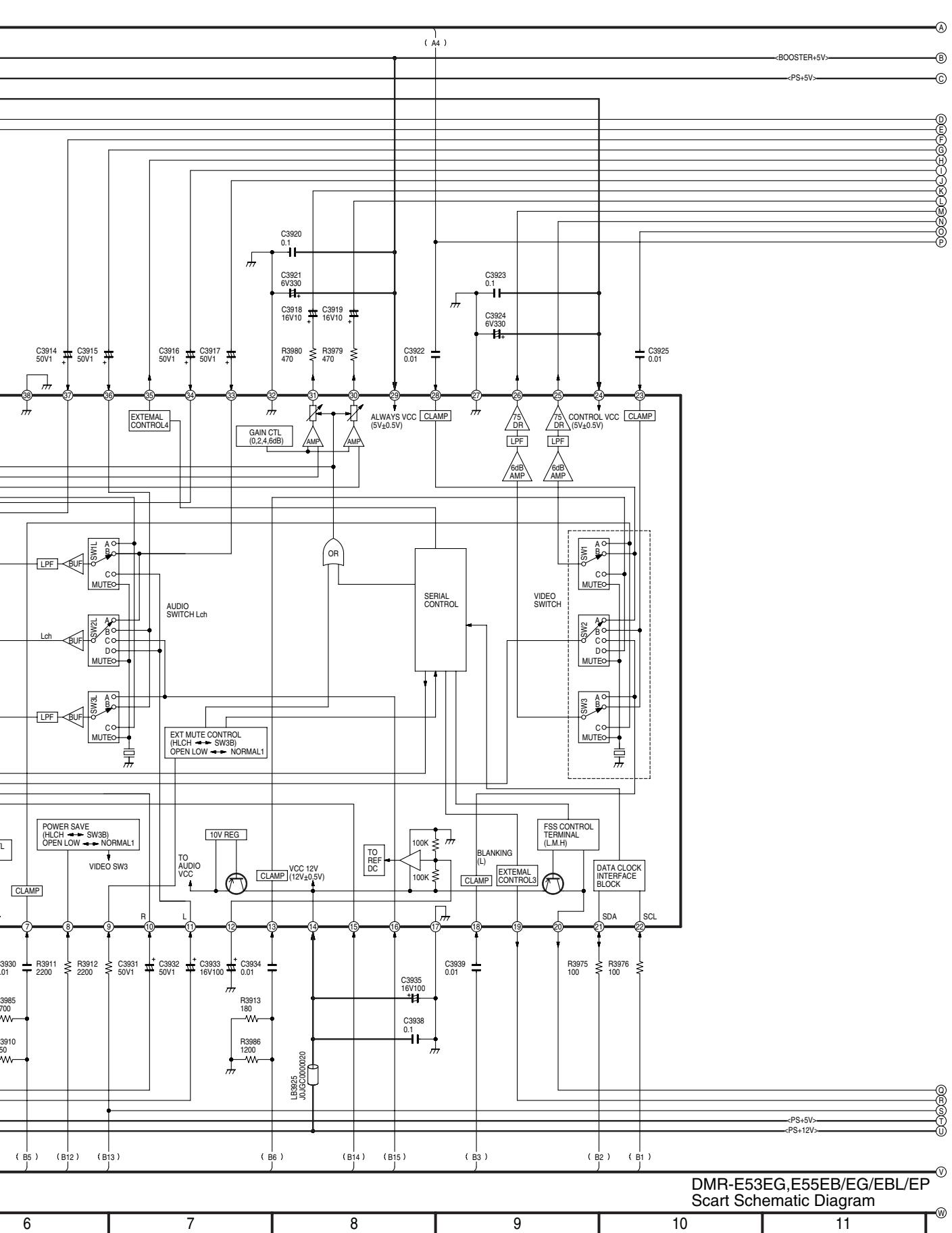


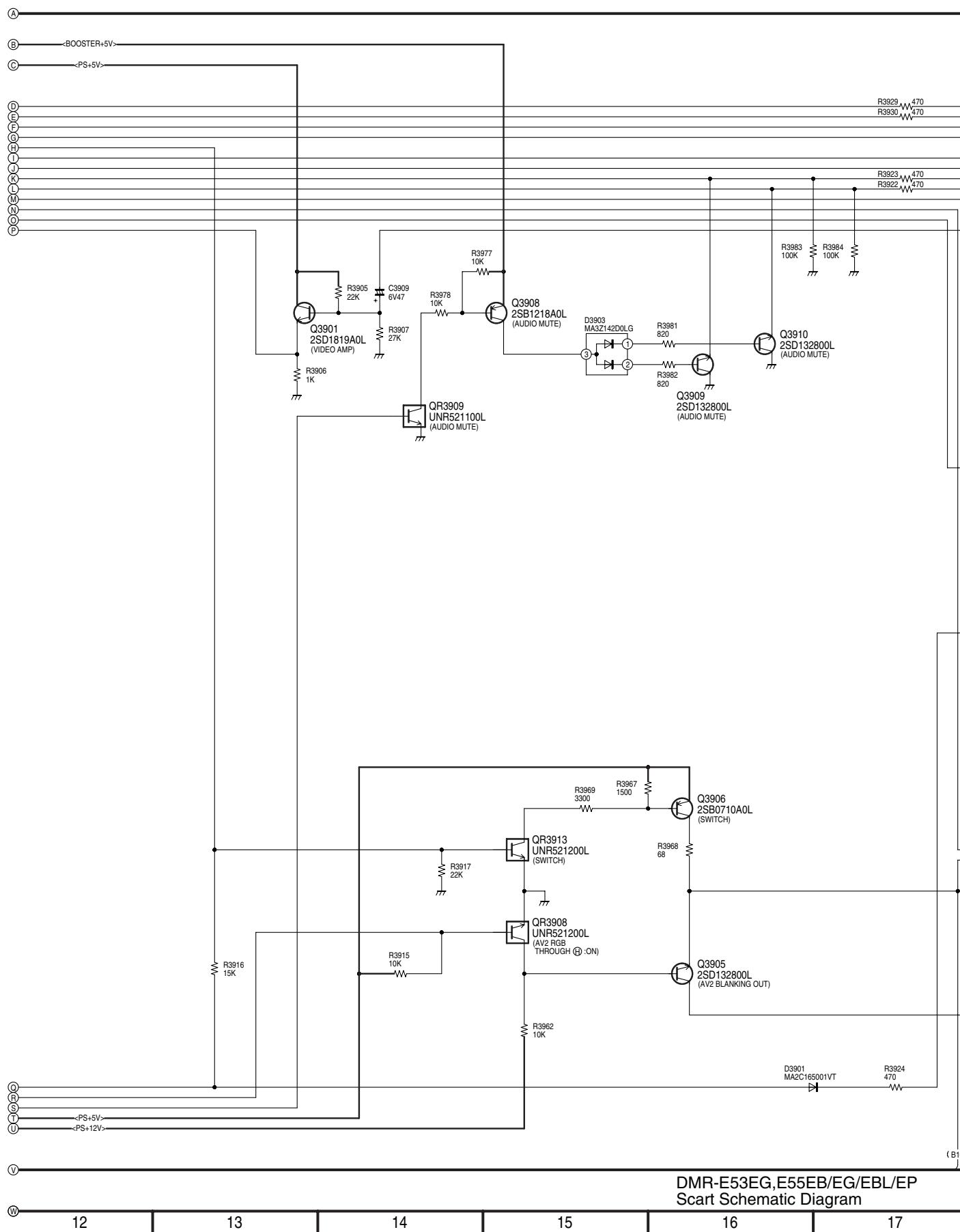
NOTE:  
DO NOT USE ANY PART NUMBER SHOWN ON THIS SCHEMATIC DIAGRAM  
FOR ORDERING. WHEN YOU ORDER A PART, PLEASE REFER TO PARTS LIST.

DMR-E53EG,E55EB/EG/EBL/EP  
Nicam Decoder Schematic Diagram

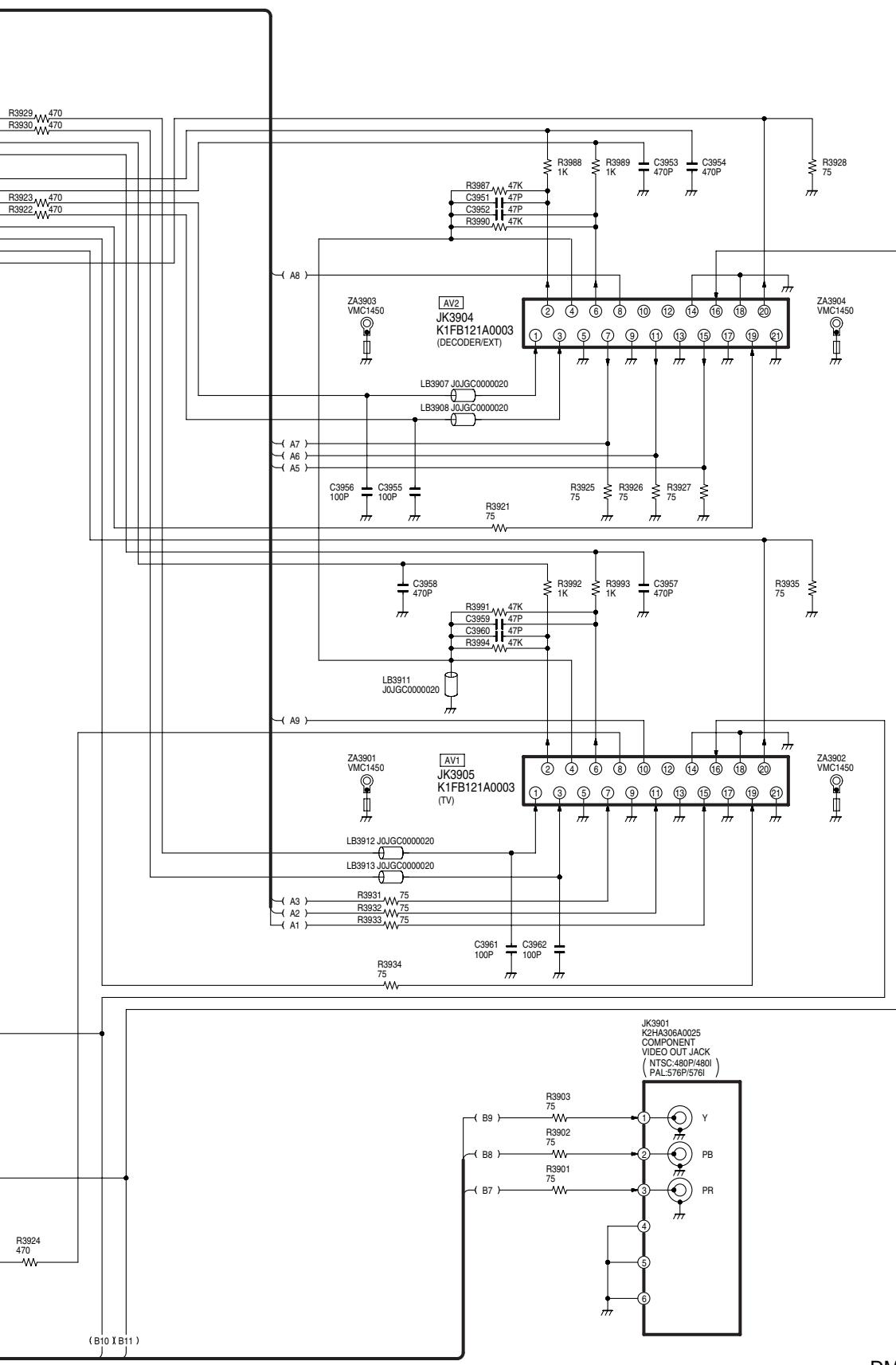
## 17.15. Scart Schematic Diagram







## DMR-E53EG,E55EB/EG/EBL/EP Scart Schematic Diagram

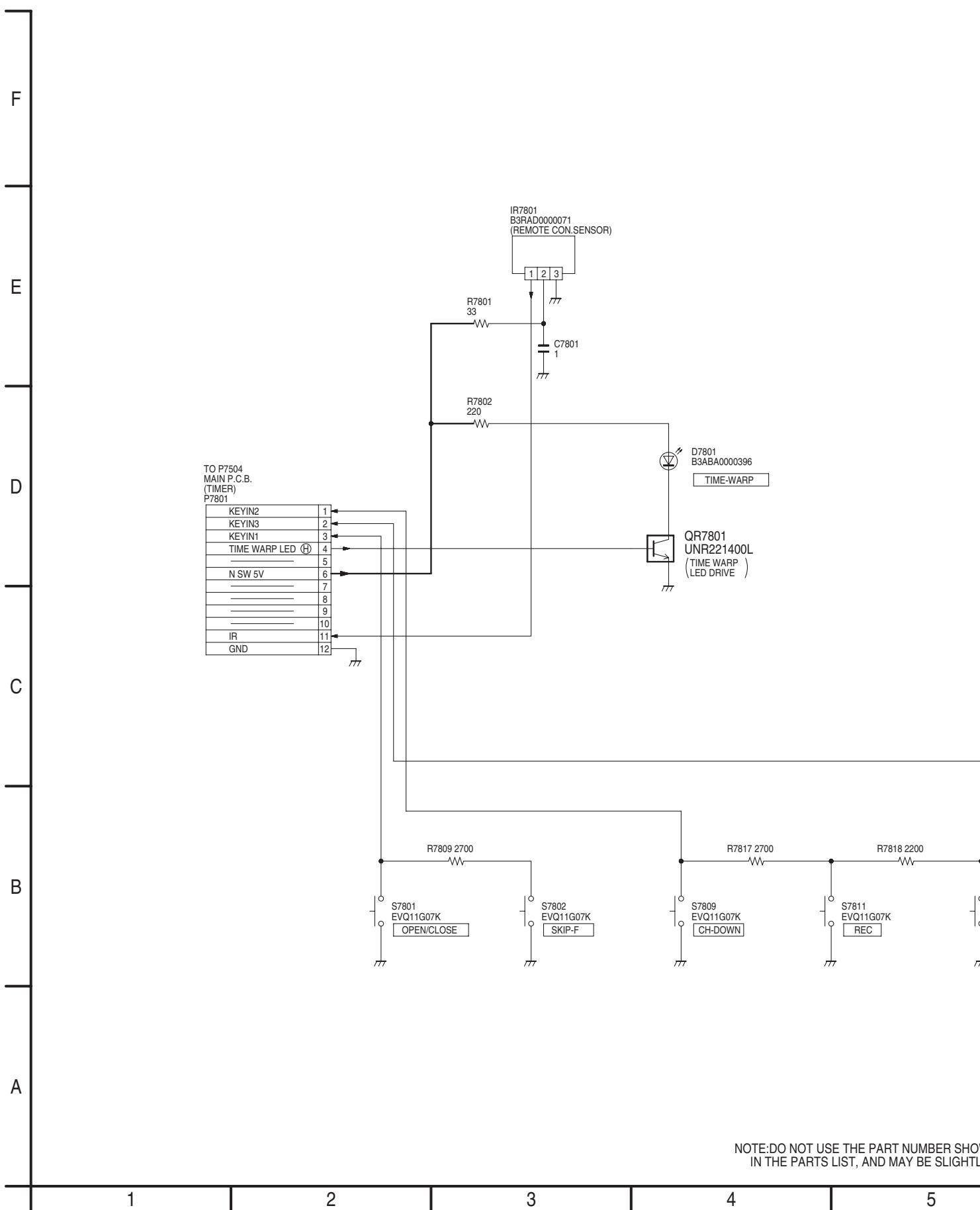


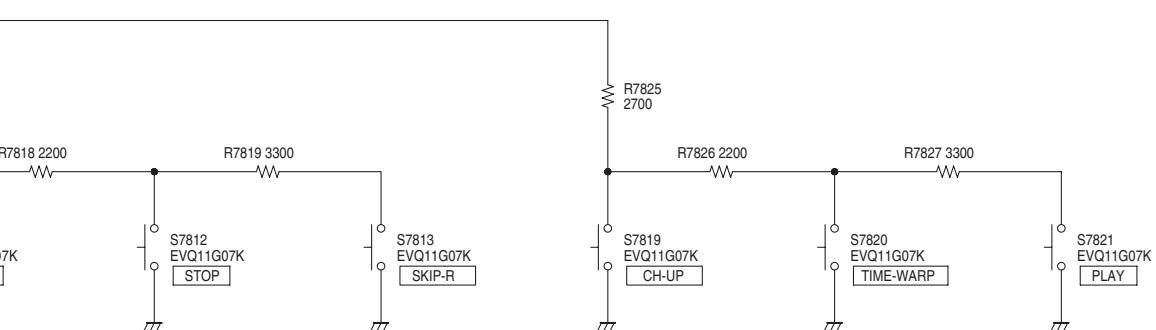
DMR-E53EG, E55EB/EG/EBL/EP  
Scart Schematic Diagram

AV2	
1	AUDIO OUT CH2(R)
2	AUDIO IN CH2(R)
3	AUDIO OUT CH1(L)
4	GND(A)
5	GND
6	AUDIO IN CH1(L)
7	BLUE
8	AV2 +12V
9	GND
10	-CONTROL
11	GREEN
12	-DATA
13	GND
14	GND
15	RED/C IN
16	BLANKING
17	GND
18	GND
19	VIDEO OUT
20	VIDEO IN/Y IN
21	GND

AV1	
1	AUDIO OUT CH2(R)
2	AUDIO IN CH2(R)
3	AUDIO OUT CH1(L)
4	GND(A)
5	GND
6	AUDIO IN CH1(L)
7	BLUE
8	PB +12V
9	GND
10	-CONTROL
11	GREEN
12	-DATA
13	GND
14	GND
15	RED/C OUT
16	BLANKING
17	GND
18	GND
19	VIDEO OUT/Y OUT
20	VIDEO IN
21	GND

## 17.16. Front (R) Schematic Diagram





PART NUMBER SHOWN ON THIS DRAWING FOR ORDERING. THE CORRECT PART NUMBER IS SHOWN  
AND MAY BE SLIGHTLY DIFFERENT OR AMENDED SINCE THIS DRAWING WAS PREPARED.

DMR-E53EG,E55EB/EG/EBL/EP  
Front (R)  
Schematic Diagram