



# IBM E50 LG CB553H

## COLOR MONITOR SERVICE MANUAL

CHASSIS NO. : CA-120

### CAUTION

BEFORE SERVICING THE UNIT,  
READ THE **SAFETY PRECAUTIONS**  
IN THIS MANUAL.



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## SPECIFICATIONS

### 1. PICTURE TUBE

Size	: 15 inch (Flat Square Tube)
Deflection Angle	: 90°
Neck Diameter	: 29.1 mm
Dot Pitch	: 0.28 mm
Face Treatment	: AR-ASC (Anti-Reflection and Anti-Static Coating) AG(Anti-Glare)
Low Radiation	: MPR-II

### 2. SIGNAL

- 2-1. Horizontal & Vertical Sync
- 1) Input Voltage Level: Low= 0~1.2V, High= 2.5~5.5V
  - 2) Sync Polarity : Positive or Negative
- 2-2. Video Input Signal
- 1) Voltage Level : 0 ~ 0.7 Vp-p
    - a) Color 0, 0 : 0 Vp-p
    - b) Color 7, 0 : 0.467 Vp-p
    - c) Color 15, 0 : 0.7 Vp-p
  - 2) Input Impedance : 75 Ω
  - 3) Video Color : R, G, B Analog
  - 4) Signal Format : Refer to the Timing Chart
- 2-3. Signal Connector
- 15-pin D-Sub Connector (Attached Type)
- 2-4. Scanning Frequency
- Horizontal : 30 ~ 54 kHz
  - Vertical : 50 ~ 120 Hz

### 3. POWER SUPPLY

- 3-1. Power Range
- AC 100~240V (Free Voltage), 50/60Hz, 1.5A Max.

### 3-2. Power Consumption

MODE	H/V SYNC	POWER CONSUMPTION	LED COLOR
NORMAL (ON)	ON/ON	less than 75 W	GREEN
STAND-BY	OFF/ON	less than 15 W	ORANGE
SUSPEND	ON/OFF	less than 15 W	
OFF	OFF/OFF	less than 5 W	ORANGE

### 4. DISPLAY AREA

- 4-1. Active Video Area :
- 285 x 215 mm (11.22" x 8.46") - Max Image Size
  - 270 x 200 mm (10.63" x 7.87") - Preset Image Size
- 4-2. Display Color : Full Colors
- 4-3. Display Resolution : 1024 x 768 / 60Hz  
(Non-Interlace)
- 4-4. Video Bandwidth : 65 MHz

### 5. ENVIRONMENT

- 5-1. Operating Temperature: 0°C ~ 40°C  
(Ambient)
- 5-2. Relative Humidity : 10%~ 80%  
(Non-condensing)
- 5-3. Altitude : 3,000 m

### 6. DIMENSIONS (with TILT/SWIVEL)

Width	: 356.0 mm (14.01")
Depth	: 395.0 mm (15.55")
Height	: 371.0 mm (14.60")

### 7. WEIGHT (with TILT/SWIVEL)

Net Weight	: 11.5 kg (25.4lbs)
Gross Weight	: 13.7 kg (30.14 lbs)

# SAFETY PRECAUTIONS

## SAFETY-RELATED COMPONENT WARNING!

There are special components used in this color monitor which are important for safety. ***These parts are marked ⚠ on the schematic diagram and the replacement parts list.*** It is essential that these critical parts should be replaced with the manufacturer's specified parts to prevent X-radiation, shock, fire, or other hazards. Do not modify the original design without obtaining written permission from manufacturer or you will void the original parts and labor guarantee.

**CAUTION:** No modification of any circuit should be attempted.

Service work should be performed only after you are thoroughly familiar with all of the following safety checks and servicing guidelines.

## SAFETY CHECK

Care should be taken while servicing this color monitor because of the high voltage used in the deflection circuits. These voltages are exposed in such areas as the associated flyback and yoke circuits.

## FIRE & SHOCK HAZARD

An isolation transformer must be inserted between the color monitor and AC power line before servicing the chassis.

- In servicing, attention must be paid to the original lead dress specially in the high voltage circuit. If a short circuit is found, replace all parts which have been overheated as a result of the short circuit.
- All the protective devices must be reinstalled per the original design.
- Soldering must be inspected for the cold solder joints, frayed leads, damaged insulation, solder splashes, or the sharp points. Be sure to remove all foreign materials.

## IMPLOSION PROTECTION

All used display tubes are equipped with an integral implosion protection system, but care should be taken to avoid damage and scratching during installation. Use only same type display tubes.

## X-RADIATION

The only potential source of X-radiation is the picture tube. However, when the high voltage circuitry is operating properly there is no possibility of an X-radiation problem. The basic precaution which must be exercised is keep the high voltage at the factory recommended level; the normal high voltage is about 24.5kV. The following steps describe how to measure the high voltage and how to prevent X-radiation.

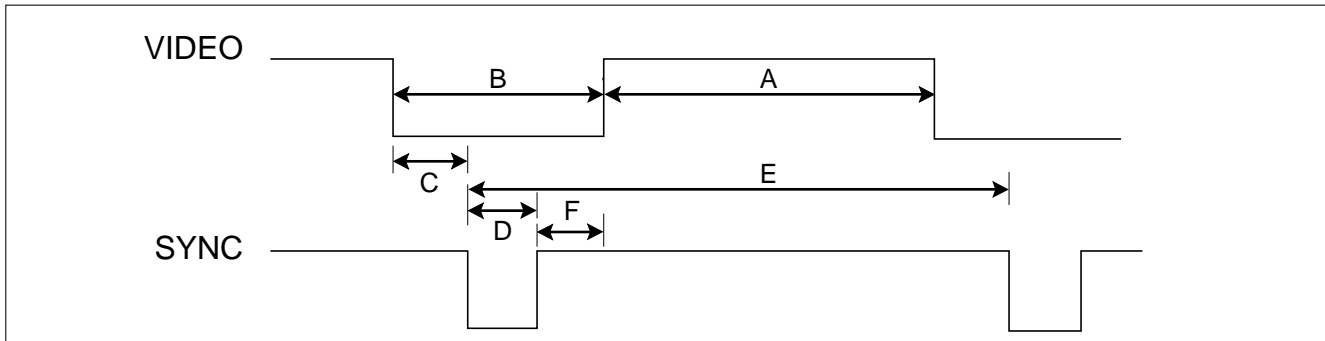
**Note :** It is important to use an accurate high voltage meter calibrated periodically.

- To measure the high voltage, use a high impedance high voltage meter, connect (–) to chassis and (+) to the CDT anode cap.
- Set the brightness control to maximum point at full white pattern.
- Measure the high voltage. The high voltage meter should be indicated at the factory recommended level.
- If the meter indication exceeds the maximum level, immediate service is required to prevent the possibility of premature component failure.
- To prevent X-radiation possibility, it is essential to use the specified picture tube.

## CAUTION:

Please use only a plastic screwdriver to protect yourself from shock hazard during service operation.

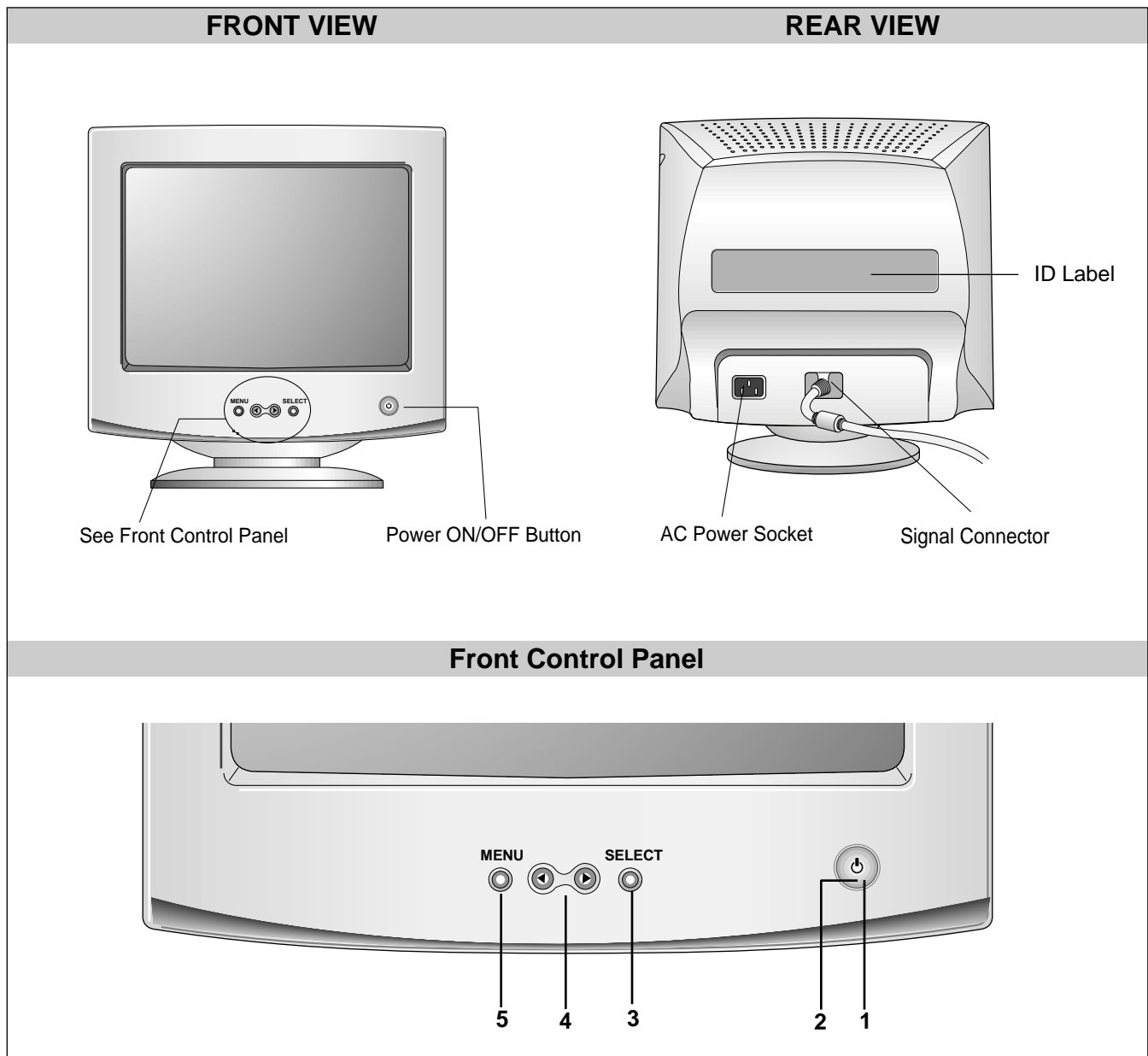
## TIMING CHART



<< Dot Clock (MHz), Horizontal Frequency (kHz), Vertical Frequency (Hz), Horizontal etc... (μs), Vertical etc... (ms) >>

Mode	H/V Sort	Sync Polarity	Frequency	Total Period (E)	Video Active Time (A)	Blanking Time (B)	Sync Duration (D)	Back Porch (F)	Front Porch (C)	Resolution
1	H	–	31.47	31.78	25.42	6.36	3.81	1.91	0.64	640x480 60Hz
	V	–	59.94	16.684	15.254	1.430	0.063	1.049	0.318	
2	H	–	37.50	26.67	20.32	6.35	2.03	3.81	0.51	640x480 75Hz
	V	–	74.99	13.335	12.802	0.533	0.080	0.427	0.026	
3	H	–	43.27	23.112	17.778	5.334	1.556	2.222	1.556	640x480 85Hz
	V	–	85.01	11.763	11.093	0.670	0.069	0.578	0.023	
4	H	–	31.47	31.782	25.422	6.36	3.813	1.907	0.636	720x400 70Hz
	V	+	70.08	14.27	13.158	1.112	0.064	0.858	0.191	
5	H	+	46.88	21.33	16.16	5.17	1.62	3.23	0.32	800x600 75Hz
	V	+	75.01	13.331	12.798	0.533	0.064	0.448	0.021	
6	H	+	60.02	16.66	13.00	3.66	1.22	2.24	0.20	1024x768 75Hz
	V	+	75.03	13.328	12.795	0.533	0.050	0.466	0.017	

# OPERATING INSTRUCTIONS



## 1. Power ON/OFF Button

Use this button to turn the monitor on or off.

## 2. Power Indicator

This indicator lights up green when the monitor operates normally; in DPMS (Energy Saving) mode, -stand-by, suspend, or power off mode -its color changes to orange, and if abnormal or damaging circuit turns out orange blink.

## 3. SELECT Button

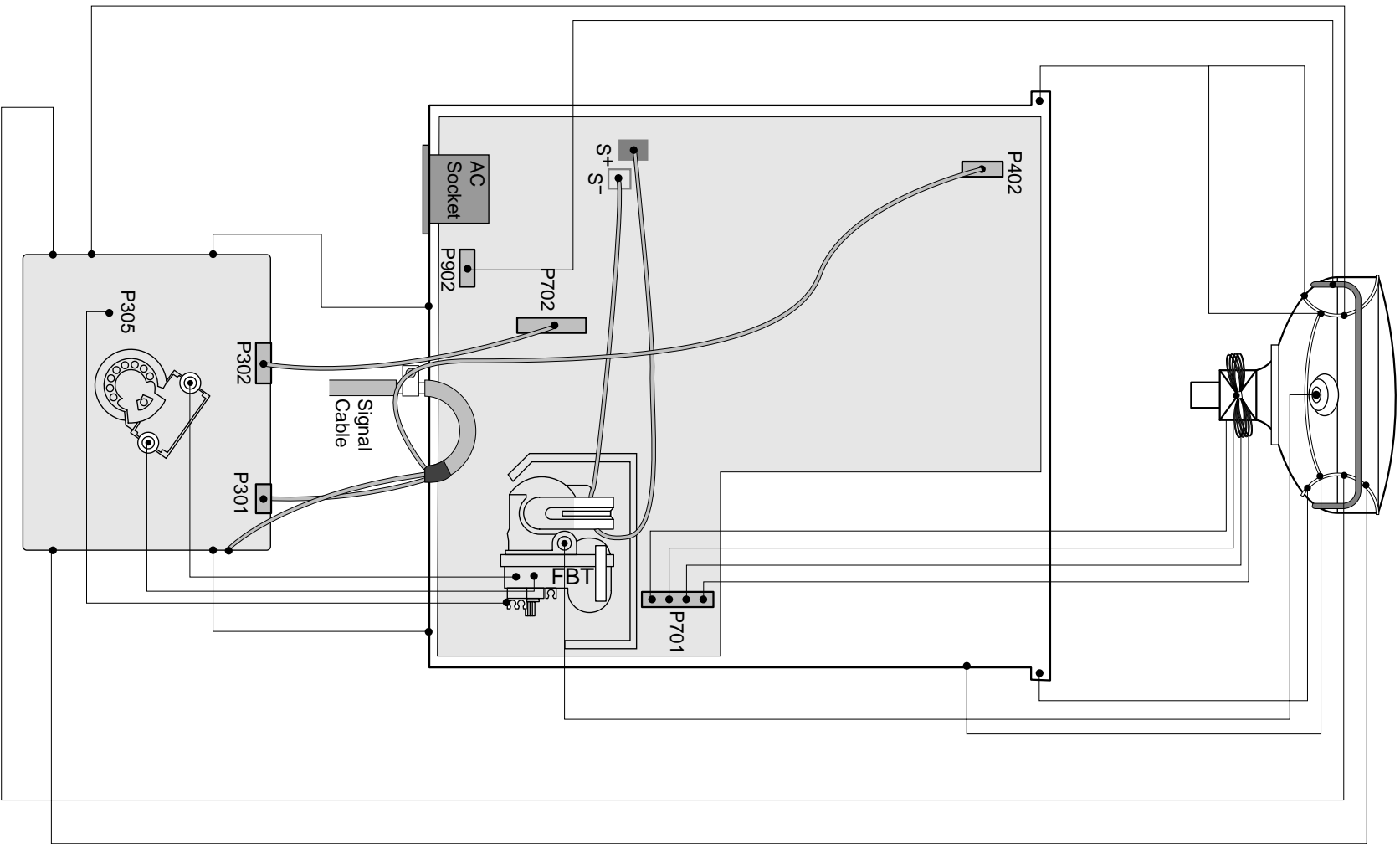
Use this button to enter a selection in the on screen display.

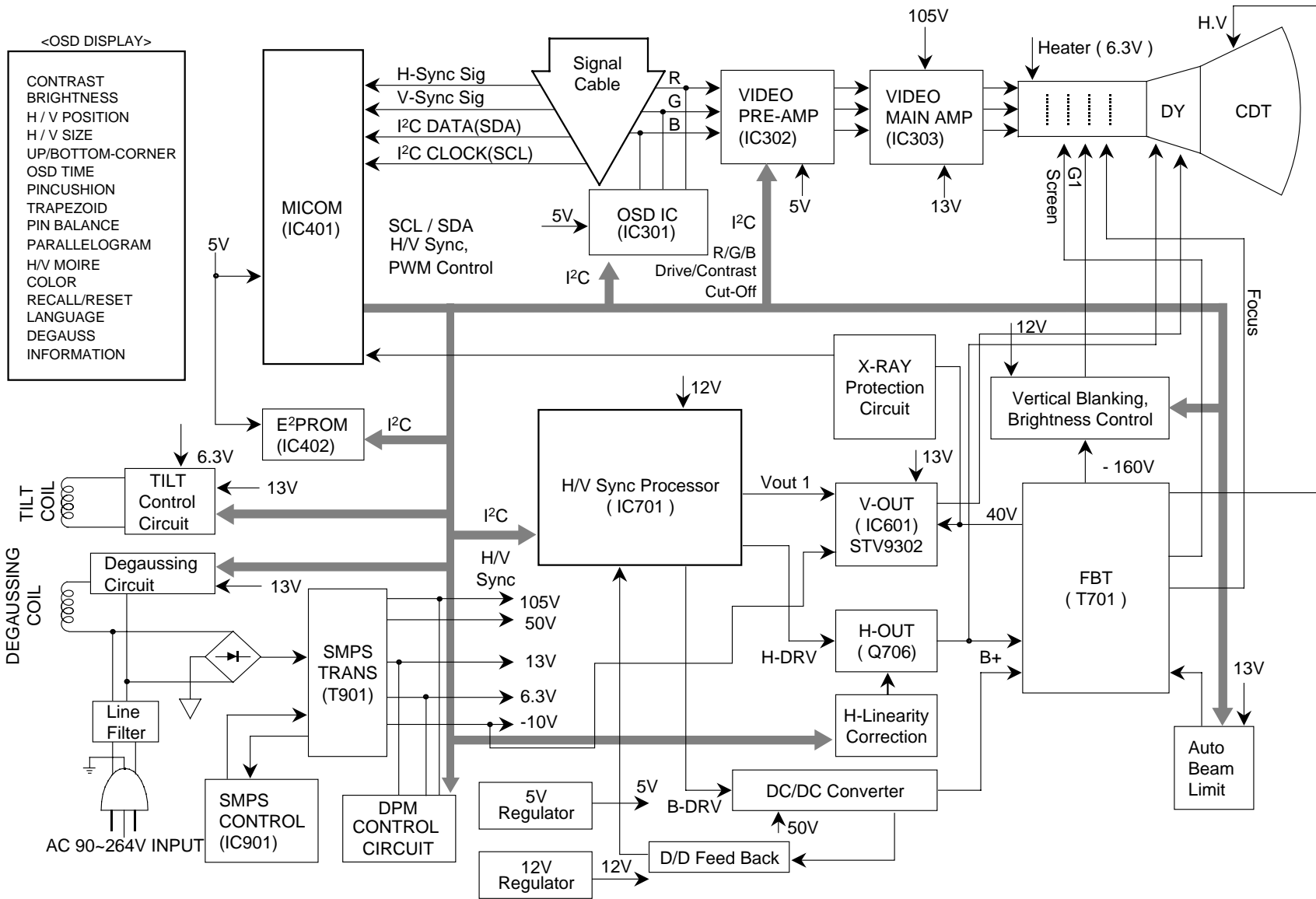
## 4. SET Button

Use these buttons to choose or adjust items in the on screen display.

## 5. MENU Button

Use this button to enter or exit the on screen display.





## DESCRIPTION OF BLOCK DIAGRAM

### 1. Line Filter & Associated Circuit

This is used for suppressing noise of power input line flowing into the monitor and/or some noise generated in the monitor flowing out through the power input line. That is to say, this circuit prevents interference between the monitor and other electric appliance.

### 2. Degaussing Circuit Coil.

The degaussing circuit consists of the degaussing coil, the PTC(Positive Temperature Coefficient) thermistor (TH901), and the relay(RL901). This circuit eliminates abnormal color of the screen automatically by degaussing the shadow mask in the CRT during turning on the power switch. When you need to degaussing in using the monitor, select DEGAUSS on the OSD menu.

### 3. SMPS(Switching Mode Power Supply).

This circuit is working of 90~264V AC(50/60Hz).

The operation procedure is as below:

- 1) AC input voltage is rectified and smoothed by the bridge diodes(D900) and the capacitor.
- 2) The rectified voltage(DC) is applied to the primary coil of the transformer(T901).
- 3) The control IC(IC901) generates switching pulse to turn on and off the primary coil of the transformer (T901) repeatedly.
- 4) Depending on turn ratio of the transformer, the secondary voltage appears at the secondary coils of the transformer(T901).
- 5) These secondary voltage are rectified by each diode (D941,D951,D961,D971,D942) and operate other circuit.(horizontal and vertical deflection, video amplifier,...etc.)

### 4. X-ray Protection Circuit

When the high voltage reaches to 29kV in an abnormal state, voltage of IC401(MICOM) pin 35 comes to about 2.5V.

Then MICOM control IC701 (Deflection controller) to stop horizontal drive pulse and stop horizontal deflection.

### 5. Microprocessor Control Circuit

The operating procedure of MICOM(Microprocessor) and its associated circuit is as follows:

- 1) Horizontal and Vertical sync signals are supplied from the signal cable.
- 2) Microprocessor(IC401) discriminates the operating mode from the sync polarity and resolution.
- 3) The Micom sets operating mode and offers the controlled data.(H-Size,H-Position,V-Size,...)
- 4) The controlled data of each mode is stored in itself.
- 5) User can adjust screen condition by each OSD function. The data of the adjusted condition is stored in EEPROM(IC402).

### 6. Horizontal and Vertical Oscillation

This circuit generates the horizontal pulse and the vertical pulse by taking the H and V sync signal. This circuit consists of the H/V processor(IC701) and the associated circuit.

### 7. D/D(DC to DC) Converter

This circuit supplies DC voltage to the horizontal deflection output circuit by increasing DC 50V which is the secondary voltage of the SMPS in accordance with the input horizontal sync signal.

### 8. Side-Pincushion & Trapezoid Correction Circuit

This circuit improves the side-pincushion and the trapezoid distortion of the screen by mixing parabola and saw-tooth wave to output of the horizontal deflection D/D converter which is used for the supply voltage ( $B +$ ) of the deflection circuit.

### 9. Horizontal Deflection Output Circuit

This circuit makes the horizontal deflection by supplying the saw-tooth current to the horizontal deflection yoke.

### 10. High Voltage Output & FBT(Flyback Transformer)

The high voltage output circuit is used for generating pulse to the primary coil of the FBT(Flyback Transformer(T701)). A boosted voltage (about 24.5V) appears at the secondary of the FBT and it is supplied to the anode, focus, and screen voltage of the CRT.

### 11. H-Linearity Correction Circuit

This circuit corrects the horizontal linearity for each horizontal sync frequency.

### 12. Vertical Output Circuit

This circuit takes the vertical ramp wave from the IC701 and performs the vertical deflection by supplying the saw-tooth current to the vertical deflection yoke.

### 13. H & V Blanking and Brightness Control

Blanking circuit eliminates retrace line by supplying negative pulse to the G1 of the CRT. And Brightness circuit is used for control of the screen brightness by changing DC level of the G1.

### 14. Image Rotation(Tilt) Circuit

This circuit corrects the tilts of the screen by supplying the image rotation signal to the tilt which is attached near the deflection yoke of the CRT.

### 15. Video Pre-AMP Circuit

This circuit amplifies the analog video signal from 0-0.7V to 0-4V. It is operated by taking the clamp,R,G,B drive and contrast signal from the MICOM(IC401).

### 16. Video Output AMP Circuit

This circuit amplifies the video signal which comes from the video pre-amp circuit and amplifies it to apply the CRT cathode.



# ADJUSTMENT

## GENERAL INFORMATION

All adjustment are thoroughly checked and corrected when the monitor leaves the factory, but sometimes several adjustments may be required.

Adjustment should be following procedure and after warming up for a minimum of 30 minutes.

- Alignment appliances and tools.
  - IBM compatible PC.
  - Programmable Signal Generator.  
(eg. VG-819 made by Astrodesign Co.)
  - EPROM or EEPROM with saved each mode data.
  - Alignment Adaptor and Software.
  - Digital Voltmeter.
  - White Balance Meter.
  - Luminance Meter.
  - High-voltage Meter.

## AUTOMATIC AND MANUAL DEGAUSSING

The degaussing coil is mounted around the CDT so that automatic degaussing when turn on the monitor. But a monitor is moved or faced in a different direction, become poor color purity cause of CDT magnetized, then press DEGAUSS on the OSD menu.

## ADJUSTMENT PROCEDURE & METHOD

- Install the cable for adjustment such as Figure 1 and run the alignment program on the DOS for IBM compatible PC.
- Set external Brightness and Contrast volume to max position.

### 1. Adjustment for B<sup>+</sup> Voltage.

- 1) Display cross hatch pattern at Mode 6.
- 2) Adjust C999 (+) voltage to  $50 \pm 0.5\text{Vdc}$ .

### 2. Adjustment for High-Voltage.

- 1) Display cross hatch pattern at Mode 6.
- 2) DIST.ADJ. → CTRL PWM → High Voltage Command.
- 3) Adjust High Voltage to  $24.5\text{kV} \pm 0.1\text{ kVdc}$ .
- 4) Press Enter Key.

### 3. Adjustment for Factory Mode (Preset Mode).

- 1) Display cross hatch pattern at Mode 1.
- 2) Run alignment program for E50 on the IBM compatible PC.
- 3) EEPROM → ALL CLEAR → Y(Yes) command.  
**<Caution>** Do not run this procedure unless the EEPROM is changed. All data in EEPROM (mode data and color data) will be erased.
- 4) Power button of the monitor turn off → turn on.
- 5) COMMAND → PRESET START → Y(Yes) command.
- 6) DIST. ADJ. → BALANCE command.

- 7) Adjust parallelogram as arrow keys to be the best condition.
- 8) Adjust balance of pin-balance as arrow keys to be the best condition.
- 9) DIST. ADJ. → FOS. ADJ command.
- 10) Adjust V-SIZE as arrow keys to  $200 \pm 2\text{mm}$ .
- 11) Adjust V-POSITION as arrow keys to center of the screen.
- 12) Adjust H-SIZE as arrow keys to  $270 \pm 4\text{mm}$ .
- 13) Adjust H-POSITION as arrow keys to center of the screen.
- 14) Adjust S-PCC (Side-Pincushion) as arrow keys to be the best condition.
- 15) Adjust TRAPEZOID as arrow keys to be the best condition.
- 16) Save of the Mode 1.
- 17) Display from Mode 2 to 6 and repeat above from number 10) to 17)
- 18) PRESET EXIT → Y (Yes) command.

### 4. Adjustment for White Balance and Luminance.

- 1) Set the White Balance Meter.
- 2) Press the DEGAUSS on the OSD menu for demagnetization of the CDT.
- 3) COLOR ADJ. → LUMINANCE command of the alignment program.
- 4) Set Brightness and Contrast to Max position.
- 5) Display color 0,0 pattern at Mode 6.
- 6) COLOR ADJ. → BIAS ADJ. → COLOR No. → 1 command of the alignment program.
- 7) Check whether green color or not at R-BIAS and G-BIAS to min position and G-BIAS to 127(7F) position. Sub-Brightness to 90(5A) position. Adjust G2 (screen) command to  $0.4 \pm 0.05\text{FL}$  of the raster luminance.
- 8) Adjust R-BIAS and G-BIAS command to  $x=0.283 \pm 0.005$  and  $y=0.298 \pm 0.005$  on the White Balance Meter with PC arrow keys.
- 9) Adjust SUB-Brightness command to  $0.7 \pm 0.1\text{FL}$  of the raster luminance.
- 10) Adjust repeat number 8).
- 11) After push the "ENTER" key.
- 11-1) COMMAND → PRESET START → Y(Yes) command.
- 12) Display color 15,0 full white pattern at Mode 6.
- 13) DRIVE ADJ. → No 1. command.
- 14) Set Brightness and Contrast to Max position.
- 15) Set SUB-CONTRAST Max 127(7F) (decimal) position.
- 16) Set G-DRIVE to 180(B4) at DRIVE of the alignment program.

- 17-1) Adjust R-DRIVE and B-DRIVE command to white balance  $x=0.283\pm0.003$  and  $y=0.298\pm0.003$  on the White Balance Meter with PC arrow keys.
- 17-2) Display color 15,0 window pattern (70x70mm) at mode 6.
- 18) Adjust SUB-CONTRAST command to  $50\pm1FL$ .
- 19) Display color 15,0 full white pattern at Mode 6.
- 20) Set Brightness and Contrast to Max position.
- 21) COLOR ADJ. → LUMINANCE → ABL command.
- 22) Adjust ABL to  $32\pm1FL$  of the luminance.
- 23) After push the "ENTER" key, and "COMMAND → PRESET EXIT → Y(Yes)" command.
- 24) Exit from the program.

#### **5. Input EDID Data.**

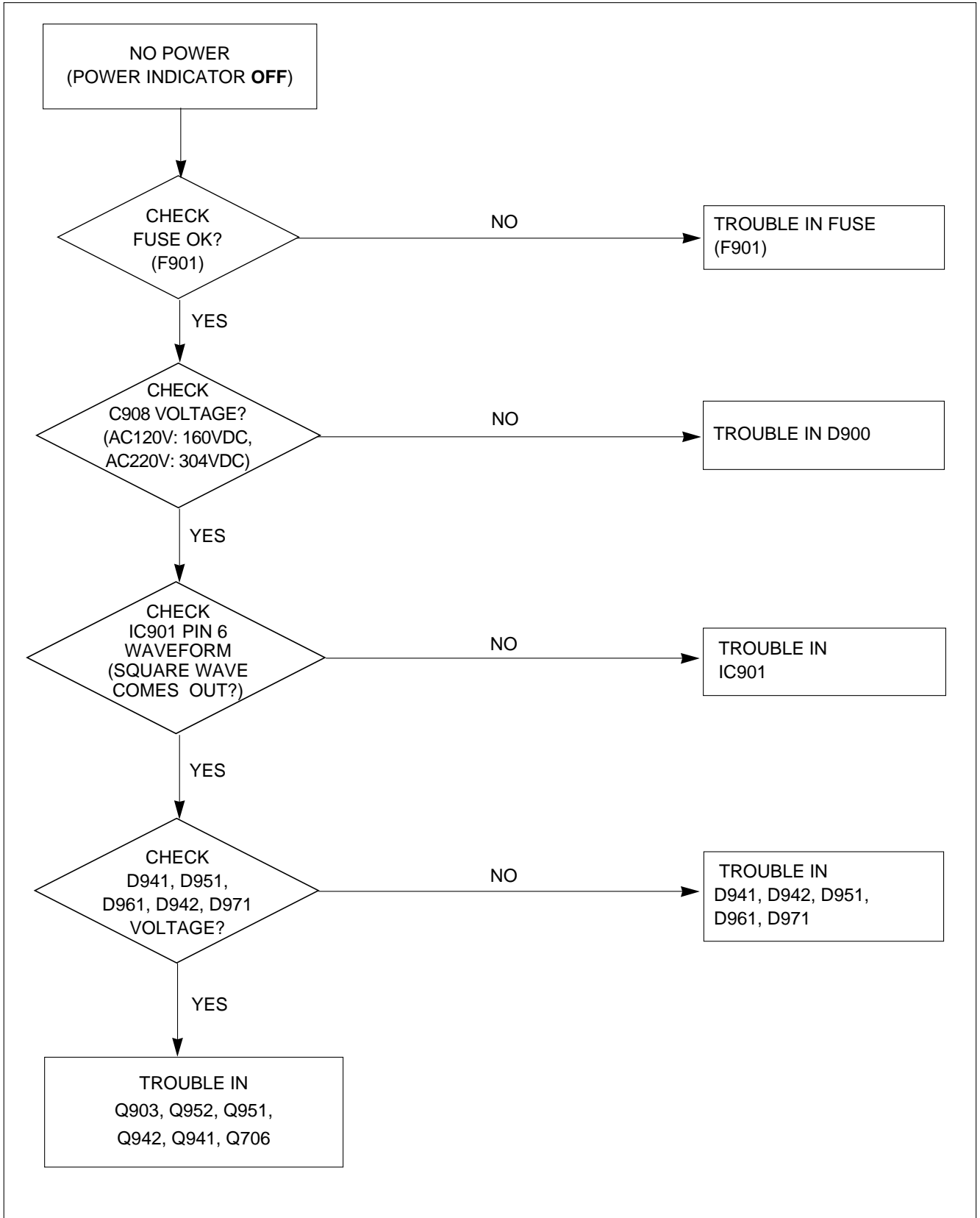
- 1) Display color 15,0 cross hatch pattern at Mode 6.
- 2) EEPROM → Write EDID command and confirm "EDID Write OK!!" message of monitor.
- 3) Exit from the alignment program.
- 4) Power switch OFF/ON for EDID data save.

#### **6. Adjustment for Focus.**

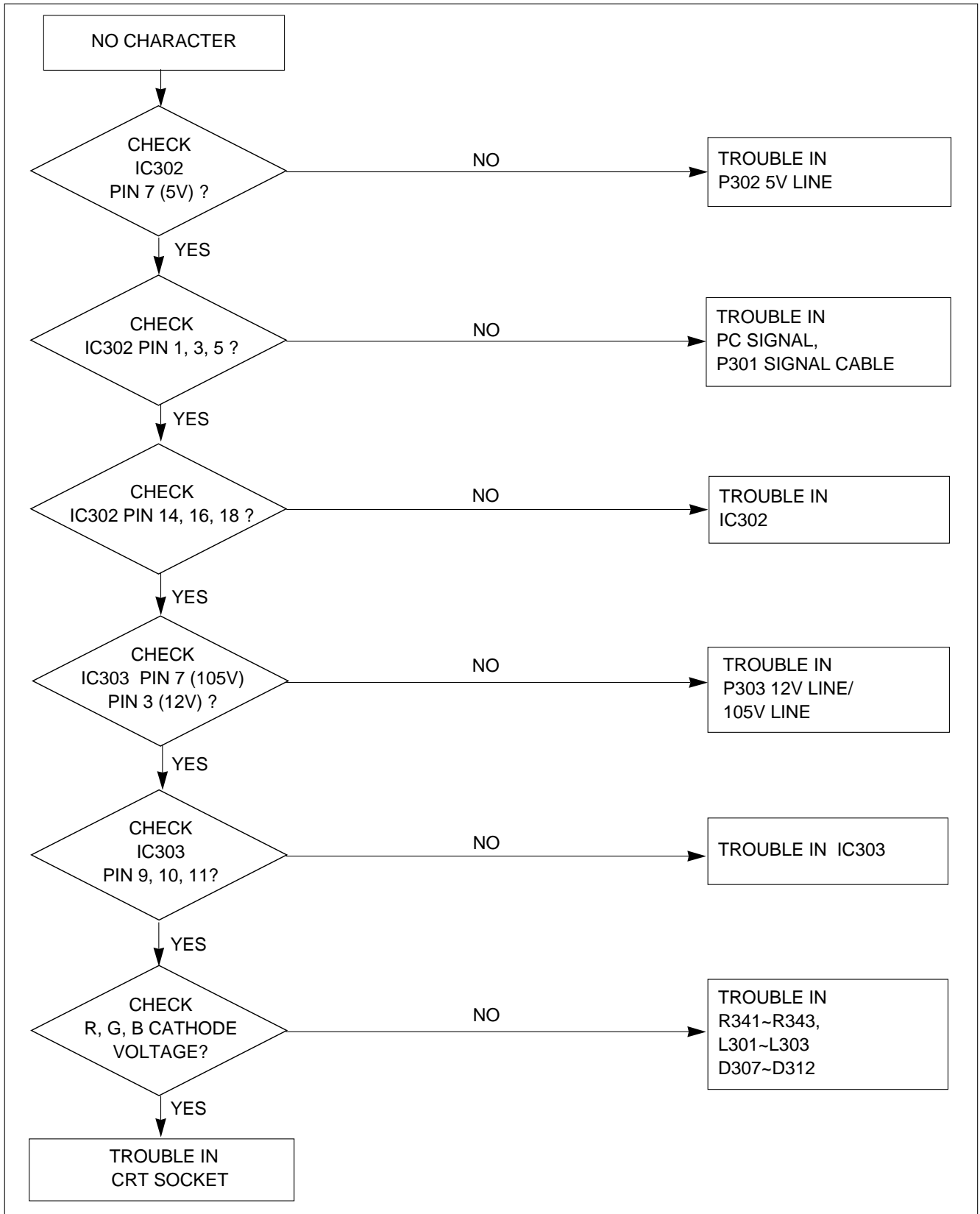
- 1) Set the Brightness and Contrast to max position.
- 2) Display H character in full screen at Mode 6.
- 3) Adjust two Focus control on the FBT that focus should be the best condition.

# TROUBLESHOOTING GUIDE

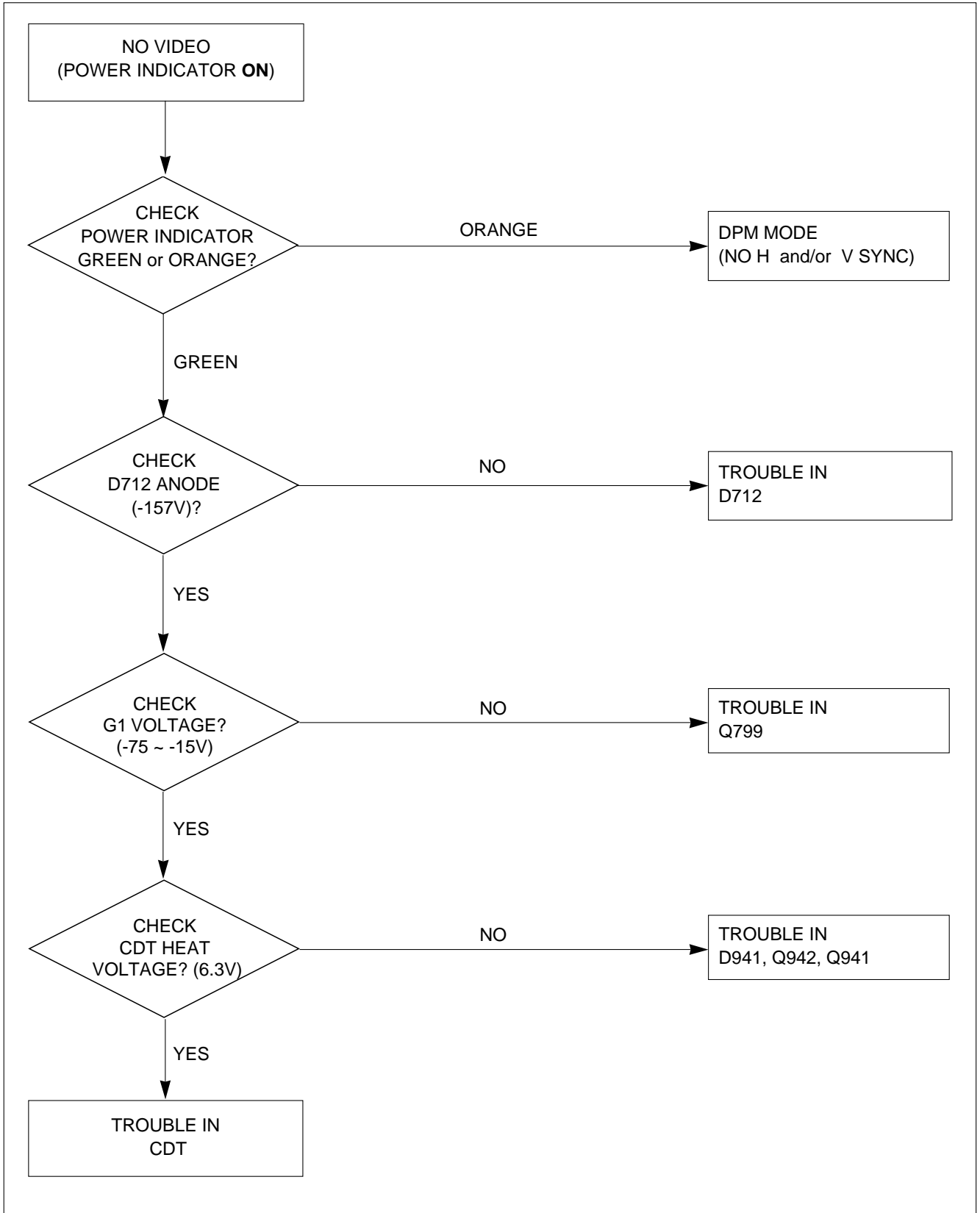
## 1. NO POWER



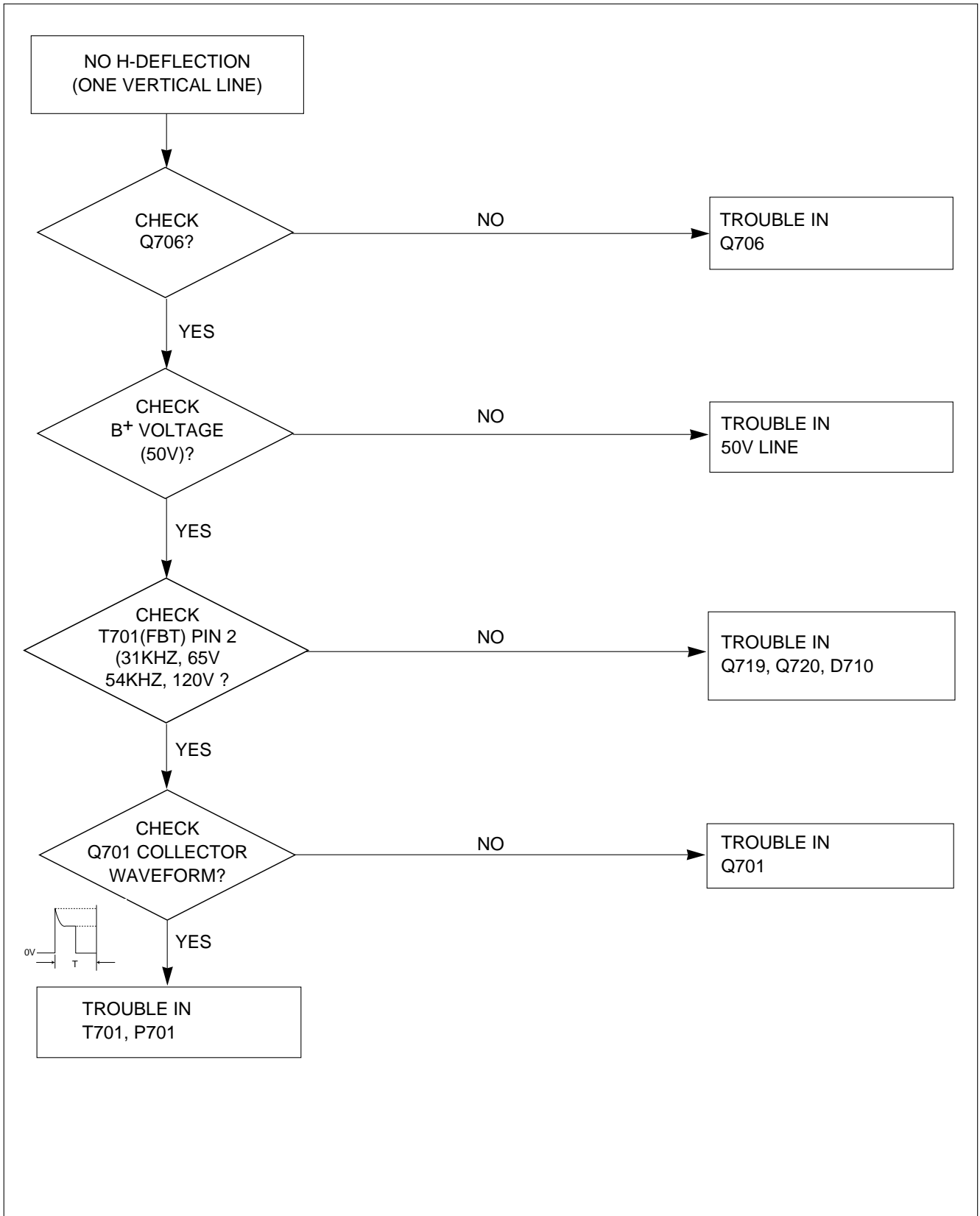
## 2. NO CHARACTER



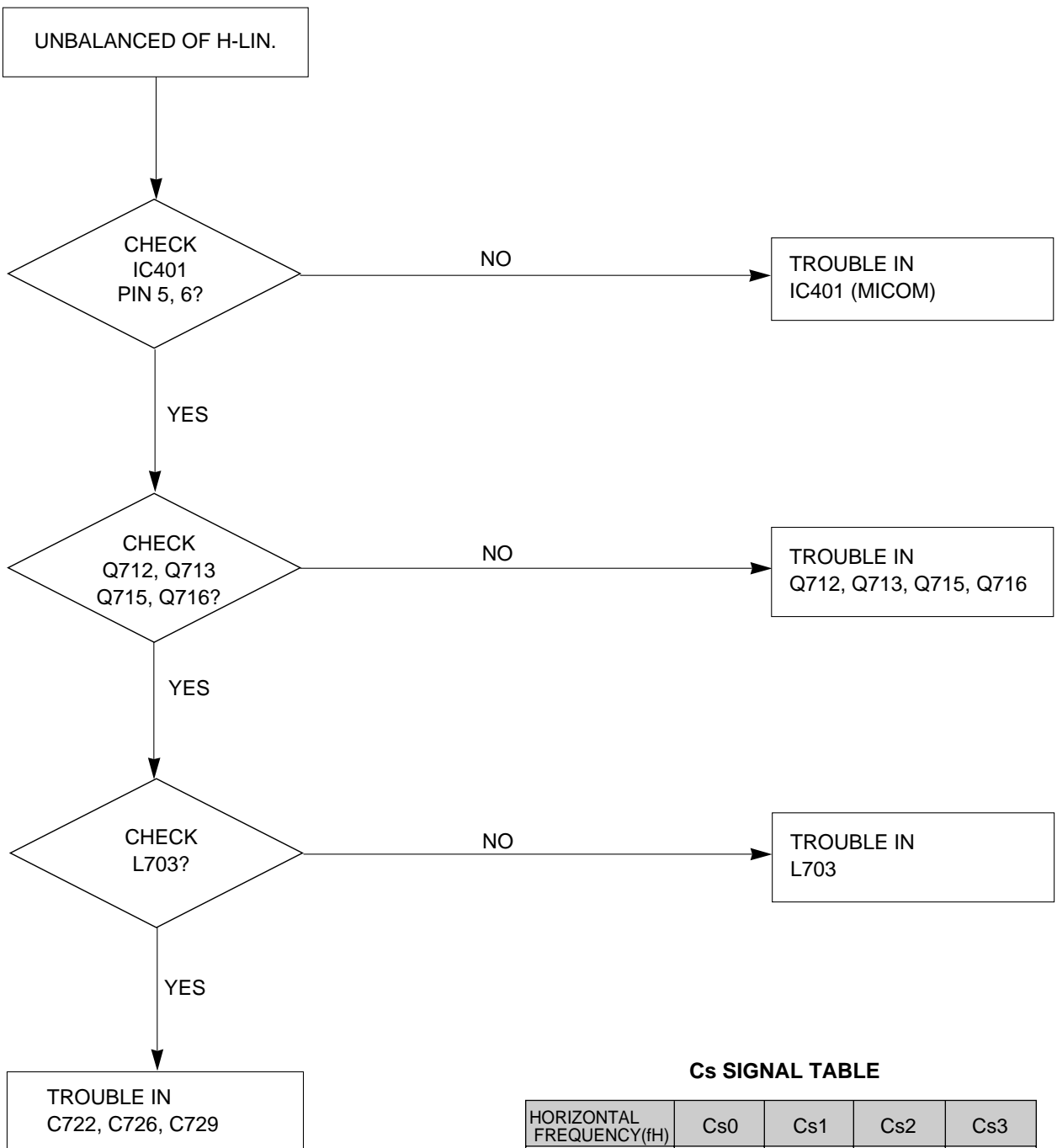
### 3. NO RASTER



#### 4. NO HORIZONTAL DEFLECTION



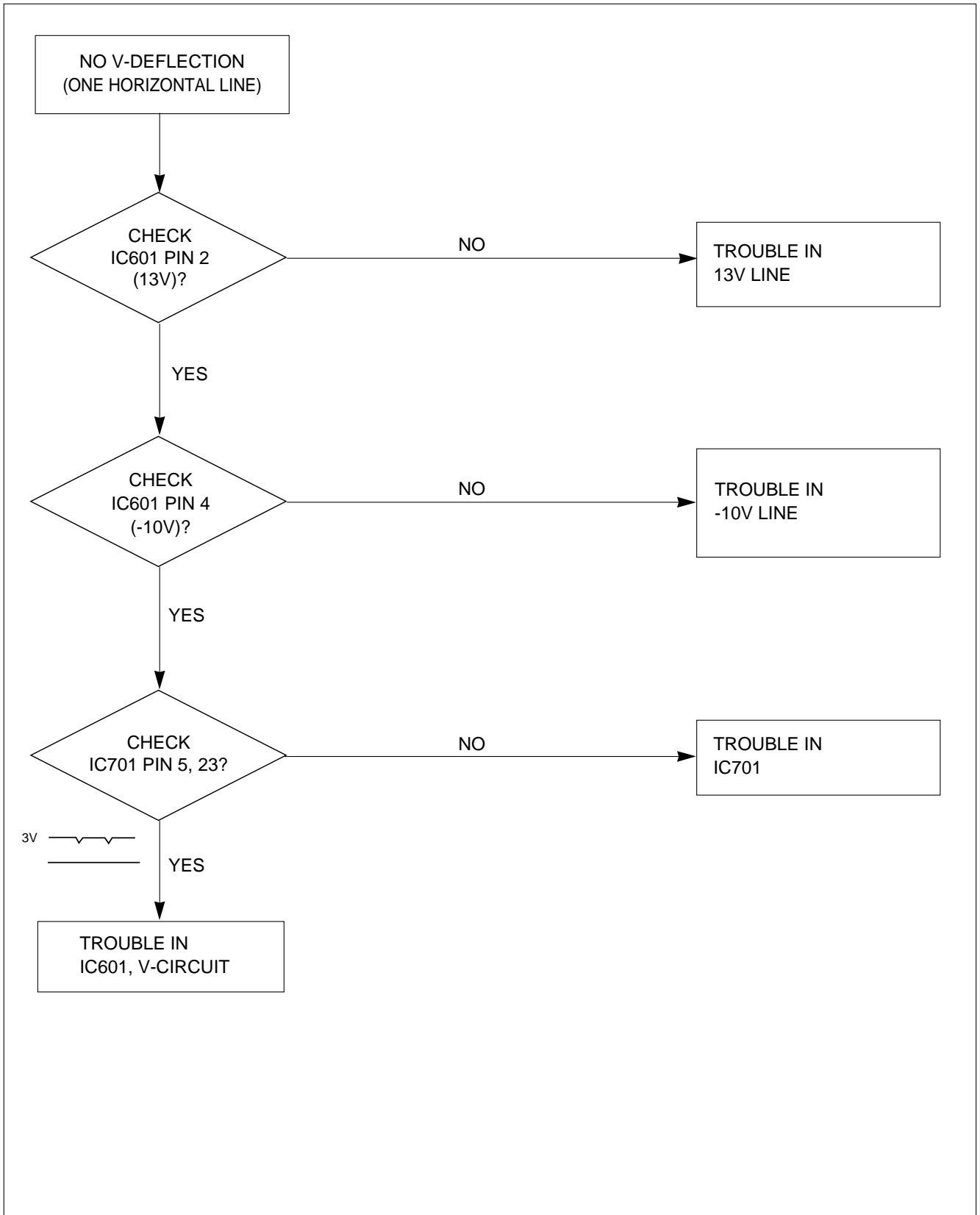
## 5. TROUBLE IN H-LINEARITY



**Cs SIGNAL TABLE**

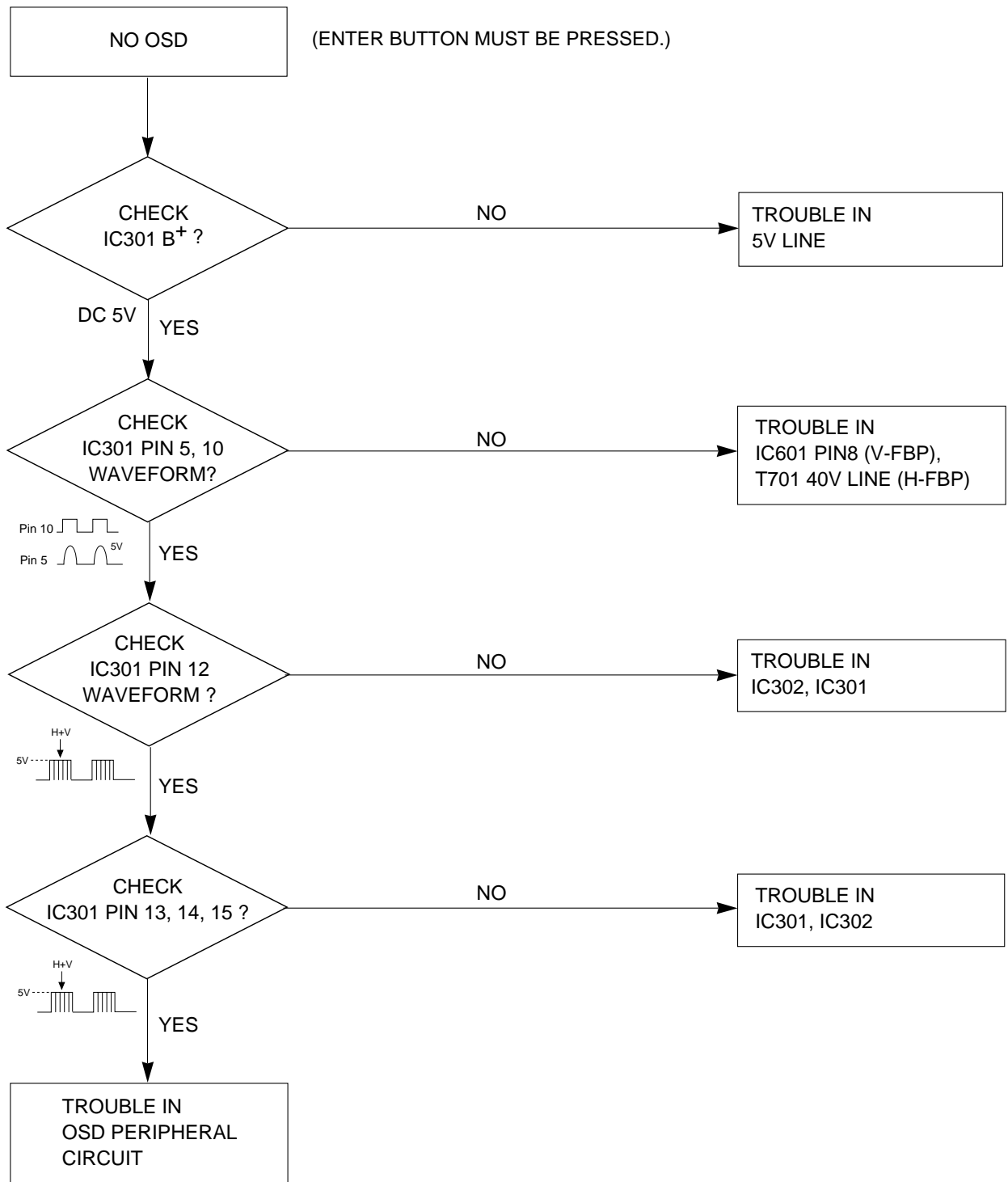
HORIZONTAL FREQUENCY(fH)	Cs0	Cs1	Cs2	Cs3
30K ~ 33.9K	255	L	L	L
34K ~ 38.9K	155	L	H	L
39K ~ 43.9K	130	H	L	H
44K ~ 48.9K	100	H	L	H
49K ~ 51.9K	85	H	H	H
52K ~ 54K	85	H	H	H

## 6. NO VERTICAL DEFLECTION

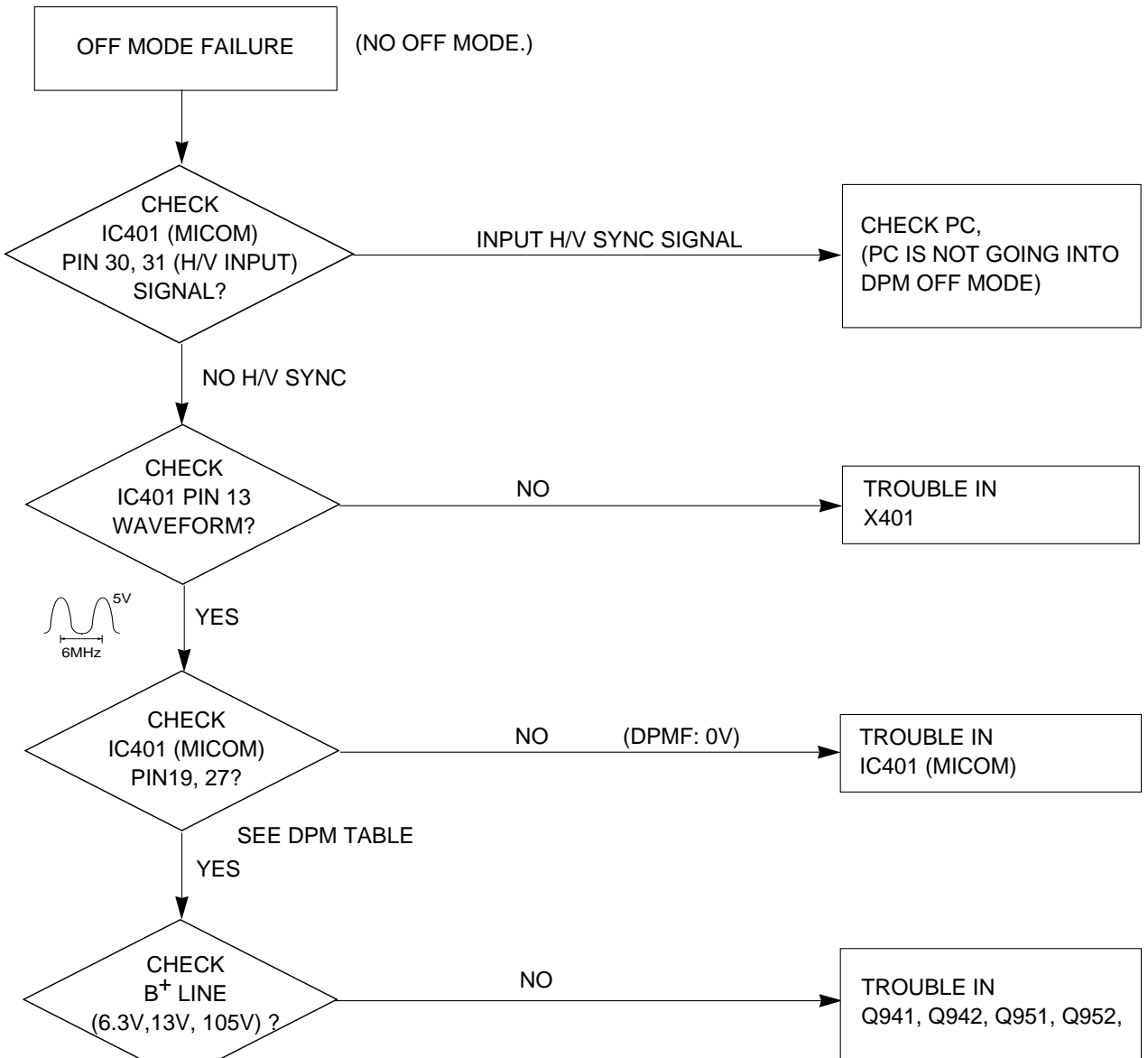




## 7. TROUBLE IN OSD



## 8. TROUBLE IN DPM

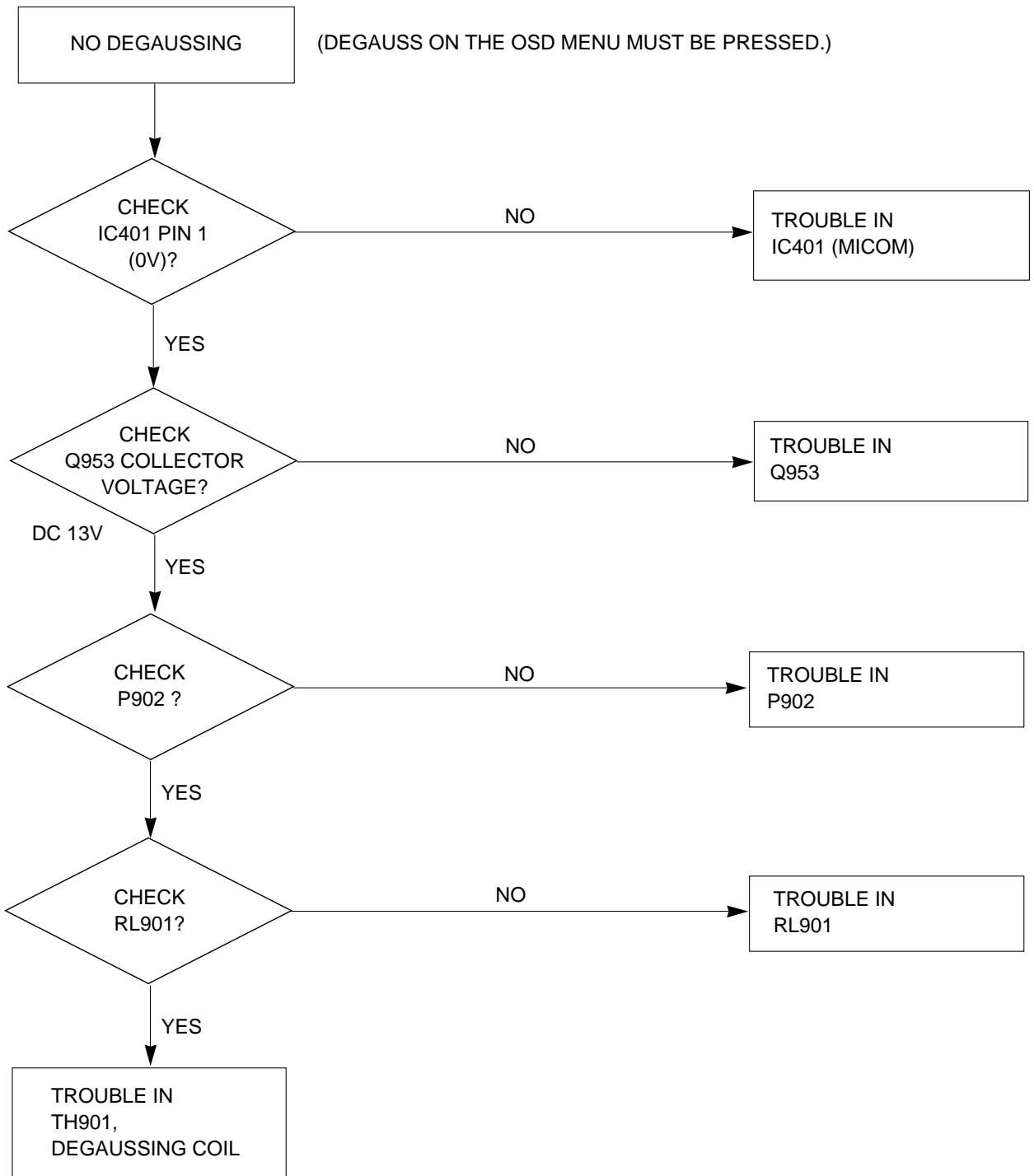


**DPM TABLE**

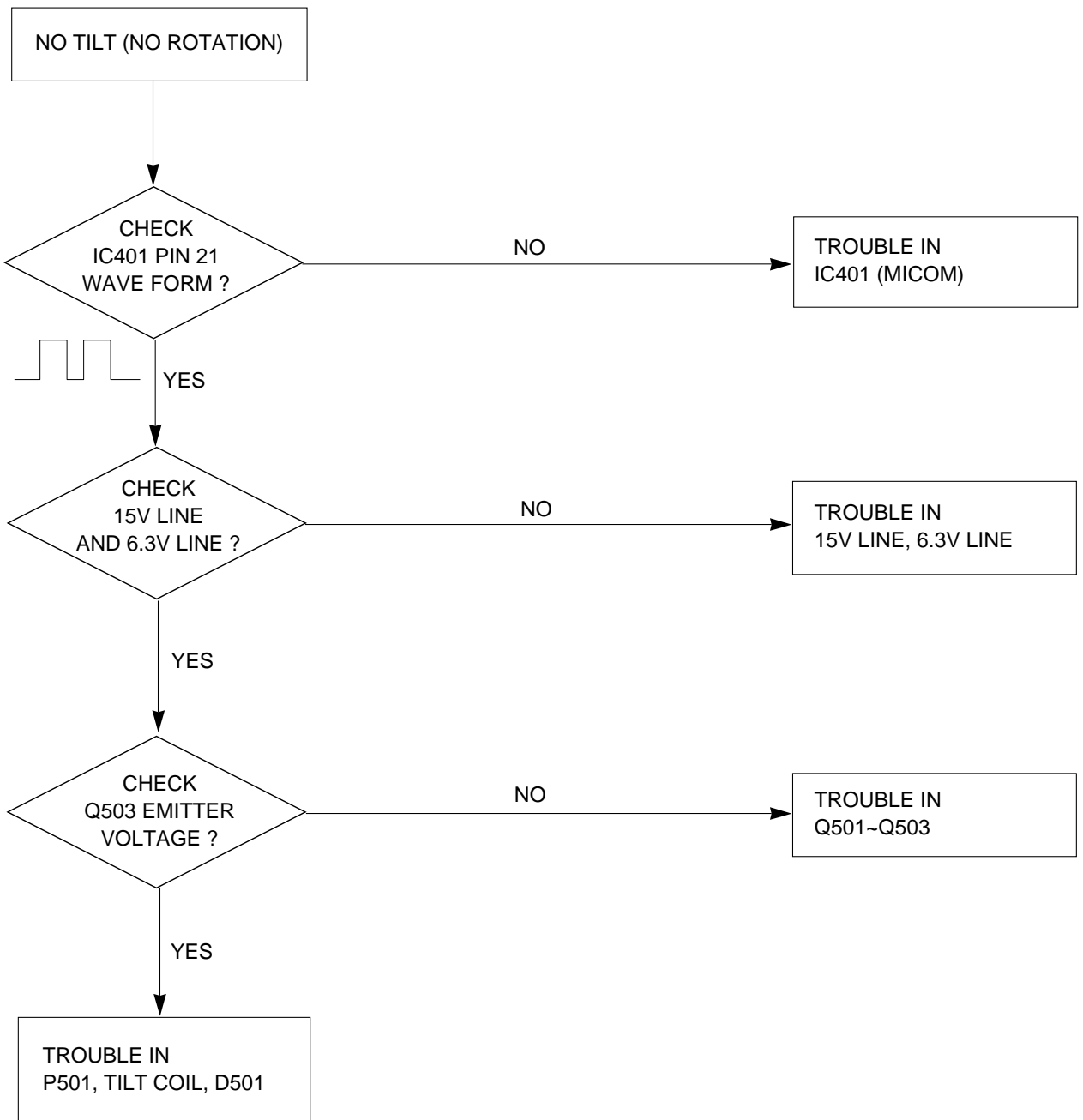
Mode \ Item	DPMF	DPMS	LED
NORMAL	H	H	GREEN
STAND-BY	L	H	ORANGE
SUSPEND	L	H	ORANGE
OFF	L	L	ORANGE

## 9. NO DEGAUSSING

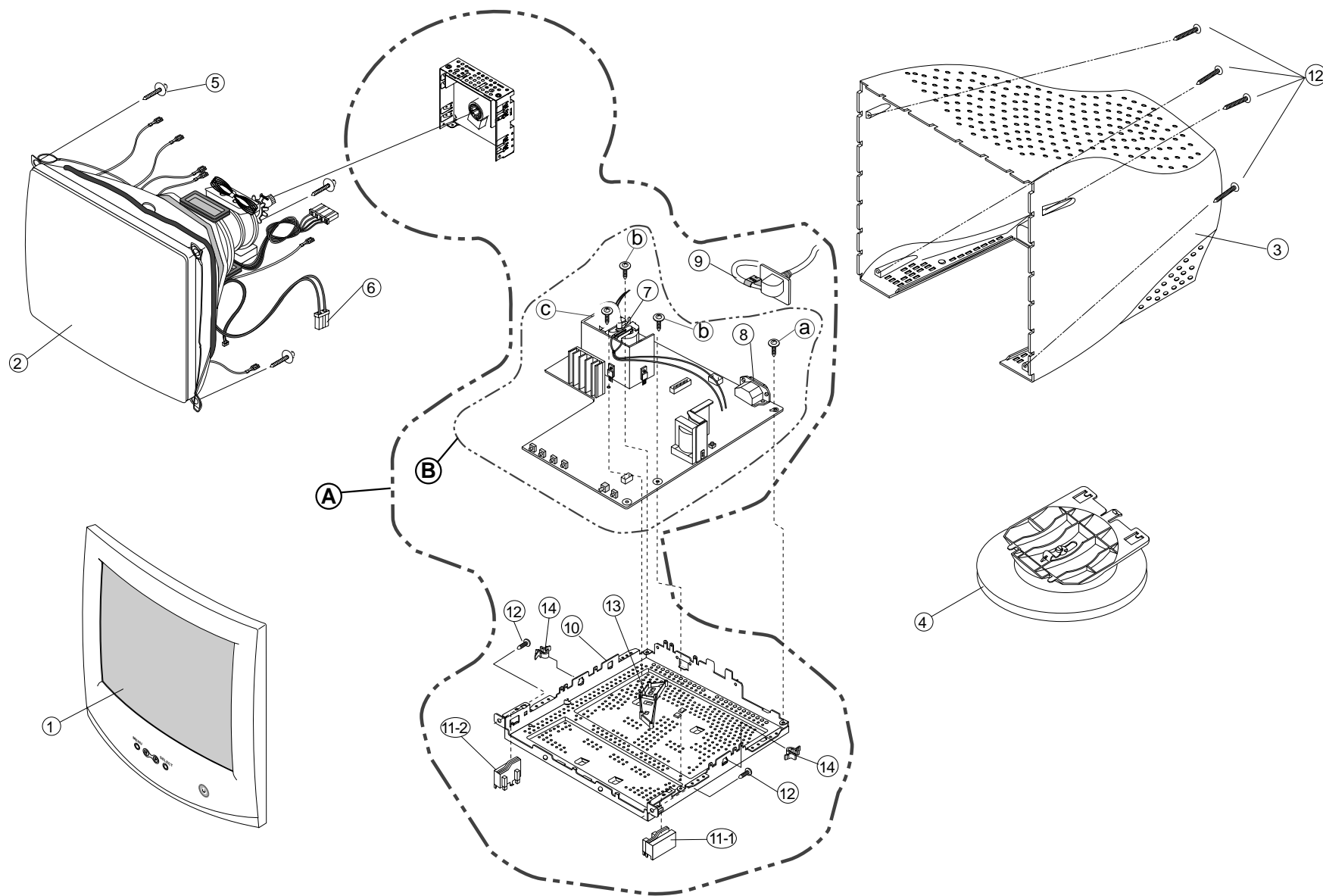
(DEGAUSS ON THE OSD MENU MUST BE PRESSED.)



## 10. NO TILT (NO ROTATION)



# EXPLODED VIEW



## EXPLODED VIEW PARTS LIST


Ref. No.	Part No.	Description
1	3091TKB048E	CABINET ASSEMBLY, CB553H BRAND B031 IBM E50 9930 320T SP LOCAL
2	6318G15001A	CDT(CIRC), M36QAW351X 122 SAMSUNG 61KHZ 29.1MM FST MPR
	or 2423GB0A8AX	CDT(CIRC), M36LBL803X 31RLLA LG-PHILIPS DISPLAYS 54KHZ 29.1 MM
3	3809TKB021H	BACKCOVER ASSEMBLY
4	3043TKK071J	TILT SWIVEL ASSEMBLY, CB563 B046,T051 IBM E52 9930 320T
5	339-002D	SCREW ASSY, PHP+5*30BP(FZMY)+GW18
6	6140TC3006B	COIL, DEGAUSSING, 75D-437 KWANGSUNG CB563G NT
7	6174Z-1035G	FBT (FLY BACK TRANSFORMER), FMMTC81 AM1035G (LIM SANG IL)
8	6620TKB002A	SOCKET(CIRC), POWER, BAE EUN AC UNIVERSAL 3PIN BLACK
	or 6620TKB002D	SOCKET(CIRC), POWER, CDJ-3C DUOLING AC UNIVERSAL 3PIN BLACK
9	6850TA9009F	CABLE, D-SUB, UL20276-9C(5.8MM) AT 1560MM BLACK 9930 TC170H DM
10	4950TKS212B	METAL, SHIELD BOTTOM, "A"CKD,CB553/CB563
11-1	4810TKK153A	BRACKET, CB773D SUPPORTER CDT
11-2	4810TKK154A	BRACKET, CB773D SUPPORTER CDT(L)
12	332-102F	SCREW, PTP+4*20BP(MSWR/FZMY)
13	4810TKK204C	BRACKET, H-CHASSIS HOLDER FBT, A-CKD
14	4930TKK031C	HOLDER, PCB FIX , PC+ABS
A	3313T15088A	MAIN TOTAL ASSEMBLY, E50H IBM CA-120
B	6871TMT427A	PWB(PCB) ASSEMBLY,MAIN, E50H KLBRMS IBM CA-120 TOTAL
a	4001TKK004E	SCREW ASSEMBLY, TAPTITE P TYPE D3.0 L10.0 MSWR/FZMY SW3+RW10
b	332-112F	SCREW, DRAWING, D3.5 L10.0 MSWR/FZMY +SW3.5+RW3.5
c	332-095B	SCREW, DRAWING, PZP+3*10(MSWR/FZMY)

# REPLACEMENT PARTS LIST

**CAUTION:** BEFORE REPLACING ANY OF THESE COMPONENTS,  
READ CAREFULLY THE **SAFETY PRECAUTIONS** IN THIS MANUAL.

\* NOTE : **S** SAFETY Mark   
**AL** ALTERNATIVE PARTS

DATE: 2003. 03. 28.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
CAPACITORS				
		C301	OCK1040K945	0.1UF 50V Z F TR
		C302	OCK1040K945	0.1UF 50V Z F TR
		C303	OCK1040K945	0.1UF 50V Z F TR
		C305	181-288C	MKT 100V 224JTR PHS 26224
		C306	0CE107CF638	"100UF SHL,SD 16V M FM5 TP 5"
		C307	OCK1040K945	0.1UF 50V Z F TR
		C308	OCK1040K945	0.1UF 50V Z F TR
		C309	OCK1040K945	0.1UF 50V Z F TR
		C310	0CE106CF638	"10UF SHL,SD 16V M FM5 TP 5"
		C311	OCK1040K945	0.1UF 50V Z F TR
		C312	OCK1040K945	0.1UF 50V Z F TR
		C314	OCK1010K515	100PF 50V K B TR
		C325	OCK1040K945	0.1UF 50V Z F TR
		C326	OCK4710W515	470P 500V K B TS
		C327	OCK10302940	0.01M 2KV Z F S
		C328	OCK10202515	1000PF D 2KV 10% TR B(Y5P)
		C331	0CC2200W415	22PF 500V J NP0 TR
		C332	OCK10301945	10000PF D 1KV Z F(Y5V) TR
		C346	0CE475CP638	"4.7UF SHL,SD 160V M FM5 TP 5"
		C380	0CE107CF638	"100UF SHL,SD 16V M FM5 TP 5"
		C384	0CC1000K115	10P 50V D NP0 TS
		C386	0CC1000K115	10P 50V D NP0 TS
		C388	0CC1000K115	10P 50V D NP0 TS
		C389	0CE475CP638	"4.7UF SHL,SD 160V M FM5 TP 5"
		C390	OCK10301945	10000PF D 1KV Z F(Y5V) TR
		C394	0CN1520F569	1500P 16V K X TA52
		C395	OCK1520K515	1500P 50V K B TS
		C396	OCK1520K515	1500P 50V K B TS
		C397	OCK1040K945	0.1UF 50V Z F TR
		C402	0CE476CF638	"47UF SHL,SD 16V M FM5 TP 5"
		C403	OCK1040K945	0.1UF 50V Z F TR
		C404	0CC1800K415	18P 50V J NP0 TP
		C405	0CC1800K415	18P 50V J NP0 TP
		C406	OCK1010K515	100PF 50V K B TR
		C407	OCK1010K515	100PF 50V K B TR
		C408	OCK1040K945	0.1UF 50V Z F TR
		C409	0CC5600K415	56P 50V J NP0 TP
		C410	OCK1010K515	100PF 50V K B TR
		C416	0CE225CK638	"2.2UF SHL,SD 50V M FM5 TP 5"
		C601-1	0CE477CF618	470UF SHL 16V M FL TP5
		C603	0CE227CK618	220U SHL 50V M FL TP5
		C606	0CQ4721N419	0.0047U 100V J POLY NI TP5
		C611-1	0CE477CF618	470UF SHL 16V M FL TP5
		C613	181-288Q	MKT 100V 154JTR PHS26154
		C614	0CE225CK638	"2.2UF SHL,SD 50V M FM5 TP 5"
		C615	0CQ4721N419	0.0047U 100V J POLY NI TP5
		C701	0CE105CK638	"1UF SHL,SD 50V 20% FM5 TP 5"
		C702	0CQ2231N419	0.022UF 100V J PE NI TP
		C703	0CQ1021N419	1000P 100V J POLY NI TP
		C704	0CQ4721N419	0.0047U 100V J POLY NI TP5
		C705	0CE475CK638	"4.7UF SHL,SD 50V M FM5 TP 5"
		C706	0CE105CK638	"1UF SHL,SD 50V 20% FM5 TP 5"
		C707	OCK1520K515	1500P 50V K B TS

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		C708	0CE227CH638	"220UF SHL,SD 25V M FM5 TP 5"
		C709	0CE105CK638	"1UF SHL,SD 50V 20% FM5 TP 5"
		C710	181-288Q	MKT 100V 154JTR PHS26154
		C711	181-288M	MKT 63V 105KTR PHS15105
		C712	OCK1040K945	0.1UF 50V Z F TR
		C713	OCK2210K515	220P 50V K B TS
		C714	0CE107CF638	"100UF SHL,SD 16V M FM5 TP 5"
		C715	0CQ1031N419	0.01U 100V J POLY NI TP
		C717	0CE476CF638	"47UF SHL,SD 16V M FM5 TP 5"
		C719	0CZZTAB001F	SHL-BP SYE / SWE 50V 3.3UF 2
		C722	181-303H	394J 31.0*23.0*16.0*20.0 250
		C724	OCK1040K945	0.1UF 50V Z F TR
		C725	OCK6810W515	680P 500V K B TS
		C726	181-482F	274JF 18.0*17.0*10.0*7.5 250
		C728	0CQ5621N419	5600P 100V J POLY NI TP
		C729	181-305V	514J 26.0*18.0*11.0*15.0 250
		C730	OCK1040K945	0.1UF 50V Z F TR
		C731	181-309X	542J 31.0*17.0*10.0*20.0 1.
		C732	0CQ1031N419	0.01U 100V J POLY NI TP
		C733	0CBZTBU003K	472J 20.0*13.0*8.0*10.0 800V
		C735	181-288B	MKT 100V 104JTR PHS26104
		C736	0CE2266F618	22M SMS 16V M FM5 TP(5)
		C737	OCK10102515	100PF D 2KV 10% B(Y5P) TR
		C739	0CE106CK638	"10UF SHL,SD 50V M FM5 TP 5"
		C740	0CE227CL630	220U SHL 63V M FM5
		C741	0CZZTFT002B	ECQV1H154JZ3 154J 50V TP5.0
		C742	181-288K	MKT 100V 683JTR PHS26683
		C743	0CZZTFT002B	ECQV1H154JZ3 154J 50V TP5.0
		C744	0CZZTAB005A	SMSHR SYE / SWE 160V 47UF 20
		C746	OCK3310W515	330P 500V K B TS
		C748	OCK1510W515	150PF 500V K B TR
		C749	0CE2256R638	2.2000UF SMS 250V M FM5 TP5
		C750	OCK1040K945	0.1UF 50V Z F TR
		C751	181-288J	MKT 100V 563JTR PHS26563
		C752	0CQ4721N419	0.0047U 100V J POLY NI TP5
		C753	0CQ1021N419	1000P 100V J POLY NI TP
		C754	0CC4700W405	47PF 500V J SL TP
		C759	OCK1020K515	1000PF 50V K B TR
		C771	OCK10301945	10000PF D 1KV Z F(Y5V) TR
		C801	OCK1040K945	0.1UF 50V Z F TR
		C802	0CE106CK638	"10UF SHL,SD 50V M FM5 TP 5"
		C805	0CE106CK638	"10UF SHL,SD 50V M FM5 TP 5"
		C901	0CBZTBU002A	BULK PCX2 335 224K
		C902	0CBZTBU002A	BULK PCX2 335 224K
		C903	0CKZTTA003A	SC E 222M 10.0FF7 250V TP7.5
		C904	0CKZTTA003A	SC E 222M 10.0FF7 250V TP7.5
		C905	0CKZTTA003A	SC E 222M 10.0FF7 250V TP7.5
		C906	0CKZTTA003A	SC E 222M 10.0FF7 250V TP7.5
		C908	181-296K	"150UF SMH,HC(25.4*30) 400V M"
		C909	OCK1030W510	0.01U 500V K B S
		C910	OCK27101515	270P 1KV K B TS
		C911	0CE475CK638	"4.7UF SHL,SD 50V M FM5 TP 5"
		C913	0CE476CK638	"47UF SHL,SD 50V M FM5 TP 5"
		C914	0CZZTFT001P	ECQB1H153JM3 153J 50V TP5.0

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		C915	0CK6810K515	680P 50V K B TS
		C917	0CK1020K515	1000PF 50V K B TR
		C918	0CK1040K945	0.1UF 50V Z F TR
		C941	0CE108CD618	1000UF SHL 10V M FL TP5
		C942	0CE107CF638	"100UF SHL,SD 16V M FM5 TP 5"
		C943	0CK56101515	560P 1KV K B TS
		C944	0CZZTCB002C	DCF472M59Y5UQ7DK7D HONGMING
		C945	0CK5610W515	560P 500V K B TS
		C946	0CZZTCB002C	DCF472M59Y5UQ7DK7D HONGMING
		C951	0CE108CF630	1000UF SHL 16V M FM5 BULK
		C952	0CE227CH638	"220UF SHL,SD 25V M FM5 TP 5"
		C953	0CE107CF638	"100UF SHL,SD 16V M FM5 TP 5"
		C954	0CE108CF630	1000UF SHL 16V M FM5 BULK
		C971	0CE476CN618	47UF SHL 100V M FL TP5
		C999	0CE227CL630	220U SHL 63V M FM5
DIODEs				
		D201	0DLGP0010AB	XIAMEN G&P GP32052ME/512-ZY-
		D301	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D302	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D303	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D304	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D305	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D306	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D307	0DS124409AA	1SS244 TP ROHM KOREA
		D308	0DS124409AA	1SS244 TP ROHM KOREA
		D309	0DS124409AA	1SS244 TP ROHM KOREA
		D310	0DS124409AA	1SS244 TP ROHM KOREA
		D311	0DS124409AA	1SS244 TP ROHM KOREA
		D312	0DS124409AA	1SS244 TP ROHM KOREA
		D313	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D314	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D399	0DR140059AD	1N4005 GULF TP DO41 600V 1A
		D402	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D404	971-0016	TIN HDC 0.60H
		D610	0DR100009CD	RGP10G-1021 TIWAN SEMI TP DO
		D702	0DS124409AA	1SS244 TP ROHM KOREA
		D703	0DRTW00050A	MUR460L-1121 TIWAN SEMI BK D
		D704	0DR150001AD	DTV1500LFP SGS-THOMSON ST TO
		D705	0DR100009CD	RGP10G-1021 TIWAN SEMI TP DO
		D706-1	0DR150001AA	DTV1500MFP ST SGS-THOMSON TO
		D707	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D709	971-0016	TIN HDC 0.60H
		D710	0DRGF00109B	GUF10G-28A GULF TP DO41 400V
		D711	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D712	0DR100009CD	RGP10G-1021 TIWAN SEMI TP DO
		D713	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D714	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D715	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D716	0DR140059AD	1N4005 GULF TP DO41 600V 1A
		D717	0DR140059AD	1N4005 GULF TP DO41 600V 1A
		D719	0DR100009DA	RGP10J TP GULF SEMICONDUCTOR
		D720	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D721	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D724	0DR140059AD	1N4005 GULF TP DO41 600V 1A
		D725	0DRGF00069A	SB140 GULF TP DO41 40V 1A 40
		D801	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D802	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D900	0DRGF00090A	GBL06 GULF BK GBL 600V 4A 12
		D902	971-0016	TIN HDC 0.60H
		D904	0DR100009CD	RGP10G-1021 TIWAN SEMI TP DO

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		D905	0DRGF00109A	GUF10M GULF TP DO41 1000V 1A
		D906	0DR100009CD	RGP10G-1021 TIWAN SEMI TP DO
		D908	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D910	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D911	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D941	0DR100009LD	UG1D GULF TP DO41 200V 1A 40
		D942	0DR100009CD	RGP10G-1021 TIWAN SEMI TP DO
		D951	0DRTW00044B	UG2DL-1021 TIWAN SEMI BK DO1
		D952	0DS141489AB	1N4148 TP GRANDE DO-34 500MW
		D961	0DRTW00060A	SF38GL-1121 TIWAN SEMI BK DO
		D971	0DR100009DA	RGP10J TP GULF SEMICONDUCTOR
		ZD402	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500
		ZD403	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500
		ZD404	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500
		ZD405	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500
		ZD407	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500
		ZD408	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500
		ZD409	0DZ560009AG	GDZJ5.6B TP GRANDE DO-34 500
		ZD701	0DZ120009BF	GDZJ12B TP GRANDE DO34 0.5W
		ZD702	971-0016	TIN HDC 0.60H
		ZD902	0DZ510009BE	GDZ5.1B TP GRANDE DO34 500MW
ICs				
		IC301	0IPRPWL001A	"6805-N160WT-87A WELTREND 16,"
		IC302	0IPRPSG014A	"STV9211 SGS-THOMSON 20P,DIP"
		IC303	0IPRPSG015A	"STV9555 SGS-THOMSON 11P,CLIP"
		IC401	0IMCRSS019A	LGM21A-080/AMH SAMSUNG ELECT
		IC402	0ISG240860A	M24C08-BN6 8DIP BK 8K SERIAL
		IC601	0IPRPSG016A	"STV9302A SGS-THOMSON TO220,7"
		IC701	0IPRPSS003A	S1D2519X01 SAMSUNG ELECTRONI
		IC901	0ISS384200A	KA3842B (PWM)
COILs & COREs				
		FB303	6210TCE003J	BAS2550T BO SUNG 2550MM AXIA
		FB304	6210TCE003J	BAS2550T BO SUNG 2550MM AXIA
		FB305	6210TCE003A	BRD3510B BO SUNG 3510MM RADI
		FB314	6210TCZ001J	BAS3550T0(125-022J) BO SUNG
		FB315	6210TCZ001J	BAS3550T0(125-022J) BO SUNG
		FB316	6210TCZ001J	BAS3550T0(125-022J) BO SUNG
		FB401	971-0016	TIN HDC 0.60H
		FB402	6210TCE003K	BAS3550T BO SUNG 3550MM AXIA
		FB403	6210TCE003K	BAS3550T BO SUNG 3550MM AXIA
		FB701	6210TCE003L	BAS3580T BO SUNG 3580MM AXIA
		FB703	6210TCE003B	BRS3580B BO SUNG 3580MM RADI
		FB705	971-0016	TIN HDC 0.60H
		FB903	6210TCE003P	BRS2550B BO SUNG 2550MM RADI
		FB904	971-0016	TIN HDC 0.60H
		FB905	6210TCE003P	BRS2550B BO SUNG 2550MM RADI
		FB921	6210TCE003A	BRD3510B BO SUNG 3510MM RADI
		FB922	6210TCE003L	BAS3580T BO SUNG 3580MM AXIA
		FB951	971-0016	TIN HDC 0.60H
		L301	0LA0560K119	0.56UH K 2.3*3.4 TP
		L302	0LA0560K119	0.56UH K 2.3*3.4 TP
		L303	0LA0560K119	0.56UH K 2.3*3.4 TP
		L304	0LA1000K119	100UH K 2.3*3.4 TP
		L310	6210TCE003P	BRS2550B BO SUNG 2550MM RADI
		L702	6140TBZ025C	DR14*20 150UH 0.12*25MM 51T
		L703	6140TYZ010F	"LX31 GET DR14*15-C5.2,19.5T,"
		L705	6140TBZ026C	DR15*18-C9.8 100UH 0.1*30MM
		L901	6200TZZ004A	SQE2626 NAMYANG BK L/FILTER



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		L903	6200J00003A	RH3.5*5.0 BOSUNG TP
TRANSISTOR				
		Q301	0TR100809AA	KSC1008C-Y TP SAMSUNG TO92
		Q701	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO
		Q703	0TR127009AA	KTA1270-Y(KTA562TM) TP KEC T
		Q704	0TR320209AA	KTC3202-Y(KTC1959) TP KEC TO
		Q705	0TR100809AA	KSC1008C-Y TP SAMSUNG TO92
		Q706	0TRTH10005B	2SC5855(LG1) TOSHIBA ST TO3P
		Q707	0TR127009AA	KTA1270-Y(KTA562TM) TP KEC T
		Q708	0TR127009AA	KTA1270-Y(KTA562TM) TP KEC T
		Q709	0TR141300AB	KTD1413 BK KEC TO220I S NPN
		Q711	0TF630000DA	IRF630A BK SAMSUNG 200V 9A T
		Q713	0TF630000DA	IRF630A BK SAMSUNG 200V 9A T
		Q715	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO
		Q716	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO
		Q717	0TR100809AA	KSC1008C-Y TP SAMSUNG TO92
		Q719	0TF630000DA	IRF630A BK SAMSUNG 200V 9A T
		Q799	0TR920009AB	KSP92 TP SAMSUNG TO92 HIGH V
		Q901	0TF760000AD	SSS7N60B FAIRCHILD ST TO220F
		Q903	0TR100809AA	KSC1008C-Y TP SAMSUNG TO92
		Q941	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO
		Q942	0TR928009AB	KSA928A-Y TP SAMSUNG TO92L P
		Q951	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO
		Q952	0TR928009AB	KSA928A-Y TP SAMSUNG TO92L P
		Q953	0TR319809AA	KTC3198-Y(KTC1815) TP KEC TO
RESISTORS				
		R301	ORD0752Q609	75 1/4W(3 5% TA52
		R302	ORD0752Q609	75 1/4W(3 5% TA52
		R303	ORD0752Q609	75 1/4W(3 5% TA52
		R304	ORD3001Q609	3K 1/4W(3 5% TA52
		R305	ORD1001Q609	1K 1/4W(3 5% TA52
		R307	ORD6200Q609	620 1/4W(3 5% TA52
		R308	ORD6803Q609	680K 1/4W(3 5% TA52
		R309	ORN6201F409	6.20K 1/6W 1% TA52
		R311	ORD0271Q609	2.70 1/4W(3 5% TA52
		R312	ORD2001Q609	2K 1/4W(3 5% TA52
		R313	ORD1000Q609	100 1/4W(3 5% TA52
		R314	ORD6800Q609	680 1/4W(3 5% TA52
		R315	ORD2400A609	240 OHM 1/2 W (7.0) 5% TA52
		R317	ORD1001Q609	1K 1/4W(3 5% TA52
		R319	ORD1000Q609	100 1/4W(3 5% TA52
		R320	ORD1000Q609	100 1/4W(3 5% TA52
		R321	ORD0152Q609	15 1/4W(3 5% TA52
		R322	ORD0152Q609	15 1/4W(3 5% TA52
		R323	ORD0152Q609	15 1/4W(3 5% TA52
		R324	ORD3300Q609	330 1/4W(3 5% TA52
		R325	ORD3300Q609	330 1/4W(3 5% TA52
		R326	ORD3300Q609	330 1/4W(3 5% TA52
		R327	ORD3300Q609	330 1/4W(3 5% TA52
		R331	ORD0512Q609	51 1/4W(3 5% TA52
		R332	ORD0512Q609	51 1/4W(3 5% TA52
		R333	ORD0512Q609	51 1/4W(3 5% TA52
		R335	ORD0271Q609	2.70 1/4W(3 5% TA52
		R336	ORD1000Q609	100 1/4W(3 5% TA52
		R337	ORD1000Q609	100 1/4W(3 5% TA52
		R341	ORD1500Q609	150 1/4W(3 5% TA52
		R342	ORD1500Q609	150 1/4W(3 5% TA52
		R343	ORD1500Q609	150 1/4W(3 5% TA52

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		R344	ORD1000Q609	100 1/4W(3 5% TA52
		R351	ORD2200A609	220 OHM 1/2 W (7.0) 5% TA52
		R352	ORD2200A609	220 OHM 1/2 W (7.0) 5% TA52
		R353	ORD2200A609	220 OHM 1/2 W (7.0) 5% TA52
		R354	ORD0392A609	39 OHM 1/2 W (7.0) 5% TA52
		R382	ORD1000Q609	100 1/4W(3 5% TA52
		R383	ORD1000Q609	100 1/4W(3 5% TA52
		R401	ORD1000Q609	100 1/4W(3 5% TA52
		R402	ORD5600Q609	560 1/4W(3 5% TA52
		R403	ORD1002Q609	10K 1/4W(3 5% TA52
		R405	ORD2001Q609	2K 1/4W(3 5% TA52
		R406	ORD2001Q609	2K 1/4W(3 5% TA52
		R407	ORD1300Q609	130 1/4W(3 5% TA52
		R408	ORD1300Q609	130 1/4W(3 5% TA52
		R409	ORD1000Q609	100 1/4W(3 5% TA52
		R410	ORD1000Q609	100 1/4W(3 5% TA52
		R414	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R417	ORD1000Q609	100 1/4W(3 5% TA52
		R418	ORD1002Q609	10K 1/4W(3 5% TA52
		R419	ORD1004Q609	1M OHM 1/4 W (3.4) 5% TA52
		R424	ORD2200Q609	220 1/4W(3 5% TA52
		R425	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R426	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R429	ORD1000Q609	100 1/4W(3 5% TA52
		R430	ORD1000Q609	100 1/4W(3 5% TA52
		R431	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R432	ORD1000Q609	100 1/4W(3 5% TA52
		R433	ORD1000Q609	100 1/4W(3 5% TA52
		R434	ORD1000Q609	100 1/4W(3 5% TA52
		R438	ORD1001Q609	1K 1/4W(3 5% TA52
		R439	ORD1001Q609	1K 1/4W(3 5% TA52
		R441	ORD2200Q609	220 1/4W(3 5% TA52
		R442	ORD2200Q609	220 1/4W(3 5% TA52
		R443	ORD0912Q609	91 OHM 1/4 W (3.4) 5% TA52
		R445	ORD5101Q609	5.10K 1/4W(3 5% TA52
		R446	ORD1002Q609	10K 1/4W(3 5% TA52
		R447	ORD1001Q609	1K 1/4W(3 5% TA52
		R448	ORD1801Q609	1.80K 1/4W(3 5% TA52
		R490	ORD9100Q609	910 1/4W(3 5% TA52
		R491	ORD2200Q609	220 1/4W(3 5% TA52
		R492	ORD4300Q609	430 OHM 1/4 W(3.4) 5.00% TA5
		R493	ORD7500Q609	750 OHM 1/4 W (3.4) 5% TA52
		R494	ORD1001Q609	1K 1/4W(3 5% TA52
		R495	ORD1001Q609	1K 1/4W(3 5% TA52
		R602	ORN1000F409	100OHM 1/6 W 1% TA52
		R604	ORN2001F409	2K OHM 1/6 W 1.00% TA52
		R607	ORN5101F409	5.10K 1/6W 1% TA52
		R608	ORN2002F409	20K 1/6W 1% TA52
		R609	ORN1102F409	11K 1/6W 1% TA52
		R611	ORD0151A609	1.5 OHM 1/2 W (7.0) 5% TA52
		R612	ORD2700A609	270 OHM 1/2 W (7.0) 5% TA52
		R614	ORN0111H509	1.1 OHM 1/2 W 2.00% TA52
		R615	ORN1202F409	12K 1/6W 1% TA52
		R619	ORN2001F409	2K OHM 1/6 W 1.00% TA52
		R700	971-0016	TIN HDC 0.60H
		R701	ORD6201Q609	6.20K 1/4W(3 5% TA52
		R702	ORD2001Q609	2K 1/4W(3 5% TA52
		R703	ORD1001Q609	1K 1/4W(3 5% TA52
		R704	ORD6202Q609	62K OHM 1/4 W (3.4) 5% TA52
		R705	ORD1203Q609	120K 1/4W(3 5% TA52
		R706	ORD1002Q609	10K 1/4W(3 5% TA52
		R707	ORD1001Q609	1K 1/4W(3 5% TA52

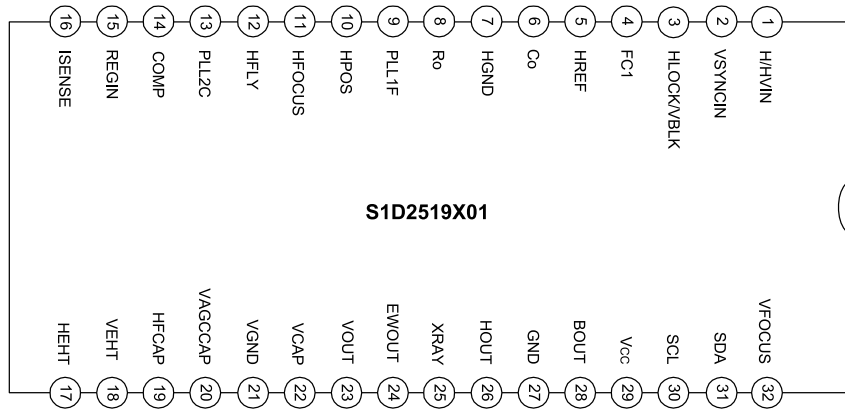
DATE: 2003. 03. 28.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R708	ORD1102Q609	11K 1/4W(3 5% TA52
△		R709	ORN1002F409	10K 1/6W 1 TA52
		R710	ORD1000Q609	100 1/4W(3 5% TA52
		R711	ORD1000Q609	100 1/4W(3 5% TA52
		R712	ORD1501Q609	1.50K 1/4W(3 5% TA52
△		R713	ORN7502F409	75000 OHM 1/6 W 1% TA52
△		R714	ORN1102F409	11K 1/6W 1% TA52
		R716	ORD1002Q609	10K 1/4W(3 5% TA52
		R717	ORD2701Q609	2.70K 1/4W(3 5% TA52
		R718	ORD0152Q609	15 1/4W(3 5% TA52
△		R719	ORD1001Q609	1K 1/4W(3 5% TA52
		R720	ORD3302Q609	33K 1/4W(3 5% TA52
		R721	971-0016	TIN HDC 0.60H
		R722	ORD1001Q609	1K 1/4W(3 5% TA52
		R723	ORD1001Q609	1K 1/4W(3 5% TA52
		R724	ORD1001Q609	1K 1/4W(3 5% TA52
		R726	ORD7502A609	75K OHM 1/2 W (7.0) 5% TA52
		R727	ORX0362K665	36 OHM 2 W 5% SF
		R728	ORD1001Q609	1K 1/4W(3 5% TA52
		R729	ORD1002Q609	10K 1/4W(3 5% TA52
		R731	ORD1002Q609	10K 1/4W(3 5% TA52
		R732	ORD6802Q509	68K OHM 1/4 W (3.4) 2% TA52
		R733	ORD1001Q609	1K 1/4W(3 5% TA52
		R735	ORD1002Q609	10K 1/4W(3 5% TA52
		R736	ORX2201J609	2.2KOHM 1 W 5% TA52
		R737	ORN0560H609	0.56 1/2W 5 TA52
		R738	ORN0560H609	0.56 1/2W 5 TA52
		R740	ORD0271A609	2.7 OHM 1/2 W (7.0) 5% TA52
		R743	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R744	ORD2200A609	220 OHM 1/2 W (7.0) 5% TA52
		R747	ORD3001Q609	3K 1/4W(3 5% TA52
		R748	ORD4702Q609	47K 1/4W(3 5% TA52
		R749	ORD2201Q609	2.20K 1/4W(3 5% TA52
		R750	ORD3001Q609	3K 1/4W(3 5% TA52
		R751	ORD2001Q609	2K 1/4W(3 5% TA52
		R752	ORD2201Q609	2.20K 1/4W(3 5% TA52
		R756	ORD2202A609	22K OHM 1/2 W (7.0) 5% TA52
		R757	ORD3602Q609	36K 1/4W(3 5% TA52
		R758	ORN1303F409	130K 1/6W 1% TA52
		R759	ORD1302Q509	13K OHM 1/4 W (3.4) 2% TA52
		R760	ORD5103Q609	510K 1/4W(3 5% TA52
		R761	ORD3001Q609	3K 1/4W(3 5% TA52
		R762	ORD3001Q609	3K 1/4W(3 5% TA52
		R764	971-0016	TIN HDC 0.60H
		R765	ORD3000A609	300 OHM 1/2 W (7.0) 5% TA52
		R766	ORD6800A609	680 OHM 1/2 W (7.0) 5% TA52
		R767	971-0016	TIN HDC 0.60H
		R769	ORD1803Q609	180K 1/4W(3 5% TA52
		R771	ORN2001F409	2K OHM 1/6 W 1.00% TA52
		R772	ORN2401F409	2.40K 1/6W 1% TA52
		R773	ORD6202A609	62K OHM 1/2 W (7.0) 5% TA52
		R783	ORD2001Q609	2K 1/4W(3 5% TA52
		R786	ORD4302Q609	43K 1/4W(3 5% TA52
		R789	ORD1201Q609	1.20K 1/4W(3 5% TA52
		R793	ORD4702Q609	47K 1/4W(3 5% TA52
		R797	ORD1501Q609	1.50K 1/4W(3 5% TA52
		R798	ORD2001Q609	2K 1/4W(3 5% TA52
		R799	ORD7501Q609	7.50K 1/4W(3 5% TA52
		R801	ORD4702Q609	47K 1/4W(3 5% TA52
		R802	ORD1502Q609	15K 1/4W(3 5% TA52
		R803	ORD2001Q609	2K 1/4W(3 5% TA52
		R808	971-0016	TIN HDC 0.60H

DATE: 2003. 03. 28.				
*S	*AL	LOC. NO.	PART NO.	DESCRIPTION / SPECIFICATION
		R809	ORX0101K665	1 OHM 2 W 5% SF
		R813	ORD6802Q609	68K 1/4W(3 5% TA52
		R814	ORD1202Q609	12K 1/4W(3 5% TA52
△		R816	ORN3301F409	3.30K 1/6W 1% TA52
△		R818	ORN6202F409	62KOHM 1/6 W 1% TA52
		R901	ORD4703A609	470K OHM 1/2 W (7.0) 5% TA52
		R902	ORD0511Q609	5.1 OHM 1/4 W (3.4) 5% TA52
		R904	ORX3902K665	39K OHM 2 W 5% SF
		R906	ORD6200Q609	620 1/4W(3 5% TA52
		R908	971-0016	TIN HDC 0.60H
		R910	ORX4702J609	47K OHM 1 W 5% TA52
		R911	971-0016	TIN HDC 0.60H
△		R912	ORD1802Q609	18K 1/4W(3 5% TA52
△		R913	ORD2201Q609	2.20K 1/4W(3 5% TA52
		R915	ORD1000Q609	100 1/4W(3 5% TA52
		R916	ORD1002Q609	10K 1/4W(3 5% TA52
		R918	ORD1001Q609	1K 1/4W(3 5% TA52
		R923	ORD1003Q609	100K 1/4W(3 5% TA52
		R925	ORB0220K607	0.22 2 W 5% TA62
		R926	ORD4301Q609	4.30K 1/4W(3 5% TA52
		R927	ORD2002Q609	20K 1/4W(3 5% TA52
		R928	ORD1800Q609	180 1/4W(3 5% TA52
		R929	ORD0332Q609	33 1/4W(3 5% TA52
		R941	971-0016	TIN HDC 0.60H
		R944	ORD4700A609	470 OHM 1/2 W (7.0) 5% TA52
		R945	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R951	ORN0560H609	0.56 1/2W 5 TA52
		R952	ORD1202A609	12K OHM 1/2 W(7.0) 5.00% TA5
		R953	ORD1001A609	1K OHM 1/2 W (7.0) 5% TA52
		R954	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R955	ORD4701Q609	4.70K 1/4W(3 5% TA52
		R956	ORD6802A609	68K OHM 1/2 W (7.0) 5% TA52
		R957	ORD0472Q609	47 1/4W(3 5% TA52
		R960	ORD6200A609	620 OHM 1/2 W(7.0) 5.00% TA5
		R971	ORD0102A609	10 OHM 1/2 W (7.0) 5% TA52
OTHERs				
		F1	430-858C	AFC-520 BAE EUN TA
		F2	430-858C	AFC-520 BAE EUN TA
		F901	0FZZTH001B	"TIME LAG HBC 5A/250V,215 005"
		J302	ORD0471Q609	4.70 1/4W(3 5% TA52
		RL901	6920TBA001A	DY3MA-DC12 DONGYANG 250VAC 1
		SC301	6620TBC002A	PCS629-01B PARK ELEC. 8PIN 1
		SC901	6620TKB002A	BAE EUN AC UNIVERSAL 3PIN BL
		SG305	6918TRT005A	"SSG-102-A0,1KV SMART RADIAL"
		SW1	6600R00001B	JTP1286 JEIL 12V DC 1MA VERT
		SW2	6600R00001B	JTP1286 JEIL 12V DC 1MA VERT
		SW3	6600R00001B	JTP1286 JEIL 12V DC 1MA VERT
		SW4	6600R00001B	JTP1286 JEIL 12V DC 1MA VERT
		SW5	6600R00001B	JTP1286 JEIL 12V DC 1MA VERT
		T2	5240TOB002A	W-T 480MM UL1007 AWG 24 TWI
		T3	5240TOB002A	W-T 480MM UL1007 AWG 24 TWI
△		T701	6174Z-1035G	FMMTC81 AM1035G (LIM SANG IL
		T703	6170TCZ001D	"EI2218 4.0MH H-DRIVE,EB770G"
		T901	6170TMZ140A	EER3541 240UH V-16PIN CB553H
		TH901	163-053D	J502P62C090Q290 JAHWA +/-20
		TH902	6322TA080BA	SCK-084 THINKING 8 OHM 15% 2
		VR901	180-035G	"EVN-DJAA03B13 (MEC),1KB"
		X401	6212AA2004E	HC-49U TXC 12.0MHZ +/- 30 PP

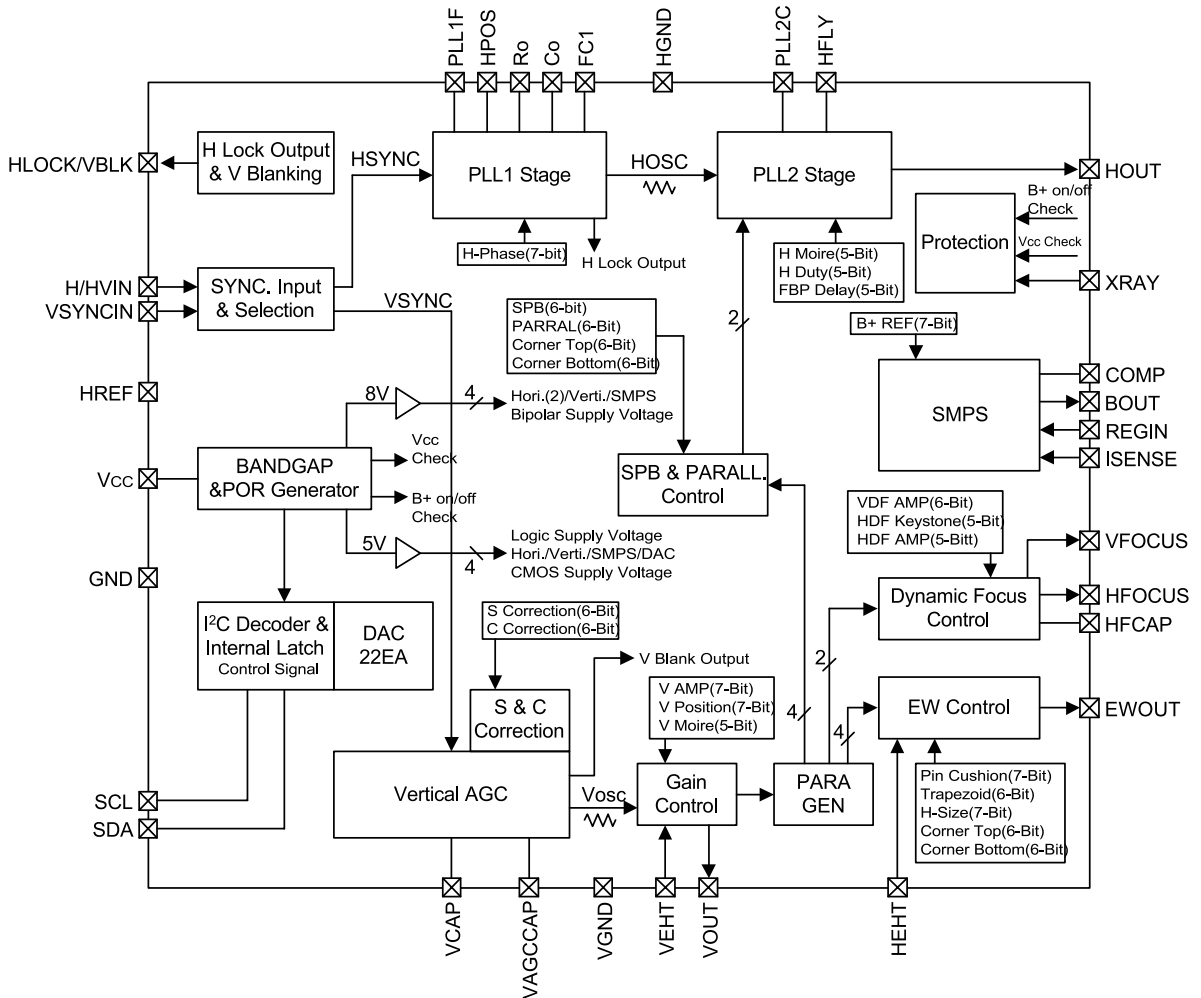
# PIN CONFIGURATION

DEFLECTION PROCESSOR FOR MULTISYNC MONITORS

S1D2519X01



## BLOCK DIAGRAM

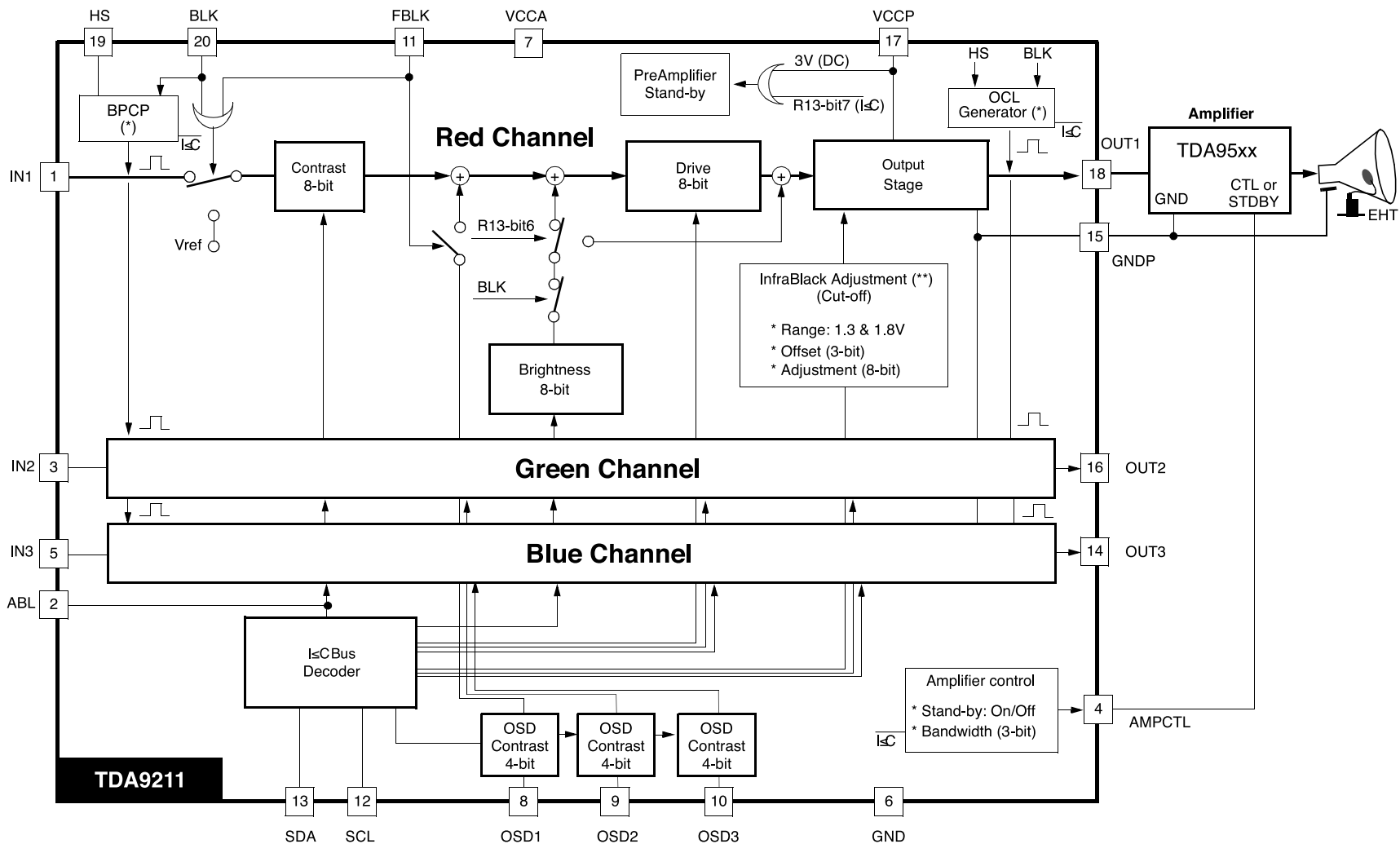


## Pin Configuration

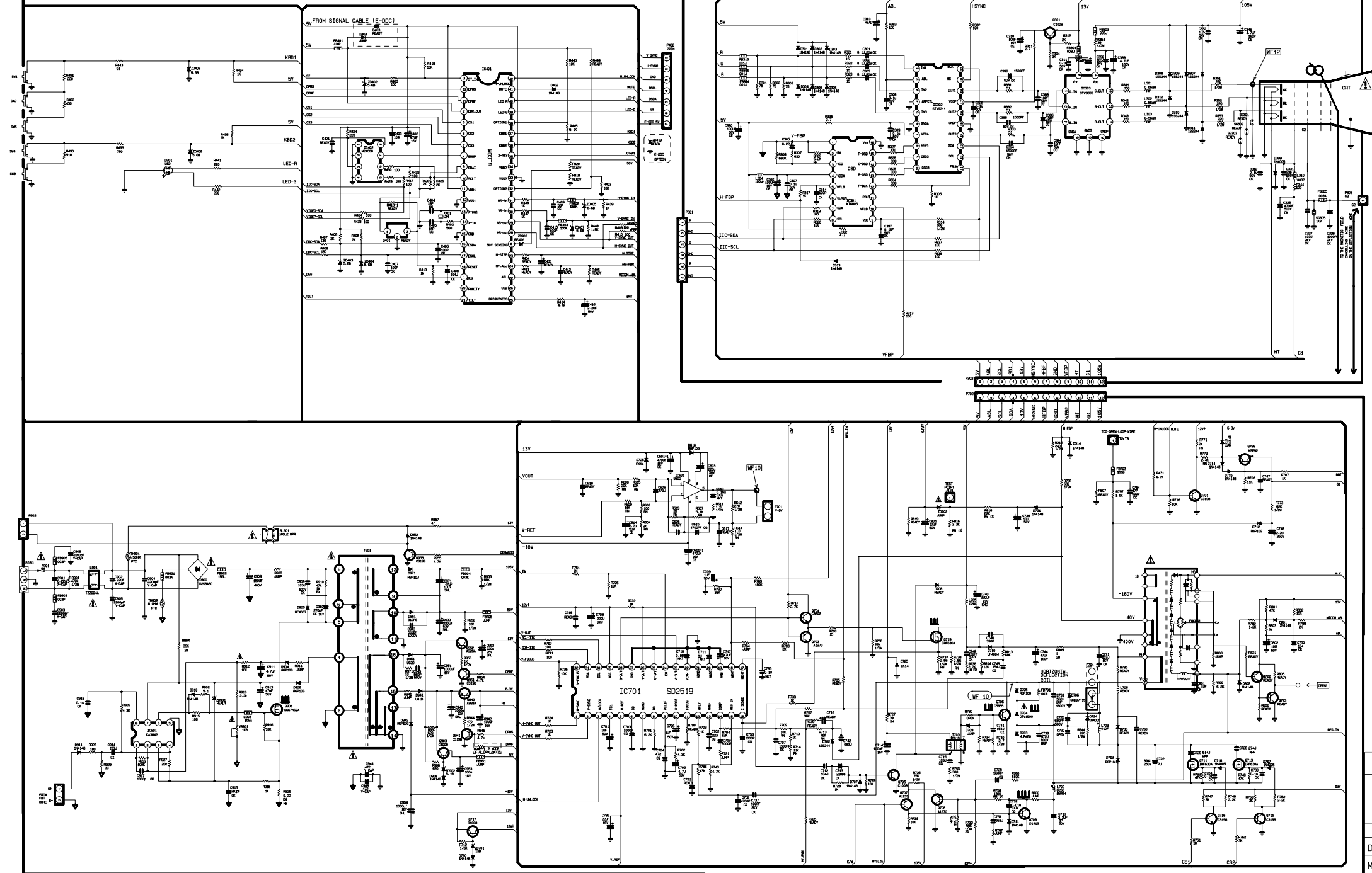
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ABL	<input type="checkbox"/>	2	19	<input type="checkbox"/>	HS
IN2	<input type="checkbox"/>	3	18	<input type="checkbox"/>	OUT1
AMPCTL	<input type="checkbox"/>	4	17	<input type="checkbox"/>	V <sub>CCP</sub>
IN3	<input type="checkbox"/>	5	16	<input type="checkbox"/>	OUT2
GNDA	<input type="checkbox"/>	6	15	<input type="checkbox"/>	GNDP
V <sub>CCA</sub>	<input type="checkbox"/>	7	14	<input type="checkbox"/>	OUT3
OSD1	<input type="checkbox"/>	8	13	<input type="checkbox"/>	SDA
OSD2	<input type="checkbox"/>	9	12	<input type="checkbox"/>	SCL
OSD3	<input type="checkbox"/>	10	11	<input type="checkbox"/>	FBLK

## Pin Description

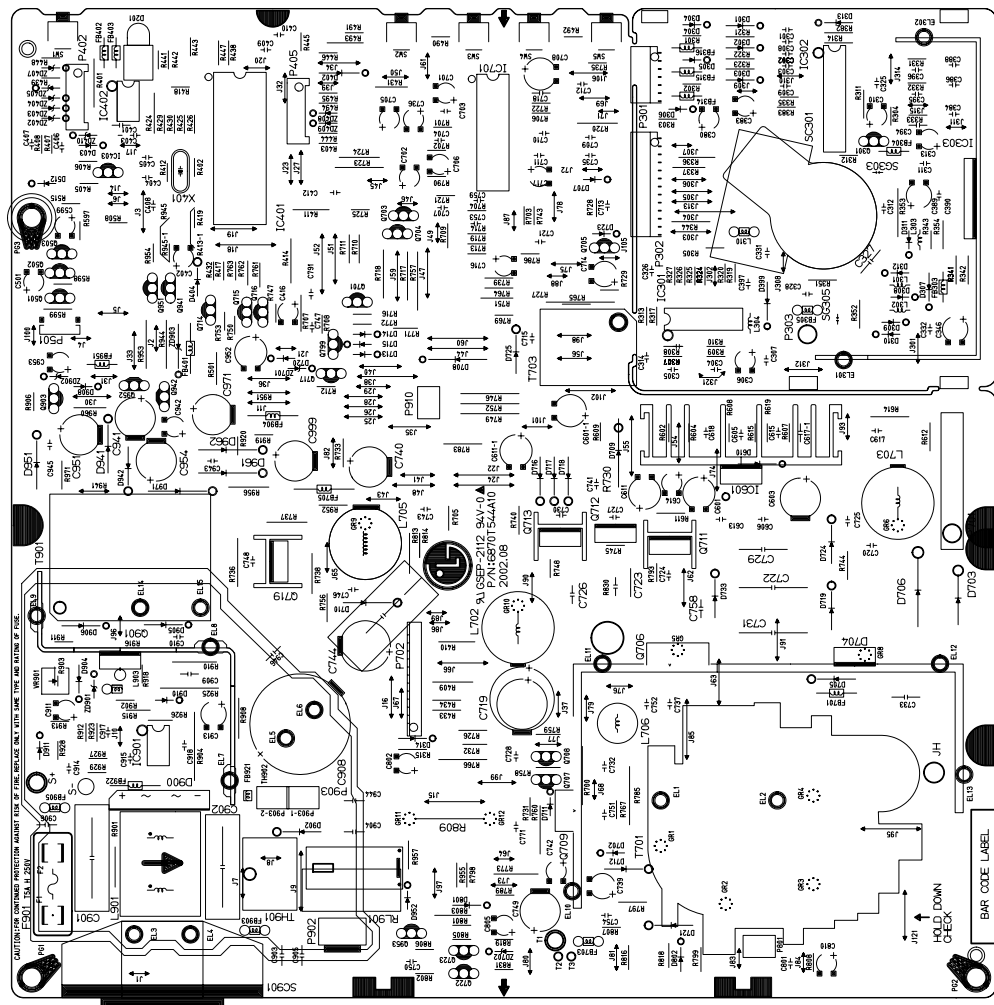
Pin number	symbol	description
1	IN1	Video input (channel 1, red)
2	ABL	ABL input
3	IN2	Video input (channel 2, green)
4	AMPCTL	Amplifier control (bandwidth and stand-by). Only applicable with amplifiers with the CTL or STDBY pins. To be connected to ground if not used.
5	IN3	Video input (channel 3, blue)
6	GNDA	Analog ground
7	V <sub>CCA</sub>	Analog supply (5V)
8	OSD1	OSD input (channel 1, red)
9	OSD2	OSD input (channel 2, green)
10	OSD3	OSD input (channel 3, blue)
11	FBLK	Fast blanking
12	SCL	SCL
13	SDA	SDA
14	OUT3	Video output (channel 3, blue)
15	GNDP	Power ground
16	OUT2	Video output (channel 2, green)
17	V <sub>CCP</sub>	Output stage supply (5 V to 8 V)
18	OUT1	Video output (channel 1, red)
19	HS	Horizontal synchro or BPCP pulse
20	BLK	Blanking input



SCHEMATIC DIAGRAM(SAMSUNG IC701)



1. MAIN BOARD (Component Side)



2. MAIN BOARD (Solder Side)

