

# SERVICE MANUAL

LC-23Ixx1/ LC-26Ixx1/ LC-27Ixx1/ LC-30Ixx1

LC-32Ixx1/ LC-37Ixx1/ LC-42Ixx1

23"/26"/27"/30"/32"/37"/42" TFT-LCD TV/MONITOR



2005. 05. 19.



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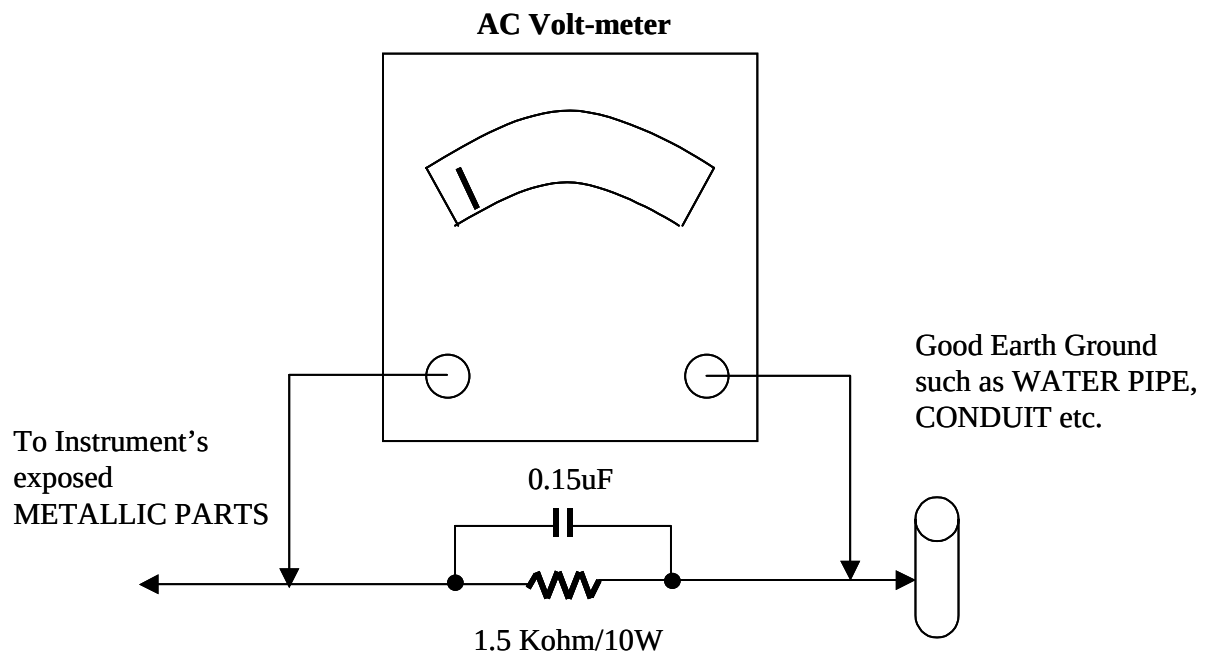
## 1. Safety Instructions

### Important Safety Notice

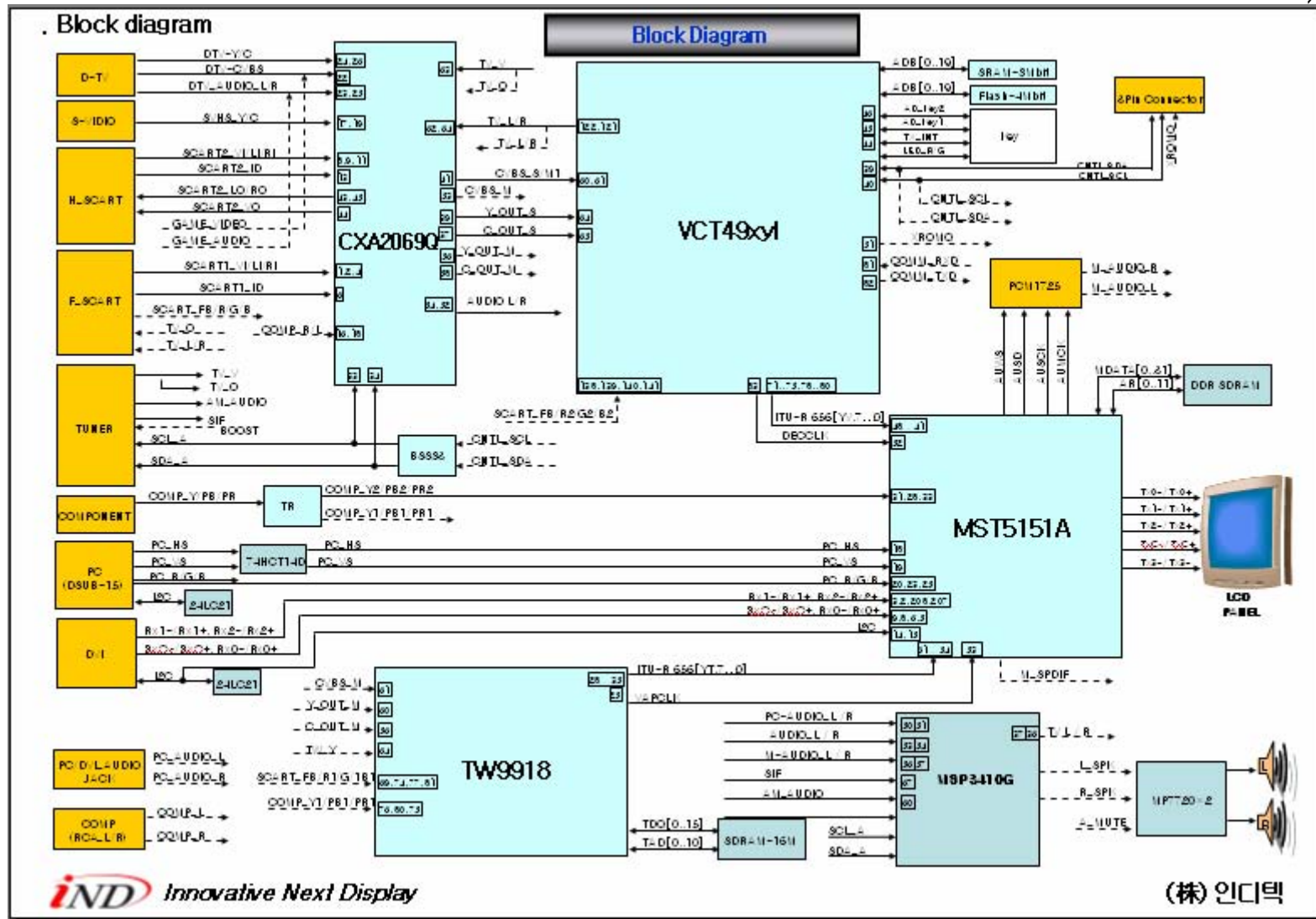
Many electrical and mechanical parts in this chassis have special safety-related characteristics. These parts are identified by in the Schematic Diagram and Replacement Parts List. It is essential that these special safety parts should be replaced with the same components as recommended in this manual to prevent Shock, Fire, or other Hazards. Do not modify the original design without permission of manufacturer.

### Leakage Current Hot Check (See below Figure)

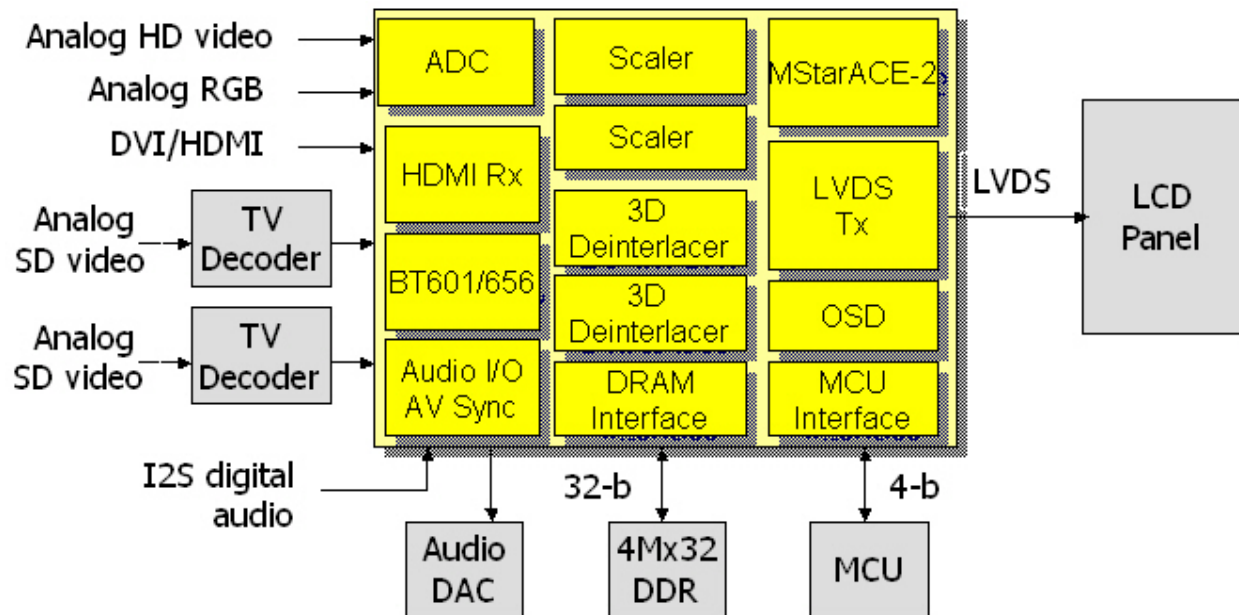
Plug the AC cord directly into the AC outlet. Do not use a line Isolation Transformer during this check. Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc) and the exposed metallic parts. Measure the AC voltage across the resistor using AC voltmeter with 1000 ohms/volt or more sensitivity. Reverse plug of the AC cord into the AC outlet and repeat AC voltage measurements for each exposed metallic part. Any voltage measured must not exceed 0.75 volt RMS, which is, corresponds to 0.5mA. In case any measurement is out of the limits specified, there is possibility of shock hazard and the set must be checked and repaired before it is returned to the customer.



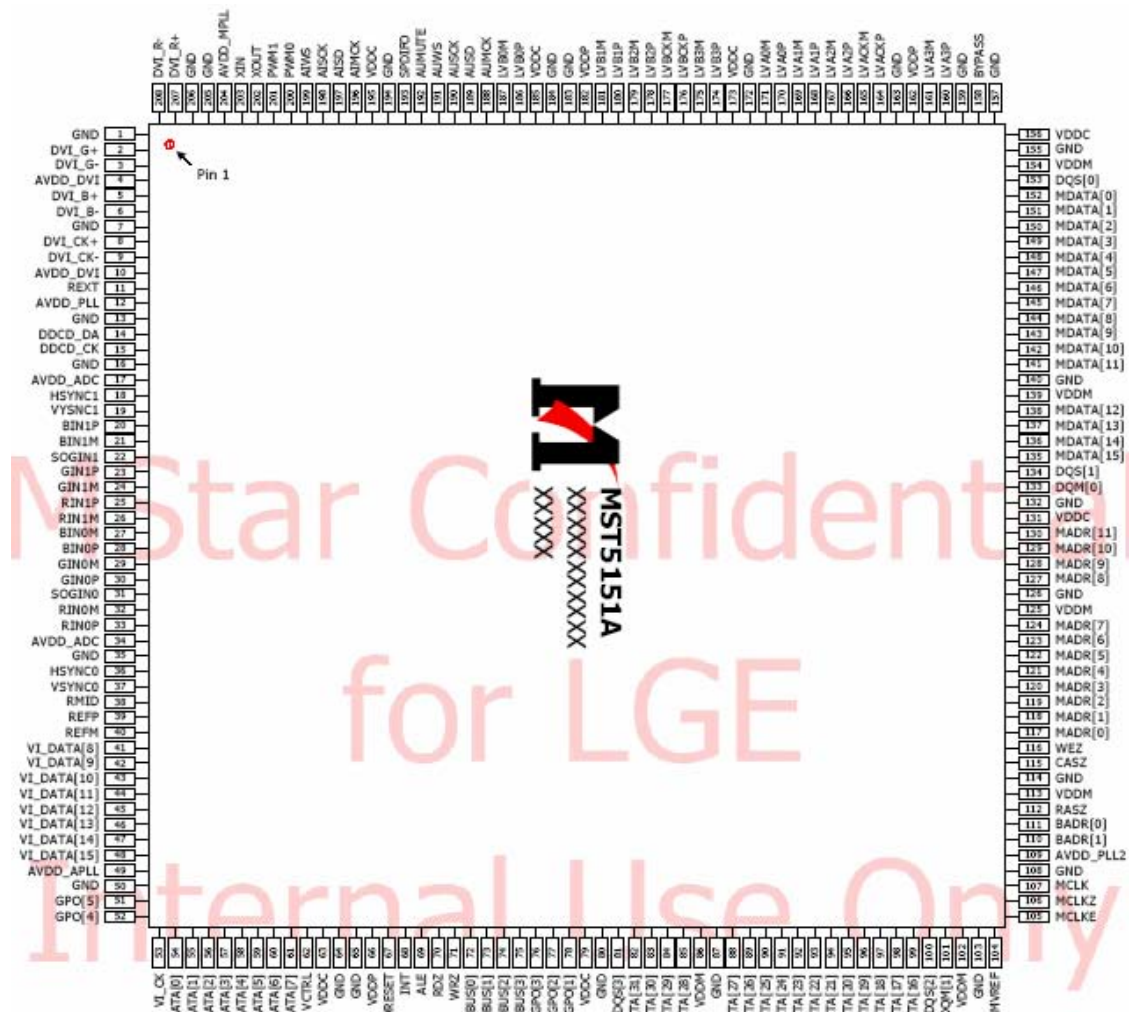
## 2. BLOCK DIAGRAM



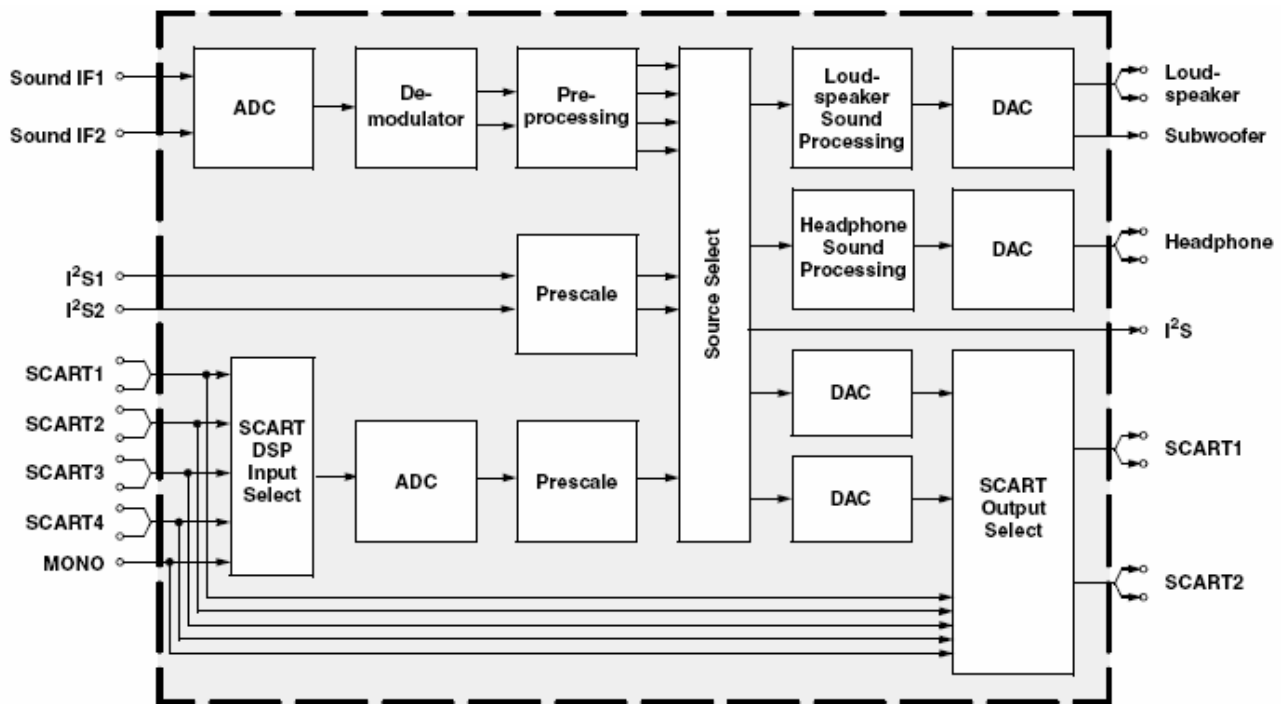
## ■ IC FUNCTIONAL BLOCK DIAGRAM (MST5151A)



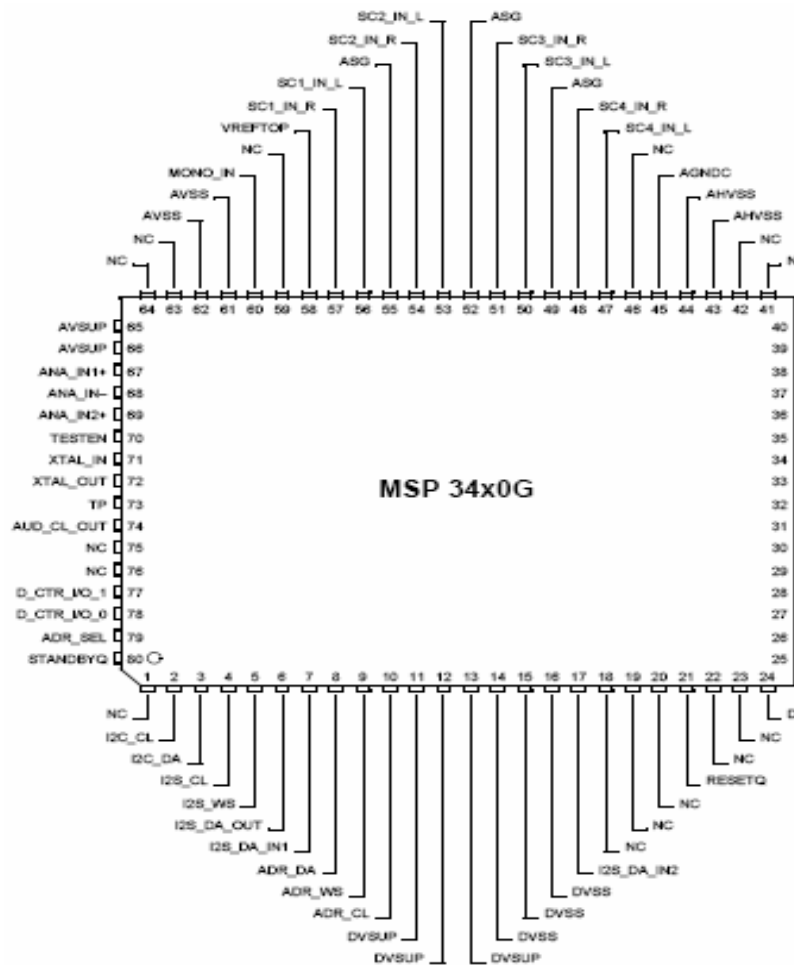
## ■ IC PIN ASSIGNMENT (MST5151A)



## ■ IC BLOCK DIAGRAM (MSP3410G)



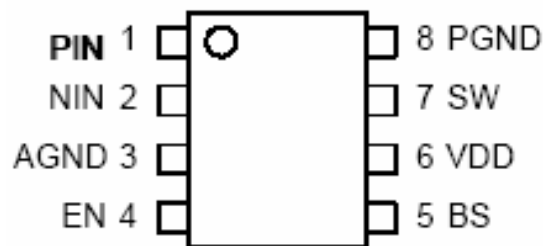
## ■ IC PIN OUT (MSP3410G)



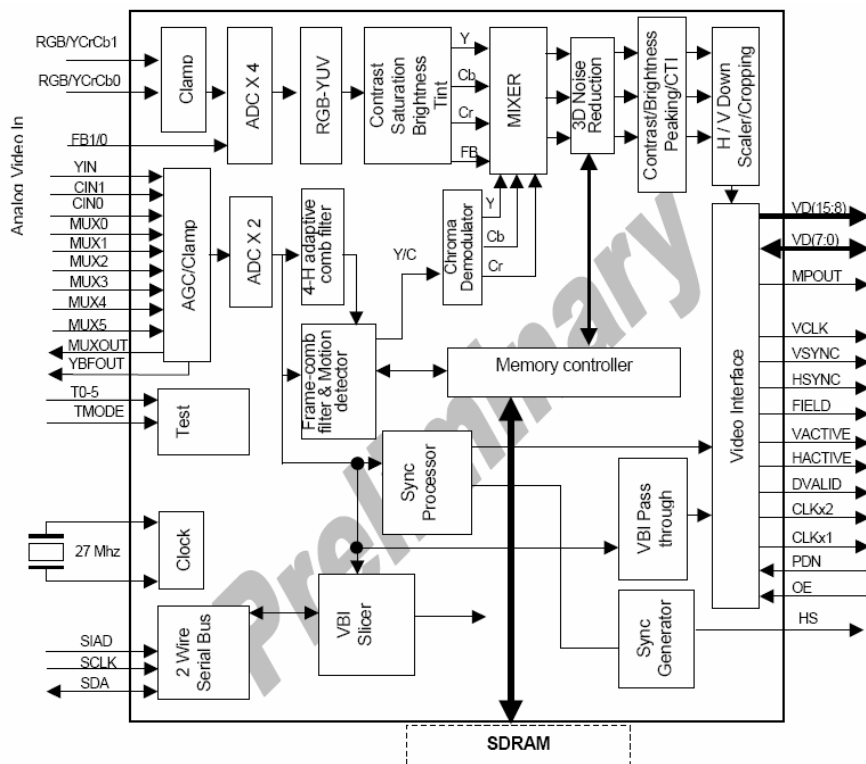
#### ■ IC BLOCK DIAGRAM (MP7720)

- 20W output at  $V_{DD}=24V$  into a  $4\Omega$  load
- THD+N as low as 0.06%
- 90% efficiency at 20W
- Low Quiescent Current (2mA)
- Switching Frequency to 1MHz
- 7.5V to 24V operation from single supply
- Integrated Start up and Shut Down
- Pop Elimination Circuit
- Thermal protection
- Integrated  $180m\Omega$  switches
- Mute / Standby-mode (Sleep)
- **Tiny 8 Pin SOIC or PDIP Package**
- **Evaluation Board Available**

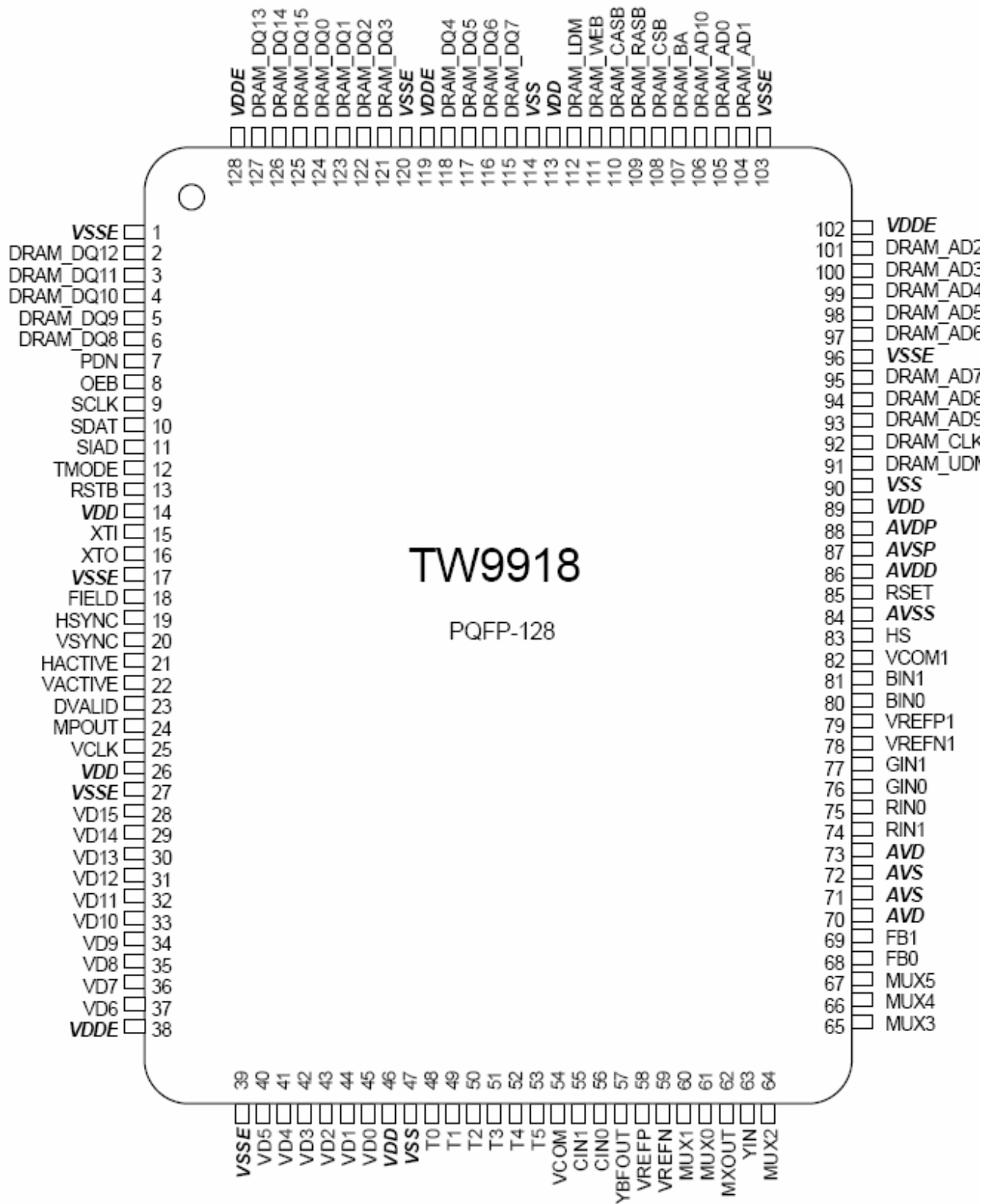
#### ■ IC PIN OUT (MP7720)



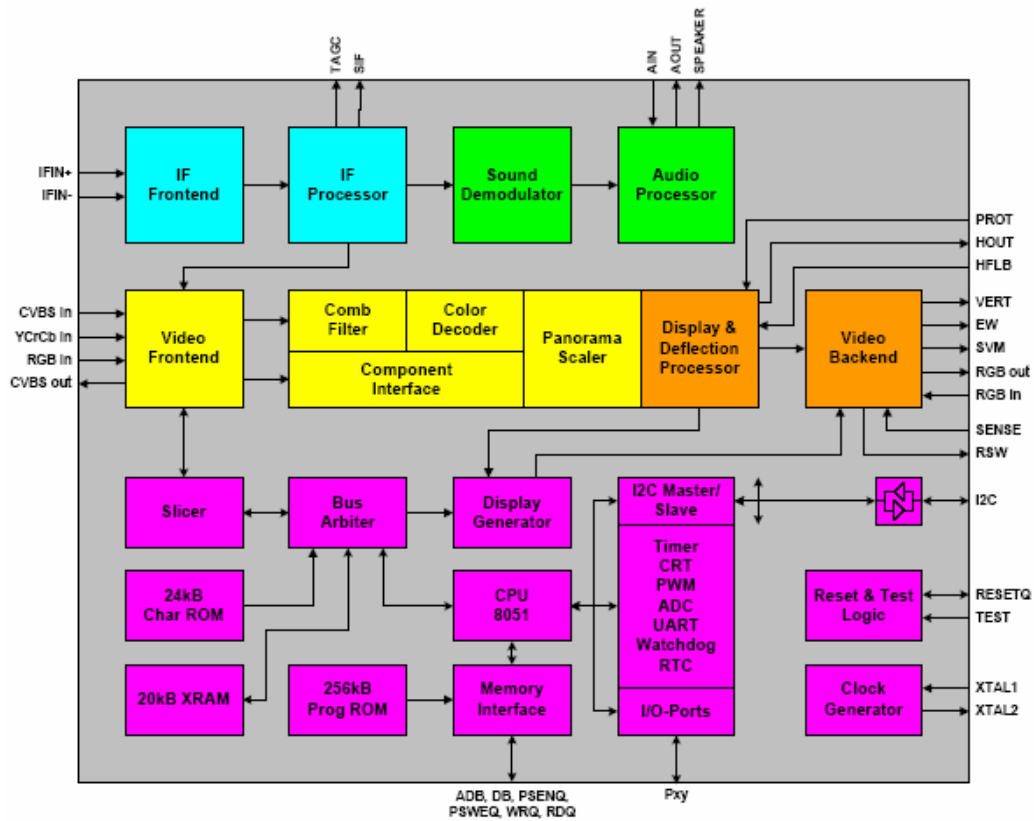
#### ■ IC BLOCK DIAGRAM (TW9918)



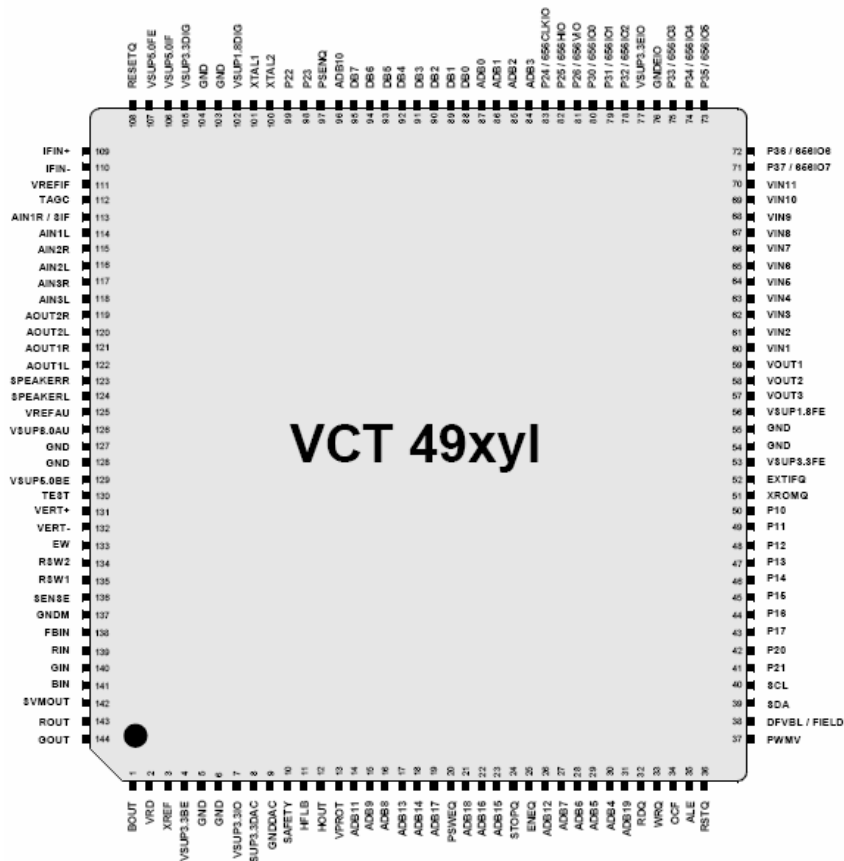
■ IC PIN OUT (TW9918)



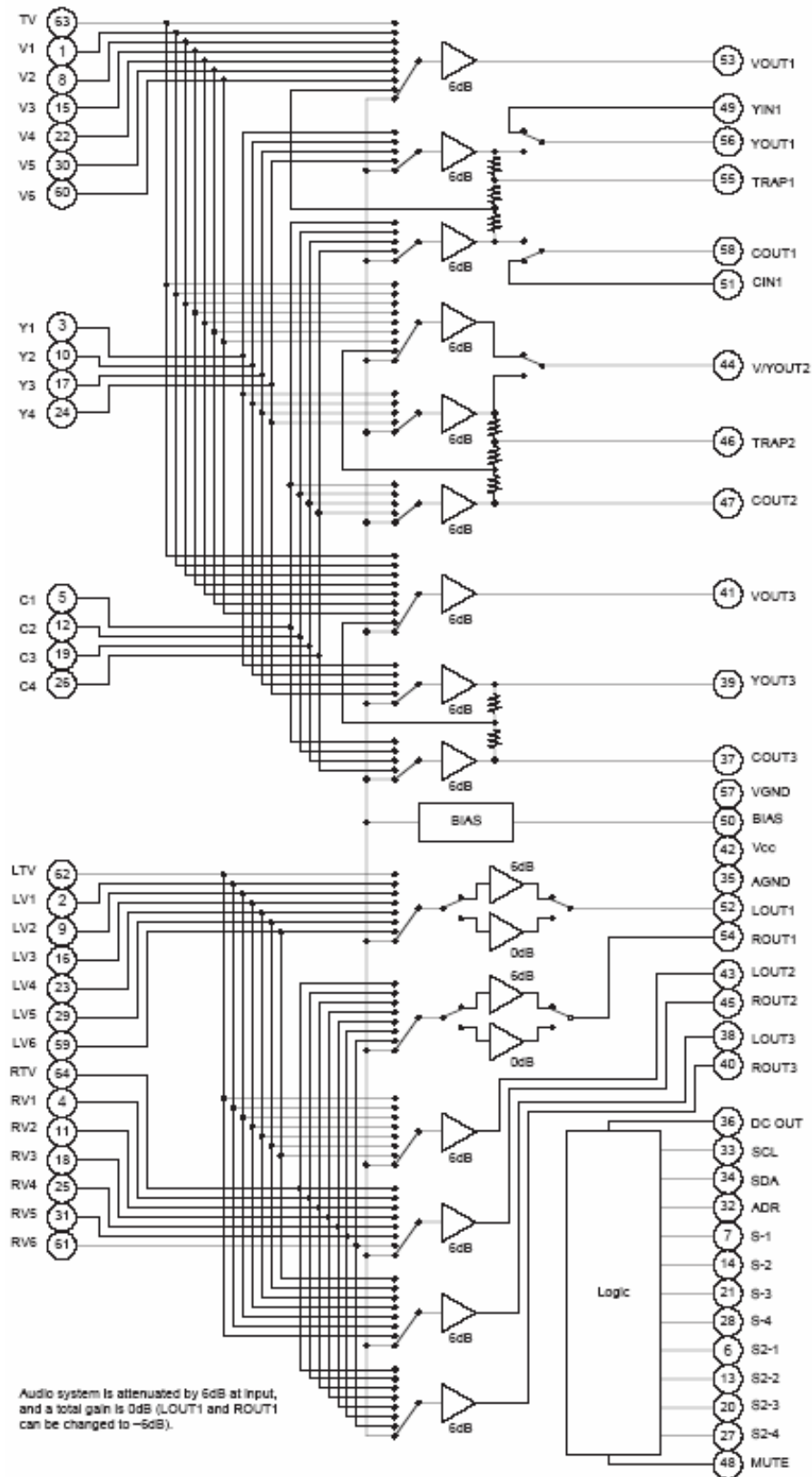
## ■ IC BLOCK DIAGRAM (VCT49xy I)



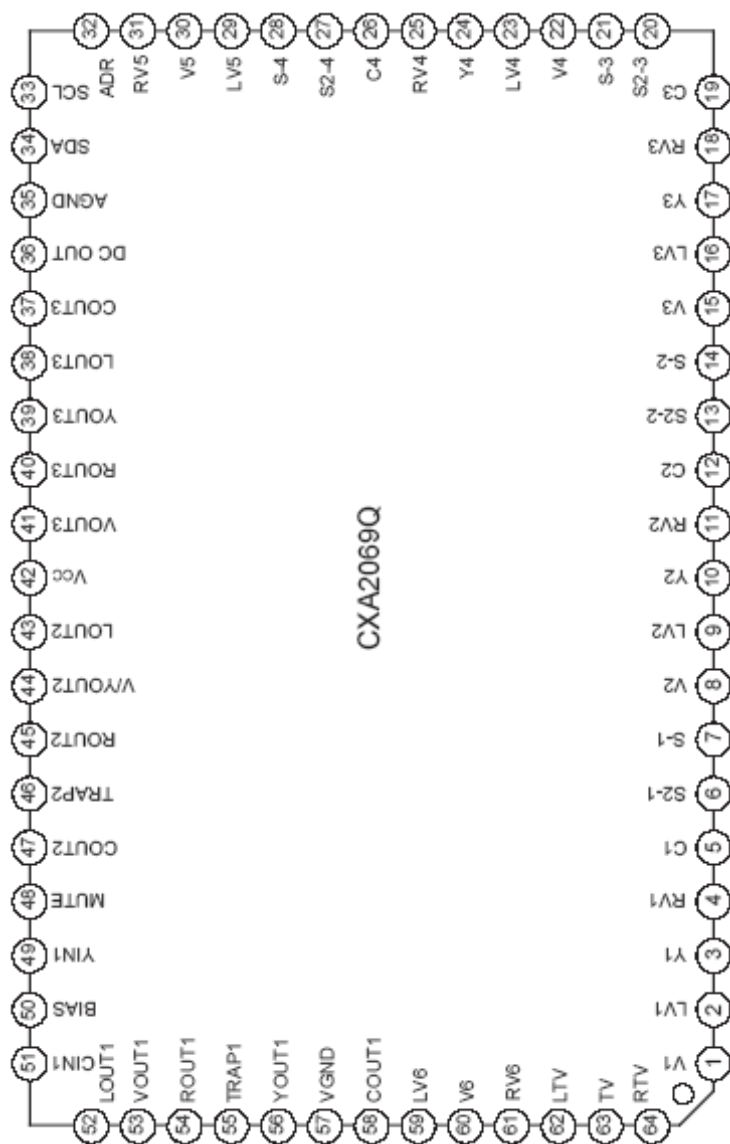
## ■ IC PIN OUT (VCT49xyI)



## ■ IC BLOCK DIAGRAM (CXA2069Q)



■ IC PIN OUT (CXA2069Q)



### 3. General Specification

| No | Item               | Specification                                                                                             |     |     |      | Remark                                                                    |
|----|--------------------|-----------------------------------------------------------------------------------------------------------|-----|-----|------|---------------------------------------------------------------------------|
|    |                    | Min                                                                                                       | Typ | Max | Unit |                                                                           |
| 1. | Video Input        | 1) NTSC M<br>2) NTSC 4.43<br>3) PAL<br>4) SECAM                                                           |     |     |      | 3.579545 / 60 Hz<br>4.433618 / 60 Hz<br>4.433618 / 50 Hz<br>4.286 / 50 Hz |
| 2. | Component Input    | 480i/59.94/60Hz<br>576i/50Hz<br>480p/59.94/60Hz<br>576p/50Hz<br>720p/50/59.94/60Hz<br>1080i/50/59.94/60Hz |     |     |      | Table 1.<br>(Component)                                                   |
| 3. | RGB DTV Input      | 480p/59.94/60Hz<br>576p/50Hz<br>720p/50/59.94/60Hz<br>1080i/50/59.94/60Hz                                 |     |     |      | Table 2.<br>(RGB DTV)                                                     |
| 4. | DVI DTV Input      | 480p/59.94/60Hz<br>576p/50Hz<br>720p/50/59.94/60Hz<br>1080i/50/59.94/60Hz                                 |     |     |      | Table 3.<br>(DVI DTV)                                                     |
| 5. | RGB PC Input       | VGA (640x480)<br>SVGA (800x600)<br>XGA (1024x768)<br>SXGA (1280x1024)<br>UXGA (1600x1200)<br>MAC          |     |     |      | Table 4.<br>(RGB PC)                                                      |
| 6. | DVI PC Input       | VGA (640x480)<br>SVGA (800x600)<br>XGA (1024x768)<br>SXGA (1280x1024)<br>UXGA (1600x1200)<br>MAC          |     |     |      | Table 5.<br>(DVI PC)                                                      |
| 7. | HDMI Input         | 480p/59.94/60Hz<br>576p/50Hz<br>720p/50/59.94/60Hz<br>1080i/50/59.94/60Hz                                 |     |     |      | Table 2.<br>(RGB DTV)<br>→HDMI Input<br>(digital interface with HDCP)     |
| 8. | Input Voltage      | AC 100 ~ 240 V, 50hz / 60hz                                                                               |     |     |      |                                                                           |
| 9. | External Interface | DVI/ DVI DTV/<br>HDMI Input                                                                               |     | 1   |      | DVI-I Connector                                                           |
|    |                    | RGB PC/RGB DTV<br>Input                                                                                   |     | 1   |      | D-Sub 15 Pin                                                              |
|    |                    | PC Sound Input                                                                                            |     | 1   |      | Ear-phone Jack<br>(RGB PC,DVI)                                            |
|    |                    | Component/L/R                                                                                             |     | 1   |      | RCA 2P                                                                    |
|    |                    | COMPONENT Input                                                                                           |     | 1   |      | RCA 3P                                                                    |
|    |                    | Full SCART<br>Half SCART                                                                                  |     | 1   |      | SCART JACK                                                                |
|    |                    | SPDIF Output                                                                                              |     | 1   |      | OPTICAL JACK<br>(HDMI)                                                    |
|    |                    | RF Input                                                                                                  |     | 1   |      | -                                                                         |
|    |                    | S-VIDEO Input                                                                                             |     | 1   |      | S-VIDEO JACK                                                              |

■< Table 1. > Component Signal Resolution

| No  | Resolution | H-freq(KHz) | V-freq.(Hz) | Pixel clock(MHz) | Proposed           |
|-----|------------|-------------|-------------|------------------|--------------------|
| 1.  | 720x480    | 15.73       | 59.94       | 13.500           | SDTV,DD 480i(525i) |
| 2.  | 720x480    | 15.75       | 60.00       | 13.514           | SDTV,DD 480i(525i) |
| 3.  | 720x576    | 15.625      | 50.00       | 13.500           | SDTV,DD 576i(525i) |
| 4.  | 720x480    | 31.47       | 59.94       | 27.000           | SDTV 480p          |
| 5.  | 720x480    | 31.50       | 60.00       | 27.027           | SDTV 480p          |
| 6.  | 720x576    | 31.25       | 50.00       | 27.000           | SDTV 576p          |
| 7.  | 1280x720   | 44.96       | 59.94       | 74.176           | HDTV 720p          |
| 8.  | 1280x720   | 45.00       | 60.00       | 74.250           | HDTV 720p          |
| 9.  | 1280x720   | 37.50       | 50.00       | 74.25            | HDTV 720p 50Hz     |
| 10. | 1920x1080  | 33.72       | 59.94       | 74.176           | HDTV 1080i         |
| 11. | 1920x1080  | 33.75       | 60.00       | 74.250           | HDTV 1080i         |
| 12. | 1920x1080  | 28.125      | 50.00       | 74.250           | HDTV 1080i 59Hz    |

■< Table 2. > RGB -DTV Signal Resolution

| No | Resolution | H-freq(KHz) | V-freq.(Hz) | Pixel clock(MHz) | Proposed        |
|----|------------|-------------|-------------|------------------|-----------------|
| 1. | 720x480    | 31.47       | 59.94       | 27.000           | SDTV 480p       |
| 2. | 720x480    | 31.50       | 60.00       | 27.027           | SDTV 480p       |
| 3. | 720x576    | 31.25       | 50.00       | 27.000           | SDTV 576p       |
| 4. | 1280x720   | 44.96       | 59.94       | 74.176           | HDTV 720p       |
| 5. | 1280x720   | 45.00       | 60.00       | 74.250           | HDTV 720p       |
| 6. | 1280x720   | 37.50       | 50.00       | 74.25            | HDTV 720p 50Hz  |
| 7. | 1920x1080  | 33.72       | 59.94       | 74.176           | HDTV 1080i      |
| 8. | 1920x1080  | 33.75       | 60.00       | 74.250           | HDTV 1080i      |
| 9. | 1920x1080  | 28.125      | 50.00       | 74.250           | HDTV 1080i 59Hz |

■< Table 3. > DVI- DTV Resolution

| No | Resolution | H-freq(KHz) | V-freq.(Hz) | Pixel clock(MHz) | Proposed        |
|----|------------|-------------|-------------|------------------|-----------------|
| 1. | 720x480    | 31.47       | 59.94       | 27.000           | SDTV 480p       |
| 2. | 720x480    | 31.50       | 60.00       | 27.027           | SDTV 480p       |
| 3. | 720x576    | 31.25       | 50.00       | 27.000           | SDTV 576p       |
| 4. | 1280x720   | 44.96       | 59.94       | 74.176           | HDTV 720p       |
| 5. | 1280x720   | 45.00       | 60.00       | 74.250           | HDTV 720p       |
| 6. | 1280x720   | 37.50       | 50.00       | 74.25            | HDTV 720p 50Hz  |
| 7. | 1920x1080  | 33.72       | 59.94       | 74.176           | HDTV 1080i      |
| 8. | 1920x1080  | 33.75       | 60.00       | 74.250           | HDTV 1080i      |
| 9. | 1920x1080  | 28.125      | 50.00       | 74.250           | HDTV 1080i 59Hz |

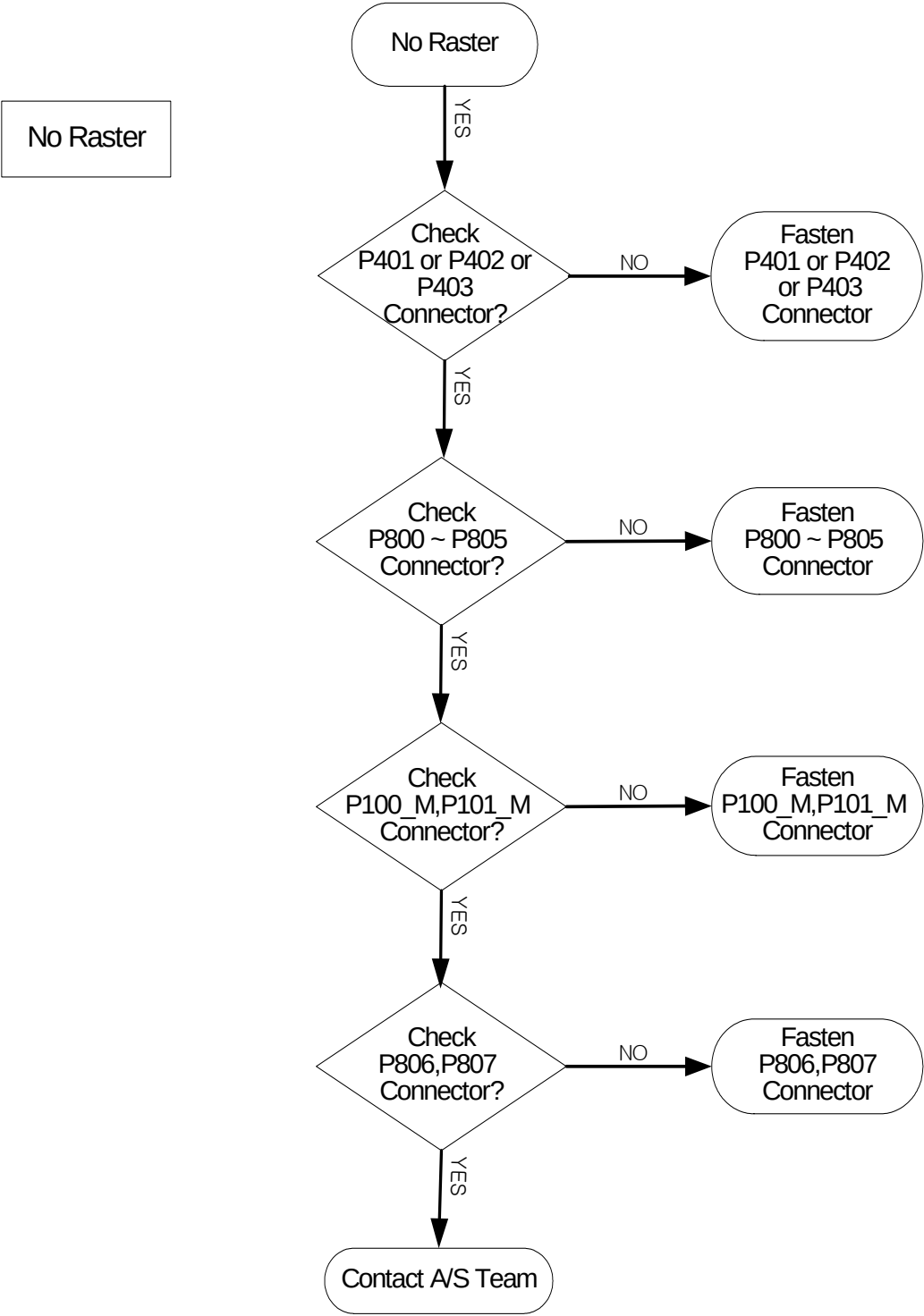
■< Table 4. > RGB –PC Signal Resolution

| No  | Resolution | H-freq(KHz) | V-freq.(Hz) | Pixel clock(MHz) | Proposed   |
|-----|------------|-------------|-------------|------------------|------------|
| 1.  | 640x350    | 31.469      | 70.08       | 25.17            | DOS        |
| 2.  | 720x400    | 31.469      | 70.08       | 28.32            | DOS        |
| 3.  | 720x400    | 37.927      | 85.03       | 35.50            | DOS        |
| 4   | 640x480    | 31.469      | 59.94       | 25.17            | VESA(VGA)  |
| 5.  | 640x480    | 37.861      | 72.80       | 31.50            | VESA(VGA)  |
| 6.  | 640x480    | 37.500      | 75.00       | 31.50            | VESA(VGA)  |
| 7.  | 640x480    | 43.269      | 85.00       | 36.00            | VESA(VGA)  |
| 8.  | 800x600    | 35.156      | 56.25       | 36.00            | VESA(SVGA) |
| 9.  | 800x600    | 37.879      | 60.31       | 40.00            | VESA(SVGA) |
| 10. | 800x600    | 48.077      | 72.18       | 50.00            | VESA(SVGA) |
| 11. | 800x600    | 46.875      | 75.00       | 49.50            | VESA(SVGA) |
| 12. | 800x600    | 53.674      | 85.06       | 56.25            | VESA(SVGA) |
| 13. | 832x624    | 49.725      | 74.55       | 57.28            | Macintosh  |
| 14. | 1024x768   | 48.363      | 60.00       | 65.00            | VESA(XGA)  |
| 15. | 1024x768   | 56.476      | 70.06       | 75.00            | VESA(XGA)  |
| 16. | 1024x768   | 60.023      | 75.02       | 78.75            | VESA(XGA)  |
| 17. | 1024x768   | 68.677      | 85.00       | 95.62            | VESA(XGA)  |
| 18. | 1280x768   | 47.693      | 60.0        | 80.12            | VESA(WXGA) |
| 19. | 1280x768   | 60.091      | 75.0        | 102.87           | VESA(WXGA) |
| 20. | 1280x768   | 68.504      | 85.0        | 118.37           | VESA(WXGA) |
| 21. | 1280x1024  | 64.000      | 60.00       | 108.000          | VESA(SXGA) |
| 22. | 1280x1024  | 74.405      | 69.99       | 125.000          | VESA(SXGA) |
| 23. | 1280x1024  | 80.000      | 75.00       | 135.000          | VESA(SXGA) |
| 24. | 1280x1024  | 91.100      | 85.00       | 157.500          | VESA(SXGA) |
| 25. | 1600x1200  | 75.000      | 60.00       | 162.000          | VESA(UXGA) |

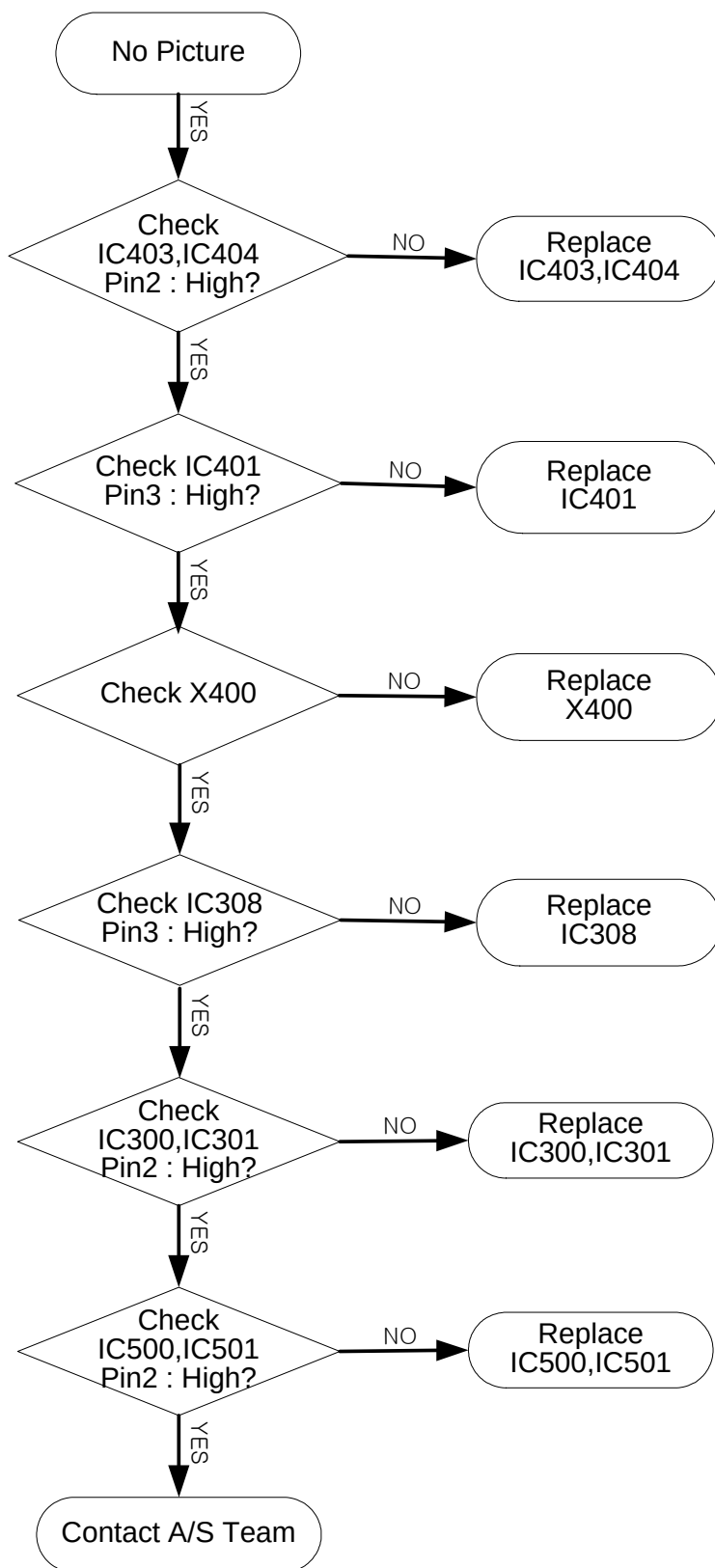
■< Table 5. > DVI –PC Signal Resolution

| No  | Resolution | H-freq(KHz) | V-freq.(Hz) | Pixel clock(MHz) | Proposed   |
|-----|------------|-------------|-------------|------------------|------------|
| 1.  | 640x350    | 31.469      | 70.08       | 25.17            | DOS        |
| 2.  | 720x400    | 31.469      | 70.08       | 28.32            | DOS        |
| 3.  | 720x400    | 37.927      | 85.03       | 35.50            | DOS        |
| 4   | 640x480    | 31.469      | 59.94       | 25.17            | VESA(VGA)  |
| 5.  | 640x480    | 37.861      | 72.80       | 31.50            | VESA(VGA)  |
| 6.  | 640x480    | 37.500      | 75.00       | 31.50            | VESA(VGA)  |
| 7.  | 640x480    | 43.269      | 85.00       | 36.00            | VESA(VGA)  |
| 8.  | 800x600    | 35.156      | 56.25       | 36.00            | VESA(SVGA) |
| 9.  | 800x600    | 37.879      | 60.31       | 40.00            | VESA(SVGA) |
| 10. | 800x600    | 48.077      | 72.18       | 50.00            | VESA(SVGA) |
| 11. | 800x600    | 46.875      | 75.00       | 49.50            | VESA(SVGA) |
| 12. | 800x600    | 53.674      | 85.06       | 56.25            | VESA(SVGA) |
| 13. | 832x624    | 49.725      | 74.55       | 57.28            | Macintosh  |
| 14. | 1024x768   | 48.363      | 60.00       | 65.00            | VESA(XGA)  |
| 15. | 1024x768   | 56.476      | 70.06       | 75.00            | VESA(XGA)  |
| 16. | 1024x768   | 60.023      | 75.02       | 78.75            | VESA(XGA)  |
| 17. | 1024x768   | 68.677      | 85.00       | 95.62            | VESA(XGA)  |
| 18. | 1280x768   | 47.693      | 60.0        | 80.12            | VESA(WXGA) |
| 19. | 1280x768   | 60.091      | 75.0        | 102.87           | VESA(WXGA) |
| 20. | 1280x768   | 68.504      | 85.0        | 118.37           | VESA(WXGA) |
| 21. | 1280x1024  | 64.000      | 60.00       | 108.000          | VESA(SXGA) |
| 22. | 1280x1024  | 74.405      | 69.99       | 125.000          | VESA(SXGA) |
| 23. | 1280x1024  | 80.000      | 75.00       | 135.000          | VESA(SXGA) |
| 24. | 1280x1024  | 91.100      | 85.00       | 157.500          | VESA(SXGA) |
| 25. | 1600x1200  | 75.000      | 60.00       | 162.000          | VESA(UXGA) |

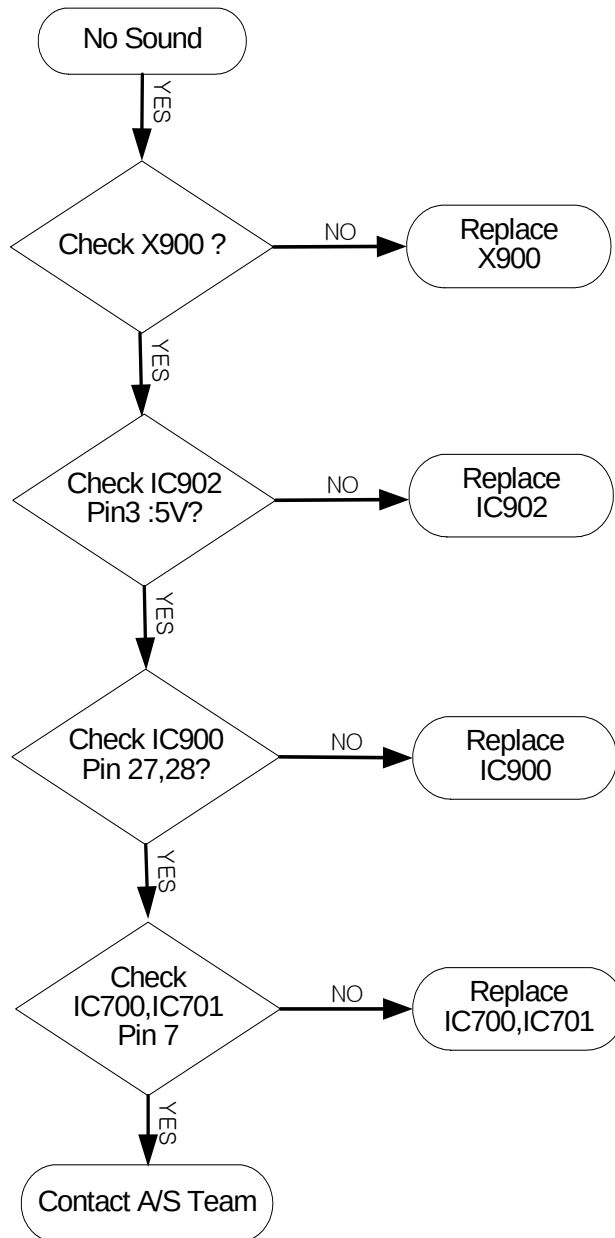
4. TROUBLESHOOTING



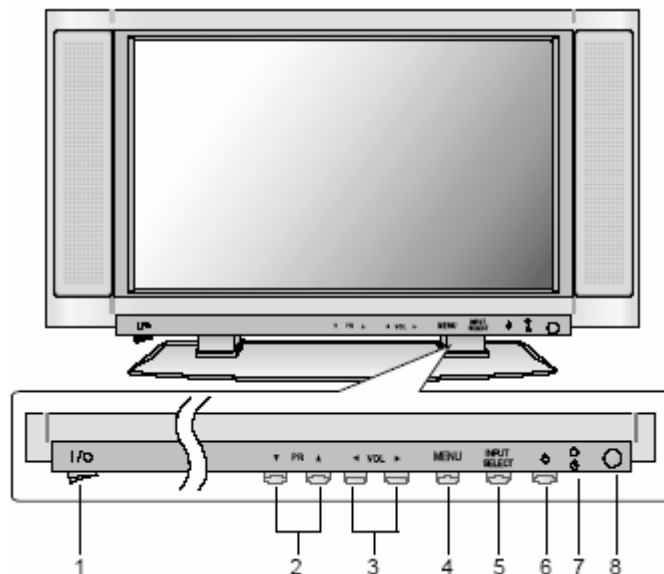
No Picture



No Sound



## 4. CONTROLS OF FRONT PANEL



### 1.MAIN POWER

switches the set on or off.

### 2.D / E (Programme Up/Down)

selects a programme or a menu item.

switches the set on from standby.

### 3.F / G (Volume Down/Up)

adjusts the volume.

adjusts menu settings.

### 4.MENU

selects a menu.

### 5. INPUT SELECT

selects TV, AV1, AV2, S-VIDEO, COMPONENT, PC-RGB, DVI mode.

switches the set On from standby.

### 6. POWER (I / $\Phi$ )

switches the set on from standby or off to standby.

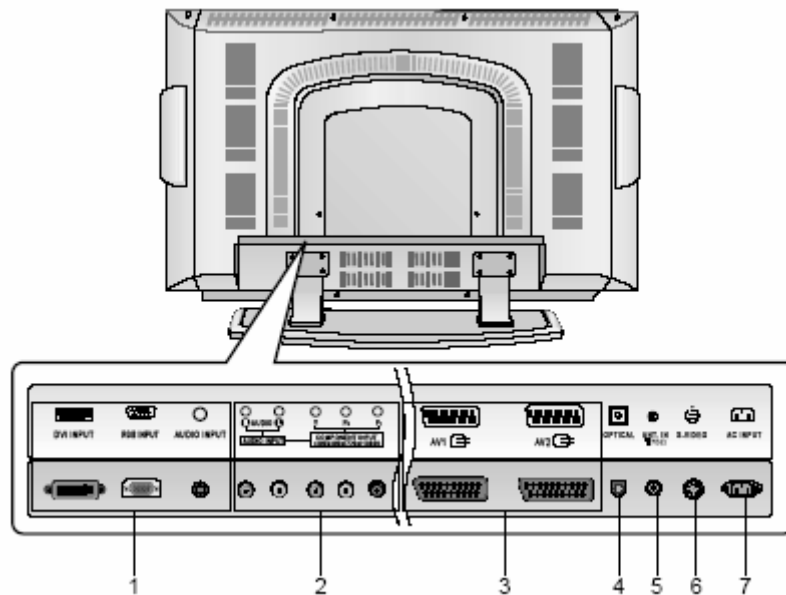
### 7.POWER/STANDBY INDICATOR ( $\Phi$ )

illuminates red in standby mode.

illuminates green when the set is switched on.

### 8.REMOTE CONTROL SENSOR

## 5. CONNECTIONS OF BACK PANEL



### 1. DVI INPUT / RGB INPUT / AUDIO INPUT SOCKETS

Connect the set output socket of the PERSONAL COMPUTER to this socket.

### 2. AUDIO INPUT / COMPONENT INPUT (480i / 480p / 720p / 1080i) SOCKETS

### 3. EURO SCART SOCKET

connect the euro scart socket of the VCR to these sockets.

### 4. Digital Audio (OPTICAL)

Connect digital audio from various types of equipment.

**Note :** In standby mode, these ports will not work.

### 5. AERIAL SOCKET

### 6. S-VIDEO INPUT

connect video out from an S-VIDEO VCR to the SVIDEO input.

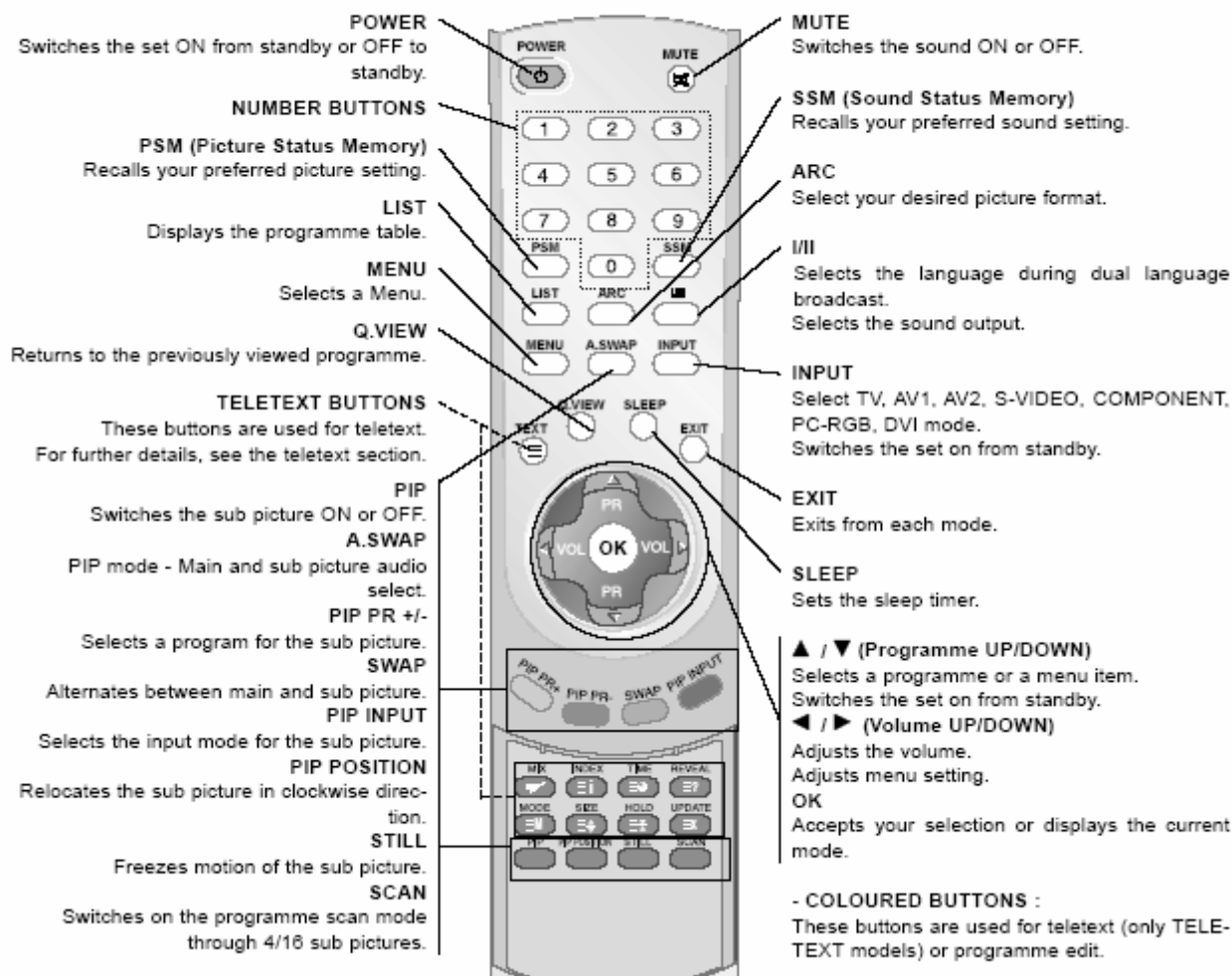
### 7. POWER CORD SOCKET

This set operates on an AC power. The voltage is indicated on the Specifications page.

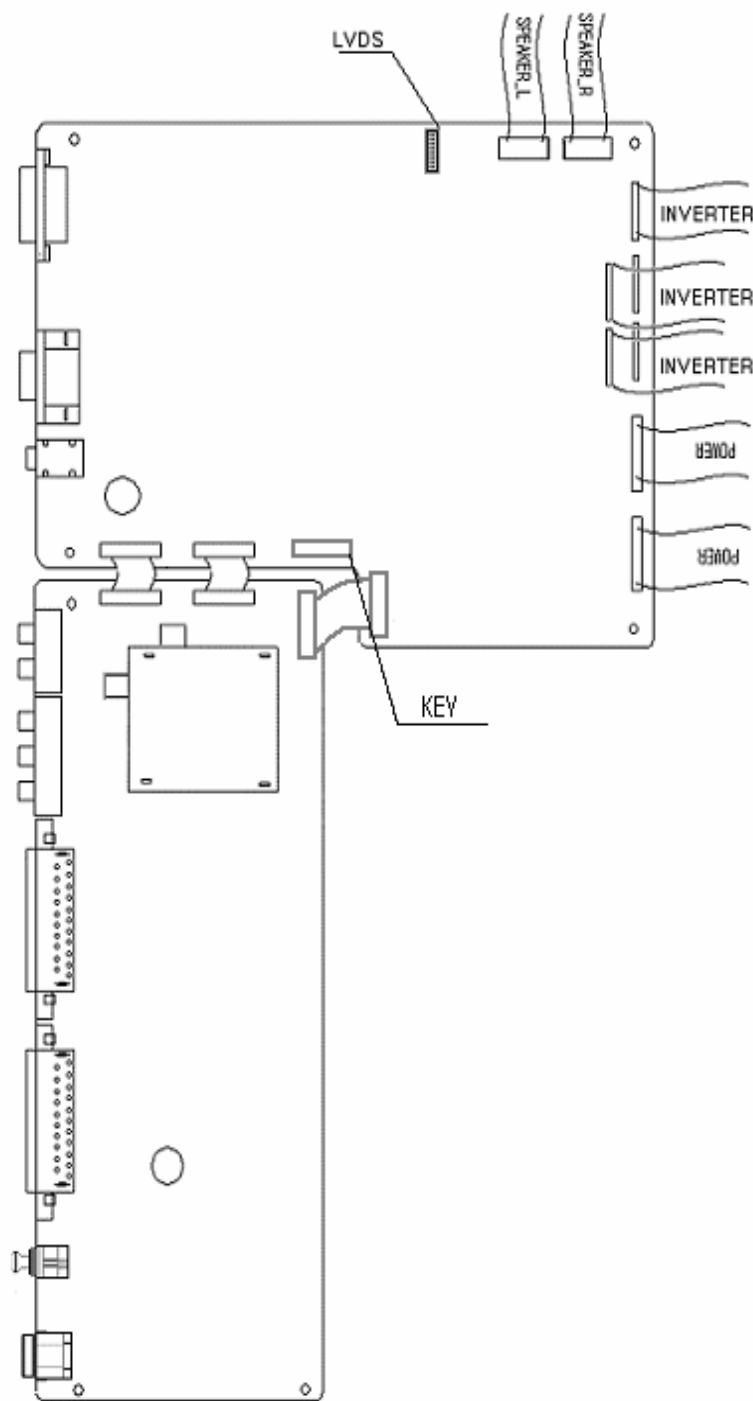
Never attempt to operate the set on DC power.

## 6. REMOTE CONTROL HANDSET

- All the functions can be controlled with the remote control handset.
- Some functions can also be adjusted with the buttons on the front panel of the set.

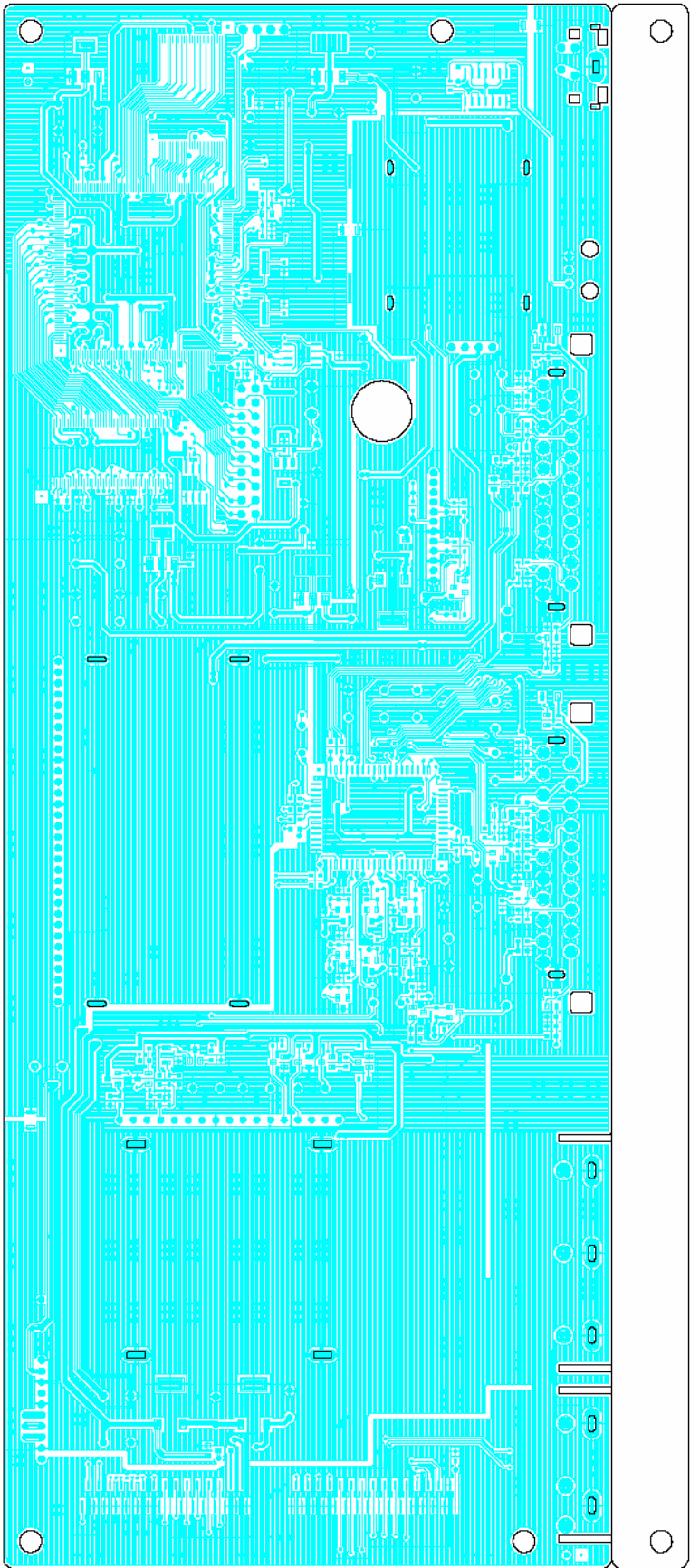


7. CONNECTING DIAGRAM



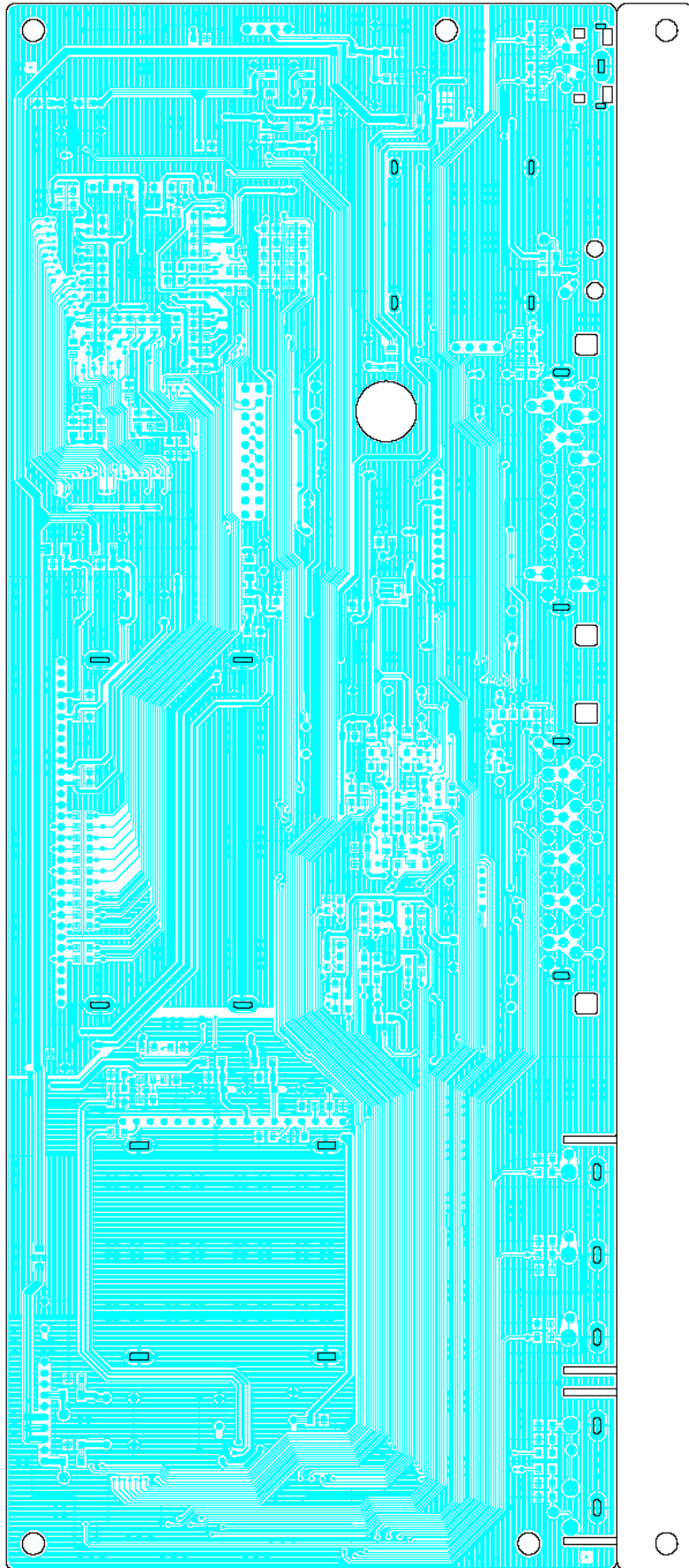
8. PCB LAYOUT

■AV TOP PATTEN

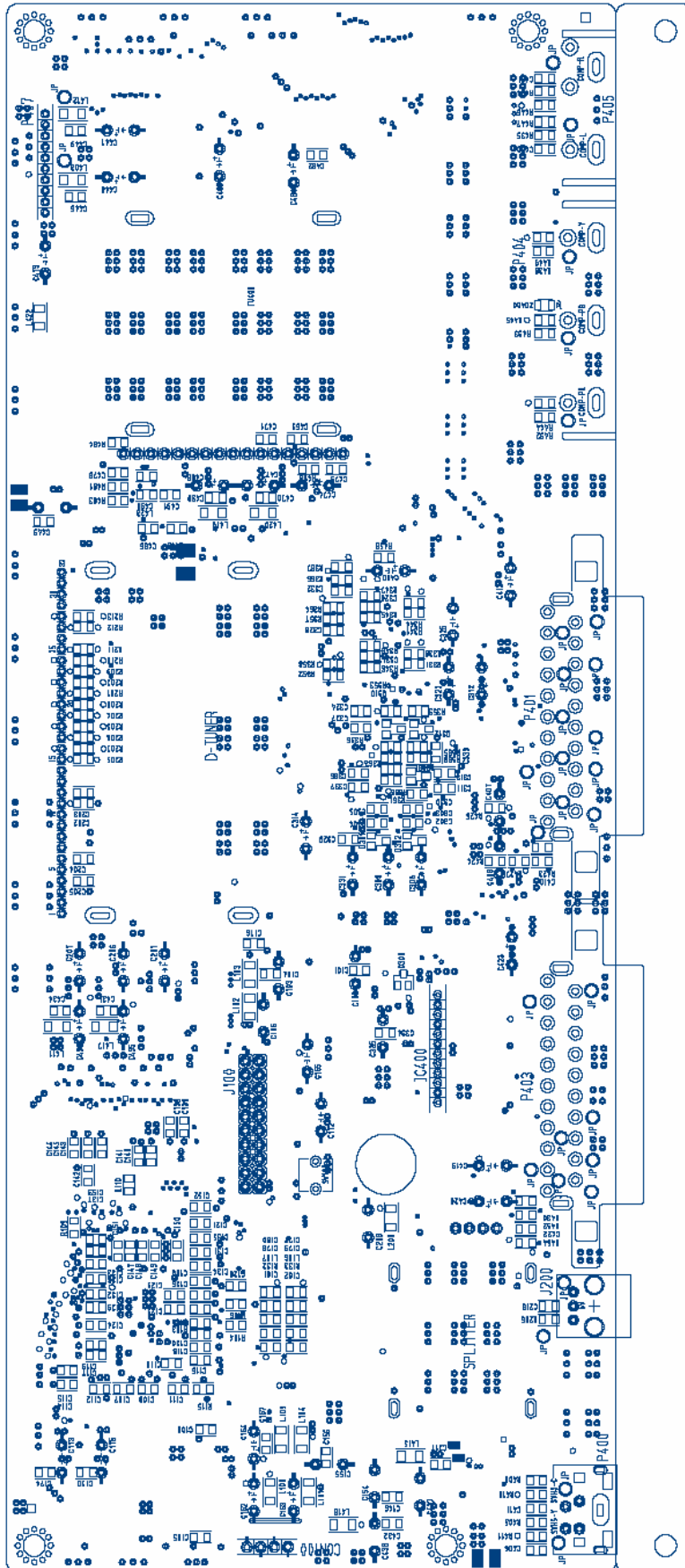




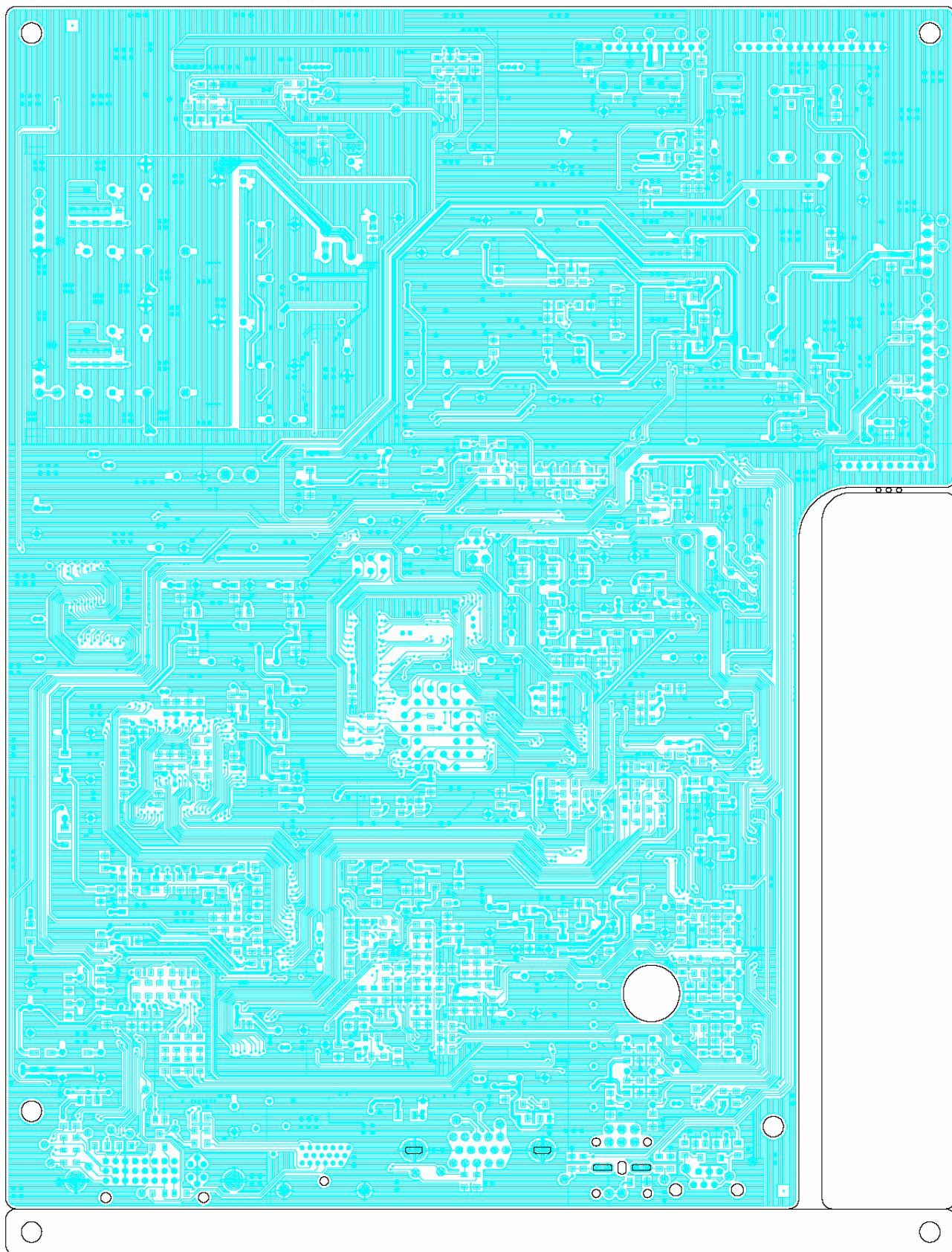
■AV BOTTOM PATTEN



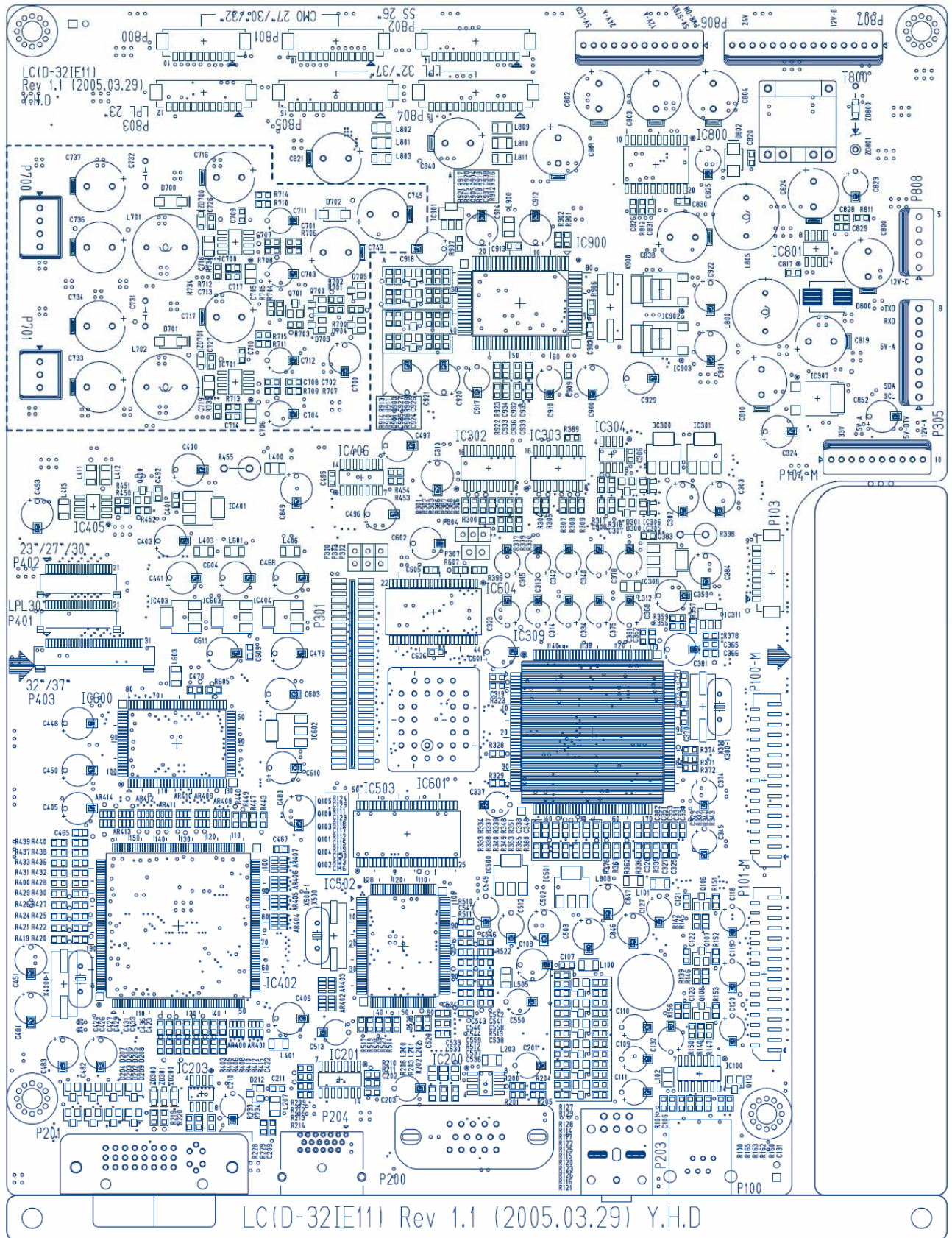
■AV BOTTOM SILK



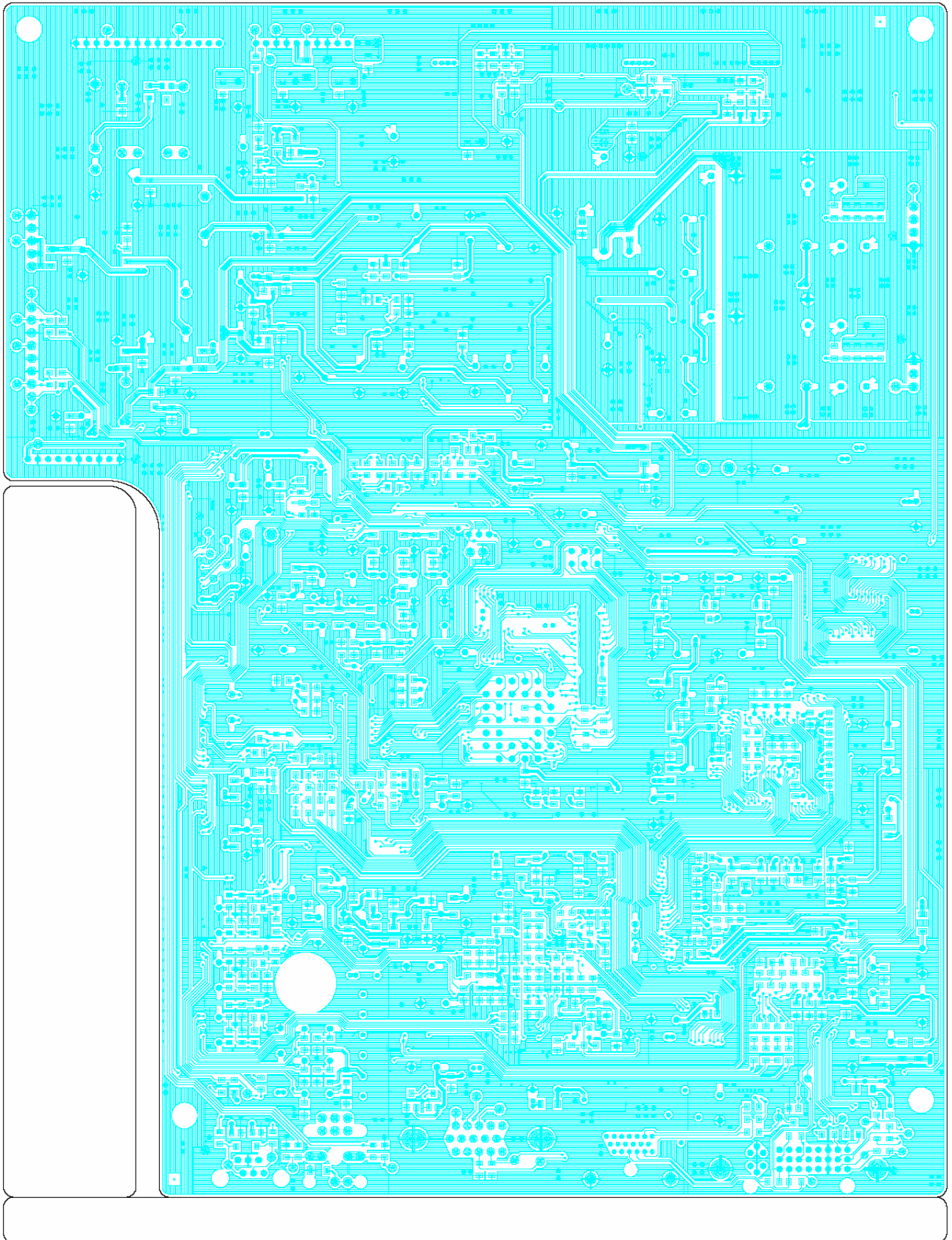
■ MAIN TOP PATTEN



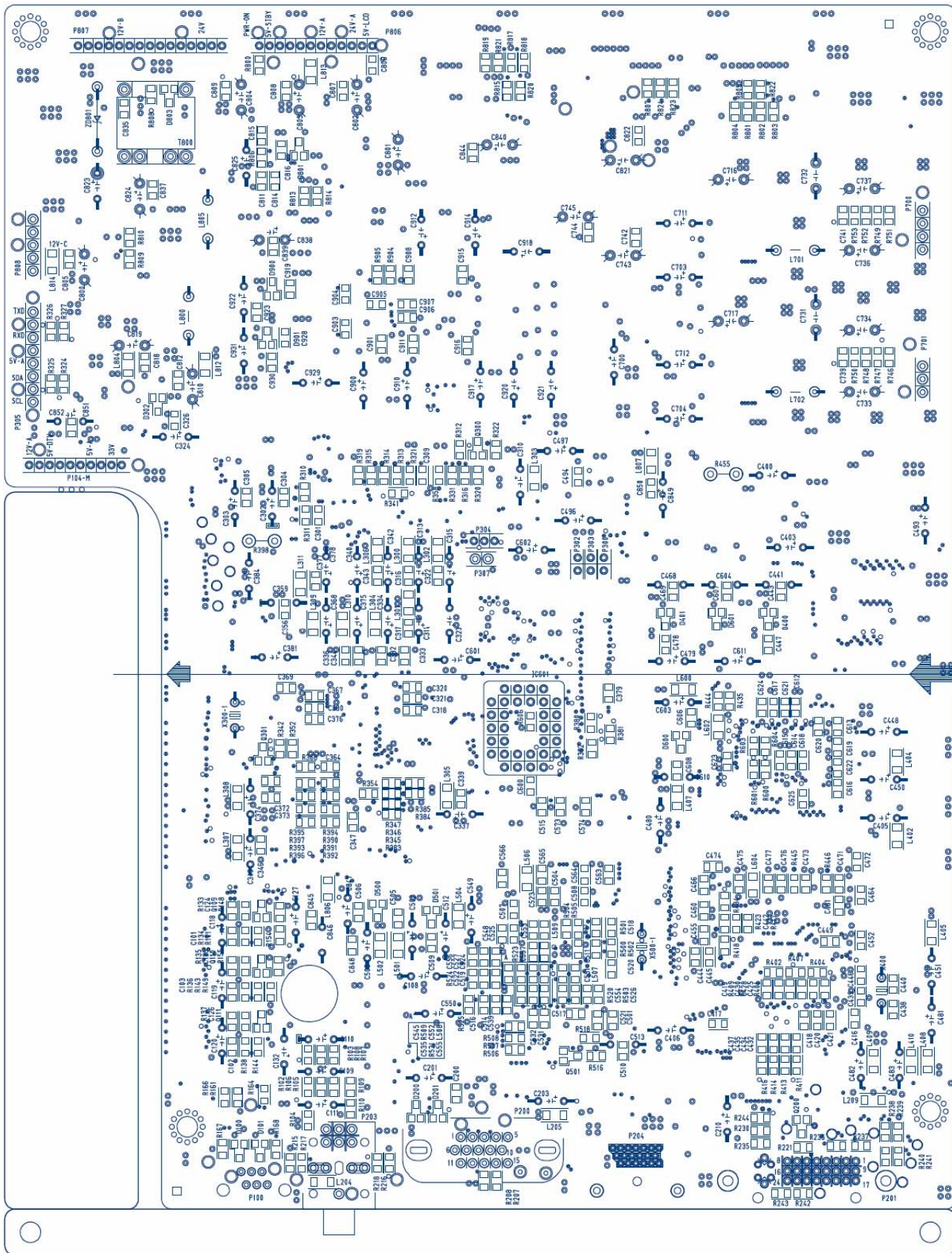
■ MAIN TOP SILK



■MAIN BOTTOM PATTEN



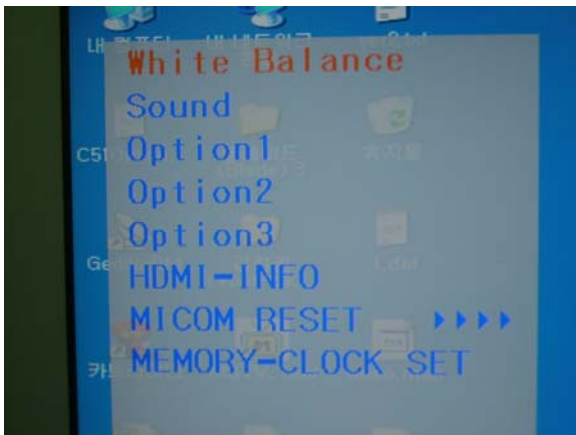
■MAIN BOTTOM PATTEN



## 9. FACTORY MENU

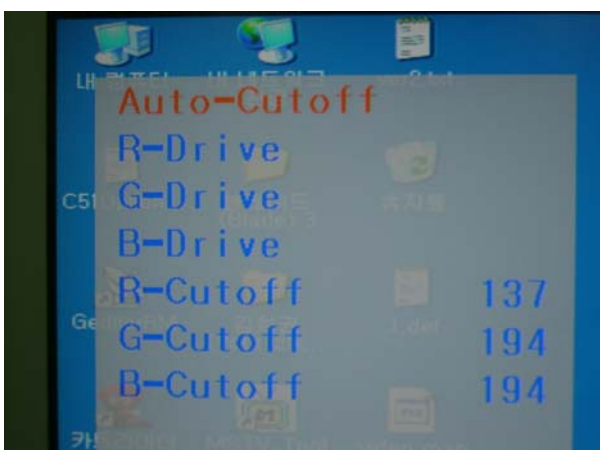
### ■Methods to enter Factory menu

- Power Off (Press “POWER” key).
- Press “Menu” key
- Press “Mute” key
- Press “OK” key
- Press “POWER” Key
- Factory menu



### ■White Balance

- enter to Factory menu
- Press “OK” key or “VOL +” key.
- Auto-Cutoff : Adjusting Auto R,G,B Cutoff  
(Input Mode:PC-RGB,DVI,COMPONET)
- R-Cutoff,G-Cutoff,B-Cutoff : Adjusting Red,Green,Blue Gain  
(Input Mode:PC-RGB,DVI,COMPONET)
- Press “PR+” or “PR-“ key : Select Sub Menu
- Press “VOL+” or “VOL-“ : Adjusting Value
- Press “Menu” key : return Factory menu
- Press “Exit” key : exit

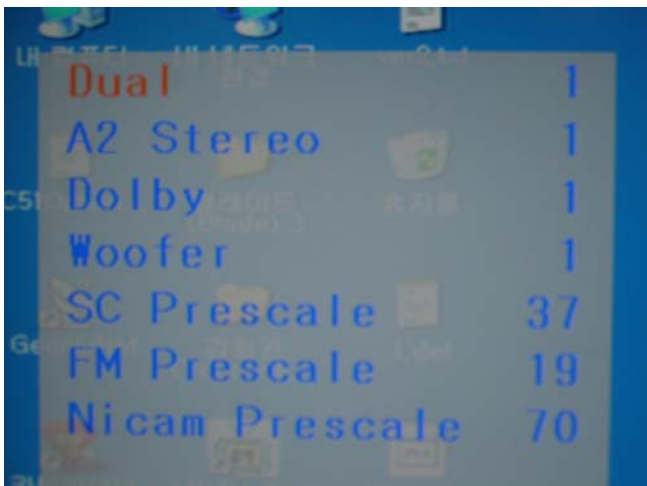


## ■ Sound

- enter to Factory menu
- Select menu
- Press “OK” key or “VOL +” key
- Press “PR+” or “PR-“ key : Select Sub Menu
- Press “VOL+” or “VOL-“ : Adjusting Value
- Press “Menu” key : return Factory menu
- Press “Exit” key : exit

### \* Adjusting Range

- Dual ,A2 Stereo,Dolby,Woofer (0: Off / 1: On)
- SC Prescale,FM Prescale, Nicam Prescale : 0~255



## ■ OPTION1

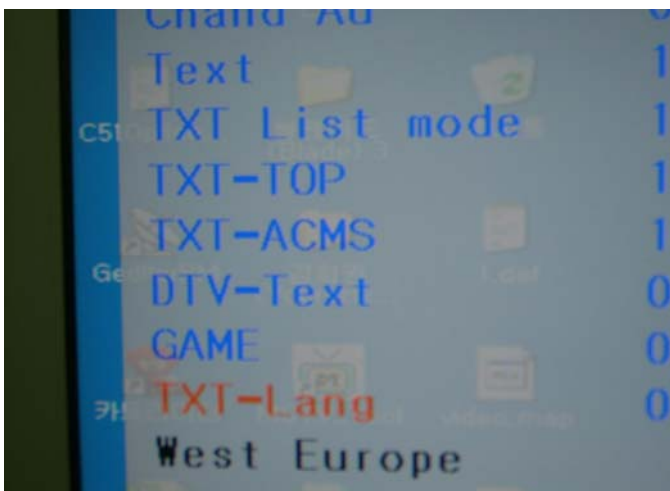
- enter to Factory menu
- Select menu
- Press “OK” key or “VOL +” key
- Press “PR+” or “PR-“ key : Select Sub Menu
- Press “VOL+” or “VOL-“ : Adjusting Value
- Press “Menu” key : return Factory menu
- Press “Exit” key : exit

### \* Adjusting Range

- China Au,Text,TXT-List Mode,TXT-TOP,TXT-ACMS,DTV-Text,GAME  
(0: On / 1:Off)

-TXT-Lang: 0~16 ,Teletext Language

| NO | Language       | NO | Language      |
|----|----------------|----|---------------|
| 0  | West Europe    | 9  | Turkey/Greek3 |
| 1  | East Europe    | 10 | ARAB/FRANCE   |
| 2  | Turkey         | 11 | ARAB/ENGLISH  |
| 3  | Czecho/Hungary | 12 | ARAB/HEBREW1  |
| 4  | Cyrillic1      | 13 | ARAB/HEBREW2  |
| 5  | Cyrillic2      | 14 | FARSI/ENGLISH |
| 6  | Cyrillic3      | 15 | FARSI/FRANCE  |
| 7  | Turkey/Greek1  | 16 | FARSI ALL     |
| 8  | Turkey/Greek2  |    |               |

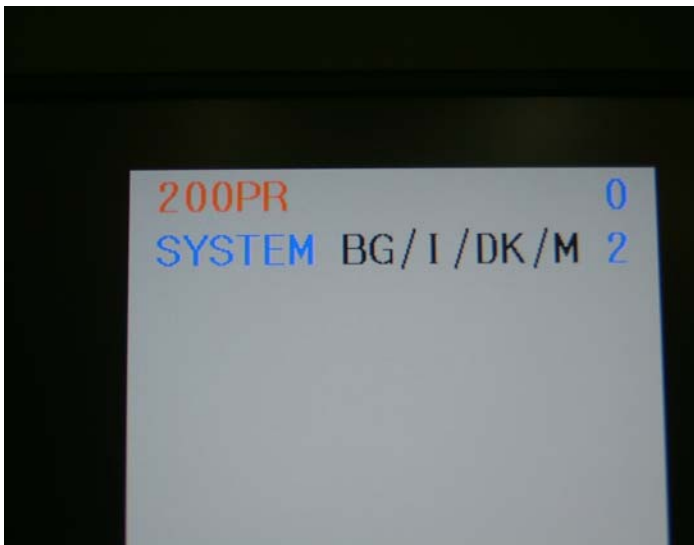


## ■OPTION2

- enter to Factory menu
- Select menu
- Press “OK” key or “VOL +” key
- Press “PR+” or “PR-“ key : Select Sub Menu
- Press “VOL+” or “VOL-“ : Adjusting Value
- Press “Menu” key : return Factory menu
- Press “Exit” key : exit

## \* Adjusting Range

- 200PR 0: PR Number 0~99  
1: PR Number 0~199
- SYSTEM 0: Not Use  
1: BG/I/DK/L  
2: BG/I/DK/M



### ■OPTION3

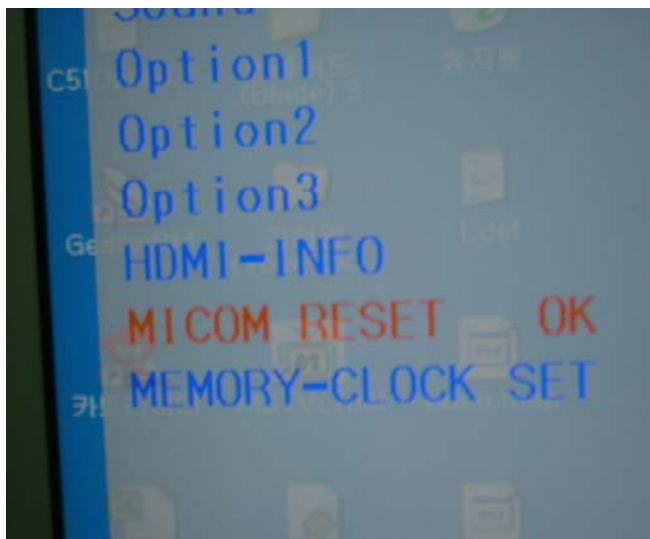
- enter to Factory menu
- Select menu
- Press “OK” key or “VOL +” key
- Press “PR+” or “PR-“ key : Select Sub Menu
- Press “VOL+” or “VOL-“ : Adjusting Value
- Press “Menu” key : return Factory menu
- Press “Exit” key : exit
- OSD Language Table

| NO | Language | NO | Language   |
|----|----------|----|------------|
| 0  | English  | 5  | Portuguese |
| 1  | Deutsch  | 6  | Danish     |
| 2  | French   | 7  | Swedish    |
| 3  | Italian  | 8  | Finnish    |
| 4  | Spanish  | 9  | Dutch      |



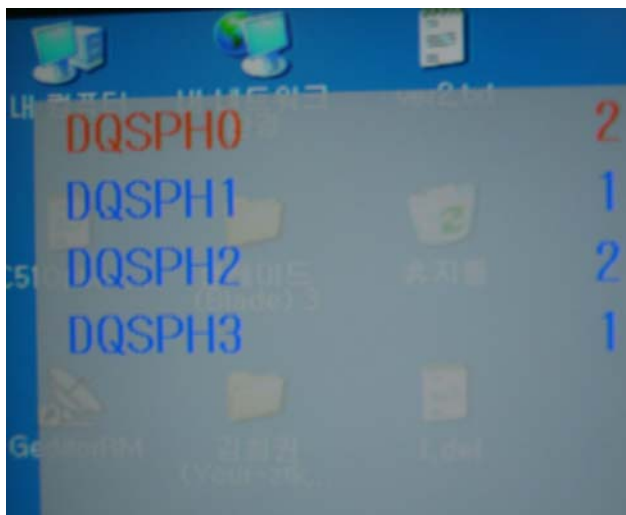
## ■MICOM RESET

- Press “PR+/-” key Select MICOM RESET
- Press “OK” or ”VOL +” key
- Power off ,and Power on : Change System ID
- all User Adjust value Reset

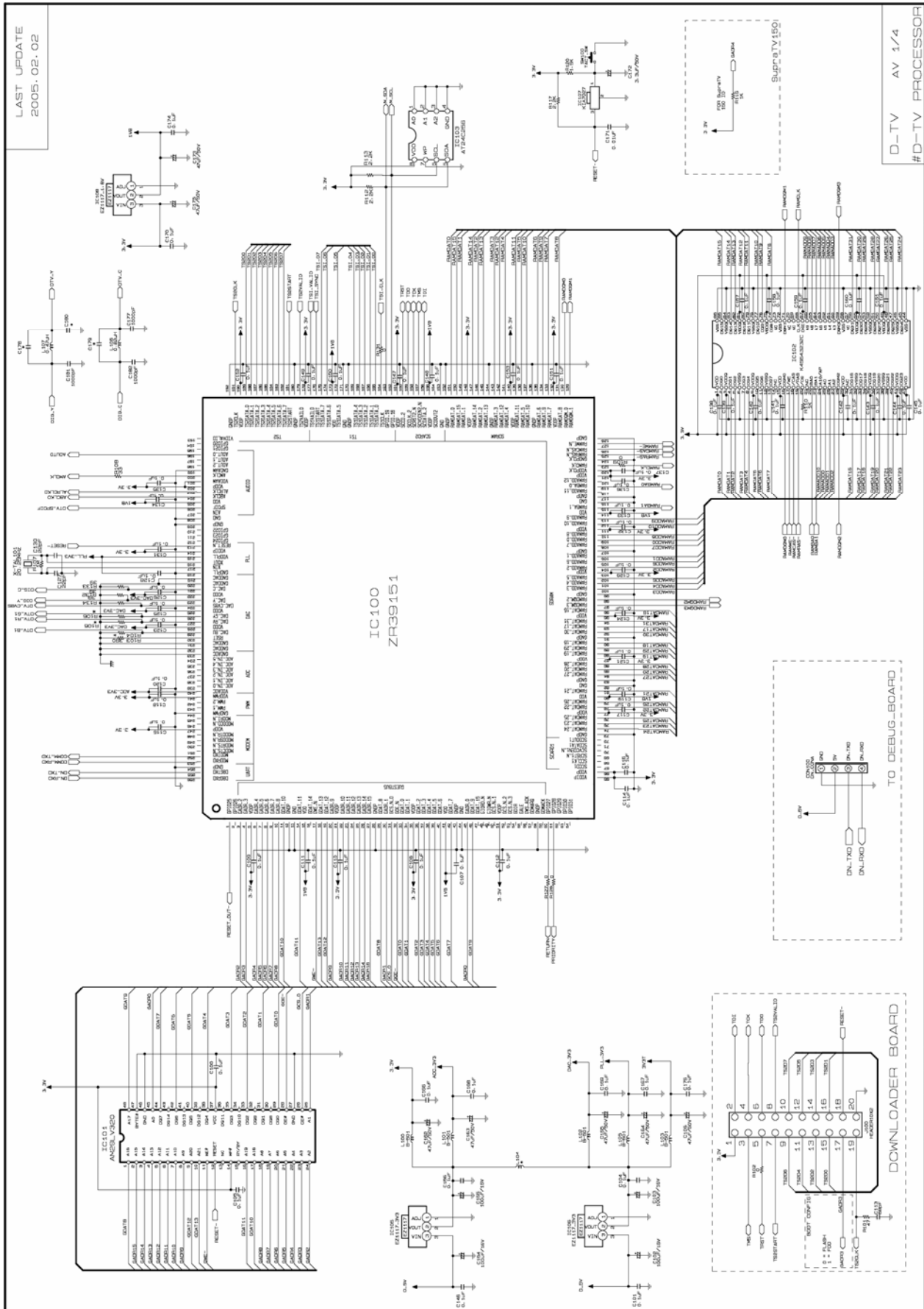


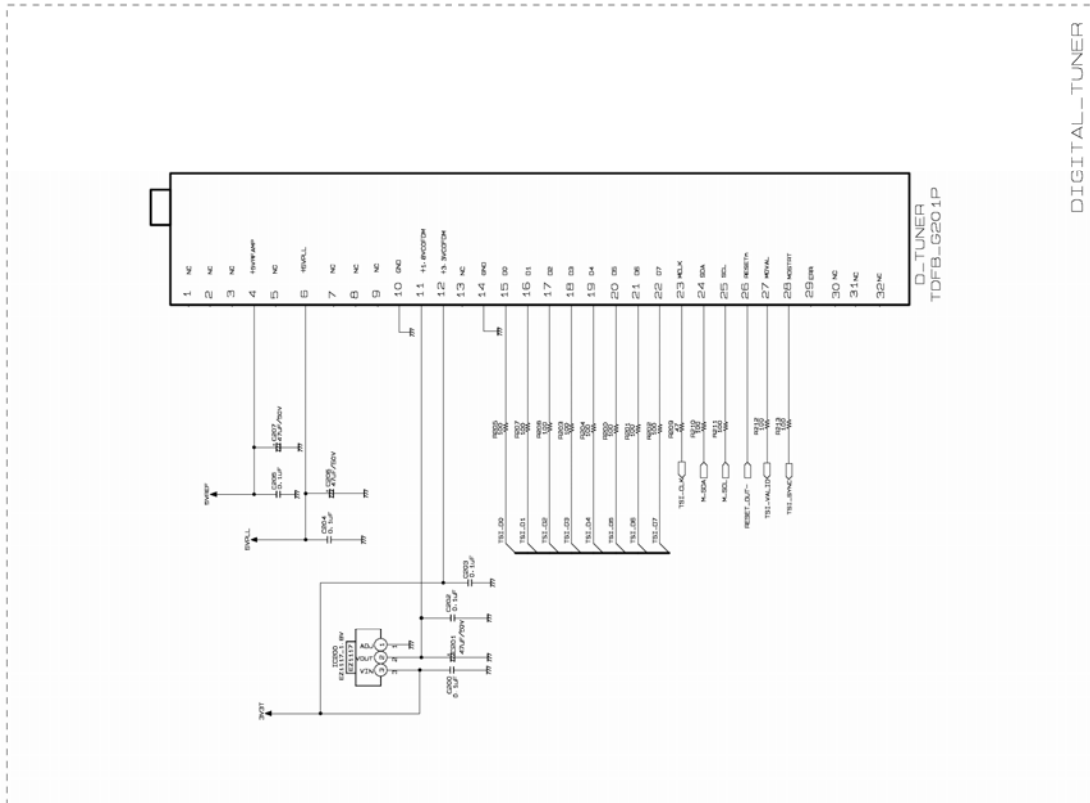
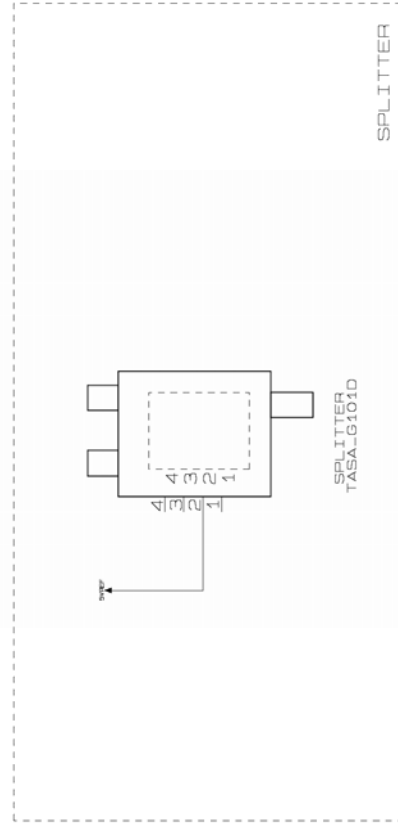
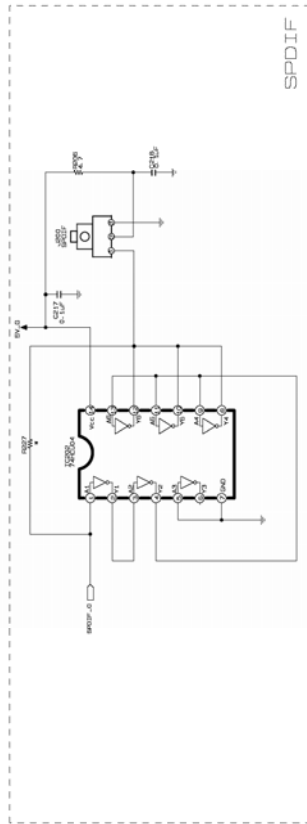
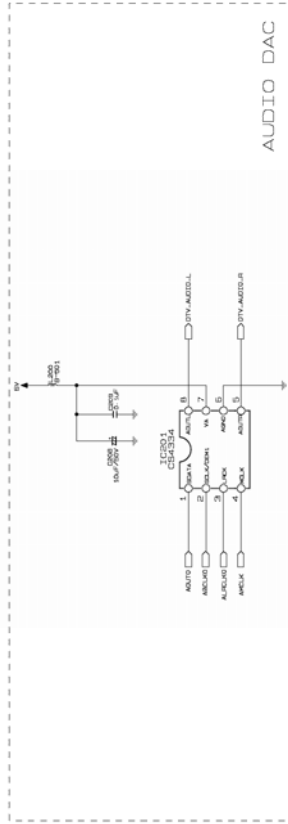
## ■MEMORY-CLOCK SET

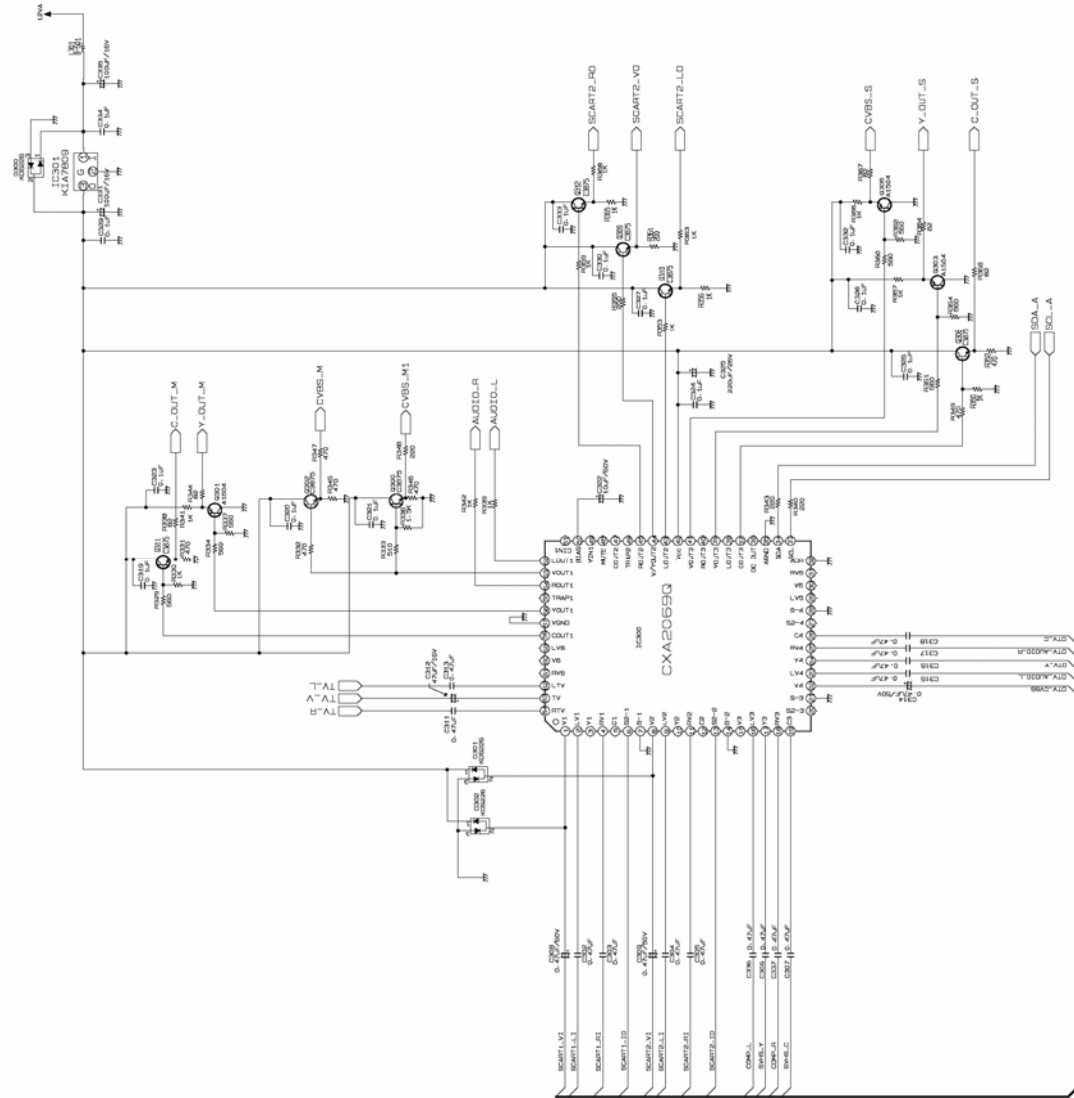
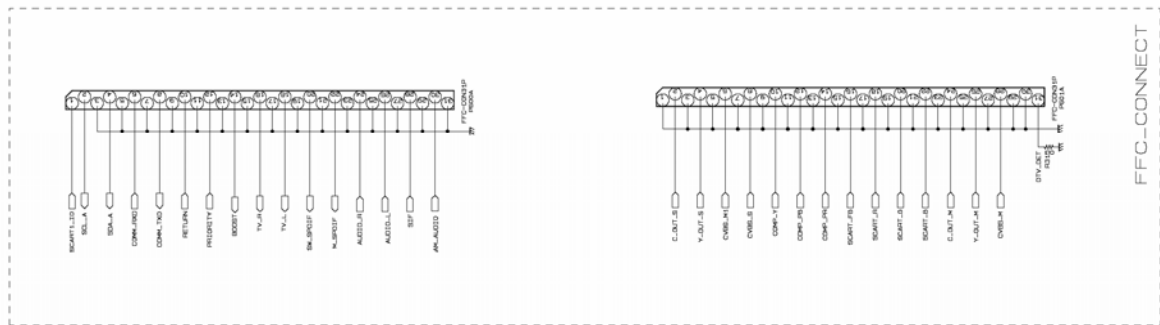
- Press “PR +/-“ key Select MEMORY-CLOCK SET menu
- Press “OK” or “VOL+” key enter to Sub menu
- Default value
  - DQSPH0 2
  - DQSPH1 1
  - DQSPH2 2
  - DQSPH3 1
- Recomand : Do Not Change!

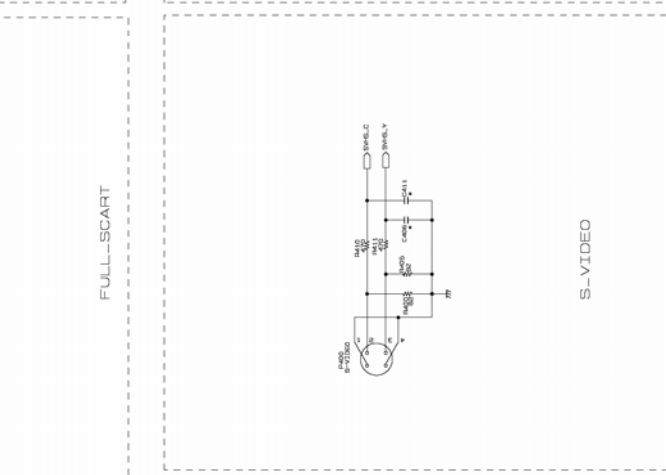
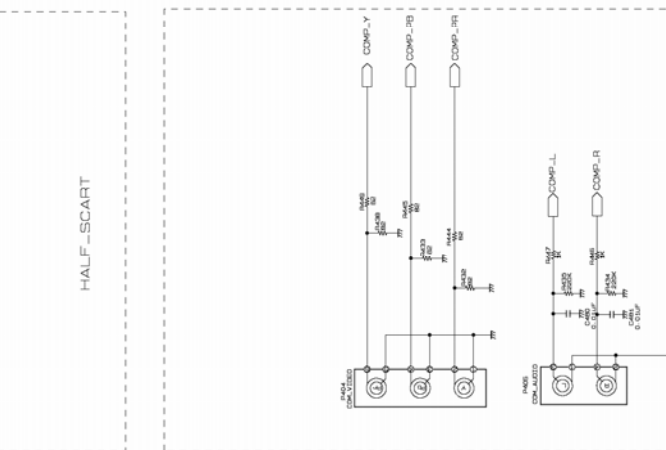
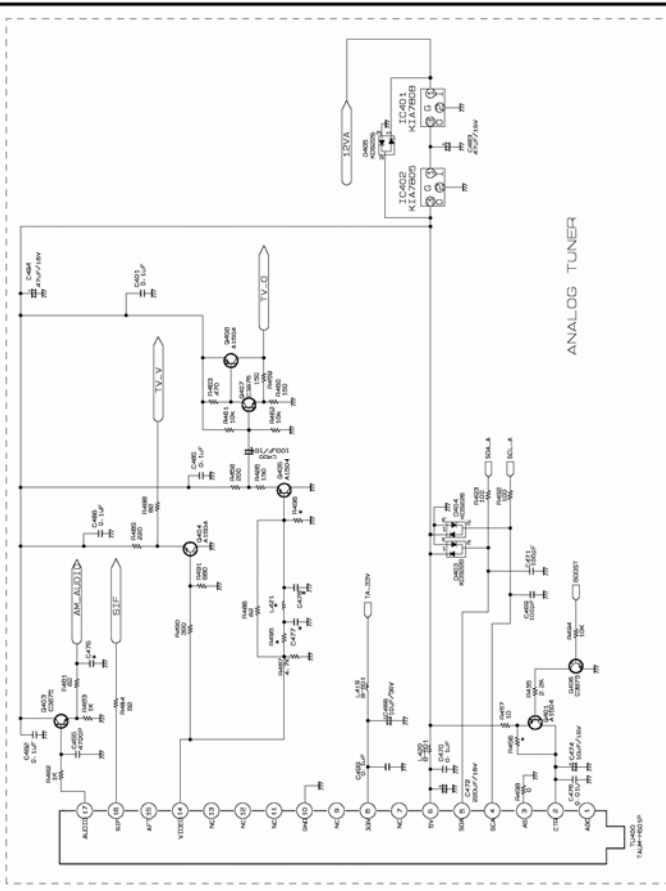
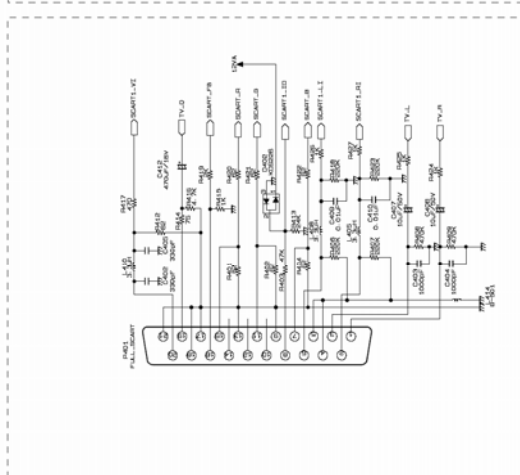
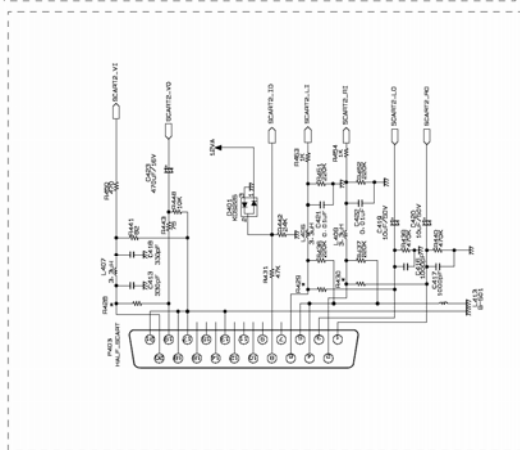
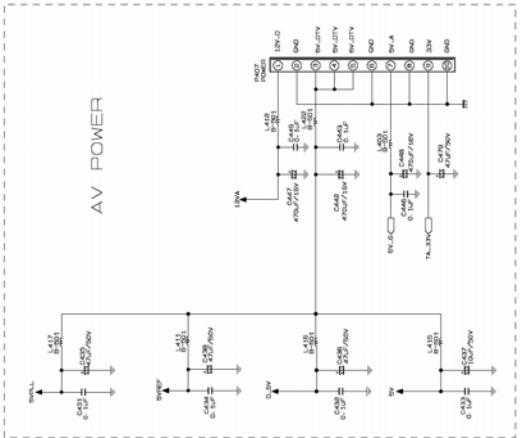


## 9. SCHEMATIC DIAGRAM

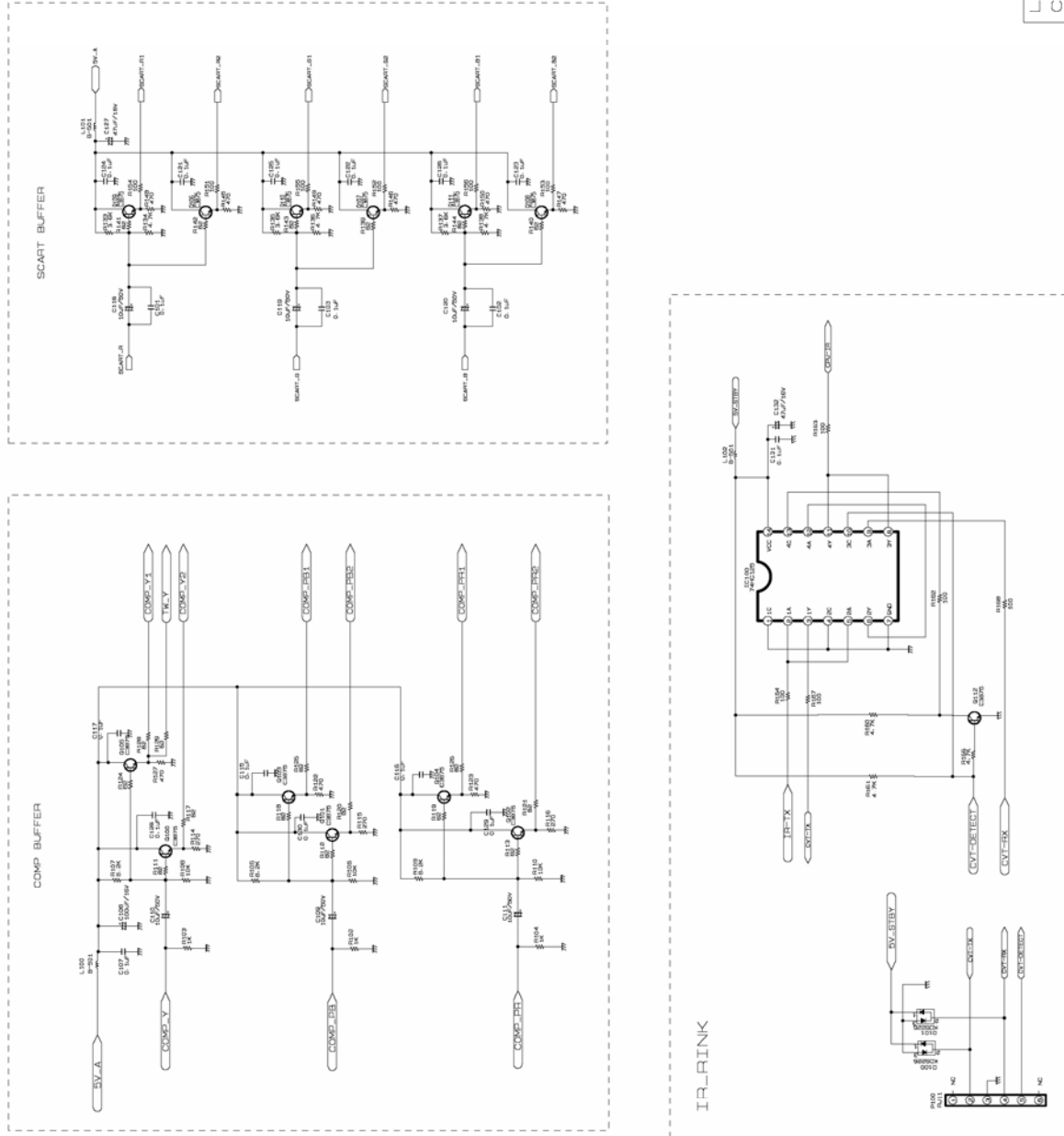


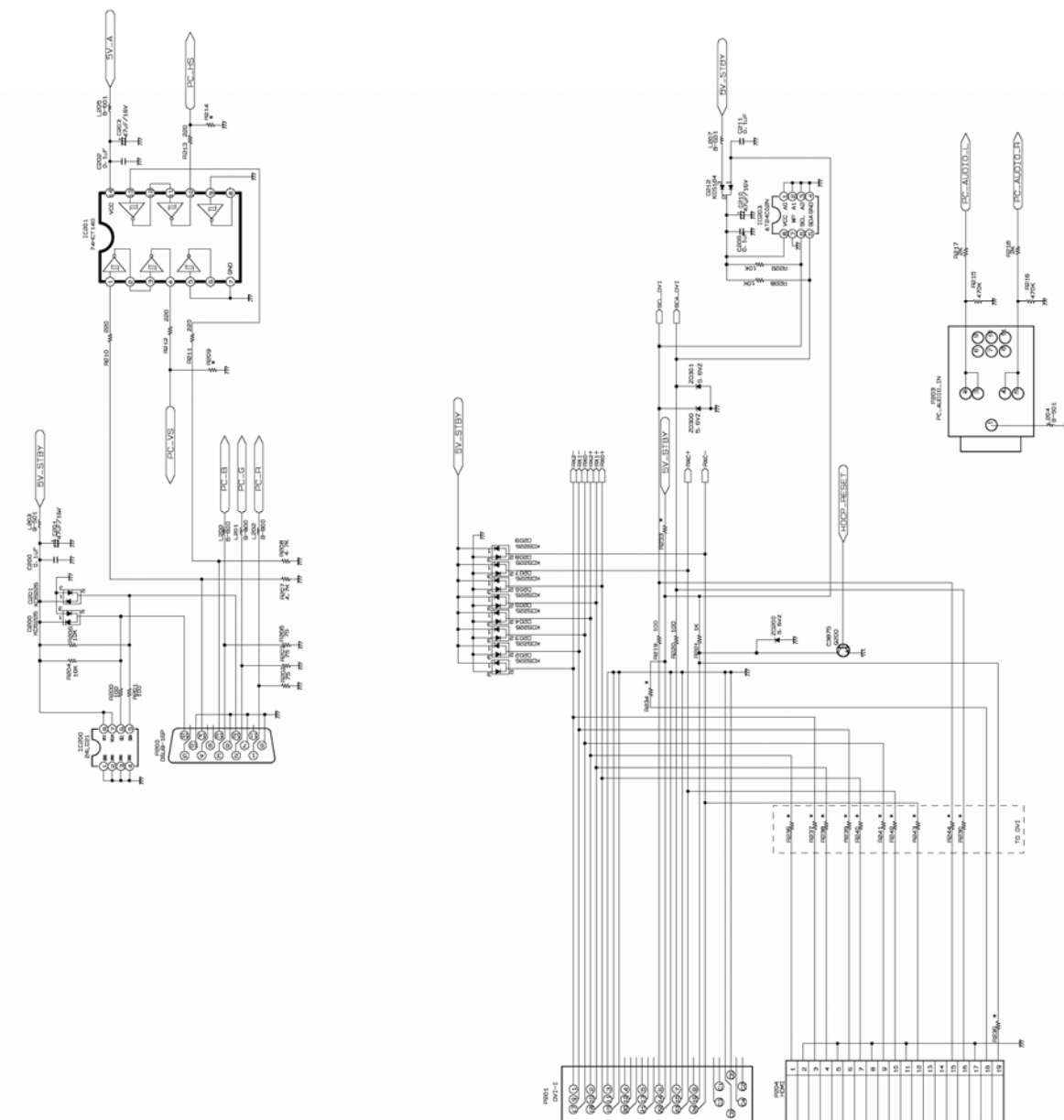




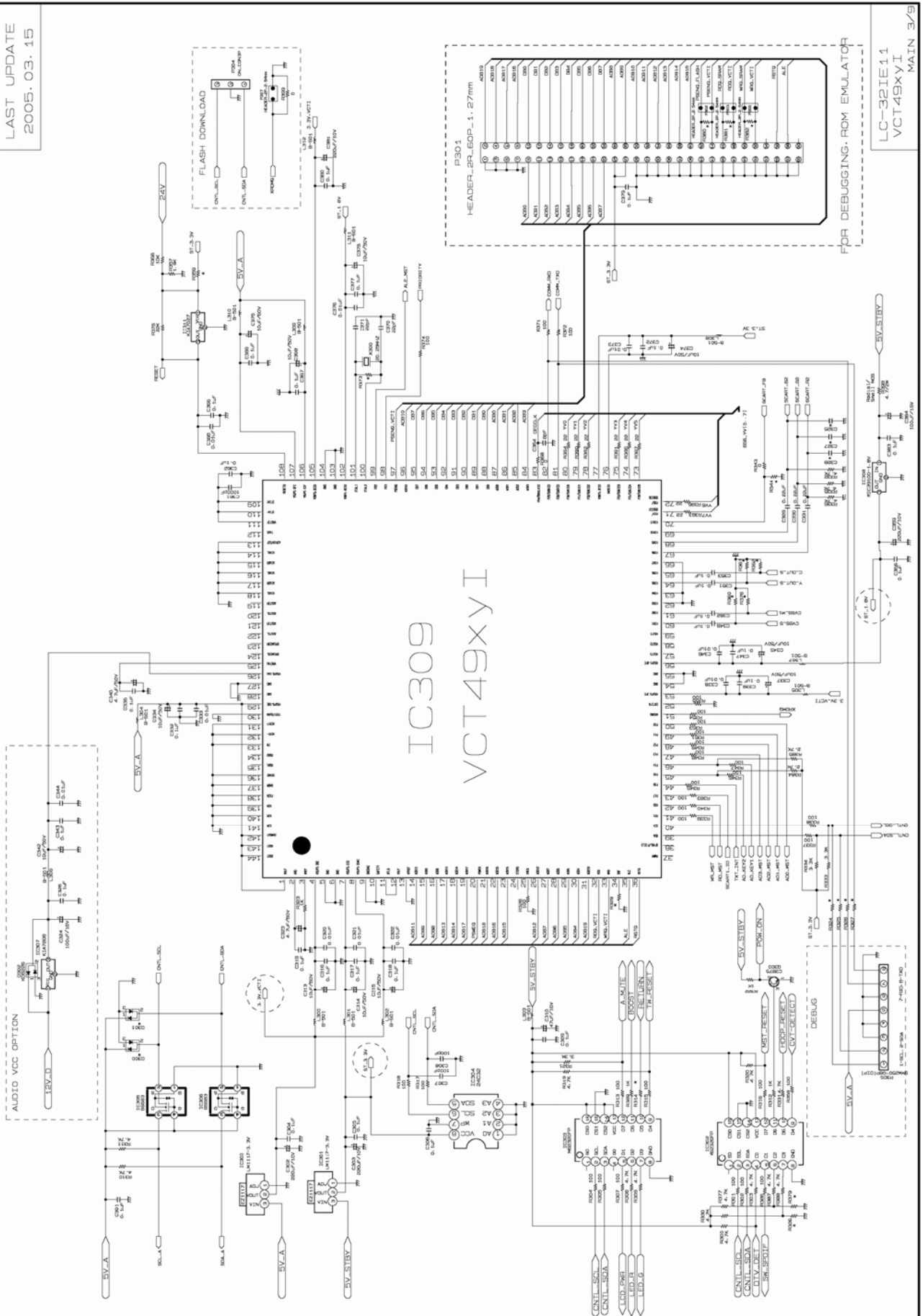


|           |          |
|-----------|----------|
| D_TV      | AV 4/4   |
| #A_TUNER. | AV_POWER |

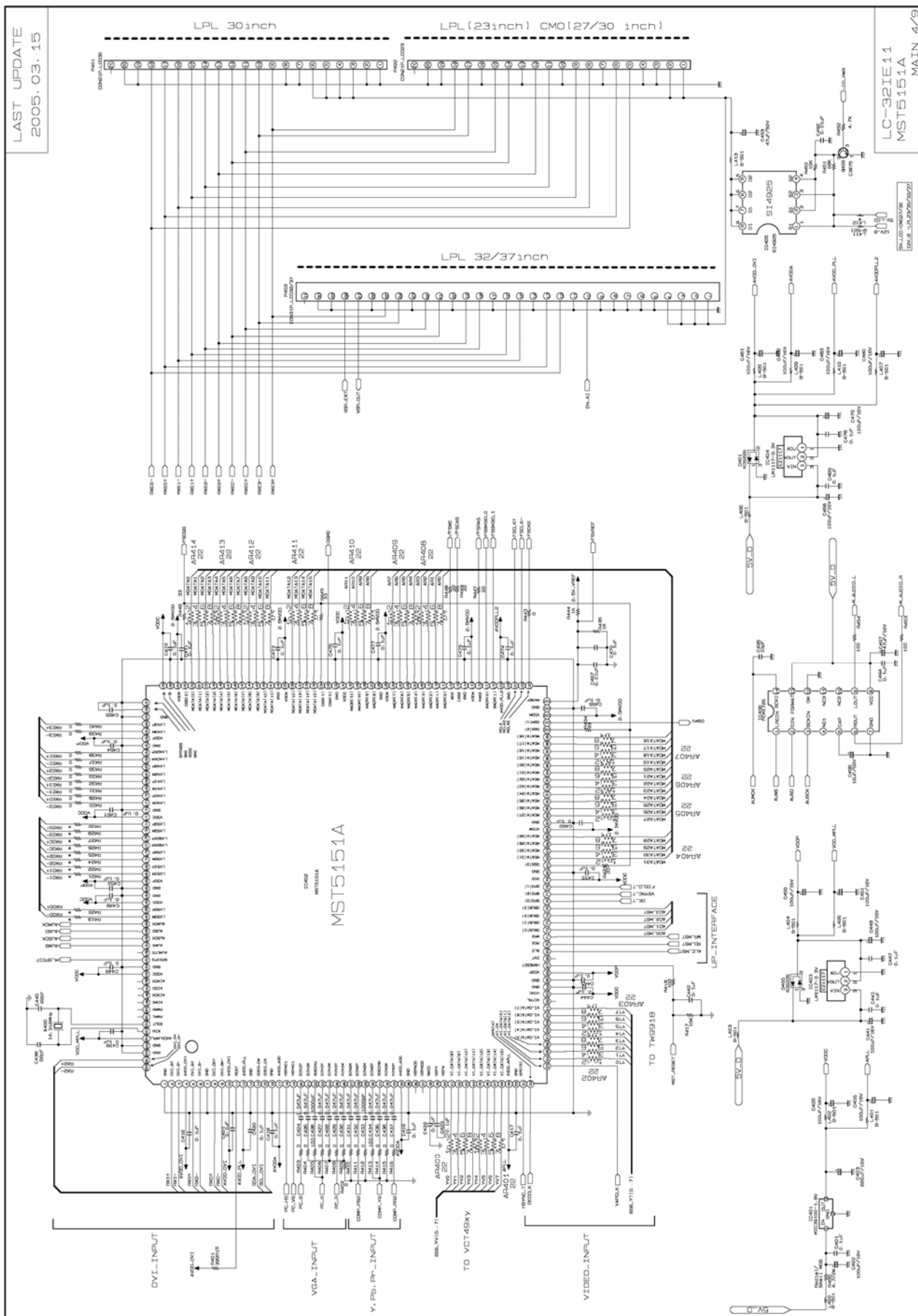




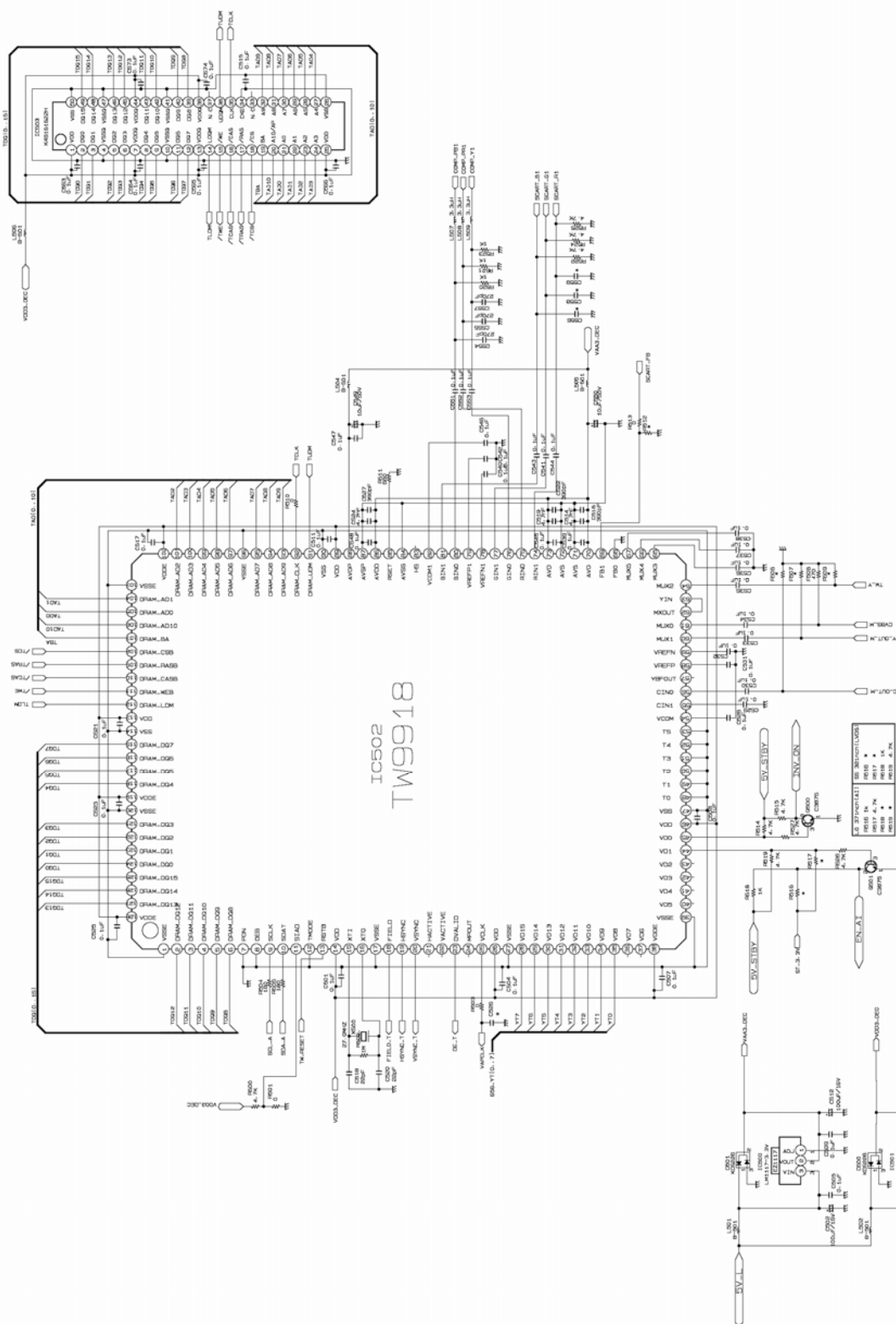
LAST UPDATE  
2005. 03. 15

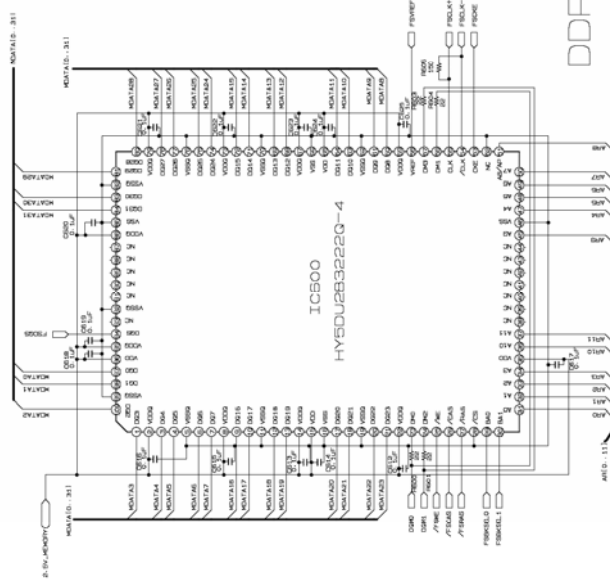
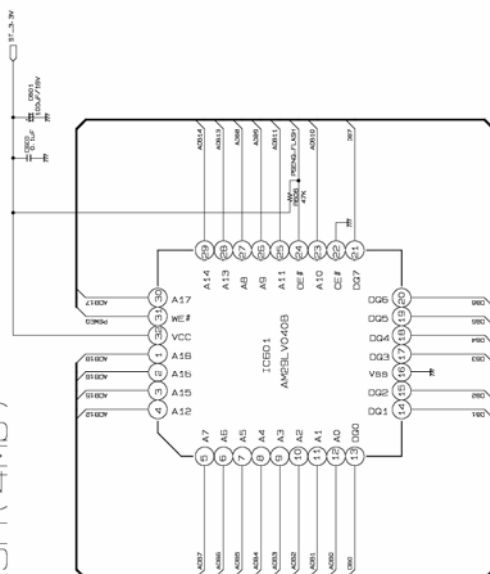
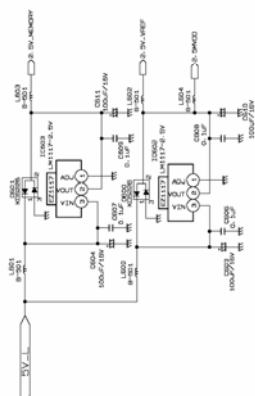
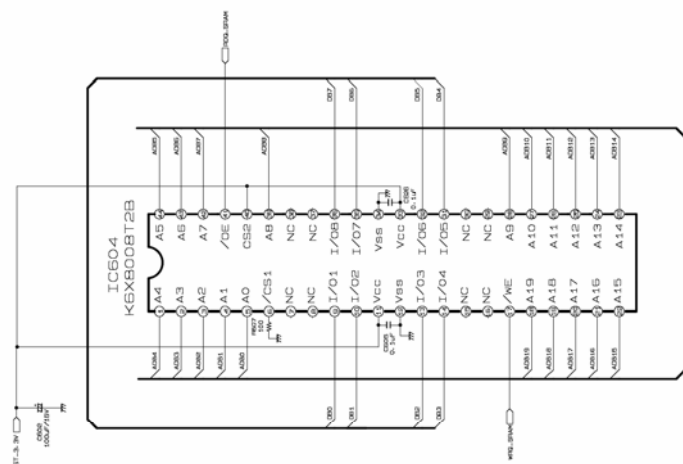


LAST UPDATE  
2005.03.15

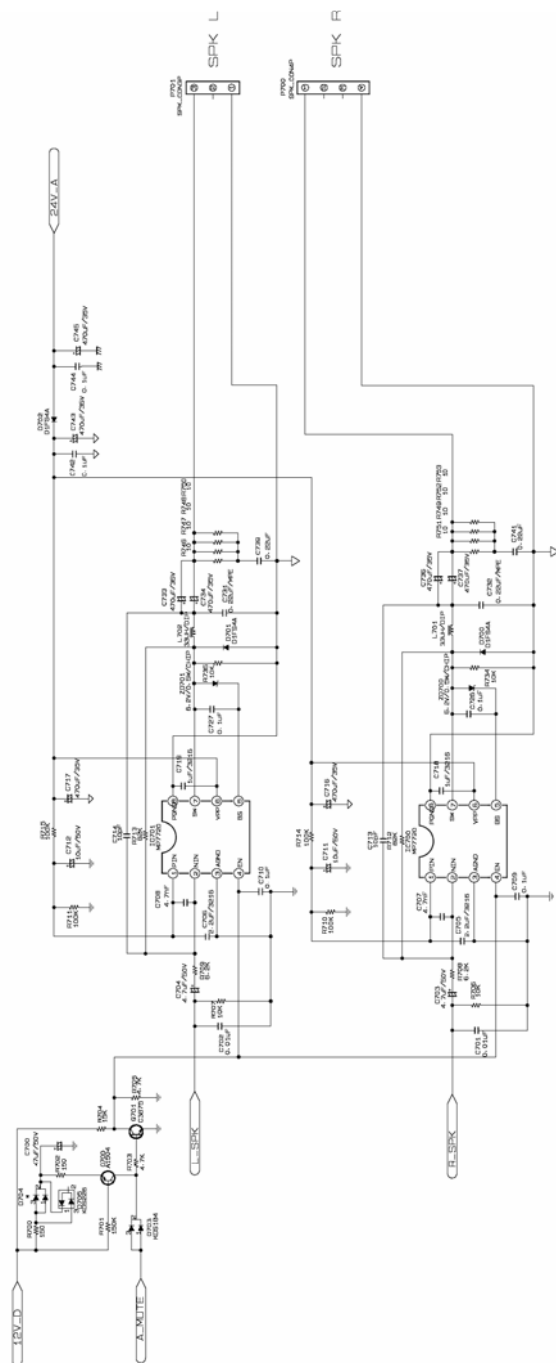


LC-32IE11  
MST5151A  
MAIN 4/9





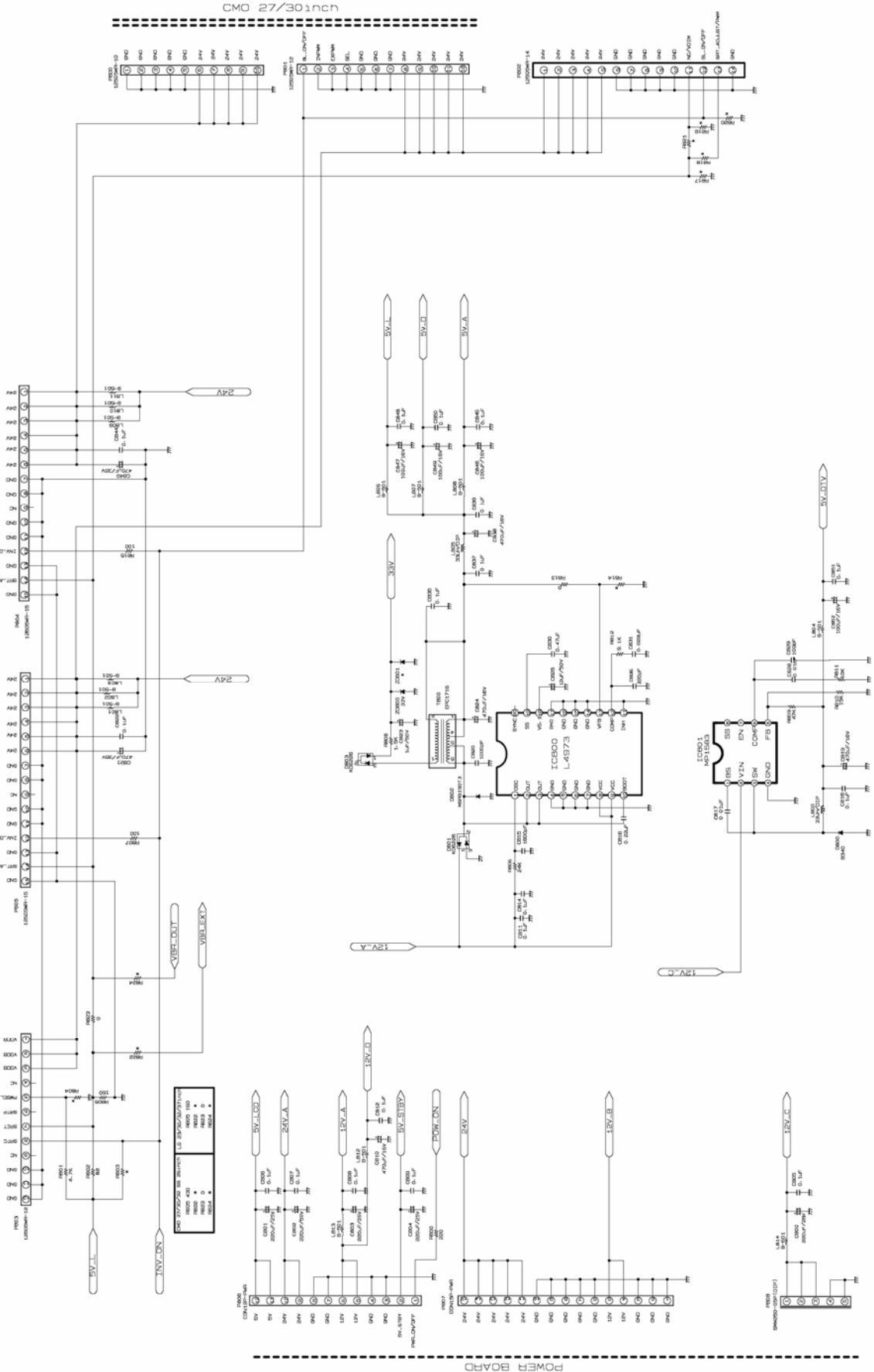
DDR SDRAM

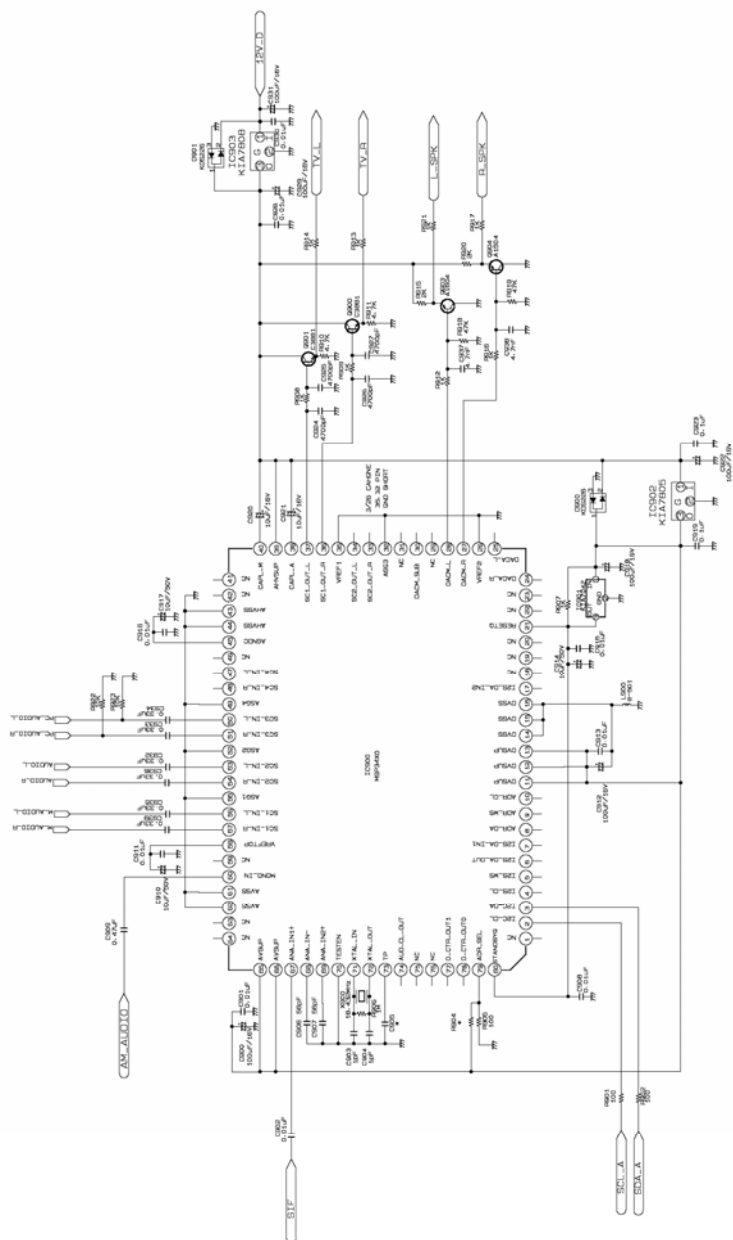


LAST UPDATE  
2005.03.15

30/32/37inch INVERTER(LPL)

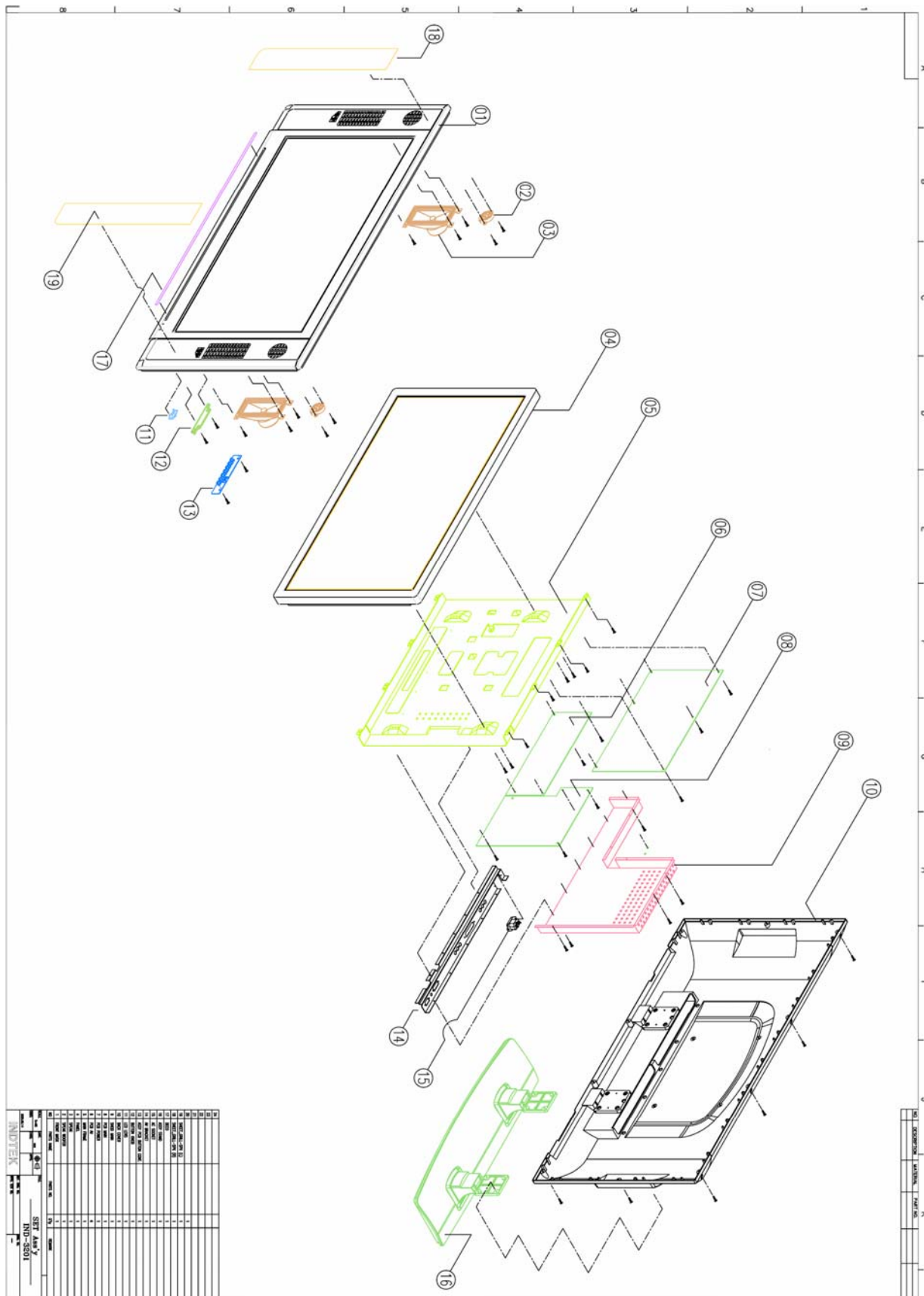
231inch INVERTER(LPL)



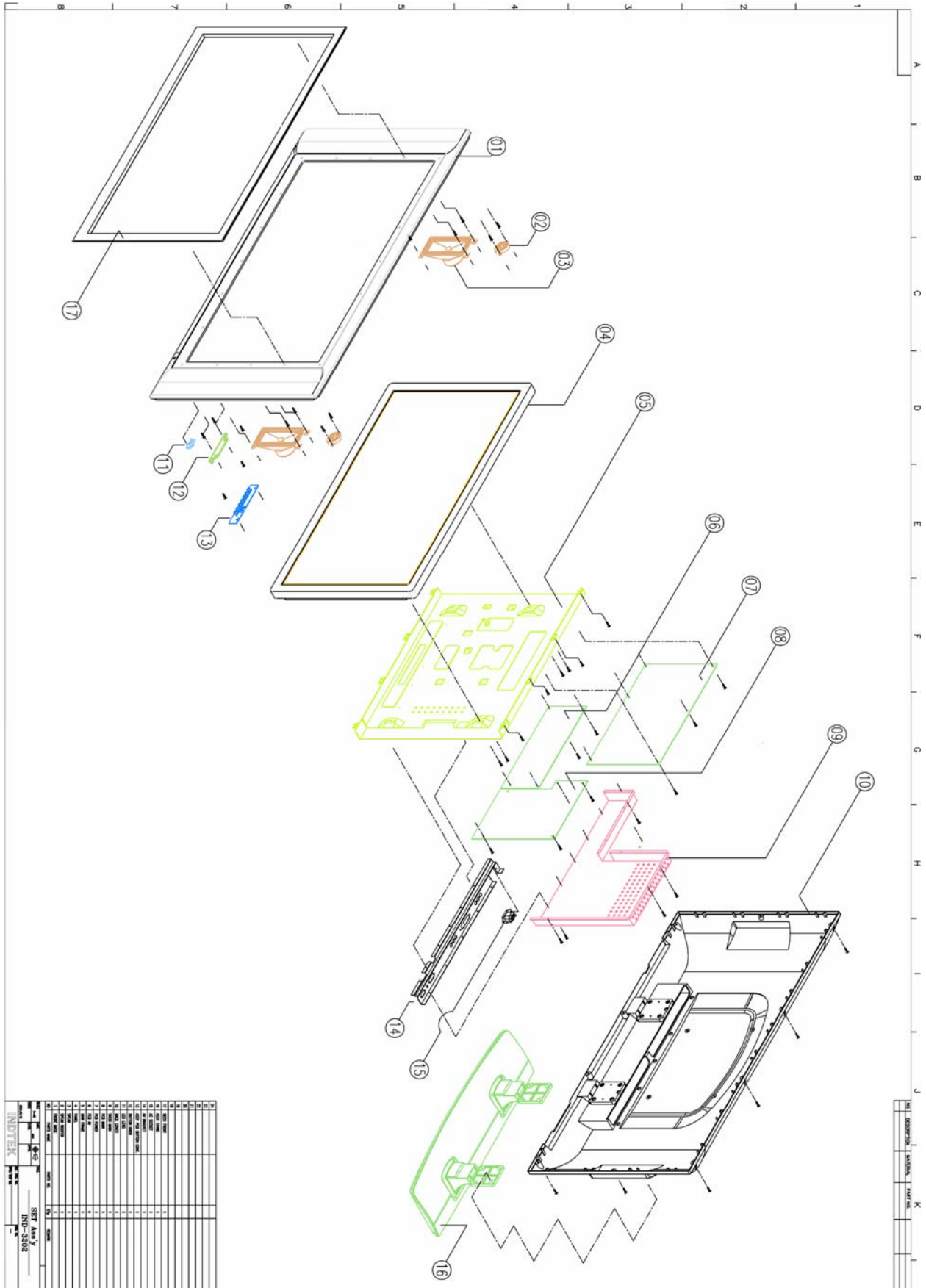


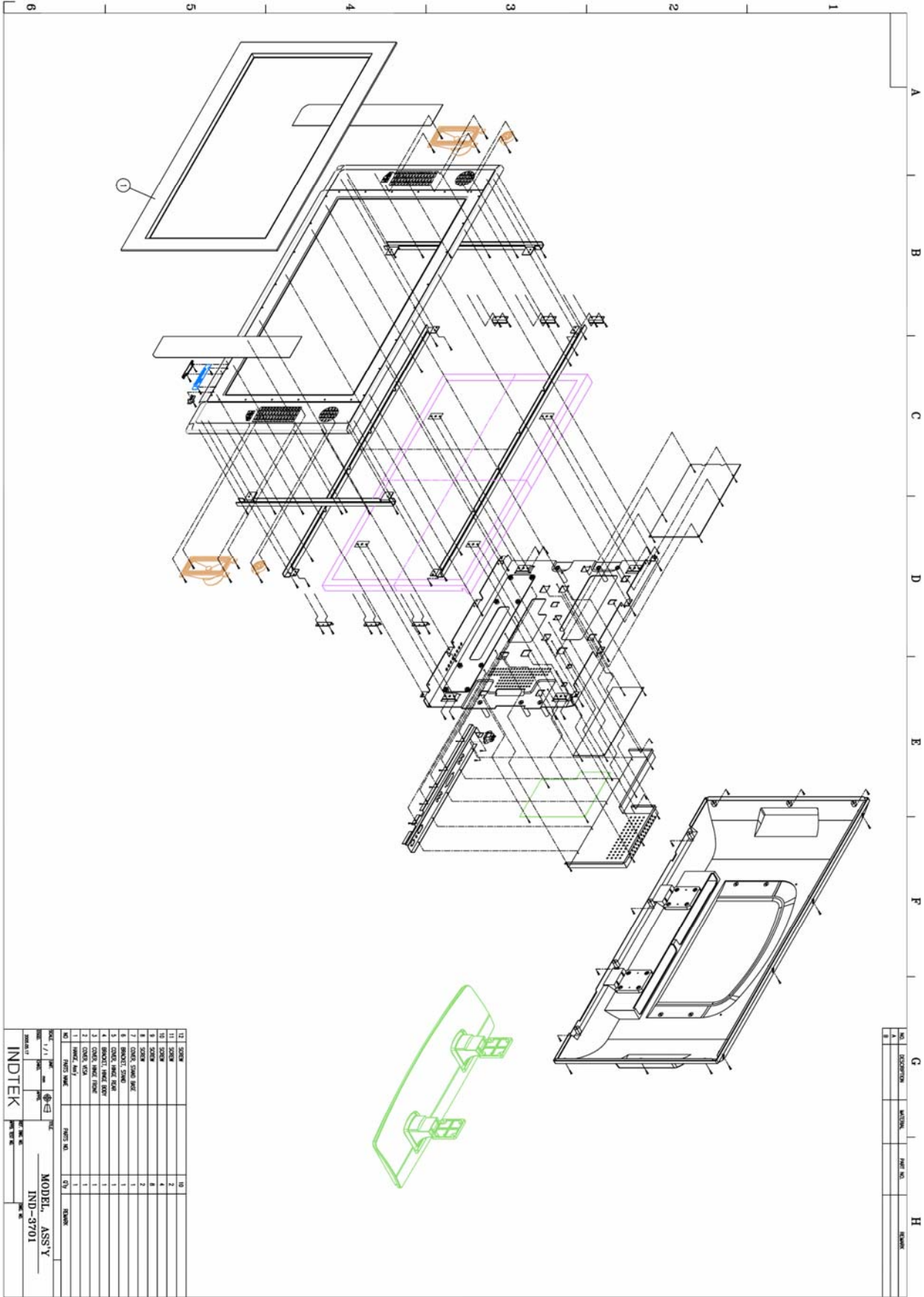
## 10. EXPLODED VIEW

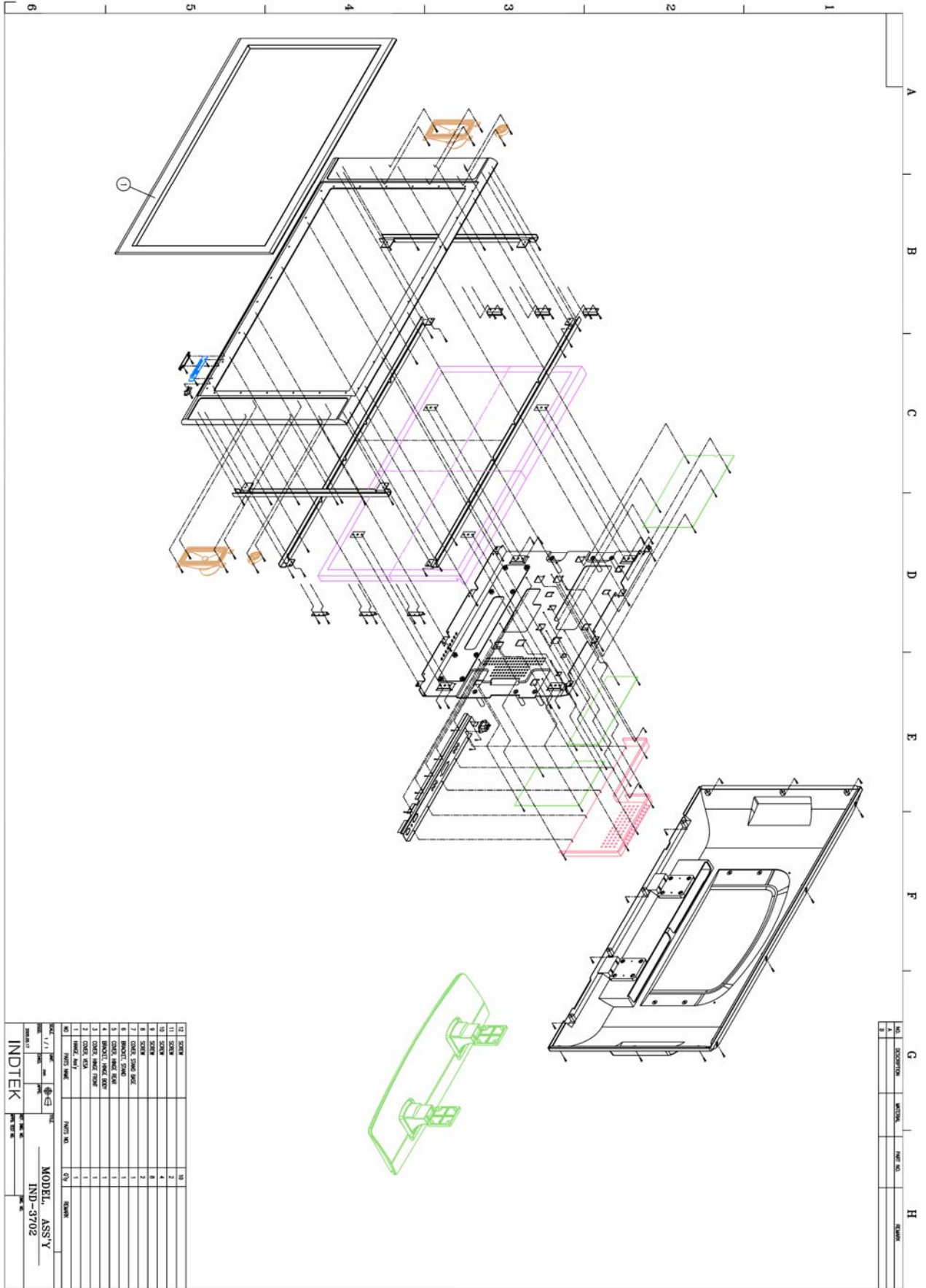
■ LC-32IE11



■ LC-32IE21







## 11. REPLACEMENT PARTS LIST

| Item                           | Specification                          | Location                                           |
|--------------------------------|----------------------------------------|----------------------------------------------------|
| MAIN ASS'Y                     | LC-32IE11_LPL_MAIN PCB ASS'Y           |                                                    |
| LC-32IE11_MAIN (MANUAL INSERT) |                                        |                                                    |
| CONNECTOR                      | EARPHONE JACK (UEJ-CV-003)             | P203;                                              |
| CONNECTOR DVI                  | DVI CONNECTOR 440062-1 ==>AMP          | P201;                                              |
| TRANSFORMER, SMPS[COIL]        | EPC1716 650UH +-15%, DC-DC CON.        | T800;                                              |
| PLCC AMP (SOCKET)              | 822473-3 AMP 32PIN 2.54MM NIKEL PLCC   | IC601;                                             |
| IC FLASH MEMORY                | AM29LV040B(PLCC) 4Mb AMD               | IC601;                                             |
| CONNECTOR D_SUB                | D_SUB FEMALE 15P 3ROW R/A              | P200;                                              |
| WAFER                          | SMW200-03P (DIP) , YEONHO              | P304;                                              |
| WAFER                          | SMW200-10P (DIP) , YEONHO              | P104_M;                                            |
| WAFER                          | SMW200-12P (DIP) , YEONHO              | P806;                                              |
| WAFER                          | SMW200-15P (DIP) , YEONHO              | P807;                                              |
| WAFER                          | SMW250-03P (DIP) , YEONHO              | P701;                                              |
| WAFER                          | SMW250-04P (DIP) , YEONHO              | P700;                                              |
| POWER INDUCTOR                 | 33uH, CPS-01-330(CH-8010S), GET 170    | L701,L702,L805;                                    |
| CRYSTAL                        | HC49U KJE RADIAL 14.31818MHz +/-30 PPM | X400;                                              |
| LC-32IE11_MAIN (SMD_BOTTOM)    |                                        |                                                    |
| CHIP RESISTOR                  | 0 OHM 1/8W 2012 5% D (000)             | R380,R381,R382,R390,R391,R392,R393,R394,R395,R396, |
|                                |                                        | R397,R402,R404,R407,R409,R411,R414,R416,R501,R503, |
|                                |                                        | R813,R823;                                         |
| CHIP RESISTOR                  | 10 OHM 1/8W 2012 5% D (100)            | R746,R747,R748,R749,R750,R751,R752,R753;           |
| CHIP RESISTOR                  | 22 OHM 1/8W 2012 5% D (220)            | R368,R600,R601,R603,R604;                          |
| CHIP RESISTOR                  | 33 OHM 1/8W 2012 5% D (330)            | R423,R434,R445,R446;                               |
| CHIP RESISTOR                  | 180 OHM 1/8W 2012 5% D (181)           | R504,R505;                                         |
| CHIP RESISTOR                  | 1.5K OHM 1/8W 2012 5% D (152)          | R808;                                              |
| CHIP RESISTOR                  | 82 OHM 1/8W 2012 5% D (820)            | R141,R143,R144,R802;                               |
| CHIP RESISTOR                  | 100 OHM 1/8W 2012 5% D (101)           | R154,R155,R313,R315,R316,R345,R346,R347,R354,R358, |
|                                |                                        | R383,R413,R418,R807,R815,R905;                     |
| CHIP RESISTOR                  | 160 OHM 1/8W 2012 5% D (161)           | R805;                                              |
| CHIP RESISTOR                  | 220 OHM 1/8W 2012 5% D (221)           | R800;                                              |
| CHIP RESISTOR                  | 390 OHM 1/8W 2012 5% D (391)           | R401;                                              |
| CHIP RESISTOR                  | 470 OHM 1/8W 2012 5% D (471)           | R148,R149,R508;                                    |
| CHIP RESISTOR                  | 1K OHM 1/8W 2012 5% D (102)            | R102,R103,R104,R221,R312,R322,R435,R444,R520,R521, |
|                                |                                        | R523;                                              |
| CHIP RESISTOR                  | 1M OHM 1/8W 2012 5% D (105)            | R502;                                              |

|                 |                                 |                                                    |
|-----------------|---------------------------------|----------------------------------------------------|
| CHIP RESISTOR   | 2K OHM 1/8W 2012 5% D (202)     | R217,R218;                                         |
| CHIP RESISTOR   | 2.7K OHM 1/8W 2012 5% D (272)   | R384,R385;                                         |
| CHIP RESISTOR   | 3.3K OHM 1/8W 2012 5% D (332)   | R321;                                              |
| CHIP RESISTOR   | 3.6K OHM 1/8W 2012 5% D (362)   | R133,R135,R137;                                    |
| CHIP RESISTOR   | 4.7K OHM 1/8W 2012 5% D (472)   | R134,R136,R138,R207,R208,R310,R311,R319,R320,R331, |
|                 |                                 | R341,R342,R352,R500,R524,R525,R801;                |
| CHIP RESISTOR   | 8.2K OHM 1/8W 2012 5% D (822)   | R105,R107,R109;                                    |
| CHIP RESISTOR   | 10K OHM 1/8W 2012 5% D (103)    | R106,R108,R110,R417;                               |
| CHIP RESISTOR   | 24K OHM 1/8W 2012 5% D (243)    | R806;                                              |
| CHIP RESISTOR   | 47K OHM 1/8W 2012 5% D (473)    | R606;                                              |
| CHIP RESISTOR   | 470K OHM 1/8W 2012 5% D (474)   | R215,R216;                                         |
| CHIP CAPACITORS | 1pF 50V 10% 2012 R/TP (010)     | C903,C904;                                         |
| CHIP CAPACITORS | 15pF 50V 10% 2012 R/TP (150)    | C364;                                              |
| CHIP CAPACITORS | 22pF 50V 10% 2012 R/TP (220)    | C438,C440,C518,C520;                               |
| CHIP CAPACITORS | 56pF 50V 10% 2012 R/TP (560)    | C906,C907;                                         |
| CHIP CAPACITORS | 270pF 50V 10% 2012 R/TP (271)   | C554,C555,C557;                                    |
| CHIP CAPACITORS | 390pF 50V 10% 2012 R/TP (391)   | C516,C522,C527;                                    |
| CHIP CAPACITORS | 1800pF 50V 10% 2012 R/TP (182)  | C815;                                              |
| CHIP CAPACITORS | 4700pF 50V 10% 2012 R/TP (472)  | C514,C519,C524;                                    |
| CHIP CAPACITORS | 0.01uF 50V 10% 2012 R/TP (103)  | C320,C321,C322,C333,C346,C373,C376,C901,C908,C911, |
|                 |                                 | C915,C916,C928,C930;                               |
| CHIP CAPACITORS | 0.047uF 50V 10% 2012 R/TP (473) | C425,C428,C430,C432,C434,C435,C437;                |
| CHIP CAPACITORS | 0.1uF 50V 20% 2012 R/TP (104)   | C101,C102,C103,C124,C125,C126,C200,C301,C304,C305, |
|                 |                                 | C309,C316,C317,C318,C332,C336,C339,C347,C356,C367, |
|                 |                                 | C369,C372,C377,C380,C416,C417,C418,C419,C420,C421, |
|                 |                                 | C439,C442,C443,C444,C445,C446,C447,C449,C452,C455, |
|                 |                                 | C460,C461,C464,C466,C469,C471,C472,C473,C474,C475, |
|                 |                                 | C476,C477,C478,C494,C501,C504,C505,C506,C507,C508, |
|                 |                                 | C509,C510,C511,C515,C517,C521,C523,C525,C531,C532, |
|                 |                                 | C535,C539,C545,C548,C551,C552,C553,C563,C564,C565, |
|                 |                                 | C566,C573,C574,C600,C606,C607,C608,C612,C613,C614, |
|                 |                                 | C615,C616,C617,C618,C619,C620,C621,C622,C623,C624, |
|                 |                                 | C625,C742,C744,C806,C807,C808,C809,C811,C812,C814, |
|                 |                                 | C822,C835,C837,C839,C844,C845,C848,C850,C919,C923; |
| CHIP CAPACITORS | 0.22uF 50V 20% 2012 R/TP (224)  | C739,C741,C816;                                    |
| CHIP INDUCTOR   | 3.3uH Inductor 50mA 2012 20%    | L507,L508,L509;                                    |
| CHIP BEAD       | CHIP BEAD 3216 501 (500Ω)       | L201,L204,L205,L209,L300,L301,L302,L303,L304,L305, |

|                                     |                                       |                                                    |
|-------------------------------------|---------------------------------------|----------------------------------------------------|
|                                     |                                       | L307,L308,L309,L310,L311,L402,L404,L405,L407,L408, |
|                                     |                                       | L409,L410,L501,L502,L504,L506,L600,L602,L604,L806, |
|                                     |                                       | L807,L812,L813,L814;                               |
| DIODE, SWITCHING                    | KDS226, S0T-23, high speed switching  | D200,D201,D400,D401,D500,D501,D600,D601,D801,D803  |
|                                     |                                       | D900,D901;                                         |
| TR                                  | KTC3875S, KET, S0T-23, switching      | Q109,Q110,Q111,Q200,Q300,Q301;                     |
| LC-321E11_MAIN (AUTO_INSERT_RADIAL) |                                       |                                                    |
| RADIAL REGISTER                     | 4.7 OHM 2 W 5.00%                     | R398,R455;                                         |
| CAPACITOR, FIXED FILM               | 0.22uF 63V 5% PCMT 365                | C731,C732;                                         |
| AL EL CAPACITORS                    | 1uF STD 50V M FL TP5 (5X11 85°C)      | C823;                                              |
| AL EL CAPACITORS                    | 4.7uF STD 50V M FL TP5 (5X11 85°C)    | C323,C340,C703,C704;                               |
| AL EL CAPACITORS                    | 10uF STD 16V M FL TP5 (5X11 85°C)     | C920,C921;                                         |
| AL EL CAPACITORS                    | 10uF STD 50V M FL TP5 (5X11 85°C)     | C109,C110,C111,C118,C119,C120,C313,C314,C315,C334, |
|                                     |                                       | C337,C345,C368,C374,C375,C378,C496,C549,C550,C711, |
|                                     |                                       | C712,C825,C910,C914,C917;                          |
| AL EL CAPACITORS                    | 47uF STD 16V M FL TP5 (5X9 85°C)      | C127,C201,C203,C210,C310,C497;                     |
| AL EL CAPACITORS                    | 47uF STD 50V M FL TP5 (6.3X11 85°C)   | C493,C700;                                         |
| AL EL CAPACITORS                    | 100uF STD 16V M FL TP5 (6.3X11 85°C)  | C108,C384,C400,C405,C406,C441,C448,C450,C451,C468, |
|                                     |                                       | C479,C480,C481,C482,C483,C502,C503,C512,C513,C601, |
|                                     |                                       | C602,C603,C604,C610,C611,C846,C847,C849,C900,C912, |
|                                     |                                       | C918,C922,C929,C931;                               |
| AL EL CAPACITORS                    | 220uF STD 10V M FL TP5 (6.3X11 85°C)  | C302,C303,C359,C381;                               |
| AL EL CAPACITORS                    | 220uF STD 16V M FL TP5 (8X11.5 85°C)  | C403;                                              |
| AL EL CAPACITORS                    | 220uF STD 25V M FL TP5 (8X11.5 85°C)  | C801,C803,C804;                                    |
| AL EL CAPACITORS                    | 220uF STD 50V M FL TP5 (10X16 85°C)   | C802;                                              |
| AL EL CAPACITORS                    | 470uF STD 16V M FL TP5 (10X12.5 85°C) | C810,C824,C838;                                    |
| AL EL CAPACITORS                    | 470uF STD 35V M FL TP5 (10X16 85°C)   | C716,C717,C733,C734,C736,C737,C743,C745,C821,C840; |
| LC-321E11_MAIN (SMD_TOP)            |                                       |                                                    |
| PCB                                 | MAIN B/D 2005.03.30 Rev. 1.1          |                                                    |
| CHIP RESISTOR                       | 0 OHM 1/10W 1608 5% D (000)           | R165,R399,R343,R400,R403,R406,R408,R410,R412,R415, |
|                                     |                                       | R428,R431,R432,R433,R436,R437,R438,R439,R440,R443, |
|                                     |                                       | R510,R513;                                         |
| CHIP RESISTOR                       | 22 OHM 1/10W 1608 5% D (220)          | R447,R448,R449;                                    |
| CHIP RESISTOR                       | 75 OHM 1/10W 1608 5% D (750)          | R202,R203,R206;                                    |
| CHIP RESISTOR                       | 82 OHM 1/10W 1608 5% D (820)          | R111,R112,R113,R117,R118,R119,R120,R121,R124,R125, |
|                                     |                                       | R126,R128,R129,R139,R140,R142;                     |
| CHIP RESISTOR                       | 100 OHM 1/10W 1608 5% D (101)         | R151,R152,R153,R156,R200,R201,R219,R220,R301,R302, |

|                     |                                 |                                                              |
|---------------------|---------------------------------|--------------------------------------------------------------|
|                     |                                 | R304,R305,R307,R317,R318,R337,R338,R339,R340,R348,           |
|                     |                                 | R349,R351,R353,R355,R371,R372,R386,R405,R453,R454            |
|                     |                                 | R607,R901,R902;                                              |
| CHIP RESISTOR       | 150 OHM 1/10W 1608 5% D (151)   | R605,R700,R702;                                              |
| CHIP RESISTOR       | 220 OHM 1/10W 1608 5% D (221)   | R210,R211,R212,R213;                                         |
| CHIP RESISTOR       | 270 OHM 1/10W 1608 5% D (271)   | R114,R115,R116;                                              |
| CHIP RESISTOR       | 470 OHM 1/10W 1608 5% D (471)   | R122,R123,R127,R145,R146,R147,R150;                          |
| CHIP RESISTOR       | 680 OHM 1/10W 1608 5% D (681)   | R511;                                                        |
| CHIP RESISTOR       | 1K OHM 1/10W 1608 5% D (102)    | R100,R323,R389,R907,R908,R909,R912,R913,R914,R916,           |
|                     |                                 | R917,R921;                                                   |
| CHIP RESISTOR       | 1.8K OHM 1/10W 1608 5% D (182)  | R357;                                                        |
| CHIP RESISTOR       | 1M OHM 1/10W 1608 5% D (105)    | R906;                                                        |
| CHIP RESISTOR       | 2K OHM 1/10W 1608 5% D (202)    | R915,R920;                                                   |
| CHIP RESISTOR       | 3.3K OHM 1/10W 1608 5% D (332)  | R333,R334,R708,R709;                                         |
| CHIP RESISTOR       | 4.7K OHM 1/10W 1608 5% D (472)  | R300,R303,R308,R309,R330,R332,R335,R336,R374,R377,           |
|                     |                                 | R387,R388,R452,R522,R703,R705,R910,R911;                     |
| CHIP RESISTOR       | 9.1K OHM 1/10W 1608 5% D (912)  | R812;                                                        |
| CHIP RESISTOR       | 10K OHM 1/10W 1608 5% D (103)   | R204,R205,R228,R229,R356,R450,R706,R707,R734,R735,           |
|                     |                                 | R922,R923;                                                   |
| CHIP RESISTOR       | 15K OHM 1/10W 1608 5% D (153)   | R704;                                                        |
| CHIP RESISTOR       | 22K OHM 1/10W 1608 5% D (223)   | R378;                                                        |
| CHIP RESISTOR       | 47K OHM 1/10W 1608 5% D (473)   | R101,R918,R919;                                              |
| CHIP RESISTOR       | 68K OHM 1/10W 1608 5% D (683)   | R451;                                                        |
| CHIP RESISTOR       | 75K OHM 1/10W 1608 5% D (753)   | R712,R713;                                                   |
| CHIP RESISTOR       | 100K OHM 1/10W 1608 5% D (104)  | R710,R711,R714,R715;                                         |
| CHIP RESISTOR       | 150K OHM 1/10W 1608 5% D (154)  | R701;                                                        |
| CHIP ARRAY RESISTOR | 22 OHM ARRAY 1/8W 3216 5% (220) | AR400,AR401,AR402,AR403,AR404,AR405,AR406,AR407,AR408,AR409, |
|                     |                                 | AR410,AR411,AR412,AR413,AR414;                               |
| CHIP CAPACITORS     | 10pF 50V 10% 1608 R/TP (100)    | C495,C713,C714;                                              |
| CHIP CAPACITORS     | 22pF 50V 10% 1608 R/TP (220)    | C370,C371;                                                   |
| CHIP CAPACITORS     | 100pF 50V 10% 1608 R/TP (101)   | C307,C308;                                                   |
| CHIP CAPACITORS     | 220pF 50V 10% 1608 R/TP (221)   | C826;                                                        |
| CHIP CAPACITORS     | 1000pF 50V 10% 1608 R/TP (102)  | C106,C361,C426,C433,C820;                                    |
| CHIP CAPACITORS     | 4700pF 50V 10% 1608 R/TP (472)  | C707,C708,C924,C925,C926,C927,C937,C938;                     |
| CHIP CAPACITORS     | 0.01uF 50V 10% 1608 R/TP (103)  | C338,C365,C467,C492,C701,C702,C902,C913;                     |
| CHIP CAPACITORS     | 0.022uF 50V 10% 1608 R/TP (223) | C831;                                                        |

|                         |                                        |                                                    |
|-------------------------|----------------------------------------|----------------------------------------------------|
| CHIP CAPACITORS         | 0.047uF 50V 10% 1608 R/TP (473)        | C424,C427,C429,C431,C436;                          |
| CHIP CAPACITORS         | 0.1uF 50V 20% 1608 R/TP (104)          | C107,C115,C116,C117,C121,C122,C123,C128,C129,C130, |
|                         |                                        | C202,C209,C211,C306,C319,C348,C351,C353,C362,C366, |
|                         |                                        | C382,C383,C401,C422,C423,C465,C470,C528,C529,C530, |
|                         |                                        | C533,C534,C536,C537,C538,C540,C541,C542,C543,C544, |
|                         |                                        | C546,C547,C605,C609,C626,C709,C710,C726,C727;      |
| CHIP CAPACITORS         | 0.22uF 16V 20% 1608 R/TP (224)         | C329,C330,C331;                                    |
| CHIP CAPACITORS         | 0.33uF 16V 20% 1608 R/TP (334)         | C932,C933,C934,C935,C936,C939;                     |
| CHIP CAPACITORS         | 0.47uF 16V 20% 1608 R/TP (474)         | C830,C909;                                         |
| CHIP CAPACITORS         | 1uF 50V 10% 3216 R/TP (105)            | C718,C719;                                         |
| CHIP CAPACITORS         | 2.2uF 50V 10% 3216 R/TP (225)          | C705,C706;                                         |
| CHIP BEAD               | CHIP BEAD 2012 800 (80Ω)               | L200,L201,L202;                                    |
| CHIP BEAD               | CHIP BEAD 3216 501 (500Ω)              | L100,L101,L102,L203,L207,L312,L400,L401,L403,L406, |
|                         |                                        | L411,L413,L505,L601,L603,L801,L802,L803,L808,L809, |
|                         |                                        | L810,L811,L900;                                    |
| DIODE, SWITCHING        | KDS184, S0T-23, high speed switching   | D212,D703;                                         |
| DIODE, SWITCHING        | KDS226, S0T-23, high speed switching   | D202,D203,D204,D205,D206,D207,D208,D209,D705;      |
| DIODE,HOTTKEY RECTIFERS | D1FS4A SBD SHINDENGEN                  | D700,D701,D702;                                    |
| DIODE, CHIP             | MBRS190T3, ON semi., SMB-403A          | D802;                                              |
| DIODE, ZENER            | UDZS 5.6B, ROHM, S0D-323, 5.6v zener   | ZD200,ZD300,ZD301;                                 |
| DIODE, ZENER            | UDZS 6.2B, ROHM, S0D-323, 6.2v zener   | ZD700,ZD701;                                       |
| DIODE, ZENER            | UDZS 33B, ROHM, S0D-323, 33v zener     | ZD800;                                             |
| TR                      | KTA1504S, KEC, S0T-23, switching       | Q700,Q903,Q904;                                    |
| TR                      | KTC3875S, KET, S0T-23, switching       | Q100,Q101,Q102,Q103,Q104,Q105,Q106,Q107,Q108,Q400, |
|                         |                                        | Q701;                                              |
| TR                      | KTC3881S, KEC, S0T-23, VHF band amp.   | Q900,Q901;                                         |
| IC,MICRO CONTROLLER     | VCT49xyl, 144P QFP MICOM&VSP&MSP IC    | IC309;                                             |
| IC Video Processor      | TW9918 PQFP 128P TRAY TECHWELL         | IC502;                                             |
| IC SCALER               | MST5151A, MSTAR                        | IC402;                                             |
| IC                      | PCM1725, DIGITAL TO ANALOG AUDIO CONV. | IC406;                                             |
| IC AUDIO AMP            | MP7720DS S0IC8 20W CLASS D MONO MPS    | IC700,IC701;                                       |
| IC Voltage Detector     | KIA7027AF 3P S0T-89 R/TP KEC           | IC311;                                             |
| IC Voltage Detector     | KIA7042AF 3P S0T-89 R/TP KEC           | IC901;                                             |
| IC REG                  | KIA7808AF 2P DPAK R/TP KEC             | IC903;                                             |
| IC REG                  | KIA7805AF 2P DPAK R/TP KEC             | IC902;                                             |
| IC                      | M62320FP,I/O EXPANDER 16P S0P          | IC302,IC303;                                       |
| TR, FET                 | SI4925DY, TEMIC, S0-8, 30V 6.1A        | IC405;                                             |

|                                     |                                        |                                                             |
|-------------------------------------|----------------------------------------|-------------------------------------------------------------|
| IC                                  | L4973D5.1(S020) ST                     | IC800;                                                      |
| IC REG                              | MIC39100-1.8BS S0T223 MICREL           | IC308, IC401;                                               |
| IC REG                              | LM1117S-2.5V (S0T-223) HTC             | IC602, IC603;                                               |
| IC REG                              | LM1117S-3.3V (S0T-223) HTC             | IC300, IC301, IC403, IC404, IC500, IC501;                   |
| IC TTL                              | 74HCT14D Hex inverting Schmitt trigger | IC201;                                                      |
| IC SDRAM                            | K4S161622H-UC80, TSOP32 16Mb SAMSUNG   | IC503;                                                      |
| IC SRAM                             | K6X8008T2B-TF70 TSOP32 8Mb SEC         | IC604;                                                      |
| IC DDR SDRAM                        | HY5DU283222Q-4, DDR SDRAM LQFP 100P    | IC600;                                                      |
| IC EEPROM                           | AT24C32 SOP8 ATMEL                     | IC304;                                                      |
| IC EEPROM                           | 24LC21A 1/SN SOP8 MICRO CHIP           | IC200;                                                      |
| IC EEPROM                           | AT24C02N-10SI-1.8 8S1 ATMEL            | IC203;                                                      |
| TR                                  | BSS83, S0T-143B, n-ch switching tr     | IC305, IC306;                                               |
| IC Sound Processor                  | MSP3410G PQFP80 TRAY MICRONAS          | IC900                                                       |
| CRYSTAL                             | SX-1 27.0000MHZ +/-30ppm 16pF TA       | X500;                                                       |
| CRYSTAL                             | SX-1 20.250000MHZ +/-30ppm 16pF TA     | X300;                                                       |
| CRYSTAL                             | SX-1 18.432000MHZ +/-30ppm 16pF TA     | X900;                                                       |
| WAFER                               | 1001-31MV (SMD) 1.25MM 삼원FT            | P403;                                                       |
| WAFER                               | 10022HS-31C 31P 1.0MM FFC              | P100_M, P101_M;                                             |
| WAFER                               | 12505WR-09A (SMD) , YEONHO             | P103;                                                       |
| WAFER                               | 12505WR-15 (SMD) , YEONHO              | P804, P805;                                                 |
| <b>A/V ASS'Y</b>                    | <b>LC-32IE11_AV PCB ASS'Y</b>          |                                                             |
| <b>LC-32IE11 AV (MANUAL INSERT)</b> |                                        |                                                             |
| JACK, S_VIDEO                       | PJ6046G (S_VIDEO), PARK                | P400;                                                       |
| JACK, SCART                         | UPJ-R1-023 (SHIELD SCART), UGCOM       | P401, P403;                                                 |
| SPDIF                               | T0TX178A, TOSHIBA                      | J200;                                                       |
| TUNER                               | TAUM-W501P LG INOTEK MULTI FS MINI 4   | TU400;                                                      |
| WAFER                               | SMW200-10P (DIP) , YEONHO              | P407;                                                       |
| CONNECTOR ASS'Y                     | 10P 2.5mm 80mm H-H (32" AV B+)         | P407;                                                       |
| JACK, RCA                           | PPJ128A-1 (A/V 3P WITH S/W GR-BU-RD)   | P404;                                                       |
| JACK, RCA                           | PPJ137A (RCA_L/R WITH S/W RD-WH), PARK | P405;                                                       |
| <b>LC-32IE11 AV (SMD_BOTTOM)</b>    |                                        |                                                             |
| CHIP RESISTOR                       | 0 OHM 1/8W 2012 5% D (000)             | R498;                                                       |
| CHIP RESISTOR                       | 1K OHM 1/8W 2012 5% D (102)            | R341, R353, R356, R357, R359, R363, R365, R366, R368, R424, |
|                                     |                                        | R425, R427, R446, R447, R454, R483;                         |
| CHIP RESISTOR                       | 200 OHM 1/8W 2012 5% D (201)           | R355, R361;                                                 |
| CHIP RESISTOR                       | 220 OHM 1/8W 2012 5% D (221)           | R348;                                                       |
| CHIP RESISTOR                       | 220K OHM 1/8W 2012 5% D (224)          | R423, R434, R435, R452;                                     |

|                                   |                                      |                                                    |
|-----------------------------------|--------------------------------------|----------------------------------------------------|
| CHIP RESISTOR                     | 300 OHM 1/8W 2012 5% D (301)         | R458;                                              |
| CHIP RESISTOR                     | 4.7 OHM 1/8W 2012 5% D (4R7)         | R206;                                              |
| CHIP RESISTOR                     | 470 OHM 1/8W 2012 5% D (471)         | R331,R345,R346,R347,R352,R410,R411;                |
| CHIP RESISTOR                     | 82 OHM 1/8W 2012 5% D (820)          | R338,R344,R358,R364,R367,R400,R405,R432,R433,R438, |
|                                   |                                      | R444,R445,R449,R481,R484;                          |
| CHIP CAPACITORS                   | 0.01uF 50V 10% 2012 R/TP (103)       | C410,C422,C475,C480,C481;                          |
| CHIP CAPACITORS                   | 0.1uF 50V 20% 2012 R/TP (104)        | C217,C218,C320,C321,C324,C327,C328,C329,C330,C332, |
|                                   |                                      | C333,C334,C446,C449,C470,C482,C486,C499;           |
| CHIP CAPACITORS                   | 100pF 50V 10% 2012 R/TP (101)        | C469,C471;                                         |
| CHIP CAPACITORS                   | 0.47uF 25V 20% 2012 R/TP (474)       | C302,C303,C304,C305,C311,C313,C336,C337;           |
| CHIP BEAD                         | CHIP BEAD 3216 501 (500Ω)            | L403,L412,L419,L420;                               |
| TR                                | KTC3875S, KET, SOT-23, switching     | Q309,Q310,Q312;                                    |
| DIODE, SWITCHING                  | KDS226, SOT-23, high speed switching | D300,D301,D302;                                    |
| LC-321E11 AV (AUTO_INSERT_RADIAL) |                                      |                                                    |
| AL EL CAPACITORS                  | 10uF STD 50V M FL TP5 (5X11 85℃)     | C322,C407,C408,C419,C420,C468;                     |
| AL EL CAPACITORS                  | 10uF STD 16V M FL TP5 (5X11 85℃)     | C474;                                              |
| AL EL CAPACITORS                  | 47uF STD 50V M FL TP5 (6.3X11 85℃)   | C479;                                              |
| AL EL CAPACITORS                  | 0.47uF STD 50V M FL TP5 (5X11 85℃)   | C308,C309;                                         |
| AL EL CAPACITORS                  | 100uF STD 16V M FL TP5 (6.3X11 85℃)  | C331,C335;                                         |
| AL EL CAPACITORS                  | 220uF STD 16V M FL TP5 (8X11.5 85℃)  | C472;                                              |
| AL EL CAPACITORS                  | 47uF STD 16V M FL TP5 (5X9 85℃)      | C312,C483,C484;                                    |
| AL EL CAPACITORS                  | 220uF STD 25V M FL TP5 (8X11.5 85℃)  | C325;                                              |
| AL EL CAPACITORS                  | 470uF STD 16V M FL TP5 (10X12.5 85℃) | C412,C423,C447,C448;                               |
| AL BIPOLAR EL CAPACITORS          | 100uF STD 16V M FL TP5 , 무극성         | C400;                                              |
| LC-321E11 AV (SMD_TOP)            |                                      |                                                    |
| PCB                               | AV B/D 2005.02.04 L.C.Y              |                                                    |
| CHIP RESISTOR                     | 0 OHM 1/10W 1608 5% D (000)          | R480;                                              |
| CHIP RESISTOR                     | 10 OHM 1/10W 1608 5% D (100)         | R457;                                              |
| CHIP RESISTOR                     | 100 OHM 1/10W 1608 5% D (101)        | R492,R493;                                         |
| CHIP RESISTOR                     | 1K OHM 1/10W 1608 5% D (102)         | R330,R339,R342,R350,R415,R426,R453,R482;           |
| CHIP RESISTOR                     | 10K OHM 1/10W 1608 5% D (103)        | R448,R461,R462,R494;                               |
| CHIP RESISTOR                     | 150 OHM 1/10W 1608 5% D (151)        | R459,R460,R485;                                    |
| CHIP RESISTOR                     | 1.5K OHM 1/10W 1608 5% D (152)       | R120,R336;                                         |
| CHIP RESISTOR                     | 2K OHM 1/10W 1608 5% D (202)         | R419;                                              |
| CHIP RESISTOR                     | 2.2K OHM 1/10W 1608 5% D (222)       | R455;                                              |
| CHIP RESISTOR                     | 220 OHM 1/10W 1608 5% D (221)        | R340,R343,R489;                                    |
| CHIP RESISTOR                     | 220K OHM 1/10W 1608 5% D (224)       | R406,R407,R418,R436,R437,R451;                     |

|                               |                                      |                                                    |
|-------------------------------|--------------------------------------|----------------------------------------------------|
| CHIP RESISTOR                 | 24K OHM 1/10W 1608 5% D (243)        | R413,R442;                                         |
| CHIP RESISTOR                 | 470 OHM 1/10W 1608 5% D (471)        | R332,R349,R417,R450,R463;                          |
| CHIP RESISTOR                 | 4.7K OHM 1/10W 1608 5% D (472)       | R416,R487;                                         |
| CHIP RESISTOR                 | 47K OHM 1/10W 1608 5% D (473)        | R403,R431;                                         |
| CHIP RESISTOR                 | 470K OHM 1/10W 1608 5% D (474)       | R408,R409,R439,R440;                               |
| CHIP RESISTOR                 | 510 OHM 1/10W 1608 5% D (511)        | R333;                                              |
| CHIP RESISTOR                 | 560 OHM 1/10W 1608 5% D (561)        | R329,R334,R337,R351,R354,R360,R362;                |
| CHIP RESISTOR                 | 680 OHM 1/10W 1608 5% D (681)        | R491;                                              |
| CHIP RESISTOR                 | 75 OHM 1/10W 1608 5% D (750)         | R414,R443;                                         |
| CHIP RESISTOR                 | 82 OHM 1/10W 1608 5% D (820)         | R401,R402,R404,R412,R420,R421,R422,R441,R486,R488; |
| CHIP CAPACITORS               | 0.01uF 50V 10% 1608 R/TP (103)       | C409,C421;                                         |
| CHIP CAPACITORS               | 0.1uF 50V 20% 1608 R/TP (104)        | C319,C323,C326,C401,C485;                          |
| CHIP CAPACITORS               | 1000pF 50V 10% 1608 R/TP (102)       | C403,C404,C416,C417;                               |
| CHIP CAPACITORS               | 120pF 50V 10% 1608 R/TP (121)        | C477,R496;                                         |
| CHIP CAPACITORS               | 330pF 50V 10% 1608 R/TP (331)        | C402,C405,C413,C418;                               |
| CHIP CAPACITORS               | 4700pF 50V 10% 1608 R/TP (472)       | C455;                                              |
| CHIP CAPACITORS               | 0.47uF 16V 20% 1608 R/TP (474)       | C306,C307,                                         |
| CHIP INDUCTOR                 | 3.3uH Inductor 50mA 2012 20%         | L405,L406,L407,L408,L409,L410,L421;                |
| CHIP BEAD                     | CHIP BEAD 3216 501 (500Ω)            | L301,L413,L414;                                    |
| TR                            | KTC3875S, KET, SOT-23, switching     | Q300,Q302,Q308,Q311,Q403,Q406,Q407;                |
| TR                            | KTA1504S, KEC, SOT-23, switching     | Q301,Q303,Q305,Q401,Q404,Q405,Q408;                |
| DIODE, SWITCHING              | KDS226, SOT-23, high speed switching | D401,D402,D403,D404,D405;                          |
| WAFER                         | 10022HS-31A02 31P 1.0MM FFC          | P600A, P601A;                                      |
| IC TTL                        | 74HCU04D S014 PHILIPS                | IC202;                                             |
| IC REG                        | KIA7809AF 2P DPAK R/TP KEC           | IC301;                                             |
| IC REG                        | KIA7808AF 2P DPAK R/TP KEC           | IC401;                                             |
| IC REG                        | KIA7805AF 2P DPAK R/TP KEC           | IC402;                                             |
| IC                            | CXA2069Q QFP64 BK SONY               | IC300;                                             |
| KEY ASS'Y                     | LC-32IE10_KEY PCB ASS'Y              |                                                    |
| LC-32IC10_KEY (MANUAL INSERT) |                                      |                                                    |
| IR Receiver Modules           | TSOP1238RF1, VISHAY                  | I901;                                              |
| dual color LED lamp           | SAM5270, dual color LED (red, green) | D901;                                              |
| TACT_SW                       | TP-1145(AMEGATECH)                   | SW901,SW902,SW903,SW904,SW905,SW906,SW907;         |
| LC-32IC10_KEY (SMD)           |                                      |                                                    |
| PCB                           | KEY B/D 2004.11.15.C.J.H             |                                                    |
| CHIP BEAD                     | CHIP BEAD 3216 501 (500Ω)            | L902;                                              |
| CHIP RESISTOR                 | 1.8K OHM 1/8W 2012 5% D (182)        | R903;                                              |

|               |                                  |                      |
|---------------|----------------------------------|----------------------|
| CHIP RESISTOR | 910 OHM 1/8W 2012 5% D (911)     | R904;                |
| CHIP RESISTOR | 680 OHM 1/8W 2012 5% D (681)     | R905,R911;           |
| CHIP RESISTOR | 2.2K OHM 1/8W 2012 5% D (222)    | R906;                |
| CHIP RESISTOR | 1.6K OHM 1/8W 2012 5% D (162)    | R907;                |
| CHIP RESISTOR | 0 OHM 1/8W 2012 5% D (000)       | R908;                |
| CHIP RESISTOR | 4.7K OHM 1/8W 2012 5% D (472)    | R909;                |
| CHIP RESISTOR | 470 OHM 1/8W 2012 5% D (471)     | R910,R912,R913,R914; |
| TR            | KTC3875S, KET, S0T-23, switching | Q901,Q902;           |
| WAFER         | 12505WR-09A (SMD) , YEONHO       | P901;                |

■ Differential Part List Of Each Product.

| MODEL  | 32"                        | 23"                        | 26"                        |
|--------|----------------------------|----------------------------|----------------------------|
| Loc/No | (LPL)                      | (LPL)                      | (LPL)                      |
| R356   | 10K OHM 1/10W 1608 5% D    | 10K OHM 1/10W 1608 5% D    | 10K OHM 1/10W 1608 5% D    |
| R357   | 1.8KOHM 1/10W 1608 5% D    | 1.8KOHM 1/10W 1608 5% D    | 1.8KOHM 1/10W 1608 5% D    |
| R359   | X                          | X                          | X                          |
| P401   | X                          | X                          | X                          |
| P402   |                            | FI-TWE21P-VF(JAE)          | X                          |
| P403   | 1001-31MV (SMD) 1.25MM     | X                          | 1001-31MV (SMD) 1.25MM     |
| L411   | CHIP BEAD 3216 501         | CHIP BEAD 3216 501         | CHIP BEAD 3216 501         |
| L412   | X                          | X                          | X                          |
| R805   | 160 OHM 1/8W 2012 5% D     | 160 OHM 1/8W 2012 5% D     | 160 OHM 1/8W 2012 5% D     |
| R822   | X                          | X                          | X                          |
| R823   | 0 OHM 1/8W 2012 5% D (000) | 0 OHM 1/8W 2012 5% D (000) | 0 OHM 1/8W 2012 5% D (000) |
| R824   | X                          | X                          | X                          |
| P800   | X                          | X                          | X                          |
| P801   | X                          | X                          | X                          |
| P802   | X                          | X                          | X                          |
| P803   | X                          | 12505WR-12                 | X                          |
| P804   | 12505WR-15 (SMD)           | X                          | 12505WR-15 (SMD)           |
| P805   | 12505WR-15 (SMD)           | X                          | 12505WR-15 (SMD)           |
| R518   | X                          | X                          | X                          |
| R519   | X                          | X                          | X                          |
| R516   | X                          | X                          | X                          |
| R517   | X                          | X                          | X                          |
| R526   | X                          | X                          | X                          |
| Q501   | X                          | X                          | X                          |

| MODEL  | 26"                        | 27"                        | 30"                        |
|--------|----------------------------|----------------------------|----------------------------|
| Loc/No | (S/S)                      | (CMO)                      | (CMO)                      |
| R356   | 10K OHM 1/10W 1608 5% D    | 10K OHM 1/10W 1608 5% D    | 10K OHM 1/10W 1608 5% D    |
| R357   | 1.8KOHM 1/10W 1608 5% D    | 1.8KOHM 1/10W 1608 5% D    | 1.8KOHM 1/10W 1608 5% D    |
| R359   | X                          | X                          | X                          |
| P401   | X                          | X                          | X                          |
| P402   | X                          | FI-TWE21P-VF(JAE)          | FI-TWE21P-VF(JAE)          |
| P403   | 1001-31MV (SMD) 1.25MM     | X                          | X                          |
| L411   | X                          | X                          | X                          |
| L412   | CHIP BEAD 3216 501         | CHIP BEAD 3216 501         | CHIP BEAD 3216 501         |
| R805   | 430 OHM 1/8W 2012 5% D     | 430 OHM 1/8W 2012 5% D     | 430 OHM 1/8W 2012 5% D     |
| R822   | X                          | X                          | X                          |
| R823   | 0 OHM 1/8W 2012 5% D (000) | 0 OHM 1/8W 2012 5% D (000) | 0 OHM 1/8W 2012 5% D (000) |
| R824   | X                          | X                          | X                          |
| P800   | X                          | 12505WR-10                 | 12505WR-10                 |
| P801   | X                          | 12505WR-12                 | 12505WR-12                 |
| P802   | 12505WR-14                 | X                          | X                          |
| P803   | X                          | X                          | X                          |
| P804   | X                          | X                          | X                          |
| P805   | X                          | X                          | X                          |
| R518   | X                          | X                          | X                          |
| R519   | X                          | X                          | X                          |
| R516   | 1K OHM 1/8W 2012 5% D      | X                          | X                          |
| R517   | 3.3K OHM 1/10W 1608 5% D   | X                          | X                          |
| R526   | 3.3K OHM 1/10W 1608 5% D   | X                          | X                          |
| Q501   | 2SC3875S Y RTK (SOT-23)    | X                          | X                          |

| MODEL  | 32"                        | 37"                        | 42"                        |
|--------|----------------------------|----------------------------|----------------------------|
| Loc/No | (CMO)                      | (LPL)                      | (LPL)                      |
| R356   | 10K OHM 1/10W 1608 5% D    | X                          | X                          |
| R357   | 1.8KOHM 1/10W 1608 5% D    | X                          | X                          |
| R359   | X                          | 0 OHM 1/10W 1608 5% D      | 0 OHM 1/10W 1608 5% D      |
| P401   | X                          | X                          | X                          |
| P402   |                            | X                          | X                          |
| P403   | 1001-31MV (SMD) 1.25MM     | 1001-31MV (SMD) 1.25MM     | 1001-31MV (SMD) 1.25MM     |
| L411   | X                          | CHIP BEAD 3216 501         | CHIP BEAD 3216 501         |
| L412   | CHIP BEAD 3216 501         | X                          | X                          |
| R805   | 430 OHM 1/8W 2012 5% D     | 160 OHM 1/8W 2012 5% D     | 160 OHM 1/8W 2012 5% D     |
| R822   | X                          | X                          | X                          |
| R823   | 0 OHM 1/8W 2012 5% D (000) | 0 OHM 1/8W 2012 5% D (000) | 0 OHM 1/8W 2012 5% D (000) |
| R824   | X                          | X                          | X                          |
| P800   | 12505WR-10                 | X                          | X                          |
| P801   | 12505WR-12                 | X                          | X                          |
| P802   | X                          | X                          | X                          |
| P803   | X                          | X                          | X                          |
| P804   | X                          | 12505WR-15 (SMD)           | 12505WR-15 (SMD)           |
| P805   | X                          | 12505WR-15 (SMD)           | 12505WR-15 (SMD)           |
| R518   | X                          | X                          | X                          |
| R519   | X                          | X                          | X                          |
| R516   | X                          | X                          | X                          |
| R517   | X                          | X                          | X                          |
| R526   | X                          | X                          | X                          |
| Q501   | X                          | X                          | X                          |