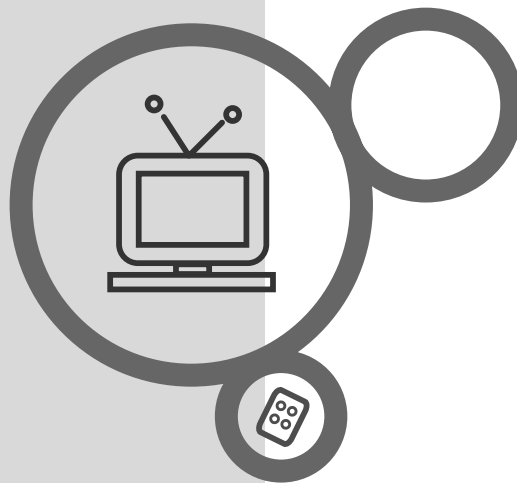


# SERVICE MANUAL

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



# CONTENTS

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1. SAFETY PRECAUTION	3
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# 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.

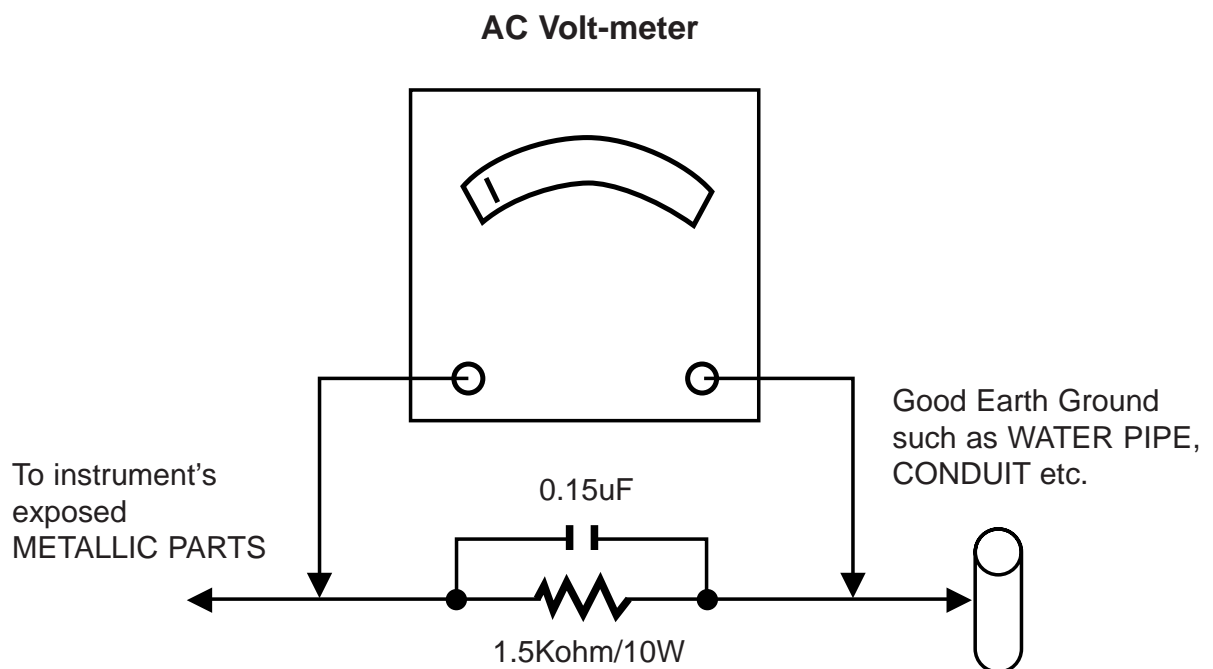
It is essential that these special safety parts should be replaced with the same components as

recommended in this manual to prevent Shock, Fire, or other Hazards.

Do not modify the original design without permission of manufacturer.

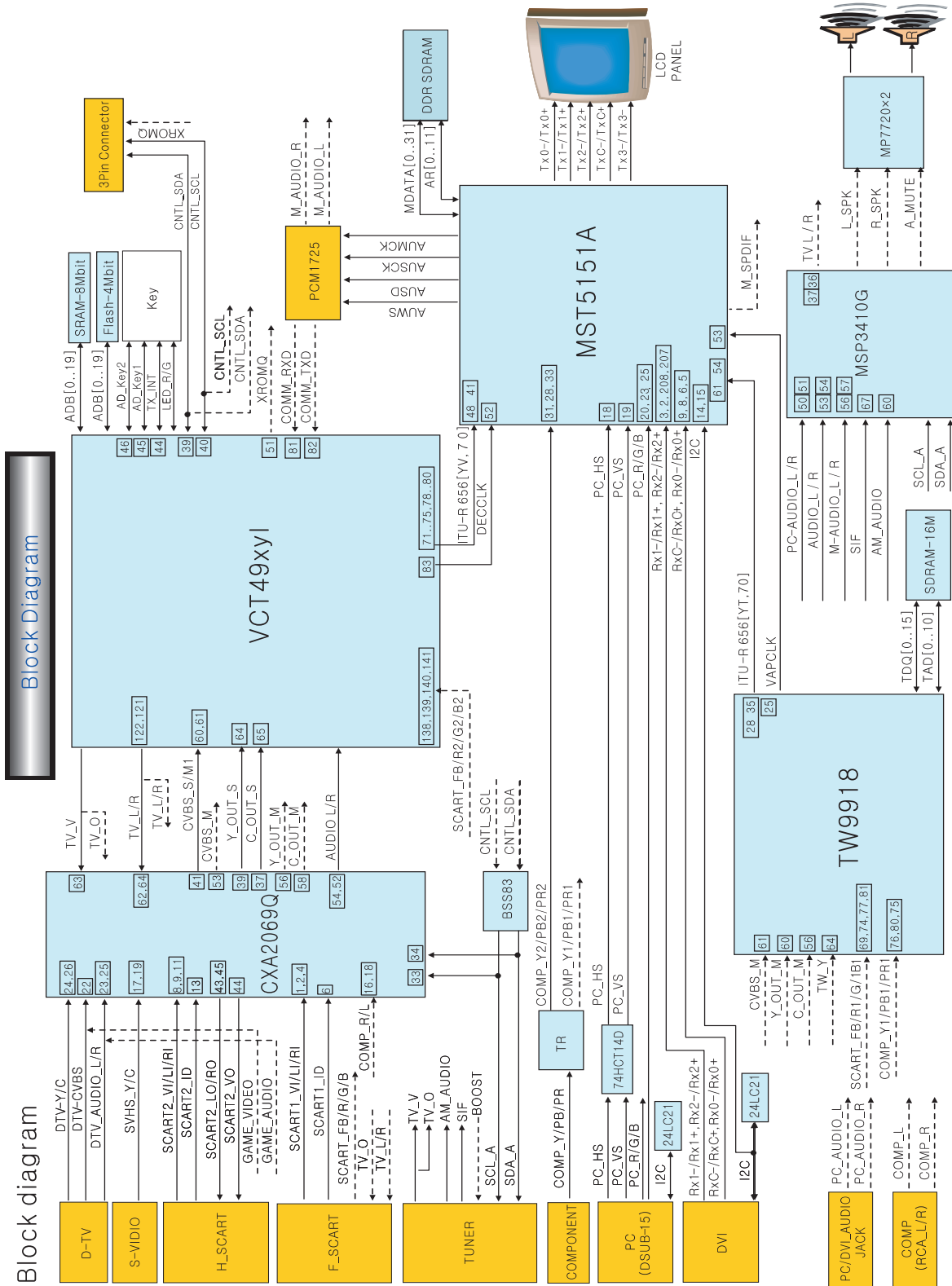
## Leakage Current Hot Check (See below Figure)

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.



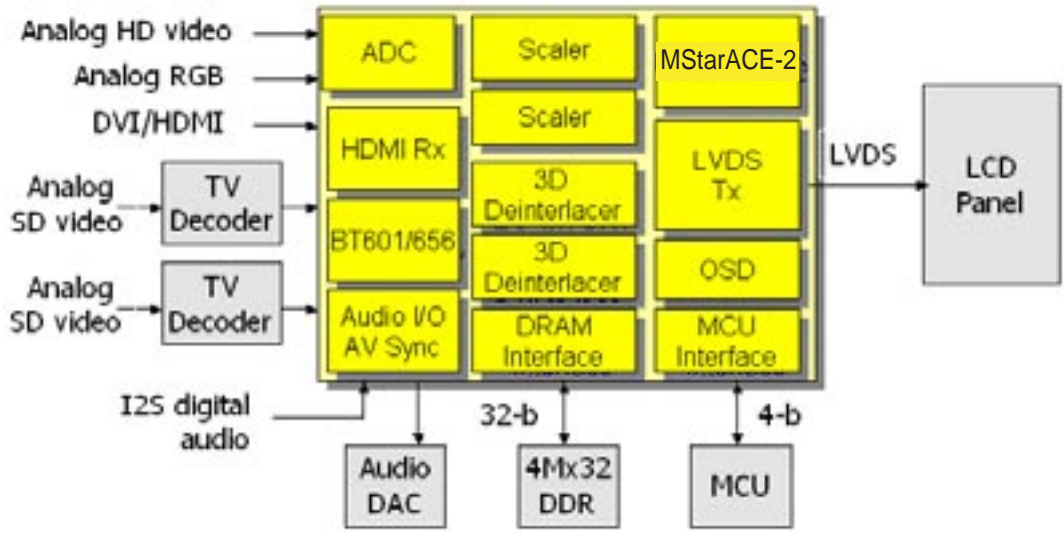
# BLOCK DIAGRAM

## BLOCK DIAGRAM

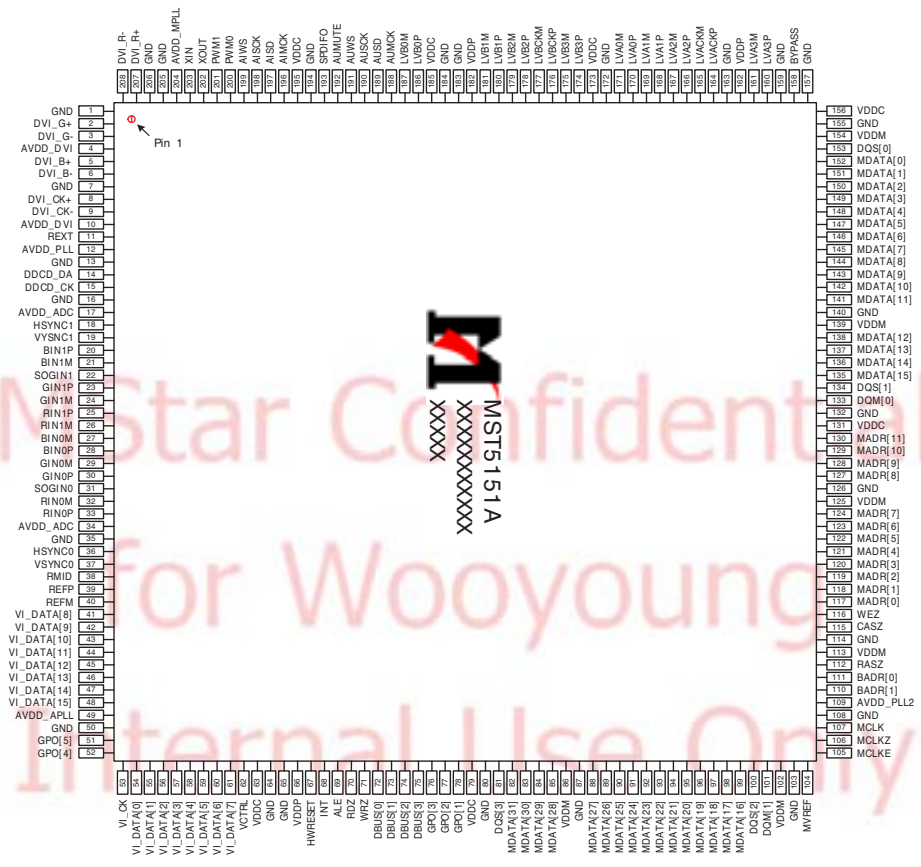


Innovative Next Display

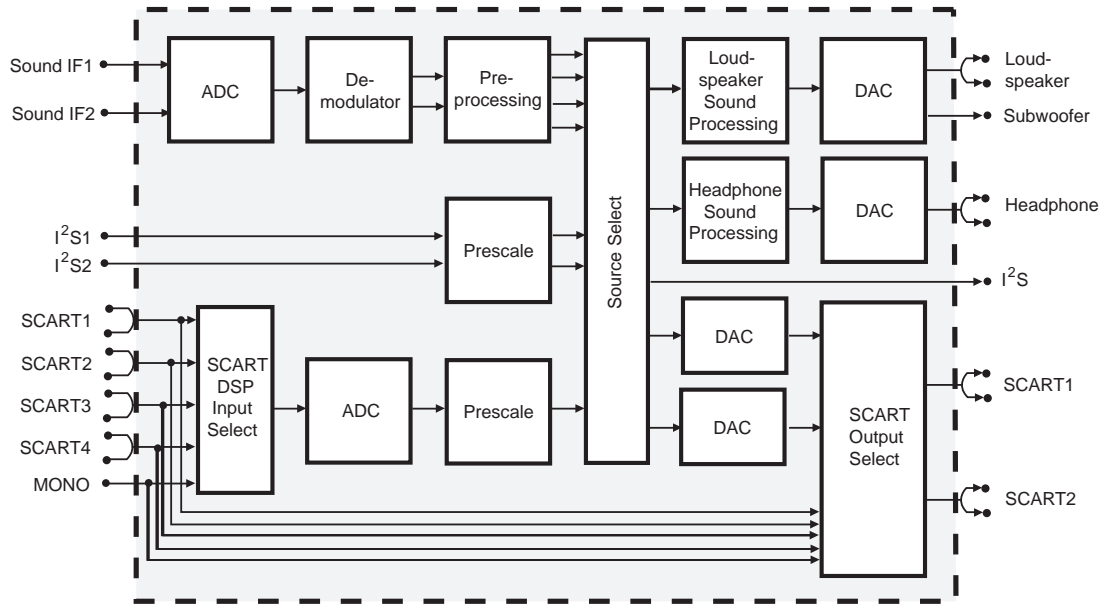
## IC FUNCTIONAL BLOCK DIAGRAM (MST515A)



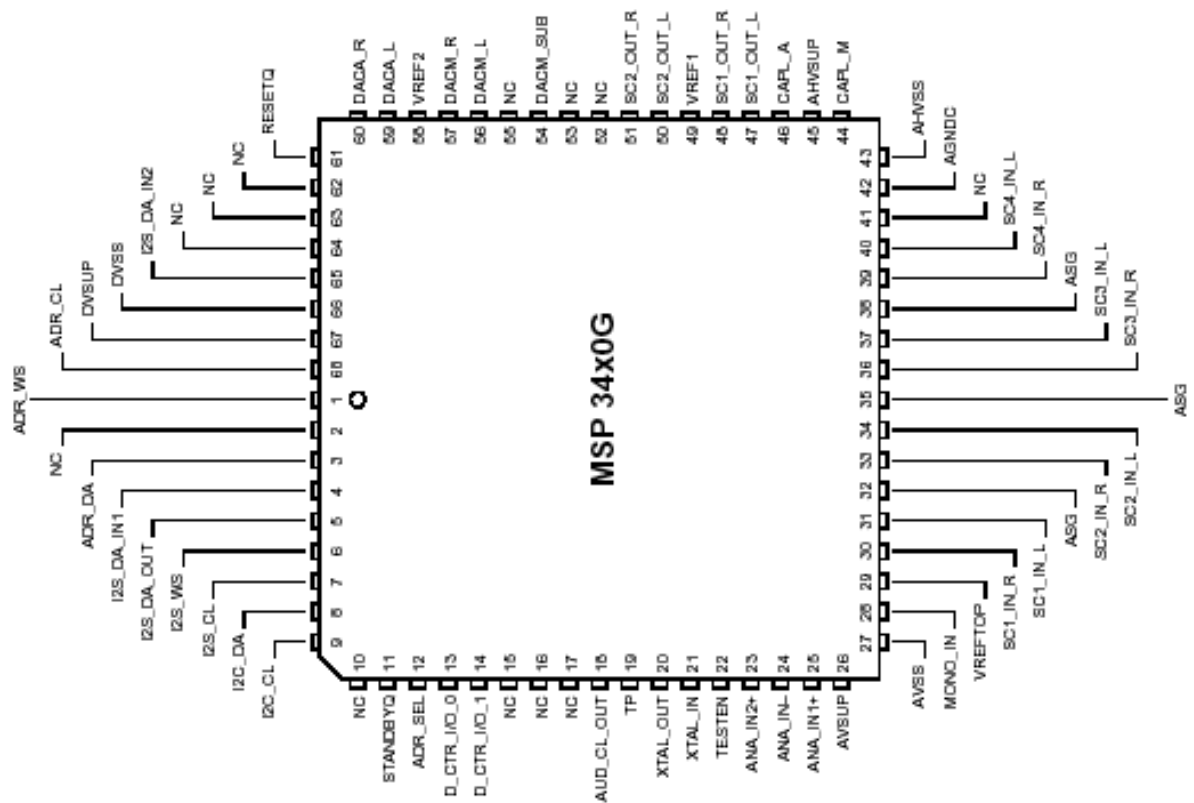
## IC PIN ASSIGNMENT (MST515A)



## IC BLOCK DIAGRAM (MSP3410G)



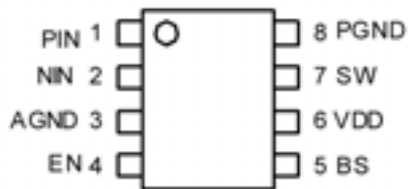
## IC PIN OUT (MSP3410G)



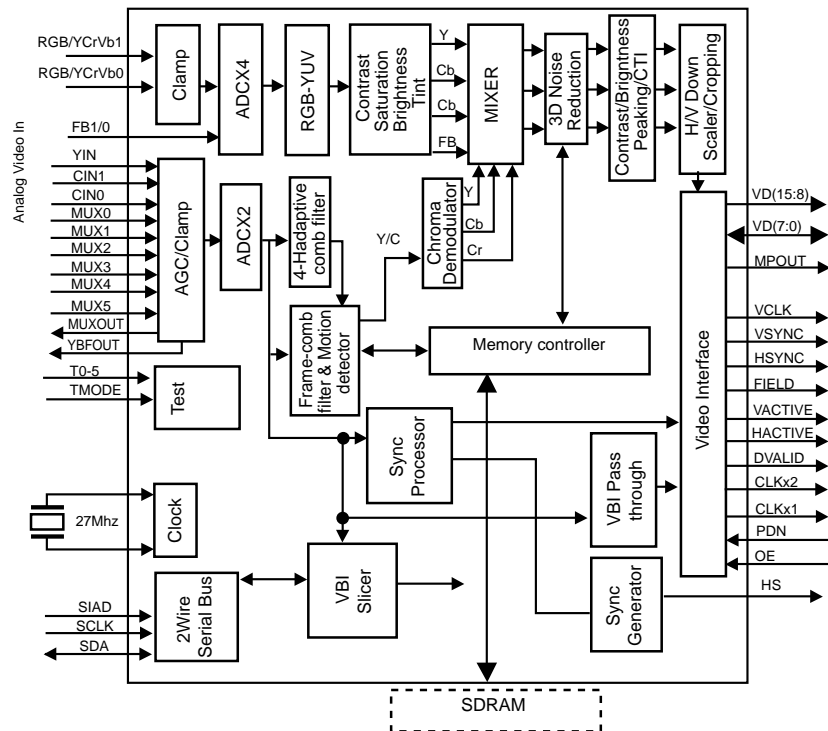
## IC BLOCK DIAGRAM (MP7720)

- 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 18m  $\Omega$  switches
- Mute / Standby-mode (Sleep)
- Tiny 8Pin SOIC or PDIP Package
- Evaluation Board Available

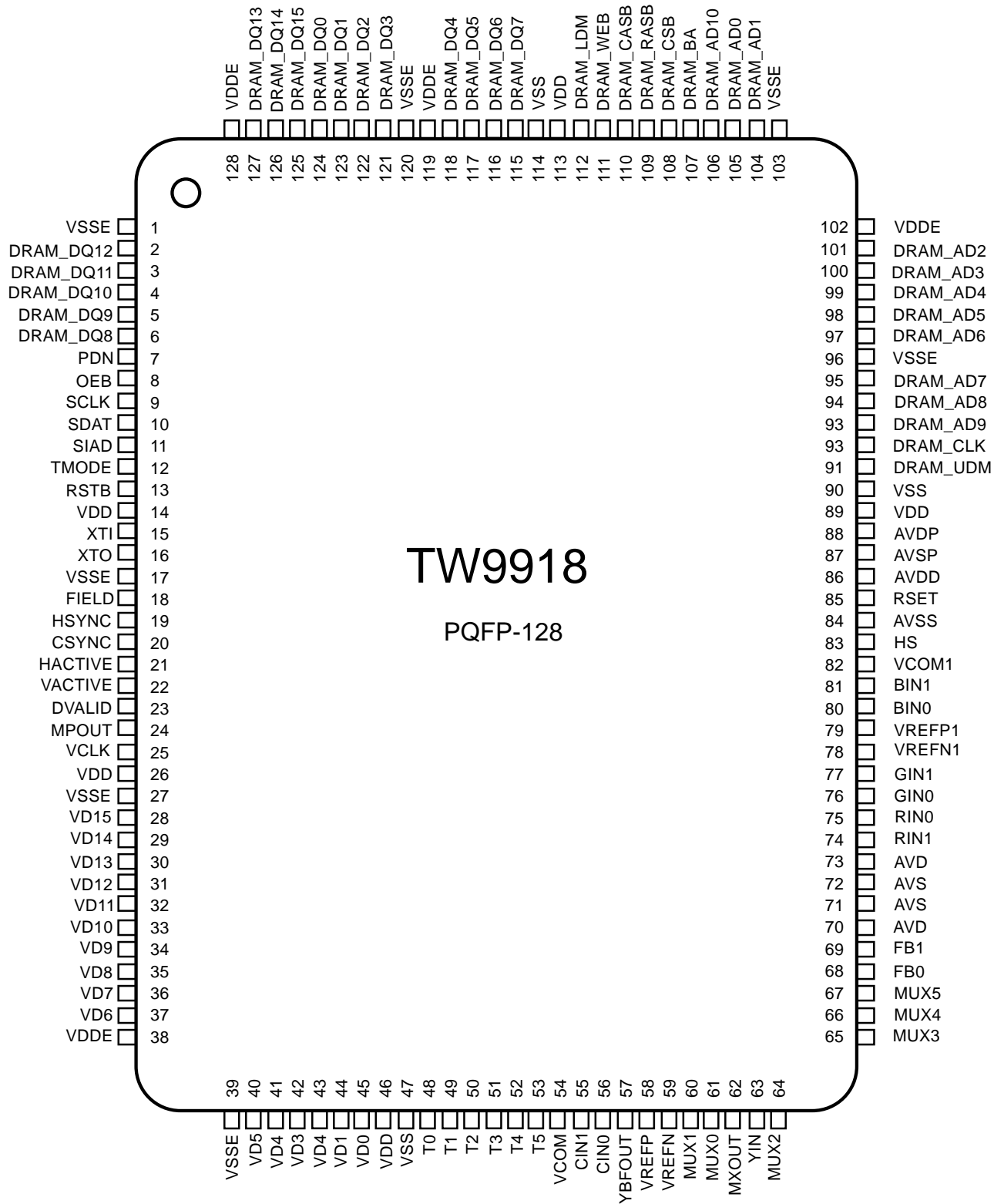
## IC BLOCK DIAGRAM (MP7720)



## IC BLOCK DIAGRAM (TW9918)

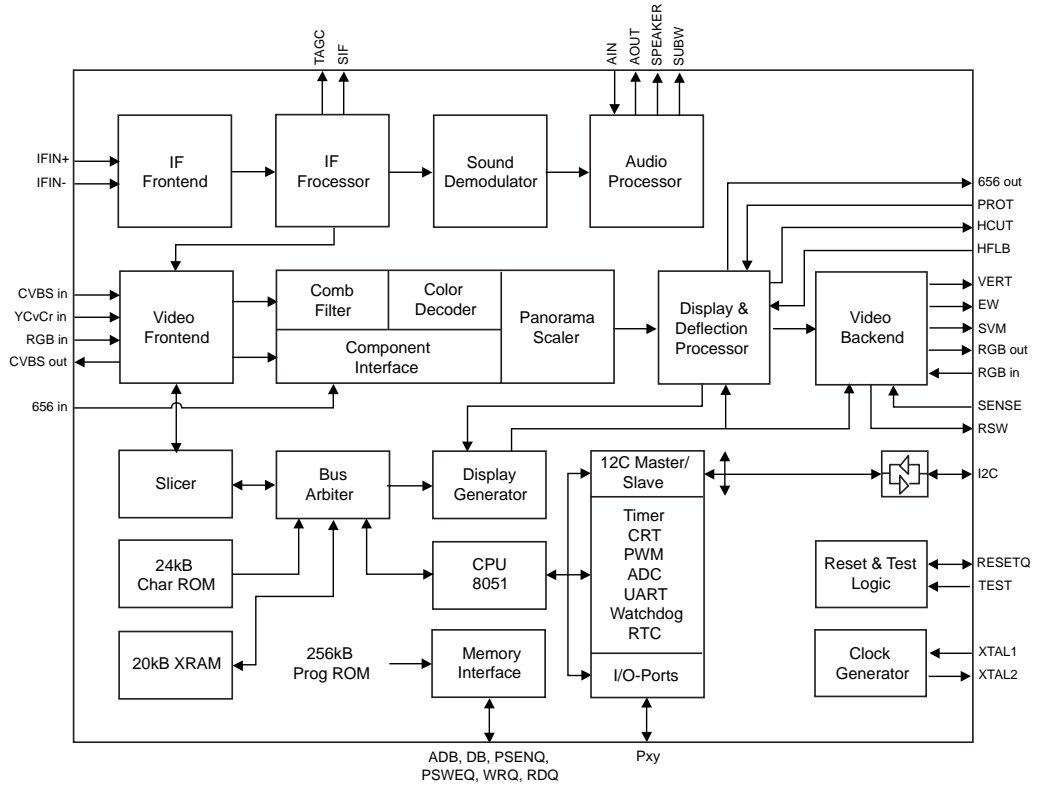


**IC PIN OUT (TW9918)**

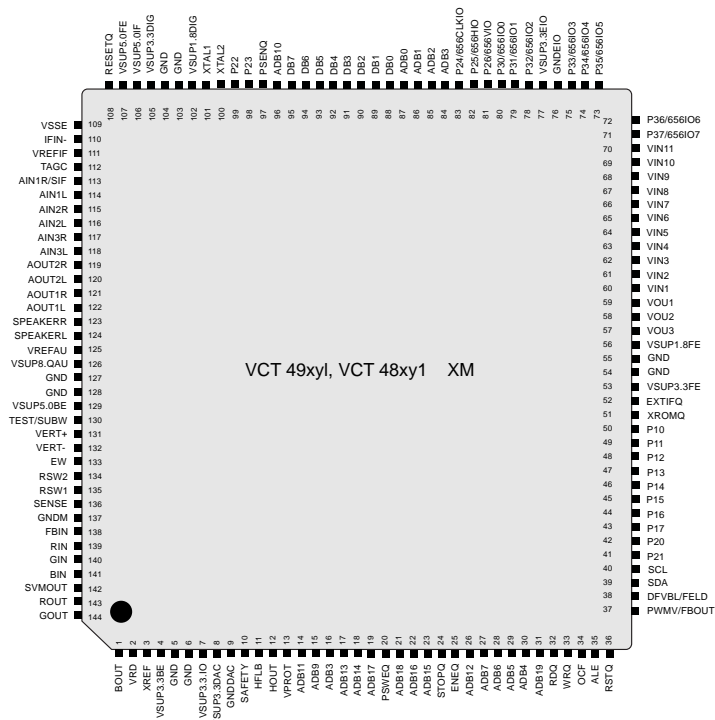




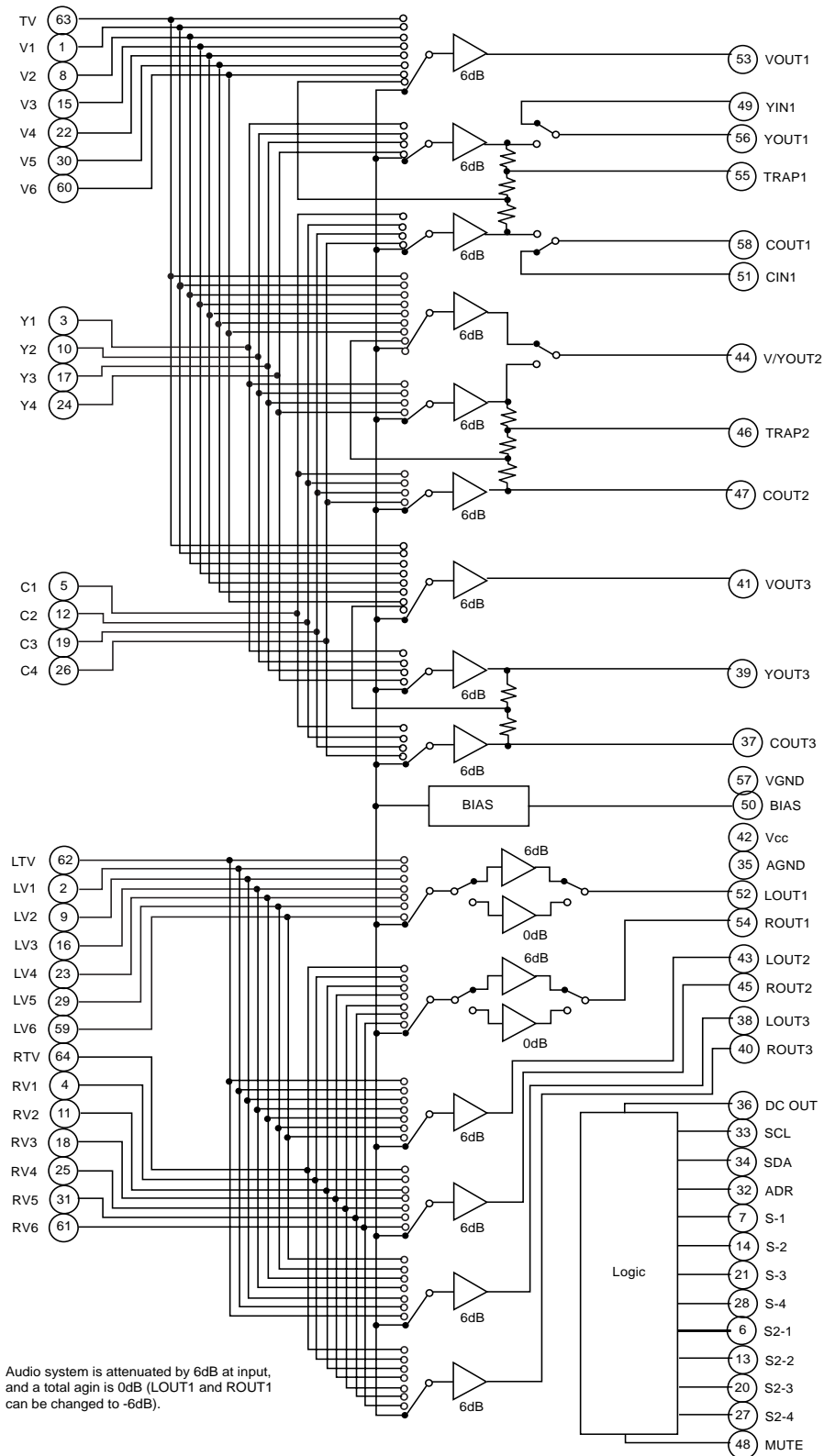
## IC BLOCK DIAGRAM (VCT49xy I)



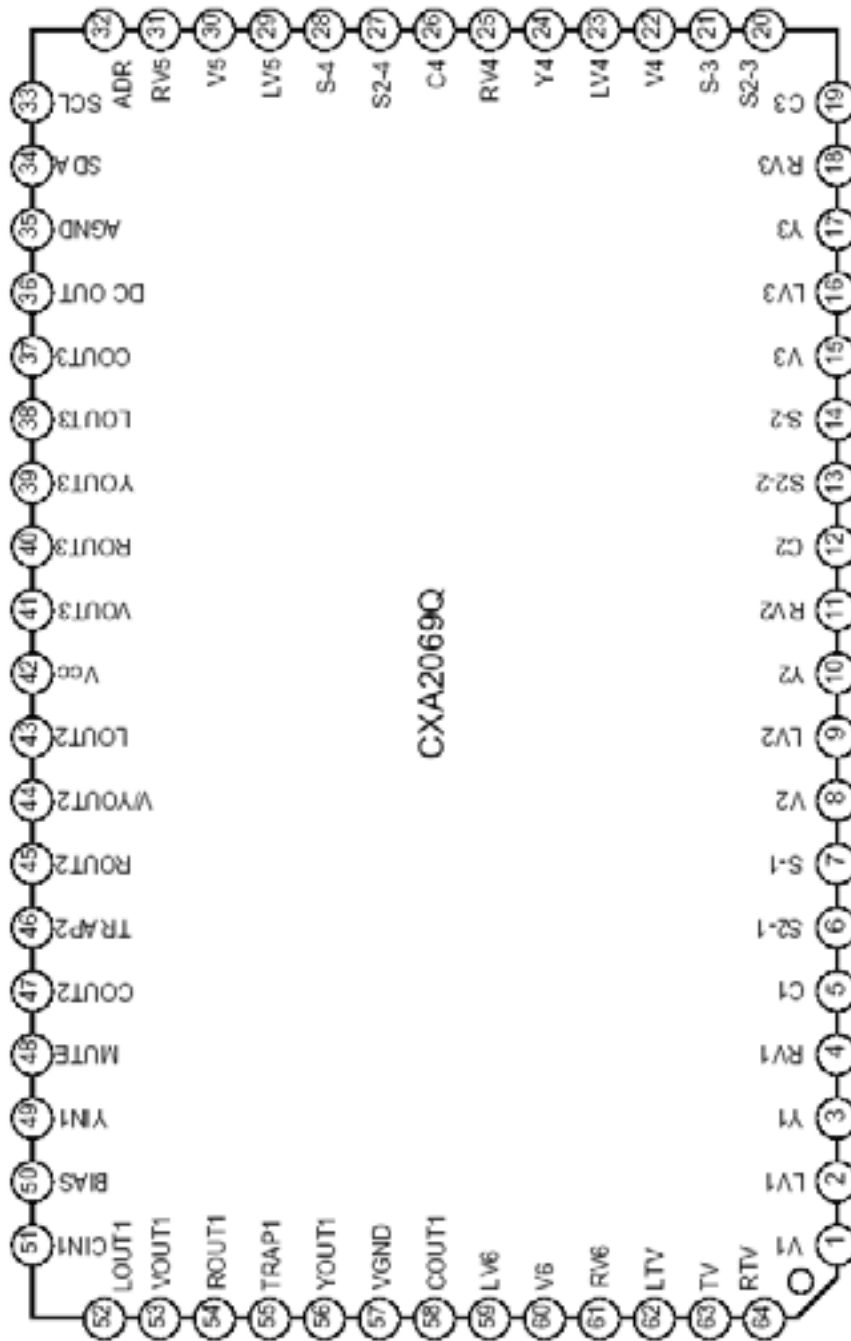
## IC PIC OUT (VCT49xyI)



## IC BLOCK DIAGRAM (CX2069Q)



IC PIN OUT (CXA209Q)



# General Specification

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

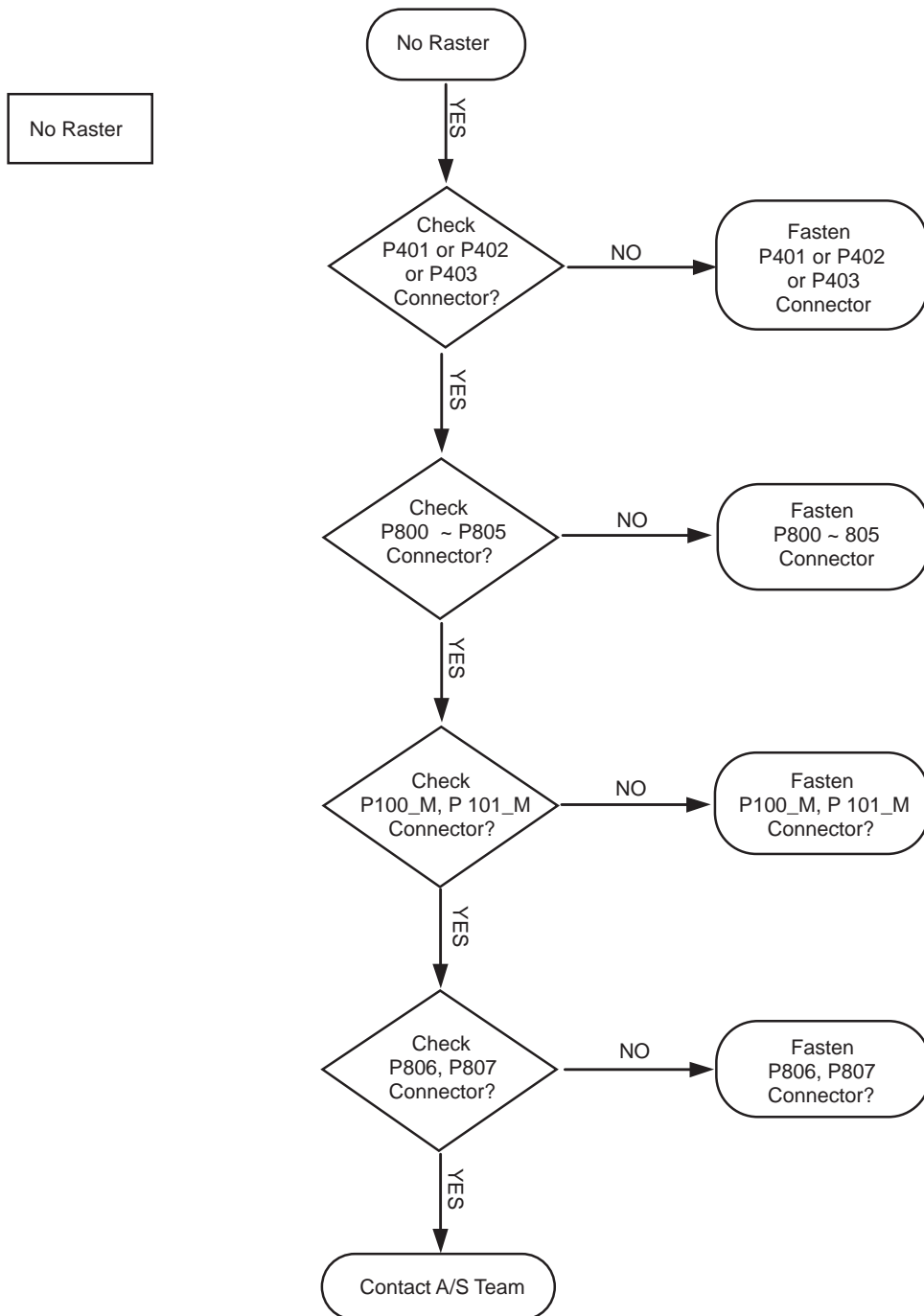
No	Resolution	H-freq(KHz)	V-freq.(Hz)	Pixel clock (MHz)	Proposed
1.	640x350	31.469	70.08	25.17	DOS
2.	720x400	31.469	70.08	28.32	DOS
3.	720x400	37.927	85.03	35.50	DOS
4.	640x480	31.469	59.94	25.17	VESA(VGA)
5.	640x480	37.861	72.80	31.50	VESA(VGA)
6.	640x480	37.500	75.00	31.50	VESA(VGA)
7.	640x480	43.269	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)

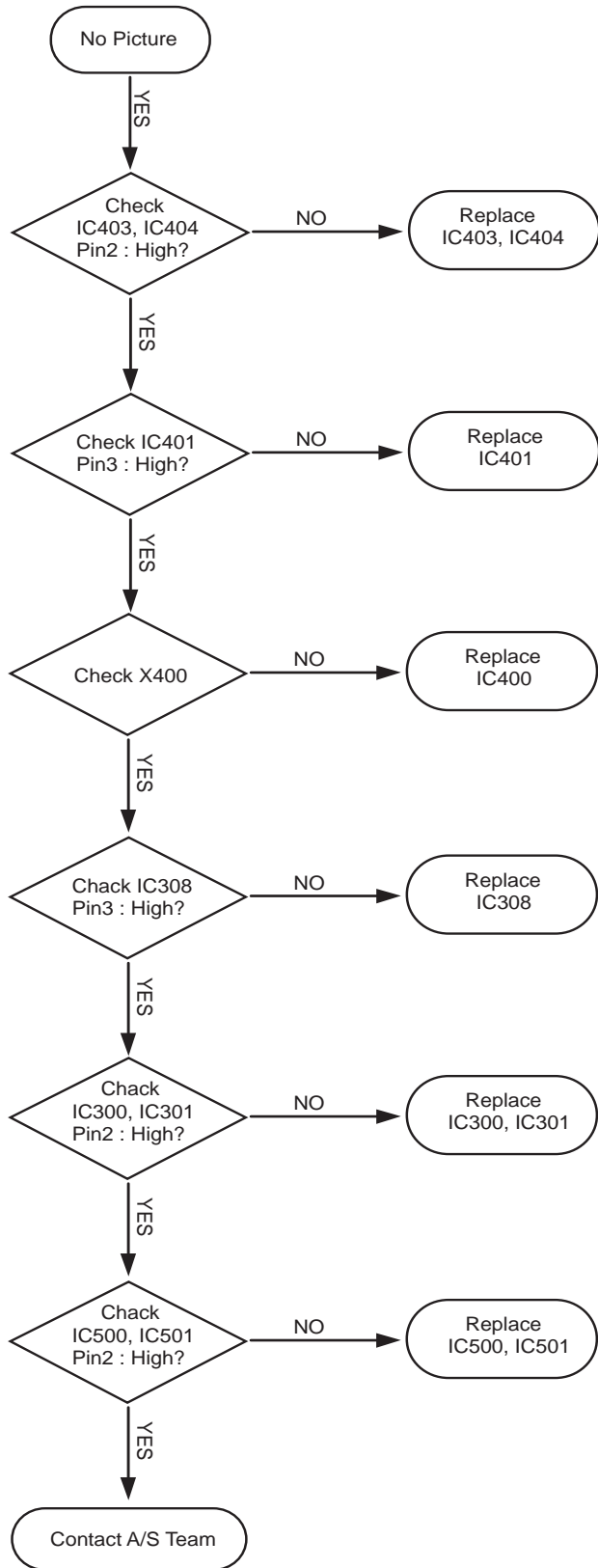
# TROUBLESHOOTING

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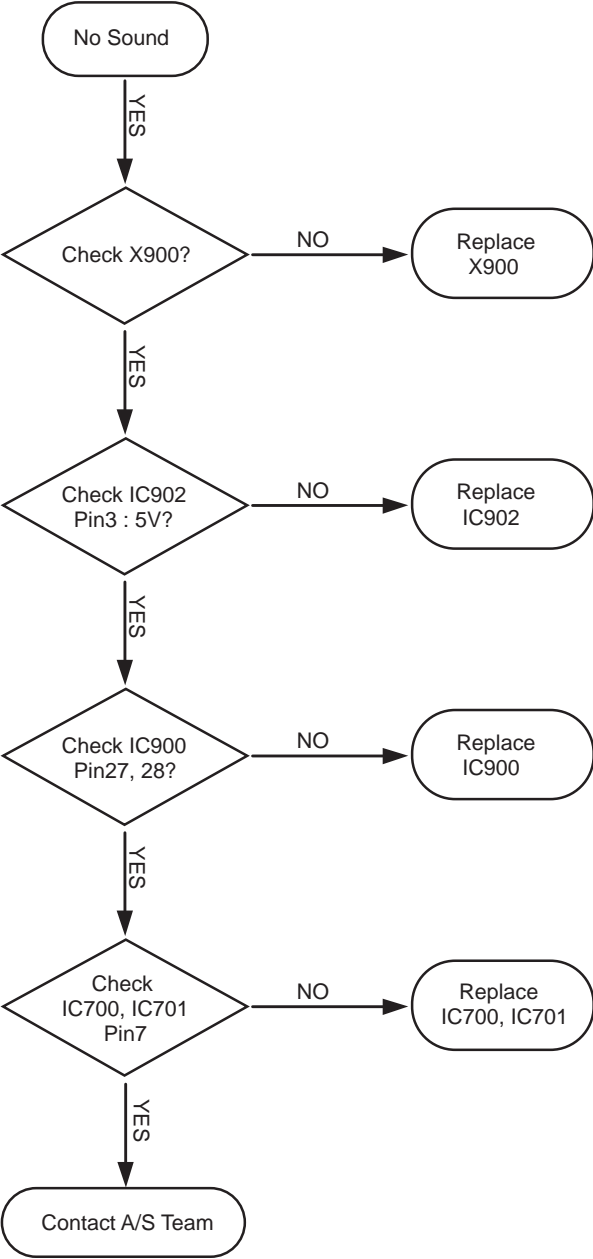




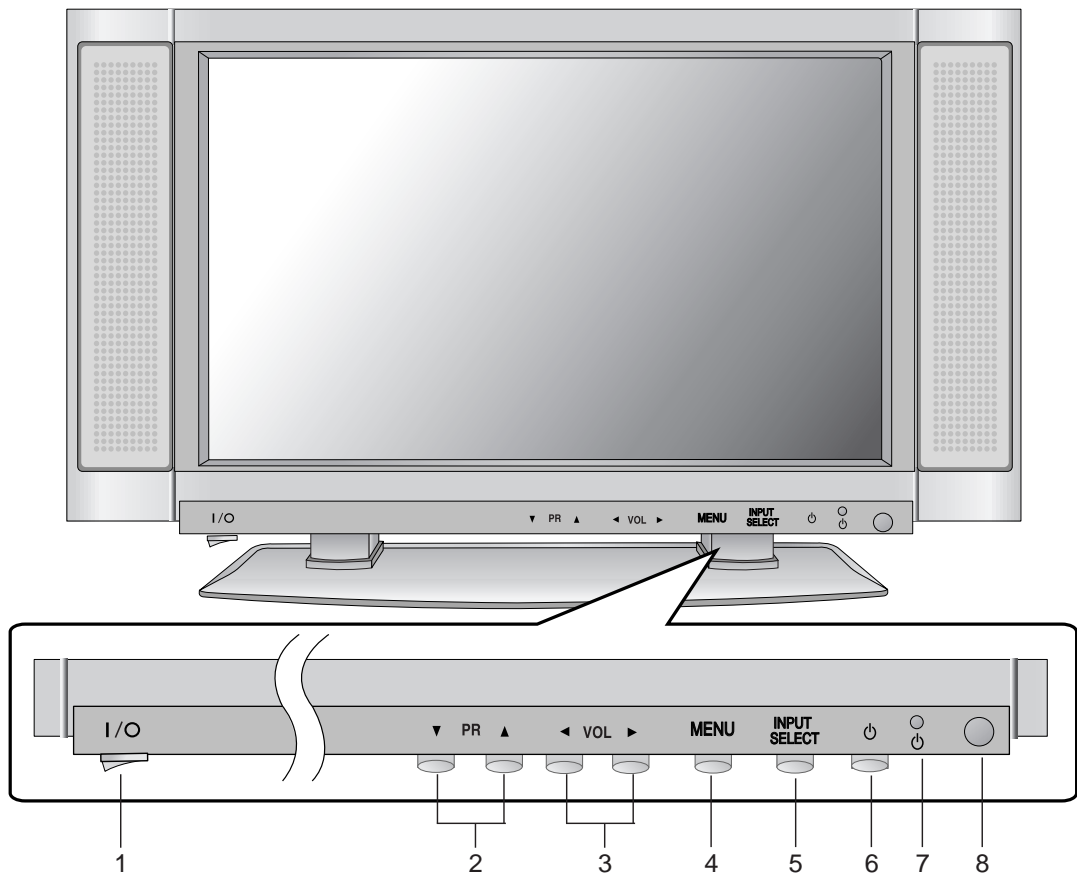
No Picture



No Sound

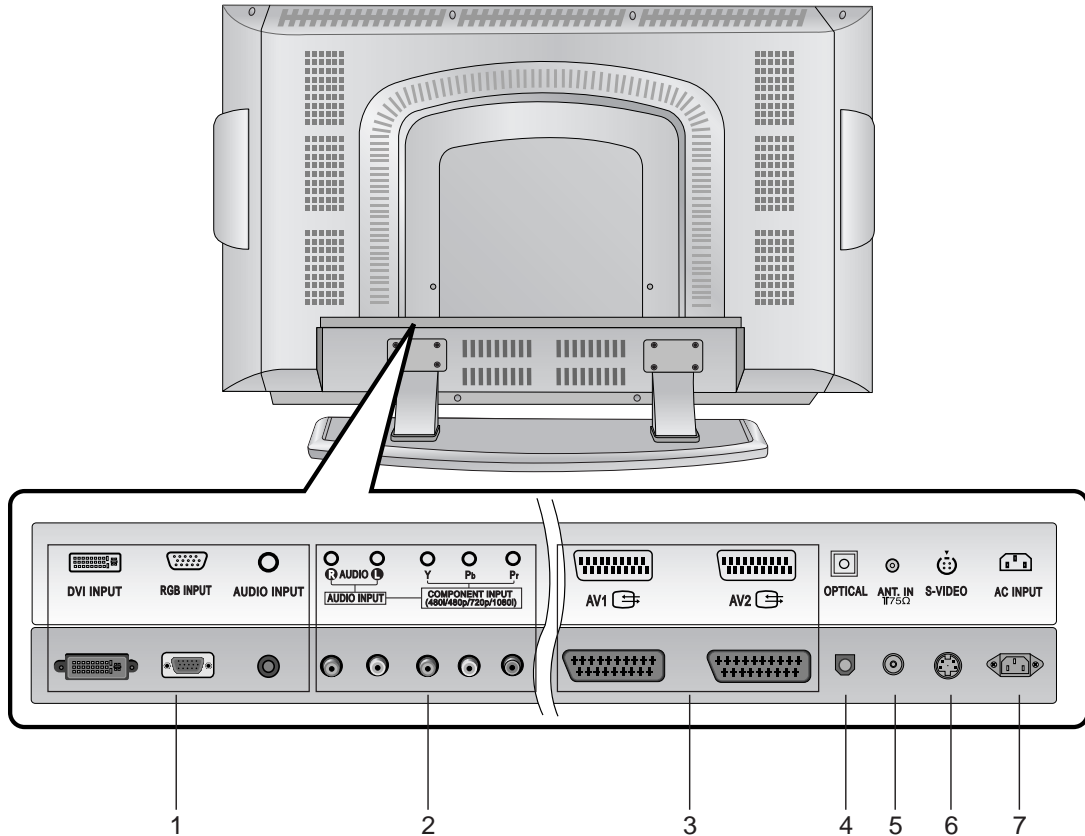


# CONTROLS OF FRONT PANEL



- 1. MAIN POWER ( I / O )**  
switches the set On or Off.
- 2. ▲ / ▼ (Programme Up/Down)**  
selects a programme or a menu item.  
switches the set On from standby.
- 3. ◀ / ▶ (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 (⏻)**  
switches the set On from standby or On to standby.
- 7. POWER/STANDBY INDICATOR (⦿)**  
illuminates red in standby mode.  
illuminates green when the set is switched On.
- 8. REMOTE CONTROL SENSOR (⦿)**  
illuminates green when the set is switched On.

# 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

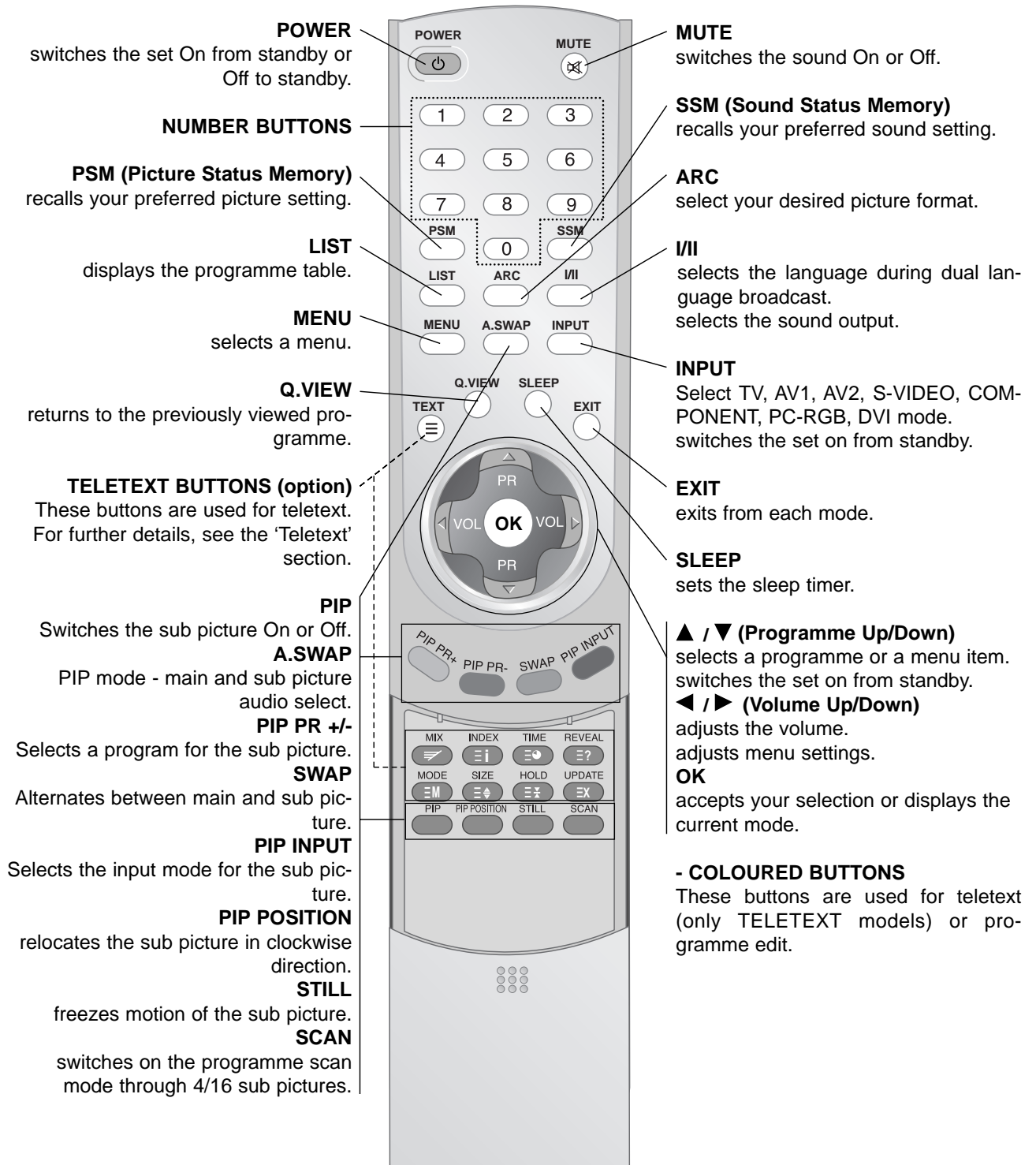
connect video out from an S-VIDEO VCR to the S-VIDEO input.

## 7. POWER CORD SOCKET

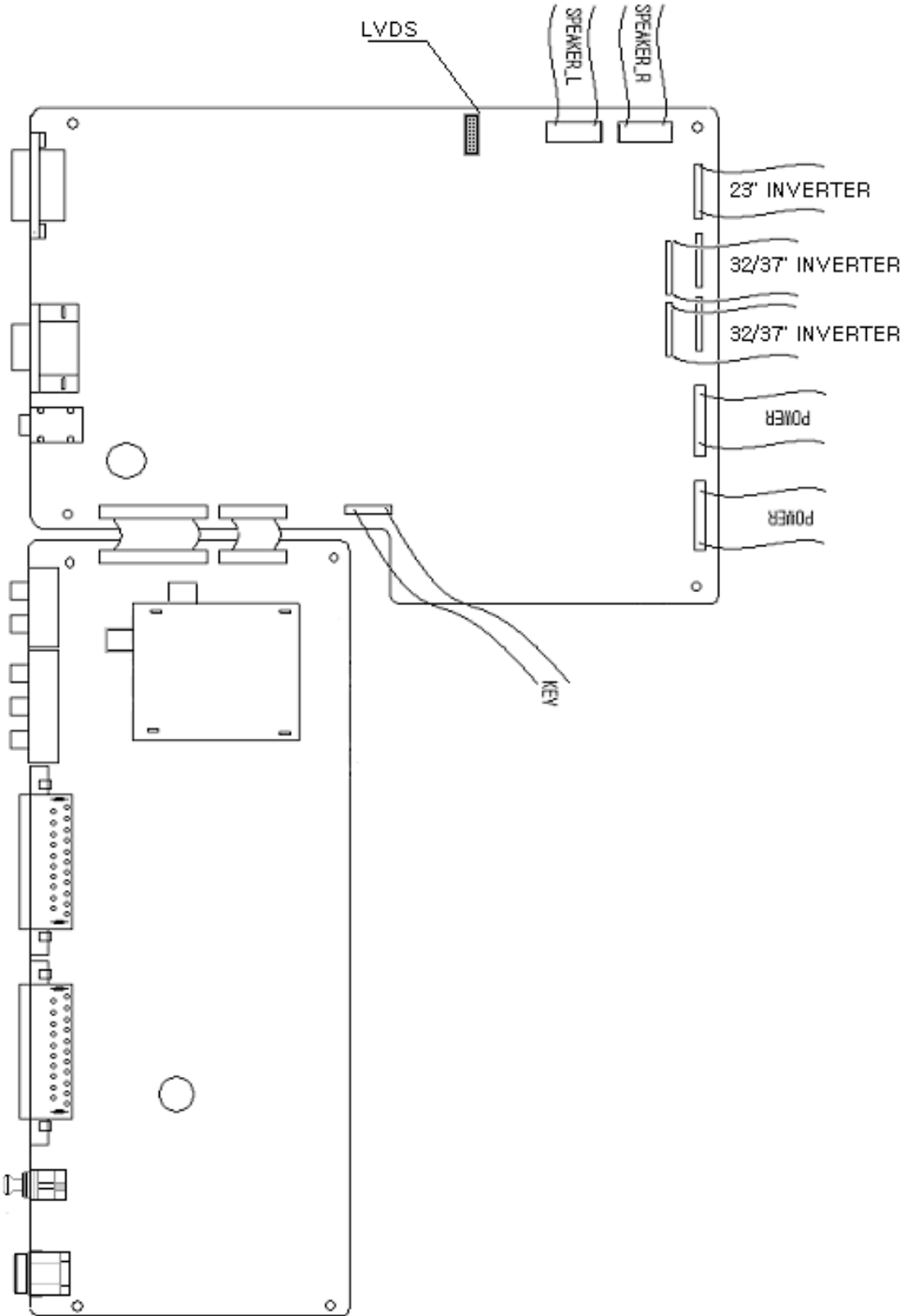
This set operates on an AC power. The voltage is indicated on the Specifications page. Never attempt to operate the set on DC power.

# 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.

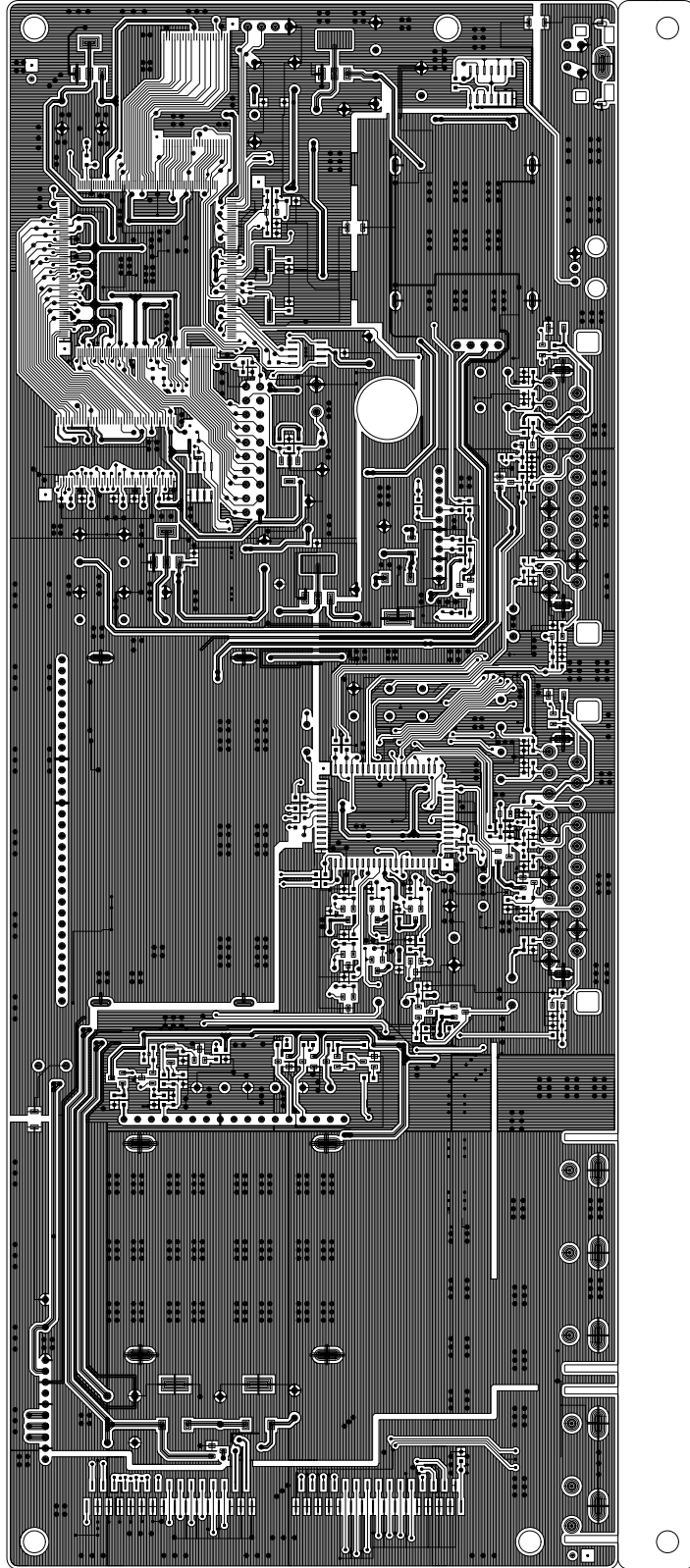


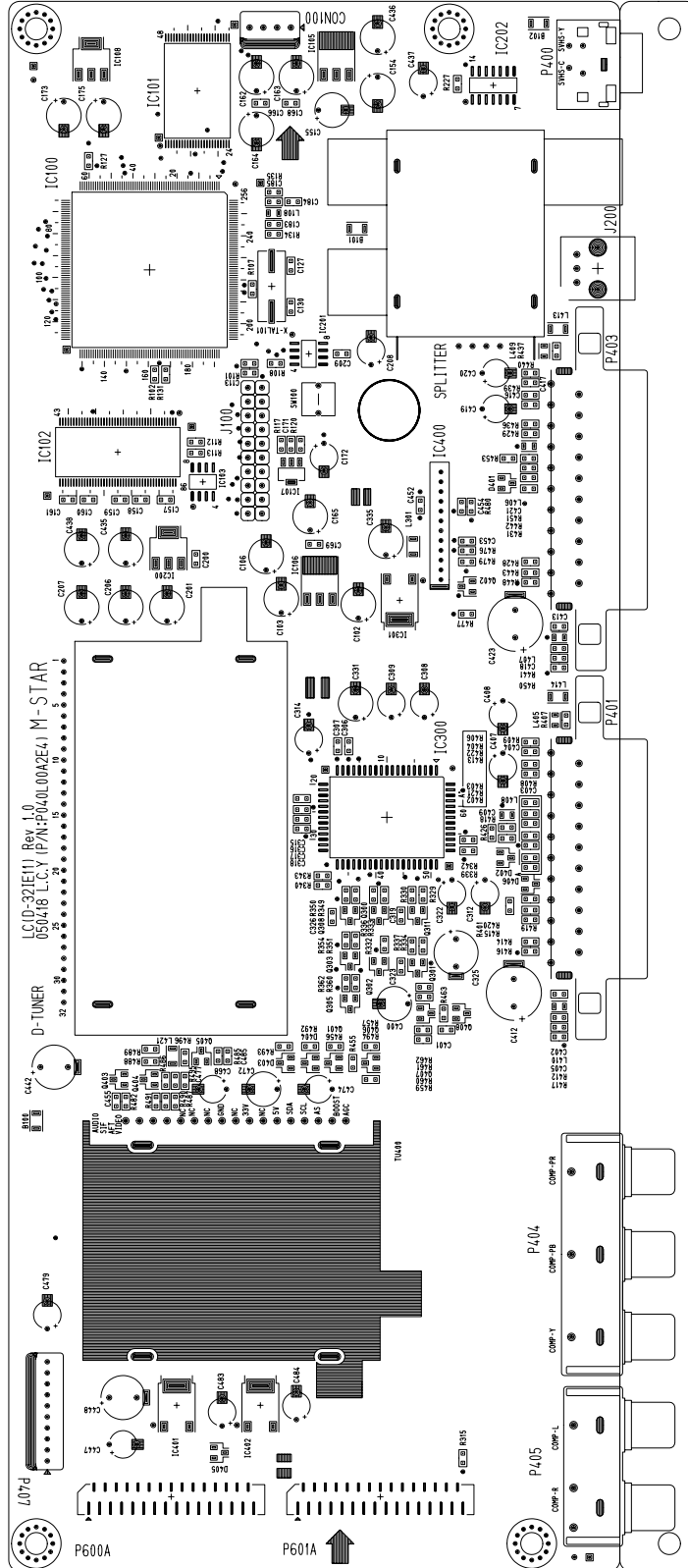
# CONNECTING DIAGRAM



# PCB LAYOUT

AV TOP PATTEN

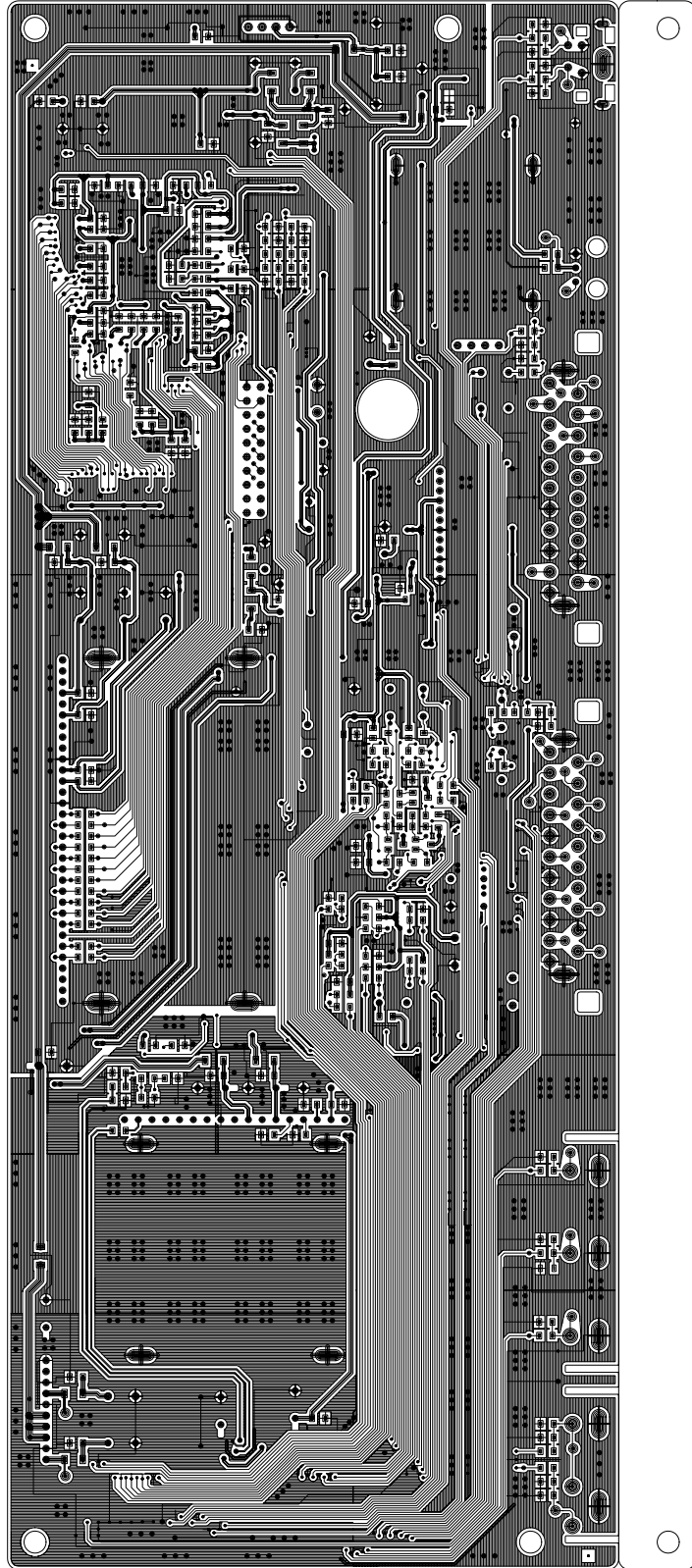


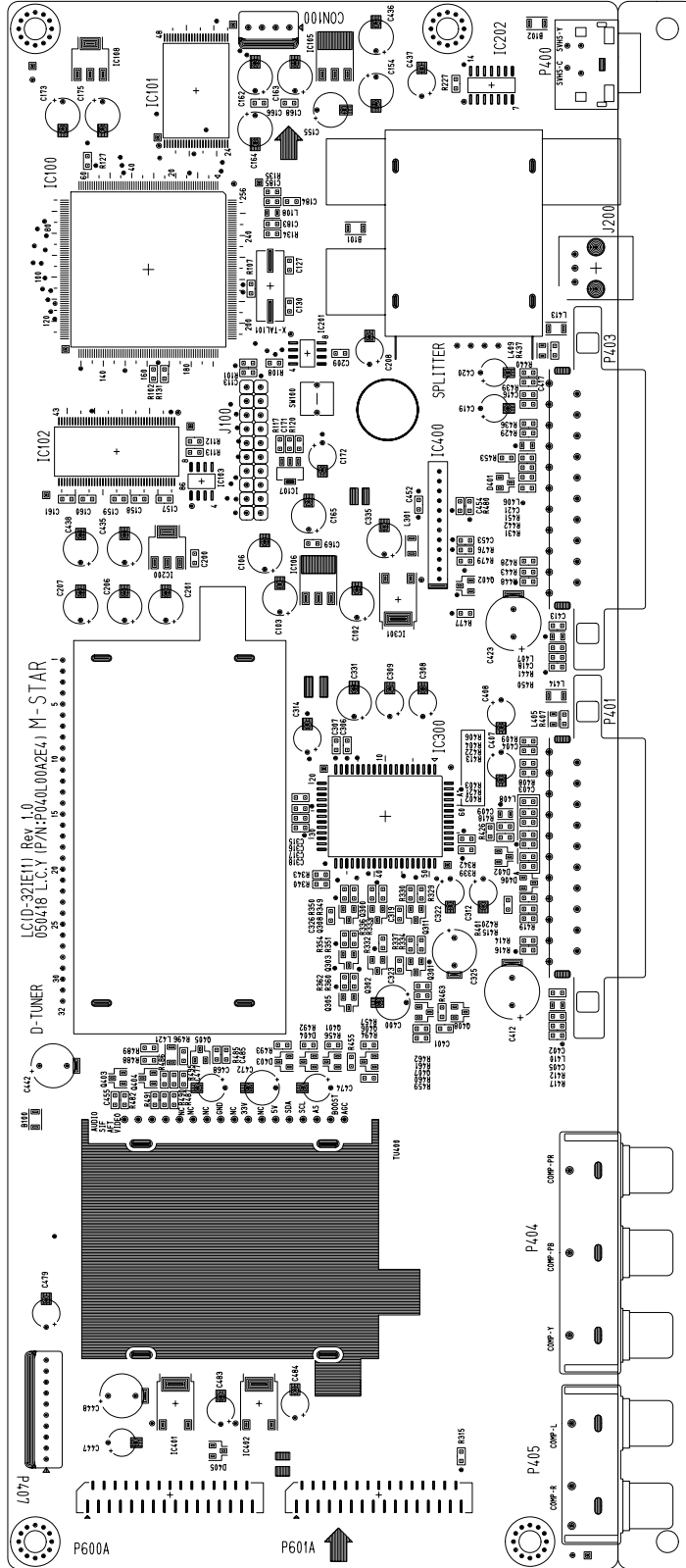




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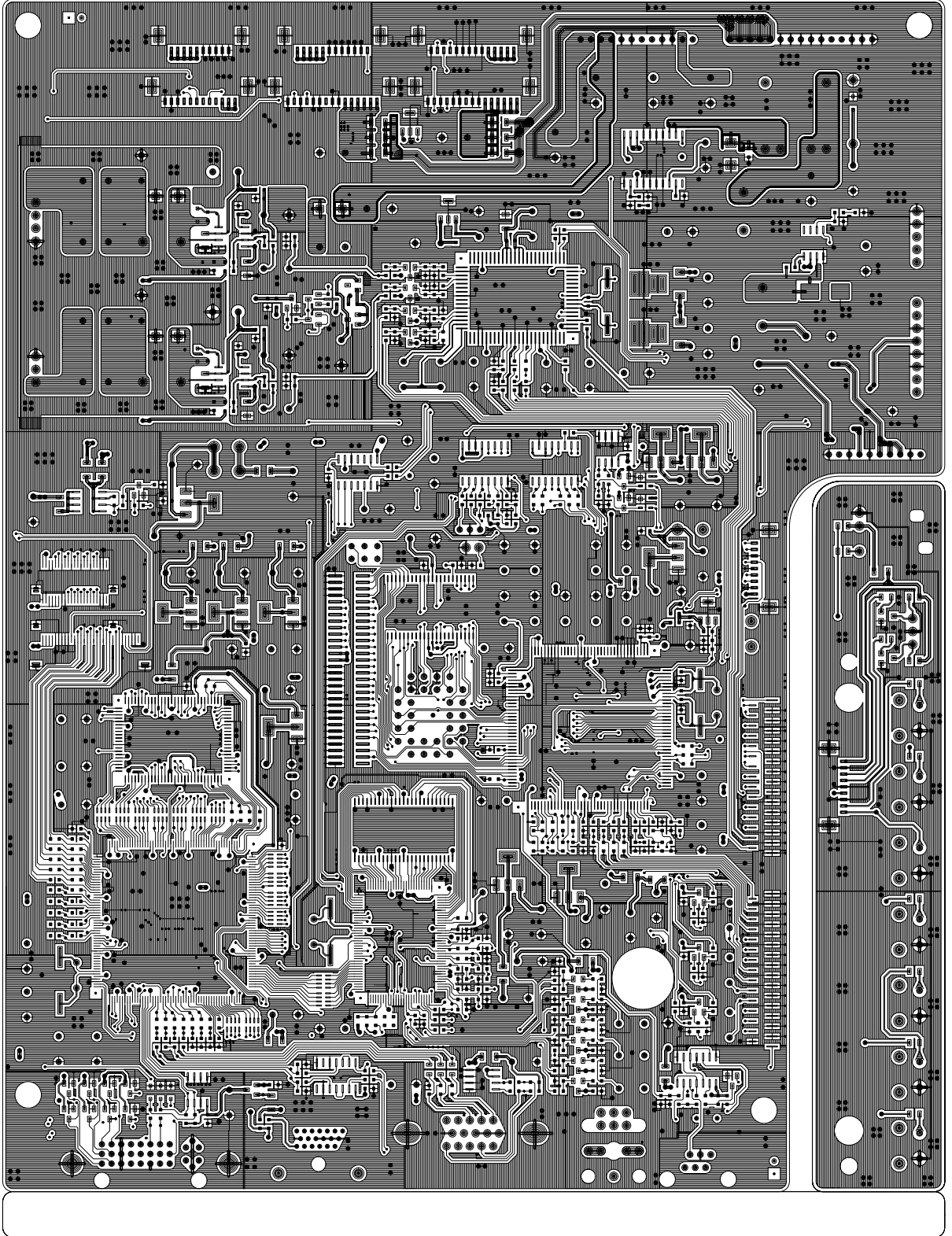
AV BOTTOM PATTEN



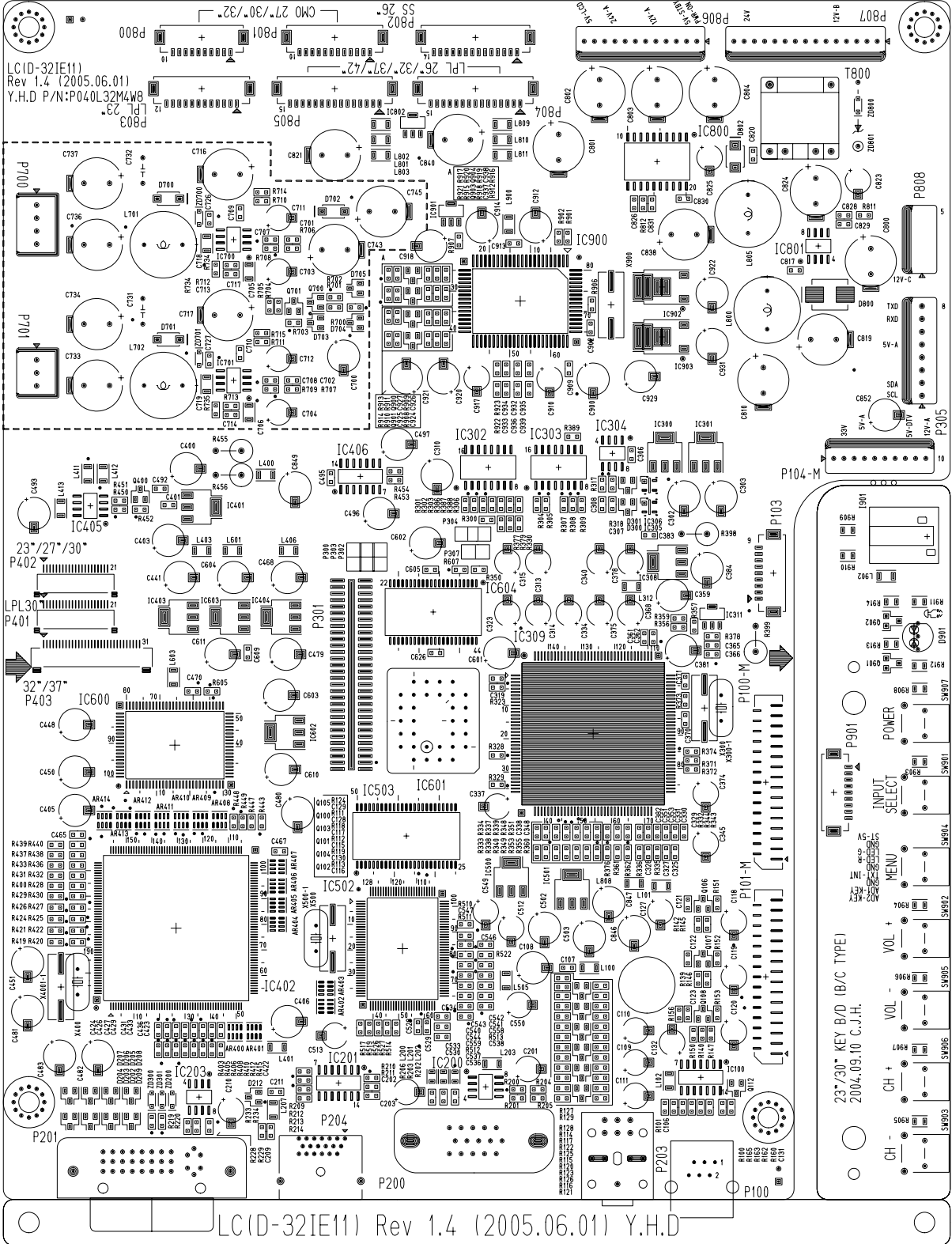


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■ MAIN TOP PATTEN

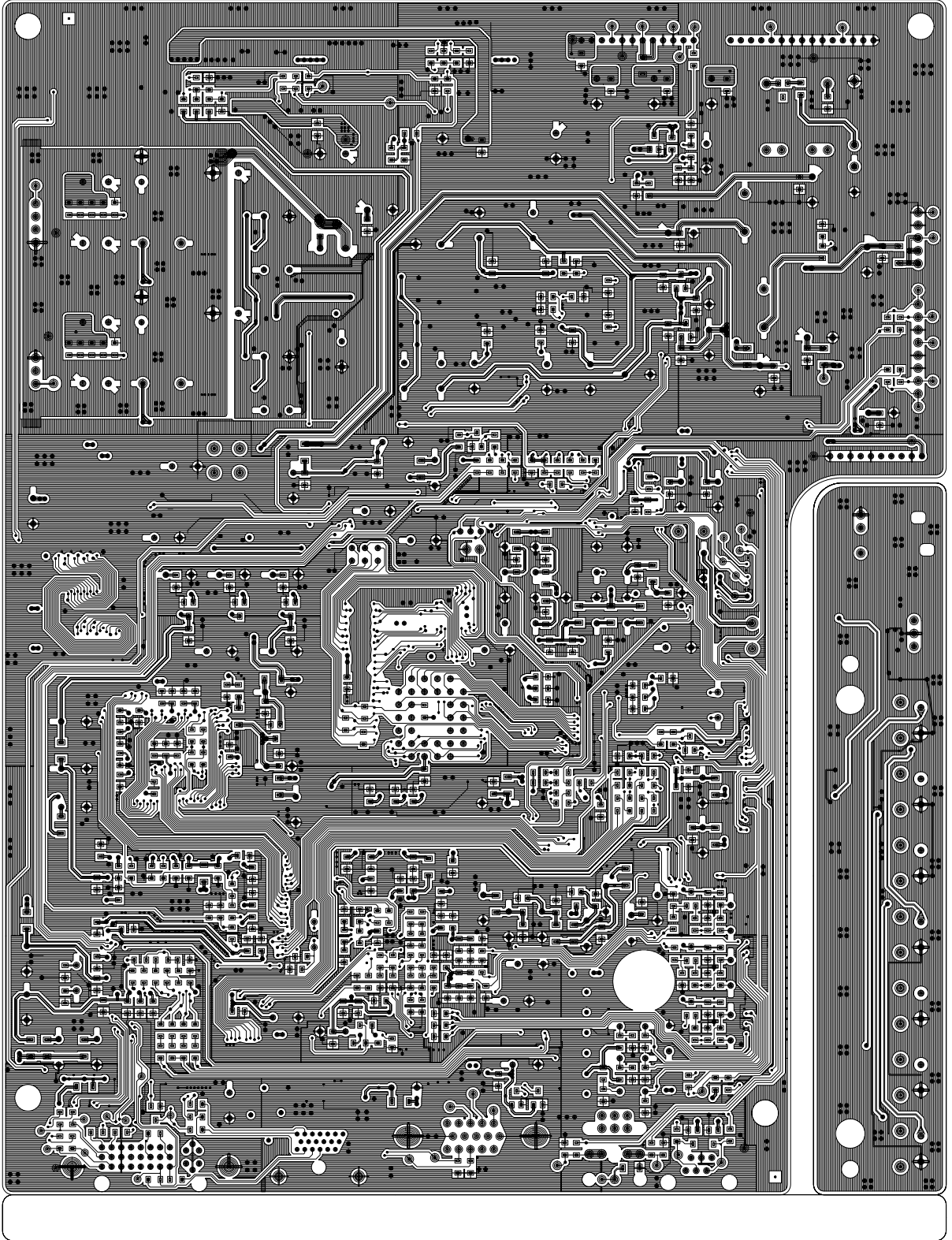


MAIN TOP SILK

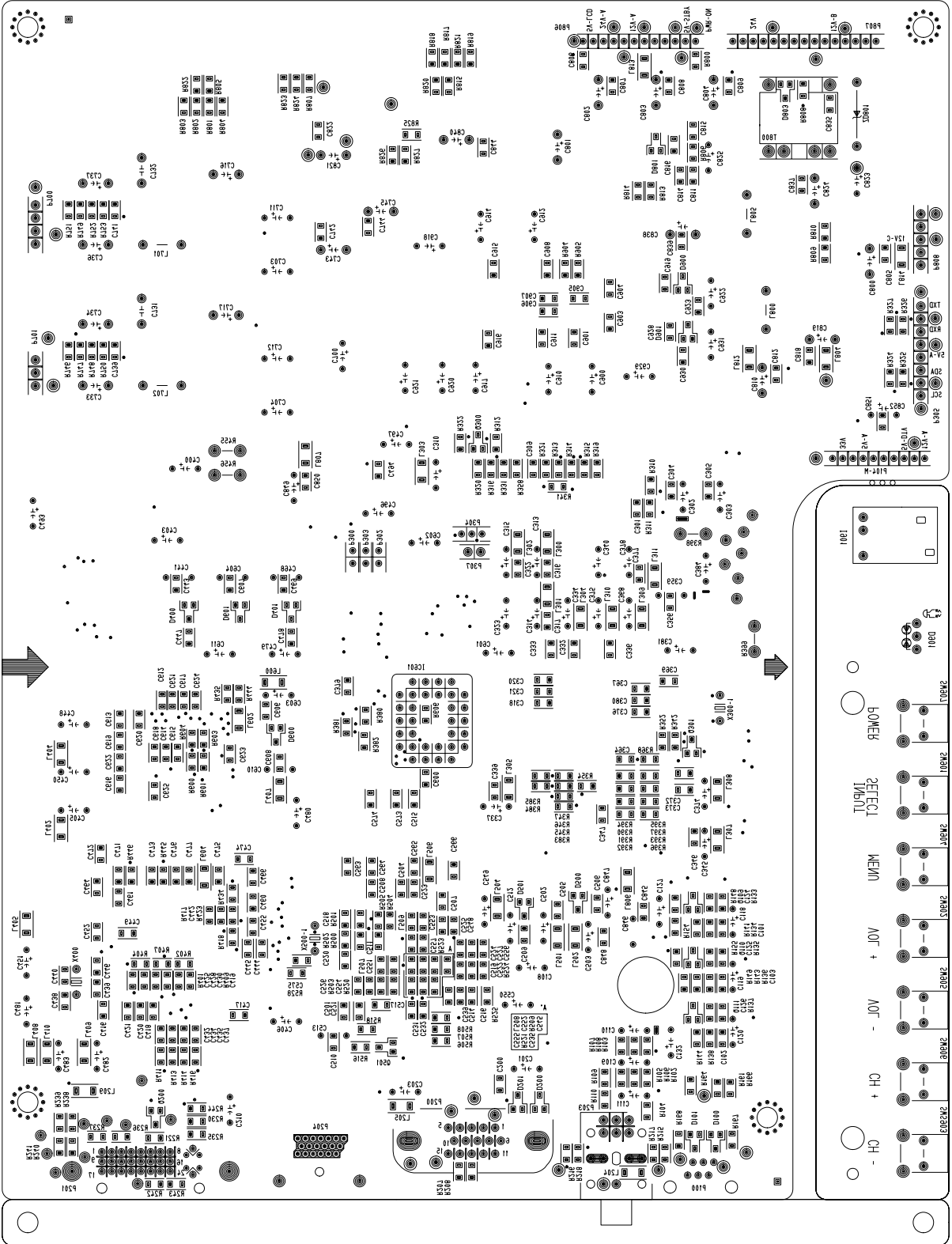


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**MAIN BOTTOM PATTEN**



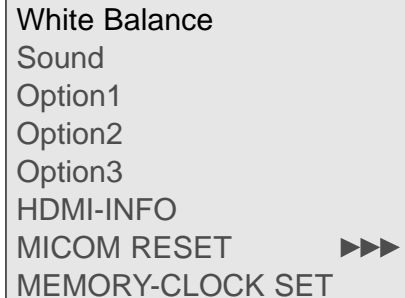
# MAIN BOTTOM SILK



# 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
Sound
Option1
Option2
Option3
HDMI-INFO
MICOM RESET
MEMORY-CLOCK SET
```

## 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,COMPONENT)
- R-Cutoff,G-Cutoff,B-Cutoff : Adjusting Red,Green,Blue Gain (Input Mode:PC-RGB,DVI,COMPONENT)
- Press "**PR+**" or "**PR-**" key : Select Sub Menu
- Press "**VOL+**" or "**VOL-**" : Adjusting Value
- Press "**Menu**" key : return Factory menu
- Press "**Exit**" key : exit



```
Auto-Cutoff
R-Drive
G-Drive
B-Drive
R-Cutoff      137
G-Cutoff      194
B-Cutoff      194
```

## 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



```
Dual          1
A2 Stereo     1
Dolby         1
Woofer        1
SC Prescale   37
FM Prescale   19
Nicam Prescale 70
```

## 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		

Text	1
TXT List mode	1
TXT-TOP	1
TXT-ACMS	1
DTV-Text	0
GAME	0
TXT-Lang	0
West Europe	

## 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

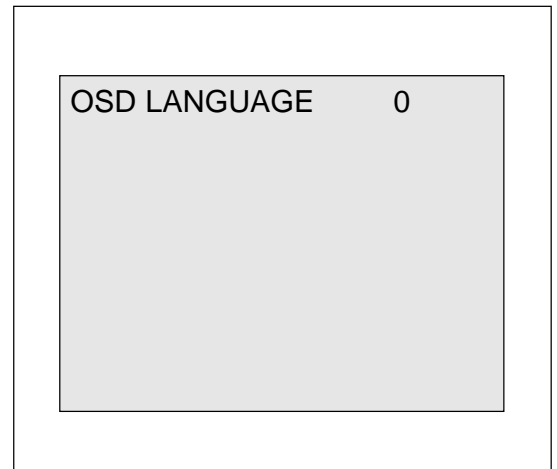
200PR	0
SYSTEM BG/I/DK/M	2



### OPTION3

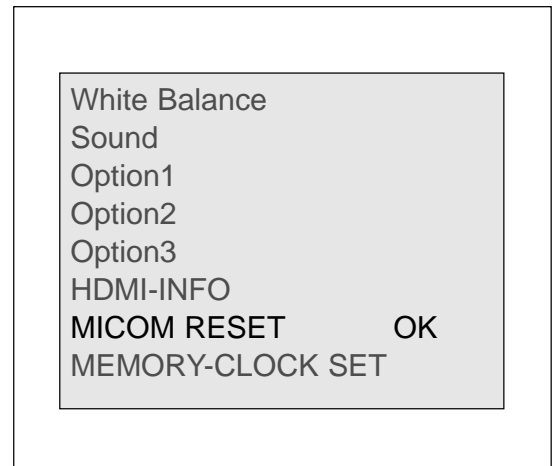
- enter to Factory menu
- Select menu
- Press "OK" key or "VOL +" key
- Press "PR+" or "PR-" key : Select Sub Menu
- Press "VOL+" or "VOL-" : Adjusting Value
- Press "Menu" key : return Factory menu
- Press "Exit" key : exit
- OSD Language Table

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



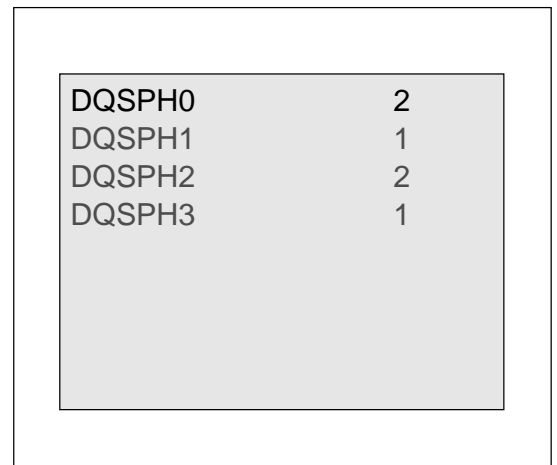
### MICOM RESET

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

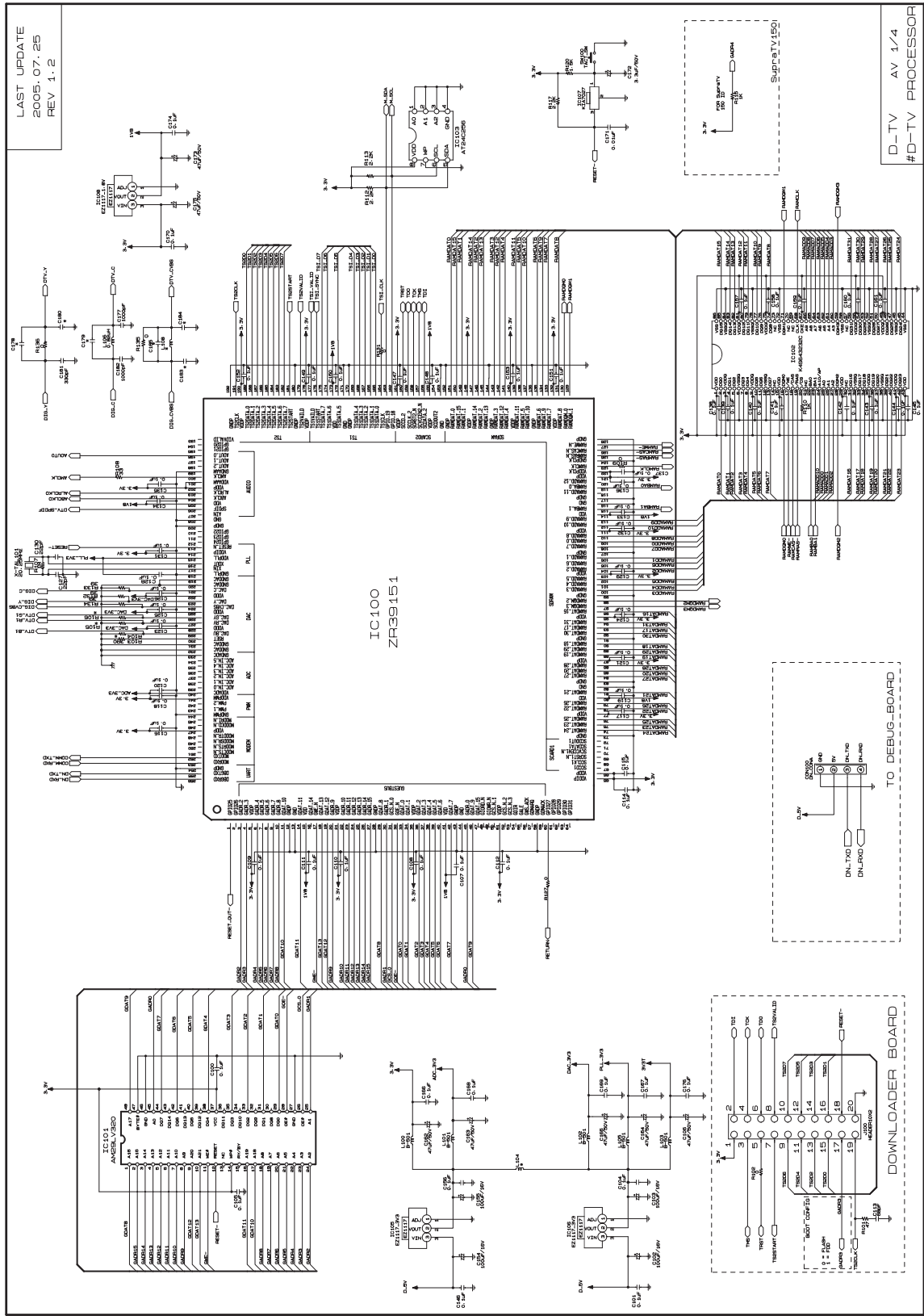


### MEMORY-CLOCK SET

- 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
- Recomend : Do Not Change!

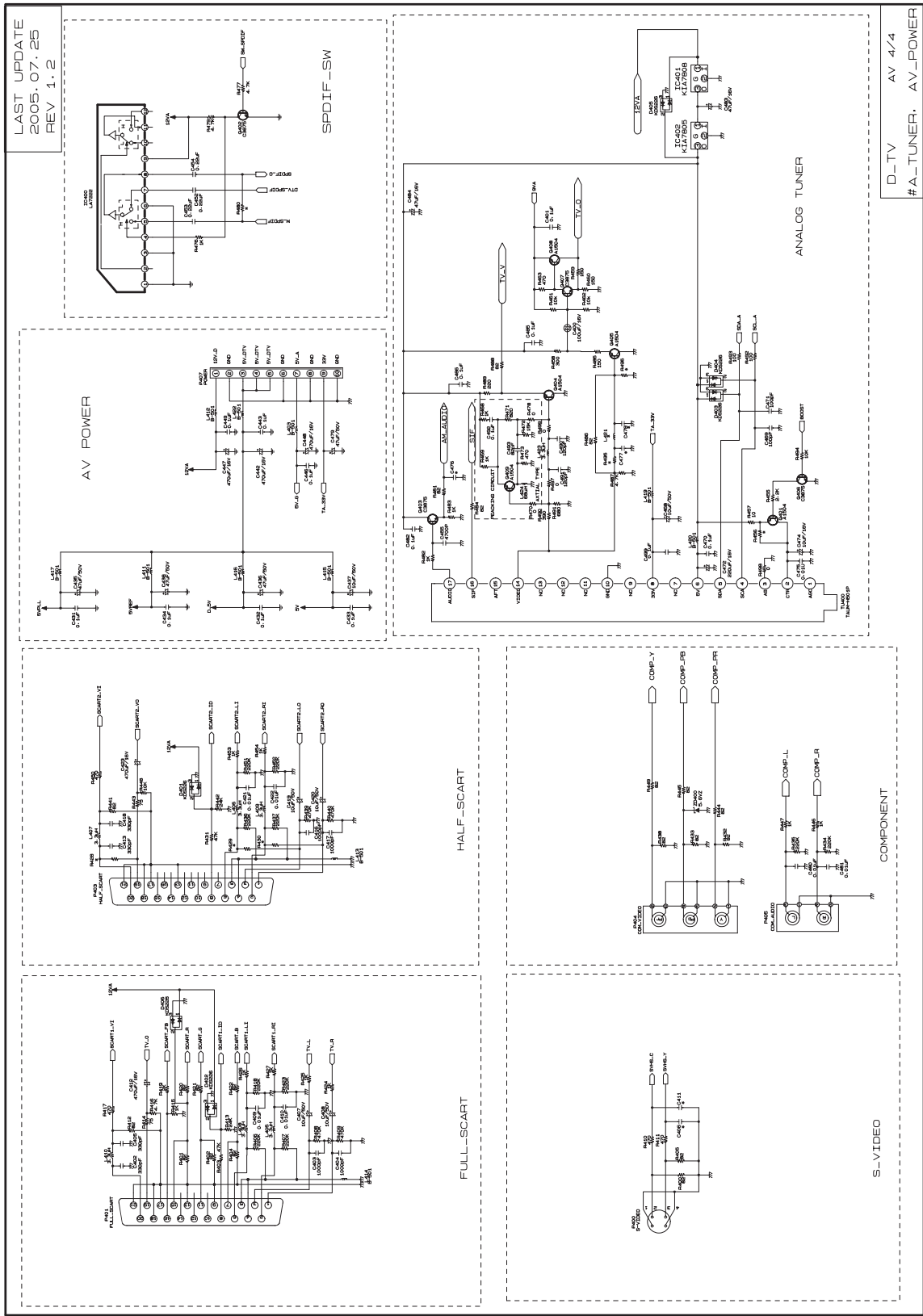


# SCHEMATIC DIAGRAM





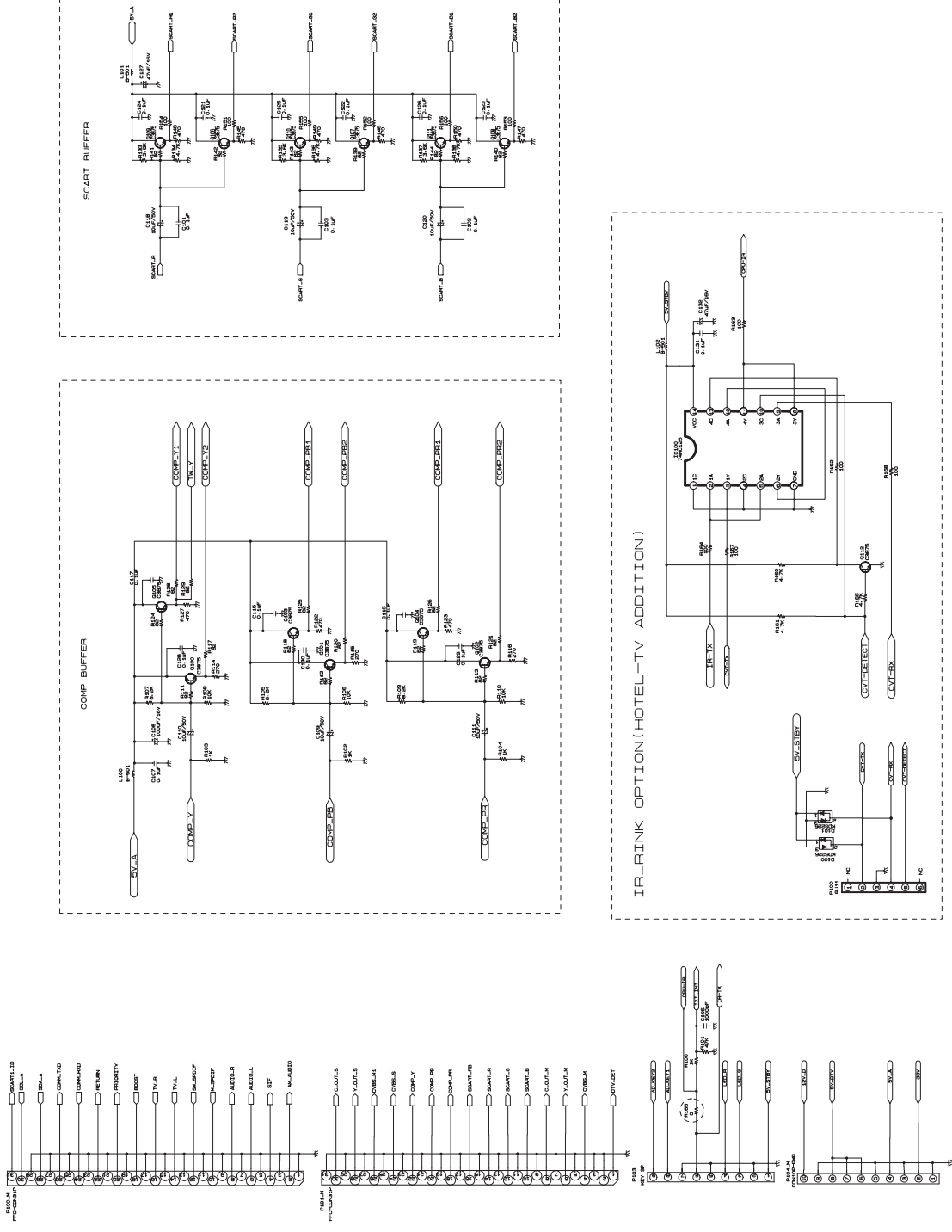




LAST UPDATE  
2005.07.25  
REV 1.2

D-TV AV 4/4  
#A-TUNER- AV-POWER

LAST UPDATE  
2006.07.28  
REV 1.5

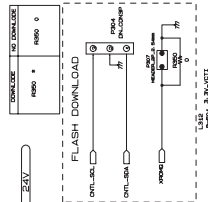


LC-32IE11  
CONNECTOR  
MAIN 1/9



LAST UPDATE  
2005.07.28  
REV 1.5

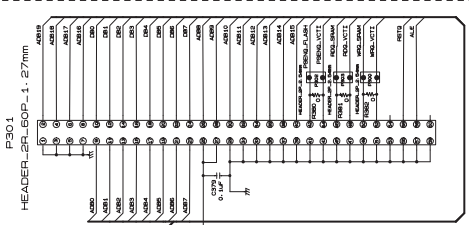
RESET	5V_A	3V	3V
RESET	5V_A	3V	3V
RESET	5V_A	3V	3V
RESET	5V_A	3V	3V



NO DOWNLOAD	NO DOWNLOAD
NO DOWNLOAD	NO DOWNLOAD
NO DOWNLOAD	NO DOWNLOAD
NO DOWNLOAD	NO DOWNLOAD

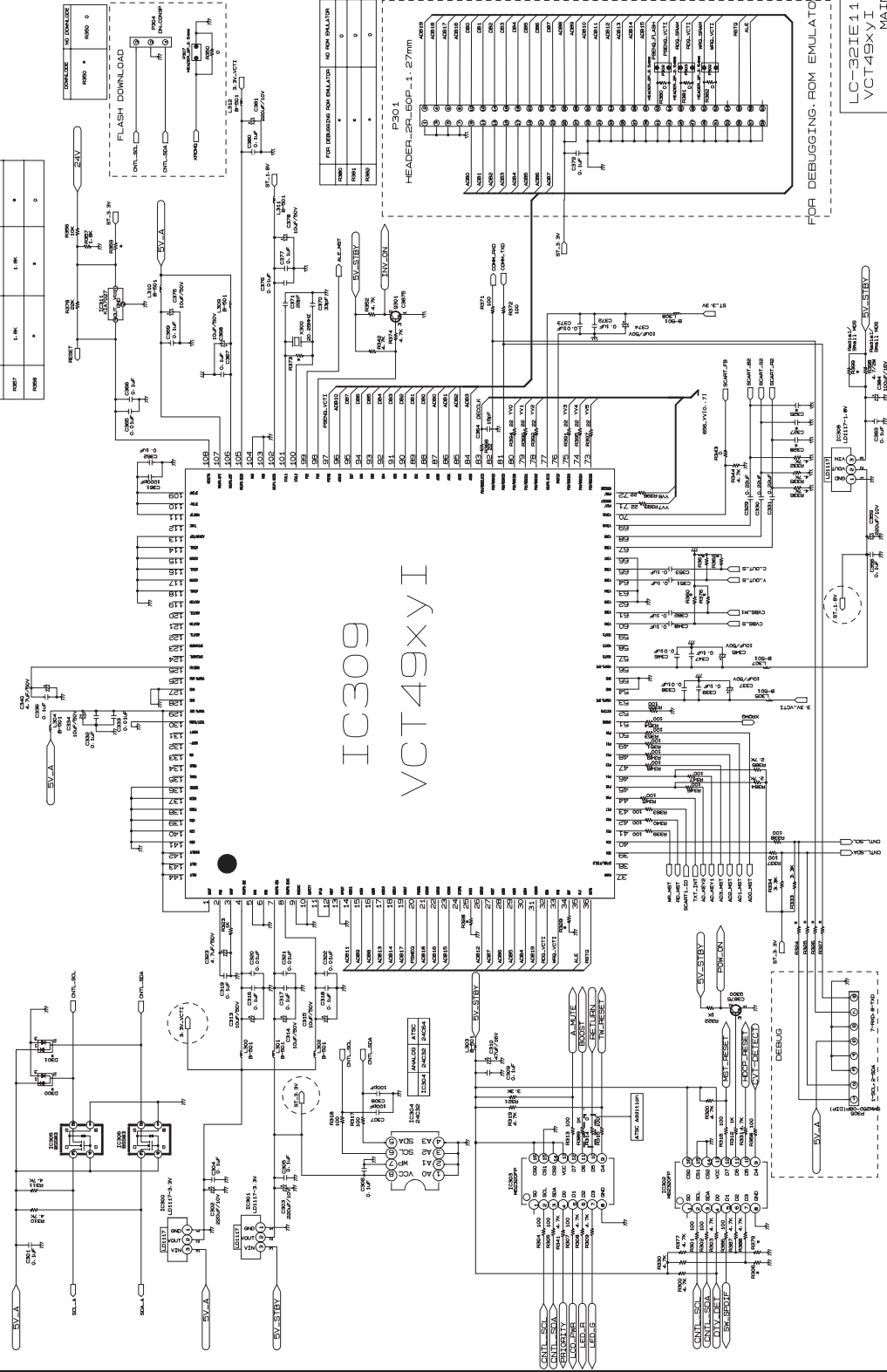
NO DOWNLOAD	NO DOWNLOAD
NO DOWNLOAD	NO DOWNLOAD
NO DOWNLOAD	NO DOWNLOAD
NO DOWNLOAD	NO DOWNLOAD

# IC309 VCT49XYI



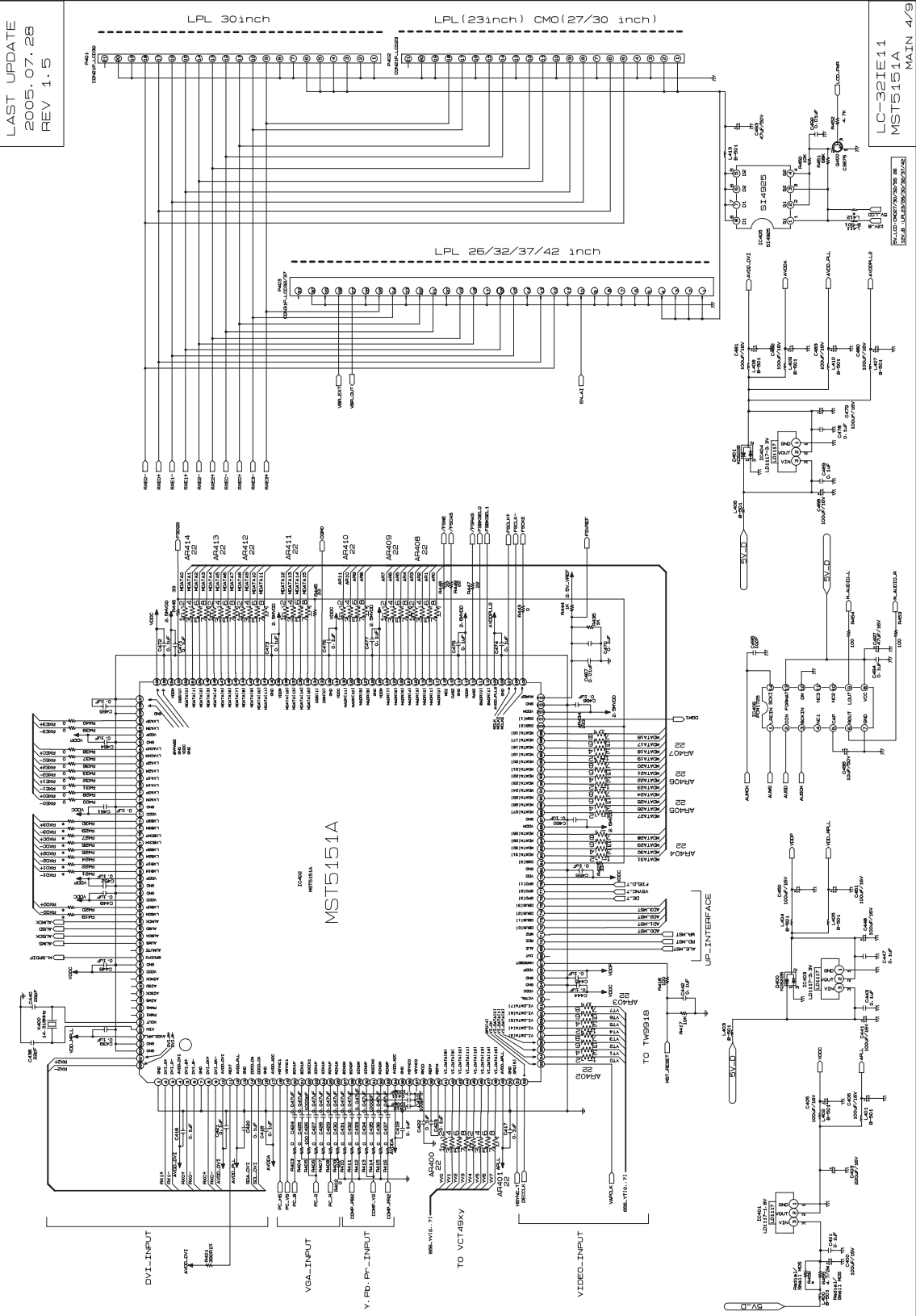
FOR DEBUGGING ROM EMULATOR

LC-32IE11  
VCT49XYI  
MAIN 3/3



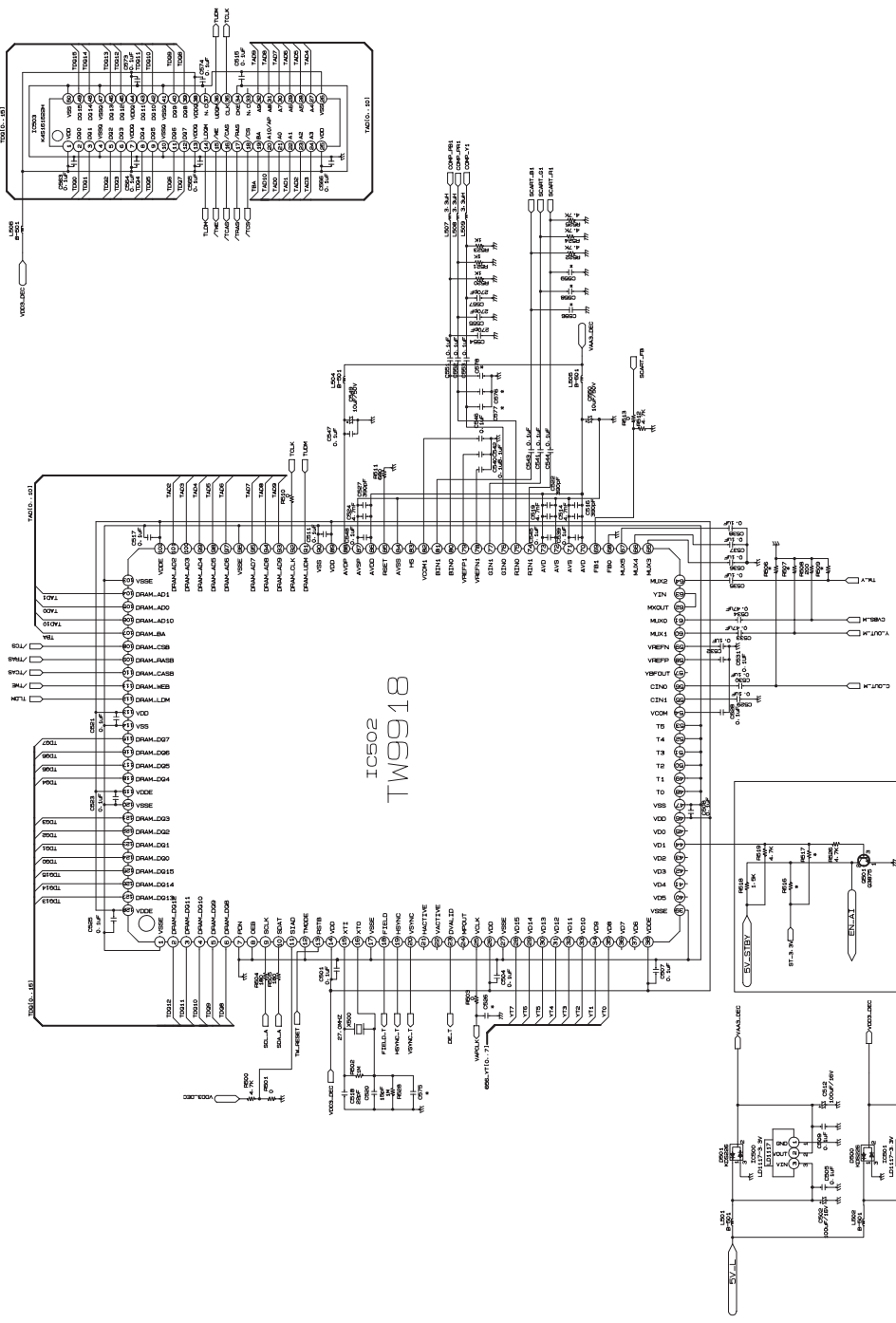


LAST UPDATE  
2005.07.28  
REV 1.5



LC-32IE11  
MST5151A  
MAIN 4/9

LAST UPDATE  
2005.07.28  
REV 1.5

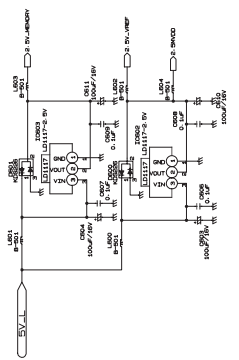
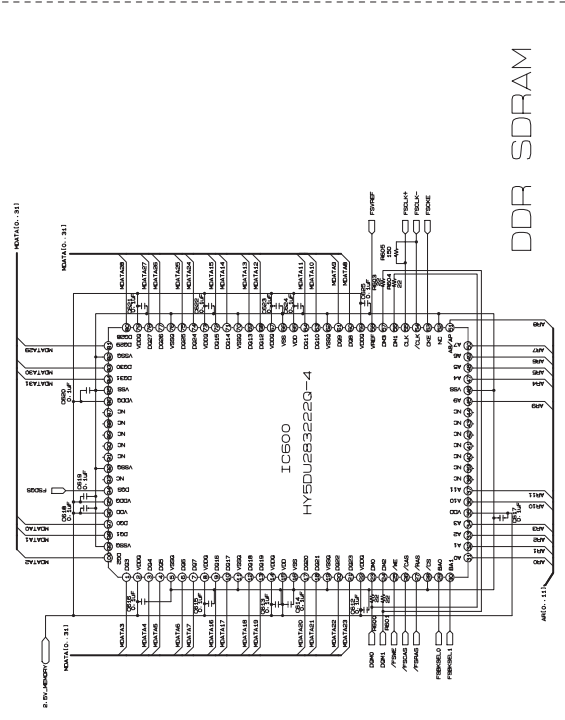
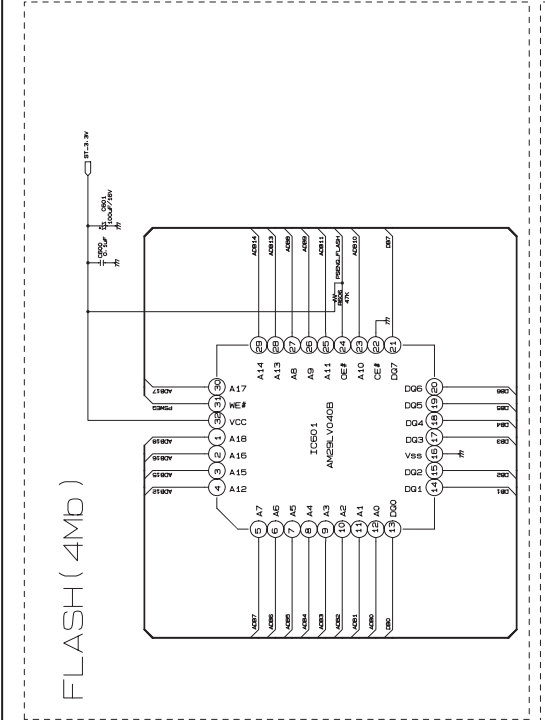
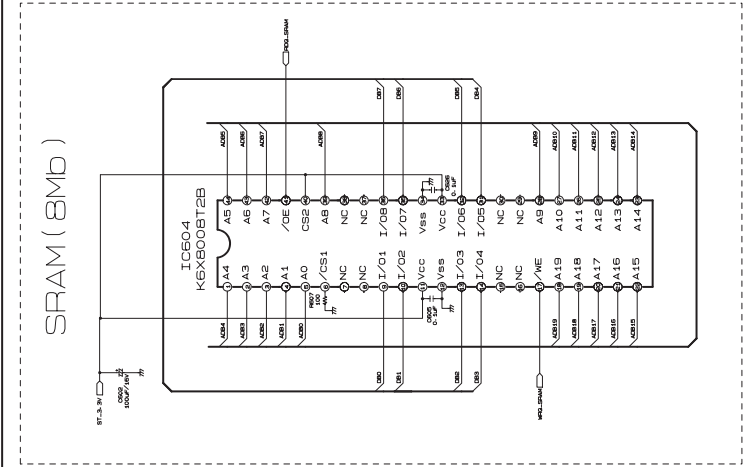


IC502  
TW9918

AI ADDITION

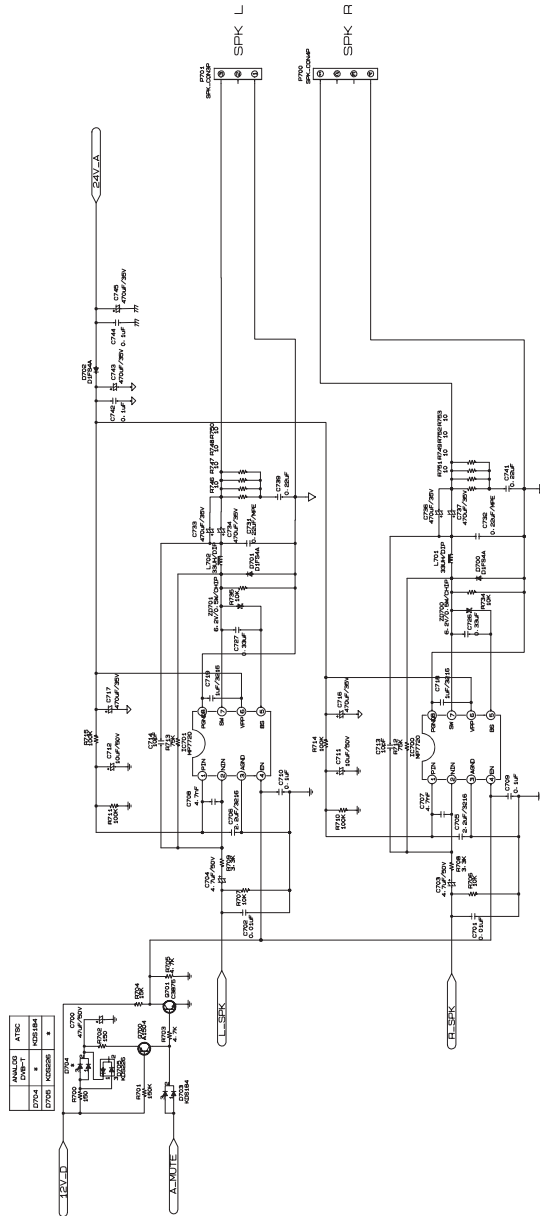
LC-32IE11  
TW9918  
MAIN 5/9

LAST UPDATE  
2005.07.28  
REV 1.5

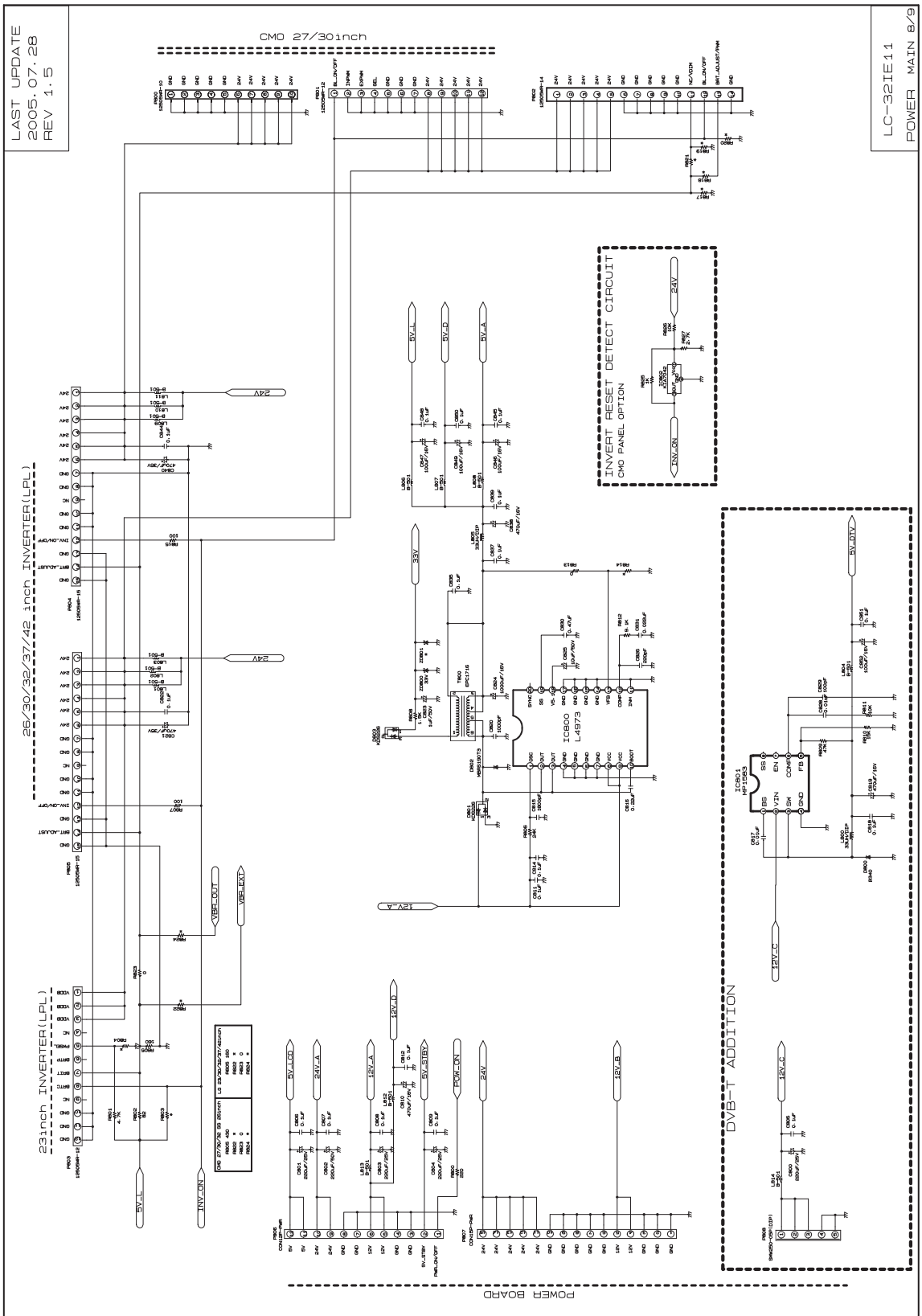


LC-32IE11  
RAM MAIN 6/9

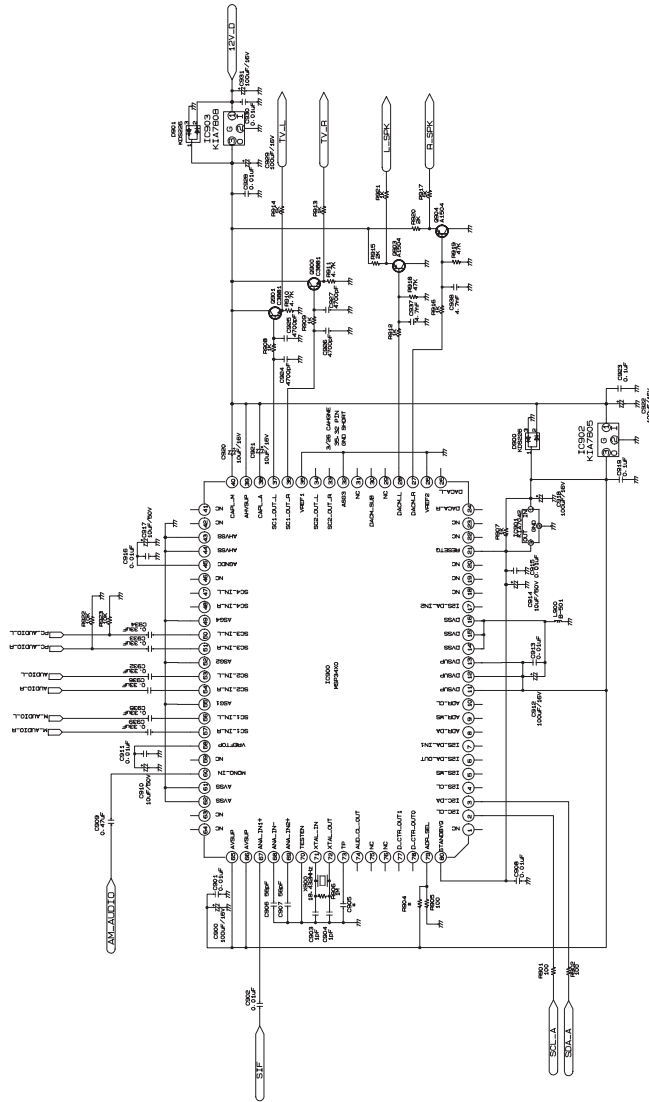
LAST UPDATE  
2005.07.28  
REV 1.5



LC-32IE41  
AMP MAIN 7/9



LAST UPDATE  
2005.07.28  
REV 1.5

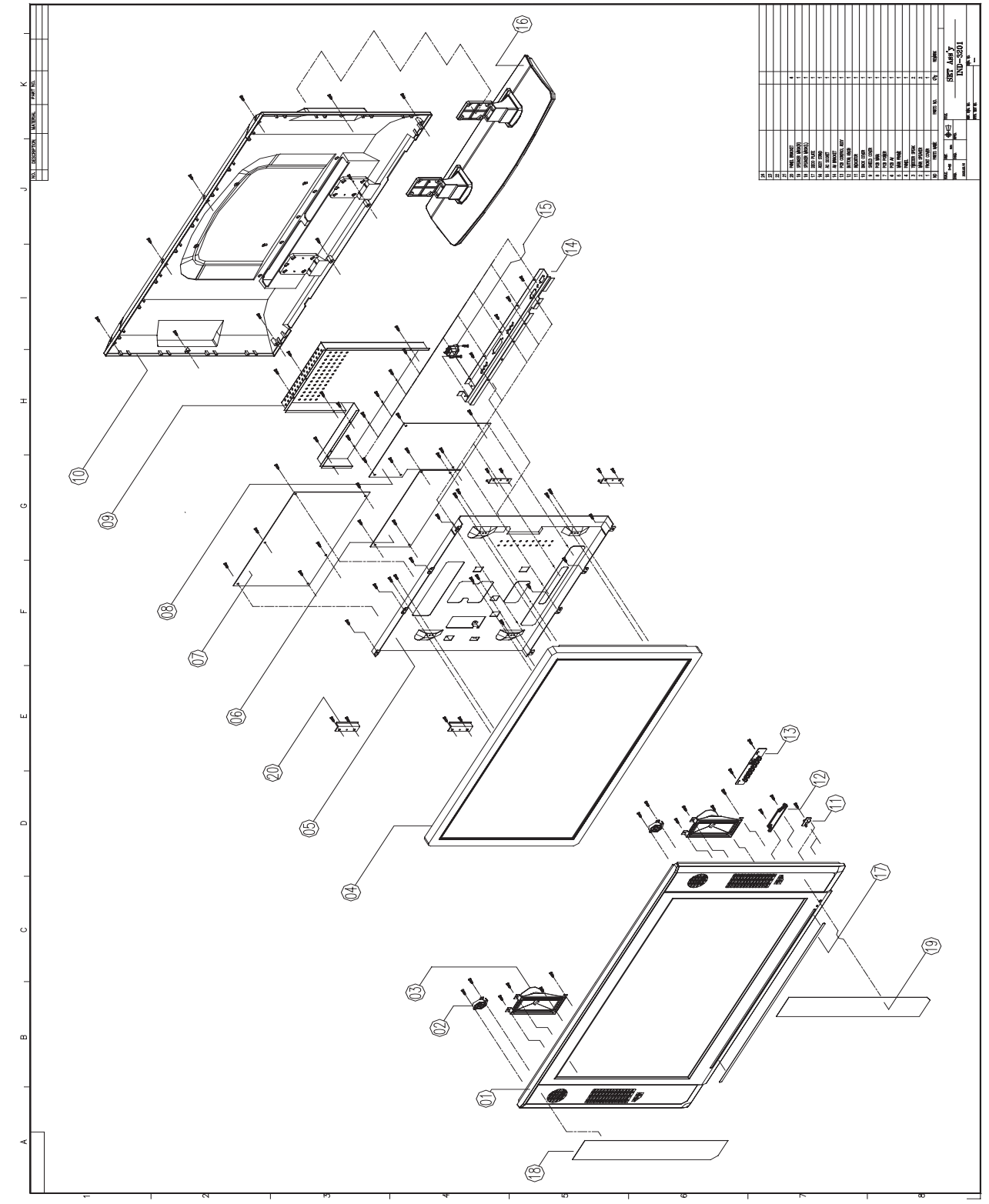


MSP3410G	MSP3440G
EU, NON-EU	KOR, USA

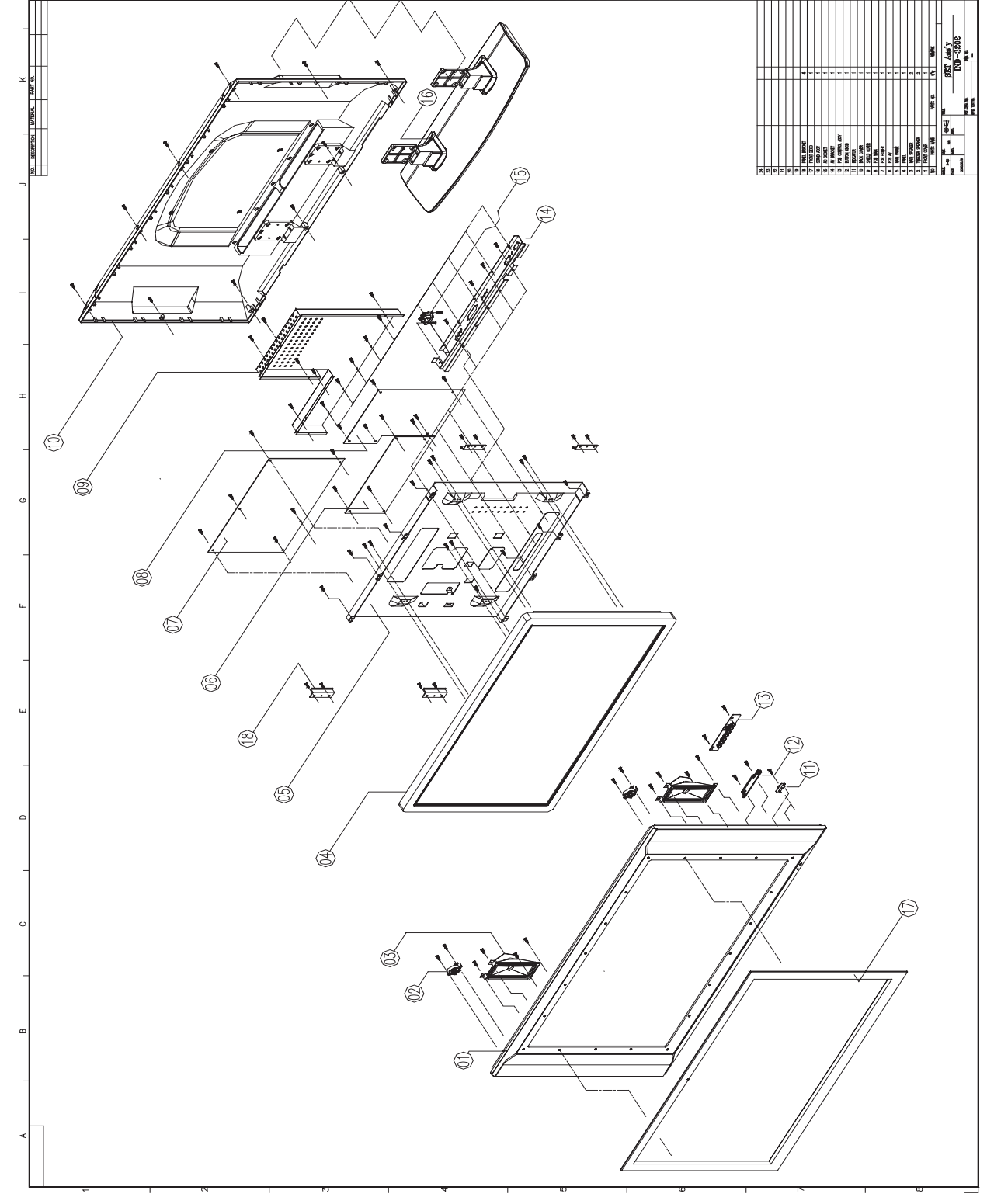
LC-32IE11  
MSP34xxX  
MAIN 9/9

# EXPLODED VIEW

**TKL3290S**

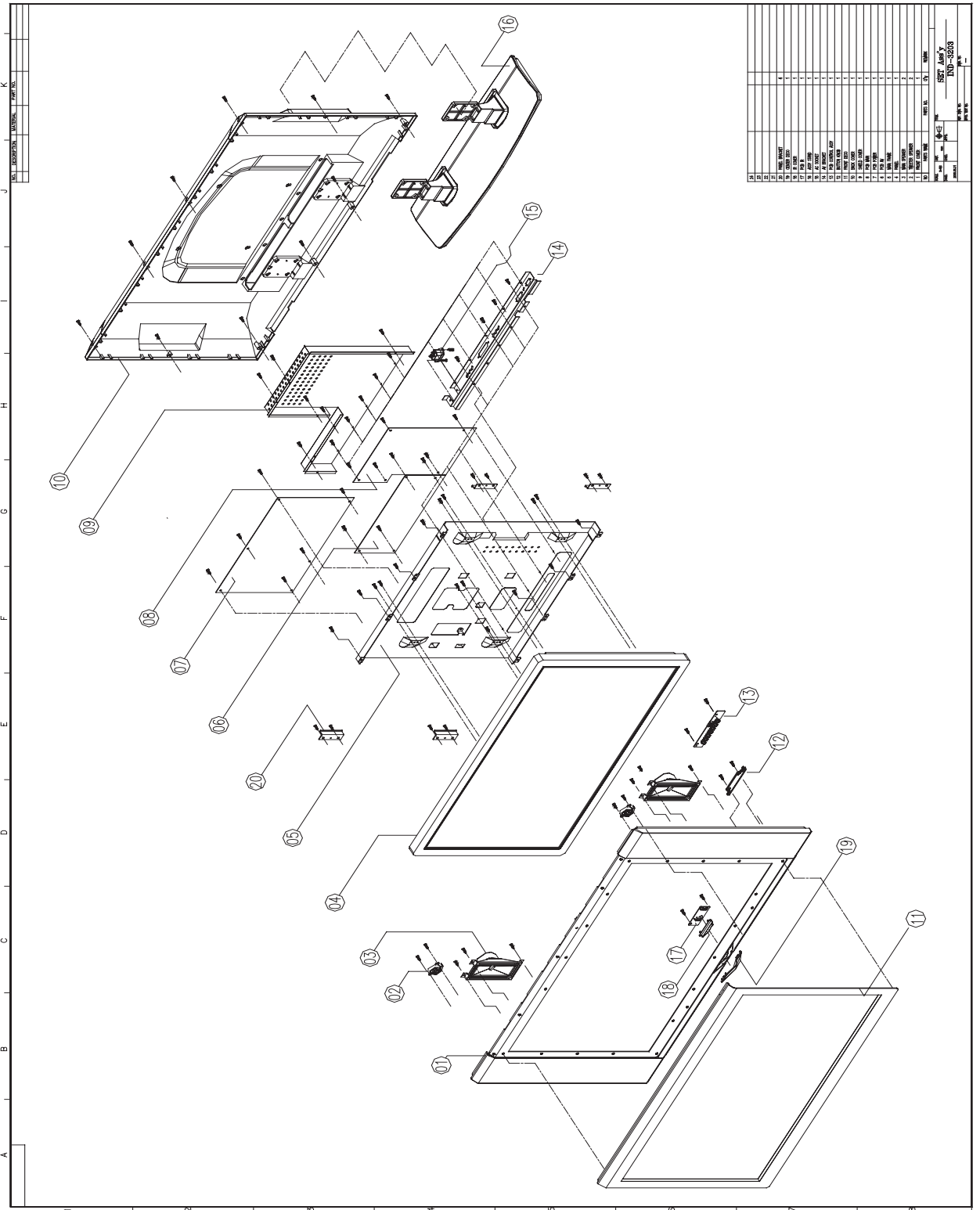


**LC-32IE21**

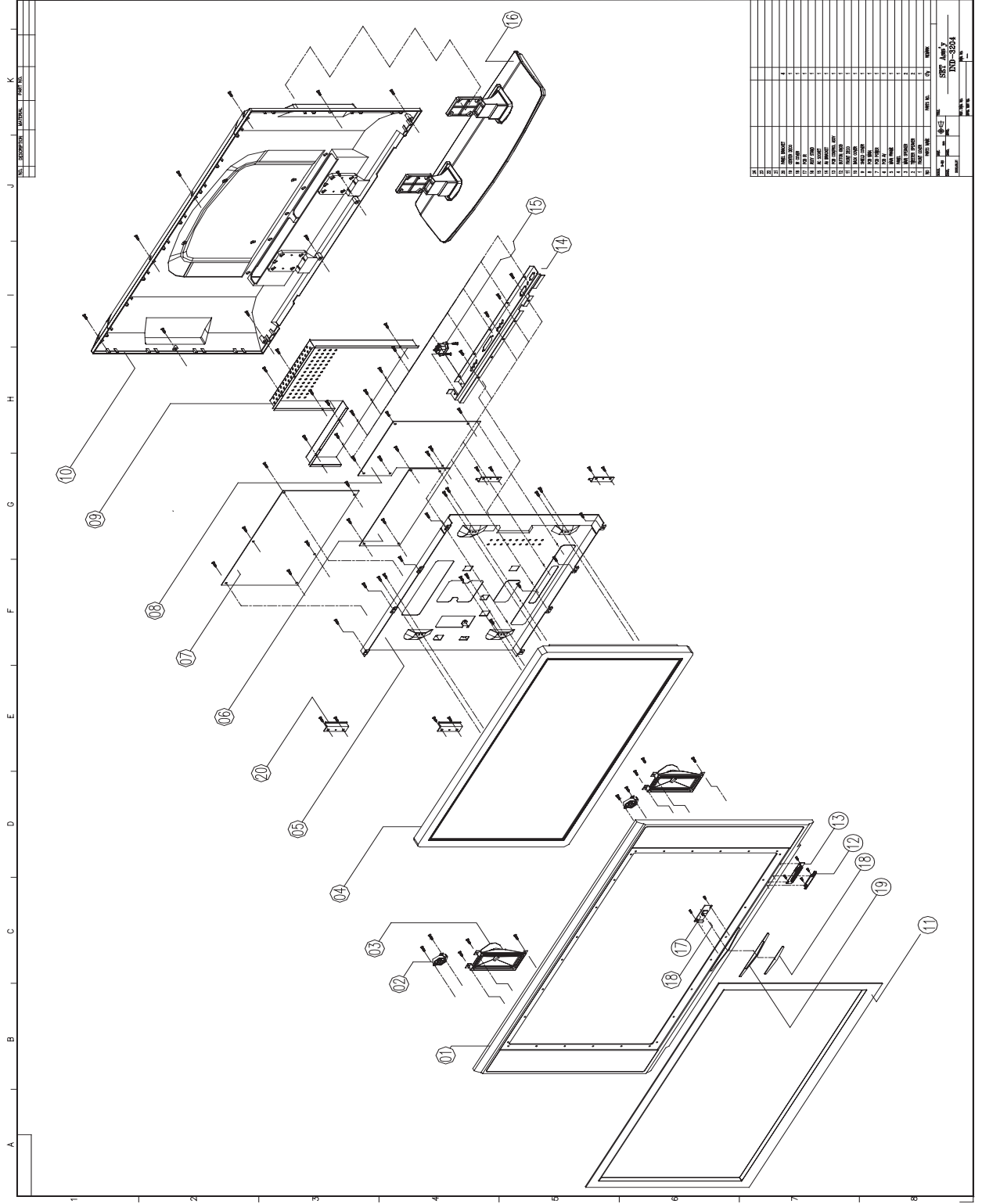




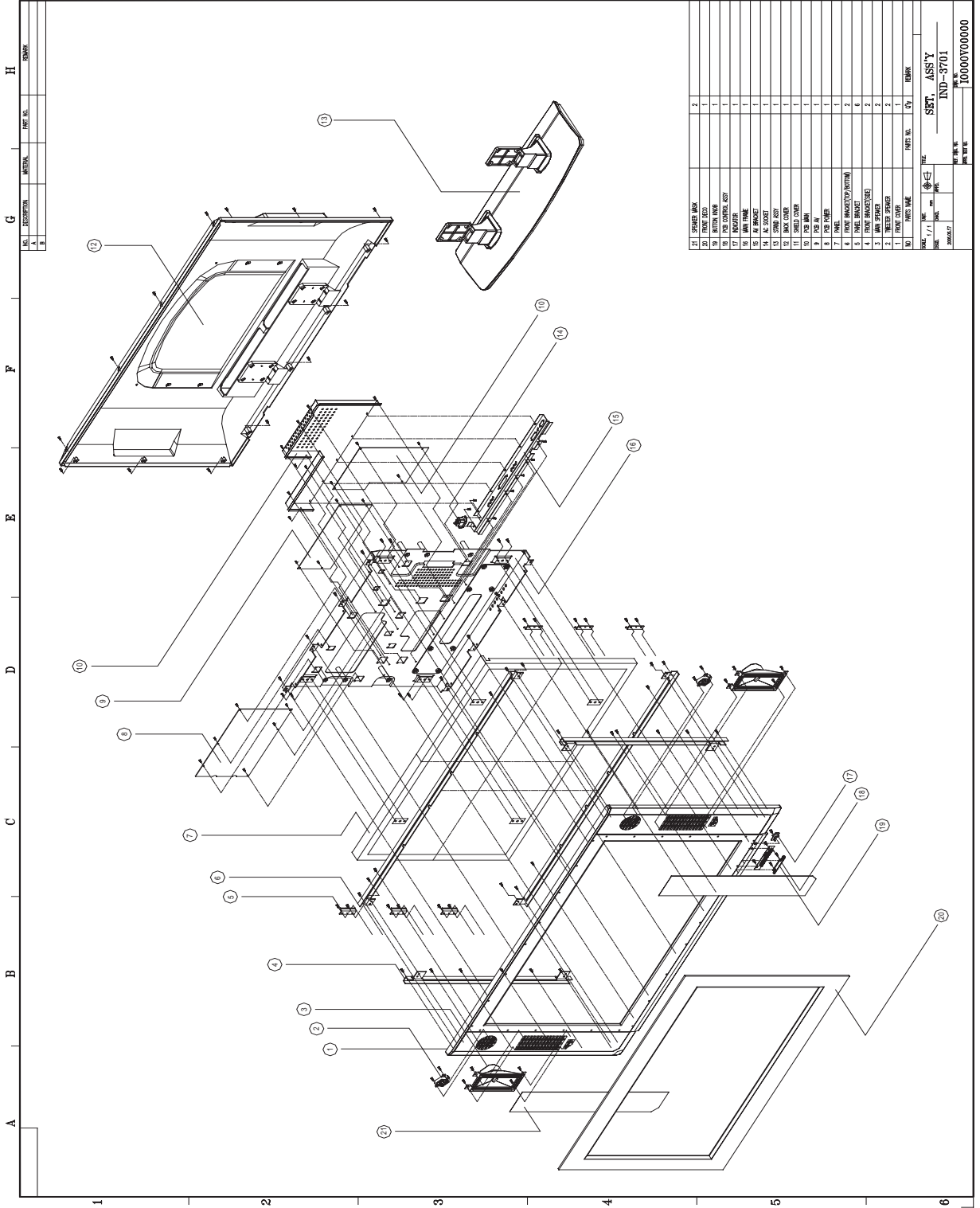
**LC-32IE31**



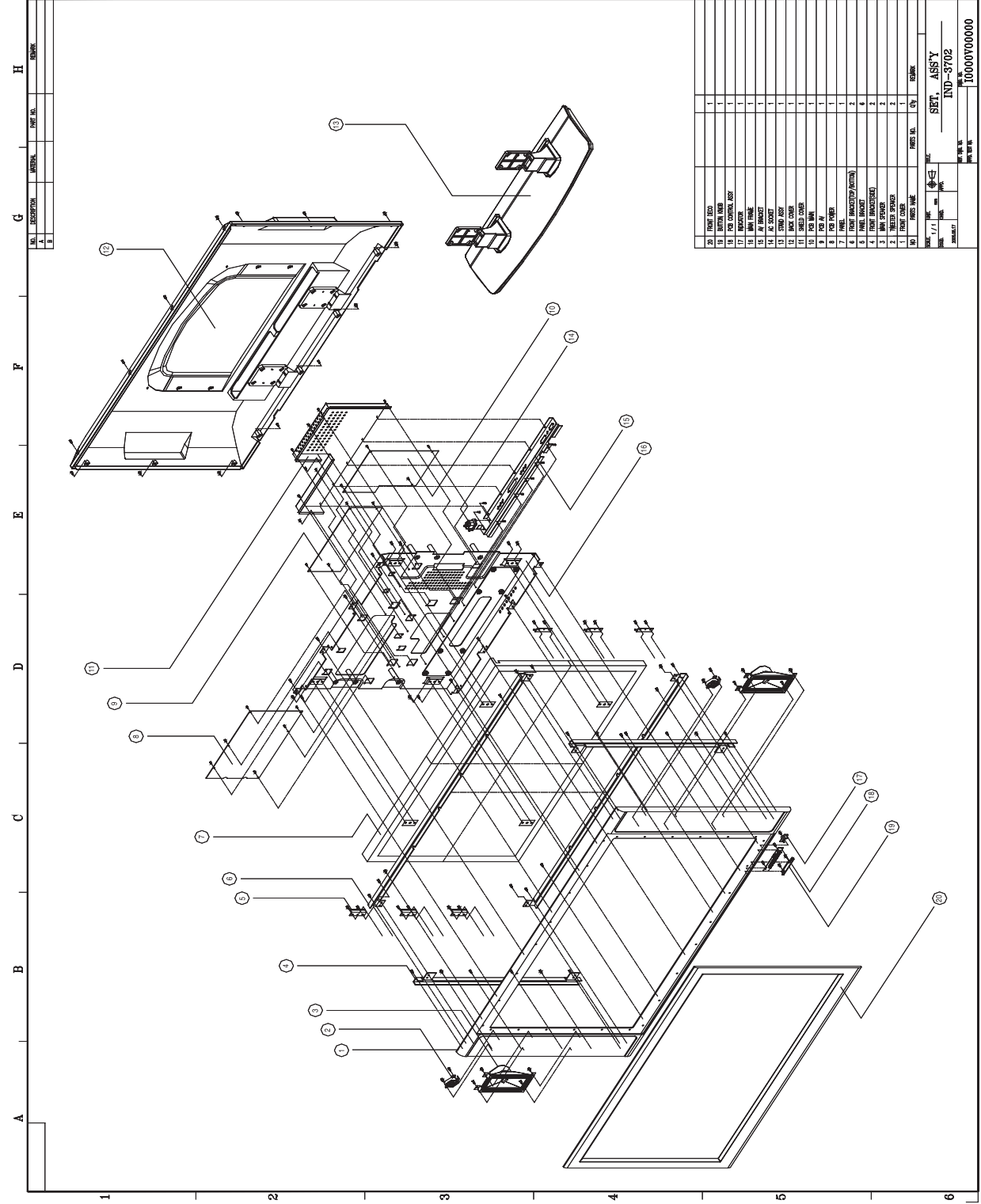
**BL3201S**



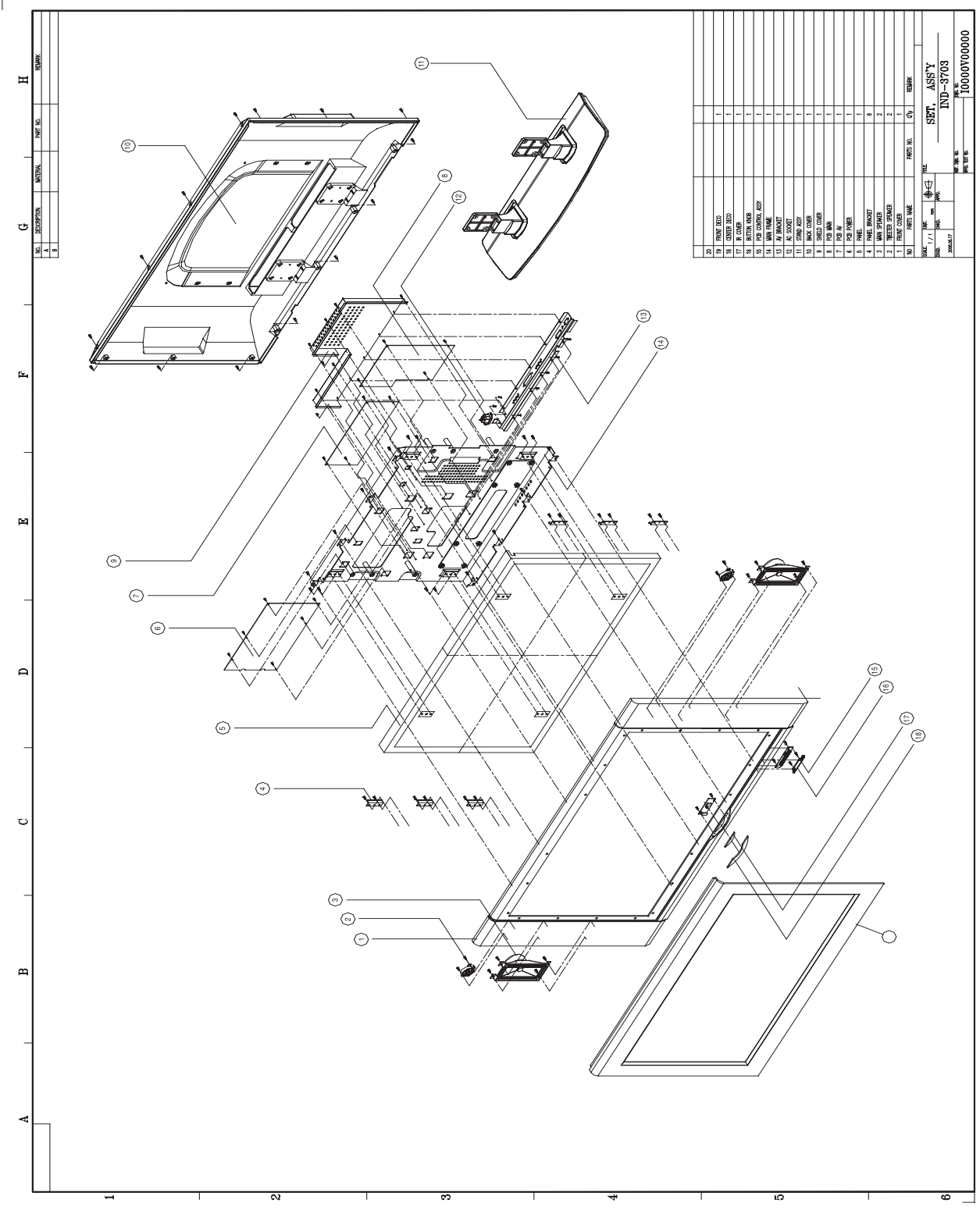
**LC-37IL11**



LC-37IE21



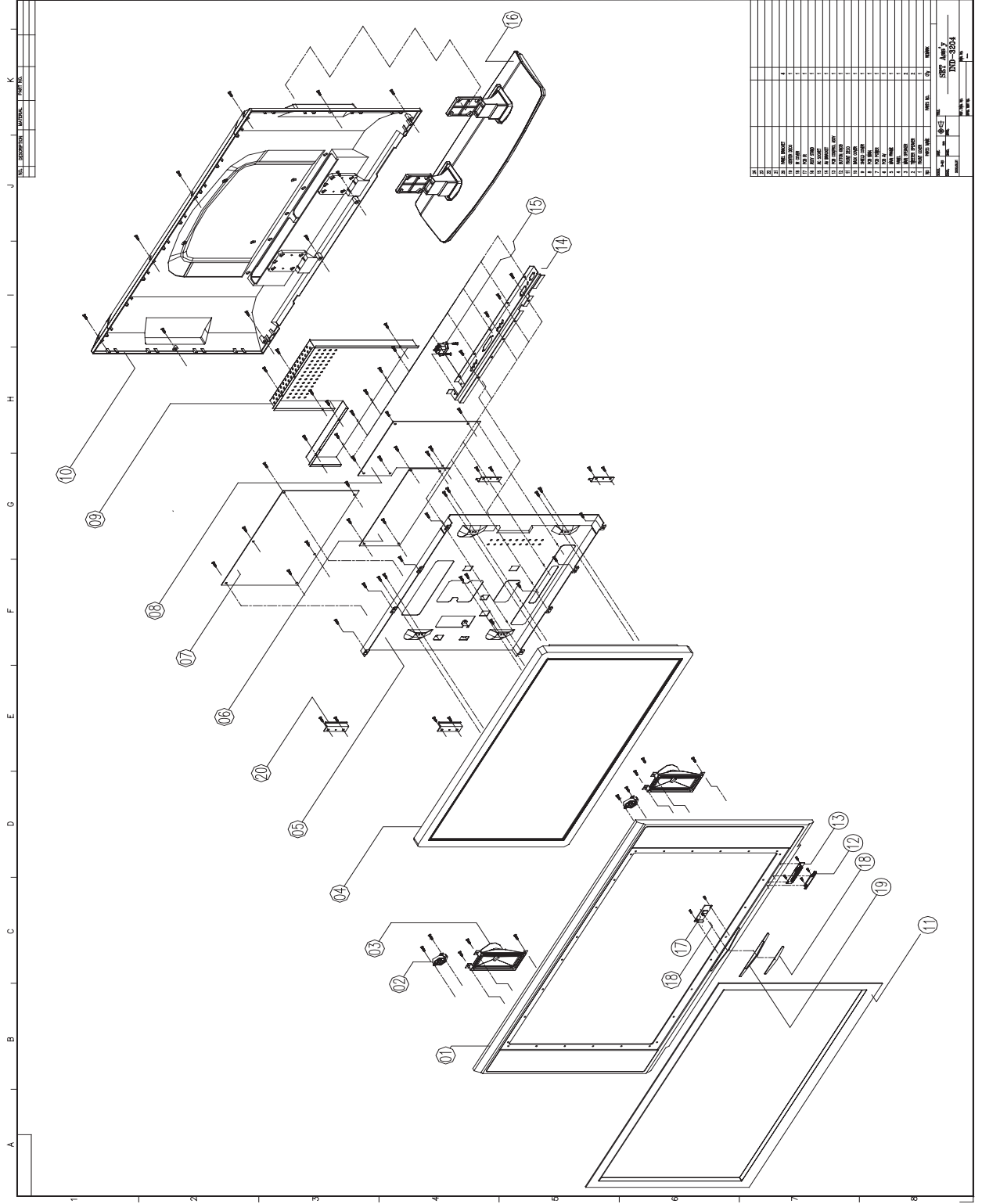
**BL3701S**



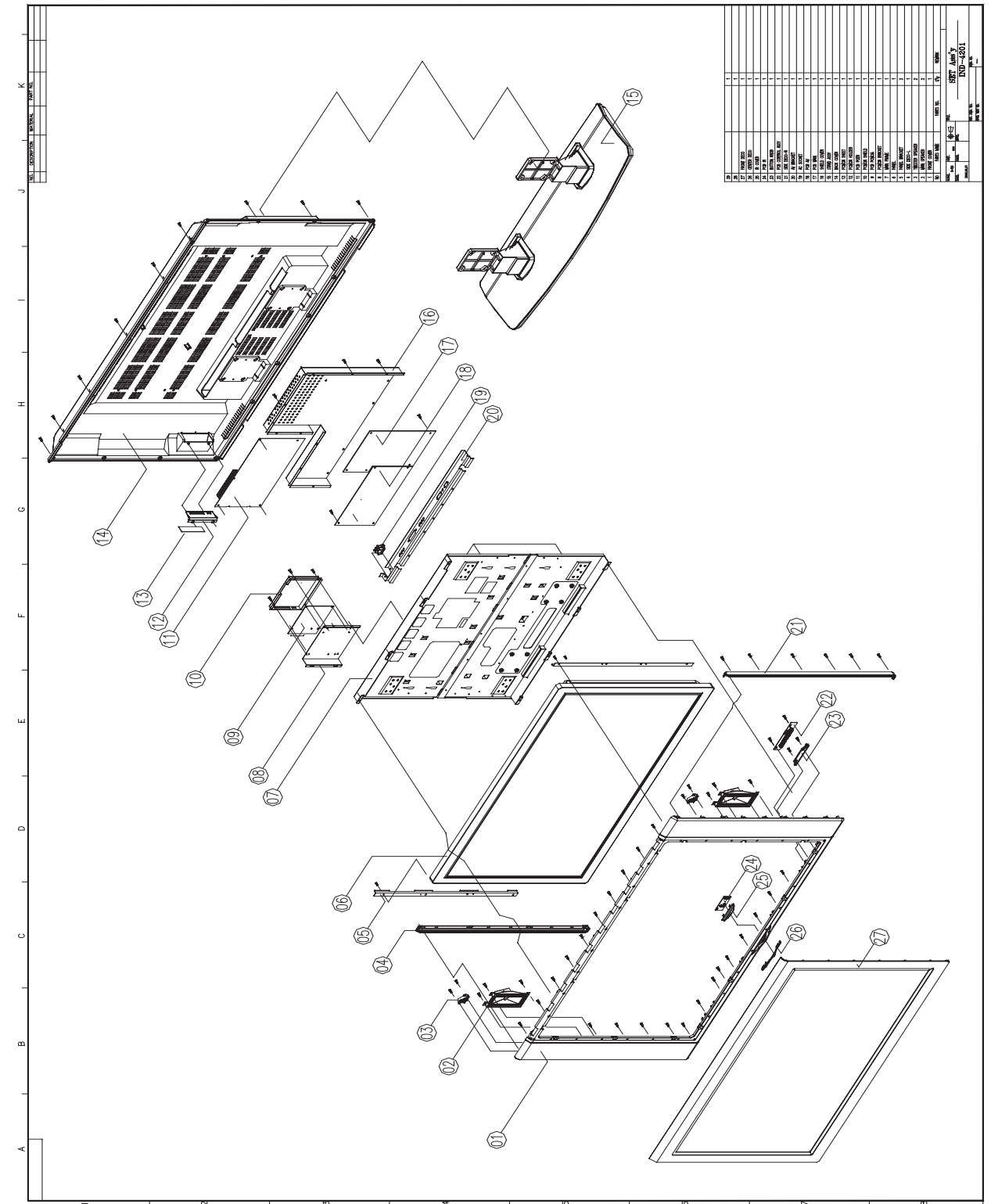
NO.	DESCRIPTION	QTY	REMARK
1	FRONT FACE	1	
2	FRONT COVER	1	
3	FRONT COVER	1	
4	FRONT COVER	1	
5	FRONT COVER	1	
6	FRONT COVER	1	
7	FRONT COVER	1	
8	FRONT COVER	1	
9	FRONT COVER	1	
10	FRONT COVER	1	
11	FRONT COVER	1	
12	FRONT COVER	1	
13	FRONT COVER	1	
14	FRONT COVER	1	
15	FRONT COVER	1	
16	FRONT COVER	1	
17	FRONT COVER	1	
18	FRONT COVER	1	
19	FRONT COVER	1	
20	FRONT COVER	1	

SET, ASSY  
 IND-3703  
 10000Y00000

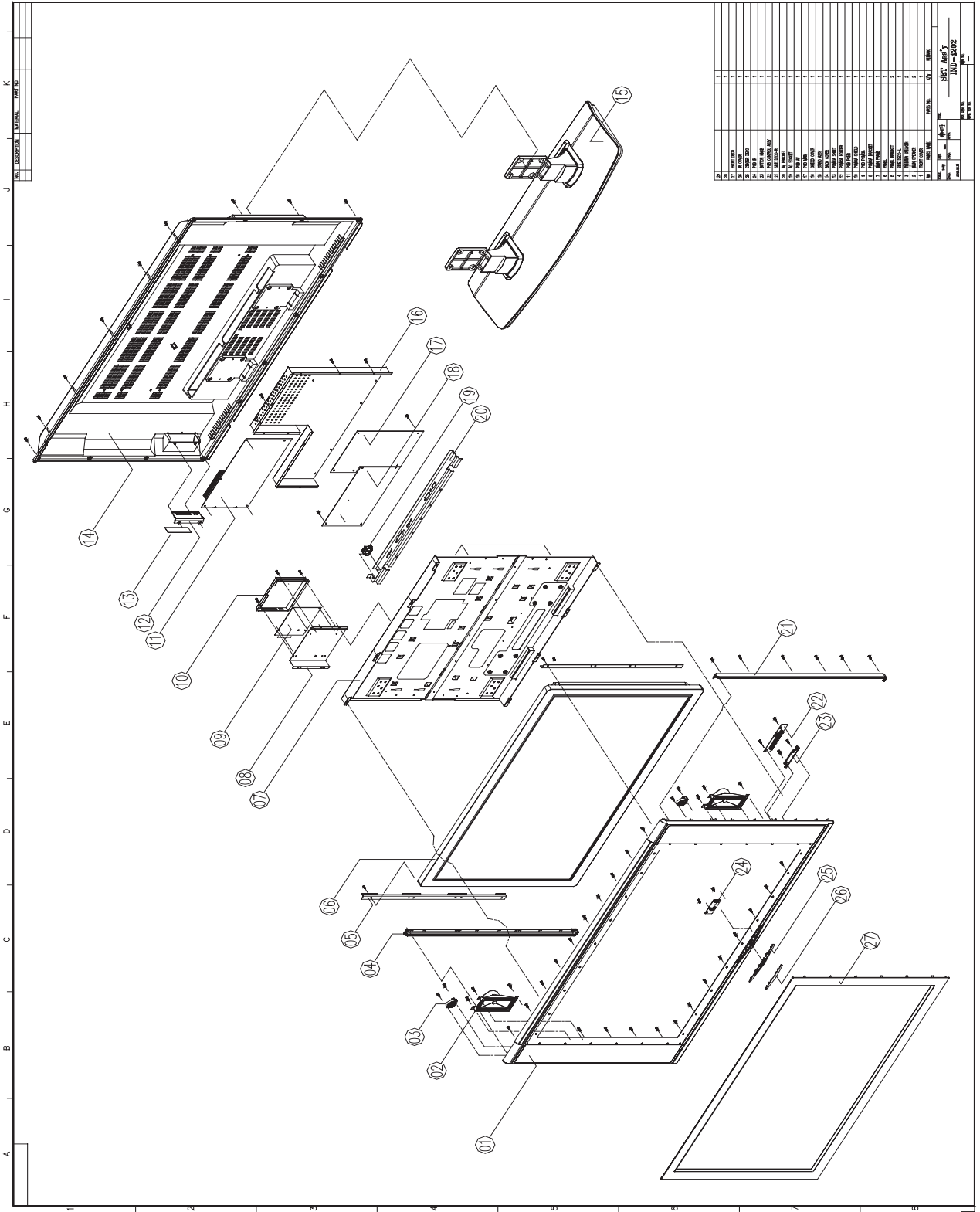
**LC-37IE41**



**LC-42IE11**



**LC-42IE21**





# REPLACEMENT PARTS LIST

Item	Specification	Location
<b>MAIN ASS'Y LC-32IE11_LPL_MAIN PCB ASS'Y</b>		
<b>LC-32IE11_MAIN (MANUAL INSERT)</b>		
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;
<b>LC-32IE11_MAIN (SMD_BOTTOM)</b>		
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;

Item	Specification	Location
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 (500 )	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, SOT-23, high speed switching	D200, D201, D400, D401, D500, D501, D600, D601, D801, D803 D900, D901;
TR	KTC3875S, KET, SOT-23, switching	Q109, Q110, Q111, Q200, Q300, Q301;

Item	Specification	Location
<b>LC-32IE11_MAIN (AUTO INSERT_RADIAL)</b>		
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;
<b>LC-32IE11_MAIN (SMD_TOP)</b>		
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;

Item	Specification	Location
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;

Item	Specification	Location
CHIP BEAD	CHIP BEAD 2012 800 (80 )	L200, L201, L202;
CHIP BEAD	CHIP BEAD 3216 501 (500 )	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, SOT-23, high speed switching	D212,D703;
DIODE, SWITCHING	KDS226, SOT-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, SOD-323, 5.6v zener	ZD200, ZD300, ZD301;
DIODE, ZENER	UDZS 6.2B, ROHM, SOD-323, 6.2v zener	ZD700, ZD701;
DIODE, ZENER	UDZS 33B, ROHM, SOD-323, 33v zener	ZD800;
TR	KTA1504S, KEC, SOT-23, switching	Q700, Q903, Q904;
TR	KTC3875S, KET, SOT-23, switching	Q100, Q101, Q102, Q103, Q104, Q105, Q106, Q107, Q108, Q400, Q701;
TR	KTC3881S, KEC, SOT-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 SOIC8 20W CLASS D MONO MPS	IC700, IC701;
IC Voltage Detector	KIA7027AF 3P SOT-89 R/TP KEC	IC311;
IC Voltage Detector	KIA7042AF 3P SOT-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 SOP	IC302, IC303;
TR, FET	SI4925DY, TEMIC, SO-8, 30V 6.1A	IC405;
IC	L4973D5.1(SO20) ST	IC800;
IC REG	MIC39100-1.8BS SOT223 MICREL	IC308, IC401;
IC REG	LM1117S-2.5V (SOT-223) HTC	IC602, IC603;
IC REG	LM1117S-3.3V (SOT-223) HTC	IC300, IC301, IC403, IC404, IC500, IC501;
IC TTL	74HCT14D Hex inveting 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 I/SN SOP8 MICRO CHIP	IC200;
IC EEPROM	AT24C02N-10SI-1.8 8S1 ATMEL	IC203;
TR	BSS83, SOT-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 SAMONE FT	P403;
WAFER	10022HS-31C 31P 1.0MM FFC	P100_M, P101_M;

Item	Specification	Location
WAFER	12505WR-09A (SMD), YEONHO	P103;
WAFER	12505WR-15 (SMD), YEONHO	P804, P805;
<b>A/V ASS'Y 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	TOTX178A, 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 (500 )	L403, L412, L419, L420;
TR	KTC3875S, KET, SOT-23, switching	Q309, Q310, Q312;
DIODE, SWITCHING	KDS226, SOT-23, high speed switching	D300, D301, D302;
<b>LC-32IE11 AV (AUTO INSERT_RADIAL)</b>		
AL EL CAPACITORS	10uF STD 50V M FL TP5 (5X11 85°C)	C322, C407, C408, C419, C420, C468;
AL EL CAPACITORS	10uF STD 16V M FL TP5 (5X11 85°C)	C474;
AL EL CAPACITORS	47uF STD 50V M FL TP5 (6.3X11 85°C)	C479;
AL EL CAPACITORS	0.47uF STD 50V M FL TP5 (5X11 85°C)	C308, C309;
AL EL CAPACITORS	100uF STD 16V M FL TP5 (6.3X11 85°C)	C331, C335;
AL EL CAPACITORS	220uF STD 16V M FL TP5 (8X11.5 85°C)	C472;
AL EL CAPACITORS	47uF STD 16V M FL TP5 (5X9 85°C)	C312, C483, C484;
AL EL CAPACITORS	220uF STD 25V M FL TP5 (8X11.5 85°C)	C325;
AL EL CAPACITORS	470uF STD 16V M FL TP5 (10X12.5 85°C)	C412, C423, C447, C448;

Item	Specification	Location
AL BIPOLAR EL CAPACITORS	100uF STD 16V M FL TP5, BP Type	C400;
<b>LC-32IE11 AV (SMD_TOP)</b>		
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 (500 )	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 SO14 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;

Item	Specification	Location
<b>KEY ASS'Y LC-32IE10_KEY PCB ASS'Y</b>		
<b>LC-32IC10_KEY (MANUAL INSERT)</b>		
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;
<b>LC-32IC10_KEY (SMD)</b>		
PCB	KEY B/D 2004.11.15.C.J.H	
CHIP BEAD	CHIP BEAD 3216 501 (500 )	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, SOT-23, switching	Q901, Q902;
WAFER	12505WR-09A (SMD) , YEONHO	P901;

#### Differential Part List Of Each Product.

MODEL Loc/No	32" (LPL)	23" (LPL)	26" (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



**Differential Part List Of Each Product.**

<b>MODEL Loc/No</b>	<b>26" (S/S)</b>	<b>27" (CMO)</b>	<b>30" (CMO)</b>
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	4.7K OHM 1/10W 1608 5% D	X	X
R526	4.7K OHM 1/10W 1608 5% D	X	X
Q501	2SC3875S Y RTK (SOT-23)	X	X

**Differential Part List Of Each Product.**

<b>MODEL Loc/No</b>	<b>32" (S/S)</b>	<b>37" (LPL)</b>	<b>42" (LPL)</b>
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

# NOTE

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The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every sale, purchase, and payment must be properly documented to ensure the integrity of the financial statements. This includes keeping receipts, invoices, and bank statements in a secure and organized manner.

Next, the document outlines the process of reconciling the books. This involves comparing the company's internal records with the bank's records to identify any discrepancies. Regular reconciliation helps in detecting errors early and ensures that the company's financial position is accurately reflected in its records.

The document also covers the preparation of financial statements. It details the steps involved in calculating the net income, assets, and liabilities. It stresses the importance of following the generally accepted accounting principles (GAAP) to ensure that the financial statements are reliable and comparable to those of other companies in the industry.

Finally, the document discusses the role of the accountant in providing financial advice to the business owner. It highlights that an accountant should not only keep the books but also analyze the financial data to identify areas for improvement and provide strategic recommendations to maximize the company's profitability.