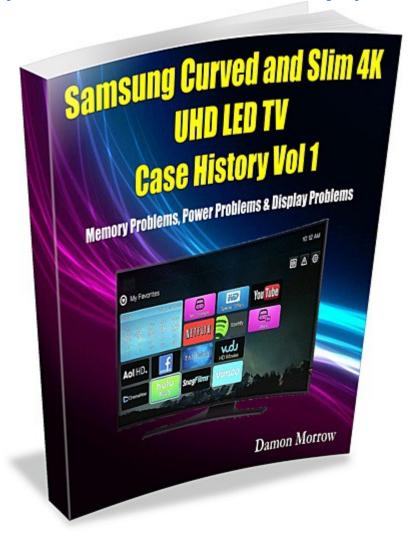
# DAMON MORROW Samsung Curved and Slim 4K UHD LED TV Case History Vol 1

Memory Problems, Power Problems & Display Problems



http://www.PlasmaTVRepairGuide.com

Samsung Curved and Slim 4K UHD LED TV Case History Vol 1

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### **Dedication**

This book is dedicated to: <u>Jestine Yong</u>, Sunny, David Maltz, Teonna Flags, and Michael Danish. I would like to give special thanks to Jestine for being a great teacher to me and a great friend and always inspiring me to study harder to become an Engineer of electronics. Also special thanks to David for being my big brother and keeping my spirits up and always encouraging me to stay fit and healthy and to go further and to never give up. Thank you

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#### **DAMON MORROW**

# Samsung Curved 4K UHD LED TV & Samsung Slim 4K UHD LED TV Case History Vol.1

Memory Problems, Power Problems, Display Problems

Documented Service Records - All Level Technicians

For Intermediates, Professional Technicians And Advanced Students

#### **Documented Service Records – All Level Technicians.**

<u>Power Faults</u> - <u>Display Faults</u> - <u>Memory Errors</u>

The following information in this Samsung **4K UHD LED TV** case history e-book was written and compiled according to Damon Morrow's in-house service records (or case history) of Samsung 4K LED TV failures. This e-book documents a fair range of Samsung 4K LED TV faults including various memory errors, display symptoms, and power failures. This Samsung 4K case history e-book is very easy to use, and it simply lists a fair range of known problems and secretive fixes for Samsung 4K LED TV's. The information contained in these pages are complete with the **model number of the Samsung 4K LED TV**, the **board-number of the faulty circuit**, and the **part-location number** of the defective component(s).

This Samsung 4K LED TV e-book is a simple and affective reference tool, revealing components which have failed causing performance issues with Samsung 4K LED TV's. This e-book documents known symptoms on Samsung 4K TV's such as Stand-by power only, dead-no power, no start-up cycle, no picture, backlights only, no audio, and much more.

The components and IC's which have failed are listed in this e-book, and they are mainly standard components and IC chips. Standard component failure include diodes, resistors, p-rectifiers, MOSFET's, IGBT's, NPN's, and capacitors.

IC chip failure include memory IC's, switching IC's, control IC's, DC-DC IC's, etc. The test equipment used while compiling this Samsung 4K case history information was a standard DVM meter (Fluke), Capacitor meter (uF/ESR) and a 100Mhz digital Oscilloscope (the very basics all technicians use). The scope was primarily used to troubleshoot IC chips and their I/O signaling. The scope was also used to test feedback-loops, start-pulses, and duty-cycles on SMPS boards and serial-clocks, gate-circuits, and bucking control on main boards, logic, LED drive boards, and timing boards. However, in this e-book all of the troubleshooting has been done for you, with the causes and bad parts listed.

This Samsung 4K LED TV e-book is for technicians of all levels, there are no complex diagrams or detailed graphics involved. This e-book is not a case history of troubleshooting and circuit evaluation (as with my other books). Instead this e-book is a simple case history of Samsung 4K TV parts failure. Again, all of the troubleshooting work has been done for you and compiled in a simple and easy to follow format. This e-book is written text information correlating to shop records. There are no pictorial graphics or illustrative diagrams used in this e-book as it is not required i.e. 'case-history'.

Note: Below is an example of how the Service-Case-History Records of each Samsung 4K LED TV model are laid out in this e-book, and also shows the meaning of each category.

# Samsung Curved and Slim 4K UHD LED TV Service Case History Layout Example

- 1) TV Model Number: Model number of TV issued by TV manufacturer (Example UN50EH5000FXZA LED TV).
- 2) TV Failure Symptom: *The kind of problem the TV is having* (Example Partial start-up, back light flash once then shut down into protect mode).
- 3) Faulty Board: Which board inside the TV has the failure (Example SMPS/LED Drive Board).
- 4) Faulty Board Number: Manufactures Part Number of faulty board (Example BN44-00499A).
- 5) Board Location Number Of Faulty Part(s): *The location number of the faulty part(s)*on the SMPS-board
  (Example ICP801S).
- 6) Part(s) Failure Type: The way in which the part(s) have failed (Example mode control chip ICP801S internal switching fault pin #3, thermal shutdown).
- 7) Shop Notes: (If available) shop notes relating to the repair (Example SMD resistor RP811 out of Ohm value and replaced). (n.a. Means shop notes are not available.

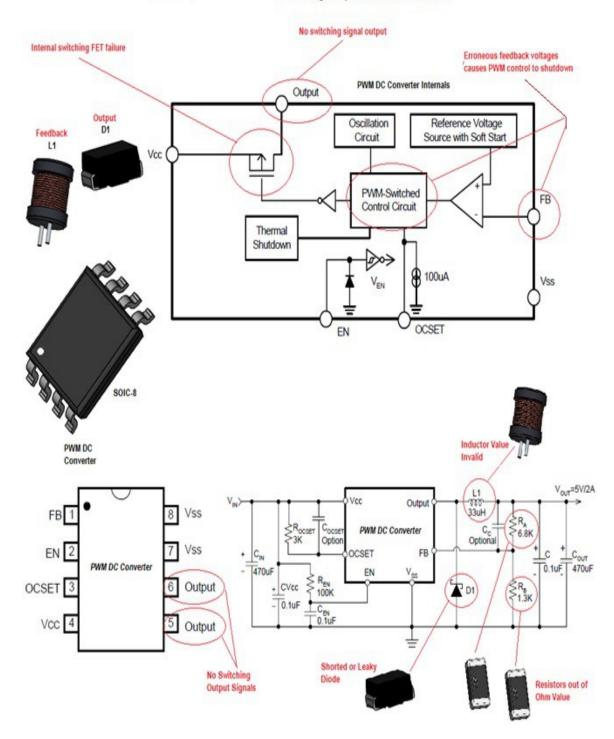
#### Quick Emphasis on Samsung 4K TV parts

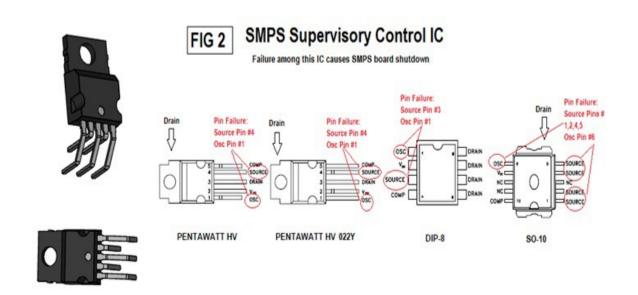
The following are basic illustrations of known parts that are famous for faulty function in the professional TV repair industry. These components are found on SMPS boards, main boards, T-Con boards, and LED Drive boards with-in Samsung LED TV's for SLIM and CURVED TV models. A fair number of these Samsung LED TV's require a firmware update after a fault-code (smart-code) has been issued. After any board repair on Samsung Smart-TV's go into the setup menu for firmware updates. All other Samsung LED TV firmware updates can be downloaded here: http://www.samsung.com/us/support/downloads

#### Quick Emphasis on critical parts failure from Samsung 4K TV's

FIG 1 in the next page is a typical stepdown DC switching regulator (or converter) with internal PWM control. This semiconductor is found on T-con boards, main boards, and LED Drive boards in Samsung Curved and SLIM LED TV models. Internaly this DC converter IC is known to fail at the output switching pins 5 and 6 usually due to a faulty POS-FET switch between the Vcc and output pins (5,6). Externaly this DC converter shuts down due to a feedback inductor (L1) thats out of uH value, feedback resistors R1/R2 have changed in Ohm value or output diode has shorted or is leaky. A change in value from either of these external components will trigger a Reference Voltage Source (RVS) circuit inside the converter IC and shutdown all internal functions, resulting in board shutdown *i.e.* T-con, Main, LED Drive.

## Failure among these parts will cause board shutdown





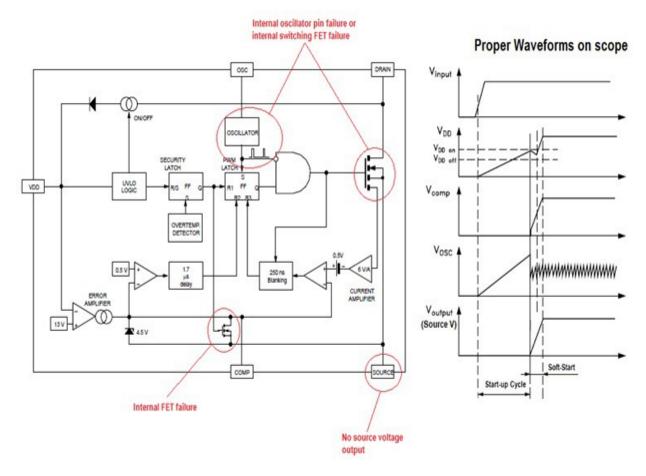
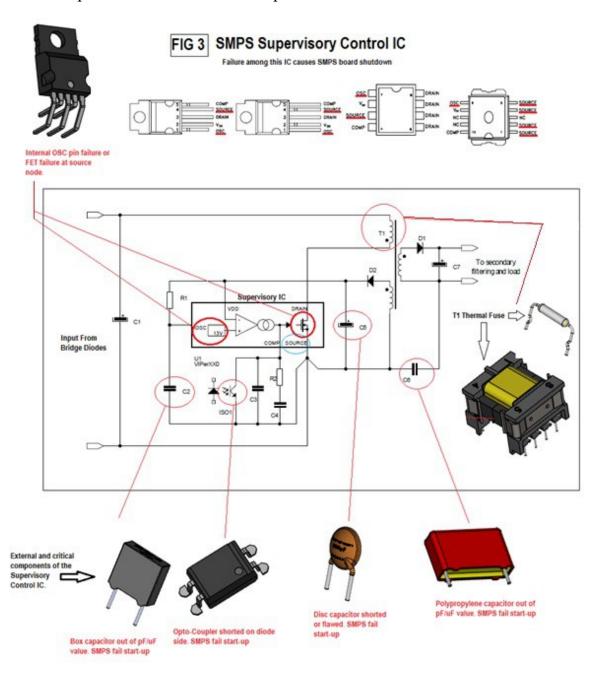
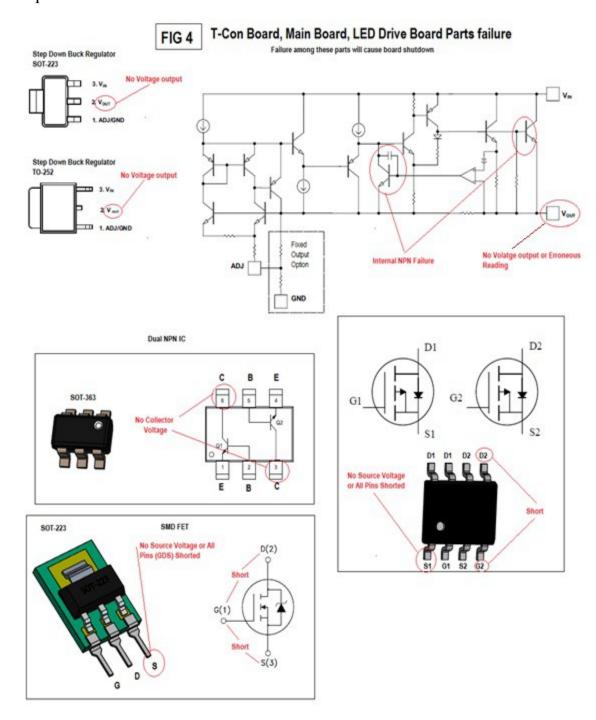


FIG 2 in the previous page is a well known component called the Supervisory IC or Mode Control IC, it is the 'heartbeat' of SMPS boards for all LCD and LED TV's. Internally this IC will usually deveope a switching output problem due to a faulty internal 700 volt Vertical-FET resulting in Drain, Source, and 'mode-control' error's (normally its source voltage issues or oscillation errors). A voltage drop or a flaw in the squarewave signal at the OSC pin indicates an internal squarewave error.



**FIG 3** in the previous page is the same Supervisory IC in FIG 2, except now its illustrating the <u>external</u> components that cause the IC to shut down or cancel BURST mode. The external components that interrupt IC start-up are box capacitors out of uF/pF value, shorted opto-couplers, shorted disc caps, an open thermal fuse inside a power transformer, and polypropylene caps out of pF/uF value.



**FIG 4** in the previous page depicts 4 semiconductors known to fail on T-Con boards, main boards, and LED Drive boards. The SMD buck regulator which fails at the output pin from internal switching errors, the 6-pin NPN IC that fails at the collector pin, the SMD FET will not produce a source voltage or will short at all three junctions (GDS), and the 8-pin MOSFET IC which will not produce a source voltage or will short between gate and drain pins. Failure from either 4 of these semiconductors will cause IC shut down resulting in board shut down, *i.e.* T-con, main, LED Drive.

FIG 5 in the next page is a synchronous buck regulator found on Samsung T-con, main, and LED Drive boards. It's synchronous because it performs various functions to produce the desired PWM controlled output. However, internally this IC usually fails at the switching PWM output pin 3 causing chip shut down. Externally the IC shuts down when L1 is flawed in uH value or when feedback resistors R1/R2 change in Ohm value, this causes Under Voltage Detection UVD to engage and shut the IC off.

#### T-Con Board, Main Board, LED Drive Board Part Failure FIG 5 Failure among this part cause board shutdown Buck Regulator IC SOT-25 5 1 2 **Buck IC Internals** 3 4 1. EN 2. GND 0.6V 3. (SW) Slope FB 4. N 5 5. FB No switching output voltage UVDE SWITCHING LOGIC AND BLANKING CIRCUIT OVDE 0.65V Internal switching FET failure causes board shutdown. Buck 0.6V VREF GND IRCMP Regulator 2 IC 5 DO 1 2 Check inductor value L1 4 V<sub>IN</sub>= 2.5V to 5.5V 2.2µH Output 1.8V IN VIN D SW 600mA Buck R2 CIN 22pF Regulator 887K 4.7µF IC C<sub>OUT</sub> 10µF CER **GND** CER R1 442K Check feedback resistor value, R1, R2.

Fig 6 A T-Con Board IC's Failure among these IC's causes T-Con board shutdown TVS Diode Clamp IC Pin Configuration TVS Diode Clamp IC Internals 1/0 12 1/01 1/0 11 1/02 LVDS Input (GND\_) L 1/0 10 1/03 1/09 1/04 (GND) 1/08 1/05 GND 1/07 Shorted pins to chip 1/06 ground (A/K) 0.1µF 04 V<sub>N</sub> +1.8∨TO +2.7∨ LI 0 0 01 ± 10µF 6.3V 169kΩ 1% 10Ω C4\_1 >R2 T-Con DC-Power ≤30.9kΩ **5V Input** IC FREQ ACINE Internal Op-Amp failure causes Gamma correction POND error on screen. Washed out picture image on SUF screen. Internal Switching FET failure at NEG! LX pin causes T-con board ≥ R7\* shutdown. TO VCOM BACKPLANE NEG2 POS2 LDO SRC R9 SkΩ DRM V<sub>GON</sub> +22V/10mA -(O O) From T-Con IC COM V<sub>N</sub> T-Con DC-Powr IC STEP-UP REGULATOR LINEAR CONTROLLER REGULATOR AND BOOTSTRAP



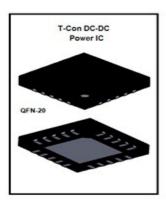


Figure 6 B

FIG 6A and 6B shows the TVS diode IC and T-con DC power IC found on T-con boards. The TVS diode IC develops internal shorts from one or more of its many internal diodes (and especially its main TVS diode), this short condition causes T-con board shut down. The T-con DC power IC usually fails at the switching FET node at the LX output pin causing DC output loss (no power supply to the T-con board). Internal Op-amp failure from the T-con DC power IC causes gamma correction problems on screen at the Vcom output node, resulting in solarized screen image.

#### This concludes Samsung parts failures



#### **TV Model List**

## 38 Samsung LED Models-9 curved models and 29 slim models in Over 60 case histories.

UN78HU9000FXZA, UN75JU650DFXZA, UN75J6300AFXZA, UN75H7150AFXZA UN75H6350AFXZA, UN75H6300AFXZA, UN75F8000AFXZA, UN75F7100AFXZA UN75F6400AFXZA, UN75F6300AFXZA, UN75ES9000FXZA, UN65J620DAFXZA UN65J630DAFXZA, UN65JU6500FXZA, UN65JU6700FXZA, UN65JU670DFXZA UN65JU6750FXZA, UN65JU7500FXZA, UN65HU8700FXZA, UN65HU9000FXZA UN65H6350AFXZA, UN65H6400AFXZA, UN65H7100AFXZA, UN65H7150AFXZA UN65H8000AFXZA, UN65HU7200FXZA, UN65HU7250FXZA, UN65H8500BFXZA UN65F6350AFXZA, UN65F6400AFXZA, UN65F7100AFXZA, UN65F8000BFXZA UN65F9000AFXZA, UN65F8000BFXZA, UN60JU650DFXZA, UN60J6200AFXZA, UN60HU8550FXZA, UN60H6203AFXZA

#### "Once again here's the case history layout example"

- 1) TV Model Number: *Model number of TV issued by TV manufacturer* (Example UN50EH5000FXZA LED TV).
- 2) TV Failure Symptom: *The kind of problem the TV is having* (Example Partial start-up, back light flash once then shut down into protect mode).
- 3) Faulty Board: Which board inside the TV has the failure (Example SMPS/LED Drive Board).
- 4) Faulty Board Number: Manufactures Part Number of faulty board (*Example BN44-00499A*).
- 5) Board Location Number Of Faulty Part(s): *The location number of the faulty part(s)* on the SMPS-board (Example ICP801S).
- 6) Part(s) Failure Type: The way in which the part(s) have failed (Example mode control chip ICP801S internal switching fault pin #3, thermal shutdown).
- 7) Shop Notes: (If available) shop notes relating to the repair (Example SMD resistor RP811 out of Ohm value and replaced). (n.a. Means shop notes are not available.

# The Actual Samsung Curved and Slim 4K UHD LED TV Case History Vol 1 Begins Now

#### -Power Problems, Display Problems, Memory Problems-

- 1) TV Model Number: UN78HU9000FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Partial smart-start-up, backlights only no raster, smart code, then protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: LJ94-30621J
- 5) Board Location Number Of Faulty Part(s): F1, F2, ICS1
- 6) Parts Failure Type: SMD fuses F1/F2 open, FET chip ICS1 shorted at drain and source pins.
- 7) Shop Notes: FET chip ICS2 replaced as a service precaution.

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- 1) TV Model Number: UN78HU9000FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Stand-by only, smart-fault code, then protect mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: BN44-00763A
- 5) Board Location Number Of Faulty Part(s): FP803S, CM807
- 6) Parts Failure Type: Fuse FP803S open, disc capacitor CM807 shorted, charred on solder side.
- 7) Shop Notes: Box cap CM806CS out of nF value and replaced, along with CM807CS as precaution.

- 1) TV Model Number: UN75JU650DFXZA (4K UHD LED-TV)
- 2) TV Failure Symptom: Partial smart-start-up, immediate protect mode

- 3) Faulty Board: SMPS
- 4) Faulty Board Number: BN44-00809A
- 5) Board Location Number Of Faulty Part(s): QM858, QM856, RM877
- 6) Parts Failure Type: SMD FET's QM858/856 shorted, SMD resistor RM877 out of Ohm value.
- 7) Shop Notes: n.a.

- 1) TV Model Number: UN75H7150AFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Partial smart-start-up backlights only, then fault error code, then protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN95-01418A
- 5) Board Location Number Of Faulty Part(s): IC205
- 6) Parts Failure Type: Supervisory memory chip IC205 not resetting at reset pin, and chip very warm.
- 7) Shop Notes: Check inductor L1 for proper uH value before replacing IC205.
- 1) TV Model Number: UN75H7150AFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Partial smart-start-up, welcome screen, then fault error code, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN95-01418A
- 5) Board Location Number Of Faulty Part(s): QD02
- 6) Parts Failure Type: SMD FET QD02 shorted.
- 7) Shop Notes: QD01/05 both replaced as a service precaution. Update firmware from setup menu.

- 1) TV Model Number: UN75H6350AFXZA (Smart LED-TV)
- 2) TV Failure Symptom: Audio clarity distorted with snapping sound intermittent
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: BN94-07410T
- 5) Board Location Number Of Faulty Part(s): IC301
- 6) Parts Failure Type: Audio chip IC301 erroneous audio signal output on all channels from scope.
- 7) Shop Notes: Inductor L302 out of uH and replaced. Update firmware after IC301 replacement.

- 1) TV Model Number: UN75H6300AFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Sudden shut down in protect mode after a few minutes
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: BN94-07573B
- 5) Board Location Number Of Faulty Part(s): L305
- 6) Parts Failure Type: Inductor L305 open.
- 7) Shop Notes: IC305 replaced as a service precaution.

- 1) TV Model Number: UN75F8000AFXZA (4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Full smart start-up, backlight flicker, then protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00658A
- 5) Board Location Number Of Faulty Part(s): T9701CS
- 6) Parts Failure Type: Inverter transformer T9701CS open at secondary winding.
- 7) Shop Notes: n.a.

- 1) TV Model Number: UN75F8000AFXZA (4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Stand-by only, smart fault code, then protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00658A
- 5) Board Location Number Of Faulty Part(s): ICP801
- 6) Parts Failure Type: Switching control chip ICP801 dead at switching output. Internal fault.
- 7) Shop Notes: ICP801 was not available in proper package style. Entire SMPS/Drive board replaced.

- 1) TV Model Number: UN75F7100AFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Full smart-start-up, no raster, then backlights only, then protect mode
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: BN94-06186T
- 5) Board Location Number Of Faulty Part(s): Q201
- 6) Parts Failure Type: 6-pin chip Q201 dead at collector voltage pin, no panel voltage output (PNL-VCC).
- 7) Shop Notes: Q205 replaced as a service precaution.

- 1) TV Model Number: UN75F6400AFXZA (3D LED-TV)
- 2) TV Failure Symptom: Partial start-up, then immediate fault code, protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00621A
- 5) Board Location Number Of Faulty Part(s): D9036
- 6) Parts Failure Type: SMD diode D9036 shorted.
- 7) Shop Notes: SMD diodes D9033/34/35 replaced as a service precaution.

- 1) TV Model Number: UN75F6300AFXZA (Smart LED-TV)
- 2) TV Failure Symptom: Full start-up, backlights only, no raster, then protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN95-00952D
- 5) Board Location Number Of Faulty Part(s): DD51
- 6) Parts Failure Type: SMD diode DD51 shorted, no 15 volts.
- 7) Shop Notes: SMD capacitors CD56/63 replaced as a service precaution.

- 1) TV Model Number: UN75ES9000FXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Partial smart-start-up, brief welcome screen, backlights only, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN96-23417A
- 5) Board Location Number Of Faulty Part(s): QD6, RD103
- 6) Parts Failure Type: SMD FET QD6 shorted all 3 junctions (GDS), resistor RD103 out of Ohm value.
- 7) Shop Notes: Update firmware from setup menu after T-con repair for this model.
- 1) TV Model Number: UN75ES9000FXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Stand-by only, smart fault code then protect mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: BN44-00561A
- 5) Board Location Number Of Faulty Part(s): ICM802
- 6) Parts Failure Type: PWM switching chip ICM802 very hot when only in stand-by (internal short).
- 7) Shop Notes: This IC was not available to market. Entire SMPS replaced.

- 1) TV Model Number: UN65JU7500FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Smart fault code, immediate protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00812A
- 5) Board Location Number Of Faulty Part(s): ICM801
- 6) Parts Failure Type: PWM/PFC switching chip ICM801 dead at switching duty output on scope.
- 7) Shop Notes: SMD resistor RM808 out of Ohm value and replaced.

- 1) TV Model Number: UN65JU7500FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Full smart start-up, then smart fault code, then protect mode
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: BN94-08410D
- 5) Board Location Number Of Faulty Part(s): IC307
- 6) Parts Failure Type: Buck regulator chip IC307 no step down voltage output.
- 7) Shop Notes: Inductor L303 out of uH value and replaced.

- 1) TV Model Number: UN65JU6750FXZA (4K UHD Smart LED-TV)
- 2) TV Failure Symptom: Partial smart-start-up, then smart fault code, protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00808A
- 5) Board Location Number Of Faulty Part(s): QM850
- 6) Parts Failure Type: SMD FET QM850 shorted.
- 7) Shop Notes: SMD resistor RM851 replaced as a service precaution. RM851 at source pin of QM850.

- 1) TV Model Number: UN65JU670DFXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Muffled audio, snapping sound gets louder as volume increases
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: BN94-08708A
- 5) Board Location Number Of Faulty Part(s): IC501
- 6) Parts Failure Type: Audio amp chip IC501 very warm in stand-by, bad audio signal output on scope.
- 7) Shop Notes: On this TV model be sure to upgrade firmware after installing new audio IC.

- 1) TV Model Number: UN65JU670DFXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Dead, no stand-by power
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00808A
- 5) Board Location Number Of Faulty Part(s): FP801S, QM801CS, QM802CS, RM808
- 6) Parts Failure Type: Fuse FP801S open, FET's QM801CS/802 shorted.
- 7) Shop Notes: SMD resistor (gate of QM801) RM808 out of Ohm Value. Replace BEM801/802.

- 1) TV Model Number: UN65JU6700FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Backlights only, no raster, smart fault code, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN95-01943A
- 5) Board Location Number Of Faulty Part(s): F200
- 6) Parts Failure Type: SMD fuse F200 open.
- 7) Shop Notes: This TV also had firmware glitches with USB ports. Upgrade firmware on this TV.

- 1) TV Model Number: UN65JU6700FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Full start-up, no picture on cable signal only
- 3) Faulty Board: Main board
- 4) Faulty Board Number: BN94-08214E
- 5) Board Location Number Of Faulty Part(s): TU801
- 6) Parts Failure Type: Threated RF jack physically broken and detached from tuner circuit inside box.
- 7) Shop Notes: RF circuit inside tuner box was not cracked, new RF jack installed.
- 1) TV Model Number: UN65JU6500FXZA (4K Smart 3D LED-TV)
- 2) TV Failure Symptom: Full smart start-up, then power down after a few seconds
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: BN94-09032C
- 5) Board Location Number Of Faulty Part(s): IC301
- 6) Parts Failure Type: DC regulator dead stepdown voltage output pin.
- 7) Shop Notes: After repair firmware and drives were updated because this board had other problems.

- 1) TV Model Number: UN65J630DAFXZA (Smart LED-TV)
- 2) TV Failure Symptom: Full start-up scrambled menu, backlights only, then protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN96-30392A
- 5) Board Location Number Of Faulty Part(s): IC507
- 6) Parts Failure Type: Flash/EEPROM IC507 dead SDA data I/O pin #5.
- 7) Shop Notes: New Flash/EEPROM replacement does not require programming. Update firmware.

- 1) TV Model Number: UN65J630DAFXZA (Smart LED-TV)
- 2) TV Failure Symptom: Full start-up, welcome screen, then backlights only, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN96-36925A
- 5) Board Location Number Of Faulty Part(s): IC204
- 6) Parts Failure Type: Voltage regulator dead at pin #1 voltage output. Chip internal shut down.
- 7) Shop Notes: Update firmware from setup menu after replacing IC204 for this TV.

- 1) TV Model Number: UN65J620DAFXZA (Smart LED-TV)
- 2) TV Failure Symptom: Partial smart-start-up backlight blink, smart fault code, protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00776A
- 5) Board Location Number Of Faulty Part(s): Q9002C
- 6) Parts Failure Type: Switching FET Q9002C shorted.
- 7) Shop Notes: Disc capacitor C9039 also out of pF value and replaced.
- 1) TV Model Number: UN65HU9000FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Full start-up, half menu screen faded, smart code, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN96-30714A
- 5) Board Location Number Of Faulty Part(s): QD7
- 6) Parts Failure Type: SMD FET QD7 no source output voltage.

7) Shop Notes: After servicing the T-con, TV had software upgrade.

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- 1) TV Model Number: UN65HU9000FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Dead, no stand-by power
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: BN44-00744A
- 5) Board Location Number Of Faulty Part(s): FP801S, QP801CS, RP833
- 6) Parts Failure Type: Fuse FP801S open, FET QP801CS shorted.
- 7) Shop Notes: SMD resistor RP833 out of Ohm value. RP833 at gate of QP801CS (flip side of board).

- 1) TV Model Number: UN65HU8700FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Full start-up, half screen (left side) upon shutdown, smart code, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN96-30714A
- 5) Board Location Number Of Faulty Part(s): DD3041
- 6) Parts Failure Type: SMD diode DD3041 shorted
- 7) Shop Notes: Inductor LD304 replaced as a service precaution. Update firmware on this TV model.

- 1) TV Model Number: UN65HU8500FXZA (4K Smart 3D LED-TV)
- 2) TV Failure Symptom: Full start-up, welcome screen then power-down, smart code, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN96-30070B
- 5) Board Location Number Of Faulty Part(s): UP8

- 6) Parts Failure Type: Buck regulator UP8 no stepdown voltage output (dead).
- 7) Shop Notes: After T-con repair, update firmware from setup menu for this TV model

1) TV Model Number: UN65HU8500FXZA (4K Smart 3D LED-TV)

- 2) TV Failure Symptom: Stand-by only, no start-up, smart code, then protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00741A
- 5) Board Location Number Of Faulty Part(s): CM806CS
- 6) Parts Failure Type: Box capacitor CM806CS out of uF value, (no reading).
- 7) Shop Notes: Update firmware/drives from setup menu for this TV model.

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- 1) TV Model Number: UN65HU7250FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Stand-by only, then immediate smart-code, then protect mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: BN44-00782A
- 5) Board Location Number Of Faulty Part(s): ICM301
- 6) Parts Failure Type: Control chip ICM301 dead at switching pins (0V) and very warm in stand-by.
- 7) Shop Notes: SMD resistor RM829 replaced as a service precaution. Update firmware on this TV.

- 1) TV Model Number: UN65HU7250FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Full start-up, welcome screen, backlights only, smart code, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN96-30714A

- 5) Board Location Number Of Faulty Part(s): ICD2
- 6) Parts Failure Type: NPN chip ICD2 no voltage output pin #3 (dead) ICD11 chip shutdown.
- 7) Shop Notes: Inductor LD1 replaced as a service precaution. Update firmware on this TV.

- 1) TV Model Number: UN65HU7250FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Partial start-up, flashing backlight, smart code, protect mode
- 3) Faulty Board: LED Strip
- 4) Faulty Board Number: BN96-33495A
- 5) Board Location Number Of Faulty Part(s): LM41-00093A
- 6) Parts Failure Type: LED strip LM41-00093A shorted LED diode.
- 7) Shop Notes: Critical to update firmware after replacing LED strip.

- 1) TV Model Number: UN65HU7200FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Partial start-up, smart-code, then protect mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: BN44-00782A
- 5) Board Location Number Of Faulty Part(s): D9351C
- 6) Parts Failure Type: Diode D9351C shorted.
- 7) Shop Notes: Capacitor C9370 also high ESR reading and replaced. Update firmware for this TV.

- 1) TV Model Number: UN65HU7200FXZA (Curved 4K UHD 3D LED-TV)
- 2) TV Failure Symptom: Stand-by only, then immediate smart-code, protect mode

- 3) Faulty Board: SMPS
- 4) Faulty Board Number: BN44-00782A
- 5) Board Location Number Of Faulty Part(s): NT801S
- 6) Parts Failure Type: Thermistor NT801S internal crack failed resistance test with analog meter.
- 7) Shop Notes: Disc capacitor CY804S replaced as a service precaution.

- 1) TV Model Number: UN65H8000AFXZA (Curved 1080p Smart 3D LED-TV)
- 2) TV Failure Symptom: Stand-by, start-up attempt, smart-code, protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00743A
- 5) Board Location Number Of Faulty Part(s): CX802S
- 6) Parts Failure Type: Box capacitor CX802S no nF value (dead).
- 7) Shop Notes: Spark-gap SA803 charred and replaced. Update firmware from setup menu.

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- 1) TV Model Number: UN65H8000AFXZA (Curved 1080p Smart 3D LED-TV)
- 2) TV Failure Symptom: Start-up attempt, brief welcome screen, power down, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN95-01595A
- 5) Board Location Number Of Faulty Part(s): IC205
- 6) Parts Failure Type: DC regulator IC205 no Power-Good signal from pin #8.
- 7) Shop Notes: After servicing update firmware from setup menu for this TV.

- 1) TV Model Number: UN65H7150AFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Full start-up, then shut down, smart code, protect mode
- 3) Faulty Board: Main board
- 4) Faulty Board Number: BN94-08192L
- 5) Board Location Number Of Faulty Part(s): IC306
- 6) Parts Failure Type: Regulator chip IC306 stepdown voltage output out value (0.35V).
- 7) Shop Notes: After servicing update firmware from setup menu for this TV.

- 1) TV Model Number: UN65H7100AFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Stand-by, start-up attempt, smart code, protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00717A
- 5) Board Location Number Of Faulty Part(s): PCM803S
- 6) Parts Failure Type: Opto-Coupler PCM803S shorted on diode side.
- 7) Shop Notes: n.a.

- 1) TV Model Number: UN65H7100AFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Full start-up, then power down, smart code, protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00717A
- 5) Board Location Number Of Faulty Part(s): CM863
- 6) Parts Failure Type: Electrolytic capacitor CM863 very high ESR level.
- 7) Shop Notes: CM862 replaced as a service precaution. Update firmware from setup menu for this TV.

- 1) TV Model Number: UN65H6400AFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Full start-up, brief welcome screen, back lights, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN96-30392A
- 5) Board Location Number Of Faulty Part(s): IC200
- 6) Parts Failure Type: FET chip IC200 no source output voltage (dead).
- 7) Shop Notes: Check SMD resistors R202/R207. Update firmware from setup menu for this TV.

- 1) TV Model Number: UN65H6400AFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Partial start-up, immediate smart-code, then protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00713A
- 5) Board Location Number Of Faulty Part(s): Q9803C
- 6) Parts Failure Type: FET Q9803C shorted.
- 7) Shop Notes: Diode D9803C leaky and replaced. Update firmware from setup menu for this TV.

- 1) TV Model Number: UN65H6350AFXZA (Smart LED-TV)
- 2) TV Failure Symptom: Full start-up, backlights only no raster, smart-code, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN96-30392A
- 5) Board Location Number Of Faulty Part(s): F200, D200
- 6) Parts Failure Type: SMD fuse F200 open, SMD diode D200 shorted.

7) Shop Notes: FET chip IC200 replaced as a service precaution. Update firmware from setup menu.

- 1) TV Model Number: UN65H6350AFXZA (Smart LED-TV)
- 2) TV Failure Symptom: Stand-by, brief start-up attempt, smart-code, then protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00706A
- 5) Board Location Number Of Faulty Part(s): RM806, CM809
- 6) Parts Failure Type: Resistor RM806 out of Ohm value, capacitor CM809 very high ESR level.
- 7) Shop Notes: Update firmware from the setup menu for this TV.

- 1) TV Model Number: UN65F9000AFXZA (4K UHD LED-TV)
- 2) TV Failure Symptom: Start-up attempt, then immediate smart-code, protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00675B
- 5) Board Location Number Of Faulty Part(s): C9801
- 6) Parts Failure Type: Disc capacitor C9801 shorted, L9801CS replaced as a service precaution.
- 7) Shop Notes: Resistor R8910 slightly out of Ohm value and replaced. Update firmware from setup menu for this TV.

- 1) TV Model Number: UN65F9000AFXZA (4K UHD LED-TV)
- 2) TV Failure Symptom: Dead, no stand-by power
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00675B

- 5) Board Location Number Of Faulty Part(s): FP8015, DS811C, DS812C
- 6) Parts Failure Type: Fuse FP8015 open, diodes DS811C/812C shorted. CS820/823 also replaced.
- 7) Shop Notes: n.a.

- 1) TV Model Number: UN65F8000BFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Full start-up, then backlights only, smart-code, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN96-25628A
- 5) Board Location Number Of Faulty Part(s): D402
- 6) Parts Failure Type: 12-pin TVS Diode chip D402 shorted pins A/K out of circuit.
- 7) Shop Notes: Diode chip D401 replaced as a service precaution. Update firmware from setup menu.

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- 1) TV Model Number: UN65F8000BFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Start-up attempt, then smart-code, protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00743A
- 5) Board Location Number Of Faulty Part(s): PCM803S
- 6) Parts Failure Type: Opto-Coupler PCM803S shorted on diode side (no 13 Volts)
- 7) Shop Notes: Update firmware from the setup menu for this TV.

- 1) TV Model Number: UN65F7100AFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Full start-up, brief welcome screen, smart-code, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN95-01330A
- 5) Board Location Number Of Faulty Part(s): QD11
- 6) Parts Failure Type: 6-pin transistor IC QD11 no output voltage
- 7) Shop Notes: Update firmware from setup menu for this TV.

- 1) TV Model Number: UN65F6400AFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Full start-up, welcome screen, backlights only, smart-code, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN96-25627A
- 5) Board Location Number Of Faulty Part(s): IC200
- 6) Parts Failure Type: FET chip IC200 no source voltage output (dead).
- 7) Shop Notes: Replace SMD resistors R200/R202. Update firmware from setup menu for this TV.

- 1) TV Model Number: UN65F6400AFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Stand-by, immediate smart-code, protect mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: BN44-00627A
- 5) Board Location Number Of Faulty Part(s): ICP801C
- 6) Parts Failure Type: Mode control chip ICP801C no switching signal output and warm in stand-by.
- 7) Shop Notes: Update firmware from setup menu for this TV.

- 1) TV Model Number: UN65F6350AFXZA (LED-TV)
- 2) TV Failure Symptom: Dead, no stand-by power
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00614A
- 5) Board Location Number Of Faulty Part(s): FP802S, QM801CS, QM802CS
- 6) Parts Failure Type: Fuses FP801CS/802CS open, FET's QM801CS/802CS shorted.
- 7) Shop Notes: CM814 out of pF value, CM813 replaced as a service precaution.

- 1) TV Model Number: UN65F9000AFXZA (4K UHD LED-TV)
- 2) TV Failure Symptom: Full start-up, menu flash, backlights only, smart-code, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN96-29165A
- 5) Board Location Number Of Faulty Part(s): QD307
- 6) Parts Failure Type: FET chip QD307 shorted.
- 7) Shop Notes: RD3074 also out of Ohm value and replaced. Update firmware for this TV.

- 1) TV Model Number: UN65F9000AFXZA (4K UHD LED-TV)
- 2) TV Failure Symptom: Stand-by, then immediate smart-code, protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00675B
- 5) Board Location Number Of Faulty Part(s): FP802S, DS804,
- 6) Parts Failure Type: Fuse FP802S open, diode DS804 shorted, CX803S also replaced.
- 7) Shop Notes: ICS801 replaced as a service precaution. Update firmware for this TV.

- 1) TV Model Number: UN65F8000BFXZA (Smart 3D LED-TV)
- 2) TV Failure Symptom: Full power-up, then flashing backlights, smart-code, protect mode
- 3) Faulty Board: SMPS/LED Drive Board
- 4) Faulty Board Number: BN44-00657A
- 5) Board Location Number Of Faulty Part(s): U9104
- 6) Parts Failure Type: Buck regulator U9104 no voltage output.
- 7) Shop Notes: Update firmware from setup menu for this TV.

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- 1) TV Model Number: UN60JU650DFXZA (4K UHD LED-TV)
- 2) TV Failure Symptom: Partial start-up, then immediate smart-code, protect mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: BN44-00808A
- 5) Board Location Number Of Faulty Part(s): Q9851C
- 6) Parts Failure Type: FET Q9851C shorted.
- 7) Shop Notes: Q9852Calso replace as a service precaution. Update firmware for this TV.
- 1) TV Model Number: UN60J6200AFXZA (Smart LED-TV)
- 2) TV Failure Symptom: Full start-up, no menu, backlights only, smart-code, protect mode
- 3) Faulty Board: T-Con Board
- 4) Faulty Board Number: BN95-01336A
- 5) Board Location Number Of Faulty Part(s): Q906
- 6) Parts Failure Type: 8-pin FET chip Q906 shorted gate/drain pins.
- 7) Shop Notes: 8-pin Q903/905 replaced as a service precaution. Update firmware form setup menu.

# TV Manufacturer Reset Codes

# **WARNING**

The following information is to help TV technicians fix code problems with various LCD/LED TV's and Plasma TV's. Many of these TV's are misprogrammed, locked, or in a programming mode that is not situated for home-use.

Be sure to record what the original values are before changing them, if you enter the wrong value while the TV is in service-mode it can cause permanent software damage to the TV and the TV will not work again. Use this information at your own discretion and don't put the TV in service-mode if you're not sure what you are doing.

AKAI:

AKAI Service Menu

Method 1

Press the MENU key.

Then press the 1, 9, 7, & 9 keys.

The Service Menu will now be displayed on screen.

To exit service mode, power off the TV.

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AKAI Service Menu

Method 2

Turn TV power on.

Press the MENU, 8, 2, 0, & 2, keys on the remote control.

The Service Menu will now be displayed on screen.

To exit service mode, power off the TV.

#### COBY:

COBY Service Menu:

Enter menu, move hi lite-bar to "audio" then enter 8893

(Another method for Coby)

Press Mode or Source key(s) then enter 2,5,8,0, then go to "other setting", then select "shipment" then yes, TV is now in service mode. After exiting the service menu, turn TV power off (to save the data).

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#### DELL:

DELL Service Menu:

Service Code is 3355

If 3355 does not work, use this sequence:

Press and hold the Input or Source key - on the TV (not on the remote) continue to press and hold it until step 7

- 1. Press and release the Power key
- 2. The TV turns off
- 3. Press and release the Power key
- 4. The TV turns on
- 5. Wait until 10 seconds
- 6. A message on the screen will say the TV has been reset
- 7. Release the Input Source key

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#### **DYNEX**

DYNEX Service Menu:

Dynex Service Access Code Method 1

Press the input key (or the source key) after which press 2,5,8,0 on the remote keys, then volume bar will go up to halfway on screen then TV shuts off.

TV is back on and the menu is now displayed on screen. (see method 2 to continue)

Dynex Service Access Code Method 2

Press Menu

Press 1,9,9,9

**Press ENTER** 

If the keys on the remote don't work just press the TV control keys on the side of the TV.

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#### **ELEMENT:**

**ELEMENT Service Menu:** 

Turn TV on..

Press menu 0000

Or press menu 1147

TV is now in service mode.

### **FUNAI:**

FUNAI Service Menu:

Funai LCD Service Access Code

Method 1

Turn the TV power on using the POWER key on the TV.

Press the STANDBY-ON, 2, 7, 1, & MUTE keys on the remote control.

The Service Menu will be displayed on screen.

To exit service mode, press the STANDBY-ON key on the remote.

Funai LCD Service Access Code

Method 2

Turn the TV power off.

Press and hold MENU key on the TV.

Then press the STANDBY-ON key on the TV.

The TV will turn on with the Service Menu displayed on screen.

To exit service mode, press the STANDBY-ON key on the TV.

Funai LCD Service Access Code

Method 3

Turn the TV power off.

Press and hold SETUP key on the TV.

Then press the STANDBY-ON key on the TV.

The TV will turn on with the Service Menu displayed on screen.

To exit service mode, press the STANDBY-ON key on the TV.

Funai LCD Service Access Code

Method 4

Press the CH down & VOL down keys at same time.

Then press the MENU key.

The Service Menu displayed on screen.

To exit service mode, turn the TV power off.

Funai LCD Service Access Code

Method 5

Press the CH up, CH down & VOL up keys at same time.

Then press the MENU key.

The Service Menu displayed on screen.

To exit service mode, turn the TV power off.

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#### HAIER:

HAIER Service Menu:

Haier \*

Bring the menu up, move the hi lite-bar to "audio" then enter 8893 on remote keys (Another method for Haier)

Press the 'Menu' key

Then enter 8893

Press "OK". The TV is now in factory mode

To "Exit" from service mode, press the 'Exit' key on the remote control

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#### HP:

HP Service Menu:

While the LCD TV is on, unplug the AC power cable.

Then while pressing the INPUT & VOL down keys on the remote,

plug the AC power cable back into the wall outlet.

When it powers up you will see a small letter "k" appear in brackets on the screen.

Then on the TV, press and hold down the VOL down & CH down keys and release.

CH up & CH down keys navigate through screen menu.

VOL up & VOL down keys adjust various field values.

Turn the TV off to exit the Service mode.

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#### HISENSE:

HISENSE Service Menu:

In customer menu go to"Parental" enter 0000 then select"Clean All"

then power the TV off and back on and first time setup menu will be on screen.

For other models, same as the above model but in menu it is labeled "Lock"

(Another Method for Hisense)

Power on the TV.

Press 'Menu" key to bring up User OSD menu.

Select 'Sound => Balance.

When the 'Balance' is "0", Enter  $\{0 \Rightarrow 5 \Rightarrow 3 \Rightarrow 2\}$  in sequence.

Factory OSD will appear.

Press the 'Standby' key then AC Turn OFF, and restart the TV, to "EXIT" Service Mode.

## HITACHI:

HITACHI Service Menu:

There are many Hitachi reset codes try either one until the right code works.

Hitachi TV Service Method 1

Turn the TV power on.

Press the MENU, MENU, 8, SELECT, keys on the remote.

The Service Menu will be displayed on screen.

Use the UP DOWN keys to select items.

Use the LEFT RIGHT keys to change the data.

Press the EXIT key to exit the Service mode.

Hitachi TV Service Method 2

Turn the TV power off.

Press and hold the INPUT key on the TV then press the POWER key.

Hold both keys until the TV turns on with the Service Menu displayed on screen.

Use the UP DOWN keys to select specific field options.

Use the LEFT RIGHT keys to change data values.

Press the EXIT key to exit the Service mode.

Hitachi TV Service Method 3

Turn the TV power off.

Press POWER & INPUT keys on the TV for more than 3 seconds.

The Service Menu will now be displayed on screen.

The letter "P" means picture and "A" means audio.

Use the UP DOWN keys to select specific field options.

Use the LEFT RIGHT keys to change data values.

Press the EXIT key to exit the Service mode.

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**INSIGNIA:** 

INSIGNIA Service Menu:

Power on the TV.

press input key, then enter 2580

(Another method for Insignia is)

Power on the TV.

Adjust the volume to zero

On the the remote - Input, 9876, - then press OK within 5 seconds.

If successfully done, the TV will default to FACTORY SET MENU screen.

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JVC:

JVC Service Menu:

JVC LCD/PLASMA Service Access Code method 1

Press the MENU key and go to the User Menu screen, make sure that the indicator arrow is positioned and highlights "Picture Control".

The keys on the top part of the remote are set to TV & VCR.

Put the sleep timer to "0" minutes and while its being displayed on screen,

simultaneously press the VIDEO STATUS & DISPLAY keys.

The Service Menu will be displayed on screen.

Use the number keys {1-9} used to select a particular category.

Use the CH up CH down keys to select various options.

Use the VOL up VOL down keys to change initial settings.

Use the MUTING key to save the settings.

Press the BACK key to exit Service Menu.

JVC LCD/PLASMA Service Access Code Method 2

Simultaneously press "Display" & "Video Status" keys on the remote.

Use 'Menu Up' & 'Menu Down' key to select a particular option to adjust.

To change the data value to selected item, use > or < key on the remote.

Press the "EXIT' key to 'Exit' from service menu.

JVC Projector Service Access Code

Utilizing the remote control:

Press the UP DOWN RIGHT LEFT keys.

Now press the {ENTER} key.

The Service Menu will be displayed on screen.

To exit service mode, power off the TV.

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#### LG:

### LG Service Menu:

Press and hold <OK> keys on remote as well as the OK key on TV panel for a few seconds

and the service menu will be on the TV screen.

For some LG TV models, it may be required to press "Menu" keys on remote and TV panel

simultaneously for a few seconds to get too the service menu.

In a few TV models, both methods work and they open different service menus.

If the service menu requires a password, enter 0000 (four zeros).

If 0000 doesn't work, use 7777 or 0413 or 8741 or 8743 or 8878.

Now you can easily make changes to your desired settings.

To save the data changes, press <OK> key on the remote.

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## LG Extra Tech Tips:

Using these hidden service menu's in LG TV, you can now enable USB drive use from settings

USB option to 1. Once this feature is enabled, you can now insert any USB drive in USB slot located at the back of the LG TV and the TV will automatically detect it and you will now be able to play video or audio files that's saved in the USB drive (such as flash-drive etc) on your TV set. It is now possible to view images saved in the USB drive on the TV set.

All LG TV come with a factory hidden feature called "Hotel Mode".

This feature can be enabled by settings Hotel option to 1 using the service menu. Once this feature is enabled, the Setup or Channel Search option will be disabled in the TV Settings.

So this means no one else will be able to scan channels or fine tune channels. This is the reason why this option is called Hotel Mode.

#### LG Firmware:

In order to update the LG TV firmware/software, you can use these easy steps:

- 1. First download the required firmware files from official LG TV website. log on to LG TV website and search for your specific TV model. There you will find the official firmware files on a specific TV model page. Once the files are Downloaded save it to a PC.
- 2. Now connect a USB drive (such as flash-drive) in the PC and create a new folder LG DTV in the USB drive.
- 3. Copy the .epk file in LG\_DTV folder.
- 4. At this point insert the USB drive in your LG TV and do the following steps:

Press Home/Menu key on the TV remote, it will open up the Settings screen. Move the cursor hi lite-bar to OPTION but do not press the OK key. Now press the number 7 key 7 times on the remote and it will open up the firmware update screen.

If pressing the number 7 key 7 times does not work. Press the Fav key 7 times. If you want to restore default firmware, do the same steps above but instead press the number 9 key 7 times.

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## LG Service Menu Instructions

#### Method 1

Press and Hold <OK> key on remote and the OK key on the TV panel at the same time for a few seconds.

#### Method 2

Press and hold the {MENU} key on the remote and the MENU key on the TV simultaneously for approximately 6-8 seconds.

#### Method 3

Press and hold the {MENU} key ON THE REMOTE control until a required 4-digit password is displayed on screen.

#### LG Service Menu PIN/Password Codes

8741

8743

7777

0000

8878

0413

#### LG LCD Monitor Service Menu:

First turn off the LCD monitor, then press and hold the "MENU" key, then turn on the monitor. Release MENU key after the monitor is turn on. Press "MENU" key to open the OSD menu, at the bottom of menu, you can see a new selection to go into the factory service mode. Inside the factory service mode, you can observe affective information such as, manufacturer date, product model, F-engine Video chip-set version, LCD panel number, etc.

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#### MITSUBISHI:

MITSUBISHI Service Menu:

Power on the TV, then press Menu 123 or menu 2470

The above code (123, or menu, 2470) is most popular but there are many codes available for accessing service menu in various Mitsubishi TV models.

You can try following codes one by one until you get access to service menu:

(Other Mitsubishi Reset Codes)

Mitsubishi Service Menu Method 1

MENU 0 1 5 7

Mitsubishi Service Menu Method 2

MENU 0 3 5 3

Mitsubishi Service Menu Method 3

MENU 0 3 5 7

Mitsubishi Service Menu Method 4

MENU 1 2 5 7

Mitsubishi Service Menu Method 5

MENU 1 2 5 9

Mitsubishi Service Menu Method 6

MENU 1 3 7 0

Mitsubishi Service Menu Method 7

MENU 2 3 5 6

Mitsubishi Service Menu Method 8

MENU 2 3 5 7

Mitsubishi Service Menu Method 9

MENU 2 3 5 8

Mitsubishi Service Menu Method 10

MENU 2 3 5 9

Mitsubishi Service Menu Method 11

MENU 2 4 5 7

Mitsubishi Service Menu Method 12

MENU 8 2 5 7

- 1.Use the VIDEO & AUDIO keys to enter two optional groups of adjustments.
- 2.{VIDEO} and AUDIO keys move through menus. + and keys change settings.
- 3. Press the ENTER key to save.
- 4. Press the MENU key two times to exit.

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### OLEVIA:

OLEVIA Service Menu:

Methods on how to Enable or Disable Olevia Store mode or Demo Mode

Press the Menu key from the remote,

Press the Down arrow key until you observe the word 'Picture' on the screen, then press the Right arrow key,

Press the Down arrow key until you observe 'Mode' on the screen, then press the Right arrow key,

Press the Down arrow key until you observe 'Power Up' on the screen, then press the Right arrow key,

Press the Down arrow key until you observe 'Home' on the screen, then press the Enter key,

Press the Menu key four times to exit out of the OSD service Menu.

(Another Olevia Method for factory default)

1. Press the "Menu" button on the remote.

- 2.Use the up and down arrows on the remote to select "Settings," and then press "Enter key.
- 3. Use the arrows once again to scroll to and highlight "Factory Default."
- 4.Press "Enter." at this stage, the TV will power down and reset its self to factory settings. (Other Olevia default code unlock numbers)

1111, 0000, 1234, 9999, 0123.

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#### PANASONIC:

PANASONIC Service Menu:

Panasonic factory reset

Turn the TV ON

- -Hold Volume Down on the TV (on the TV panel not the remote)
- -Now (while continuing to press volume down) Hold the Menu key on the Remote.
- -You will see a screen that displays Self-Check in progress.
- -You will now see the Self-Check screen and all should display OK
- -Unplug the TV from the wall outlet while on the Self-Check screen when everything displays OK
- -Wait approximately 1 minute

When the TV is plugged back up, you will see the first time setup menu.

(Other Panasonic Reset Codes):

Generic Factory Reset Instructions for Panasonic TVs

Method 1

If the TV is off or in standby, switch the TV on and set to view a TV channel.

By using the keys on the front panel on the TV, press the Function [F] key

By using the keys on the front panel on the TV, press and hold the Volume [-] key

At the same time as step [3], press and hold the info / key on the remote control

If this procedure has been accepted, the TV will show that it is performing a "Selfcheck".

At the end of the "Self - Check", turn the TV off and unplug it from the wall outlet for approximately 25 seconds.

When you plug the TV back into the wall outlet and turn the TV on it will perform a complete "first time installation".

Method 2

If the TV is off or in standby, turn the TV on and set to view a TV channel By Using the keys on the front panel of the TV, press the Function FCN button By Using the keys on the front panel of the TV, press the Volume [-] until a message appear on screen.

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# Panasonic service menu for projectors & older TV models:

Panasonic Projector Service Mode:

Method 1

Turn the TV Projector on.

Now press the POWER key.

A "Power Off" confirmation will be displayed on screen.

Then press LEFT UP DOWN UP DOWN & ENTER keys.

The Service Menu will be displayed on screen.

To exit service mode, turn the TV Projector Off.

Panasonic Projector Service Mode

Method 2

Turn the TV Projector on.

Now press the POWER key.

At this point press RIGHT UP DOWN UP DOWN & ENTER keys.

The Service Menu will be displayed on screen.

To exit service mode, turn the TV Projector Off.

Panasonic Projector Service Menu

Method 3

Turn the TV projector on.

Now press the MENU key.

Now Go to "Options" menu.

Then select "OSD".

Now press and hold the ENTER key, until the Service Menu is displayed on screen.

Press the MENU button to exit service mode.

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Panasonic TV Service Mode (LCD/Plasma)

Method 1

Hold down the VOL down key ON THE TV.

Now press the RECALL or INFO key 3 times on the remote.

The Service Menu will now be displayed on screen.

Use 1, 2, keys on remote to navigate main menu fields.

Use 3, 4,keys on remote to navigate sub-menu fields.

Use VOL up, VOL down, keys on the remote to change field value.

Power off the TV to exit service mode to save the data.

Panasonic TV Service Mode (LCD/Plasma)

Method 2

Press and hold down the {VOL down} key on the TV

Then press the 0 key 3 times on the remote control.

To exit service mode, press the EXIT key or turn the power off.

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#### PHILIPS:

PHILIPS Service Menu:

Turn TV on

Reset is achieved by holding the "Menu" key, for approximately 5 - 15 seconds.

The menu key should be located on or around the frontal area of the set.

(Another method for Philips is)

Turn TV on.

Push menu, select"Features"then select"current software info" push 062596-info on remote then push info again then "initialize" appears in red and changes color to green then complete and ready for data change. Push power button to exit service mode.

The above code (062596) is most popular but there are many codes available for accessing service menu

in various Philips TV models. You can try following codes one by one until you get access to service menu:

(Other Philips Reset Codes)

062597, Menu, Info, Status

061596, Menu

061597, Menu

162596, Menu, Status

123654, Menu

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# Philips Extra Tech Tips:

How TO EXIT Philips TV out of 'Store Mode'

Turn on the TV then press "Menu" Scroll down to "Installation" once in installation.

Go down to "Preferences"option

Once your in "Preferences", go down to "Location" option

In Location there is the choice to change this from "Store Demo" to "Home Use" Press "OK" on the remote control for "Home Use or Store Use.

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#### Philips V-chip code:

How To Reset Philips V-Chip

Philips TV's use a four digit code to control the v-chip.

### The override code for Philip TV's is 0711, NOTE:

it could display "Incorrect code" the first time to confuse or deceive you.

If "Incorrect code" is displayed, simply enter 0711 again.

To use it press the MENU key to get to the menus. Go up or down until you reach AUTOLOCK or SMARTLOCK option,

depending on the model, and press the "right arrow" key on the remote control.

Enter the override code, and enter it a second time if it says it is incorrect code.

Once in the AUTOLOCK or SMARTLOCK screen, go to BLOCK, and push the "right arrow" key.

Go to BLOCKING OPTIONS and press the "right arrow" key. Go to MASTER DISABLE and press the "right arrow"

key so that it displays "MASTER DISABLE ON".

The v-chip is now reset to factory status.

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#### PIONEER:

PIONEER Service Menu:

Turn the TV off/in standby....press home menu key.

Approximately 5 seconds turn the TV on , Integrated Menu will be displayed on screen.

Hold Display key until Final Setup appears in the top menu.

Use arrow left or right until 'yes' appears in lower section of menu.

Hold enter until menu disappears from screen.

Wait approximately 60 seconds.

Power the TV off and unplug from the wall outlet for 5 or more minutes.

(Another method for Pioneer)

Press the INPUT key on the remote.

The input list will appear on screen.

Then press the 0 9 1 7 keys on the remote.

To exit service mode, press the EXIT key on the remote.

## POLAROID:

POLAROID Service Menu:

Power on TV then simultaneously press and Hold vol down and CH down keys (or) hold vol up and CH up keys.

TV is now in service mode.

Polaroid FLM-3232 Reset V-Chip Code

The override code for most Polaroid sets is 8202. (V-chip override)

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#### PROSCAN:

PROSCAN Service Menu:

Turn TV on.

On the customer menu go to the setup, then select parental control menu, enter 0000 then select "clear channel list". TV is now reset in service mode.

### RCA:

RCA Service Menu:

Turn TV on

Press Menu, 1147,

TV is now in service mode.

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#### SANYO:

SANYO Service Menu:

Press and hold vol down key on TV, press and hold number 1 key on remote, volume status bar will go to halfway and Then TV shuts off.

Turn the TV back on then you will see the first time setup screen menu.

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### SAMSUNG:

SAMSUNG Service Menu:

There are many codes available for accessing service menu in various Samsung TV models.

You can try following codes one by one until you get access to service menu:

# Samsung TV Factory Reset

Most modern Samsung TVs have a more efficient way to access reset mode.

Press and hold the 'exit' key on the remote for approximately 15 seconds until a reset screen appears.

Follow the on screen prompts to reset the TV.

# (Another method for Samsung is)

Power off the TV using the remote control, then press the following keys quickly on the remote:

Mute, 182, power (TV will turn on in reset mode)

(On some models, Factory Reset is on this menu, on some others, you must go into the "Options" sub-menu

## Other Samsung Reset Codes:

Display/Info Menu, Mute, Power

Display/Info P.STD, Mute, Power

P.STD + Help, Sleep, Power

P.STD + Menu, Sleep, Power

Sleep + P.STD, Mute, Power

Press the Channel Up/Down keys to navigate between available on screen options.

To change the values, press Volume Up/Down keys.

Other Samsung reset codes:

Method 1

Put TV on standby and then push in series these keys on the remote: 'info, menu, mute, power'

the TV will turn itself on from this point and display a menu.

#### Method 2

Turn the TV power off. On the remote, press Mute followed by 1, 8, 2, Power in sequence.

#### Method 3

With the TV in standby mode, press the DISPLAY P.STD MUTE POWER on the remote.

#### Method 4

With the TV in standby mode, press the SLEEP P.STD MUTE POWER on the remote.

#### Method 5

With the TV in standby mode, press the DISPLAY MENU MUTE POWER on the remote.

#### Method 6

With the TV in standby mode. On the remote, press Mute followed by 1, 1, 9, Enter in sequence.

Samsung LCD Monitor Service Menu Instructions

Power on the LCD monitor and open the OSD menu.

Set the Brightness and Contrast to 0.

Then press and hold the "SOURCE or ENTER" key for 5 second until the "SERVICE FUNCTION MENU" appears.

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How To Disable / Enable "Store Mode (Shop Mode)" on most Samsung TVs There are four methods for removing your TV from Shop Mode or Store Demo Mode. If the first method does not work, try the proceeding methods (1,2,etc).

#### Method 1

To remove your TV from Shop Mode or Store Demo Mode, follow these steps:

Press the Volume key on the side panel of your TV. If your TV does not have a side panel, press the Volume key on the front panel. The TV displays the volume bar.

Press the Menu key on the side panel or front panel of your TV for about seven seconds. Again, if your TV does not have a side panel, press the Menu key on the front panel.

If Dynamic or Dynamic Mode is displayed on the screen,

then the TV has been removed from Shop Mode or Store Demo Mode.

#### Method 2

Press the Volume key on your remote. The TV displays the volume bar.

Press the Menu key on the side panel of your TV for about seven seconds. Once again, if the TV does not have a side panel, press the Menu key on the front panel.

If Dynamic or Dynamic Mode is displayed on the screen,

then the TV has been removed from Shop Mode or Store Demo Mode.

#### Method 3

Press and hold the Volume key on your TV. The TV displays the volume bar.

While you are holding the Volume key, press the Menu key on the side panel

of the TV for approximately seven seconds. Once again, if the TV does not have a side panel,

press the Menu button on the front panel. If Dynamic or Dynamic Mode is displayed on the screen,

your TV has been removed from Shop Mode or Store Demo Mode.

#### Method 4

Change your TV to the "TV" source. The TV source is the coax (RF) source.

If you have anything connected to this source it does not matter.

Press the MENU button.

Use the up or down key to select the "Setup" portion of the menu, and then press the ENTER key.

Now the "Plug & Play" option should be highlighted if it is not use the up or down arrow to select

"Plug & Play" option, and then press ENTER key.

NOTE: If the "Plug & Play" option is grayed out and can not be selected this indicates that you are not

on the TV (Coaxial (RF) source. go back to step 1.

Follow the instructions on screen. When the options comes up select "Home" instead of "Shop".

Go through the plug and play option until finished and your TV will no longer be in Shop Mode or Store Demo.

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#### SEIKI:

SEIKI Service Menu:

Turn TV On.

Press Menu, 0000

TV is now in service mode.

### SHARP:

SHARP Service Menu:

With the LCD TV on, unplug the AC power cable.

Then while pressing the INPUT & VOL down keys on the remote,

plug the AC power cable back into the wall outlet.

When the TV powers up you will see a small letter "k" appear in brackets.

Then on the TV, press and hold VOL up & CH down keys and release.

The Service Menu will be displayed on screen.

Use CH up CH down keys to navigate, Use VOL up VOL down keys to adjust the value.

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SONY:

SONY Service Menu:

Turn on the TV

Then press and hold down the up arrow on the remote control

While holding it down, press and release the Power [standby]

key on the remote control then let go of the up key.

TV will automatically turn off and then turn on again with its memory cleared.

### (Another method for Sony is)

First power off the TV using the remote, then press following keys quickly on your TV remote:

Hold "arrow up" on remote and push power key on tv (tv is on and in factory mode) It'll show the hidden service menu on the TV screen.

# (Another method for Sony is)

First power off the TV using the remote, then press following keys quickly on the TV remote:

Display, 5, Volume Up, Power (TV is on and in factory mode) It'll show the hidden service menu on the TV screen.

Once the TV enters into Sony service menu, you can press Menu (or Options) key again on the remote to switch between various service modes such as Digital, Chassis and VPC.

To navigate between available options press 1 or 4 keys.

To change or modify their values press 3 or 6 keys.

To save your changes, just press Mute + 0 (or Enter) keys on the remote.

To restore settings to factory defaults, press 8 + 0 (or Enter) keys.

NOTE: For some newer models the above methods may or may not work. Use following key sequence to access service menu in the newer models:

While TV is on, press Left + Right + Mute + Center key + Mute + Menu keys. NOTE: You may also press Display (or i+) + 5 + Volume Down + Power keys

on the remote to enter in Self Check mode. This mode shows the total usage hours of the Sony TV set.

Sony Extra Tech Tips:

Sometimes sets can get stuck in store mode -

If the TV has strange behavior like settings reverting by themselves automatically or scrolling banners through the TV screen, it is very possible that the TV is in store mode.

Press Home key on remote control Enter settings menu Choose set-up Select auto start-up and choose the location as 'Home' which will take it out of store-mode.

Sony Service menu:

Sony Service Menu Method 1

Put the TV in standby mode then press the following keys on the remote: DISPLAY 5 VOL-up POWER

Sony Service Menu Method 2

Put the TV in standby mode then press the following keys on the remote: DISPLAY 5 POWER

Sony Service Menu Method 3

Put the TV in standby mode then press the following keys on the remote: DISPLAY 5 PICTURE POWER

Sony Service Menu Method 4

Put the TV in standby mode then press the following keys on the remote: DISPLAY 5 VOL-up PICTURE POWER

Exit Service Menu = <Power>

Sony Service Menu Navigation Tips

Menu Next = <1> key

Menu Previous = <4> key

Category Next = <2> key

Category Previous = <5> key

Adjust Up = <3> key

Adjust Down = <6> key

Save New Settings = <MUTE> <ENTER> keys

Restore Factory Defaults = <8> <ENTER> keys

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SYMPHONY:

SYMPHONY Service Menu:

Turn TV On.

Press Source or Input Key, then 2580

TV is now in service mode.

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TOSHIBA:

TOSHIBA Service Menu:

Toshiba LCD Service Code

Press the {MENU} key on the remote.

Then Highlight the "Picture" icon.

Press the 9 3 0 1 keys on the remote.

The OK key will access/navigate through various modes

VOL up, VOL down, {P+} & {P-} keys move through options and change values.

To exit service mode, press the MENU key.

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Toshiba TV/CRT Service Menu Code Method 1

Press and hold the MUTE key on the remote.

Then press the MENU key on the TV's front panel.

CH up & CH down keys select options

VOL up & VOL down keys change values

To exit service mode, turn the power off.

Toshiba TV/CRT Service Code Method 2

Turn the TV on.

Press the MUTE key three times on the remote.

Press the MUTE key again on the remote and hold.

Then press the MENU key on the TV's front panel or siade panel.

Release both keys

There should be a letter "S" on the upper right hand side of the screen.

Press the MENU key on the TV's front panel once again.

CH up & CH down keys select options

VOL up & VOL down keys change values

To exit service mode, turn the power off.

Toshiba TV/CRT Service Code Method 3

Turn the TV on.

Press the MUTE key twice on the remote.

Press the MUTE key again on the remote and hold.

Then press the MENU key on the TV's front panel.

Release both keys

There should be a letter "S" on the upper right hand side of the screen.

Press the MENU button on the TV's front panel again.

CH up & CH down keys select options

VOL up & VOL down keys change values

To exit service mode, turn the power off.

Toshiba TV/CRT Service Code Method 4

Turn the TV on.

Press the MUTE key on the remote.

Press the MUTE key again on the remote and hold.

Then press the MENU key on the TV's front panel.

Release both keys

There should be a letter "S" on the upper right hand side of the screen.

Press the MENU key on the TV's front panel again.

CH up & CH down keys select options

VOL up & VOL down keys change values

To exit service mode, turn the power off.

Toshiba TV/CRT Service Code Method 5

Press and hold the {VOL down} key on the TV and the {9} key on the remote control for approximately 5 seconds.

CH up+ & CH down keys select options

VOL up & VOL down keys change values

To exit service mode, press the MENU key or turn the power off.

VISION QUEST:

VISION QUEST Service Menu:

Turn TV On.

Press Source or Input key, then 2580

TV is now in service mode.

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VIZIO:

VIZIO Service Menu:

Turn TV on

In customer menu under "Help" option is Factory Default, then enter 0000

(Other Vizio reset methods)

Vizio Service Menu:

Method 1

Turn The TV off.

Press and hold the CH up & CH down keys on the TV.

Then press and release the POWER key on the TV.

Release the CH up & CH down keys.

Now press the MENU key on the remote.

You will see a regular menu up, but it will have an "F"

in the bottom right hand corner of the menu (This is for factory).

Press and hold the MENU key for few seconds.

The Service Menu will be displayed on screen.

Vizio Service Menu

#### Method 2

Turn The TV off.

Press and hold the CH up & CH down keys on the TV.

Then press and hold the POWER key on the TV.

Keep all three keys pressed for few seconds.

Now press the MENU key on the remote.

You will see a regular menu up, but it will have an "F"

in the bottom right hand corner of the menu (This is for factory).

Press and hold the MENU key for few seconds.

The Service Menu will be displayed on screen.

Vizio Service Menu

#### Method 3

Press and hold the EXIT key on the remote for 3 seconds then release it.

Then press the 1 2 3 keys on the remote.

To exit, press the EXIT key.

For other Vizio models VA320E/VA320M/VA370M/VT420M:

Press "Menu" and then press the following combination: "1," "9," "9," "1"

The service menu will be displayed on screen.

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Vizio Extra Tech Tips:

Vizio Netflix Reset:

From the first selection screen it will be on the Netflix app, press these keys on the remote:

up, up, down, down, left, right, left, right, up, up, up, up,

then a screen will come up with the basic account information attached to the Netflix app and also the software version.

Select Disable with the remote.

This selection will remove the account information from the Netflix app thus allowing the TV owner to re-attach their TV to a new account or reset a faulty Netflix app.

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VIORE:

VIORE Service Menu:

Method 1

Press and hold the MENU key on the remote for approximately 15 seconds.

A menu with an option for the Service Menu 'Factory Settings' will be displayed on screen

To exit service menu, press the MENU key.

VIORE Service Menu

Method 2

Press and hold the MENU key on the remote and the MENU key on the TV at the same time for approximately 15 seconds.

A menu with an option for the Service Menu 'Factory Settings' will be displayed on screen.

To exit service menu, press the MENU key.

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## **WESTINGHOUSE:**

WESTINGHOUS Service Menu:

Unplug the AC power from the LCD TV.

Wait approximately 35 seconds

Then plug AC cord back in LCD TV.

Now press and hold the power key (on the lower left hand side on the TV) for approximately 15 seconds

The Westinghouse logo will appear. Then go to "Menu" then "Settings" scroll down to "Factory Reset" then click "Yes".

This method is also to fix HDMI ports not working on these particular TV's.

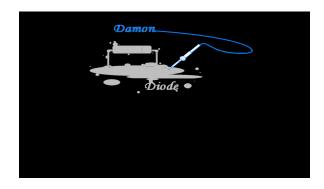
# This concludes Factory Reset Codes.

# Conclusion

This manual is dedicated to the greatest technicians David Maltz, Jestine Yong, Sunny, Teonna Flags and Micheal B Danish. For any questions or concerns with Samsung Curved and Slim 4K UHD LED TV Case History Vol 1, you can email me at <a href="mailto:damon@plasmatvrepairguide.com">damon@plasmatvrepairguide.com</a>

All material and illustrations in this manual are original, written, compiled, and illustrated by Damon Diode at Tech Society in USA.

# To your success,



Damon C Morrow

Author of "Samsung Curved and Slim 4K UHD LED TV Case History Volume 1" and

Plasma TV Repair Guide

**LCD TV Repair Secrets** 

LCD TV SMPS Repair

**LCD TV Mainboard Power Faults** 

Samsung SMPS Case History

Sanyo LCD TV Case History

Toshiba LED/LCD TV Repair case history 1

Sony LED/LCD TV Repair case history 1

LG LED/LCD TV Case History 1

LG Plasma TV Case History 1

Panasonic 3D LED And Plasma Smart TV Vol1

Samsung-Sony-Toshiba-Vizio TV Case History Vol 1

# Recommended Resources

# **Electronics Repair Ebooks**

1) <a href="http://www.jestineyong.com/resources-2/">http://www.jestineyong.com/resources-2/</a>

# **List Of Electronics Spare Part Suppliers**

http://www.jestineyong.com/category/electronic-suppliers/

http://www.ebay.com

http://www.shopjimmy.com

http://www.encompassparts.com

http://www.iccfl.com

http://www.aliexpress.com

## **Electronics Repair Websites**

- 1) www.ElectronicRepairGuide.com
- 2) www.Anatekcorp.com
- 3) <u>www.Epanorama.net/links/repair.html</u>

# **Kent Liew's Electronics Repair Ebooks**

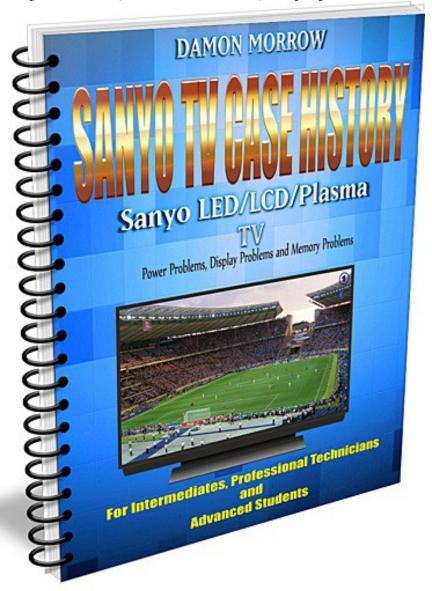


1) http://www.jestineyong.com/repairing-guides-by-kent/

# **FREE Bonus Ebook**

# Sanyo LCD/LED/Plasma TV Case History

Memory Problems, Power Problems, Display Problems



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# <u>Documented Service Records – All Level</u> Technicians.

# Power Faults - Display Faults - Memory Errors

The following data in this handbook is written and compiled according to Damon Morrow's in-house service records (or case history) of Sanyo's LCD, LED, and Plasma TV failures. This handbook documents a fair range of Sanyo LCD, LED, and Plasma TV faults including various memory error's, display symptoms, and power failures.

This Sanyo case history e-book is very easy to use, and it simply lists a wide scenario of popular problems and secretive fixes for Sanyo LCD, LED, and Plasma TV's. There's an extra bonus section in this e-book for Vizio LCD, LED TV case histories exposing secret solutions to well-known problems with Vizio LCD and LED TV's.

The information contained in these pages are complete with the **model number of the Sanyo TV**, the **board-number of the faulty circuit**, and the **part-location number** of the defective component(s). It's the same complete format for Vizio case histories as well.

This Sanyo case history e-book is a very simple and affective reference tool on components which have failed causing performance issues with Sanyo LCD, LED, and Plasma TV's. This case history e-book documents well-known symptoms on Sanyo TV's such as random shut down, saturated picture, no power, no start-up, TV stuck on logo screen, no audio, and more.

The components that have failed in this Sanyo case history e-book are mainly standard parts and IC's. Parts such as diodes, mosfet's, LDO's, and IC's such as regulators, EEPROM's, control IC's switching IC's, etc. The test equipment used while compiling this case history information was a standard DVM meter, Capacitor meter (uF/ESR) and a 60Mhz digital Oscilloscope. The scope was generally used to troubleshoot IC chips such as resonant chips on SMPS boards and memory chips on main boards.

This Sanyo case history e-book is for technicians of all levels, there are no complex diagrams or detailed graphics involved. This e-book is not a case

history of troubleshooting and circuit evaluation (as with my other books), it is a simple case history of Sanyo parts failure. All of the troubleshooting work has been done for you and compiled in a simple format. This Sanyo case history e-book is written text information correlating to shop records. There are no pictorial graphics or illustrative diagrams used in the <u>case</u> <u>history section</u> of this e-book.

Note: Many of Sanyo's boards are interchangeable between multiple Sanyo LCD, LED, and Plasma TV models unless otherwise noted due to board revision or part recall from Sanyo or its parts distribution subsidiaries. Below is an example of how the Service-Case-History Records of each Sanyo TV model are laid out in this e-book and also shows the meaning of each category.

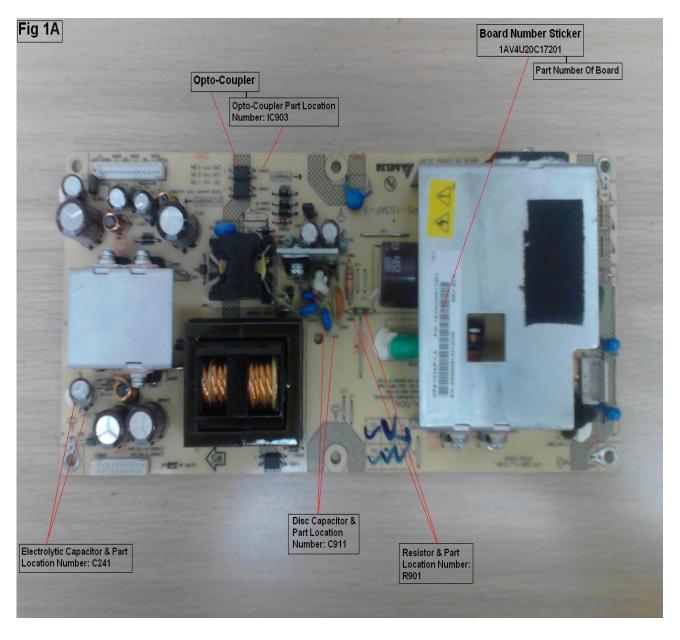
# Sanyo LCD/LED/Plasma TV Service Case History Record Layout Example:

- 1) TV Model Number: *Model number of TV issued by TV manufacturer* (example DP37647).
- 2) TV Failure Symptom: *The kind of problem the TV is having* (example Power-Up, No Picture).
- 3) Faulty Board: Which board inside the TV has the failure (example Main Board).
- 4) Faulty Board Number: Manufactures Part Number of faulty board (example 431C5369L02).
- 5) Main Board Location Number Of Faulty Part(s): *The location number of the faulty part(s) on the main-board* (example U3, R19).
- 6) Part(s) Failure Type: The way in which the part(s) have failed (example U3 no Enable signal, SMD R19 out of value).
- 7) Shop Notes: (If available) shop notes relating to the repair (example U3 was removed and new replacement was re-programmed, and SMD R19 was replaced with a 'through-hole' resistor as an SMD of that value wasn't available).
- (n.a. Means shop notes are not available.

# **Basic Sanyo Board Example**

# A Sanyo SMPS board number & part location numbers

This Sanyo e-book covers case histories on all Sanyo boards such as Inverter boards, LED Driver boards, T-con boards, SMPS boards, Main-boards. In Fig1A we will use a Sanyo LCD SMPS board to serve only as an example of what a board-number is, and what part-location numbers are.



**Fig- 1A** 

The picture in Fig 1A simply illustrates a basic method on identifying the board. First there is the part number of the board located on the white sticker or sometimes printed directly on the board. Then there are the actual parts or components that make the board what it is.....in this case a Sanyo SMPS for a 32-inch Sanyo LCD TV. For example there is an opto-coupler and its board location number is IC903, once the location of the part is found, you can then test the part to determine if it is working properly or not.

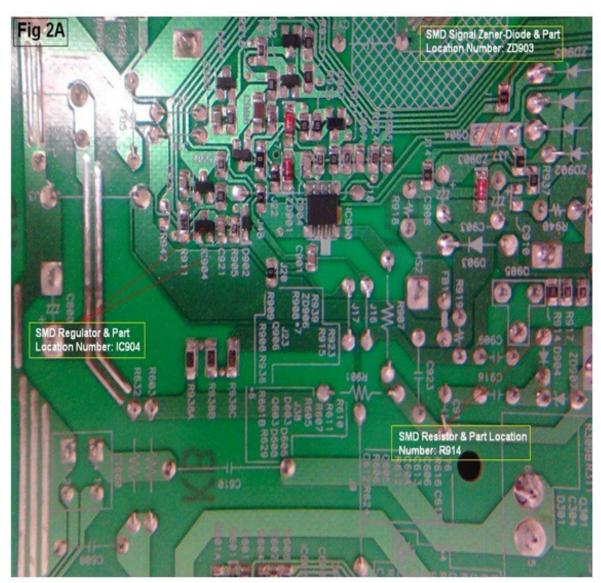


Fig 2A- Flip side of SMPS board (SMD parts)

In Fig 2A you can see the SMD parts use the same method of location and identifying as do through-hole parts. SMD parts play a vital role in LCD and Plasma TV repair because they fail quite often. SMD parts fail a lot due to their electrical connection to larger powerful parts which fail first, such as MOSFET's, IGBT's, and Power-Rectifiers. When a MOSFET shorts it will usually destroy or damage the SMD resistors and SMD diodes connected to it on the flip side of the board. It is easy to overlook these SMD parts because they are so small and seem rather insignificant, but overlooking SMD parts can mean the difference between a successful repair or a wasted attempt.

This particular Sanyo SMPS board in Fig1A/2A has a few faults starting with the two main switching MOSFET's Q681, Q682, and their control IC

Chip IC601. See Fig 3A.

Fig 3A

Disc Capacitor CY2 out of pF
value

Main Fuse F1 Open

Switching MOSFET Q602
shorted

Fig 3A. Identifying faulty MOSFET's and Control IC chip

The main fuse F1 was opened because of two faulty MOSFET's that shorted and also damaging their control chip IC601 located at the flip side of the board. Sometimes in a rare situation MOSFET's will open internally and will not produce a working source voltage. Sanyo LCD and LED TV's seem to have fault issues with semiconductors and IC chips. Usually any high-voltage disc capacitor connected to power-MOSFET's will either burn to a crisp or damage its farad value far out of tolerance.

Many technicians will replace MOSFET's with better quality MOSFET's from a different manufacturer than the originals. This is largely done by technicians who put lengthy warranties behind their repairs. You can see the control chip IC601 in Fig 4A which controls the switching pulse for the gate of each MOSFET also known as 'switchers'....

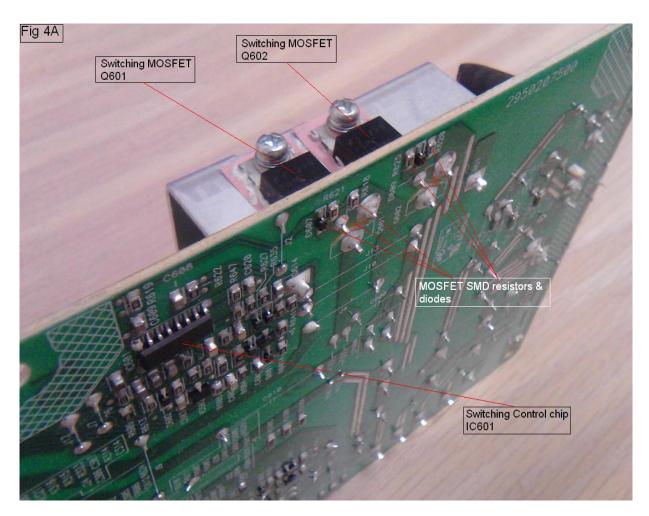


Fig 4A-Identifying faulty MOSFET's and Control IC chip

IC601 is a high voltage resonant control chip, it's a very important chip to troubleshoot if there's only stand-by power on the TV (though there are other faults that can cause stand-by only) or if the TV go's into protect mode soon as its plugged in. IC601 drives both Q601 and Q602 using a half-bridge topology, and this particular chip is being replaced because there is no start-up pulse at pin 1 and no switching square-wave at pins 11 & 15.

Pins 11 & 15 are used to switch the gates of Q601 and Q602, IC601 also has two internal FET's that short often and also an internal bootstrap driver diode that fails often as well, causing the chip to get hot. Usually when Q601 and Q602 become shorted they will damage the internal switching driver inside of IC601 and this is generally the case with many SMPS using resonant control IC's.

In Fig 5A/6A at the next page you can see the meter in 'Diode-check' reading 0.000 indicating a short on all 3 junctions (gate, drain, and source) between Q601 and Q602.

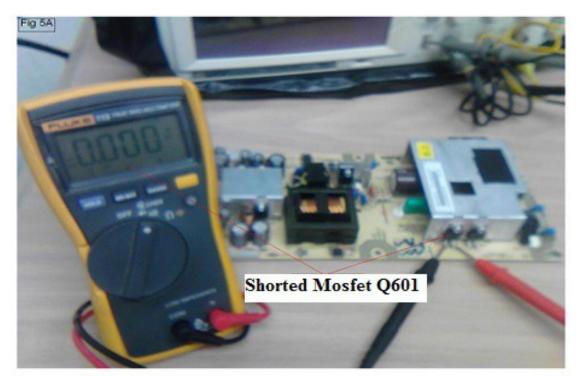


Fig 5A



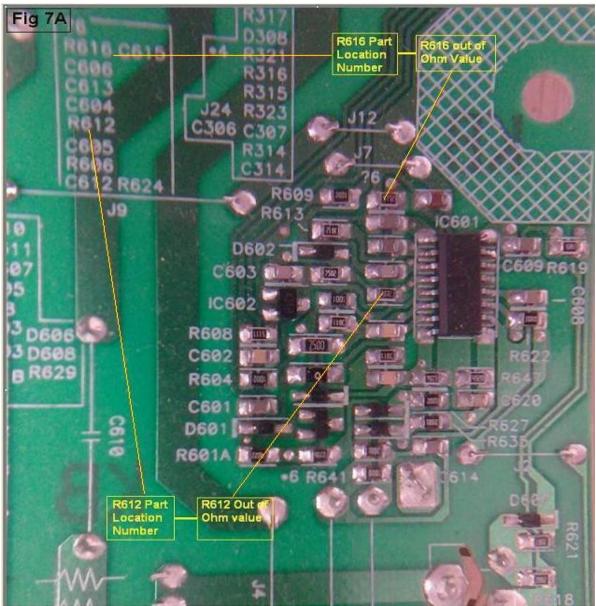


FIG 7A- Identifying faulty MOSFET's and Control IC chip

When MOSFET's become shorted they damage the internals of the driver IC chip controlling the switching pulse at the gate of each FET. When the control chip get's damaged (electrically) the chip will usually damage the external SMD components connected to it such as R612 and R616. In many cases the quickest way to test a resonant chip such as IC601 is to suspend pin 12 and pin 16 and see if they are shorted using a DVM meter. The bootstrap driver in IC601 are between those 2 pins and many times has shorted on its own or extended damage from external MOSFET's Q601/Q602 shorting.



Fig-8A- Identifying faulty MOSFET's and Control IC chip

The original FET's (Q601/Q602) were replaced with new FET's of higher quality as seen in Fig 8A. IC601 was replaced with another resonant chip from a stock of SMPS boards I use for parts and IC's. When replacing and using a resonant IC from another 'parts-board' be sure to check the IC's datasheet very carefully because if one pin is connected to the wrong component(s) the results are electrically disastrous and extremely dangerous.

A resonant chip is one chip not to make mistakes with, be sure to get all of the electrical specifications correct before installing a resonant IC control chip. This Sanyo SMPS board had other problems with leaky diodes pointed out in Fig 9A and were replaced with new diodes of equal quality.



Fig 10A/11A- Vizio main-board part-location number Identifying good MOSFET IC chip

In Fig 10A and Fig 11A is an example of checking switching MOSFET chips on main-boards such as a Vizio main-board. In this example the MOSFET chip (U1) checks good and if it were shorted the meter would read 0.000 across the display on all pins indicating a bad MOSFET chip. In Fig10A/11A show's a normal junction voltage between the source and drain pins. MOSFET chips can sometimes develop an internal open causing the

chip not to produce an output voltage. Also check the MOSFET chips by applying an input voltage and verify if it produces an output voltage. If there's an output voltage then the chip is good if not then its faulty. When U1 fails it causes a black screen condition, and there are many Sanyo and Vizio secret fixes in this Sanyo case history e-book.

# "Once again here's the case history layout example" Sanyo LCD/LED Plasma TV Service Case history Layout Example

- 1) TV Model Number: *Model number of TV issued by TV manufacturer* (example DP37647).
- 2) TV Failure Symptom: *The kind of problem the TV is having* (example Power-Up, No Picture).
- 3) Faulty Board: Which board inside the TV has the failure (example Main Board).
- 4) Faulty Board Number: Manufactures Part Number of faulty board (example 431C5369L02).
- 5) Main Board Location Number Of Faulty Part(s): The location number of the faulty part(s) on the main-board (example U3, R19).
- 6) Part(s) Failure Type: The way in which the part(s) have failed (example U3 no Enable signal, SMD R19 out of value).
- 7) Shop Notes: (If available) shop notes relating to the repair (example U3 was removed and new replacement was re-programmed, and SMD R19 was replaced with a 'through-hole' resistor as an SMD of that value wasn't available).
- (n.a. Means shop notes are not available.

## Sanyo LCD/LED TV Case History

## Power Problems, Display Problems, Memory Problems-

1) TV Model Number: DP15647D

2) TV Failure Symptom: TV plugged in, stand-by only, will not start-up into full power,

then no stand-by

3) Faulty Board: Main Board

4) Faulty Board Number: 1AA4B10N20000 (N4SK)

5) Board Location Number Of Faulty Part(s): X6201

6) Parts Failure Type: Quartz crystal X6201 flawed, no signal pulse at stand-by or start-

up cycle.

7) Shop Notes: After replacing crystal picture had a reddish hue tint. Replace SMD L6222, L6550.

\_\_\_\_\_

1) TV Model Number: DP15657

2) TV Failure Symptom: No power, dead

3) Faulty Board: SMPS

4) Faulty Board Number: 1AV4U20C09100

5) Board Location Number Of Faulty Part(s): F1, Q251, GAS4

6) Parts Failure Type: Main fuse open, switcher Q251 shorted, spark-gap GAS4 charred

and burned.

7) Shop Notes: Box capacitor CX202 was replaced as a service precaution.

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1) TV Model Number: DP15657

2) TV Failure Symptom: Power on, back-light flash once, then shutdown into stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: 1AV4U20C09100

5) Board Location Number Of Faulty Part(s): T102, F100

6) Parts Failure Type: Inverter transformer T102 open at its primary end, pico fuse F100 open.

7) Shop Notes: 4 pin switching IC at HS5 was replaced as a service precaution.

\_\_\_\_\_\_

1) TV Model Number: DP19657

2) TV Failure Symptom: Stand-by only no main power

3) Faulty Board: SMPS

4) Faulty Board Number: 1LB4U20B01500

5) Board Location Number Of Faulty Part(s): D5F

6) Parts Failure Type: Diode D5F shorted.

7) Shop Notes: n.a.

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1) TV Model Number: DP19648D

2) TV Failure Symptom: No back-light

3) Faulty Board: SMPS

4) Faulty Board Number: 1LB4U20B01500

5) Board Location Number Of Faulty Part(s): T1

6) Parts Failure Type: Inverter transformer T1 open at secondary end.

7) Shop Notes: Inverter transformer T2 and Disc capacitors C17/C18 were replaced as a service precaution.

1) TV Model Number: DP19647

2) TV Failure Symptom: Stand-by only, no start-up to full power 3) Faulty Board: SMPS 4) Faulty Board Number: 2995305200 5) Board Location Number Of Faulty Part(s): Q251, F201 6) Parts Failure Type: Switching mosfet shorted, fuseable resistor F201 was open. 7) Shop Notes: n.a. 1) TV Model Number: DP19649 2) TV Failure Symptom: TV on with no back-light 3) Faulty Board: Main Board 4) Faulty Board Number: CA1BI93281 5) Board Location Number Of Faulty Part(s): IC2804 6) Parts Failure Type: EEPROM IC2804 replaced. 7) Shop Notes: Replaced EEPROM, 10 day's TV came back same problem. Entire mainboard replaced. 1) TV Model Number: DP26746 2) TV Failure Symptom: Back-light on briefly then off

3) Faulty Board: Inverter Board

4) Faulty Board Number: V1448.331/C

5) Board Location Number Of Faulty Part(s): T7

6) Parts Failure Type: Inverter transformer T7 open at secondary end.

7) Shop Notes: Switchers U16/U17 were replaced as a service precaution.

1) TV Model Number: DP26746

2) TV Failure Symptom: TV on after5 minutes, then no back-light, sound only, then shut

#### down

3) Faulty Board: Inverter Board

4) Faulty Board Number: V1448.331/C

5) Board Location Number Of Faulty Part(s): U5

6) Parts Failure Type: Quad Op-Amp IC 'U5' no negative feedback voltage pin 13.

7) Shop Notes: SMD resistors R127, R122 replaced as a service precaution.

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1) TV Model Number: DP26746

2) TV Failure Symptom: TV on with back-lights and no composite video, no menu screen

3) Faulty Board: T-Con Board

4) Faulty Board Number: 222000006700

5) Board Location Number Of Faulty Part(s): F1, L1

6) Parts Failure Type: T-Con SMD fuse F1 open, SMD coupling inductor L1 out of value.

7) Shop Notes: Main board had a unstable voltage and LVDS signal swing. Entire main board replace.

(Core processor had internal DC volt errors causing bouncing LVDS differential swing on scope)

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1) TV Model Number: DP26671

2) TV Failure Symptom: No back-light

3) Faulty Board: SMPS

4) Faulty Board Number: CEK671

5) Board Location Number Of Faulty Part(s): Q7003, IC7001

6) Parts Failure Type: Switcher Q7003 shorted, control IC 7001 no switching pulse output and very hot.

7) Shop Notes: Check IC 7001 SMD diodes D700/D7002 for out-of-circuit shorts.

1) TV Model Number: DP26671

2) TV Failure Symptom: Turn on TV, back-lights flicker once then stand-by mode

3) Faulty Board: SMPS

4) Faulty Board Number: CEK671

5) Board Location Number Of Faulty Part(s): T7001

6) Parts Failure Type: Inverter transformer T7001 was open at secondary end.

7) Shop Notes: Switchers Q7005/Q7006 were replaced as a service precaution.

1) TV Model Number: DP26671

2) TV Failure Symptom: TV stuck in DVD mode

3) Faulty Board: Built-in DVD Assembly Module

4) Faulty Board Number: A55Z01K650

5) Board Location Number Of Faulty Part(s): A55Z01K650

6) Parts Failure Type: DVD disc stuck inside DVD player, damaged disc motor.

7) Shop Notes: Replaced entire DVD assembly module.

1) TV Model Number: DP26649

2) TV Failure Symptom: No stand-by, dead

3) Faulty Board: SMPS

4) Faulty Board Number: 1AV4U20C17201

5) Board Location Number Of Faulty Part(s): F1, Q602

6) Parts Failure Type: Main fuse F1 open, switcher Q602 shorted.

7) Shop Notes: Box capacitor CX1 had strange pico reading and was replaced.

1) TV Model Number: DP26649

2) TV Failure Symptom: No stand-by dead

3) Faulty Board: SMPS

4) Faulty Board Number: 1AV4U20C17201

5) Board Location Number Of Faulty Part(s): F1, Q601, Q602, SG2

- 6) Parts Failure Type: Main fuse F1 open, switchers Q601/Q602 shorted, spark-gap SG2 charred and burned.
- 7) Shop Notes: There were also two bulged capacitors, and a shorted FET (C1/C2/Q2) on inverter board.

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1) TV Model Number: DP26649

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: 1AV4U20C17201

5) Board Location Number Of Faulty Part(s): F1, Q602, IC601

6) Parts Failure Type: Main fuse F1 open, switcher Q602 shorted, resonant control IC601 no switching output.

7) Shop Notes: IC601 was back ordered and not available. The entire SMPS was replaced.

1) TV Model Number: DP26649

2) TV Failure Symptom: TV on, then sudden intermittent shut down into stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: 1AV4U20C17201

5) Board Location Number Of Faulty Part(s): IC301

- 6) Parts Failure Type: OP-Amp IC301 pin 1/pin 7 outputs not in phase with feed-back voltage.
- 7) Shop Notes: IC301 was replaced with feed-back SMD components R302B, R306, C303.

- 1) TV Model Number: DP26647
- 2) TV Failure Symptom: Power-up then immediate shut down
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: 1AV4U20C09700
- 5) Board Location Number Of Faulty Part(s): D905
- 6) Parts Failure Type: D905 shorted.
- 7) Shop Notes: PFC switcher Q904 was replaced as a service precaution.

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- 1) TV Model Number: DP26640
- 2) TV Failure Symptom: Stand-by only, then protection mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: 1AA0B10N29100
- 5) Board Location Number Of Faulty Part(s): D602, D603
- 6) Parts Failure Type: isolation diodes D602/D603 shorted.
- 7) Shop Notes: Electrolytic capacitor C619 out of uF value and replaced.

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- 1) TV Model Number: DP26640
- 2) TV Failure Symptom: Dead, no stand-by power
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: 1LG0B10Y0820A

- 5) Board Location Number Of Faulty Part(s): T4AL250V, Q603, D621
- 6) Parts Failure Type: Main fuse T4AL250V open, switcher Q603 shorted, diode D621 shorted.
- 7) Shop Notes: Box capacitor C602 was out of pF value and replaced.

- 1) TV Model Number: DP32746
- 2) TV Failure Symptom: Menu error on screen, menu feature disrupts motion picture
- 3) Faulty Board: T-con
- 4) Faulty Board Number: 55.31T01.147
- 5) Board Location Number Of Faulty Part(s): U5
- 6) Parts Failure Type: Flash memory U5 had no data input pin 5, no data output pin 2.
- 7) Shop Notes: U5 must be programmed before install. SMD C61, R88, replaced as service precaution.

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- 1) TV Model Number: DP32746
- 2) TV Failure Symptom: Power-on then start-up screen only, then shut down into stand-by
- 3) Faulty Board: T-con
- 4) Faulty Board Number: 55.31T01.147
- 5) Board Location Number Of Faulty Part(s): Q302
- 6) Parts Failure Type: 4 pin MOSFET IC Q302 shorted at source and drain pins.
- 7) Shop Notes: SMD junction diodes D301/D302 and F1 were replaced as a service precaution.

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- 1) TV Model Number: DP32746
- 2) TV Failure Symptom: TV stuck in stand-by mode, will not initiate start-up
- 3) Faulty Board: Main Board

- 4) Faulty Board Number: 1AA4B10N16200 (tuner N3HE)
- 5) Board Location Number Of Faulty Part(s): IC802
- 6) Parts Failure Type: 4 pin EEPROM IC802 no serial bus data output.
- 7) Shop Notes: IC802 must be programmed before install. SMD R828/R829 replaced as a service precaution.

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- 1) TV Model Number: DP32746
- 2) TV Failure Symptom: Will not power on, stand-by only
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1AA4B10N16200 (tuner N3HE)
- 5) Board Location Number Of Faulty Part(s): Q1673
- 6) Parts Failure Type: SMD switching transistor Q1673 shorted.
- 7) Shop Notes: SMD resistor R1678 was out of value and replaced.

- 1) TV Model Number: DP32670
- 2) TV Failure Symptom: Dead, no stand-by power
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: 1AV4U20C17201
- 5) Board Location Number Of Faulty Part(s): F1, Q601, Q602
- 6) Parts Failure Type: main fuse F1 open, switchers Q601/Q602 both shorted.
- 7) Shop Notes: n.a.

- 1) TV Model Number: DP32670
- 2) TV Failure Symptom: Start-up then immediate shut down

3) Faulty Board: SMPS

4) Faulty Board Number: 1AV4U20C17201

5) Board Location Number Of Faulty Part(s): Q905, D903

6) Parts Failure Type: Q905 shorted, D903 shorted.

7) Shop Notes: R907 was out of value and replaced.

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1) TV Model Number: DP32670

- 2) TV Failure Symptom: When ac cord plugged in, TV in stand-by briefly then dead (no stand-by)
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: 1AV4U20C17201
- 5) Board Location Number Of Faulty Part(s): IC601
- 6) Parts Failure Type: HV resonant control IC601 had no gate pulse at pins 11/16.
- 7) Shop Notes: IC601 was replaced and switchers Q601, Q602 replaced as a service precaution.

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1) TV Model Number: DP32670

2) TV Failure Symptom: Dead, no stand-by power

3) Faulty Board: SMPS

4) Faulty Board Number: 1AV4U20C17201

- 5) Board Location Number Of Faulty Part(s): F1, Q602, SG3, CX2
- 6) Parts Failure Type: fuse F1 open, switcher Q602 shorted, spark-gap SG3 charred, box cap CX2 no pF value.
- 7) Shop Notes: Switcher Q601 was replaced as a service precaution. Check SMD IC602 LDO regulator.

1) TV Model Number: DP32648

- 2) TV Failure Symptom: Picture has over-saturated white color (solarized)
- 3) Faulty Board: T-Con
- 4) Faulty Board Number: 996510009692
- 5) Board Location Number Of Faulty Part(s): U6
- 6) Parts Failure Type: Voltage buffer U6 distorted Vcom signal I/O pins 39/47, indicates bad internal Op-amps.
- 7) Shop Notes: U6 was replaced and the Vcom adjust was automatic for gamma correction.
- 1) TV Model Number: DP32648
- 2) TV Failure Symptom: Power fully on, back-lights on, with no picture
- 3) Faulty Board: T-Con
- 4) Faulty Board Number: 996510009692
- 5) Board Location Number Of Faulty Part(s): F1
- 6) Parts Failure Type: SMD micro fuse F1 open on 5V line.
- 7) Shop Notes: UP2 and Q2 were replaced as a service precaution.

1) TV Model Number: DP32648

- 2) TV Failure Symptom: Power-on, then back-lights flash once, then shut down into stand-by
- 3) Faulty Board: Inverter Board
- 4) Faulty Board Number: 6632L-0495A
- 5) Board Location Number Of Faulty Part(s): Q8, Q10
- 6) Parts Failure Type: Switchers Q8/Q10 shorted.
- 7) Shop Notes: Capacitors C1, C2 were replaced as a service precaution. Also SMD R148, R21 replaced.

1) TV Model Number: DP32648

- 2) TV Failure Symptom: TV turns on, quick back-light flicker, then TV enters protection mode
- 3) Faulty Board: Inverter Board
- 4) Faulty Board Number: 6632L-0495A
- 5) Board Location Number Of Faulty Part(s): U1, Q4, Q8
- 6) Parts Failure Type: Control IC U1 had no switching pulse, switchers Q4, Q8 shorted.
- 7) Shop Notes: Control IC U1 replaced. Q4, Q8, SMD resistors R149, R28, R21, R148 replaced.

- 1) TV Model Number: DP32642
- 2) TV Failure Symptom: Dead, no stand-by power (storm damage)
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: BK.01109.H01
- 5) Board Location Number Of Faulty Part(s): F201, BD1, D001, D002
- 6) Parts Failure Type: Fuse F201 open, bridge rectifier shorted BD1, diodes D001/D002 shorted.
- 7) Shop Notes: RY325 out of value and replaced, CX201/CX202 replaced as a service precaution.

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- 1) TV Model Number: DP32642
- 2) TV Failure Symptom: TV start-up, then back-light flicker once then shut down. Inverter blue 'LED1" off.
- 3) Faulty Board: Inverter Board
- 4) Faulty Board Number: 6632L-0627A
- 5) Board Location Number Of Faulty Part(s): C1, C2, Q1, Q3,
- 6) Parts Failure Type: E-capacitors C1/C2 bulged, switchers Q1, Q2, shorted.
- 7) Shop Notes: Control IC U1, SMD resistors R1, R3, were replaced as a service precaution.

1) TV Model Number: DP32642

2) TV Failure Symptom: Partial start-up, then stand-by only

3) Faulty Board: SMPS

4) Faulty Board Number: N0AB3EJ00003

5) Board Location Number Of Faulty Part(s): DM1

6) Parts Failure Type: Diode DM1 shorted.

7) Shop Notes: n.a.

1) TV Model Number: DP32642

2) TV Failure Symptom: Stuck on start-up screen logo prompt

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y112A0

5) Board Location Number Of Faulty Part(s): IC6706

6) Parts Failure Type: EEPROM IC6706 no SDA, I/O bus signal dead at pin 5.

7) Shop Notes: EEPROM IC6706 must be programmed before install. This EEPROM IC6706 had a software password, to break the password suspend SMD resistor R6755, then short pins 7 & 4 together and proceed to read/write chip.

1) TV Model Number: DP32642

2) TV Failure Symptom: No audio on Component input or HDMI input

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y112A0

5) Board Location Number Of Faulty Part(s): IC001

6) Parts Failure Type: Audio chip IC001 dead at PWM pins 6, 9, 10, 13.

7) Shop Notes: SMD resistors R022, R005 were replaced as a service precaution.

- 1) TV Model Number: DP32640
- 2) TV Failure Symptom: Static audio, snapping sounds
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y06900
- 5) Board Location Number Of Faulty Part(s): IC001
- 6) Parts Failure Type: Audio chip IC001 pins 21, 25, 30, 34 noisy audio signal pulse.
- 7) Shop Notes: SMD caps C021, C011, C020, C010, C022 were replaced as a service precaution.

- 1) TV Model Number: DP32640
- 2) TV Failure Symptom: Power on, then shut down into stand-by
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y06900
- 5) Board Location Number Of Faulty Part(s): IC5750
- 6) Parts Failure Type: EEPROM IC5750 dead SCLK.
- 7) Shop Notes: After EEPROM replaced, main-board contacts were cleaned with steel brush.

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- 1) TV Model Number: DP32640
- 2) TV Failure Symptom: All audio outputs dead, A/V, HDMI, Component
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y04100 (NBLH)
- 5) Board Location Number Of Faulty Part(s): IC001
- 6) Parts Failure Type: Audio chip IC001 dead at signal output pin channels.

7) Shop Notes: n.a.

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1) TV Model Number: DP37819

2) TV Failure Symptom: Audio is extremely low and get's lower, then sound in and out

3) Faulty Board: Speaker

4) Faulty Board Number: LBB08700

5) Board Location Number Of Faulty Part(s): LBB08700

6) Parts Failure Type: Right speaker LBB08700 was only 1.6 Ohm's. Should be 8.0

Ohms.

7) Shop Notes: Both Speakers were replaced as a service precaution.

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1) TV Model Number: DP37819

2) TV Failure Symptom: TV fully on, no picture and no menu screen

3) Faulty Board: T-Con

4) Faulty Board Number: 222000006700

5) Board Location Number Of Faulty Part(s): U301

6) Parts Failure Type: EEPROM U301 no serial data I/O pin 5.

7) Shop Notes: EEPROM U301 must be programmed before install.

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1) TV Model Number: DP37819

2) TV Failure Symptom: Disturbing audio with loud static noise

3) Faulty Board: Main Board

4) Faulty Board Number: 1AA4B10N22900 (N7CK)

5) Board Location Number Of Faulty Part(s): IC001

6) Parts Failure Type: Audio IC001 bad audio signal trace output.

7) Shop Notes: Also check speaker resistance should be 8.0, Ohms.

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1) TV Model Number: DP37819

2) TV Failure Symptom: No back-light

3) Faulty Board: Inverter Board

4) Faulty Board Number: 19.37T05.006

5) Board Location Number Of Faulty Part(s): T7

6) Parts Failure Type: Inverter transformer T7 open at primary end.

7) Shop Notes: n.a.

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1) TV Model Number: DP37819

2) TV Failure Symptom: Back-lights flicker once then shut down into stand-by

3) Faulty Board: Inverter Board

4) Faulty Board Number: 19.37T05.006

5) Board Location Number Of Faulty Part(s): F3, Q106

6) Parts Failure Type: SMD Fuse F3 open, switcher Q106 shorted.

7) Shop Notes: Q106 SMD resistors R729, R730 were out of value and replaced.

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1) TV Model Number: DP37819

2) TV Failure Symptom: No back-light

3) Faulty Board: Inverter Board

4) Faulty Board Number: 19.37T05.006

5) Board Location Number Of Faulty Part(s): T2, CH02

6) Parts Failure Type: Inverter transformer T2 open at secondary end, disc capacitor out of value.

7) Shop Notes: Back-lights still shut down after an hour, U201 not available. Entire inverter board replaced.

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- 1) TV Model Number: DP37647
- 2) TV Failure Symptom: Over saturated picture
- 3) Faulty Board: T-Con
- 4) Faulty Board Number: 55.37T03.021
- 5) Board Location Number Of Faulty Part(s): U10
- 6) Parts Failure Type: Buffer chip U10 bad V-Com reference voltage for proper gamma correction.
- 7) Shop Notes: n.a.

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- 1) TV Model Number: DP37647
- 2) TV Failure Symptom: Partial start-up, then stand-by only
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: 1AV4U20C09900
- 5) Board Location Number Of Faulty Part(s): Q986, D984
- 6) Parts Failure Type: Switcher Q986 shorted, isolation diode D984 shorted.
- 7) Shop Notes: n.a.

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- 1) TV Model Number: DP37647
- 2) TV Failure Symptom: Audio with no picture, no menu
- 3) Faulty Board: T-Con
- 4) Faulty Board Number: 55.37T03.C02

5) Board Location Number Of Faulty Part(s): F01, D01,

6) Parts Failure Type: SMD fuse F01 open, SMD diode D01 leaky.

7) Shop Notes: n.a.

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1) TV Model Number: DP39843

2) TV Failure Symptom: No audio on any input

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y112A0 Z6SH

5) Board Location Number Of Faulty Part(s): IC001

6) Parts Failure Type: Audio chip IC001 no audio output pins 6, 9, 10, 13

7) Shop Notes: n.a.

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1) TV Model Number: DP39843

2) TV Failure Symptom: TV on and intermittently shuts down into stand-by mode

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y112A0 Z6SH

5) Board Location Number Of Faulty Part(s): IC8000

6) Parts Failure Type: Flash/EEPROM IC8000 dead at pin 2.

7) Shop Notes: IC8000 must be programmed before install.

1) TV Model Number: DP42861

2) TV Failure Symptom: Brief start-up then shut down into stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: 1LG4B10Y048C0

5) Board Location Number Of Faulty Part(s): D611
6) Parts Failure Type: Diode D611 shorted.
7) Shop Notes: n.a.
1) TV Model Number: DP42861
2) TV Failure Symptom: Stand-by only, no start-up, then stand-by goes dead
3) Faulty Board: SMPS
4) Faulty Board Number: 1LG4B10Y048C0
5) Board Location Number Of Faulty Part(s): IC601, D602
6) Parts Failure Type: Switching chip IC601 no switching pulse and hot, diode D602 shorted.
7) Shop Notes: IC601 was not available. Entire SMPS board replaced.
1) TV Model Number: DP42849
2) TV Failure Symptom: Turn TV on, back-light flicker once then shut down into stand-by
3) Faulty Board: Inverter Board
4) Faulty Board Number: 996510006929
5) Board Location Number Of Faulty Part(s): T1
6) Parts Failure Type: Inverter transformer T1 open at secondary end
7) Shop Notes: n.a.
1) TV Model Number: DP42849
2) TV Failure Symptom: No back-light
3) Faulty Board: Inverter Board
4) Faulty Board Number: 996510006932

<ul><li>5) Board Location Number Of Faulty Part(s): Q200</li><li>6) Parts Failure Type: Switcher Q200 shorted.</li></ul>
6) Parts Failure Type: Switcher Q200 shorted.
7) Shop Notes: n.a.
1) TV Model Number: DP42841
2) TV Failure Symptom: No power
3) Faulty Board: SMPS
4) Faulty Board Number: N0AB4FK00001
5) Board Location Number Of Faulty Part(s): FI1, DP1, DP2
6) Parts Failure Type: Box fuse FI1 open, diodes DP1/DP2 shorted.
7) Shop Notes: n.a.
1) TV Model Number: DP42841
2) TV Failure Symptom: Dead, no stand-by
3) Faulty Board: SMPS
4) Faulty Board Number: N0AB4FK00001
5) Board Location Number Of Faulty Part(s): F1, BD1, QP1
6) Parts Failure Type: Main fuse F1 open, bridge rectifier BD1 shorted, switcher 6 shorted.
7) Shop Notes: Resistor RY1 and RX1 were out of value and replaced. TV suffere storm damage.

1) TV Model Number: DP42841

2) TV Failure Symptom: Audio no picture, strange static glitches on screen, then shut down

3) Faulty Board: T-Con

4) Faulty Board Number: 55.42T14.C01

5) Board Location Number Of Faulty Part(s): U201

6) Parts Failure Type: Bias power supply U201 no panel voltage output (32V) pin 10. No

drive signal.

7) Shop Notes: Inductor L201 was replaced as a service precaution.

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1) TV Model Number: DP42841

2) TV Failure Symptom: Color saturation, grainy picture

3) Faulty Board: T-Con

4) Faulty Board Number: 55.42T14.C01

5) Board Location Number Of Faulty Part(s): U601

6) Parts Failure Type: Buffer chip U601 bad reference V-Com voltage reading on scope.

7) Shop Notes: SMD R625 out of value and replaced.

1) TV Model Number: DP42647

2) TV Failure Symptom: Audio with no picture, no menu

3) Faulty Board: T-Con

4) Faulty Board Number: 35-D016166

5) Board Location Number Of Faulty Part(s): F1

6) Parts Failure Type: SMD fuse F1 open.

7) Shop Notes: n.a.

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1) TV Model Number: DP42647

2) TV Failure Symptom: Screen start-up normal then immediate shut down into stand-by

3) Faulty Board: T-Con

4) Faulty Board Number: 55.42T01.050

5) Boai	d Location	Number	Of Faulty	Part(s):	O304
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- 6) Parts Failure Type: 4 pin MOSFET Q304 shorted at drain and source pins.
- 7) Shop Notes: SMD D302 was replaced as a service precaution.

1) TV Model Number: DP42647

2) TV Failure Symptom: Back-light on then off, then shut down into stand-by protection mode

3) Faulty Board: Inverter Board

4) Faulty Board Number: 27-D012836

5) Board Location Number Of Faulty Part(s): F203 U205

6) Parts Failure Type: SMD fuse F203 open, switcher chip U205 shorted all pins.

7) Shop Notes: n.a.

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1) TV Model Number: DP42647

2) TV Failure Symptom: Back-light on then off, then shut down into stand-by protection mode

3) Faulty Board: Inverter Board

4) Faulty Board Number: 27-D012836

5) Board Location Number Of Faulty Part(s): T202, C218

6) Parts Failure Type: Inverter transformer T202 open at secondary end, C218 bulged.

7) Shop Notes: All electrolytic caps on inverter were replaced as a service precaution.

1) TV Model Number: DP46861

2) TV Failure Symptom: brief start-up then shut down

3) Faulty Board: SMPS

- 5) Board Location Number Of Faulty Part(s): D611
- 6) Parts Failure Type: Diode D611 shorted.
- 7) Shop Notes: C640 bad ESR and replaced.

### 1) TV Model Number: DP46861

- 2) TV Failure Symptom: No power-up
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: LG4B10Y048C0
- 5) Board Location Number Of Faulty Part(s): Q602HD
- 6) Parts Failure Type: Switcher Q602HD shorted.
- 7) Shop Notes: Switcher Q601HD replaced as a service precaution.

- 1) TV Model Number: DP46861
- 2) TV Failure Symptom: Stand-by only
- 3) Faulty Board: Key-Pad
- 4) Faulty Board Number: 1LG4B10Y083BB (Z5VE)
- 5) Board Location Number Of Faulty Part(s): SW1901
- 6) Parts Failure Type: Tactile switch SW1901 physically damaged. No contact.
- 7) Shop Notes: The entire key-pad board was replaced.

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- 1) TV Model Number: DP46849
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: SMPS

4) Faulty Board Number: FSP270-3PI03

5) Board Location Number Of Faulty Part(s): F100, Q120

6) Parts Failure Type: Main fuse F100 open, switcher Q120 shorted.

7) Shop Notes: n.a.

1) TV Model Number: DP46849

2) TV Failure Symptom: No back-light

3) Faulty Board: SMPS

4) Faulty Board Number: FSP270-3PI03

5) Board Location Number Of Faulty Part(s): T420

6) Parts Failure Type: Inverter transformer T420 open at secondary end.

7) Shop Notes: D401 was replaced as a service precaution.

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1) TV Model Number: DP46849

2) TV Failure Symptom: No back-lights

3) Faulty Board: SMPS

4) Faulty Board Number: FSP270-3PI03

5) Board Location Number Of Faulty Part(s): D410

6) Parts Failure Type: D410 shorted.

7) Shop Notes: Inverter transformer T430 was replaced as a service precaution.

1) TV Model Number: DP46841

2) TV Failure Symptom: No back-light

3) Faulty Board: Inverter Board

4) Faulty Board Number: 6632L-0604A

5) Board Location Number Of Faulty Part(s): U1

6) Parts Failure Type: Inverter control chip U1 no switching source voltage output.

7) Shop Notes: U1 was also hot.

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1) TV Model Number: DP46841

2) TV Failure Symptom: No back-light

3) Faulty Board: Inverter Board

4) Faulty Board Number: 6632L-0604A

5) Board Location Number Of Faulty Part(s): Q1

6) Parts Failure Type: Switcher Q1 shorted.

7) Shop Notes: n.a.

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1) TV Model Number: DP46841

2) TV Failure Symptom: TV shuts down when changing channels on remote and keypad

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y06900 (Z5VH)

5) Board Location Number Of Faulty Part(s):

6) Parts Failure Type: Flash/EEPROM IC5750 dead at pin 7 (CS) chip-select line.

7) Shop Notes: IC5750 must be programmed before install. Op-Amp IC6250 was replaced as a service precaution.

1) TV Model Number: DP46841

2) TV Failure Symptom: Loud static audio

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y06900 Z5VH

5) Board Location Number Of Faulty Part(s): IC001

6) Parts Failure Type: Audio amp IC001 rippled audio output signals.

7) Shop Notes: n.a.

1) TV Model Number: DP46841

2) TV Failure Symptom: No audio on all inputs

3) Faulty Board: Main Board

4) Faulty Board Number: 1AA4B10N26100 (Z5VK)

5) Board Location Number Of Faulty Part(s): IC001

6) Parts Failure Type: Audio IC001 output for audio dead at pins 6, 9, 10, 13.

7) Shop Notes: n.a.

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1) TV Model Number: DP46819

2) TV Failure Symptom: TV won't come out of stand-by mode

3) Faulty Board: Main Board

4) Faulty Board Number: 1AA4B10N22900 (N7EJ)

5) Board Location Number Of Faulty Part(s): IC5750

6) Parts Failure Type: NAND/flash chip IC5750 dead at pin 18 write-enable (WE)

7) Shop Notes: IC5750 must be programmed before install.

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1) TV Model Number: DP46819

2) TV Failure Symptom: Turn TV on, then stuck at start-up screen

3) Faulty Board: Main Board
4) Faulty Board Number: 1AA4B10N22900 (N7EJ)
5) Board Location Number Of Faulty Part(s): IC5750
6) Parts Failure Type: NAND/Flash chip IC5750 dead at read-enable (RE) pin 16.
7) Shop Notes: After IC5750 program and install, main board had other problems with color. Entire main board replaced.
1) TV Model Number: DP46819
2) TV Failure Symptom:
3) Faulty Board: Main Board
4) Faulty Board Number: 1AA4B10N22900 (N7EJ)
5) Board Location Number Of Faulty Part(s): IC001
6) Parts Failure Type: Audio chip IC001 bad audio output signals.
7) Shop Notes: n.a.
1) TV Model Number: DP46819
2) TV Failure Symptom: Power on, immediate shut down into stand-by protection mode
3) Faulty Board: SMPS
4) Faulty Board Number: AV4U20C38800
5) Board Location Number Of Faulty Part(s): U1201

1) TV Model Number: DP46819

7) Shop Notes: U1201 was also hot.

6) Parts Failure Type: Inverter control chip U1201 no switching output.

2) TV Failure Symptom: Turn TV on, back-light flicker once, then shut down into stand-by
3) Faulty Board: SMPS
4) Faulty Board Number: AV4U20C38800
5) Board Location Number Of Faulty Part(s): T1303
6) Parts Failure Type: Inverter transformer T1303 open at secondary end.
7) Shop Notes: HV disc capacitors CH1/CH2 replaced as service precaution.
1) TV Model Number: DP50843
2) TV Failure Symptom: No power-up
3) Faulty Board: SMPS
4) Faulty Board Number: N0AB3FK00001
5) Board Location Number Of Faulty Part(s): FI1, QI1
6) Parts Failure Type: Box fuse FI1 open switcher QI1 shorted.
7) Shop Notes: n.a.
1) TV Model Number: DP50843
2) TV Failure Symptom: Dead No stand-by
3) Faulty Board: SMPS
4) Faulty Board Number: N0AB3FK00001
5) Board Location Number Of Faulty Part(s): F1, BD1, QP1, QP2
6) Parts Failure Type: Main fuse F1 open, bridge rectifier BD1 shorted, switchers QP1/QP2 shorted.
7) Shop Notes: RY1 was out of value and replaced along with disc capacitors CP2/CP3.
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1) TV Model Number: DP50843

2) TV Failure Symptom: Start-up then shut down

3) Faulty Board: SMPS

4) Faulty Board Number: N0AB3FK00001

5) Board Location Number Of Faulty Part(s): DM2

6) Parts Failure Type: Diode DM2 shorted.

7) Shop Notes: Electrolytic capacitor CEM8 had high ESR an was replaced.

1) TV Model Number: DP50843

2) TV Failure Symptom: No back-light, shut down into stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: N0AB3FK00001

5) Board Location Number Of Faulty Part(s): QI1, CI34

6) Parts Failure Type: Switcher QI1 shorted, disc capacitor CI34 out of pF value.

7) Shop Notes: Switcher QI2 and disc cap CI35 were replaced as a service precaution.

1) TV Model Number: DP50843

2) TV Failure Symptom: Brief start-up then immediate shut down into stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: N0AB3FK00001

5) Board Location Number Of Faulty Part(s): DM1

6) Parts Failure Type: Diode DM1 shorted.

7) Shop Notes: Disc capacitor CM1 was out of pF value and replaced.

1) TV Model Number: DP50843

2) TV Failure Symptom: Bad audio quality 3) Faulty Board: Main Board 4) Faulty Board Number: 1LG4B10Y117A0 Z6WJ 5) Board Location Number Of Faulty Part(s): IC0001 6) Parts Failure Type: Audio chip IC0001 distorted signals at pins 6, and 9. 7) Shop Notes: n.a. 1) TV Model Number: DP50843 2) TV Failure Symptom: Power-on, then stuck on start-up screen 3) Faulty Board: Main Board 4) Faulty Board Number: 1LG4B10Y117A0 Z6WJ 5) Board Location Number Of Faulty Part(s): IC8000 6) Parts Failure Type: No serial data at pin 5. 7) Shop Notes: n.a. 1) TV Model Number: DP50843

2) TV Failure Symptom: Intermittent audio

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y117A0 Z6WJ

5) Board Location Number Of Faulty Part(s): IC0001

6) Parts Failure Type: Audio chip IC8000 no voltage at pin 11, chip was unusually warmer than normal.

7) Shop Notes: After replacement of IC0001 a heat-sink was mounted on it for longer life.

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2) TV Failure Symptom: No back-light				
3) Faulty Board: Inverter Board				
4) Faulty Board Number: RDENC2543TPZZ				
5) Board Location Number Of Faulty Part(s): T303				
6) Parts Failure Type: Inverter transformer open at secondary end.				
7) Shop Notes: n.a.				
1) TV Model Number: DP52848				
2) TV Failure Symptom: No back-light				
3) Faulty Board: Inverter Board				
4) Faulty Board Number: RDENC2543TPZZ				
5) Board Location Number Of Faulty Part(s): F301				
6) Parts Failure Type: Box fuse F301 open.				
7) Shop Notes: Electrolytic capacitors C411, C422, slightly bulged and replaced.				
1) TV Model Number: DP52848				
2) TV Failure Symptom: Audio and back-light, with no picture, no menu screen				
3) Faulty Board: T-Con				
<ul><li>4) Faulty Board Number: 996510020716</li><li>5) Board Location Number Of Faulty Part(s): F100, FET300</li></ul>				
6) Parts Failure Type: SMD fuse open, MOSFET chip FET300 shorted at drain and source pins.				
7) Shop Notes: n.a.				

1) TV Model Number: DP52848

- 1) TV Model Number: DP52848 2) TV Failure Symptom: Grainy picture discoloration 3) Faulty Board: T-Con 4) Faulty Board Number: 996510020716 5) Board Location Number Of Faulty Part(s): IC301 6) Parts Failure Type: Buffer IC301 bad V-com signal. 7) Shop Notes: IC301 was not available. Entire T-con board replaced. 1) TV Model Number: DP52440 2) TV Failure Symptom: Power-up, brief start-up screen then back-light only 3) Faulty Board: T-Con 4) Faulty Board Number: 55.52T01.C13 5) Board Location Number Of Faulty Part(s): Q205 6) Parts Failure Type: 4 pin MOSFET chip Q205 shorted source and drain pins. 7) Shop Notes: 4 pin MOSFET Q206 was replaced as a service precaution. 1) TV Model Number: DP52440 2) TV Failure Symptom: Power-on, back-light on, no picture, no menu screen
- 3) Faulty Board: T-Con
- 4) Faulty Board Number: 55.52T01.C13
- 5) Board Location Number Of Faulty Part(s): F1
- 6) Parts Failure Type: SMD fuse F1 open.
- 7) Shop Notes: n.a.

1) TV Model Number: DP52440				
2) TV Failure Symptom: No back-light				
3) Faulty Board: SMPS				
4) Faulty Board Number: 1AV4U20C49000				
5) Board Location Number Of Faulty Part(s): T420				
6) Parts Failure Type: Inverter transformer T420 open at secondary end.				
7) Shop Notes: Disc capacitor C421 replaced as a service precaution.				
1) TV Model Number: DP52440				
2) TV Failure Symptom: Dead, no stand-by				
3) Faulty Board: SMPS				
4) Faulty Board Number: 1AV4U20C49000				
5) Board Location Number Of Faulty Part(s): F100, Q120				
6) Parts Failure Type: Main fuse F100 open, IGBT Q120 shorted.				
7) Shop Notes: n.a.				
1) TV Model Number: DP52440				
2) TV Failure Symptom: Power-up, brief start-up then shut down				
3) Faulty Board: SMPS				
4) Faulty Board Number: 1AV4U20C49000				
5) Board Location Number Of Faulty Part(s): D150				
6) Parts Failure Type: Isolation diode D150 shorted.				

7) Shop Notes: n.a.

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1) TV Model Number: DP24E14M

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS/Main Board

4) Faulty Board Number: B13106117 V.1

5) Board Location Number Of Faulty Part(s): FB1, QB101, DB106

6) Parts Failure Type: Main fuse FB1 open, switcher QB101 shorted, diode DB106 shorted.

7) Shop Notes: Disc capacitor CB116 replaced as a service precaution. Storm damaged TV.

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1) TV Model Number: DP24E14M

2) TV Failure Symptom: Start-up back-light flicker once, then quick shut down into stand-by

3) Faulty Board: SMPS/Main Board

4) Faulty Board Number: B13106117 V.1

5) Board Location Number Of Faulty Part(s): QB801, DB803

6) Parts Failure Type: Switcher QB801 shorted, SMD junction diode DB803 shorted.

7) Shop Notes: n.a.

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1) TV Model Number: DP32D53

2) TV Failure Symptom: TV on, no back-lights

3) Faulty Board: Main Board/SMPS

4) Faulty Board Number: B13095197 V.1

5) Board Location Number Of Faulty Part(s): UF1

- 6) Parts Failure Type: Flash/EEPROM UF1 dead at SCK pin.
- 7) Shop Notes: Flash/EEPROM UF1 must be programmed before install.

- 1) TV Model Number: DP32D53
- 2) TV Failure Symptom: TV on, then sudden shut down into stand-by mode
- 3) Faulty Board: Main Board/SMPS
- 4) Faulty Board Number: B13095197 V.1
- 5) Board Location Number Of Faulty Part(s): UF1
- 6) Parts Failure Type: Flash/EEPROM erroneous readings at SDA pin.
- 7) Shop Notes: Flash/EEPROM UF1 must be programmed before install.

- 1) TV Model Number: DP32D53
- 2) TV Failure Symptom: No main power, stand-by only
- 3) Faulty Board: Main Board/SMPS
- 4) Faulty Board Number: B13095197 V.1
- 5) Board Location Number Of Faulty Part(s): UF1
- 6) Parts Failure Type: Flash/EEPROM UF1 had SCK (serial-clock) problems.
- 7) Shop Notes: Flash/EEPROM UF1 must be programmed before install.

- 1) TV Model Number: DP32D53
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: Main Board/SMPS
- 4) Faulty Board Number: B13095197 V.1
- 5) Board Location Number Of Faulty Part(s): FB1, DB2, DB4

- 6) Parts Failure Type: Main fuse FB1 open, bridge rectifiers DB2, DB4 shorted.
- 7) Shop Notes: DB1, DB3 were replaced as a service precaution. (surge damaged TV)

- 1) TV Model Number: DP32D53
- 2) TV Failure Symptom: TV in protect mode, will not start-up
- 3) Faulty Board: Main Board/SMPS
- 4) Faulty Board Number: B13095197 V.1
- 5) Board Location Number Of Faulty Part(s): QB101
- 6) Parts Failure Type: Switcher QB101 shorted.
- 7) Shop Notes: Disc capacitor CB116 was out of value and replaced.

1) TV Model Number: DP32D13

- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: ADTVCL621XX01
- 5) Board Location Number Of Faulty Part(s): F9901, Q9901
- 6) Parts Failure Type: Main fuse F9901 open, switcher Q9901 shorted.
- 7) Shop Notes: D9101 was leaky and replaced.

- 1) TV Model Number: DP32D13
- 2) TV Failure Symptom: Brief start-up then immediate shut down into stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: ADTVCL621XX01
- 5) Board Location Number Of Faulty Part(s): D9101

6) Pa	rts Failu	re Type:	Diode D9101	shorted.

1) TV Model Number: DP32D13

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2) TV Failure Symptom: No back-light

3) Faulty Board: SMPS

7) Shop Notes: n.a.

4) Faulty Board Number: ADTVCL621XX01

5) Board Location Number Of Faulty Part(s): Q8102

6) Parts Failure Type: SMD switcher Q8102 shorted (flip side of board).

7) Shop Notes: SMD resistor R8110 was out of value and replaced.

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1) TV Model Number: DP32D13

2) TV Failure Symptom: Brief start-up then shut down into stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: ADTVCL621UXD3

5) Board Location Number Of Faulty Part(s): D9302

6) Parts Failure Type: Isolation diode D9302 shorted.

7) Shop Notes: n.a.

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1) TV Model Number: DP32D13

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: ADTVCL621UXD3

5) Board Location Number Of Faulty Part(s): F9901, Q9101

6) Parts Failure Type: Main fuse F9901 open, switcher Q9101 shorted.

7) Shop Notes: n.a.

1) TV Model Number: DP39E63

2) TV Failure Symptom: Audio and back-light on, no picture, no menu screen

3) Faulty Board: T-Con

4) Faulty Board Number: 3E-D078809

5) Board Location Number Of Faulty Part(s): U5

6) Parts Failure Type: Buffer IC U5 had V-com buffering error.

7) Shop Notes: Also check the integrity SMD inductor LP1.

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1) TV Model Number: DP39E63

2) TV Failure Symptom: Using keypad or remote, TV shuts down into stand-by mode

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y112A0 Z6SV

5) Board Location Number Of Faulty Part(s): IC8000

6) Parts Failure Type: Flash/EEPROM IC8000 dead at pin 1 (CS).

7) Shop Notes: Flash/EEPROM IC8000 must be programmed before install.

1) TV Model Number: DP39E63

2) TV Failure Symptom: TV on for a few hours, then doesn't power-up again

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y112A0 Z6SV

5) Board Location Number Of Faulty Part(s): IC8000

6) Parts Failure Type: intermittent problems with Vss pin 4 and HOLD pin 7.

7) Shop Notes: After IC8000 install picture had discoloration. Entire main board replaced.

1) TV Model Number: DP39E63

2) TV Failure Symptom: Dead no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: 1LG4B10Y0980A Z6SD

5) Board Location Number Of Faulty Part(s): F601, Q601, Q602

6) Parts Failure Type: Main fuse F601 open, switchers Q601/Q602 shorted.

7) Shop Notes: n.a.

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1) TV Model Number: DP39E63

2) TV Failure Symptom: Brief power-up then immediate stand-by only

3) Faulty Board: SMPS

4) Faulty Board Number: 1LG4B10Y0980A Z6SD

5) Board Location Number Of Faulty Part(s): D611

6) Parts Failure Type: Filter diode D611 shorted.

7) Shop Notes: Q602 was replaced as a service precaution.

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1) TV Model Number: DP39E63

2) TV Failure Symptom: Press power-on, then suddenly no stand-by, dead

3) Faulty Board: SMPS

4) Faulty Board Number: 1LG4B10Y0980A Z6SD

5) Board Location Number Of Faulty Part(s): IC602

6) Parts Failure Type: Control IC602 (flip side of board) no switching gate signal.

7) Shop Notes: IC602 was not available. Entire SMPS board was replaced.

1) TV Model Number: DP39E23

2) TV Failure Symptom: TV won't turn on, stand-by only

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y117A0 Z7ZA

5) Board Location Number Of Faulty Part(s): IC8000

6) Parts Failure Type: Flash/EEPROM IC8000 data I/O problems.

7) Shop Notes: Flash/EEPROM IC8000 must be programmed before install.

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1) TV Model Number: DP39E23

2) TV Failure Symptom: Static audio on all inputs

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y117A0 Z7ZA

5) Board Location Number Of Faulty Part(s): IC001

6) Parts Failure Type: Audio system chip IC001 bad audio output signals on all channels.

7) Shop Notes: n.a.

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1) TV Model Number: DP39E23

2) TV Failure Symptom: No back-light

3) Faulty Board: LED Driver Assembly

4) Faulty Board Number: 55.39T03.D01

5) Board Location Number Of Faulty Part(s): F1, Q103

6) Parts Failure Type: SMD fuse open, switcher Q103 shorted.

7) Shop Notes: Switcher Q103 replaced LED back-light were dim. Entire LED driver board replaced.

- 1) TV Model Number: DP39E23
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: 1LG4B10Y12600 Z7ZA
- 5) Board Location Number Of Faulty Part(s): F601, Q603, D606
- 6) Parts Failure Type: Main box fuse F601 open, switcher Q603 shorted, D606 shorted.
- 7) Shop Notes: Bridge diodes D603, D604, D605 were replaced as a service precaution.
- 1) TV Model Number: DP39E23
- 2) TV Failure Symptom: Brief power-up then shut down into stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: 1LG4B10Y12600 Z7ZA
- 5) Board Location Number Of Faulty Part(s): D618
- 6) Parts Failure Type: Diode D618 shorted.
- 7) Shop Notes: Electrolytic capacitor C656 was out of uF value and replaced.

- 1) TV Model Number: DP39E23
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: 1LG4B10Y12600 Z7ZA
- 5) Board Location Number Of Faulty Part(s): F601, Q603, D621

6) Parts Failure Type: Box fuse F601 open, switcher Q603 shorted, diode D621 shorted.
7) Shop Notes: n.a.
1) TV Model Number: DP42D23
2) TV Failure Symptom: Logo only on screen
3) Faulty Board: Main Board
4) Faulty Board Number: 1LG4B10Y117A0 Z7LF
5) Board Location Number Of Faulty Part(s): IC8000
6) Parts Failure Type: Flash/EEPROM IC8000 data I/O errors.
7) Shop Notes: IC8000 must be programmed before install.
1) TV Model Number: DP42D23
2) TV Failure Symptom: Changing channels with keypad or remote, TV suddenly shuts down
3) Faulty Board: Main Board
4) Faulty Board Number: 1LG4B10Y117A0 Z7LF
5) Board Location Number Of Faulty Part(s): IC8000
6) Parts Failure Type: Flash/EEPROM IC8000 SCK errors.
7) Shop IC8000 must be programmed before install.
1) TV Model Number: DP42D23
2) TV Failure Symptom: No audio on all inputs
3) Faulty Board: Main Board
4) Faulty Board Number: 1LG4B10Y117A0 Z7LF

5) Board Location Number Of Faulty Part(s): IC001

6) Parts Failure Type: Audio system chip IC001 no audio output signal.
7) Shop Notes: n.a.
1) TV Model Number: DP42D23
2) TV Failure Symptom: TV power-up the shut down after few minutes
3) Faulty Board: SMPS
4) Faulty Board Number: 1LG4B10Y12500 Z7LF
5) Board Location Number Of Faulty Part(s): IC603
6) Parts Failure Type: Control chip IC603 had PWM errors.
7) Shop Notes: Electrolytic capacitor C668 has high ESR and was replaced.
1) TV Model Number: DP42D23
2) TV Failure Symptom: Dead, no power-up
3) Faulty Board: SMPS
4) Faulty Board Number: 1LG4B10Y12500 Z7LF
5) Board Location Number Of Faulty Part(s): F601, Q609
6) Parts Failure Type: Main fuse F601 open, switcher Q609 shorted.
7) Shop Notes: n.a.
1) TV Model Number: DP42D23
2) TV Failure Symptom: Brief power-up then immediate shut down
3) Faulty Board: SMPS

4)	<b>Faulty</b>	Board N	Number:	1LG4B1	0Y	12500	Z7LF	
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- 5) Board Location Number Of Faulty Part(s): D618
- 6) Parts Failure Type: Filter diode D618 shorted.
- 7) Shop Notes: Disc capacitor C662 was out of value and replaced along with switcher Q609.

- 1) TV Model Number: DP42D23
- 2) TV Failure Symptom: Stand-by, then press power and TV is dead. No stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: 1LG4B10Y12500 Z7LF
- 5) Board Location Number Of Faulty Part(s): IC602
- 6) Parts Failure Type: Control chip IC602 dead at switching pins.
- 7) Shop Notes: IC602 was not available. Entire SMPS replaced.

1) TV Model Number: DP42D23

- 2) TV Failure Symptom: back-light on and audio with no picture, no menu
- 3) Faulty Board: T-Con
- 4) Faulty Board Number: 55.42T34.C02
- 5) Board Location Number Of Faulty Part(s): F101
- 6) Parts Failure Type: SMD fuse F101 open.
- 7) Shop Notes: n.a.

- 1) TV Model Number: DP42D23
- 2) TV Failure Symptom: Solarized picture reproduction mostly on left side of screen
- 3) Faulty Board: T-Con

- 4) Faulty Board Number: 55.42T34.C02
- 5) Board Location Number Of Faulty Part(s): U201
- 6) Parts Failure Type: Buffer chip U201 bad V-com buffer signals.
- 7) Shop Notes: IC chip U201 only available in large quantity. Entire T-con board replaced.

- 1) TV Model Number: DP42142
- 2) TV Failure Symptom: Grainy picture yielding to left side of screen
- 3) Faulty Board: T-Con
- 4) Faulty Board Number: LJ94-25451F
- 5) Board Location Number Of Faulty Part(s): IC1
- 6) Parts Failure Type: Buffer chip IC1 erroneous V-com signaling.
- 7) Shop Notes: Attempt to remove IC1 damaged T-con board. Entire T-con board replaced.

- 1) TV Model Number: DP42142
- 2) TV Failure Symptom: Back-light dimming high and low intermittently
- 3) Faulty Board: LED Driver Board
- 4) Faulty Board Number: 55.42T23.D01
- 5) Board Location Number Of Faulty Part(s): U951
- 6) Parts Failure Type: Op-Amp chip U951 intermittent inverting signals on ether I/O pins.
- 7) Shop Notes: n.a.

- 1) TV Model Number: DP46142
- 2) TV Failure Symptom: Brief star-up then shut down into stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: 75017704

5) Board Location Number Of Faulty Part(s): D505

6) Parts Failure Type: Diode D505 shorted.

7) Shop Notes: n.a.

1) TV Model Number: DP46142

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: 75017704

5) Board Location Number Of Faulty Part(s): F101, Q101

6) Parts Failure Type: Main fuse F101 open, switcher Q101 shorted.

7) Shop Notes: Switcher Q102 replaced as a service precaution.

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1) TV Model Number: DP46142

2) TV Failure Symptom: TV shut down into protect mode, won't start-up again

3) Faulty Board: SMPS

4) Faulty Board Number: 75017704

5) Board Location Number Of Faulty Part(s): U501

6) Parts Failure Type: High voltage resonant control IC U501 was very hot.

7) Shop Notes: Diode D501, and capacitors C504, C509 were all out of Ohm/uF value and replaced.

1) TV Model Number: DP46142

3) Faulty Board: SMPS
4) Faulty Board Number: 75017704
5) Board Location Number Of Faulty Part(s): D505, Q504
6) Parts Failure Type: Diode 505 shorted, switcher Q504 shorted emitter/base.
7) Shop Notes: n.a.
1) TV Model Number: DP46142 2) TV Failure Symptom: No back-light
3) Faulty Board: LED Driver Board
4) Faulty Board Number: LJ97-00230A
5) Board Location Number Of Faulty Part(s): IC001
6) Parts Failure Type: Voltage regulator control chip IC001 no switching pulse, no Vss.
7) Shop Notes: n.a.
1) TV Model Number: DP46142
2) TV Failure Symptom: Brief back-light on, then off, then TV shutdown into protect mode
3) Faulty Board: LED Driver Board
4) Faulty Board Number: LJ97-00230A
5) Board Location Number Of Faulty Part(s): Q301, Q401
6) Parts Failure Type: Switchers Q301, Q401 shorted.
7) Shop Notes: IC001 was warmer than normal and replaced as a service precaution.
1) TV Model Number: DP46142

2) TV Failure Symptom: Turn TV on, then quick shut down into stand-by

2) TV Failure Symptom: Back-light intermittently shut down

3) Faulty Board: LED Driver Board

4) Faulty Board Number: LJ97-00230A

5) Board Location Number Of Faulty Part(s): C033, D001

6) Parts Failure Type: Polypropylene Capacitor C003 out of value, rectifier D001 very

hot.

7) Shop Notes: n.a.

1) TV Model Number: DP46142

2) TV Failure Symptom: No back-light

3) Faulty Board: LED Driver Board

4) Faulty Board Number: 55.46T14.D01

5) Board Location Number Of Faulty Part(s): F1, F2

6) Parts Failure Type: SMD fuses F1, F2 open.

7) Shop Notes: n.a.

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1) TV Model Number: DP55D33

2) TV Failure Symptom: Stuck at logo screen

3) Faulty Board: Sub Processor Board

4) Faulty Board Number: 1LG4B10Y118B0 Z7MC

5) Board Location Number Of Faulty Part(s): IC7800

6) Parts Failure Type: Flash/EEPROM chip IC7800 error at pin 3 (WP) write-protect.

7) Shop Notes: IC7800 must be programmed before install.

1) TV Model Number: DP55D33

- 2) TV Failure Symptom: Press power, then immediate stand-by protect mode
- 3) Faulty Board: Sub Processor Board
- 4) Faulty Board Number: 1LG4B10Y118B0 Z7MC
- 5) Board Location Number Of Faulty Part(s): IC7800
- 6) Parts Failure Type: Flash/EEPROM chip IC7800 dead at pin 4 Vss.
- 7) Shop Notes: IC7800 must be programmed before install.

- 1) TV Model Number: DP55D33
- 2) TV Failure Symptom: TV turns fully on with no back-light, then shut down into stand-by
- 3) Faulty Board: Sub Processor Board
- 4) Faulty Board Number: 1LG4B10Y118B0 Z7MC
- 5) Board Location Number Of Faulty Part(s): IC7800
- 6) Parts Failure Type: Flash/EEPROM chip IC7800 dead at pin 5 data I/O.
- 7) Shop Notes: IC7800 must be programmed before install.

- 1) TV Model Number: DP55D33
- 2) TV Failure Symptom: Power-on logo start-up, then shut down into stand-by
- 3) Faulty Board: Sub Processor Board
- 4) Faulty Board Number: 1LG4B10Y118B0 Z7MC
- 5) Board Location Number Of Faulty Part(s): Q7801
- 6) Parts Failure Type: 4 pin chip Q7801 shorted at drain and source pins.
- 7) Shop Notes: SMD capacitor C7606 was replaced as a service precaution.
- 1) TV Model Number: DP55D33

2) TV Failure Symptom: No back-light

3) Faulty Board: LED Driver Board

4) Faulty Board Number: 55.55T11.D01

5) Board Location Number Of Faulty Part(s): Q211, Q212, U1

6) Parts Failure Type: Switchers Q211/Q212 shorted, control IC U1 burned switching

pins.

7) Shop Notes: SMD R229 was out of value and replaced.

1) TV Model Number: DP55D33

2) TV Failure Symptom: No back-light

3) Faulty Board: LED Driver Board

4) Faulty Board Number: 55.55T11.D01

5) Board Location Number Of Faulty Part(s): F1, F1A

6) Parts Failure Type: SMD fuses F1 and F1A open.

7) Shop Notes: n.a.

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1) TV Model Number: DP55D33

2) TV Failure Symptom: TV on with no picture, no menu screen

3) Faulty Board: T-Con

4) Faulty Board Number: 55.55T11.C01

5) Board Location Number Of Faulty Part(s): F1, D7

6) Parts Failure Type: SMD fuse F1 open, SMD diode D7 leaky.

7) Shop Notes: n.a.

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1) TV Model Number: DP55D33

2) TV Failure Symptom: Over saturated picture color
3) Faulty Board: T-Con
4) Faulty Board Number: 55.55T11.C01
5) Board Location Number Of Faulty Part(s): U201
6) Parts Failure Type: Buffer IC U201 V-com output errors.
7) Shop Notes: IC U201 was not available. Entire T-con board replaced.
1) TV Model Number: DP58D33
2) TV Failure Symptom: Dead, no stand-by
3) Faulty Board: SMPS
4) Faulty Board Number: 1LG4B10Y11900 Z7GB
5) Board Location Number Of Faulty Part(s): F601, Q603, C632
6) Parts Failure Type: Main box fuse F601 open, switcher Q603 shorted, disc capacitor C632 shorted.
7) Shop Notes: polypropylene capacitor C630 was out of value and replaced.
1) TV Model Number: DP58D33
2) TV Failure Symptom: Brief power-up then immediate shut down
3) Faulty Board: SMPS
4) Faulty Board Number: 1LG4B10Y11900 Z7GB
5) Board Location Number Of Faulty Part(s): D611
6) Parts Failure Type: Diode D611 shorted.
7) Shop Notes: n.a.
1) TV Model Number: DP58D33

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: 1LG4B10Y11900 Z7GB

- 5) Board Location Number Of Faulty Part(s): F601, Q602, Q603, R641, R642, R638, R639
- 6) Parts Failure Type: Box fuse F601 open, switchers Q602/Q603 shorted, SMD resistors R641/R642/R638/R639 all out of value.

7) Shop Notes: SMD resistors are on flip side of board under Q602/Q603.

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1) TV Model Number: DP58D33

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: 1LG4B10Y11900 Z7GB

5) Board Location Number Of Faulty Part(s): F601 Q602, D631

6) Parts Failure Type: Box fuse F601 open, switcher Q602 shorted, SMD diode D631 shorted.

7) Shop Notes: SMD diode D631 flip side of board under Q602.

1) TV Model Number: DP58D33

2) TV Failure Symptom: Brief power-up then shut down into protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: 1LG4B10Y11900 Z7GB

5) Board Location Number Of Faulty Part(s): Q604

6) Parts Failure Type: switcher Q604 shorted.

7) Shop Notes: n.a.

1) TV Model Number: DP58D33
2) TV Failure Symptom: No start-up power
3) Faulty Board: SMPS
4) Faulty Board Number: 1LG4B10Y11900 Z7GB
5) Board Location Number Of Faulty Part(s): D728
6) Parts Failure Type: Diode D728 shorted.
7) Shop Notes: n.a.
1) TV Model Number: DP58D33
2) TV Failure Symptom: Audio in and out sound with snapping noises
3) Faulty Board: Main Board
4) Faulty Board Number: 1LG4B10Y117000 Z7GB
5) Board Location Number Of Faulty Part(s): IC001
6) Parts Failure Type: Audio system chip IC001 distorted audio output signal
7) Shop Notes: n.a.
1) TV Model Number: FVE3923
2) TV Failure Symptom: No back-light sustain
3) Faulty Board: LED Driver Board
4) Faulty Board Number: 55.39T03.D01

5) Board Location Number Of Faulty Part(s): U3

6) Parts Failure Type: LED drive chip U3 no drive voltage at pin 6.

7) Shop Notes: U3 equivalent chip was on lengthy back order. Entire LED driver board replaced.

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- 1) TV Model Number: FVE3923
- 2) TV Failure Symptom: Back-light dimming up and down intermittently
- 3) Faulty Board: LED Driver Board
- 4) Faulty Board Number: 55.39T03.D01
- 5) Board Location Number Of Faulty Part(s): U3
- 6) Parts Failure Type: LED drive chip U3 erroneous PWM signal at pin 16.
- 7) Shop Notes: n.a.

- 1) TV Model Number: FVE3923
- 2) TV Failure Symptom: Back-light flickers once then shuts off, then TV shut down
- 3) Faulty Board: LED Driver Board
- 4) Faulty Board Number: 55.39T03.D01
- 5) Board Location Number Of Faulty Part(s): U3
- 6) Parts Failure Type: LED drive chip U3 in shut-down mode at pin 10.
- 7) Shop Notes: U3 was in shut down mode due to a shorted diode in the LED strip.
- 1) TV Model Number: FVE3923
- 2) TV Failure Symptom: No back-light start-up
- 3) Faulty Board: LED Driver Board
- 4) Faulty Board Number: 55.39T03.D01
- 5) Board Location Number Of Faulty Part(s): F1
- 6) Parts Failure Type: SMD fuse F1 open.

7) Shop Notes: n.a.

- 1) TV Model Number: FVE3923
- 2) TV Failure Symptom: Back-light on briefly, then shut down
- 3) Faulty Board: LED Driver Board
- 4) Faulty Board Number: 55.39T03.D01
- 5) Board Location Number Of Faulty Part(s): D202
- 6) Parts Failure Type: SMD switch diode D202 shorted
- 7) Shop Notes: D202 is connected to the internal power-switch of U3 at pin 5.
- 1) TV Model Number: FVE3923
- 2) TV Failure Symptom: Audio shuts off intermittently after TV warms-up
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y117A0 Z7ZD
- 5) Board Location Number Of Faulty Part(s): IC001
- 6) Parts Failure Type: Audio system chip IC001 internal failure at audio output pins.
- 7) Shop Notes: n.a.

- 1) TV Model Number: FVE3923
- 2) TV Failure Symptom: Stuck at logo start-up
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y117A0 Z7ZD
- 5) Board Location Number Of Faulty Part(s): IC8000
- 6) Parts Failure Type: Flash/EEPROM IC8000 data I/O errors at pin 5.
- 7) Shop Notes: Flash/EEPROM IC8000 must be programmed before install.

1) TV Model Number: FVE3923

2) TV Failure Symptom: HDMI discoloration and static picture on both HDMI inputs

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y117A0 Z7ZD

5) Board Location Number Of Faulty Part(s): IC5500

6) Parts Failure Type: Core processor chip IC5500 internal HDMI interface errors.

7) Shop Notes: IC5500 replaced from another main board. IC8000 must be re-flashed at IC5500 install.

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1) TV Model Number: FVE3923

2) TV Failure Symptom: No screen raster

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y117A0 Z7ZD

5) Board Location Number Of Faulty Part(s): IC600

6) Parts Failure Type: Drop-Out regulator IC600 no output voltage.

7) Shop Notes: n.a.

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1) TV Model Number: FVE3923

2) TV Failure Symptom: Fuzzy picture, picture clears up when LVDS cable is physically touched

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y117A0 Z7ZD

5) Board Location Number Of Faulty Part(s): K7200

6) Parts Failure Type: LVDS connector K7200 cleaned and re-soldered.

7) Shop Notes: LVDS cable connector was also cleaned at both ends.

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1) TV Model Number: FVD4064

2) TV Failure Symptom: Dead, no power

3) Faulty Board: Main Board/SMPS

4) Faulty Board Number: B13126936 V.1

5) Board Location Number Of Faulty Part(s): FB1, QB101

6) Parts Failure Type: Main fuse FB1 open, switcher QB101 shorted.

7) Shop Notes: Disc capacitor CB116 out of value and replaced.

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1) TV Model Number: FVD4064

2) TV Failure Symptom: Brief start-up then shut down into protect mode

3) Faulty Board: Main Board/SMPS

4) Faulty Board Number: B13126936 V.1

5) Board Location Number Of Faulty Part(s): PCB101

6) Parts Failure Type: Opto-Isolator PCB101 shorted internal LED diode.

7) Shop Notes: n.a.

1) TV Model Number: FVD4064

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: Main Board/SMPS

4) Faulty Board Number: B13126936 V.1

5) Board Location Number Of Faulty Part(s): FB1, DB2, DB4

6) Parts Failure Type: main fuse FB1 open, bridge rectifiers DB2/DB4 shorted.

7) Shop Notes: Bridge rectifiers DB1, DB3, were replaced as a service precaution.

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- 1) TV Model Number: FVD4064
- 2) TV Failure Symptom: Partial start-up, then immediate shut down
- 3) Faulty Board: Main Board/SMPS
- 4) Faulty Board Number: B13126936 V.1
- 5) Board Location Number Of Faulty Part(s): DB115, RB128,
- 6) Parts Failure Type: Bucking diode DB115 shorted, SMD resistor RB128 out of value.
- 7) Shop Notes: SMD resistor RB129 replaced as a service precaution.

- 1) TV Model Number: FVD4064
- 2) TV Failure Symptom: Stuck on logo start-up then shut down into protect mode
- 3) Faulty Board: Main Board/SMPS
- 4) Faulty Board Number: B13126936 V.1
- 5) Board Location Number Of Faulty Part(s): UF1
- 6) Parts Failure Type: Flash/EEPROM UF1 serial data error.
- 7) Shop Notes: Flash/EEPROM UF1 must be programmed before install.

- 1) TV Model Number: FVD4064
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: Main Board/SMPS
- 4) Faulty Board Number: B13126936 V.1
- 5) Board Location Number Of Faulty Part(s): FB1, QB101, CB116
- 6) Parts Failure Type: Main fuse FB1 open, switcher QB101 shorted, disc capacitor CB116 shorted.

7) Shop Notes: Box capacitor CXB1 was out of uF value and replaced.

1) TV Model Number: FVD4064

2) TV Failure Symptom: No start-up, protect mode only

3) Faulty Board: Main Board/SMPS

4) Faulty Board Number: B13126936 V.1

5) Board Location Number Of Faulty Part(s): DB103

6) Parts Failure Type: Coupling diode DB103 shorted.

7) Shop Notes: Diode DB102 replaced as a service precaution.

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1) TV Model Number: FVM4012

2) TV Failure Symptom: Stand-by, press power, then no stand-by, dead

3) Faulty Board: SMPS

4) Faulty Board Number: 8TL08-PE371H

5) Board Location Number Of Faulty Part(s): U401

6) Parts Failure Type: Mode control IC U401 start-up regulator errors and very hot.

7) Shop Notes: U401 unstable readings at pin 2.

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1) TV Model Number: FVM4012

2) TV Failure Symptom: Brief start-up then immediate shut down into protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: 8TL08-PE371H

5) Board Location Number Of Faulty Part(s): D401

6) Parts Failure Type: Diode D401 shorted.

7) Shop Notes: Mode control IC U401 was replaced as a service precaution.

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1) TV Model Number: FVM4012

2) TV Failure Symptom: Brief start-up then shut down into protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: 8TL08-PE371H

5) Board Location Number Of Faulty Part(s): D302

6) Parts Failure Type: Diode D302 shorted.

7) Shop Notes: Diode D301 was replaced as a service precaution.

1) TV Model Number: FVM4012

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: 8TL08-PE371H

5) Board Location Number Of Faulty Part(s): D303

6) Parts Failure Type: Diode D303 shorted.

7) Shop Notes: Disc capacitor C303 was replaced as a service precaution.

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1) TV Model Number: FVM4012

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: 8TL08-PE371H

5) Board Location Number Of Faulty Part(s): F1, QW3

6) Parts Failure Type: Main fuse F1 open, switcher QW3 shorted.

7) Shop Notes: Disc capacitor C302 had strange reading and replaced.

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1) TV Model Number: FVM4012

2) TV Failure Symptom: Protect mode only

3) Faulty Board: SMPS

4) Faulty Board Number: 8TL08-PE371H

5) Board Location Number Of Faulty Part(s): D303, C406

6) Parts Failure Type: Diode D303 shorted, Box capacitor C406 out of value.

7) Shop Notes: n.a.

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1) TV Model Number: FVM4012

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: 8TL08-PE371H

5) Board Location Number Of Faulty Part(s): F1, QW3

6) Parts Failure Type: Main fuse F1 open, switcher QW3 shorted.

7) Shop Notes: After QW3 install, still shut down. U301 very hot. U301 not available.

Entire SMPS replaced.

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1) TV Model Number: FVM4012

2) TV Failure Symptom: No start-up, stand-by only, then protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: 8TL08-PE371H

5) Board Location Number Of Faulty Part(s): U301, R316

- 6) Parts Failure Type: IC U301 internal short, SMD resistor R316 out of value.
- 7) Shop Notes: IC U301 was not available on market. Entire SMPS replaced.

- 1) TV Model Number: FVM4012
- 2) TV Failure Symptom: Start-up then immediate shut down into protect mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: 8TL08-PE371H
- 5) Board Location Number Of Faulty Part(s): D202
- 6) Parts Failure Type: Diode D202 shorted.
- 7) Shop Notes: Diode D301 was replaced as a service precaution.

- 1) TV Model Number: FVM4212
- 2) TV Failure Symptom: Stuck at start-up logo
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y10200 Z5GK
- 5) Board Location Number Of Faulty Part(s): IC5750
- 6) Parts Failure Type: Flash/EEPROM IC5750 erroneous signal pin 8.
- 7) Shop Notes: Flash/EEPROM IC5750 must be programmed before install.

- 1) TV Model Number: FVM4212
- 2) TV Failure Symptom: No start-up, stand-by only
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y10200 Z5GK
- 5) Board Location Number Of Faulty Part(s): IC5750

- 6) Parts Failure Type: Flash/EEPROM IC5750 pin 1 and pin 16 erroneous logic voltage/clock voltage.
- 7) Shop Notes: Flash/EEPROM IC5750 must be programmed before install.

- 1) TV Model Number: FVM4212
- 2) TV Failure Symptom: Turn TV on, brief color test-pattern then shut-down. Turn on color pattern only.
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y10200 Z5GK
- 5) Board Location Number Of Faulty Part(s): IC5750
- 6) Parts Failure Type: Flash/EEPROM IC5750 no data I/O at pin 8.
- 7) Shop Notes: Flash/EEPROM IC5750 must be programmed before install.

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- 1) TV Model Number: FVM4212
- 2) TV Failure Symptom: No audio on all inputs
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y10200 Z5GK
- 5) Board Location Number Of Faulty Part(s): IC001
- 6) Parts Failure Type: Audio system chip IC001 no audio output signals.
- 7) Shop Notes: IC001 was warmer than usual. A heat sink was mounted on replacement IC001.

- 1) TV Model Number: FVM4212
- 2) TV Failure Symptom: TV is on with back-light only, no image, no menu screen
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y10200 Z5GK

- 5) Board Location Number Of Faulty Part(s): IC5750
- 6) Parts Failure Type: IC5750 dead at pin 8 (SDO)
- 7) Shop Notes: Flash/EEPROM IC5750 must be programmed before install.

- 1) TV Model Number: FVM4212
- 2) TV Failure Symptom: No start-up, TV in stand-by only
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y10200 Z5GK
- 5) Board Location Number Of Faulty Part(s): IC5750
- 6) Parts Failure Type: Flash/EEPROM IC5750 dead at pin 16 during start-up attempt.
- 7) Shop Notes: Flash/EEPROM IC5750 must be programmed before install.

- 1) TV Model Number: FVM4212
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: Z5GK 1LG4B10Y0980A
- 5) Board Location Number Of Faulty Part(s): F601, Q601
- 6) Parts Failure Type: Main fuse F601 open, switcher Q601 shorted.
- 7) Shop Notes: n.a.

- 1) TV Model Number: FVM4212
- 2) TV Failure Symptom: Brief start-up then immediate shut down into stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: Z5GK 1LG4B10Y0980A
- 5) Board Location Number Of Faulty Part(s): D611

6) Parts Failure Type: Diode D611 shorted.

7) Shop Notes: n.a.

1) TV Model Number: FVM4212

2) TV Failure Symptom: Dead, no stand-by power

3) Faulty Board: SMPS

4) Faulty Board Number: Z5GK 1LG4B10Y0980A

5) Board Location Number Of Faulty Part(s): F601, Q601, Q602, C636

6) Parts Failure Main fuse F601 open, switchers Q601/Q602 shorted, disc capacitor C636 shorted.

7) Shop Notes: Resistor R628 was out of value and replaced.

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1) TV Model Number: FVM4212

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: Z5GK 1LG4B10Y0980A

5) Board Location Number Of Faulty Part(s): F601, Q602, R638, R639

6) Parts Failure Type: Fuse F601 open, switcher Q601 shorted, SMD resistors R638/R639 out of Ohm value.

7) Shop Notes: SMD R638/R639 are under switcher Q602.

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1) TV Model Number: FVM4212

2) TV Failure Symptom: Dead no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: Z5GK 1LG4B10Y0980A

5) Board Location Number Of Faulty Part(s): F601, Q601, Q602, D632, R642

- 6) Parts Failure Type: Fuse F601 open, switchers Q601/Q602 shorted, D632 shorted, R642 out of value.
- 7) Shop Notes: SMD Diode D632 and SMD resistor R642 are under switchers Q601/Q602.

- 1) TV Model Number: FVM4212
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: Z5GK 1LG4B10Y0980A
- 5) Board Location Number Of Faulty Part(s): F601, Q602, IC602, R638, R639
- 6) Parts Failure Type: Fuse F601 open, switcher Q602 shorted, IC602 dead switching pins R638/R639 open.
- 7) Shop Notes: IC602 was not available. Entire SMPS replaced.

- 1) TV Model Number: FVM4612
- 2) TV Failure Symptom: Brief start-up then immediate shut down
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: PLTVCR808UXA3
- 5) Board Location Number Of Faulty Part(s): D9114
- 6) Parts Failure Type: Diode D9114 shorted.
- 7) Shop Notes: n.a.
- 1) TV Model Number: FVM4612
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: PLTVCR808UXA3

- 5) Board Location Number Of Faulty Part(s): F9901, Q9801, R9813
- 6) Parts Failure Type: Main fuse F9901 open, switcher Q9801 shorted SMD R9813 out of value.
- 7) Shop Notes: SMD resistor R9813 is under Q9801.

- 1) TV Model Number: FVM4612
- 2) TV Failure Symptom: Stand-by, then turn power on, then immediate protect mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: PLTVCR808UXA3
- 5) Board Location Number Of Faulty Part(s): IC9801
- 6) Parts Failure Type: 4 pin switching chip IC9801 had no switching output drive signal.
- 7) Shop Notes: IC9801 located on flip side of board was not available. Entire SMPS board was replaced.

- 1) TV Model Number: FVM4612
- 2) TV Failure Symptom: Brief start-up then immediate shut down into protect mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: PLTVCR808UXA3
- 5) Board Location Number Of Faulty Part(s): Q9104
- 6) Parts Failure Type: MOSFET Q9104 shorted.
- 7) Shop Notes: Q9104 located on flip side of board, near IC9101.

- 1) TV Model Number: FVM4612
- 2) TV Failure Symptom: No start-up, protect mode only
- 3) Faulty Board: SMPS

- 4) Faulty Board Number: PLTVCR808UXA3
- 5) Board Location Number Of Faulty Part(s): IC9101
- 6) Parts Failure Type: Drive chip IC9101 very hot from internal short and no switching pulse.
- 7) Shop Notes: IC9101 was not available. Entire SMPS board was replaced.

- 1) TV Model Number: FVM4612
- 2) TV Failure Symptom: No start-up, protect mode only
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: PLTVCR808UXA3
- 5) Board Location Number Of Faulty Part(s): D9802, R9801
- 6) Parts Failure Type: Diode D9802 shorted, R9801 out of Ohm value.
- 7) Shop Notes: Bridge rectifier BD9901 was replaced as a service precaution.

- 1) TV Model Number: FVM4612
- 2) TV Failure Symptom: Dead audio on all inputs, loud static popping noises only
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 756TXCCB01K095
- 5) Board Location Number Of Faulty Part(s): FB612, U602
- 6) Parts Failure Type: SMD fuse FB612 open, audio IC U602 very hot with no audio output signals.
- 7) Shop Notes: Capacitor C602 had very high ESR level and was replaced.

- 1) TV Model Number: FVM4612
- 2) TV Failure Symptom: Turn TV off, will not come out of stand-by
- 3) Faulty Board: Main Board

- 4) Faulty Board Number: 756TXCCB01K073
- 5) Board Location Number Of Faulty Part(s): U405
- 6) Parts Failure Type: Flash/EEPROM erroneous signal pin 5.
- 7) Shop Notes: Flash/EEPROM U405 must be programmed before install.
- 1) TV Model Number: FVM4612
- 2) TV Failure Symptom: Back-light on, no picture, no menu screen
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 756TXCCB01K073
- 5) Board Location Number Of Faulty Part(s): U405
- 6) Parts Failure Type: Flash/EEPROM erroneous dead at pins 5 and 6.
- 7) Shop Notes: Flash/EEPROM U405 must be programmed before install.
- 1) TV Model Number: FVM4612
- 2) TV Failure Symptom: No audio from left speaker
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 756TXCCB01K073
- 5) Board Location Number Of Faulty Part(s): FB612
- 6) Parts Failure Type: SMD fuse FB612 open.
- 7) Shop Notes: U602 suspected source of opening fuse FB612. Check also L604 and R627.

- 1) TV Model Number: FVM4612
- 2) TV Failure Symptom: Audio good, back-light on, with no picture
- 3) Faulty Board: T-Con

4) Faulty Board Number: LJ94-16057D
5) Board Location Number Of Faulty Part(s): F1
6) Parts Failure Type: No 12 volt input, SMD fuse F1 open.
7) Shop Notes: n.a.
1) TV Model Number: FVM4612
2) TV Failure Symptom: Grainy picture with discoloration
3) Faulty Board: T-Con
4) Faulty Board Number: LJ94-16057D
5) Board Location Number Of Faulty Part(s): ICD1
6) Parts Failure Type: Buffer chip ICD1 bad V-com buffering I/O signals.
7) Shop Notes: Buffer chip ICD1 was not available. Entire T-con board was replaced.
1) TV Model Number: FVM5082
2) TV Failure Symptom: Dead, no stand-by
3) Faulty Board: SMPS
4) Faulty Board Number: N0AB3FK00001
5) Board Location Number Of Faulty Part(s): F1, QP1
6) Parts Failure Type: Main fuse F1 open, switcher QP1 shorted.
7) Shon Notes: n a

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1) TV Model Number: FVM5082

2) TV Failure Symptom: Brief start-up then shut down into stand-by

3) Faulty Board: SMPS

- 4) Faulty Board Number: N0AB3FK00001
- 5) Board Location Number Of Faulty Part(s): DM1
- 6) Parts Failure Type: Diode DM1 shorted.
- 7) Shop Notes: Disc capacitor CM1 was out of value and replaced.

- 1) TV Model Number: FVM5082
- 2) TV Failure Symptom: Full start-up then shut down into protect mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: N0AB3FK00001
- 5) Board Location Number Of Faulty Part(s): DM3, RM27, RM28
- 6) Parts Failure Type: Rectifier diode DM3 shorted, SMD resistors RM27/RM28 out of Ohm value.
- 7) Shop Notes: n.a.

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- 1) TV Model Number: FVM5082
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: N0AB3FK00001
- 5) Board Location Number Of Faulty Part(s): F1, QP1, QP2, RP16
- 6) Parts Failure Type: Main fuse F1 open, switchers QP1/QP2 shorted, SMD resistor RP16 out of Ohm value.
- 7) Shop Notes: SMD RP16 located under QP1.

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- 1) TV Model Number: FVM5082
- 2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: N0AB3FK00001

5) Board Location Number Of Faulty Part(s): F1, QP1,

6) Parts Failure Type: Main fuse F1 open, switcher QP1 shorted.

7) Shop Notes: SMD resistors RP12, RP15, RP16 were all out of value.

1) TV Model Number: FVM5082

2) TV Failure Symptom: Stand-by only, no full power-up

3) Faulty Board: SMPS

4) Faulty Board Number: N0AB3FK00001

5) Board Location Number Of Faulty Part(s): UP1

6) Parts Failure Type: Switching IC UP1 no switching pulse and hot.

7) Shop Notes: UP1 was not available on market. Entire SMPS board replaced.

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1) TV Model Number: FVM5082

2) TV Failure Symptom: Brief power-up then shut down into protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: N0AB3FK00001

5) Board Location Number Of Faulty Part(s): DM6

6) Parts Failure Type: SMD diode DM6 shorted.

7) Shop Notes: SMD Diode DM6 located under QM1. QM1 was replaced as a service precaution.

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1) TV Model Number: FVM5082

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

- 4) Faulty Board Number: N0AB3FK00001 5) Board Location Number Of Faulty Part(s): F1, QP1, RP15 6) Parts Failure Type: Main fuse F1 open, switcher QP1 shorted, SMD resistor RP15 out of Ohm value. 7) Shop Notes: n.a. 1) TV Model Number: FVM5082 2) TV Failure Symptom: Dead, no stand-by 3) Faulty Board: SMPS 4) Faulty Board Number: N0AB3FK00001 5) Board Location Number Of Faulty Part(s): F1, F11, QP1, QP2, 6) Parts Failure Type: Main fuse F1 & secondary fuse F11 open, switchers QP1/QP2 shorted. 7) Shop Notes: Switching IC UP1 very hot. UP1 not available. Entire SMPS board replaced. 1) TV Model Number: FVM5082 2) TV Failure Symptom: Audio sound in and out with snapping noises 3) Faulty Board: Main Board 4) Faulty Board Number: 1LG4B10Y10500 Z6WF 5) Board Location Number Of Faulty Part(s): IC001, C024, C025 6) Parts Failure Type: Audio chip IC001 bad signal trace on output pins. SMD caps
- 1) TV Model Number: FVM5082

C024/C025 out of uF value.

7) Shop Notes: n.a.

2) TV Failure Symptom: No audio on all inputs

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y10500 Z6WF

5) Board Location Number Of Faulty Part(s): IC001

6) Parts Failure Type: Audio chip IC001 no audio signals on output pins.

7) Shop Notes: n.a.

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1) TV Model Number: FVM5082

2) TV Failure Symptom: TV randomly shuts down into stand-by

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y10500 Z6WF

5) Board Location Number Of Faulty Part(s): IC5750

6) Parts Failure Type: Flash/EEPROM IC5750 serial clock errors on start-up.

7) Shop Notes: Flash/EEPROM must be programmed before install.

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1) TV Model Number: FVM5082

2) TV Failure Symptom: TV shuts down when using remote or keypad

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y10500 Z6WF

5) Board Location Number Of Faulty Part(s): IC5750

6) Parts Failure Type: Flash/EEPROM IC5750 bit errors at pin 15.

7) Shop Notes: Flash/EEPROM must be programmed before install.

1) TV Model Number: FVM5082

2) TV Failure Symptom: Start-up then stuck on logo screen
3) Faulty Board: Main Board
4) Faulty Board Number: 1LG4B10Y10500 Z6WF
5) Board Location Number Of Faulty Part(s): IC5750
6) Parts Failure Type: Flash/EEPROM IC5750 read errors at pin 8 dead after check-sum.
7) Shop Notes: Flash/EEPROM must be programmed before install.
1) TV M - J - 1 N 1 TV M 5 0 9 2
1) TV Model Number: FVM5082
2) TV Failure Symptom: Bad audio quality on all inputs, audio squelching intermittently
3) Faulty Board: Main Board
4) Faulty Board Number: 1LG4B10Y10500 Z6WF
5) Board Location Number Of Faulty Part(s): IC001
6) Parts Failure Type: Audio chip IC001 internal faults and IC001 chip was hot.
7) Shop Notes: n.a.
1) TV Model Number: FVM5082
2) TV Failure Symptom: TV fully on with back-light, no picture
3) Faulty Board: Main Board
4) Faulty Board Number: 1LG4B10Y10500 Z6WF
5) Board Location Number Of Faulty Part(s): IC5750
6) Parts Failure Type: Flash/EEPROM IC5750 dead at pin 8, noise at pin 16.

7) Shop Notes: Flash/EEPROM must be programmed before install.

1) TV Model Number: FVM5082

2) TV Failure Symptom: Brief start-up attempt, then back into stand-by

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y10500 Z6WF

5) Board Location Number Of Faulty Part(s): IC5750

- 6) Parts Failure Type: Flash/EEPROM IC5750 serial-clock errors pin 16, write-enable errors pin 9.
- 7) Shop Notes: Flash/EEPROM must be programmed before install.

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1) TV Model Number: FVM5082

2) TV Failure Symptom: Audio always at minimum loudness level

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y10500 Z6WF

5) Board Location Number Of Faulty Part(s): IC001

6) Parts Failure Type: Audio system chip IC001 internal gain error on all channels.

7) Shop Notes: n.a.

This concludes Sanyo LCD/LED TV Case History

## Sanyo Plasma TV Case History

Sanyo Plasma TV Models: DP42545, DP42746, DP50749, DP50710, DP50740, DP50719

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1) TV Model Number: DP42545

2) TV Failure Symptom: TV on, screen primed with no picture

3) Faulty Board: Y-Sustain Board

4) Faulty Board Number: BN96-02039A

5) Board Location Number Of Faulty Part(s): Q5016, R5031

6) Parts Failure Type: Switcher Q5016 shorted, SMD resistor R5031 out of Ohm value.

7) Shop Notes: n.a.

1) TV Model Number: DP42545

2) TV Failure Symptom: TV on, screen primed with no picture

3) Faulty Board: Y-Sustain Board

4) Faulty Board Number: BN96-02039A

5) Board Location Number Of Faulty Part(s): U5002

6) Parts Failure Type: Resonant chip U5002 dead at pin 3.

7) Shop Notes: Y-Board had other negative voltage problems. Entire Y-board was replaced.

1) TV Model Number: DP42545

2) TV Failure Symptom: TV on, screen primed with no picture

3) Faulty Board: Y-Sustain Board

- 4) Faulty Board Number: BN96-02039A
- 5) Board Location Number Of Faulty Part(s): Q5021, ZD5005
- 6) Parts Failure Type: Switcher Q5021 shorted, signal zener diode ZD5005 shorted.
- 7) Shop Notes: TV had other problems related to SMPS board.

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- 1) TV Model Number: DP42545
- 2) TV Failure Symptom: TV on, screen primed with no picture
- 3) Faulty Board: Y-Sustain Board
- 4) Faulty Board Number: BN96-02039A
- 5) Board Location Number Of Faulty Part(s): F5004, Q5014 R5019
- 6) Parts Failure Type: Fuse F5004 open, switcher Q5014 shorted, SMD resistor R5019 out of Ohm value.
- 7) Shop Notes:

- 1) TV Model Number: DP42545
- 2) TV Failure Symptom: Brief picture, then TV on with no picture
- 3) Faulty Board: Y-Sustain Board
- 4) Faulty Board Number: BN96-02039A
- 5) Board Location Number Of Faulty Part(s): U5016
- 6) Parts Failure Type: 4 pin switching IC U5016 dead at pin 5.
- 7) Shop Notes: This Y-board had other BIAS voltage error's. Entire Y-board was replaced.

- 1) TV Model Number: DP42545
- 2) TV Failure Symptom: Picture on then off at start-up

3) Faulty Board: Y-Sustain Board

4) Faulty Board Number: BN96-02039A

5) Board Location Number Of Faulty Part(s): U5003

6) Parts Failure Type: Can not adjust Y rr voltage at VR5001.

7) Shop Notes: U5003 external circuitry offsets and other problems. Entire Y-board was replaced.

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1) TV Model Number: DP42545

2) TV Failure Symptom: Thin horizontal line across bottom screen

3) Faulty Board: Lower Y-Buffer Board

4) Faulty Board Number: BN96-02041A

5) Board Location Number Of Faulty Part(s): U5502

6) Parts Failure Type: Buffer scan IC U5502 shorted channels and very hot.

7) Shop Notes: This IC was not available. Entire lower Y-buffer board replaced.

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1) TV Model Number: DP42545

2) TV Failure Symptom: Thick horizontal line across screen bottom

3) Faulty Board: Lower Y-Buffer Board

4) Faulty Board Number: BN96-02041A

5) Board Location Number Of Faulty Part(s): U5501

6) Parts Failure Type: Buffer scan IC U5501 had two burn holes on top of package.

7) Shop Notes: Entire lower Y-buffer board replaced.

1) TV Model Number: DP42545

2) TV Failure Symptom: Two thin horizontal lines across bottom screen

3) Faulty Board: Lower Y-Buffer Board

4) Faulty Board Number: BN96-02041A

5) Board Location Number Of Faulty Part(s): U5502

6) Parts Failure Type: Buffer scan IC U5502 shorted channels.

7) Shop Notes: Entire lower Y-buffer board replaced.

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1) TV Model Number: DP42545

2) TV Failure Symptom: Thick horizontal line across top screen

3) Faulty Board: Upper Y-Buffer Board

4) Faulty Board Number: BN96-02040A

5) Board Location Number Of Faulty Part(s): U5401

6) Parts Failure Type: Buffer scan IC U5401 shorted channels.

7) Shop Notes: Not economical to replaced scan IC. Entire Upper Y-board was replaced.

1) TV Model Number: DP42545

2) TV Failure Symptom: Top horizontal half of screen all black

3) Faulty Board: Upper Y-Buffer Board

4) Faulty Board Number: BN96-02040A

5) Board Location Number Of Faulty Part(s): U5401, U5402

6) Parts Failure Type: Both buffer scan IC's U5401/U5402 shorted channels.

7) Shop Notes: Not economical to replaced scan IC. Entire Upper Y-board was replaced.

1) TV Model Number: DP42545

2) TV Failure Symptom: 4 thin horizontal lines across top half of screen

3) Faulty Board: Upper Y-Buffer Board

4) Faulty Board Number: BN96-02040A

5) Board Location Number Of Faulty Part(s): U5402

6) Parts Failure Type: Buffer scan IC U5402 shorted channels.

7) Shop Notes: Not economical to replaced scan IC. Entire Upper Y-board was replaced...

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1) TV Model Number: DP42746

2) TV Failure Symptom: Display appears, then disappears intermittently

3) Faulty Board: T-Con Logic Board

4) Faulty Board Number: LJ92-01270K

5) Board Location Number Of Faulty Part(s): U2624

6) Parts Failure Type: U2624 clock errors.

7) Shop Notes: Clock multiplier chip U2624 was not available. Entire T-con logic board

was replaced.

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1) TV Model Number: DP42746

2) TV Failure Symptom: Picture ambiance would flicker intermittently

3) Faulty Board: T-Con Logic Board

4) Faulty Board Number: LJ92-01270K

5) Board Location Number Of Faulty Part(s): U2024

6) Parts Failure Type: Linear regulator IC U2024 no voltage output and hot.

7) Shop Notes: This TV had other main board problems when T-con was repaired.

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1) TV Model Number: DP42746

2) TV Failure Symptom: TV fully on with no picture or menu screen

3) Faulty Board: T-Con Logic Board

4) Faulty Board Number: LJ92-01270K

5) Board Location Number Of Faulty Part(s): U2618

6) Parts Failure Type: Core processor U2618 was re-balled.

7) Shop Notes: TV returned with same problem in 3 days. Entire T-con logic board was replaced.

(Discovered later SMD R2170, 2175, 2176 out of value and may have lead to the TV returning.)

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1) TV Model Number: DP42746

2) TV Failure Symptom: Stand-by only

3) Faulty Board: SMPS

4) Faulty Board Number: LJ44-00126A

5) Board Location Number Of Faulty Part(s): U8006

6) Parts Failure Type: Switching IC dead at pin 3.

7) Shop Notes: U8006 located on flip side of board..

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1) TV Model Number: DP42746

2) TV Failure Symptom: Start-up then immediate shut down into protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: LJ44-00126A

5) Board Location Number Of Faulty Part(s): U8307

6) Parts Failure Type: Switching chip U8307 dead at pin2 and pin 7

7) Shop Notes: U8307 located on flip side of board.

1) TV Model Number: **DP42746** 

2) TV Failure Symptom: Partial start-up then shut down into stand-by only

3) Faulty Board: SMPS

4) Faulty Board Number: LJ44-00126A

5) Board Location Number Of Faulty Part(s): Q8301, DB312

6) Parts Failure Type: Switcher Q8301 shorted, SMD diode DB312 shorted.

7) Shop Notes: Q8301 and DB312 located on flip side of board.

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1) TV Model Number: DP50749

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: BN44-00274A

5) Board Location Number Of Faulty Part(s): F801S, QP803, DQ838

6) Parts Failure Type: Main fuse F801S open, switcher QP803 shorted, diode DQ838 shorted.

7) Shop Notes: DQ809 was replaced as a service precaution.

1) TV Model Number: DP50749

2) TV Failure Symptom: Brief start-up then shut down into protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: BN44-00274A

5) Board Location Number Of Faulty Part(s): DB803, CB803

6) Parts Failure Type: Diode DB803 shorted, electrolytic capacitor CB803 high ESR

level.

7) Shop Notes: n.a.

1) TV Model Number: DP50749

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: BN44-00274A

5) Board Location Number Of Faulty Part(s): F801S, QP802, QP803 RP828,

6) Parts Failure Type: Fuse F801S open, switchers QP802/QP803 shorted, SMD RP828 out of Ohm value.

7) Shop Notes: SMD resistor RP828 is under switcher QP803.

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1) TV Model Number: DP50749

2) TV Failure Symptom: Partial start-up then shut down into stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: BN44-00274A

5) Board Location Number Of Faulty Part(s): DX809

6) Parts Failure Type: Diode DX809 shorted.

7) Shop Notes: Electrolytic capacitor CX823 was out of uF value and replaced.

1) TV Model Number: DP50749

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: BN44-00274A

5) Board Location Number Of Faulty Part(s): F801S, QP802, RP826

6) Parts Failure Type: Fuse FS801S open, switcher QP802 shorted, SMD resistor RP826 out of Ohm value.
7) Shop Notes: n.a.
1) TV Model Number: DP50749
2) TV Failure Symptom: TV is on, then shuts down randomly
3) Faulty Board: SMPS
4) Faulty Board Number: BN44-00274A
5) Board Location Number Of Faulty Part(s): RS804
6) Parts Failure Type: SMD resistor RS804 out of Ohm value.
7) Shop Notes: RS804 is under switcher QS801, and QS801 was replaced as a service precaution.
1) TV Model Number: DP50749
2) TV Failure Symptom: No start-up
3) Faulty Board: SMPS
4) Faulty Board Number: BN44-00274A
5) Board Location Number Of Faulty Part(s): ICT804
6) Parts Failure Type: Switching chip ICT804 dead at Vcc pin, can not turn VS-On. (Vs dead).
7) Shop Notes: ICT804 was not available. Entire SMPS was replaced.
1) TV Model Number: DP50749
2) TV Failure Symptom: Dead, no stand-by
3) Faulty Board: SMPS

4) Faulty Board Number: BN44-00274A

- 5) Board Location Number Of Faulty Part(s): F801S, QP802, RP828
- 6) Parts Failure Type: Fuse F801S open, switcher QP802 shorted, SMD resistor RP828 out of Ohm value.
- 7) Shop Notes: SMD RP826, RP849 were also out of Ohm value and replaced.

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- 1) TV Model Number: DP50749
- 2) TV Failure Symptom: Stand-by only
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: BN44-00274A
- 5) Board Location Number Of Faulty Part(s): ICF801
- 6) Parts Failure Type: Switching PWM chip ICF801 no switching signal.
- 7) Shop Notes: ICF801 was not available on market. Entire SMPS was replaced.

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- 1) TV Model Number: DP50710
- 2) TV Failure Symptom: TV on, no picture, then shutdown
- 3) Faulty Board: Y-Sustain Board
- 4) Faulty Board Number: TNPA5063AB
- 5) Board Location Number Of Faulty Part(s): Q402, R402
- 6) Parts Failure Type: Switcher Q402 shorted, SMD resistor R402 out of Ohm value.
- 7) Shop Notes: Wire-wound resistor R696 was also open, and replaced.

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- 1) TV Model Number: DP50710
- 2) TV Failure Symptom: TV on, no picture, then shut down
- 3) Faulty Board: Y-Sustain Board
- 4) Faulty Board Number: TNPA5063AB

- 5) Board Location Number Of Faulty Part(s): Q661, R665, D671
- 6) Parts Failure Type: Switcher Q661 shorted, SMD resistor R665 out of Ohm value, SMD D671 shorted.
- 7) Shop Notes: n.a.

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- 1) TV Model Number: DP50710
- 2) TV Failure Symptom: TV on, no picture, then shut down
- 3) Faulty Board: Y-Sustain Board
- 4) Faulty Board Number: TNPA5063AB
- 5) Board Location Number Of Faulty Part(s): Q441, R441
- 6) Parts Failure Type: Switcher Q441 shorted, SMD resistor R441 out of Ohm value.
- 7) Shop Notes: n.a.

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- 1) TV Model Number: DP50710
- 2) TV Failure Symptom: No audio on A/V and HDMI inputs
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y04600B (J4FL)
- 5) Board Location Number Of Faulty Part(s): IC001
- 6) Parts Failure Type: Audio chip IC001 internal channel switching error.
- 7) Shop Notes: SMD resistor R006 was out of Ohm value and replaced.

1) TV Model Number: DP50710

- 2) TV Failure Symptom: Blue screen only, then shut down
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y04600B (J4FL)

- 5) Board Location Number Of Faulty Part(s): IC5600
- 6) Parts Failure Type: Flash/EEPROM serial data error pin 5.
- 7) Shop Notes: Flash/EEPROM IC5600 must be programmed before install.

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- 1) TV Model Number: DP50710
- 2) TV Failure Symptom: TV shuts down intermittently into stand-by mode
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y04600B (J4FL)
- 5) Board Location Number Of Faulty Part(s): IC5600
- 6) Parts Failure Type: Flash/EEPROM reset error pin 2.
- 7) Shop Notes: Flash/EEPROM IC5600 must be programmed before install.

- 1) TV Model Number: DP50710
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: N0AB6JK00001
- 5) Board Location Number Of Faulty Part(s): F102, Q602, R622
- 6) Parts Failure Type: Fuse F102 open, Switcher Q602 shorted, SMD resistor R622 out of Ohm value.
- 7) Shop Notes: SMD R622 located under Q602. Fuse F101 was replaced as a service precaution.

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- 1) TV Model Number: DP50710
- 2) TV Failure Symptom: Brief start-up then shut down into protect mode
- 3) Faulty Board: SMPS

4) Faulty Board Number: N0AB6JK00001

5) Board Location Number Of Faulty Part(s): D304

6) Parts Failure Type: Diode D304 shorted.

7) Shop Notes: n.a.

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1) TV Model Number: DP50710

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: N0AB6JK00001

5) Board Location Number Of Faulty Part(s): F101, F102, Q602, Q603

6) Parts Failure Type: Fuses F101/F102 open, switchers Q602/Q603 shorted.

7) Shop Notes: Disc capacitor C615 was out of uF value and replaced.

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1) TV Model Number: DP50710

2) TV Failure Symptom: Stand-by only, no start-up

3) Faulty Board: SMPS

4) Faulty Board Number: N0AB6JK00001

5) Board Location Number Of Faulty Part(s): R628

6) Parts Failure Type: Wire-wound resistor R628 open.

7) Shop Notes: Diode D607 leaky and was replaced.

1) TV Model Number: DP50710

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

- 4) Faulty Board Number: N0AB6JK00001
- 5) Board Location Number Of Faulty Part(s): F101, F102, Q602, Q603
- 6) Parts Failure Type: Fuses F101/F102 open, switchers Q602/Q603 shorted.
- 7) Shop Notes: D605 was also shorted and replaced.

- 1) TV Model Number: DP50710
- 2) TV Failure Symptom: Brief start-up then shut down into protect mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: N0AB6JK00001
- 5) Board Location Number Of Faulty Part(s): F201, Q203
- 6) Parts Failure Type: Fuse F201 open, switcher Q203 shorted.
- 7) Shop Notes: n.a.

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- 1) TV Model Number: DP50710
- 2) TV Failure Symptom: No start-up, stand-by only
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: N0AB6JK00001
- 5) Board Location Number Of Faulty Part(s): Z601
- 6) Parts Failure Type: 4 pin diode chip Z601 internal cathode short.
- 7) Shop Notes: Z601 was not available. Entire SMPS was replaced.

1) TV Model Number: DP50710

- 2) TV Failure Symptom: Stand-by, turn on attempt, then immediate protect mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: N0AB6JK00001

- 5) Board Location Number Of Faulty Part(s): F301, D308, D311
- 6) Parts Failure Type: Fuse F301 open, half bridge diodes D308/D311 shorted.

7) Shop Notes: n.a.

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- 1) TV Model Number: DP50710
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: N0AB6JK00001
- 5) Board Location Number Of Faulty Part(s): F101, F102, Q602, Q603
- 6) Parts Failure Type: Fuses F101/F102 open, switchers Q602/Q603 shorted.
- 7) Shop Notes: n.a.

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- 1) TV Model Number: DP50710
- 2) TV Failure Symptom: TV starts up then shuts down into stand-by mode
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y04600B (J4FLE)
- 5) Board Location Number Of Faulty Part(s): IC5600
- 6) Parts Failure Type: Flash/EEPROM IC5600 errors at pin 7 reset.
- 7) Shop Notes: Flash/EEPROM IC5600 must be programmed before install.
- 1) TV Model Number: DP50710
- 2) TV Failure Symptom: TV volume/channel up & down by its self randomly
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y04600B (J4FLE)

5) Board Location Number Of Faulty Part(s): IC5600
6) Parts Failure Type: Flash/EEPROM IC5600 data address errors pin 5.
7) Shop Notes: Flash/EEPROM IC5600 must be programmed before install.
1) TV Model Number: DP50710
2) TV Failure Symptom: TV is on with no picture, blue stand-by screen only
3) Faulty Board: Main Board
4) Faulty Board Number: 1LG4B10Y04600B (J4FLE)
5) Board Location Number Of Faulty Part(s): IC5600
6) Parts Failure Type: Flash/EEPROM IC5600 serial clock & SDA errors at pins 5, and 6.
7) Shop Notes: Flash/EEPROM IC5600 must be programmed before install.
1) TV M 1 1 N 1
1) TV Model Number: DP50740
2) TV Failure Symptom: Audio with no picture
3) Faulty Board: Y-Sustain Board
4) Faulty Board Number: TNPA4848AG
5) Board Location Number Of Faulty Part(s): Q621, Q622, D865
6) Parts Failure Type: Switchers Q621/Q622 shorted, SMD diode D865 shorted.
7) Shop Notes: n.a.

1) TV Model Number: DP50740

2) TV Failure Symptom: TV on, no picture, primed screen only

3) Faulty Board: Y-Sustain Board

- 4) Faulty Board Number: TNPA4848AG
- 5) Board Location Number Of Faulty Part(s): Q402, R613
- 6) Parts Failure Type: Switcher Q402 shorted, SMD resistor R613 out of Ohm value.
- 7) Shop Notes: SMD diode D618 was also leaky and replaced.

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- 1) TV Model Number: DP50740
- 2) TV Failure Symptom: TV on, no picture primed screen only
- 3) Faulty Board: Y-Sustain Board
- 4) Faulty Board Number: TNPA4848AG
- 5) Board Location Number Of Faulty Part(s): Q604, R806, R869
- 6) Parts Failure Type: Switcher Q604 shorted, SMD resistor R806 out of Ohm value, SMD R869 open.
- 7) Shop Notes: This Y-board had other negative voltage problems. Entire Y-board was replaced.

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- 1) TV Model Number: DP50740
- 2) TV Failure Symptom: TV turned off, will not turn on again
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 1LG4B10Y04600 (J4FKF)
- 5) Board Location Number Of Faulty Part(s): IC5600
- 6) Parts Failure Type: Flash/EEPROM IC5600 dead at pin 7 reset.
- 7) Shop Notes: Flash/EEPROM IC5600 must be programmed before install.

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- 1) TV Model Number: DP50740
- 2) TV Failure Symptom: TV shuts down into stand-by randomly
- 3) Faulty Board: Main Board

- 4) Faulty Board Number: 1LG4B10Y04600 (J4FKF)
- 5) Board Location Number Of Faulty Part(s): IC5600
- 6) Parts Failure Type: Flash/EEPROM IC5600 error at pin 1 watch-dog and pin 6 serial clock (SCL).
- 7) Shop Notes: Flash/EEPROM IC5600 must be programmed before install.

1) TV Model Number: DP50740

2) TV Failure Symptom: TV stuck in stand-by only, no start-up

3) Faulty Board: Main Board

4) Faulty Board Number: 1LG4B10Y04600 (J4FKF)

5) Board Location Number Of Faulty Part(s): IC5600

6) Parts Failure Type: Flash/EEPROM IC5600 dead at pin 5 SDA.

7) Shop Notes: Flash/EEPROM IC5600 must be programmed before install.

1) TV Model Number: DP50740

2) TV Failure Symptom: Brief start-up then immediate shut down into protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: N0AB6JK00001

5) Board Location Number Of Faulty Part(s): R628

6) Parts Failure Type: Wire-wound resistor R628 open.

7) Shop Notes: Wire-wound resistor R629 was replaced as a service precaution.

1) TV Model Number: DP50740

2) TV Failure Symptom: Brief start-up then immediate shut down into protect mode

3) Faulty Board: SMPS
4) Faulty Board Number: N0AB6JK00001
5) Board Location Number Of Faulty Part(s): D304
6) Parts Failure Type: Diode D304 shorted.
7) Shop Notes: D305 was replaced as a service precaution.
1) TV Model Number: DP50740
2) TV Failure Symptom: Dead, no stand-by
3) Faulty Board: SMPS
4) Faulty Board Number: N0AB6JK00001
5) Board Location Number Of Faulty Part(s): F101, F102, Q602, R625
6) Parts Failure Type: Fuses F101/F102 open, switcher Q602 shorted, resistor R625 out of Ohm value.
7) Shop Notes: Resistor R626 and Q604 were replaced as a service precaution.
1) TV Model Number: DP50719
2) TV Failure Symptom: Dead, no stand-by
3) Faulty Board: SMPS
4) Faulty Board Number: LSEP1279HNHB
5) Board Location Number Of Faulty Part(s): F100, F101, F200 Q104, D200
6) Parts Failure Type: Fuses F100/F101/F200 open, switcher Q104 shorted, suppressor D200 shorted.

1) TV Model Number: DP50719

7) Shop Notes: n.a.

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: LSEP1279HNHB

5) Board Location Number Of Faulty Part(s): F101, Q104

6) Parts Failure Type: Fuse F101 open, switcher Q104 shorted.

7) Shop Notes: Disc capacitors C122, C123 were out of pF value and replaced.

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1) TV Model Number: DP50719

2) TV Failure Symptom: Brief start-up then shut down into protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: LSEP1279HNHB

5) Board Location Number Of Faulty Part(s): D202

6) Parts Failure Type: Isolation diode D202 shorted.

7) Shop Notes: n.a.

1) TV Model Number: DP50719

2) TV Failure Symptom: Brief start-up then shut down into protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: LSEP1279HNHB

5) Board Location Number Of Faulty Part(s): D301, D310

6) Parts Failure Type: Diodes D301/D310 shorted.

7) Shop Notes: n.a.

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1) TV Model Number: DP50719

2) TV Failure Symptom: Brief start-up then shut down into protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: LSEP1279HNHB

5) Board Location Number Of Faulty Part(s): IC301

6) Parts Failure Type: Mode control chip IC301 switching error.

7) Shop Notes: IC301 was not available. Entire SMPS board was replaced.

1) TV Model Number: DP50719

2) TV Failure Symptom: Brief start-up then shut down into protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: LSEP1279HNHB

5) Board Location Number Of Faulty Part(s): D212

6) Parts Failure Type: Diode D212 shorted.

7) Shop Notes: IC201 was replaced as a service precaution.

This concludes Sanyo Plasma TV Case History

## BONUS-2 Vizio LCD/LED TV Case History

## Vizio LCD/LED TV Models

1) TV Model Number:E321VL

2) TV Failure Symptom: TV stuck in stand-by mode (Amber light only)

3) Faulty Board: Main Board

4) Faulty Board Number: 3632-1732-0150

5) Board Location Number Of Faulty Part(s): U18

6) Parts Failure Type: Flash/EEPROM U18 serial clock errors pin 6.

7) Shop Notes: Flash/EEPROM U18 must be programmed before install.

1) TV Model Number: E321VL

2) TV Failure Symptom: TV shuts down randomly into stand-by mode

3) Faulty Board: Main Board

4) Faulty Board Number: 3632-1732-0150

5) Board Location Number Of Faulty Part(s): U18

6) Parts Failure Type: Flash/EEPROM U18 serial data errors pin 5.

7) Shop Notes: Flash/EEPROM U18 must be programmed before install.

1) TV Model Number: E321VL

2) TV Failure Symptom: Audio volume moving up by its self randomly

3) Faulty Board: Main Board

4) Faulty Board Number: 3632-1732-0150

5) Board Location Number Of Faulty Part(s): U18

6) Parts Failure Type: Flash/EEPROM U18 serial data loss pin 5, SMD cap C275 was also replaced.

7) Shop Notes: Flash/EEPROM U18 must be programmed before install..

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1) TV Model Number: E321VL

2) TV Failure Symptom: TV on, no back light, black screen only

3) Faulty Board: Main Board

4) Faulty Board Number: 3632-1732-0150

5) Board Location Number Of Faulty Part(s): U21

6) Parts Failure Type: Switching chip U21 no output switching voltage pin 1 and pin 3.

7) Shop Notes: n.a.

1) TV Model Number: E321VL

2) TV Failure Symptom: TV shows logo screen then screen stay's black, no back lights

3) Faulty Board: Main Board

4) Faulty Board Number: 3632-1732-0150

5) Board Location Number Of Faulty Part(s): U21

6) Parts Failure Type: Switching chip U21 shorted. Pin 1 shorted to pins 5, 6, 7, 8.

7) Shop Notes: R345 was out of value and replaced. F2 should have opened. F2 replaced

## as a service precaution.

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1) TV Model Number: E321VL

2) TV Failure Symptom: TV on, no back light, black screen only

3) Faulty Board: Main Board

4) Faulty Board Number: 3632-1732-0150

5) Board Location Number Of Faulty Part(s): F2, U21

6) Parts Failure Type: SMD fuse F2 open, switching chip U21 shorted pins 1, 5, 6, 7, 8.

7) Shop Notes: SMD Q14 was replaced as a service precaution.

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1) TV Model Number: E321VL

2) TV Failure Symptom: Back light on, then immediately turns off

3) Faulty Board: Inverter Board

4) Faulty Board Number: 27-D030801

5) Board Location Number Of Faulty Part(s): T4, R81

6) Parts Failure Type: inverter transformer T4 open at secondary end. SMD R81 out of

Ohm value.

7) Shop Notes: n.a.

1) TV Model Number: E321VL

2) TV Failure Symptom: TV turned on, back lights shut down after a few minutes

3) Faulty Board: Inverter Board

4) Faulty Board Number: 27-D030801

5) Board Location Number Of Faulty Part(s): U2

6) Parts Failure Type: Inverter control chip U2 had ERROR AMP faults.

7) Shop Notes: SMD R138 was out of Ohm value and replaced.

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1) TV Model Number: E321VL

2) TV Failure Symptom: Back flickers once, then shut down

3) Faulty Board: Inverter Board

4) Faulty Board Number: 27-D030801

5) Board Location Number Of Faulty Part(s): Q11, R12

6) Parts Failure Type: Switcher Q11 shorted, SMD resistor R12 out of Ohm value.

7) Shop Notes: n.a.

1) TV Model Number: E422VLE

2) TV Failure Symptom: TV on, no back lights, black screen only

3) Faulty Board: Main Board

4) Faulty Board Number: 3642-1242-0150

5) Board Location Number Of Faulty Part(s): U33

6) Parts Failure Type: Switching chip U33 shorted pins, 1, 5, 6, 7

7) Shop Notes: n.a.

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1) TV Model Number: E422VLE

2) TV Failure Symptom: TV on, no back lights, black screen only

3) Faulty Board: Main Board

4) Faulty Board Number: 3642-1242-0150

5) Board Location Number Of Faulty Part(s): U33, TF1, R381

6) Parts Failure Type: Switching chip U33 no out put voltage, fuse TF1 open, SMD R381 out of Ohm value.

7) Shop Notes: n.a.		

1) TV Model Number: E422VLE

2) TV Failure Symptom: Audio intermittently mutes on and off

3) Faulty Board: Main Board

4) Faulty Board Number: 3642-1242-0150

5) Board Location Number Of Faulty Part(s): U47

6) Parts Failure Type: Audio system chip U47 reset error pin 25.

7) Shop Notes: U47 gets very warm when used. A heat sink was mounted to extend chip life.

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1) TV Model Number: E422VLE

2) TV Failure Symptom: Brief power-up then shut down into protect mode

3) Faulty Board: SMPS/Inverter Board

4) Faulty Board Number: 0500-0405-1290

5) Board Location Number Of Faulty Part(s): D211

6) Parts Failure Type: Diode D211 shorted.

7) Shop Notes: n.a.

1) TV Model Number: E422VLE

2) TV Failure Symptom: Back light on briefly then shut down

3) Faulty Board: SMPS/Inverter Board

4) Faulty Board Number: 0500-0405-1290

5) Board Location Number Of Faulty Part(s): Q411, R412, R413

6) Parts Failure Type: Switcher Q411 shorted, SMD resistors R412/R413 out of Ohm

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7) Shop Notes: SMD resistors R412/R413 located under Q411.

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1) TV Model Number: E422VLE

2) TV Failure Symptom: Back light on briefly then shut down

3) Faulty Board: SMPS/Inverter Board

4) Faulty Board Number: 0500-0405-1290

5) Board Location Number Of Faulty Part(s): Q401, R403

6) Parts Failure Type: Switcher Q401 shorted, SMD resistor R403 out of Ohm value.

7) Shop Notes: n.a.

1) TV Model Number: E422VLE

2) TV Failure Symptom: Brief start-up then shut down into protect mode

3) Faulty Board: SMPS/Inverter Board

4) Faulty Board Number: 0500-0412-1030

5) Board Location Number Of Faulty Part(s): D220

6) Parts Failure Type: Diode D220 shorted.

7) Shop Notes: n.a.

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1) TV Model Number: E422VLE

2) TV Failure Symptom: Back light flicker once then shut down

3) Faulty Board: SMPS/Inverter Board

4) Faulty Board Number: 0500-0412-1030

5) Board Location Number Of Faulty Part(s): Q709, R711, R702

6) Parts Failure Type: Switcher Q709 shorted, SMD resistors R711/R702 out of Ohm value.
7) Shop Notes: n.a.
1) TV Model Number: E422VLE
2) TV Failure Symptom: No back-light then shut down
3) Faulty Board: SMPS/Inverter Board
4) Faulty Board Number: 0500-0412-1030
5) Board Location Number Of Faulty Part(s): T701A
6) Parts Failure Type: Inverter transformer T701A open at secondary end.
7) Shop Notes: Disc capacitors C401 and C401A were out of pF value and replaced.
<del>=====================================</del>
1) TV Model Number: E420VT
2) TV Failure Symptom: No start-up, protect mode only
3) Faulty Board: SMPS
4) Faulty Board Number: ADTVAQA24AAX
<ul><li>4) Faulty Board Number: ADTVAQA24AAX</li><li>5) Board Location Number Of Faulty Part(s): IC9101</li></ul>
5) Board Location Number Of Faulty Part(s): IC9101
<ul><li>5) Board Location Number Of Faulty Part(s): IC9101</li><li>6) Parts Failure Type: Resonant control chip IC9101 no switching pulse.</li></ul>
<ul><li>5) Board Location Number Of Faulty Part(s): IC9101</li><li>6) Parts Failure Type: Resonant control chip IC9101 no switching pulse.</li></ul>

4) Faulty Board Number: ADTVAQA24AAX

3) Faulty Board: SMPS

5) Board Location Number Of Faulty Part(s): F901, Q9801

6) Parts Failure Type: Main fuse F901 open, switcher Q9801 shorted.

7) Shop Notes: n.a.

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1) TV Model Number: E420VT

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: ADTVAQA24AAX

5) Board Location Number Of Faulty Part(s): F901, Q9801, D9802 C9810

6) Parts Failure Type: Fuse F901 open, switcher Q9801 shorted, diode D9802 shorted, disc cap C9810 shorted.

7) Shop Notes: Box capacitor C9908 was out of uF value and replaced.

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1) TV Model Number: E420VT

2) TV Failure Symptom: Brief start-up then shut down into protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: ADTVAQA24AAX

5) Board Location Number Of Faulty Part(s): D907, C9302

6) Parts Failure Type: Diode D907 shorted, electrolytic capacitor C9302 high ESR level.

7) Shop Notes: Fly-back switching chip IC9301 was replaced as a service precaution.

1) TV Model Number: E420VT

2) TV Failure Symptom: Brief start-up then shut down into protect mode

3) Faulty Board: SMPS

4) Faulty Board Number: ADTVAQA24AAX

5) Board Location Number Of Faulty Part(s): D904

6) Parts Failure Type: Diode D904 shorted.

7) Shop Notes: n.a.

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1) TV Model Number: E420VT

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS

4) Faulty Board Number: ADTVAQA24AAX

5) Board Location Number Of Faulty Part(s): F901, Q9801, D9802

6) Parts Failure Type: Fuse F901 open, switcher Q9801 shorted, diode D9802 shorted.

7) Shop Notes: Disc capacitor C9811 was out of pF value and replaced.

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1) TV Model Number: E420I-B0

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS/LED Board

4) Faulty Board Number: 0500-0607-0420

5) Board Location Number Of Faulty Part(s): F1, Q901, R923

6) Parts Failure Type: Main fuse F1 open, switcher Q901 shorted, resistor R923 open.

7) Shop Notes: n.a.

1) TV Model Number: E420I-B0

2) TV Failure Symptom: Brief start-up then shut down into protect mode

3) Faulty Board: SMPS/LED Board

4) Faulty Board Number: 0500-0607-0420

5) Board Location Number Of Faulty Part(s): D751

6) Parts Failure Type: Diode D751 shorted.

7) Shop Notes: Disc capacitor C757 was out of pF value and replaced.

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1) TV Model Number: E420I-B0

2) TV Failure Symptom: Partial start-up then shut down into protect mode

3) Faulty Board: SMPS/LED Board

4) Faulty Board Number: 0500-0607-0420

5) Board Location Number Of Faulty Part(s): IC901

6) Parts Failure Type: Switching IC901 error at switching pins.

7) Shop Notes: Switcher Q901 was replaced as a service precaution. IC901 located at flip

side of board.

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1) TV Model Number: E420I-B0

2) TV Failure Symptom: No audio on A/V

3) Faulty Board: Main Board

4) Faulty Board Number: 3642-1842-0150

5) Board Location Number Of Faulty Part(s): UA3

6) Parts Failure Type: Audio chip UA3 internal switching problems and very hot.

7) Shop Notes: SMD resistor RA21 was out of Ohm value and replaced.

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1) TV Model Number: E420I-B0

2) TV Failure Symptom: Loud snapping noises intermittently with audio sound

3) Faulty Board: Main Board

4) Faulty Board Number: 3642-1842-0150

5) Board Location Number Of Faulty Part(s): UA3

6) Parts Failure Type: Audio chip UA3 pins 1, 36, 33 distorted output audio signals.

7) Shop Notes: n.a.

1) TV Model Number: E420I-B0

2) TV Failure Symptom: Back light dimming problems

3) Faulty Board: Main Board

4) Faulty Board Number: 3642-1842-0150

5) Board Location Number Of Faulty Part(s): UP8

6) Parts Failure Type: Switching IC UP8 intermittent out put voltage at source pin.

7) Shop Notes: n.a.

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1) TV Model Number: E470-A0

2) TV Failure Symptom: Stuck in stand-by (Amber light only)

3) Faulty Board: Main Board

4) Faulty Board Number: 3647-0812-0150

5) Board Location Number Of Faulty Part(s): US5/US4

6) Parts Failure Type: Flash/EEPROM US5/US4 serial clock errors pin 6.

7) Shop Notes: Flash/EEPROM US5/US4 must be programmed before install.

1) TV Model Number: E470-A0

2) TV Failure Symptom: Power-up then stuck on start-up screen logo

3) Faulty Board: Main Board

4) Faulty Board Number: 3647-0812-0150

- 5) Board Location Number Of Faulty Part(s): US5/US4
- 6) Parts Failure Type: Flash/EEPROM US5/US4 dead at pin 5 SDA.
- 7) Shop Notes: Flash/EEPROM US5/US4 must be programmed before install.

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- 1) TV Model Number: E470-A0
- 2) TV Failure Symptom: TV randomly shuts down into stand-by mode
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 3647-0812-0150
- 5) Board Location Number Of Faulty Part(s): US5/US4
- 6) Parts Failure Type: Flash/EEPROM US5/US4 serial clock and SDA errors pins 5, and

6.

7) Shop Notes: Flash/EEPROM US5/US4 must be programmed before install.

- 1) TV Model Number: E470-A0
- 2) TV Failure Symptom: Intermittent picture when using RF tuner coaxial
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 3647-0812-0150
- 5) Board Location Number Of Faulty Part(s): UT4
- 6) Parts Failure Type: Tuner module UT4 cold solder joint at RF threaded jack pin inside tuner box.
- 7) Shop Notes: n.a.

- 1) TV Model Number: E470-A0
- 2) TV Failure Symptom: Static audio on Component and A/V inputs
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 3647-0812-0150

- 5) Board Location Number Of Faulty Part(s): UA1
- 6) Parts Failure Type: Audio chip UA1 half bridge internal errors at output pins, and hot.
- 7) Shop Notes: n.a.

- 1) TV Model Number: E470-A0
- 2) TV Failure Symptom: Dead, no Stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: 0500-0614-0270
- 5) Board Location Number Of Faulty Part(s): FP801S, QS802S,
- 6) Parts Failure Type: Main fuse FP801S open, switcher QS802S shorted.
- 7) Shop Notes: Disc capacitor CS808 was out of pF value and replaced.
- 1) TV Model Number: E472VLE
- 2) TV Failure Symptom: No audio from HDMI and A/V inputs
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 3647-0722-0150
- 5) Board Location Number Of Faulty Part(s): UA2
- 6) Parts Failure Type: Audio chip UA2 no output signal, internal error.
- 7) Shop Notes: n.a.

- 1) TV Model Number: E472VLE
- 2) TV Failure Symptom: Turn TV on, then immediate shut down into protect mode
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 3647-0722-0150
- 5) Board Location Number Of Faulty Part(s): FP2

- 6) Parts Failure Type: SMD fuse FP2 open.
- 7) Shop Notes: Audio chip UA2 was unusually hot and replaced. Entire main board replaced from other faults.

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- 1) TV Model Number: E472VLE
- 2) TV Failure Symptom: Brief start-up then immediate shut down into protect mode
- 3) Faulty Board: SMPS/Inverter Board
- 4) Faulty Board Number: 0500-0412-1290
- 5) Board Location Number Of Faulty Part(s): D101
- 6) Parts Failure Type: Diode D101 shorted.
- 7) Shop Notes: Linear chip U101 was replaced as service precaution.

- 1) TV Model Number: E472VLE
- 2) TV Failure Symptom: No back light
- 3) Faulty Board: SMPS/Inverter Board
- 4) Faulty Board Number: 0500-0412-1290
- 5) Board Location Number Of Faulty Part(s): Q707, R713
- 6) Parts Failure Type: Switcher Q707 shorted, SMD resistor R713 out of Ohm value.
- 7) Shop Notes: Switcher Q709 was replaced as a service precaution.

- 1) TV Model Number: E472VLE
- 2) TV Failure Symptom: No start-up, stand-by only
- 3) Faulty Board: SMPS/Inverter Board
- 4) Faulty Board Number: -0500-0407-0700
- 5) Board Location Number Of Faulty Part(s): IC900

- 6) Parts Failure Type: Switching chip IC900 no square-wave from switching pins. Dead.
- 7) Shop Notes: IC900 was not available. Entire SMPS/Inverter board was replaced.
- 1) TV Model Number: E472VLE
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: SMPS/Inverter Board
- 4) Faulty Board Number: 0500-0407-0700
- 5) Board Location Number Of Faulty Part(s): F1, Q802, IC801
- 6) Parts Failure Type: Fuse F1 open, switcher Q802 shorted, PWM chip IC801 dead/charred.
- 7) Shop Notes: IC801 was replaced using identical chip from another compatible SMPS board.
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- 1) TV Model Number: E500I-B1E
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: ADTVDY481XAE1
- 5) Board Location Number Of Faulty Part(s): F9901, Q9100, R9111
- 6) Parts Failure Type: Main fuse open, switcher Q9100 shorted, resistor R9111 out of Ohm value.
- 7) Shop Notes: n.a.

- 1) TV Model Number: E500I-B1E
- 2) TV Failure Symptom: Dead, no stand-by
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: ADTVDY481XAE1
- 5) Board Location Number Of Faulty Part(s): F9901, Q8100, Q9100, R9107

- 6) Parts Failure Type: Fuse F9901 open, switcher Q8100 shorted, SMD resistor R9107 out of Ohm value.
- 7) Shop Notes: Switching chip IC9100 was replaced as a service precaution.
- 1) TV Model Number: E500I-B1E
- 2) TV Failure Symptom: Brief start-up then shut down into protect mode
- 3) Faulty Board: SMPS
- 4) Faulty Board Number: ADTVDY481XAE1
- 5) Board Location Number Of Faulty Part(s): D9104
- 6) Parts Failure Type: Diode D9104 shorted.
- 7) Shop Notes: n.a.

- 1) TV Model Number: E500I-B1E
- 2) TV Failure Symptom: Audio and back lights with no picture, no menu screen
- 3) Faulty Board: T-Con
- 4) Faulty Board Number: 55.50T10.C01
- 5) Board Location Number Of Faulty Part(s): F101
- 6) Parts Failure Type: SMD fuse F101 open.
- 7) Shop Notes: n.a.

- 1) TV Model Number: E500I-B1E
- 2) TV Failure Symptom: Grainy picture, color over saturated
- 3) Faulty Board: T-Con
- 4) Faulty Board Number: 55.50T10.C01
- 5) Board Location Number Of Faulty Part(s): U400
- 6) Parts Failure Type: Buffer chip U400 bad VCOM CF signal I/O.

7) Shop Notes: U400 was not available. Entire T-con board was replaced. 1) TV Model Number: E500I-B1E 2) TV Failure Symptom: Audio and back lights with no picture, no menu screen 3) Faulty Board: T-Con 4) Faulty Board Number: 55.50T10.C01 5) Board Location Number Of Faulty Part(s): F101, D111 6) Parts Failure Type: SMD fuse F101 open, SMD diode D111 shorted. 7) Shop Notes: n.a. 1) TV Model Number: E5001-A0 2) TV Failure Symptom: Brief start-up then shut down into protect mode 3) Faulty Board: SMPS/LED Driver Board 4) Faulty Board Number: 0500-0614-0280 5) Board Location Number Of Faulty Part(s): DS814 6) Parts Failure Type: Isolation diode DS814 shorted. 7) Shop Notes: n.a. 1) TV Model Number: E5001-A0

2) TV Failure Symptom: Brief start-up then shut down into protect mode

3) Faulty Board: SMPS/LED Driver Board

4) Faulty Board Number: 0500-0614-0280

5) Board Location Number Of Faulty Part(s): DS802

6) Parts Failure Type: Diode DS802 shorted.

7) Shop Notes: Diode DS814 was replaced as a service precaution.

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1) TV Model Number: E5001-A0

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS/LED Driver Board

4) Faulty Board Number: 0500-0614-0280

5) Board Location Number Of Faulty Part(s): FP 801S, FP802S, QP801S, DS809,

6) Parts Failure Type: Main fuse FP801S open, switcher QP801S shorted, diode DS809 shorted.

7) Shop Notes: Disc capacitor CP818 was out of pF value and replaced.

1) TV Model Number: E5001-A0

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS/LED Driver Board

4) Faulty Board Number: 0500-0614-0280

5) Board Location Number Of Faulty Part(s): FP801S, QS802S, DS806,

6) Parts Failure Type: Fuse FP801S open, switcher QS802S shorted, diode DS806 shorted.

7) Shop Notes: SMD resistor RS812 was out of Ohm value and replaced. RS812 located under QS802S.

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1) TV Model Number: E5001-A0

2) TV Failure Symptom: Dead, no stand-by

3) Faulty Board: SMPS/LED Driver Board

4) Faulty Board Number: 0500-0614-0280

- 5) Board Location Number Of Faulty Part(s): FP801S, QS802S, RS812, RS808
- 6) Parts Failure Type: Fuse FP801S open, switcher QS802S shorted, resistors RS812/RS808 out of Ohm value.
- 7) Shop Notes: SMD resistors RS812, and RS808 located under QS802S.

1) TV Model Number: E5001-A0

2) TV Failure Symptom: Brief start-up then shut down into protect mode

3) Faulty Board: SMPS/LED Driver Board

4) Faulty Board Number: 0500-0614-0280

5) Board Location Number Of Faulty Part(s): D9102A

6) Parts Failure Type: Diode D9102A shorted.

7) Shop Notes: n.a.

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1) TV Model Number: GV52LFHDTV10A

2) TV Failure Symptom: No start-up, (Amber light only)

3) Faulty Board: Main Board

4) Faulty Board Number: 3652-0022-0150

5) Board Location Number Of Faulty Part(s): U17

6) Parts Failure Type: EEPROM U17 bad serial data stream pin 6.

7) Shop Notes: EEPROM U17 must be programmed before install.

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1) TV Model Number: GV52LFHDTV10A

2) TV Failure Symptom: TV shuts down randomly into stand-by mode

3) Faulty Board: Main Board

4) Faulty Board Number: 3652-0022-0150

- 5) Board Location Number Of Faulty Part(s): U17, Q48
- 6) Parts Failure Type: EEPROM U17 Vcc errors at pin 8, SMD MOSFET Q48 no source voltage.
- 7) Shop Notes: EEPROM U17 must be programmed before install.

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- 1) TV Model Number: GV52LFHDTV10A
- 2) TV Failure Symptom: TV stuck in protect mode (Amber light blinking)
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 3652-0022-0150
- 5) Board Location Number Of Faulty Part(s): U17
- 6) Parts Failure Type: EEPROM U17 dead at pin 6 SCL serial clock.
- 7) Shop Notes: EEPROM U17 must be programmed before install.

- 1) TV Model Number: GV52LFHDTV10A
- 2) TV Failure Symptom: Black screen only no audio
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 3652-0022-0150
- 5) Board Location Number Of Faulty Part(s): U8, U1
- 6) Parts Failure Type: LDO regulator U8 no output voltage, switching chip U1 shorted at drain, source pins.
- 7) Shop Notes:

- 1) TV Model Number: GV52LFHDTV10A
- 2) TV Failure Symptom: TV on with audio no back light
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 3652-0022-0150

- 5) Board Location Number Of Faulty Part(s): F2, U1
- 6) Parts Failure Type: SMD fuse open, switching chip U1 shorted at drain, source pins.
- 7) Shop Notes: Electrolytic capacitor CE4 had high ESR level and replaced.

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- 1) TV Model Number: GV52LFHDTV10A
- 2) TV Failure Symptom: Blue screen only, no sound
- 3) Faulty Board: Main Board
- 4) Faulty Board Number: 3652-0022-0150
- 5) Board Location Number Of Faulty Part(s): U32, U33
- 6) Parts Failure Type: Switching chip U32 no output voltage, LDO regulator output voltage error.
- 7) Shop Notes: n.a.

This concludes Vizio LCD/LED TV Case History