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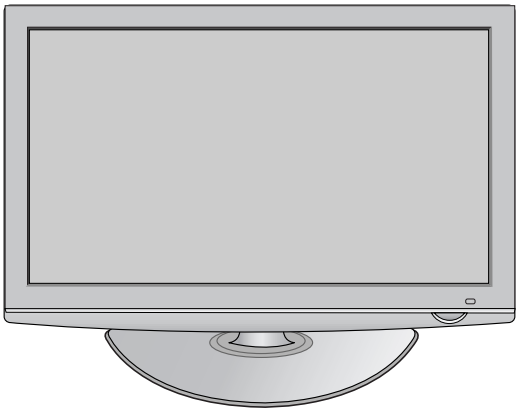
PLASMA TV
SERVICE MANUAL

CHASSIS : PD92A

MODEL : 50PS3000 50PS3000-ZA

CAUTION
BEFORE SERVICING THE CHASSIS,
READ THE SAFETY PRECAUTIONS IN THIS MANUAL.



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PRINTED CIRCUIT DIAGRAM .....

SAFETY PRECAUTIONS

IMPORTANT SAFETY NOTICE

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

General Guidance

An **isolation Transformer should always be used** during the servicing of a receiver whose chassis is not isolated from the AC power line. Use a transformer of adequate power rating as this protects the technician from accidents resulting in personal injury from electrical shocks.

It will also protect the receiver and it's components from being damaged by accidental shorts of the circuitry that may be inadvertently introduced during the service operation.

If any fuse (or Fusible Resistor) in this monitor is blown, replace it with the specified.

When replacing a high wattage resistor (Oxide Metal Film Resistor, over 1W), keep the resistor 10mm away from PCB.

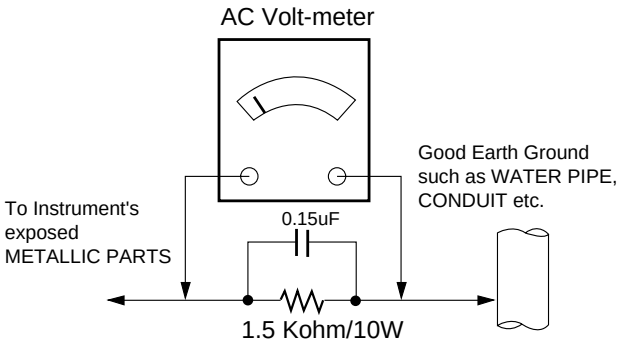
Keep wires away from high voltage or high temperature parts.

Due to high vacuum and large surface area of picture tube, extreme care should be used in **handling the Picture Tube.**
Do not lift the Picture tube by it's Neck.

Leakage Current Cold Check(Antenna Cold Check)
With the instrument AC plug removed from AC source, connect an electrical jumper across the two AC plug prongs. Place the AC switch in the on position, connect one lead of ohm-meter to the AC plug prongs tied together and touch other ohm-meter lead in turn to each exposed metallic parts such as antenna terminals, phone jacks, etc.
If the exposed metallic part has a return path to the chassis, the measured resistance should be between 1MΩ and 5.2MΩ.
When the exposed metal has no return path to the chassis the reading must be infinite.
An other abnormality exists that must be corrected before the receiver is returned to the customer.

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

Leakage Current Hot Check circuit



SPECIFICATIONS

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

v Application Range

This spec is applied to the 42/50” PLASMA TV used PD92A Chassis.

Chassis	Model Name	Market	Brand	Remark
PD92A	50PQ3000-ZA 42PQ3000-ZA 50PQ6000-ZA 42PQ6000-ZA 50PS3000-ZA	UK, German, Italy, Spain, Finland, Austria, Netherlands, Switzerland, Luxembourg, Belgium, Czech, Greece, Morocco, Turkey, Coratia, France, Norway, Denmark, Sweden, Slovenia, Poland, Ukraine, Hungary, Ireland, Portugal, Russia, Serbia, Rumania, Bulgaria, Slovakia, Bosnia, Albania, Kazakstan	LG	

v Specification

Each part is tested as below without special appointment.

1) Temperature : 25±5°C (77±9°F), CST : 40±5
2) Relative Humidity: 65±10%
3) Power Voltage: Standard Input voltage (100-240V~, 50/60Hz)
   * Standard Voltage of each product is marked by models.
4) Specification and performance of each parts are followed each drawing and specification by part number in accordance with SBOM.
5) The receiver must be operated for about 20 minutes prior to the adjustment.

v Test Method

1) Performance : LGE TV test method followed.
2) Demanded other specification
   Safety : CE, IEC specification
   EMC : CE, IEC

Model	Market	Appliance	Remark
50PQ3000-ZA 42PQ3000-ZA 50PQ6000-ZA 42PQ6000-ZA 50PS3000-ZA	UK, German, Italy, Spain, Finland, Austria, Netherlands, Switzerland, Luxembourg, Belgium, Czech, Greece, Morocco, Turkey, Coratia, France, Norway, Denmark, Sweden, Slovenia, Poland, Ukraine, Hungary, Ireland, Portugal, Russia, Serbia, Rumania, Bulgaria, Slovakia, Bosnia, Albania, Kazakstan	Safety : IEC/EN60065 EMI : EN55013 EMS : EN55020	TEST

v Module Specification

(1) 50”

No	Item	Specification	Remark
1	Display Screen Device	50 inch Wide Color Display Module	PDP
2	Aspect Ratio	16:9	
3	PDP Module	PDP50XG2####, RGB Closed Type, Film Filter	
4	Operating Environment	1) Temp. : 0 ~ 40deg 2) Humidity : 20 ~ 80%	LGE SPEC.
5	Storage Environment	3) Temp. : -20 ~ 60deg 4) Humidity : 10 ~ 90%	
6	Input Voltage	AC100-240V~, 50/60Hz	Maker LG

(2) 42”

No	Item	Specification	Remark
1	Display Screen Device	42 inch Wide Color Display Module	PDP
2	Aspect Ratio	16:9	
3	PDP Module	PDP42XG2####, RGB Closed Type, Film Filter	
4	Operating Environment	1) Temp. : 0 ~ 40deg 2) Humidity : 20 ~ 80%	LGE SPEC.
5	Storage Environment	3) Temp. : -20 ~ 60deg 4) Humidity : 10 ~ 90%	
6	Input Voltage	AC100-240V~, 50/60Hz	Maker LG

v Model General Specification

No	Item	Specification	Remark
1	Market	UK, German, Italy, Spain, Finland, Austria, Netherlands, Switzerland, Luxembourg, Belgium, Czech, Greece, Morocco, Turkey, Coratia, France, Norway, Denmark, Sweden, Slovenia, Poland, Ukraine, Hungary, Ireland, Portugal, Russia, Serbia, Rumania, Bulgaria, Slovakia, Bosnia, Albania, Kazakstan	Analog Only
2	Broadcasting system	1) PAL-BG 2) PAL-DK 3) PAL-I, I' 4) DVB T(ID TV) 5) SECAM-L/L'	
3	Receiving system	Analog : Upper Heterodyne Digital : COFDM	
4	Scart Jack(2EA)	PAL, SECAM	
5	Video Input (1EA)	PAL, SECAM, NTSC	4 System : PAL, SECAM,NTSC,PAL60
6	S-Video Input (1EA)	PAL, SECAM, NTSC	4 System : PAL, SECAM,NTSC,PAL60
7	Component Input (1EA)	Y/Cb/Cr, Y/Pb/Pr	
8	RGB Input(1EA)	RGB-PC	
9	HDMI Input(3EA)	HDMI-DTV & SOUND	
10	Audio Input (5EA)	PC Audio, Component(1EA), AV(3EA)	L/R Input(PC 1EA, SCART 2EA, SIDE AV 1EA, Component 1EA)
11	Audio Out(1EA)	SPDIF(1EA)	
12	USB(1EA)	Divx, MP3, JPEG	MP3, JPEG: 42/50PQ3000-ZA DIVX, MP3, JPEG: 42/50PQ6000-ZA

ADJUSTMENT INSTRUCTION

1. Application Range

This spec sheet is applied all of the PDP TV, PD92A chassis.

2. Specification.

(1) Because this is not a hot chassis, it is not necessary to use an isolation transformer. However, the use of isolation transformer will help protect test instrument.
(2) Adjustment must be done in the correct order.
(3) The adjustment must be performed in the circumstance of 25±5°C of temperature and 65±10% of relative humidity if there is no specific designation.
(4) The input voltage of the receiver must keep 100~240V, 50/60Hz.
(5) The receiver must be operated for about 5 minutes prior to the adjustment when module is in the circumstance of over 15°
- In case of keeping module is in the circumstance of 0°C, it should be placed in the circumstance of above 15°C for 2 hours
- In case of keeping module is in the circumstance of below -20°C, it should be placed in the circumstance of above 15°C for 3 hours,.

o After RGB Full White in HEAT-RUN Mode, the receiver must be operated prior to the adjustment.
o Enter into HEAT-RUN MODE
(1) Press the POWER ON KEY on R/C for adjustment.
(2) OSD display and screen display PATTERN MODE.

* Set is activated HEAT run without signal generator in this mode.
* Single color pattern (WHITE) of HEAT RUN MODE uses to check panel.

Caution: If you turn on a still screen more than 20 minutes (Especially digital pattern, cross hatch pattern), an after image may be occur in the black level part of the screen.

Caution: Using 'power on' button of the control R/C, power on TV.

o Auto-control adjustment protocol(RS-232C)

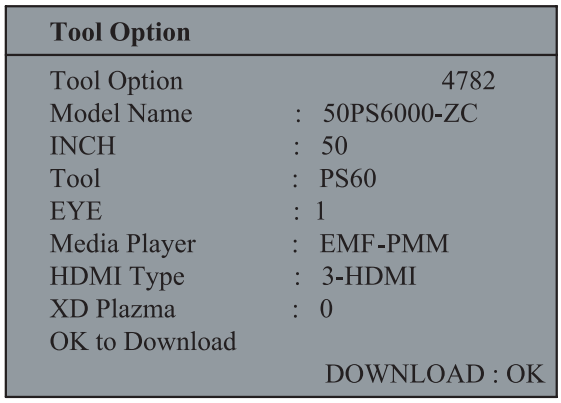
No	Item	CMD 1	CMD 2	Data 0		Remark
1	EDID Download	a	e	1	0	All=0
2	Define model name	a	e	5	1 ~ 9	
3	Download Mode Out	a	e	9	0	

3. Insert Tool OPTION and Model Name Download

(1) Press IN_START key on R/C to insert Tool OPTION
(2) On the "Tool Option 1", Insert Tool Option by a number key
(3) Press the ENTER(ⅴ)

Model Name	Model Option Value
50PG3000-ZA	2669
42PQ3000-ZA	2413
50PG6000-ZA	4718
42PQ6000-ZA	4462
50PQ2000-ZA	621
42PQ2000-ZA	365
50PS3000-ZB	2733
50PS6000-ZC	4782

(4) Press ENTER(ⅴ) again.
(5) Select "OK to Download" by using F/G(VOL +/-) and press G(VOL +)

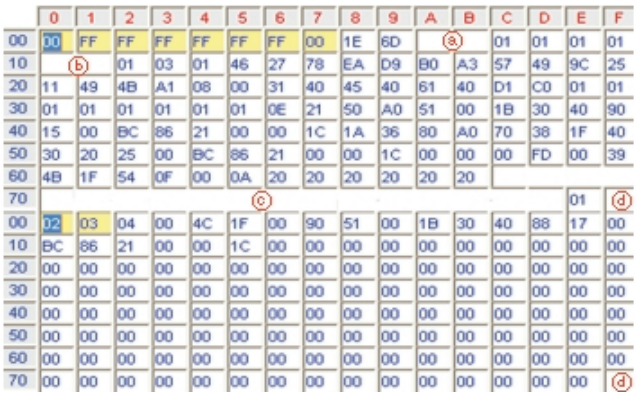


4. EDID(The Extended Display Identification Data) Download

(1) Press the ADJ KEY on R/C and enter EZ ADJUST.
(2) Select “5.EDID D/L” by using D/E(CH +/-) and press ENTER(V).
(3) Select “Start” and press navigation key(G).
(4) EDID download is executed automatically.
(5) Press EXIT key on R/C

(6) EDID DATA

1) Analog RGB



o Detail EDID Options are below (ⓐ, ⓑ, ⓒ, ⓓ)

ⓐ Product ID

MODEL NAME	Product ID	Product ID	
		HEX	EDID Table
42PQ3000	40432	9DF0	F09D
42PQ6000	40430	9DEE	EE9D
50PQ3000	50249	C449	49C4
50PQ6000	50247	C447	47C4
42PQ2000	40466	9E12	129E
50PQ2000	50275	C463	63C4
50PS3000	50277	C465	65C4
50PS6000	50279	C467	67C4

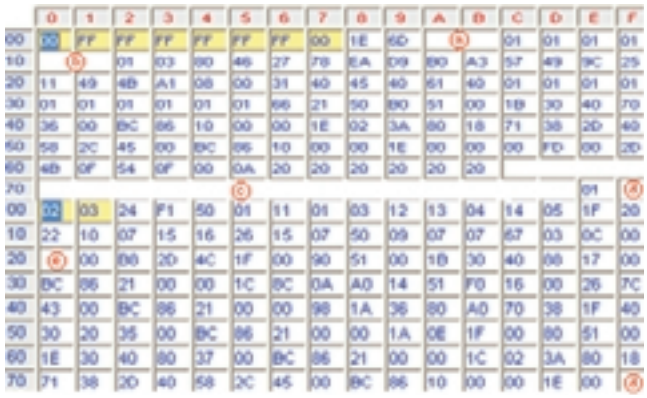
ⓑ Week, Year
=> Controlled on production line:
ex) Week: ‘03’ -> ‘03’
Year: ‘2006’ -> ‘10’

ⓒ Model Name(Hex)

MODEL NAME	Model Name(Hex)
LG TV	000000FC004C472054560A20202020202020

ⓓ Checksum: Changeable by total EDID data.

2) HDMI



o Detail EDID Options are below (ⓐ, ⓑ, ⓒ, ⓓ, ⓔ)

ⓐ Product ID

MODEL NAME	Product ID	Product ID	
		HEX	EDID Table
42PQ3000	40433	9DF1	F19D
42PQ6000	40431	9DEF	EF9D
50PQ3000	50250	C44A	4AC4
50PQ6000	50248	C448	48C4
42PQ2000	40467	9E13	139E
50PQ2000	50276	C464	64C4
50PS3000	50278	C466	66C4
50PS6000	50280	C468	68C4

ⓑ Week, Year
=> Controlled on production line:
ex) Week: ‘03’ -> ‘03’
Year: ‘2006’ -> ‘10’

ⓒ Model Name(Hex)

MODEL NAME	Model Name(Hex)
LG TV	000000FC004C472054560A20202020202020

ⓓ Checksum: Changeable by total EDID data.

ⓔ Vender ID

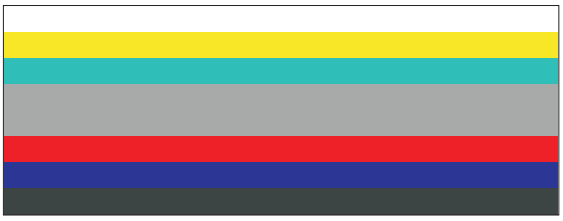
INOUT	HEX
HDMI 1	10
HDMI 2	20
HDMI 3	30

5. ADC Adjustment

5-1. Adjustment of RGB

Auto RGB Gain/Offset Adjustment

(1) Convert to PC in Input-source.
(2) Signal equipment displays
Output Voltage: 700 mVp-p
Impress Resolution XGA (1024 x 768 @ 60Hz)
Model : 60 in Pattern Generator
Pattern : 65 in Pattern Generator (MSPG-925 SERISE)



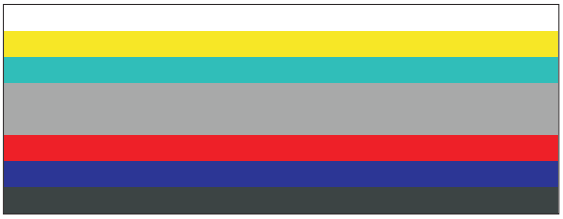
3) Adjust by commanding AUTO_COLOR_ADJUST

5-2. COMPONENT input ADC

Component Gain/Offset Adjustment

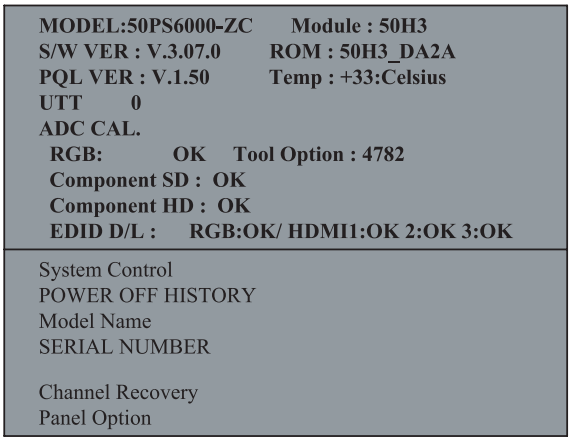
(1) Convert to Component in Input-source.
(2) Signal equipment displays
Impress Resolution 480i
MODEL: 209 in Pattern Generator(480i Mode)
PATTERN : 65 in Pattern Generator(MSPG-925 SERISE)

Impress Resolution 1080i
MODEL: 223 in Pattern Generator(1080i Mode)
PATTERN: 65 in Pattern Generator(MSPG-925 SERISE)



5-3. Confirmation

Press 'InStart' Key on Factory SVC Remote Controller, It is possible to check ADC & EDID ADJ



Caution: Each PCB assembly must be checked by check JIG set.
(Because power PCB Assembly damages to PDP Module, especially be careful)

6. POWER PCB Assembly Voltage Adjustment (Va, Vs voltage Adjustment)

6-1. Test Equipment: D.M.M 1EA

6-2. Connection Diagram for Measuring:

Refer to fig.1

6-3. Adjustment Method

(1) Va adjustment

1) Connect + terminal of D. M.M. to Va pin of P811, connect - terminal to GND pin of P811.
2) After turning VR901,voltage of D.M.M adjustment as same as Va voltage which on label of panel right/top (deviation; ±0.5V)

(2) Vs adjustment

1) Connect + terminal of D. M..M. to Vs pin of P811, connect -terminal to GND pin of P811.
2) After turning VR951, voltage of D.M.M adjustment as same as Vs voltage which on label of panel right/top (deviation ; ±0.5V)

7. Download Serial Number (RS-232C)

(1) Press "Power on" key of service R/C.(Baud rate : 115200 bps)
(2) Connect RS232 Signal Cable to RS-232 Jack.
(3) Write Serial number by use RS-232.
(4) Must check the serial number at the Diagnostics of SET UP menu.
(Refer to below '6.SET INFORMATION').

8. Adjustment of White Balance

8-1. Required Equipment

(1) Remote controller for adjustment
(2) Color Analyzer (CS-1000, CA-100,100+,CA-210 or same product) : CH 10 (PDP)
[Please adjust CA-210, CA-100+ by CS-1000 before measuring

(3) Auto W/B adjustment instrument(only for Auto adjustment)
(4) 9 Pin D-Sub Jack(RS232C) is connected to the AUTO W/B EQUIPMENT.

8-2. AUTO White Balance Process

Before Adjust of White Balance, Please press POWER ONLY key
Adjust Process will start by execute RS232C Command

o Color temperature standards according to CSM and Module

CSM	PLASMA	Remark
Cool	11000K	
Medium	9300K	
Warm	6500K	

o CS-1000/CA-100+/CA-210(CH 10) White balance adjustment coordinates and color temperature.

CSM	Color Coordinate		Temp	±Color Coordinate
	x	y		
Cool	0.276	0.283	11,000K	0.002
Medium	0.285	0.293	9,300K	0.002
Warm	0.313	0.329	6,500K	0.002

8-3. Manual W/B Process (using adjusts Remote control)

Please Adjust in AV 1 MODE, Turn off Energy Saving Mode.

(1) Enter “PICTURE RESET” on Picture Mode, then turn off Fresh Contrast and Fresh colour in Advanced Control
(2) After enter Service Mode by pushing “ADJ” key,
(3) Enter White Pattern off of service mode, and change off -> on.
(4) Enter “W/B ADJUST” by pushing “G” key at “3. W/B ADJUST”.
(5) Adjust W/B DATA, for all CSM, choose ‘COPY ALL’

[Gain Max Value is 192. So, Never make any Gain Value over 192 and please fix one Value on 192, between R, G and B.

	Min	Tpy	Max
R-GAIN	0	192	192
G-GAIN	0	192	192
B-GAIN	0	192	192

8-4. Auto-control Interface and Directions

(1) Adjust in the place where the influx of light like floodlight around is blocked.
(Illumination is less than 10ux).
(2) Measure and adjust after sticking the Color Analyzer (CA-100+, CA210) to the side of the module.
(3) Aging time
After aging start, keep the Power on (no suspension of power supply) and heat-run over 5 minutes

8-5. Auto Adjustment Map(RS232C)

No	Index	CMD1	CMD2	Set ID	Data
1	Start	w	b	0	00
2	Gain Start	w	b	0	10
3	Gain End	w	b	0	1F
4	Offset Start	w	b	0	20
5	Offset End	w	b	0	2F
6	End	w	b	0	FF
7	Medium R	j	a	0	00~FF
8	Medium G	j	b	0	00~FF
9	Medium B	j	c	0	00~FF
10	Warm R	j	d	0	00~FF
11	Warm G	j	e	0	00~FF
12	Warm B	j	f	0	00~FF
13	Cool R	j	g	0	00~FF
14	Cool G	j	h	0	00~FF
15	Cool B	j	i	0	00~FF

9. Checking the EYE-Q Operation

(1) Press the EYE Key on the adjustment remote controller.
(2) Check the Sensor DATA (It must be under 10) and keep the data longer than 1.5s
(3) Check 'OK'

Green Eye-Check(Factory Mode)	
Sensor Data	9
Power saving mode	1
OK	

(Sensor DATA 0 ~ 4095, Power Saving Mode 0 ~ 12)
[IF you press IN-STAP Button, change Green Eye-check OSD.

10. Set Information(Serial No & Model name)

10-1. Check the Serial Number & Model Name

(1) Push the menu button in DTV mode.
(2) Check the Serial Number
Select the STATION ==> Diagnostics ==> To set

PDP TV Repair Process Index

- Trouble shooting by worst symptom

No.	Symptom (L)	Symptom (M)	Page	Remark
1	A. Picture Problem	No Picture/Sound OK	1	
2		No Picture/No sound	2	
3		Mal-discharge/Noise/dark picture	3	
4		Picture broken/Freezing	4	
5		Vertical bar/ Horizontal Bar	5	
6	B. Power Problem	No Power (Not turn on)	6	
7		Turn off (Instant, under watching)	7	
8	C. Sound Problem	No sound/ Sound distortion	8	
9	E. General function Problem	Remote control & Local switch checking	9	

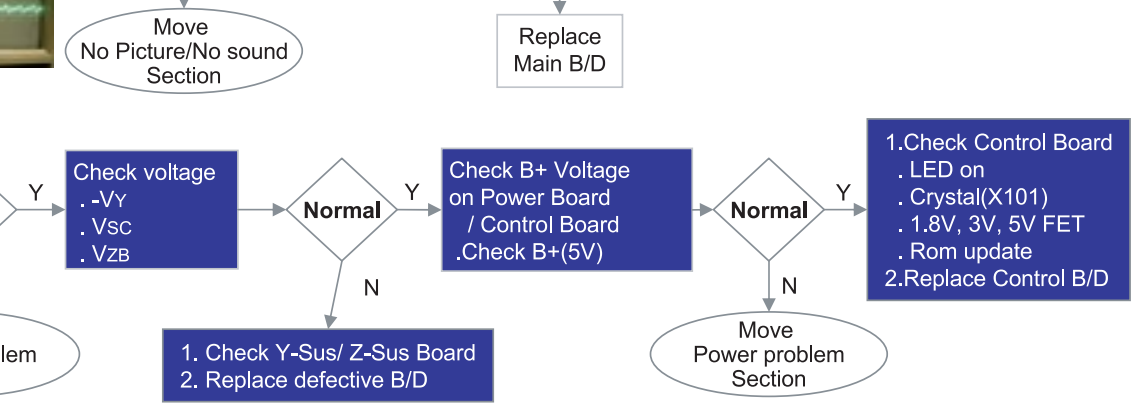
First of all, Check whether there is SVC Bulletin in GCSC System for these model.

Repair Process

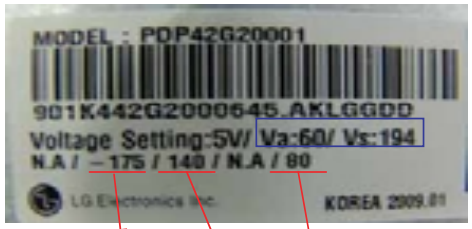
PDP TV	Symptom	A. Picture Problem	Making	2009. 2 . 1	
		No Picture/Sound OK	Revision		1/9

First of all, Check whether all of cable between board was inserted properly or not.
(Main B/D<->Power B/D, Power B/D<->Y-sus B/D,Y-Sus B/D<->Z-Sus B/D,LVDS Cable,Speaker Cable,IR B/D Cable,,,)

<SVC R/C & Pattern>

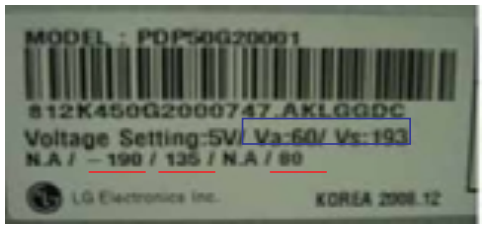


※ Refer to the Module label for each voltage



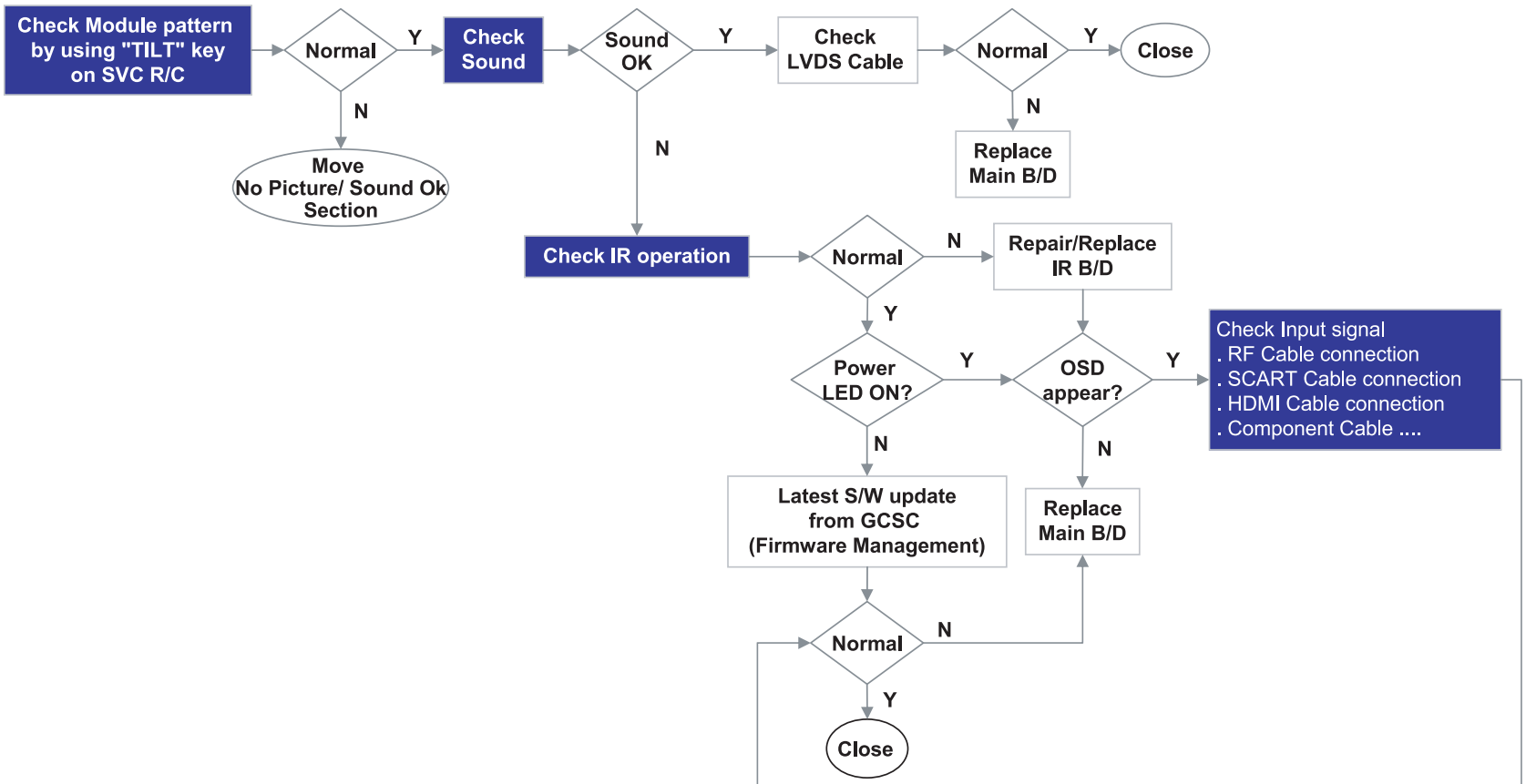
-VY VSC VZB

1



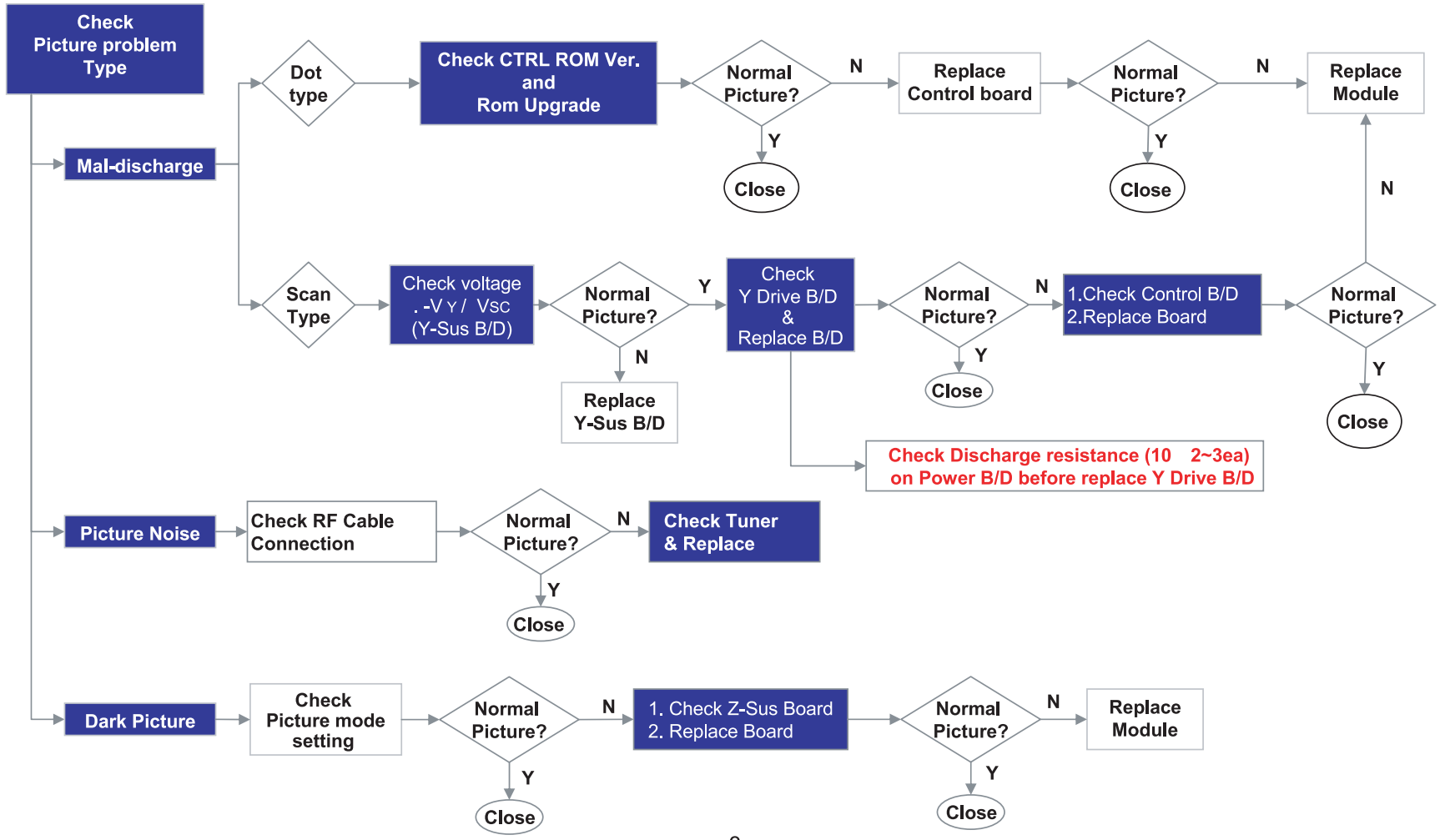
Repair Process

PDP TV	Symptom	A. Picture Problem	Making	2009. 2 . 1	
		No Picture/No Sound	Revision		2/9



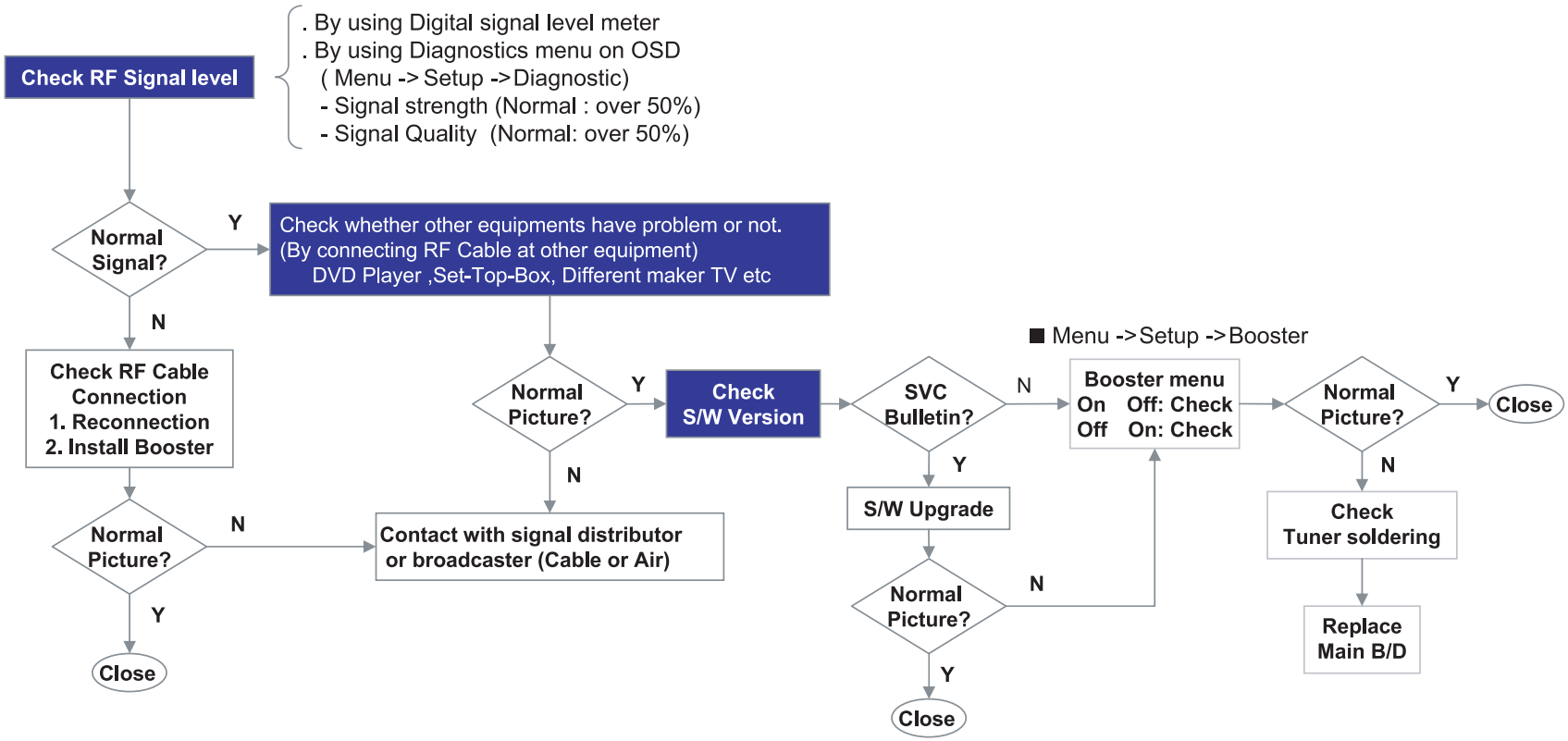
Repair Process

PDP TV	Symptom	A. Picture Problem	Making	2009. 2 . 1	
		Mal-discharge/Noise/dark picture	Revision		3/9



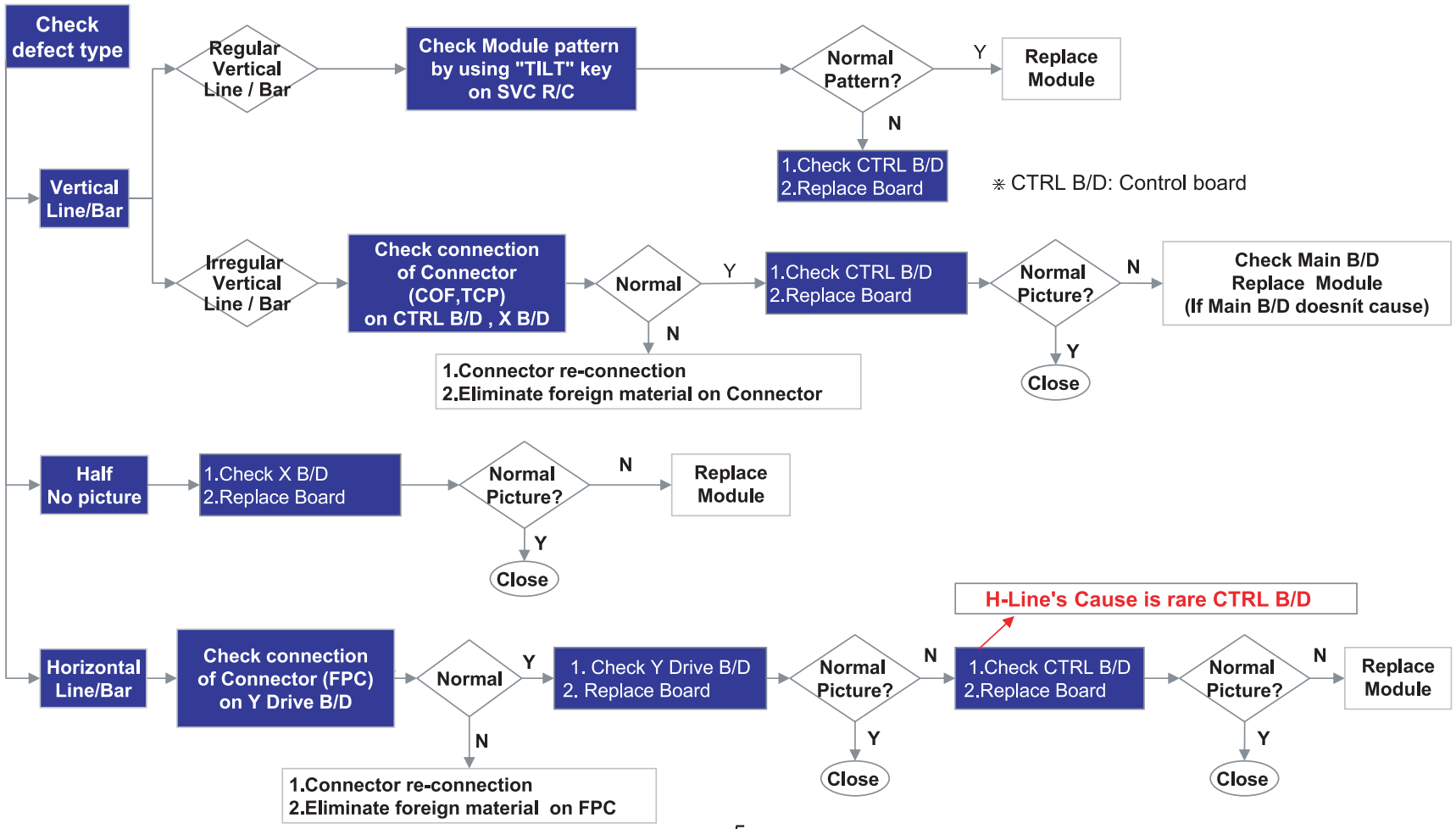
Repair Process

PDP TV	Symptom	A. Picture Problem	Making	2009. 2 . 1	
		Picture broken/Freezing	Revision		4/9



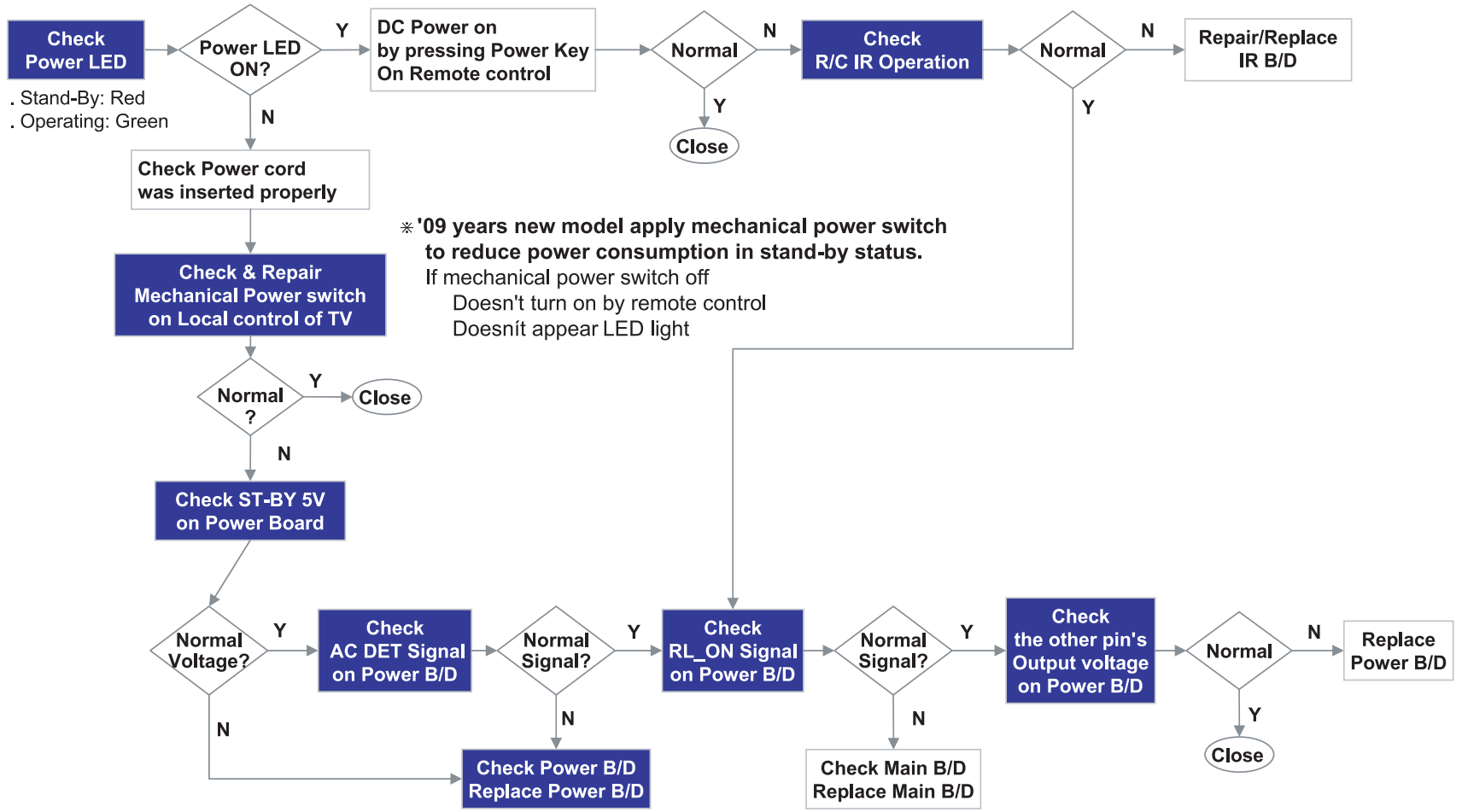
Repair Process

PDP TV	Symptom	A. Picture Problem	Making	2009. 2 . 1	
		Vertical bar/ Horizontal Bar	Revision		5/9



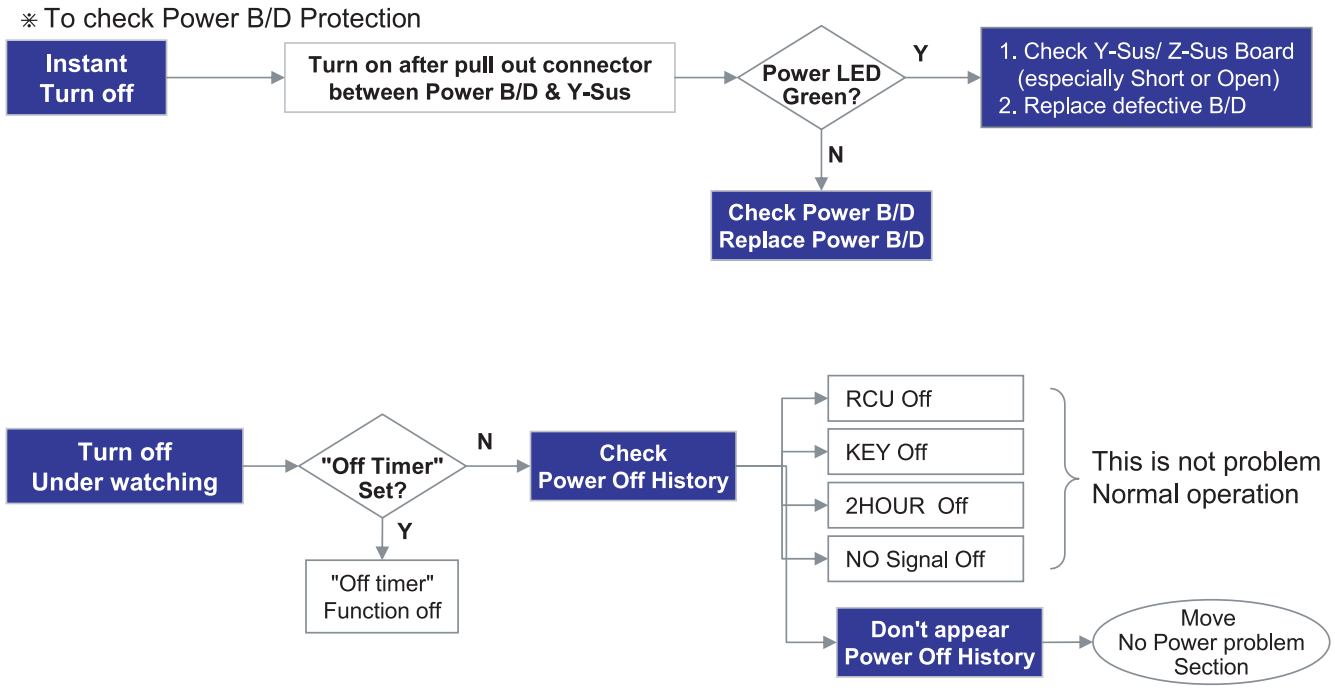
Repair Process

PDP TV	Symptom	B. Power Problem	Making	2009. 2 . 1	
		No Power (Not turn on)	Revision		6/9



Repair Process

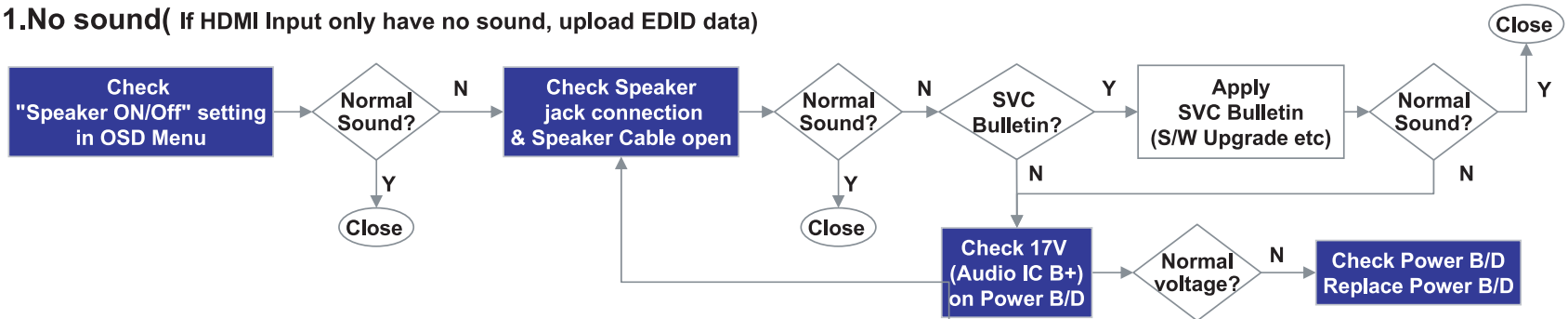
PDP TV	Symptom	B. Power Problem	Making	2009. 2 . 1	
		Turn off (Instant, under watching)	Revision		7/9



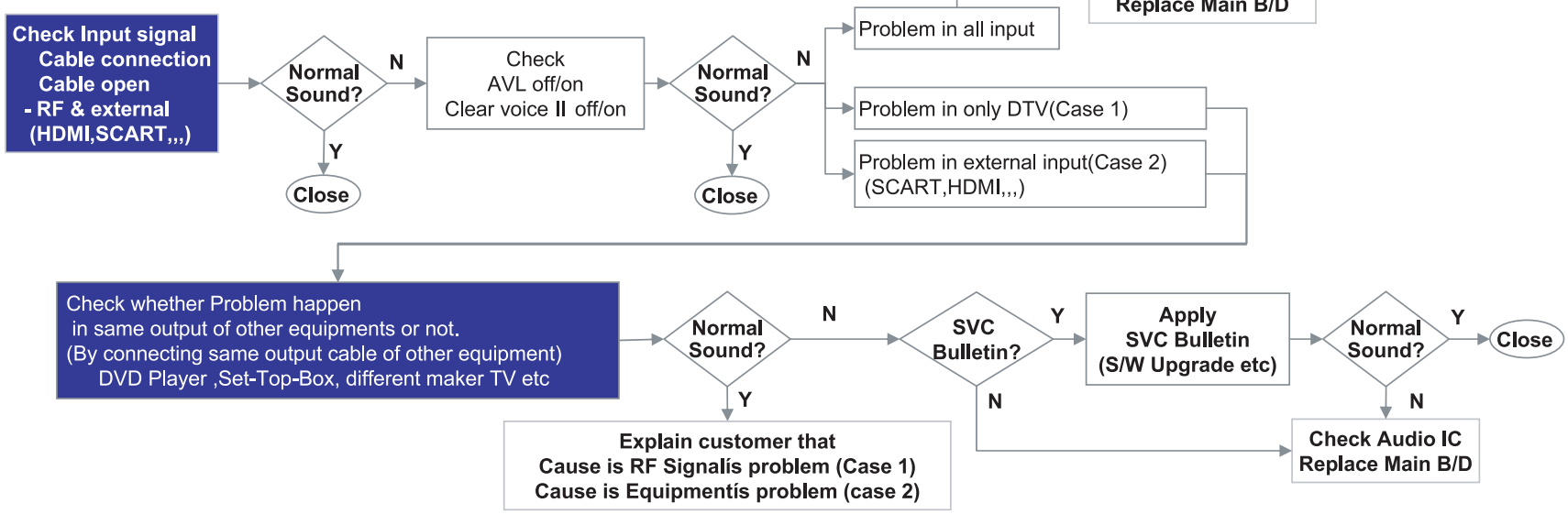
Repair Process

PDP TV	Symptom	C. Sound Problem	Making	2009. 2 . 1	
		No sound/ Sound distortion	Revision		8/9

1.No sound(If HDMI Input only have no sound, upload EDID data)



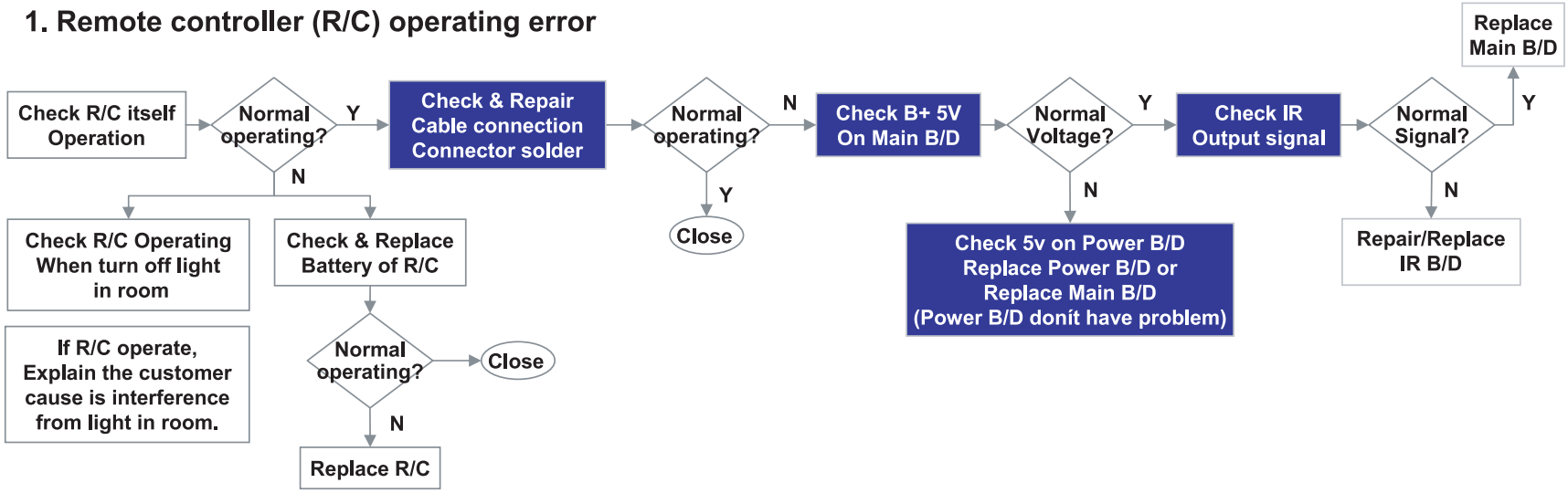
2.Sound distortion & sound drop



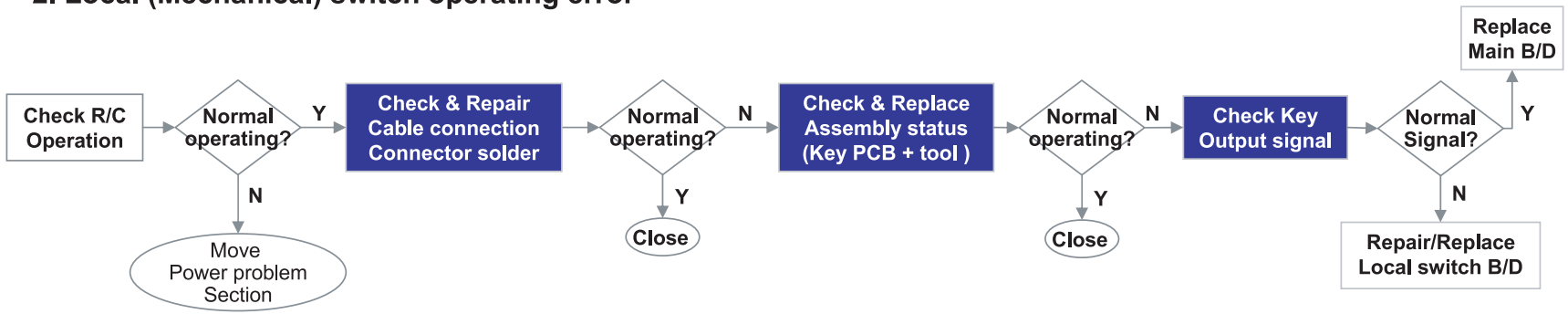
Repair Process

PDP TV	Symptom	D. General Function Problem	Making	2009. 2 . 1	
		Remote control & Local switch checking	Revision		9/9

1. Remote controller (R/C) operating error



2. Local (Mechanical) switch operating error

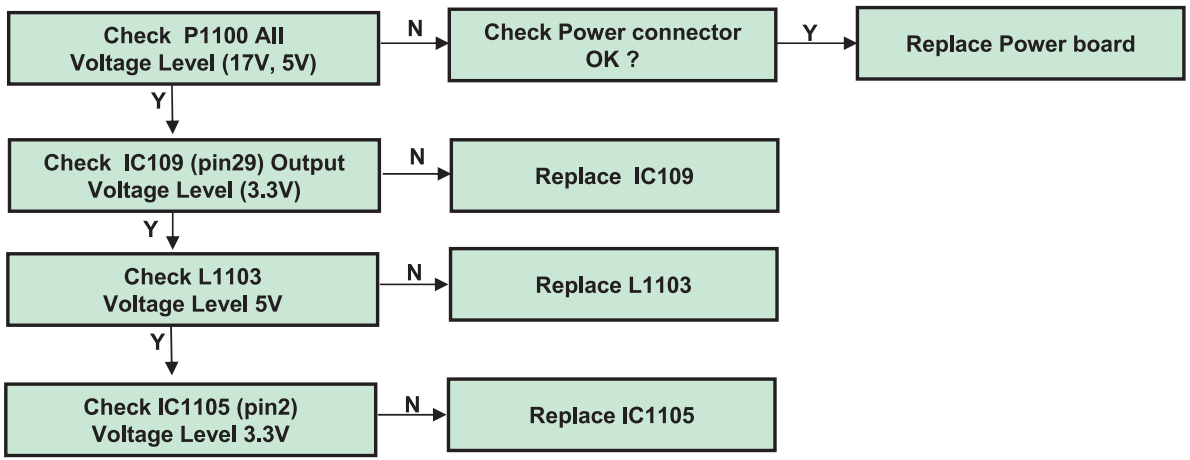


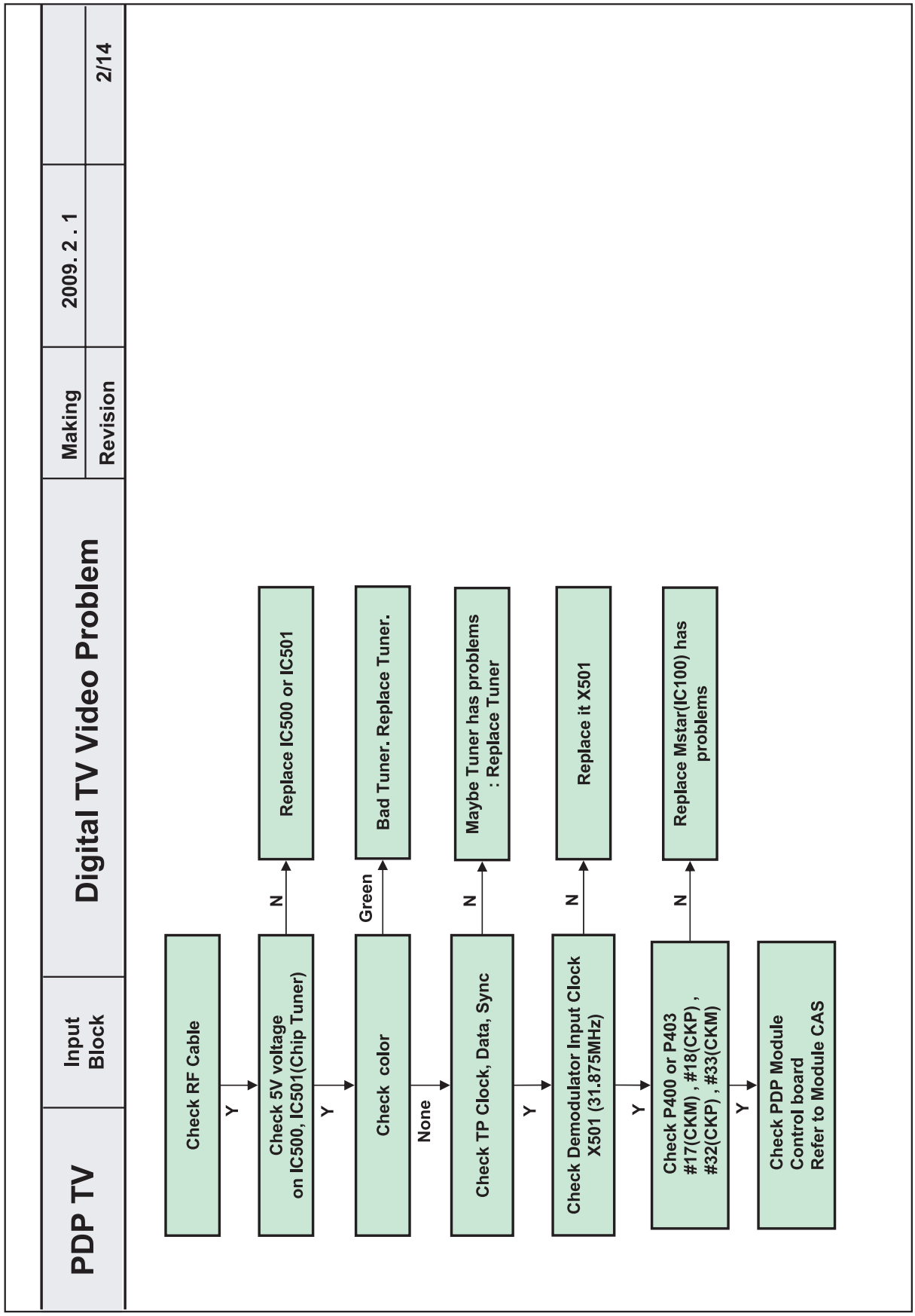
PDP TV Repair Process Index

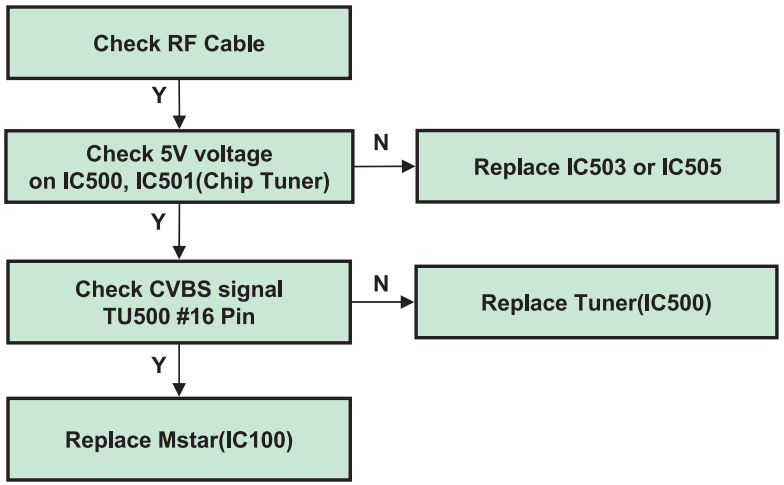
- Trouble shooting by input block (Component level check)

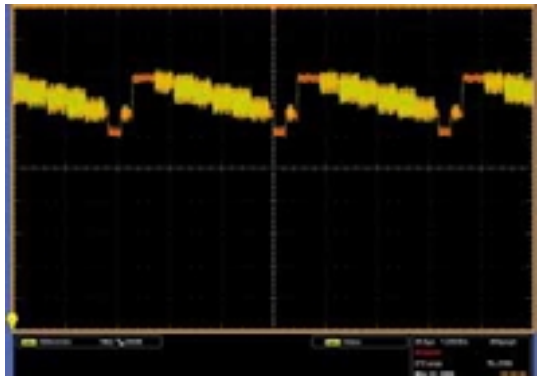
No.	Symptom (L)	Input Block	Page	Remark
1	Pow er Problem	Power-up Boot fail	1	
2	Video Probelm	Digital TV	2	
3		Analog TV	3	
4		Component	4	
5		RGB(D-SUB)	5	
6		AV(Scart / CVBS/ S-Video)	6	
7		HDMI	7	
8	Audio Problem	All Input	8	
9		Digital TV / HDMI	9	
10		Analog TV	10	
11		Component / AV / RGB	11	
12		Optical Audio	12	
13	USB Problem	USB Problem	13	
14	No OSD	All Input	14	

PDP TV	Symptom	Power-Up Boot Fail	Making	2009. 2 . 1	
			Revision		1/14



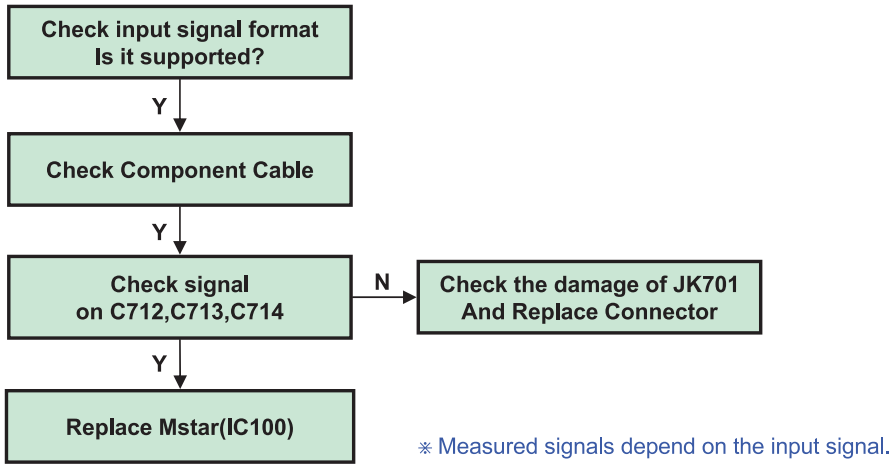






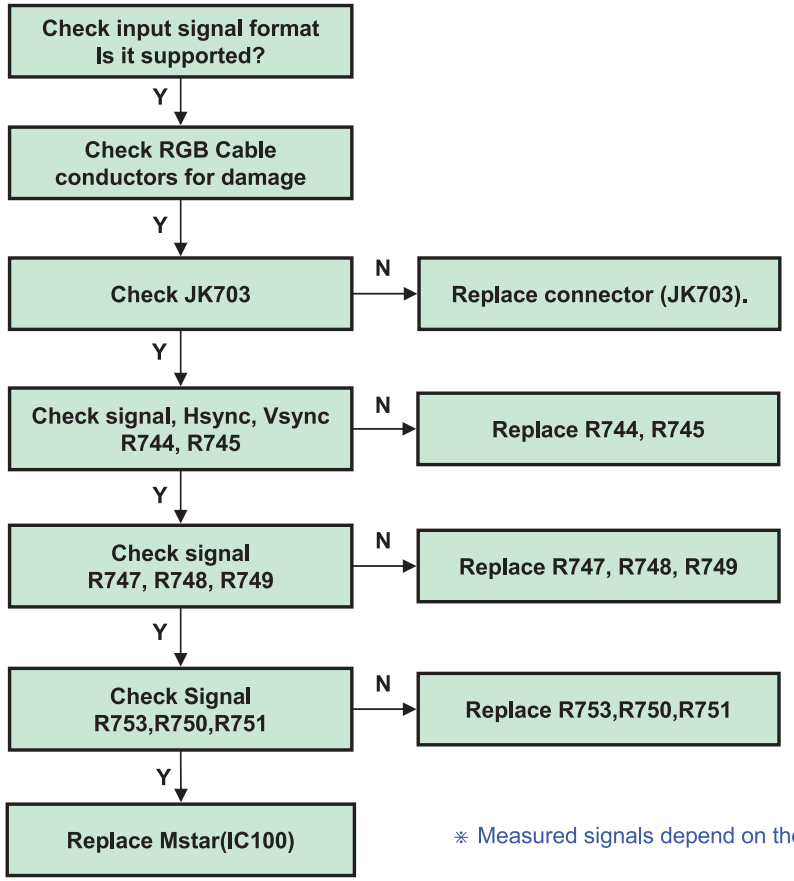
< CVBS waveform ñ sample >
- Defend on the input signal.

PDP TV	Input Block	Component Video Problem	Making	2009. 2 . 1	
			Revision		4/14

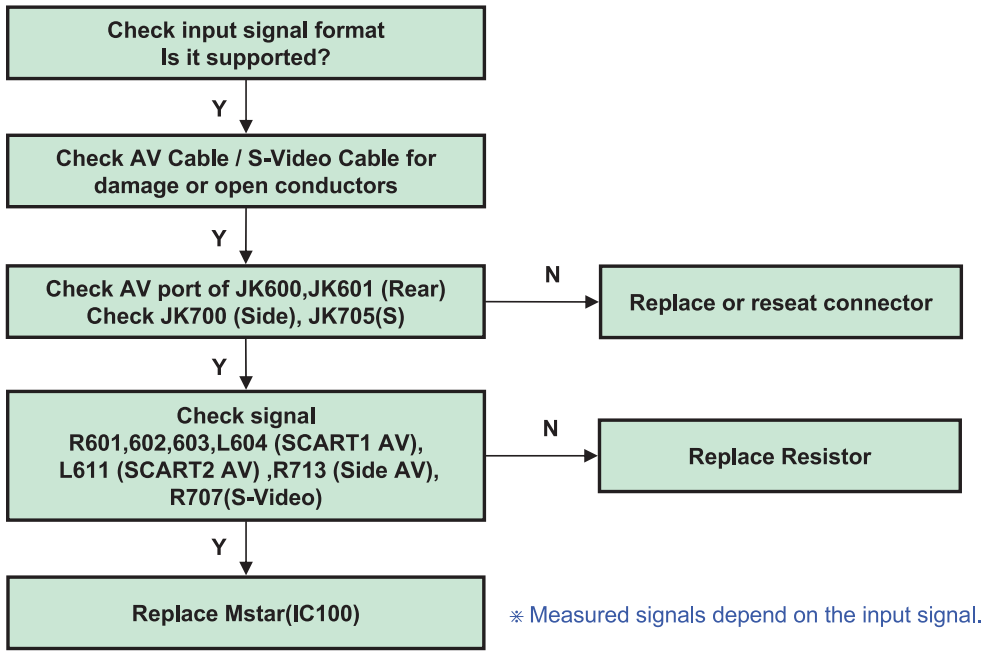


※ Measured signals depend on the input signal.

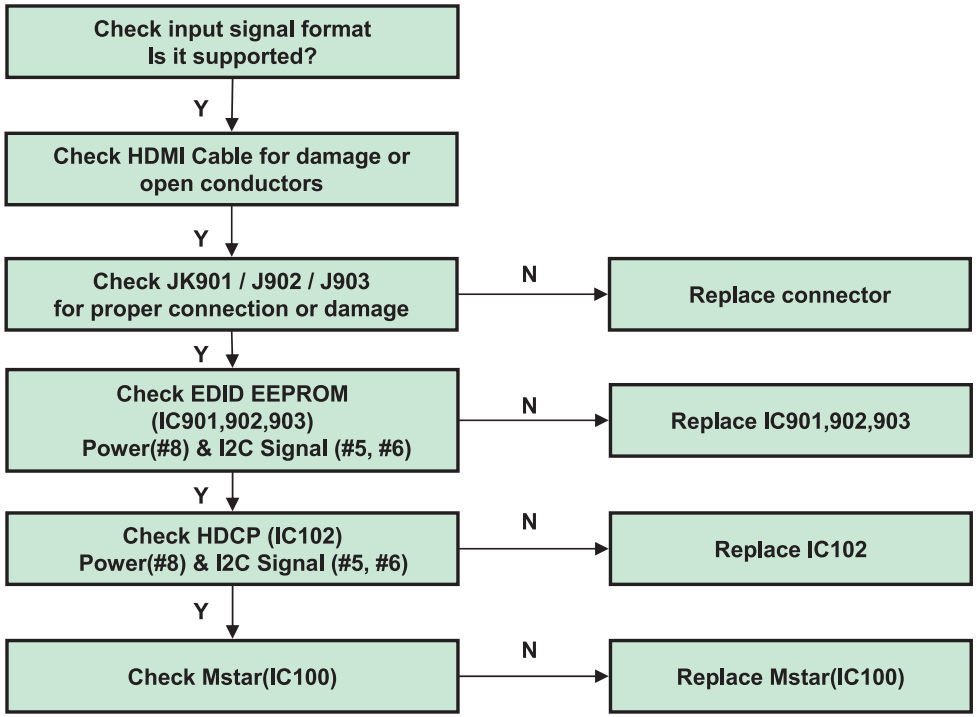
PDP TV	Input Block	RGB(D-Sub) Video Problem	Making	2009. 2 . 1	
			Revision		5/14

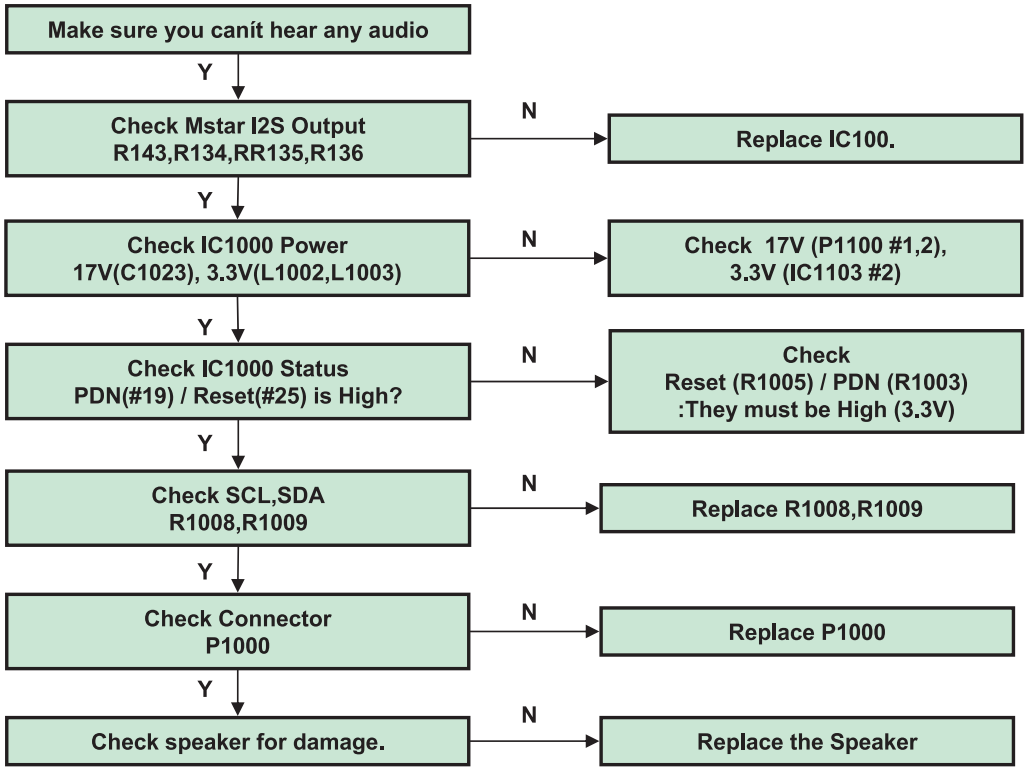


※ Measured signals depend on the input signal.

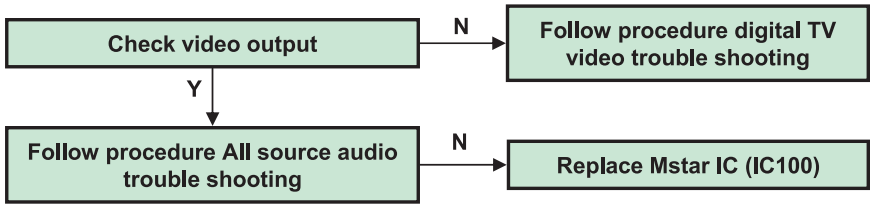


※ Measured signals depend on the input signal.

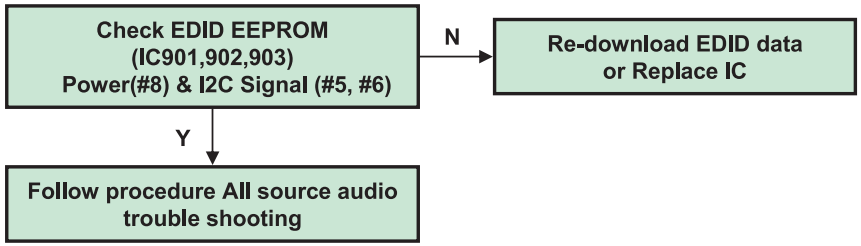


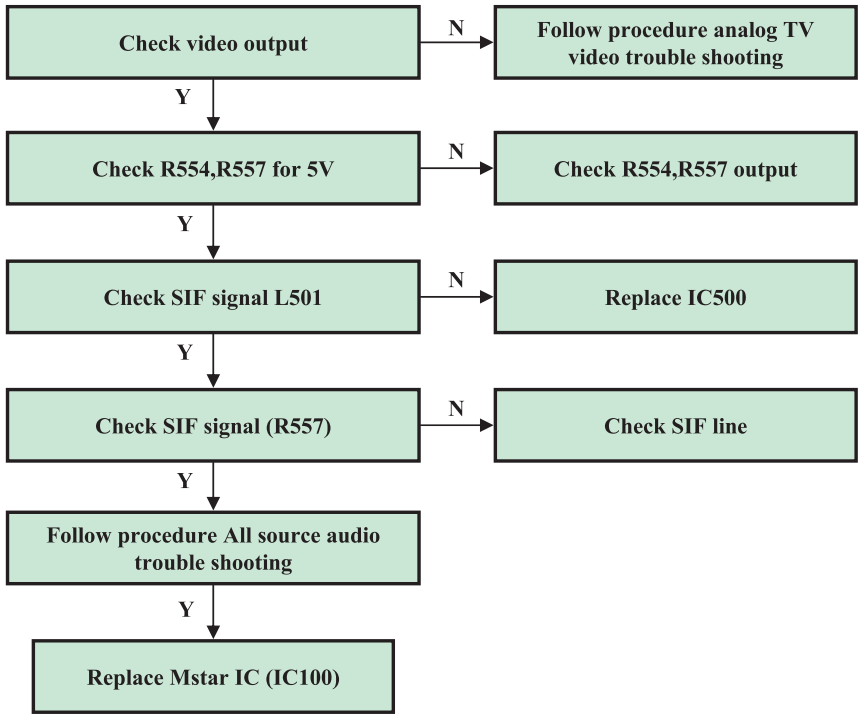


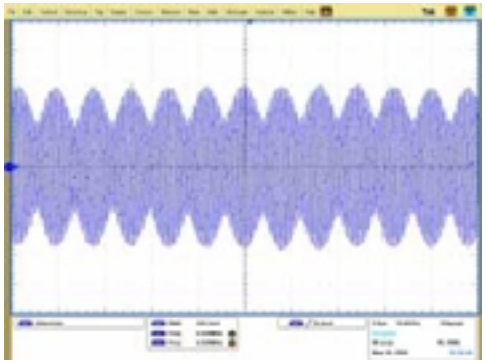
Digital TV



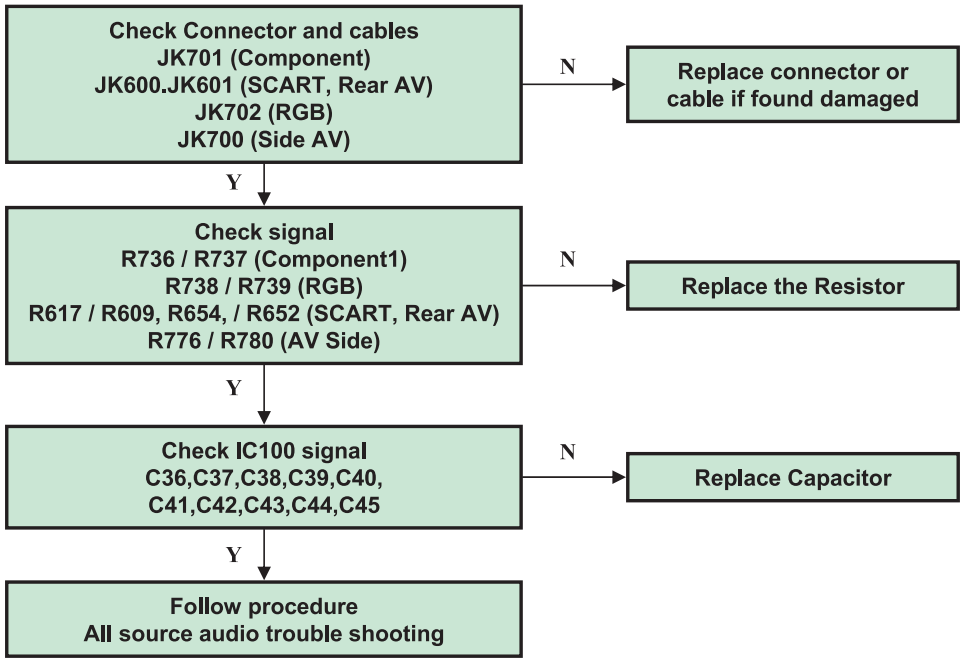
HDMI

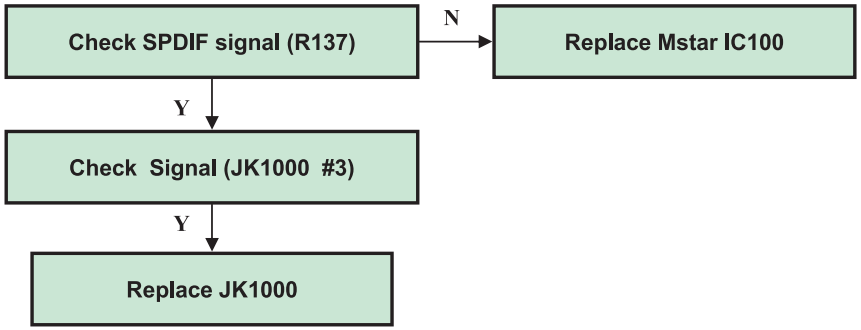


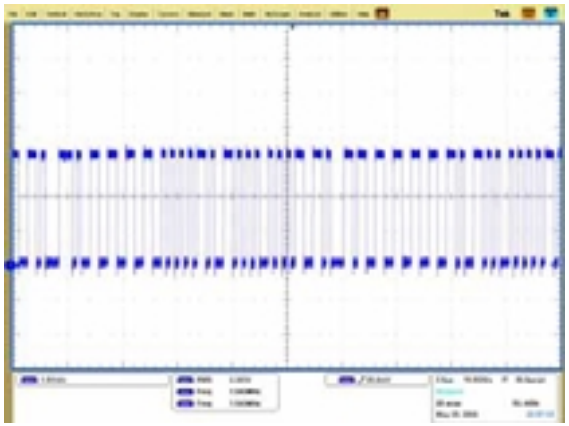




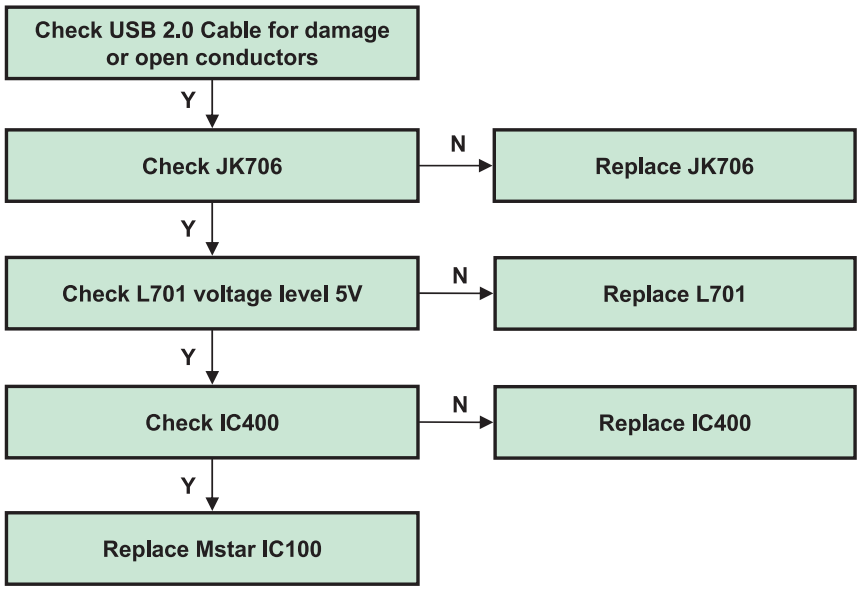
< SIF waveform ñ sample >
- Defend on the input signal.



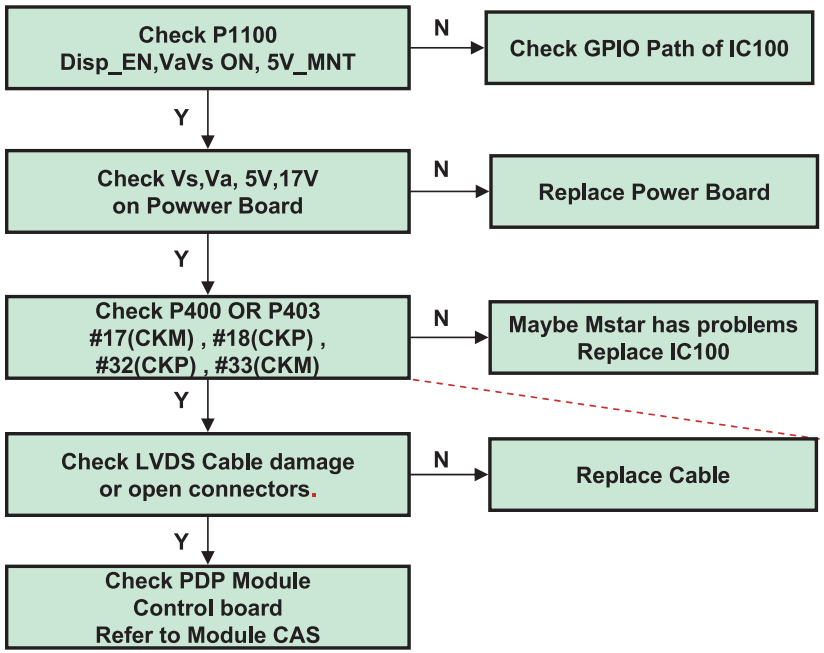


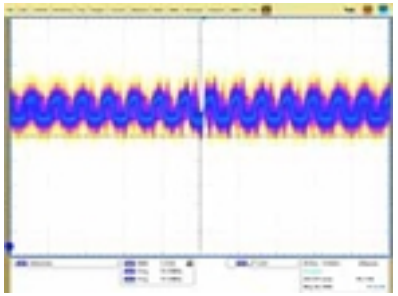


< SPDIF waveform ñ sample >
- Defend on the input signal.



- **Exception**
  - **USB power could be disabled by inrushing current**
  - **In this case, remove the device and try to reboot the TV (AC power off/on)**

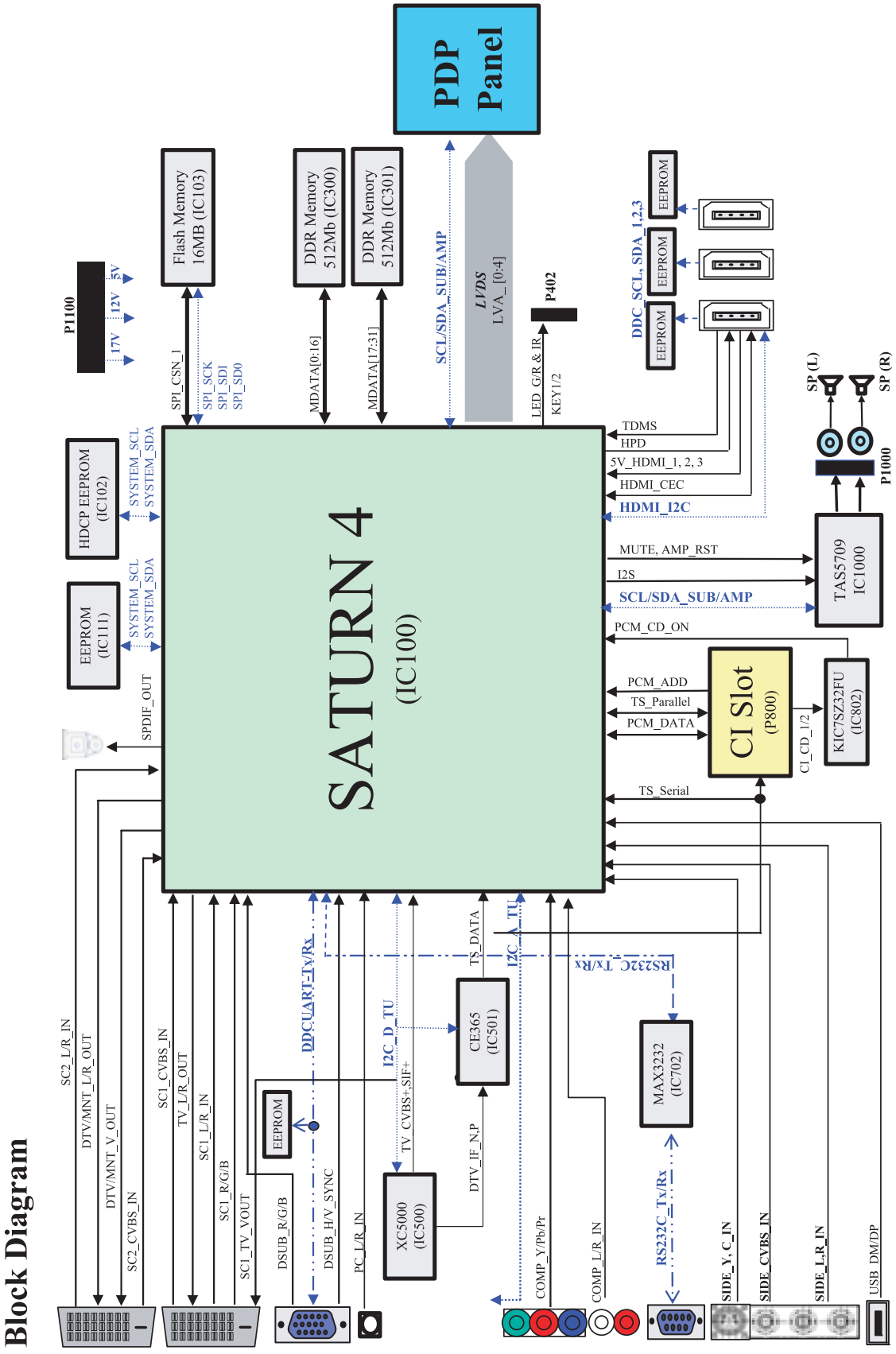




It should satisfy the Pixel Clock on CAS.

BLOCK DIAGRAM

Block Diagram

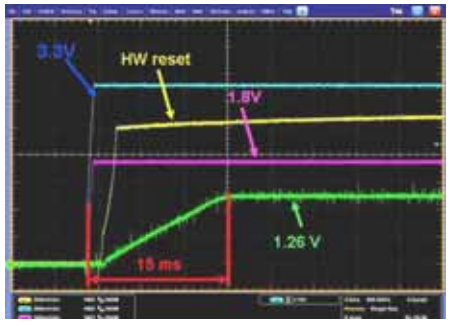


Power Flow Diagram

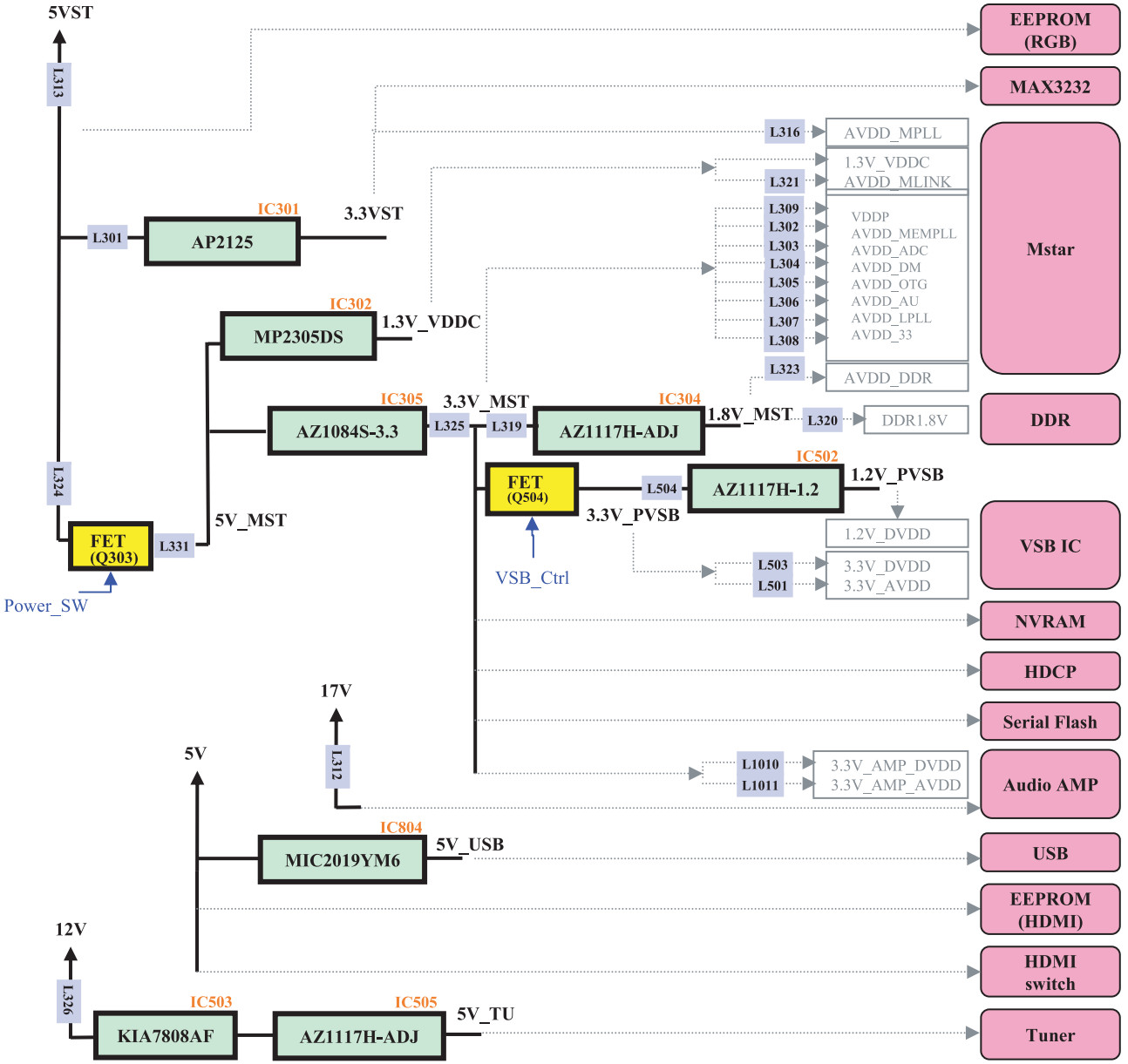
P1			
1	17V	2	17V
3	GND	4	GND
5	12V	6	12V
7	GND	8	GND
9	5V	10	5V
11	5VST	12	5V
13	GND	14	GND
15	GND	16	GND
17	5V DET	18	AC DET
19	RL-ON	20	Vs-ON
21	M5V-ON	22	AUTO_GND
23	5VST	24	KEY-ON
Wafer	SMW200-24C		

GPIO90

P_KEY



<Mstar Power Sequence>



HW Power On Sequence (LGE2872A)

1. HWRESET: Chip Reset; High Reset (Level)
   This pin is suggested to connect to AVDD_MPLL as in Figure-1.
   The VIH is 2V (Typ) +/- 10% (2.2V~1.8V); the VIL is 1.2V (Typ) +/- 10% (1.08V~1.32V).
   The power sequence is as shown in Figure-2.

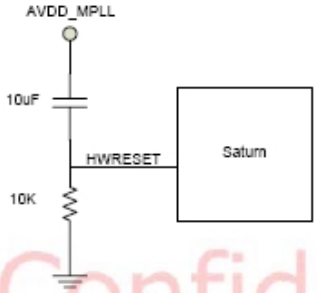


Figure-1 Reset Application Circuit

i. External 3.3V LDO + external 1.8V LDO, the timing is as Figure-2.
ii. The RST waveform must satisfy Figure-2 with parameter as Table1.

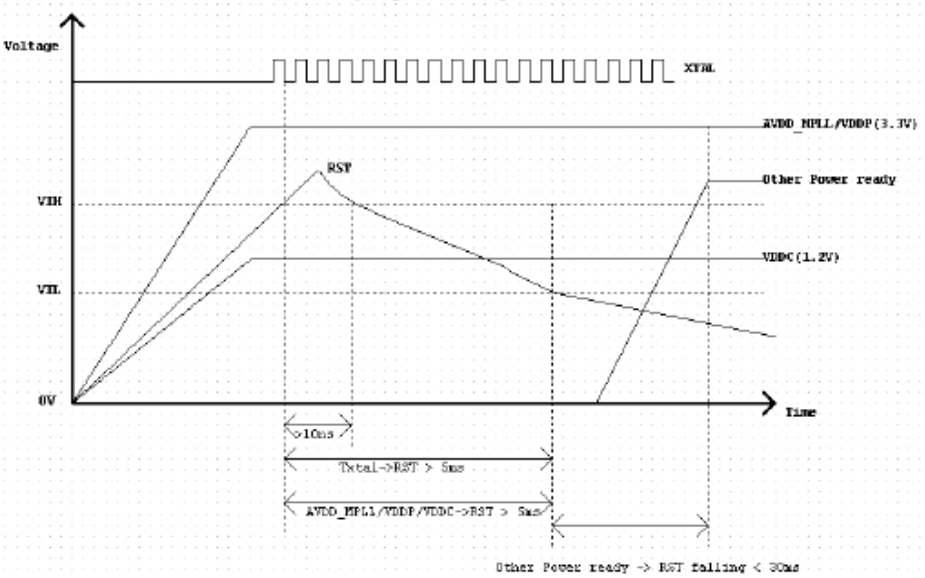
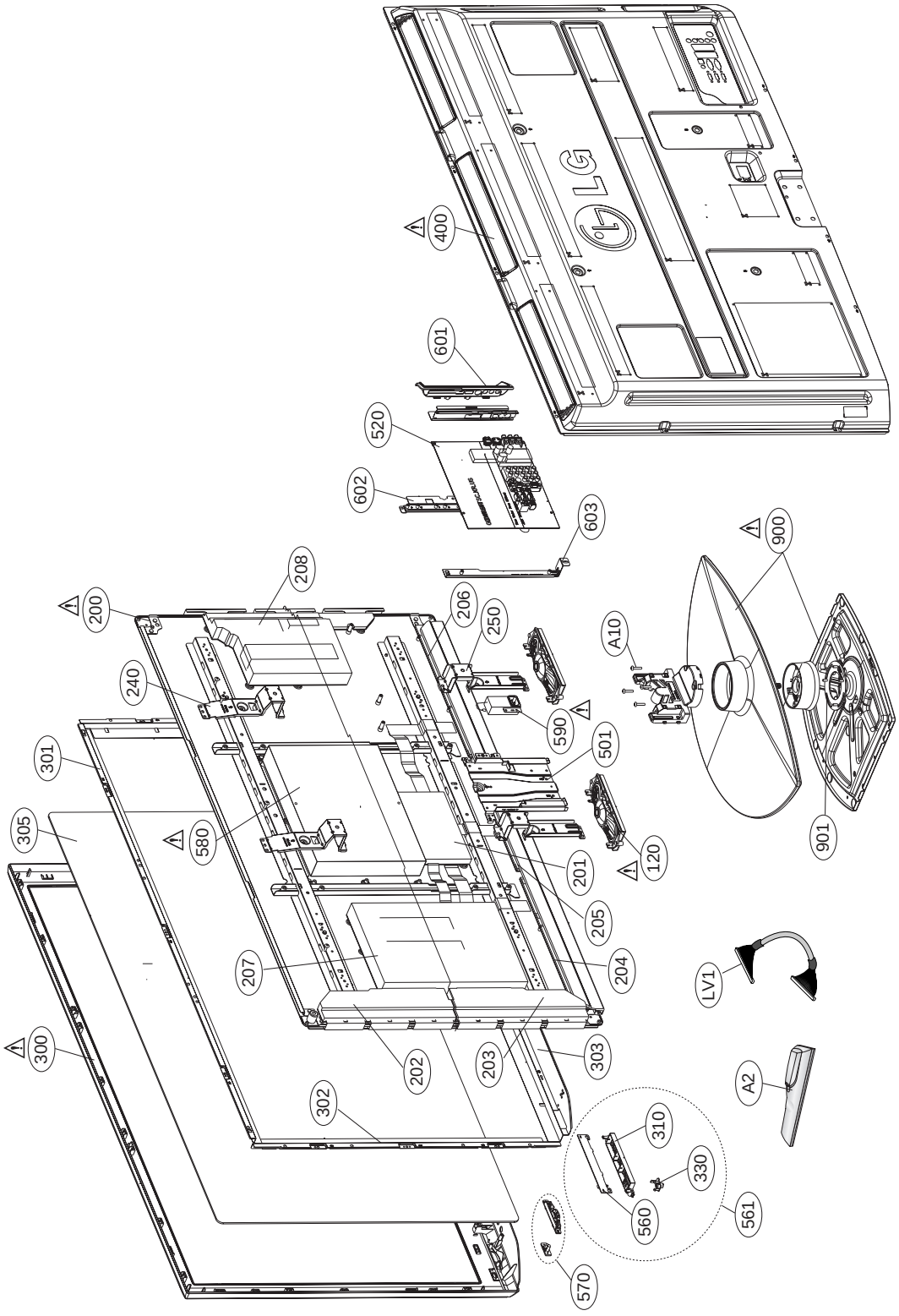


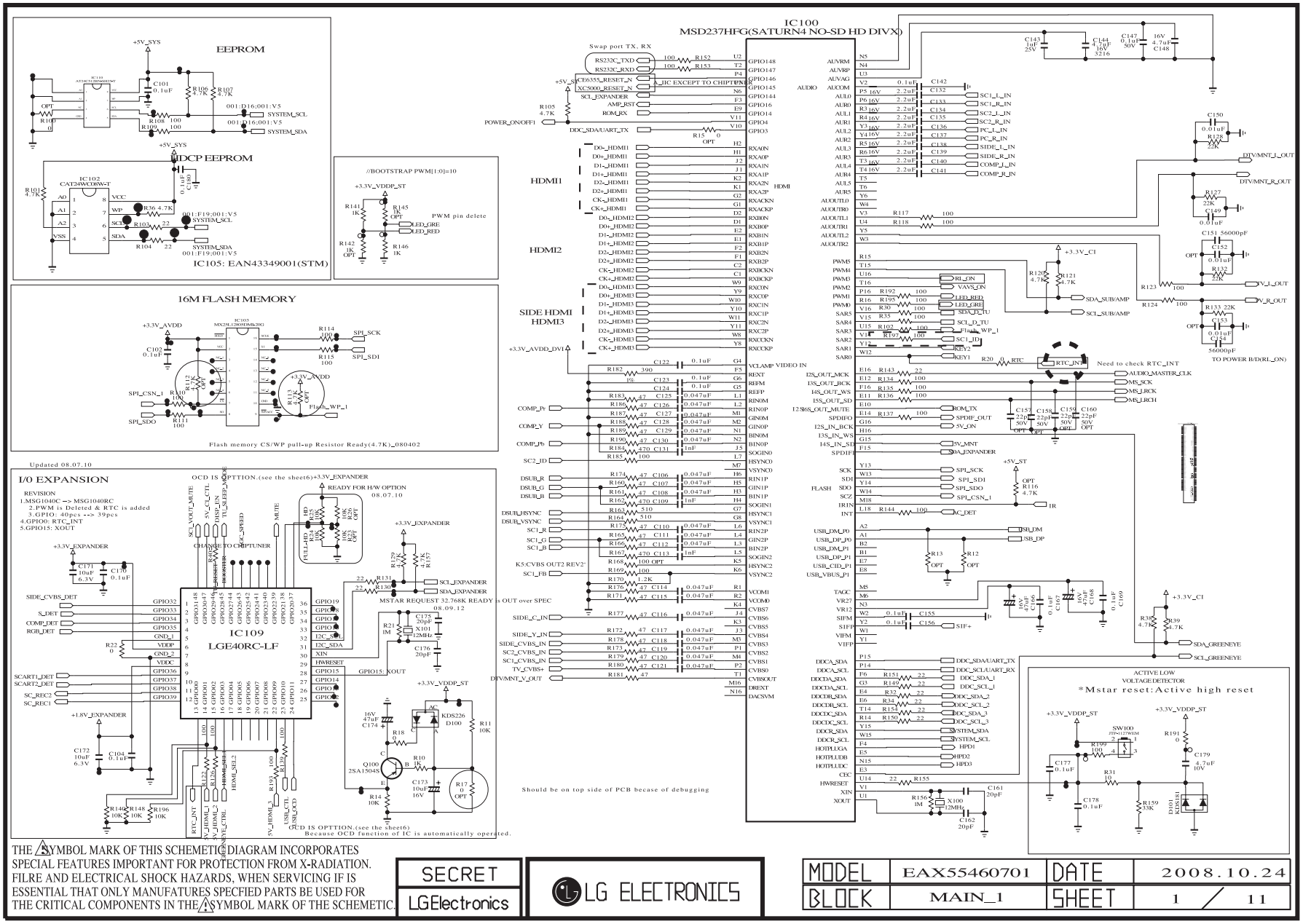
Figure-2 Correct Power Sequence for External 3.3V LDO + External 1.2V LDO

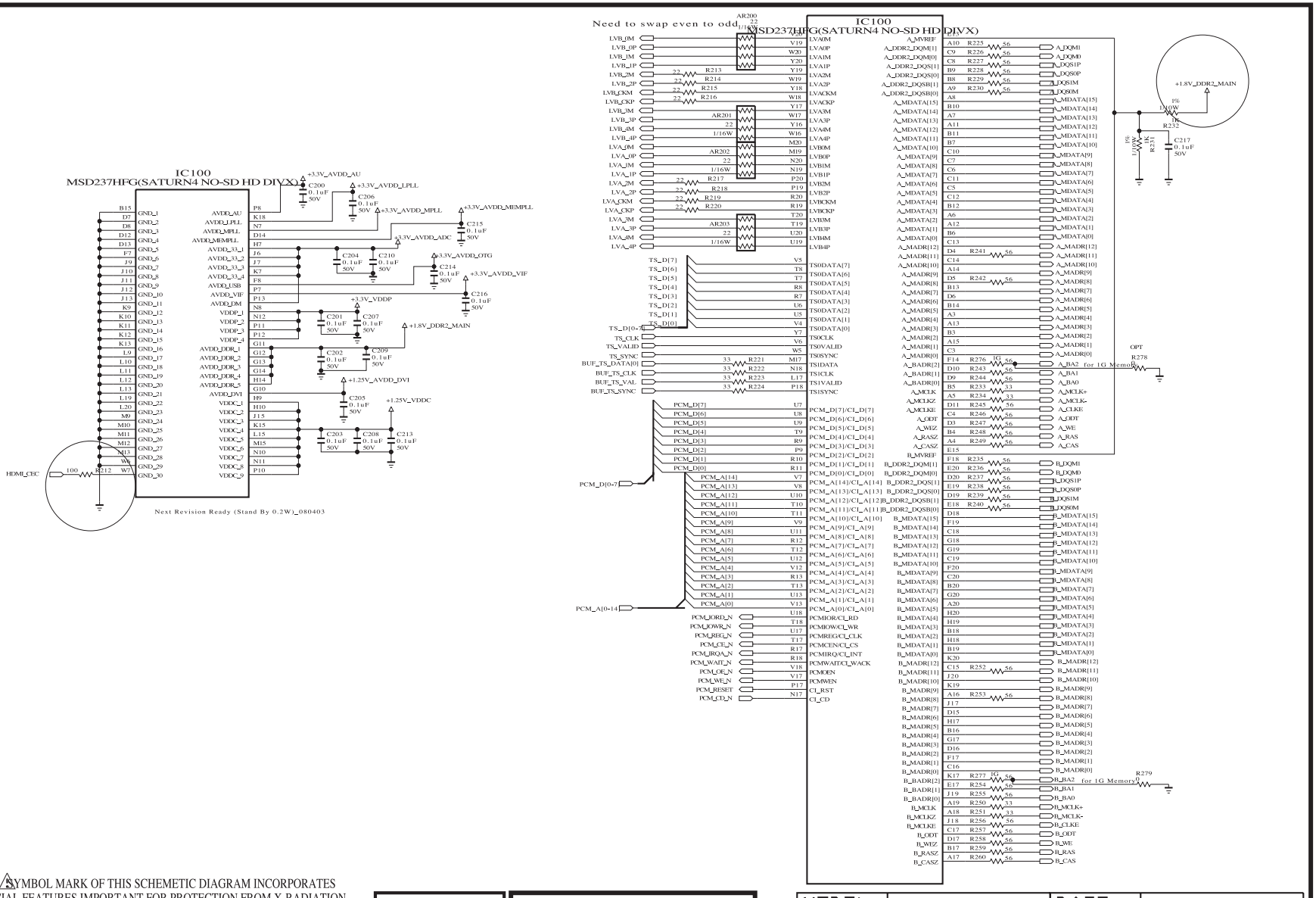
EXPLODED VIEW

IMPORTANT SAFETY NOTICE

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







THE ⚠ SYMBOL MARK OF THIS SCHEMETIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION. FILRE AND ELECTRICAL SHOCK HAZARDS, WHEN SERVICING IF IS ESSENTIAL THAT ONLY MANUFATURES SPECFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE ⚠ SYMBOL MARK OF THE SCHEMETIC.

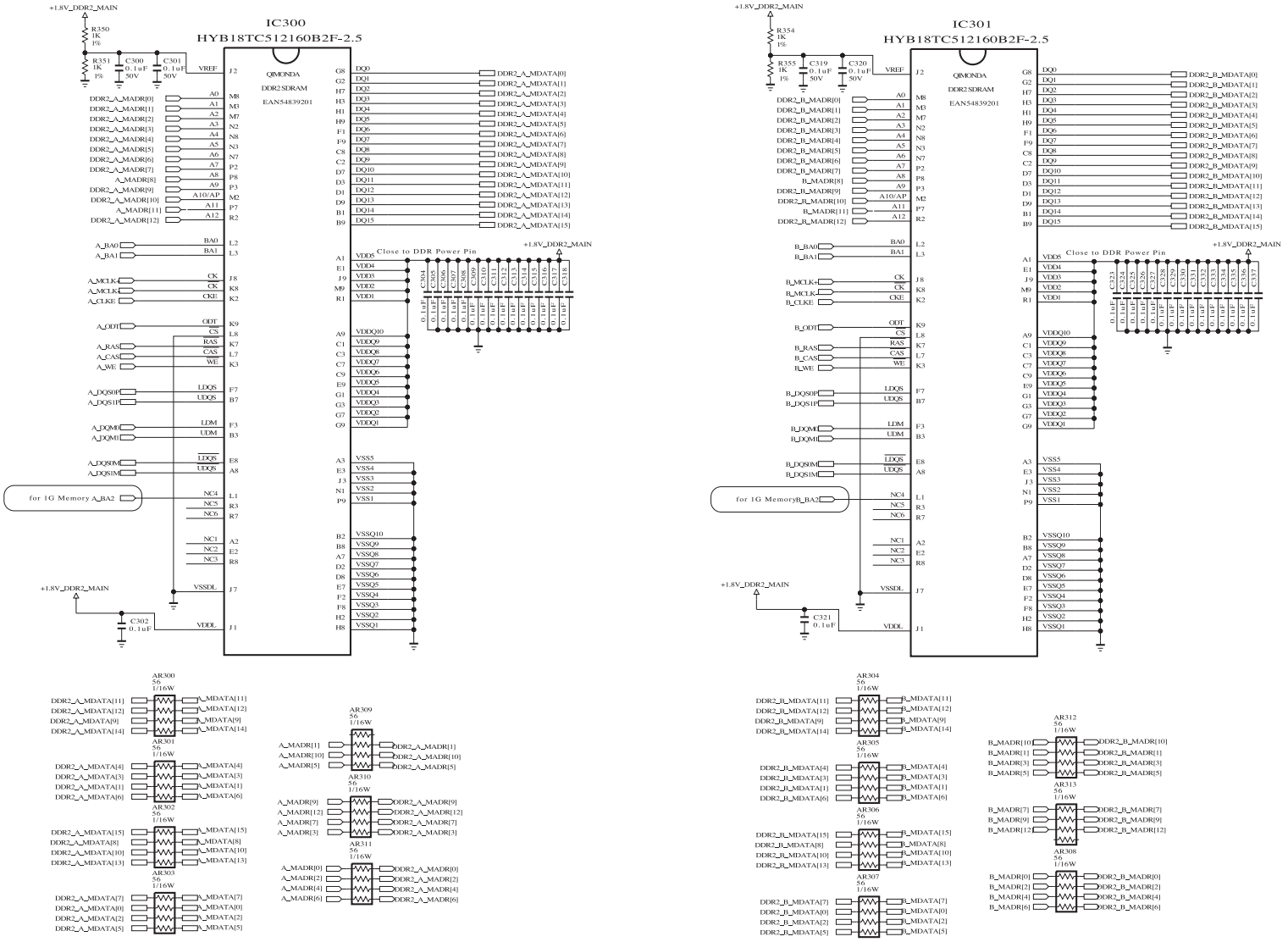
IN 2

SECRET

LGElectronics

LG ELECTRONICS

MODEL	EAX55460701	DATE	2008.10.24
BLOCK	MAIN_2	SHEET	2 / 11



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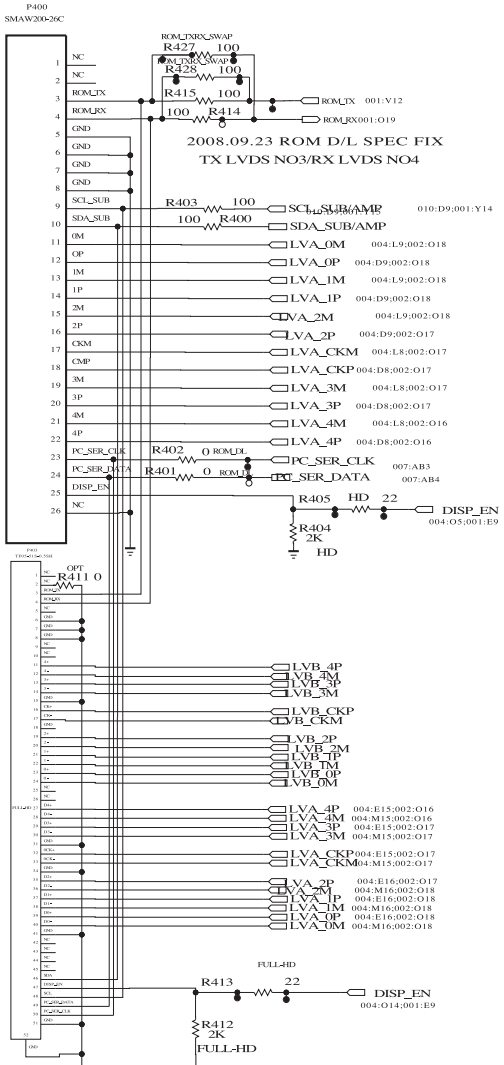
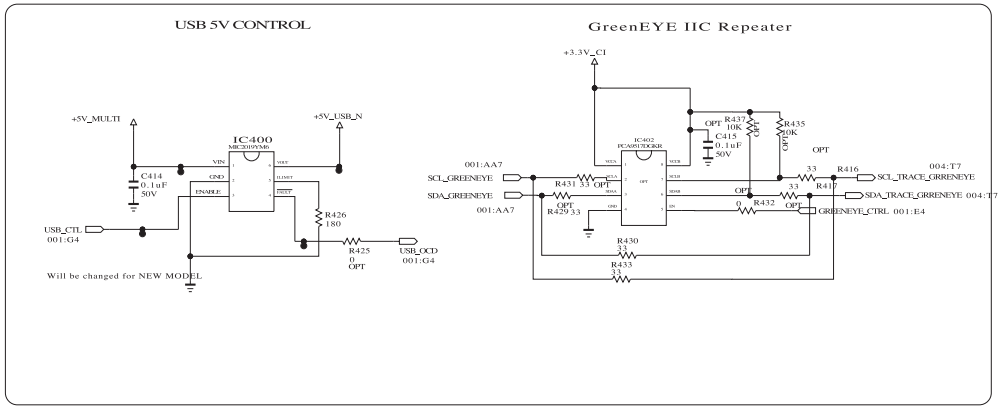
SECRET
LGElectronics

LG ELECTRONICS

MODEL	EAX55460701	DATE	2008.10.24
BLOCK	DDR2	SHEET	3 / 11

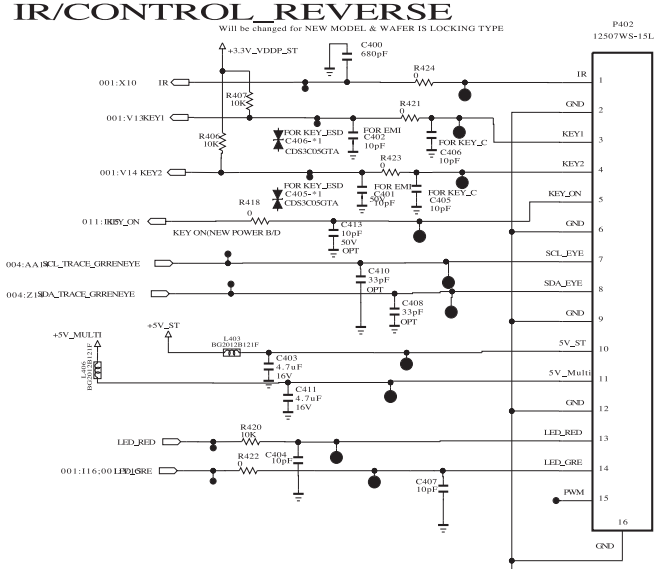
Module PANNEL WAFER





IR/CONTROL_REVERSE

Will be changed for NEW MODEL & WAFER IS LOCKING TYPE



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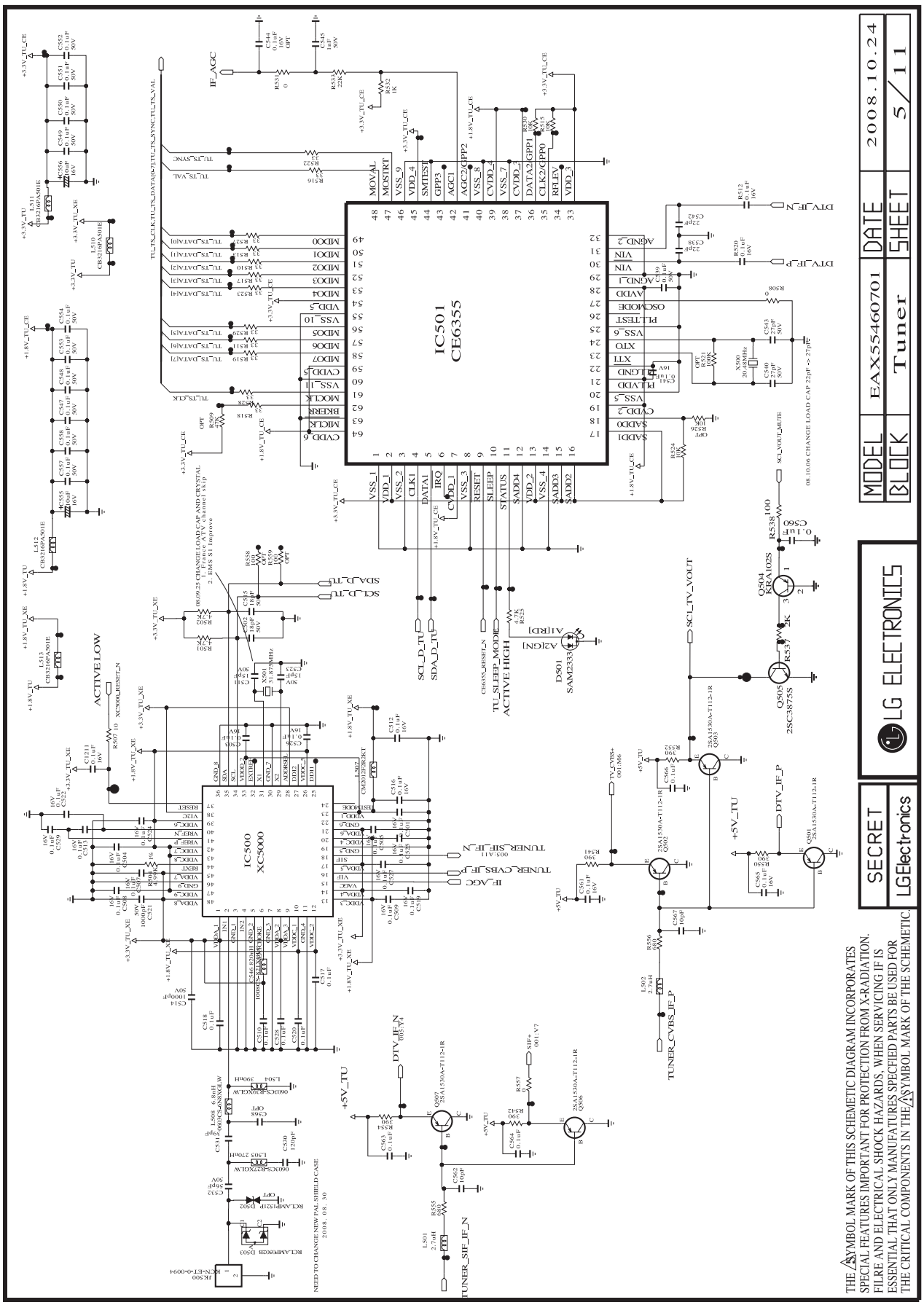
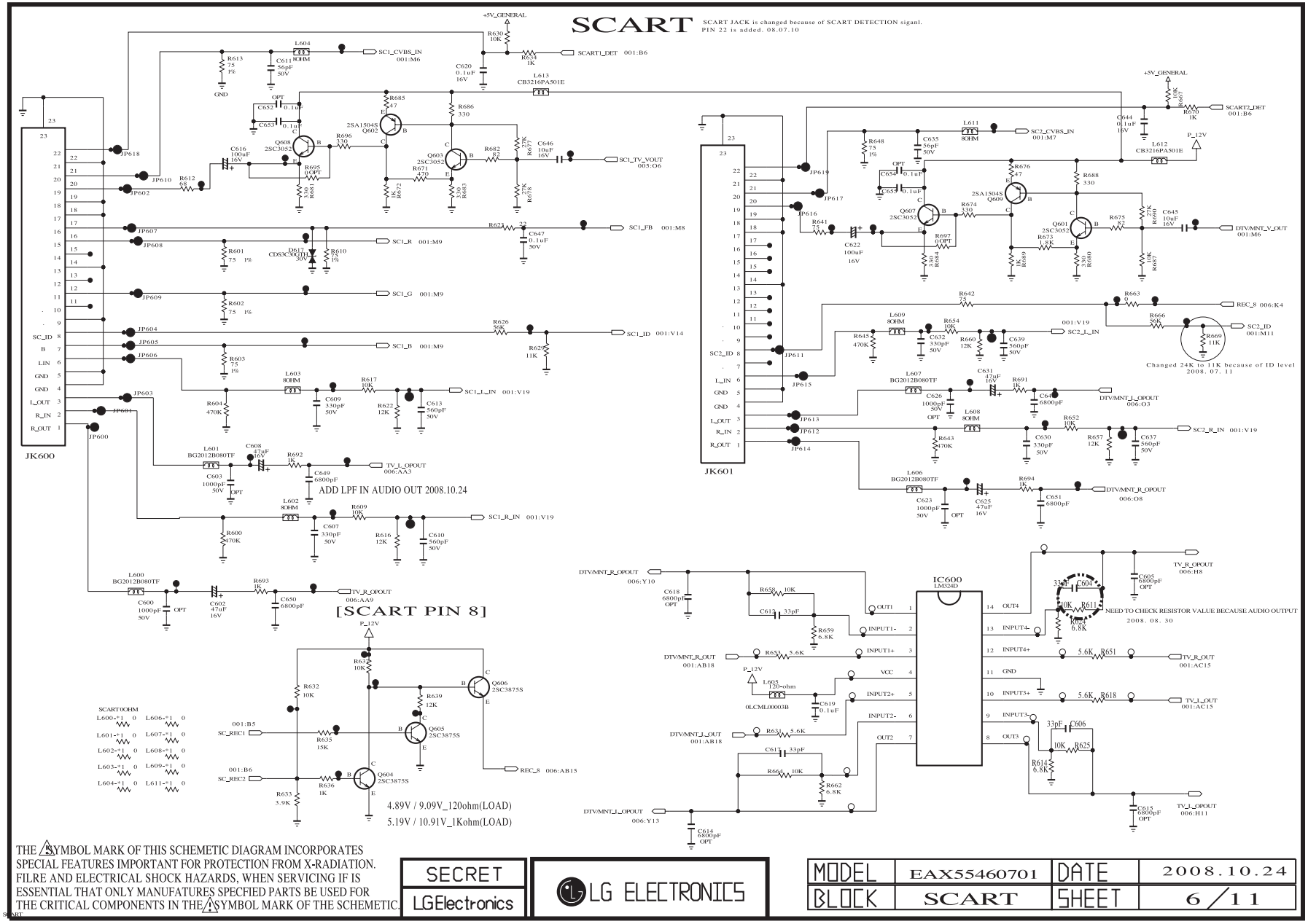
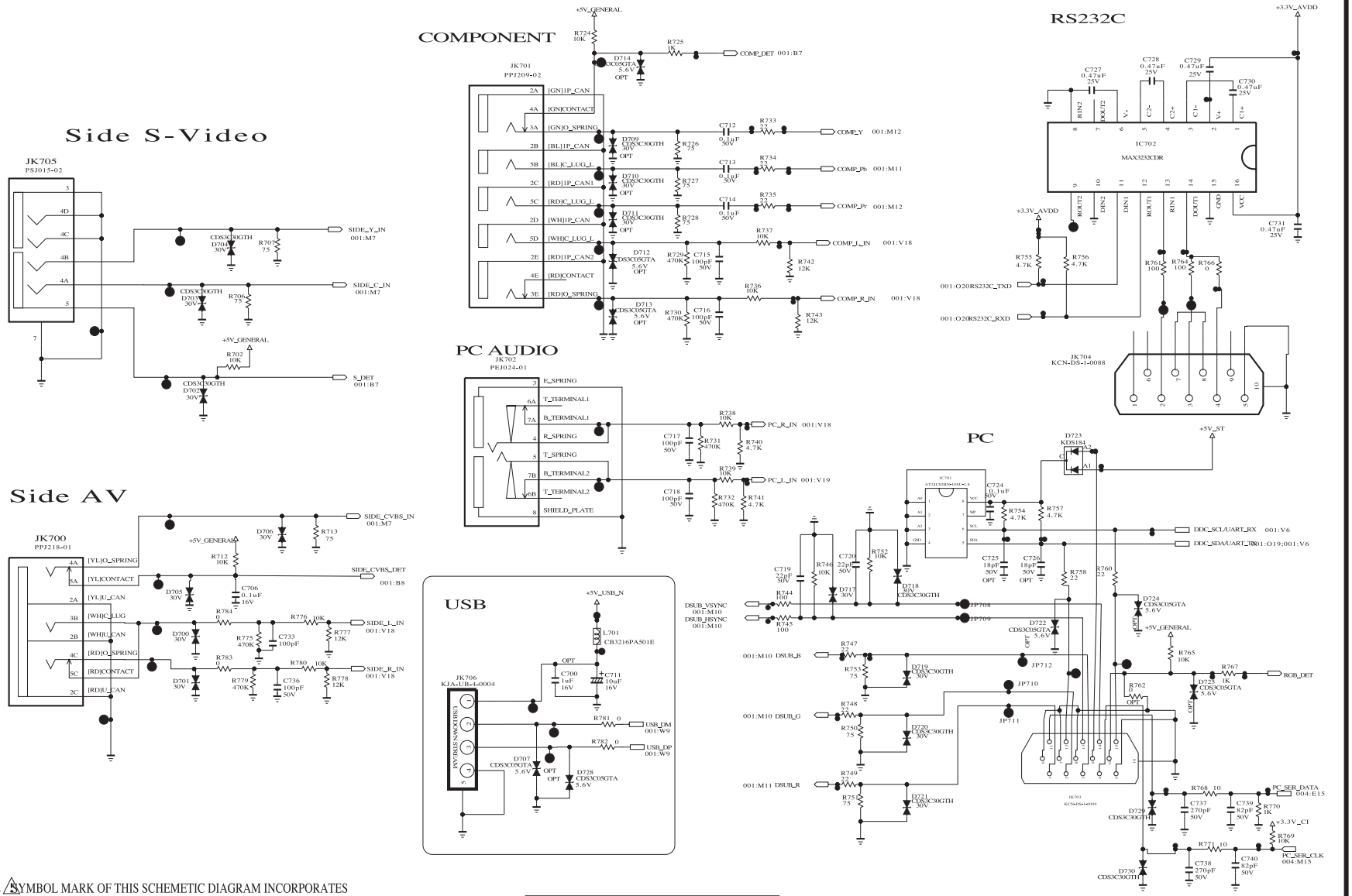
SECRET
LGElectronics

LG ELECTRONICS

MODEL	EAX55460701	DATE	2008.10.24
BLOCK	Module&Ctl	SHEET	4/11







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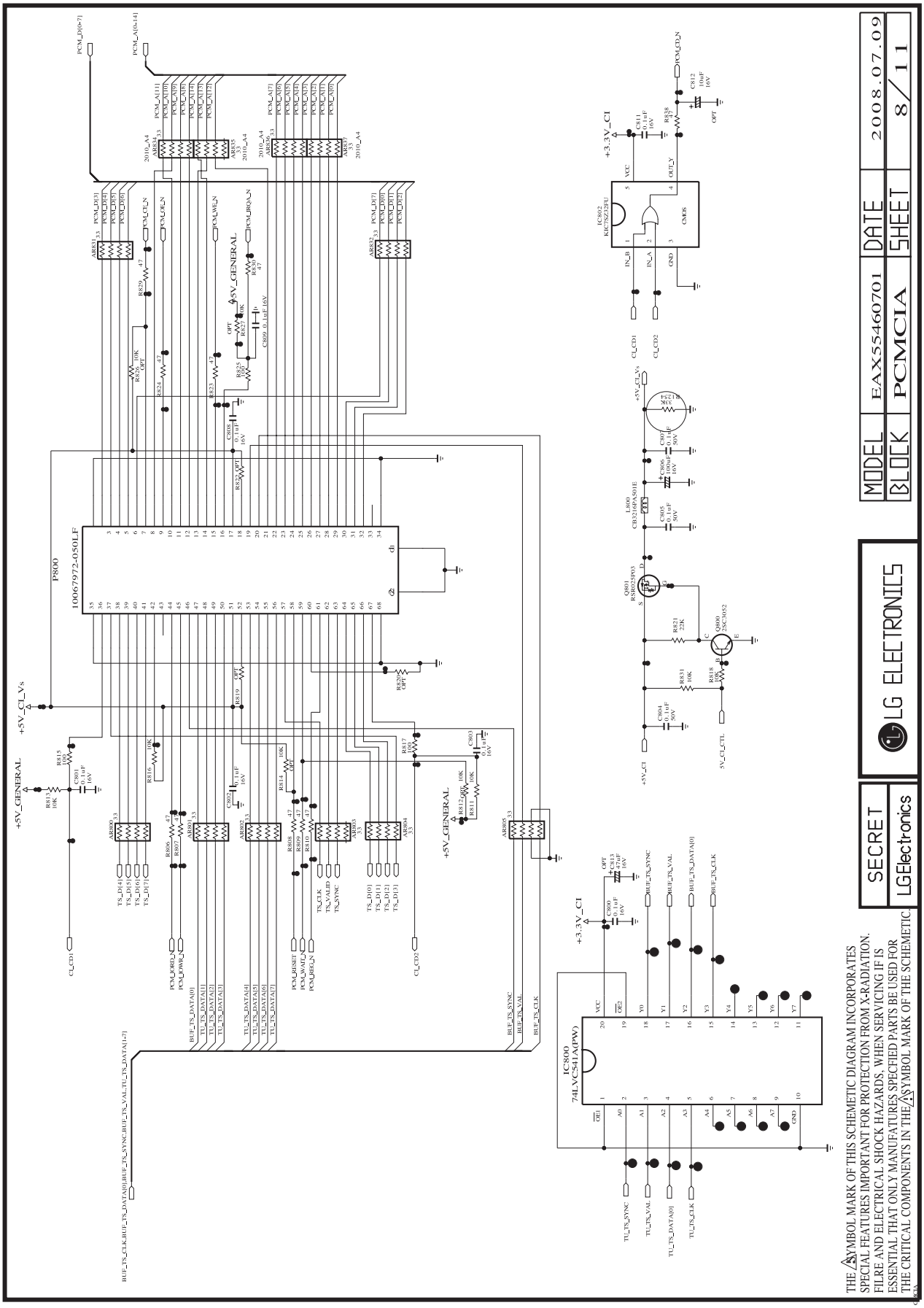
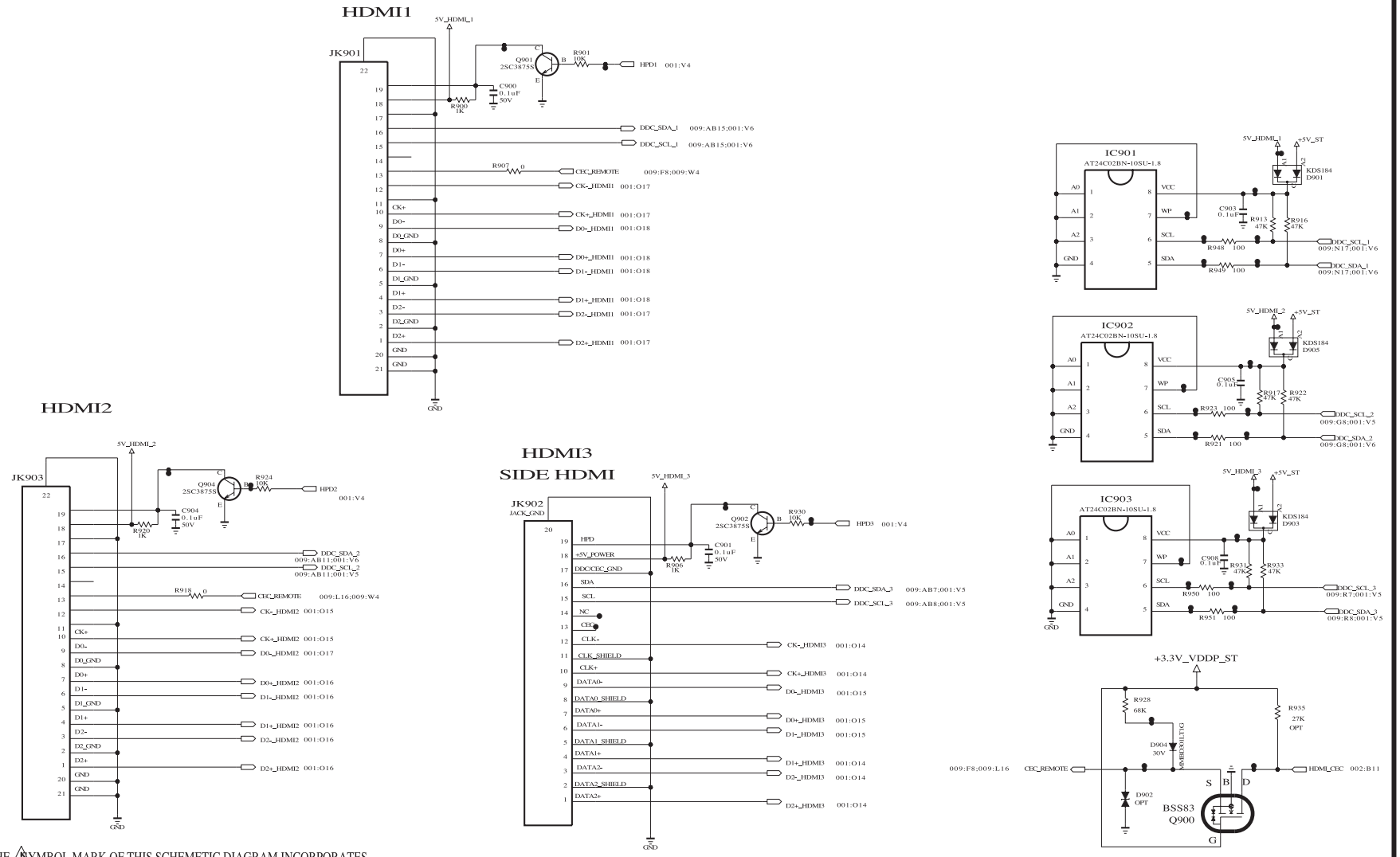
SECRET
LGElectronics

LG ELECTRONICS

MODEL	EAX55460701	DATE	2008.07.09
BLOCK	Interface	SHEET	7/11



HDMI



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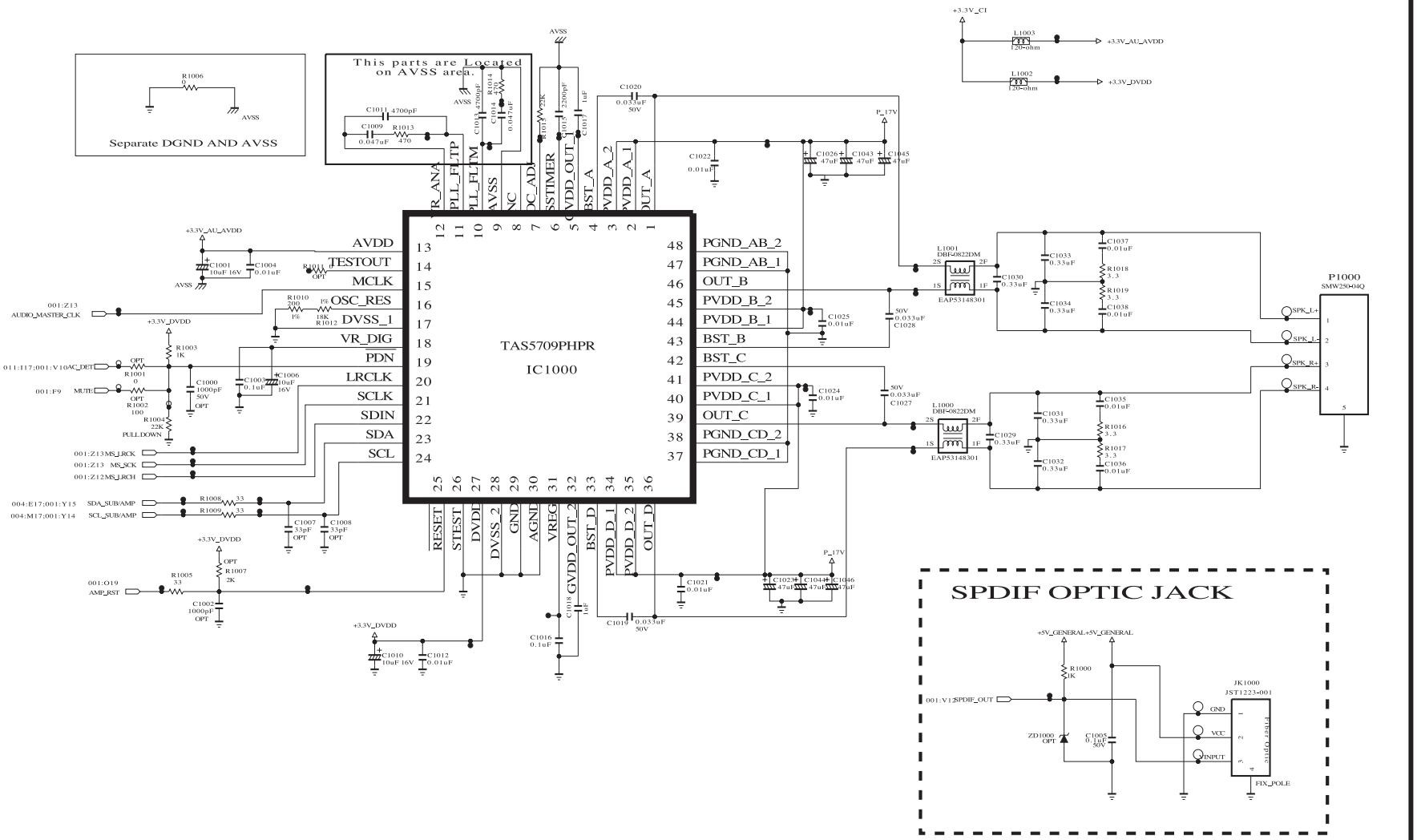
SECRET
LGElectronics

LG ELECTRONICS

MODEL	EAX55460701	DATE	2008.07.09
BLOCK	HDMI	SHEET	9/11

AMP



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SECRET
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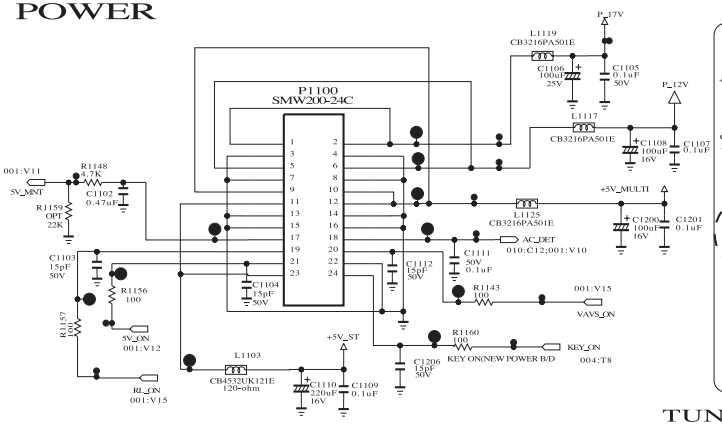
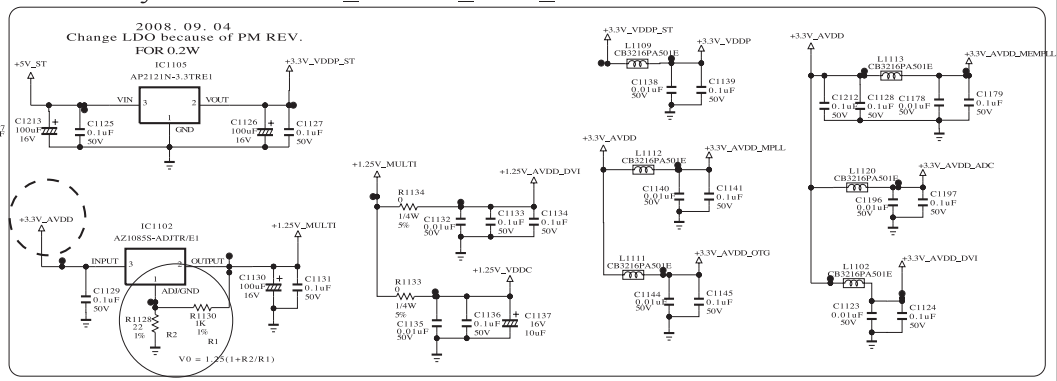
LG ELECTRONICS

MODEL	EAX55460701	DATE	2008.07.09
BLOCK	AMP	SHEET	10 / 11

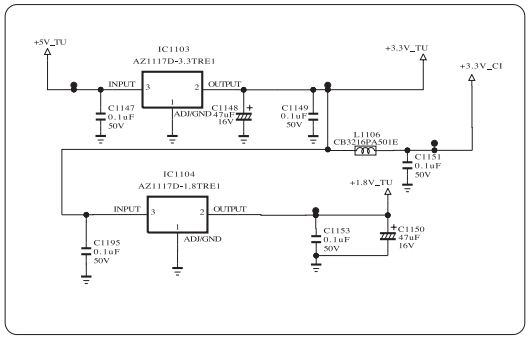
POWER



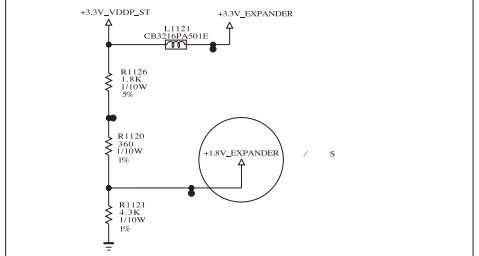
Stand-by&Multi +3.3V_+1.25V_MST_Core



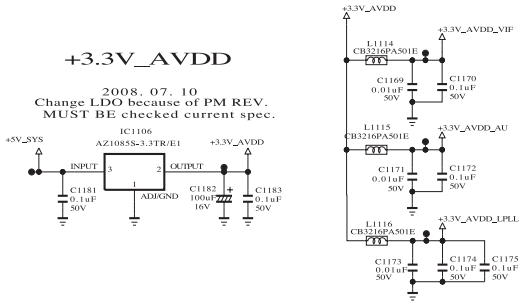
TUNER_CI +3.3V & +1.8V



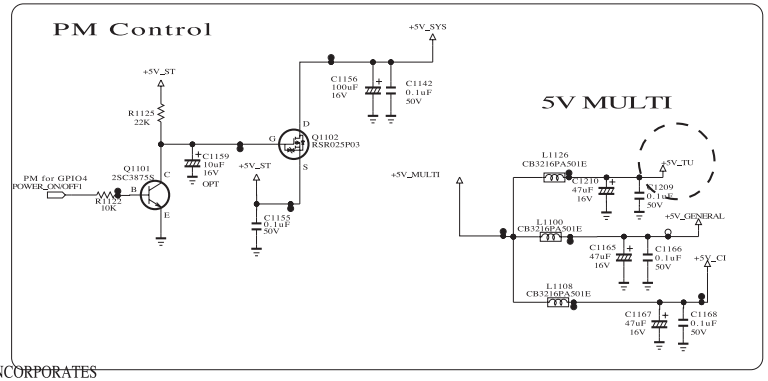
EXPANDER POWER 3.3V & 1.8V



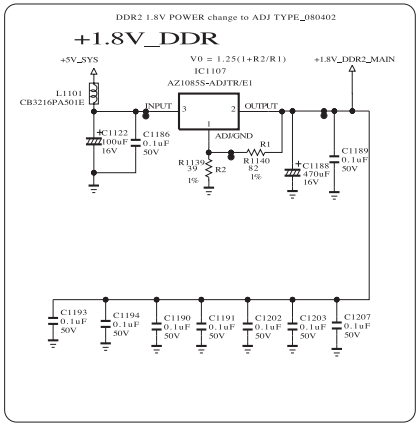
+3.3V_AVDD



PM Control



+1.8V_DDR



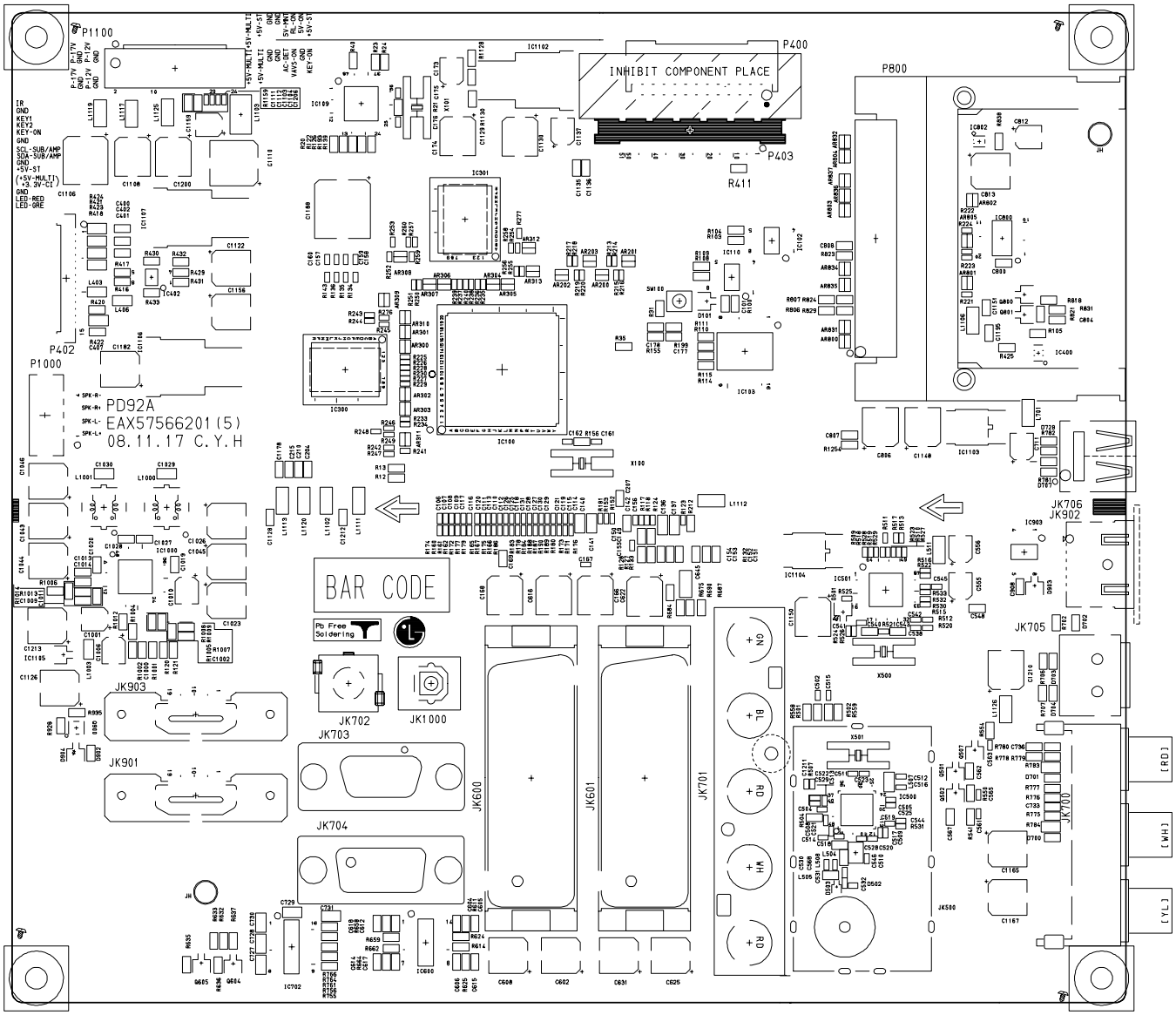
THE ⚠ SYMBOL MARK OF THIS SCHEMETIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR PROTECTION FROM X-RADIATION. FILRE AND ELECTRICAL SHOCK HAZARDS, WHEN SERVICING IF IS ESSENTIAL THAT ONLY MANUFATURES SPECFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE ⚠ SYMBOL MARK OF THE SCHEMETIC.

SECRET
LGElectronics

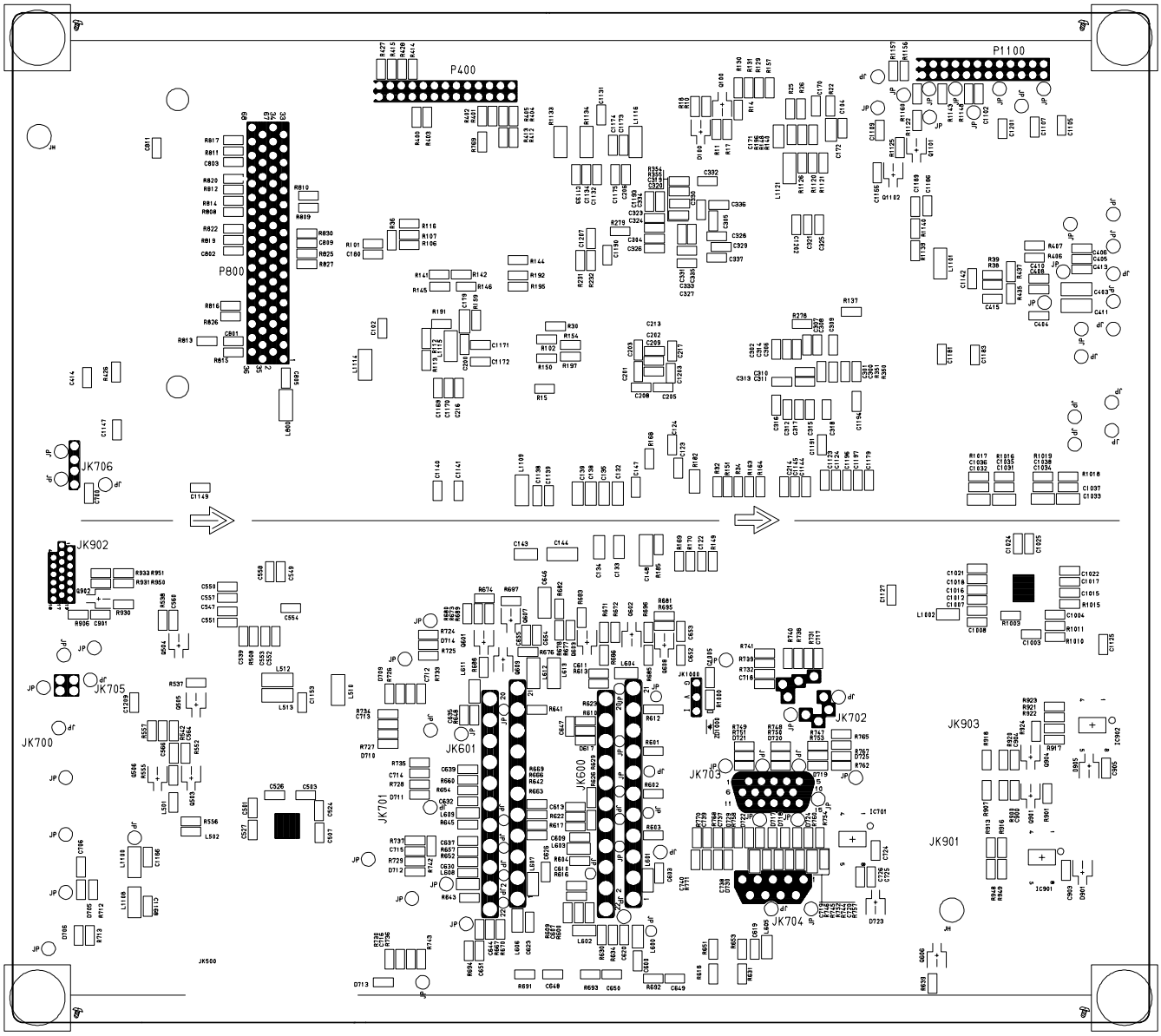
LG ELECTRONICS

MODEL	EAX55460701	DATE	2008.10.24
BLOCK	Power	SHEET	11/11

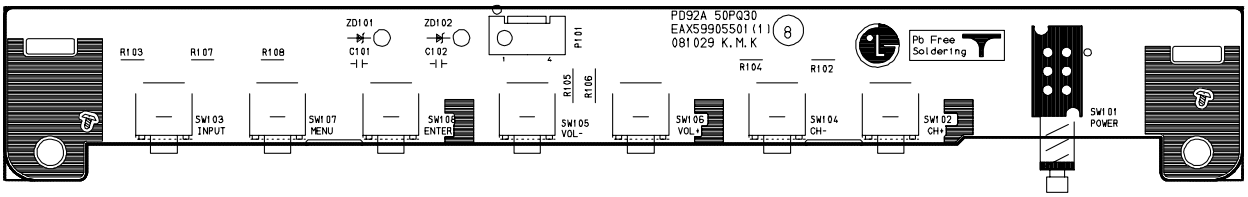
MAIN(TOP)



MAIN(BOTTOM)



CONTROL(TOP)



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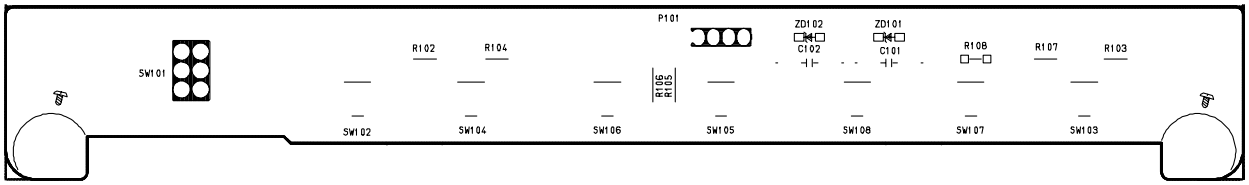

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