

SAMSUNG

# LCD PROJECTION TELEVISION

Chassis : PLT51A  
Model: SP403JHAX

# ***SERVICE Manual***

## LCD PROJECTION TELEVISION



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# 1. Precautions

Follow these safety, servicing and ESD precautions to prevent damage and protect against potential hazards such as electrical shock and X-rays.

## 1-1 Safety Precautions

1. Be sure that all of the built-in protective devices are replaced. Restore any missing protective shields.
2. When reinstalling the chassis and its assemblies, be sure to restore all protective devices, including: nonmetallic control knobs and compartment covers.
3. Make sure that there are no cabinet openings through which people—particularly children—might insert fingers and contact dangerous voltages. Such openings include the spacing between the picture tube and the cabinet mask, excessively wide cabinet ventilation slots, and improperly fitted back covers.

If the measured resistance is less than 1.0 megohm or greater than 5.2 megohms, an abnormality exists that must be corrected before the unit is returned to the customer.

4. Leakage Current Hot Check (Figure 1-1): Warning: Do not use an isolation transformer during this test. Use a leakage-current tester or a metering system that complies with American National Standards Institute (ANIS C101.1, Leakage Current for Appliances), and Underwriters Laboratories (UL Publication UL1410, 59.7).
5. With the unit completely reassembled, plug the AC line cord directly into the power outlet. With the unit's AC switch first in the ON position and then OFF, measure the current between a known earth ground (metal water pipe, conduit, etc.) and all exposed metal parts, including: antennas, handle brackets, metal cabinets, screwheads and control shafts. The current measured should not exceed 0.5 milliamp. Reverse the power-plug prongs in the AC outlet and repeat the test.

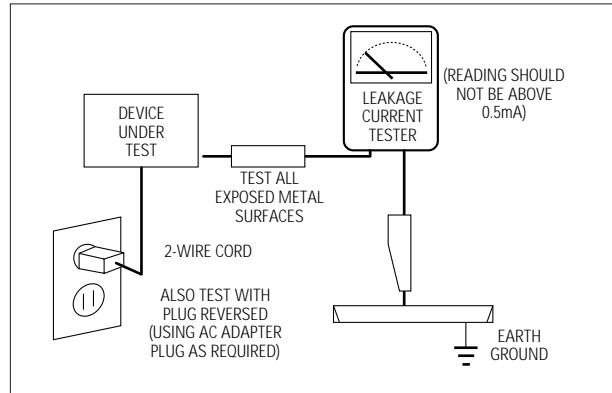


Fig. 1-1 AC Leakage Test

6. Antenna Cold Check: With the unit's AC plug disconnected from the AC source, connect an electrical jumper across the two AC prongs. Connect one lead of the ohmmeter to an AC prong. Connect the other lead to the coaxial connector.
7. X-ray Limits: The picture tube is especially designed to prohibit X-ray emissions. To ensure continued X-ray protection, replace the picture tube only with one that is the same type as the original. Carefully reinstall the picture tube shields and mounting hardware; these also provide X-ray protection.
8. High Voltage Limits: High voltage must be measured each time servicing is done on the B+, horizontal deflection or high voltage circuits. Correct operation of the X-ray protection circuits must be reconfirmed whenever they are serviced. (X-ray protection circuits also may be called "horizontal disable" or "hold-down".) Heed the high voltage limits. These include the X-ray Protection Specifications Label, and the Product Safety and X-ray Warning Note on the service data schematic.

## 1-1 Safety Precautions (Continued)

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9. High voltage is maintained within specified limits by close-tolerance, safety-related components and adjustments. If the high voltage exceeds the specified limits, check each of the special components.
  10. Design Alteration Warning:  
Never alter or add to the mechanical or electrical design of this unit. Example: Do not add auxiliary audio or video connectors. Such alterations might create a safety hazard. Also, any design changes or additions will void the manufacturer's warranty.
  11. Hot Chassis Warning:  
Some TV receiver chassis are electrically connected directly to one conductor of the AC power cord. If an isolation transformer is not used, these units may be safely serviced only if the AC power plug is inserted so that the chassis is connected to the ground side of the AC source.  
  
To confirm that the AC power plug is inserted correctly, do the following: Using an AC voltmeter, measure the voltage between the chassis and a known earth ground. If the reading is greater than 1.0V, remove the AC power plug, reverse its polarity and reinsert. Re-measure the voltage between the chassis and ground.
  12. Some TV chassis are designed to operate with 85 volts AC between chassis and ground, regardless of the AC plug polarity. These units can be safely serviced only if an isolation transformer inserted between the receiver and the power source.
  13. Some TV chassis have a secondary ground system in addition to the main chassis ground. This secondary ground system is not isolated from the AC power line. The two ground systems are electrically separated by insulating material that must not be defeated or altered.
  14. Components, parts and wiring that appear to have overheated or that are otherwise damaged should be replaced with parts that meet the original specifications. Always determine the cause of damage or overheating, and correct any potential hazards.
  15. Observe the original lead dress, especially near the following areas: Antenna wiring, sharp edges, and especially the AC and high voltage power supplies. Always inspect for pinched, out-of-place, or frayed wiring. Do not change the spacing between components and the printed circuit board. Check the AC power cord for damage. Make sure that leads and components do not touch thermally hot parts.
  16. Picture Tube Implosion Warning:  
The picture tube in this receiver employs "integral implosion" protection. To ensure continued implosion protection, make sure that the replacement picture tube is the same as the original.
  17. Do not remove, install or handle the picture tube without first putting on shatterproof goggles equipped with side shields. Never handle the picture tube by its neck. Some "in-line" picture tubes are equipped with a permanently attached deflection yoke; do not try to remove such "permanently attached" yokes from the picture tube.
  18. Product Safety Notice:  
Some electrical and mechanical parts have special safety-related characteristics which might not be obvious from visual inspection. These safety features and the protection they give might be lost if the replacement component differs from the original—even if the replacement is rated for higher voltage, wattage, etc.
- Components that are critical for safety are indicated in the circuit diagram by shading, ( ) or ( ).
- Use replacement components that have the same ratings, especially for flame resistance and dielectric strength specifications. A replacement part that does not have the same safety characteristics as the original might create shock, fire or other hazards.

## 1-2 Servicing Precautions

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Warning1: First read the "Safety Precautions" section of this manual. If some unforeseen circumstance creates a conflict between the servicing and safety precautions, always follow the safety precautions.

Warning2: An electrolytic capacitor installed with the wrong polarity might explode.

1. Servicing precautions are printed on the cabinet. Follow them.
2. Always unplug the unit's AC power cord from the AC power source before attempting to: (a) Remove or reinstall any component or assembly, (b) Disconnect an electrical plug or connector, (c) Connect a test component in parallel with an electrolytic capacitor.
3. Some components are raised above the printed circuit board for safety. An insulation tube or tape is sometimes used. The internal wiring is sometimes clamped to prevent contact with thermally hot components. Reinstall all such elements to their original position.
4. After servicing, always check that the screws, components and wiring have been correctly reinstalled. Make sure that the portion around the serviced part has not been damaged.
5. Check the insulation between the blades of the AC plug and accessible conductive parts (examples: metal panels, input terminals and earphone jacks).
6. **Insulation Checking Procedure:** Disconnect the power cord from the AC source and turn the power switch ON. Connect an insulation resistance meter (500V) to the blades of the AC plug.  
The insulation resistance between each blade of the AC plug and accessible conductive parts (see above) should be greater than 1 megohm.
7. Never defeat any of the B+ voltage interlocks. Do not apply AC power to the unit (or any of its assemblies) unless all solid-state heat sinks are correctly installed.
8. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the positive lead; always remove the instrument's ground lead last.
9. When some parts inside the optical engine (except lamp) are damaged, replace the whole optical engine.

## 1-3 Precautions for Electrostatically Sensitive Devices (ESDs)

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1. Some semiconductor (“solid state”) devices are easily damaged by static electricity. Such components are called Electrostatically Sensitive Devices (ESDs); examples include integrated circuits and some field-effect transistors. The following techniques will reduce the occurrence of component damage caused by static electricity.
2. Immediately before handling any semiconductor components or assemblies, drain the electrostatic charge from your body by touching a known earth ground. Alternatively, wear a discharging wrist-strap device. (Be sure to remove it prior to applying power—this is an electric shock precaution.)
3. After removing an ESD-equipped assembly, place it on a conductive surface such as aluminum foil to prevent accumulation of electrostatic charge.
4. Do not use freon-propelled chemicals. These can generate electrical charges that damage ESDs.
5. Use only a grounded-tip soldering iron when soldering or unsoldering ESDs.
6. Use only an anti-static solder removal device. Many solder removal devices are not rated as “anti-static”; these can accumulate sufficient electrical charge to damage ESDs.
7. Do not remove a replacement ESD from its protective package until you are ready to install it. Most replacement ESDs are packaged with leads that are electrically shorted together by conductive foam, aluminum foil or other conductive materials.
8. Immediately before removing the protective material from the leads of a replacement ESD, touch the protective material to the chassis or circuit assembly into which the device will be installed.
9. Minimize body motions when handling unpackaged replacement ESDs. Motions such as brushing clothes together, or lifting a foot from a carpeted floor can generate enough static electricity to damage an ESD.

## 2. Reference Information

### 2-1 Tables of Abbreviations and Acronyms

Table 2-1 Abbreviations

A	Ampere	MV	Megavolt
Ah	Ampere-hour	MW	Megawatt
Å	Angstrom	MΩ	Megohm
dB	Decibel	m	Meter
dBm	Decibel Referenced to One Milliwatt	μA	Microampere
°C	Degree Celsius	μF	Microfarad
°F	Degree Fahrenheit	μH	Microhenry
°K	degree Kelvin	μm	Micrometer
F	Farad	μs	Microsecond
G	Gauss	μW	Microwatt
GHz	Gigahertz	mA	Millampere
g	Gram	mg	Milligram
H	Henry	mH	Millihenry
Hz	Hertz	ml	Milliliter
h	Hour	mm	Millimeter
ips	Inches Per Second	ms	Millisecond
kWh	Kilowatt-hour	mV	Millivolt
kg	Kilogram	nF	Nanofarad
kHz	Kilohertz	Ω	Ohm
kΩ	Kilohm	pF	Picofarad
km	Kilometer	lb	Pound
km/h	Kilometer Per Hour	rpm	Revolutions Per Minute
kV	Kilovolt	rps	Revolutions Per Second
kVA	Kilovolt-ampere	s	Second (Time)
kW	Kilowatt	V	Volt
l	Liter	VA	Volt-ampere
MHz	Megahertz	W	Watt
		Wh	Watt-hour

Table 2-1 Abbreviations

ABL	Automatic Brightness Limiter	I/O	Input/output
AC	Alternating Current	L	Left
ACC	Automatic Chroma Control	L	Low
AF	Audio Frequency	LED	Light Emitting Diode
AFC	Automatic Frequency Control	LF	Low Frequency
AFT	Automatic Fine Tuning	MOSFET	Metal-Oxide-Semiconductor-Field-Effect-Tr
AGC	Automatic Gain Control	MTS	Multi-channel Television Sound
AM	Amplitude Modulation	NAB	National Association of Broadcasters
ANSI	American National Standards Institute	NEC	National Electric Code
APC	Automatic Phase Control	NTSC	National Television Systems Committee
APC	Automatic Picture Control	OSD	On Screen Display
A/V	Audio-Video	PCB	Printed Circuit Board
AVC	Automatic Volume Control	PLL	Phase-Locked Loop
BAL	Balance	PWM	Pulse Width Modulation
BPF	Bandpass Filter	QIF	Quadrature Intermediate Frequency
B-Y	Blue-Y	R	Right
CATV	Community Antenna Television (Cable TV)	RC	Resistor & Capacitor
CB	Citizens Band	RF	Radio Frequency
CCD	Charge Coupled Device	R-Y	Red-Y
CCTV	Closed Circuit Television	SAP	Second Audio Program
Ch	Channel	SAW	Surface Acoustic Wave(Filter)
CRT	Cathode Ray Tube	SIF	Sound Intermediate Frequency
CW	Continuous Wave	SMPS	Switching Mode Power Supply
DC	Direct Current	S/N	Signal/Noise
DVM	Digital Volt Meter	SW	Switch
EIA	Electronics Industries Association	TP	Test Point
ESD	Electrostatic Discharge	TTL	Transistor Transistor Logic
ESD	Electrostatically Sensitive Device	TV	Television
FBP	Feedback Pulse	UHF	Ultra High Frequency
FBT	Flyback Transformer	UL	Underwriters Laboratories
FF	Flip-Flop	UV	Ultraviolet
FM	Frequency Modulation	VCD	Variable-Capacitance Diode
FS	Fail Safe	VCO	Voltage Controlled Oscillator
GND	Ground	VCXO	Voltage Controlled Crystal Oscillator
G-Y	Green-Y	VHF	Very High Frequency
H	High	VIF	Video Intermediate Frequency
HF	High-Frequency	VR	Variable Resistor
HI-FI	High Fidelity	VTR	Video Tape Recorder
IC	Inductance-Capacitance	VTVM	Vacuum Tube Voltmeter
IC	Integrated Circuit	TR	Transistor
IF	Intermediate Frequency		

## 2-2 IC Line Up

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Table 2 - 2 IC Line - Up

BLOCK	SPECIFICATION	MAKER	FUNCTION
MAIN	TDA9810T	PHILLIPS	VIF (QSS-IF&AM)
	TDA7265	SGS-THOMSON	STEREO AMP (25W)
	PCF8574P	PHILIPS	FAN,LEVER S/W,THERMO S/W DETECT
	SAA1300	PHILIPS	LED CONTROL, LAMP ON/OFF
AV-TERMINAL	TDA6920X	SIEMENS	7*5 VIDEO S/W
	TEA5114A	SGS-THOMSON	VIDEO S/W
	TL062CDT	T.I	OP AMP
SOUND	MSP3410D	ITT	SOUND PROCESSOR
	DPL3519A	ITT	DOLBY PRO LOGIC
	TL062CDT	T.I	OP AMP
	74HC4052	PHILIPS	ANALOG-MULTIPLEXER
	SDA30C264	SIEMENS	8-BIT MICRO CONTROLLER
MICOM	ST24W16	SGS-THOMSON	EEPROM (2K*8)
	TMS27C040	T.I	PROGRAMMABLE ROM
	SDA5273P	SIEMENS	MEGATEXT
	KM44C1004D	SEC	DRAM (1M*4BIT)
	HD74HC123P	HITACHI	MULTIVIBRATOR
LCD-CONTROL	74HC04D	PHILIPS	CMOS-LOGIC
	TDA4780	PHILIPS	RGB CONTROL
	TDA8444	PHILIPS	DAC
	CXA1853Q	SONY	RGB DRIVER
	CXA2504N	SONY	SAMPLE/HOLD DRIVER
	CXD2443Q	SONY	TIMING GENERATOR
	CIP3215A	ITT	COMPONENT INTERFACE PROCESSOR
FEATURE-BOX	VPC3210A	ITT	VIDEO PROCESSOR
	TL7705AC	T.I	POWER-ON RESET GENERATOR
	SDA9280	SIEMENS	DISPLAY PROCESSOR
	SDA9272	SIEMENS	VIDEO INTERPOLATION PROCESSOR
	SDA9253	SIEMENS	DRAM
	74F125	PHILIPS	BUFFER
	74F541	PHILIPS	BUFFER

### 3. Specifications

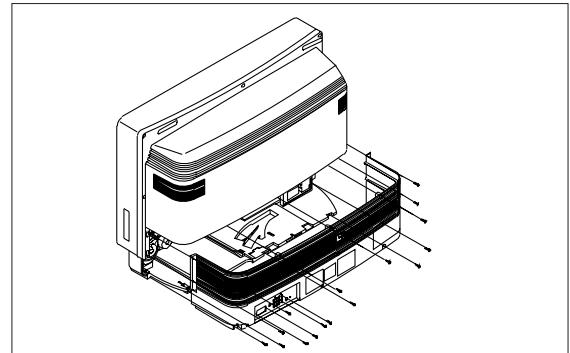
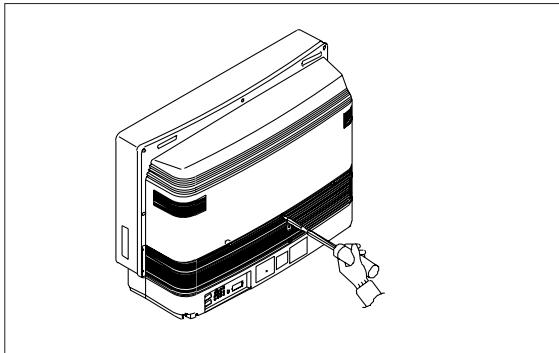
MODEL		SP-403JHA
MAIN CHARACTERISTICS	Progressive	0
	Dolby Prologic	0 (3D Sound)
	AV- LINK	0
SYSTEM	TUNING	Frequency Synthesizer
	COLOR	PAL, SECAM, NTSC (only AV mode)
	SOUND	NICAM, A2 STEREO, AM
ANTENNA INPUT		75Ω, Coaxial Cable
POWER	CONSUMPTION	168 W
	REQUIREMENTS	Main Voltage : 230V Input Range : 220 ~240V
	FREQUENCY	50Hz
LCD	SIZE	1.43" , 16:9
	TYPE	p-Si : Active matrix TFT
NUMBER OF CHANNELS		100
TUNING RANGE		VHF : 2 ~ 12, UHF : 21 ~ 69, Cable : S1 ~ S41
SOUND OUTPUT		Right : 13W Left : 13W
SOCKETS	EXT4	-1 RCA Input / 1 S-Video input -Headphone Audio Output
	BACK (3 SCARTS)	-EXT1 : full RGB Scart / AV-LINK -EXT2 : Scart (Output Selectable) -EXT3 : Decoder (Output Selectable) -Dolby Prologic Signal Output (RCA Jack)

Specifications are subject to change.

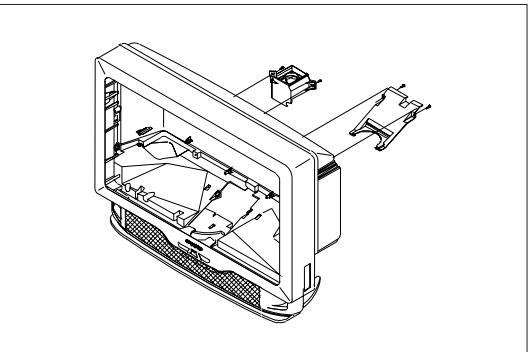
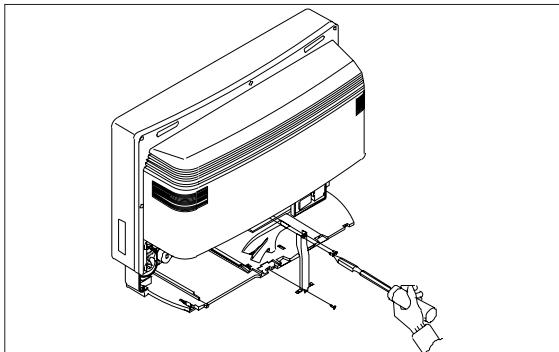
## 4. Disassembly and Reassembly

### 4-1 Back Cover Removal

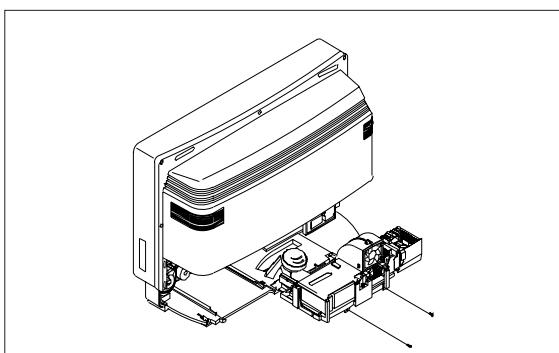
1. After removing the 16 screws, pull the bottom part of the cabinet back wards.



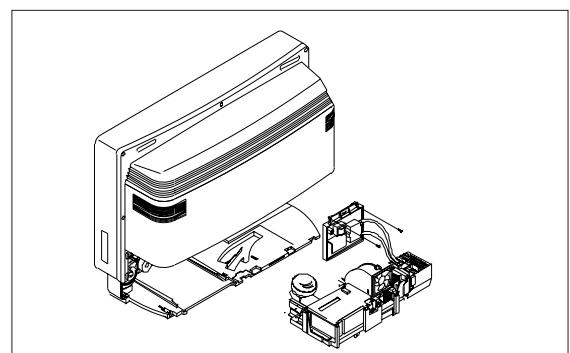
2. Loosen the 4 screws and remove the supporter.



4. Loosen the 2 screws. Remove the optical meter.



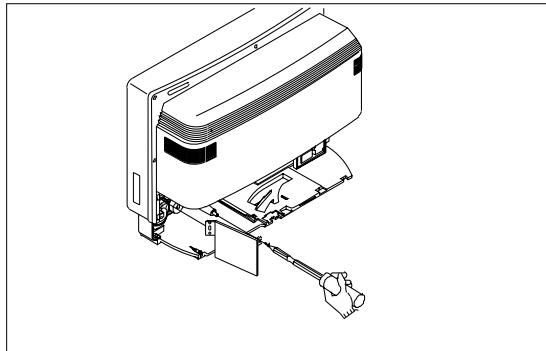
3. After loosening the 4 screws, remove the lens cover and fan duct.



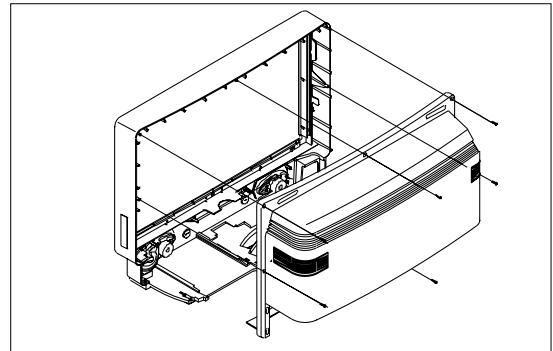
5. Loosen the 2 screws. Remove the stabilizer.

Disassembly and Reassembly

6. After loosening the 2 screws, remove the chassis holder and power mounting.

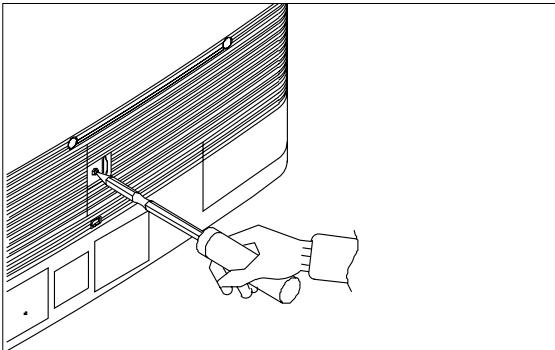


7. After removing the 6 screws, pull the top cabinet backwards.

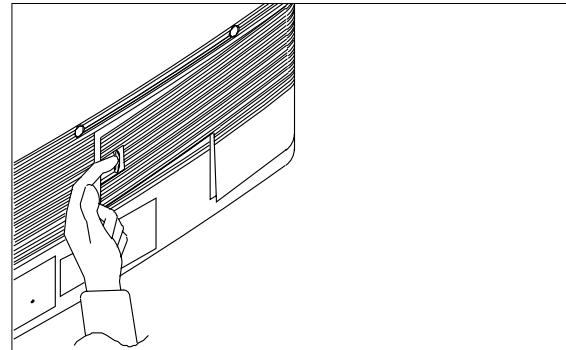


## 4-2 Lamp Replacement

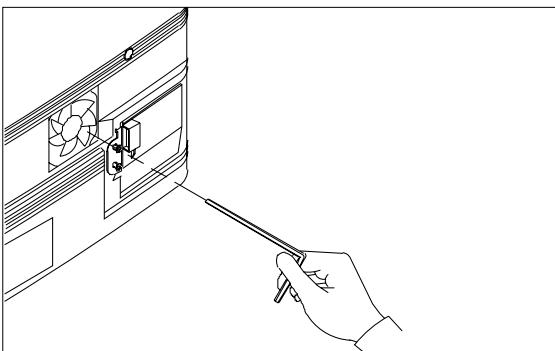
1. Loosen the screw.



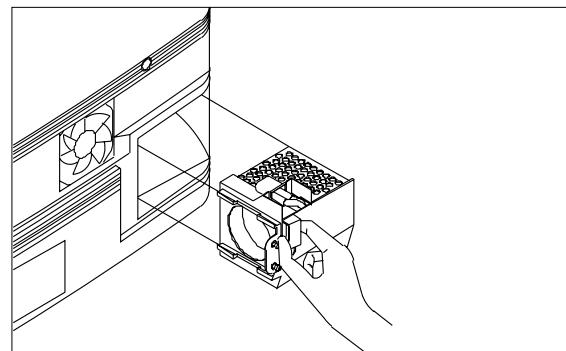
2. Remove the cover.



3. Using a hexagonal wrench, loosen the two screws that secure the lamp.



4. Pull out the lamp.



### 5. PROCEDURE

After completing the lamp replacement, enter the Service Mode

Press the remote control Keys in the following sequence:

"Display → P.STD → Mute → Power"

**00** Lamp Total time (05999)  
**01** Lamp Life (05999)

(1) Select 01 (lamp life) with using the channel (▼) key, then press the volume (+) key (See the figure below).

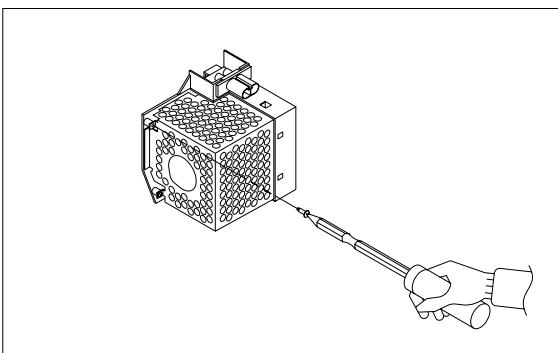
(2) Press the Cancel key to reset the lamp life ("00000").

(3) Press the Power key to reset the factory value.

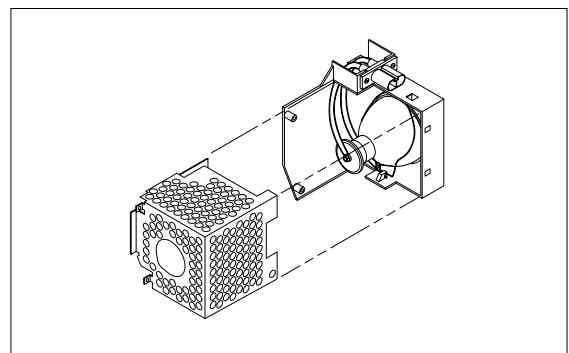
(4) Press the DISPLAY key to verify that the lamp use time is  $\emptyset$ .

#### 4-2-1 Lamp (Bulb only) Replacement

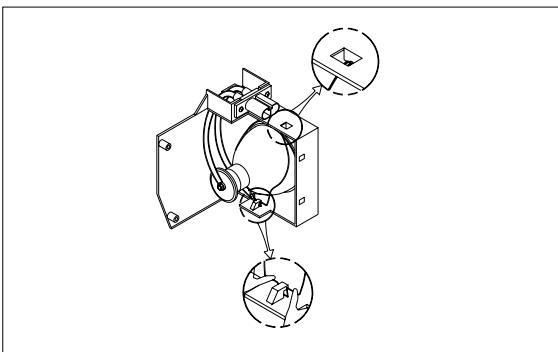
1. Loosen the two screws.



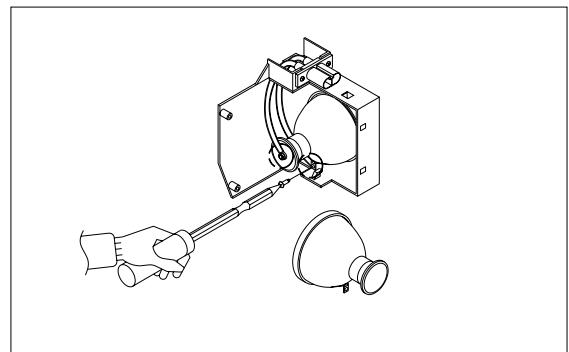
2. Remove the lamp-bracket from the lamp assembly.



3. After loosening the two brackets, remove the lamp-holder and wires.



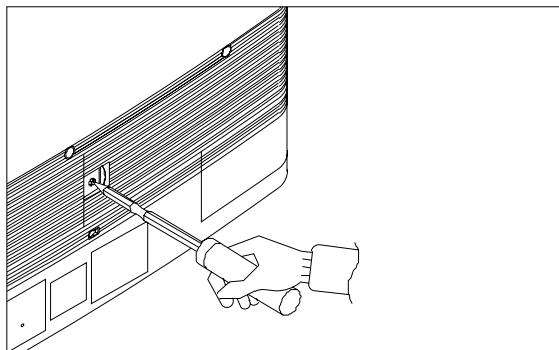
4. After loosening one screw and one nut, remove the bulb.



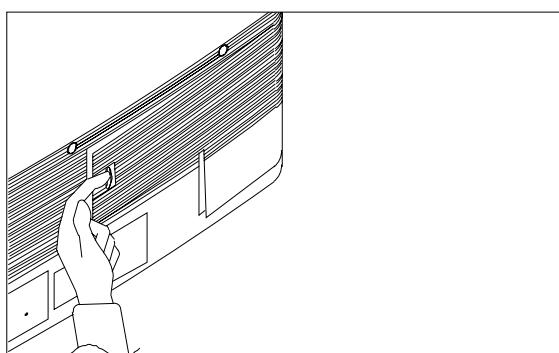
### 4-3 Air Filter Check

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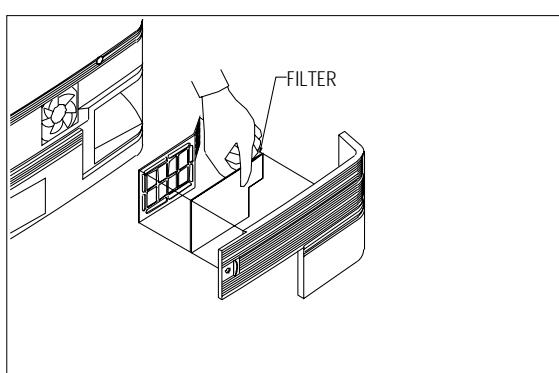
1. Loosen the screw.



2. Remove the cover.

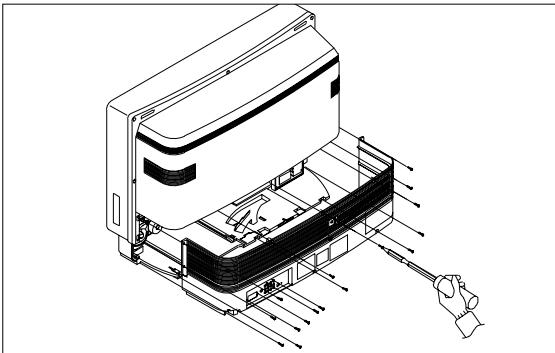


3. After removing the holder and filter from the cover, clean the filter.

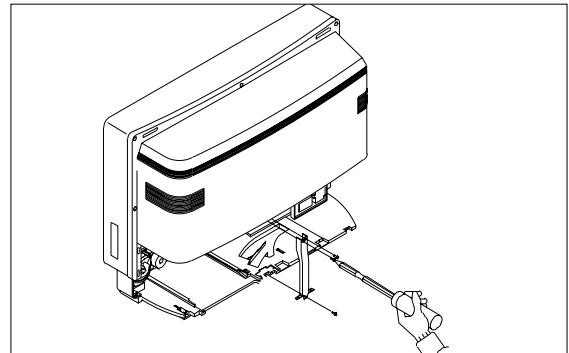


## 4-4 Liquid Crystal Panel Replacement

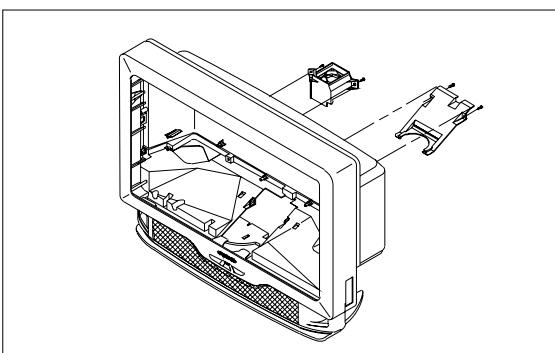
1. After removing the 16 screws, pull the cabinet backwards.



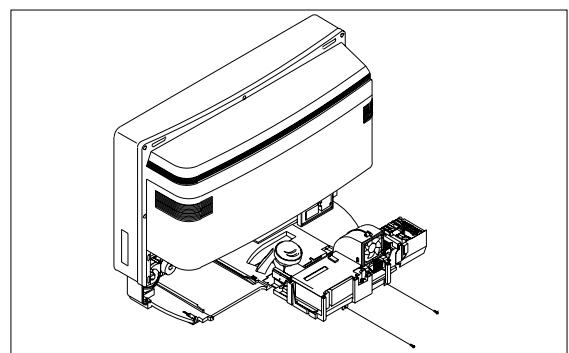
2. Loosen the 3 screws. Remove the supporter.



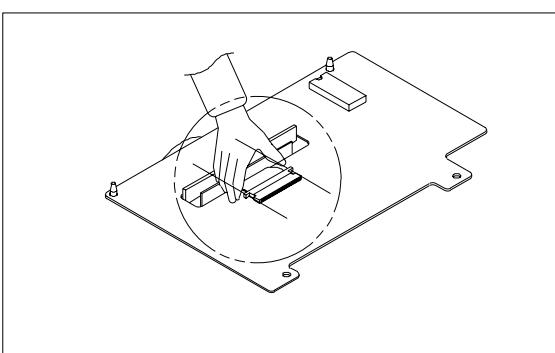
3. After loosening the 4 screws, remove the lens cover and fan duct.



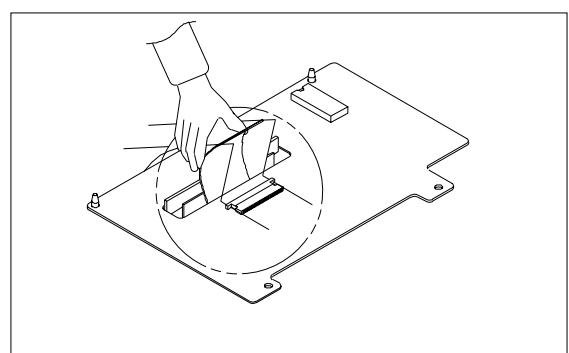
4. Loosen the 2 screws. Remove the optical meter.



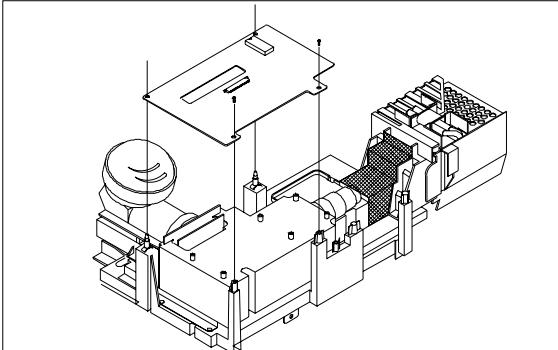
5. Remove the GUIDE from the FPC-Connector.



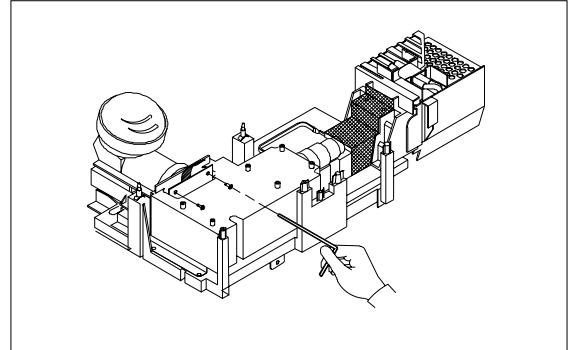
6. Remove FPC cable from the FPC-Connector.



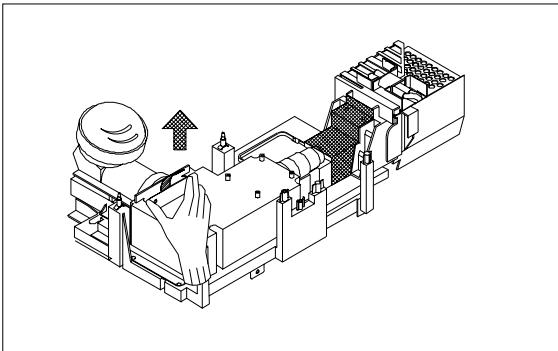
7. Loosen the 2 screws, 2 PCB spacers and remove the PCB-LCD.



8. Using a hexagonal wrench, loosen the two screws.



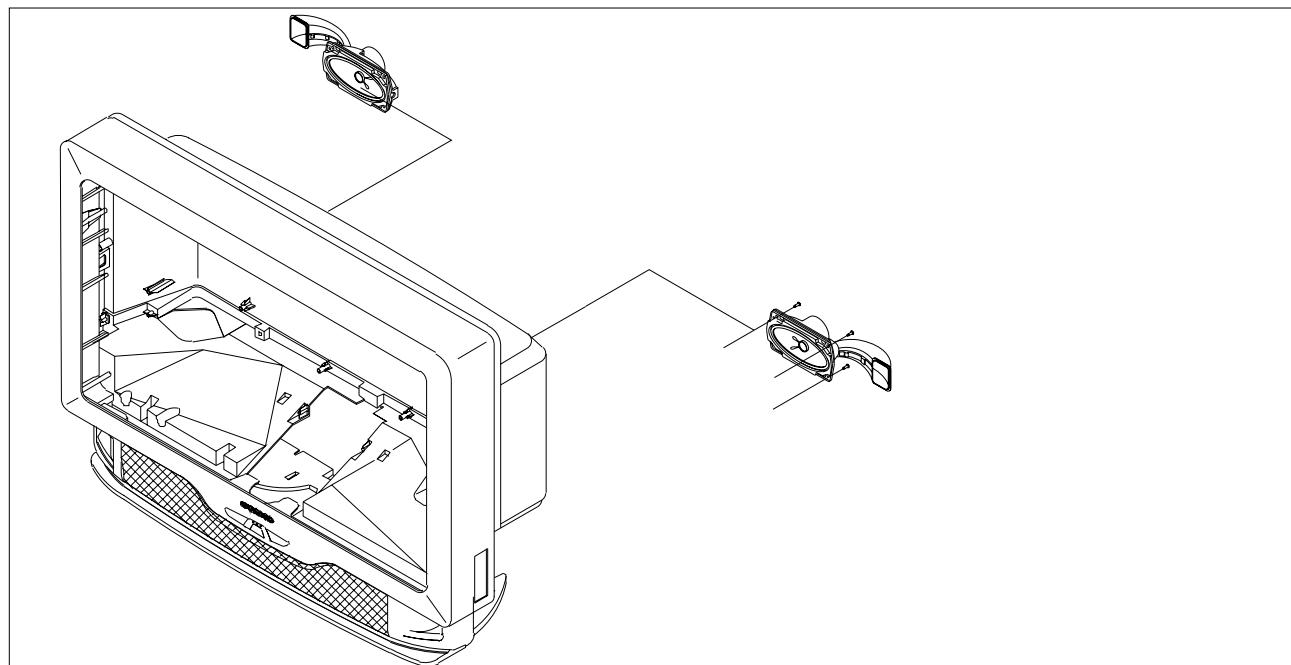
9. Lift the LCD in the direction of arrow.



## 4-5 Speaker Removal

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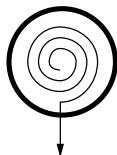
1. Loosen the 4 screws and remove the speaker holders.



## 5. Alignment and Adjustments

### 5-1 Lens and Mirror Cleaning

1. Mix the alcohol and ethyl in appropriate proportions.
2. Use a clean cotton cloth or a cleaning paper.
3. Clean the top of the lens by turning it as shown. The pattern starts at the center and proceeds outward, as shown below:



4. Use minimal pressure when rubbing the mirror. Otherwise, the surface will be damaged.

### 5-2 Focus Adjustment for projection Lens

1. Loosen the 4 screws that secure the optical assembly.
2. After setting the optical assembly on the front cabinet, secure the unit temporarily using the two screws.
3. After applying the liquid crystal panel signal, input a lion head pattern from a pattern generator.
4. Move the focus adjustment screws right and left until the liquid crystal picture element is clearly displayed on the screen.
5. Reposition the optical assembly, and fasten all 4 screws.
6. Check the focus adjustment.
7. Repeat adjustments 1~5, if necessary.

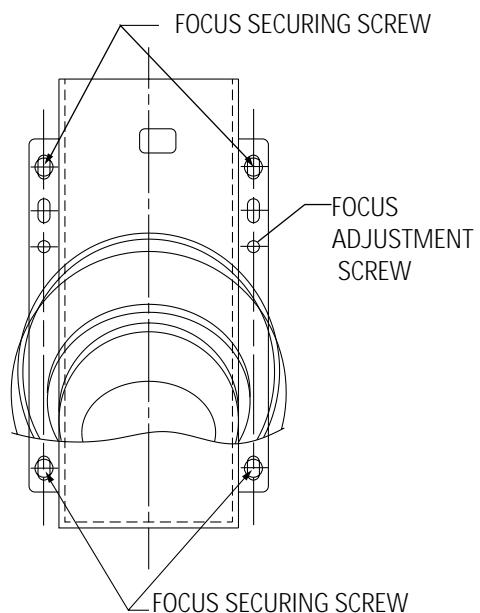


Fig. 5-1

## 5-3 Liquid Crystal Screen Center Adjustment

After replacing with the new liquid crystal panel, make sure that the liquid crystal screen center is aligned with the screen center. If they are not aligned, make the following adjustments:

1. Using a hexagonal wrench, loosen the two screws that secure the liquid crystal panel.

Note: Loosen the screws just until the panel can move easily.

2. Using two fingers, lift the liquid crystal upward. (The screen moves downward.)
3. When moving the liquid crystal panel towards the left, the screen moves right (and vice versa).
4. Repeat adjustments 2~4 until the screen center is aligned vertically and horizontally.
5. Using a hexagonal wrench, refasten the two screws.

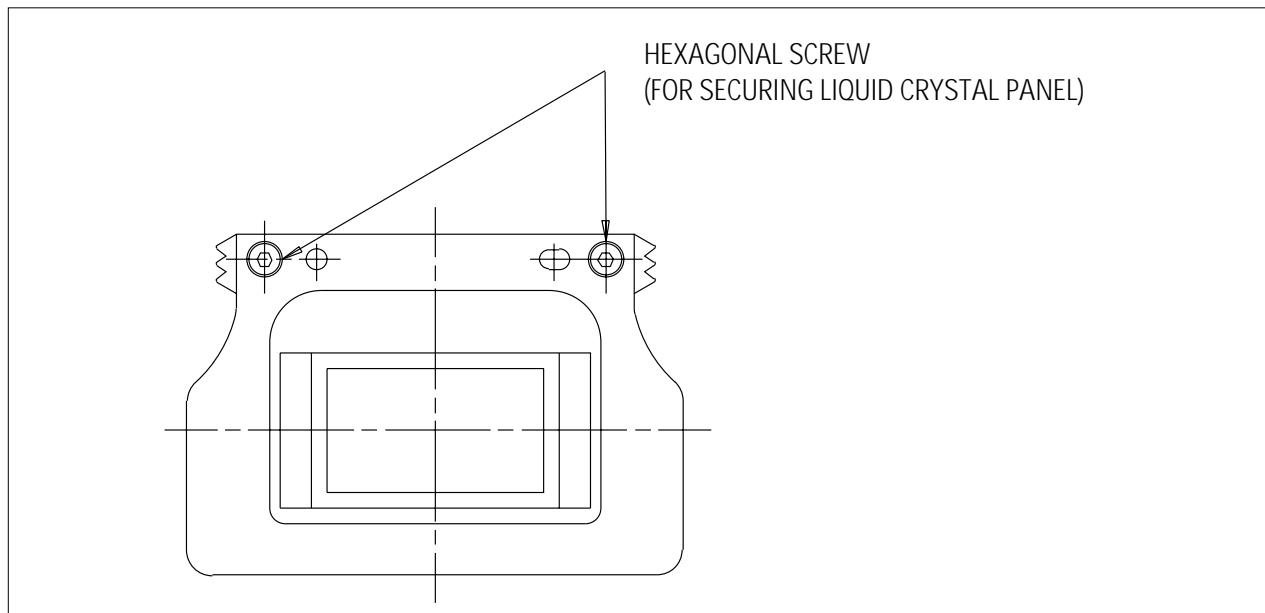
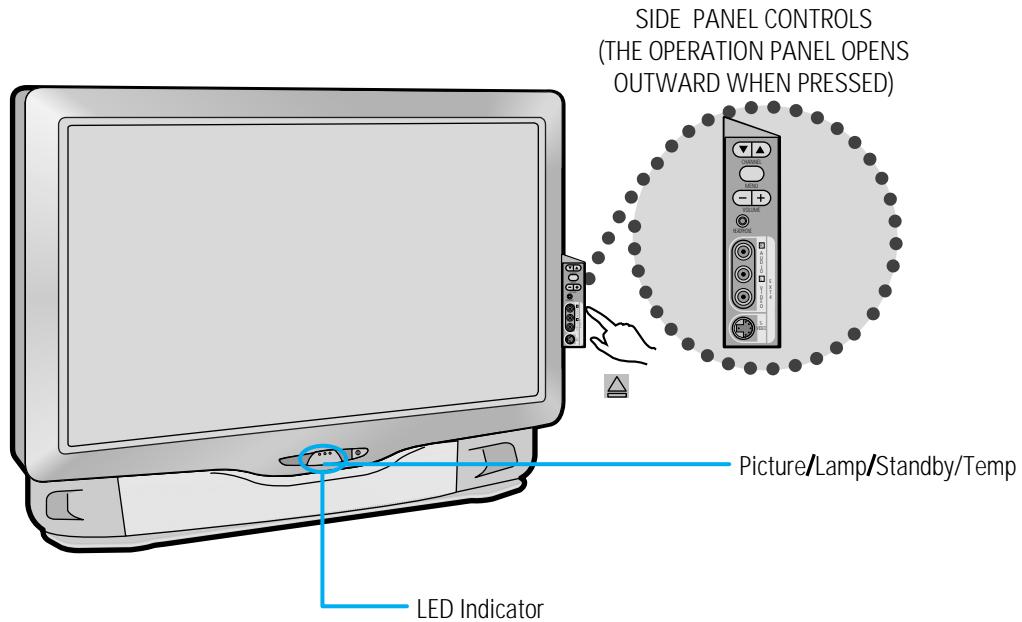
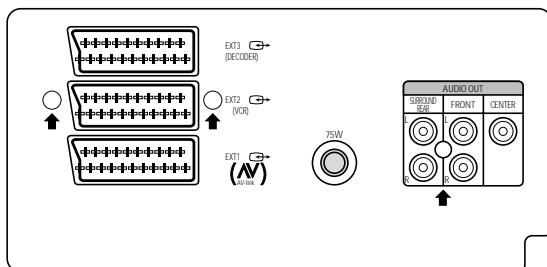


Fig. 5-2

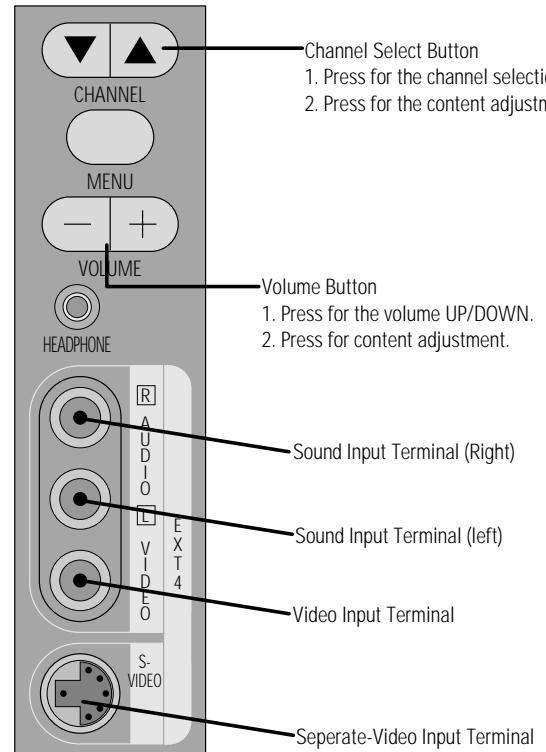
## 5-4 Side Panel Controls



### 4-4-1 Rear Panel Jacks



### 5-4-2 Side Operation Panel





## 5-5 Service Mode Adjustments

### 5-5-1 MATRIX IC (TDA4780) Adjustment

No.	Item	Range	Initial value	Description
00	RED DRIVE	63	52	Adjustment for the R gain
01	GREEN DRIVE	63	48	Adjustment for the G gain
02	BLUE DRIVE	63	53	Adjustment for the B gain
03	RED CUTOFF	63	32	Adjustment for the R cutoff
04	GREEN CUTOFF	63	32	Adjustment for the G cutoff
05	BLUE CUTOFF	63	32	Adjustment for the B cutoff
06	SUB BRIGHTNESS	20	14	Adjustment for the brightness
07	SUB CONTRAST	20	20	Adjustment for the contrast
08	SUB COLOR	20	00	Adjusts the color difference signal level of YUVIN 1
09	PEAK DRIVE LIMIT	63	43	Adjustment for the peak drive limit
10	P.YC DELAY	15	13	Adjustment for the P.YC delay
11	SUB TINT	17	09	Adjusts the center of tint (0 →R 9 →CENTER 17 →G )
12	γ CORRECTION	63	63	Adjustment for the γ correction

## 5-5-2 LCD Interface IC (CXA1853\_A) Adjustment

No.	Item	Range	Initial value	Description
00	Gamma gain 1	63	41	Adjusts the gain of black side on the gamma curve (R,G,B)
01	R gamma gain 1	63	39	Adjusts the gain of black side on the gamma curve for R
02	B gamma gain 1	63	48	Adjusts the gain of black side on the gamma curve for B
03	Gamma gain 2	63	16	Adjusts the gain of white side on the gamma curve (R,G,B)
04	R gamma gain 2	63	36	Adjusts the gain of white side on the gamma curve for R
05	B gamma gain 2	63	36	Adjusts the gain of white side on the gamma curve for R
06	Gamma ctrl 2	63	34	Adjusts the change point of the white side on the gamma curve (R,G,B). The smaller the value, the more it moves towards white.
07	Main bright	63	42	Adjust the DC level of R,G,B signal before doing the gamma adjustment. It determines the change point of the gamma curve. The greater the value, the darker it gets.
08	R main bright	63	36	Adjusts the DC level of R before doing the gamma adjustment. It determines the change point of the gamma curve. The greater the value, the darker it gets.
09	B main bright	63	36	Adjusts the DC level of B before doing the gamma adjustment. It determines the change point of the gamma curve. The greater the value, the darker it gets.
10	White limit	63	41	Adjusts the limiter voltage of white peak of R,G,B video signal (applied to LCD). The greater the value, the lower the limiter voltage becomes.

### 5-5-3 LCD Interface IC (CXA1853\_B) Adjustment

No.	Item	Range	Initial value	Description
00	Gamma ctrl 1 off	63	36	Adjusts the change point of the black side on the gamma curve (R,G,B). The greater the value, the more it moves towards black
01	Black Stretch On	36	33	Adjusts the change point of the back side on the (R,G,B) gamma curve. Moves the change point to the white side. The value is always less than the one of the gamma ctrl 1 off.
02	R gamma ctrl 1	63	40	Adjusts the change point of the back side on the gamma curve for R. The greater the value, the more it moves towards black.
03	B gamma ctrl 1	63	32	Adjusts the change point of the black side on the gamma curve for B. The greater the value, the more it moves towards black.
04	Sub bright	20	10	Adjusts the brightness of R, G, B after doing the gamma adjustment. No change of the gamma curve. The greater the value, the darker it gets.
05	R sub bright	63	35	Adjusts the brightness of R after doing the gamma adjustment. No change on the gamma curve. The greater the value, the darker it gets.
06	B sub bright	63	42	Adjusts the brightness of B after doing the gamma adjustment. No change on the gamma curve. The greater the value, the darker it gets.
07	Common ctrl	63	30	Adjusts the common voltage (applied to LCD)
08	Signal center	63	15	Adjusts the DC level of composite video signals (applied to LCD). Set the signal center to 7V.
09	Sub contrast	63	47	Adjusts the gain of R, G, B (applied to LCD).
10	R sub contrast	63	42	Adjusts the gain of R (applied to LCD).
11	B sub contrast	63	34	Adjusts the gain of B (applied to LCD).



### 5-5-4 LCD CONTROLLER (CXD2443Q) Adjustment

No.	Item	Range	Initial value	Description
00	LCD h pos	255	70	Determines the start location of horizontal indication by picture element.
01	LCD v pos	15	3	Determines the start location of vertical indication (within 1H)
02	SH position	15	6	Determines the phase of the sample/hold pulse.

### 5-5-5 Lamp's Total Hours

No.	Item	Range	Initial value	Description
00	lamp total time	05999		Records total elapsed time (from the time where power is first applied). Reset not possible
01	lamp time	05999		Records total elapsed time (from the point where power is first applied). Reset (using the cancel key). The lamp time is displayed by using the Display key. Reset must be done during the set shipment. Reset must be done after lamp replacement.

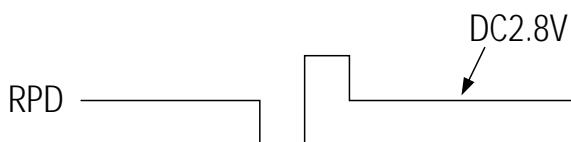
### 5-5-6 Option

No.	Item	Range	Initial value	Description
00	Epg	on/off	off	Electronic program guide
01	Av_link	on/off	on	Av_link
02	Palplus	on/off	off	-
03	27Mhz external	on/off	on	27Mhz external
04	16 : 9 wide	on/off	on	16 : 9 wide
05	Dolby prologic	on/off	on	Dolby prologic
06	3d sound	on/off	off	3d sound
07	S-audio mute	on/off	on	Scart audio mute
08	Blue screen	on/off	on	Blue screen
09	UHF only	on/off	off	UHF only
10	Vga	on/off	off	Vga input
11	Atm one run	on/off	on	Atm one run ("OFF" for France)
12	Size key	on/off	off	Size key
13	Vip option	on/off	on	Vip option

## 5-6 Circuit Adjustments

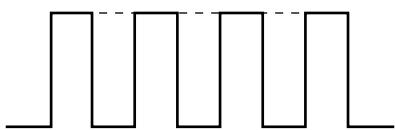
### 5-6-1 LCD Control Board PLL Adjustment

1. Input a color bar signal.
2. Connect CNL06, RPD to an oscilloscope, and check the waveforms.  
(1 V/div, 20  $\mu$  sec/div)



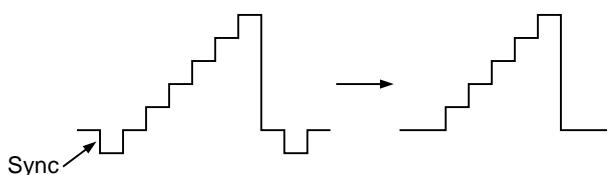
### 5-6-2 Matrix IC (TDA4780) Sub Tint Adjustment

1. Input a color bar signal.
2. Connect CNL07 (B output) to an oscilloscope, and check the waveform.  
(0.5 V/div, 20  $\mu$  sec/div)



### 5-6-3 Matrix R Output Signal Amplitude Adjustment (Red Drive)

1. Input a 10-step signal (Color OFF).
2. Connect CNL07 (R output) to an oscilloscope, and check the waveform.  
(0.5 V/div, 10  $\mu$  sec/div)
3. Adjust the red drive so that the signal amplitude becomes 0.7Vp-p.
4. Adjust the Sub-brightness of TDA4780 so that the waveform (without sync) is seen as shown in the figure below.



### 5-6-4 Matrix G Output Signal Amplitude Adjustment (Green Drive)

1. Input a 10-step signal (Color OFF).
2. Connect CNL07 (G output) to an oscilloscope, and check the waveform.  
(0.5 V/div, 10  $\mu$  sec/div)
3. Adjust the green drive so that the signal amplitude becomes 0.7Vp-p.

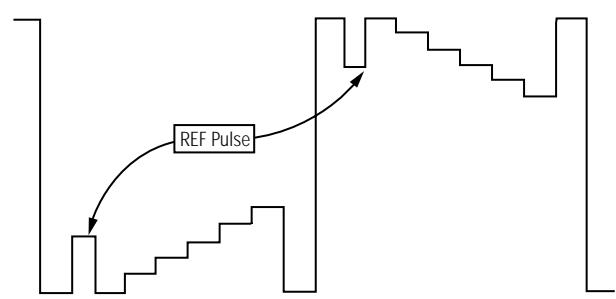
### 5-6-5 Matrix B Output Signal Amplitude Adjustment (Blue Drive)

1. Input a 10-step signal (Color OFF).
2. Connect CNL07 (B output) to an oscilloscope, and check the waveform.  
(0.5 V/div, 10  $\mu$  sec/div)
3. Adjust the blue drive so that the signal amplitude becomes 0.7Vp-p.

### 5-6-6 Main Brightness Adjustment

1. Input a 10-step signal (Color OFF).
2. Connect LCD CNL08(R1) input to an oscilloscope, and check the waveform.  
(2 V/div, 10  $\mu$  sec/div)
3. Adjust the main brightness so that the Ref pulse is positioned on the center of signal.

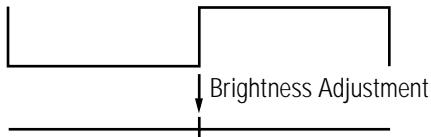
Note : The change point (on gamma curve) is determined by Ref.



### 5-6-7 R Main Brightness & B Main Brightness Adjustments

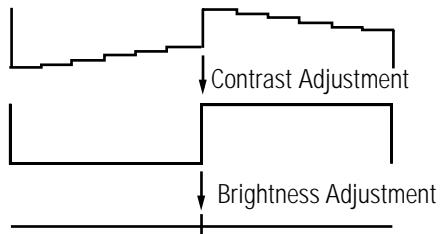
1. Input a 5-step signal (Color OFF).
2. Connect CH1 to LCD G1 input and CH2 to LCD R,B input. (1 V/div, 10 u sec/div)
3. Reverse the CH2 signal, and add CH1 and CH2 in ADD mode.
4. Adjust R,B main brightness for the waveform shown below.

Note: The R,B main brightness adjustment should be done with Gamma Adjustment OFF (gamma ctrl1 = 63, gamma ctrl2 = 17).



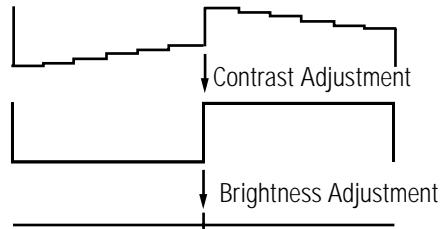
### 5-6-8 R Sub-brightness & R Contrast Adjustments

1. Input a 5-step signal (Color OFF).
2. Connect CH1 to LCD G1 input and CH2 to LCD R1 input. (1 V/div, 10 u sec/div)
3. Reverse the CH2 signal, and add CH1 and CH2 in ADD mode.
4. Adjust R sub-contrast and R sub-brightness waveforms, as shown below:



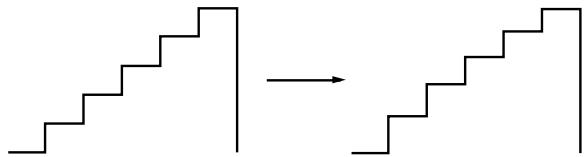
### 5-6-9 B Sub-brightness & B Contrast Adjustments

1. Input a 5-step signal (Color OFF).
2. Connect CH1 to LCD G1 input and CH2 to LCD B1 input. (1 V/div, 10 u sec/div)
3. Reverse the CH2 signal, and add CH1 and CH2 in ADD mode.
4. Adjust B sub-contrast and B sub-brightness waveforms, as shown below:



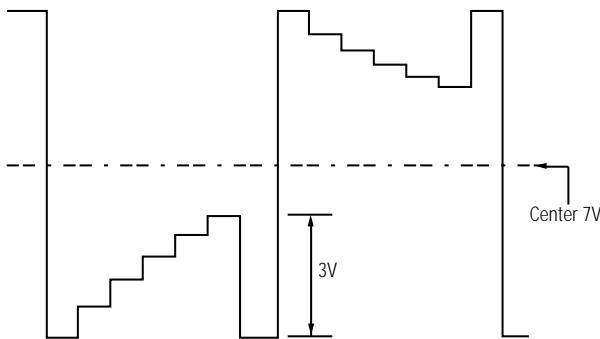
### 5-6-10 Gamma Adjustment

1. Input a 5-step signal (Color OFF).
2. Connect LCD G1 input to an oscilloscope. (2 V/div, 10 u sec/div)
3. Adjust the gamma gain1, gain2 and the gamma ctrl1, ctrl2 for the waveform shown below.



### 5-6-11 Sub-Contrast Adjustment

1. Input a 5-step signal (Color OFF).
2. Connect LCD G1 input to an oscilloscope.  
(2 V/div, 10  $\mu$  sec/div)
3. Adjust the sub-contrast so that the signal level is 3V, as shown below:



### 5-6-12 Signal Center Adjustment

1. Input a 5-step signal (Color OFF).
2. Connect LCD G1 input to an oscilloscope, and check the waveform.  
(2 V/div, 10  $\mu$  sec/div)
3. Set the signal center to 7V.

### 5-6-13 Common Voltage Adjustment

1. Connect LCD COMMON input to an oscilloscope, and check the waveform.  
(1 V/div, 10  $\mu$  sec/div)
2. Set the common control to 6.8V.

### 5-6-14 White Balance Adjustment

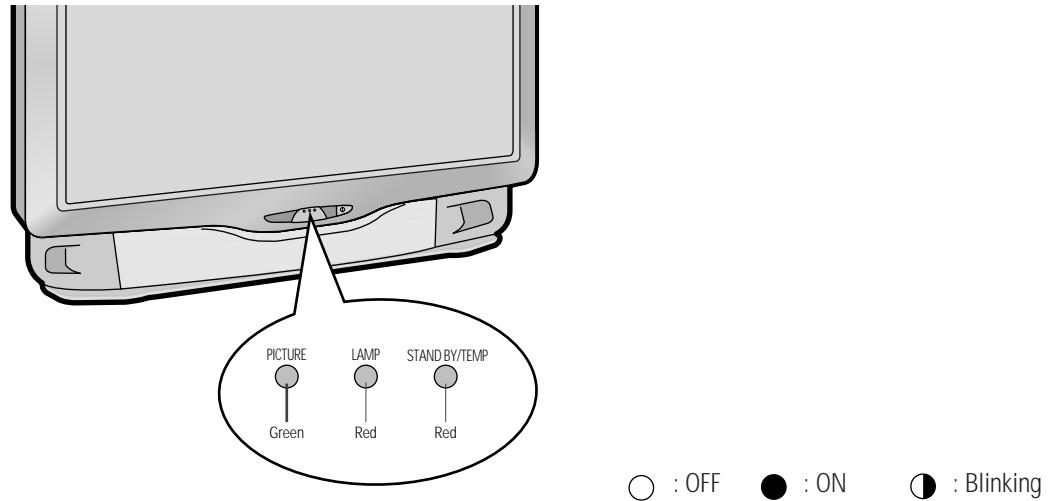
1. Input a lion head pattern from a pattern generator.
2. Adjust the sub-brightness so that the white cannot be saturated.
3. Adjust R,B contrast for the high light of white balance.
4. Adjust R,B sub-brightness when the middle tone is not black and white, but colored. Repeat adjustments 3 ~ 4 for optimum.
5. Adjust gamma ctrl1 for adjusting the brightness of the black side.
6. Adjust R,B gamma ctrl1 while checking the tone of the black side so that any color is not seen.
7. Repeat adjustments 2 ~ 6, if necessary.

### 5-6-15 Center Convergence Adjustment

1. Input a lion head pattern from a pattern generator.
2. Adjust the LCD Horizontal/Vertical POS.

## 5-7 LED Display Check

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No	Status	Picture	Lamp	Stand By Temp
1	Master Power ON (in the Stand-by Mode)	○	○	●
2	Normal operation	●	●	○
3	Lamp is warming up. The normal picture comes on after 25 seconds.	○ ● ○	● ● ●	○ ○
4	Air vent cover in the rear of the TV is not properly installed.	○	○ ●	●
5	Inside temperature of the TV is over normal. Clean the air vent cover in the rear of the TV. Turn the TV back on after 1 hour. (see below "Temperature")	○	○	●
6	The lamp needs to be replaced.	●	●	●

### ◆ Temperature

When the inside temperature of the TV becomes too high, the TV set is automatically turned off. You will observe the following.

1. "TEMP" LED is blinking for about 5 ~ 6 seconds.
2. The picture is turned to blue screen and "TEMPERATURE" character blinks for about 5 ~ 6 seconds.
3. The power is turned off and "TEMP" LED is blinking for about 20 seconds.  
(This is not a TV set failure and normal operation)

## 6. Troubleshooting

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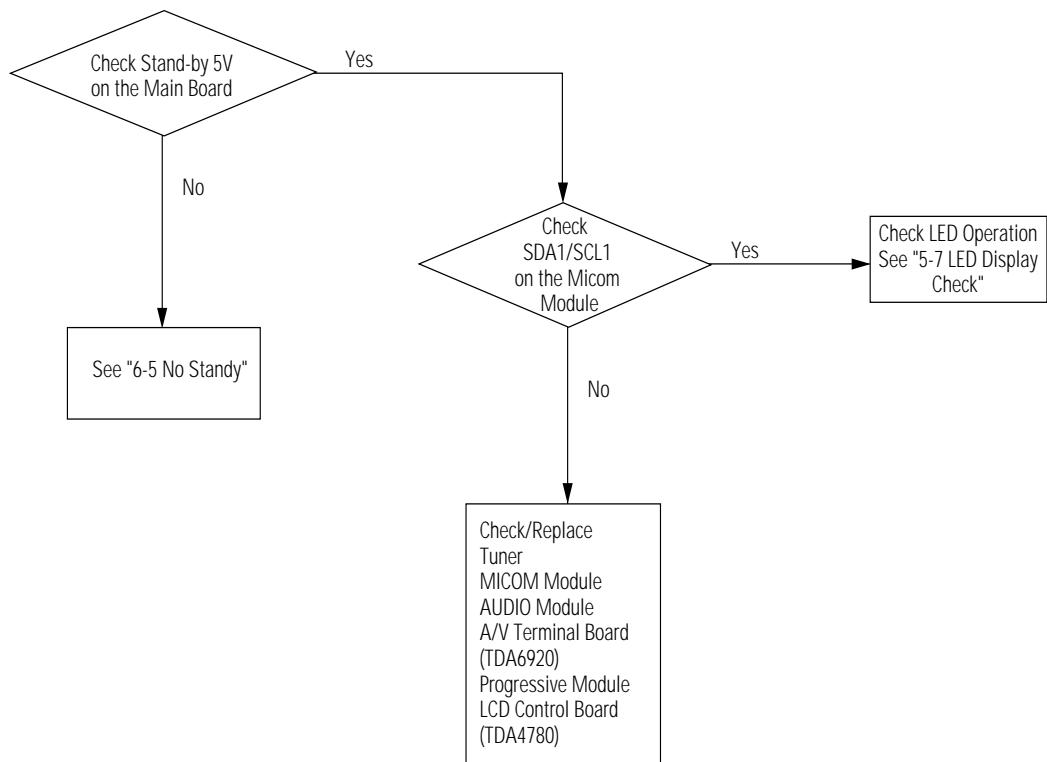
### 6-1 Service Mode

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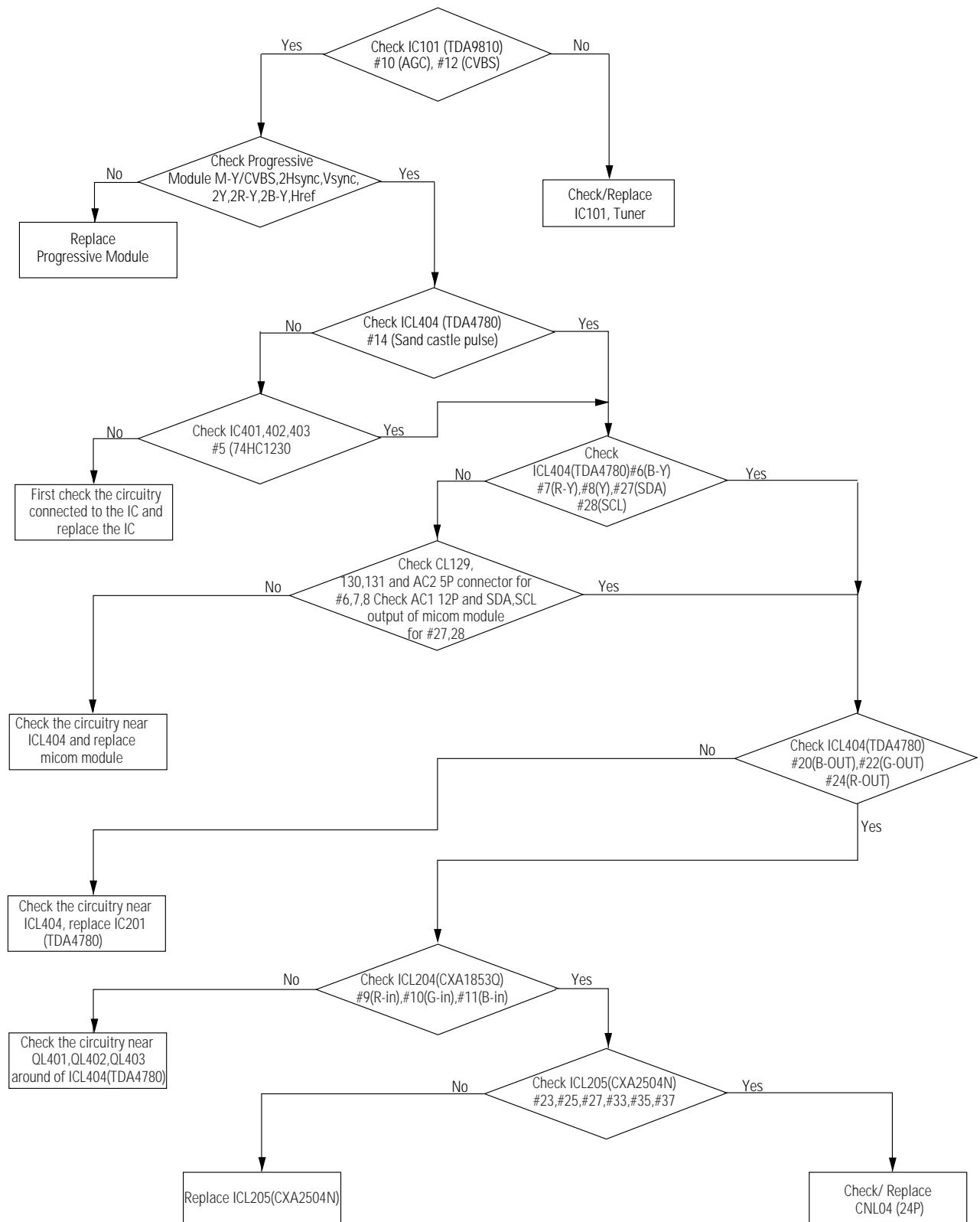
1. To enter the Service Mode, press the remote-control keys in the following sequence:  
Display → Picture Standard → Mute → Power
2. Use the Channel UP/DOWN keys to move within the Service Mode.
3. Use the Vol (+) key and Vol (-) key to change data.
  - (1) Press the Vol (+) key to increase data.
  - (2) Press the Vol (-) key to decrease data.
4. Use the Power key to exit and store data in memory.

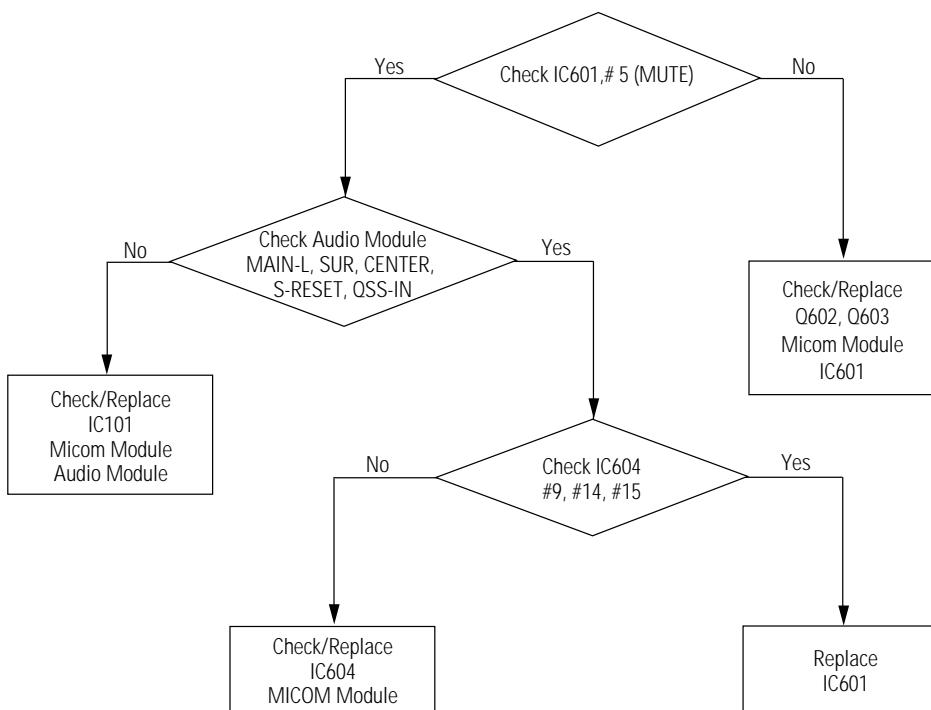
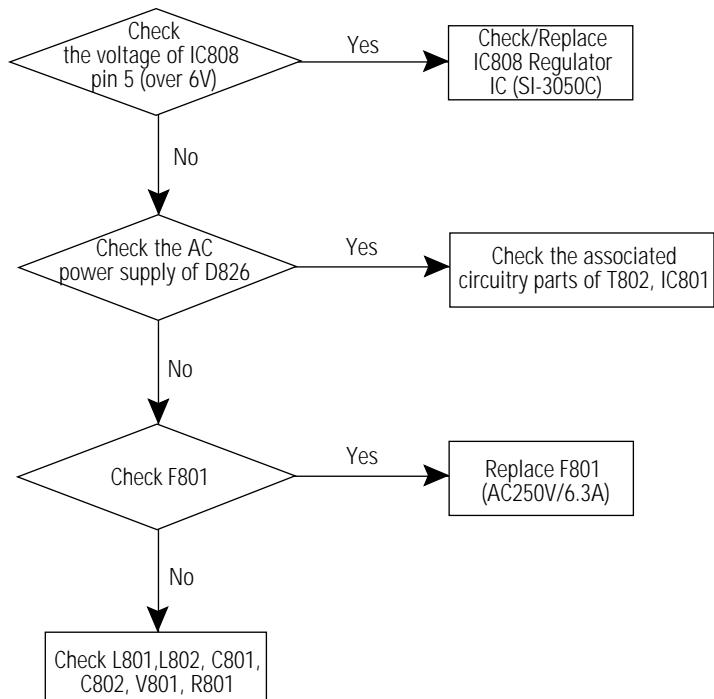
## 6-2 No Power

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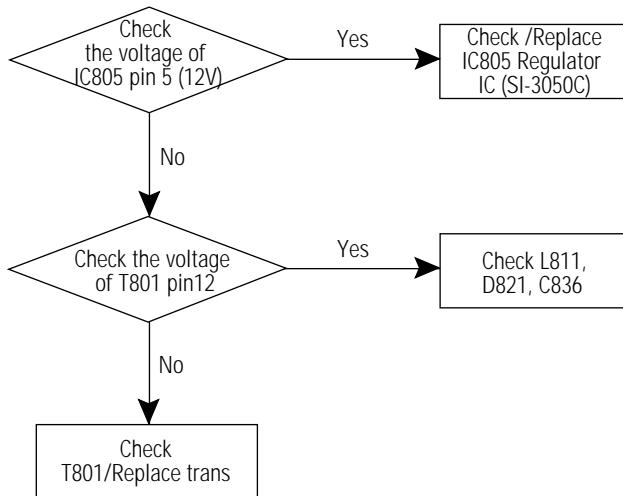
## 6-3 No Picture



**6-4 No Sound****6-5 No Standby (+5V)**

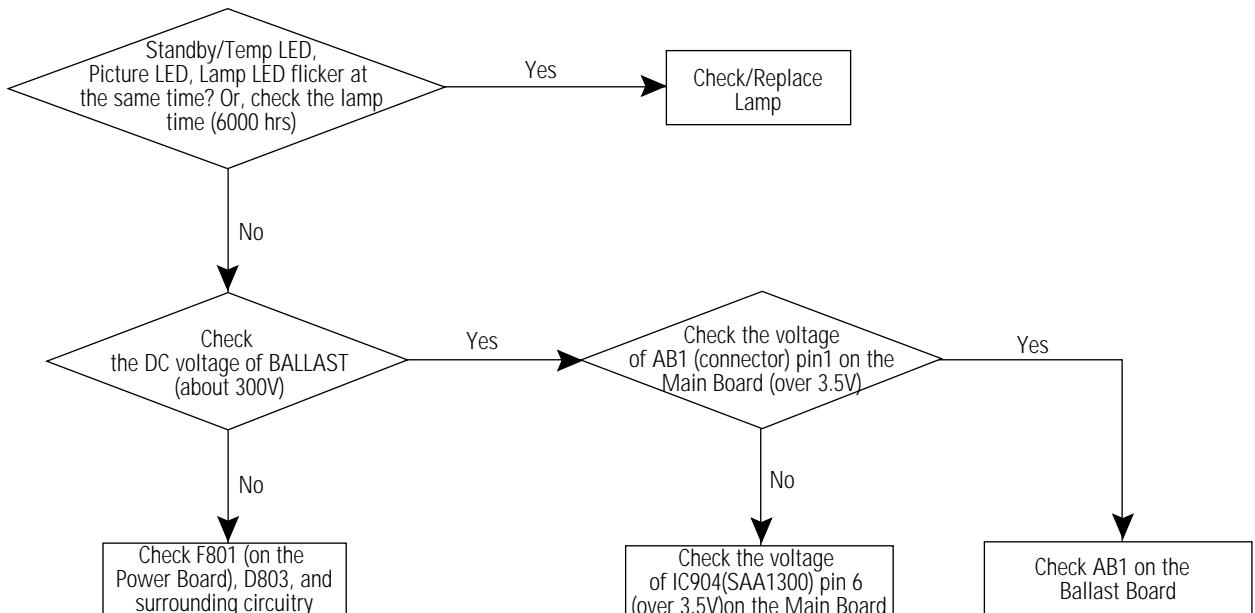
## 6-6 No FAN Voltage (+8V)

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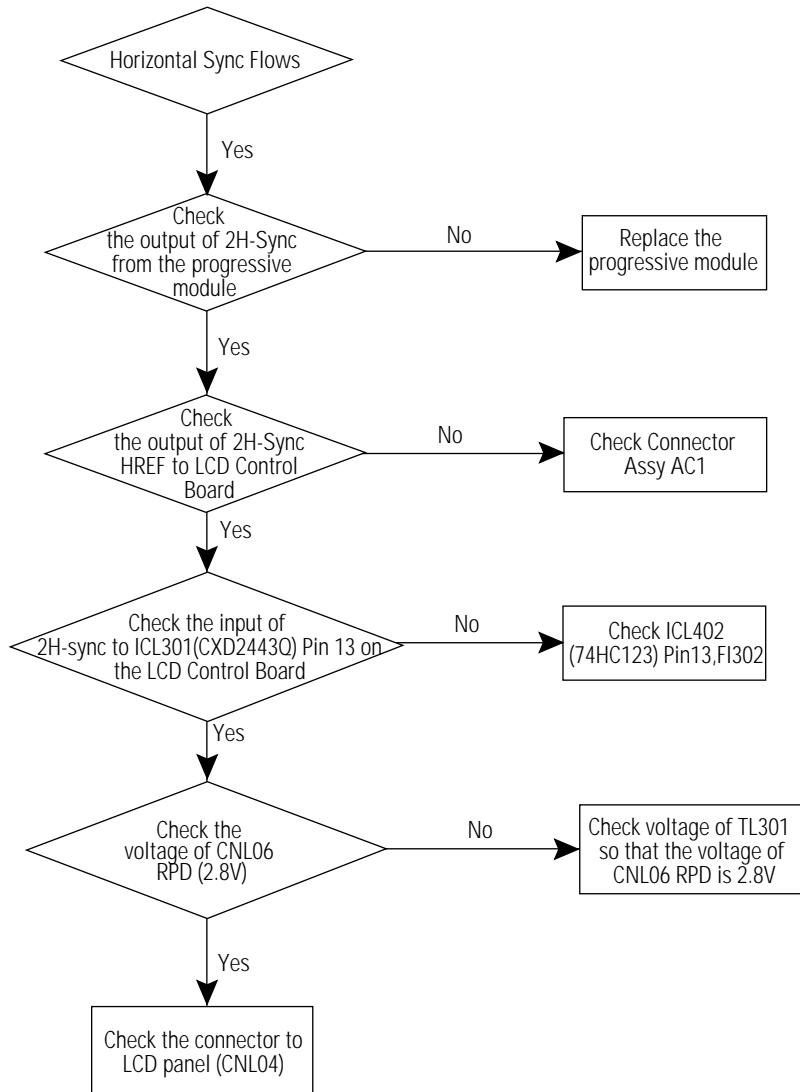
## 6-7 Lamp Does Not Work

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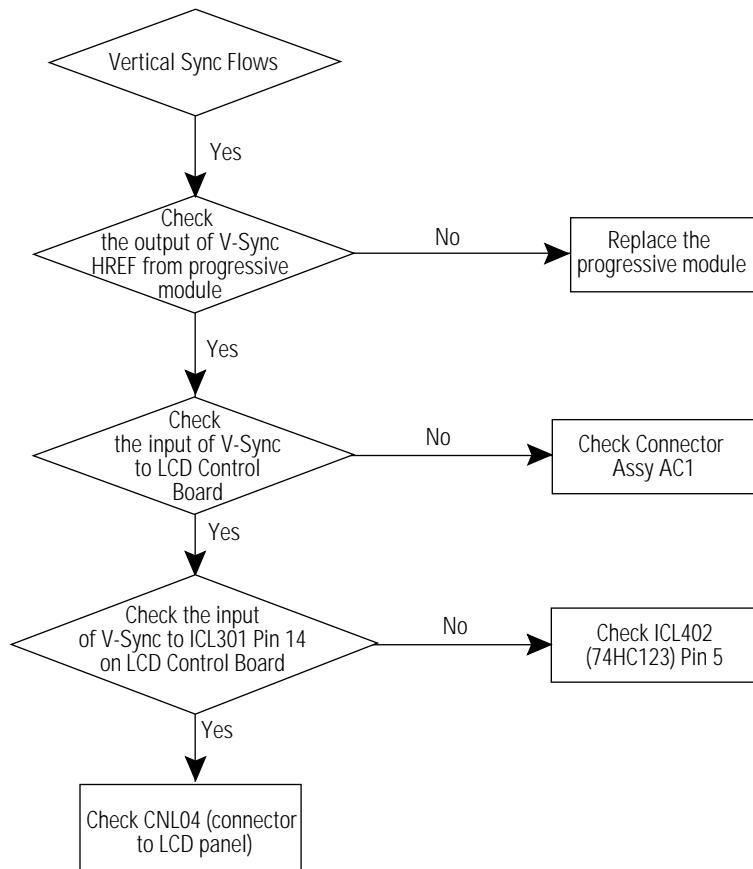
## 6-8 Horizontal Sync Flows

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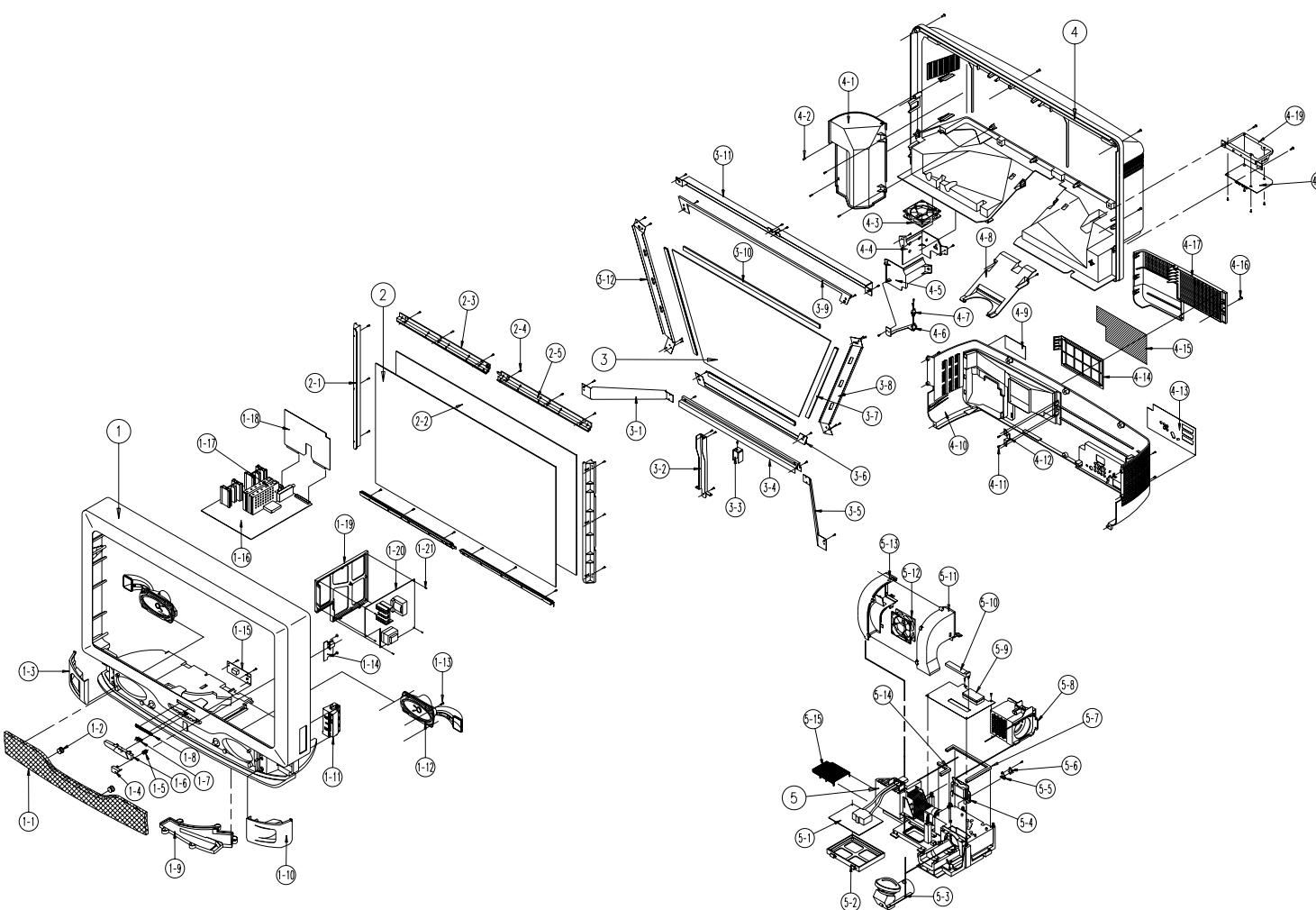
## 6-9 Vertical Sync Flows

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## 7. Exploded View & Parts List

### 7-1 SP403JHAX



No	Code No	Description	Specification	Q'ty	Remark
1	AA91-10308L	ASSY-CABINET,FRONT	-SPM403JHARX/NWT,PLT51A UKRAINE	1	
	AA64-30853E	CABINET-FRONT	-,-DG-703P,HIPS,HB,BLK,-,-	1	
1-1	AA63-30128A	COVER-GRILLE	-,-SVP-403J,-,HIPS,HB,BLK,-,-	1	
1-2	AA61-20061A	HOLDER-GRILLE	-,-S5288,NEOPRENE,HB,BLK,-	2	
1-3	AA63-30127F	COVER-HORN,L	-,-SP403JHAR,-,ABS,HB,BLK,	1	
1-4	AA64-10775A	KNOB-POWER,MASTER	-,-SP403JHA,-,PC,-,VIOLET	1	
1-5	AA61-60004N	SPRING-ES	-,-SUS304,0,6,OD8.1,H10,N5,-,-	1	
1-6	AA61-20301A	HOLDER-INDICATOR	-,-SPM-403J,PC,VO,VIOLET,-	1	
1-7	AA64-40381A	INDICATOR-LED	-,-SVP403J,-,ACRYL,HB,CLEAR,-	1	
1-8	AA64-70105A	BADGE-BRAND	-,-AL,SS FLAT,SILVER,L70,-,-	1	
1-9	AA63-30177A	COVER-DUCT,BOT	-,-SVP40LW,-,HIPS,HB,BLK,-,-	1	
1-10	AA63-30126B	COVER-HORN,R	-,-SP403JHA,DG703P,HIPS,HB,BLK,	1	
1-11	AA91-20056C	ASSY-DOOR	-,-ABS HB,DG-703PSPM403J	1	
1-12	AA91-60225A	ASSY-HOLDER,SPK	-,-PP,HB,BLK,8R20W,168BR20K	1	
1-13	6002-000522	SCREW-TAPPING	-,-TH,+2,M4,L15,ZPC(BLK),SWRCH18	8	
1-14	AA95-90032Z	ASSY-PCB,MASTER	-,-SP-403JHA,PLT51A,EC,-,-	1	
1-15	AA95-90032Y	ASSY-PCB,REMOCON	-,-SP-403JHA,PLT51A,EC,-,-	1	
1-16	AA94-00724A	ASSY-PCB,MAIN(OPT)	-,-SP403JHARX/NWT,PLT51A,UKRANINE-	1	

No	Code No	Description	Specification	Q'ty	Remark
1-17	AA95-90031M	ASSY-PCB,MICOM	-,-SPT-403J,PLT51A,PAL,-,-	1	
1-18	AA95-90031J	ASSY-AV,TERMINAL	-,-SP403JHA,PLT51A,-,-,EU	1	
1-19	AA61-20217A	HOLDER-CHASS/POWER	ABS VO GRAY	1	
1-20	AA95-10010X	ASSY-PCB,POWER	SP-403JHA,PLT51A,40,-,EC,-	1	
1-21	AA60-10008A	SCREW-TAPPING	TH,+,M3,L10,ZPC(YEL),SWRCH185	1	
2	AA67-70049A	SUN-SCREEN	-,-SVP-403J,P=0.72,PMMA,-,T=3.0	1	
2-1	AA61-20215B	HOLDER-SCREEN,S	-,-S40LW,HIPS,HB,BLK,-	2	
2-2	AA67-70051A	SCREEN-TINT	-,-SVP-403J,P=0.72,PMMA,-,T=3.0	1	
2-3	AA61-20214B	HOLDER-SCREEN,T	-,-SPV403J,HIPS,HB,BLK,-	2	
2-4	6002-000522	SCREW-TAPPING	TH,+,2,M4,L15,ZPC(BLK),SWRCH18	18	
2-5	AA61-20215A	HOLDER-SCREEN,T	-,-SVP403J,HIPS,HB,BLK,-	2	
3	AA67-20024A	MIRROR-FRONT	40,GLASS,3,-,SURFACE,779x460x	1	
3-1	AA61-10341A	BRACKET-MIRROR,SUP	-,-SVP-403J,SECC-1,T1.6,BLK,RIG	1	
3-2	AA61-10371A	BRACKET-BACK,SUP(A)	-,-SVP-403J,SECC-1,T1.2,BLK,-	1	
3-3	AA61-10344A	BRACKET-BACK,BOT	-,-SVP-403J,SECC-1,T1.2,BLK,-	1	
3-4	AA61-10337A	BRACKET-BACK,TOP	-,-SVP-403J,SECC-1,T1.2,BLK,-	1	
3-5	AA61-10340A	BRACKET-MIRROR,SUP	-,-SVP-403J,SECC-1,T1.6,BLK,LEF	1	
3-6	AA61-10338A	BRACKET-MIRROR,BOT	-,-SVP-403J,SECC-1,T1.2,BLK,-	1	
3-7	AA63-60052G	SPACER-MIRROR	PVC,HB,BLK,390,SVP403J,-	3	
3-8	AA61-10342A	BRACKET-MIRROR,SIDE	-,-SVP-403J,SECC-1,T1.6,BLK,LEF	1	
3-9	AA61-10339A	BRACKET-MIRROR,TOP	-,-SVP-403J,SECC-1,T1.2,BLK,-	1	
3-10	AA63-60052F	SPACER-MIRRORPVC	-,-BLK,HB,720,SVP-403J,-	1	
3-11	AA61-10323A	BRACKET-FRONT,T	-,-SVP-403J,SECC-1,T1.2,BLK,-	1	
3-12	AA61-10343A	BRACKET-MIRROR,SIDE	-,-SVP-403J,SECC-1,T1.6,BLK,RIG	1	
4	AA64-30854B	CABINET-B/TOP	HIPS V2 GRAY	1	
4-1	AA63-30130A	COVER-DUCT	-,-SVP403J,-,HIPS,VO,BLK,-	1	
4-2	6002-000522	SCREW-TAPPING	TH,+,2,M4,L15,ZPC(BLK),SWRCH18	4	
4-3	AA91-20069A	ASSY-DUCT,IN	-,-VO,FAN,SVP403J	1	
4-4	AA63-30180A	COVER-DUCT,OUT,R	-,-SVP-403J,-,HIPS,VO,BLK,-	1	
4-5	AA63-30181A	COVER-DUCT,OUT,L	-,-SVP-403J,-,HIPS,VO,BLK,-	1	
4-6	AA61-11006A	BRACKET-LAMP	-,-SVP-403J,SECC-1,T1.0,-,-	1	
4-7	4712-000121	THERMOSTAT	125V/250V,15A/7.5A,95+5C,85+-	1	
4-8	AA63-30176A	COVER-LENS,A	-,-SVP-403J,-,HIPS,VO,BLK,-	1	
4-9	AA64-60411B	INLAY-LAMP	SPT-403J,-,PS,T0.5,BLK,-	1	
4-10	AA64-31012B	CABINET-BACK,BO	T,-SPM-403J,-,HIPS,V2,GRAY,-	1	
4-11	6002-000522	SCREW-TAPPING	TH,+,2,M4,L15,ZPC(BLK),SWRCH18	2	
4-12	AA61-10379A	BRACKET-COVER	-,-SVP403J,SECC,T1.0,-,-	1	
4-13	AA64-60442A	INLAY-TERMINAL,PAL	-,-SPM-403J,-,PS,T0.5,BLK,-	1	
4-14	AA61-20253A	HOLDER-SPONGE,A	-,-SVP-403J,ABS,HB,BLK,-	1	
4-15	AA63-60112B	SPACER-SPONGE,DUCT	PU FORM,T5,BLK,-,SVP403J,-	1	
4-16	AA60-10050K	SCREW-MACHINE	FH,M4,L15.5,ZPC(BLK),SWRC	1	
4-17	AA63-30183B	COVER-FAN,A	-,-SPM-403J,-,HIPS,V2,GRAY,-	1	
4-18	AA95-90033C	ASSY-PCB,PFC	-,-SP-403JHA,PLT51A,EC,-	1	
4-19	AA61-11005	BRACKET-PFC	SP403J	1	
5	AA91-20057A	ASSY-LENS,MECHA	-,-DS001AKB-61B,SVP-403J	1	
5-1		BALLAST-PCB			
5-2	AA61-20252A	HOLDER-CHASSIS	-,-ABS,VO,GRY,-,SVP-403J	1	
5-3	AA07-10002A	LCD	SP403J	1	
5-4	AA95-90033B	ASSY-PCB,LCD CONTROL	-,-SP-403JHA,PLT51A,EC,-	1	
5-5	AA61-10185A	BRACKET-SENSOR	-,-L3300,SECC,T1.0,-,-	1	
5-6	3409-000178	SWITCH-LEVER	12V,100mA,SPDT,-,27deg	1	
5-7	AA63-60123A	SPACE-SPONGE,LCD	SPONGE,VO,BLK	1	
5-8		ASSY-LAMP			
5-9	AA95-90033B	ASSY-PCB,LCD CONTROL	-,-SP-403JHA,PLT51A,EC,-	1	
5-10	AA63-30223A	COVER-LCD	ABS VO BLK	1	
5-11	AA63-30178A	COVER-DUCT,IN,R	-,-SVP-403J,-,HIPS,VO,BLK,-	1	
5-12	AA91-20069A	ASSY-DUCT,IN	-,-VO,FAN,SVP403J	1	
5-13	AA63-30179A	COVER-DUCT,IN,L	-,-SVP-403J,-,HIPS,VO,BLK,-	1	
5-14	AA63-60123B	SPACE-SPONGE,LCD	SPONGE,VO,BLK	1	
5-15	AA63-50351A	GRILLE-LAMP	SECC-1 T0.5	1	

## 8. Electric Parts List

### 8-1 SP403JHAX Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
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#### ASSY-PCB,MAIN(OPT)

BUYER : SRSC  
 \* AA94-00274A ASSY-PCB,MAIN(OPT);SP403JHARX/NWT, PLT51A,UKRAI  
     BUYER : AMFO  
 \* AA94-10148Y SSY-PCB,MAIN(OPT);SP403JHAX/AMF,PLT51A,NETHERAN  
     BUYER : ANA  
 \* AA94-10149H ASSY-PCB,MAIN(OPT);SP403JHAX/ANA,PLT51A,RUMA  
     BUYER : ATR  
 \* AA94-10149F ASSY-PCB,MAIN(OPT);SP403JHAX/ATR,PLT51A,SWISS,-  
     BUYER : BOB  
 \* AA94-10149J ASSY-PCB,MAIN(OPT);SP403JHAX/BOB,PLT51A,BULGARIA,  
     BUYER : NSI  
 \* AA94-10148W ASSY-PCB,MAIN(OPT);SP403JHAX/NSI,PLT51A,DEN  
     BUYER : ELS  
 \* AA94-10149A ASSY-PCB,MAIN(OPT);SP403JHAX/ELS,PLT51A,AUSTRIA,-  
     BUYER : EUP  
 \* AA94-10149E ASSY-PCB,MAIN(OPT);SP403JHAX/EUP,PLT51A,CROATIA,-  
     BUYER : INT  
 \* AA94-10149G ASSY-PCB,MAIN(OPT);SP403JHAX/INT,PLT51A,SLOVENIA,  
     BUYER : XEC  
 \* AA94-10148U ASSY-PCB,MAIN(OPT);SP403JHAX/XEC,PLT51A,SPAIN,-  
     BUYER : XEF  
 \* AA94-10143R ASSY-PCB,MAIN(OPT);SP-403JHAX/XEF,PLT51A,FRANCE,-  
     BUYER : XEH  
 \* AA94-10149D ASSY-PCB,MAIN(OPT);SP403JHAX/XEH,PLT51A,HUNGARY,-  
     BUYER : XEO  
 \* AA94-10149C ASSY-PCB,MAIN(OPT);SP403JHAX/XEO,PLT51A,POLAND,-  
     BUYER : XEU  
 \* AA94-10148S ASSY-PCB,MAIN(OPT);SP403JHAX/XEU,PLT51A,U.K,-  
     BUYER : SEI  
 \* AA94-10148T ASSY-PCB,MAIN(OPT);SP403JHAX/XET,PLT51A,ITALY,-  
  
 AB1 3711-002642 CONNECTOR-HEADER;BOX,3P,1R,2.5mm,STRAIGHT,SN  
 AF1 3711-002642 CONNECTOR-HEADER;BOX,3P,1R,2.5mm,STRAIGHT,SN  
 AF3 3711-002642 CONNECTOR-HEADER;BOX,3P,1R,2.5mm,STRAIGHT,SN  
 AF4 3711-002642 CONNECTOR-HEADER;BOX,3P,1R,2.5mm,STRAIGHT,SN  
 AT1 3711-002642 CONNECTOR-HEADER;BOX,3P,1R,2.5mm,STRAIGHT,SN  
 C101 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C103 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C104 2401-000660 C-AL:2.2uF,20%,50V,GP,TP,5x11,5  
 C105 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C107 2305-000289 C-FILM,MPEF:220nF,5%,63V,TP,-,5mm  
 C108 2401-000667 C-AL:2.2uF,20%,50V,WT,TP,5x11,5  
 C109 2401-002300 C-AL:47uF,20%,50V,GP,TP,6x11,5  
 C111 2201-000292 C-CERAMIC,DISC:1nF,10%,50V,Y5P,TP,5x3,5  
 C112 2401-000947 C-AL:22uF,20%,35V,GP,TP,5x11,5  
 C113 2201-000180 C-CERAMIC,DISC:10nF,10%,50V,Y5V,TP,6.5\*3,5  
 C114 2201-000292 C-CERAMIC,DISC:1nF,10%,50V,Y5P,TP,5x3,5  
 C115 2201-000180 C-CERAMIC,DISC:10nF,10%,50V,Y5V,TP,6.5\*3,5  
 C116 2401-001176 C-AL:33uF,20%,25V,GP,TP,5x11,5  
 C117 2201-000982 C-CERAMIC,DISC:10nF,+80-20%,50V,Y5V,TP,6.5x3,  
 C119 2401-000302 C-AL:100uF,20%,25V,GP,TP,6.3x11,5  
 C120 2401-000302 C-AL:100uF,20%,25V,GP,TP,6.3x11,5  
 C121 2401-002300 C-AL:47uF,20%,50V,GP,TP,6x11,5  
 C267 2201-000146 C-CERAMIC,DISC:100pf,5%,50V,SL,TP,5x3,5  
 C270 2201-000375 C-CERAMIC,DISC:220pf,5%,50V,RH,TP,9.5x3.0,5  
 C290 2201-000376 C-CERAMIC,DISC:220pf,5%,50V,SL,TP,4x4,5  
 C296 2201-000558 C-CERAMIC,DISC:470pf,10%,50V,Y5P,TP,5x3,5  
 C603 2401-000192 C-AL:1000uF,20%,50V,GP,TP,16x25,7.5  
 C604 2301-000530 C-FILM,PEF:100nF,5%,100V,TP,11.5x12.5x6.5  
 C605 2401-000192 C-AL:1000uF,20%,50V,GP,TP,16x25,7.5  
 C606 2301-000530 C-FILM,PEF:100nF,5%,100V,TP,11.5x12.5x6.5  
 C607 2401-000192 C-AL:1000uF,20%,50V,GP,TP,16x25,7.5

C608 2301-000530 C-FILM,PEF:100nF,5%,100V,TP,11.5x12.5x6.5  
 C609 2401-000603 C-AL:1uF,20%,50V,GP,TP,5x11,5  
 C610 2401-000318 C-AL:100uF,20%,25V,LZ,TP,8x11,5,5  
 C611 2401-000603 C-AL:1uF,20%,50V,GP,TP,5x11,5  
 C621 2301-000383 C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm  
 C622 2301-000383 C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm  
 C623 2301-000530 C-FILM,PEF:100nF,5%,100V,TP,11.5x12.5x6.5  
 C624 2401-000603 C-AL:1uF,20%,50V,GP,TP,5x11,5  
 C629 2401-000962 C-AL:22uF,20%,50V,GP,TP,5x11,5  
 C633 2401-000480 C-AL:10uF,20%,50V,GP,TP,5x11,5  
 C634 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C635 2401-000480 C-AL:10uF,20%,50V,GP,TP,5x11,5  
 C636 2401-000302 C-AL:100uF,20%,25V,GP,TP,6.3x11,5  
 C637 2401-000302 C-AL:100uF,20%,25V,GP,TP,6.3x11,5  
 C638 2401-000302 C-AL:100uF,20%,25V,GP,TP,6.3x11,5  
 C639 2401-000302 C-AL:100uF,20%,25V,GP,TP,6.3x11,5  
 C831 2401-002286 C-AL:470uF,20%,16V,WT,TP,10x12.5,5  
 C832 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C833 2401-003034 C-AL:220uF,20%,16V,WT,TP,8x11,5,5  
 C835 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C836 2401-002286 C-AL:470uF,20%,16V,WT,TP,10x12.5,5  
 C837 2401-002286 C-AL:470uF,20%,16V,WT,TP,10x12.5,5  
 C838 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C839 2401-003034 C-AL:220uF,20%,16V,WT,TP,8x11,5,5  
 C840 2401-003034 C-AL:220uF,20%,16V,WT,TP,8x11,5,5  
 C841 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C842 2401-000302 C-AL:100uF,20%,25V,GP,TP,6.3x11,5  
 C843 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C851 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C852 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C863 2401-001397 C-AL:470uF,20%,25V,GP,TP,10x16,5  
 C864 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C866 2401-002273 C-AL:220uF,20%,25V,HR,TP,10x20mm,5m  
 C870 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C901 2305-000665 C-FILM,MPEF:100nF,5%,63V,TP,7.5x4.0x5.0mm,  
 C902 2401-000914 C-AL:22uF,20%,16V,GP,TP,5x11,5  
 C903 2301-000383 C-FILM,PEF:10nF,5%,50V,TP,6x7x3.2mm,5mm  
 C904 2401-002235 C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm  
 C905 2301-000452 C-FILM,PEF:47nF,5%,50V,TP,8x11x4.5mm,5mm  
 CN704A 3710-001208 CONNECTOR-SOCKET:32P,2R,2.54mm,STRAIGHT,AUF  
 CN705A 3710-001208 CONNECTOR-SOCKET:32P,2R,2.54mm,STRAIGHT,AUF  
 CNM01 3711-002645 CONNECTOR-HEADER;BOX,6P,1R,2.5mm,STRAIGHT,SN  
 CNM02 3711-003641 CONNECTOR-HEADER;BOX,12P,1R,2.5mm,STRAIGHT,SN  
 CNM08 3711-001054 CONNECTOR-HEADER;BOX,6P,1R,2.5mm,STRAIGHT,SN  
 CNM09 3711-003641 CONNECTOR-HEADER;BOX,12P,1R,2.5mm,STRAIGHT,SN  
 CNM09A AA39-20032C LEAD-CONNECTOR,ASSY,-,67096-012,S,12P,400,1007#26  
 CNM10 3711-002645 CONNECTOR-HEADER;BOX,6P,1R,2.5mm,STRAIGHT,SN  
 CNM10A AA39-20038D LEAD-CONNECTOR,ASSY,-,67096-006,S,6P,300,1185#26  
 CNM11 3711-002641 CONNECTOR-HEADER;BOX,10P,1R,2.54mm,STRAIGHT,Sn  
 CNM11A AA39-20025E LEAD-CONNECTOR,ASSY,-,67096-010,S,10P,400,1007#26  
 CNM12 3711-000900 CONNECTOR-HEADER;BOX,3P,1R,2.5mm,STRAIGHT,SN  
 CNM13 3711-002643 CONNECTOR-HEADER;BOX,4P,1R,2.5mm,STRAIGHT,SN  
 CNM14 3711-003359 CONNECTOR-HEADER;BOX,10P,1R,2.5mm,STRAIGHT,SN  
 CNM15 3711-000392 CONNECTOR-HEADER;3WALL,10P,1R,2.5mm,STRAIGHT,-  
 D101 0401-000005 DIODE-SWITCHING:1N4148,75V,300mA,DO-35,TP  
 D103 0401-001024 DIODE-SWITCHING:BAW75,25V,300mA,DO-35,TP  
 D104 0401-001024 DIODE-SWITCHING:BAW75,25V,300mA,DO-35,TP  
 D601 0401-000005 DIODE-SWITCHING:1N4148,75V,300mA,DO-35,TP  
 D602 0401-000005 DIODE-SWITCHING:1N4148,75V,300mA,DO-35,TP  
 D603 0401-000005 DIODE-SWITCHING:1N4148,75V,300mA,DO-35,TP  
 D901 0401-000005 DIODE-SWITCHING:1N4148,75V,300mA,DO-35,TP  
 D902 0401-000005 DIODE-SWITCHING:1N4148,75V,300mA,DO-35,TP  
 DZ102 1203-000451 IC-VOLTAGE REGULATOR;33,TO-92,3P,-,PLASTIC,31/35V,2  
 DZ201 0403-000297 DIODE-ZENER:MTZ6.2B,6.2V,5.96-6.27V,500mW,  
 DZ202 0403-000297 DIODE-ZENER:MTZ6.2B,6.2V,5.96-6.27V,500mW,

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
DZ203	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,		R621	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DZ205	0403-000296	DIODE-ZENER:MTZ5.6B,5.6V,5.45-5.73V,500mW,		R622	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DZ601	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500mW,		R623	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DZ602	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500mW,		R624	2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DZ603	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500mW,		R626	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
DZ604	0403-000654	DIODE-ZENER:MTZ12B,12V,11.44-12.03V,500mW,		R630	2001-001055	R-CARBON(S);1.8Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
F1102	2904-000301	FILTER-SAW AV:38.90MHz,SIP5,ST,14.5dB,PAL-B		R631	2001-000109	R-CARBON(S);470ohm,5%,1/2W,AA,TP,2.4x6.4mm	
F1103	2903-000181	FILTER-CERAMIC:TR,5.5MHz,-,TP,TPSS,5.5MB-TF		R901	2001-000577	R-CARBON;2Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
F1105	2904-000302	FILTER-SAW AV:38.90MHz,-,ST,13.9dB,PAL-B/G,-		R902	2001-000577	R-CARBON;2Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
IC101	1204-001276	IC-SOUND PROCESSOR: TDA9810T,DIP,24P,400MIL,PLASTI		R903	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
IC601	1201-001026	IC-POWER AMP:T265,ZIP,11P,19.6MIL,1000		R904	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
IC604	0801-000961	IC-CMOS LOGIC:4053,MUTIPLEXER,DIP,16P,300MIL		R905	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
IC802	1203-000203	IC-POSI ADJUST REG.:3050,TO-220,5P,-,PLASTIC,5V,1.		R906	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
IC803	1203-000203	IC-POSI ADJUST REG.:3050,TO-220,5P,-,PLASTIC,5V,1.		R907	2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
IC805	1203-000293	IC-POSI,FIXED REG.:7808,TO-220,3P,-,PLASTIC,7.7/8		R908	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
IC806	1203-000298	IC-POSI,FIXED REG.:7809,TO-220,3P,-,PLASTIC,8.6/5		R909	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
IC904	1001-001038	IC-ANALOG SWITCH:SAA1300,,SOT-142,9P,-,SINGLE,		R910	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
IC905	0904-001121	IC-I/O SUPPORT CHIP:8574,8BIT,DIP,16P,300MIL,100KH		R911	2001-001097	R-CARBON(S);2.4Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
J295	2001-000812	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2mm		R912	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
L101	AA26-100066G	TRANS-IF;-,7mg,VIF,-,7mm,8pf,77.8MHz,ST		R913	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
L104	2701-000101	INDUCTOR-AXIAL:1.2uH,10%,2.5x3.4mm		R914	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
L105	2701-000120	INDUCTOR-AXIAL:12uH,10%,2.5x3.4mm		R915	2001-000109	R-CARBON(S);470ohm,5%,1/2W,AA,TP,2.4x6.4mm	
L106	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R916	2001-000109	R-CARBON(S);470ohm,5%,1/2W,AA,TP,2.4x6.4mm	
L107	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R917	2001-000109	R-CARBON(S);470ohm,5%,1/2W,AA,TP,2.4x6.4mm	
L108	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R925	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
L109	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		R926	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
L110	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		R927	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
L113	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm		R928	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
L276	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		R929	2001-000281	R-CARBON;100ohm,5%,1/8W,AA,TP,1.8x3.2mm	
L277	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		R930	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
L278	2701-000146	INDUCTOR-AXIAL:2.2uH,10%,2.5x3.4mm		R933	2001-000812	R-CARBON;5.6Kohm,5%,1/8W,AA,TP,1.8x3.2mm	
L279	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		TU01	AA40-10005P	TUNER/B/S:TELE9-042A,PAL/B/G,TR,181 CH	
L280	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		VR101	2103-000672	VR-SEMI:20Kohm,25%,1/5W,TOP	
L601	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm		VR102	2103-000676	VR-SEMI:50Kohm,25%,1/5W,TOP	
L602	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm					
L901	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm					
Q101	0504-000137	TR-DIGITAL:KSR1202,PNP,300mW,10K,10K,TO-9					
Q102	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP					
Q104	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP					
Q105	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-					
Q602	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP					
Q603	0504-000123	TR-DIGITAL:KSR1010,NPN,300mW,10K,TO-92,TP					
Q901	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-					
Q902	0504-000117	TR-DIGITAL:KSR1002,NPN,300mW,10K-10K,TO-9					
Q903	0504-000117	TR-DIGITAL:KSR1002,NPN,300mW,10K-10K,TO-9					
Q904	0504-000117	TR-DIGITAL:KSR1002,NPN,300mW,10K-10K,TO-9					
Q905	0501-000283	TR-SMALL SIGNAL:KSA539,NPN,400mW,TO-92,TP,120-					
R101	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R102	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R105	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R106	2001-000660	R-CARBON;33Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R107	2001-000331	R-CARBON;12Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R109	2001-000490	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R110	2001-000734	R-CARBON;4.7Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R111	2001-000515	R-CARBON;220ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R113	2001-001138	R-CARBON(S);390ohm,5%,1/2W,AA,TP,2.4x6.4mm					
R116	2001-000969	R-CARBON;750ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R121	2001-000522	R-CARBON;22Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R122	2001-000857	R-CARBON;560ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R123	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R124	2001-000241	R-CARBON;1.5Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R125	2001-000429	R-CARBON;1Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R126	2001-000362	R-CARBON;150ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R258	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R259	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R268	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R269	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R270	2001-000302	R-CARBON;10ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R601	2001-001055	R-CARBON(S);1.8Kohm,5%,1/2W,AA,TP,2.4x6.4mm					
R602	2001-001055	R-CARBON(S);1.8Kohm,5%,1/2W,AA,TP,2.4x6.4mm					
R603	2001-001146	R-CARBON(S);4.7ohm,5%,1/2W,AA,TP,2.4x6.4mm					
R604	2001-001055	R-CARBON(S);1.8Kohm,5%,1/2W,AA,TP,2.4x6.4mm					
R605	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R606	2001-001146	R-CARBON(S);4.7ohm,5%,1/2W,AA,TP,2.4x6.4mm					
R607	2001-000290	R-CARBON;10Kohm,5%,1/8W,AA,TP,1.8x3.2mm					
R608	2001-000628	R-CARBON;300ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R609	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R610	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R611	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R612	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R613	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R614	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R615	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R616	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R617	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R618	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R619	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R620	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R621	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R622	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R623	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R624	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R625	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R626	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R627	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R628	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R629	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R630	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R631	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R632	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R633	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R634	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R635	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R636	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R637	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R638	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R639	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R640	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R641	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R642	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R643	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R644	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R645	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R646	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R647	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R648	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R649	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R650	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R651	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R652	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R653	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R654	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R655	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R656	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R657	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R658	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R659	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R660	2001-000628	R-CARBON;200ohm,5%,1/8W,AA,TP,1.8x3.2mm					
R661	2001-000628	R-CARBON;200ohm,5					

Loc. No.	Code No.	Description : Specification	Remark	Loc. No.	Code No.	Description : Specification	Remark
C850	2401-002215	C-AL:2200uF,20%,25V,WT,TP,13x25.5		R806	2001-001129	R-CARBON(S):330Kohm,5%,1/2W,AA,TP,2.4x6.4m	
C851	2401-002215	C-AL:2200uF,20%,25V,WT,TP,13x25.5		R807	2001-001129	R-CARBON(S):330Kohm,5%,1/2W,AA,TP,2.4x6.4m	
C852	2401-001333	C-AL:470nF,20%,50V,GP,TP,5x11.5		R812	2003-001090	R-METAL OXIDE(S):10Kohm,5%,2W,AF,TP,4x12mm	
C853	2401-001333	C-AL:470nF,20%,50V,GP,TP,5x11.5		R813	2003-001090	R-METAL OXIDE(S):10Kohm,5%,2W,AF,TP,4x12mm	
C854	2201-000990	C-CERAMIC,DISC:4.7nF,20%,400V,Y5U,BK,7x16,10m		R814	2006-000307	R-CEMENT:20ohm,5%,5W,CH,BK,9.5x27x9.5mm	
C855	2201-000990	C-CERAMIC,DISC:4.7nF,20%,400V,Y5U,BK,7x16,10m		R815	2003-001090	R-METAL OXIDE(S):10Kohm,5%,2W,AF,TP,4x12mm	
CNP01	3711-002645	CONNECTOR-HEADER:BOX,6P1R,2.5mm,STRAIGHT,SN		R816	2001-001088	R-CARBON(S):1Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
CNP01A	AA39-20027C	LEAD-CONNECTOR,ASSY:-,67096-006,S,6P,500,1007#26		R817	2001-001093	R-CARBON(S):2.2Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
CNP02	3711-003641	CONNECTOR-HEADER:BOX,12P1R,2.5mm,STRAIGHT,SN		R818	2001-001143	R-CARBON(S):4.3Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
CNP02A	AA39-20032E	LEAD-CONNECTOR,ASSY:-,67096-012,S,12P,600,1007#26		R819	2001-001410	R-CARBON(S):430hm,5%,1/2W,AA,TP,2.4x6.4mm	
CNP03	3711-002647	CONNECTOR-HEADER:BOX,8P,1R,2.5mm,STRAIGHT,SN		R820	2001-001117	R-CARBON(S):2Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
CNP03A	AA39-20030D	LEAD-CONNECTOR,ASSY:-,67096-008,S,8P,600,1007#26		R821	2001-001117	R-CARBON(S):2Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
D803	0402-000549	DIODE-BRIDGE:RBV606,600V,6A,-,BK		R822	2009-000021	R-METAL PLATE:0.33ohm,10%,5W,CL,TP,5x14x18mm	
D808	0402-000213	DIODE-RECTIFIER:ERB12-06,600V,1.0A,DO-41,TP		R823	2001-001117	R-CARBON(S):2Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
D811	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP		R826	2008-000270	R-FUSIBLE:3.3ohm,5%,1/2W,AA,TP,4.7x11mm	
D812	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP		R827	2002-001013	R-COMPOSITION:4.7Mohm,10%,1/2W,AA,TP,3.7x9mm	
D813	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP		R828	2002-001013	R-COMPOSITION:4.7Mohm,10%,1/2W,AA,TP,3.7x9mm	
D814	0403-000704	DIODE-ZENER:TP7.5B,7.5V,7.5-8.4V,1W,DO-41		R831	2008-000270	R-FUSIBLE:3.3ohm,5%,1/2W,AA,TP,4.7x11mm	
D815	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP		R832	2001-000052	R-CARBON(S):3.3Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
D816	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP		R833	2001-001088	R-CARBON(S):1Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
D817	0402-000233	DIODE-RECTIFIER:FML-G12S,200V,5A,-		R834	2001-000109	R-CARBON(S):470hm,5%,1/2W,AA,TP,2.4x6.4mm	
D818	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP		R835	2001-001096	R-CARBON(S):2.2ohm,5%,1/2W,AA,TP,2.4x6.4mm	
D819	0402-000233	DIODE-RECTIFIER:FML-G12S,200V,5A,-		R836	2001-000109	R-CARBON(S):470hm,5%,1/2W,AA,TP,2.4x6.4mm	
D820	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP		R838	2001-001088	R-CARBON(S):1Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
D821	0402-000233	DIODE-RECTIFIER:FML-G12S,200V,5A,-		R839	2001-001116	R-CARBON(S):270hm,5%,1/2W,AA,TP,2.4x6.4mm	
D822	0403-000656	DIODE-ZENER:MTZ15C,15V,14.35-15.09V,500mW		R840	2008-000179	R-FUSIBLE(S):100hm,5%,1/2W,AA,TP,2.5x6.5mm	
D823	0402-000546	DIODE-RECTIFIER:TVR10G,400V,1.0A,DO-41,TP		R841	2001-001106	R-CARBON(S):220Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
D825	0402-000132	DIODE-RECTIFIER:1N4004,400V,1A,DO-41,TP		R842	2001-001112	R-CARBON(S):24Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
D826	0402-000102	DIODE-BRIDGE:D2SB60,600V,1.5A,-		R843	2001-000085	R-CARBON(S):100Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
D827	0406-001007	DIODE-TVS:P6KE180A,171/180/189V,600W,CAS		REL801	3501-001053	RELAY-POWER:5Vdc,530mW,10A,1FormA,15ms,5ms	
D828	0402-000243	DIODE-RECTIFIER:RC2-1,2000V,0.2A,DO-201		△ T801	AA26-200077	TRANS-SWITCHING:-,AC80V~AC280V,34/36/12/8/2,-	
D829	0401-000005	DIODE-SWITCHING:1N418,75V,300mA,DO-35,TP		△ T802	AA26-20004M	TRANS-SWITCHING:-,90~260V,KS,E2118,7.92MH,-,C	
D830	0402-000534	DIODE-RECTIFIER:RG10V,400V,1.2A,DO-201,TP		V801	1405-000152	VARISTOR:560V,2500A,14x8.5mm,TP	
D831	0402-000233	DIODE-RECTIFIER:FML-G12S,200V,5A,-		V802	1405-000152	VARISTOR:560V,2500A,14x8.5mm,TP	
D832				V803	1405-000152	VARISTOR:560V,2500A,14x8.5mm,TP	
F801	3601-001007	FUSE-FERRULE:250V,6.3A,TL,GLASS,5.2x20mm					
F801A	3602-000114	FUSE-HOLDER:-,30mohm					
F801B	3602-000114	FUSE-HOLDER:-,30mohm					
F802	3601-00261	FUSE-FERRULE:250V,3.15A,TL,GLASS,5.2x20mm					
F802A	3602-000114	FUSE-HOLDER:-,30mohm					
F802B	3602-000114	FUSE-HOLDER:-,30mohm					
△ F803	3601-00261	FUSE-FERRULE:250V,3.15A,TL,GLASS,5.2x20mm					
F803A	3602-000114	FUSE-HOLDER:-,30mohm					
F803B	3602-000114	FUSE-HOLDER:-,30mohm					
△ F805	3601-001086	FUSE-FERRULE:125V,5A,FA,GLASS,2.4x7.5mm					
△ IC802	AA13-20002K	IC-HYBRID:-,STR-S6709 LF953,9P,SMPS					
△ IC803	1203-001583	IC-SWITCH VOL REG:801,SI10P,157MIL,PLASTIC,5/9					
△ IC805	1203-002003	IC-POSI ADJUST REG:3050,TO-220,5P,-,PLASTIC,5V,1.					
△ IC806	1203-001197	IC-POWER PRESCALER:012,SI3P,TO-220,PLASTIC,12V,					
△ IC807	1203-000640	IC-PWM CONTROLLER:210,DIP,8P,245ML,PLASTIC,12V,					
△ IC808	1203-002003	IC-POSI ADJUST REG:3050,TO-220,5P,-,PLASTIC,5V,1.					
△ IC809	0604-001038	PHOTO-COUPLE:TR,130-260%200mW,DP4-ST					
JP801A	AA39-20010A	LEAD CONNECTOR-ASSY:-,YFH800-01,S,1P,200,1617#22					
L801	AA29-30002D	FILTER-LINE:-,10mH,2.8A,-,SQE-3535H					
L802	AA29-30002D	FILTER-LINE:-,10mH,2.8A,-,SQE-3535H					
L803	AA27-10001C	COIL-CHOKE:-,100uH,K,-,5.0A,ST,700UH-K(R)					
L804	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G					
L805	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G					
L806	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G					
L807	AA27-10001U	COIL-CHOKE:-,20uH,K,-,2A,-,20uH-K(2A),12x					
L808	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G					
L809	AA27-10001U	COIL-CHOKE:-,20uH,K,-,2A,-,20uH-K(2A),12x					
L810	2701-000112	INDUCTOR-AXIAL:100uH,10%,2.8x7mm					
L811	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G					
L812	AA27-10001C	COIL-CHOKE:-,100uH,K,-,5.0A,ST,700UH-K(R)					
L813	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G					
L816	3301-000287	CORE-FERRITE BEAD:AA,3.5x1.0x6.0mm,1500,2400G					
L817	AA27-10002L	COIL-CHOKE:-,24uH,K,-,2A,-,24uH-K,10x10mm					
L818	AA27-10001Y	COIL-CHOKE:-,100uH,K,25,1A,-,100uH-K(1.0A					
L819	AA27-10001Y	COIL-CHOKE:-,100uH,K,25,1A,-,100uH-K(1.0A					
P802F	AA39-20010B	LEAD CONNECTOR-ASSY:-,YFH800-01,S,1P,500,1617#22					
P805D	AA39-20176E	LEAD CONNECTOR-ASSY:-,YFH800-03,S,3(2),500mm,1617					
P807A	AA39-20010B	LEAD CONNECTOR-ASSY:-,YFH800-01,S,1P,500,1617#22					
△ Q801	0503-000153	TR-DARLINGTON:TIP102,NPN,2W,TO-220,TP,1000-2					
△ Q804	0501-00369	TR-SMALL SIGNAL:KSC2331-Y,NPN,1W,TO-92,-,120-					
R801	2002-001011	R-COMPOSITION:3.3Mohm,10%,1/2W,AA,TP,3.7x9mm					
R802	1404-001045	THERMISTOR-NTC:4.7ohm 15% 2900K 3.50mW TP					

## Electric Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
C640	2203-000938	C-CERAMIC,CHIP:470pF,5%,50V,NPO,TP2012,-		D602	0401-000133	DIODE-SWITCHING:RLS4148,100V,200mA,SOD-80C,TP	
C641	2203-000142	C-CERAMIC,CHIP:1.5nF,10%,50V,X7R,TP2012,-		D603	0401-000005	DIODE-SWITCHING:1N4148,75V,300mA,DO-35,TP	
C642	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		D604	0401-000005	DIODE-SWITCHING:1N4148,75V,300mA,DO-35,TP	
C643	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11,5		D605	0401-000005	DIODE-SWITCHING:1N4148,75V,300mA,DO-35,TP	
C644	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11,5		D606	0401-000005	DIODE-SWITCHING:1N4148,75V,300mA,DO-35,TP	
C645	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11,5		IC601	1204-001163	IC-SOUND PROCESSOR:MSP3410D,PLCC,68P,24.2MIL,PLAS	
C646	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11,5		IC602	1001-000164	IC-ANALOG MULTIPLEX:74HC4052,CMOS,SOP,16P,150MIL,S	
C647	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		IC603	1201-000407	IC-POWER AMP:7050,DIP,8P-,SINGLE,-,PLASTIC	
C648	2401-000027	C-AL:4.7uF,20%,50V,GP,TP,5x11,5		IC604	1201-000541	IC-OP AMP:062,SOP,8P,153MIL,DUAL,6V/mV/P	
C649	2401-001496	C-AL:47uF,20%,16V,GP,TP,5x7,5		ICD601	1204-001198	IC-DECODER:DPL3519A,PLCC,68P,24.2MIL,PLAS	
C650	2203-000979	C-CERAMIC,CHIP:47nF,10%,50V,X7R,TP,2012,-		ICD602	1201-000541	IC-OP AMP:062,SOP,8P,153MIL,DUAL,6V/mV/P	
C651	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5		L601	2701-000170	INDUCTOR-AXIAL:3.9uH,10%,2.8x7mm	
C653	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP2012,2mm		L602	2701-000170	INDUCTOR-AXIAL:3.9uH,10%,2.8x7mm	
C654	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP3216,		L603	2701-000112	INDUCTOR-AXIAL:100uH,10%,2.8x7mm	
C655	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP2012,2mm		LD601	2701-000170	INDUCTOR-AXIAL:3.9uH,10%,2.8x7mm	
C656	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP3216,		LD602	2701-000112	INDUCTOR-AXIAL:100uH,10%,2.8x7mm	
C657	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP3216,		LD603	2701-000170	INDUCTOR-AXIAL:3.9uH,10%,2.8x7mm	
C658	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP2012,2mm		O604	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C659	2401-000660	C-AL:2.2uF,20%,50V,GP,TP,5x11,5		O605	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C660	2401-000660	C-AL:2.2uF,20%,50V,GP,TP,5x11,5		O606	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C661	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP2012,2mm		O607	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C662	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP3216,		R603	2007-000029	R-CHIP:0ohm,5%,1/10W,DA,TP,2012	
C663	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP3216,		R604	2007-000029	R-CHIP:0ohm,5%,1/10W,DA,TP,2012	
C664	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP2012,2mm		R605	2007-000881	R-CHIP:4.7ohm,5%,1/10W,DA,TP,2012	
C665	2401-000660	C-AL:2.2uF,20%,50V,GP,TP,5x11,5		R606	2007-000881	R-CHIP:4.7ohm,5%,1/10W,DA,TP,2012	
C666	2401-000660	C-AL:2.2uF,20%,50V,GP,TP,5x11,5		R607	2001-001105	R-CARBON(S):200hm,5%,1/2W,AA,TP,2.4x6.4mm	
C667	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP2012,2mm		R608	2007-000300	R-CHIP:10Kohm,5%,1/10W,DA,TP,2012	
C668	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP3216,		R609	2007-000300	R-CHIP:10Kohm,5%,1/10W,DA,TP,2012	
C669	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP3216,		R610	2007-000290	R-CHIP:100ohm,5%,1/10W,DA,TP,2012	
C670	2203-000784	C-CERAMIC,CHIP:330pF,5%,50V,NPO,TP2012,2mm		R611	2007-000290	R-CHIP:100ohm,5%,1/10W,DA,TP,2012	
C671	2401-000660	C-AL:2.2uF,20%,50V,GP,TP,5x11,5		R612	2007-000686	R-CHIP:3.3Kohm,5%,1/10W,DA,TP,2012	
C672	2401-000660	C-AL:2.2uF,20%,50V,GP,TP,5x11,5		R613	2007-000686	R-CHIP:3.3Kohm,5%,1/10W,DA,TP,2012	
C679	2203-000979	C-CERAMIC,CHIP:47nF,10%,50V,X7R,TP,2012,-		R614	2007-000468	R-CHIP:1Kohm,5%,1/10W,DA,TP,2012	
C680	2203-000979	C-CERAMIC,CHIP:47nF,10%,50V,X7R,TP,2012,-		R617	2007-000931	R-CHIP:470ohm,5%,1/10W,DA,TP,2012	
C681	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R618	2007-000931	R-CHIP:470ohm,5%,1/10W,DA,TP,2012	
C682	2203-002392	C-CERAMIC,CHIP:220nF,+80-20%,50V,Y5V,TP,2012,		R619	2007-000290	R-CHIP:100ohm,5%,1/10W,DA,TP,2012	
C683	2203-002392	C-CERAMIC,CHIP:220nF,+80-20%,50V,Y5V,TP,2012,		R620	2007-000290	R-CHIP:100ohm,5%,1/10W,DA,TP,2012	
C684	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5		R621	2007-000290	R-CHIP:100ohm,5%,1/10W,DA,TP,2012	
C685	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5		R622	2007-000290	R-CHIP:100ohm,5%,1/10W,DA,TP,2012	
C688	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5		R623	2007-000477	R-CHIP:1Mohm,5%,1/10W,DA,TP,2012	
C691	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5		R624	2007-000477	R-CHIP:1Mohm,5%,1/10W,DA,TP,2012	
C692	2203-00260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-		R625	2007-000477	R-CHIP:1Mohm,5%,1/10W,DA,TP,2012	
C694	2401-002212	C-AL:10uF,20%,25V,WT,TP,5x11,5		R626	2007-000477	R-CHIP:1Mohm,5%,1/10W,DA,TP,2012	
C695	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP3216,		R632	2007-000931	R-CHIP:470ohm,5%,1/10W,DA,TP,2012	
C696	2203-000716	C-CERAMIC,CHIP:3.3nF,10%,50V,X7R,TP,2012,-		R633	2007-000931	R-CHIP:470ohm,5%,1/10W,DA,TP,2012	
C697	2203-000176	C-CERAMIC,CHIP:3.3nF,10%,50V,X7R,TP,2012,-		R634	2007-000931	R-CHIP:470ohm,5%,1/10W,DA,TP,2012	
CD601	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-		R635	2007-000931	R-CHIP:470ohm,5%,1/10W,DA,TP,2012	
CD602	2203-000142	C-CERAMIC,CHIP:1.5nF,10%,50V,X7R,TP,2012,-		R636	2007-000931	R-CHIP:470ohm,5%,1/10W,DA,TP,2012	
CD603	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		R637	2007-000931	R-CHIP:470ohm,5%,1/10W,DA,TP,2012	
CD604	2203-000595	C-CERAMIC,CHIP:220pF,5%,50V,NPO,TP,2012,-		R638	2007-000931	R-CHIP:470ohm,5%,1/10W,DA,TP,2012	
CD605	2203-000938	C-CERAMIC,CHIP:470pF,5%,50V,NPO,TP,2012,-		R639	2007-000001	R-CHIP:68Kohm,5%,1/10W,DA,TP,2012	
CD606	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		R641	2007-000001	R-CHIP:68Kohm,5%,1/10W,DA,TP,2012	
CD607	2203-000938	C-CERAMIC,CHIP:470pF,5%,50V,NPO,TP,2012,-		R642	2007-000001	R-CHIP:68Kohm,5%,1/10W,DA,TP,2012	
CD608	2203-000142	C-CERAMIC,CHIP:1.5nF,10%,50V,X7R,TP,2012,-		R644	2007-000001	R-CHIP:68Kohm,5%,1/10W,DA,TP,2012	
CD609	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R645	2007-000001	R-CHIP:68Kohm,5%,1/10W,DA,TP,2012	
CD610	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		R646	2007-000001	R-CHIP:68Kohm,5%,1/10W,DA,TP,2012	
CD611	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R647	2007-001177	R-CHIP:8.2Kohm,5%,1/10W,DA,TP,2012	
CD612	2401-001026	C-AL:3.3uF,20%,50V,GP,TP,5x11,5		R648	2007-001177	R-CHIP:8.2Kohm,5%,1/10W,DA,TP,2012	
CD613	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11,5		R651	2007-000290	R-CHIP:100ohm,5%,1/10W,DA,TP,2012	
CD615	2401-000914	C-AL:22uF,20%,16V,GP,TP,5x11,5		R652	2007-000221	R-CHIP:1.2Kohm,5%,1/10W,DA,TP,2012	
CD616	2203-000444	C-CERAMIC,CHIP:1nF,10%,50V,X7R,TP,2012,-		R653	2007-000290	R-CHIP:100ohm,5%,1/10W,DA,TP,2012	
CD618	2203-000444	C-CERAMIC,CHIP:1nF,10%,50V,X7R,TP,2012,-		R655	2007-000290	R-CHIP:100ohm,5%,1/10W,DA,TP,2012	
CD619	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		R656	2007-000221	R-CHIP:1.2Kohm,5%,1/10W,DA,TP,2012	
CD620	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		R657	2007-000290	R-CHIP:100ohm,5%,1/10W,DA,TP,2012	
CD621	2203-000938	C-CERAMIC,CHIP:470pF,5%,50V,NPO,TP,2012,-		R660	2007-000872	R-CHIP:4.7Kohm,5%,1/10W,DA,TP,2012	
CD622	2203-000142	C-CERAMIC,CHIP:1.5nF,10%,50V,X7R,TP,2012,-		R661	2007-000872	R-CHIP:4.7Kohm,5%,1/10W,DA,TP,2012	
CD623	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		R662	2007-000028	R-CHIP:100Kohm,5%,1/10W,DA,TP,2012	
CD624	2203-000495	C-CERAMIC,CHIP:2.2nF,10%,50V,X7R,TP,2012,-		R663	2007-000282	R-CHIP:100Kohm,5%,1/10W,DA,TP,2012	
CD625	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5		R664	2007-000518	R-CHIP:2.7Kohm,5%,1/10W,DA,TP,2012	
CD626	2203-000495	C-CERAMIC,CHIP:2.2nF,10%,50V,X7R,TP,2012,-		R665	2007-000300	R-CHIP:10Kohm,5%,1/10W,DA,TP,2012	
CD627	2401-002144	C-AL:47uF,20%,16V,GP,TP,5x11,5		R666	2007-000872	R-CHIP:4.7Kohm,5%,1/10W,DA,TP,2012	
CD628	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-		R667	2007-000282	R-CHIP:100Kohm,5%,1/10W,DA,TP,2012	
CD629	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7.5		R668	2007-000282	R-CHIP:100Kohm,5%,1/10W,DA,TP,2012	
CD630	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP3216,		R669	2007-000518	R-CHIP:2.7Kohm,5%,1/10W,DA,TP,2012	
CN601A	3711-003626	CONNECTOR-HEADER:NOWALL,20P,1R,2.5mm,ANGLE,SN		R670	2007-000300	R-CHIP:10Kohm,5%,1/10W,DA,TP,2012	
CN602A	3711-003626	CONNECTOR-HEADER:NOWALL,20P,1R,2.5mm,ANGLE,SN		R671	2007-000872	R-CHIP:4.7Kohm,5%,1/10W,DA,TP,2012	
D601	0401-000133	DIODE-SWITCHING:RLS4148,100V,200mA,SOD-80C,TP		R672	2007-000586	R-CHIP:22Kohm,5%,1/10V,DA,TP,2012	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
R673	2007-000586	R-CHIP:22Kohm,5%,1/10W,DA,TP,2012		C751	2401-002299	C-AL:4.7uF,20%,50V,GP,TP,5x7,5	
R674	2007-000300	R-CHIP:10Kohm,5%,1/10W,DA,TP,2012		C752	2401-002299	C-AL:4.7uF,20%,50V,GP,TP,5x7,5	
R675	2007-000300	R-CHIP:10Kohm,5%,1/10W,DA,TP,2012		C755	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,2012,	
RD601	2007-000468	R-CHIP:1Kohm,5%,1/10W,DA,TP,2012		C758	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7,5	
RD602	2007-000872	R-CHIP:4.7Kohm,5%,1/10W,DA,TP,2012		C759	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7,5	
RD603	2007-000282	R-CHIP:100Kohm,5%,1/10W,DA,TP,2012		C760	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,2012,	
RD604	2007-000518	R-CHIP:2.7Kohm,5%,1/10W,DA,TP,2012		C761	2203-000683	C-CERAMIC,CHIP:27pF,5%,50V,NPO,TP,2012,-	
RD605	2007-000300	R-CHIP:10Kohm,5%,1/10W,DA,TP,2012		C762	2203-000683	C-CERAMIC,CHIP:27pF,5%,50V,NPO,TP,2012,-	
RD606	2007-000282	R-CHIP:100Kohm,5%,1/10W,DA,TP,2012		C763	2203-000683	C-CERAMIC,CHIP:27pF,5%,50V,NPO,TP,2012,-	
RD608	2007-000282	R-CHIP:100Kohm,5%,1/10W,DA,TP,2012		C764	2203-000578	C-CERAMIC,CHIP:220nf,20%,50V,Y5V,TP,3216,3.2m	
RD609	2007-000282	R-CHIP:100Kohm,5%,1/10W,DA,TP,2012		C765	2203-000578	C-CERAMIC,CHIP:220nf,20%,50V,Y5V,TP,3216,3.2m	
RD610	2007-000518	R-CHIP:2.7Kohm,5%,1/10W,DA,TP,2012		C766	2203-000578	C-CERAMIC,CHIP:220nf,20%,50V,Y5V,TP,3216,3.2m	
RD611	2007-000300	R-CHIP:10Kohm,5%,1/10W,DA,TP,2012		C767	2203-000578	C-CERAMIC,CHIP:220nf,20%,50V,Y5V,TP,3216,3.2m	
RD627	2007-000872	R-CHIP:4.7Kohm,5%,1/10W,DA,TP,2012		C768	2203-000578	C-CERAMIC,CHIP:220nf,20%,50V,Y5V,TP,3216,3.2m	
X601	2801-000186	CRYSTAL-UNIT:18.432MHz,25ppm,28-AAM,8pF,200		C769	2203-000578	C-CERAMIC,CHIP:220nf,20%,50V,Y5V,TP,3216,3.2m	
Z601	0403-000546	DIODE-ZENER:MTZ3.6B,3.6V,3.6-3.845V,500mW,		C770	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-	
				C771	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7,5	
*	AA95-90021F	ASSY-S/W,DETECTOR:-,SVP-403J,ALT51A,NTSC,110-220		C772	2203-000818	C-CERAMIC,CHIP:33pF,5%,50V,NPO,TP,2012,-	
AF1A	AA39-20015M	LEAD CONNECTOR-ASSY:-,67096-003,-,3(2)P,900mm,1007		C773	2203-000818	C-CERAMIC,CHIP:33pF,5%,50V,NPO,TP,2012,-	
SL+BS	6001-001003	SCREW-MACHINE:BH,+M2.6L6,ZPC(BLK),SWRCH10A		CN701	3722-000498	JACK-SCART21P,-,SN,BLK,NO	
SW	3409-000178	SWITCH-LEVER:12V,100mA,SPDT,-,27deg		CN702	3722-000498	JACK-SCART21P,-,SN,BLK,NO	
	AA61-10185A	BRACKET-SENSOR:-,L3300,SECC,T1.0,-,-,-		CN703	3722-000498	JACK-SCART21P,-,SN,BLK,NO	
				CN704	3711-003630	CONNECTOR-HEADER:BOX,32P,2R,2.54mm,ANGLE,AU	
				CN705	3711-003630	CONNECTOR-HEADER:BOX,32P,2R,2.54mm,ANGLE,AU	
				CN706	3711-003323	CONNECTOR-HEADER:NOWALL,4P,1R,2.54mm,STRAIGHTS,	
				CN707	3722-001157	JACK-RCA:5P(6P),3.4mm,SN,BLK,#16-22	
				D701	0401-000133	DIODE-SWITCHING:RLS4148,100V,200mA,SOD-80C,TP	
				D702	0403-000296	DIODE-ZENER:MTZ3.6B,5.6V,5.45-5.73V,500mW,	
				D703	0401-000133	DIODE-SWITCHING:RLS4148,100V,200mA,SOD-80C,TP	
				D704	0401-000133	DIODE-SWITCHING:RLS4148,100V,200mA,SOD-80C,TP	
				D707	0401-000133	DIODE-SWITCHING:RLS4148,100V,200mA,SOD-80C,TP	
C701	2203-000979	C-CERAMIC,CHIP:47nf,10%,50V,X7R,TP,2012,-		IC701	1001-001030	IC-VIDEO SWITCH:TDA6920X,-,SOP28P,300MIL,-,13	
C702	2203-000979	C-CERAMIC,CHIP:47nf,10%,50V,X7R,TP,2012,-		IC702	1001-001030	IC-VIDEO SWITCH:TDA6920X,-,SOP28P,300MIL,-,13	
C703	2203-000979	C-CERAMIC,CHIP:47nf,10%,50V,X7R,TP,2012,-		IC703	1201-000541	IC-OP AMP:062,SOP,8P,153MIL,DUAL,6V/mV,P	
C704	2203-000979	C-CERAMIC,CHIP:47nf,10%,50V,X7R,TP,2012,-		IC704	1201-000541	IC-OP AMP:062,SOP,8P,153MIL,DUAL,6V/mV,P	
C705	2203-000979	C-CERAMIC,CHIP:47nf,10%,50V,X7R,TP,2012,-		IC706	1001-002233	IC-VIDEO SWITCH:TEA5114A,-,DIP,16P,334ML,SING	
C706	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,2012,		J701	2007-000029	R-CHIP:0ohm,5%,1/10W,DA,TP,2012	
C707	2203-000979	C-CERAMIC,CHIP:47nf,10%,50V,X7R,TP,2012,-		J702	2007-000029	R-CHIP:0ohm,5%,1/10W,DA,TP,2012	
C710	2203-000979	C-CERAMIC,CHIP:47nf,10%,50V,X7R,TP,2012,-		J703	2007-000029	R-CHIP:0ohm,5%,1/10W,DA,TP,2012	
C711	2401-002009	C-AL:100uF,20%,16V,GP,TP,6.3x7,5		L701	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
C712	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,2012,		L705	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C713	2203-000979	C-CERAMIC,CHIP:47nf,10%,50V,X7R,TP,2012,-		L706	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C714	2203-000979	C-CERAMIC,CHIP:47nf,10%,50V,X7R,TP,2012,-		L707	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C717	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,2012,		L708	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C718	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,2012,		L709	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C719	2203-000239	C-CERAMIC,CHIP:100pF,5%,50V,NPO,TP,2012,-		L710	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C720	2203-000938	C-CERAMIC,CHIP:470pF,5%,50V,NPO,TP,2012,-		L711	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C721	2203-000595	C-CERAMIC,CHIP:220pF,5%,50V,NPO,TP,2012,-		L712	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C723	2203-002392	C-CERAMIC,CHIP:220nf,+80-20%,50V,Y5V,TP,2012,		L713	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C724	2203-000683	C-CERAMIC,CHIP:27pF,5%,50V,NPO,TP,2012,-		L714	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C725	2203-000683	C-CERAMIC,CHIP:27pF,5%,50V,NPO,TP,2012,-		L715	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C726	2203-000683	C-CERAMIC,CHIP:27pF,5%,50V,NPO,TP,2012,-		L716	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C727	2203-000239	C-CERAMIC,CHIP:100pF,5%,50V,NPO,TP,2012,-		L717	2701-000116	INDUCTOR-AXIAL:10uH,10%,4.2x9.8mm	
C728	2203-000239	C-CERAMIC,CHIP:100pF,5%,50V,NPO,TP,2012,-		L718	2701-000116	INDUCTOR-AXIAL:10uH,10%,4.2x9.8mm	
C729	2203-000444	C-CERAMIC,CHIP:1nf,10%,50V,X7R,TP,2012,-		L719	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C730	2203-000444	C-CERAMIC,CHIP:1nf,10%,50V,X7R,TP,2012,-		L720	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C731	2203-000444	C-CERAMIC,CHIP:1nf,10%,50V,X7R,TP,2012,-		L721	2701-000114	INDUCTOR-AXIAL:10uH,10%,2.5x3.4mm	
C732	2203-000444	C-CERAMIC,CHIP:1nf,10%,50V,X7R,TP,2012,-		Q701	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C733	2203-000239	C-CERAMIC,CHIP:100pF,5%,50V,NPO,TP,2012,-		Q702	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C734	2203-000239	C-CERAMIC,CHIP:100pF,5%,50V,NPO,TP,2012,-		Q703	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C735	2203-000239	C-CERAMIC,CHIP:100pF,5%,50V,NPO,TP,2012,-		Q704	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C736	2203-000239	C-CERAMIC,CHIP:100pF,5%,50V,NPO,TP,2012,-		Q705	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C737	2203-000444	C-CERAMIC,CHIP:1nf,10%,50V,X7R,TP,2012,-		Q706	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C738	2203-000444	C-CERAMIC,CHIP:1nf,10%,50V,X7R,TP,2012,-		Q707	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C739	2203-000979	C-CERAMIC,CHIP:47nf,10%,50V,X7R,TP,2012,-		Q708	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C740	2401-002299	C-AL:4.7uF,20%,50V,GP,TP,5x7,5		Q709	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C741	2401-002299	C-AL:4.7uF,20%,50V,GP,TP,5x7,5		Q710	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C742	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,2012,		Q711	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C743	2203-000979	C-CERAMIC,CHIP:47nf,10%,50V,X7R,TP,2012,-		Q712	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C744	2203-000979	C-CERAMIC,CHIP:47nf,10%,50V,X7R,TP,2012,-		Q713	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C745	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,2012,		Q714	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C746	2401-002009	C-AL:100uF,20%,16V,GP,TP,3x7,5		Q715	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C747	2401-002009	C-AL:100uF,20%,16V,GP,TP,3x7,5		Q716	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C748	2203-000192	C-CERAMIC,CHIP:100nf,+80-20%,50V,Y5V,TP,2012,		Q717	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
C749	2401-002299	C-AL:4.7uF,20%,50V,GP,TP,5x7,5		R701	2007-001166	R-CHIP:750hm,5%,1/10W,DA,TP,2012	
C750	2401-002299	C-AL:4.7uF,20%,50V,GP,TP,5x7,5		R702	2007-001166	R-CHIP:750hm,5%,1/10W,DA,TP,2012	
				R703	2007-000766	R-CHIP:330ohm,5%,1/10W,DA,TP,2012	

## Electric Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
R704	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		R786	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
R705	2007-000766	R-CHIP;330ohm,5%,1/10W,DA,TP,2012		R787	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
R706	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		R788	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
R707	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		R789	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
R708	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		R790	2007-000449	R-CHIP;180ohm,5%,1/10W,DA,TP,2012	
R709	2007-000766	R-CHIP;330ohm,5%,1/10W,DA,TP,2012					
R710	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012					
R711	2007-001071	R-CHIP;6.8Kohm,5%,1/10W,DA,TP,2012					
R712	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012					
R713	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012	*		AA95-90031MASSY-PCB,MICOM-,SPT-403J,PLT51A,PAL,-,-		
R714	2007-001039	R-CHIP;56Kohm,5%,1/10W,DA,TP,2012					
R715	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012		C901	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
R716	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012		C902	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
R717	2007-000738	R-CHIP;30Kohm,5%,1/10W,DA,TP,2012		C903	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,-	
R718	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012		C907	2203-000858	C-CERAMIC,CHIP;39pF,5%,50V,NPO,TP,2012,-	
R719	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		C908	2203-000858	C-CERAMIC,CHIP;39pF,5%,50V,NPO,TP,2012,-	
R720	2007-000241	R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012		C909	2401-002235	C-AL;10uF,20%,16V,GP,TP,5x11mm,5mm	
R721	2007-000241	R-CHIP;1.5Kohm,5%,1/10W,DA,TP,2012		C910	2401-001469	C-AL;47uF,20%,10V,GP,TP,5x11,5	
R722	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012		C911	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,-	
R723	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012		C917	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
R724	2007-000653	R-CHIP;27Kohm,5%,1/10W,DA,TP,2012		C918	2401-001840	C-AL;100uF,20%,16V,GP,TP,6.3x11,5	
R725	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		C919	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,-	
R726	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		C920	2401-001469	C-AL;47uF,20%,10V,GP,TP,5x11,5	
R727	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		C921	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,-	
R728	2007-000477	R-CHIP;1Mohm,5%,1/10W,DA,TP,2012		C922	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,-	
R729	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		C923	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,-	
R730	2007-000282	R-CHIP;100Kohm,5%,1/10W,DA,TP,2012		C924	2203-000408	C-CERAMIC,CHIP;180pF,5%,50V,NPO,TP,2012,-	
R731	2007-00267	R-CHIP;1.8Kohm,5%,1/10W,DA,TP,2012		C928	2401-001469	C-AL;47uF,20%,10V,GP,TP,5x11,5	
R732	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		C929	2401-001469	C-AL;47uF,20%,10V,GP,TP,5x11,5	
R733	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		C930	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,-	
R734	2007-000642	R-CHIP;270ohm,5%,1/10W,DA,TP,2012		C931	2401-000934	C-AL;22uF,20%,25V,BP,TP,8x11.5,5	
R735	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		C932	2203-000753	C-CERAMIC,CHIP;330nF,+80-20%,50V,Y5V,TP,3216,	
R736	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		C999	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,-	
R737	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		CNU01	3711-003543	CONNECTOR-HEADER:NOWALL,16P,1R,2.54mm,ANGLE,SN	
R738	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		CNU02	3711-002709	CONNECTOR-HEADER:NOWALL,12P1R,2.5mm,ANGLE,SN	
R739	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		CNU03	3711-003543	CONNECTOR-HEADER:NOWALL,16P,1R,2.54mm,ANGLE,SN	
R740	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		CT01	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
R744	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		CT02	2401-002235	C-AL;10uF,20%,16V,GP,TP,5x11mm,5mm	
R745	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		CT04	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,-	
R747	2007-000028	R-CHIP;39ohm,5%,1/10W,DA,TP,2012		CT05	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,-	
R748	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		CT06	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,-	
R749	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		CT07	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,-	
R750	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		CT10	2203-000979	C-CERAMIC,CHIP;47nF,10%,50V,X7R,TP,2012,-	
R752	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		CT11	2401-000603	C-AL;1uF,20%,50V,GP,TP,5x11,5	
R753	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		CT12	2203-000634	C-CERAMIC,CHIP;22pF,5%,50V,NPO,TP,2012,-	
R754	2007-000457	R-CHIP;18Kohm,5%,1/10W,DA,TP,2012		CT13	2203-001077	C-CERAMIC,CHIP;56pF,5%,50V,NPO,TP,2012,-	
R755	2007-001039	R-CHIP;56Kohm,5%,1/10W,DA,TP,2012		CT15	2203-000818	C-CERAMIC,CHIP;33pF,5%,50V,NPO,TP,2012,-	
R756	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		CT16	2203-000818	C-CERAMIC,CHIP;33pF,5%,50V,NPO,TP,2012,-	
R757	2007-000457	R-CHIP;18Kohm,5%,1/10W,DA,TP,2012		CT17	2401-002235	C-AL;10uF,20%,16V,GP,TP,5x11mm,5mm	
R758	2007-001039	R-CHIP;56Kohm,5%,1/10W,DA,TP,2012		CT18	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,	
R759	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		CT19	2203-000353	C-CERAMIC,CHIP;150pF,10%,50V,NPO,TP,2012,-	
R760	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		D901	0403-000689	DIODE-ZENER:DTZ5.1A,5.1V,4.84-5.04V,200mW,	
R761	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		D902	0403-00296	DIODE-ZENER:MTZ5.6B,5.6V,4.5-5.73V,500mW,	
R762	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		IC901	AA13-30013HIC-MCU:-SDA30C264,8BIT,MOFP64-1,CX72		
R763	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		IC902	1103-001043	IC-EEPROM:24C16,2Kx8BIT,DIP8P,300MIL,10	
R764	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		IC903	1102-000158	IC-EPPROM:27C040,512Kx8BIT,DIP,32P,600MIL	
R765	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		IC101	1204-0001160	IC-HOT/VE/PROCESSO:SDA5273PPLCC,68P,24.21MIL,PLA	
R766	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		IC102	1105-001140	IC-DRAM:44C1004,1Mx4BIT,SOP,20P,300MIL	
R767	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		L901	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
R768	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012		L902	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
R769	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		L903	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
R770	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		Q901	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
R771	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		Q902	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
R772	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		Q903	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
R773	2007-001166	R-CHIP;75ohm,5%,1/10W,DA,TP,2012		Q904	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
R774	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012		QT01	0501-000727	TR-SMALL SIGNAL:BC848C,NPN,310mW,SOT-23,TP,420	
R775	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012		R901	0707-000872	R-CHIP:4.7Kohm,5%,1/10W,DA,TP,2012	
R776	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012		R902	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
R777	2007-000449	R-CHIP;180ohm,5%,1/10W,DA,TP,2012		R903	2007-000409	R-CHIP:15Kohm,5%,1/10W,DA,TP,2012	
R778	2007-000449	R-CHIP;180ohm,5%,1/10W,DA,TP,2012		R904	2007-000409	R-CHIP:15Kohm,5%,1/10W,DA,TP,2012	
R779	2007-000449	R-CHIP;180ohm,5%,1/10W,DA,TP,2012		R905	2007-001177	R-CHIP:8.2Kohm,5%,1/10W,DA,TP,2012	
R780	2007-000030	R-CHIP;560ohm,5%,1/10W,DA,TP,2012		R906	2007-001177	R-CHIP:8.2Kohm,5%,1/10W,DA,TP,2012	
R781	2007-000844	R-CHIP;3Kohm,5%,1/10W,DA,TP,2012		R907	2007-000872	R-CHIP:4.7Kohm,5%,1/10W,DA,TP,2012	
R782	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012		R908	2007-000872	R-CHIP:4.7Kohm,5%,1/10W,DA,TP,2012	
R783	2007-000572	R-CHIP;220ohm,5%,1/10W,DA,TP,2012		R909	2007-000872	R-CHIP:4.7Kohm,5%,1/10W,DA,TP,2012	
R784	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		R910	2007-000872	R-CHIP:4.7Kohm,5%,1/10W,DA,TP,2012	
R785	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		R911	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	

## ASSY-PCB, MICOM

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
R912	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		*	AA95-90033B ASSY-PCB,LCD CONTROL:-,SP-403JHA,PLT51A,EC,-,-		
R913	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		AC1	3711-000661	CONNECTOR-HEADER:BOX,12P,1R,2.5mm,STRAIGHT,SN	
R914	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		AC2	3711-001054	CONNECTOR-HEADER:BOX,6P,1R,2.5mm,STRAIGHT,SN	
R915	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		AC3	3711-000585	CONNECTOR-HEADER:BOX,10P,1R,2.5mm,ANGLE,-	
R916	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		AP3	3711-002647	CONNECTOR-HEADER:BOX,8P,1R,2.5mm,STRAIGHT,SN	
R917	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		CL101	2401-001115	C-AL:330uF,20%,25V,GP,TP,10x12.5,5	
R918	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		CL102	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
R919	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		CL103	2401-001115	C-AL:330uF,20%,25V,GP,TP,10x12.5,5	
R920	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		CL104	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
R921	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		CL105	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12.5,5	
R922	2007-000766	R-CHIP;330ohm,5%,1/10W,DA,TP,2012		CL106	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
R923	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		CL107	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12.5,5	
R924	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		CL108	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
R925	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		CL109	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12.5,5	
R926	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		CL110	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
R927	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		CL111	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12.5,5	
R928	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		CL112	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
R929	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		CL113	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11.5,5	
R930	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		CL114	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
R931	2007-000653	R-CHIP;27Kohm,5%,1/10W,DA,TP,2012		CL115	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5	
R932	2007-000766	R-CHIP;330ohm,5%,1/10W,DA,TP,2012		CL116	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
R933	2007-001177	R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012		CL117	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-	
R935	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		CL118	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-	
R936	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012		CL119	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-	
R937	2007-000766	R-CHIP;330ohm,5%,1/10W,DA,TP,2012		CL120	2401-001537	C-AL:47uF,20%,25V,GP,TP,6.3x7mm,5mm	
R938	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		CL121	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-	
R952	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		CL122	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-	
R953	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012		CL123	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-	
R954	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		CL124	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-	
R955	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		CL125	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11.5	
R956	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		CL126	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11.5	
R957	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012		CL127	2401-001537	C-AL:47uF,20%,25V,GP,TP,6.3x7mm,5mm	
R958	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		CL128	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,-	
RT01	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		CL129	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-	
RT02	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012		CL130	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-	
RT03	2007-000710	R-CHIP;3.9Kohm,5%,1/10W,DA,TP,2012		CL131	2203-000979	C-CERAMIC,CHIP:47nF,10%,50V,X7R,TP,2012,-	
RT04	2007-000710	R-CHIP;3.9Kohm,5%,1/10W,DA,TP,2012		CL132	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-	
RT05	2007-000710	R-CHIP;3.9Kohm,5%,1/10W,DA,TP,2012		CL133	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-	
RT06	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		CL134	2203-002442	C-CERAMIC,CHIP:330nF,+80-20%,25V,Y5V,TP,2012,	
RT07	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		CL135	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11.5	
RT08	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		CL141	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5	
RT09	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		CL142	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-	
RT11	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012		CL142	2203-000192	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-	
RT12	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012		CL157	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
RT13	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012		CL201	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5	
RT14	2007-001118	R-CHIP;680ohm,5%,1/10W,DA,TP,2012		CL202	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
RT15	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012		CL203	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
RT16	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012		CL204	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
RT17	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012		CL205	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
X901	2801-001476	CRYSTAL-UNIT;12.0MHz,50ppm,28-ABO,S,30ohm,T		CL206	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	
XT01	2802-00121	RESONATOR-CERAMIC;20.48MHz,0.5%,TP,10.0x5.0x10.0		CL207	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,	

### ASSY-PCB,REMOCON

*	AA95-90032Y	ASSY-PCB,REMOCON:-,SP-403JHA,PLT51A,EC,-,-
CC01	2401-001496	C-AL:47uF,20%,16V,GP,TP,5x7.5
CNNM08A	AA39-20602A	LEAD CONNECTOR-ASSY:-,5264-06,35022-06,6P,500mm,10
D01	0601-000385	LED:ROUND,RED,3mm,700nm
D02	0601-000385	LED:ROUND,RED,3mm,700nm
D03	0601-000368	LED:ROUND,Y-GRN,3mm,557nm
DC02	0403-000296	DIODE-ZENER;MTZ5.6B,5.6V,5.45-5.73V,500mW,
RC01	2001-001108	R-CARBON(S);22Kohm,5%,1/2W,AA,TP,2.4x6.4mm
RC02	2001-000020	R-CARBON(S);22ohm,5%,1/2W,AA,TP,2.4x6.4mm
RMC01	AA59-60003H	MODULE-REMOCON:-,ORC-05H2,38KHz,940nm,MESH,H,

### ASSY-PCB,MASTER

*	AA95-90032Z	ASSY-PCB,MASTER:-,SP-403JHA,PLT51A,EC,-,-
SWP02	3403-001020	SWITCH-PUSH:250V,5A,DPST,OFF-ON-OFF
P804D	AA39-20176F	LEAD CONNECTOR-ASSY:-,YFH800-03,S,3(2)P,600mm,1617
P802D	AA39-20179C	LEAD CONNECTOR-ASSY:-,YFH150-03,S,3(2)P,600mm,1617

### ASSY-PCB,LCD CONTROL

*	AA95-90033B	ASSY-PCB,LCD CONTROL:-,SP-403JHA,PLT51A,EC,-,-
AC1	3711-000661	CONNECTOR-HEADER:BOX,12P,1R,2.5mm,STRAIGHT,SN
AC2	3711-001054	CONNECTOR-HEADER:BOX,6P,1R,2.5mm,STRAIGHT,SN
AC3	3711-000585	CONNECTOR-HEADER:BOX,10P,1R,2.5mm,ANGLE,-
AP3	3711-002647	CONNECTOR-HEADER:BOX,8P,1R,2.5mm,STRAIGHT,SN
CL101	2401-001115	C-AL:330uF,20%,25V,GP,TP,10x12.5,5
CL102	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,
CL103	2401-001115	C-AL:330uF,20%,25V,GP,TP,10x12.5,5
CL104	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,
CL105	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12.5,5
CL106	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,
CL107	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12.5,5
CL108	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,
CL109	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12.5,5
CL110	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,
CL111	2401-001363	C-AL:470uF,20%,16V,GP,TP,10x12.5,5
CL112	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,
CL113	2401-000360	C-AL:100uF,20%,50V,GP,TP,8x11.5,5
CL114	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,
CL115	2401-000603	C-AL:1uF,20%,50V,GP,TP,5x11,5
CL116	2401-001537	C-AL:47uF,20%,25V,GP,TP,6.3x7mm,5mm
CL117	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-
CL118	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-
CL119	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-
CL120	2401-001537	C-AL:47uF,20%,25V,GP,TP,6.3x7mm,5mm
CL121	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-
CL122	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-
CL123	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-
CL124	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-
CL125	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-
CL126	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-
CL127	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-
CL128	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-
CL129	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-
CL130	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-
CL131	2203-000979	C-CERAMIC,CHIP:47nF,10%,50V,X7R,TP,2012,-
CL132	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-
CL133	2203-000575	C-CERAMIC,CHIP:220nF,10%,50V,X7R,TP,2012,-
CL134	2203-002442	C-CERAMIC,CHIP:330nF,+80-20%,25V,Y5V,TP,2012,-
CL135	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11,5
CL141	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5
CL142	2203-000260	C-CERAMIC,CHIP:10nF,10%,50V,X7R,TP,2012,-
CL142	2203-000192	C-CERAM

## Electric Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
CL235	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		DL502	0401-000005	DIODE-SWITCHING:1N4148,75V,300mA,DO-35,TP	
CL236	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		DL503	0403-000294	DIODE-ZENER:MTZ4.7B,4.7V,4.55-4.80V,500mW,	
CL237	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		FL302	2901-000227	FILTER-EMI SMD:50V,300mA,-,100pF,12.5x4.5x1.2	
CL238	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		FL303	2901-000227	FILTER-EMI SMD:50V,300mA,-,100pF,12.5x4.5x1.2	
CL239	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5		ICL101	1203-000006	IC-POS.FIXED REG.;7808,TO-220,3P,-,PLASTIC,7.7/8	
CL240	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-		ICL102	1203-000162	IC-POS.LADJUST REG.;317,TO-220,3P,-,PLASTIC,12V,	
CL242	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-		ICL103	1203-000274	IC-POS.FIXED REG.;7805,TO-220,3P,-,PLASTIC,4.8/5	
CL243	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		ICL109	0801-000901	IC-CMOS LOGIC:74HC04,INVERTER,SOP,14P,150MIL	
CL244	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		ICL201	1002-000134	IC-D/A CONVERTER:TDA8444,6BIT,DIP,16P,-,ST,BI	
CL245	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		ICL202	1002-000134	IC-D/A CONVERTER:TDA8444,6BIT,DIP,16P,-,ST,BI	
CL246	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		ICL203	1002-000134	IC-D/A CONVERTER:TDA8444,6BIT,DIP,16P,-,ST,BI	
CL247	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		ICL204	1003-001094	IC-LCD DRIVER:CXA1853Q,QFP80P,14.0MIL,-,T	
CL248	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		ICL205	1003-001093	IC-LCD DRIVER:CXA2504N,SOP40P,248MIL,PLASTI	
CL249	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		ICL301	1003-001095	IC-LCD CONTROLLER:CXD2443Q,QFP100P,-,T,PLA	
CL250	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		ICL401	0801-000662	IC-CMOS LOGIC:74HC123,MULTIVIBATOR,SOP,16P,1	
CL251	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		ICL402	0801-000662	IC-CMOS LOGIC:74HC123,MULTIVIBATOR,SOP,16P,1	
CL252	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		ICL403	0801-000662	IC-CMOS LOGIC:74HC123,MULTIVIBATOR,SOP,16P,1	
CL255	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		ICL404	1204-000464	IC-VIDEO PROCESS:TDA4780,DIP,28P,-,PLASTIC,8.8V	
CL256	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		LL101	2701-000112	INDUCTOR-AXIAL:100uH,10%,2.8x7mm	
CL257	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		LL104	2701-000002	INDUCTOR-AXIAL:100uH,10%,4.2x9.8mm	
CL258	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		LL201	2701-000112	INDUCTOR-AXIAL:100uH,10%,2.8x7mm	
CL260	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		LL202	2701-000112	INDUCTOR-AXIAL:100uH,10%,2.8x7mm	
CL261	2401-000318	C-AL:100uF,20%,25V,LZ,TP,8x11.5		LL203	2701-000112	INDUCTOR-AXIAL:100uH,10%,2.8x7mm	
CL262	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		LL301	2701-000112	INDUCTOR-AXIAL:100uH,10%,2.8x7mm	
CL263	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-		LL303	2701-000112	INDUCTOR-AXIAL:100uH,10%,2.8x7mm	
CL264	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5		LL304	2701-000112	INDUCTOR-AXIAL:100uH,10%,2.8x7mm	
CL265	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		LL305	2701-000326	INDUCTOR-AXIAL:560nH,10%,2.3x3.4mm	
CL266	2404-000151	C-TA,CHIP;1uF,20%,16V,-,TP,3216,-		LL306	2701-000326	INDUCTOR-AXIAL:560nH,10%,2.3x3.4mm	
CL267	2404-000151	C-TA,CHIP;1uF,20%,16V,-,TP,3216,-		LL307	2701-000326	INDUCTOR-AXIAL:560nH,10%,2.3x3.4mm	
CL268	2404-000151	C-TA,CHIP;1uF,20%,16V,-,TP,3216,-		LL401	2701-000149	INDUCTOR-AXIAL:2.7uH,10%,2.5x3.4mm	
CL269	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		LL402	2701-000208	INDUCTOR-AXIAL:6.8uH,10%,2.5x3.4mm	
CL270	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		LL403	2701-000208	INDUCTOR-AXIAL:6.8uH,10%,2.5x3.4mm	
CL271	2404-000151	C-TA,CHIP;1uF,20%,16V,-,TP,3216,-		QL105	0501-000002	TR-SMALL SIGNAL:KSA812,PNP,150mW,SOT-23,TP,135	
CL272	2404-000151	C-TA,CHIP;1uF,20%,16V,-,TP,3216,-		QL106	0501-000002	TR-SMALL SIGNAL:KSA812,PNP,150mW,SOT-23,TP,135	
CL273	2404-000151	C-TA,CHIP;1uF,20%,16V,-,TP,3216,-		QL107	0501-000002	TR-SMALL SIGNAL:KSA812,PNP,150mW,SOT-23,TP,135	
CL274	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-		QL201	0501-000342	TR-SMALL SIGNAL:KSC1623-Y,PNP,200mW,SOT-23,TP	
CL301	2401-001840	C-AL:100uF,20%,16V,GP,TP,6.3x11.5		QL202	0501-000002	TR-SMALL SIGNAL:KSA812,PNP,150mW,SOT-23,TP,135	
CL302	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		QL203	0501-000342	TR-SMALL SIGNAL:KSC1623-Y,PNP,200mW,SOT-23,TP	
CL303	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		QL204	0501-000002	TR-SMALL SIGNAL:KSA812,PNP,150mW,SOT-23,TP,135	
CL305	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-		QL301	0501-000002	TR-SMALL SIGNAL:KSA812,PNP,150mW,SOT-23,TP,135	
CL307	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-		QL302	0501-000002	TR-SMALL SIGNAL:KSA812,PNP,150mW,SOT-23,TP,135	
CL309	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-		QL303	0501-000002	TR-SMALL SIGNAL:KSA812,PNP,150mW,SOT-23,TP,135	
CL311	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-		QL401	0501-000342	TR-SMALL SIGNAL:KSC1623-Y,PNP,200mW,SOT-23,TP	
CL313	2203-000239	C-CERAMIC,CHIP;100pF,5%,50%,NPO,TP,2012,-		QL402	0501-000342	TR-SMALL SIGNAL:KSC1623-Y,PNP,200mW,SOT-23,TP	
CL314	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		QL403	0501-000342	TR-SMALL SIGNAL:KSC1623-Y,PNP,200mW,SOT-23,TP	
CL315	2203-001158	C-CERAMIC,CHIP;68pF,5%,50%,NPO,TP,2012,-		QL404	0501-000342	TR-SMALL SIGNAL:KSC1623-Y,PNP,200mW,SOT-23,TP	
CL316	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		QL405	0501-000342	TR-SMALL SIGNAL:KSC1623-Y,PNP,200mW,SOT-23,TP	
CL317	2401-001026	C-AL:3.3uF,20%,50V,GP,TP,5x11.5		QL406	0501-000342	TR-SMALL SIGNAL:KSC1623-Y,PNP,200mW,SOT-23,TP	
CL318	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-		RL101	2001-001146	R-CARBON(S);4.7ohm,5%,1/2W,AA,TP,2.4x6.4mm	
CL321	2203-000260	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,2012,-		RL102	2004-001376	R-METAL(S);11Kohm,1%,1/2W,AA,TP,2.4x6.4mm	
CL322	2401-001537	C-AL:47uF,20%,25V,GP,TP,6.3x7mm,5mm		RL103	2001-001146	R-CARBON(S);4.7ohm,5%,1/2W,AA,TP,2.4x6.4mm	
CL323	2401-001537	C-AL:47uF,20%,25V,GP,TP,6.3x7mm,5mm		RL105	2001-001045	R-CARBON(S);1.2Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
CL324	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		RL112	2007-000030	R-CHIP;560ohm,5%,1/10W,DA,TP,2012	
CL325	2401-000318	C-AL:100uF,20%,25V,LZ,TP,8x11.5		RL113	2007-000030	R-CHIP;560ohm,5%,1/10W,DA,TP,2012	
CL326	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		RL114	2007-000030	R-CHIP;560ohm,5%,1/10W,DA,TP,2012	
CL327	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		RL115	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
CL329	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		RL116	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012	
CL403	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		RL118	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
CL404	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		RL119	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012	
CL405	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,		RL114	2007-000030	R-CHIP;560ohm,5%,1/10W,DA,TP,2012	
CL406	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		RL115	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
CL407	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		RL116	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012	
CL408	2203-000444	C-CERAMIC,CHIP;1nF,10%,50V,X7R,TP,2012,-		RL118	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
CL501	2201-000265	C-CERAMIC,DISC;180pF,5%,50%,RH,TP,8x3.5		RL119	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012	
CL502	2201-000146	C-CERAMIC,DISC;100pF,5%,50%,SL,TP,5x3.5		RL121	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
CL503	2201-000653	C-CERAMIC,DISC;68pF,5%,50%,SL,TP,4.0X3.5mm,2		RL122	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012	
CL601	2401-000598	C-AL:1uF,20%,50V,GP,TP,4x7.5		RL127	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012	
CL602	2401-000480	C-AL:10uF,20%,50V,GP,TP,5x11.5		RL128	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
CNL04	3708-001162	CONNECTOR-FPC/FC/PI:24P,1mm,SMD-A,SN		RL129	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
CNL06	3711-002642	CONNECTOR-HEADER:BOX,3P,1R,2.5mm,STRAIGHT,SN		RL130	2007-0000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
CNL07	3711-002644	CONNECTOR-HEADER:BOX,5P,1R,2.5mm,STRAIGHT,SN		RL131	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
CNL08	3711-002642	CONNECTOR-HEADER:BOX,3P,1R,2.5mm,STRAIGHT,SN		RL132	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
DL301	0405-000117	DIODE-VARACTOR:1SV215,30V,10nA,USC,TP		RL133	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
DL401	0401-000133	DIODE-SWITCHING:RLS4148,100V,200mA,SOD-80C,TP		RL134	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
DL402	0401-000133	DIODE-SWITCHING:RLS4148,100V,200mA,SOD-80C,TP		RL135	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
DL403	0401-000133	DIODE-SWITCHING:RLS4148,100V,200mA,SOD-80C,TP		RL136	2007-001071	R-CHIP;6.8Kohm,5%,1/10W,DA,TP,2012	
DL501	0403-000294	DIODE-ZENER:MTZ4.7B,4.7V,4.55-4.80V,500mW,		RL137	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
				RL138	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
				RL139	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
				RL140	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	
				RL141	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
				RL142	2007-000931	R-CHIP;470ohm,5%,1/10W,DA,TP,2012	

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
RL143	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL254	2007-000881	R-CHIP;4.7ohm,5%,1/10W,DA,TP,2012	
RL154	2007-000671	R-CHIP;2Kohm,5%,1/10W,DA,TP,2012		RL255	2007-000881	R-CHIP;4.7ohm,5%,1/10W,DA,TP,2012	
RL155	2007-001118	R-CHIP;680ohm,5%,1/10W,DA,TP,2012		RL256	2007-001055	R-CHIP;6.2Kohm,5%,1/10W,DA,TP,2012	
RL156	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL257	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012	
RL157	2007-000671	R-CHIP;2Kohm,5%,1/10W,DA,TP,2012		RL261	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
RL158	2007-001118	R-CHIP;680ohm,5%,1/10W,DA,TP,2012		RL262	2007-000068	R-CHIP;470Kohm,5%,1/10W,DA,TP,2012	
RL159	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL263	2007-000068	R-CHIP;470Kohm,5%,1/10W,DA,TP,2012	
RL160	2007-000671	R-CHIP;2Kohm,5%,1/10W,DA,TP,2012		RL264	2007-000068	R-CHIP;470Kohm,5%,1/10W,DA,TP,2012	
RL161	2007-001118	R-CHIP;680ohm,5%,1/10W,DA,TP,2012		RL265	2007-000068	R-CHIP;470Kohm,5%,1/10W,DA,TP,2012	
RL162	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL266	2007-000068	R-CHIP;470Kohm,5%,1/10W,DA,TP,2012	
RL163	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		RL267	2007-000068	R-CHIP;470Kohm,5%,1/10W,DA,TP,2012	
RL164	2007-000844	R-CHIP;3Kohm,5%,1/10W,DA,TP,2012		RL268	2007-000941	R-CHIP;47Kohm,5%,1/10W,DA,TP,2012	
RL165	2007-001009	R-CHIP;51Kohm,5%,1/10W,DA,TP,2012		RL301	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
RL166	2007-000964	R-CHIP;5.1Kohm,5%,1/10W,DA,TP,2012		RL302	2007-000477	R-CHIP;1Mohm,5%,1/10W,DA,TP,2012	
RL167	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL303	2007-000477	R-CHIP;1Mohm,5%,1/10W,DA,TP,2012	
RL168	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL304	2007-000964	R-CHIP;5.1Kohm,5%,1/10W,DA,TP,2012	
RL169	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL305	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RL170	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		RL306	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
RL171	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		RL307	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
RL172	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		RL308	2007-000774	R-CHIP;33Kohm,5%,1/10W,DA,TP,2012	
RL173	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012		RL310	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012	
RL174	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012		RL313	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL175	2007-001001	R-CHIP;510ohm,5%,1/10W,DA,TP,2012		RL314	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL178	2007-000710	R-CHIP;3.9Kohm,5%,1/10W,DA,TP,2012		RL315	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL201	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		RL316	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL202	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		RL317	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL203	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL318	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL204	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL320	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL205	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		RL321	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL206	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL322	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL207	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL323	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL208	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL324	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL209	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		RL325	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL210	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		RL326	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL211	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		RL327	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL212	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		RL328	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL213	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL329	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL214	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL330	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL215	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL331	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL216	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL332	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL217	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL333	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL218	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL334	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL219	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL335	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL220	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL336	2007-000615	R-CHIP;24Kohm,5%,1/10W,DA,TP,2012	
RL221	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		RL401	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012	
RL222	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		RL402	2007-000258	R-CHIP;1.6Kohm,5%,1/10W,DA,TP,2012	
RL223	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL403	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012	
RL224	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL404	2007-000710	R-CHIP;3.9Kohm,5%,1/10W,DA,TP,2012	
RL225	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		RL405	2007-000355	R-CHIP;12Kohm,5%,1/10W,DA,TP,2012	
RL226	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		RL406	2007-001177	R-CHIP;8.2Kohm,5%,1/10W,DA,TP,2012	
RL227	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		RL407	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012	
RL228	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL408	2007-001118	R-CHIP;680ohm,5%,1/10W,DA,TP,2012	
RL229	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		RL409	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012	
RL230	2007-000300	R-CHIP;10Kohm,5%,1/10W,DA,TP,2012		RL501	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012	
RL231	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012		RL502	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012	
RL232	2007-001141	R-CHIP;7.5Kohm,5%,1/10W,DA,TP,2012		RL503	2007-000642	R-CHIP;270ohm,5%,1/10W,DA,TP,2012	
RL233	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012		TL301	AA26-10006F	TRANS-IF,-,7mG,VIF,-,7mm,18pF,67MHz,ST,	
RL234	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012		*	AA95-90033C	ASSY-PCB,PFC,-,SP-403JHA,PLT51A,EC,-,-	
RL235	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012		LP801	AA27-10004C	COIL-CHOKE,-,16.M,-,1.3,ST,-,-,LEAD	
RL236	2007-000401	R-CHIP;150ohm,5%,1/10W,DA,TP,2012		LP802	AA27-10004C	COIL-CHOKE,-,16.M,-,1.3,ST,-,-,LEAD	
RL237	2007-000493	R-CHIP;2.2Kohm,5%,1/10W,DA,TP,2012		*	AA95-90036B	ASSY-PCB,FEATURE BOX,-,SP-403JHA,PLT51A,EC,-,-	
RL238	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012		C200G	2203-000578	C-CERAMIC,CHIP;220nF,20%,50V,Y5V,TP,3216,3.2m	
RL239	2007-000686	R-CHIP;470Kohm,5%,1/10W,DA,TP,2012		C201	2203-000192	C-CERAMIC,CHIP;100nF,+80-20%,50V,Y5V,TP,2012,-	
RL240	2007-000686	R-CHIP;470Kohm,5%,1/10W,DA,TP,2012		C203	2203-000683	C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,-	
RL241	2007-000686	R-CHIP;470Kohm,5%,1/10W,DA,TP,2012		C204	2203-000683	C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,-	
RL242	2007-000686	R-CHIP;470Kohm,5%,1/10W,DA,TP,2012		C205	2203-000683	C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,-	
RL243	2007-001055	R-CHIP;6.2Kohm,5%,1/10W,DA,TP,2012		C206	2203-000683	C-CERAMIC,CHIP;27pF,5%,50V,NPO,TP,2012,-	
RL244	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012					
RL245	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012					
RL246	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012					
RL247	2007-000267	R-CHIP;1.8Kohm,5%,1/10W,DA,TP,2012					
RL248	2007-000872	R-CHIP;4.7Kohm,5%,1/10W,DA,TP,2012					
RL249	2007-001224	R-CHIP;9.1Kohm,5%,1/10W,DA,TP,2012					
RL250	2007-001141	R-CHIP;7.5Kohm,5%,1/10W,DA,TP,2012					
RL251	2007-000457	R-CHIP;18Kohm,5%,1/10W,DA,TP,2012					
RL252	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012					
RL253	2007-000686	R-CHIP;3.3Kohm,5%,1/10W,DA,TP,2012					

## Electric Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
C207	2203-000578	C-CERAMIC,CHIP:220nF,20%,50V,Y5V,TP,3216,3.2m		C428	2401-000914	C-AL:22uF,20%,16V,GPT,5x11,5	
C208	2203-000578	C-CERAMIC,CHIP:220nF,20%,50V,Y5V,TP,3216,3.2m		CF01	2203-000555	C-CERAMIC,CHIP:20pF,5%,50V,NPO,TP,2012,-	
C209	2203-000578	C-CERAMIC,CHIP:220nF,20%,50V,Y5V,TP,3216,3.2m		CF02	2203-000555	C-CERAMIC,CHIP:20pF,5%,50V,NPO,TP,2012,-	
C211	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		CF03	2203-000555	C-CERAMIC,CHIP:20pF,5%,50V,NPO,TP,2012,-	
C212	2401-001271	C-AL:4.7uF,20%,50V,GP,TP,4x7mm,5mm		CF09	2203-000938	C-CERAMIC,CHIP:470pF,5%,50V,NPO,TP,2012,-	
C213	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		CN203	3711-001283	CONNECTOR-HEADER:NOWALL,14P,1R,2.5mm,ANGLE,-	
C214	2401-001271	C-AL:4.7uF,20%,50V,GP,TP,4x7mm,5mm		CN204	3711-001283	CONNECTOR-HEADER:NOWALL,14P,1R,2.5mm,ANGLE,-	
C215	2203-001172	C-CERAMIC,CHIP:6pF,0.25pF,50V,NPO,TP,2012,-		CN205	3711-003543	CONNECTOR-HEADER:NOWALL,16P,1R,2.54mm,ANGLE,-	
C216	2203-001172	C-CERAMIC,CHIP:6pF,0.25pF,50V,NPO,TP,2012,-		CN206	3711-001283	CONNECTOR-HEADER:NOWALL,14P,1R,2.5mm,ANGLE,-	
C217	2203-000444	C-CERAMIC,CHIP:1nF,10%,50V,X7R,TP,2012,-		D205	0403-000666	DIODE-ZENER:MTZ5.1A,5.1V,4.81-5.07V,500mW,	
C218	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP,3216,		IC201	1205-001172	IC-INTERFACE:CIP3250A,PLCC,68P,24.2MIL,PLAS	
C219	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		IC202	1204-001362	IC-VIDEO PROCESS:VPC3215C,PLCC,43P,-,PLASTIC,6.	
C21H	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		IC203	1203-000346	IC-VOL. SUPERVISORY:7705,SOP8P,150MIL,PLASTIC,20V	
C220	2401-001496	C-AL:47uF,20%,16V,GP,TP,5x7,5		IC204	1002-001045	IC-D/A CONVERTER:9280,8BIT,PLCC,68P,-,TR,CMOS	
C221	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		IC206	1204-001188	IC-VERTICAL PROCESSO:SDA9272,QFP,208P,28.0MIL,PLAST	
C222	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5		IC207	1105-001071	IC-DRAM:9253,212x64BIT,QFP,64P,17.2MIL	
C223	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		IC208	1105-001071	IC-DRAM:9253,212x64BIT,QFP,64P,17.2MIL	
C224	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5		IC212	0803-000123	IC-TTL:74F125,BUFFER,SOP,14P,150MIL,Q	
C225	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5		L202	2701-000142	INDUCTOR-AXIAL:1uH,10%,2.5x3.4mm	
C226	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L203	2701-000142	INDUCTOR-AXIAL:1uH,10%,2.5x3.4mm	
C227	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5		L204	2701-000142	INDUCTOR-AXIAL:1uH,10%,2.5x3.4mm	
C228	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L205	2701-000142	INDUCTOR-AXIAL:1uH,10%,2.5x3.4mm	
C229	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5		L206	2901-000297	FILTER-EMI ON BOARD:,3A,-,3.5x5,TP,-	
C230	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L207	2901-000297	FILTER-EMI ON BOARD:,3A,-,3.5x5,TP,-	
C233	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L208	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
C234	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		L210	2701-000146	INDUCTOR-AXIAL:2.2uH,10%,2.5x3.4mm	
C236	2401-002235	C-AL:10uF,20%,16V,GP,TP,5x11mm,5mm		L211	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
C237	2203-000979	C-CERAMIC,CHIP:47nF,10%,50V,X7R,TP,2012,-		L212	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
C239	2203-000753	C-CERAMIC,CHIP:330nF,+80-20%,50V,Y5V,TP,3216,		L213	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
C243	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L214	2701-000116	INDUCTOR-AXIAL:10uH,10%,4.2x9.8mm	
C244	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L215	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
C245	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L216	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
C246	2401-002594	C-AL:220uF,20%,16V,GP,TP,8x11,5,5		L217	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
C247	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L218	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
C248	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L220	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
C249	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L230	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
C250	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L232	2701-000146	INDUCTOR-AXIAL:2.2uH,10%,2.5x3.4mm	
C251	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L233	2701-000146	INDUCTOR-AXIAL:2.2uH,10%,2.5x3.4mm	
C252	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L236	2701-000146	INDUCTOR-AXIAL:2.2uH,10%,2.5x3.4mm	
C253	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		L237	2701-000115	INDUCTOR-AXIAL:10uH,10%,2.8x7mm	
C254	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		LF01	2001-000210	R-CARBON:0ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C255	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		LF02	2001-000210	R-CARBON:0ohm,5%,1/8W,AA,TP,1.8x3.2mm	
C256	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		Q203	0501-000389	TR-SMALL SIGNAL:KSC815,NPN,400mW,TO-92,TP,120-	
C257	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R1	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C258	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R11	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C259	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R13	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C260	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R15	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C262	2401-002594	C-AL:220uF,20%,16V,GP,TP,8x11,5,5		R16	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C263	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R18	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C264	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R20	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C265	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R212	2007-000941	R-CHIP:47Kohm,5%,1/10W,DA,TP,2012	
C266	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R213	2007-000941	R-CHIP:47Kohm,5%,1/10W,DA,TP,2012	
C267	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R215	2007-000380	R-CHIP:13Kohm,5%,1/10W,DA,TP,2012	
C268	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R216	2007-000300	R-CHIP:10Kohm,5%,1/10W,DA,TP,2012	
C269	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R217	2007-000401	R-CHIP:150ohm,5%,1/10W,DA,TP,2012	
C270	2401-002594	C-AL:220uF,20%,16V,GP,TP,8x11,5,5		R218	2007-000401	R-CHIP:150ohm,5%,1/10W,DA,TP,2012	
C271	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R219	2007-000401	R-CHIP:150ohm,5%,1/10W,DA,TP,2012	
C272	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R22	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C273	2401-000302	C-AL:100uF,20%,25V,GP,TP,6.3x11,5		R220	2007-000401	R-CHIP:150ohm,5%,1/10W,DA,TP,2012	
C274	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R221	2007-001055	R-CHIP:6.2Kohm,5%,1/10W,DA,TP,2012	
C275	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R222	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C276	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R223	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C277	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R224	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C278	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R225	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C279	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R226	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C280	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R227	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C281	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R228	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C282	2203-000239	C-CERAMIC,CHIP:100pF,5%,50V,NPO,TP,2012,-		R229	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C283	2203-000142	C-CERAMIC,CHIP:1.5nF,10%,50V,X7R,TP,2012,-		R230	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C402	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R231	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C404	2203-000192	C-CERAMIC,CHIP:100nF,+80-20%,50V,Y5V,TP,2012,		R232	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C405	2203-001002	C-CERAMIC,CHIP:47pF,5%,50V,NPO,TP,2012,-		R234	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C409	2203-000938	C-CERAMIC,CHIP:470pF,5%,50V,NPO,TP,2012,-		R235	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C414	2203-000239	C-CERAMIC,CHIP:100pF,5%,50V,NPO,TP,2012,-		R236	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C415	2203-001002	C-CERAMIC,CHIP:47pF,5%,50V,NPO,TP,2012,-		R237	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C416	2203-001002	C-CERAMIC,CHIP:47pF,5%,50V,NPO,TP,2012,-		R238	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	
C421	2203-001002	C-CERAMIC,CHIP:47pF,5%,50V,NPO,TP,2012,-		R24	2007-000947	R-CHIP:47ohm,5%,1/10W,DA,TP,2012	

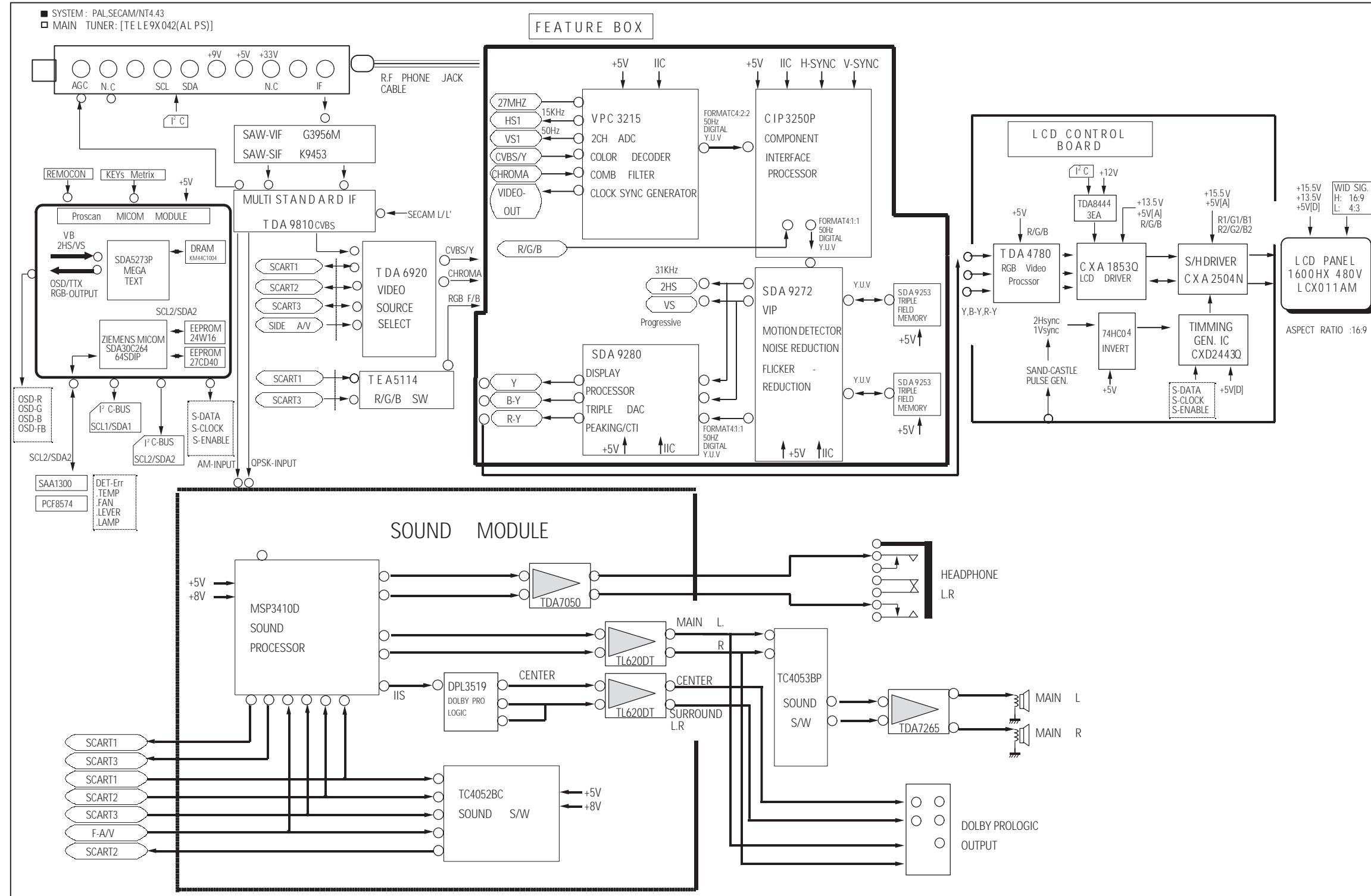
Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
R242	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		R704	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm	
R250	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012		RC06	2001-001115	R-CARBON(S);27Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R251	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012		RC07	2001-000052	R-CARBON(S);3.3Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R252	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012		RC08	2001-001055	R-CARBON(S);1.8Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R26	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012		RC09	2001-001071	R-CARBON(S);12Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R266	2007-000409	R-CHIP;15Kohm,5%,1/10W,DA,TP,2012		RC10	2001-001168	R-CARBON(S);6.8Kohm,5%,1/2W,AA,TP,2.4x6.4mm	
R267	2007-000586	R-CHIP;22Kohm,5%,1/10W,DA,TP,2012		SWY01	3404-001006	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
R268	2007-000593	R-CHIP;22ohm,5%,1/10W,DA,TP,2012		SWY02	3404-001006	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
R269	2007-000468	R-CHIP;1Kohm,5%,1/10W,DA,TP,2012		SWY03	3404-001006	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
R28	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012		SWY04	3404-001006	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
R3	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012		SWY05	3404-001006	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
R30	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012			AA61-30001ALATCH-DOOR;-,KIFUCO LA701,-		
R302	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012			AA61-60109ASPRING-DOOR;-,SUS304,P10.5,-,H12.5,N32,-		
R303	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012			AA61-80002ADAMPER-GEAR;-,DP802,-,37G,BLU,DP802,-		
R304	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012			AA63-10002ABAND-TIE;-,NYLON66 V2,-,L100,NTR,-		
R400	2007-000781	R-CHIP;33ohm,5%,1/10W,DA,TP,2012			AA64-10776ABUTTON-KEY,PAL;-,SPM-403J,5,ABS,HB,BLK		
R403	2007-000781	R-CHIP;33ohm,5%,1/10W,DA,TP,2012			AA64-30856ACASE-DRAWER,TOP;-,ABS,HB,-,BLK,-,SVP-403J		
R404	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012			AA64-30857B CASE-DRAWER,BOT;-,SPT403J,DG703P,ABS,HB,BLK,-		
R405	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012			AA64-30858ACASE-DRAWER,BODY;-,ABS,HB,-,BLK,-,SVP-403J		
R406	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012			AA64-60444AINLAY-CONTROL,PAL;SPM-403J,-,PS,T0.4,BLK,-		
R440	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012					
R441	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		*	AA91-20068A ASSY-HOUSING,MECHA;-,VO,-,SVP403J		
R443	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012			AA61-80056AHOUSING-MECHA,BOT;SVP-403J,HIPS,VO,BLK,-		
R444	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012			AA63-50351AGRILLE-LAMP;-,SVP-403J,-,SECC,T0.5,CLEAR,-		
R446	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012			AA63-60123ASPACE-RSPONGE,LCD;SPONGE;-,BLK,VO,SVP-403J,-		
R447	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012					
R451	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012					
R453	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012					
R454	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012					
R455	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012					
R457	2007-000029	R-CHIP;0ohm,5%,1/10W,DA,TP,2012					
R5	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012					
R54	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012		*	AA91-20069A ASSY-DUCT,IN;-,VO,FAN,SVP403J		
R55	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012			3103-001017 FAN-DC;12VDC,120mA,2200rpm,1m^3,2.3P		
R56	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012			6002-000522 SCREW-TAPPING,TH,+,2,M4,L15,ZPC(BLK),SWRCH18		
R57	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012			AA39-20014F LEAD CONNECTOR-ASSY;-,67096-003,-,3P,700mm,1007#26		
R65	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012		CL+CRD	AA63-30178ACOVER-DUCT,IN,R;-,SVP-403J,-,HIPS,VO,BLK,-		
R66	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012		AF3A	AA63-30179ACOVER-DUCT,IN,L;-,SVP-403J,-,HIPS,VO,BLK,-		
R67	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012					
R68	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012					
R7	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012					
R9	2007-000947	R-CHIP;47ohm,5%,1/10W,DA,TP,2012					
RF01	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012		*	AA91-20069A ASSY-DUCT,OUT;-,VO,FAN,SVP403J		
RF02	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012			3103-001017 FAN-DC;12VDC,120mA,2200rpm,1m^3,2.3P		
RF03	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012			6002-000522 SCREW-TAPPING,TH,+,2,M4,L15,ZPC(BLK),SWRCH18		
RF04	2007-000290	R-CHIP;100ohm,5%,1/10W,DA,TP,2012			AA39-20014F LEAD CONNECTOR-ASSY;-,67096-003,-,3P,700mm,1007#26		
RL405	2007-000355	R-CHIP;12Kohm,5%,1/10W,DA,TP,2012			AA63-30178ACOVER-DUCT,IN,R;-,SVP-403J,-,HIPS,VO,BLK,-		
X201	2801-003432	CRYSTAL-UNIT;20.25MHz,30ppm,28-AAA,13p,F200			AA63-30179ACOVER-DUCT,IN,L;-,SVP-403J,-,HIPS,VO,BLK,-		
<b>ASSY-DOOR</b>							
*		AA91-20056C ASSY-DOOR;-,ABS HB,DG-703P,SPM403J					
C708	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP,3.5x19,-					
C709	2202-000263	C-CERAMIC,MLC-AXIAL;470pF,10%,50V,Y5P,TP,3.5x19,-					
C710	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP,1.9x3.5,-					
C711	2202-000121	C-CERAMIC,MLC-AXIAL;100pF,10%,50V,Y5P,TP,1.9x3.5,-					
C712	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP,3.5x19,-					
C713	2202-000231	C-CERAMIC,MLC-AXIAL;330pF,10%,50V,Y5P,TP,3.5x19,-					
C714	2202-000825	C-CERAMIC,MLC-AXIAL;680pF,10%,50V,Y5P,TP,3.5x19,-					
C715	2202-000825	C-CERAMIC,MLC-AXIAL;680pF,10%,50V,Y5P,TP,3.5x19,-					
CND01	AA39-20601A	LEAD CONNECTOR-ASSY;-,5264-03,35022-03,3P,800mm,10					
CNF01	AA39-20597A	LEAD CONNECTOR-ASSY;-,5264-10,35022-10,10P,700mm,10					
DC01	0403-000296	DIODE-ZENER;MTZ5.6B,5.6V,5.45-5.73V,500mW,					
JA701	3722-001163	JACK-VHS;11P,12mm,AU,BLK,N					
JA702	3722-001178	JACK-PIN;1P,3.4mm,SN,YEL,#16-22					
JA703	3722-001176	JACK-PIN;1P,3.4mm,SN,WHT,#16-22					
JA704	3722-001177	JACK-PIN;1P,3.4mm,SN,RED,#16-22					
JKH01	3722-000143	JACK-PHONE;1P(VER),3.4mm,AG,BLK,NO					
L701	2701-000101	INDUCTOR-AXIAL;1.2uH,10%,2.5x3.4mm					
L702	2701-000101	INDUCTOR-AXIAL;1.2uH,10%,2.5x3.4mm					
L703	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm					
L704	2701-000114	INDUCTOR-AXIAL;10uH,10%,2.5x3.4mm					
R701	2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2m					
R702	2001-000273	R-CARBON;100Kohm,5%,1/8W,AA,TP,1.8x3.2m					
R703	2001-000969	R-CARBON;75ohm,5%,1/8W,AA,TP,1.8x3.2mm					
<b>ASSY-POWER CORD</b>							
		AA39-10003B POWER-CORD;-,KJP-140,KLCE-2F,2.4m,HOUS,S,					
		AA61-20284A HOLDER;-,P-CORD,PP,VO,BLK,KE-002					
		BUYER : XEU					
		AA39-10007X POWER-CORD;-,EP3/YES(HK),H03VVH2-F,2.4m,I					
<b>REMOCON</b>							
		AA59-10103F REMOCON;-,TM49,L/G KWANG,30C264,47,-					
<b>ASSY-LENS,MECHA</b>							
		AA91-20057A ASSY-LENS,MECHA;-,DS001AKB-61B,SVP-403J					
<b>ASSY-HOLDER,SPK</b>							
		AA91-60225A ASSY-HOLDER,SPK;-,PP,HB,BLK,8R20W,168BR20K					

Electric Parts List

Loc. No.	Code No.	Description ; Specification	Remark	Loc. No.	Code No.	Description ; Specification	Remark
AS1A		AA39-20505A LEAD CONNECTOR-ASSY-, YSH025-04, REC, 4P, 900.700,100					
<b>ASSY-ACCESSORY</b>							
AA39-40001B CABLE-RCA;-,RCA,1500mm,0.12/10,RED/WHT/Y BUYER : SEG/ANA/BOB/ELS/EUP/INT/XEH/XEO/XEU							
I/B	AA68-11328A	MANUAL-USERS:PLT51A,ENG/GER,TM49,B5,W/P 100					
		BUYER : UKRAINE					
I/B	AA68-00020A	MANUAL-USERS:PLT51A,N-RUSSIA,-B5,W/P(100),-					
		BUYER : ATR/AMFO					
I/B	AA68-11329A	MANUAL-USERS:PLT51A,FRA/DUT,TM49,B5,W/P					
I/B	AA68-11361A	MANUAL-USERS:PLT51A,GER/ITA,TM49,B5,W/P					
		BUYER : NSI					
I/B	AA68-11330A	MANUAL-USERS:PLT51A,FINL/NORW,TM54,B5,W/P					
I/B	AA68-11335A	MANUAL-USERS:PLT51A,SWE/DAN,TM49,B5,W/P					
		BUYER : XEC					
I/B	AA68-11331A	MANUAL-USERS:PLT51A,SPA/POR,TM49,B5,W/P					
		BUYER : XEF					
I/B	AA68-11329A	MANUAL-USERS:PLT51A,FRA/DUT,TM49,B5,W/P					
		BUYER : SEI					
I/B	AA68-11329A	MANUAL-USERS:PLT51A,FRA/DUT,TM49,B5,W/P					
S/D	AA68-20055A	MANUAL-S/D:PLT51A,ENG,-,W/P,100(G),ITAL					
S/N	AA68-20056A	MANUAL-SERVICE:PLT51A,W/P,100(G),B5,U K/IT A/S					

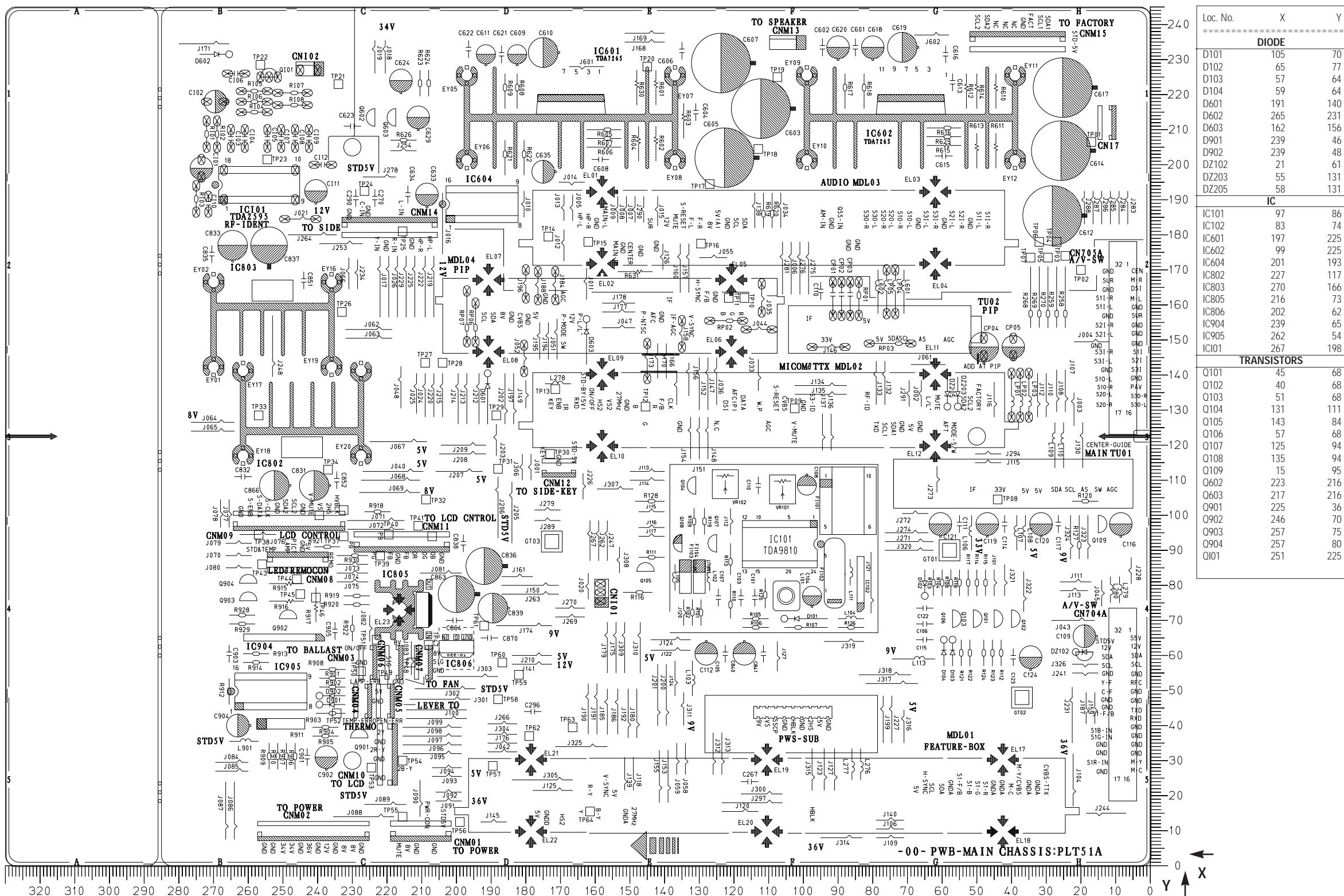
## 9. Block Diagram

### 9-1 PLT51A (SP-403JHA)

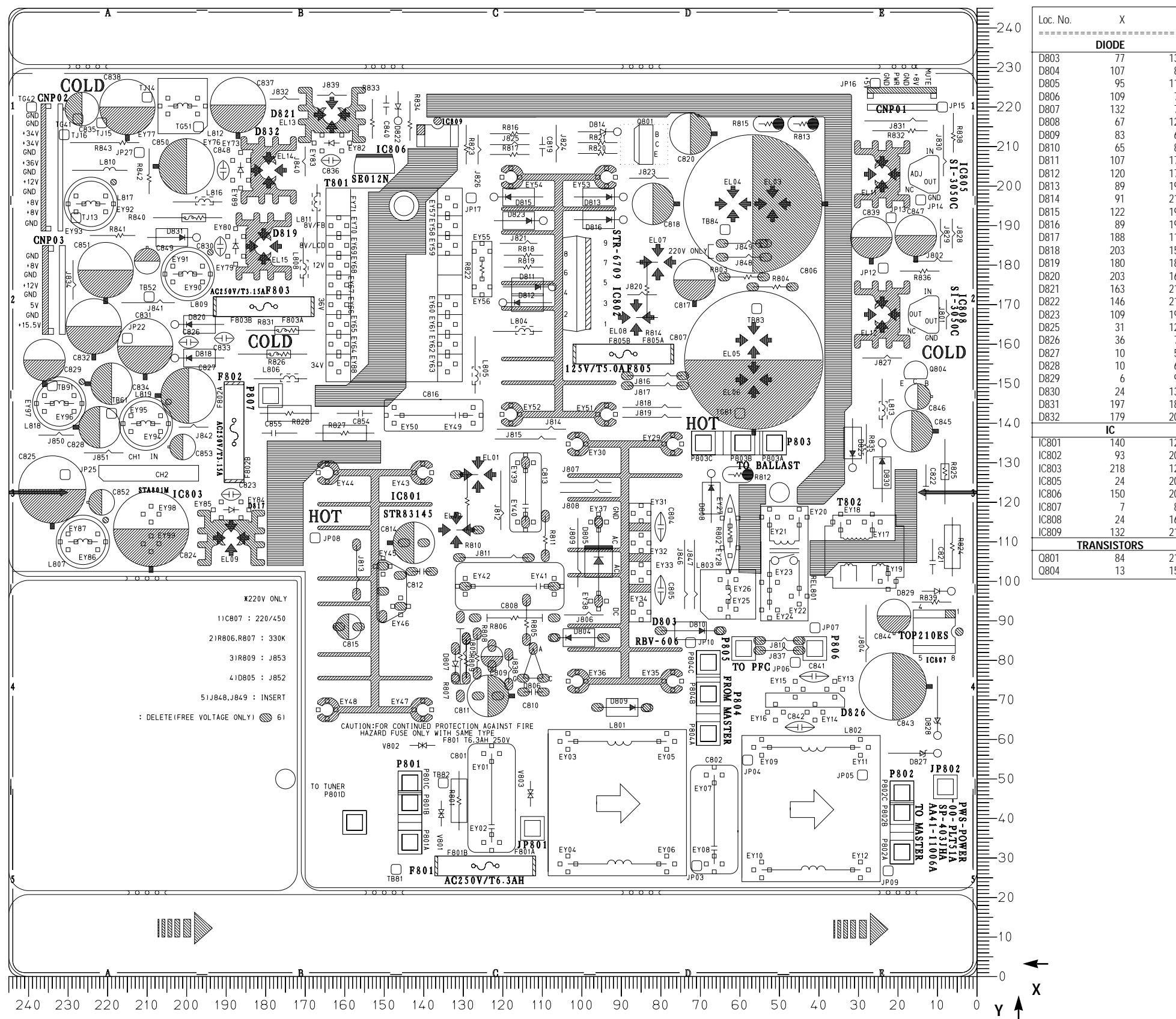


## 10. PCB Layout Diagram

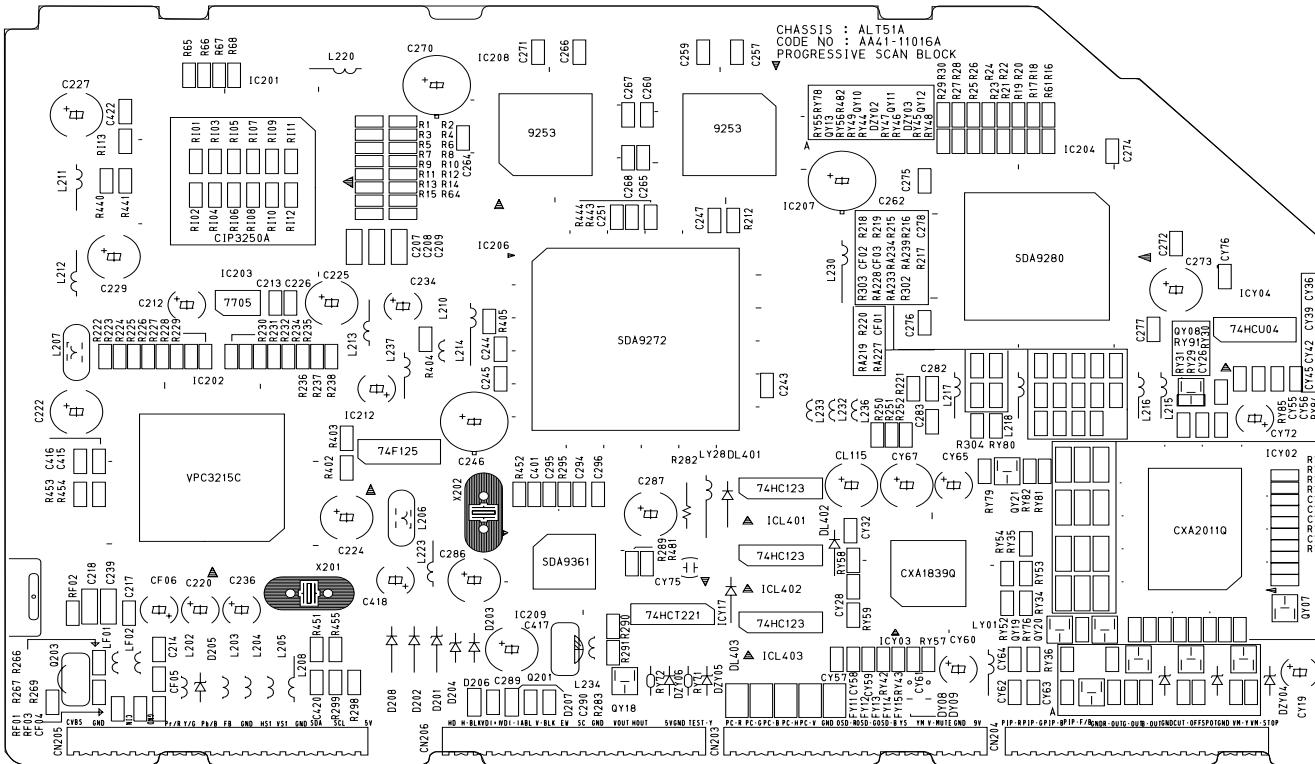
10-1 PCB-MAIN



10-2 PCB-POWER

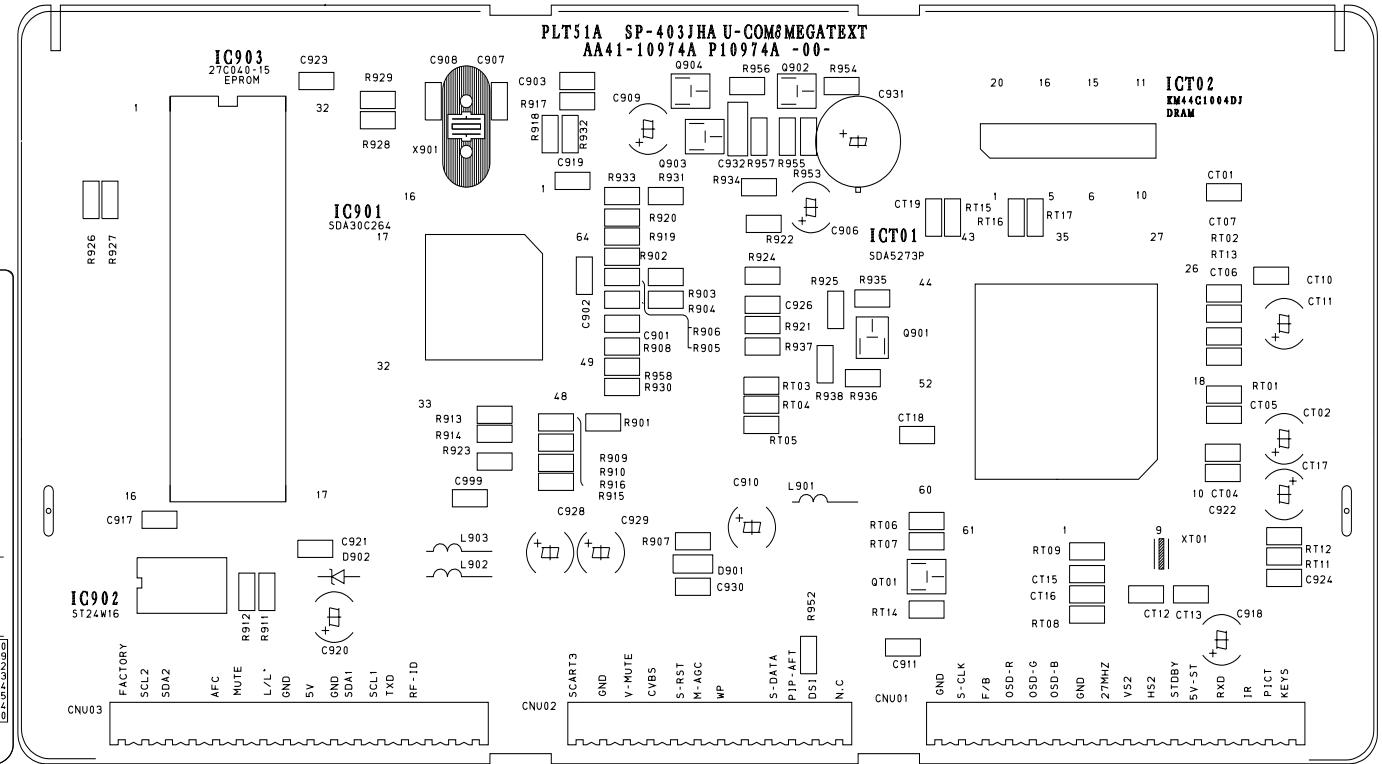


## 10-3 PCB-PROGERESSIVE



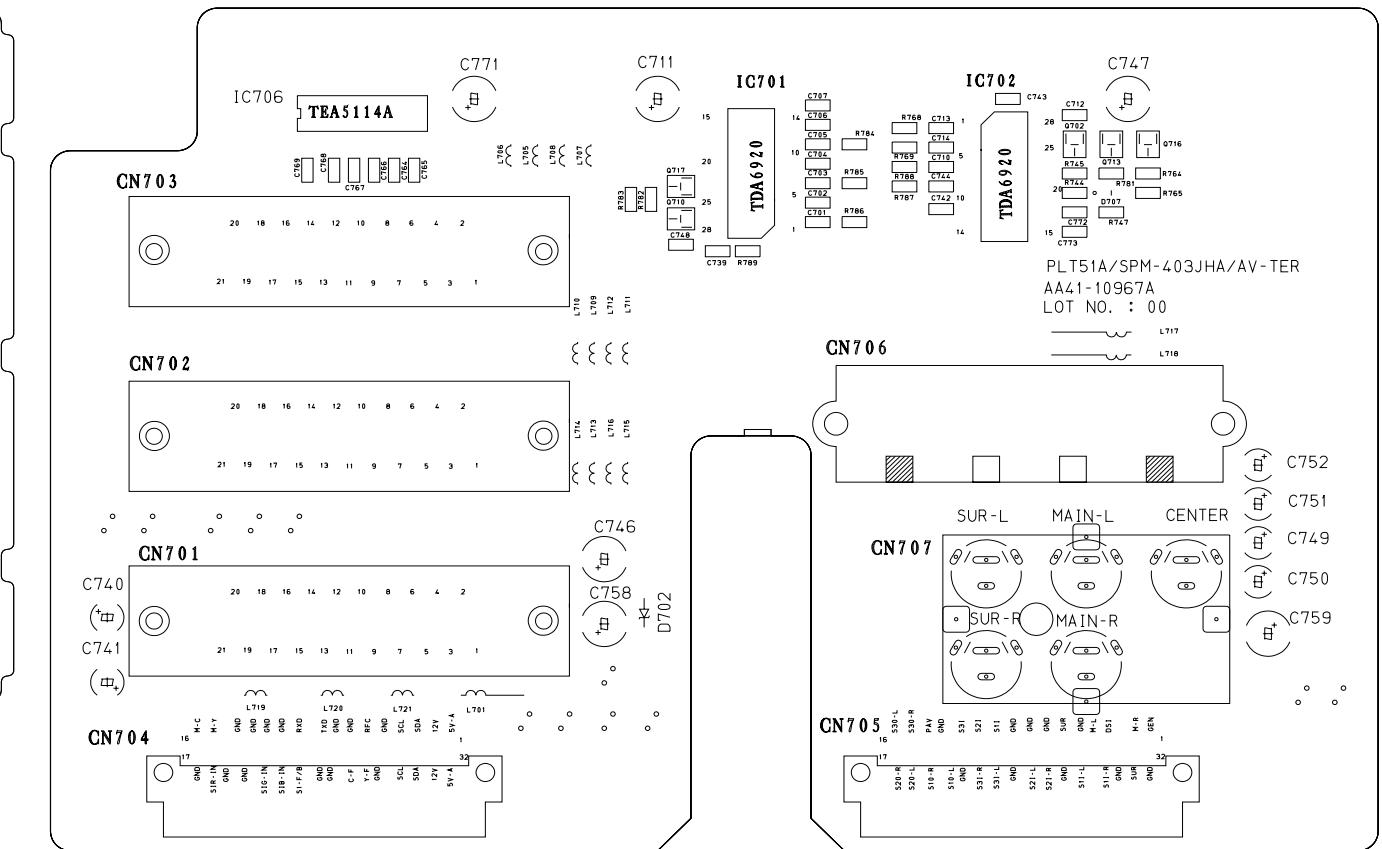
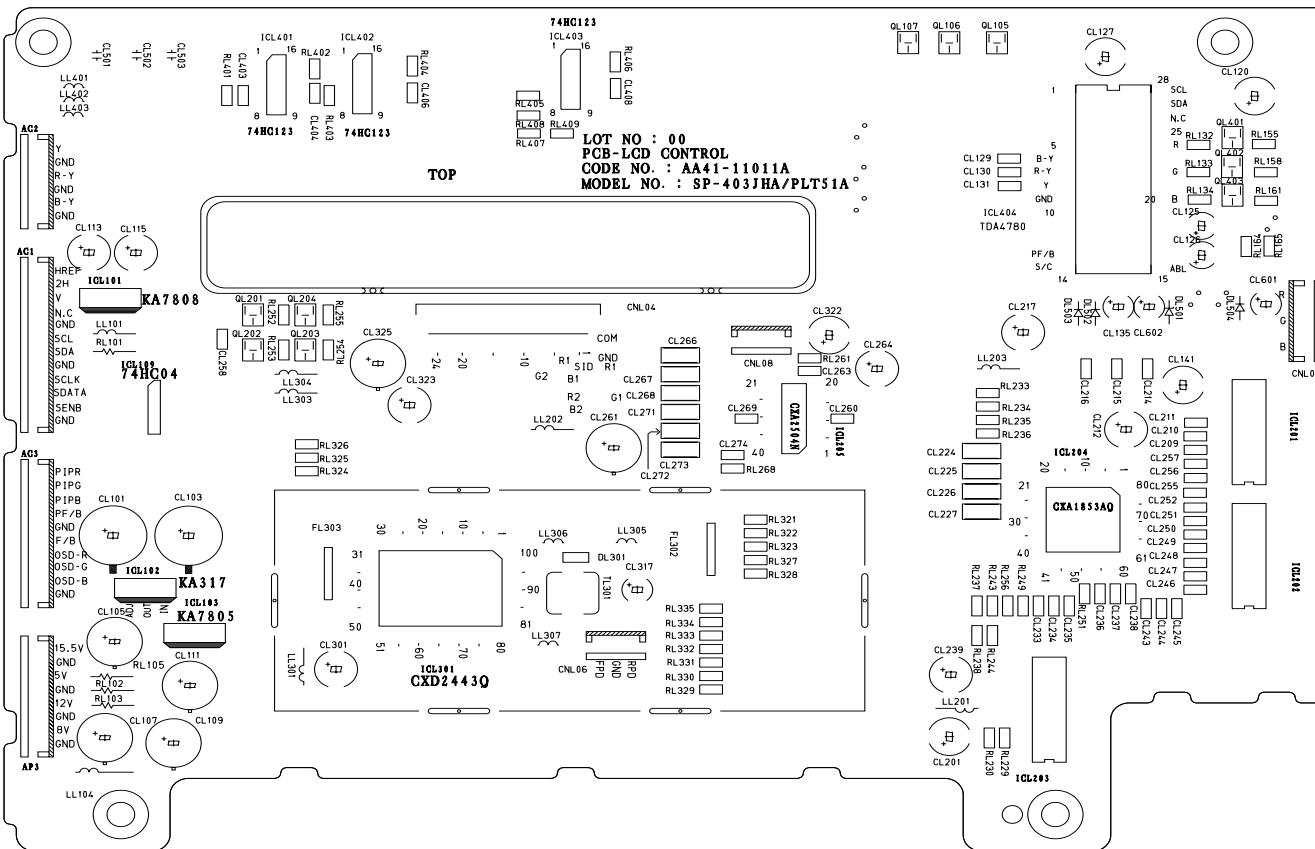
## 10-5 PCB-LCD CONTROL

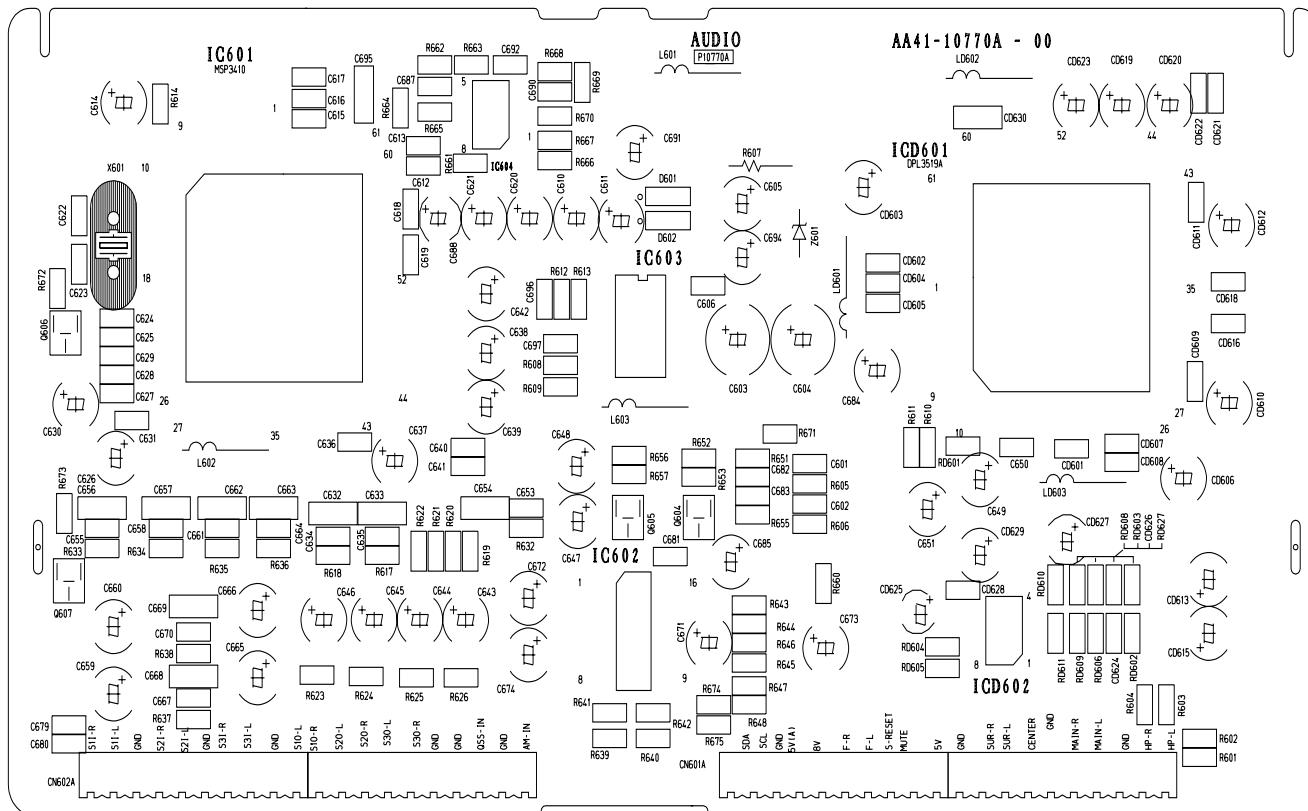
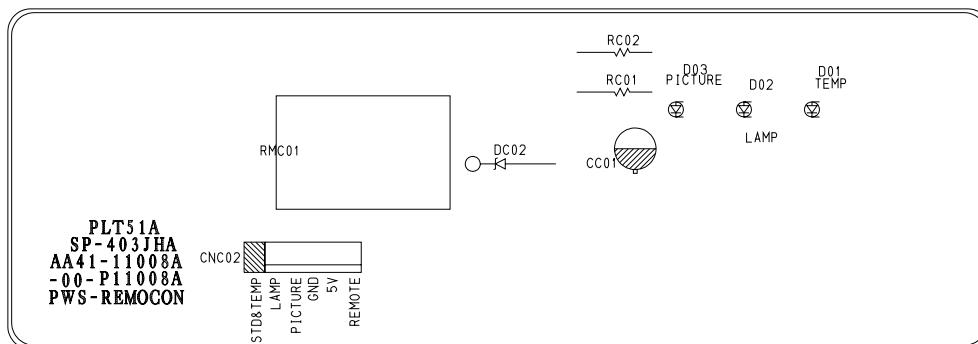
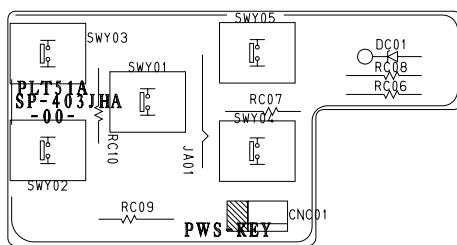
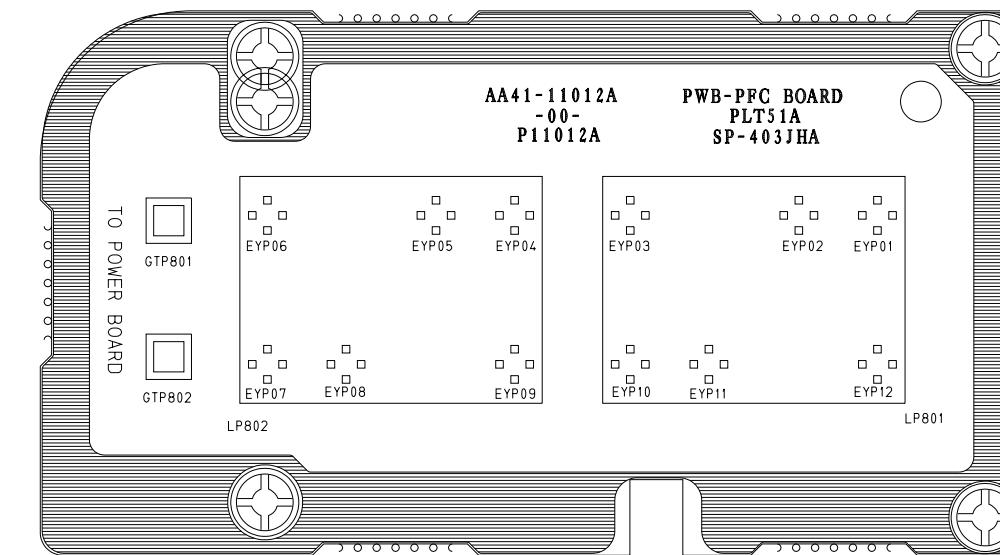
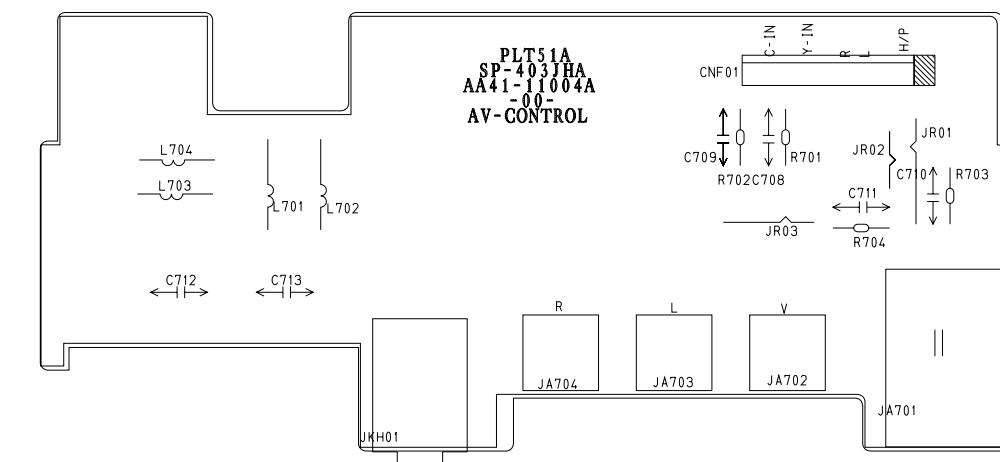
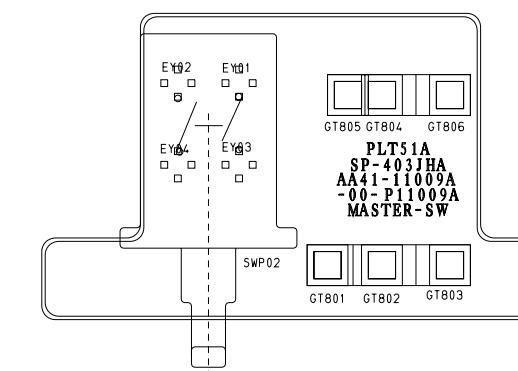
10-4 PCB u-COM



# **10-6 PCB-A/V TERMINAL**

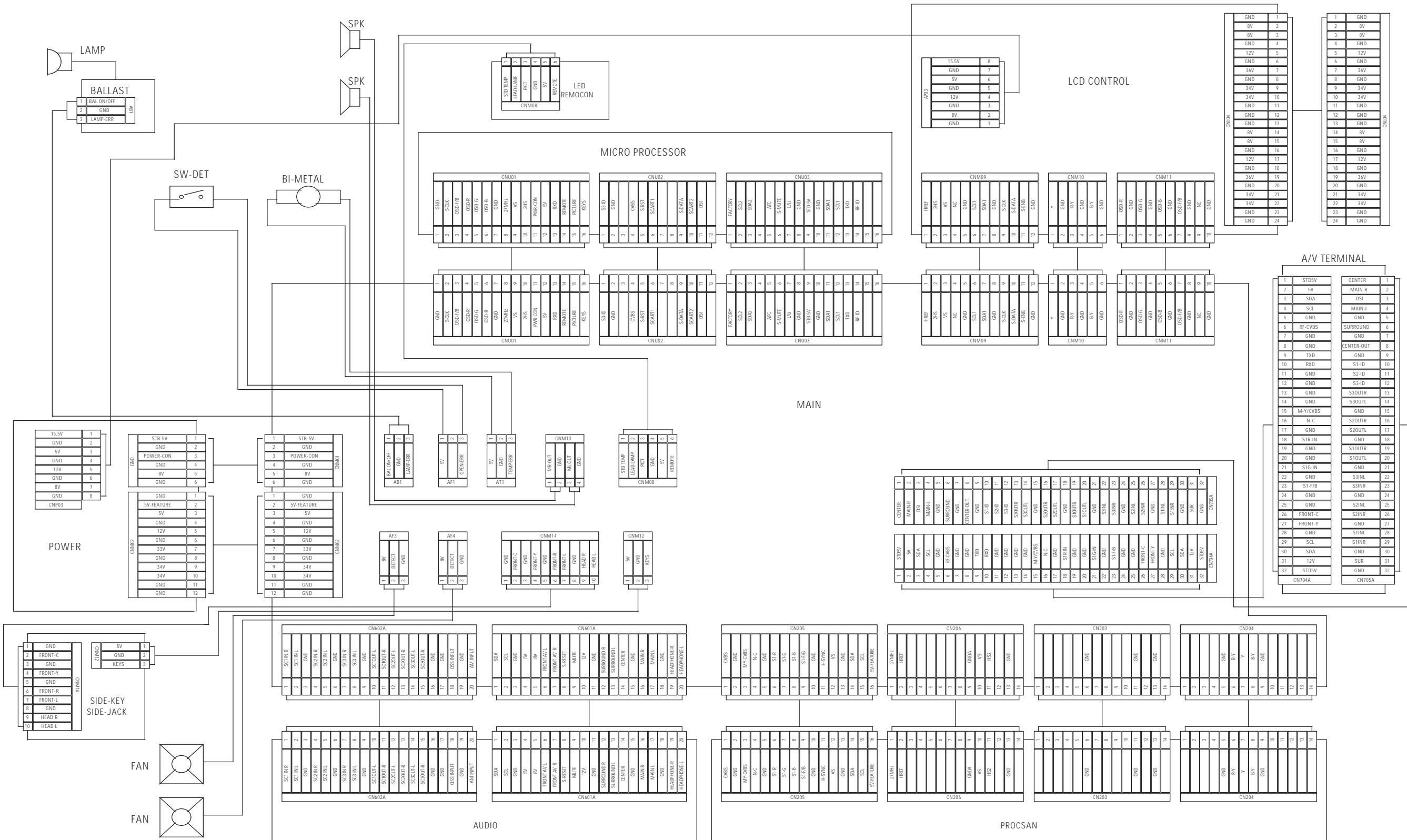
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**10-7 PCB-AUDIO****10-9 PCB-REMOCON****10-11 PCB-SIDE KEY****10-8 PCB-PFC****10-10 PCB-A/V CONTROL****10-12 PCB-MASTER S/W**

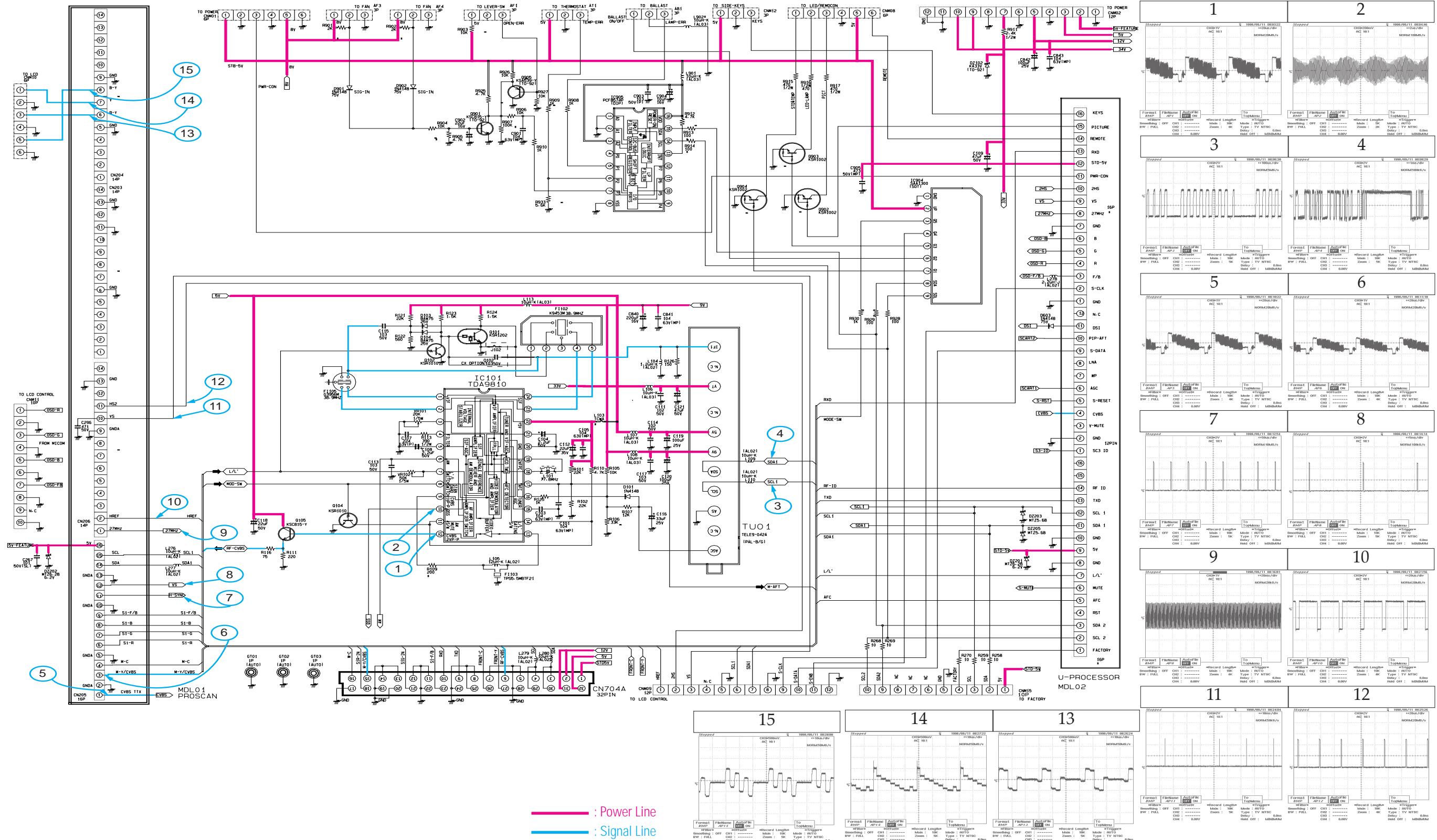
## 11. Wiring Diagram

### 11-1 PLT51A (SP-403JHA) Wiring Diagram

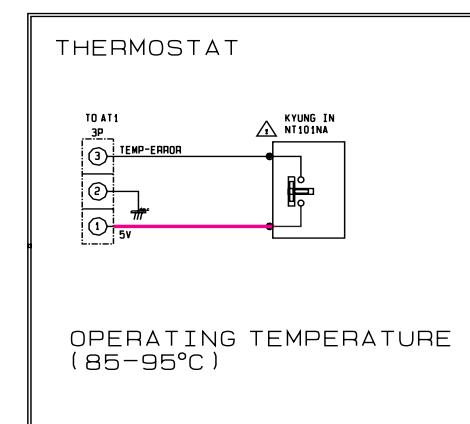
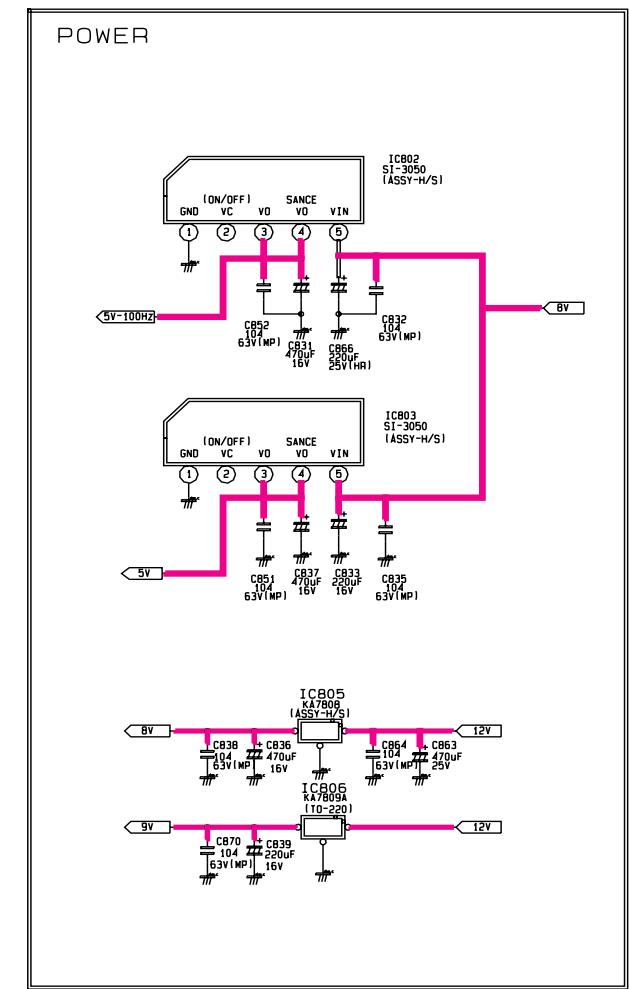
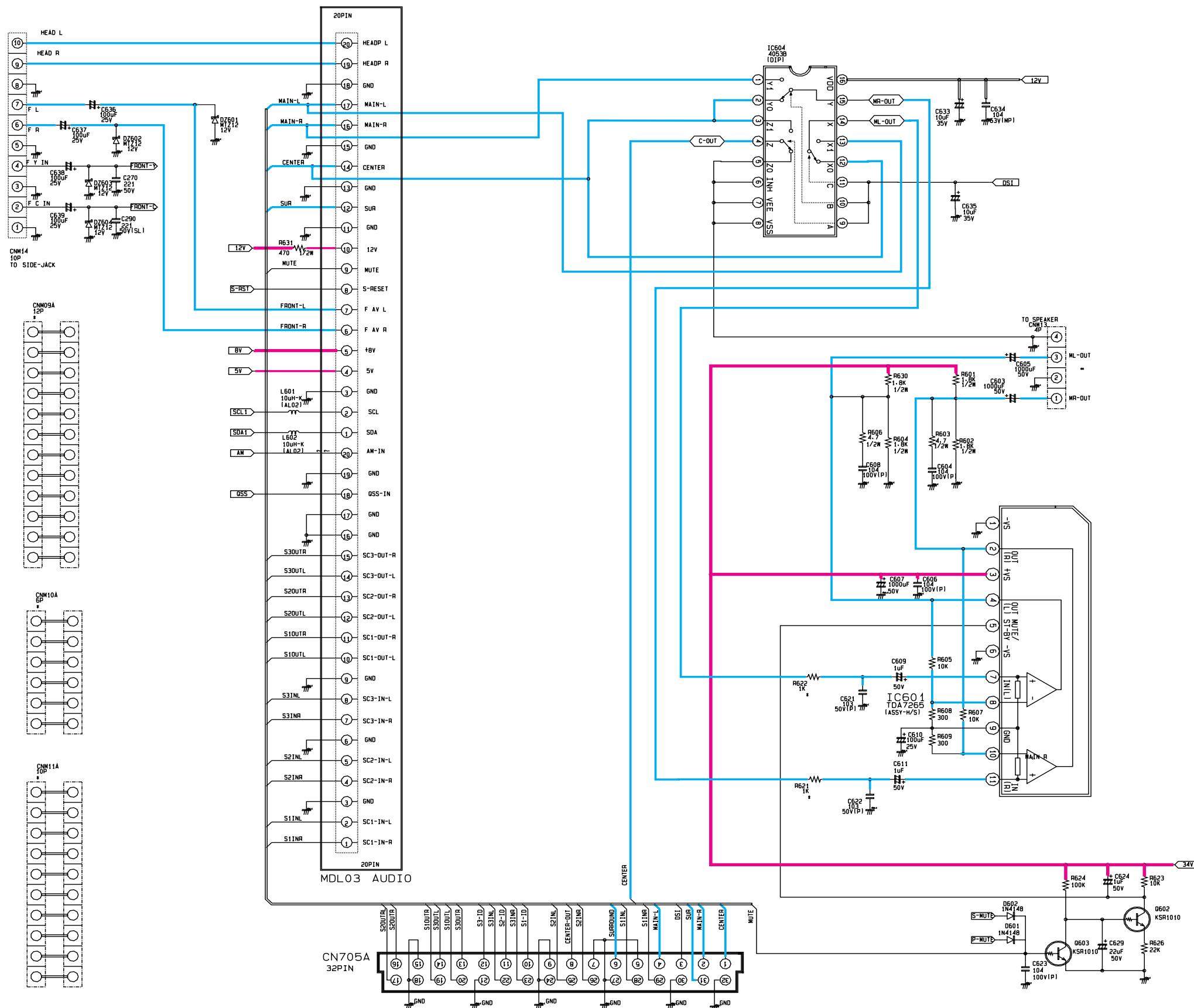


## 12. Schematic Diagrams

### 12-1 MAIN (1)

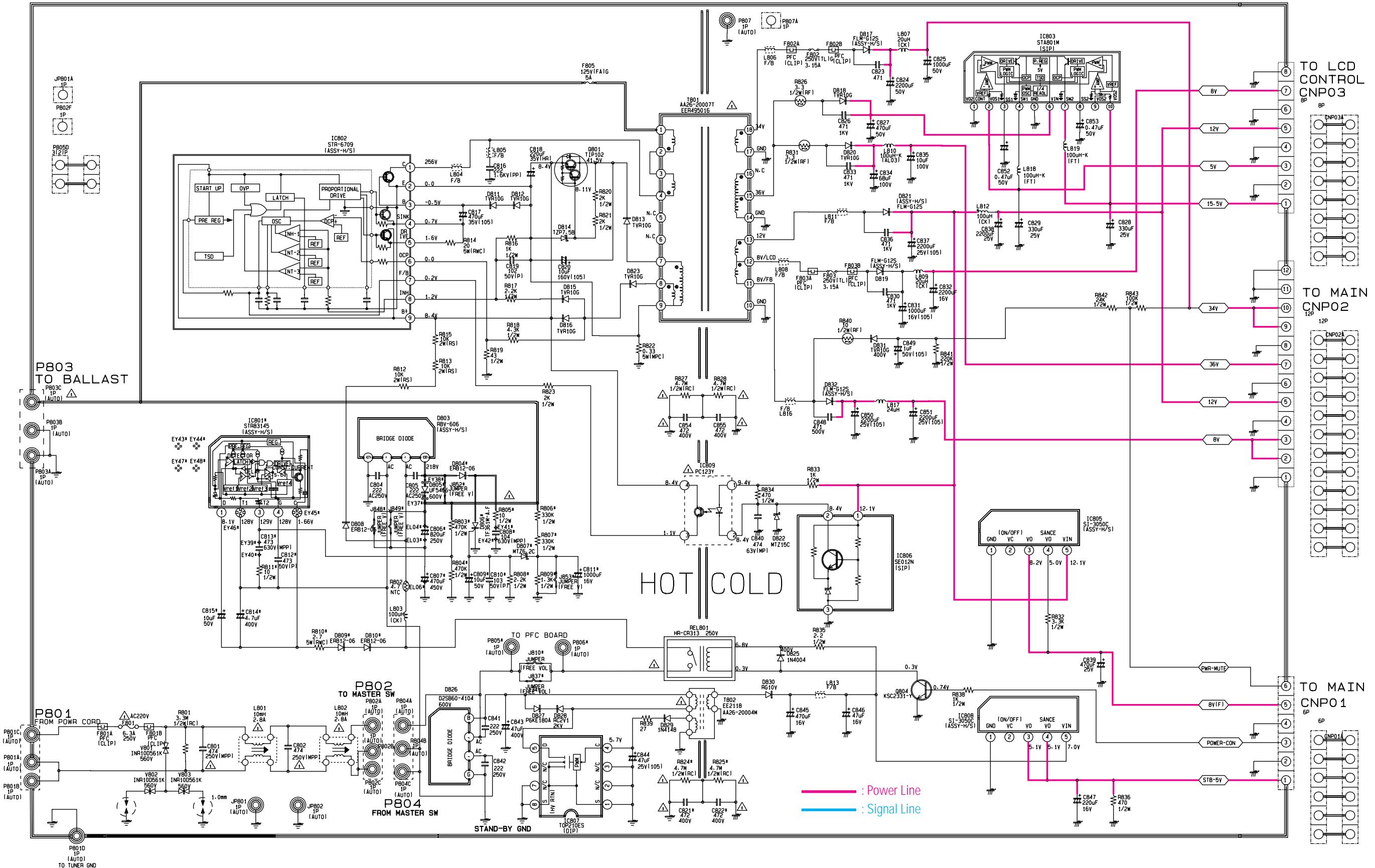


## 12-2 MAIN (2)

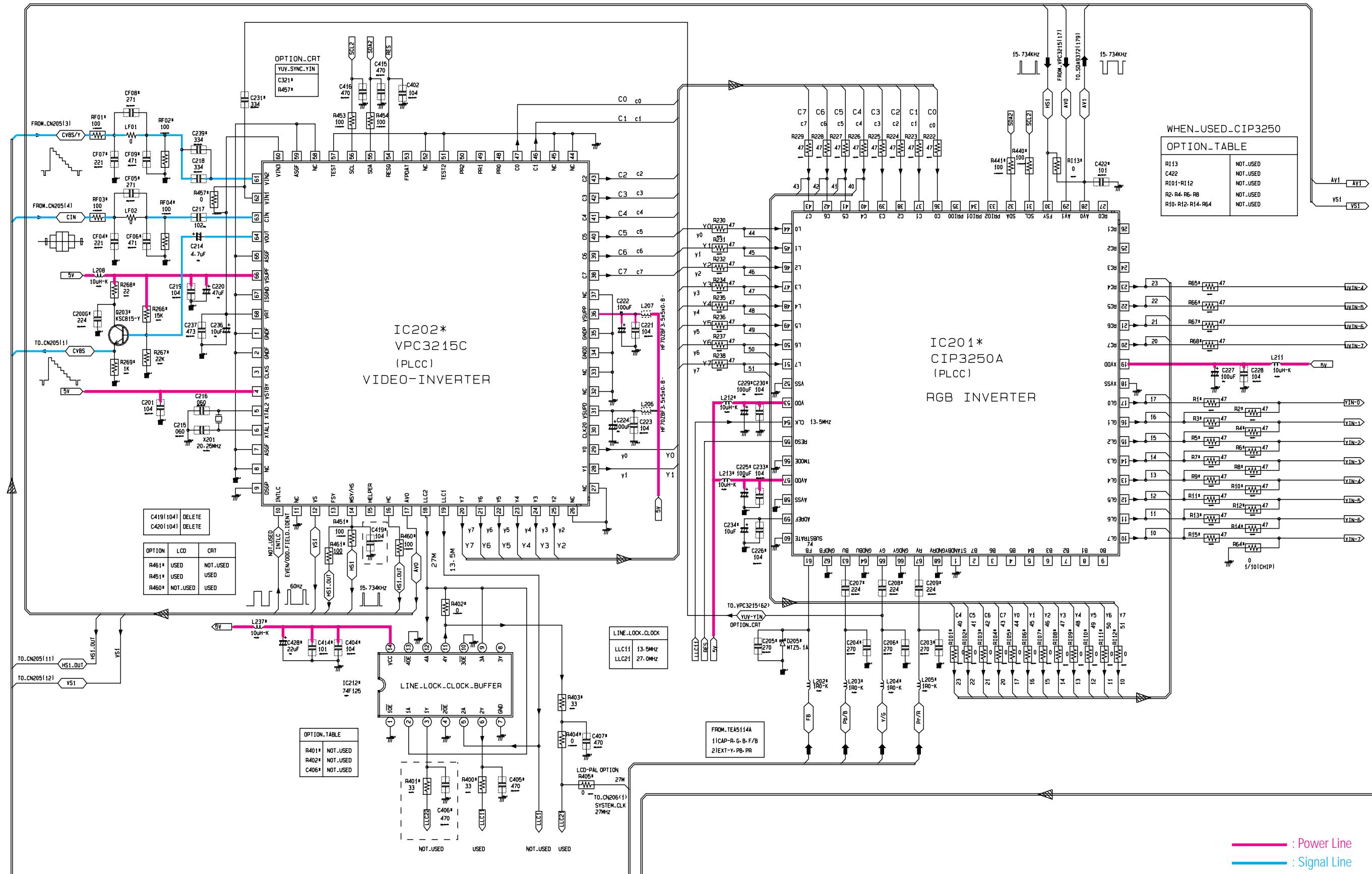


: Power Line  
 : Signal Line

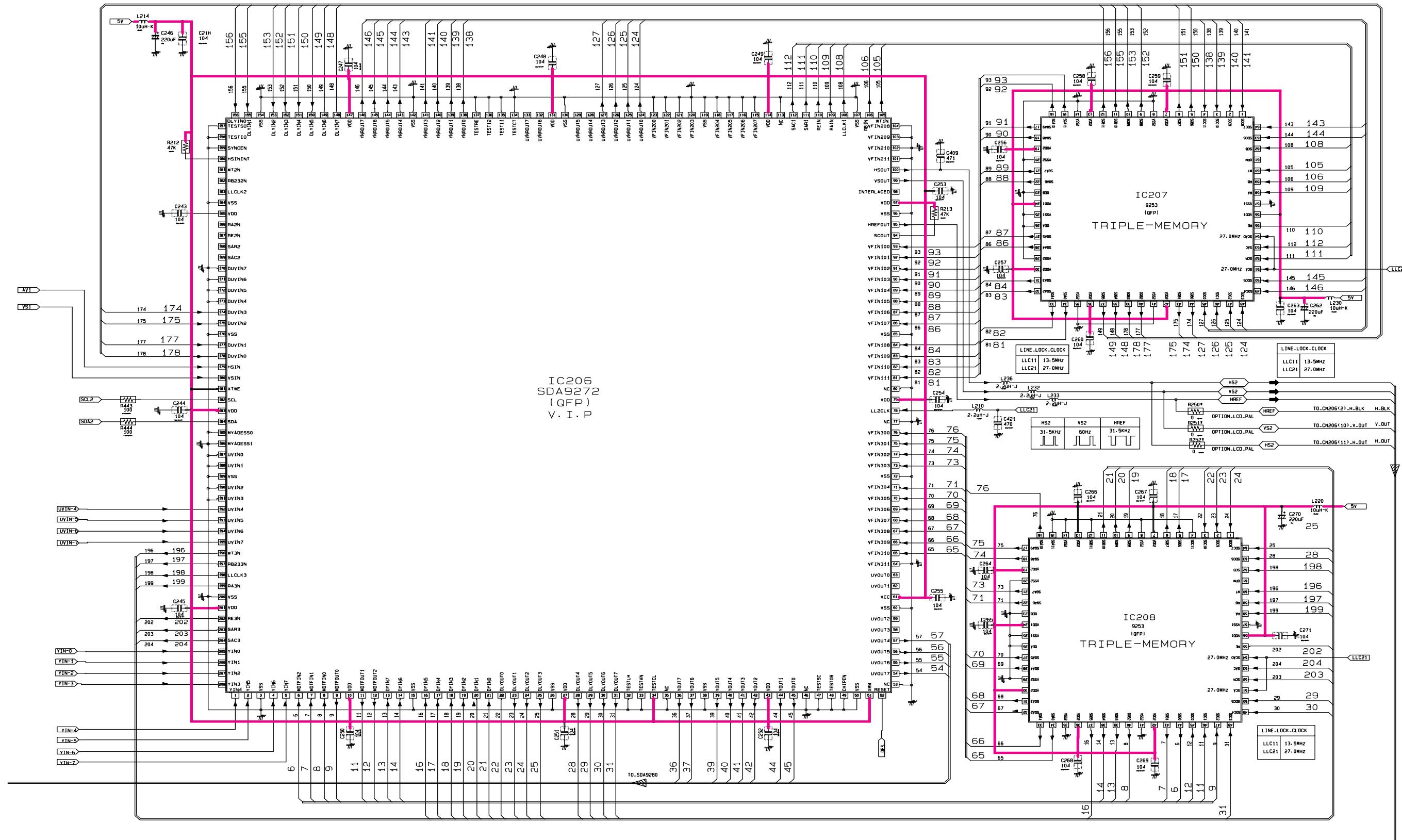
## 12-3 MAIN (POWER)



## 12-4 PROSCAN (1)



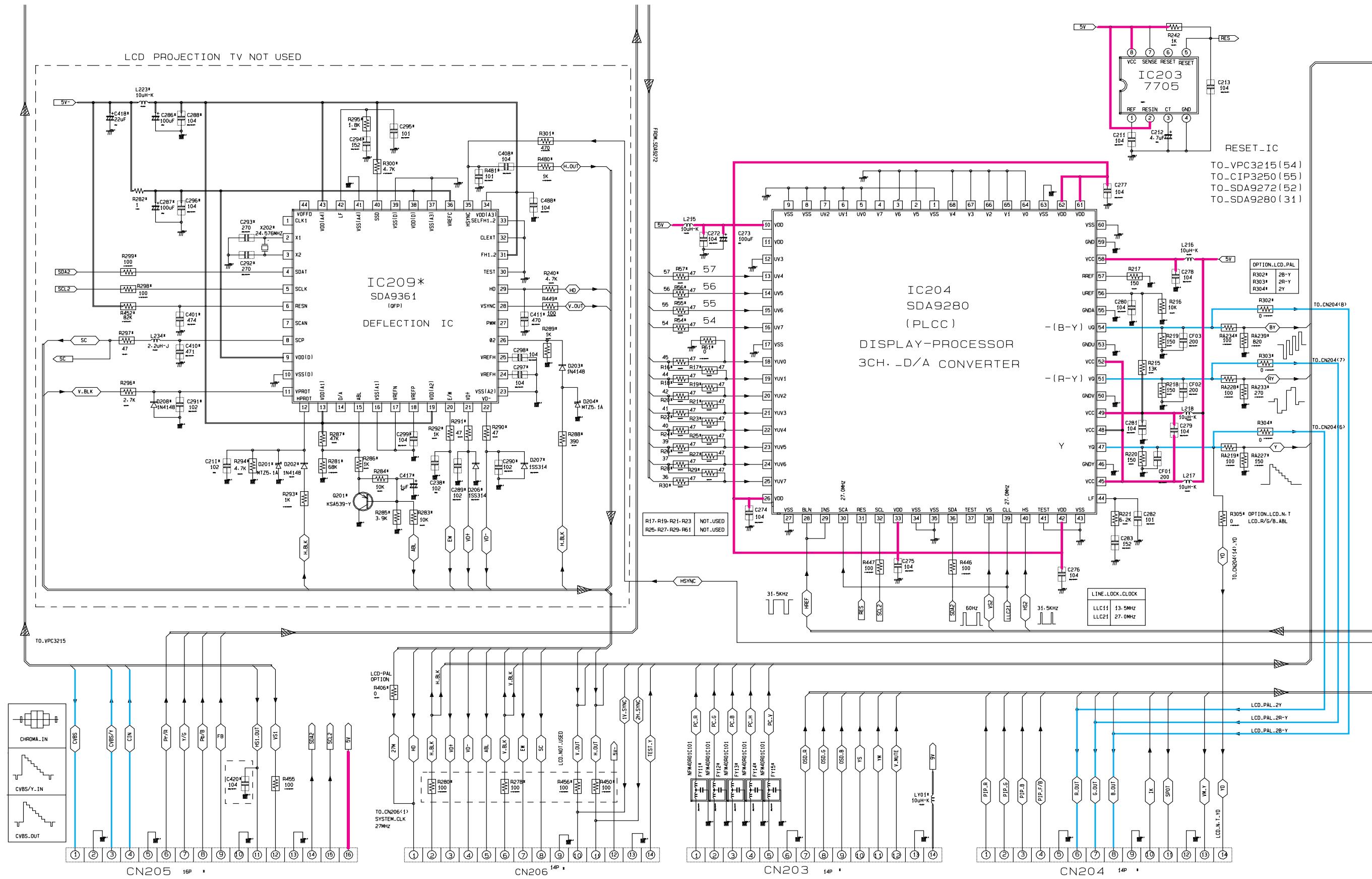
## 12-5 PROSCAN (2)



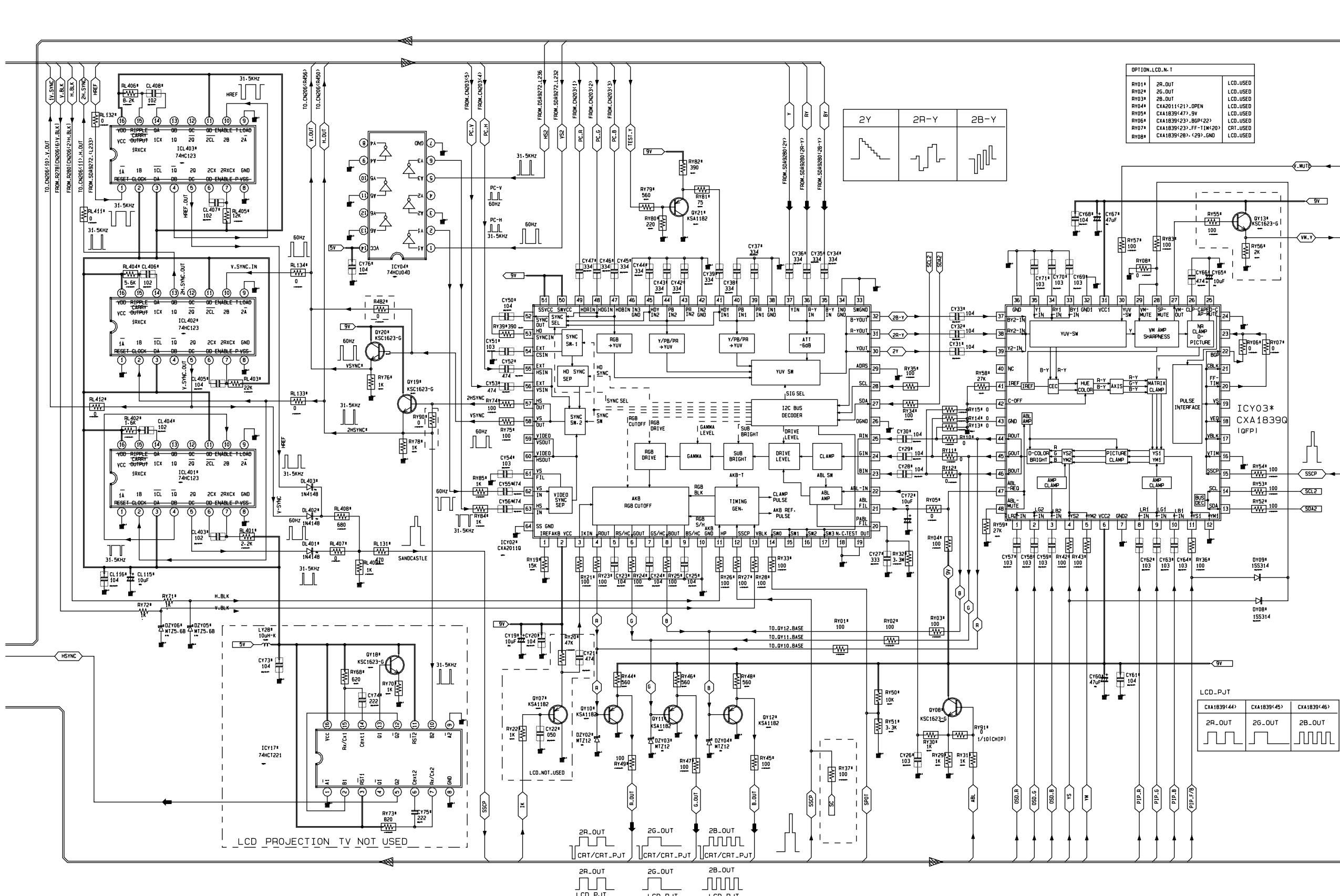
: Power Line

— : Signal Line

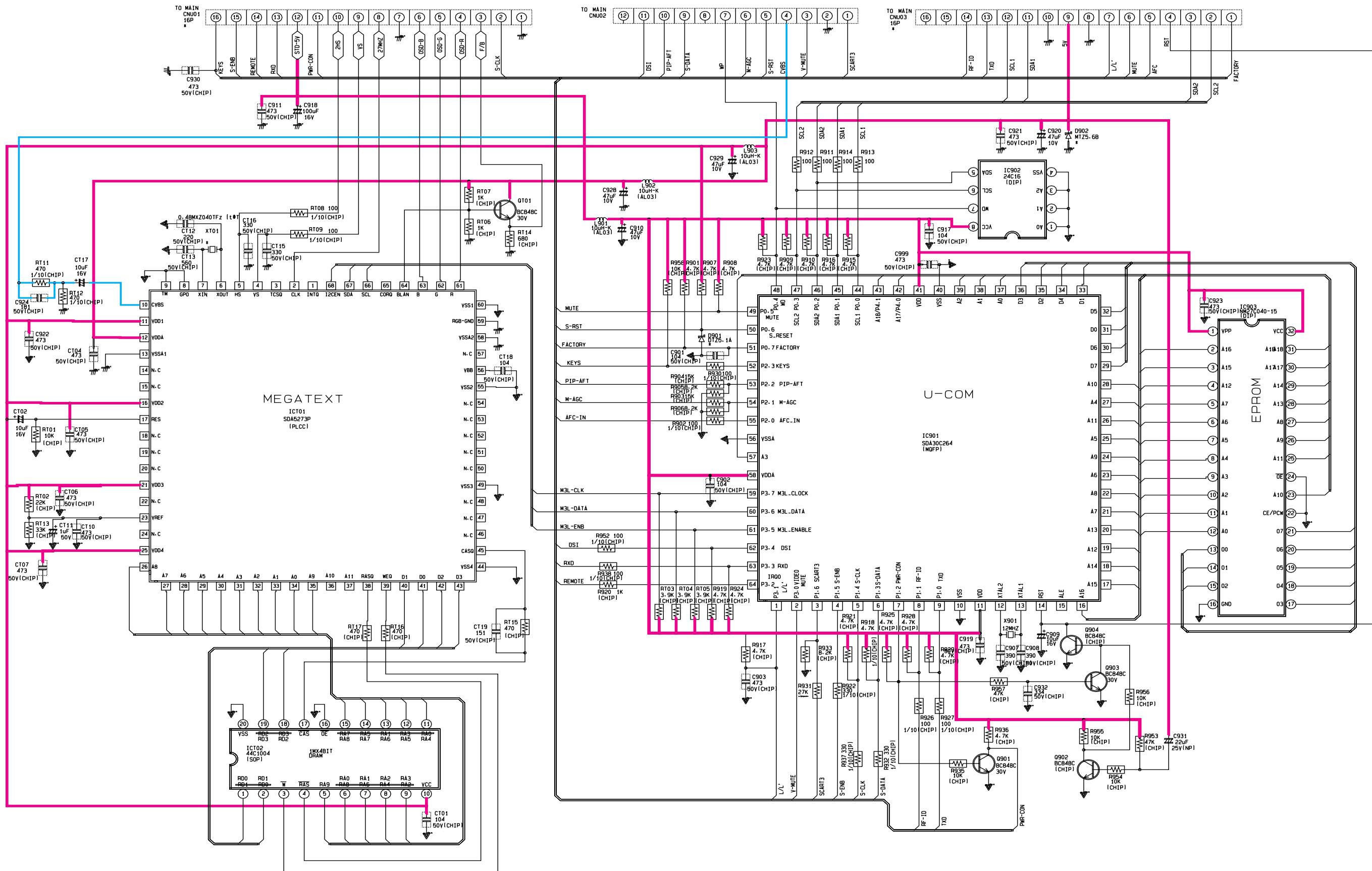
## 12-6 PROSCAN (3)



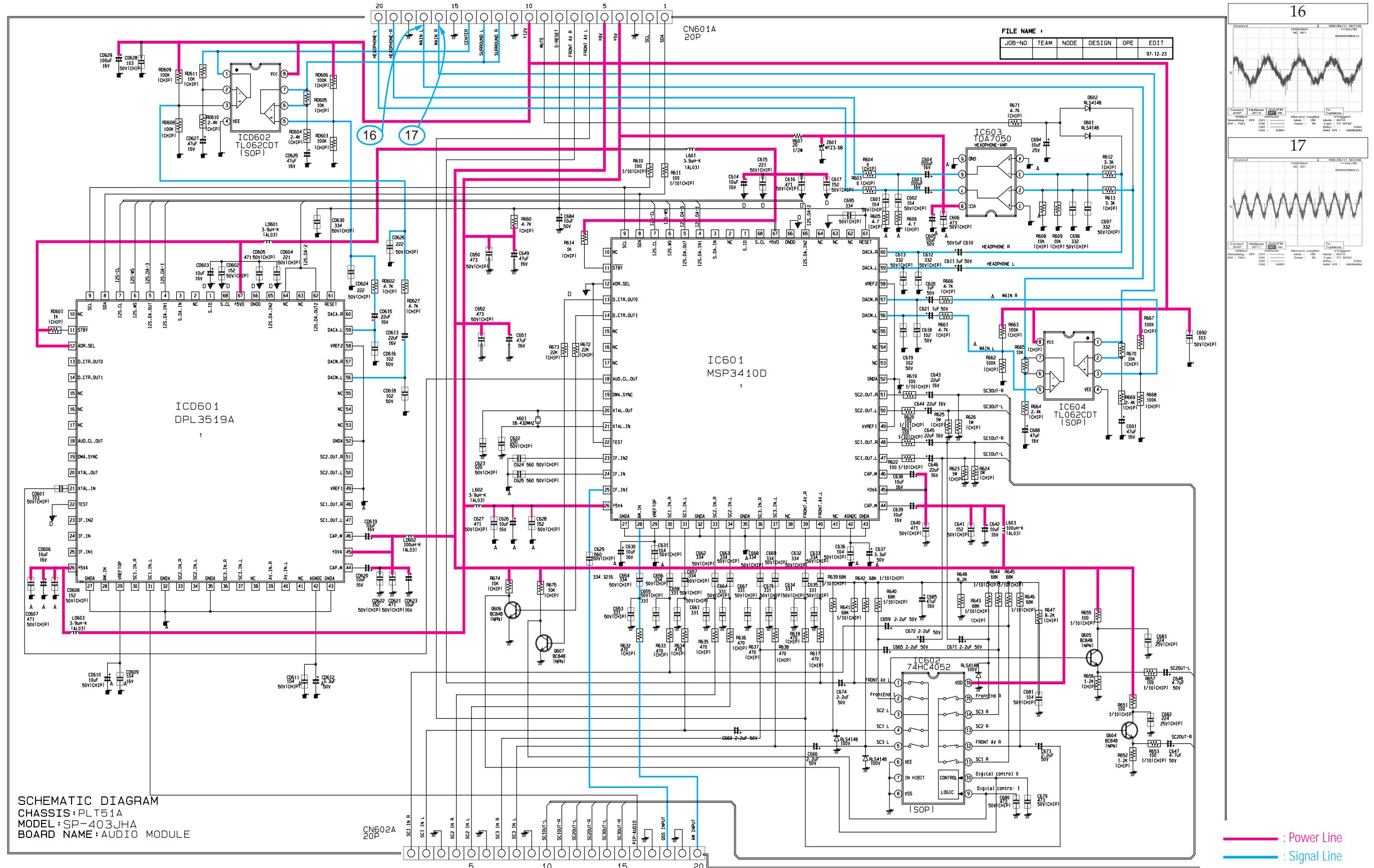
## 12-7 PROSCAN (4)



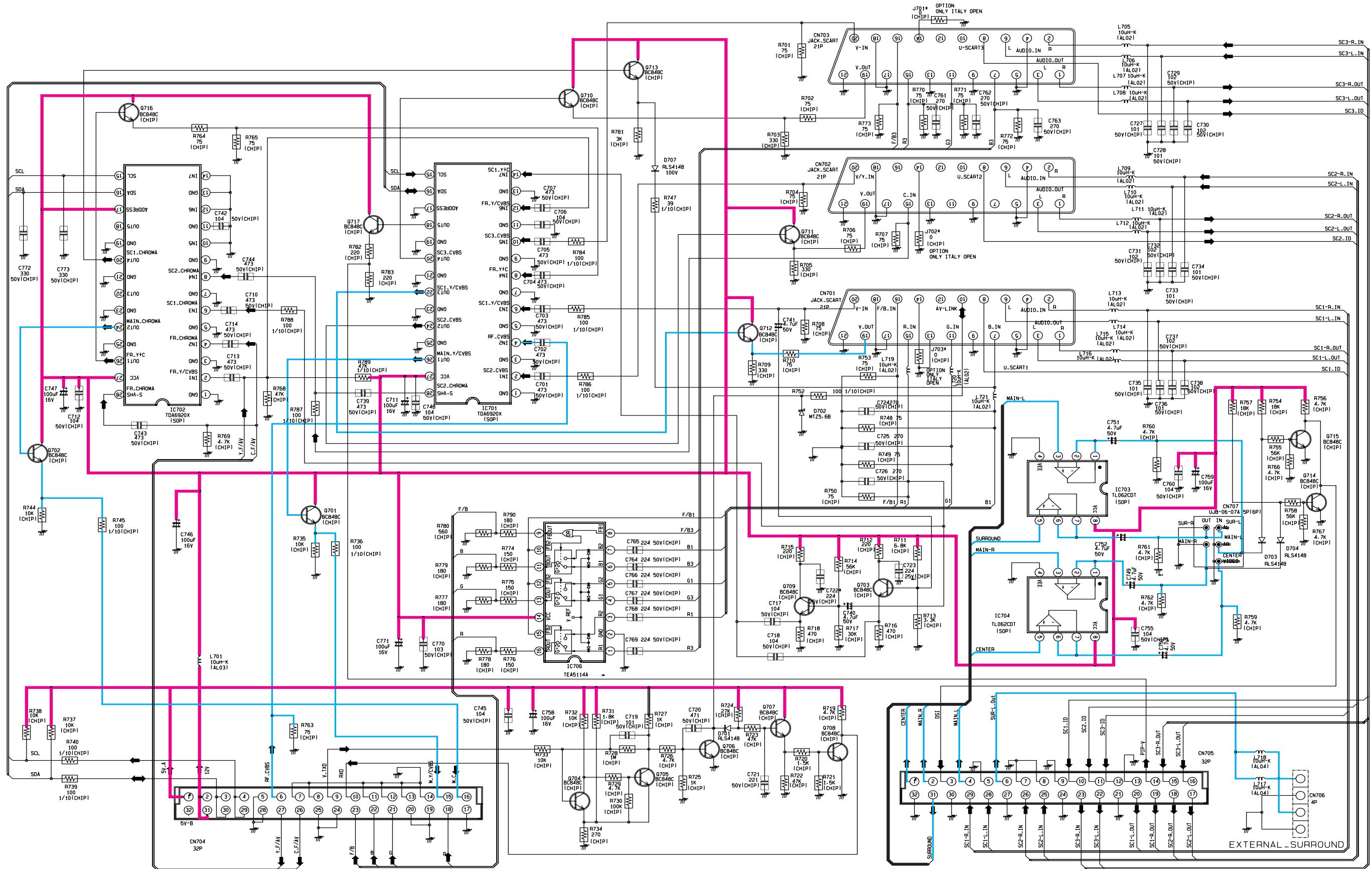
## 12-8 MAIN (u-COM)



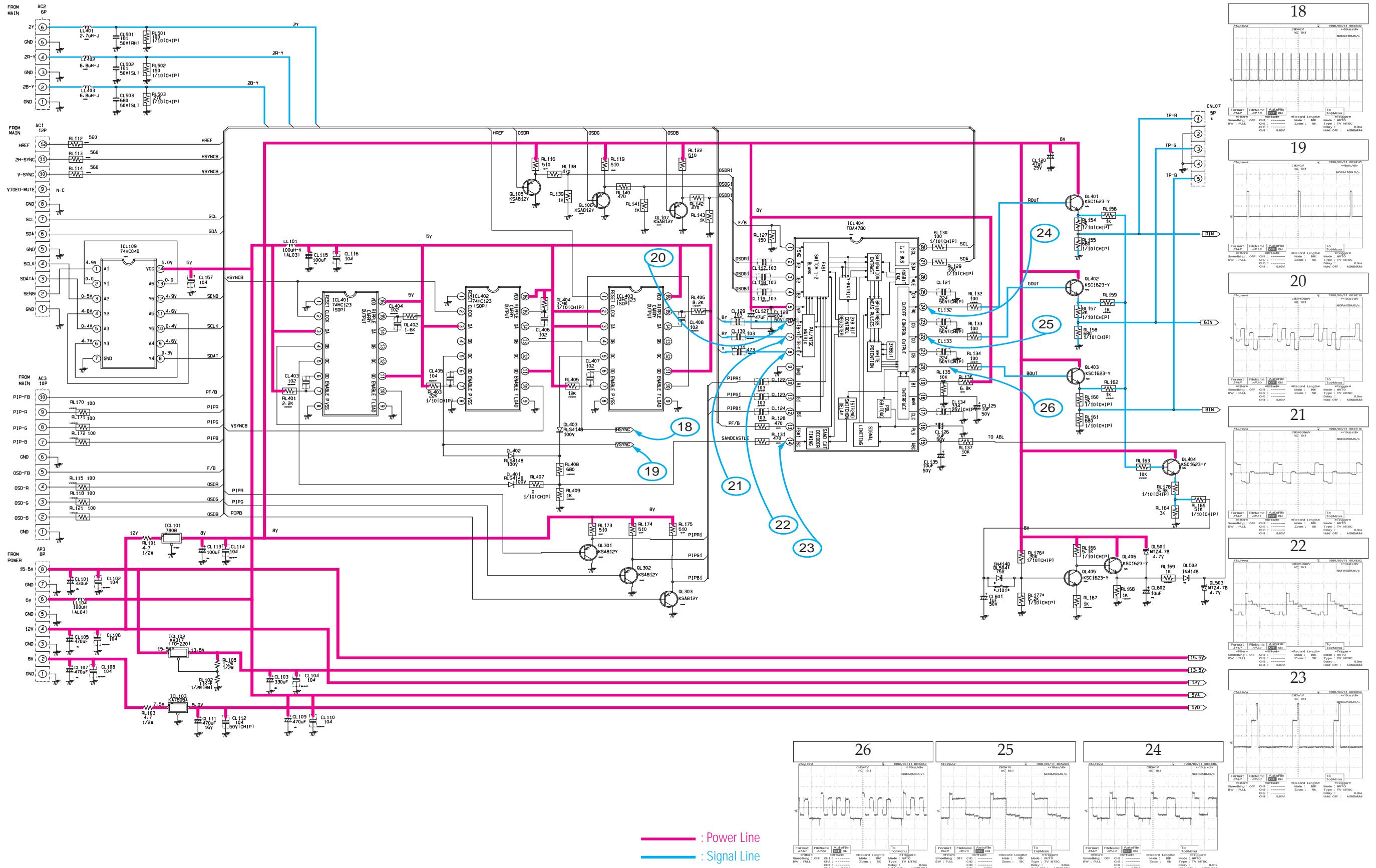
## 12-9 MAIN (AUDIO)



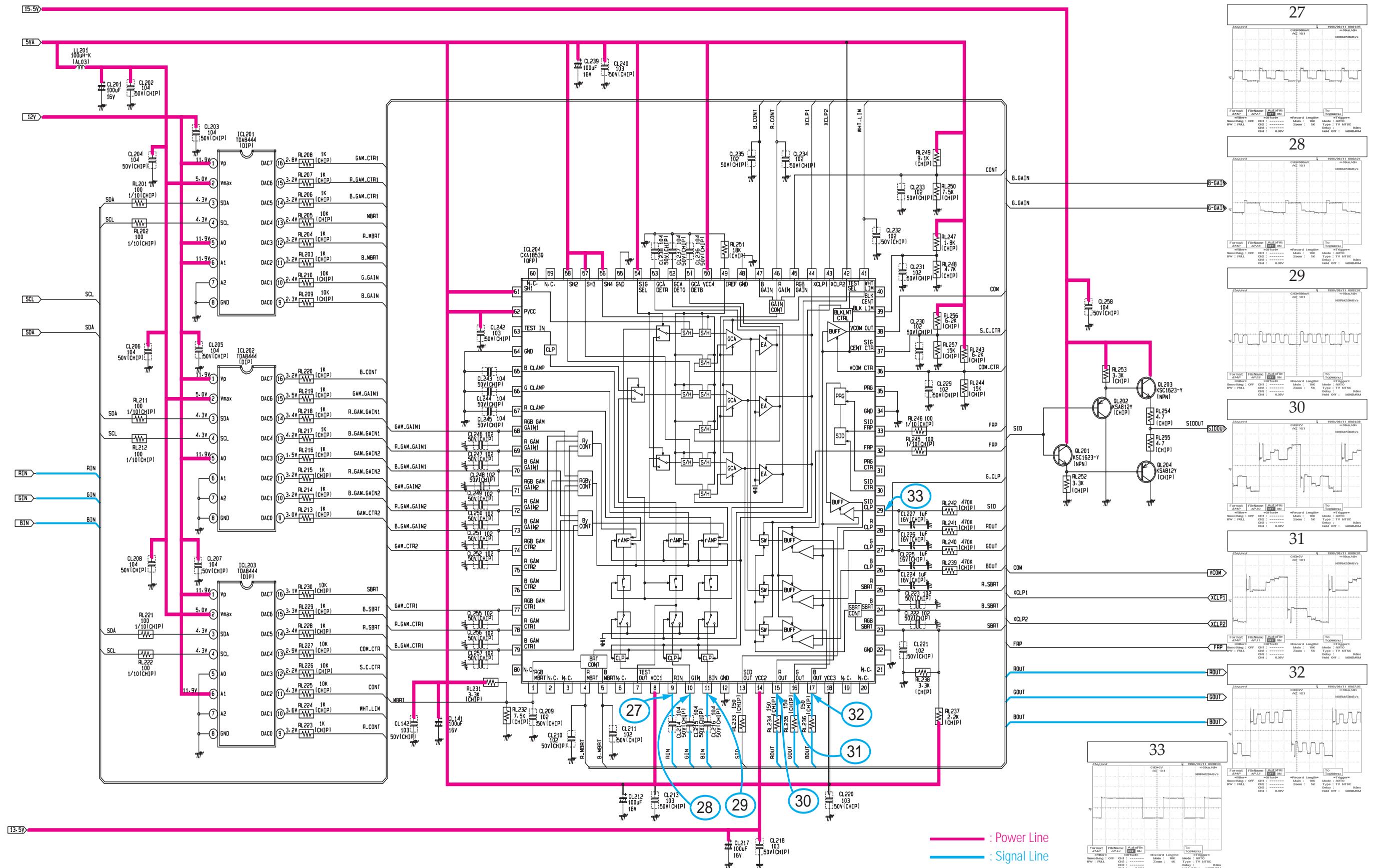
## 12-10 MAIN (A/V TERMINAL)



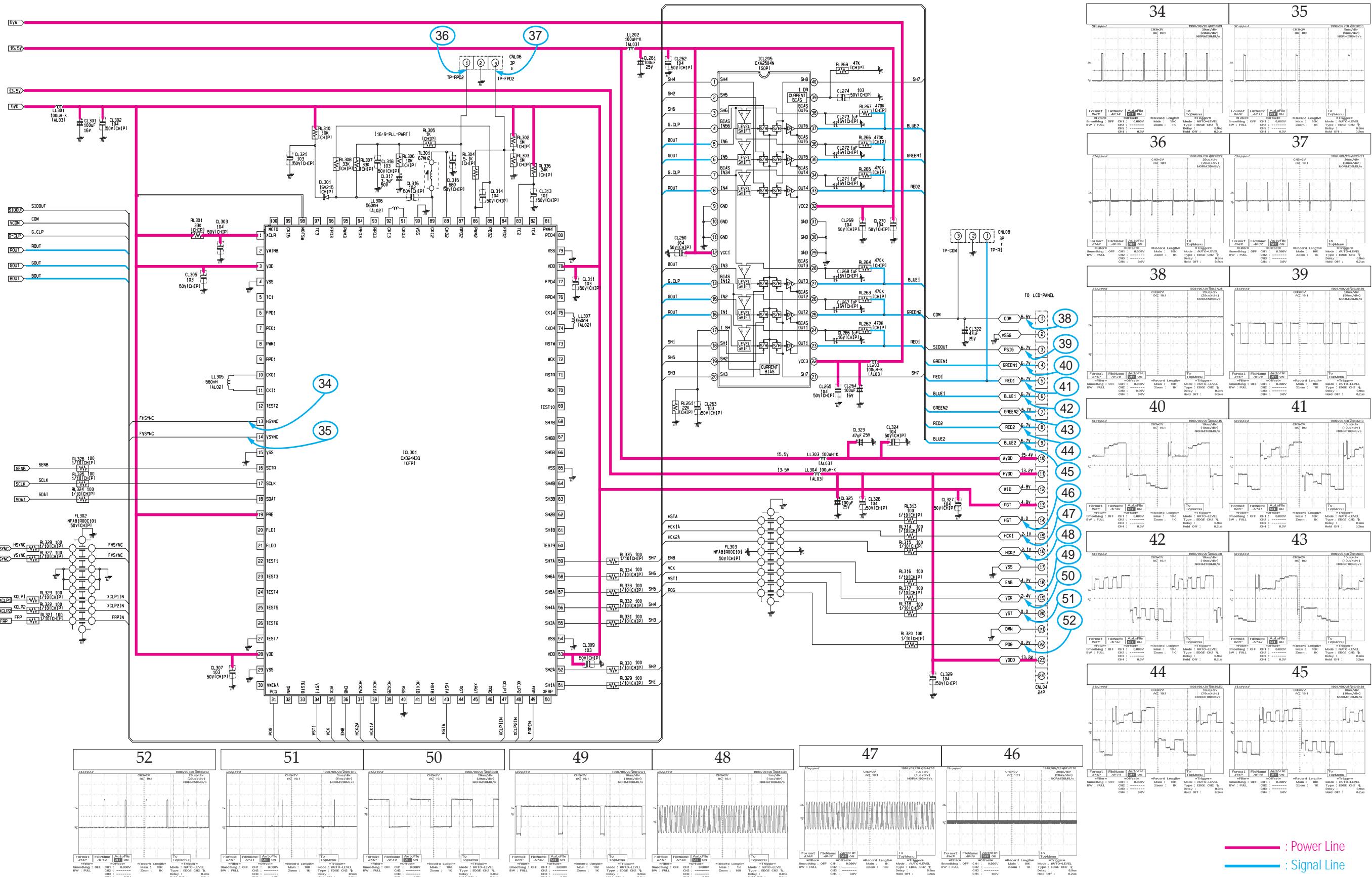
## 12-11 CONTROL LCD (1)



## 12-12 CONTROL LCD (2)



## 12-13 CONTROL LCD (3)



Samsung Electronics

## 12-14 MAIN SUB (MASTER/REMOCON/PRE-AMP)

