

Rolsen

COLOR TFT-LCD TV SERVICE MANUAL

MODEL : RL-30S10

CAUTION !!

BEFORE SERVICING THE TFT-LCD TV,
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



CONTENTS

Contents	2
Safety Precautions	3
Servicing Precautions	4
Specifications	5
Control Descriptions	10
External In/Out Ports	13
Adjustment	14
Block Diagram	19
Schematic Diagram	20
Wave Form	21
Troubleshooting	32
Replacement Parts List	37
PCB Layout	47
Exploded View	52

SAFETY PRECAUTIONS

!! 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.

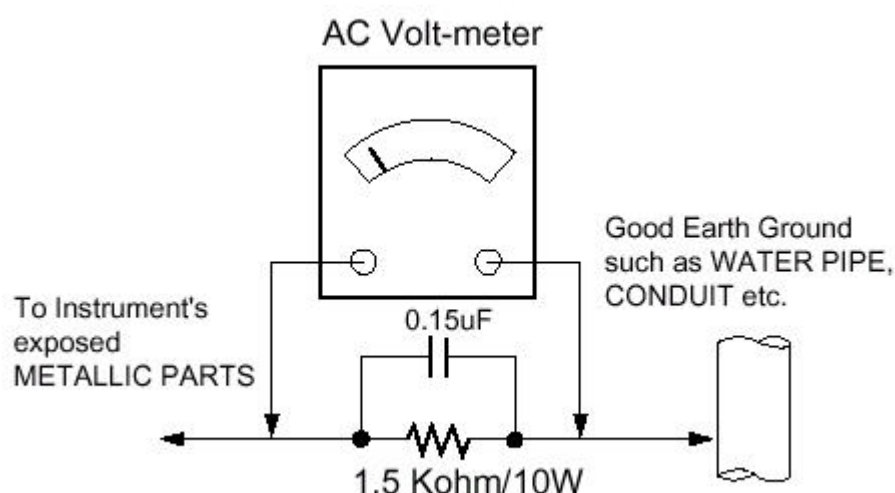
Connect 1.5K/10watt resistor in parallel with a 0.15uF capacitor between a known good earth ground (Water Pipe, Conduit, etc.) and the exposed metallic parts.

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.

Leakage Current Hot Check circuit



SERVICING PRECAUTIONS

CAUTION!!

Before servicing receivers covered by this service manual, read and follow the SAFETY PRECAUTIONS on page 3 of this publication.

General Servicing Precautions

1. Always unplug the receiver AC power cord from AC power source before;
Removing or reinstalling any component, circuit board module or any other receiver assembly.
Disconnecting or reconnecting any receiver electrical plug or other electrical connection.
Connecting a test substitute in parallel with an electrolytic capacitor in the receiver.
- CAUTION!!** A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.
2. Do not spray chemicals on or near this receiver or any of its assemblies.
3. Do not defeat any plug/socket voltage interlocks with which receivers covered by this service manual might be equipped.
4. Always connect the test receiver ground lead to the receiver chassis ground before connecting the test receiver positive lead. Always remove the test receiver ground lead last.
5. Do not connect the test fixture ground strap to power supply heatsink in this receiver

Electrostatically Sensitive(ES) Devices

Some semiconductor(solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive(ES) Device. Examples

Circuit Board Foil Repair

Excessive heat applied to the copper foil of any printed circuit board will weaken the adhesive that bonds the foil to the circuit board causing the foil to separate from or "lift-off" the board. The following guidelines and procedures should be followed whenever this condition is encountered.

At IC Connections

To repair a defective copper pattern at IC connections use the following procedure to install a jumper wire on the copper pattern side of the circuit board. (Use this technique only on IC connections.)

1. Carefully remove the damaged copper pattern with a sharp knife. (Remove only as much copper as absolutely necessary.)
2. Carefully scratch away the solder resist and acrylic coating (if used) from the end of the remaining copper pattern.
3. Bend a small "U" in one end of a small gauge jumper wire and carefully crimp it around the IC pin.
4. Route the jumper wire along the path of the out-away copper pattern and let it overlap the previously scraped end of the good copper pattern. Solder the overlapped area and clip off any excess jumper wire.

SPECIFICATIONS

Note: Specifications and others are subject to change without notice for improvement.

1.Scope.

This document is the specification of 30" TFT-LCD Color TV.

2.Power

1) Power requirement DC 24V / 6.0A

2)AC / DC Adapter.

Input Frequency : 50/60Hz

Input Voltage : AC 100V AC 240V (± 10%)

Output Voltage : DC 24V

3)Power cord

Use UL listed and CSA certified detachable power cord type ;SVT, 3-conductors, 18AWG
For AC 120V area. Use VDE listed detachable power cord type ;HO5VV-F, 3-conductors,
18AWG for AC 220 240V area.

3.Tuning system

FS, 181 Channel

4.Sound output

10W+10Wrms Stereo (Max)

20W+20Wrms Stereo (Max)

5.Antenna input impedance

VHF / UHF at 75ohm

6.OSD Type (On Screen Display)

Windows type (Center)

7.External in/output

Wofer Sound out,SCART1/VIDEO, SCART2/COMPONENT, S-Video, AV Sound In,
Head Phone, PC-Souns In, PC-Analog, PC-Digital

8.Function

CATV/Hyper band

Auto Program

Manual Program

Auto Sleep

Quick view

ACMS(Auto channel Memory System)

PSM(Picture Status memory)

SSM(Sound Status memory)

PIP(PICTURE I RICTURE)

ARC(ASPECT RATIO CONTROL)

SPECIFICATIONS

9.Receiving RF TV system

NO	Model System	RL-30S10	/	/
1	PAL-B	○	/	/
2	PAL-G	○	/	/
3	PAL-I, I /I	○	/	/
4	PAL-D	○	/	/
5	PAL-K	○	/	/
6	SECAM-B	○	/	/
7	SECAM-G	○	/	/
8	SECAM-D	○	/	/
9	SECAM-K	○	/	/
10	SECAM-K1	○	/	/
11	SECAM-I (6.0)	○	/	/
12	NTSC-3.58 / 4.5	○	/	/
13	NTSC-3.58 / 5.5	○	/	/
14	NTSC-3.58 / 6.0	○	/	/
15	NTSC-3.58 / 6.5	○	/	/
16	NTSC-3.58 / 4.5(5.0)	○	/	/
17	NTSC-4.43 / 5.5	○	/	/
18	NTSC-4.43 / 6.0	○	/	/
19	NTSC-4.43 / 6.5	○	/	/
20	PAL 5.5 / 60Hz	○	/	/
21	PAL 6.0 / 60Hz	○	/	/
22	PAL 6.5 / 60Hz	○	/	/
23	SECAM 5.5 / 60Hz	○	/	/
24	SECAM 6.0 / 60Hz	○	/	/
25	SECAM 6.5 / 60Hz	○	/	/
26	SECAM L / L'	X	/	/
	TOTAL SYSTEM	25	/	/

SPECIFICATIONS

10.Receiving function & channel

NO	Receiving System	Function	Receiving Channel
1	PAL-B	Reception of broadcast and play-back for Video Tape Recorder	VHF Band NTSC-M (US) : 2-13 NTSC-M (JAPAN) : 1-12 UHF Band NTSC-M (US) : 14-78 NTSC-M (JAPAN) : 13-62
2	PAL-G		
3	PAL- I, I / I		
4	PAL-D		
5	PAL-K		
6	SECAM-B		
7	SECAM-G		
8	SECAM-D		
9	SECAM-K		
10	SECAM-K1		
11	NTSC-M		
12	SECAM-L / L'	Play-back for special Video Tape Recorder	NTSC 3.58/4.5MHz/60Hz only
13	NTSC-4.43 / 5.5		
14	NTSC-4.43 / 6.0		
15	NTSC-4.43 / 6.5		
16	SECAM-I (6.0MHz)		
17	SECAM-L (VIDEO IN)		
18	NTSC 3.58 / 4.5MHz / 50Hz	Play-back for special Video Tape/Video disk player	NTSC 3.58/4.5MHz/60Hz only
19	PAL 5.5MHz / 60Hz		
20	PAL 6.0MHz / 60Hz		
21	PAL 6.5MHz / 60Hz		
22	SECAM 5.5MHz/60Hz		
23	SECAM 6.0MHz/60Hz		
24	SECAM 6.5MHz/60Hz		
25	NTSC-3.58 / 5.5MHz	Play-back for special Video Tape Recorder	
26	NTSC-3.58 / 6.0MHz		
27	NTSC-3.58 / 6.5MHz		

SPECIFICATIONS

11. PC/DTV Mode Scan Frequency & Timing

1) Scan Freq : H: 15 110 kHz / V : 56 85Hz

2) Preset Timing Chart

Mode	Resolution	H-Freq(Khz)	V-Freq(Khz)
VGA	640x480	31.5KHz	60Hz
	640x480	37.9KHz	72Hz
	640x480	37.5KHz	75Hz
	640x480	43.3KHz	85Hz
	720x400	31.5KHz	70Hz
SVGA	800x600	35.1KHz	56Hz
	800x600	37.9KHz	60Hz
	800x600	48.1KHz	72Hz
	800x600	46.9KHz	75Hz
	800x600	53.7KHz	85Hz
XGA	1024x768	48.4KHz	60Hz
	1024x768	56.5KHz	70Hz
	1024x768	60.2KHz	75Hz
	1024x768	68.7KHz	85Hz
D-TV	1920x1080i	33.8KHz	60Hz
	1280x720i	45KHz	60Hz
	720x480p	31.5KHz	60Hz

Note!! :

If the set is cold, there may be a small “flicker” when the set is switched on. This is Normal, there is nothing wrong with the set.

if possible, use the VESA 640x480 PC video mode to obtain the best image quality for your LCD TV. If used under the other resolutions, some scaled or processed pictures may appear on the screen.

some dot defects may appear on the screen, like Red, Green or Blue spot. However, this will have no impact or effect on the monitor performance.

SPECIFICATIONS

12. TFT – LCD Panel Character

1) Feature

Size	: 29.53 inches (750.062mm) diagonal
LCD Type	: Color Active Matrix TFT
Pixel Pitch	: 0.5025mm x 0.1675 x RGB
Pixel Format	: 1280 horiz. By 768 vert. Pixels RGB strip arrangement
Active Video Area	: 643.2mm(H) x 385.92mm(V)
Surface treatment	: Hard coating(3H) Anti-glare treatment of the front polarizer
Response Time(Typ)	: 25Ms (Typ)
Viewing Angle<CR≥10>	: Hor [Left/Right] → 85Deg (Typ) / 85Deg (Typ), Ver [High(Top)/Low(Bottom)] → 85Deg (Typ) / 85Deg (Typ)
Luminance(Typ)	: 450 cd/m ² (Typ)
Contrast Ratio(Typ)	: 350(Typ)
Display Color	: 16.7M Color
Back Light	: 16 CCFL

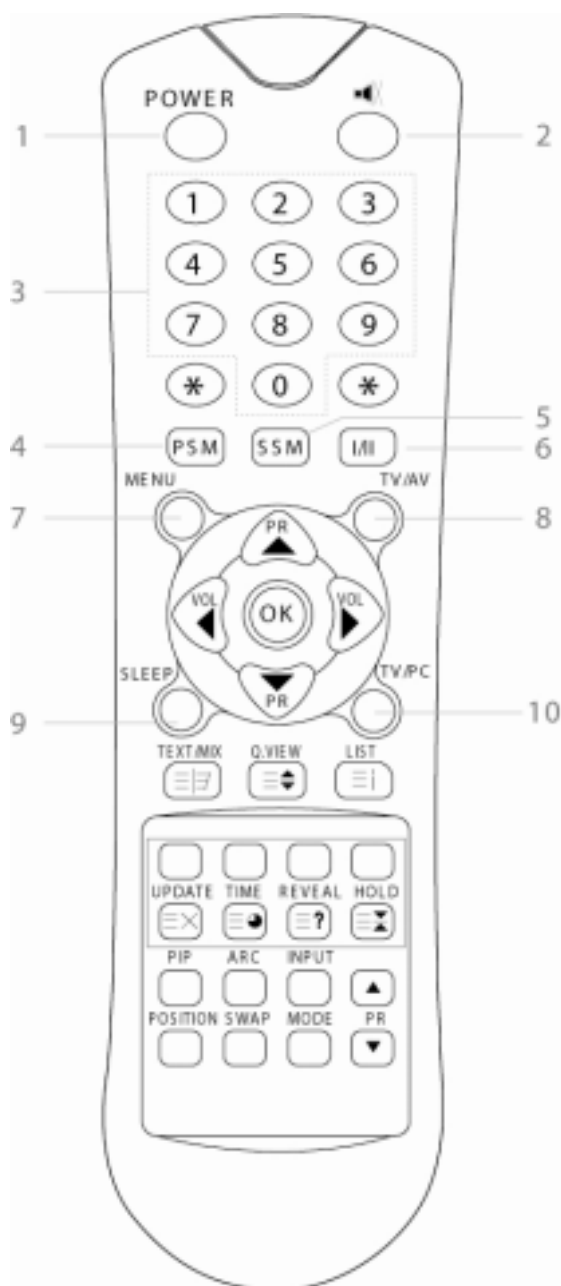
CONTROL DESCRIPTIONS

All the function can be controlled with the remote controller.

Some functions can also adjusted with the buttons on the controls on the TV front panel.

Remote controller

Note !! : Before you use the remote controller, please install the batteries.



1.POWER:

Turns the TV on from standby or off to standby mode.

2.MUTE:

Turns the sound on and off

3.NUMBER buttons:

Select channel numbers.

4.PSM (Picture Status Memory):

Recalls your preferred picture setting.

5.SSM (Sound Status Memory):

Recalls your preferred sound setting.

6. I / II:

Selects the language during dual language broadcast. / Selects the sound output.

7.MENU:

Displays a main menu.

8.TV / AV:

Selects input signal source.

/ Clears the menu from the screen.

9.SLEEP:

Sets the sleep timer.

10.TV / PC :

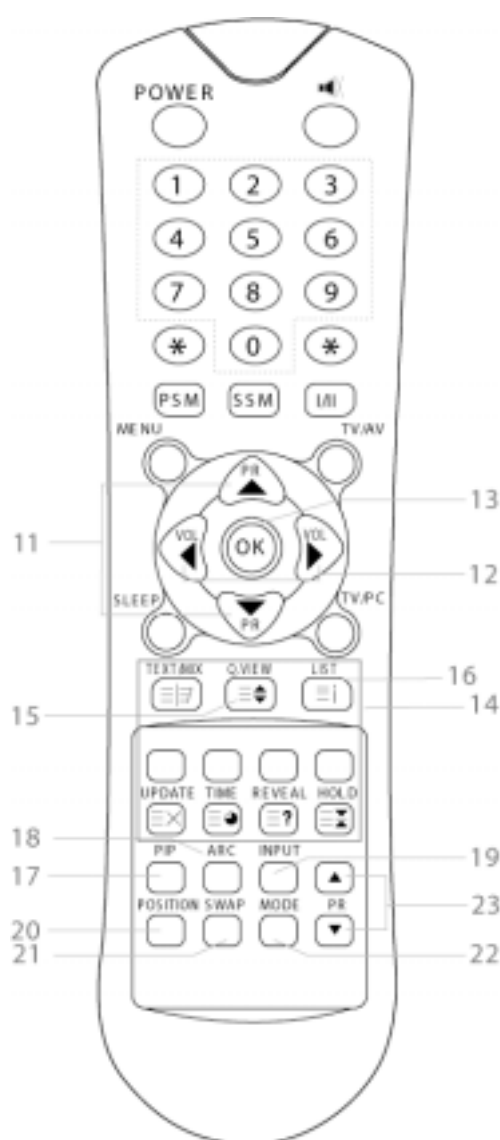
Selects TV or PC mode directly.

Note!! Disabled-PDI-P20LCD Does not support PC mode.

CONTROL DESCRIPTIONS

Remote controller

Note !! : Before you use the remote controller, please install the batteries.



11. PR▲▼ (Programme Up/Down)

Selects next programme or a menu item.

12. VOL◀▶ (Volume Up/Down)

Adjusts the sound level.

Adjusts menu settings.

13. OK

Accepts your selection or displays the current mode.

14. TELETEXT Buttons

These buttons are used for TELETEXT.

For further details, see the 'TELETEXT' section.

15. Q.VIEW

Returns to the previously viewed programme.

Note: In TELETEXT mode,

The **Q.VIEW** button is used for TELETEXT function.

16. LIST

Displays the programm list menu.

17. PIP

Displays a PIP(Picture In Picture) screen.

18. ARC

Selects a screen mode- 16:9, 14:9, ZOOM 1:1 and Auto Wide.

19. INPUT

Selects the AV source of sub picture in PIP mode.

20. POSITION

Selects a position of PIP screen.

21. SWAP

Switches a main picture for sub picture in PIP mode.

22. MODE

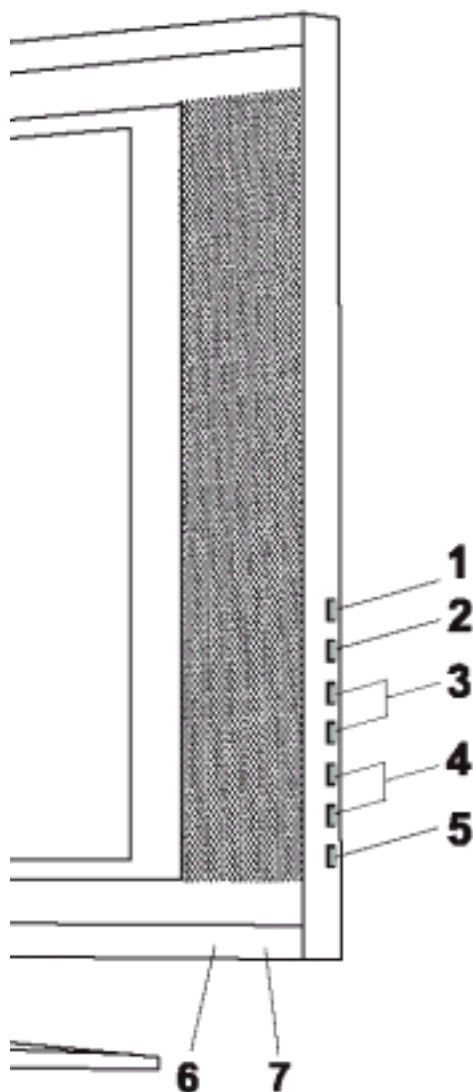
Selects a PIP screen mode. - 16:1, 9:1, double window and scan mode

23.▲PR▼

Selects a programme when RF signal is displayed in PIP mode.

CONTROL DESCRIPTIONS

Controller of Panel



< SIDE VIEW >

1.ON/OFF:

Switches TV set on or off.

2.MENU:

Display a menu.

3.+ PR - (Programme Up/Down):

Selects a programme or a menu item.

4.+ VOL - (Volume Up/Down):

Adjusts the volume.

Adjusts menu settings.

5.TV/AV:

Selects input signal source.

Clears the menu from the screen.

6:POWER INDICATOR:

Illuminates red when the TV is in-power standby mode.

Illuminates green when the TV is-switched power on mode.

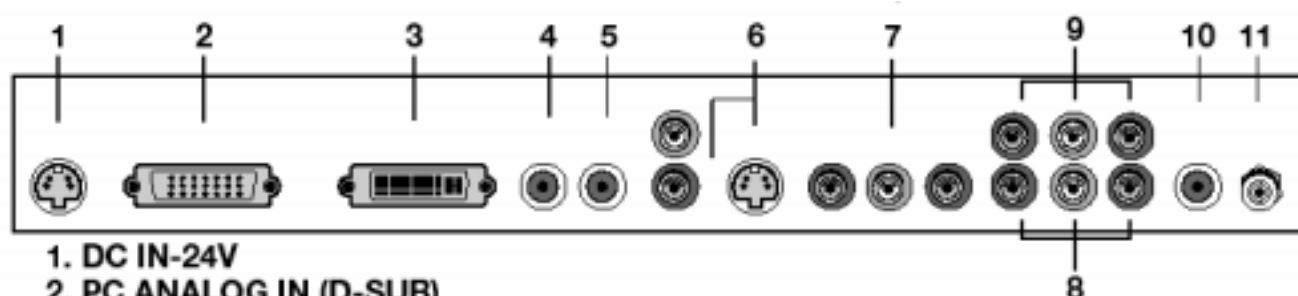
Illuminates amber when the TV is-switched power saving mode.

7.REMOTE CONTROL SENSOR:

Accepts the IR signal of remote controller.

EXTERNAL IN/OUT PORTS

External IN / OUT



1. DC IN-24V

2. PC ANALOG IN (D-SUB)

3. PC DIGITAL IN (DVI-I)

4. PC AUDIO IN

Connect the audio cable from the PC to the **PC AUDIO IN** of the set.

5. H/P (Headphone out)

Connect a headphone to this socket.

6. S-VIDEO IN

Connect the output of an S -VIDEO VCR to the S-VIDEO input.

Connect the audio outputs of an S-VIDEO VCR to the Audio IN (L(MONO), R).

7. COMPONENT IN

8. AV-IN

9. AV-OUT

10. Sub woofer Output

Connect the cable from the Sub woofer to the **Sub woofer Output** of the set.

11. Ant. (Antenna input)

ADJUSTMENT

1.Safety Precautions

1. Never disconnect leads while the TV receiver is on.
2. Don't short any portion of circuits while power is on.
3. The adjustment must be done by the correct appliances. But this is changeable in view of productivity.
4. Unless otherwise noted, set the line voltage to 230Vac 10%, 50Hz ./ 110Vac, 60Hz

2.Test Equipment required

1. RF signal generator (with pattern generator)
2. Multi meter (volt meter)
3. Oscilloscope
4. LCD Color analyzer

3.RF AGC (Automatic Gain Control) Adjustment

Note!! Adjust a RF AGC of world standard tuner only.
2 in 1 tuner need not AGC adjust.

The RF AGC was aligned at the time of manufacture for optimum performance over a wide range conditions. Readjustment of RF AGC should not be necessary unless unusual local conditions exist, such as ;

- 1) Channel interference in a CATV system.
- 2) Picture bending and/or color beats, which are unusually due to excessive RF signal input when the receiver is too close to a transmitting tower or when the receiver is connected to an antenna distribution system where the RF signal has been amplified. In this case, the input signal should be attenuated (with pad or filter) to a satisfactory level.
- 3) Picture noise caused by "broadcast noise" or weak signal. If the broadcast is "clean" and the RF signal is at least 1mV (60dBu), the picture will be noise free in any area.

Adjusting RF AGC to one end of rotation will usually cause a relatively poor signal to noise ratio; Adjusting to the other end of rotation will usually cause a degradation of over load capabilities resulting in color beats or adjacent channel interference.

Adjustment Note!!

1. Connect RF signal (65dB $\pm$ 0.5dB) and turn on the TV.
2. Press MENU buttons on TV set and Remote Controller at the same time to get into SVC mode.
3. Press YELLOW button on the Remote Controller several times to find AGC.
4. Press Volume UP/DOWN button until the AGC Voltage is the same as the Table below.
5. Press OK button to memorize the data.
6. Press TV/AV button to exit SVC mode.

ADJUSTMENT

4.SVC Data Adjustment

NOTE!! When the EEPROM has been replaced, the SVC data should be restored as the function of individual system and specification.

- 1) Press 5 Seconds MENU buttons on both TV set and Remote Controller at the same time to get into SVC mode.
- 2) Press the Yellow button several times to find SVC Data.
- 3) Input the corresponding SVC data referring to Table below with the Volume Up/down key.
- 4) Press the OK button to memorize the data.
- 5) Press TV/AV button to exit SVC mode

5.SVC Data Table

PAGE	ITEM	VALUE1	VALUE2	REMARK
DATA 1	AGC	15		Variable Data(0-31)
	RD	127		PC Contrast Coefficient-RED(0-255)
	GD	127		PC Contrast Coefficient-GREEN(0-255)
	BD	127		PC Contrast Coefficient-BLUE(0-255)
	RO	79		PC Brightness Coefficient-RED(0-63)
	GO	79		PC Brightness Coefficient-GREEN(0-63)
	BO	79		PC Brightness Coefficient-BLUE(0-63)
	PC CP	5		PC Charge Pump(0-7)
	50 PR *			* means current program NO.
DATA 2	FP	21		FM Prescaler(0-127)
	NP	89		NICAM Prescaler(0-127)
	SP	50		SCART Prescaler(0-127)
	S1 VOL	105		SCART1 Volume(0-127)
	S2 VOL	105		SCART2 Volume(0-127)
	50 PR *			* means current program NO.
DATA 3	200PR	0	0	100PR
			1	200PR
	TEXT	1	0	Not apply to TEXT
			1	Apply to TEXT
	TOP	1	0	TELETEXT TOP OFF
			1	TELETEXT TOP ON
	SCART	0	0	Apply to COMPONENT
			1	Apply to SCART
	ACMS	1	0	Not apply to ACMS
			1	Apply to ACMS
	CH+AU	0	0	Used except for CHINESS or AUSTRALIA
			1	Used CHINESS or AUSTRALIA
	SYS	2	0	BG/I/DK
			1	BG/I/DK/L
			2	BG/I/DK/M
	50 PR *			* means current program NO.
	106	Opt 1		Translate HEX into DEC(DATA3VALUE1)

ADJUSTMENT

5-1 .SVC Data Table

PAGE	ITEM	VALUE1	VALUE2		REMARK
DATA 4	DUAL	0	0		Not apply to DUAL option
			1		Apply to DUAL option
	MONO	0	0		Not apply to MONO option
			1		Apply to MONO option
	A2 ST	1	0		Not apply to NICAM STEREO option
			1		Apply to NICAM STEREO option
	VOL	1	0		Sound curve option 1
			1		Sound curve option 2
	LANG	2	0	ENG ONLY	ENGLISH ONLY
			1	EU-5EA	ENGLISH/GERMAN/FRANCE/ITALY/SPAIN
			2	EU CIS	EU-5EA + CIS
			3	E+CHINA	ENGLISH + CHINESS
			4	E+HUNGARY	ENGLISH+ HUNGRAY
			5	RESERVED	
			6	RESERVED	
			7	RESERVED	
	T-LAN	6	0	WEST EU	WEST EU U.K/GERMAN /FRANCE/ITALY/SPAIN/ SWEDEN/CZECH Rep./ NORWAY etc
			1	EAST EU1	POLAND/SLOVENIA/ROMANIA etc
			2	TURKEY EU	TURKEY
			3	EAST EU2	HUNGARY/SERVIA
			4	CYRILLIC1	ESTONIA
			5	CYRILLIC2	ESTONIA
			6	CYRILLIC3	RUSIA/UKRAINE/ESTONIA/CROATI A/KAZAKHSTAN
			7	TURK GRE1	
			8	TURK GRE2	
			9	TURK GRE3	TURKEY/GREECE
			10	ARAB ERA	
			11	ARAB ENG	ARAB CULTURE
			12	ARAB HEB1	
			13	ARAB HEB2	ARAB/HEBREW
			14	FARS ENG	PARSI
			15	FARS FRA	
			16	FARS ALL	
	50 PR *				* means current program NO.
	57	Opt 2			Translate HEX into DEC(DATA4)
DATA 5	FVS	1			Frequency voltage Disable/Enable(0-1)
	DVI	1			Fix (All Model application)
	D-TV				D-TV Disable/Enable (0-1)
	VCHIP				Violence Disable/Enable (0-1)
	WOFER	1			Fix (All Model application)

ADJUSTMENT

6.AGC Adjustment (SVC Data 1)

Note!! Adjust a RF AGC of world standard tuner only.

2 in 1 tuner need not AGC adjust.

Test point : AGC pin of Tuner
Adjust : Remote Controller

- 1) Connect RF signal ($65\pm, 0.5\text{dB}\mu\text{V}$) and tune on the TV.
→ Standard adjustment channel
- 07CH ($f_{rf} = 175.25\text{MHz}$)
- 2) Press 5 seconds MENU buttons on TV set and Remote controller at the same time to get into SVC Data.
- 3) Press the channel up/down button on the Remote Controller several times to find AGC??
- 6) Press the volume up/down button until the AGC voltage is the same as Table below.
- 7) Press **OK** button to memorize the data.

7.Optional Function

1) Language Option

OPTION	CODE	FUNCTION	REMARK
LANG	0	ENG ONLY	ONLY ENG
	1	EU - 5EA	English,,Deutch,Frencais,Itliano,Espanol
	2	ENG CIS	RUSSIA
	3	ENG CHINA	English,China
	4	EU - 12EA	-
	5	N EU06EA	-
	6	RESERVED	-
	7	RESERVED	-
	8	KOREA	Only KOREA
	9	JAPAN	Only JAPAN
	10	USA	Only USA
	11	S - AMERICA	SOUTH AMERICA
	12	NTSC ENG	NTSC English
	13	RESERVED	-
	14	RESERVED	-
	15	RESERVED	-

ADJUSTMENT

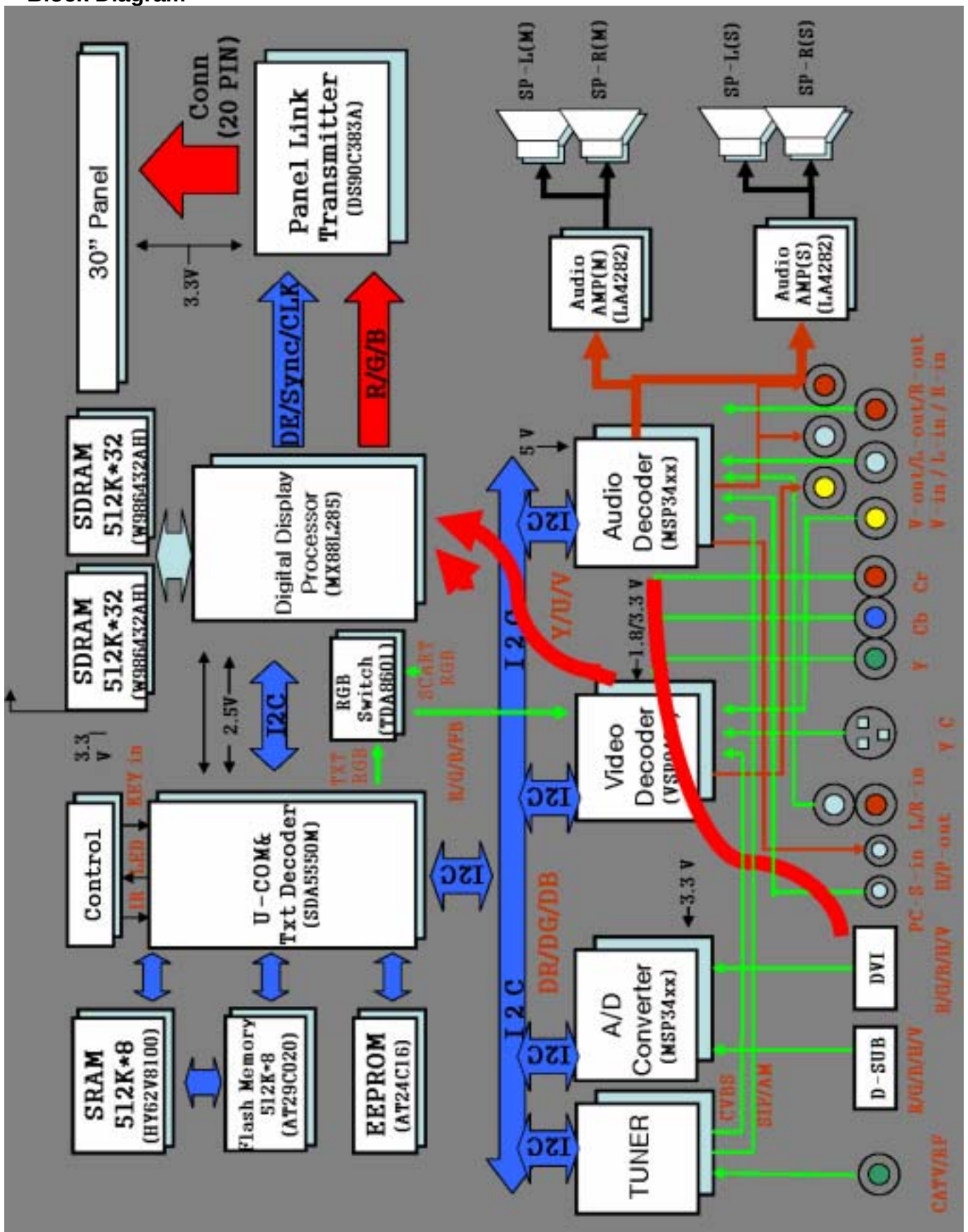
7.Optional Function

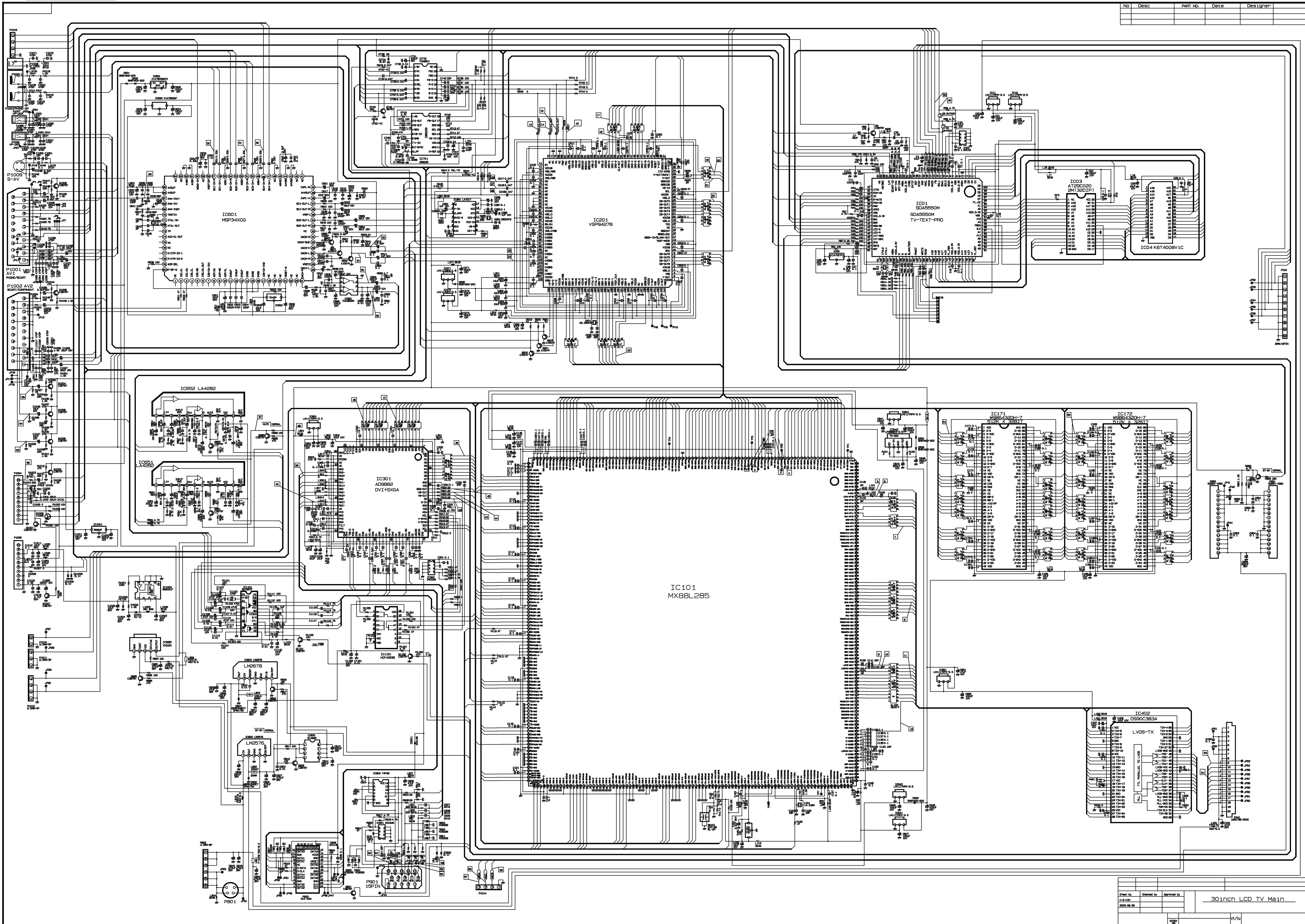
2) Teletext Language Option

OPTION	CODE	FUNCTION	REMARK
T-LANG	0	WEST EU	UK, FRANCE, SWEDEN, CZECH, GERMAN, SPAIN, ITALY, NORWAY, AUSTRALIA
	1	EAST EU1	POLAND, SLOVENIA, LUMANIA
	2	TURKEY EU	TURKEY
	3	EAST EU2	HUNGARY, SERBIA
	4	CYRILLIC1	ESTONIA
	5	CYRILLIC2	ESTONIA
	6	CYRILLIC3	RUSSIA, UKRAINA, ESTONIA, CROATIA, KAZAKHSTAN
	7	TURK GRE1	-
	8	TURK GRE2	-
	9	TURK GRE3	TURKEY, GREECE
	10	ARAB FRA	-
	11	ARAB ENG	ARAB EMIRATES(U.A.E)
	12	ARAB HEB1	-
	13	ARAB HEB2	-
	14	FABS ENG	-
	15	FABS FRA	-
	16	FABS ALL	-

BLOCK DIAGRAM

Block Diagram



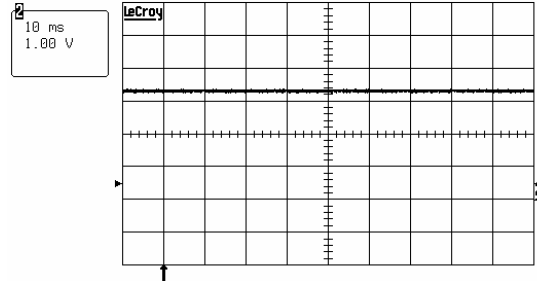


WAVE FORM

NOTE!!: You can find number from Schematic Diagram

1)IC101 PIN27 - MCKA

29-Nov-03
19:55:23

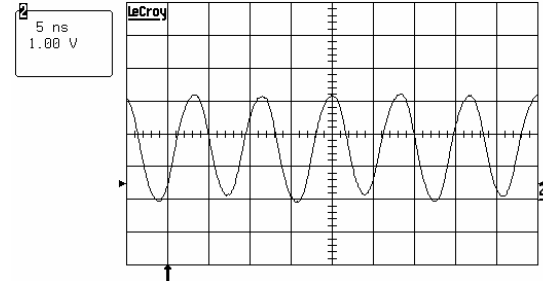


Freq(2) 12.5477 kHz
sdev(1) 22mV
rise(1) 2.1221 ms
Fall(1) 732.2 μ s
ampl(1) 0.16 V

10 ms BML
1 2 V DC $\frac{\Delta}{\Delta}$
2 1 V DC $\frac{\Delta}{\Delta}$
3 20 mV AC $\frac{\Delta}{\Delta}$
4 .5 V AC $\frac{\Delta}{\Delta}$
2 DC 0.50 V
500 kS/s
AUTO

2)IC801 PIN26 - MCLK

29-Nov-03
19:58:00

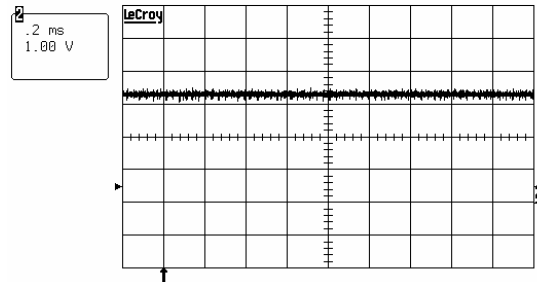


Freq(2) 118.925 MHz
sdev(1) 1.130 V
rise(1) 2.318 ns
Fall(1) 2.188 ns
ampl(1) 3.02 V

5 ns BML
1 2 V DC $\frac{\Delta}{\Delta}$
2 1 V DC $\frac{\Delta}{\Delta}$
3 20 mV AC $\frac{\Delta}{\Delta}$
4 .5 V AC $\frac{\Delta}{\Delta}$
2 DC 0.50 V
16 GS/s
AUTO

3)IC101 PIN 24 - MCKE

29-Nov-03
20:00:49

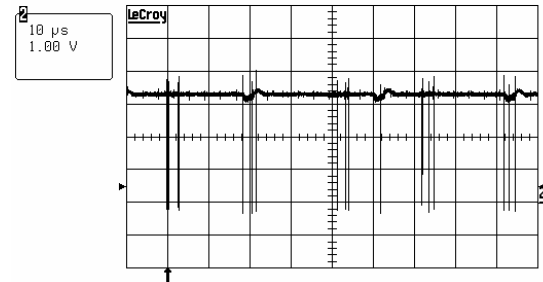


Freq(2) ---
sdev(1) 45mV
rise(1) 46.901 μ s
Fall(1) 155.199 μ s
ampl(1) 0.47 V

.2 ms BML
1 2 V DC $\frac{\Delta}{\Delta}$
2 1 V DC $\frac{\Delta}{\Delta}$
3 20 mV AC $\frac{\Delta}{\Delta}$
4 .5 V AC $\frac{\Delta}{\Delta}$
2 DC 0.50 V
25 MS/s
AUTO

4) IC101 PIN 23 - MCAS

29-Nov-03
20:03:44

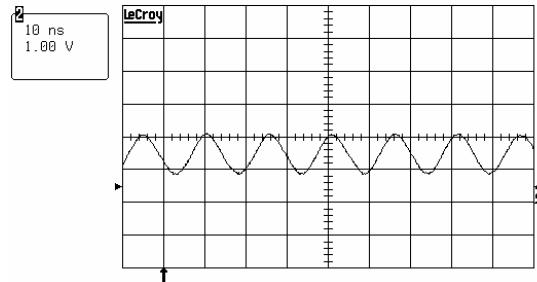


Freq(2) 1.22638 MHz
sdev(1) 135mV
rise(1) 4.6 ns
Fall(1) 5.3 ns
ampl(1) 3.64 V

10 μ s BML
1 2 V DC $\frac{\Delta}{\Delta}$
2 1 V DC $\frac{\Delta}{\Delta}$
3 20 mV AC $\frac{\Delta}{\Delta}$
4 .5 V AC $\frac{\Delta}{\Delta}$
2 DC 0.50 V
500 MS/s
AUTO

5) IC101 PIN 380 - LCLKA

29-Nov-03
20:06:50

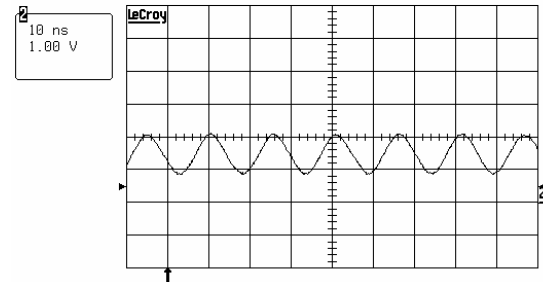


Freq(2) 65.3587 MHz
sdev(1) 410mV
rise(1) 4.076 ns
Fall(1) 4.431 ns
ampl(1) 1.12 V

10 ns BML
1 2 V DC $\frac{\Delta}{\Delta}$
2 1 V DC $\frac{\Delta}{\Delta}$
3 20 mV AC $\frac{\Delta}{\Delta}$
4 .5 V AC $\frac{\Delta}{\Delta}$
2 DC 0.50 V
16 GS/s
AUTO

6) IC101 PIN 378 - LCLKA

29-Nov-03
20:06:50



Freq(2) 65.3587 MHz
sdev(1) 410mV
rise(1) 4.076 ns
Fall(1) 4.431 ns
ampl(1) 1.12 V

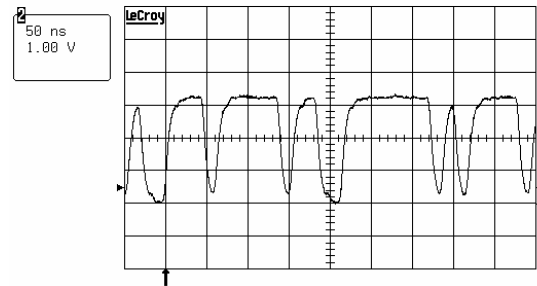
10 ns BML
1 2 V DC $\frac{\Delta}{\Delta}$
2 1 V DC $\frac{\Delta}{\Delta}$
3 20 mV AC $\frac{\Delta}{\Delta}$
4 .5 V AC $\frac{\Delta}{\Delta}$
2 DC 0.50 V
16 GS/s
AUTO

WAVE FORM

NOTE!!: You can find number from Schematic Diagram

7) IC101 PIN 369 – B signal OUT

29-Nov-03
20:08:42

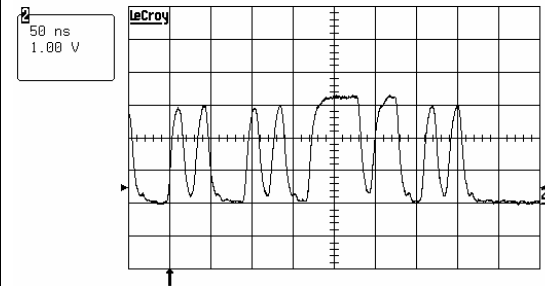


Freq(2) μ L 16.9804 MHz
sdev(1) 1.151 V
rise(1) μ L 11.614 ns
Fall(1) μ L 8.529 ns
ampl(1) 2.88 V

50 ns BML
1 2 V DC $\frac{\pi}{2}$
2 0.1 V DC $\frac{\pi}{2}$
3 20 mV AC $\frac{\pi}{2}$ 16 GS/s
4 .5 V AC $\frac{\pi}{2}$ 2 DC 0.50 V ☐ AUTO

8) IC101 PIN 346 – G signal OUT

29-Nov-03
20:09:23

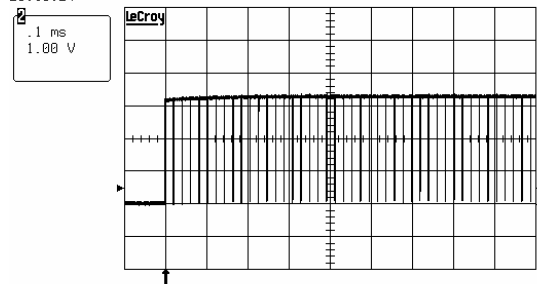


Freq(2) μ L 22.9691 MHz
sdev(1) 1.236 V
rise(1) μ L 8.369 ns
Fall(1) μ L 9.135 ns
ampl(1) 2.83 V

50 ns BML
1 2 V DC $\frac{\pi}{2}$
2 0.1 V DC $\frac{\pi}{2}$
3 20 mV AC $\frac{\pi}{2}$ 16 GS/s
4 .5 V AC $\frac{\pi}{2}$ 2 DC 0.50 V ☐ AUTO

9) IC101 PIN 327 - LDTG

29-Nov-03
20:10:24

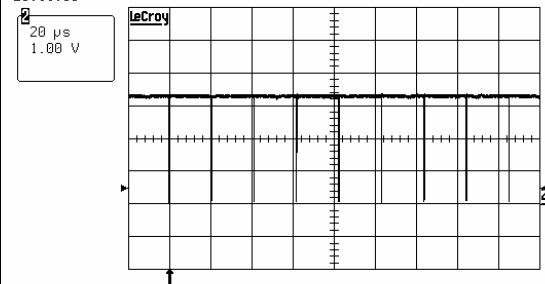


Freq(2) μ L 48.3884 kHz
sdev(1) 1.130 V
rise(1) μ L 28 ns
Fall(1) μ L 24 ns
ampl(1) 3.25 V

.1 ms BML
1 2 V DC $\frac{\pi}{2}$
2 0.1 V DC $\frac{\pi}{2}$
3 20 mV AC $\frac{\pi}{2}$ 50 MS/s
4 .5 V AC $\frac{\pi}{2}$ 2 DC 0.50 V ☐ AUTO

10) IC101 PIN 326 H- sync

29-Nov-03
20:11:05

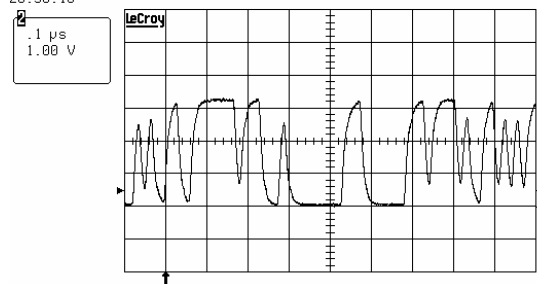


Freq(2) μ L 48.3880 kHz
sdev(1) 329 mV
rise(1) μ L 18.7 ns
Fall(1) μ L 15.3 ns
ampl(1) 3.19 V

20 μ s BML
1 2 V DC $\frac{\pi}{2}$
2 0.1 V DC $\frac{\pi}{2}$
3 20 mV AC $\frac{\pi}{2}$ 250 MS/s
4 .5 V AC $\frac{\pi}{2}$ 2 DC 0.50 V ☐ AUTO

11) IC101 PIN 328 R signal out

29-Nov-03
20:30:16

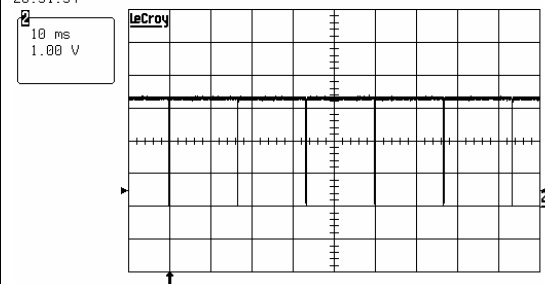


Freq(2) μ L 18.5545 MHz
sdev(1) 1.230 V
rise(1) μ L 65.809 ns
Fall(1) μ L 59.500 ns
ampl(1) 3.14 V

.1 μ s BML
1 2 V DC $\frac{\pi}{2}$
2 0.1 V DC $\frac{\pi}{2}$
3 20 mV AC $\frac{\pi}{2}$ 16 GS/s
4 .5 V AC $\frac{\pi}{2}$ 2 DC 0.50 V ☐ AUTO

12) IC 101 pin 301 V-sync

29-Nov-03
20:31:34



Freq(2) μ L 59.92 Hz
sdev(1) 356 mV
rise(1) μ L 1.6 μ s
Fall(1) μ L 1.6 μ s
ampl(1) 3.21 V

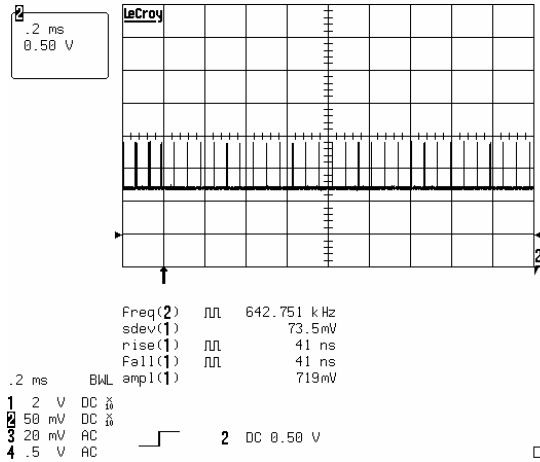
10 ms BML
1 2 V DC $\frac{\pi}{2}$
2 0.1 V DC $\frac{\pi}{2}$
3 20 mV AC $\frac{\pi}{2}$ 500 kS/s
4 .5 V AC $\frac{\pi}{2}$ 2 DC 0.50 V ☐ AUTO

WAVE FORM

NOTE!!: You can find number from Schematic Diagram

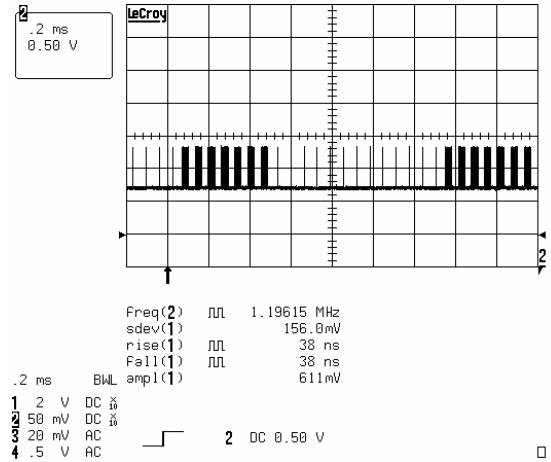
13) IC 201 pin 73 TELETEXT B signal input

29-Nov-03
20:37:14



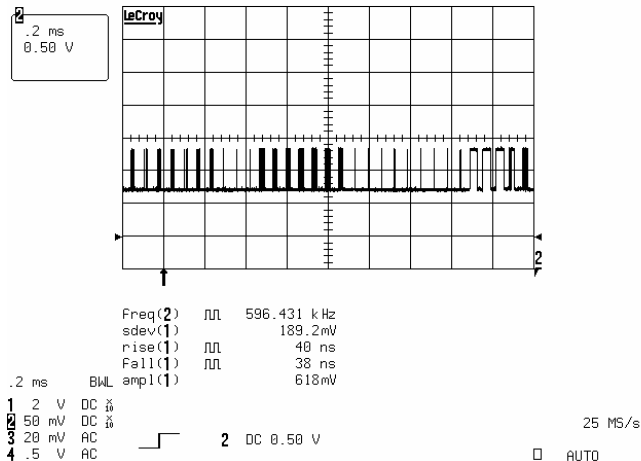
14) IC 201 pin 72 TELETEXT G signal input

29-Nov-03
20:37:36



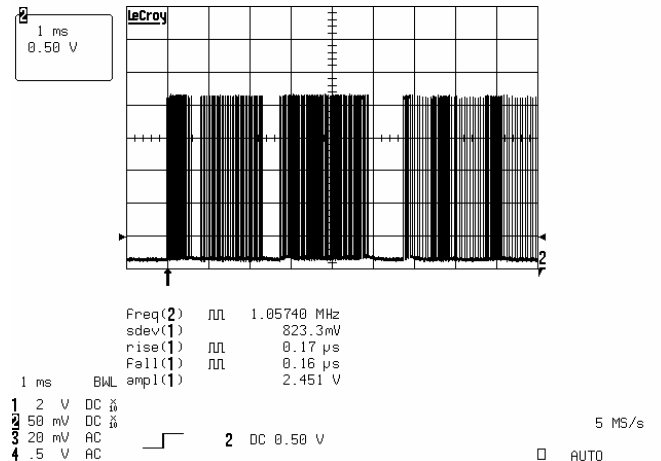
15) IC 201 pin 73 TELETEXT R signal input

29-Nov-03
20:38:03



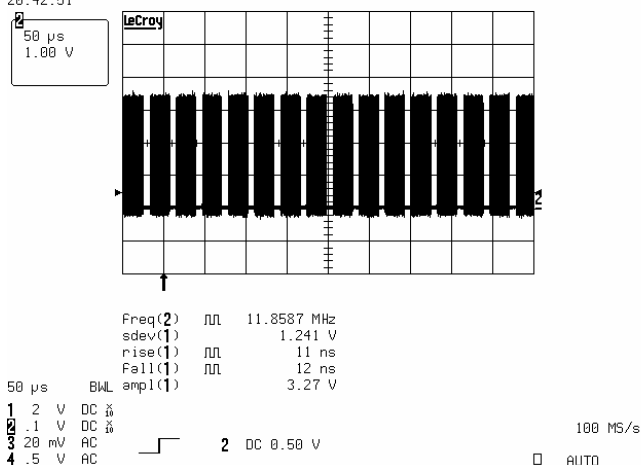
16) IC 201 pin 67 TELETEXT FB signal input

29-Nov-03
20:40:06



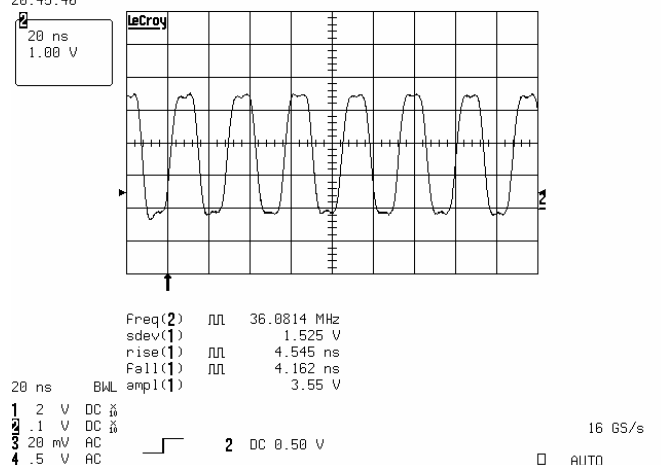
17) IC201 pin 54 R signal output

29-Nov-03
20:42:51



18) IC 201 pin 51 clock output

29-Nov-03
20:45:46

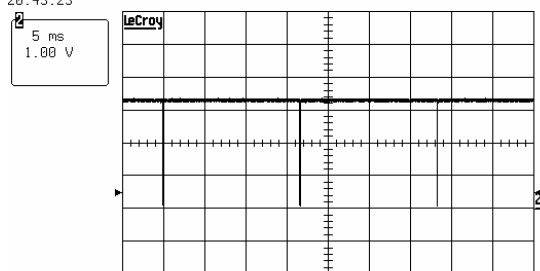


WAVE FORM

NOTE!!: You can find number from Schematic Diagram

19) IC201 pin 39 V-output

29-Nov-03
20:43:23

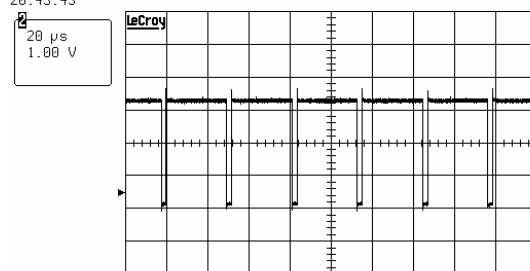


Freq(2) μ L 59.94 Hz
sdev(1) 196mV
rise(1) μ L 0.8 μ s
Fall(1) μ L 0.8 μ s
ampl(1) 3.17 V

5 ms B.W.L. 1 MS/s
1 2 V DC $\frac{\infty}{\infty}$
2 .1 V DC $\frac{\infty}{\infty}$
3 20 mV AC $\frac{\infty}{\infty}$ 2 DC 0.50 V
4 .5 V AC $\frac{\infty}{\infty}$ ☐ AUTO

20) IC201 pin 33 pin 32 H-output H-output

29-Nov-03
20:43:43

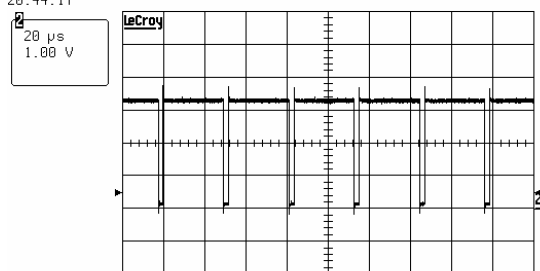


Freq(2) μ L 31.4683 kHz
sdev(1) 818mV
rise(1) μ L 5.8 ns
Fall(1) μ L 6.5 ns
ampl(1) 3.15 V

20 μ s B.W.L. 250 MS/s
1 2 V DC $\frac{\infty}{\infty}$
2 .1 V DC $\frac{\infty}{\infty}$
3 20 mV AC $\frac{\infty}{\infty}$ 2 DC 0.50 V
4 .5 V AC $\frac{\infty}{\infty}$ ☐ AUTO

21) IC201 pin 32 H-output

29-Nov-03
20:44:17

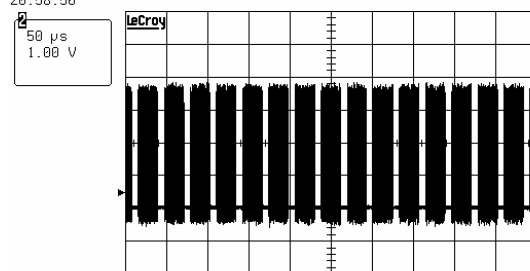


Freq(2) μ L 31.4683 kHz
sdev(1) 817mV
rise(1) μ L 4.8 ns
Fall(1) μ L 5.6 ns
ampl(1) 3.14 V

20 μ s B.W.L. 250 MS/s
1 2 V DC $\frac{\infty}{\infty}$
2 .1 V DC $\frac{\infty}{\infty}$
3 20 mV AC $\frac{\infty}{\infty}$ 2 DC 0.50 V
4 .5 V AC $\frac{\infty}{\infty}$ ☐ AUTO

22) IC201 pin 25 G -signal Output

29-Nov-03
20:58:56

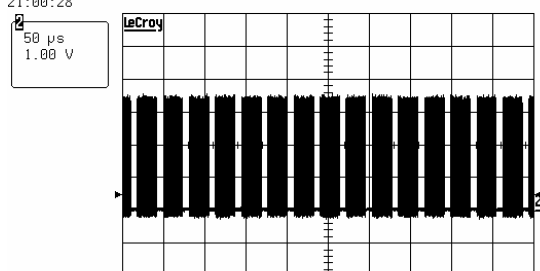


Freq(2) μ L 10.4336 MHz
sdev(1) 1.255 V
rise(1) μ L 154 ns
Fall(1) μ L 23 ns
ampl(1) 3.81 V

50 μ s B.W.L. 100 MS/s
1 2 V DC $\frac{\infty}{\infty}$
2 .1 V DC $\frac{\infty}{\infty}$
3 20 mV AC $\frac{\infty}{\infty}$ 2 DC 0.50 V
4 .5 V AC $\frac{\infty}{\infty}$ ☐ AUTO

23) IC201 pin 132 B-signal Output

29-Nov-03
21:00:28

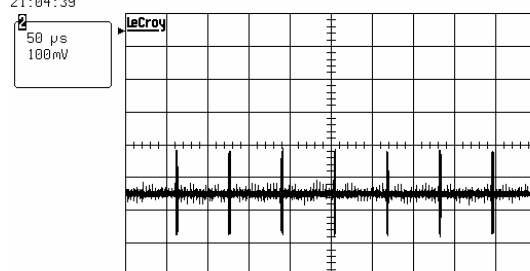


Freq(2) μ L 13.2636 MHz
sdev(1) 1.216 V
rise(1) μ L 11 ns
Fall(1) μ L 11 ns
ampl(1) 3.30 V

50 μ s B.W.L. 100 MS/s
1 2 V DC $\frac{\infty}{\infty}$
2 .1 V DC $\frac{\infty}{\infty}$
3 20 mV AC $\frac{\infty}{\infty}$ 2 DC 0.50 V
4 .5 V AC $\frac{\infty}{\infty}$ ☐ AUTO

24) IC201 S-Video C signal input

29-Nov-03
21:04:39



Freq(2) μ L 4.04115 MHz
sdev(1) 16.1mV
rise(1) μ L 3.801 μ s
Fall(1) μ L 2.609 μ s
ampl(1) 272mV

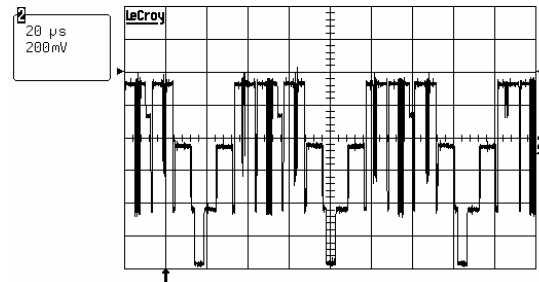
50 μ s B.W.L. 100 MS/s
1 2 V DC $\frac{\infty}{\infty}$
2 10 mV DC $\frac{\infty}{\infty}$
3 20 mV AC $\frac{\infty}{\infty}$ 2 DC 500mV
4 .5 V AC $\frac{\infty}{\infty}$ ☐ AUTO

WAVE FORM

NOTE!!: You can find number from Schematic Diagram

25)IC201 S-Video Y signal input

29-Nov-03
21:05:57

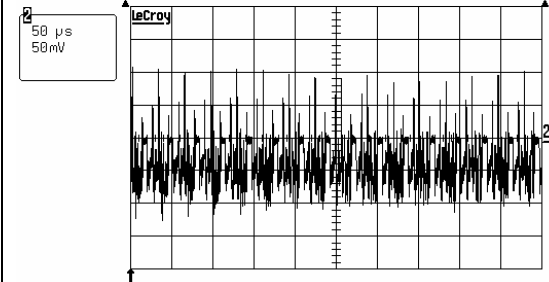


Freq(2) μ L 1.74740 MHz
sdev(1) 346.3mV
rise(1) μ L 3.8155 μ s
Fall(1) μ L 912.6 ns
ampl(1) 762mV

20 μ s B.W.L. 250 MS/s
1 2 V DC $\frac{\infty}{\infty}$
2 20 mV DC $\frac{\infty}{\infty}$
3 20 mV AC $\frac{\infty}{\infty}$
4 .5 V AC $\frac{\infty}{\infty}$ 2 DC 0.500 V ☐ STOPPED

26)IC201 pin 82 Component U - signal input

30-Nov-03
1:49:56

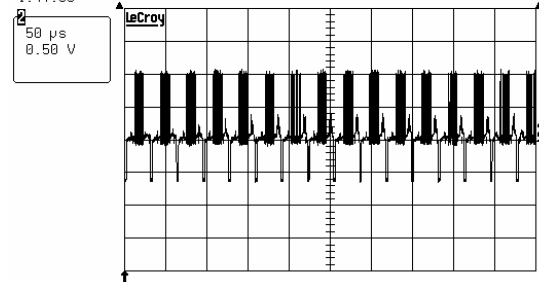


Freq(2) $\frac{\infty}{\infty}$ 618.720 kHz
sdev(1) 32.42mV
rise(1) $\frac{\infty}{\infty}$ 23.510 μ s
Fall(1) $\frac{\infty}{\infty}$ 9.687 μ s
ampl(1) $\frac{\infty}{\infty}$ 234.4mV

50 μ s B.W.L. 100 MS/s
1 2 V DC $\frac{\infty}{\infty}$
2 5 mV DC $\frac{\infty}{\infty}$
3 20 mV AC $\frac{\infty}{\infty}$
4 .5 V AC $\frac{\infty}{\infty}$ 2 DC 255mV ☐ AUTO

27) IC201 pin 80 Component Y - signal input

30-Nov-03
1:47:53

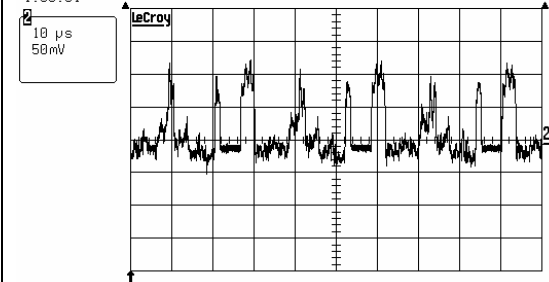


Freq(2) μ L 2.05970 MHz
sdev(1) 318.1mV
rise(1) μ L 10.015 μ s
Fall(1) μ L - - -
ampl(1) 1.607 V

50 μ s B.W.L. 100 MS/s
1 2 V DC $\frac{\infty}{\infty}$
2 50 mV DC $\frac{\infty}{\infty}$
3 20 mV AC $\frac{\infty}{\infty}$
4 .5 V AC $\frac{\infty}{\infty}$ 2 DC 2.51 V ☐ STOPPED

28) IC201 pin 78 Component V - signal input

30-Nov-03
1:50:51

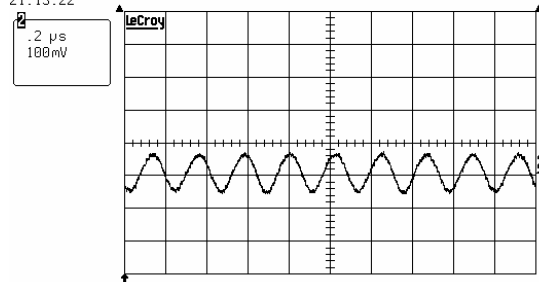


Freq(2) μ L 238.982 kHz
sdev(1) 37.61mV
rise(1) μ L 12.6855 μ s
Fall(1) μ L 1.0152 μ s
ampl(1) 134.5mV

10 μ s B.W.L. 500 MS/s
1 2 V DC $\frac{\infty}{\infty}$
2 5 mV DC $\frac{\infty}{\infty}$
3 20 mV AC $\frac{\infty}{\infty}$
4 .5 V AC $\frac{\infty}{\infty}$ 2 DC 255mV ☐ AUTO

29) IC601 pin 67 SIF signal input

29-Nov-03
21:13:22

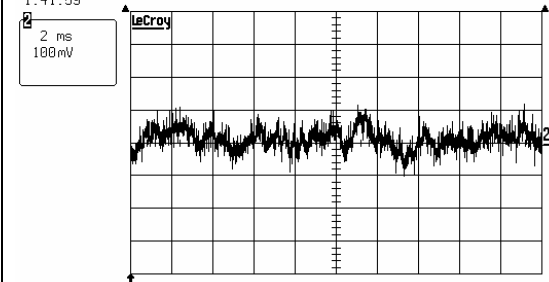


Freq(2) μ L 4.49834 MHz
sdev(1) 39.3mV
rise(1) μ L 54.200 ns
Fall(1) μ L 52.084 ns
ampl(1) 103mV

.2 μ s B.W.L. 16 GS/s
1 2 V DC $\frac{\infty}{\infty}$
2 10 mV DC $\frac{\infty}{\infty}$
3 20 mV AC $\frac{\infty}{\infty}$
4 .5 V AC $\frac{\infty}{\infty}$ 2 DC 512mV ☐ AUTO

30) IC601 pin 56&57 AV1 sound input(video)

30-Nov-03
1:41:59



Freq(2) $\frac{\infty}{\infty}$ 1.38513 kHz
sdev(1) 26.2mV
rise(1) $\frac{\infty}{\infty}$ 4.05323 ms
Fall(1) $\frac{\infty}{\infty}$ 3.31695 ms
ampl(1) $\frac{\infty}{\infty}$ 222mV

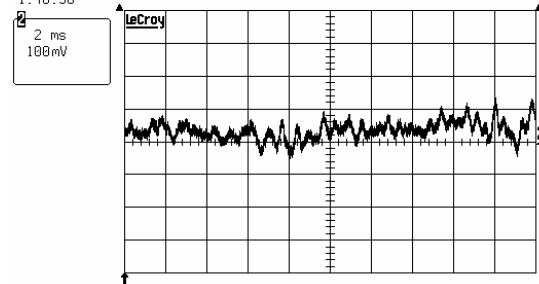
2 ms B.W.L. 2.5 MS/s
1 2 V DC $\frac{\infty}{\infty}$
2 10 mV DC $\frac{\infty}{\infty}$
3 20 mV AC $\frac{\infty}{\infty}$
4 .5 V AC $\frac{\infty}{\infty}$ 2 DC 505mV ☐ AUTO

WAVE FORM

NOTE!!: You can find number from Schematic Diagram

31) IC601 pin 50&51 sound input(phone -2P)

30-Nov-03
1:40:50



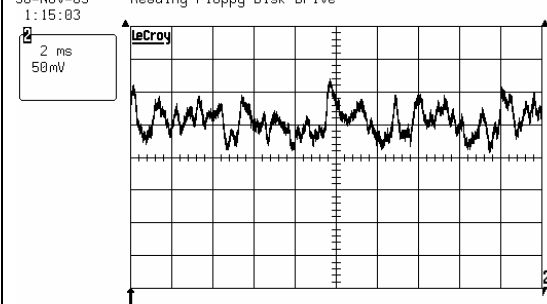
Freq(2) 637.66 Hz
sdev(1) 25.8mV
rise(1) 6.08947 ms
Fall(1) 2.39960 ms
ampl(1) 187mV

2 ms BML
1 2 V DC 2.5 MS/s
2 10 mV DC
3 20 mV AC
4 .5 V AC 2 DC 505mV STOPPED

32) IC601 pin 47&48 sound input (PC) (XGA 1024*768@60HZ)

30-Nov-03
1:15:03

Reading Floppy Disk Drive



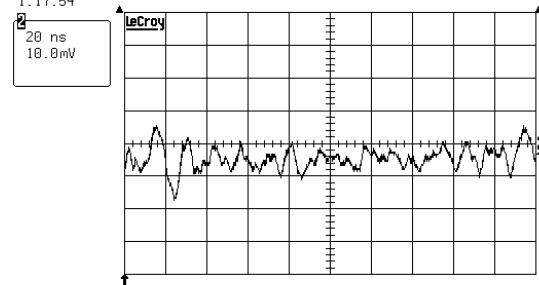
Freq(2) 807.80 Hz
sdev(1) 20.65mV
rise(1) 4.47315 ms
Fall(1) 3.33048 ms
ampl(1) 114.1mV

2 ms BML
1 2 V DC 2.5 MS/s
2 5 mV DC
3 20 mV AC
4 .5 V AC 2 DC 1.065 V AUTO

33) IC601 pin 28 L -sound output

30-Nov-03
1:17:54

Offset 2 -0.003 V

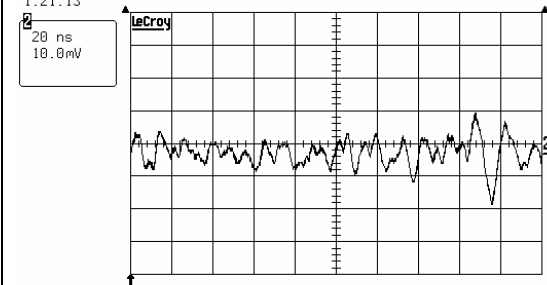


Freq(2) 43.9022 MHz
sdev(1) 3.39mV
rise(1) 168.019 ns
Fall(1) 6.276 ns
ampl(1) 23.1mV

20 ns BML
1 2 V DC 16 GS/s
2 1 mV DC
3 20 mV AC
4 .5 V AC 2 DC 53.0mV AUTO

34) IC601 pin 27 R - sound output

30-Nov-03
1:21:13

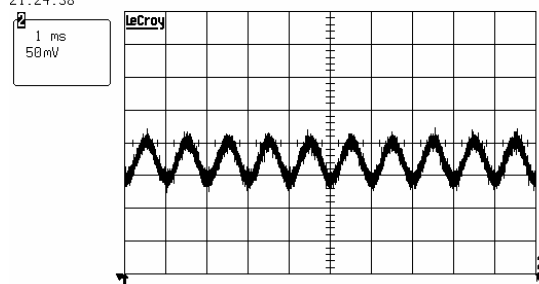


Freq(2) 24.8550 MHz
sdev(1) 3.86mV
rise(1) 5.287 ns
Fall(1) 155.781 ns
ampl(1) 28.1mV

20 ns BML
1 2 V DC 16 GS/s
2 1 mV DC
3 20 mV AC
4 .5 V AC 2 DC 53.0mV AUTO

35) IC691 pin 3 HEAD_PHONE L -sound output

29-Nov-03
21:24:38

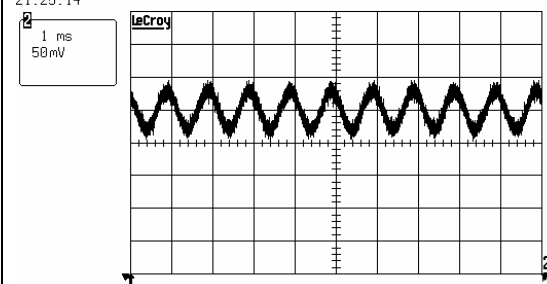


Freq(2) 21.07mV
sdev(1) 385.41 μs
rise(1) 400.27 μs
Fall(1) 100.0mV
ampl(1)

1 ms BML
1 2 V DC 5 MS/s
2 5 mV DC
3 20 mV AC
4 .5 V AC 2 DC 1.885 V AUTO

36) IC691 pin 1 HEAD_PHONE R -sound output

29-Nov-03
21:25:14

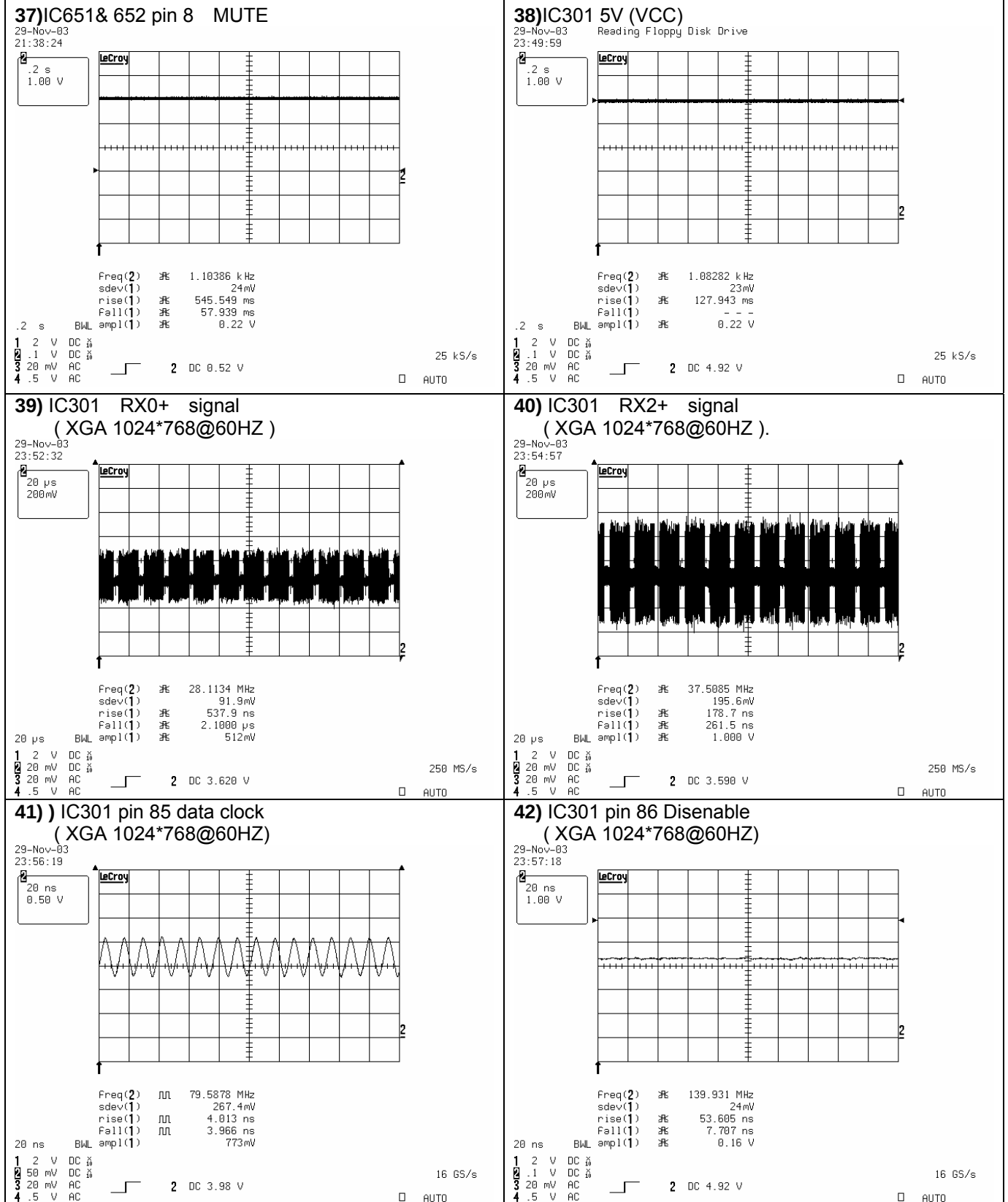


Freq(2) 21.02mV
sdev(1) 320.27 μs
rise(1) 309.48 μs
Fall(1) 93.7mV
ampl(1)

1 ms BML
1 2 V DC 5 MS/s
2 5 mV DC
3 20 mV AC
4 .5 V AC 2 DC 1.885 V AUTO

WAVE FORM

NOTE!!: You can find number from Schematic Diagram

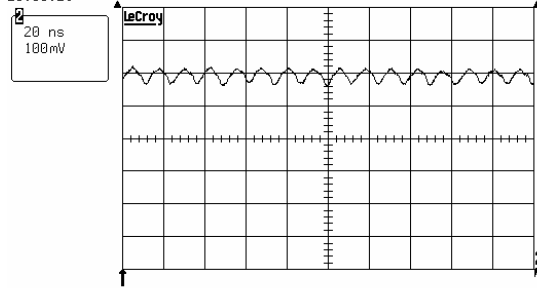


WAVE FORM

NOTE!!: You can find number from Schematic Diagram

43) IC301 pin 87 V - sync output
(XGA 1024*768@60HZ)

29-Nov-03
23:58:21

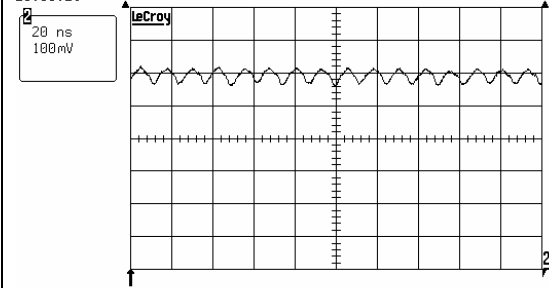


Freq(2) 79.7456 MHz
sdev(1) 15.2mV
rise(1) 4.188 ns
Fall(1) 8.832 ns
ampl(1) 47mV

20 ns BML
1 2 V DC 16 GS/s
2 10 mV DC 16 GS/s
3 20 mV AC 16 GS/s
4 .5 V AC 16 GS/s

44) IC301 pin 88 H - sync output
(XGA 1024*768@60HZ)

29-Nov-03
23:58:21

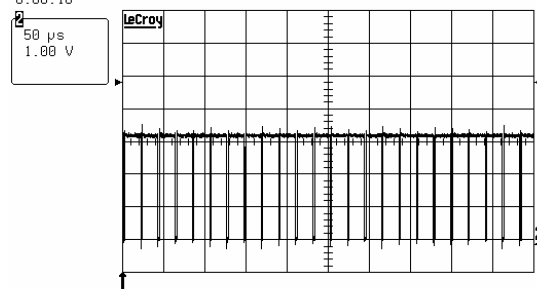


Freq(2) 79.7456 MHz
sdev(1) 15.2mV
rise(1) 4.188 ns
Fall(1) 8.832 ns
ampl(1) 47mV

20 ns BML
1 2 V DC 16 GS/s
2 10 mV DC 16 GS/s
3 20 mV AC 16 GS/s
4 .5 V AC 16 GS/s

45) IC301 pin 89 SOG sync output
(XGA 1024*768@60HZ)

30-Nov-03
0:00:10

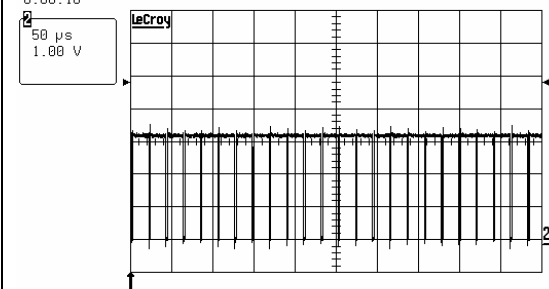


Freq(2) 47.7617 kHz
sdev(1) 846mV
rise(1) 10 ns
Fall(1) 10 ns
ampl(1) 3.13 V

50 µs BML
1 2 V DC 100 MS/s
2 .1 V DC 100 MS/s
3 20 mV AC 100 MS/s
4 .5 V AC 100 MS/s

46) IC301 pin 99 R signal ouput
(XGA 1024*768@60HZ)

30-Nov-03
0:00:10

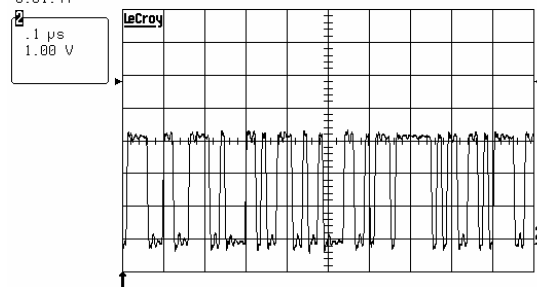


Freq(2) 47.7617 kHz
sdev(1) 846mV
rise(1) 10 ns
Fall(1) 10 ns
ampl(1) 3.13 V

50 µs BML
1 2 V DC 100 MS/s
2 .1 V DC 100 MS/s
3 20 mV AC 100 MS/s
4 .5 V AC 100 MS/s

47) IC301 pin 10 G signal ouput
(XGA 1024*768@60HZ)

30-Nov-03
0:01:47

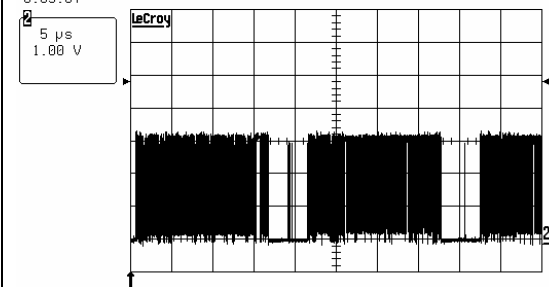


Freq(2) 22.0594 MHz
sdev(1) 1.513 V
rise(1) 3.961 ns
Fall(1) 3.912 ns
ampl(1) 3.27 V

.1 µs BML
1 2 V DC 16 GS/s
2 .1 V DC 16 GS/s
3 20 mV AC 16 GS/s
4 .5 V AC 16 GS/s

48) IC301 pin 20 B signal ouput
(XGA 1024*768@60HZ)

30-Nov-03
0:03:07



Freq(2) 26.3146 MHz
sdev(1) 1.358 V
rise(1) 10.3 ns
Fall(1) 9.0 ns
ampl(1) 3.16 V

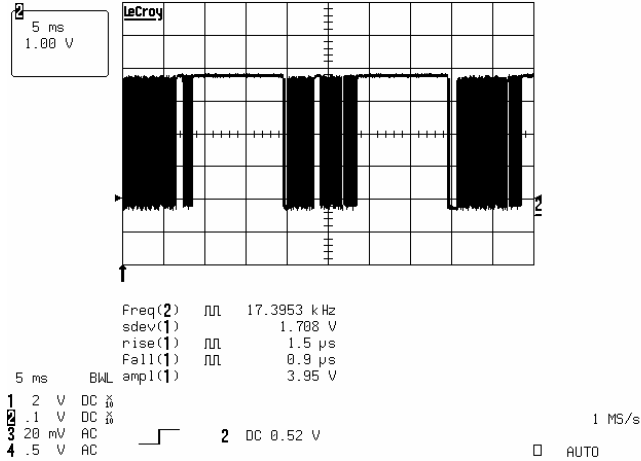
5 µs BML
1 2 V DC 1 GS/s
2 .1 V DC 1 GS/s
3 20 mV AC 1 GS/s
4 .5 V AC 1 GS/s

WAVE FORM

NOTE!!: You can find number from Schematic Diagram

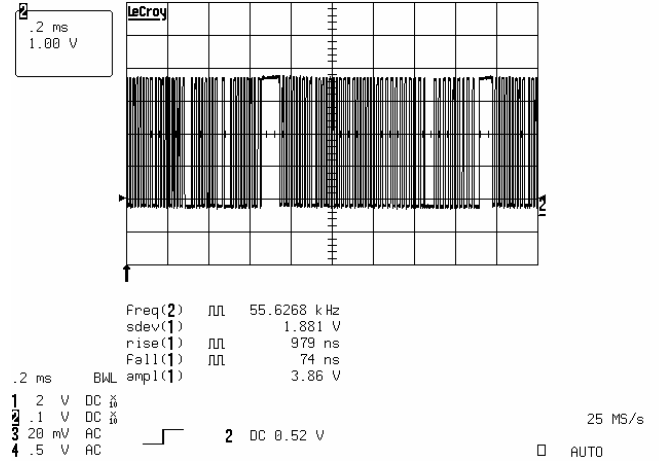
49) IC01 pin 11 SDA clock output

29-Nov-03
21:28:38



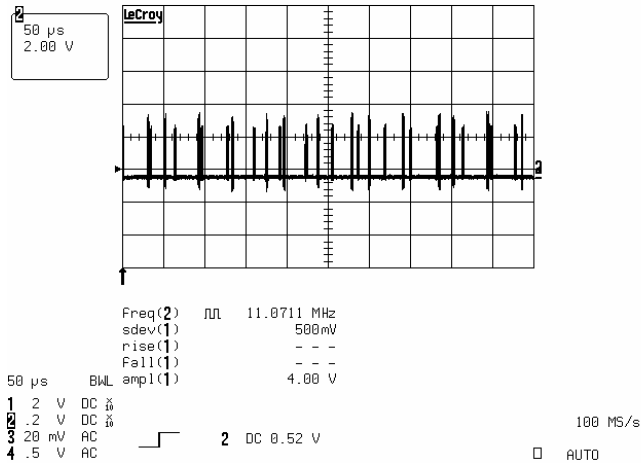
50) IC01 pin 11 SCL clock output

29-Nov-03
21:29:10



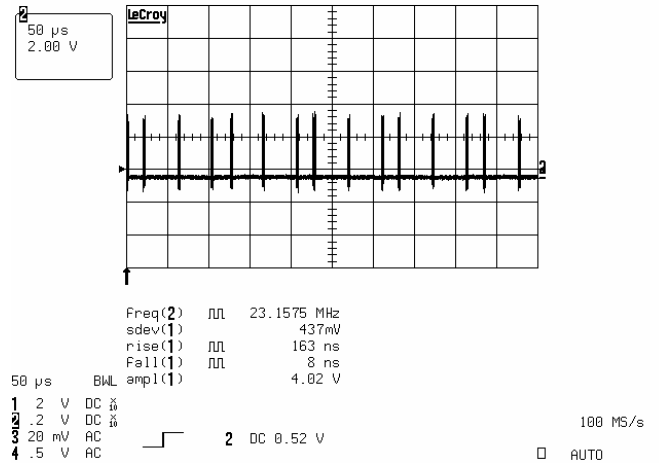
51) IC171 pin 2 data input.

29-Nov-03
21:29:55



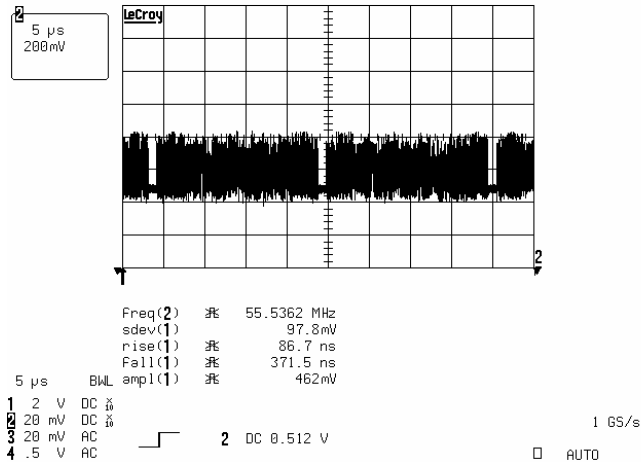
52) IC172 pin 2 data input.

29-Nov-03
21:30:40



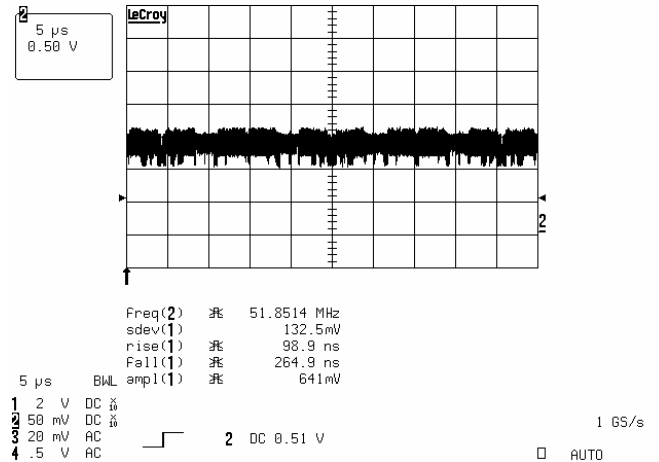
53) IC402 pin 37 ARD output

29-Nov-03
21:32:22



54) IC402 pin 41 ARC output

29-Nov-03
21:33:32

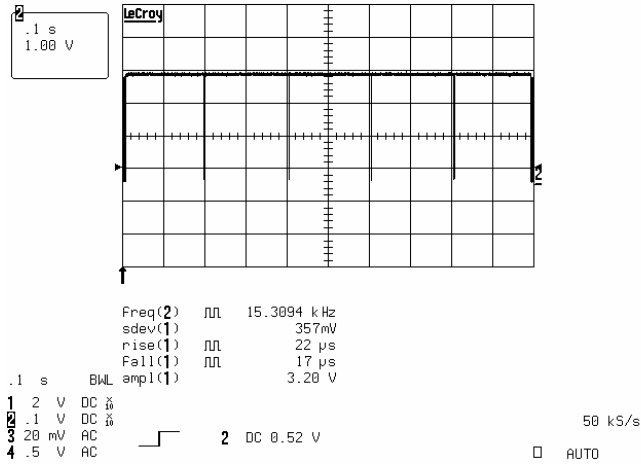


WAVE FORM

NOTE!!: You can find number from Schematic Diagram

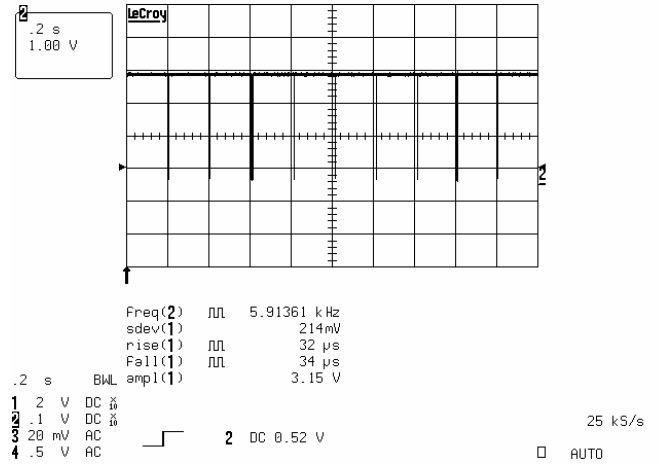
55) P1014 pin 2 MXCS clock

29-Nov-03
21:34:31



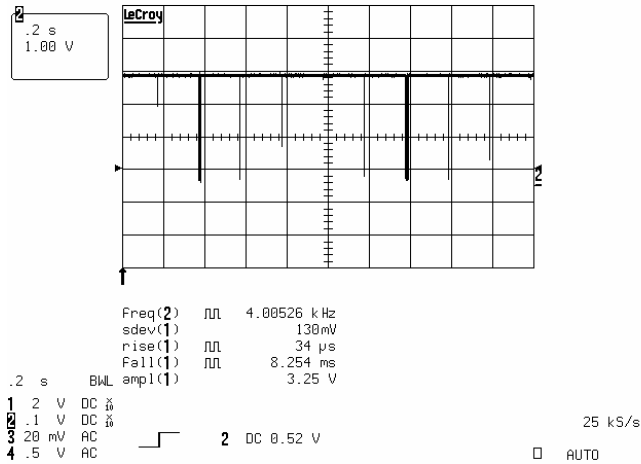
56) P1014 pin 3 MXDA clock

29-Nov-03
21:36:41



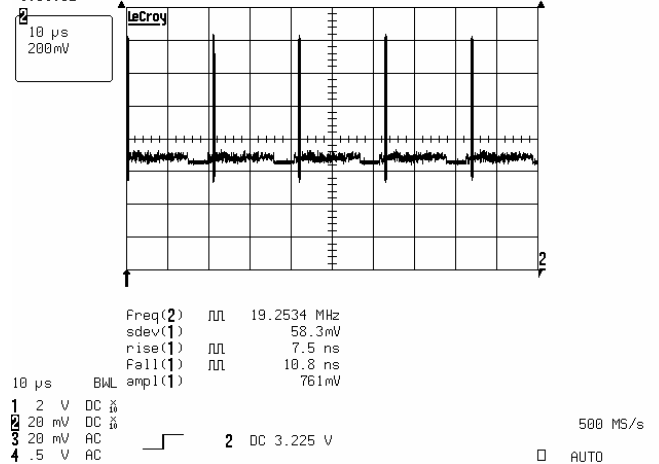
57) P1014 pin 4 MXCL clock

29-Nov-03
21:37:02



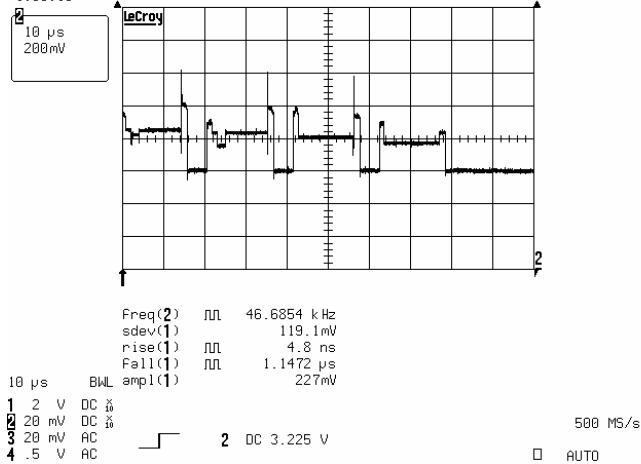
58) P901 pin 1 R signal input (XGA 1024*768@60HZ)

30-Nov-03
1:01:02



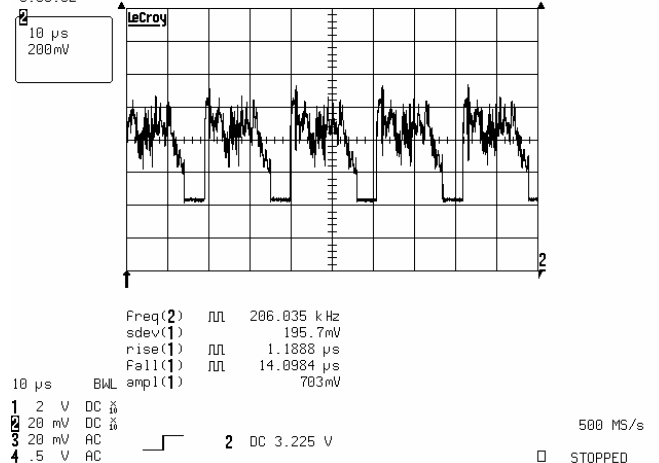
59 P901 pin 2 G signal input (XGA 1024*768@60HZ)

30-Nov-03
1:00:13



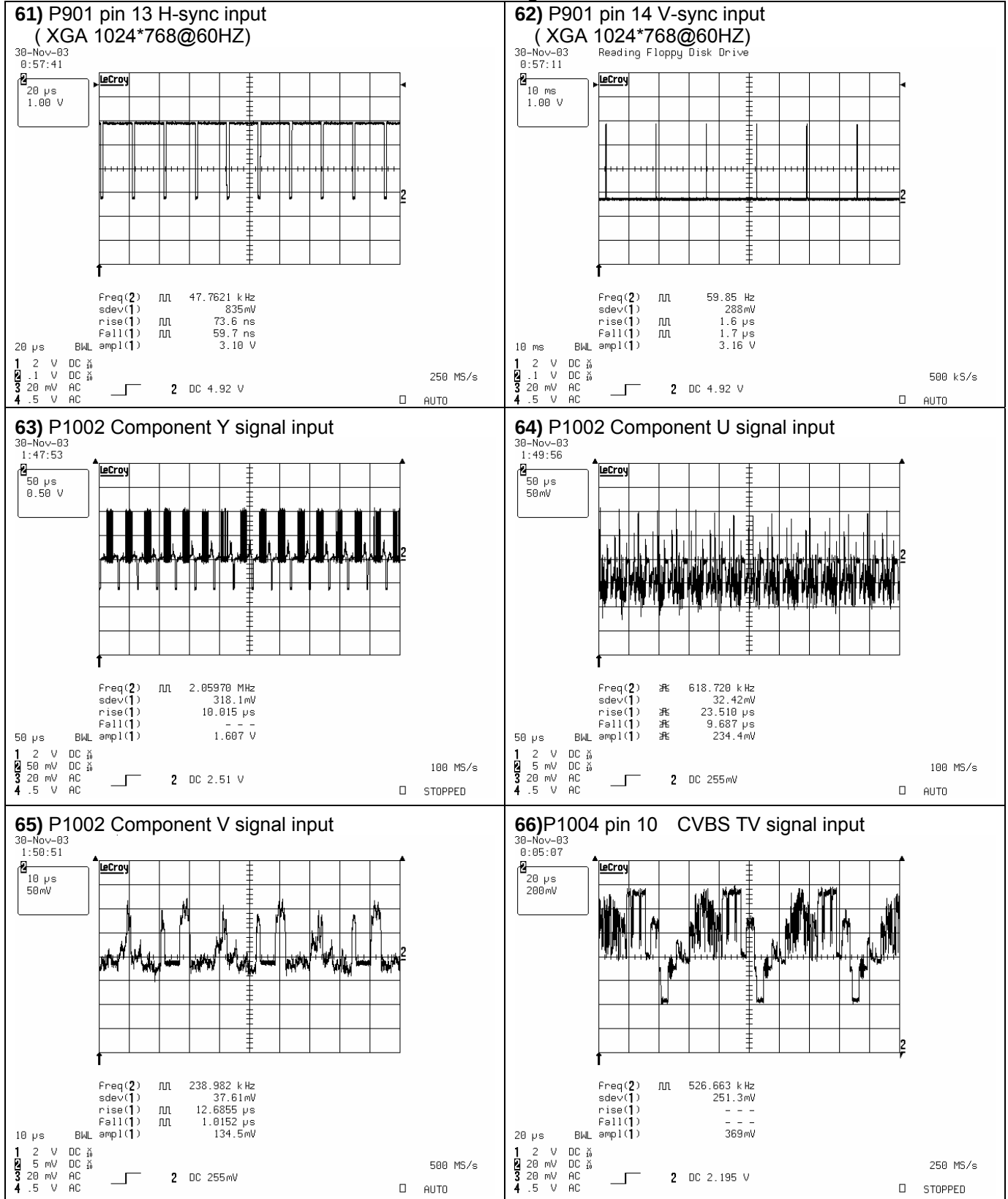
60) P901 pin 3 B signal input (XGA 1024*768@60HZ)

30-Nov-03
0:59:02



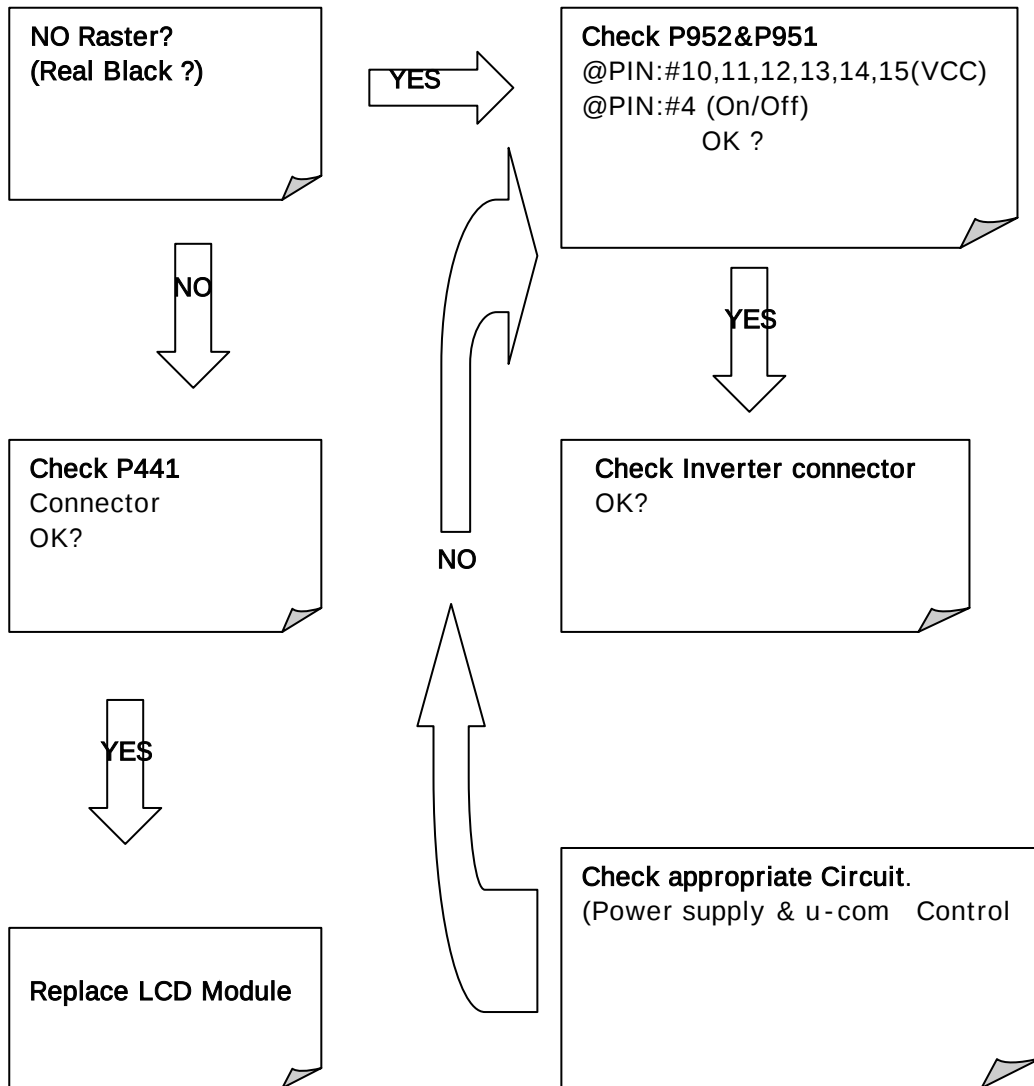
WAVE FORM

NOTE!!: You can find number from Schematic Diagram



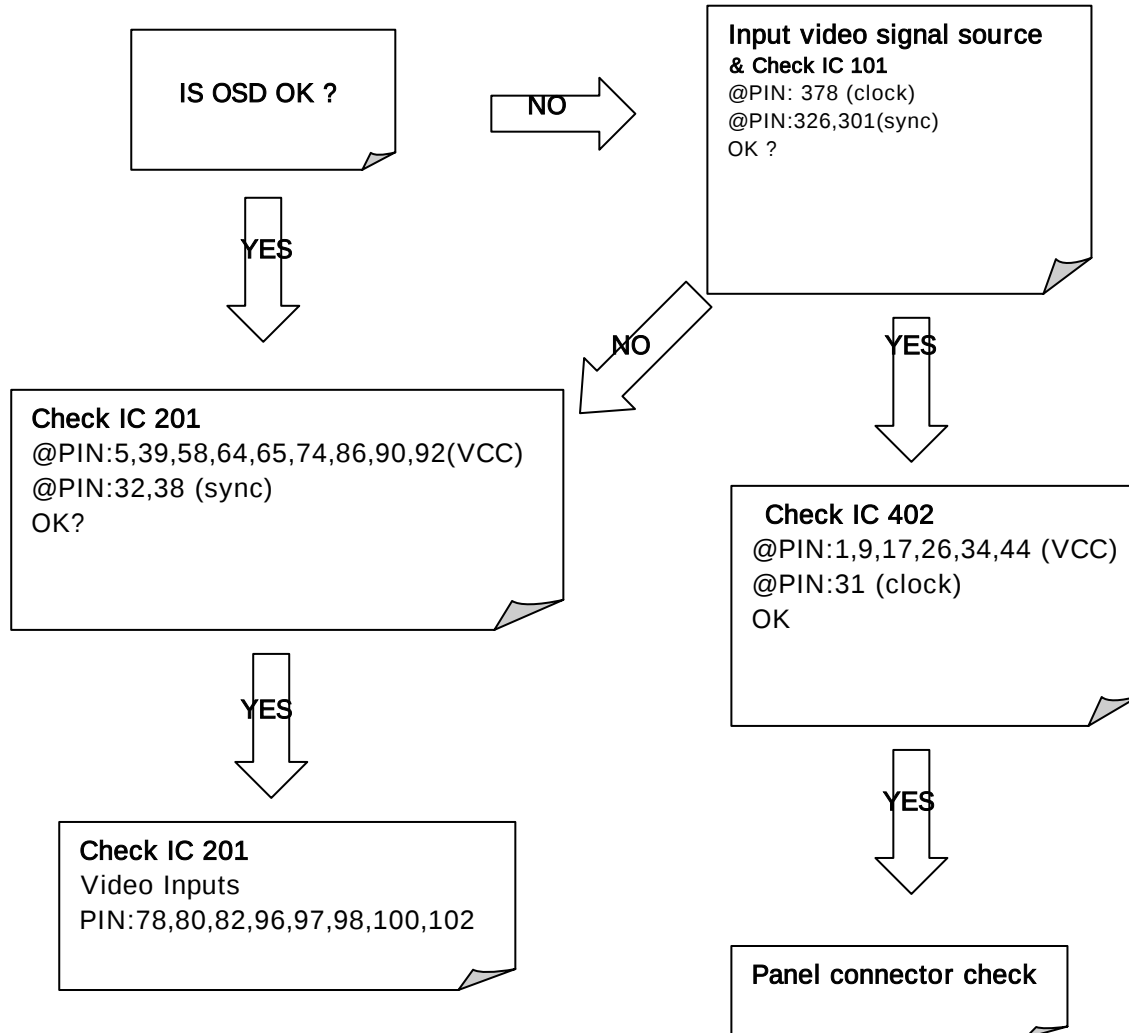
TROUBLE SHOOTING

1,NO Raster



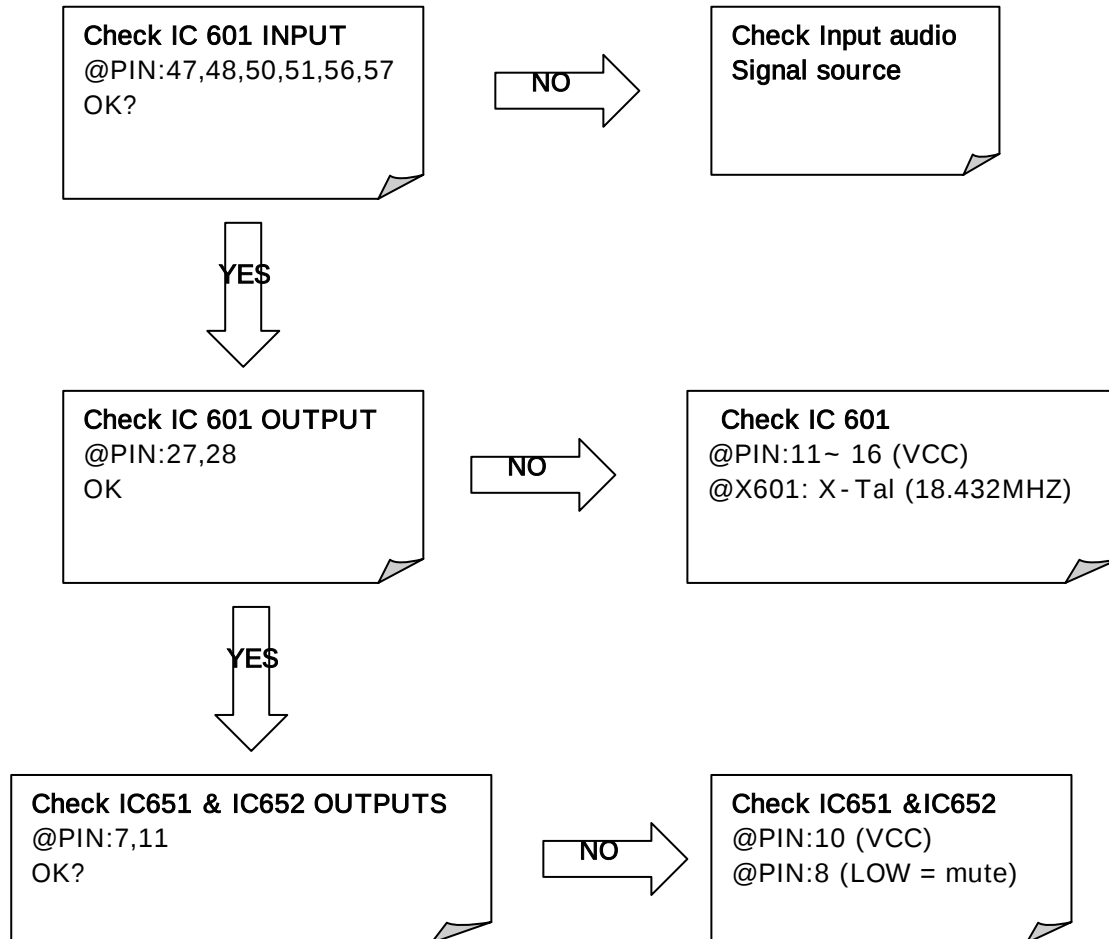
TROUBLE SHOOTING

2,NO Picture & Sound OK



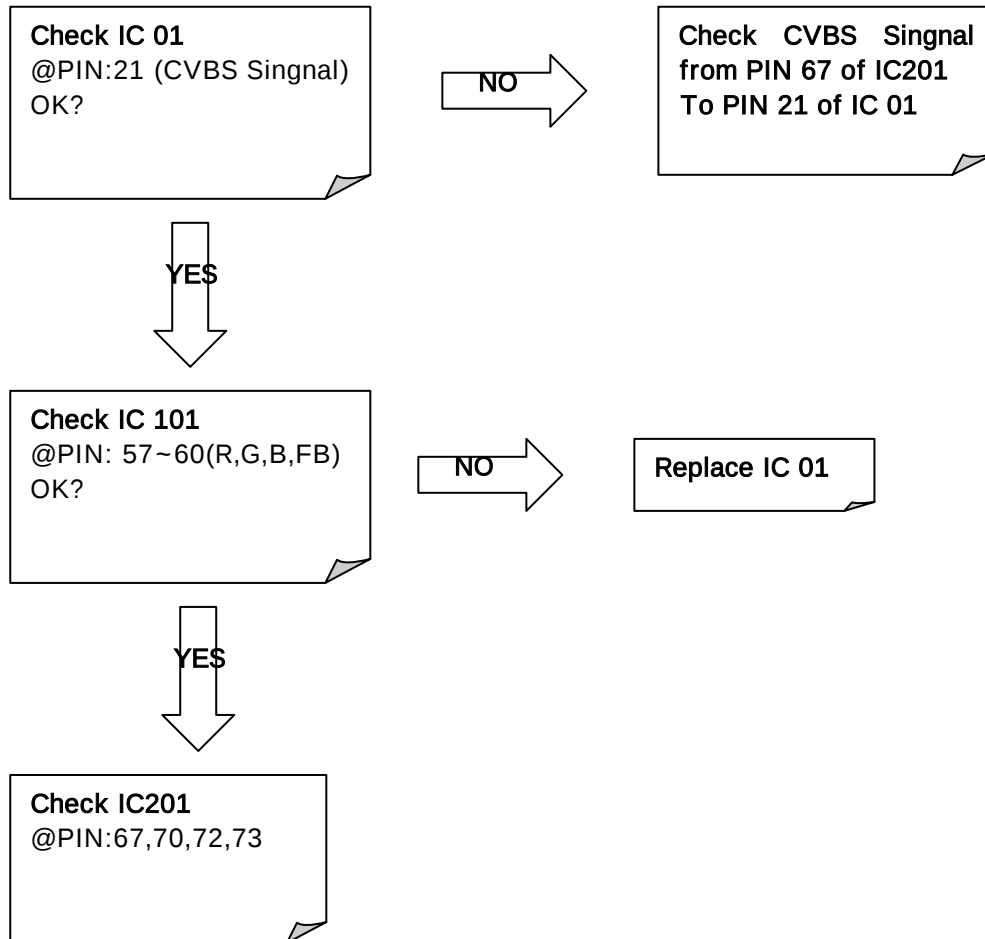
TROUBLE SHOOTING

3,NO Sound & Picture OK



TROUBLE SHOOTING

4,NO Text



TROUBLE SHOOTING

5,NO PIP

Check IC 101
@PIN:21 (CVBS Singnal)
OK?

YES

Check IC 441
@PIN 9~18

YES

Check IC 301
@PIN: 10,20,83 (VCC)
@PIN: 79,80 (sync)
Check IC 201
@PIN: 3,5,9,58,64,65,
74,86,90,92 (VCC)
@PIN:32,38 (sync)
@PIN:122,123 (X - tal)
OK?

NO

Replace IC 101

YES

Check IC301 INPUT SINGNAL
Check IC201 INPUT SINGNAL

REPLACEMENT PART LIST

1.Parts List

1) Assemble process

LEVEL	PART NO	PART NAME	DESCRIPTIONS	Q.TY
1	PANLC300W01000	PANEL, LCD COLOR	30" 400CD, LC300W01	1
1	CON20P125ADK00	LEAD ASSY	30.1" Panel, 20-PIN 250MM H/H	1
1	501-062L000	LABEL, ID	RL-30S10(LT-30FTP), RUS, ROLSEN	1
1	501-016B000	STICKER, LOGO	ROLSEN, 30" SIZE	1
1	501-0030000	LABEL, SERIAL	, SILVER/BLACK	1
1	501-001R000	LABEL, WARNING	ROLSEN/ELSON, RUS	1
1	500-003X000	OWNER'S MANUAL	RL-17S10(LT-17FTP), RUS, ROLSEN	1
1	499-004A000	TAPE, ACETATE	W:20mm, L:30m	330mm
1	499-002A000	TAPE,	W:70mm	4000mm
1	492-001B000	FERRITE CORE	CLIP CORE, ZCHT1730-0730	3
1	491-001A000	TAPE, CONDUCTIVE	W:40mm, L:20mm, COPPER	4mm
1	490-001Q000	FORM, SHIELD	GASKET, 7ITS FK13- 8-285-00	1
1	490-001P000	FORM, SHIELD	GASKET, 7ITS FK15-22-190-00	1
1	490-001N000	FORM, SHIELD	GASKET, 7ITS FK10-22-190-00	1
1	490-001M000	FORM, SHIELD	GASKET, 7ITS FK10-2-104-13	1
1	490-001L000	FORM, SHIELD	GASKET, 7ITS FK10-2-72-13	1
1	490-001K000	FORM, SHIELD	GASKET, 7ITS FK10-2-24-13	1
1	410-002R000	SCREW	PP 4*12	4
1	410-001R000	SCREW	PB 4*8	14
1	410-001Q000	SCREW	BTB 4*12	46
1	410-001N000	SCREW	FTB 3*6	10
1	410-001L000	SCREW	TTB 3*10	3
1	410-001K000	SCREW	TTB 3*8	6
1	407-004A000	SHIELD, T-BRKT	30" T-BRKT	1
1	407-003R000	SHIELD, JACK	30" JACK COVER YUV, WOOFER	1
1	407-002D000	SHIELD, REAR	30" PCB ASSY COVER	1
1	407-001G000	SHIELD, SUPPORT	30" MAIN SUPPORT 'R' SHIELD	1
1	407-001F000	SHIELD, SUPPORT	30" MAIN SUPPORT 'L' SHIELD	1
1	407-001E000	SHIELD, SUPPORT	30" FIX BRKT	9
1	404-004A000	BLOCK KNOB	F/N-MODEL, LOCAL KEY, Chromium	1
1	321-006A000	BAG, PACKING	30" SET PACKING	1
1	320-001A000	BAG, VINYL	ACCESSORY PACKING	1
1	310-010B000	PACKING, BOTTOM "R"	30" BOTTOM RIGHT PACKING	1
1	310-010A000	PACKING, BOTTOM "L"	30" BOTTOM LEFT PACKING	1
1	310-009B000	PACKING, TOP "R"	30" TOP RIGHT PACKING	1
1	310-009A000	PACKING, TOP "L"	30" TOP LEFT PACKING	1
1	300-010G000	BOX, GIFT	RL-30S10(LT-30FTP), RUS	1
1	300-003K000	BOX, ACCESSORY	30" ACCESSORY BOX	1
1	300-003G000	BOX, ACCESSORY	30" BOX	1
1	CON15P125ABK00	LEAD ASSY	30.1" INVERTER, 15-PIN 250MM H/H	1
1	CON15P125ABD00	LEAD ASSY	30.1" INVERTER, 15-PIN 100MM H/H	1
1	CON10P200ABW00	LEAD ASSY	30.1" CONTROL, 10-PIN 800MM H/H	1
1	CON05P200ABH00	LEAD ASSY	30.1" LED, 5-PIN 200MM H/H	1
1	CON04P200AOU00	LEAD ASSY	30.1" SPK, 4-PIN 700MM H/-	1
1	CON03P200AOY00	LEAD ASSY	30.1" SPK, 3-PIN 900MM H/-	1
1	CON02P200AOU00	LEAD ASSY	30.1" SPK, 2-PIN 700MM H/-	1

REPLACEMENT PART LIST

2) Assemble process

LEVEL	PART NO	PART NAME	DESCRIPTIONS	Q,TY
1	AYSTLT32A01A000	STAND ASS'Y	30", F-MODEL, GRAY	1
1	AYMALT32A01D000	MAIN PCB ASS'Y	LT-30FTP, COMP+MAP3410D	1
1	AYCOLT32A01A000	CONTROL PCB ASS'Y	F/N MODEL, 111-A34A-30 CONTROL	1
1	AYCALT32A01A000	Front body,30inch,(PR)	Front Body,1-02-010,PAL(PR)	1
1	AYBCLT32A01A000	Back Body,30inch,F/N M	1-02-011,Back Body,PAL/NTSC	1
1	627-001A000	CABLE, PC-SOUND	1.8M, BK	1
1	626-003A000	CABLE, DVI	IVORY, 2.0M (18*1 Pin)	1
1	626-001A000	CABLE, PC RGB	IVORY, 1.8M, 15-PIN	1
1	621-001B000	POWER CORD	250V, 2-PIN,1.8M, BK, VDE KKP-4819	1
1	620-004A000	AC/DC ADAPTER	24V, 6.0A, 1.8M	1
1	610-005B000	SPEAKER	10W, 8OHM	2
1	610-005A000	SPEAKER	20W, 8 OHM	2
1	522-001M000	WARRANTY CARD	ROLSSEN, COMMON, RUS	1
1	520-001A000	BATTERY	1.5V, AAA SIZE	2
1	510-004A000	REMOCON	30.1", , (PR)	1
1	507-001F000	LABEL, HANDLE WITH ONLY MARK, TEXT=BK, VINYL, 100MM		1
1	502-0010000	LABEL, BOX ID	CARTON BOX, ALL MODEL	1

REPLACEMENT PART LIST

2.Parts List

1) Main PCB

LEVEL	PART NO	PART NAME	DESCRIPTIONS	LOCATION NO	Q,TY
0	AYMALT32A01D000	MAIN PCB ASS'Y	LT-30FTP, COMP+MAP3410D		1
1	GRLT32AS001F000	GR, 30" COMP. S/I	COMP SMD INSERT		1
2	0RHSS000DJTS000	RESISTOR, CHIP	0 OHM, 1608 J	C8,R242,R244,R736	4
2	0CHSS473DKTS000	CAPACITOR, CHIP	0.047UF,1608	C217,C218,C219,R243,C737	5
2	1ICSA72170TS000	IC, SYNC DETECTOR		IC281	1
2	0TRKE3875STS000	TRANSISTOR, CHIP	KTC3875S	Q1004,Q1005,Q1006	4
2	0RHSS750DJTS000	RESISTOR, CHIP	75 OHM, 1608 J	R1027,R1028,R1029	3
2	0RHSS561DJTS000	RESISTOR, CHIP	560 OHM, 1608 J	R285	1
2	0RHSS473DJTS000	RESISTOR, CHIP	47K OHM, 1608 J	R1033,R1037,R1040	3
2	0RHSS392DJTS000	RESISTOR, CHIP	3.9K OHM, 1608 J	R286	1
2	0RHSS223DJTS000	RESISTOR, CHIP	22K OHM, 1608 J	R1034,R1036,R1039	3
2	0RHSS154DJTS000	RESISTOR, CHIP	150K OHM, 1608 J	R281	1
2	0RHSS102DJTS000	RESISTOR, CHIP	1K OHM, 1608 J	R1035,R1038,R1041	3
2	0RHSS101DJTS000	RESISTOR, CHIP	100 OHM, 1608 J	R283	1
2	0LBSS601FJTS000	BEAD, CHIP	600 OHM, 3216	L281	1
2	0CHSS821DJTS000	CAPACITOR, CHIP	820PF,1608	C284	1
2	0CHSS563DJTS000	CAPACITOR, CHIP	0.056UF,1608	C282	1
2	0CHSS223DKTS000	CAPACITOR, CHIP	0.022UF,1608	C283	1
2	0CHSS104DZTS000	CAPACITOR, CHIP	0.1UF,1608	C286,C287	2
2	0CASH1R0HMTS000	CAPACITOR,CAN	1UF 50V	C281,C285	2
2	0CASH100CMTS000	CAPACITOR,CAN	10UF 16V	C288,C1045,C1046,	4
1	GRLT32BS001A000	GR, 30" INCH OPTION, S/I	NORMAL - MAIN SMD INSERT		1
2	WAFYH15125AS000	WAFER, PIN	15-PIN, P1.25mm	P951,P952	2
2	0CASH221FMTS000	CAPACITOR,CAN	220UF 35V	C956	1
2	0TRKE3875STS000	TRANSISTOR, CHIP	KTC3875S	Q951	1
2	0RHSS472DJTS000	RESISTOR, CHIP	4.7K OHM, 1608 J	R956,R653,R654	3
2	0RHSS223DJTS000	RESISTOR, CHIP	22K OHM, 1608 J	R955	1
2	0RHSS220DJTS000	RESISTOR, CHIP	22 OHM, 1608 J	R954	1
2	0RHSS242DJTS000	RESISTOR, CHIP	2.4K OHM, 1608 J	R952	1
2	0RHSS000DJTS000	RESISTOR, CHIP	0 OHM, 1608 J	R951	1
2	0CHSS104DZTS000	CAPACITOR, CHIP	0.1UF,1608	C951,C952,C953,C9	4
2	111-A28C000	PCB,MAIN	30INCH, WOOFER	30"MAIN	1
1	GRLT32BM001A000	GR, 30" INCH OPTION, M/I	NORMAL - MAIN MANUAL INSERT		1
2	0ICKE78R08ID000	IC, REGULATOR	KIA78R08API, 8V, 1.0A	IC831	1
2	498-001A000	Silicon Grease		IC831	5
2	420-001C000	HEAT SINK	TSS016003, HEAT SINK FOR KIA7809AP	IC831	1
2	410-001J000	SCREW	PB 3*8	IC831	1
1	GRLT32AS001P000	GR, 30" SOUND 2 S/I	SOUND 2 SMD INSERT		1
2	0TRKE3875STS000	TRANSISTOR, CHIP	KTC3875S	Q652	1
2	0CASH2R2HMTS000	CAPACITOR,CAN	2.2UF 50V	C666,C670	2
2	0CASH101EMTS000	CAPACITOR,CAN	100UF 25V	C668	1
2	0CASS101CKTS000	CAPACITOR,CAN	100UF 16V	C665,C671	2
2	0RHSS2R2DJTS000	RESISTOR, CHIP	2.2 OHM, 1608 J	R670,R676	2
2	0CHSS103DKTS000	CAPACITOR, CHIP	0.01UF,1608	C674	1

REPLACEMENT PART LIST

2) Main PCB

LEVEL	PART NO	PART NAME	DESCRIPTIONS	LOCATION NO	Q,TY
2	0CHSS332DKTS000	CAPACITOR, CHIP	3300PF,1608	C667,C669	2
2	0RHSS473DJTS000	RESISTOR, CHIP	47K OHM, 1608 J	R671,R673	2
2	0RHSS472DJTS000	RESISTOR, CHIP	4.7K OHM, 1608 J	R666,R667,R665,R66	4
2	0RHSS561DJTS000	RESISTOR, CHIP	560 OHM, 1608 J	R664,R669	2
2	0RHSS102DJTS000	RESISTOR, CHIP	1K OHM, 1608 J	R672	1
1	GRLT32AS001N000	GR, 30" SOUND 1 S/I	SOUND 1 SMD INSERT		1
2	0CASH101EMTS000	CAPACITOR,CAN	100UF 25V	C654	1
2	0TRKE3875STS000	TRANSISTOR, CHIP	KTC3875S	Q651	1
2	0CASH2R2HMTS000	CAPACITOR,CAN	2.2UF 50V	C652,C656	2
2	0CASS101CKTS000	CAPACITOR,CAN	100UF 16V	C651,C657	2
2	0RHSS2R2DJTS000	RESISTOR, CHIP	2.2 OHM, 1608 J	R657,R663	2
2	0CHSS103DKTS000	CAPACITOR, CHIP	0.01UF,1608	C661	1
2	0CHSS332DKTS000	CAPACITOR, CHIP	3300PF,1608	C653,C655	2
2	0RHSS473DJTS000	RESISTOR, CHIP	47K OHM, 1608 J	R659,R660	2
2	0RHSS472DJTS000	RESISTOR, CHIP	4.7K OHM, 1608 J	R681,R682	2
2	0RHSS561DJTS000	RESISTOR, CHIP	560 OHM, 1608 J	R651,R656	2
2	0RHSS102DJTS000	RESISTOR, CHIP	1K OHM, 1608 J	R658	1
1	GRLT32AS001M000	GR, 30" TEXT S/I	TEXT SMD INSERT		1
2	0RHSS392DJTS000	RESISTOR, CHIP	3.9K OHM, 1608 J	R28	1
2	0RHSS221DJTS000	RESISTOR, CHIP	220 OHM, 1608 J	R25	1
2	0RHSS000DJTS000	RESISTOR, CHIP	0 OHM, 1608 J	R24	1
1	GRLT32AS001B000	GR, 30" DTV S/I	DTV SMD INSERT		1
2	0RHSS000DJTS000	RESISTOR, CHIP	0 OHM, 1608 J	R1101,R1110	2
2	0CHSS223DKTS000	CAPACITOR, CHIP	0.022UF,1608	C312	1
2	1ICRO7657FBS000	IC, INPUT SELECT SWITCH	BA7657F	IC1101	1
2	0TRKE3875STS000	TRANSISTOR, CHIP	KTC3875S	Q1101	1
2	0RHSS750DJTS000	RESISTOR, CHIP	75 OHM, 1608 J	R1112,R1113,R1114	3
2	0RHSS683DJTS000	RESISTOR, CHIP	68K OHM, 1608 J	R1109	1
2	0RHSS474DJTS000	RESISTOR, CHIP	470K OHM, 1608 J	R1102	1
2	0RHSS473DJTS000	RESISTOR, CHIP	47K OHM, 1608 J	R1105	1
2	0RHSS472DJTS000	RESISTOR, CHIP	4.7K OHM, 1608 J	R1106	1
2	0RHSS202DJTS000	RESISTOR, CHIP	2K OHM, 1608 J	R1108,R301	2
2	0RHSS103DJTS000	RESISTOR, CHIP	10K OHM, 1608 J	R1103	1
2	0RHSS101DJTS000	RESISTOR, CHIP	100 OHM, 1608 J	R1104,R1107,R1111	3
2	0LBSS601FJTS000	BEAD, CHIP	600 OHM, 3216	L1101	1
2	0CHSS471DJTS000	CAPACITOR, CHIP	470PF,1608	C1103	1
2	0CHSS103DKTS000	CAPACITOR, CHIP	0.01UF,1608	C1101,C1105,C1107,C1109,C1111,C111	7
2	0CASS470CKTS000	CAPACITOR,CAN	47UF 16V	C1102,C1104,C1106,C1108,C1110,C111	7
1	GRLT32AS001J000	GR, 30" TUNER,MULTI,S/I	TUNER SMD INSERT		1
2	0RHSS331DJTS000	RESISTOR, CHIP	330 OHM, 1608 J	R1003	1
2	0RHSS221DJTS000	RESISTOR, CHIP	220 OHM, 1608 J	R1004	1
2	1ICM13410DBS000	IC, SOUND DECODER	MSP3410D	IC601	1
2	0TRKE3875STS000	TRANSISTOR, CHIP	KTC3875S	Q1001	1
2	0TRKE102S0TS000	TRANSISTOR, CHIP	KRC102S	Q1002	1
2	0RHSS103DJTS000	RESISTOR, CHIP	10K OHM, 1608 J	R1005,R1006,R1061	3

REPLACEMENT PART LIST

3) Main PCB

LEVEL	PART NO	PART NAME	DESCRIPTIONS	LOCATION NO	Q,TY
2	0RHSS000DJTS000	RESISTOR, CHIP	0 OHM, 1608 J	R741,R742,R743,R74	4
2	0ICHNV8100BS000	IC, SDRAM CHIP	128K x 8bit, SRAM,	IC04	1
2	0CHSS334DZTS000	CAPACITOR, CHIP	0.33UF,1608	C1016	1
2	0CASH4R7HMTS000	CAPACITOR,CAN	4.7UF 50V	C1015	1
1	GRLT32AS001A000	GR, 30" MAIN S/I	MAIN SMD INSERT		1
2	0LBSS260DJTS000	BEAD, CHIP	26 OHM, 2012	L310,L311,L316	3
2	0RHSS000DJTS000	RESISTOR, CHIP	0 OHM, 1608 J	C1006,C1049,L1019,R1007,R1008,R1017,R109,R115,R1153,R1154,R121,R122,R162,R163,R205,R206,R207,R312,R315,R321,R355,R433,R434,R52,R62,R63,R64,R66,R71,R73,R74,R902,R910,R319,R320,R322	36
2	1ICIR25Y00TS000	IC, REGULATOR	2.5V, 1A	IC12,IC843	2
2	1ICIR18Y00TS000	IC, REGULATOR	1.8V, 1A	IC271	1
2	1ICAD98820BS000	IC, A/D CONVERTER	AD9882A - 140MHZ	IC301	1
2	1DZSC5237BTS000	DIODE, ZENER CHIP	8.2V	ZD601	1
2	1DZSC5231BTS000	DIODE, ZENER CHIP	5.1V	ZD901,ZD902,ZD1005,ZD1006	4
2	1DHSTYW020TS000	DIODE, CHIP	SMBYW02 - 200	D831,D832,D833,D834,D835,D836	6
2	1DHIR1545CTS000	DIODE, RECTIFIER	D2PAK, 45V 15A	D802,D803	2
2	0XTKI20M25TS000	CRYSTAL, CHIP	20.25MHZ, 22PF	X201	1
2	0XTKI143180S000	CRYSTAL, CHIP	14.318MHZ	X101	1
2	0XTKI06M00TS000	CRYSTAL, CHIP	6.0MHZ, 33PF	X1	1
2	0TRKE1504STS000	TRANSISTOR, CHIP	KTA1504S	Q201,Q202,Q621,Q622,Q623,Q203	6
2	0RYSS330FJTS000	RESISTOR, ARRAY CHIP	33 OHM, 3216	AL171,AL172,AL173,AL174,AL175,AL176,AL177,AL178,AL179,AL180,AL181,AL182,AL183,AL184,AL185,AL186,AL187,AL188,AL189,AL190,AL191,AL192,AL193,AL194,AL195,AL196,AL197,AL198,AL201,AL202,AL203,AL204,AL205,AL206,AL208,AL209,AL210	37
2	0RHSS750DJTS000	RESISTOR, CHIP	75 OHM, 1608 J	R1019,R1020,R1021,R1022,R1043,R921,R922,R	8
2	0RHSS511DJTS000	RESISTOR, CHIP	510 OHM, 1608 J	R323	1
2	0RHSS4R7DJTS000	RESISTOR, CHIP	4.7 OHM, 1608 J	R691,R692	2
2	0RHSS473DJTS000	RESISTOR, CHIP	47K OHM, 1608 J	R1012,R1047,R1162,R60,R636,R638,R685,	8
2	0RHSS472DJTS000	RESISTOR, CHIP	4.7K OHM, 1608 J	R101,R1161,R309,R310,R422,R57,R58,R59,R807,R812,R909,R917,R918	13
2	0RHSS470DJTS000	RESISTOR, CHIP	47 OHM, 1608 J	R1,R11,R110,R112,R114,R1151,R1152,R1155,R1156,R13,R15,R201,R202,R219,R220,R3,R302,R303,R307,R308,R313,R314,R5,R601,R602,R7,R9,R904,R905,R919,R920,	32

REPLACEMENT PART LIST

4) Main PCB

2	0RHSS220DJTS000	RESISTOR, CHIP	22 OHM, 1608 J	R103,R104,R105,R225, R316,R324,R739,R908	8
2	0RHSS152DJTS000	RESISTOR, CHIP	1.5K OHM, 1608 J	R637,R639	2
2	0RHSS151DJTS000	RESISTOR, CHIP	150 OHM, 1608 J	R662,R675	2
2	0RHSS122DJTS000	RESISTOR, CHIP	1.2K OHM, 1608 J	R1002	1
2	0RHSS105DJTS000	RESISTOR, CHIP	1M OHM, 1608 J	R102	1
2	0RHSS104DJTS000	RESISTOR, CHIP	100K OHM, 1608 J	R1001	1
2	0RHSS103DJTS000	RESISTOR, CHIP	10K OHM, 1608 J	R161,R603,R61,R686,R 687,R689,R806,R811,R9	10
2	0RHSS102DJTS000	RESISTOR, CHIP	1K OHM, 1608 J	R1009,R1010,R1015,R1 016,R1025,R1049,R53,R 54,R56,R607,R661,R674	12
2	0RHSS100DJTS000	RESISTOR, CHIP	10 OHM, 1608 J	C639,R609,R623	3
2	0RHSS000EJTS000	RESISTOR, CHIP	0 OHM, 2012 J	L112,L205,L303,L304,L3 05,L306,L308,L309	8
2	0LBSS601FJTS000	BEAD, CHIP	600 OHM, 3216	L1002,L1005,L1006,L10 3,L104,L105,L106,L107, L108,L109,L110,L113,L1 151,L16,L15,L171,L172, L201,L202,L203,L204,L2 51,L271,L301,L302,L30 7,L312,L313,L314,L315, L317,L421,L422,L601,L6 03,L604,L691,L804,L82 1,L904,L907	41
2	0LBSS301FJTS000	BEAD, CHIP	300 OHM, 3216	L901,L902,L903	3
2	0LASS100FKTS000	INDUCTOR, CHIP	10UH, 2012	L1007,L1008,L1009,L10 10,L1011,L1014,L1016, L1020,L1021,L1022,L10 23,L602,L1041	13
2	0ICVI4925DTS000	IC, MOSFET CHIP	DUAL P - CHANNEL 30V MOSFET	IC805	1
2	0ICKE7805ATS000	IC, REGULATOR CHIP	KIA7805AF 5.0V 1A	IC832,IC1001	2
2	0ICKE7042FTS000	IC, RESET CHIP	KIA7042AF, 4.2V RESET	IC602	1
2	0ICKE7027FTS000	IC, RESET CHIP	KIA7027AF, 2.7V RESET	IC06,IC161	2
2	0DHKEKDS226S000	DIODE, CHIP	KDS226	D901,D902,D903,D904, D905,D906,D907	7
2	0DHKEKDS181S000	DIODE, CHIP	KDS181	D652,D654	2
2	0CHSS822DJTS000	CAPACITOR, CHIP	8200PF,1608	C313	1
2	0CHSS560DJTS000	CAPACITOR, CHIP	56PF,1608	C638,C640,C649	3
2	0CHSS473DKTS000	CAPACITOR, CHIP	0.047UF,1608	C212,C213,C214,C320, C324,C327	6
2	0CHSS334DZTS000	CAPACITOR, CHIP	0.33UF,1608	C624,C625,C626,C627, C628,C629,C630,C631,	9
2	0CHSS330DJTS000	CAPACITOR, CHIP	33PF,1608	C13,C14,C142	3
2	0CHSS224DZTS000	CAPACITOR, CHIP	0.22UF,1608	C30	1
2	0CHSS221DJTS000	CAPACITOR, CHIP	220PF,1608	C604	1
2	0CHSS220DJTS000	CAPACITOR, CHIP	22PF,1608	C235,C236,C902	3
2	0CHSS152DKTS000	CAPACITOR, CHIP	1500PF,1608	C602,C619,C636	3
2	0RHSS000DJTS000	RESISTOR, CHIP	0 OHM, 1608 J	R741,R742,R743,R744	4
2	0ICHNV8100BS000	IC, SDRAM CHIP	128K x 8bit, SRAM, 70ns	IC04	1
2	0CHSS334DZTS000	CAPACITOR, CHIP	0.33UF,1608	C1016	1
2	0CASH4R7HMTS000	CAPACITOR,CAN	4.7UF 50V	C1015	1
1	GRLT32AS001A000	GR, 30" MAIN S/I	MAIN SMD INSERT		1
2	0LBSS260DJTS000	BEAD, CHIP	26 OHM, 2012	L310,L311,L316	3

REPLACEMENT PART LIST

5) Main PCB

LEVEL	PART NO	PART NAME	DESCRIPTIONS	LOCATION NO	Q,TY
2	0CHSS150DJTS000	CAPACITOR, CHIP	15PF,1608	C124,C125,C133,C140,C141,C301	6
2	0CHSS104DZTS000	CAPACITOR, CHIP	0.1UF,1608	C1,C101,C1012,C1014,C103,C104,C105,C106,C107,C108,C109,C110,C111,C112,C113,C114,C115,C116,C117,C118,C119,C12,C120,C121,C122,C123,C127,C128,C129,C130,C131,C132,C134,C135,C136,C137,C138,C139,C15,C16,C17,C171,C172,C173,C174,C175,C176,C177,C178,C179,C18,C180,C181,C182,C183,C184,C185,C186,C187,C188,C189,C190,C191,C192,C193,C194,C2,C201,C202,C203,C204,C205,C206,C207,C208,C209,C210,C211,C215,C216,C220,C221,C222,C223,C224,C225,C226,C227,C228,C229,C23,C230,C231,C232,C233,C234,C238,C25,C263,C27,C3,C302,C3	138
2	0CHSS103DKTS000	CAPACITOR, CHIP	0.01UF,1608	C1151,C695,C803,C810,C	5
2	0CHSS101DJTS000	CAPACITOR, CHIP	100PF,1608	C9,C10,C11,C641,L1004	5
2	0CHSS020DCTS000	CAPACITOR, CHIP	2PF,1608	C642,C643	2
2	0CASS470CKTS000	CAPACITOR,CAN	47UF 16V	C255,C660,C675,C822,C851,C906	6
2	0CASS220CKTS000	CAPACITOR,CAN	22UF 16V	C605,C615,C616,C683,C684,C1037,C1038	7
2	0CASS101CKTS000	CAPACITOR,CAN	100UF 16V	C1001,C832	2
2	0CASH471AMTS000	CAPACITOR,CAN	470UF 10V	C1007,C1061,C1039	3
2	0CASH470FMTS000	CAPACITOR,CAN	47UF 35V	C809	1
2	0CASH470EMTS000	CAPACITOR,CAN	47UF 25V	C431	1
2	0CASH3R3HMTS000	CAPACITOR,CAN	3.3UF 50V	C623	1
2	0CASH334HMTS000	CAPACITOR,CAN	0.33UF 50V	C1008	1
2	0CASH330CMTS000	CAPACITOR,CAN	33UF 16V	C7	1
2	0CASH2R2HMTS000	CAPACITOR,CAN	2.2UF 50V	C1040,C1048,C161,C28	4
2	0CASH221EMTS000	CAPACITOR,CAN	220UF 25V	C811,C812	2
2	0CASH221CMTS000	CAPACITOR,CAN	220UF 16V	C813,C814	2
2	0CASH221AMTS000	CAPACITOR,CAN	220UF 10V	C1002,C691,C693,C843,C	5
2	0CASH1R0HMTS000	CAPACITOR,CAN	1UF 50V	C608,C610,C613,C614,C6	5
2	0CASH101FMTS000	CAPACITOR,CAN	100UF 35V	C805,C808	2
2	0CASH101EMTS000	CAPACITOR,CAN	100UF 25V	C831	1
2	0CASH101AMTS000	CAPACITOR,CAN	100UF 10V	C20,C21,C22,C24,C271,C272,C273,C697,C698,C821,C834,C841,C842,C845,C846,C847,C852	17
2	0CASH100HMTS000	CAPACITOR,CAN	10UF 50V	C251,C252,C253,C254,C601,C606,C617,C620,C621,C633,C644,C1003,C1004,C1005,C1011	15

REPLACEMENT PART LIST

6) Main PCB

LEVEL	PART NO	PART NAME	DESCRIPTIONS	LOCATION NO	Q,TY
2	0CASH100CMTS000	CAPACITOR,CAN	10UF 16V	C4,C19,C26,C29,C146,C147,C148,C149,C162,C195,C196,C303,C315,C316,C427,C429,C637,	18
2	0RHSS010DJTS000	RESISTOR, CHIP	1 OHM, 1608 J	R1013	1
2	0TRKE3875STS000	TRANSISTOR, CHIP	KTC3875S	Q1003,Q1009,Q1152,Q3,Q685,Q686,Q802,Q805,Q921	9
2	0CASH101CMTS000	CAPACITOR,CAN	100UF 16V	C731	1
2	1ICPH8601TTS000	IC, RGB-SWITCH	RGB/YUV FAST BLANKING SWITCH	IC731	1
2	0CHSS102DKTS000	CAPACITOR, CHIP	1000PF,1608	C1019,C1021,C1033,C1034,C1035,C1036,C1041,C1042,C1058,C1059,C607,C609,C611,C612,C645,C646,C681,C682,C2003	19
2	0CHSS471DJTS000	CAPACITOR, CHIP	470PF,1608	C603,C618,C635,C1071,C1072	5
2	0LBSS800EJTS000	BEAD, CHIP	80 OHM, 2012	L102	1
2	0RHSS560DJTS000	RESISTOR, CHIP	56 OHM, 1608 J	R120	1
2	0RYSS101FJTS000	RESISTOR, ARRAY CHIP	100 OHM, 3216	AL102,AL103,AL104,AL108,AL109,AL110,AL114,AL115,AL301,AL302,AL303,AL304,AL305,AL306	14
2	0RHSS101DJTS000	RESISTOR, CHIP	100 OHM, 1608 J	R1014,R1042,R17,R19,R203,R22,R227,R228,R29,R30,R33,R331,R332,R34,R35,R36,R37,R38,R39,R40,R41,R42,R43,R44,R45,R46,R47,R48,R49,R50,R51,R604,R605,R608,R640,R641,R65,R901,R906,R907	40
2	WAFYH20125AS000	WAFER, PIN	20-PIN, P1.25mm	P441	1
2	1ICWB986532S000	IC, SDRAM CHIP	512K x 32bit x 4 SDRAM	IC171,IC172	2
2	1ICST4053BMS000	IC, TRIPPLE MUX/DE-MUX	HCF4053BM1	IC1151	1
2	1ICST24C02WS000	IC, EEPROM	24C02W	IC302,IC901	2
2	1ICSE24C16TS000	IC, EEPROM	16K	IC02	1
2	1ICRO6161FTS000	IC, REGULATOR	DC/DC	IC1003	1
2	1ICPH74F08TS000	IC, AND GATE	QUAD 2-INPUT AND	IC902	1
2	1ICNSLM5R0BS000	IC, REGULATOR	5.0V 3A, LM2576HVSX-	IC802	1
2	1ICNSLM120BS000	IC, REGULATOR	12V 5A, LM2678S-12	IC803	1
2	1ICNS90C383S000	IC, LVDS	LVDS TRANSMITTER 24BIT 64MHZ	IC402	1
2	1ICMX88L285000	IC, SCALER	MX88L285	IC101	1
2	1ICMI9427BCS000	IC, VIDEO DECODER	VSP9427B -C3	IC201	1
2	1ICMI5550MBS000	IC, MICOM	Txt-pro,PQFP-	IC01	1
2	1ICIR33Y00TS000	IC, REGULATOR	3.3V, 1A	IC11,IC272,IC821,IC841,IC844,IC851	6
1	GRLT32AM001J000	GR,30" SOUND 2 M/I	SOUND 2, MANUAL INSERT		1
2	WAFYH03200SD000	WAFER, PIN	3-PIN, P2.0mm	P602	1
2	WAFYH02200SD000	WAFER, PIN	2-PIN,P2.0mm	P601	1
2	0CESH471FMBD000	CAPACITOR, ELEC.	470UF 35V	C678	1
2	0CESS102FMBD000	CAPACITOR, ELEC.	1000UF 35V	C677,C673	2
2	0CQSS104KKTR000	CAPACITOR, MYLER	0.1UF 100V	C672,C676	2
2	498-001A000	Silicon Grease		IC652	5
2	420-001A000	HEAT SINK	LA4282 42*16	IC652	1
2	410-001J000	SCREW	PB 3*8	IC652	2

REPLACEMENT PART LIST

7) Main PCB

LEVEL	PART NO	PART NAME	DESCRIPTIONS	LOCATION NO	Q,TY
2	1ICSA42820AD000	IC, SOUND AMP	2 CHANNEL 10W AF POWER AMP	IC652	1
1	GRLT32AM001H000	GR,30" SOUND 1 M/I	SOUND 1, MANUAL INSERT		1
2	0CESH471FMBD000	CAPACITOR, ELEC.	470UF 35V	C662	1
2	0CESS102FMBD000	CAPACITOR, ELEC.	1000UF 35V	C659,C663	2
2	0CQSS104KKTR000	CAPACITOR, MYLER	0.1UF 100V	C658,C664	2
2	WAFYH04200AD000	WAFER, PIN	4-PIN, P2.0mm ANGLE	P1012	1
2	498-001A000	Silicon Grease		IC651	5
2	420-001A000	HEAT SINK	LA4282 42*16	IC651	1
2	410-001J000	SCREW	PB 3*8	IC651	2
2	1ICSA42820AD000	IC, SOUND AMP	2 CHANNEL 10W AF POWER AMP	IC651	1
1	GRLT32AM001G000	GR,30" TUNER. MULTI,M/I	TUNER.MANUAL INSERT		1
2	WAFYH10200AD000	WAFER, PIN	10-PIN, P2.0mm ANGLE	P101,P102	2
2	111-A35A000	PCB, TUNER	30" TUNER		1
2	0TULGZ242DBD000	TUNER	MULTI, 2 IN 1 TAFD-	TU101	1
1	GRLT32AM001D000	GR,30" COMP.M/I	COMP.MANUAL INSERT		1
2	0JAPKJ124ABD000	JACK,AV	RCA(3*2), PPJ124A	P1001	1
2	1XRMU500F9BD000	RESONATOR	500KHz Resonator	X281	1
2	0JAPK6063C0D000	JACK, AV	YUV, PJ6063C	P1002	1
1	GRLT32AM001A000	GR, 30" MAIN M/I	MAIN MANUAL INSERT		1
2	0JAGN10300BD000	JACK, WOOFER	WOOFER, RCA-103	P1008	1
2	410-001J000	SCREW	PB 3*8	IC842	1
2	WAFYH10200SD000	WAFER, PIN	10-PIN, P2.0mm	P1017,P1018	2
2	WAFLG08250SD000	WAFER, PIN	8-PIN, P:2.5mm	P10	1
2	WAFLG04250SD000	WAFER, PIN	4-PIN, P:2.5mm	P904,P1008	2
2	WA1YH10200AD000	WAFER, PIN	10-PIN, P2.0mm ANGLE	P10A	1
2	498-001A000	Silicon Grease		IC842	1
2	496-002A000	RUBBER, SILICON	ATS1-042	IC101	1
2	420-001E000	HEAT SINK	TSS0023013, HEAT SINK FOR LP3966	IC842	1
2	420-001D000	HEAT SINK	TSC037013, HEAT SINK FOR MX88L285	IC101	1
2	1ICST80860BS000	IC, EPROM		IC03	1
2	1ICSTVN02NBD000	IC, SOLID STATE	VN02N, Vertical	IC685	1
2	1ICST2822MBD000	IC, SOUND AMP	H/P SOUND AMP	IC691	1
2	1ICSB396625D000	IC, REGULATOR	LP3966ET-2.5, 2.5V, 3A	IC842	1
2	0XTKI184320D000	CRYSTAL, RADIAL	18.432MHZ	X601	1
2	0LRSM10100BD000	INDUCTOR	100UH, SMC H100	L802,L803	2
2	0LRSM00100BD000	INDUCTOR, CHOKE	10mH, SMC103	L1003	1
2	0JASYDVI29BD000	JACK, DVI-CON	DVI-CON	P902	1
2	0JASYDC4P0BD000	JACK, DC-POWER	4-PIN POWER	P801	1
2	0JAPK6046GBD000	JACK, S-VHS	S-VHS, PJ6046G	P1009	1
2	0JAKKST215BD000	JACK, SOUND	ST-215	P1006,P1007	2
2	0JAGE14060BD000	JACK, SOUND	RCA-1406(W/R) 2	P1003	1
2	0JADM15RF00D000	JACK, D-SUB	15-PIN, DAH-15RF-4B4	P901	1
2	0ISSY32P00BD000	SOCKET, IC	DIP 32-PIN	IC03	1
2	0CESH471FMBD000	CAPACITOR, ELEC.	470UF 35V	C685,C802,C806,C816	4
1	GRLT32AA001A000	GR, 30" MAIN A/I	MAIN AUTO INSERT		1
2	1ICFC2N700TR000	IC, LEVEL SHIFT	2N7000TA	Q1,Q2	2
2	1DZSSHZT33TA000	DIODE, ZENER AXIAL	33V	ZD1002	1
2	1DDSKEU1Z0TA000	DIODE, RECTIFIER	FAST RECOVERY, 200V	D1001	1
2	1DDRO41480TA000	DIODE, SWITCHING	1N4148-GSD	D908,D2001	2
2	0LBSS3580RTR000	BEAD CORE, RADIAL	1UH DUAL, 5mm BFD-3580 R2F	L431,L651,L801,L815,L804	5

REPLACEMENT PART LIST

8) Main PCB

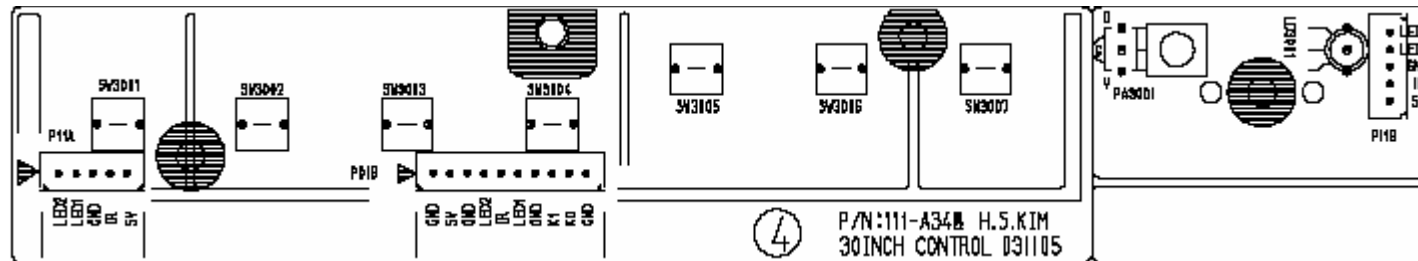
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1	AYCOLT32A01A000	CONTROL PCB ASS'Y	F/N MODEL, 111-A34A-30 CONTROL		1
2	GRLT32AS002A000	GR, 30" Control S/I	CTRL,SMD INSERT		1
3	111-A34B000	PCB, CONTROL(REV.1	F/N MODEL CONTROL		1
3	0TRKE3875STS000	TRANSISTOR, CHIP	KTC3875S	Q3001,Q3002,Q3004	3
3	0RHSS472DJTS000	RESISTOR, CHIP	4.7K OHM, 1608 J	R3012,R3014,R3016	3
3	0RHSS471DJTS000	RESISTOR, CHIP	470 OHM, 1608 J	R3011,R3013	2
3	0RHSS222DJTS000	RESISTOR, CHIP	2.2K OHM, 1608 J	R3002,R3003,R3005	3
3	0RHSS120DJTS000	RESISTOR, CHIP	12 OHM, 1608 J	R3015	1
3	0RHSS102DJTS000	RESISTOR, CHIP	1K OHM, 1608 J	R3001,R3004	2
3	0CHSS101DJTS000	CAPACITOR, CHIP	100PF,1608	C3001	1
2	GRLT32AM002A000	GR, 30" Control M/I	CTRL,MANUAL INSERT		1
3	WAFYH10200AD000	WAFER, PIN	10-PIN, P2.0mm ANGLE	P108	1
3	WAFYH05200AD000	WAFER, PIN	5-PIN, P2.0mm ANGLE	P11A,P11B	2
3	0PAVI48380AD000	PRE-AMP	PRE-AMP, 38KHZ	PA3001	1
3	0DLSYRG138AD000	DIODE, LED	RED, SL RG138 BIG SIZE	LD3001	1
2	GRLT32AA002A000	GR, 30" Control A/I	CTRL,AUTO INSERT		1
3	600-002A000	SWITCH, TACT	YTP-1141A	SW3001,SW3002,SW3003,SW3004,SW3005,SW3006,SW3007	7

PCB LAYOUT

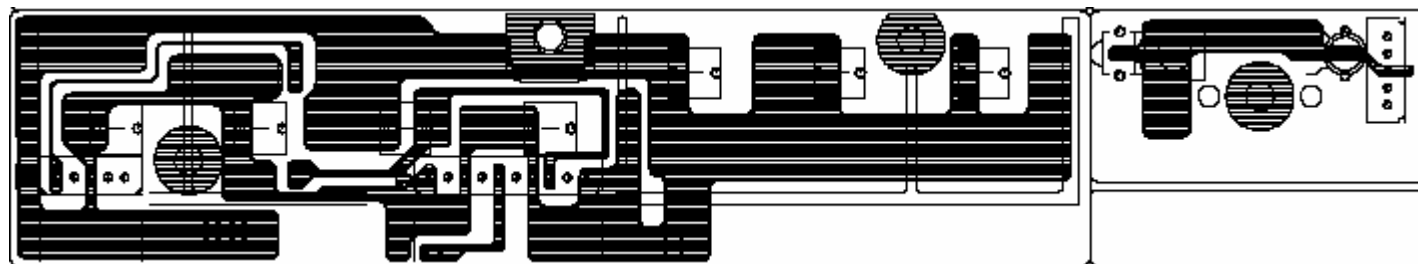
3-1. CONTROL PCB

1) TOP

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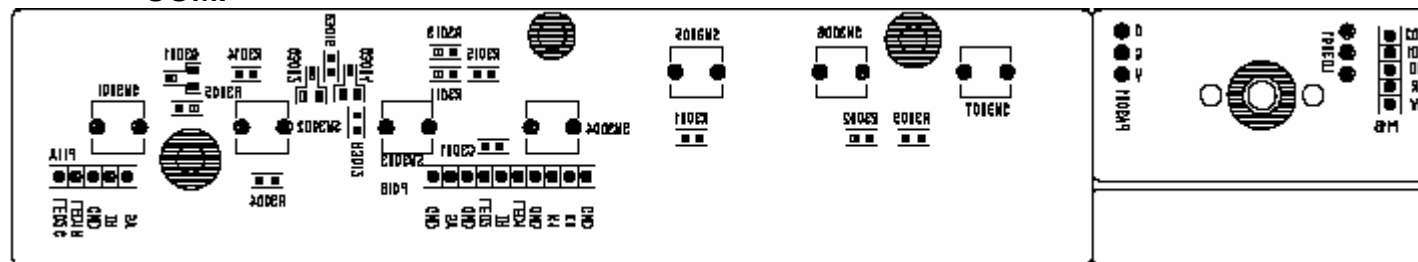


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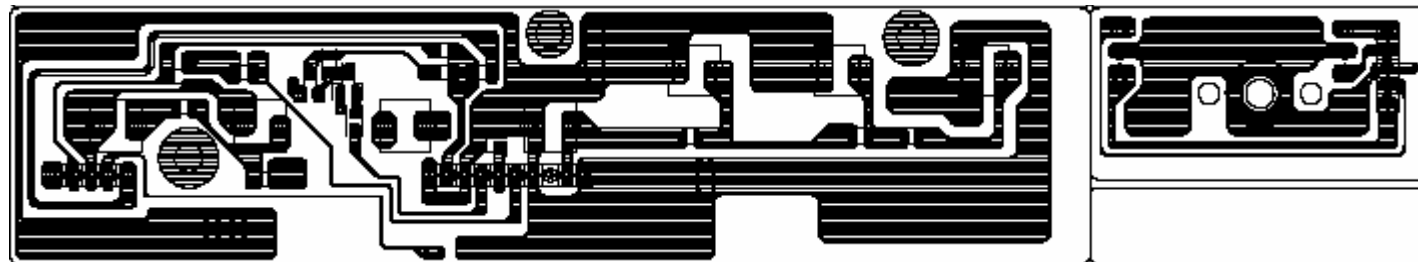


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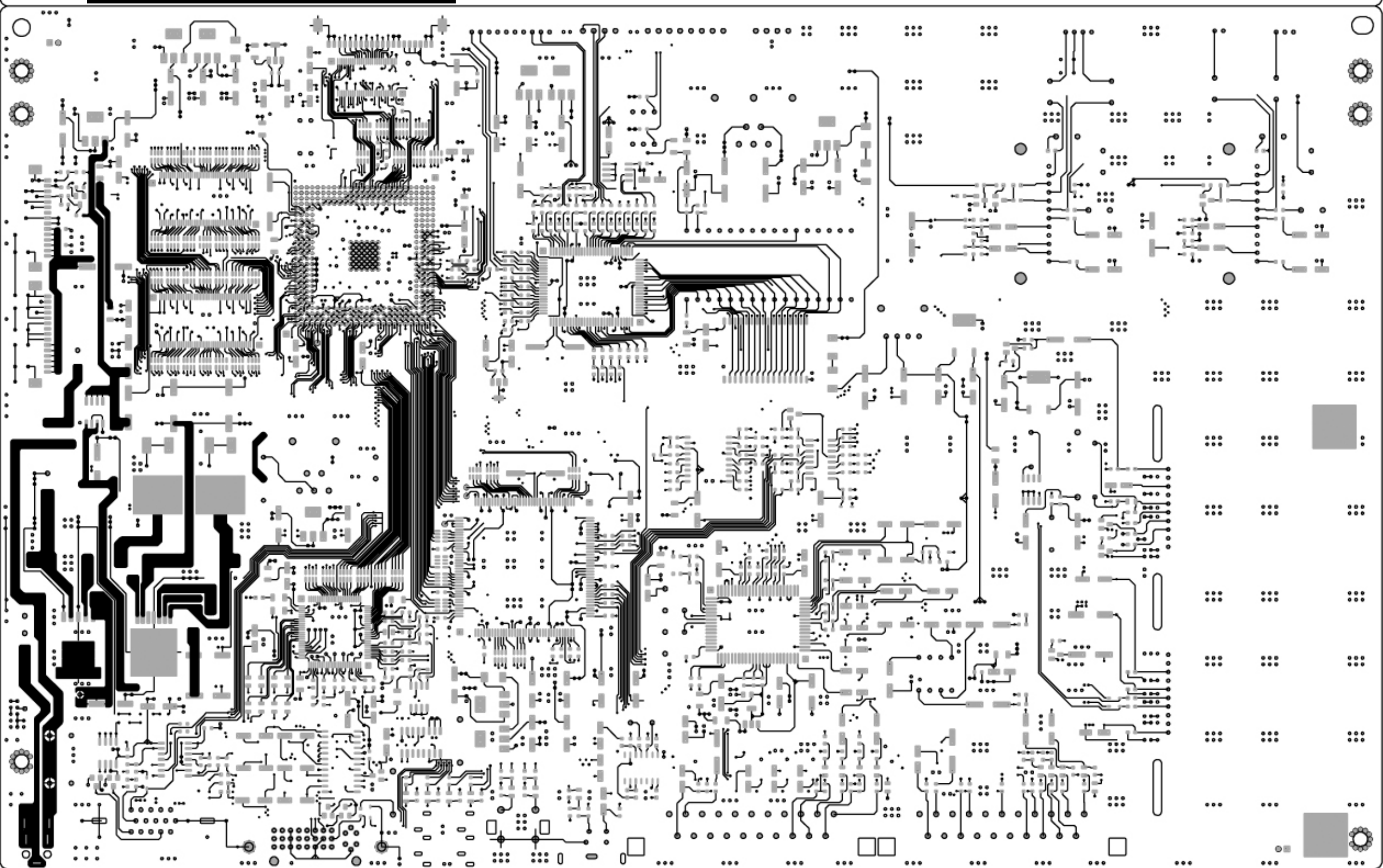
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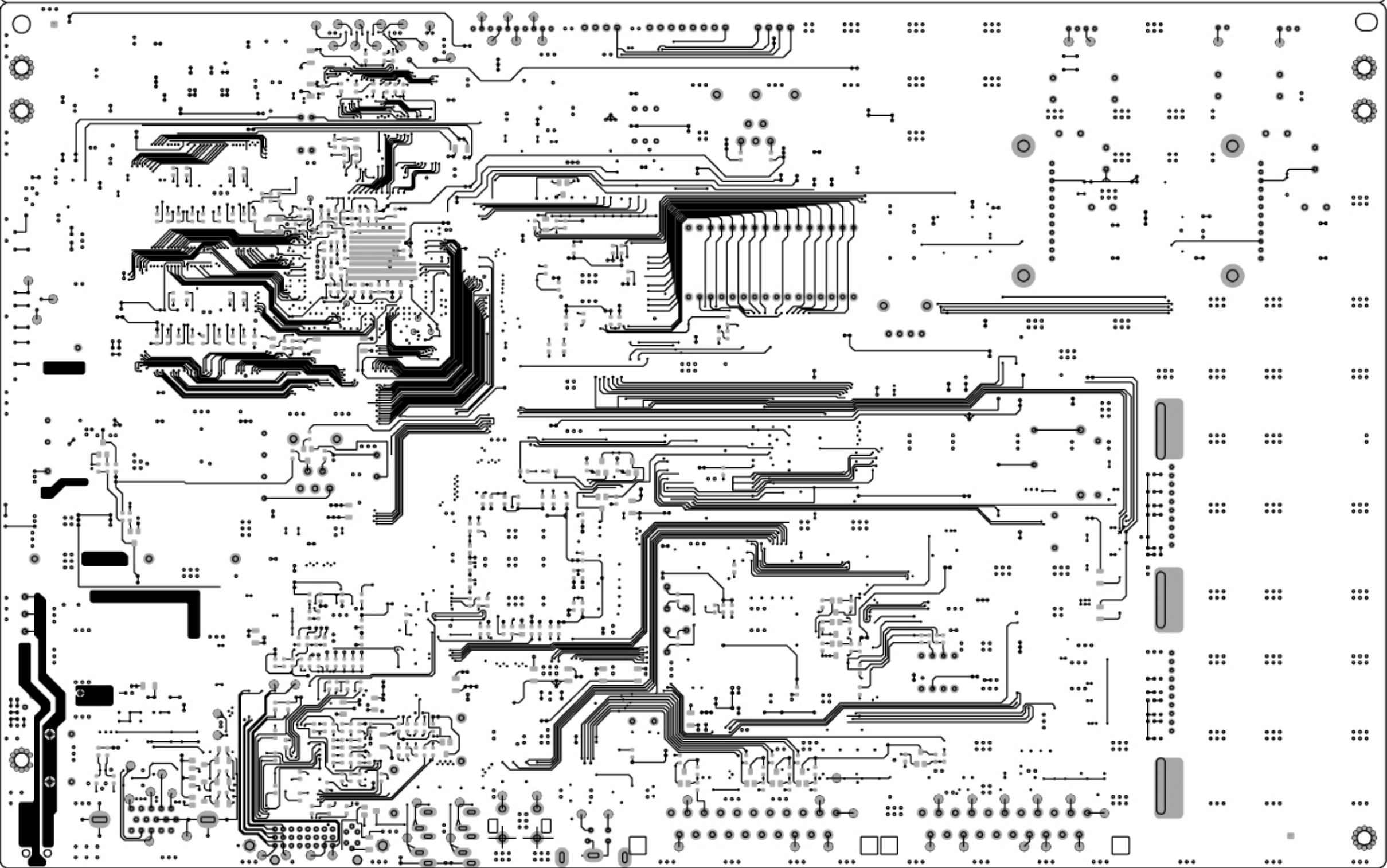
< PATTEN >



3 - 2. MAIN PCB(TOP PATTERN)

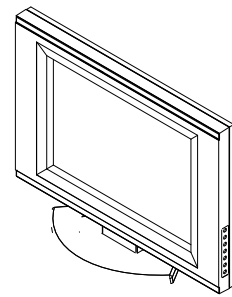


3 - 4. MAIN PCB (BOTTOM PATTERN)

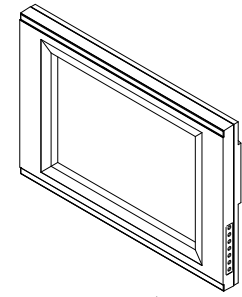


EXPLODED VIEW

No.	DESCRIPTION	MATERIAL	COLOR FINISH	Q'ty	TORQUE(Kgf.cm)	
					OPEN	CLOSE
1	FRONT BODY	PC+ABS	SPRAY, SILVER	1		
2	DECO COVER(TOP)	ACRYL	CHROME COATING	1		
3	DECO COVER(BOTTOM)	ACRYL	CHROME COATING	1		
4	CONTROL KNOB	ABS+HB	CHROME COATING	1		
5	CONTROL KEY	-	-	1		
6	SCREW TAPPING	TTB 3*10	SZN	5		
7	CONTROL PLATE	PVC, t=0.3	SILVER	1		
8	TFT LCD			1		
9	FIX BRACKET	EGI, t=1.0		10		
10	SCREW TAPPING	BTB 4*12	SZN	20		
11	SPEAKER	-	-	4		
12	SCREW TAPPING	BTB 4*12	SZN	16		
13	LCD BRACKET	EGI, t=1.6	-	2		
14	SCREW MACHINE	PP 4*8	SZN	8		
15	T-BRACKET	EGI, t=2.0		1		
16	SCREW MACHINE	PP 4*8	SZN	6		
17	SCREW TAPPING	BTB 4*12	SZN	2		
18	MAIN BOARD	-	-	1		
19	SCREW MACHINE	FTB 3*6	SZN	4		
20	SHIELD COVER	EGI, t=0.8	-	1		
21	SCREW MACHINE	FTB 3*6	SZN	4		
22	SHIELD JACK	SPTH, t=0.3	-	1		
23	SCREW MACHINE	FTB 3*6	SZN	2		
24	REAR BODY	PC+ABS	SPRAY, M/GRAY	1		
25	SCREW TAPPING	BTB 4*12	SZN	10		
26	SCREW MACHINE	FTB 3*6	SZN	3		
27	REAR PLATE	PVC, t=0.3	BLACK	1		
28	STAND FRONT	ABS/HIPS(VO)	SPRAY, M/GRAY	1		
29	BRKT STAND	EGI, t=2.0	-	1		
30	SCREW TAPPING	TTB 3*8	SZN	2		
31	STAND REAR	ABS/HIPS(VO)	SPRAY, M/GRAY	1		
32	STAND BOTTOM	ABS/HIPS(VO)	SPRAY, SILVER	1		
33	BRKT BOTTOM	EGI, t=2.0	WHITE ZN COATING	1		
34	SCREW MACHINE	PSTB 4*10	SZN	3		
35	SCREW TAPPING	BTB 4*12	SZN	4		
36	SCREW MACHINE	BTB 4*12	SZN	4		



SET ASS'Y



CABINET ASS'Y

STAND ASS'Y

SYM	ZONE	DESCRIPTION	REVISIONS	DATE	REVISED	APPROVED
①						
②						

MATERIAL		MOLD MAKER		INJECTION MAKER	
THIC		PR DATE	2003.09.30.	TITLE	SET ASS'Y
REJ		ENGR	KIM.M.I.	DRAWING NO.	1-03-052
UNIT	mm	CHK		SCALE	N/S
MODEL	LT-30F	APPD		SHEETS	1/1