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# Television

Chassis

ITC222 / ITC222 - PTV

## Section :

**Power supply**

**H\_Deflection circuit**

**V\_Deflection circuit**

**HF-IF circuit**

**Input / Output - Scart**

**Mechanical**

**Control panel**

**Data processing**

**Audio processing**

**Video processing**

**Picture Tube - Display**

**General**





# Television

Chassis ITC222 / ITC222 - PTV



## Power supply

### Symptom description

#### ITC222 - PTV

Rigging effect.

#### ITC222

The set switches into security mode.





# Television

Chassis ITC222 / ITC222 - PTV 

## H\_Deflection circuit

### Symptom description

#### ITC222

Vertical strips in the middle of the screen (similar to a rigging effect).





# Television

Chassis ITC222 / ITC222 - PTV 

## Mechanical

### Symptom description

#### ITC222

Sound vibrations transmitted by boomer speaker.

#### ITC222 - PTV

Yellowish area and bluish area on the screen are visible (40" - 16/9).

Yellowish area and bluish area on the screen are visible (52" - 16/9).





# Television

Chassis ITC222 / ITC222 - PTV 

## Data processing

### Symptom description

#### ITC222

Ringing effect (Visible mainly on a blue screen).

Freezing of Teletext sub-title.

Freezing of Teletext sub-title and display wrong pages.

#### ITC222 -PTV

Freezing of Teletext sub-title and display wrong pages.





# Television

Chassis ITC222 / ITC222 - PTV



## Video processing

### Symptom description

#### ITC222 - PTV

Ringing effect (Visible mainly on a blue screen).





# Television

Chassis ITC222 / ITC222 - PTV



## General

### Symptom description

#### ITC222 / ITC222 - PTV

Correction PART N° of capacitor CP110.

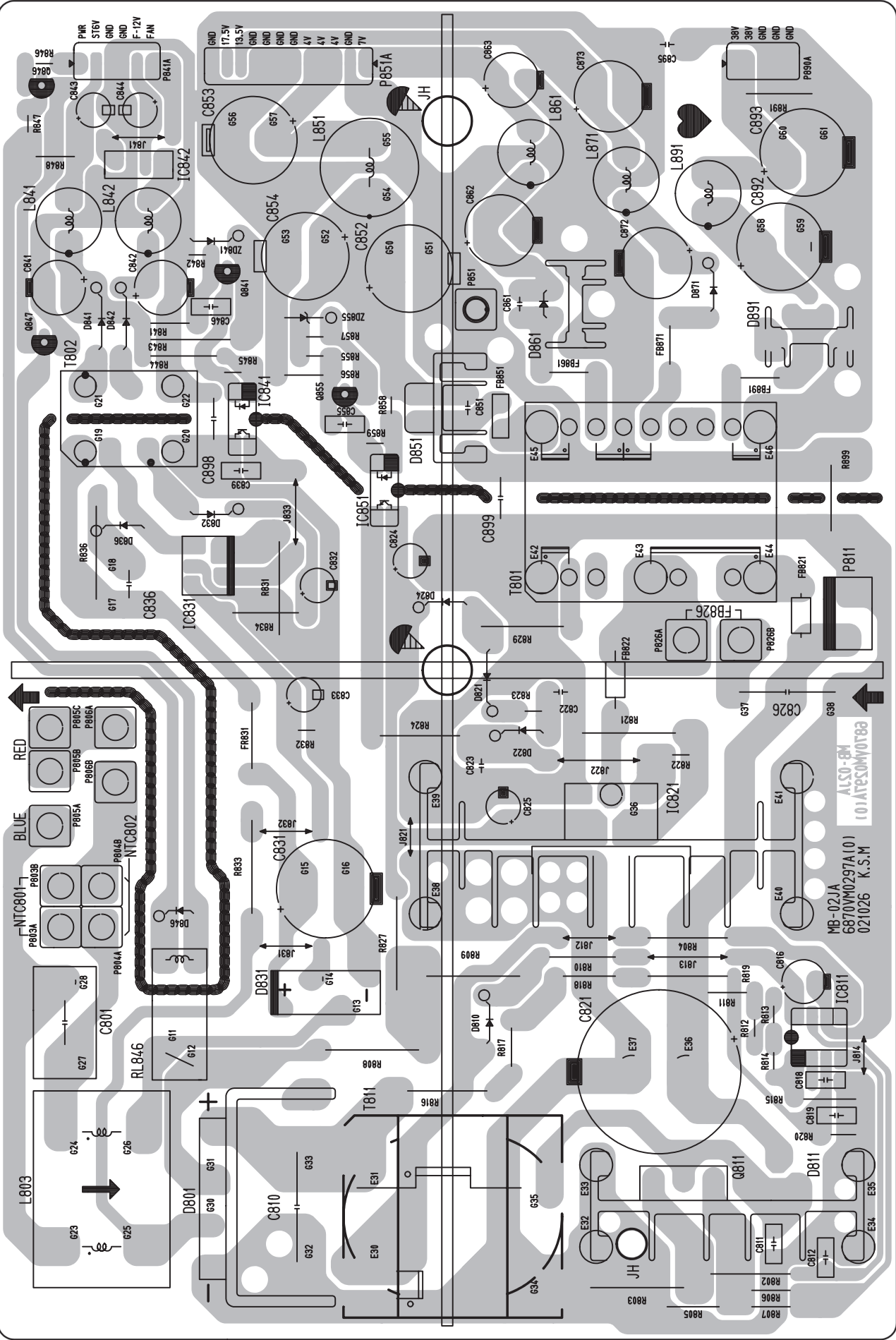
Evolution of transistor in position TP020.

#### ITC222 - PTV

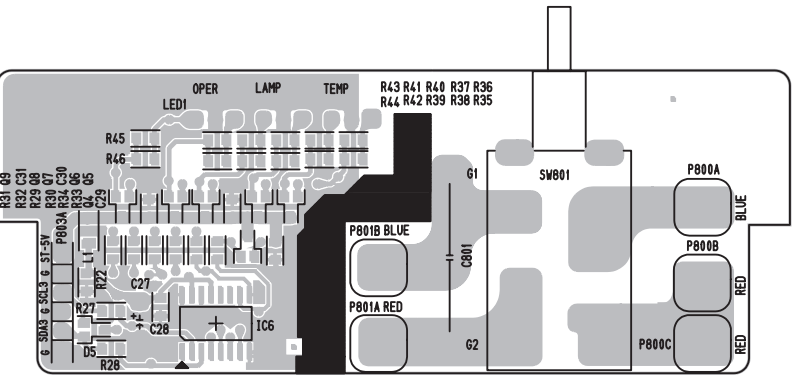
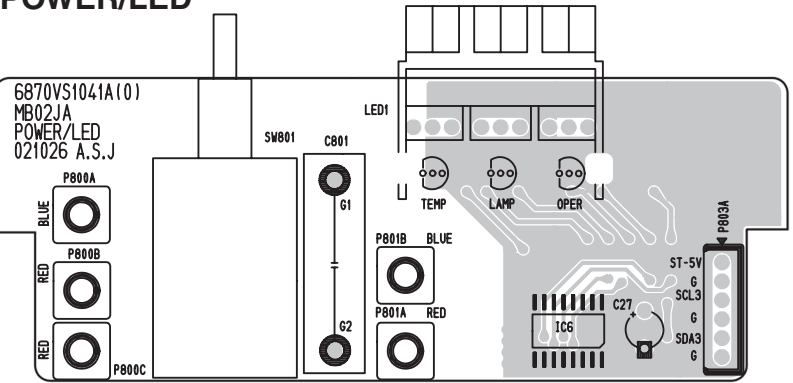
Burning of tracks on the PCB of CRT.



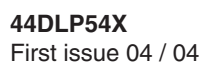
SMPS



POWER/LED

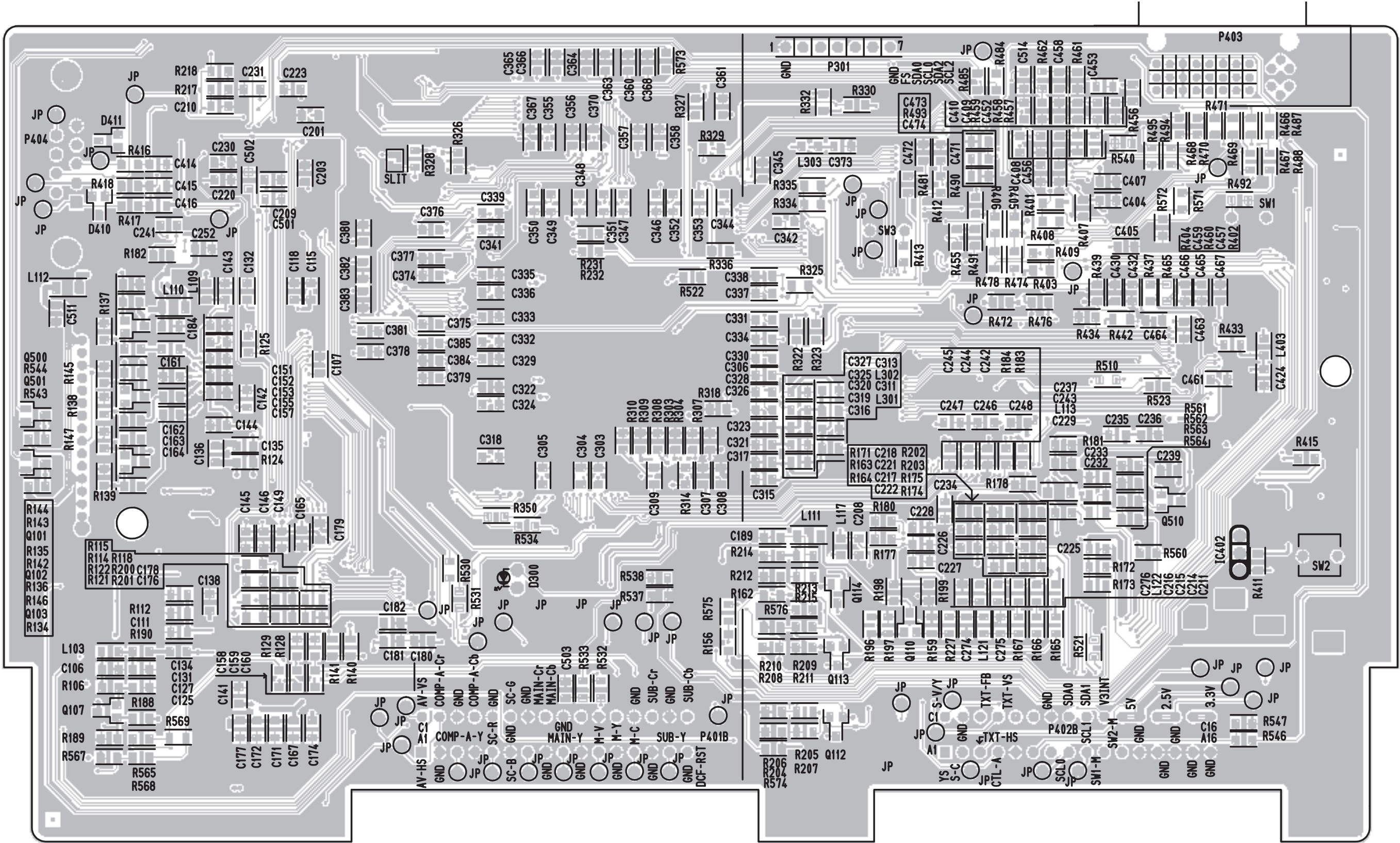


COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



SUB DIGITAL BOARD - PLATINE SUB DIGITAL - SUB DIGITAL GRUNDPLATTE - PIASTRA SUB DIGITAL - PLATINA SUB DIGITAL

SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



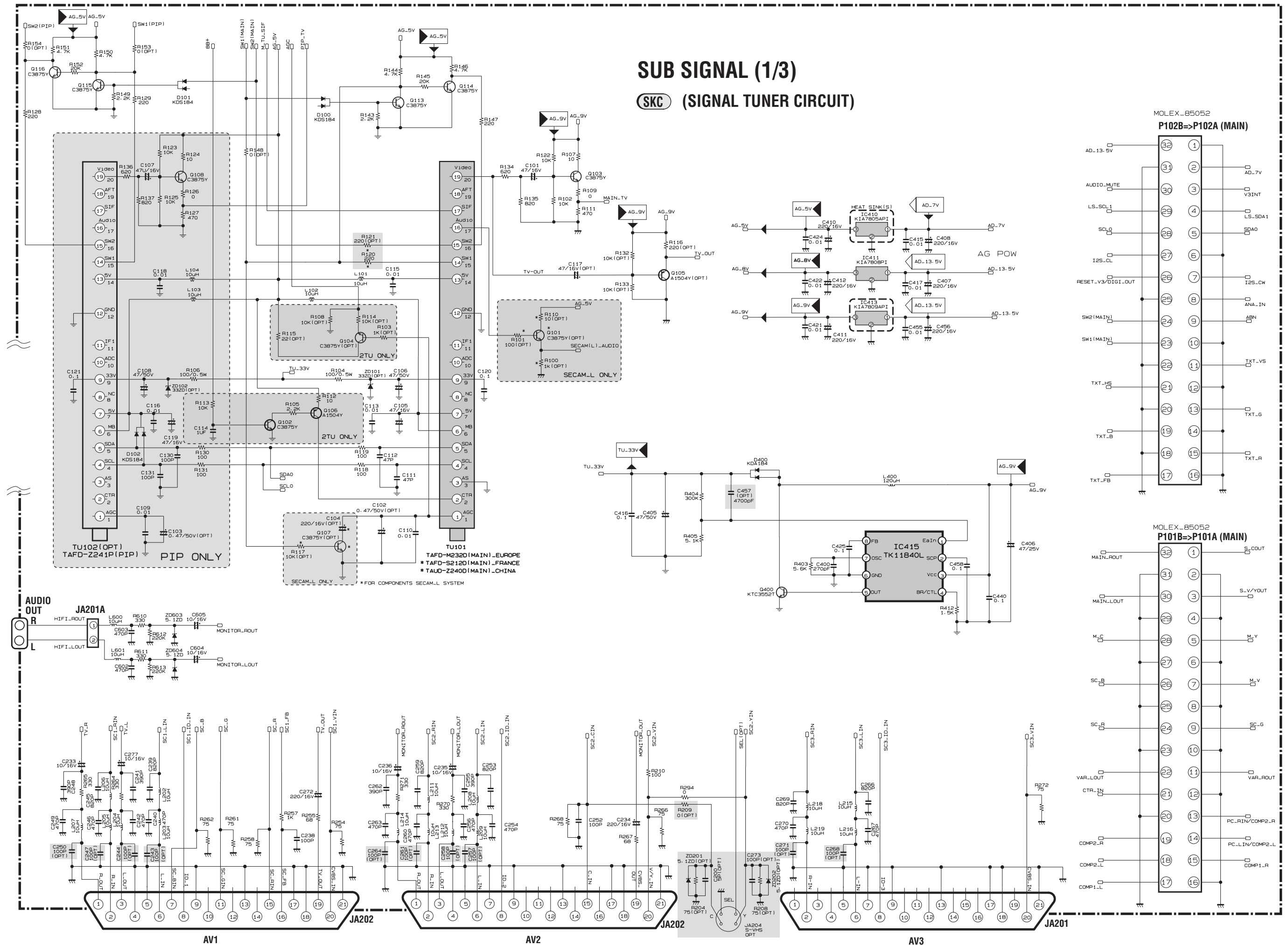
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



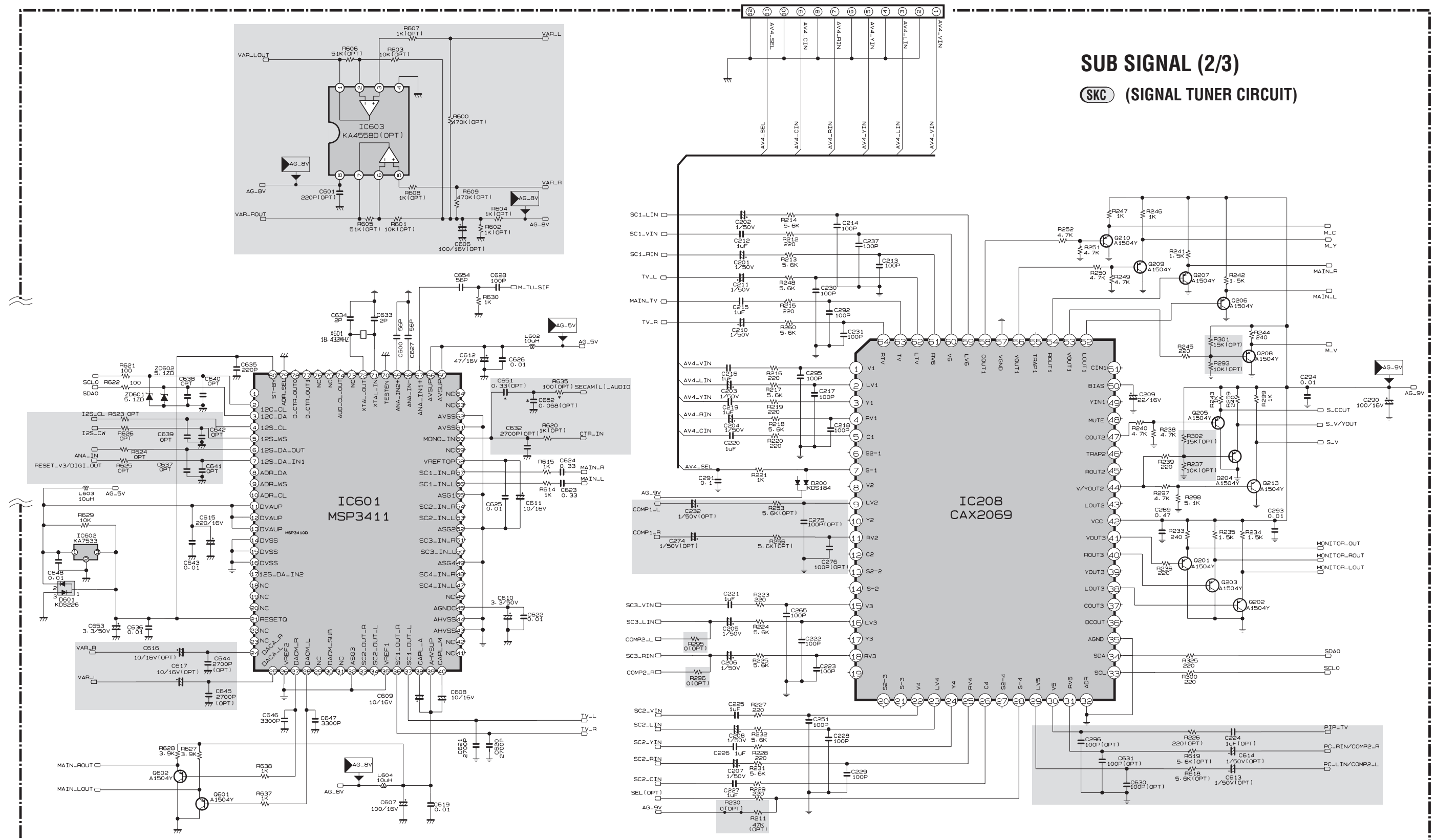
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS



### SUB SIGNAL (1/3)



**SKC (SIGNAL TUNER CIRCUIT)**



**IC831 STR-G6153**

**IC811 MC33262P**

**IC821 STR-F6668B**

**P811=>X1 BALLAST BOARD**

**POWER/LED**

**MIS**

**Note:**  
 During measurements in the power supply unit  
 - Use the primary power unit ground (⚡).  
**Attention:**  
 Mesure dans la partie primaire de l'alimentation  
 - Utiliser la masse du bloc d'alimentation (⚡).  
**Achtung:**  
 Bei Messungen im Primärnetzteil  
 - Primärnetzteilmasse verwenden (⚡).

**Attenzione:**  
 misura nell'alimentatore primario  
 - usare massa alimentazione primario (⚡).  
**Cuidado:**  
 Medida en el bloque de alimentacion  
 - Utilizar la masa del bloque de alimentacion (⚡).

**Part of board connected to mains supply**  
 Partie du châssis reliée au secteur.  
 Primärsseite des Netzteils.  
 Parte dello chassis collegata alla rete.  
 Parte del chassis conectar a la red.

**0.8 : DC VOLTAGE TV ON**  
**(0.1) : DC VOLTAGE TV Standby**  
 (after Fans stopped)

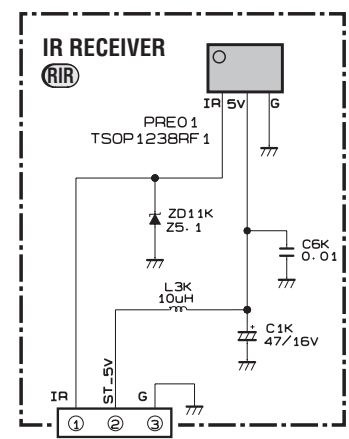
**Safety Part**  
 When repairing, use original part only  
 Piece de securite  
 N'utilisez que les pieces d'origine  
 Sicherheitsbauteil  
 Bei Ersatz nur Originalteil verwenden

**SMPS (POWER SUPPLY)**

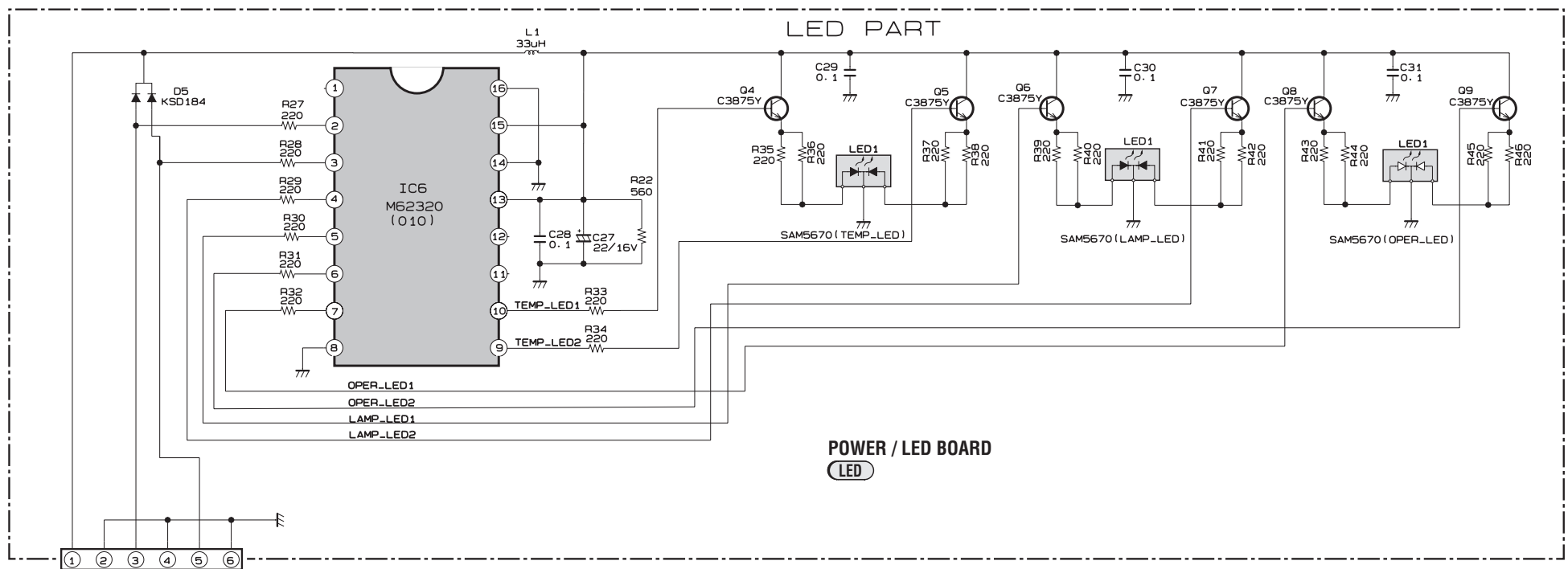
**POWE**

SUB CIRCUITS

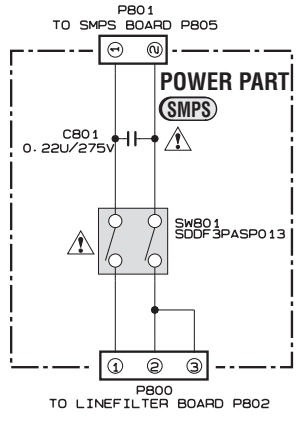
PRE-AMP BOARD



P203A  
TO FRONT/CTR BD



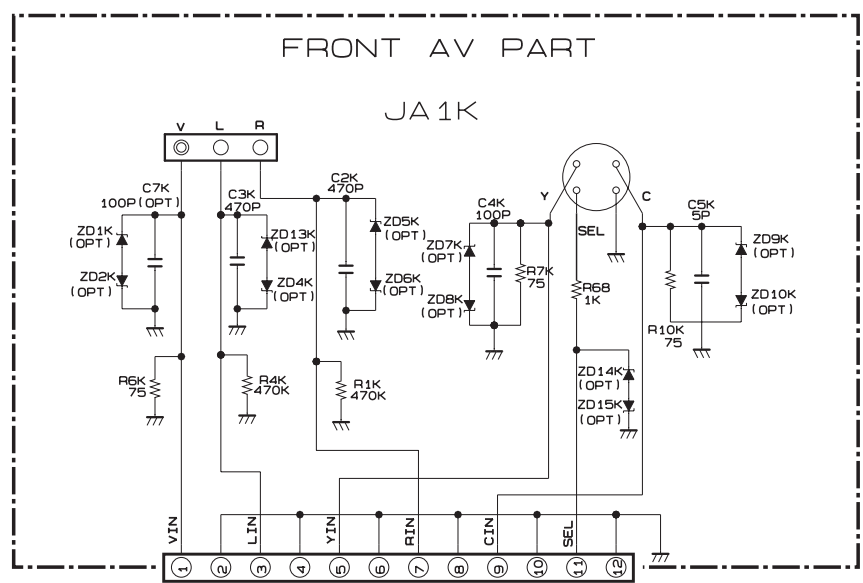
P803A  
FROM FRONT/CTR BD



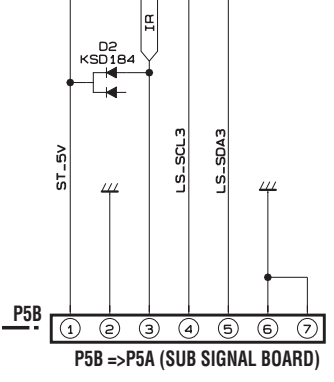
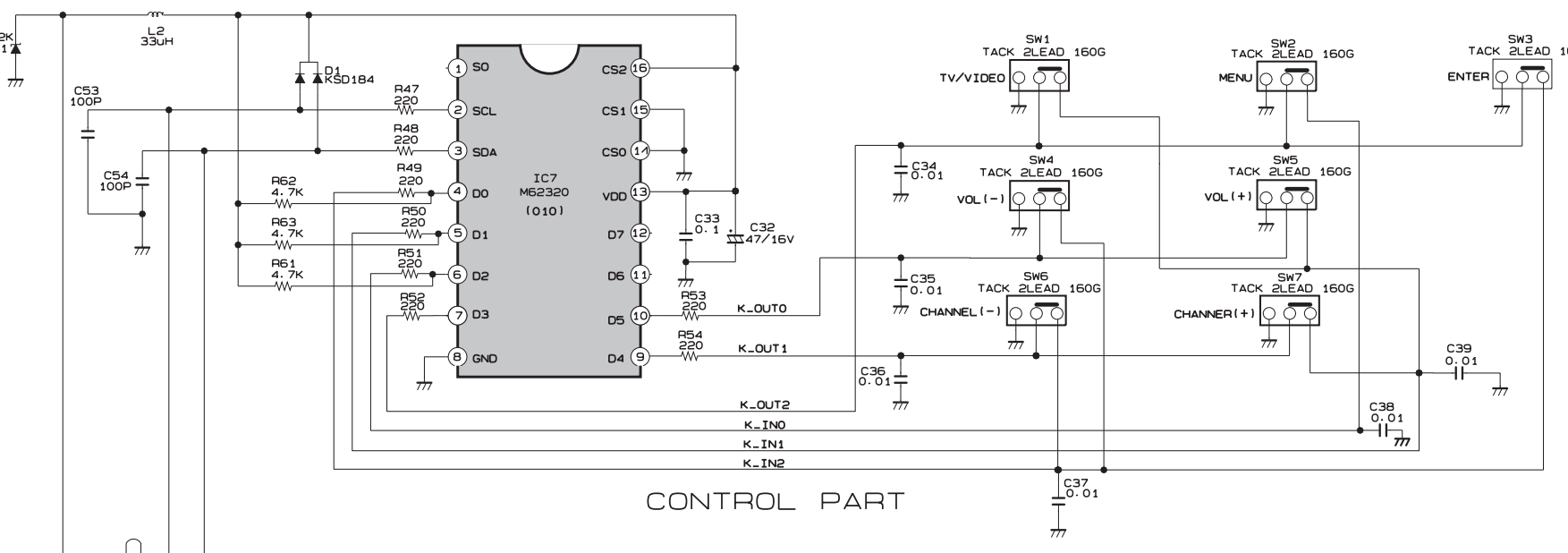
P800  
TO LINEFILTER BOARD P802

P203B  
FROM PRE-AMP BD

P803B  
TO POWER/LED B/D

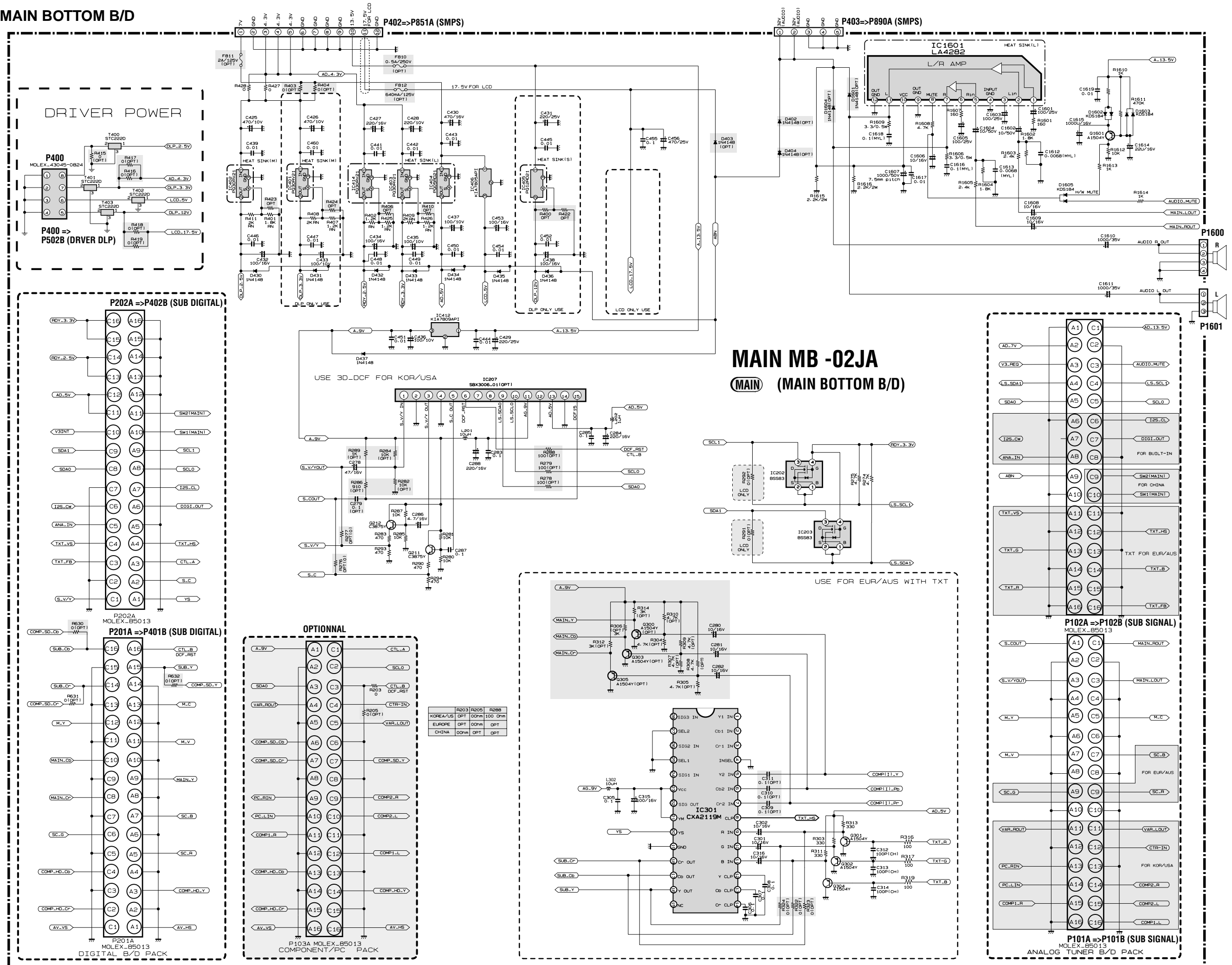


P601B  
TO SIGNAL TUNER BD

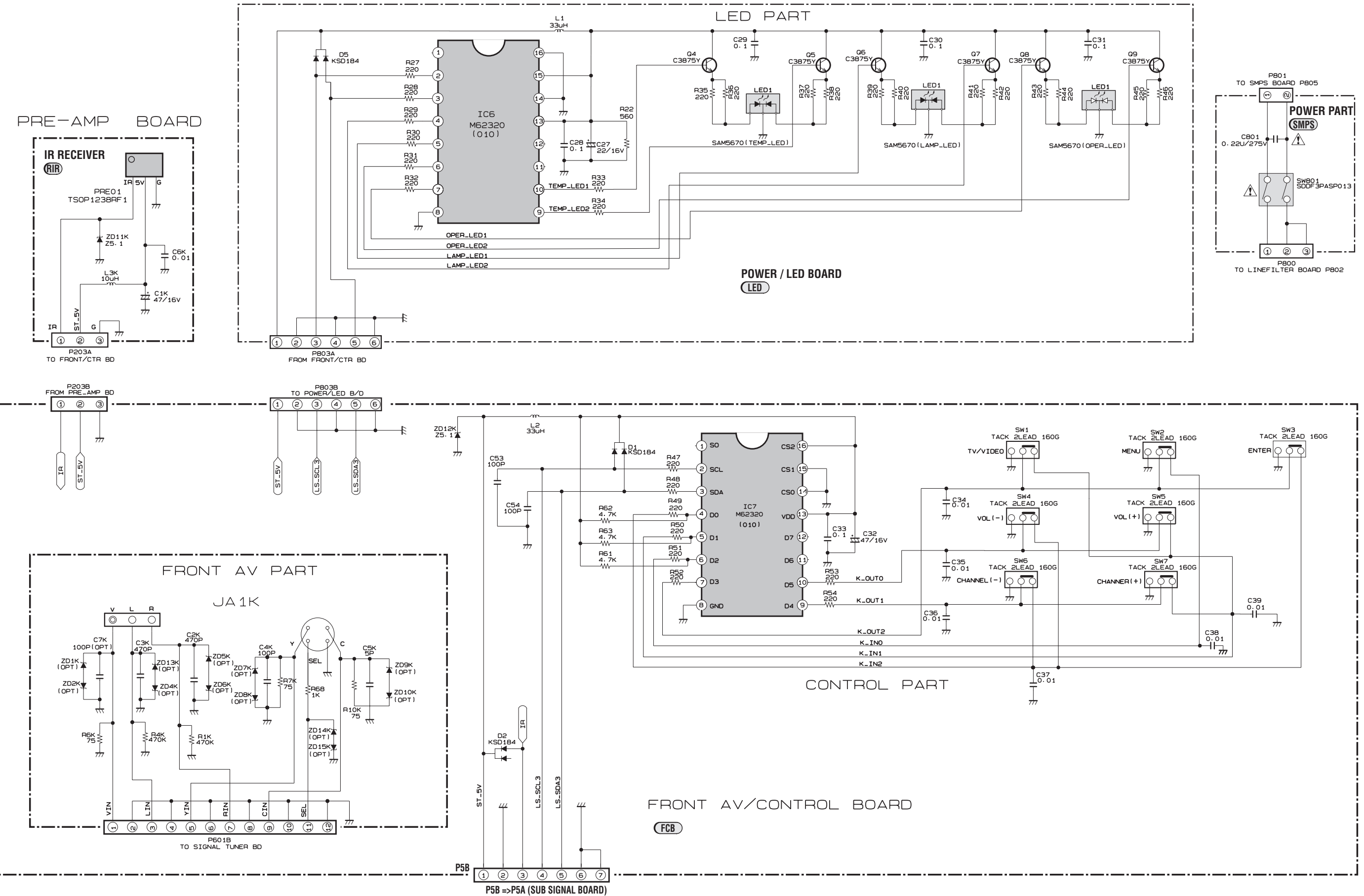


P5B => P5A (SUB SIGNAL BOARD)

## MAIN BOTTOM B/D

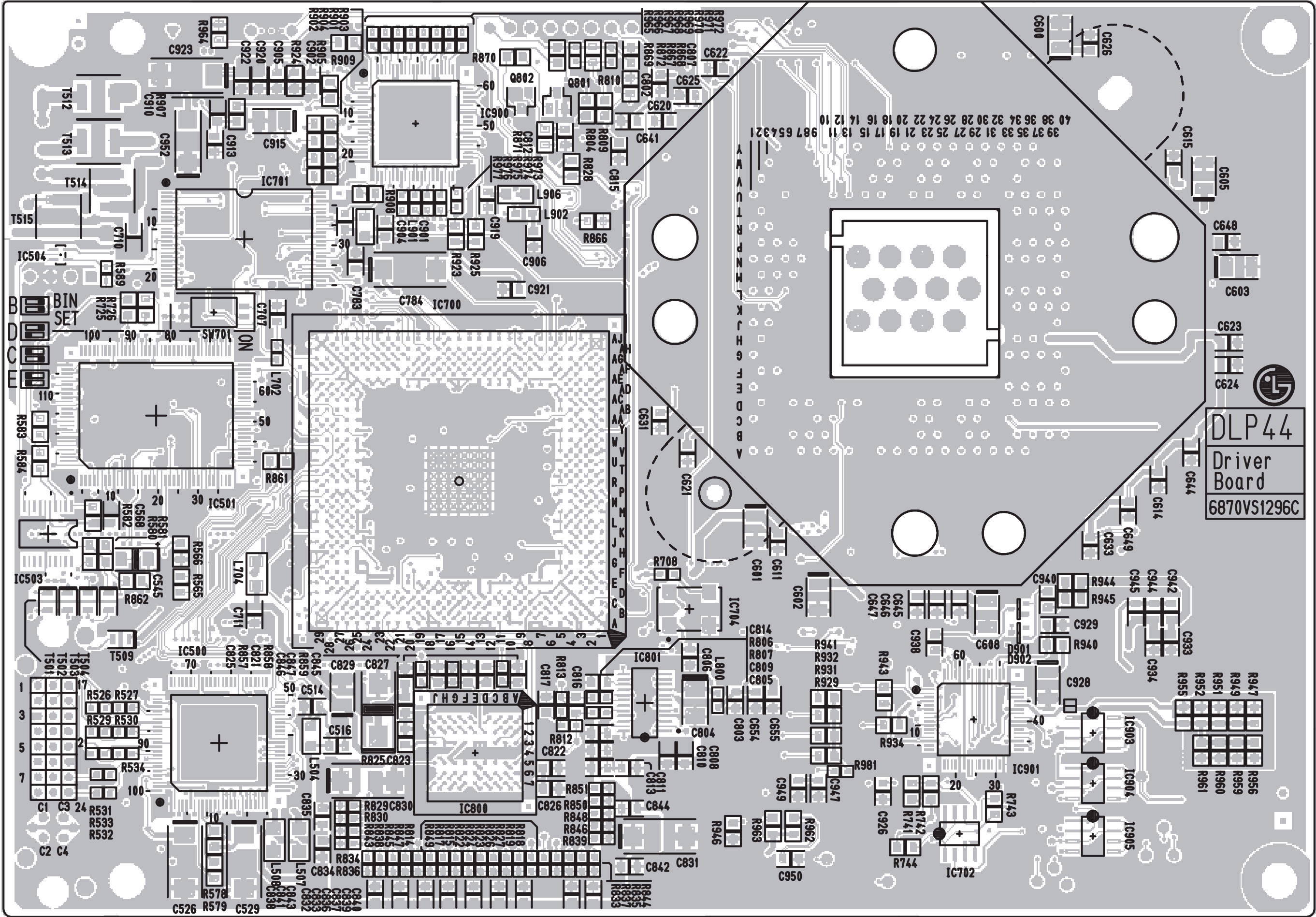


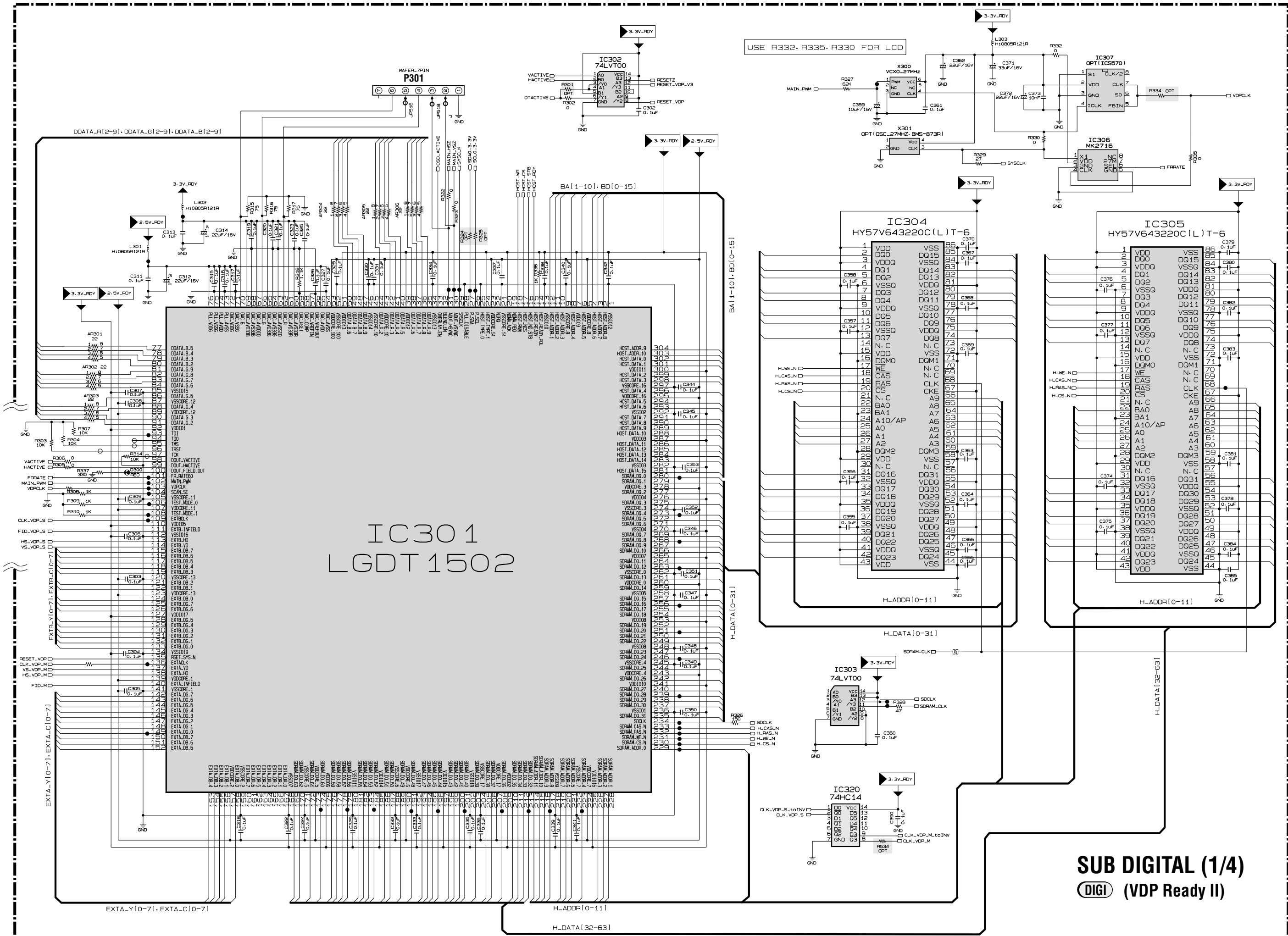
## SUB CIRCUITS



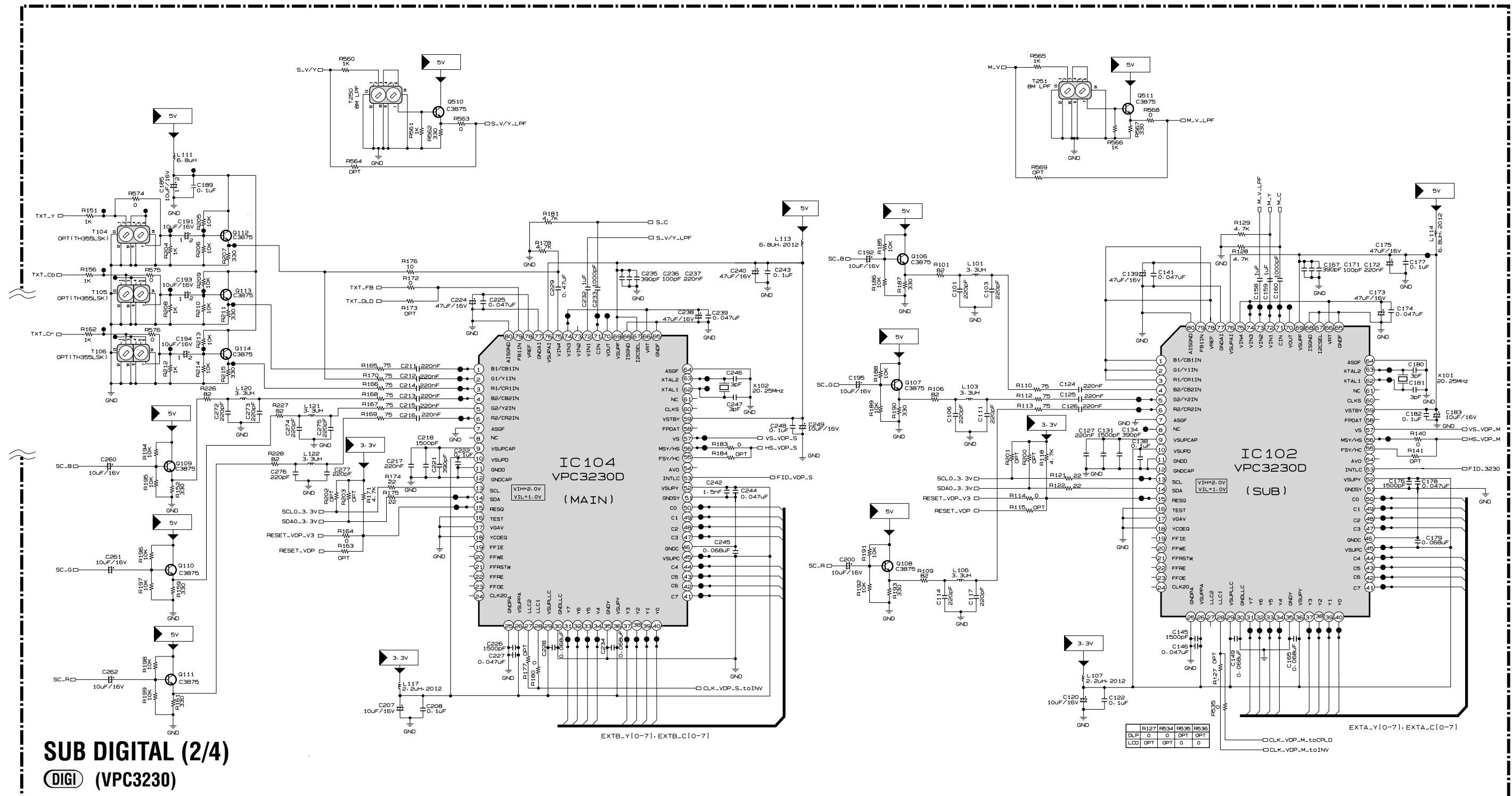
COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES

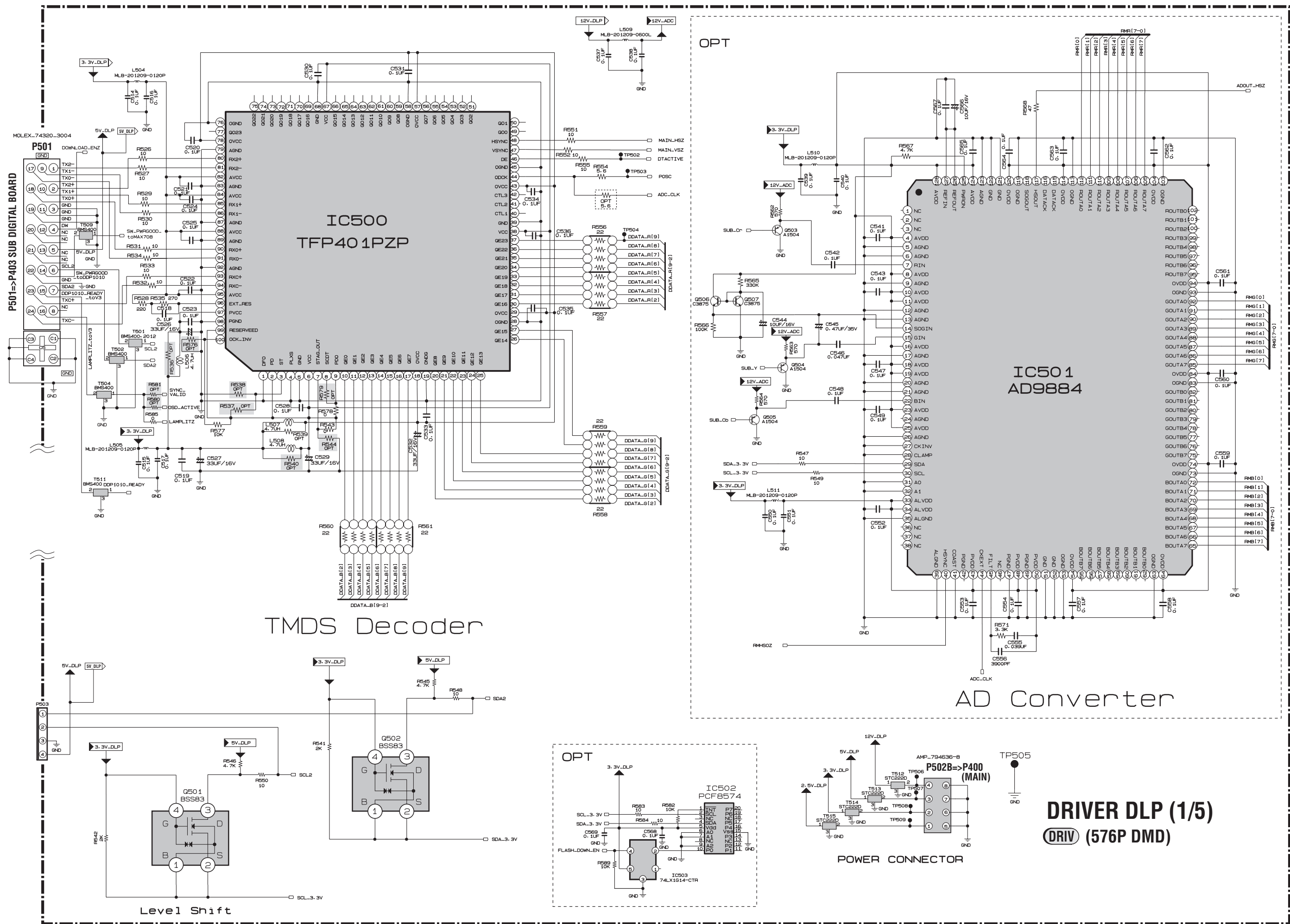


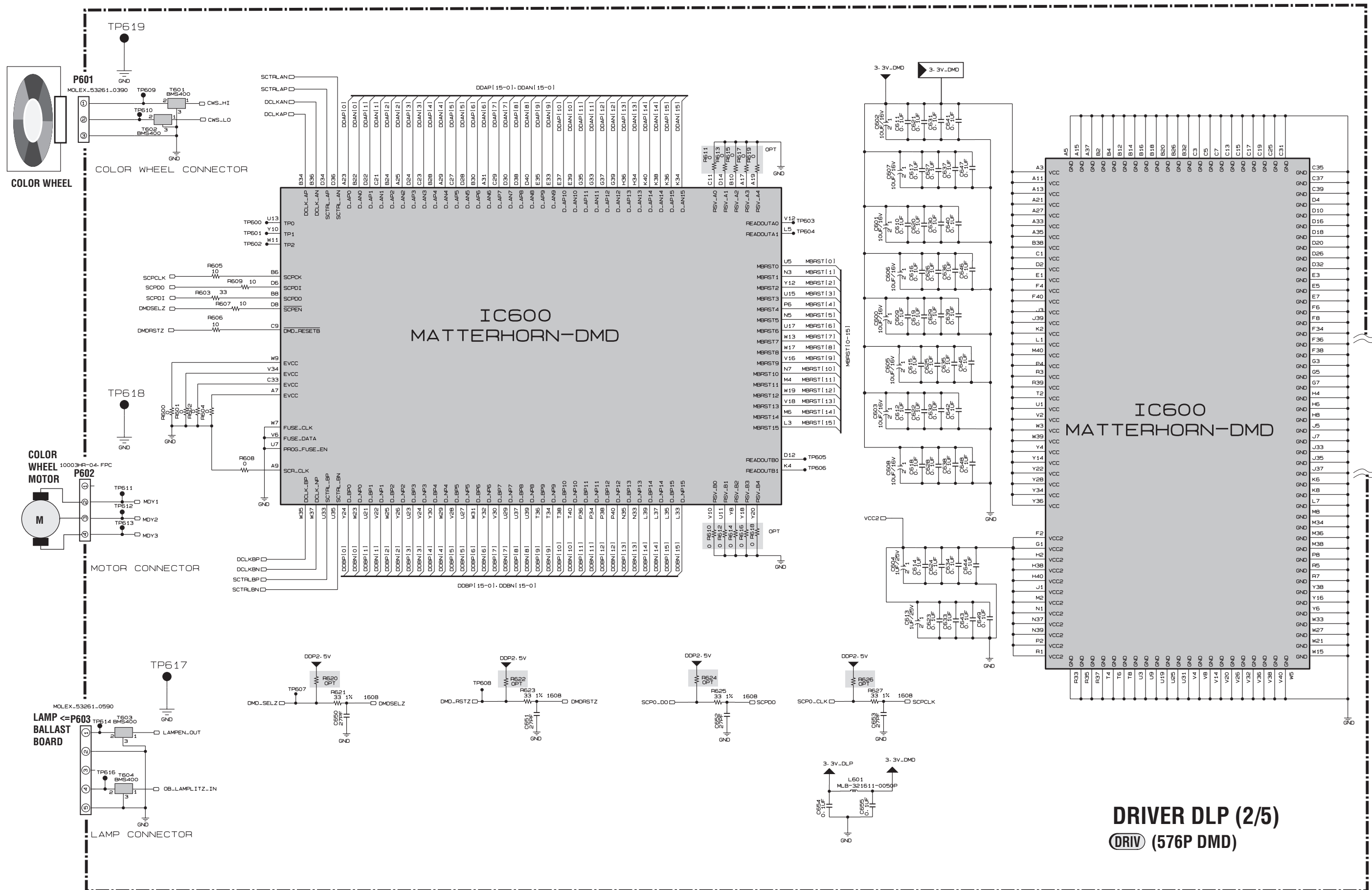




## SUB DIGITAL (2/4)







**DISASSEMBLY**

**SCREEN REMOVAL** (fig.1 to fig.5)

- a - Unscrew 01
- b - Pull strongly 02
- c - Unscrew 03 and 04
- d- Remove 05
- e - Unplug the HP connectors and remove 06

**ACCESS TO THE ELECTRONIC PART** (fig.1)

- a - Remove 07
- b - Unscrew 08
- c - Remove 09

**OPTICAL BLOCK REMOVAL** (fig.6 and fig.9)

- a - Proceed as for "screen removal" until step "d"
- b - Unscrew 10
- c - Remove 11
- d - Disconnect 12
- e - Unscrew 13
- f - Disengage 14
- g - Pull 15
- h - Disconnect 16
- i - Carrefully pull 17 and 18
- j - Disconnect 19 and remove 17

**DMD REMOVAL** (fig.10 and fig.15)

- a - Proceed as for "optical block removal"
- b - Remove the lamp block
- c - Unscrew 21 , 22 and 23
- d - Pull 20 in arrow direction
- e - Unscrew 24
- f - Remove 25
- g - Unscrew 26 x12
- h - Remove 27
- i - Unscrew 28 and 29
- j - Lift and remove 30 and 31
- k - Unscrew 32 and 33
- l - Remove 34 and DLP 35

**IMPORTANT :**  
After optical block or DMD replacement, do not forget to adjust "screen tilt and position" and "optical focus".

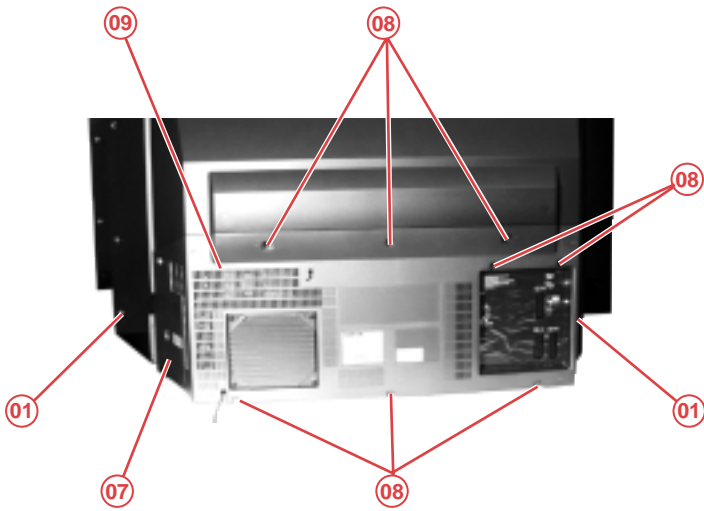


Fig. 1

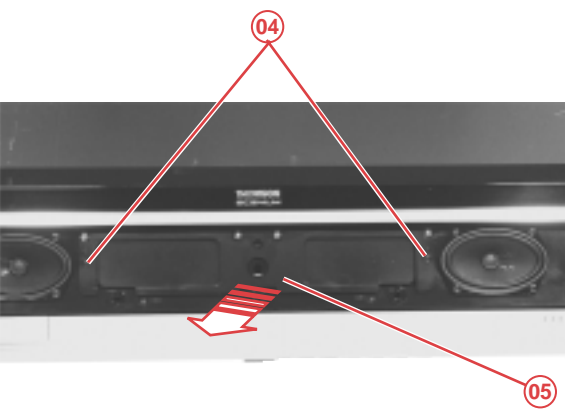


Fig. 4

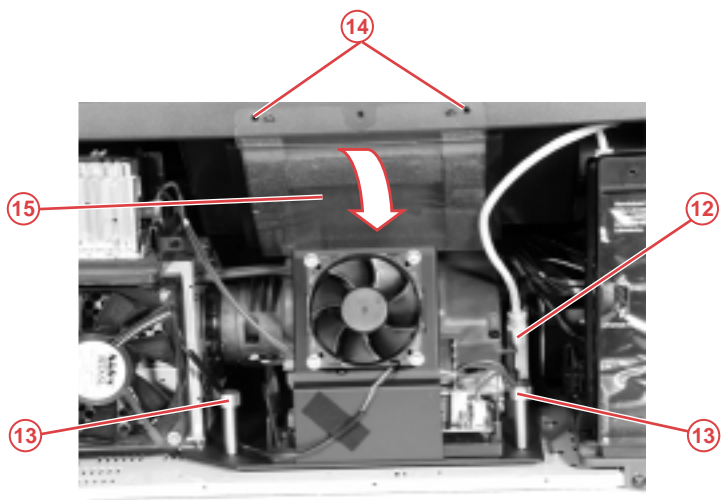


Fig. 7

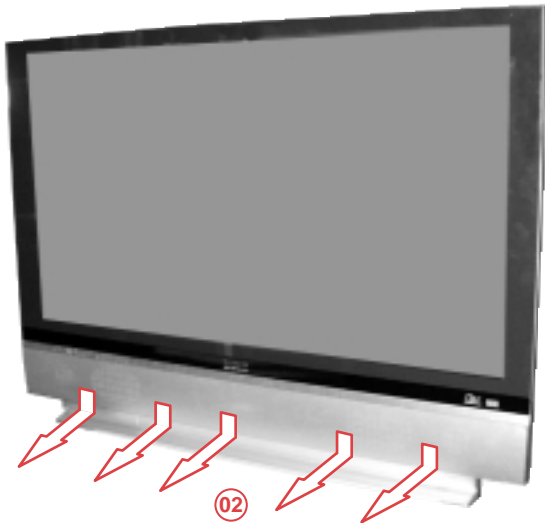


Fig. 2



Fig. 5

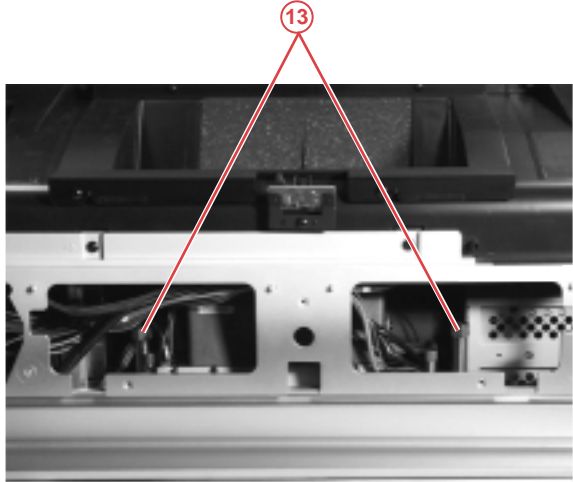


Fig. 8

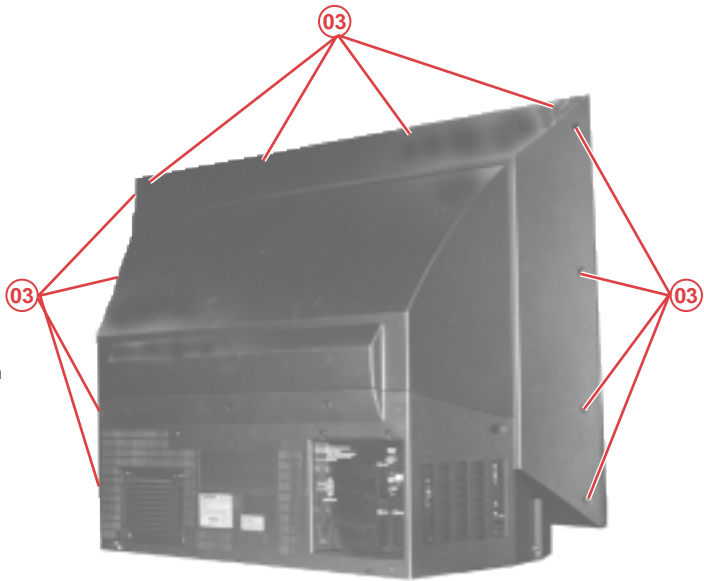


Fig. 3

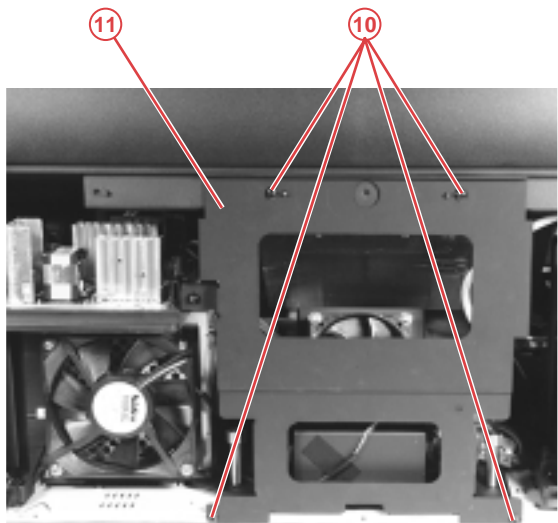


Fig. 6

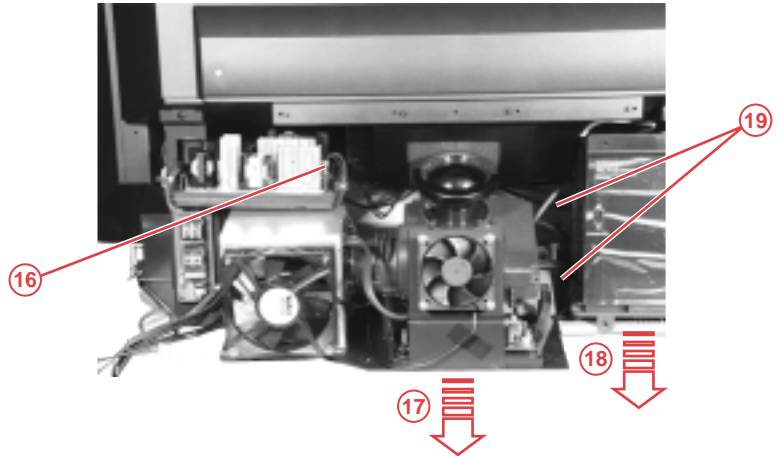


Fig. 9

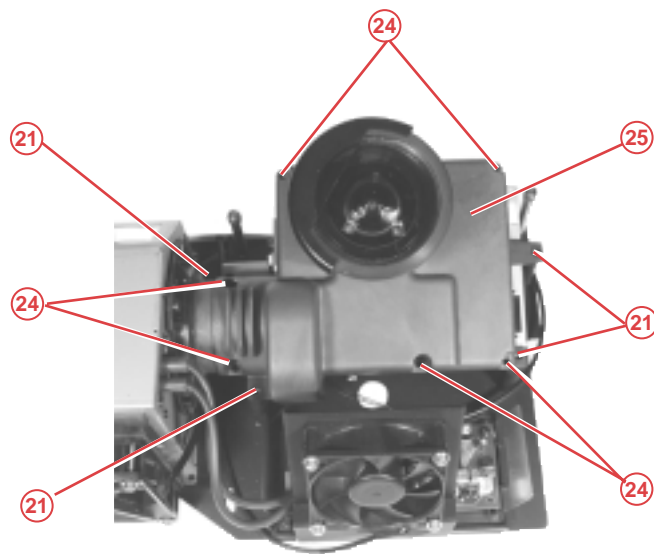


Fig. 10

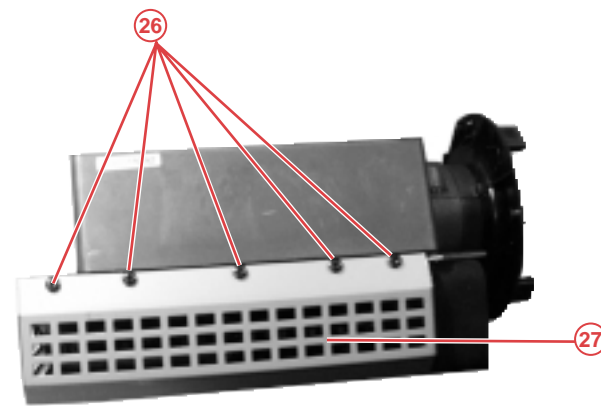


Fig. 13

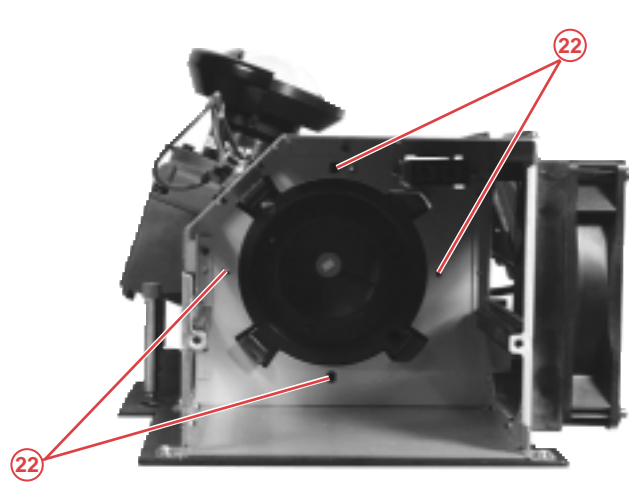


Fig. 11

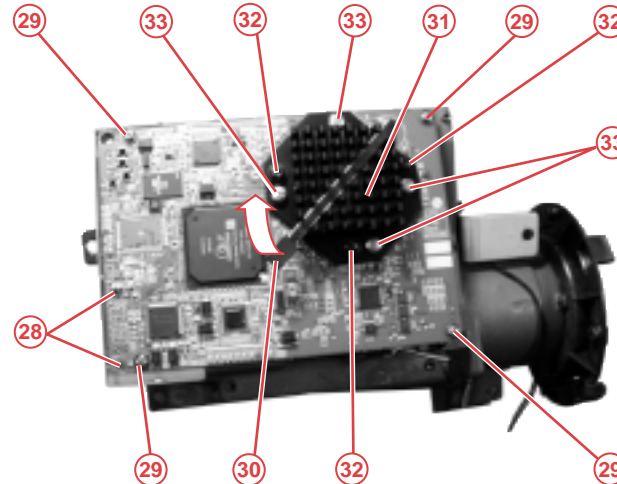


Fig. 14

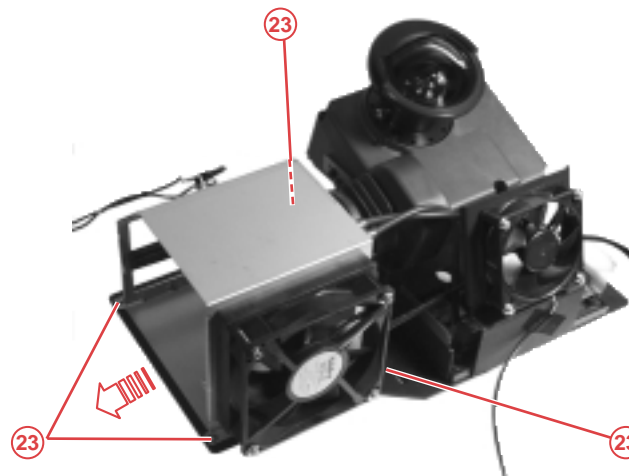


Fig. 12



Fig. 15

## REPLACING THE LAMP

You must replace the lamp when:

- The image gets darker or starts to be deteriorated.
- The lamp indicator is orange or red (flashing alternately)
- The message "LAMP REPLACE" appears on the screen.

\* Follow the instruction to replace the lamp, as below show.

1. Turn off the TV and unplug the power cable.  
(Cool the lamp for more than 1 hour.)
2. Remove the two retaining screws on the lamp cover with a "+" type screwdriver then separate the lamp cover from the TV.(Refer to Fig. 1)
3. Remove the two retaining screws on the lamp case with using "+" type screwdriver.(Refer to Fig. 2)
4. Lift up the fixed wire handle of the lamp.(Refer to Fig. 3)
5. Pull out the handle slowly and remove the lamp case.
6. Insert the new lamp gently into the correct position.  
Make sure it is inserted correctly.
7. Tighten the screws you removed in step 3.
8. Replace the lamp cover and tighten the cover screws.  
(Make sure the lamp cover is securely fastened.  
If the lamp cover is open, the lamp indicator flashes green and the TV is not turned on.)

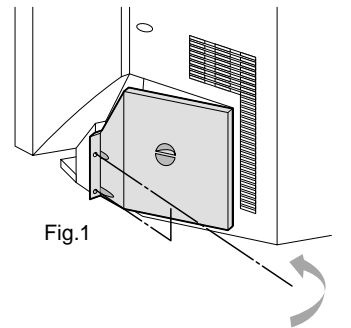


Fig.1

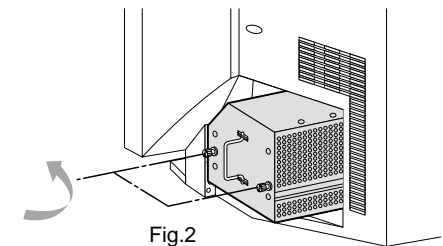


Fig.2

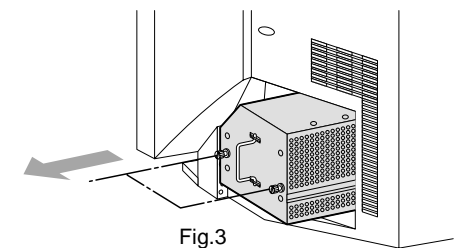
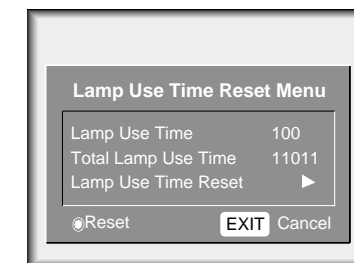


Fig.3

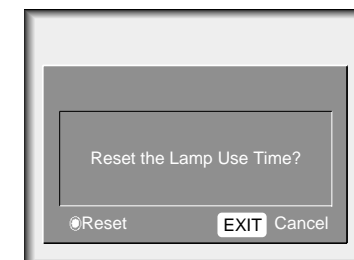
## RESET LAMP TIME

\* You must reset lamp time on the menu after replacing the lamp.

- 1 Press the "OK" button on the front panel and "MUTE" button on the remote control simultaneously  
(About 5 seconds).



- 2 Press the "VOLUME" (▷) button on the TV front panel.



- 3 Press the "OK" (●) button.  
Lamp time will be reset.

# ADJUSTMENTS

It is necessary to enter the "EZ-Adjust Mode" (Service Mode) in order to carry out alignment of the set. Most adjustments can be made with the Service Remote Control Code **357 922 30**.

- The adjustments must be performed under the correct sequence.
- The set must be operated for 5 minutes preliminarily before adjustment
- Use a 4/3 100% white test pattern.

**Note :**  
The operation of the set without the lower back and the cover of the lamp is possible by locking the contactor in closed position only.

## EZ-ADJUST MODE

### 1- Accessing EZ-Adjust Mode

- Press the "ADJ" button on the remote control.
- The main service menu appears on the screen.

EZ ADJ Mode	
1. Pattern	
2. Position	
3. White Balance	
4. System Option	
Lamp Type:	OSRAM®
DDP1010 Ver:	1.2
SubMicom Ver:	1.0
MainMicom Ver:	0.55

### 2 - Exiting from EZ-Adjust Mode

- After adjustment press the "ADJ" key on the Remote control.

### 3 - Navigation inside the EZ-Adjust Mode

- Select menu to adjust using (CH+ « Δ » CH- « ▽ ») key
- and press the VOL+ " > " key to adjust on the selected menu.

### 4 - Alignment value

- Adjust the value of adjustment with using the VOL+ " > " , VOL - " < " key.

## SCREEN TILT AND POSITION ADJUSTMENT

### 1 - Required Test equipment

- Six angles wrench and spanner for knob adjustment or fixation.

### 2 - Preparation for Adjustment

- Remove the loudspeaker grid (1) , the Base plate (2) (Fig.1) and the cabinet back lower.
- See Disassembly/Assembly §.

The adjustment knobs and the Engine plate screws are accessible

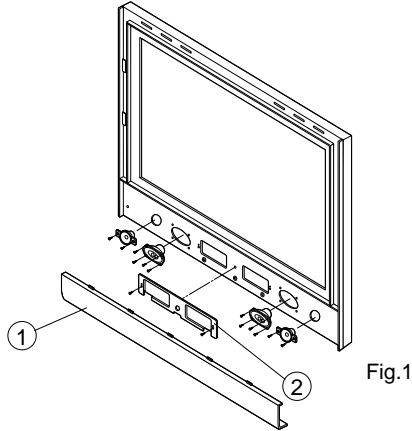


Fig.1

### 3 - Adjustment

- Select in the main menu of the EZ-Adjust Mode the line "2.Position";
- TV set display the adjustment pattern (Fig.2)

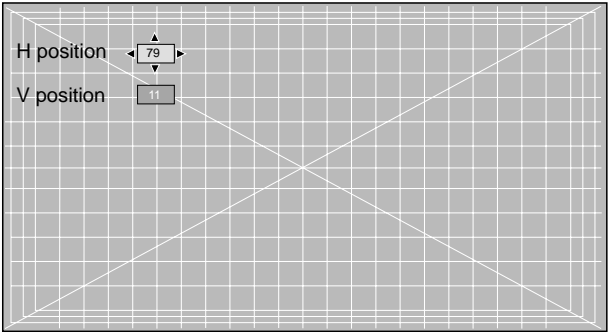


Fig.2

- Adjust Tilt with ( 2 ) and position with ( 1 ) (Fig. 3,4) of the optical Engine plate in order to obtain a correct picture as shown above.
- Lock the adjustments of Engine plate with screws (1 ) (Fig.3,4).

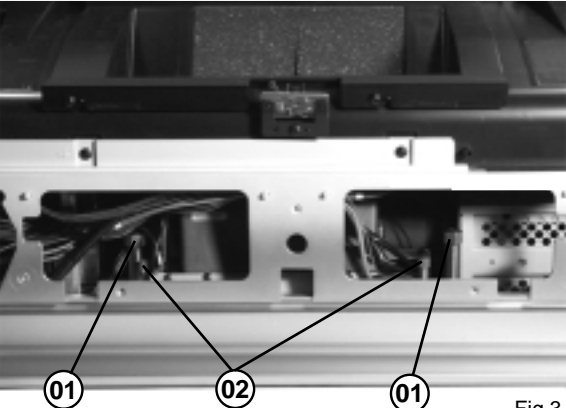


Fig.3

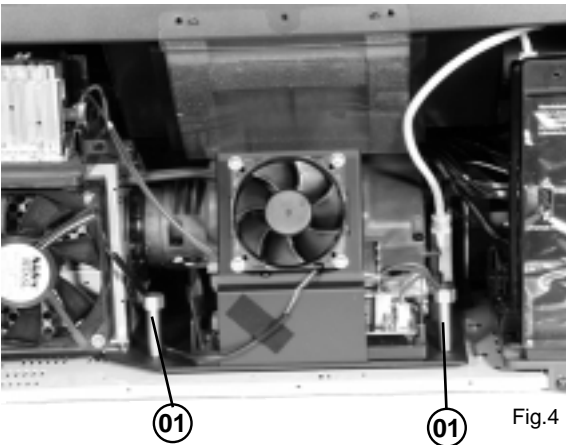










Fig.4

- Adjust the V/H position in the service mode as following.

## ALIGNMENT

GEOMETRY																				
2-Position H Position																				
V Position																				
<b>FOCUS</b> Acces for optical focus adjustment is via the rear of the unit (Fig.5)																				
Optical Focus		 +  +  = 50%  TV : AV1 Test pattern																		
<ul style="list-style-type: none"><li>- Loosen the fixing screw (1) of projection lens (Fig.6)</li><li>- Turn (2) to the left/right to make the optimum focus condition.</li><li>- Fix the lens.</li></ul>																				
<b>VIDEO</b>																				
CWI	Factory adjust (CWI = 136)*																			
3-White Balance  R_Gain R = 83°  G_Gain G = 83°  B_Gain B = 100		 +  +  standard RF -PAL/SECAM  - Fix B =100 - Adjust R / G  Grey scale test pattern white =100%	  grey																	
<b>SYSTEM</b>																				
4-System Option	<b>System</b> 1 : BG / L 0 : BG / I / DK																			
	<b>Text Language</b> <table><tr><td>0 : WEST EU</td><td>9 : TURK GREY3</td></tr><tr><td>1 : EAST EU1</td><td>10 : ARAB FRA</td></tr><tr><td>2 : EAST EU2</td><td>11 : ARAB ENG</td></tr><tr><td>3 : TURKEY EU</td><td>12 : ARAB HEB1</td></tr><tr><td>4 : CYRILLIC1</td><td>13 : ARAB HEB2</td></tr><tr><td>5 : CYRILLIC2</td><td>14 : FARS ENG</td></tr><tr><td>6 : CYRILLIC3</td><td>15 : FARS FRA</td></tr><tr><td>7 : TURK GREY1</td><td>16 : FARS ALL</td></tr><tr><td>8 : TURK GREY2</td><td></td></tr></table>			0 : WEST EU	9 : TURK GREY3	1 : EAST EU1	10 : ARAB FRA	2 : EAST EU2	11 : ARAB ENG	3 : TURKEY EU	12 : ARAB HEB1	4 : CYRILLIC1	13 : ARAB HEB2	5 : CYRILLIC2	14 : FARS ENG	6 : CYRILLIC3	15 : FARS FRA	7 : TURK GREY1	16 : FARS ALL	8 : TURK GREY2
0 : WEST EU	9 : TURK GREY3																			
1 : EAST EU1	10 : ARAB FRA																			
2 : EAST EU2	11 : ARAB ENG																			
3 : TURKEY EU	12 : ARAB HEB1																			
4 : CYRILLIC1	13 : ARAB HEB2																			
5 : CYRILLIC2	14 : FARS ENG																			
6 : CYRILLIC3	15 : FARS FRA																			
7 : TURK GREY1	16 : FARS ALL																			
8 : TURK GREY2																				

\* For Information only



Service Remote Control  
Code : 357 922 30

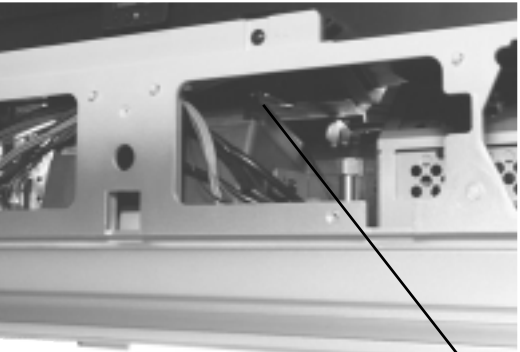


Fig.6

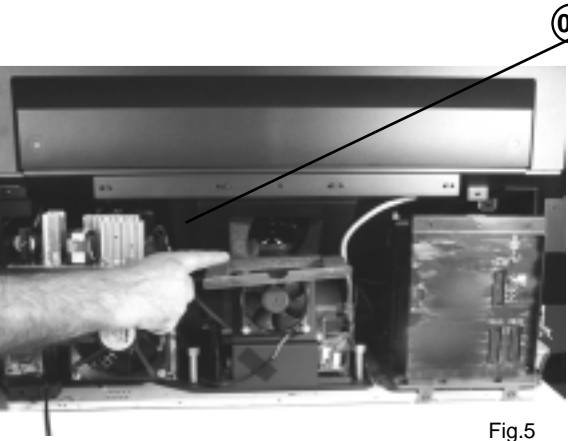


Fig.5

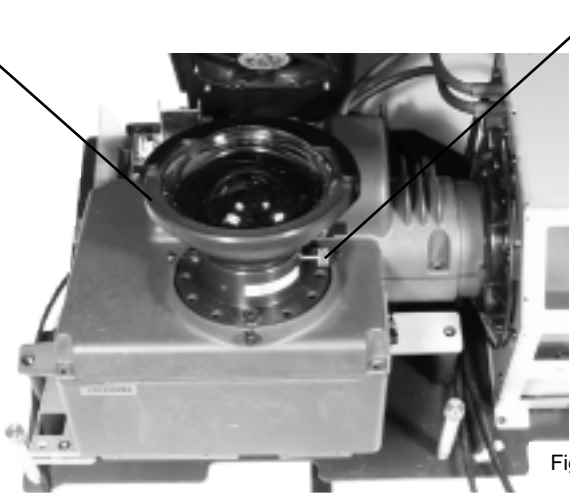
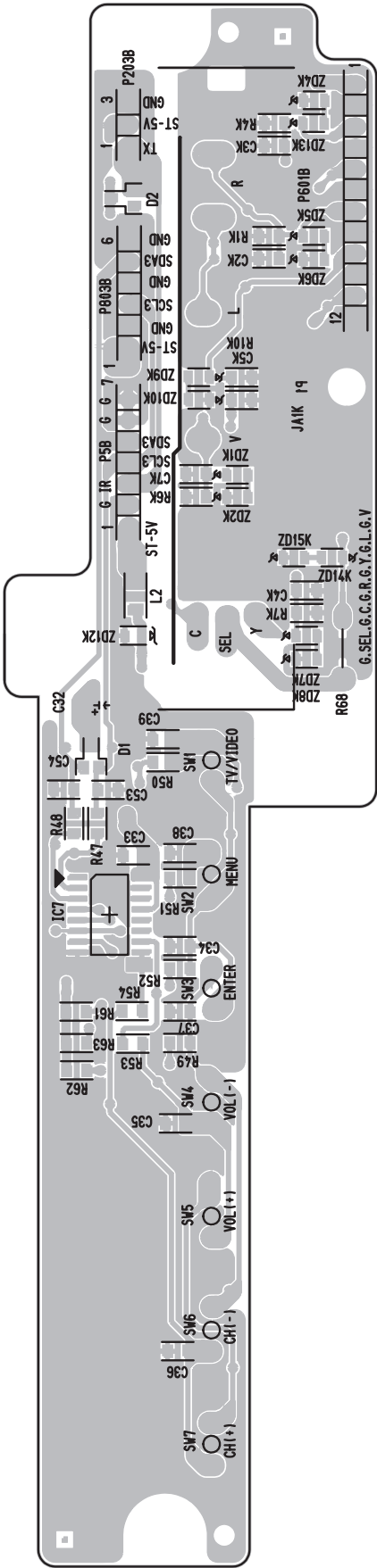
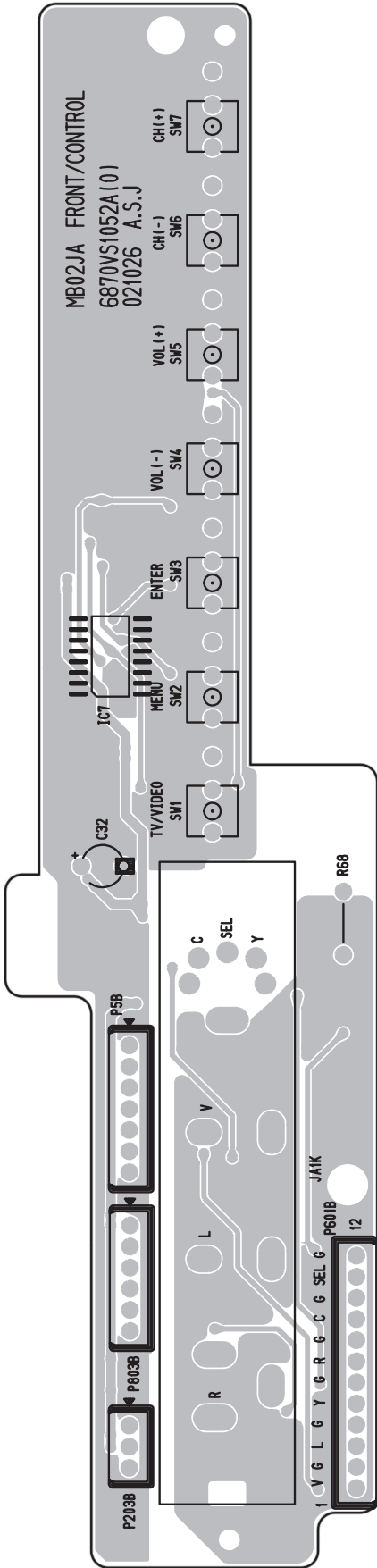


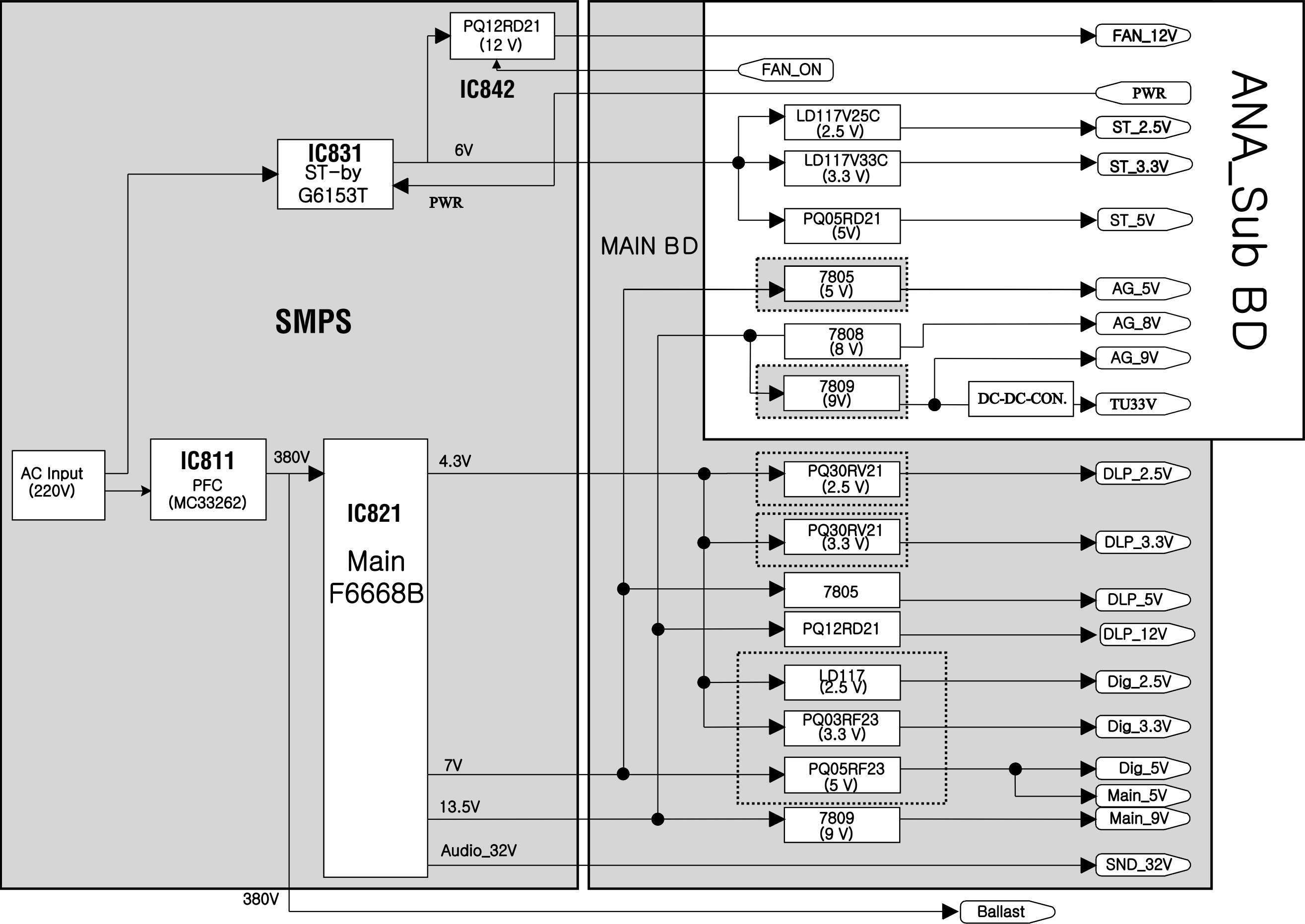
Fig.6

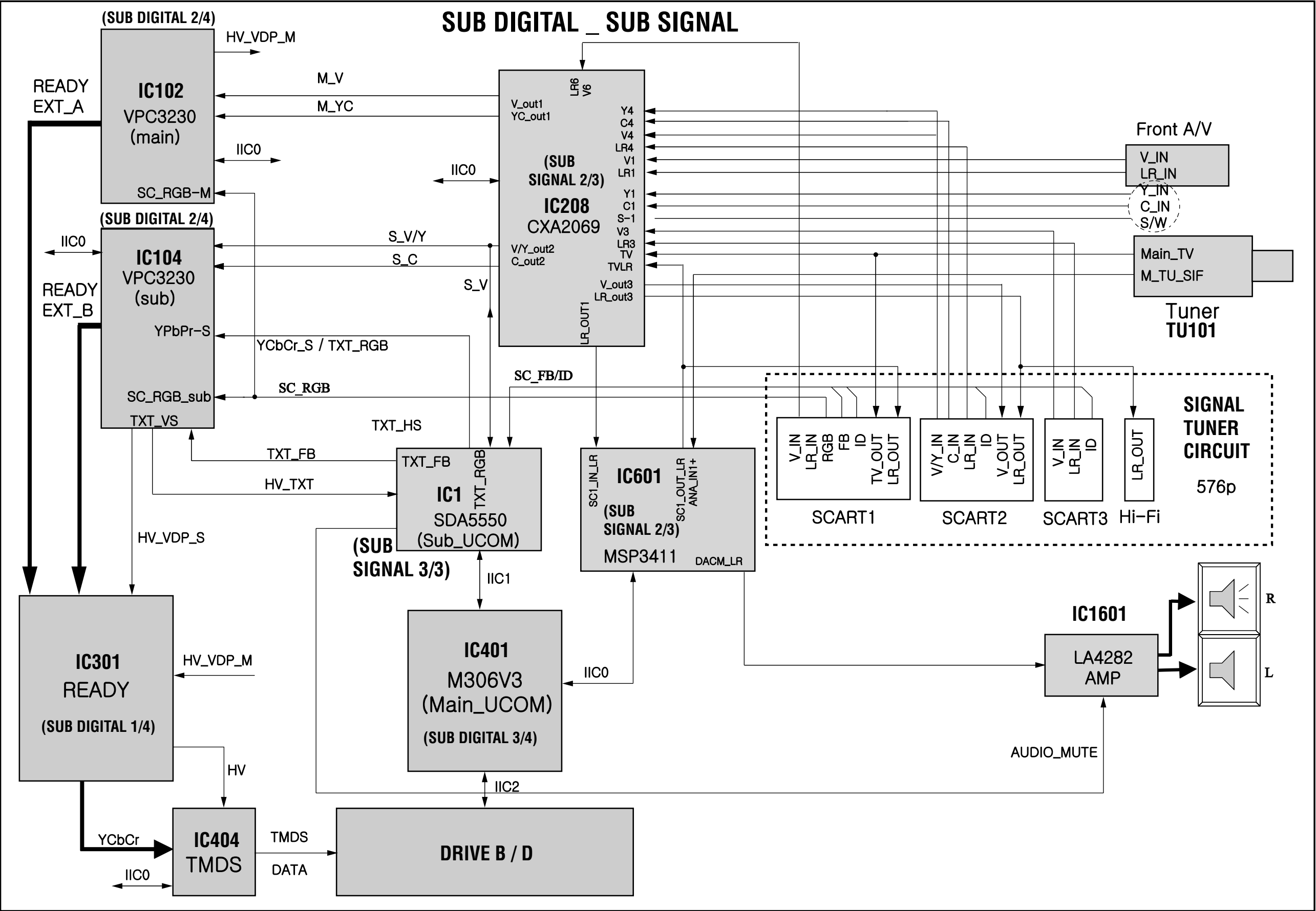
**FRONT CONNECTOR BOARD - PRISES EN FACADE ET INTERCONNEXION DU CLAVIER**  
**-FRONT ANSCHLUSSPLATTE - PIASTRA CONNESSIONE FRONTALE -**  
**PLÁTINA MANDOS FRONTAL**

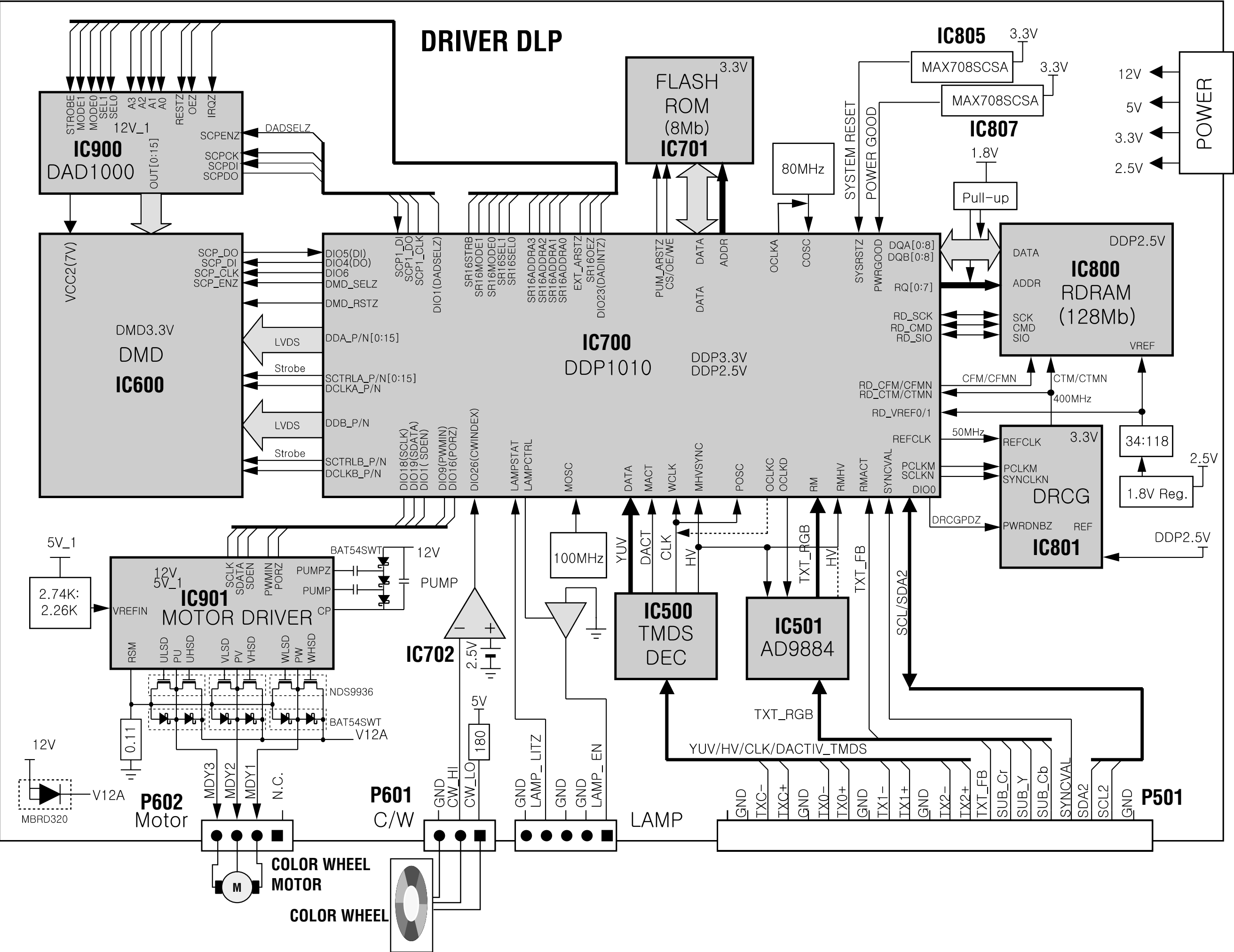
COMPONENT SIDE - CÔTE COMPOSANTS -  
 BESTÜCKUNGSSEITE -  
 LATO COMPONENTI - LADO  
 COMPONENTES

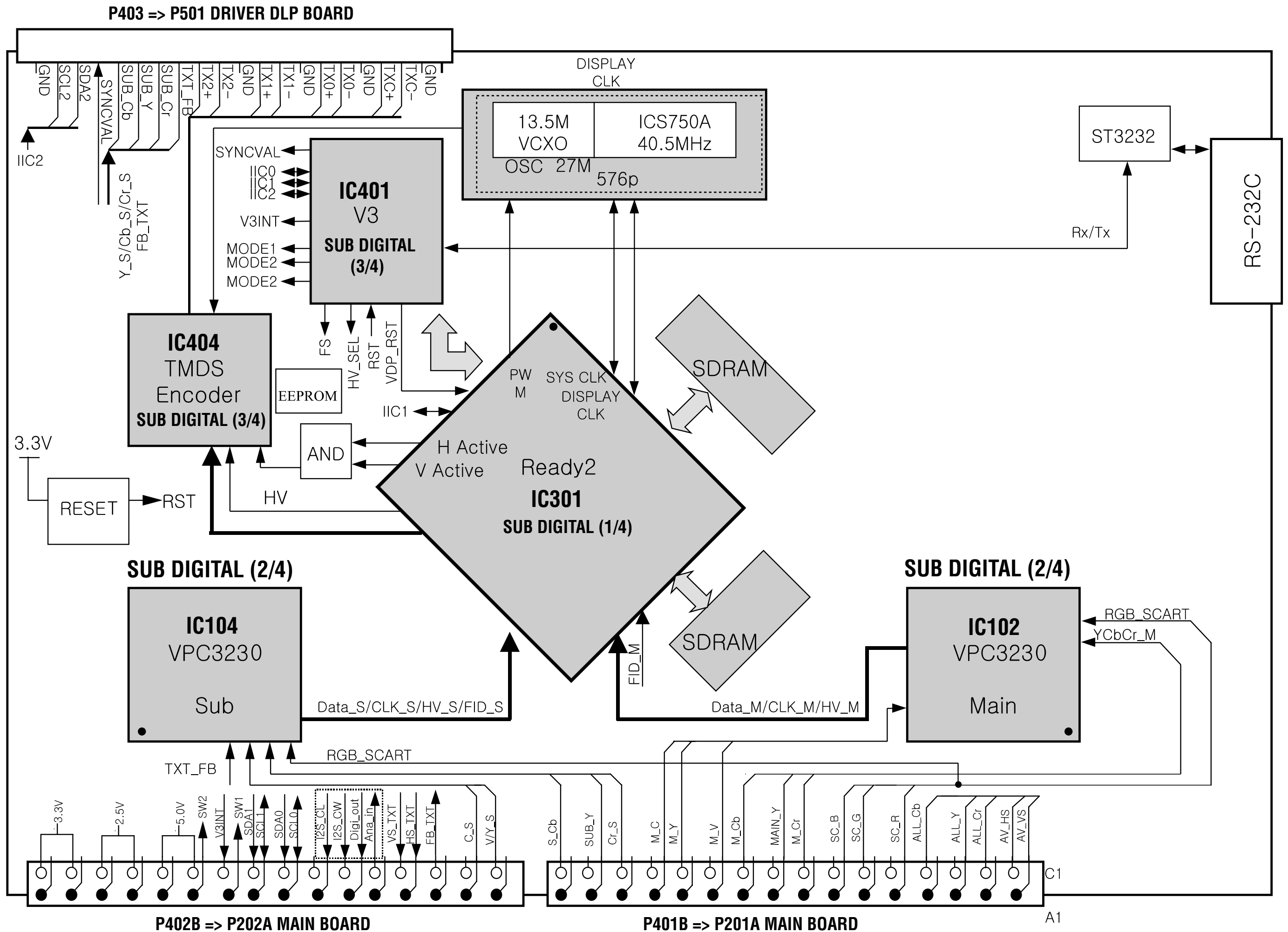
SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE -  
 LATO SALDATURE - LADO SOLDADURAS

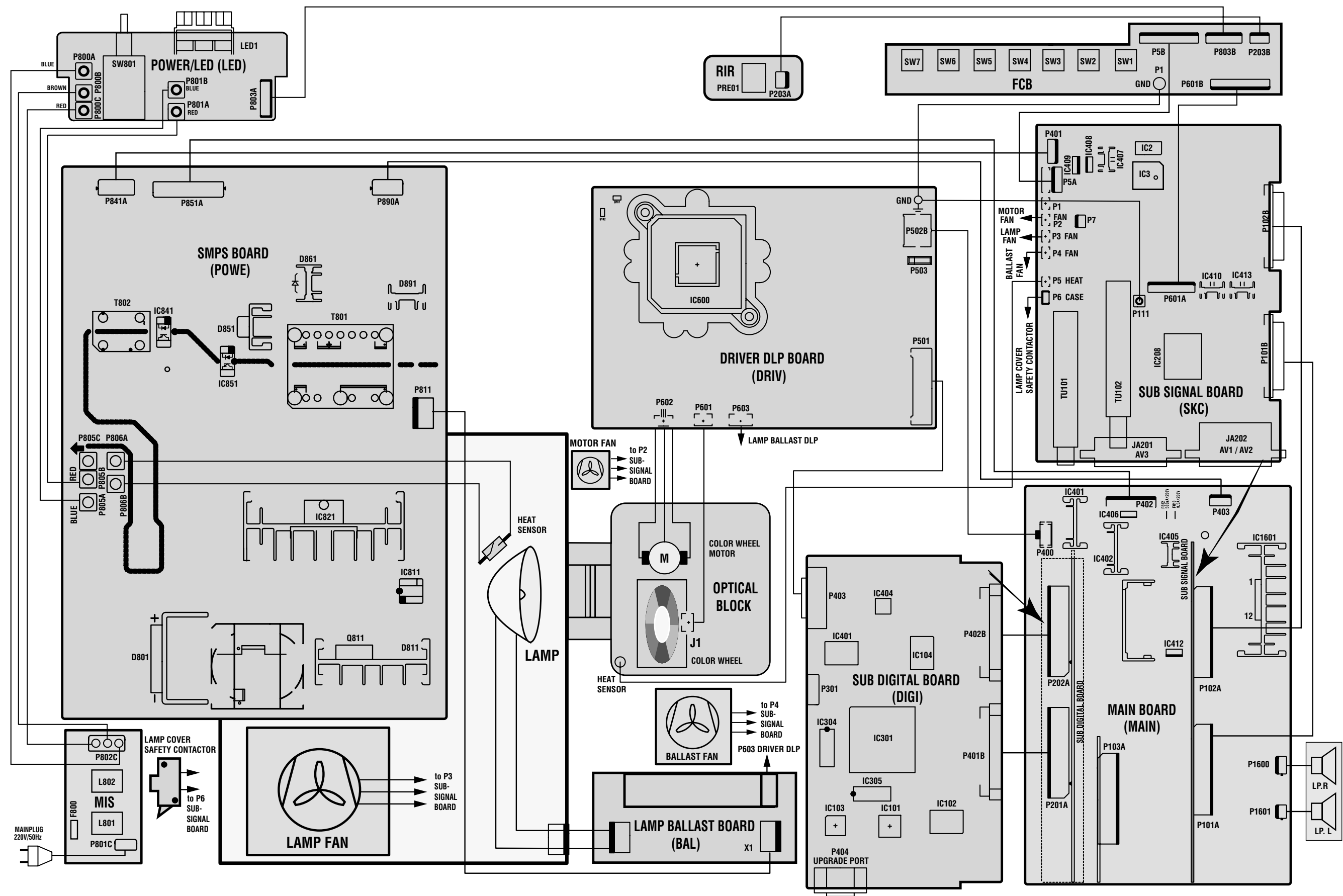












COMPONENT SIDE - COTE COMPOSANTS - BESTÜCKUNGSSEITE - LATO COMPONENTI - LADO COMPONENTES



SUB SIGNAL BOARD - PLATINE SUB SIGNAL - SUB SIGNAL GRUNDPLATTE - PIASTRA SUB SIGNAL - PLATINA SUB SIGNAL

SOLDER SIDE - CÔTE SOUDURES - LÖTSEITE - LATO SALDATURE - LADO SOLDADURAS

