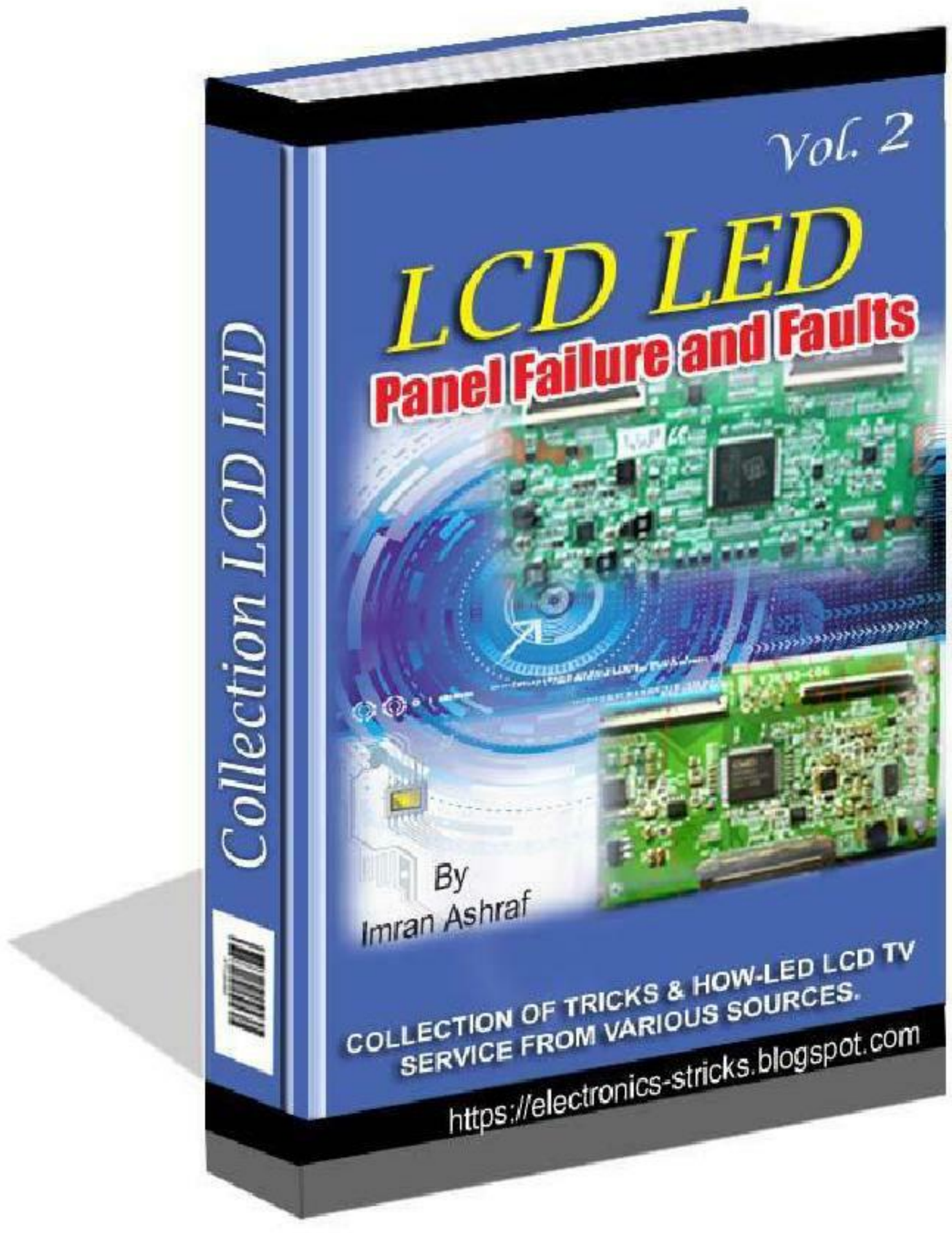
LCD LED T.V Modification and Major Repairs 2

By Imran Ashraf Khan



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Dedication

This E-book Dedicate to my late father Muhammad Ashraf, my Sweet family and my Friends around the globe and My Pakistani best friend Naseeb Jan they all helps me and supports me a lot for preparation this great e-book, Thanks all of you.

Awareness Note

The information in this newsletter is published for experienced repair technicians only and is not intended for use by the public. It does not contain warnings to advise non-technical individuals of the dangers that exist when servicing a product. Only experienced professional technicians should repair products powered by electricity. Any attempt to service or repair a product or products using the information in this newsletter by anyone other than a trained professional technician could result in serious injury or death. Information provided in this bulletin is subject to change or update without notice.

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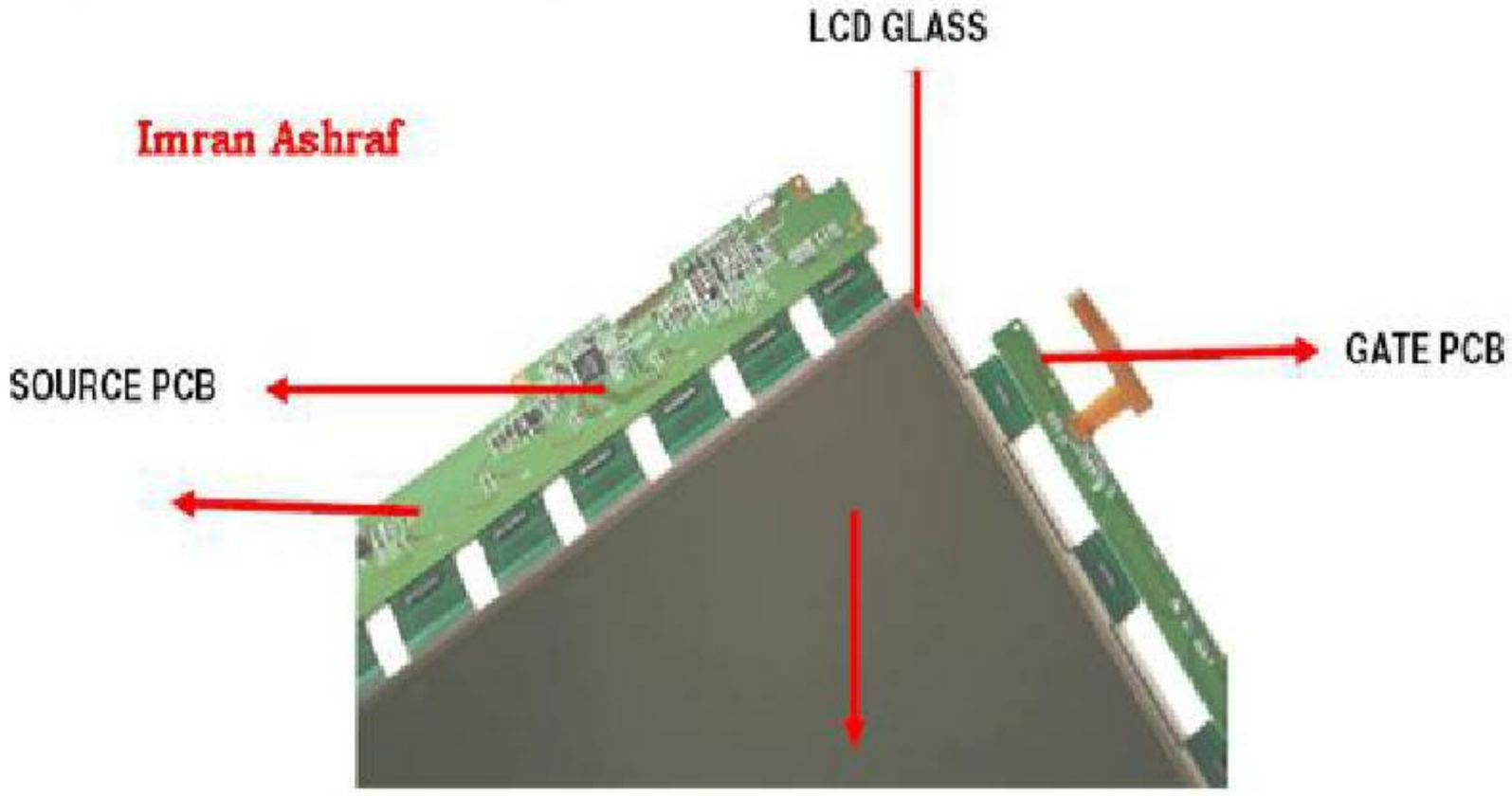
LCD Panel Repair

only Specilist can repair LCD TFT panels from 3,5 inch up to 32 inch. LCD panels in these sizes are used on Laptop, mobile phones, computers, televisions, industry machine and other digital equipment.



Polarizer Film Replacement

This polarizer is a film that is applied to the front of lcd panel.
Polarizer film provides deeper looking colors; permits a wider viewing angle in brighter environments; increases surface transmission; protects panels from fingerprints and scratches.The front polarizing film is often damaged due to accidents or abuse, seen as scratches on the front of the screen. The film must be stripped to the bare glass and the screen cleaned and prepared for reapplication of the new polarizing film. Both the removal and subsequent reapplication of polarizing film need to be conducted under stringent antistatic conditions. (class 10.000 cleanroom). This process is materialized in dust-free area which is inside of cleanroom.

Polarizer film is to be covered in front and back of glass substrate.

Polarizer film which is in front of glass substrate is the division that is seen by user. Usually, On this polarizer film is occured scratch, damaged, torn, melting of polarizer film with spilling over hot liquid. In this case, polarizer film needs to be replacement.

Polarizer film which is back of Lcd glass substrate shows the melting in the course of time because of temperature of inside of LCD glass. In this respect,User will realize like defectiveness of contrast and color , unclear image,...etc. In this case, polarizer film needs to be replacement.

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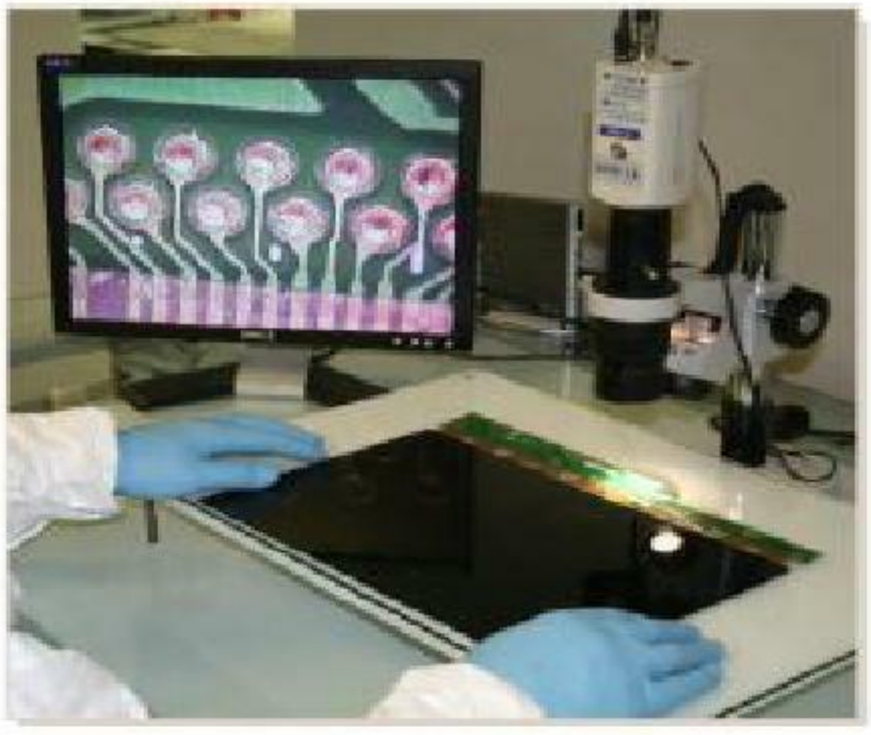

TCP/TAB Replacement

Horizontal or vertical lines on the screen are a common failure caused by poor solder connections, failed driver ICs and poor bonding of the ICs to conductive traces on the glass.
Disappeared image , lacking color, black image as vertical and horizontal block on LCD panel can occured on your LCD monitors, Laptops and/or LCD TV.
In this case, TCP/TAB driver needs to be replacement. TCP/TAB Driver are replaced by our specialized staffs in our LCD laboratory.
TCP/TAB driver replacement process requires specialized equipment for pulseheated anisolm-chemicals. Our proprietary equipment is able to execute tight process control over heat and pressure profiles precision positioning and aligment because of our advance computerized control heat sealed equipment.

GATE PCB
GATE DRIVER IC
LCD GLASS
POLARIZER FILM
SOURCE PCB
SOURCE
DRIVER IC

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LCD Panel Damages In New Models

Today many T.con which has become an integral and stick to the top of the LCD panel, so that damage to the same meaning T.con damaged panel.

The symptoms are visible damage include:

- Raster blank and white backlight only.
- Raster dark, but the backlight turns on
- One color is missing or sometimes missing
- Image blur or smudged

To ensure the kind of damage like this, then you needs to do is;

- Check if the voltage of 5v already entered on the LVDS cable
- Check the image signals in LVDS connector using an oscilloscope. If all signals no means a damaged panel.
- To locate the 5v pin and pin LVDS connector image signal, it is necessary to look at the schematic diagram

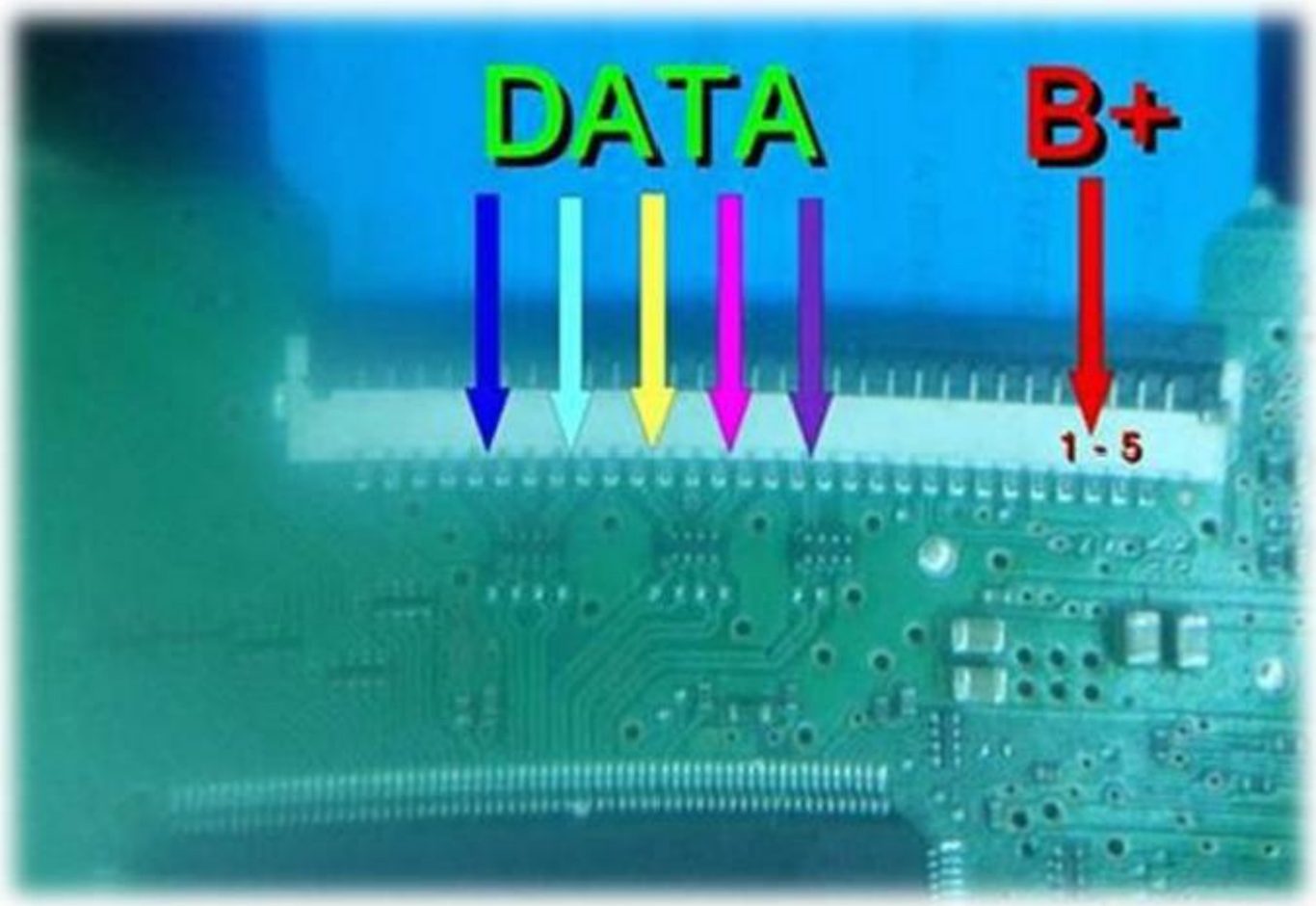
But before to make sure the panel is damaged, and then try to check FUSE chip attached to T.con, maybe the problem is only caused the fuse is broken. Fuse is located usually close to the value * with LVDS connector 2A. Replace the fuse with a piece of soft piece of fiber cable.

Different Types of Problem

Examples LVDS connector pin-out:

Broken Fuse is located usually close to the value * with LVDS connector 2A. Replace the fuse with a piece of soft piece of fiber cable.

In some Models Pin Data shows like this



Examples LVDS connector 30 pin-out

PIN No.	Description	PIN No.	Description
1	No Connection	16	GND
2	No Connection	17	RxIN3-
3	No Connection	18	RxIN3+
4	GND	19	GND
5	RxIN0-	20	GND
6	RxIN0+	21	LVDS OPTION (Note 1)
7	GND	22	No Connection
8	RxIN1-	23	GND
9	RxIN1+	24	GND
10	GND	25	GND
11	RxIN2-	26	Vin
12	RxIN2+	27	Vin
13	GND	28	Vin
14	RxCLK-	29	Vin
15	RxCLK+	30	Vin

- Vin is the input voltage of 5v
- The location of the image signal that needs to be checked with an oscilloscope is in0 - Rx / Rx to Rx in3 - IN0 + / Rx + and RxCLK - in3 / RxCLK +.

Samsung LE40D550K1W Use Panel LTF400HM03.

Set Works only 15 to 30 minutes and starts shaking, doubling vertically image. Meditate on strips of glass with your fingers found that the broken drivers are on the right bar.

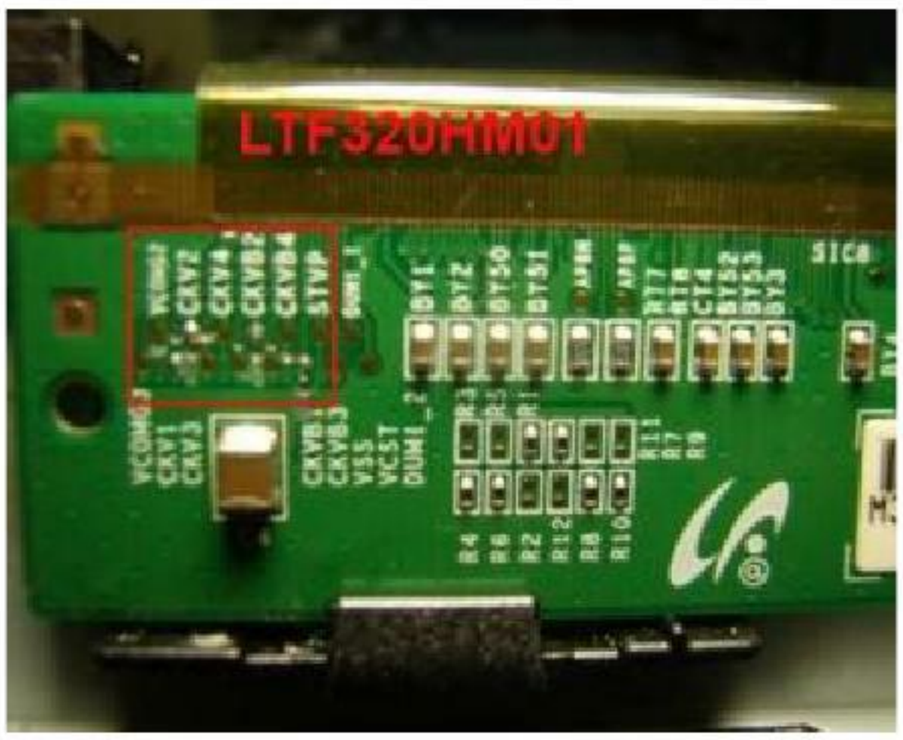
CURE

Use 8mm tape for isolation of contacts on the right side of the right (the matrix glass top) trail from the T-CON See the Picture right side circle of red.

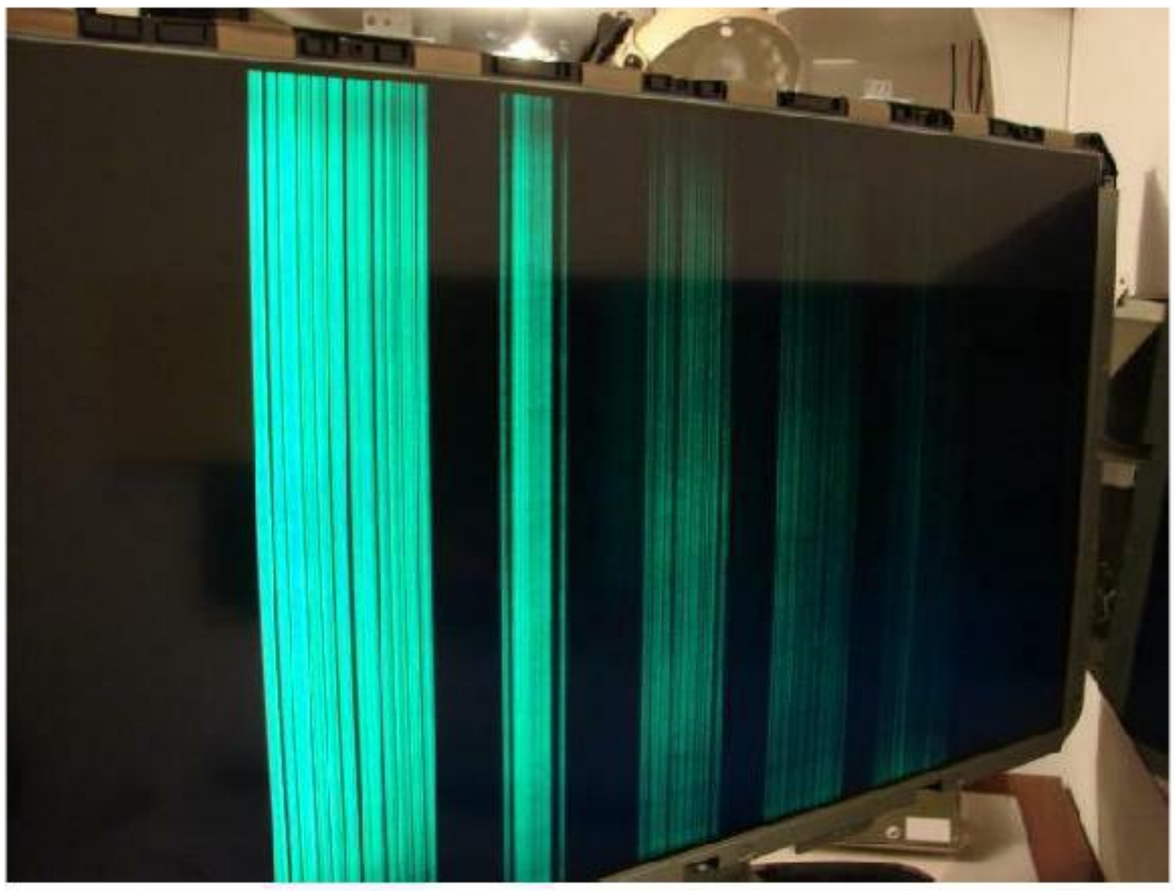
Panel LTF320HM01

Fault Twitching frames

Do not become a deal and cut off on the right bar: CKV1 CKV2 CKV3 CKV4 CKVB1 CKVB2 CKVB3 CKVB4 image fully restored.



Toshiba 40LV833G Panel V400H1-L10, T-CON: V400H1 on CM2688A; 24C128; CM501.



Fault

Vertical slowly moving band No pulse STV on 64pin CM2688A. Loop disconnect from the Panel for a short in it. Himself conclusion to call normal I decided that this chip is defective, or the configuration will set the port via firmware EEPROM U2. CM2688A and EEPROM firmware is not found. 64pin to 3v3 pulled through resistor 8k2 and the momentum appeared. At run TV worked.

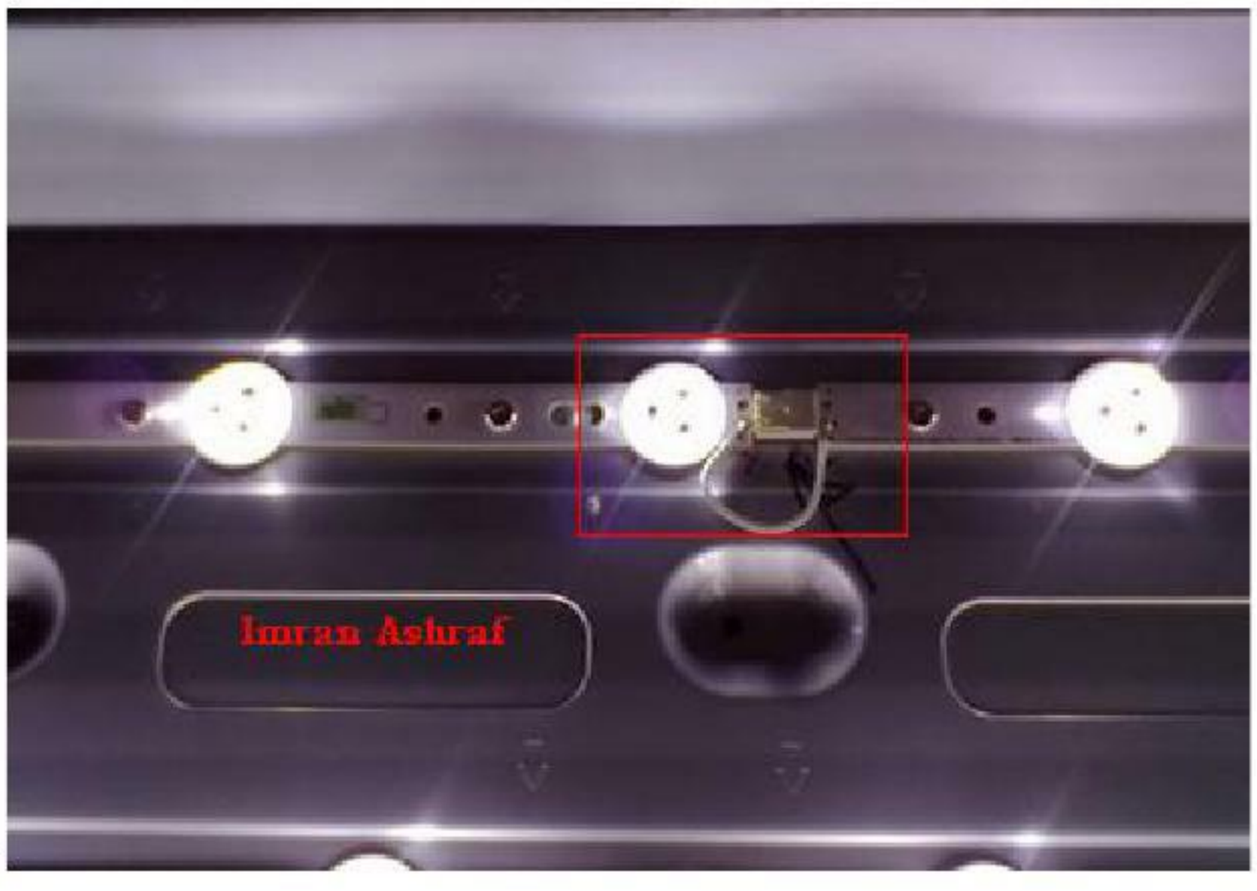
Test Case TV LED T.V Philips 40PFL3107, Panel LTA400HM23

Problem

This is the test case and you can fix problem like this method id different kind of LEDs tv

Lost LED Lights while working (the image is viewed at external observation Invertor led built into the panel.

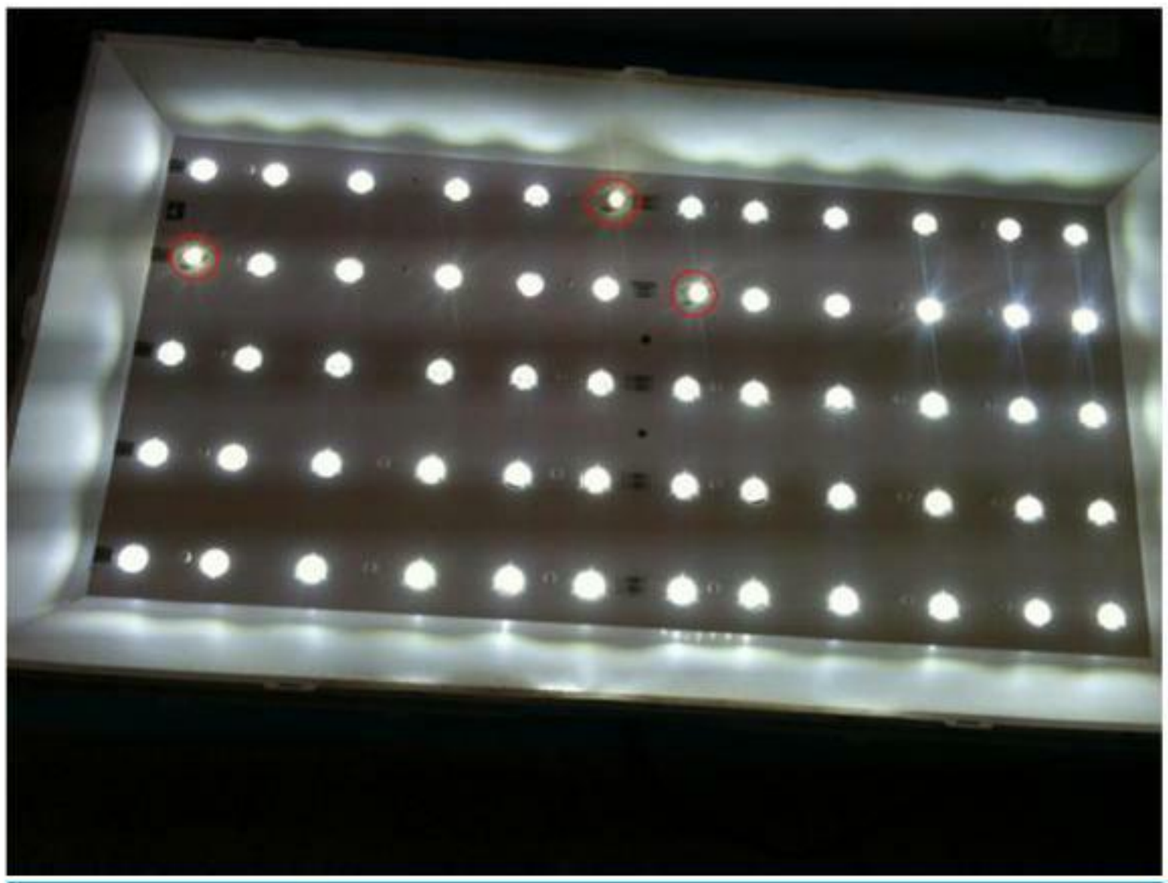
In the analysis of the panel revealed that there is no contact in the plug that connects the center of the upper limit of the LEDs. Defect localized using measuring voltages each strip Pre voltage on the non-inclusion of the bar was much higher than and 7V in rabochih.24V respectively

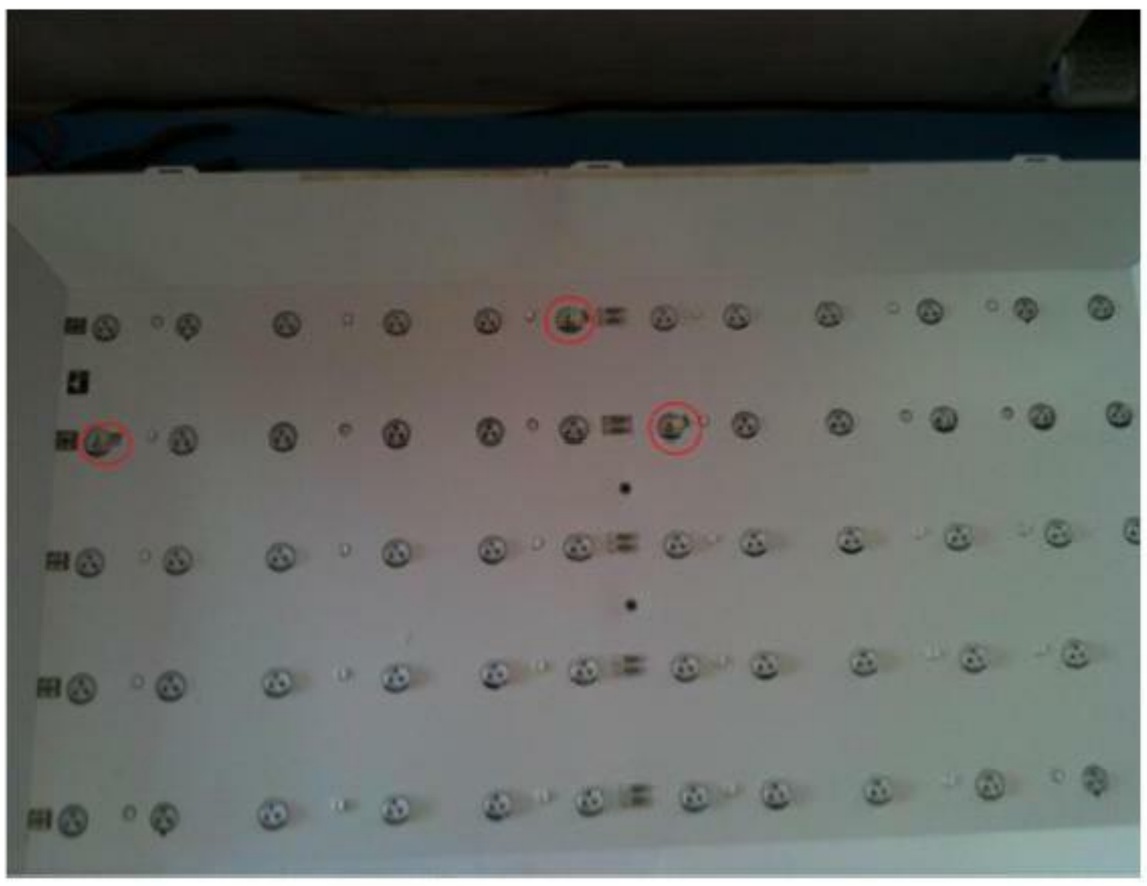


Cure: Duplicate with jumper wire like bridge and duplicate all of the joint bars, to avoid repetition of the problem.

Test Case of LED backlight of Samsung

Dark background not perfect light see the picture.





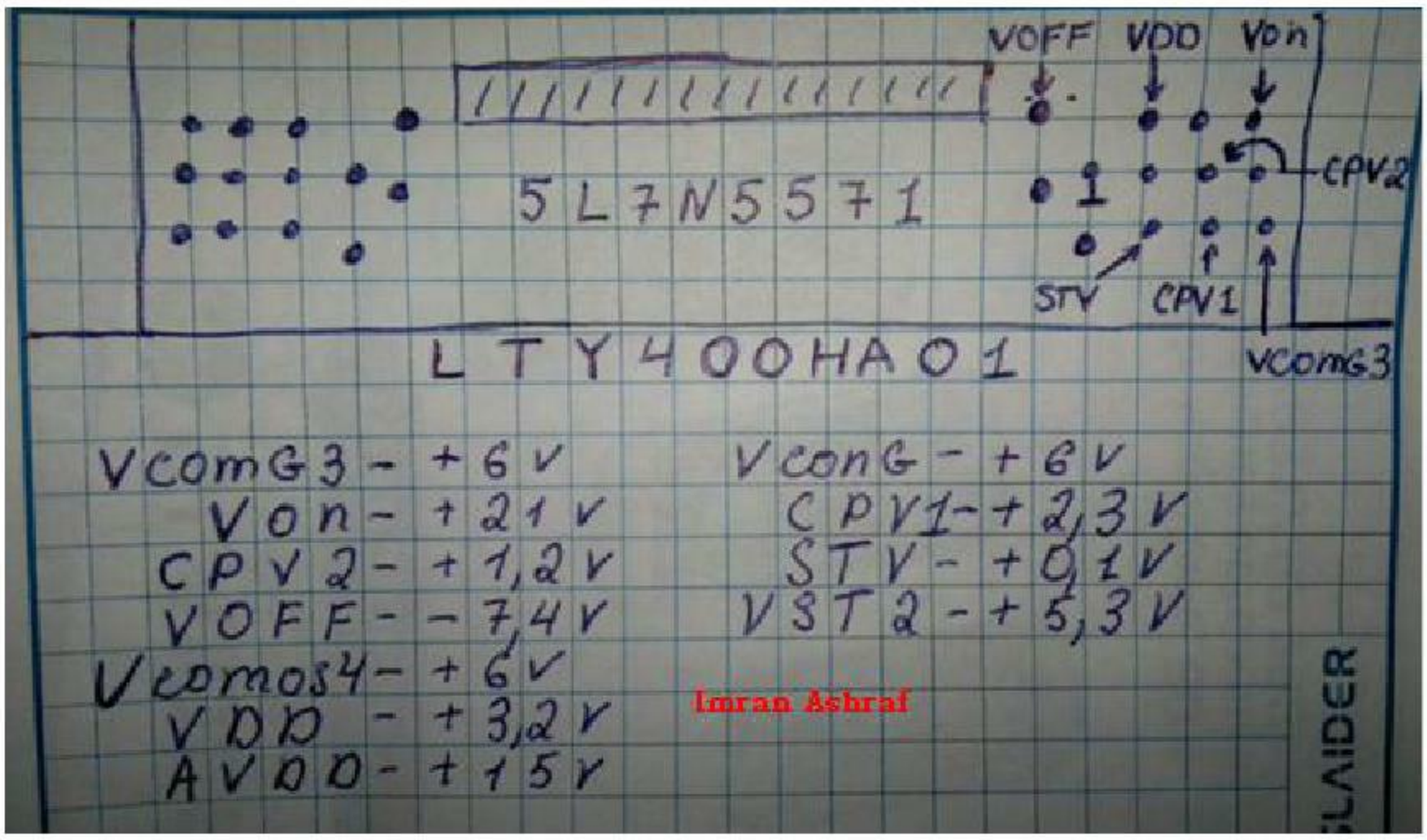
After replacing these Backlight LEDs T.V works well.

Sony KDL-40D3500 Panel LTY400HA01

Tab Mark 5L7N5571

Fault: Defect with the heating-jump shots on the right side of the raster.

Cure Duplication wires on points STV, CPV1, VcomG3, CPV2, Von, Voff as shown in picture.

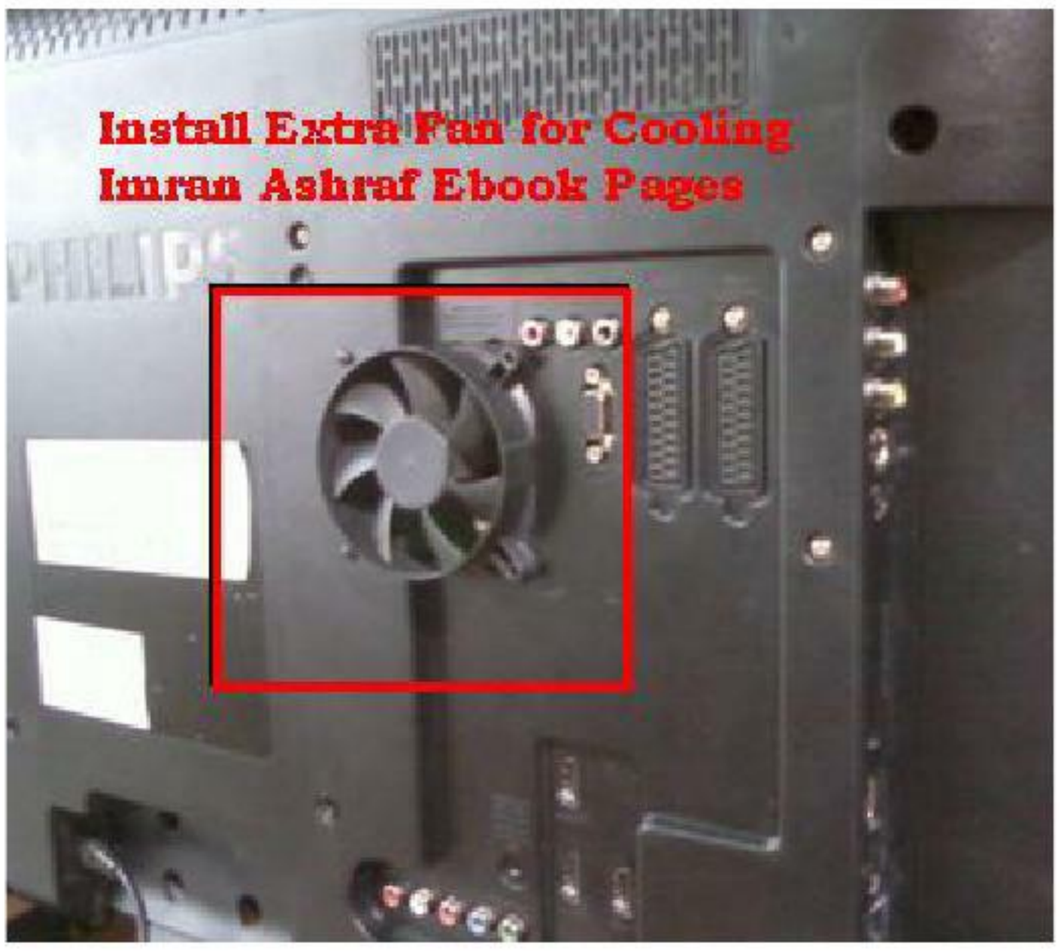


PHILIPS 32PFL7404H / 12 chassis Q548.1E LA image disappears after 10 minutes working

Description Panel SHARP LK315D3LZ93 MAIN Board PNL 3139 123 64422 3139 123 64432 BD Wk906.5 Processor: PNX85439EH24180, Scalar: PNX5100EH / A4 / S1- serial Flash: 25P05VP HDMI: TDA9996HL / C1 Tuner: HD1816AF / BHXP-3 T-CON : SHARP CPWBX RUNTK

4163TP -0001 T6UH2XBG THV3056 MAX17079 PSU: PLHL-T826B

After 10 minutes normal operation of the image appears horizontal and vertical strips with a sharp image and the appearance of darkening vertical stripes, scalar PN5100EH heated to 70 degrees when reclosing after complete cooling, the defects occur. Forced by cooling to eliminate the defect

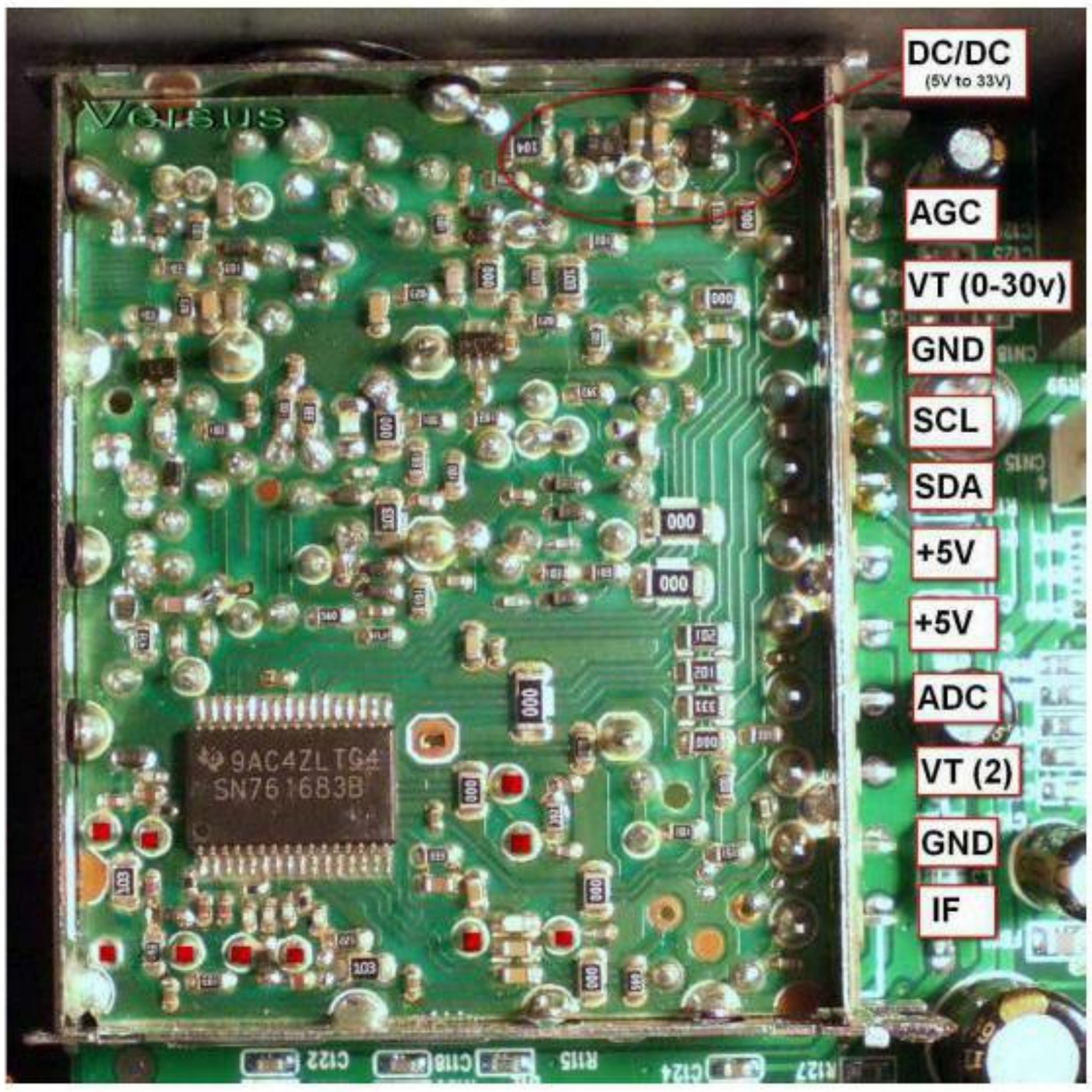


Modification Use Power cooler Fan and install it from the back side of TV connect directly from the connector on the PSU-CN8, pin. Fan PWM (+ 24V) via the IMS stub 7812 for 12v regulation and test the unit in Demonstration 48 hours without showing the defect.

LCD Samsung (No name China) chassis 2025L V1.3

Defect "floats" settings there is a deterioration of the image until the breakdown. Adjusting the image restores, but not for long. The tuner is AFT7 / W001G (QINGJIA) - C digital tuning (frequency synthesis) and theoretically no drift should not be.

Problem solved circuit inductance and quartz crystal oscillators (see. point marked in the photo).



Hyundai H-LCD2418 sound problems (lost appears)

Ingredients: VLF - SA7454 percent TSUMV26KE-LF

Problem Gradually disappearing sound. Sometimes it can work all day, and sometimes the volume lost in 15-30 minutes of work or no immediately when switched on. The voltage at 8noge SA7454 changing from 12.1 to 5.5V or if there is no sound hanging around 5c. If the TV is turned off for 10 minutes and then on again, the sound can appear. It requires replacement processor TSUMV26KE-LF. The data processor problem, often die, different fault ... After replacing the processor heat sink is desirable to set.

Modification If the processor is not available, then the defect can be eliminated by installing a resistor of 20 to 100 ohms between the 7th and 8th pin of SA7454

Sony KDL-40S4000 No image.

COMPOSITION: Panel LTZ400HA07 T-CON: 400HAC2LV3.0

MAIN Board: 603N4007-02R backlight works No image and no OSD. Blown fuse FP1 3A on the T-CON. KZ the point AVDD, broken ceramic capacitor C14 10mkf After replacing the image appeared.

LCD Akira LCT-32V82ST Negative Image

Panel LTA320WT-L05 MAIN: JUG7.820.121 Ver1.01 percent .SVP AX68 7668 LF A FBB02 QH8Y0 0812 / TAIWAN 20GFB803F525002 RAM HY5DU281622FTP-4 74HCT4052D L7H4H601 PS201 U08AST MPR5N 74VLC14AD Eeprom - 24LC64 Flash - 25X80VSIG. 24s02B x3 Tuner: AFT7 / W103G T-CON : 320WTLF3C2LV0.3 Inverter : HS320WK12 PSU : FSP205-4E03 According to the customer, before the last shutdown was vertical green stripes on the screen. " The autopsy found in PD 2 swollen electrolyte 2200mkF 10B - replaced. TV is switched on. The signal from the antenna Black and white image with a touch of sepia In the menu a color but with glitches On the AV switch mode also the same On the other inputs are not checked. I tried for Chassis ELT-01 STV-LC3204WD percent. SVP-AX68-7668LF

Mute> Menu> Sound> Balance> OK> 3138 must go, was on the same chassis VESTEL with the same problem, it helped to change the type of Panel

Problem not solved by service mode does not support:

Cure: Put a clean or blank 24LC64 everything works fine.

SAMSUNG LE26R71B Chassis GBD26KE

Description MAIN: 00311679 PCB BN94-00847C (BN41-00680D)

Tuner: BN40-00079A T-CON: T315XW01_V5 AUO-016K1 EM638325TS-6G

Inverter: VIT71008.91 BP: BN96-03058A ICS801S: VIPer22A ICP801S = 4863-2

ICM852: MC33167T

Problem TV does not switch. Not start, LED on the front panel flickers. The PSU was blown Ics801s (VIPer 22A), FS802 fuse and zener dzc804 ab, Fuse FS802 chip and Ics801s (VIPer 22A) as well as all capacitors, optocouplers and chip ICP801S (4863-2) I replaced.

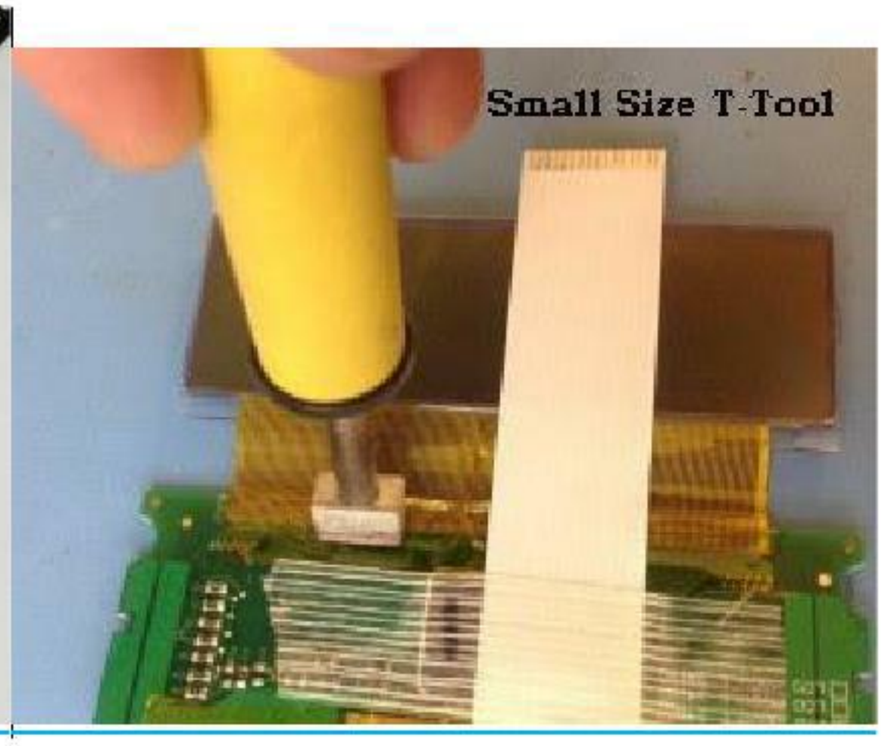
The result: instead of the supply voltage - 6.5V float voltage 9-12V there, on the banks of a stable voltage 300V, on Ics801s (VIPer 22A) Pin 1. - 0V Pin 2.0V Pin 3 0v Pin 4-floats 0-20v,

to 5,6,7,8 on the tester rolls over 1000V.

Cure: Diode DS851 (SR510) soldered vice versa replace Fuse FS802, Ics801s (VIPer 22A), optocoupler PC804S (TLP421) and resistor rs813 (4.7 ohm)

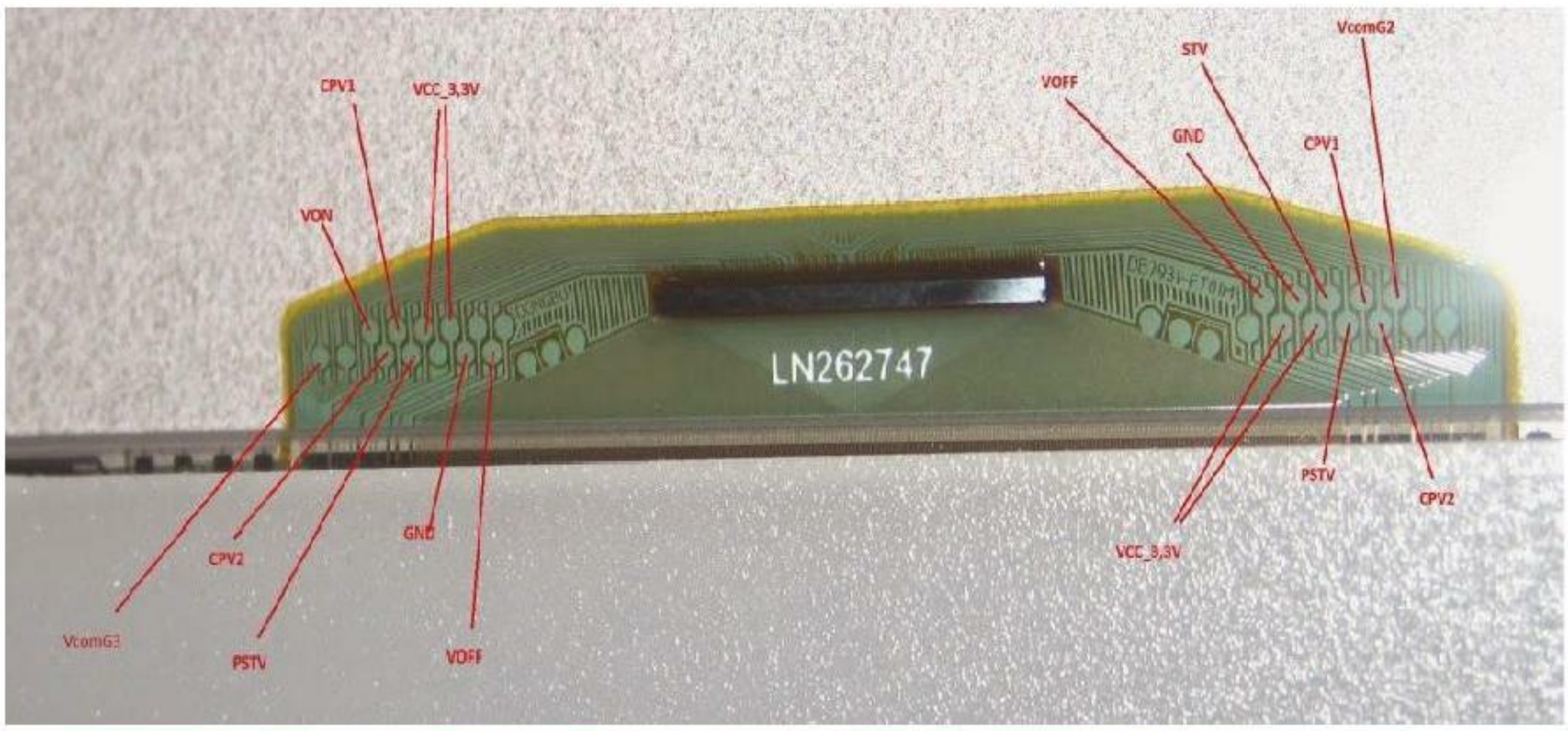
Thermal Pressing Tool for LCD LED TV Panel Tabs Pressing

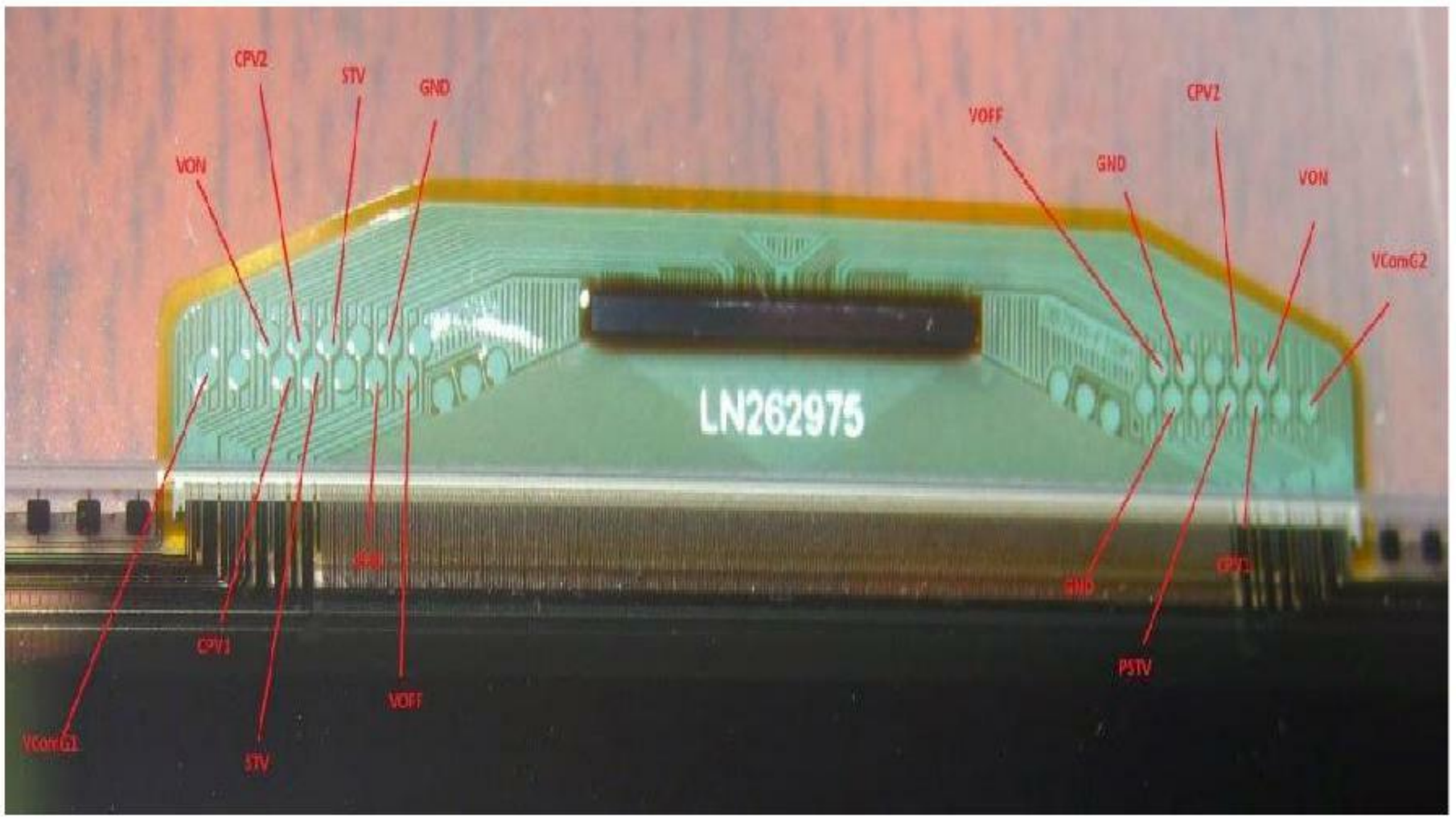
Here we show you the very important and handy tool in LCD LED Tv panel repair for Tabs pressing and it's called Thermal Pressing tool or Iron T-Tool.

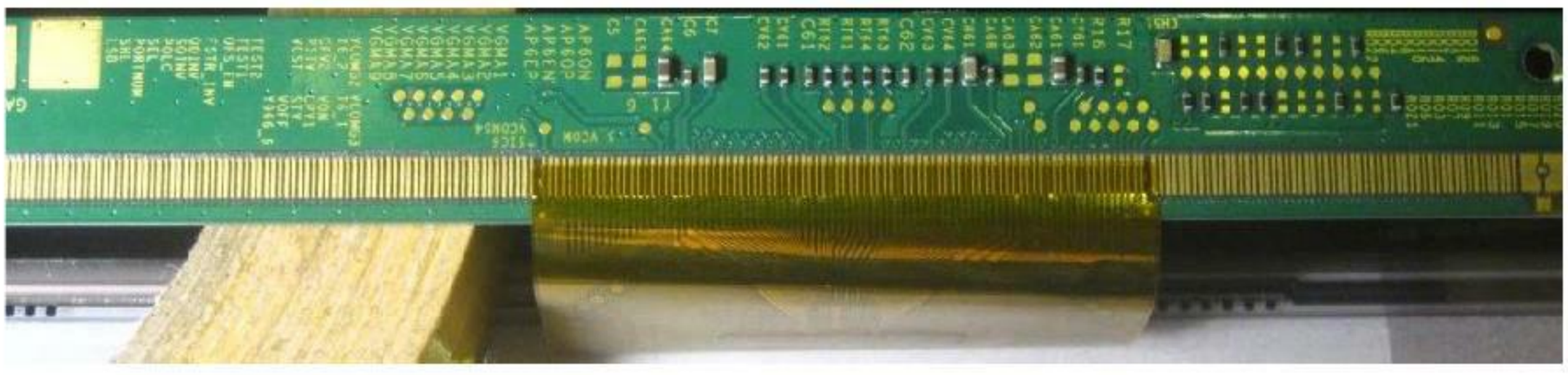


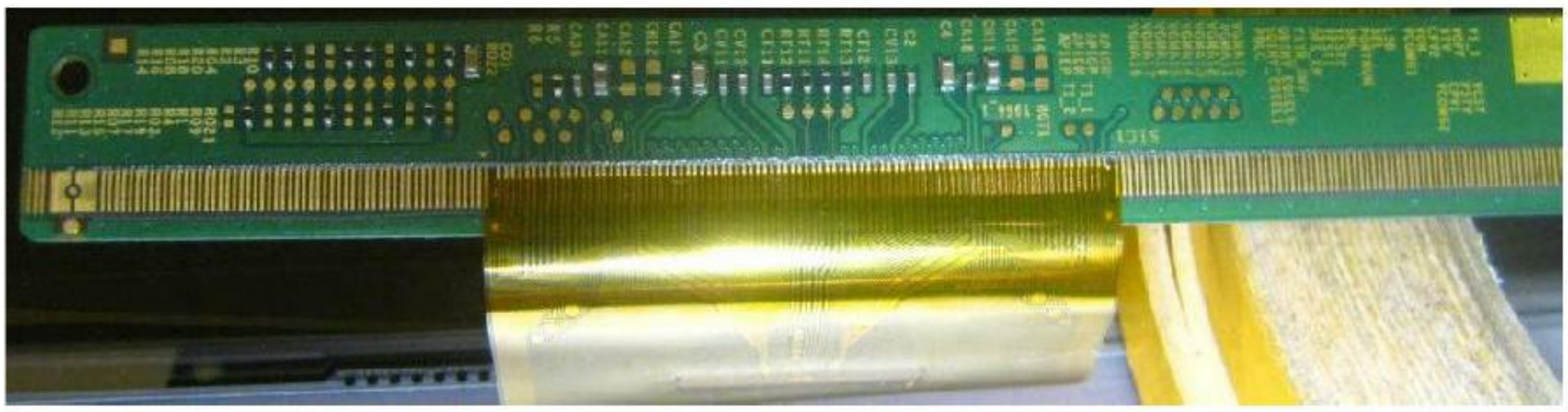
TV TOSHIBA 46ML963RB, Panel LTA460HW04

Information of LTA460HW04 Panel connections Pads DB7931-FT01M LN262747 (left side, the view from the inside, the lower Tab), LN262975 (right side, the view from the inside, the lower Tab).





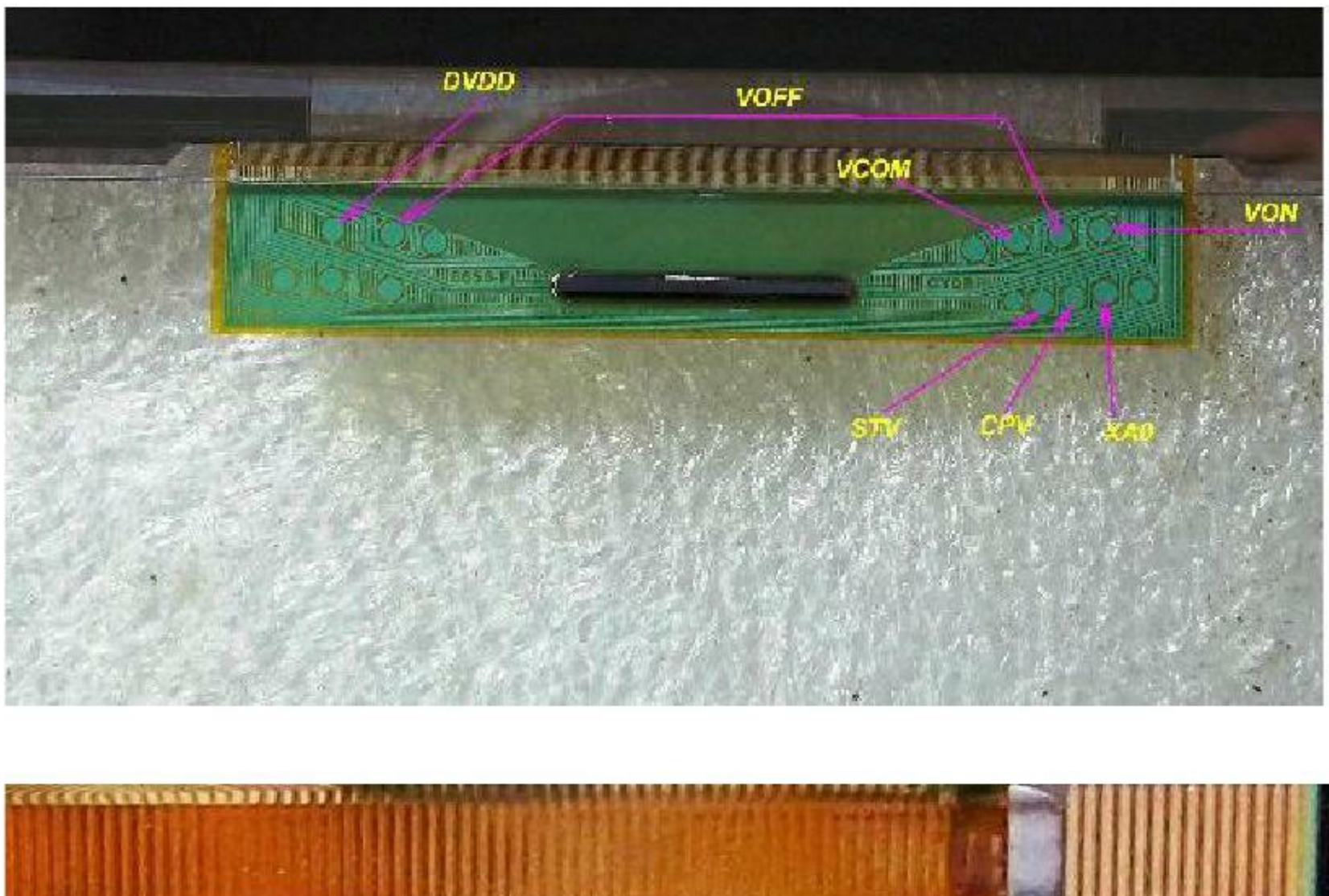


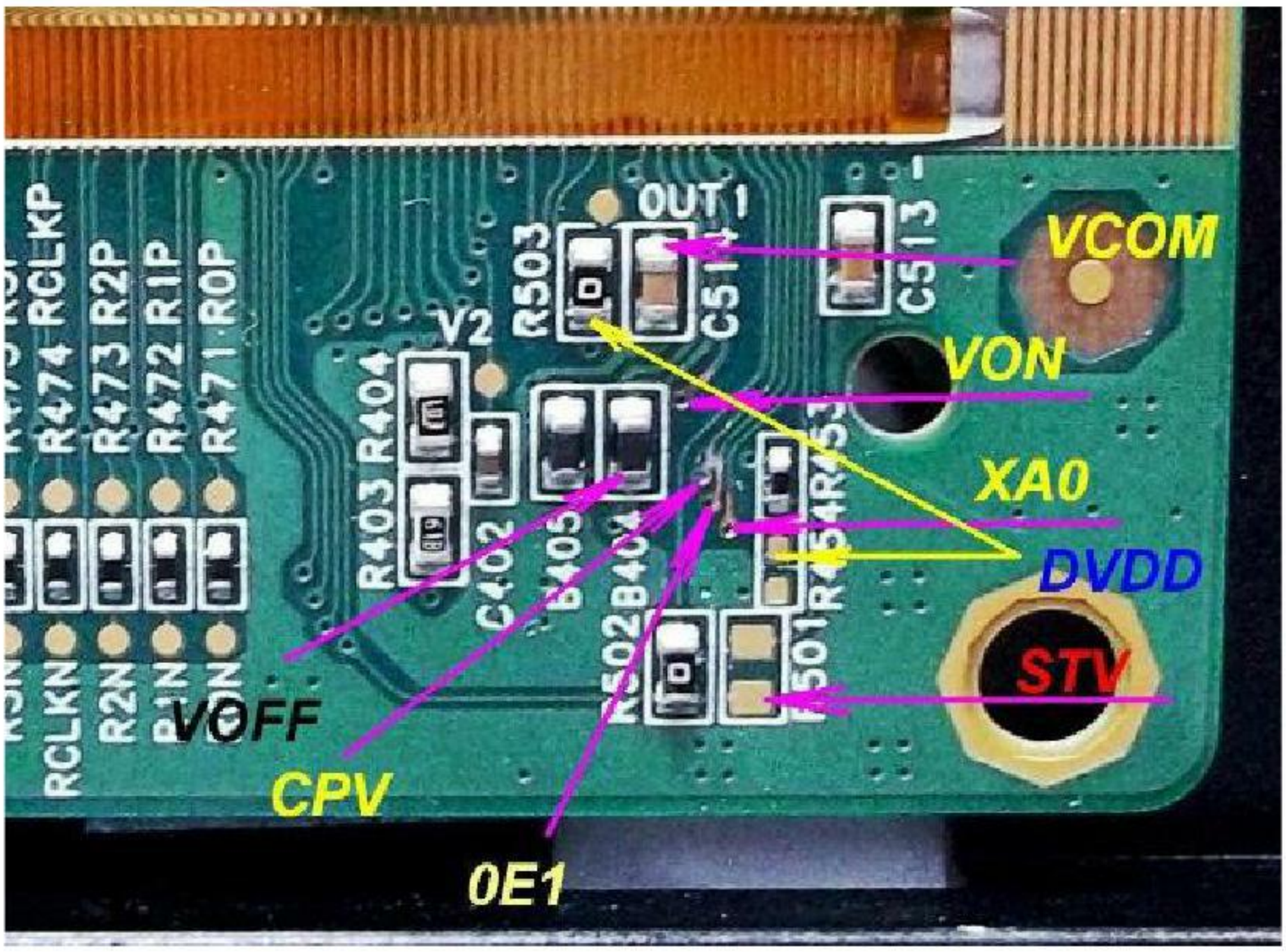


Panel: TB315B101_R414.C, glass strap: HV320WXC-100_X-PCB-X0.0, T-Con: HV320WXC-100_C-PCB-X0.1

Defect: inhibited picture (15-20 sec.) vertical strips. Because a complete break VON and other connection also broken, See the pictures of Solution.

CURE: Duplication all points with wire restores Faulty Panel with good Picture.





TV Samsung UE40D6100SW.

Inhibits image horizontally on the left side from the center increases ekrana.Zaderzhka to the left edge of the screen nearer to the edge of the larger delay. In the right everything is fine.

Matrix LD400CGC-C2., strap V400HK3-XRPE1, ear S6CG248-51B, driver 60DB586CC-129.

Main BN41-01604 on it SDP1001, DSP94 S4LJ103X.BP BN4400458 PWM 6052. T-con V460HK1-C01 on it CM3802C, MB39C313A, RT8255.

At the bar signals: pairmode 3.2v

Pol 2 1.6V

3.2v vdd

vddah 9.0V

vda sel 3.2v

vdd al 9.0V

vcm of 7.3v

7.3v vcm_tft

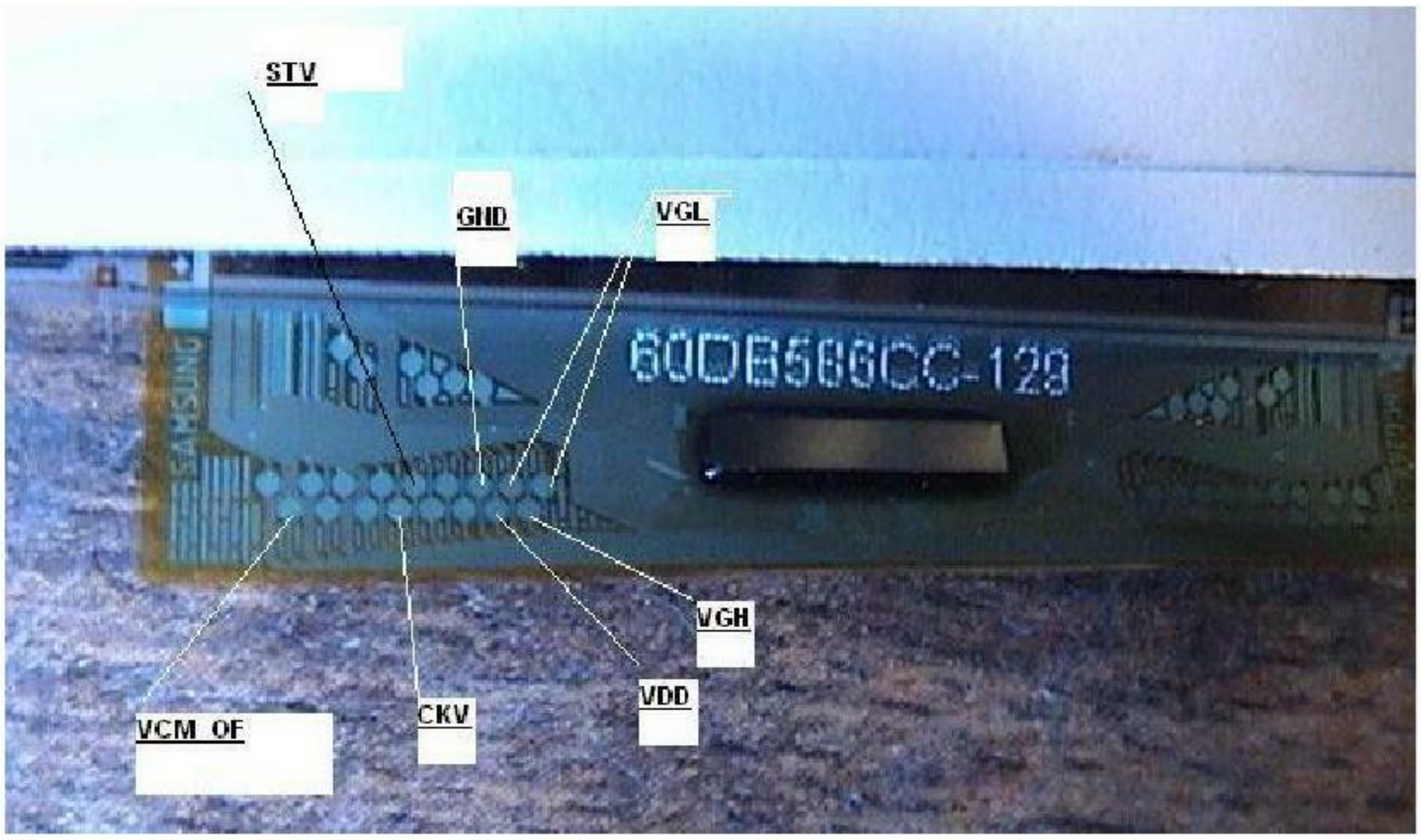
vgh 23.8v

VGL -8.1v

CKV pulses scale 3, 4 v

Defect was obtained at breakage STV from the strip V400HK3-XRPE1. I broke off in the assembled state. Disassembled call and the right and left ears of the same 100 ohm. Duplicated across the chip resistor 100 ohm. Run 2 days was successful.

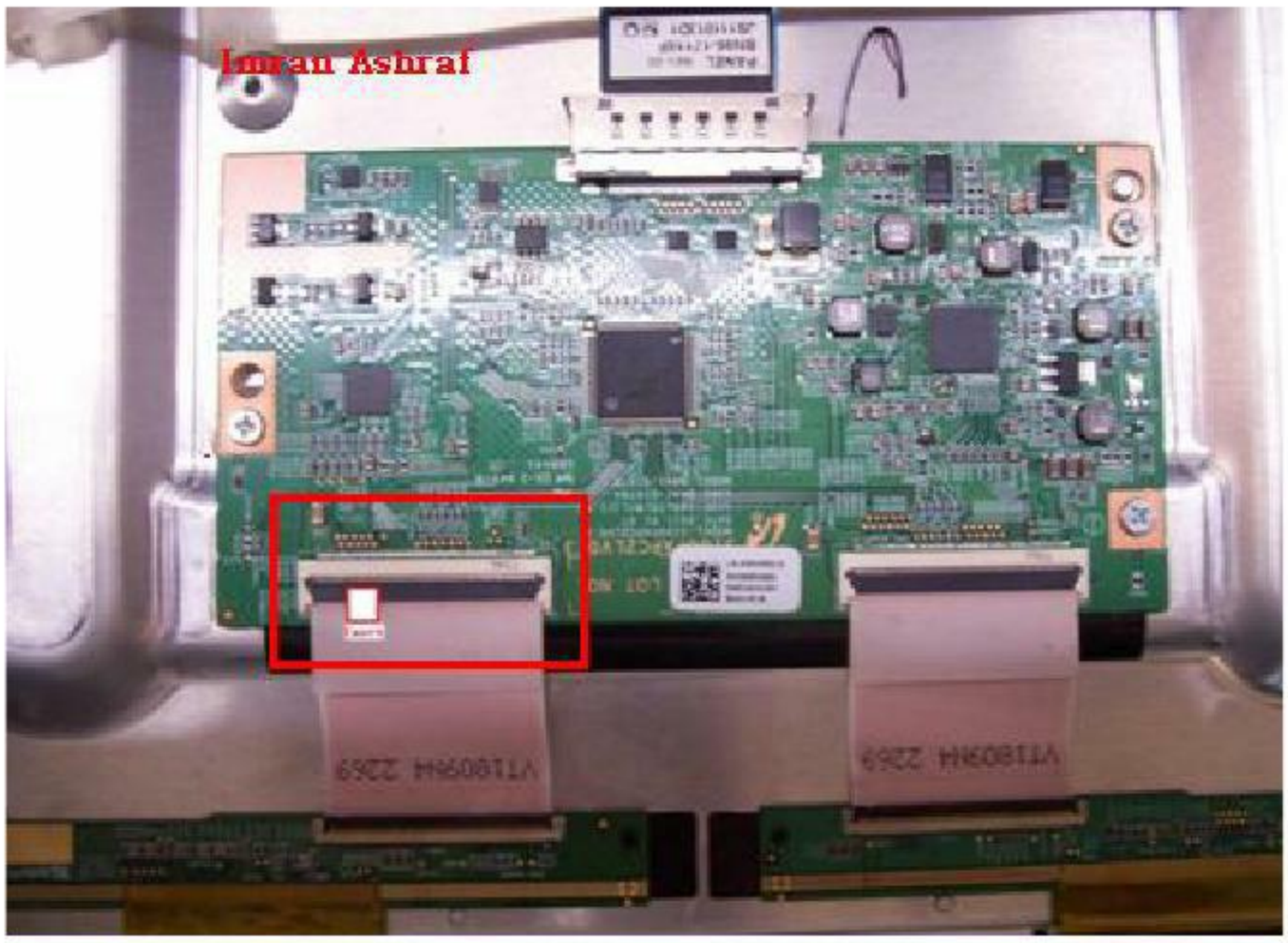
Photo Of Pad

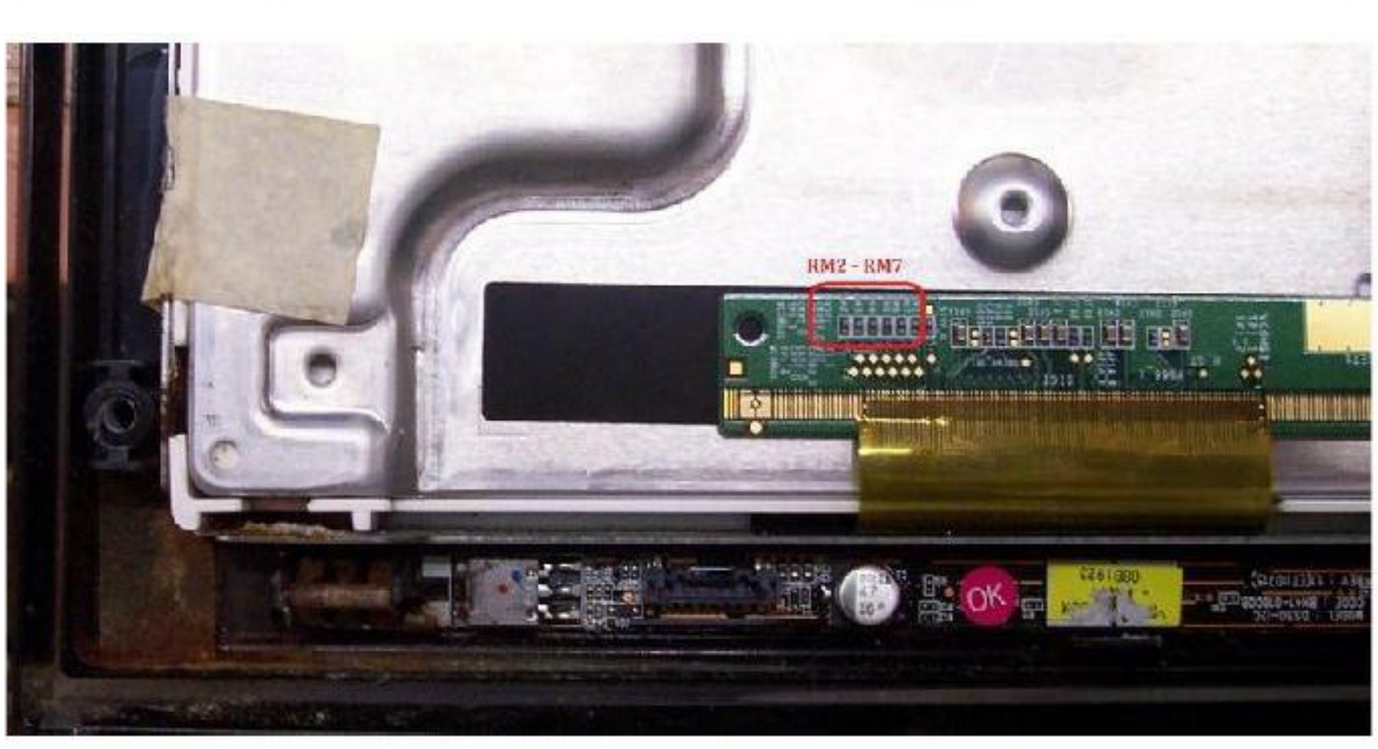


Panel LED Samsung LTJ400HM07

T-CON S100FAPC2L v0.3 (BN41-01687A) 11Y400HFSL V0.3

Fault: thin horizontal stripes at the top of the screen. The cause of the defect: cat factor in the lower right corner of the panel (left bracket). I understand that corny, but anyone can come in handy: Treated disconnecting defective CKV raising resistors RM2-RM7 on the bar or, aesthetically - sticker strips of adhesive tape to the necessary contacts with the loop T-CON. In my case, with pre-washing

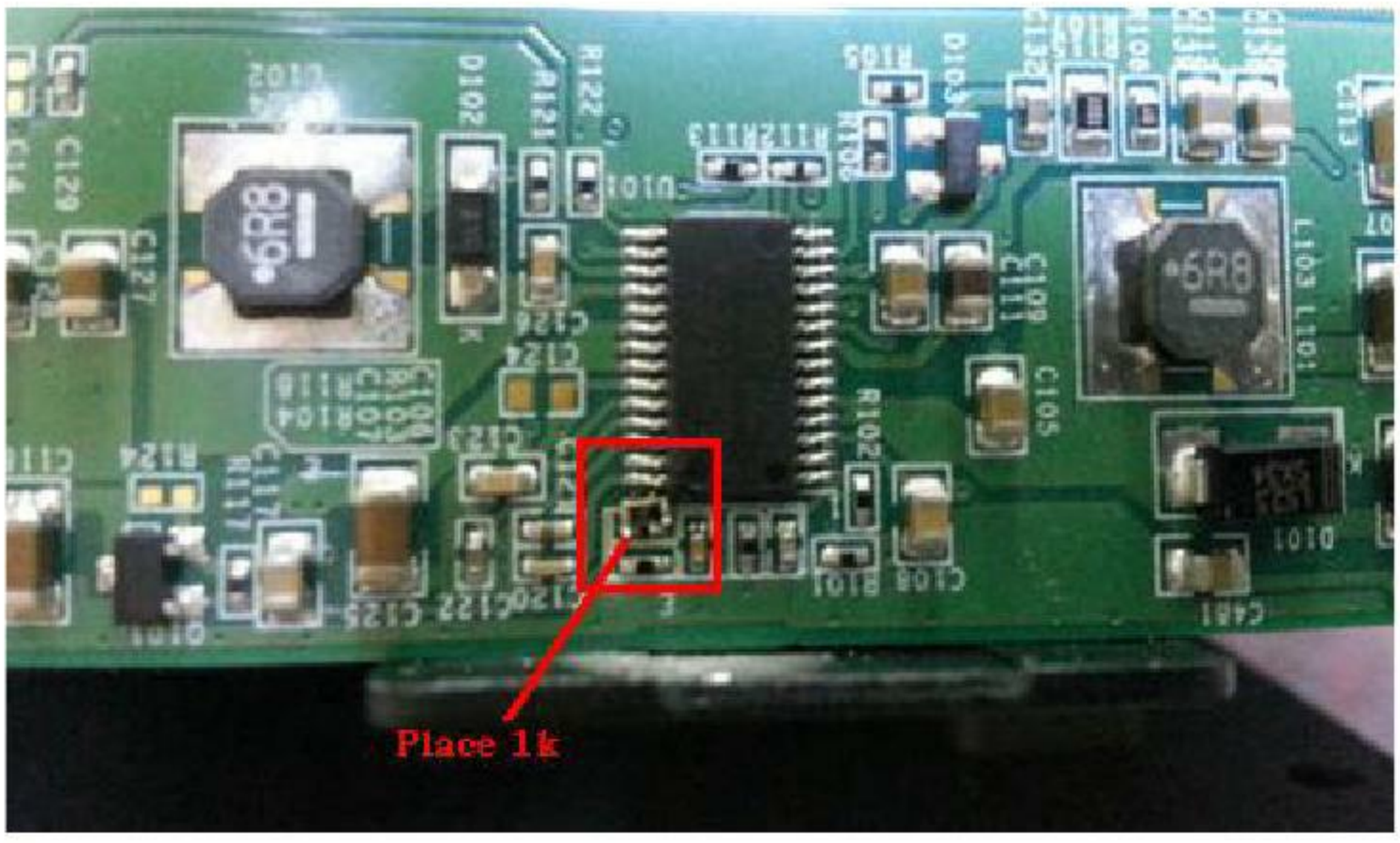




Panel- T320XVNO 5.0

T-con T315XW07 V2 CTRL BD

Reasons including, lit the lamp on the panel is good the search revealed no power Vcom. its goes to U301, name 0162 1575 (a name micro it is not any more) Power 5,6V for Vcom, iso appeared, but black and white and completely smeared. A further search led to the absence of power supply AVDD. It comes with a transistor Q101, it was closed. Transistor controlled micro U101 BD8160EFV. In general, in the R118 stood at the base of Q101. Put 1K ohm and everything is OK. Photos of the repair are attached.



Flash memory basics and its interface to a processor:

Introduction:

Flash memory or a flash RAM is a type of nonvolatile semiconductor memory device where stored data exists even when memory device is not electrically powered. It's an improved version of electrically erasable programmable read-only memory (EEPROM). The difference between Flash Memory and EEPROM are, EEPROM erases and rewrite its content one byte at a time or in other words, at byte level. Where as Flash memory erases or writes its data in entire blocks, which makes it a very fast memory compared to EEPROM. Flash memory can't replace DRAM and SRAM because the speed at which the DRAM/SRAM can access data and also their ability to address at byte level can't be matched by Flash.

The flash memory is also termed as Solid-state Storage Device (SSD) due to the absence of moving parts in comparison to traditional computer hard disk drive.

Flash memory types:

The two main types of flash memory are the NOR Flash & NAND Flash. Intel is the first company to introduce commercial (NOR type) flash chip in 1988 and Toshiba released world's first NAND-flash in 1989.

NOR-flash is slower in erase-operation and write-operation compared to NAND-flash. That means the NAND-flash has faster erase and write times. More over NAND has smaller erase units. So fewer erases are needed. NOR-flash can read data slightly faster than NAND.

NOR offers complete address and data buses to randomly access any of its memory location (addressable to every byte). This makes it a suitable replacement for older ROM BIOS/firmware chips, which rarely needs to be updated. Its endurance is 10,000 to 1,000,000 erase cycles. NOR is highly suitable for storing code in embedded systems. Most of the today's microcontrollers comes with built in flash memory.

NAND-flash occupies smaller chip area per cell.This maker NAND available in greater storage densities and at lower costs per bit than NOR-flash. It also has up to ten times the endurance of NOR-flash. NAND is more fit as storage media for large files including video and audio. The USB thumb drives, SD cards and MMC cards are of NAND type.

NAND-flash does not provide a random-access external address bus so the data must be read on a block-wise basis (also known as page access), where each block holds hundreds to thousands of bits, resembling to a kind of sequential data access. This is one of the main reasons why the NAND-flash is unsuitable to replace the ROM, because most of the microprocessors and microcontrollers require byte-level random access.

A write operation in any type of flash device can only be performed on an empty or erased unit. So in most cases write operation must be preceded by an erase operation. The erase operation is fairly straightforward in the case of NAND-flash devices. But for a NOR-flash, it is mandatory that all bytes in the target block should be written with zeros before they can be erased.

The size of an erase-block in NOR-flash ranges from 64 to 128 Kbytes. Here a write/erase operation can take up to 5 s. But the NAND-flash has erase blocks 8 to 32 Kbytes in size. So it is obvious that the NAND performs the identical operation in a lesser time duration.

INOR-flash interface resembles closely to a SRAM memory interface, which has enough address pins to map its entire media, allowing for easy access to every byte contained in it, where as the NAND-flash go for serially accessed complicated I/O mapped interface. Here the same pins are used for control, address & data.

In traditional single-level cell flash devices, each cell stores only one bit of information. Later, many developers have developed a new form of flash memory known as multi-level cell flash that can store/hold more than one bits rather than a single bit in each memory cell, thus doubling the capacity of memory.

Here we will show you how to reset your TV by resetting the SoC EEPROM. This can be very useful in case you have bricked your TV by messing with some of its internal settings, which can easily happen if you mess around in the Service Menu. It is highly recommended to take photos of each screen in the service menu, showing your original firmware settings, before changing anything!

Blind Factory Reset for Samsung

Before trying to EEPROM reset, please try a factory reset, that might revive your TV also.

Press "EXIT" button for 12 seconds (15 is better since you cannot see TV), than press "Left" and "Enter"

EEPROM

EEPROM is a short of electrically erasable programmable read only memory, which is actually a chip. There are several EEPROM chips used in Samsung TVs. All service menu settings are kept in the so called SoC EEPROM. You can delete and reprogram this chips millions time. So they are fast and reliable...

Resetting NVRAM (EEPROM)

For resetting TV, settings, you needed to remove SoC EEPROM device from TV. But it's not required. In electronic world, if you disable communication of the chip, it counts as removed. So we just needed to kill communication of SoC EEPROM. EEPROMs on Samsung TV's communicating via common i2c protocol. That protocol carries data via SDA line and send clocks via SCL line. In our situation, both blocking SCL or SDA will works. But I decide SDA.

To do this, all you have to do that feeding (connecting) GND (ground) or VCC (3.3v) to SDA line with little wire... That's all. Since this lines are HIGH (v3.3) in IDLE, its better to hold it via VCC. You can also hold this lines via GND too. But don't try to connect both GND and VCC. It will be short circuit and probably will damage your board.

Join VCC and SDA, power on TV and hold about for 20 seconds with the TV powered. It just try to read (wrong) settings from EEPROM, since it cannot read anything (refer to the warning message bellow), just start with defaults. That is what we want. Than releasing SDA line and shutting TV off will update the settings on EEPROM with null values, that TV could boot with it. After all, you can enter service menu and change the required changes.

Where do I find the SoC EEPROM chip?

Its located near CPU (SoC) at C and D series. On top, it writes some numbers and letters starting with 24256 or 24512... Here I place some screen shots from D series bellow. In my TV, 24512 EEPROM chip used. You can get the 24512 Chip Datasheet here. In picture, white triangle shows the first pin.

For this procedure you have to enter to the Service menu of the TV:

1. With TV switched off, press the following sequence on the remote: **[INFO] [MENU] [MUTE] [POWER]**

!!!At this point be careful. Values are changeable with Left/Right keys. Moving in the menu is only with Up/Down!!!

2. Have to turn off the OTN Support. Path to option may vary between models.

2.1. MST models (when firmware name contains "MST", e.g. T-MST12DEUC), mostly E/F-5xxx/6xxx and value H.

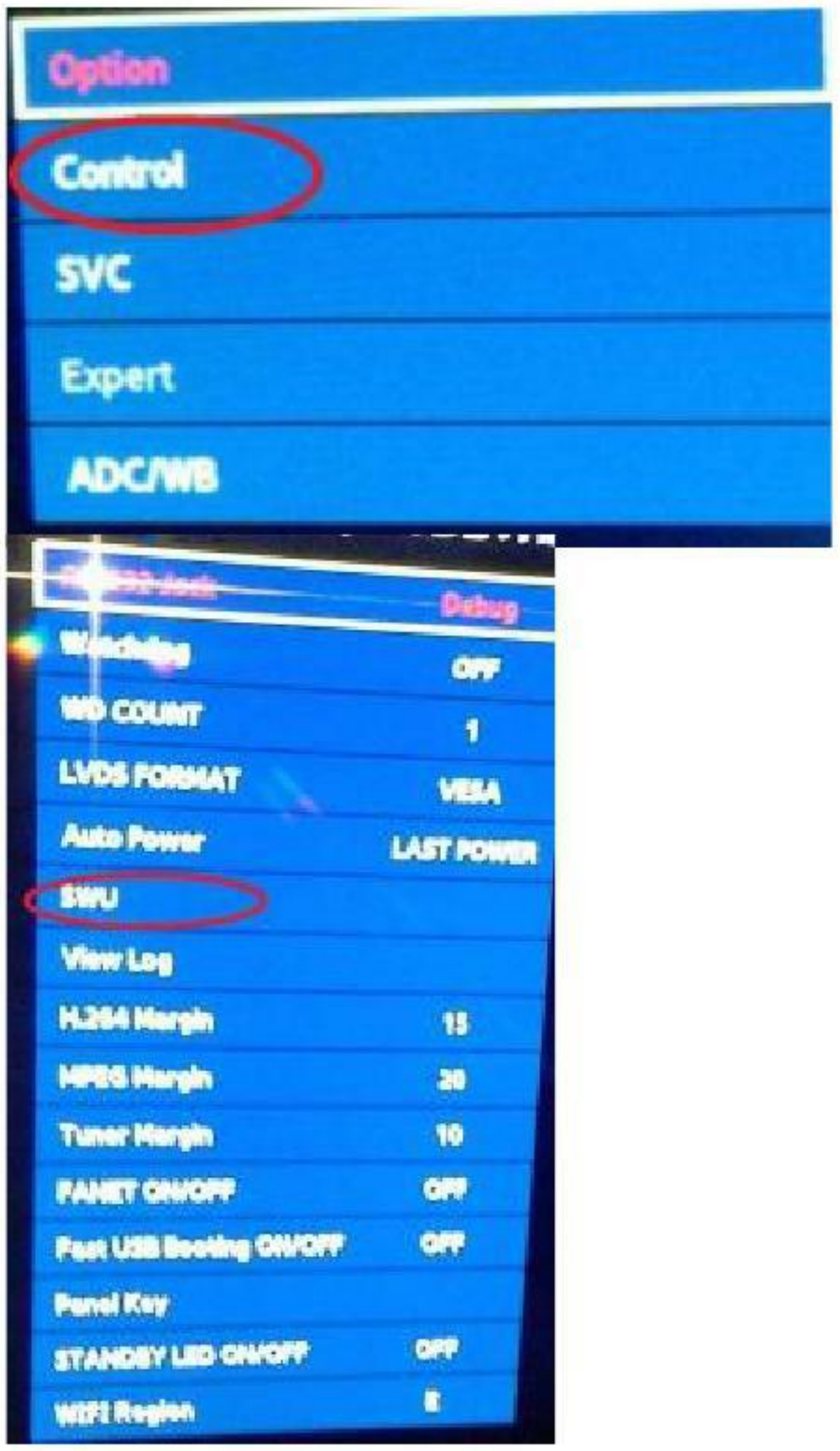
E-5xxx/6xxx and H : Service Menu -> "Control" (or "Option") -> "Sub Option" -> "OPTION_SWU" -> "OTN Support" -> Off

F-5xxx/6xxx : Service Menu -> "Option" -> "MRT Option" -> "OTN Support" -> Off

2.2. Non-MST models (when firmware name does not contain "MST", e.g. T-FXPDEUC), mostly E/F-7xxx/8xxx/9xxx and high-end H/HU.**You first need to unlock extended service menu by sending FACTORY+3SPEED keys to TV** to make option accessible:

- **How to send FACTORY+3SPEED keys**

E-7xxx/8xxx : Service Menu -> "Control" -> "SWU" -> "OTN Support" -> Off



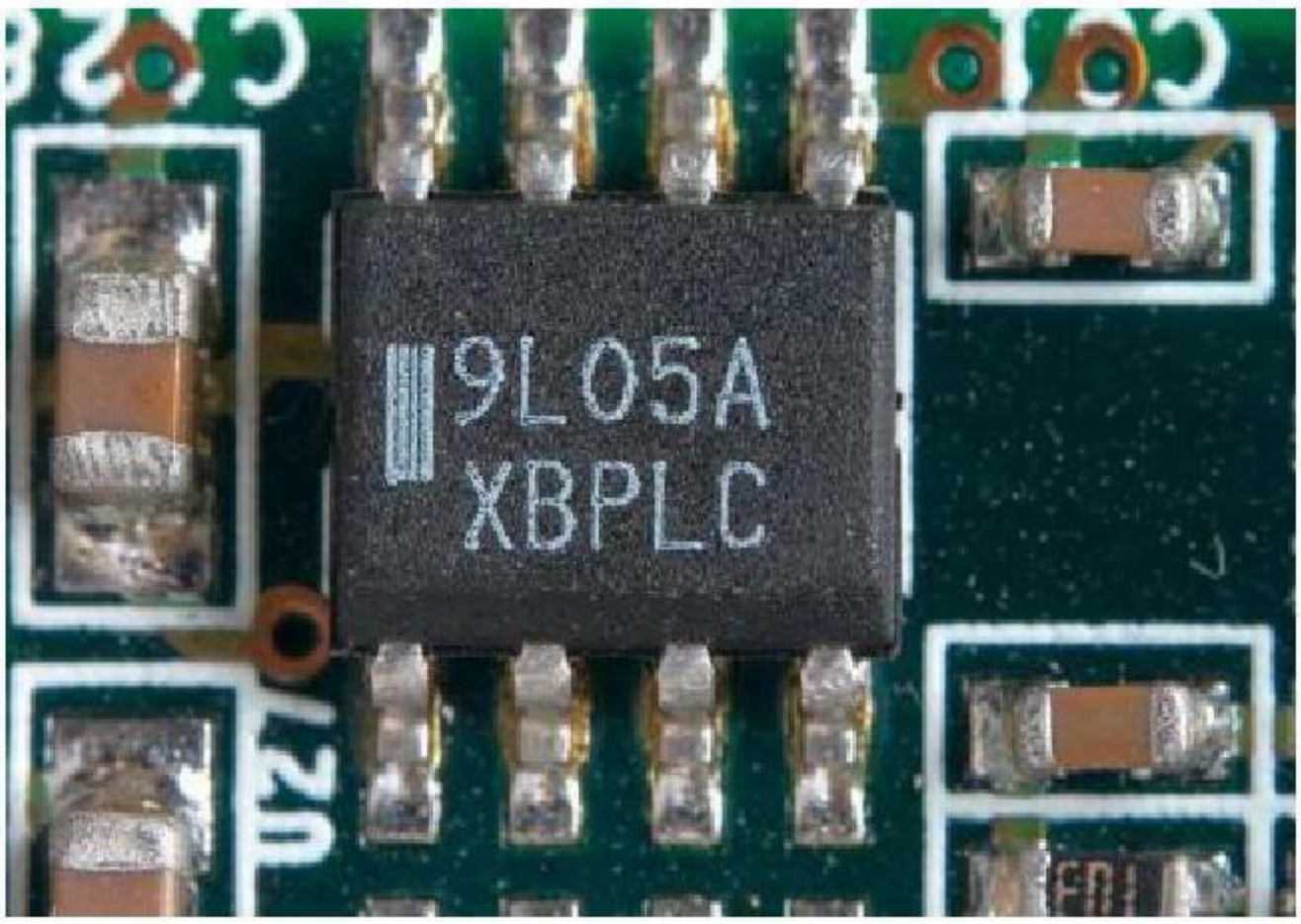
F-7xxx/8xxx/9xxx and H/HU : Service Menu -> "Control" -> "MRT Option" -> "OTN Support" -> Off

1. Hardware is nothing without software

In many electronic devices stuck universal microprocessors. This control by software other specialized modules, which then provide the example of the output of audio and video signals. The firmware is in a non-volatile memory (EEPROM or flash ROM, EEPROM) which retains its contents even without power supply. If required, the firmware can also exchange ("flash"). All devices have to meet the more complex tasks - whether DSL router, smartphone, smart TV, multimedia hard drive or PC -, the technique is similar. You are here once dependent on the software that the manufacturer has intended. If this error has or is difficult to operate, you must hope that the manufacturer offers an update. Who does not want to wait for that improves the firmware itself and makes them available to other users. However, manipulation of firmware is anything but simple. Because although many devices use Linux as an operating system, the source code of the firmware is often not available - and if they do, it is not complete. The proprietary customizations are usually secret and can only analyze and modify engineering via reverse. These are lengthy investigations, for example, the internal communication of the device, necessary that some

require expert knowledge. But sometimes it is also easily and without Firmware Hack: The development of new hardware is expensive, although the individual components do not cost much in mass production , In many devices, thus infected the same electronics, only the software is configured differently. This enables manufacturers, televisions with the same inner life, for example, one with and one without recording function (PVR, personal video recorders) to extradite. The devices without PVR are some economical hotels with par tiger and the sales figures high. When TV with PVR, the customer must pay more, which reduces the number of units sold. In sum, the manufacturer then in this method, however, makes more profit than if he did have to develop neuter different hardware. Resourceful tinkerers now need only determine yet where the differences lie in the configuration and how it can be changed. An example of such a hack, see ➡ in point 6.

2. Analysis of the manufacturer firmware

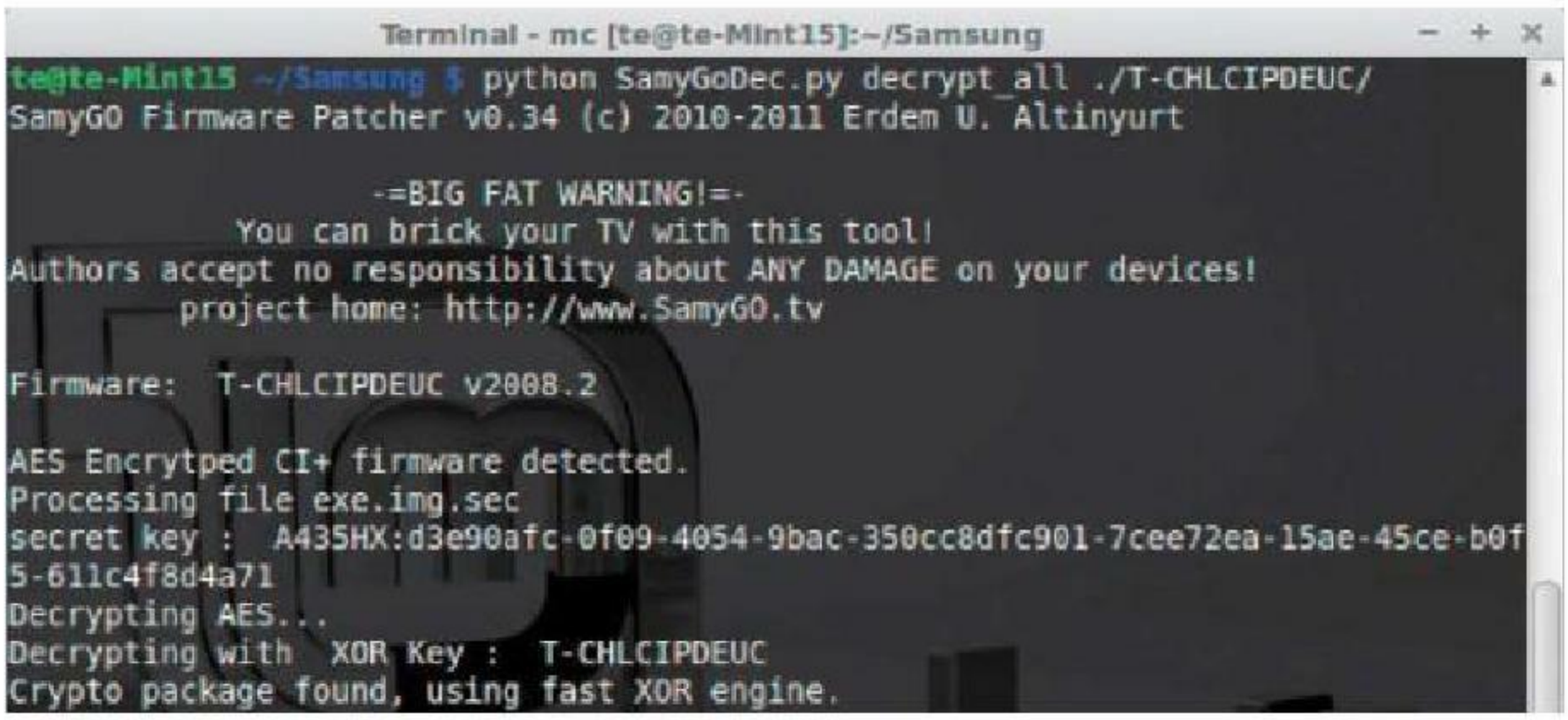


Almost all devices have an update function ("flash"), on the eliminate errors in the software and can be retrofitted new features. The update generally takes place directly via the Internet. Thus, it can also be carried out without a network connection, the manufacturer's firmware provide mostly alternatively for download. The update can be done then by using a connection to the PC, a CD or a USB flash drive. So the software is it easy to reach - at least in theory. Because the update packages always look different depending on which model or for which the model they have determined. In addition, the files are normally encrypted and are only accepted with the appropriate signature from the device. For this purpose, a concrete example: TV sets and Blu-ray player from Samsung are among the best-selling in Germany. It is therefore not surprising that a larger community with hacks employed for this hardware. One of them runs the website www.samygo.tv. Here you will find the necessary

tools, a Wiki with tutorials and a forum through which visitors can exchange information. If you want to view the firmware precisely who needs a Linux system that can run in a virtual machine. Here Python plus the pycrypto package must be installed. The firmware file you get with Samsung, either in the support area or on http://opensource.samsung.com . The tool Samygo Firmware Decrypter can be on Source forge download. The unzipped firmware file comes along with the Samygo Firmware De crypter in a directory. Rename the script in SamyGoDec.py to and run from the command line command

SamyGoDec.py decrypt_all ./T-CHLCIPDEUC/

from. "./T-CHLCIPDEUC/" Replacing the name of the folder where you unzipped the firmware. The firmware folder can then be found, for example, the file exe.img which is about with the command sudo mount -o exe.img loop / mnt / img can attach to the file system. You can then analyze the files and try to figure out their func NEN. Some of the img-files may have been created with the the system Squashfs. The contents extract example with unsquashfs appdata.img. The files are then in the "squashs-root". The modified firmware can be conclusively with the line



Samsung LCD Power Cycling/Reset Symptom

SERVICE BULLETIN	
PRODUCT:	LED TV
BULLETIN NUMBER:	ASC20130429001
BULLETIN DATE:	04/29/2013
MODELS:	UN46ES7500, UN55ES7500, UN60ES7500, UN46ES7550, UN55ES7550, UN60ES7550, UN46ES8000, UN55ES8000, UN60ES8000

SUBJECT: Power Cycling / Reset

SYMPTOMS:

- The TV may display vertical lines or a frozen image on the screen and then power OFF and ON by itself.
- The WD Count in Service Menu>Control>Sub Option is higher than 0.

REPAIR:

This issue can be resolved by either Step 1 or 2 below:

1) Check the power cable between the Main board and the SMPS (Power Supply).
   a. If the cable or connector on the SMPS is discolored, replace the cable and SMPS board.
   b. If the cable and the connectors are both OK, do not replace the cable or SMPS board and skip to Step 2.

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This issue can be resolved by either Step 1 or 2 below:

1) Check the power cable between the Main board and the SMPS (Power Supply).
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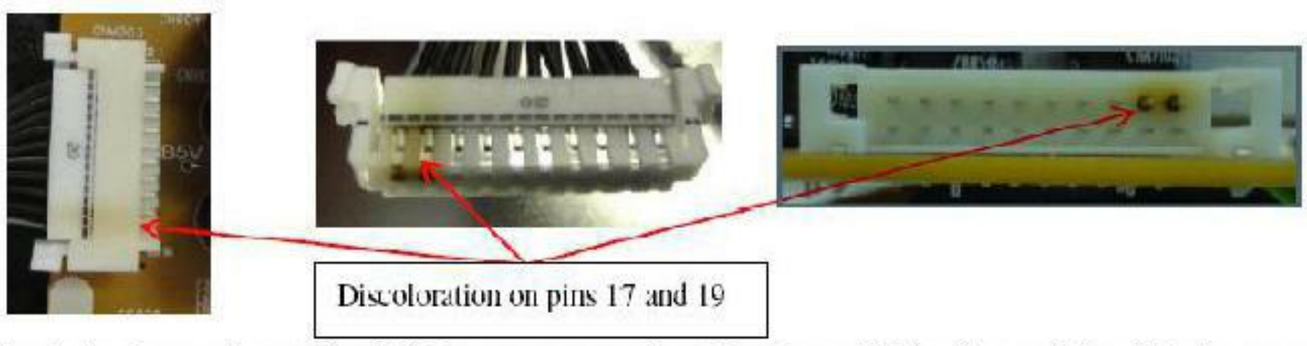


2) Check the Lot number of the LVDS connector on the T-Con board. If the first 6 digits of the Lot number is lower than **120531**, replace both the LVDS cable and T-Con board.

Samsung LED TV Test Method

Using the T-Con Jig (Part Number SPC-2011)

The T-CON Test Jig is available for 2011 thru 2013 LCD/LED models to help you test TV Power and T-CON TEST PATTERNS without the Main Board.

The jig works with 2011, 2012, and 2013 TVs, 32 inches and larger. Do not use on models that are not supported. You can damage the TV.

The Test Jig comes with a set of LVDS cables for all supported models to help you troubleshoot LVDS related issues.

Common Symptoms

Use the on-screen symptom guides below to determine which part(s) to replace.

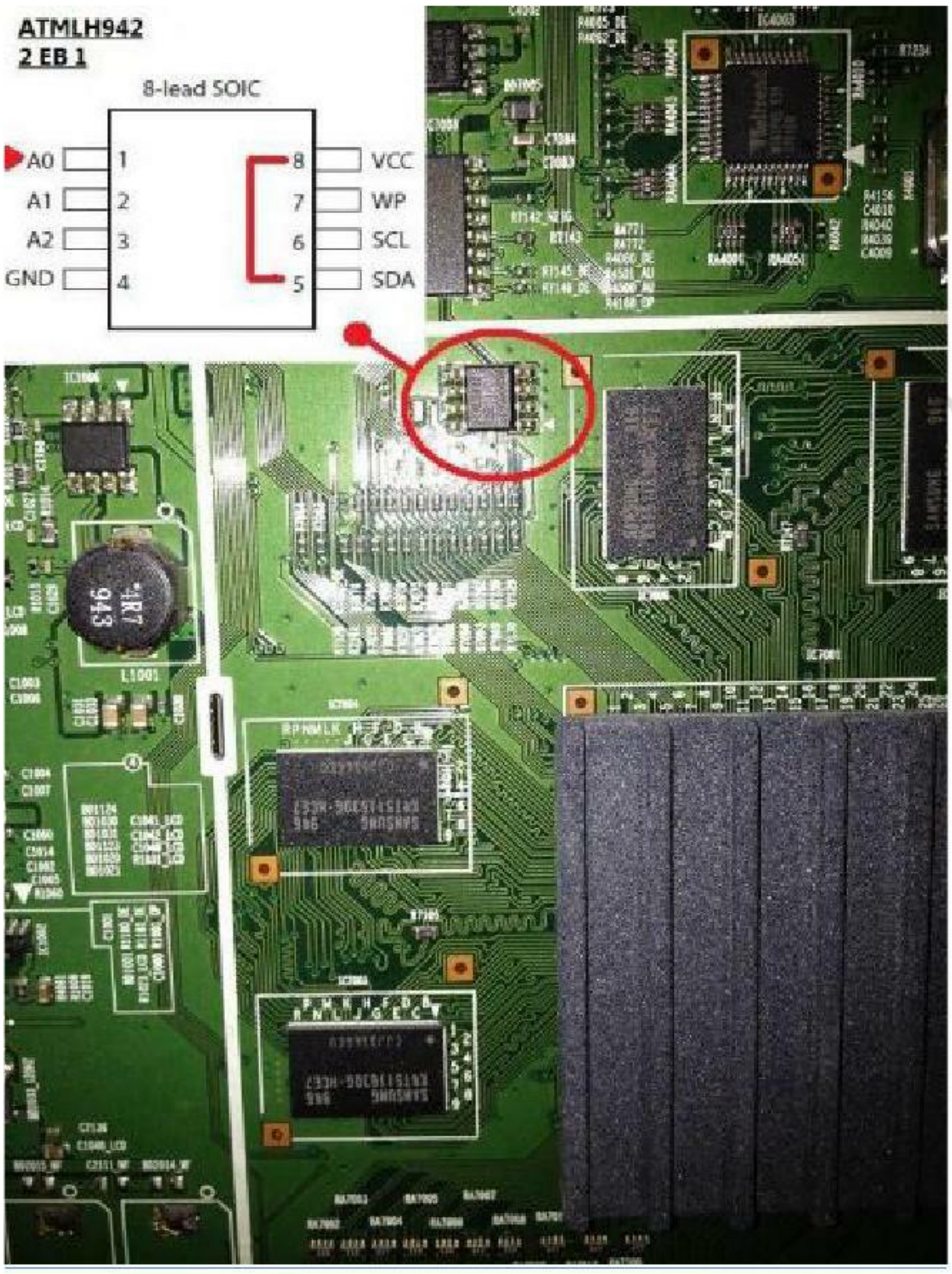
Common Symptoms

Use the on-screen symptom guides below to determine which part(s) to replace.

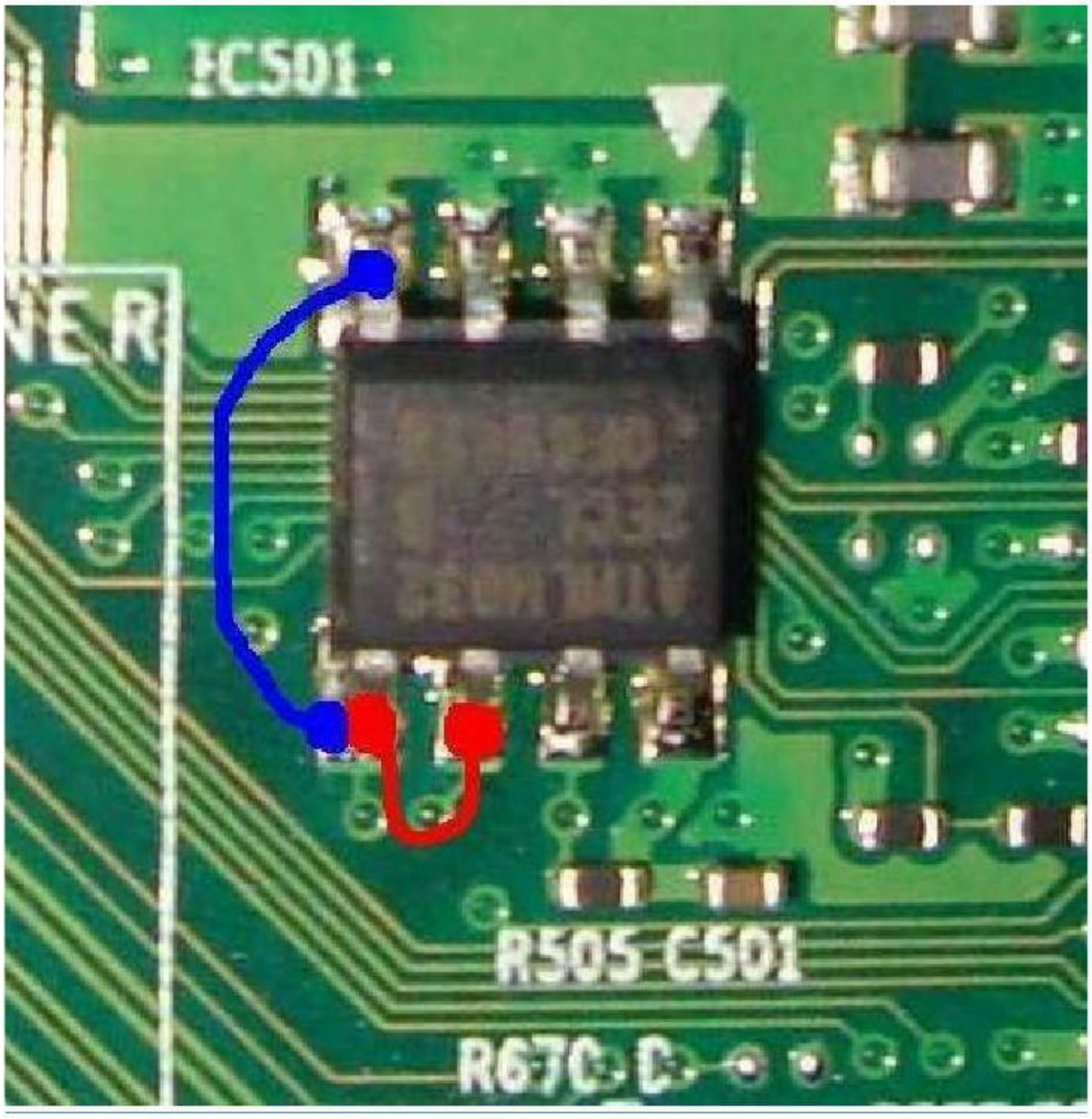
Common LED Symptoms

Note: Article Picked from Website

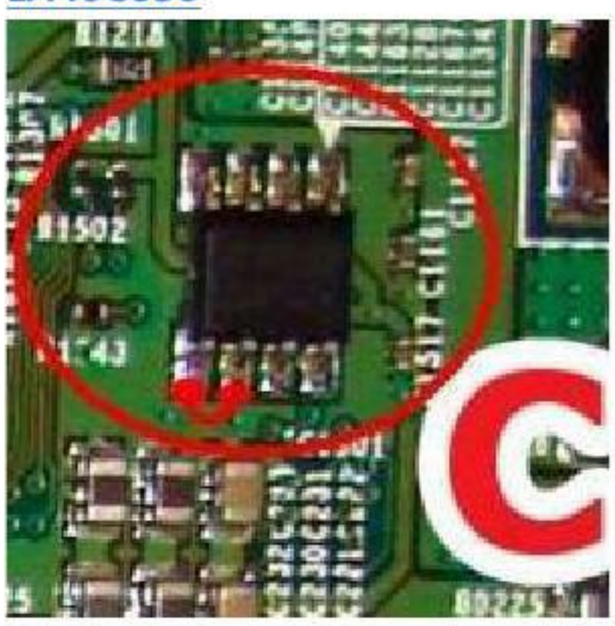
Samsung UE32 B 6000 EEPROM reset Method for expert user.



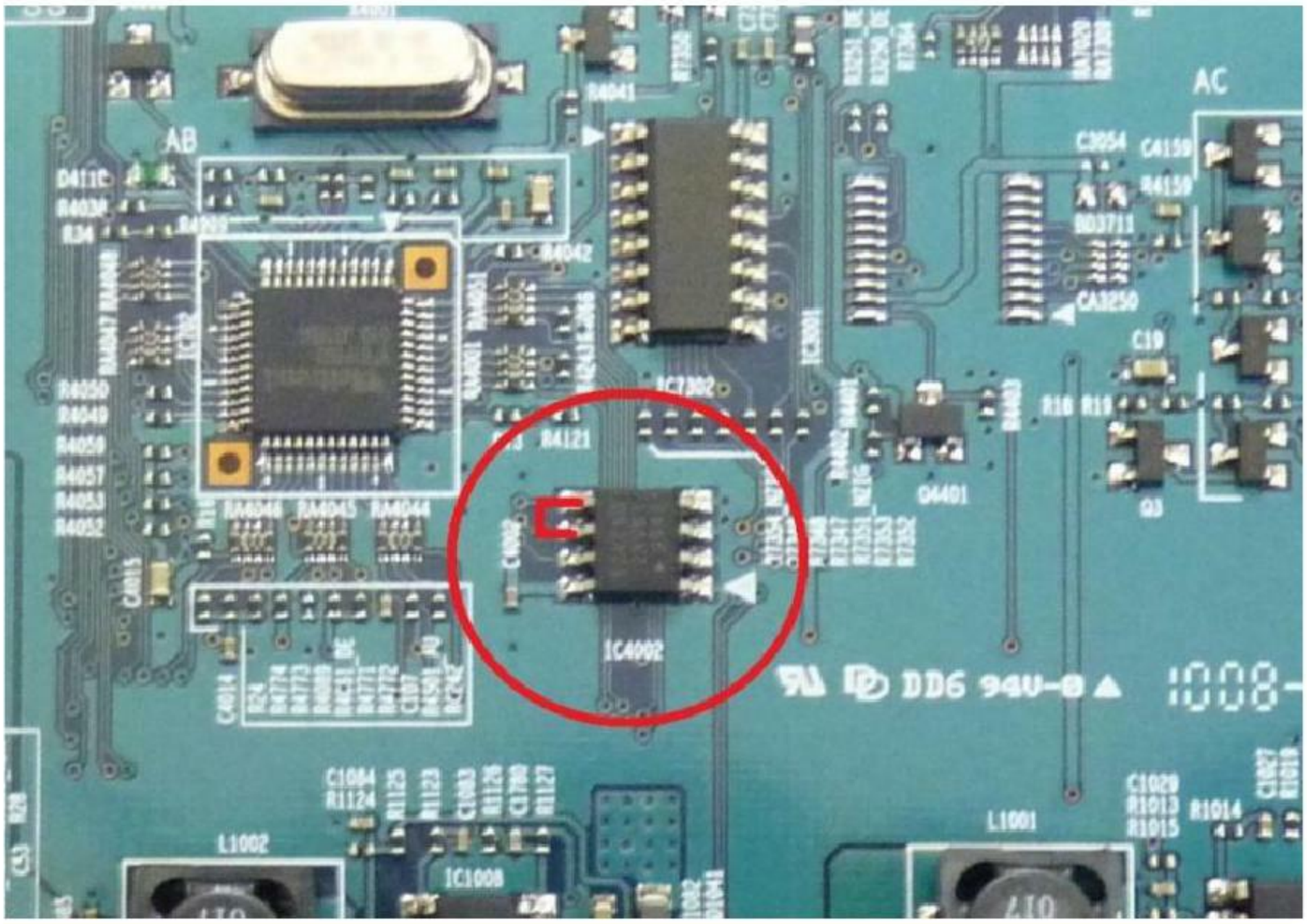
LEXXC550 EEPROM Reset



LA40C650



UA40C6200 Reset



LCD TV Repair journal | LG 42LV4400 | 47LV4400 | 55LV4400 | 32LV2400 LG 42LV4400-UA.CUSYLH | LCD TV

SYMPTOMS: Dead set. No lights at all.

DIAGNOSIS: This model in particular, along with some other LG has what is called a FLASH IC plate base (MAIN PCB). This is the most common point of failure.

SOLUTION: Replace the FLASH IC for your model. If this is not possible, replace the main PCB for your model. Different affected models and part numbers for your respective MAIN PCB and IC flash bin for each IC code is listed below.

55LV4400 Main PCB: COV31310901 Flash IC: COV31451701 Location: U14

47LV4400 Main PCB: COV31310801 Flash IC: COV31451801 Location: U18 42LV4400

Main PCB: COV31310701 Flash IC: COV31451901 Location: U18 32LV2400

Main PCB: COV31310601 Flash IC: COV31452001 Location: U18

Here are some references of image if you need help to find the Flash IC on the main card:

As additional advice, be sure to find or acquire a fine tip (wordplay sometimes suck) for your welder. This will make things much easier, believe me. If you are having trouble soldering connections (which are very small connections, trust me on that) it is normal. Best thing you can do is to minimize the

time that the welder is put in contact with the workpiece / PCB so that has not been damaged by the heat. If you have a braid of copper as Chem-Wik, it is very useful in the desoldering process. A solder sucker may also work well, but I have found that they have no affinity for the silly welding (just a personal preference). Anyway, good luck and have fun!

As additional advice, be sure to find or acquire a fine tip (wordplay sometimes suck) for your welder. This will make things much easier, believe me. If you are having trouble soldering connections (which are very small connections, trust me on that) it is normal. Best thing you can do is to minimize the time that the welder is put in contact with the workpiece / PCB so that has not been damaged by the heat. If you have a braid of copper as Chem-Wik, it is very useful in the desoldering process. A solder sucker may also work well, but I have found that they have no affinity for the silly welding (just a personal preference). Anyway, good luck and have fun!

Collection Of LCD TV Repair Cases

Here we'll be providing a collection of LCD TV repair cases, gathered from a good reliable source. We've seen some of these cases in our repair lab and have proven to be very helpful.

LG: No start-up. Standby LED flashes from red to green

Model/s: LG 32LC56ZC LCD TV

Symptom: No start-up. Standby LED flashes from red to green

Cure/Solutions: Check or replace C202, C206, C217, C218 (all 2200uF/10v) and C226 (470uF/25v).

LG: Picture divided into several parts. Distorted picture

Model/s: LG 32LC56 LCD TV

Symptom: Picture divided into several parts. Distorted picture

Cure/Solutions: Replace T-CON (Part Number: 218394).

LG: Stuck in standby

Model/s: LG 32LC56ZC LCD TV

Symptom: Stuck in standby

Cure/Solutions: Check & change C204. If pcb board discolored around R208 then replace PSU.

LG: "No Signal" displayed

Model/s: LG 32LC45 LCD TV

Symptom: "No Signal" displayed. No sound and no picture. Backlight and OSD menu ok. LED is green color light.

Cure/Solutions: Try to update firmware if not then replace main signal board.

LG: No Power

Model/s: LG 47LF66 LCD TV

Symptom: No power

Cure/Solutions: Change C202, C206 and C217 (all 2200uf/10v) on IP board (Power Supply Inverter Board).

LG: No Power

Model/s: LG 37LF66 LCD TV

Symptom: No power

U500 (ICE3B1565J) short circuit and fusible resistor FB501 (2.2R) open circuit.

Cure/Solutions: Check safety resistor for open circuit. Replace D501 (UF4007), 3.6v zener diode ZD502 (1N5227) and C508 (33uF/50v).

LG: Negative picture and no sound

Model/s: LG 47LY95 Chassis LD75A LCD TV

Symptom: Negative picture and no sound.

Voltage low at pin 7 of connector P202.

Cure/Solutions: Check Q202 (AP72T02GH), U203 (APU3037M), Q203 (AP60T03GH) and connector P202 in PSU. Also check or replace C221, C222, C223 and C232.

LOGIK: No sound or picture. The front controls light up & relay clicks.

Model/s: Logic LCXW32HDI LCD TV

Symptom: No sound or picture. The front controls light up & relay clicks.

Cure/Solutions: Check or replace R65 (2M) in U3 PSU for open circuit.

Panasonic: Enter Service Mode.

Model/s: Panasonic TX-32LED7FM Chassis GLP22M LCD TV

Symptom: Enter Service Mode.

Cure/Solutions: 1. Press F button to access volume setting.

2. Press V- button on set until volume reaches minimum.

3. While still holding V- button press 0 button three times on remote control.

4. Press 1 and 2 buttons to scroll through the menu.

5. Press 3 and 4 buttons to select an adjustment.

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3. While still holding V- button press 0 button three times on remote control.

4. Press 1 and 2 buttons to scroll through the menu.

5. Press 3 and 4 buttons to select an adjustment.

Philips: Picture jitter if contrast function is used.

Model/s: Philips 23PF9966/37 LCD TV

Symptom: Picture jitter if contrast function is used.

Cure/Solutions: Replace transistor 7563 on Scalar board.

Philips: No sound

Model/s: Philips 23MW9010/37 LCD TV

Symptom: No sound

Cure/Solutions: Defective sound output IC7731 (AN7522).

Philips: Stuck in standby

Model/s: Philips 42PF7621/D10 LCD TV

Symptom: Stuck in standby. Switches to protection mode Green LED flashes.

Cure/Solutions: Replace capacitors 2540 and 2544 (both 10nF). Change to both with 220nF.

Philips: High pitched noise coming from LCD supply

Model/s: Philips 42PF7621/D10 LCD TV

Symptom: High pitched noise coming from LCD supply

Cure/Solutions: Check or replace 5025, 5026 and 5027 at LCD supply and glue them if necessary.

Philips: Switches off for a second or two intermittently.

Model/s: Philips Chassis BJ3.0E_LA LCD TV

Symptom: Switches off for a second or two intermittently.

Relay clicks and standby LED remains green. Switches off intermittently with green LED on,no sound or picture.

Cure/Solutions: Check 27MHz KDS quartz crystal (SSB, item 1H00). Replace all yellow marked crystals (made in China) bearing a "5E", "5J" or "5K" batch number. Also replace all silver marked crystals (made in Taiwan) bearing a "6D" batch number. Note: Replace crystals with order code 242254301397.

Polaroid: No Start-up

Model/s: Polaroid FLM3232 LCD TV

Symptom: No startup.

Cure/Solutions: Replace Z9 zener diode with NTEPN4990 in the PSU.

SONY: Stuck in standby. Standby LED is green.

Model/s: Sony KDL32U2000 Chassis SE1 LCD TV

Symptom: Stuck in standby. Standby LED is green.

Red LED flashes 3 times. No remote control or front panel functions.

Cure/Solutions: Check or replace D301 zener diode (can be use a 5v zener diode) for short circuit.

SONY: Error codes 4

Model/s: SONY KDL40U2000 LCD TV

Symptom: Error codes 4

LED turns green, flashes 4 times then goes green again and flashes 4 times again. Fuse (500mA) on inverter panel open circuit.

Cure/Solutions: Replace the fuse on inverter board.

SONY: No start-up. Red LED flashes 3 times.

Model/s: SONY KDL40U2000 LCD TV

Symptom: No start-up. Red LED flashes 3 times.

Slow start-up before this symptom occurred. The standby 5v ok. PSU heat sensitive.

Cure/Solutions: Check C6055 (47uf/25v) in G2 supply.

SONY LCD TV - KDL-32EX725 - 40EX725 - 55EX725 – Standby LED BLINKING CODES DETAILS

Sony KDL-32EX725 - 40EX725 - 55EX725 – LED BLINKING CODES DETAILS _ Self-Diagnostic _ Troubleshooting by PWB Assy' _ Universal remote control set-up codes to check with Sony Brand Televisions

SELF CHECK DIAGNOSTIC HISTORY

* TV must be in standby mode. (Power off).

* Press the following buttons on the Remote Commander within a second of each other:

DISPLAY > Channel 5 > Volume (--) > POWER. [NOTE: This differs from accessing Service Adjustments Mode (Volume +)]

SELF CHECK DIAGNOSTIC PAGE

CLEARING THE SELF CHECK DIAGNOSTIC LIST

Since the diagnostic results displayed on the screen are not automatically cleared, always check the self-diagnostic screen after you have completed the repairs to be sure you have cleared the result display to “0”. To clear the Error history and Error count press 8 > 0 .

RESETTING THE PANEL OPERATING HOURS

The 3 sets of numbers displayed on the lower left corner of the screen indicates the total accumulated operating hours of the television and the operating hours of the LCD panel. Total operating hours is on the left, boot count in the center and panel hours in the right group (The center

numbers are not used.) To clear the LCD Panel operating hours of the LCD Panel after replacing the panel, press 7 > 0 .

To exit the Self Diagnostic screen, turn off the power to the TV by pressing the POWER button on the remote or the POWER button on the TV.

STANDBY LED BLINKING CODES & DETAILS

These models have a self-diagnostic function. If an error occurs, the standby LED will automatically begin to flash. The number of times the LED flashes translates to a probable source of the problem. A history of the errors is stored on the Self Check diagnostic page. The failure occurrence data stored in memory to reveal past problems and how often these problems occurred. If there is more than one error, the standby LED will identify the fist of the problem areas. If the Self Check screen displays a “0”, no error has occurred.

2 TIMES BLINKS

A 2X protection mode blink pattern can be activated due one of the following defects.

> Loss of REG12V (LVP)*

> Loss of -125V (Single Line)

> Excessive -125V Level (OVP)*

> Loss of Power-ON Signal

> Excessive PFC Voltage (OVP)

> Excessive PFC Temperature (OTP)

Low Voltage Protection (LVP)

Over Voltage Protection (OVP)

A loss or excessive condition of the REG12VDC secondary voltage from the main power supply IC6351 will cause a 2X blink pattern on the standby LED. The 12Vdc can be checked at CN6704/pin 16. If the measurement is 0V or rises above 12Vdc (approaches 15V) before the TV shuts down the Power Supply Board is defective. If approximately 12Vdc is present and remains below 12Vdc before shutdown then further troubleshooting is necessary to determine the defective component. After confirming proper REG12V levels, check the Negative LED Backlight supply levels. A loss or excessive condition of the negative supply will cause a 2X blink failure. The voltage level can be checked at CN6701/pins 1 & 3 before the TV shuts off. There will be 2 to 4 wires (Red & Blue) depending on the panel size. All individual wires should be checked for proper voltage level. In normal operation the voltage level will initially rise to approximately -175V and then should regulate down to between 89V and 125V depending on the Backlight adjustment in the User Menu. If one of the negative supplies is 0V or rises above -175V before shut-off then the Power Supply Board is defective, replace it to fix the problem. A defective X-Reality processor on the Main Board or Switch circuit on the Power Supply Board will cause a loss of the Power-ON signal (2X). To determine which component is defective check the Power ON voltage level at CN6704/pin 1. In normal operation 3V should be measured. If

the 3V is presented before shut-off then the Power Supply Board is defective. If 0V is measured before shut-off then the Main Board is defective.

Finally, there are PFC protection circuits on the Power Supply Board that when activated will cause a 2X blink protection mode. The PFC circuit is monitored for both over-voltage and over-temperature. Therefore, if all the previously discussed circuits checkout okay, there could still be a problem on the Power Supply Board in the PFC circuit causing the 2X blink. Replacing the Power Supply Board will fix the TV.

3 TIMES BLINKS

3X Blink- DC Regulator/Audio Error

The Audio error can occur due on of the following error conditions.

> Defective DC Regulator on Main Board

> Shorted or Damaged Speaker Connections

> Defective Audio Amplifir (Main Board)

> Loss of AU12V (Open F4200 on Main Board)

> Loss of AU12V (Open Fuse on Power Supply Board)

The first thing to check when a 3X blink protection mode occurs is the physical condition of the speakers and speaker connections. The speakers should measure 8 ohms. Shorted speakers or connections can cause a 3X blink protection mode. If the speakers and connections check okay, then the defective component is on the Main Board. An open F4200, defective DC Regulator, or defective Audio amplifier will cause a 3X blink protection mode. In any of these cases, replace the Main Board to fix this condition. A defect on the Power Supply Board can cause a 3X blink protection mode and shut-off. Check the AU12V level at CN6704/pin 14. If 0V is measure before shut-off the Power Supply Board is defective.

4 TIMES BLINKS

4X Blink – Balancer Error

The 4X error code is only used on models incorporating local dimming LED backlighting. If a failure occurs on the LD board the TV will shut down and display this diagnostic code. Models using conventional non-local dimming LED backlighting do not utilize this error code.

5 TIMES BLINKS

5X Blink - T-CON Error

The 5X blink protection mode indicates a communications error between the T-CON Board and the X-Reality microprocessor on the Main Board. If the T-CON is available for replacement, replace the T-CON. [If the T-CON is not available, the LCD panel must be replaced since the T-CON circuit is part of the LCD panel assembly.] In rare cases a loose or defective LVDS cable could also be the cause.

6 TIMES BLINKS

6X Blink - Backlight System Failure

NOTE: All models will make two attempts to power up before a 6X is activated. The SONY logo (Backlight) may or may not display on the screen. However, the splash tones will be heard two times. After the second attempt the TV will turn off and the standby LED will blink a 6X protection mode. (Note: The splash tone may not be heard if it is turned off or the volume is set to minimum.) If a 6X blink pattern is activated then a defect has occurred in one of the following areas.

Defective Panel LED(s)

Defective Power Supply

When troubleshooting a 6X backlight system failure it is key to notice if the backlights illuminate before the TV shuts off. The following list shows the possible backlight status and blink pattern and the possible failed components.

* Momentary Backlight and 6X [Defective LED(s) (LCD Panel Assb.)]

* No Backlight and 6X [Replace Power Supply]

In most cases, if the Sony logo (Backlight) momentarily illuminates and the TV shuts off and a 6X is activated than one or more of the backlight LEDs are defective. The LCD Panel assembly panel must be replaced for a defective LED. However, before replacing the LCD panel assembly check for a complete loss of the Negative Backlight (-89V to -125V) power supply. The -89V to -125V power supply can be checked at CN6702/pins 1 & 3.

If there is no backlight before the TV shuts off and activates a 6X, than check the “Backlight ON” signal from the TV microprocessor and the Positive (+145V) Backlight power supply from the Power Supply Board. The BL-ON signal can be checked at CN6704/pin 5 and the +145V at CN6701/pins 1 & 3. If the “Backlight-ON” signal is okay and the Positive Power supply is missing then the Power Supply Board is defective. However, if the Backlight-ON is missing then the X-Reality Microprocessor is defective and the Main Board must be replaced to repair the problem.

7 TIMES BLINKS

7X Blink - Temperature Failure

These models do not display a temperature warning OSD dialogue box before shutting off and going into a 7X standby LED blink pattern. The main objective when a 7X blink pattern occurs is to determine which of the following possible defects is causing the excessive temperature condition indication.

1. Excessive Ambient Room Temperature

2. Dust or Debris Blocking the TV Ventilation Apertures

3. Defective Temperature Sensor or X-Reality Microprocessor (Main Board)

The first step is to notice how long it takes the TV to shut off and trigger a 7X blink protection mode.

If the TV has an actual excessive temperature condition it will take a considerable period of time to shut off and indicate a 7X blink protection mode.

This is because it will take time for the TV components to heat up and for the temperature sensor to detect the excessive temperature and shut the TV off.

If the TV takes a considerable period of time to shut-off check the following items

> The TV should not be located too close to any heating devices.

> The TV should have at least 4 inches of clearance around the sides & rear, and 11 inches of clearance over the top to ensure adequate ventilation.

> Check that all vented areas on the TV are clear of all dust and debris.

If the TV shuts off immediately after Power-ON then one of the following components has failed (Not an Actual Excessive Temperature Condition).

* X-Reality Microprocessor (Main Board)

* Temperature Sensor (Main Board)

In either case the Main Board must be replaced to fix the problem.

Toshiba: Dead

Model/s: Toshiba 32WLT58 LCD TV

Symptom: Dead

Cure/Solutions: Check F870 (2A), Q860 (STRZ4479) and D866. If F801 open circuit, then check the voltage regulator Q820 for short circuit, R831 (4.7R/5W) and D825 (MTZJ33A).

Viewsonic: Picture flickers and is brighter on the right, than on the left

Model/s: Viewsonic N3260W VS114361M LCD TV

Symptom: Picture flickers and is brighter on the right, than on the left.

Cure/Solutions: Replace four electrolytic capacitors (2x 820uF and 2x 1000uF) in upper left PSU.

Viewsonic: No startup

Model/s: Viewsonic N3260W VS114361M LCD TV

Symptom: No startup

Cure/Solutions: Check capacitors (with ESR Capacitor tester), Q7 and SMD resistor R65 (5.1R) in primary side of PSU. This TV set using the FSP228-3F01 PSU.

Westinghouse: Blue screen. No sound, no picture and no OSD

Model/s: Westinghouse LTV40W1HDC LCD TV

Symptom: Blue screen. No sound, no picture and no OSD.

Cure/Solutions: Replace circuit protector fuse on T-CON board.

VIZIO: Green distortion in picture.

Model/s: Vizio VO42LFHDTV10A LCD TV

Symptom: Green distortion in picture.

Cure/Solutions: If PSU secondary side voltages ok. Check & clean contacts of ribbon cables coming from control board.

Wharfedale: Starts-up, backlight came after that switches off immediately.

Model/s: Wharfedale LCD3210AF Chassis 17MB116 LCD TV

Symptom: Starts-up, backlight came after that switches off immediately.

Runs ok when inverter board is externally supplied with 24v.

Cure/Solutions: Replace C877 and C878 (15nf/630v) between heat sink of switching transistor and larger transformer on the primary side of the PSU.

Samsung: Unit cycles on and off several times before starting

Symptom: Unit cycles on and off several times before starting

Cure/Solutions: If the unit will cycle on and off several times before turning on and then playing fine, check the power supply carefully for filter capacitors with bulged tops. Replace the capacitors or power supply to correct the issue.

Samsung: Auto-shutdown on 2008 LCD TV's

Symptom: Auto-shutdown on 2008 LCD TV's.

Cure/Solutions: Upon inspections of 2008 LCD TV's we have found that the LVDS (ribbon cable) can cause an auto shut down. Even if the LVDS cable doesn't look defective try changing it anyway and retest the TV. It is a good practice to carry a few extra LVDS cables in your van for such testing circumstances.

Samsung: Unit tries to start with melody but cycles off and back on

Model/s: Samsung LN40A650A1FXZA,LN46A650A1FXZA,LN40A750R1FXZC,LN46A750R1FXZA,LN40A750R1FXZA LCD TV

Symptom: Unit tries to start with melody but cycles off and back on.

Cure/Solutions: If the unit tries to turn on and makes the startup melody but then immediately shuts off and starts again, unplug the LVDS cable and apply power again. If the set stays on, replace the T-Con board.

Samsung LNS2651 & LNT3242: Picture is lost, sound OK after MAIN PCB was replaced

Model/s: Samsung LNT3242HX/XAA, LNS2651DX/XAA LCD TV

Symptom: Picture is lost, sound OK after MAIN PCB was replaced

Cure/Solutions: If after replacing MAIN PCB and made all correct setups in "OPTION BYTE" you get the symptoms: lost picture after 5-10 min. but sound OK, picture comes back if you restart the LCD but just to be lost again after the same interval or Picture is lost intermittently every 10-20 sec. and comes back itself, again sound OK.

You may not have to come back with another Main PCB, this may be corrected just by moving the connection between inverter and SMPS on the SMPS board. If it was on A-CNM803 move it to S-CNM802 or vice versa from S-CNM802 to A-CNM803 on the SMPS board, see picture. If this is not working then use a new MAIN PCB.

This may be applied to other LCD models too.

Samsung LNS4051: Clicking repeatedly TV will not turn on

Model/s: Samsung LNS4051DX/XAA LCD TV

Symptom: Clicking repeatedly TV will not turn on

Cure/Solutions: Found 2 electrolytic 100uf at 16v capacitors on the 5v line C115 and C123 bad. Or replace the power supply.

Samsung: Backlight Failure Testing

Model/s: Samsung LN32B360C5DXZA,LN32B530P7FXZA,LN32B650T1FXZA,LN32B, Symptom: Backlight Failure Testing

Cure/Solutions: Backlight failures can be partial or full failure Check the backlight supply voltage (refer to service manual) If supply voltage is present, use a flashlight behind the television and shine a light through the panel. If the video is working you will see it.

Samsung LNS4041: Unit Continually Cycling On and Off

Model/s: Samsung LNS4041DX/XAA LCD TV

Symptom: Unit Continually Cycling On and Off. Set turns on and off in a continuous cycle. Plays the melody each time.

Cure/Solutions: First, check the power supply voltages, if missing, replace the power pcb. Next unplug the lvds cable. If the set continues to cycle, replace the main pcb. If the cycling stops, replace the lcd panel. Part numbers are version dependent, so be sure to check the set's version.

Samsung LNT4671 & LNT5271: TV is cycling, the red led blinking and the relay is cycling

Model/s: Samsung LNT5271FX/XAA,LNT4671FX/XAA LCD TV

Symptom: TV is cycling, the red led blinking and the relay is cycling sometime TV will come on.

Cure/Solutions: TV is cycling, the red led blinking and the relay is cycling sometime TV will come on. The Main board replaced, did not fix. This unit was a Refurb, found cable from the main board to the side AV jack was reversed, is not labeled as to direction of use. This cable if reversed will be hot to the touch. Found by removing and replugging and changing direction of cable TV worked. This was tried on both model numbers with the same result.

Hitachi 37LD6600: No sound or intermittent sound

Model/s: Hitachi 37LD6600, 37LD6600A LCD TV

Symptom: No sound or intermittent sound

Cause: Pins of headphone socket touching the chassis.

Cure/Solutions: Trim the pins of the Headphone socket.

Hitachi 37LD6600: MECHANICAL NOISE FROM SCREEN ONLY IN CINEMA MODE

Model/s: Hitachi 37LD6600, 37LD6600A LCD TV.

Symptom: MECHANICAL NOISE FROM SCREEN ONLY IN CINEMA MODE

Cause: High back light setting on Cinema mode.

Backlight settings are different for each mode :

DYNAMIC: 00

NATURAL: 50

CINEMA : 100

Cure/Solutions: Reduce backlight settings in Cinema mode from 100 to 59 as follows.

Enter Service Mode with the remote control,

PRESS MENU

4725 OR 1267 OR 1461 (there are 3 different software versions, only one code will work)

Service Menu will appear, Select PIC ADJUST and enter with VOL+

A second service menu will appear, the bottom adjustment in the menu is Back Light setting and will be set to 100.

From the Mode Heading select CINEMA mode.

Select Back Light and reduce the setting to 59.

To memorize and exit Service Mode press Standby.

Hitachi 32LD7200: Distorted Sound/Audio

Model/s: Hitachi 32LD7200 LCD TV

Symptom: Distorted Sound/Audio

Sound is distorted when the set is first switched on. After a while the fault clears and the set works normally.

Cure/Solutions: Replace Joint PWB. p/n: TP01336.

Hitachi 32LD7200: MECHNICAL NOISE FROM SCREEN IN DYNAMIC MODE

Model/s: Hitachi 32LD7200 LCD TV

Symptom: MECHNICAL NOISE FROM SCREEN IN DYNAMIC MODE

Cause: Low back light setting on Dynamic mode.

Backlight settings are different for each mode :

DYNAMIC : 12

NATURAL : 15

CINEMA : 10

Cure/Solutions: Increase backlight settings in Dynamic mode from 12 to 20

If similar noise problem occurs on other modes, adjust backlight levels to the position in which noise becomes minimum..

ADJUSTMENT

Backlight level can be adjusted in USER menu only.

Select Menu ----- Picture ----- Backlight ------ and adjust as necessary.

Hitachi 32LD6600: No picture, but sound ok

Model/s: Hitachi 32LD6600_A_B_C LCD T V

Symptom: No picture, but sound ok.

Cause: Dry joints on components S627 and S629 near connector PL308 on the main board.

Cure/Solutions: Resolder components S627 and S629 and also check other components for dry joints near the connector.

Hitachi 32LD6200: Unit does not switch on or fails to power on

Model/s: Hitachi 32LD6200_A_B_C LCD TV

Symptom: Unit does not switch on or fails to power on

Unit does not work, standby LED not lighting.

Cause: Working of Pixelworks controller IC21 depends on ambient temperature.

If the IC is heated externally the unit starts to work normally.

Cure/Solutions: Replace Ferrite bead L500 and L501 with a jumper wire.

Hitachi 32LD6200: Set fails to power on/switch on

Model/s: Hitachi 32LD6200_A_B_C LCD TV

Symptom: Set fails to power on/switch on.

If MB11-6 Main board is used instead of the original Main board MB11-2 the unit won't switch on.

Unit switches off immediately and a clicking noise comes from the Power Regulator Board.

Countermeasure:

Replace the LVDS cable (p/n: VS30041693) and add a 47uF(p/n: VS30000396, CAP EL47UF16V) electrolytic capacitor to Power Regulation Board .

Hitachi: Picture Display Problem

Model/s: Hitachi 32LD6200_A_B_C, 32LD6600_A_B_C LCD TV

Symptom: Picture Display Problem

Cause: Various picture problems can be caused by poor connection of the LVDS cable on connector PL103 on the Main board.

Cure/Solutions: Remove LVDS cable from connector PL103 and reinsert carefully.

Make sure both end of the LVDS cable are inserted properly between PL103 and the display panel.

Sharp: The Sharp LCD TV still under protection mode?

Model/s: SHARP LCD TV Repair tips

Symptom: The Sharp LCD TV still under protection mode?

The Sharp LCD TV always have the protection mode come out. Normally, the repairer will first check the inverter board, after that power board/PSU, if still can't get any result, then they will check the signal board or mainboard. Even you change the inverter or PSU board, the lcd TV still under protection mode. Sometime, the lcd TV has been fixed by the repairer, but they don't know the TV still remember the protection mode inside the memory. So, now you need to know how to clear this protection error inside the lcd TV memory.

Cure/Solutions: Press & hold the CHANNEL DOWN & VOLUME UP buttons, then ON the LCD TV. The LCD TV Protection Error has been clear & solve the TV problem.

Hyundai: Slow start-up

Model/s: Hyundai Imagequest HQL260WR LCD TV

Symptom: Slow start-up

Cure/Solutions: Replace capacitor C109, C110 and C111 (all 1000uf/35v). Also check SMD resistor R56 and R57(both 22K) for dry joints.

Hyundai: Shuts down after a few minutes

Model/s: Hyundai Imagequest HQL260WR LCD TV

Symptom: Shuts down after a few minutes

Three 1000uf electronic capacitors in PSU replaced unsuccessfully.

Cure/Solutions: Change optocoupler IC PC102-2.

Samsung: LN32A450_LN32A330: Video will intermittently turn mostly white

Model/s: Samsung LN32A450C1DXZA,LN32A450C1HXZA,LN32A450C3HXZA,LN32A330J1DXZA,LN32A330J1NXZA LCD TV

Symptom: Video will intermittently turn mostly white

White display with a faint image of OSD (On Screen Display) and video in the background. Video will intermittently turn mostly white with the OSD barely visible in the background. Even a black image or when the panel should not be showing any video, it is white. I found that one of the sub-boards inside the panel, the boards that the ribbon cable from the T-Con connect to, are not seated properly and the larger SMD capacitors on the board are intermittently making contact with the metal frame of the set, effectively creating a short to ground.

This is one of the panels that are mounted upside down, so the stand mounts just below and behind the panel frame. Any slight pressure from the stand can cause the frame to make contact. In many cases, the TV can be slightly flexed to make this issue occur.

You may see besides a T-Con ribbon cable, that the sub-board is not seated properly, and is in fact bowing towards the outer frame.

Pulling the frame out slightly, you can see one of the SMD capacitors that can make connection with the frame.

Cure/Solutions: Adding felt to the affected area will solve the issue.

Samsung most model: Firmware Blinking in Red at the Top of the Screen

Model/s: Samsung LN32B360C5DXZA,LN32B530P7FXZA,LN32B650T1FXZA,LN32B

LN55B650T1FXZA LCD TV.

Symptom: Firmware blinking in Red at the top of the screen.

Cure/Solutions: Problem - After changing the main board, I'm now stuck with the firmware text info blinking in RED print at the top of the screen.

Solution : The unit is stuck in aging mode. To exit, simply hit the menu button on the TV itself.

Samsung LNT4065_LNT5265: With Signal-Blue Screen and Flashing White Short Horizontal Lines

Model/s: LNT4065FX/XAA,LNT4665FX/XAA,LNT5265FX/XAA,LNT4061FX/XAA,LNT4661FX/XAA

Symptom: Blue screen without signal, with signal -blue screen with flashing white short horizontal lines

Cure/Solutions: Refit or replace LVDS cable, check if the cable not strangled by the metal cover and loosen up the screws of the cover.

Samsung LNT3242_3232 : Wont Power On

Model/s: Samsung LNT3242HX/XAA,LNT3232HX/XAA LCD TV

Symptom: Wont power on

Cure/Solutions: TV would not come on. Removed the back and as soon as we did the set came on.

Found glue all on the cables to the smps. Cleaned glue off and cleaned the terminals. Set operates normally.

ACER AL2671W: No start-up. LED is orange

Model: Acer AL2671W LCD TV

Symptom: No start-up. LED is orange.

Cure/Solution: Check C380 (100uf.16v) under heatsink, next to U42 and U61 on signal PCB for capacity loss.

Sony KDL32U2000: No Picture

Model: Sony KDL32U2000 Chassis SE1 LCD TV

Symptom: No Picture

Cure/Solution: Check SMD fuse CP101P on LVDS board. The LVDS board is behind the BDT board.

SONY KDL32S2010E: Switches to standby for a short while, then back again

Model: SONY KDL32S2010E Chassis WAX2 LCD TV

Symptom: Switches to standby for a short while, then back again

Cure/Solution: Replace standby push button on user control, has contact resistance.

Philips 32PF3320/10: "F" is displayed on screen

Model: Philips 32PF3320/10 Chassis LC4.5 EAA LCD TV

Symptom: "F" is displayed on screen

Cure/Solution: TV is in factory mode. To quit the factory mode, press both "VOLUME" "-" keys and "PROGRAM" "-" for 5 seconds simultaneously.

LG 32LC56: Picture divided into several parts. Distorted picture

Model: LG 32LC56 LCD TV

Symptom: Picture divided into several parts. Distorted picture

Cure/Solution: Replace T-CON board (Part Number: 218394).

LG 32LC56ZC: No start-up. Standby LED flashes from red to green

Model: LG 32LC56ZC LCD TV

Symptom: No start-up. Standby LED flashes from red to green

Cure/Solution: Replace C202, C206, C217 and C218 (2200uf/10v all), and C226 (470uf/25v).

GOODMANS GTV26WLCD: Shuts down and LED blinks

Model: GOODMANS GTV26WLCD LCD TV

Symptom: Shuts down and LED blinks

Cure/Solution: Replace C877 and C878 (both 15nf/630V) near heatsink, at top left corner of PSU

BUSH LCD26TV006HDX: No display. Flashing standby light

Model: BUSH LCD26TV006HDX LCD TV

Symptom: No display. Flashing standby light.

Cure/Solution: The capacitor C315 (1000uF/25v) is supplied higher rated, and is a little bigger so use longer leads don't fit close to board. Be careful when soldering you don't accidentally remove the tiny surface mount resistors on back of board.

Samsung LN32A330: The TV takes longer to power on than normal

Model/s: Samsung LN32A330J1DXZA,LN32A330J1NXZA LCD TV

Symptom: The TV takes longer to power on than normal

The TV takes longer to power on than normal. You may hear several clicks while the TV attempts to power on.

Cause: The electrolytic in the capacitors on the power supply board over time will dry out causing the power supply to shut down during its initial power on cycle.

Cure/Solutions: Refer to the capacitor cross reference guide below for the list of the capacitors that should be replaced.

Samsung: Unit tries to start with melody but cycles off and back on

Model/s: Samsung LN40A650A1FXZA,LN46A650A1FXZA,LN40A750R1FXZC,LN46A 750R1FXZA,LN40A750R1FXZA LCD TV

Symptom: Unit tries to start with melody but cycles off and back on

Cure/Solutions: If the unit tries to turn on and makes the startup melody but then immediately shuts off and starts again, unplug the LVDS cable and apply power again. If the set stays on, replace the T-Con board.

Samsung: Will not turn on, cycles on and off with startup melody, no backlights

Model/s: Samsung LN52A650A1FXZA,LN40A650A1FXZA,LN46A650A1FXZA,LN52A 650A1FXZC,LN46A650A1FXZC LCD TV

Symptom: Will not turn on, cycles on and off with startup melody, no backlights

Cure/Solutions: If the set will try to turn on and the startup melody sounds but no backlight appears and the set cycles off and on every 5 to 10 seconds, unplug the LVDS cable from the T-Con/FRC board. If the set then runs and the backlights come on and stay on, replace the defective T-Con/FRC board.

Samsung LNS4692: No video TV, has backlight and audio. TV will not come on

Model/s: Samsung LNS4692DX/XAA LCD TV

Symptom: No video TV, has backlight and audio. TV will not come on.

Cure/Solutions: Found pico fuse open at cp1 on the T-CON pcb short cp1 TV comes on runs fine. Replace the T-CON pcb.

Samsung: Standby light is on, flashes once briefly then unit attempts to turn on

Model/s: Samsung LN32A330J1DXZA,LN32A450C1DXZA,LN32A550P3FXZA,LN32A 540P2DXZA,LN32A330J1NXZA,LN32A450C1HXZA,LN32A450C3 HXZA, LN32A300J1DXZA LCD TV

Symptom: Standby light is on, flashes once briefly then unit attempts to turn on

Cure/Solutions: If the unit will not turn on, but the red standby LED is on and flashes once quickly when the power button is pressed on the remote or the TV, the 2200uf 10v filter capacitor on the SMPS has failed. This capacitor is located in the upper right side of the power supply close to the cable that connects the main board. Visual inspection will normally show that it has a swollen top. Replace capacitor and inspect the others in the filter stage to restore operation.

Hisense: Dead with a Bang Noise

Model/s: Hisense LCD4204EU LCD TV

Symptom: Dead with a Bang Noise

Cure/Solutions: Replace chopper drive STRX6769, RE038 (10R) and RE032 (150R) in primary PSU.

Goodmans: Dark picture. OSD bounces

Model/s: GOODMANS GTV32W22HD AVZOOO Chassis LM

Symptom: Dark picture. OSD bounces

Cure/Solutions: Replace C2042 and C2044 (680uf) in PSU.

Dell W2600: Erratic functions

Model/s: Dell W2600 LCD TV

Symptom: Erratic functions.

Sometime the TV locks-up problem, shuts down, no start-up and no remote control or front panel functions too.

Cure/Solutions: Resolder or reflow system ROM IC1234 and all regulator ICs on the mainboard.

Model: Skyworth 30AAA Chassis 8TP2 LCD TV

Symptom: Sometime display white screen and then back to normal. After

power on the TV, the words “Please wait” character move to top left side.

Repair/Solution:

Replaced the U804 (APX1117-5V) and the TV is working properly now.

Model: SONY KDL32S2010E Chassis WAX2 LCD TV

Symptom: Switches to standby for a short while, then back again.

Repair/Solution:

Replace standby push button on user control, has contact resistance.

Model: Sony KDL32U2000 Chassis SE1 LCD TV

Symptom: No Picture.

Repair/Solution:

Check SMD fuse CP101P on T-CON board. The T-CON board is behind the

BDT board

Model: SONY KDL40U2000 with SE1 Chassis LCD TV

Symptom: No start-up, red LED light flashes 3 times.

Repair/Solution:

TV has slow start-up before this symptom occurred. When check standby 5v ok

and PSU is heat sensitive. Check and replace the C6055 (47uf/25v) in G2

supply it will solve the problem.

Model: SONY KDL40U2000 LCD TV

Symptom: Error codes 4

LED light turns green, flashes 4 times then goes green again and flashes 4 times

again. Fuse (500mA) on inverter panel is open circuit.

Repair/Solution:

Replace the fuse on inverter board.

Model: SONY KLV26U2520 Chassis SE1 LCD TV

Symptom: No picture but sound ok.

Repair/Solution:

Check SMD fuse CP101P on LVDS panel (T-CON).

Model: Sony KDL32U2000 Chassis SE1 LCD TV

Symptom: Stuck in standby. Standby LED light is green.

Red LED light flashes 3 times. No remote control or front panel functions.

Repair/Solution:

Check or replace D301 zener diode (can be use a 5v zener diode) for short

circuit.

Model: Sylvania LC-420SSB (A81 H1UH)

Symptom: High frequency noise from power transformer T600 when the TV is

in the standby mode.

Repair/Solution:

Remove diode D655 from the power supply.

Model: Sylvania LC420SS8 LCD TV

With Power Supplies:

1ESA20888

1ESA20888-PW

1ESA14710

1ESA14710-PW

Symptom: Low level hums (buzz) sound from speakers.

Repair/Solution:

Perform the following fix on the power supply board.

1. Cut Jumper J220.

2. Cut Jumper J256.

3. Solder a wire (about 140mm AWG20) from J190 to J256. On J256, solder the jumper on the Audio Amplifier (IC800) side.

Model: Toshiba 32WLT58 LCD TV

Symptom: Dead

Repair/Solution:

Check F870 (2A), Q860 (STRZ4479) and D866. If F801 open circuit, then check the voltage regulator Q820 for short circuit. Also checked R831 (4.7R/5W) and D825 (MTZJ33A).

Model: Toshiba 20W330DB Chassis 17MB222 (Vestel) LCD TV

Symptom: No Power

Repair/Solution:

The main fuse F800 (T2.5A) blew. Found main filter TR801 short circuit, D824 (ST-TH12R06FP) also shorted. Check SMD IC802 (FAN7529) and Q803 (FQPF13N50C) both short circuits. R830 (0.22R/3W) and SMD resistor R823 (15R) both also open circuits.

Model: Toshiba 20W330DB Chassis 17MB222 (Vestel) LCD TV

Symptom: Stuck in Standby Mode.

Repair/Solution:

If the EEPROM IC was removed, the standby LED light turns to green color.

But still can't start-up. Try to programme a new EEPROM IC, because can't get

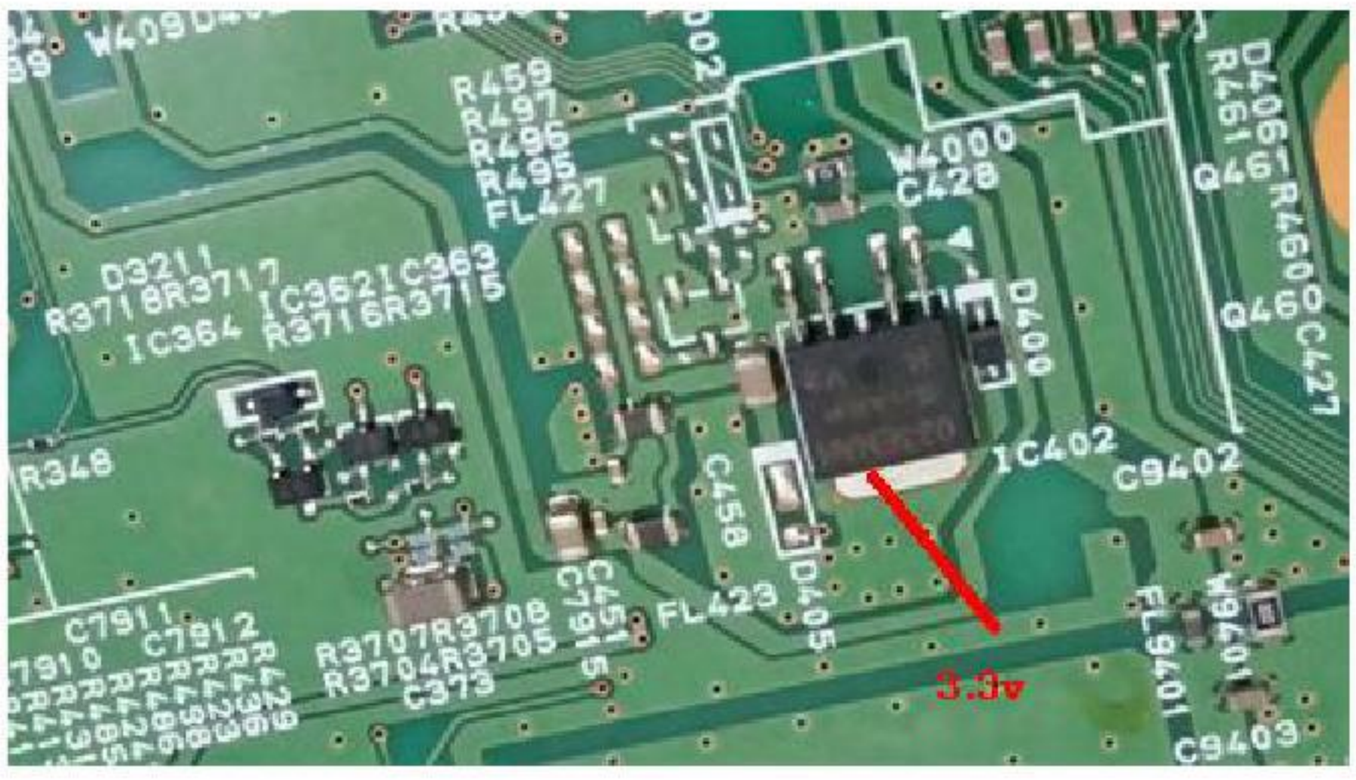
the actual version of firmware, and then replace a new mainboard (17MB22-2).

The TV is working properly now.

Sharp lCD TV in dead no LED light

Missing 3.3v from regulator and I.C was faulty; this is a common fault in this kind of boards of sharp LCD T.V

Shows in picture



Model: Viewsonic N3260W VS114361M LCD TV

Symptom: No startup

Repair/Solution:

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Check capacitors (with ESR Capacitor tester), Q7 and SMD resistor R65 (5.1R) in primary side of PSU. This TV set using the FSP228-3F01 PSU.

Model: Viewsonic N3260W VS114361M LCD TV

Symptom: Picture flickers and is brighter on the right, than on the left.

Repair/Solution:

Replace four electrolytic capacitors (2x 820uF and 2x 1000uF) in upper left PSU.

Model: Vizio VO42LFHDTV10A LCD TV

Symptom: Green distortion in picture.

Repair/Solution:

If PSU secondary side voltages ok. Check & clean contacts of ribbon cables coming from control board.

Model: Westinghouse LTV40W1HDC LCD TV

Symptom: Blue screen. No sound, no picture and no OSD.

Repair/Solution:

Replace circuit protector fuse on T-CON board.

Model: Wharfedale LCD3210AF Chassis 17MB116 LCD TV

Symptom: Starts-up, backlight came after that switches off immediately.

TV runs ok when inverter board is externally supplied with 24v.

Repair/Solution:

Replace the C877 and C878 (15nf/630v) between heatsink of switching transistor and larger transformer on the primary side of the PSU.

DELL W2600: Display locks after 10 minutes

Model/s: Dell W2600 LCD TV

Symptom: Locks after 10 minutes

Cure/Solutions: Change regulator IC (LM1117 DT-2.5) on mainboard.

DELL W2600: No start-up after warm-up

Model/s: Dell W2600 LCD TV

Symptom: No start-up after warm-up

Cure/Solutions: Replace capacitor (10uf/50v) on small board mounted to power supply next to mainboard power connector.

Acer: No function on user control and remote control

Model/s: Acer AT3201W LCD TV

Symptom: No function on user control and remote control

When SCART module removed, remote control reaction ok.

Cure/Solutions: Replace electrolytic capacitors C348 and C350 (both 220uF/16v) on mainboard.

BUSH: No Backlight

Model/s: Bush IDLCD26TV05HD Chassis L9 LCD TV

Symptom: No Backlight

They are no 24v to the inverter board after a while. Sensitive to power supply tapping.

Cure/Solutions: Check & replace SMD 27v zener diode (red with yellow bands). Note: There are no reference numbers on any of the SMD components. The diode is located in primary side of the 24v chopper transformer supply, near pin5-8 of the SMD IC (UC3843A). (This PSU board is GDP002 ZR1910R NETZTEIL SPS 180W 24/5 12/5 PFC 2PIN(LISH)).

Hitachi: Intermittent Color or no color

Model/s: Hitachi 28LD5200E LCD TV

Symptom: Intermittent Color or no color

- Color drops out after the unit has been running for two to three hours.

Cure/Solutions: Resolder capacitor C510 and other components in its vicinity.

Hitachi: Poor image quality or polarization of image

Model/s: Hitachi 26LD6600 & 26LD6600A_B_C_D, 32LD8A10, 37LD6600, 37LD6600A & 37LD8500, 37LD8550, 37LD8600, 37LD8700C, 37LD8700CA, 37LD8700U, 37LD8700UA, 37LD8A20, 37LD8D10, 37LD8D20E, 37LD8D20U LCD TV

Symptom: Poor image quality or polarization of image

This phenomenon may be very intermittent and only displayed after a number of hours/days on soak

Cause: The glue on the LDVS cable heats up over time and the properties change and creating a contact problem within the cable and the PCB. This causes permanent or intermittent picture problems

Cure/Solutions: Remove the LDVS cable and clean the connections at the LCD control panel and replace the LVDS cable.

Hitachi: SOCKET CHANGE ON POWER BOARD 17PW15-9

Model/s: Hitachi 26LD6600 & 26LD6600A_B_C_D LCD TV

Tip: SOCKET CHANGE ON POWER BOARD 17PW15-9

Change: On the new version of Power Board 17PW15-9, socket PL805 has been changed to a 13 pin. On the earlier version of the power board socket PL805 is 12 pin.

When new Power Board with 13 pin (PL805 socket) is fitted to a set, the connector lead from socket PL805 must be changed .

Hitachi: CHANGE OF POWER SUPPLY FROM TYPE 17PW15-8 & 17PW15-9 TO 17PW20

Model/s: Hitachi 26LD6600 & 26LD6600A_B_C_D, 32LD8A10 LCD TV

Tip: CHANGE OF POWER SUPPLY FROM TYPE 17PW15-8 & 17PW15-9 TO 17PW20

The original power supply, version 17PW15-8 & 17PW15-9 has now been changed to the later version 17PW20

When fitting the new power supply, it may also be necessary to replace two cables with a new type as described below.

There is one new part number to replace all. This new part number will supply a kit that includes the power supply and the necessary new cable which you should use if required.

Remove the following connecting leads used with Power board 17PW15-8

1.Remove cable from Power board connector PL806 going to Mainboards MB15E-5 or MB15E-7 connector PL902.

2.Remove cable from Power board connector PL805 going to Mainboards MB15E-5 or MB15E-7 connector PL900 .

Replace the two cables with the new cable type:

Order New cable part number VS30049856

CHANGES:

Insert new cable:

1. On the Power Board Connect 12 pin connector of the new cable to PL805

2. On the Main Board: Connect the 7 pin connector of the new cable to PL902 and 12 pin connector to PL900.

Hitachi: FITTING NEW MAIN BOARD TYPE MB15E-7

Model/s: Hitachi 26LD6600 & 26LD6600A_B_C_D, 32LD8A10, 37LD6600, 37LD6600A, 37LD8600, 37LD8700C, 37LD8700U LCD TVs.

Tip: FITTING NEW MAIN BOARD TYPE MB15E-7

When new Main board type MB15E-7 is replaced instead of Main board type MB15E-5 the following changes have to be made.

REMOVE PARTS:

1. Remove and discard cable between Audio board (AMP05) connector PL709 and Main board connector PL1001.

2. Remove and discard cable between Audio board (AMP05) connector PL704 to main board connector PL903

CHANGES:

Order New cable part number VS30051586

Insert new cable:

On the main PCB Connect 6 pin connector of the new cable to PL1004.

On the Audio PCB you must first Check the version of Audio pcb fitted to the TV.

For Audio PCB version AMP05: Connect the 5 pin connector of the new cable to PL709 and 2 pin connector to PL704

For Audio PCB Version AMP03 : Connect the 5 pin connector of the new cable to PL709. As PL704 does not exist on this version the 2 pin connector must be removed and the cable then soldered to legs of D700 and D701.

New Chassis Version MB15E-7 changed in production as table below

Model Part Number Serial Number (From ~)

32LD8600A VS20286080 V61101471 ~

32LD8A10A VS20286080 V61101681 ~

Samsung: DEAD BACKLIGHT FLASHES ON THEN OFF

Model/s: Samsung LNS4051DX/XAA LCD TV

Symptom: Dead backlight flashes on then off.

Cure/Solutions: UNIT WOULD FLASH ON THEN OFF AND AUDIO WOULD WORK. YOU COULD SEE VIDEO WITH A FLASHLIGHT. SOMETIMES UNIT WOULD STAY ON AND RUN IF YOU CYCLED ON AND OFF MANY TIMES. FOUND BAD SOLDER CONNECTION ON IP BOARD TI801 ON PRIMARY SIDE. RESOLDERED AND CORRECTED PROBLEM.

Samsung: Poor or Intermittent Video

Model/s: Samsung LNS4695DX/XAA,LNS4696DX/XAA,LNS4096DX/XAA,LNS4095DX/XAA LCD TV

Symptom: Poor or Intermittent Video

Cure/Solutions: Check the LVDS cable where it connects to the panel interface board. Be sure that the cable does not have any glue on it. On occasion, the glue can cause a poor connection if it gets into the connector. Remove glue or replace the LVDS cable with BN39-00726A.

Samsung: Half screen is purple

Model/s: Samsung LNT4065FX/XAA,LNT4665FX/XAA,LNT5265FX/XAA,LNT4061FX/XAA,LNT4661FX/XAA LCD TV

Symptom: Half screen is purple

Cure/Solutions: Half screen is purple. LCD panel controller board is defective. Panel needs to be replaced.

Samsung: Video Stuttering or Hesitation

Model/s: Samsung LNT4071FX/XAA,LNT4671FX/XAA,LNT5271FX/XAA LCD TV

Symptom: Video Stuttering or Hesitation

Cure/Solutions: The customer may complain that the video has a stutter or hesitation when viewing regular programming, either standard definition or high definition.

To fix, go into the customer menu, select Picture, then scroll to Auto Motion Plus 120Hz and select Off.

This enhancement circuit works for some movies, but can introduce severe hesitations and ghosting on regular programming. The customer should also be informed that this does not affect the 120Hz operation of the panel. The panel operates at 120Hz regardless of this setting.

Samsung: Troubleshooting Inverter PCB boards

Model/s: Samsung LNT4061FX/XAA, LN32A450C1DXZC, LN32A550P3FXZC, LN32A550P3FXZX, LN32A450C1DXZX,

LN32A650A1FXZA, LN32A450C1XZD, LN32A450C1DXZA, LN32A540P2DXZA, LN32A450C1XZP, LN32A550P3RXZD, LN40A530P1FXZA, LN40A530P1FXZX, LN40A450C1HXZX, LN40A450C1DXZA, N40A750R1FXZA, LN40A450C1DXZX, LN40A530P1FXZC, LN40A550P3FXZC, LN40A650A1FXZC, LN40A550P3FXZX, LN40A750R1FXZC, LN40A330J1DXZX, LN40A650A1FXZX, LN40A450C1XZD, N40A450C1DXZC, LN40A330J1DXZA, LN40A550P3FXZA, LN40A650A1FXZA, LN40A750R1FXZX, LN40A550P3RXZD, LN40A330J1XZD, LN40A630M1FXZA, LN40A540P2FXZA, LN40A650A2RXZD,

LN40A630M1FXZC, LN40A630M1FXZX, LN40A610A3RXZD, LN40A500T1FXZA, LN40A330J1XZP, LN40A450C1XZP, LN40A650A1RXZP, LN40A610A1RXZD, LN40A650A1FXZD LCD TVs.

Symptom: Troubleshooting Inverter PCB boards

Cure/Solutions: The inverter PCB is the power supply for the Cold Cathode Fluorescent tubes. The inverter acts exactly like the ballast used in a standard fluorescent light fixture. In the case of an LCD TV, 24 volts from the power supply is applied to a switch mode power supply (SMPS). The SMPS outputs ~1000 Volts to energize the bulbs then the voltage drops to ~ 500 volts for run operation. The SMPS switching frequency is around 90 KHz. The first step for verifying inverter board operation is to confirm the 24 volt supply is present. An oscilloscope can also be used to verify the SMPS circuit is oscillating. Simply holding the oscilloscope probe in the area of the switching transformer will show screen activity if the switching action is taking place. Measuring the SMPS output with standard equipment is not recommended as this is high voltage and at a high frequency.

Hitachi: No sound or audio

Model/s: Hitachi 26LD6600 & 26LD6600A, 32LD6600_A_B_C LCD TV

Symptom: No sound/audio

Cause: Sound setting may have been lost in the memory and defaulted to zero.

Cure/Solutions: Reinstate sound settings as follows:

Enter Service mode.

Press Menu then 4,7,2,5.

Go to Audio menu.

Select Sound 2. and enter the following values:

FM PRESCALER 15

NICAM PRESCALE AVL ON 35

SCART PRESCALE AVL ON 14

SCART VOLUME AVL ON 122

GO TO STANDBY TO MEMORISE SETTINGS

Hitachi: Burn in Mode when replacing Main PCB

Model/s: Hitachi 26LD6600 & 26LD6600A, 32LD6600_A_B_C, 37LD6600 LCD TV

Tip: Burn in Mode when replacing Main PCB

When replacing the main PCB on these models, the new part may be in the 'burn in' mode from manufacture. This will result in the image on screen flashing different colors.

To exit the burn in mode:

Use the remote control :

1. Press menu button

2. Press the following button sequence: 4,7,2,5 :

3. Go to “OPTIONS” and then set “BURN IN MODE” to either ON or OFF.

Hitachi: Audio noise may be heard from speakers when unit is in Tuner mode

Model/s: Hitachi 26LD6200 LCD TV

Symptom: Audio noise may be heard from speakers when unit is in Tuner mode and the volume control is set to near minimum.

Cure/Solutions: Add four SMD jumpers on the Amp board to positions J100, J101, J102 and J103 (JUMPER SMD 0603 R).

Hitachi: Retune of Digital TV channels

Model/s: Hitachi 22LD4500UK LCD TV

Tip: Retune of Digital TV channels

1. Press the menu button on the remote control to display the main menu on screen

2. Use the cursor down button on the remote control to highlight 'Installation' and then press OK

3. “Your previous digital channel list will be destroyed. Are you sure……” This message will appear on screen, select yes using the left cursor button and press OK

4. All channels will automatically be installed.

Hitachi: No sound or very low sound on terrestrial and no sound on Digital or any AV inputs

Model/s: Hitachi 22LD4500U, 22LD4500UK LCD TV

Symptom: No sound or very low sound on terrestrial and no sound on Digital or any AV inputs.

Cure/Solutions: This is a software/firmware problem. Replace memory IC302 Type 24LC16 (part number: VS20167612). All customer controls are set to minimum on the new IC. Please reset language and all picture controls to normal after replacing the IC.

Hitachi: Green horizontal line flashing across the screen intermittently

Model/s: Hitachi 22LD4200 LCD TV

Symptom: Green horizontal line flashing across the screen intermittently.

Cure/Solutions: Remove resistor R149 on the Input signal board (Signal processing-analog) and replace it with Jumper SMD(0 ohm, partnumber: VS30001734).

Hitachi: No Switch on from standby

Model/s: Hitachi L32VP03E, L32VP03U LCD TV

Symptom: No Switch on from standby

If the TV is switched into standby when it has been running for some time and is warm, it will not come out of standby until the set has cooled completely

Cure/Solutions: Replace the crystal X104 (XTAL 14.318MHZ 20PF 20PPM SMD ROHS, part number: VS30054926) on the main pcb/main logic board, the system control section.

Hitachi: Audio is distorted constantly and may have some background noise

Model/s: Hitachi L32A01, L32A01A, L32H01E, L32H01EA, L32H01U, L32H01UA, 32LD8D20E_EA, 32LD8D20U, 32LD8D20UA LCD TVs.

Symptom: Audio is distorted constantly and may have some background noise

Cure/Solutions: Replace D845 and D846 (both UF5402 3A/200V 150A, part number: VS30009366) on the power supply board/PSU.

Samsung LE32R73BD: No picture and no OSD menu. Backlight ok.

Model/s: Samsung LE32R73BD LCD TV

Symptom: No picture and no OSD menu. Backlight ok.

Cure/Solutions: Reflow LVDS socket on screen driver PCB and mainboard PCB.

SAMSUNG LE32R74BD: TV dead. Pulsating noise from PSU and LED light flashes.

Model/s: Samsung LE32R74BD LCD TV

Symptom: TV dead. Pulsating noise from PSU and LED light flashes.

Cure/Solutions: Check shottky diode DM854 (MBRF1545CT) in PSU for short circuit.

BUSH LCD32TV005HD: After TV on few seconds, then the TV off again.

Model/s: BUSH LCD32TV005HD APH000 Chassis BEKO LM LCD TV

Symptom: Picture appears for a few seconds after switch on, after that the TV switches off again.

Cure/Solutions: Check C2042 and C2044 (both 680uf/35v) in PSU for capacity loss.

BUSH LCD32TV005HD: No Picture and no back light. Front controls react and remote control does not.

Model/s: BUSH LCD32TV005HD APH000 Chassis BEKO LM LCD TV

Symptom: No Picture and no backlight. The front controls was working but remote control does not

Cure/Solutions: Replace IR receiver (short circuit).

JVC LT32DX7B: No functions after lightning strike

Model/s: JVC LT32DX7B LCD TV

Symptom: No functions after lightning strike.

Cure/Solutions: The primary voltage 300v is present. But secondary voltage output was only 21 volt. Replace standby transformer T9201.

Sharp LC32P55E: Red LED appears for a seconds, relay clicks then dead.

Model/s: Sharp LC32P55E LCD TV

Symptom: Red LED appears for a seconds, relay clicks then dead.

Cure/Solutions: The resistor R751 blown. Replaced IC704 & R751.

Sharp LC32P55E: Dead after start-up. Bang-noise head before

Model/s: Sharp LC32P55E LCD TV

Symptom: Dead after start-up. Bang-noise head before.

Cure/Solutions: Replace R751 (0.1R/2W), IC704, D762, D725 and C725 (470pF/3K) in PSU.

Philips Chassis BJ3.0E LA: Switches off for a second or two intermittently

Model/s: Philips Chassis BJ3.0E LA LCD TV

Symptom: Switches off for a second or two intermittently. Relay clicks and standby LED remains green. Switches off intermittently with green LED on, no sound or no picture.

Cure/Solutions: Please check the 27MHz KDS quartz crystal (SSB, item 1H00). If all yellow marked crystals bearing with a "5E", "5J" or "5K" batch number direct replaced it. Also replaced all the silver marked crystals bearing with a "6D" batch number.

LG 37LE2R: No start-up

Model/s: LG 37LE2R Chassis LP61A LCD TV

Symptom: No start-up.

Cure/Solutions: Replace SMD regulator TL431 (U130) in PSU.

LG 27LC2R: No Backlight

Model/s: LG 27LC2R Chassis LP61A LCD TV

Symptom: No backlight

Cure/Solutions: Check the SMD fuse F1 on inverter board for open circuit.

Samsung LE27T51B: Dark frame with color stripes

Model/s: Samsung LE27T51B LCD TV

Symptom: Dark frame with color stripes.

Cure/Solutions: It looks like the unstable voltage problem. Check and replace UP4 (L1117DG) on T-CON board.

LG 32LE2RZJ: Remote control no functions at all

Model/s: LG 32LE2RZJ Chassis LP61A LCD TV

Symptom: Remote control doesnt function at all.

Cure/Solutions: Replace SMD capacitor at output of IR receiver.

ACER AL2671W: Dead

Model/s: ACER AL2671W LCD TV

Symptom: Dead.

Cure/Solutions: Replace power supply IC (TNY264PN) and resistor R60 (10R/0.33W, NFR type).

ACER AL2671W: No start-up. LED is orange

Model/s: ACER AL2671W LCD TV

Symptom: No start-up. LED is orange.

Cure/Solutions: When C380 unsuccessfully replaced. Standby PSU functions and standby 5v present. The voltage appears at pin PSON in the PSU after switch on but PSU does not start. Actually they are three 330K SMD resistors in series in the PSU which supply voltage for DLA001. Check if resistors are high resistive.

Bush IDLCD26TV05HD: No backlight and no picture. Sound ok and can be intermittently

Model/s: Bush IDLCD26TV05HD Chassis L9 (Beko) LCD TV

Symptom: No backlight and no picture. Sound ok and can be intermittently.

Cure/Solutions: Replace C512, C513 (both 1000uF/35v) and C519 (220uF/35v) in PSU. Also a 1000uf/16v capacitor on the signals board on the far right-hand side, near the top.

SONY KDL40U2000: No start-up, red LED flashes 3 times

Model/s: SONY KDL40U2000 with SE1 Chassis LCD TV

Symptom: No start-up, red LED flashes 3 times.

Cure/Solutions: TV has slow start-up before this symptom occurred. When check standby 5v ok and PSU is heat sensitive. Check and replace the C6055 (47uf/25v) in G2 supply it will solve the problem.

BUSH LCD32TV022HD: Intermittently no start-up or dead after a few hours

Model/s: BUSH LCD32TV022HD with 17MB15 Chassis LCD TV

Symptom: Intermittently no start-up or dead after a few hours.

Cure/Solutions: The PSU replaced and EEPROM IC resoldered, but on help. Try to resolder IC220 (SDA5550) and IC224 on main board the TV back to normal.

EVESHAM ALQEM37SX: No start-up, the TV screen lights up, then switches back to standby mode

Model/s: EVESHAM ALQEM37SX with 17MB15 Chassis LCD TV

Symptom: No start-up, the TV screen lights up, then switches back to standby mode.

Cure/Solutions: Please check or direct replace the C877 and C878 on PSU board for open circuits. Sometime these caps will check good, but would breaks down under load.

Grundig GULENAR32HDIP: Stuck in standby mode, LED light is blue color

Model/s: Grundig GULENAR32HDIP with Chassis L9 LCD TV

Symptom: Stuck in standby mode, LED light is blue color.

Cure/Solutions: The blue LED always stays on, even when appliance is on standby mode. Capacitor C931 (1000uF) replaced but appliance is still dead with 12v and 24v ok. Check and replace diode D300 on the right-hand side, on middle-top of the main board.

Samsung LN40A650_A750_LN46A750: Unit tries to start with melody but cycles off and back on

Model/s: Samsung LN40A650A1FXZA,LN46A650A1FXZA,LN40A750R1FXZC,LN46A750R1FXZA,LN40A750R1FXZA LCD TV

Symptom: Unit tries to start with melody but cycles off and back on

Cure/Solutions: If the unit tries to turn on and makes the startup melody but then immediately shuts off and starts again, unplug the LVDS cable and apply power again. If the set stays on, replace the T-Con board.

Samsung LNT4665FX/XAA lost brightness when you replaced MAIN PCB

Model/s: Samsung LNT4665FX/XAA LCD TV

Symptom: LNT4665FX/XAA lost brightness when you replaced MAIN PCB

Cure/Solutions: Because MAIN PCB BN94-01199E is designed to work with both models LNT4665FX/XAA and LNT4661FX/XAA when you replaced the board is possible to lose the brightness. Go in SERVICE MODE and turn value LVDS BYTE from 8 to 10.

Samsung LNS4051: Dead Backlight Flashes On Then Off

Model/s: Samsung LNS4051DX/XAA LCD TV

Symptom: DEAD BACKLIGHT FLASHES ON THEN OFF

Cure/Solutions: UNIT WOULD FLASH ON THEN OFF AND AUDIO WOULD WORK. YOU COULD SEE VIDEO WITH A FLASHLIGHT. SOMETIMES UNIT WOULD STAY ON AND RUN IF YOU CYCLED ON AND OFF MANY TIMES. FOUND BAD SOLDER CONNECTION ON IP BOARD TI801 ON PRIMARY SIDE. RESOLDERED AND CORRECTED PROBLEM.

Samsung most model: Flickering on the screen intermittently

Model/s: Samsung

LN32B360C5DXZA,LN32B530P7FXZA,LN32B460B2DXZA,LN32B 540P8DXZA,LN32B550K1FXZA,LN37B530P7FXZA,

LN37B550K1FXZA,LN40B550K1FXZA,LN40B530P7FXZA,LN40B 530P7NXZA,LN40B530P7FXZC,LN40B540P8FXZA,

LN46B530P7NXZA,LN46B530P7FXZA,LN46B550K1FXZA,LN46B 540P8FXZA.

Symptom: Flickering on the screen intermittently

When the unit is connected via HDMI to a Scientific Atlanta cable set top box set in by pass mode for resolutions 480p and 720p a flickering will occur.

Cure/Solutions: Change the cable box to a fixed resolution. OR Have the customer install the latest TV firmware which can be located on samsung.com.

Samsung most model: Unit cycles on/off during startup

Model/s: Samsung LN46A550P3FXZA,LN46A650A1FXZA,LN46A530P1FXZA,LN46A 750R1FXZA,LN46A860S2FXZA,LN46A950D1FXZA,

LN46A540P2FXZA,LN46A850S1FXZA,LN46A630M1FXZA,LN46A 580P6FXZA,LN52A530P1FXZA,LN52A750R1FXZA,

LN52A650A1FXZA,LN52A550P3FXZA,LN52A630M1FXZA,LN52A 860S2FXZA,LN52A850S1FXZA,LN52A540P2FXZA,

LN40A530P1FXZA,LN40A450C1DXZA,LN40A330J1DXZA,LN40A 550P3FXZA,LN40A650A1FXZA,LN40A630M1FXZA,

LN40A540P2FXZA LCD TV.

Symptom: Unit cycles on/off during startup

Cure/Solutions: If the unit tries to turn on but begins to cycle on and off before any video is displayed and all of the SMPS voltages are good, disconnect the LVDS cable at the T-Con board. If the set starts and the backlights come on, replace the T-Con board. If the set does not start, disconnect the LVDS

cable at the main board. If the set starts, replace the LVDS cable. If the set still does not startup, replace the main board.

Samsung LNT3253: After a few minutes when TV warms-up picture becomes distorted

Model/s: Samsung LNT3253HX/XAA LCD TV.

Symptom: After a few minutes when TV warms-up picture becomes distorted

Cure/Solutions: 10-15 minutes after you turned on the unit panel warms-up and picture becomes distorted. If you just push the TV's frame picture becomes even more distorted. On the back of the panel the CONTROL ASIC area is very hot. Replace the panel to fix the problem.

Model: Samsung LNT4665FX/XAA LCD TV

Symptom: Brightness lost after replaced MAIN PCB.

Repair/Solution:

Because MAIN PCB BN94-01199E is designed to work with both models LNT4665FX/XAA and LNT4661FX/XAA when you replaced the board is possible to lost the brightness. Go in SERVICE MODE and turn value LVDS BYTE from 8 to 10.

Model/s: Samsung LNT5271FX/XAA, LNT4671FX/XAA LCD TV

Symptom: TV is cycling, the red LED light blinking and the relay is cycling sometime TV will come on.

Repair/Solution:

TV is cycling, the red LED light blinking and the relay is cycling sometime TV will come on. Even the Main board replaced, did not fix. This was a used unit, found cable from the main board to the side AV jack was reversed, is not labelled as to direction of use. This cable if reversed will be hot to the touch. Found by removing and re-plugging and changing direction of cable TV worked. This was tried on both model numbers with the same result.

Model/s: Samsung

LN32B360C5DXZA,LN32B530P7FXZA,LN32B650T1FXZA,LN32B 460B2D

XZA,LN32B540P8DXZA,LN32B550K1FXZA,

LN32B640R3FXZA,LN32B457C6HXZA,LN32B450C4HXZA,LN37B 457C6

HXZA,LN37B530P7FXZA,LN37B650T1FXZA,

LN37B550K1FXZA,LN40B457C6HXZA,LN40B550K1HXZA,LN40B 500P3F

XZA,LN40B550K1FXZA,LN40B650T1FXZA,

LN40B530P7FXZA,LN40B530P7NXZA,LN40B750U1FXZA,LN40B 540P8F

XZA,LN40B610A5FXZA,LN40B630N1FXZA,

LN40B640R3FXZA,LN46B650T1FXZA,LN46B530P7NXZA,LN46B 530P7F

XZA,LN46B550K1FXZA,LN46B610A5FXZA,

LN46B540P8FXZA,LN46B630N1FXZA,LN46B640R3FXZA,LN46B 750U1F

XZA,LN52B550K1HXZA,LN52B610A5FXZA,

LN52B550K1FXZA,LN52B540P8FXZA,LN52B530P7FXZA,LN52B 630N1F

XZA,LN52B750U1FXZA,LN55B640R3FXZA,LN55B650T1FXZA LCD TV

Symptom: Firmware blinking in Red at the top of the screen

Repair/Solution: Problem - After changing the main board, I'm now stuck with the firmware blinking in RED print at the top of the screen.

Solution: The unit is stuck in aging mode. To exit, simply hit the menu button on the TV itself.

Model/s: Samsung

LN32B360C5DXZA,LN32B530P7FXZA,LN32B460B2DXZA,LN32B 540P8D

XZA,LN32B550K1FXZA,LN37B530P7FXZA,

LN37B550K1FXZA,LN40B550K1FXZA,LN40B530P7FXZA,LN40B 530P7N

XZA,LN40B530P7FXZC,LN40B540P8FXZA,

LN46B530P7NXZA,LN46B530P7FXZA,LN46B550K1FXZA,LN46B 540P8F

XZA

Symptom: Flickering on the screen intermittently

When the unit is connected via HDMI to a Scientific Atlanta cable set top box set in by pass mode for resolutions 480p and 720p a flickering will occur.

Repair/Solution:

Change the cable box to a fixed resolution. OR have the customer install the latest TV firmware which can be located on samsung.com.

Model/s: Samsung

LN46A550P3FXZA,LN46A650A1FXZA,LN46A530P1FXZA,LN46A 750R1F XZA,LN46A860S2FXZA,LN46A950D1FXZA,

LN46A540P2FXZA,LN46A850S1FXZA,LN46A630M1FXZA,LN46A 580P6F XZA,LN52A530P1FXZA,LN52A750R1FXZA,

LN52A650A1FXZA,LN52A550P3FXZA,LN52A630M1FXZA,LN52A 860S2F XZA,LN52A850S1FXZA,LN52A540P2FXZA,

LN40A530P1FXZA,LN40A450C1DXZA,LN40A330J1DXZA,LN40A 550P3F XZA,LN40A650A1FXZA,LN40A630M1FXZA,

LN40A540P2FXZA LCD TV

Symptom: Unit cycles on/off during start-up.

Repair/Solution:

If the unit tries to turn on but begins to cycle on and off before any video is displayed and all of the SMPS voltages are good, disconnect the LVDS cable at the T-Con board. If the set starts and the backlights come on, replace the T-Con board. If the set does not start, disconnect the LVDS cable at the main board. If the set starts, replace the LVDS cable. If the set still does not start-up, replace the main board.

Model/s: Samsung

LN32A330J1DXZA,LN32A450C1DXZA,LN32A650A1FXZA,LN32A 550P3F

XZA,LN32A540P2DXZA,LN32A330J1NXZA,LN32A300J1DXZA,

LN40A530P1FXZA,LN40A450C1DXZA,LN40A750R1FXZA,LN40A 330J1D

XZA,LN40A550P3FXZA,LN40A540P2FXZA,LN40A500T1FXZA,

LN46A530P1FXZA,LN46A860S2FXZA,LN46A750R1FXZA,LN46A 550P3F

XZA,LN46A650A1FXZA,LN46A950D1FXZA,LN46A540P2FXZA,

LN46A500T1FXZA,LN46A850S1FXZA,LN46A630M1FXZA,LN46A 850S1F

XZX,LN46A580P6FXZA,LN52A530P1FXZA,LN52A750R1FXZA,

LN52A650A1FXZA,LN52A550P3FXZA,LN52A630M1FXZA,LN52A 860S2F

XZA,LN52A850S1FXZA,LN52A540P2FXZA,LN52A580P6FXZA

Symptom: Auto-shutdown on 2008 LCD TV's.

Repair/Solution:

Upon inspections of 2008 LCD TV's we have found that the LVDS (ribbon cable) can cause an auto shut down. Even if the LVDS cable doesn't look defective try changing it anyway and retest the TV. It is a good practice to carry a few extra LVDS cables for such testing circumstances.

Model/s: Samsung

LN32B360C5DXZA,LN32B530P7FXZA,LN32B650T1FXZA,LN32B 460B2D

XZA,LN32B540P8DXZA,LN32B550K1FXZA,LN32B640R3FXZA,

LN32B457C6HXZA,LN32B450C4HXZA,LN32B540P8DUZA,LN32B 450C3

HXZA,LN32B460B2DUZA,LN32B360C5DUZA,LN32B550K1FUZA,

LN32B530P7FUZA,LN32B450C3HUZA,LN40B530P7FUZA,LN40B 550K1F

UZA,LN40B457C6HXZA,LN40B550K1HXZA,LN40B610A5FUZA,

LN40B640R3FUZA,LN40B650T1FUZA,LN40B630N1FUZA,LN40B 540P8F

UZA,LN40B500P3FXZA,LN40B550K1FXZA,LN40B650T1FXZA,

LN40B530P7FXZA,LN40B530P7NXZA,LN40B750U1FXZA,LN40B 540P8F

XZA,LN40B630N1FXZA,LN40B640R3FXZA,LN52B550K1HXZA,

LN52B610A5FXZA,LN52B550K1FXZA,LN52B540P8FXZA,LN52B 530P7F

XZA,LN52B630N1FXZA, LN52B750U1FXZA LCD TV

Symptom: Backlight Failure Testing.

Repair/Solution:

Backlight failures can be partial or full failure check the backlight supply voltage (refer to service manual). If supply voltage is present, use a flashlight behind the television and shine a light through the panel. If the video is working you will see it.

Model: Samsung LNS4051DX/XAA LCD TV

Symptom: Dead backlight flashes on then off.

Repair/Solution:

Unit would flash on then off and audio would work. You could saw video with a flashlight. Sometimes unit would stay on and run if you cycled on and off many times. Found bad solder connection on IP board TI801 on primary side. Re-soldered and problem solved.

Model/s: Samsung LNT4065FX/XAA, LNT4665FX/XAA,

LNT5265FX/XAA, LNT4061FX/XAA, LNT4661FX/XAA LCD TV

Symptom: Half screen is purple colour.

Repair/Solution:

Half screen is purple color. That's mean LCD panel controller board is defective. Panel needs to be replaced.

Model/s: Samsung

LNT4069FX/XAA,LNT4066FX/XAA,LNT4669FX/XAA,LNT3255HTX/XAA

,LNT375HAX/XAA,LNT4042HX/XAA,LNT325HAX/XAA,LNT405HAX/X

AA,LNT2353HTX/XAA,LNT3753HX/XAA,LNT2653HTX/XAA,LNT3242H

TX/XAA,LNT3253HTX/XAA,LNT4042HTX/XAA,LNT4053HTX/XAA,LNT

4071FX/XAA,LNT4671FX/XAA,LNT5271FX/XAA,LNT4642HX/XAA,LNT

466FX/XAA,LNT4065FX/XAA,LNT4665FX/XAA,LNT5265FX/XAA,LNT26

32HX/XAA,LNT2642HX/XAA,LNT2653HX/XAA,LNT3232HX/XAA,LNT3

242HX/XAA,LNT3253HX/XAA,LNT3732HX/XAA,LNT4032HX/XAA,LNT

4053HX/XAA,LNT4061FX/XAA,LNT4661FX/XAA LCD TV

Symptom: Intermittent LCD Video Troubleshooting.

Repair/Solution:

Troubleshooting intermittent video problems can be time consuming, but these tips may help narrow down the cause of an intermittent video problem.

The very first thing to do is to make sure the customer does not have OSD.

They can verify this by just pressing Menu or Volume on their TV remote control. If they do have OSD, then the problem is most likely in the source and not the TV.

The next step when encountering an intermittent video problem is to find out if the backlights are on when the set looses video. You can probably obtain this information from the customer before you schedule the call. Ask if they noticed if the screen is completely black or if it is lit up slightly when the video goes out.

They may be able to notice it better if they stand at an angle to the TV and turn it on or off and see if there is any change in brightness.

If the backlights are out, you need to know if the set ever has video when they turn it on, or does it go out after they have had the set on for a period of time. If the set occasionally will not have backlights when it is first turned on, suspect the panel or power supply/IP board. If the set has video for a while and then looses the backlights, suspect a power supply/IP board or main board. Typically the panel will cause a no backlight at turn on, while the power supply and Main

Board will cause the backlights to go out after a period of time. If the set has backlights when first turned on and the lights change their brightness in several steps before quickly going out, suspect the IP board.

If the backlights are on when the set loses video after it has been on for a while, most likely the LVDS cable is defective. If the set has backlights but no video when it is first turned on, the T/Con or Main Board would probably be at fault.

Always check the simple things first, like a LVDS cable that is not plugged in properly or a power connector to the panel being loose.

There are exceptions to every rule, but this generally should help with narrowing down no video in LCD sets.

Model/s: Samsung LN32A450C1DXZA, LN32A450C1HXZA, LN32A450C3HXZA, LN32A330J1DXZA, LN32A330J1NXZA LCD TV

Symptom: Video will intermittently turn mostly white.

White screen with a faint image of OSD and video is in the background. Video will intermittently turn mostly white with the OSD barely visible in the background. Even a black image or when the panel should not be showing any video, it is white. I found that one of the sub-boards inside the panel, the boards that the ribbon cable from the T-Con connect to, are not seated properly and the larger SMD capacitors on the board are intermittently making contact with the metal frame of the set, effectively creating a short to ground.

This is one of the panels that are mounted upside down, so the stand mounts just below and behind the panel frame. Any slight pressure from the stand can cause the frame to make contact. In many cases, the TV can be slightly flexed to make this issue occur.

Here, just beside a T-Con ribbon cable, you can see that the sub-board is not seated properly, and is in fact bowing towards the outer frame.

Model/s: Samsung LNS4695DX/XAA, LNS4696DX/XAA,

LNS4096DX/XAA, LNS4095DX/XAA LCD TV

Symptom: Poor or Intermittent Video.

Repair/Solution:

Check the LVDS cable where it connects to the panel interface board. Be sure that the cable does not have any glue on it. On occasion, the glue can cause a poor connection if it gets into the connector. Remove glue or replace the LVDS cable with BN39-00726A.

Model/s: Samsung LN32A330J1DXZA, LN32A450C1DXZA,

LN32A550P3FXZA, LN32A540P2DXZA, LN32A330J1NXZA,

LN32A450C1HXZA, LN32A450C3HXZA,

LN32A300J1DXZA LCD TV

Symptom: Standby light is on, flashes once briefly then unit attempts to turn on

Repair/Solution:

If the unit will not turn on, but the red standby LED is on and flashes once quickly when the power button is pressed on the remote or the TV, the 2200uf 10v filter capacitor on the SMPS has failed. This capacitor is located in the upper right side of the power supply close to the cable that connects the main board. Visual inspection will normally show that it has a swollen top. Replace capacitor and inspect the others in the filter stage to restore operation.

Model/s: Samsung LNT4061FX/XAA, LN32A450C1DXZC,

LN32A550P3FXZC, LN32A550P3FXZX, LN32A450C1DXZX,

LN32A650A1FXZA, LN32A450C1XZD, LN32A450C1DXZA,

LN32A540P2DXZA, LN32A450C1XZP, LN32A550P3RXZD,

LN40A530P1FXZA, LN40A530P1FXZX, LN40A450C1HXZX,

LN40A450C1DXZA, LN40A750R1FXZA, LN40A450C1DXZX,

LN40A530P1FXZC, LN40A550P3FXZC, LN40A650A1FXZC,

LN40A550P3FXZX, LN40A750R1FXZC, LN40A330J1DXZX,

LN40A650A1FXZX, LN40A450C1XZD, LN40A450C1DXZC,

LN40A330J1DXZA, LN40A550P3FXZA, LN40A650A1FXZA,

LN40A750R1FXZX, LN40A550P3RXZD, LN40A330J1XZD,

LN40A630M1FXZA, LN40A540P2FXZA, LN40A650A2RXZD,

LN40A630M1FXZC, LN40A630M1FXZX, LN40A610A3RXZD,

LN40A500T1FXZA, LN40A330J1XZP, LN40A450C1XZP,

LN40A650A1RXZP, LN40A610A1RXZD, LN40A650A1FXZD LCD TV

Symptom: Troubleshooting Inverter PCB boards

Repair/Solution:

The inverter PCB is the power supply for the Cold Cathode Fluorescent tubes. The inverter acts exactly like the ballast used in a standard fluorescent light fixture. In the case of an LCD TV, 24 volts from the power supply is applied to a switch mode power supply (SMPS). The SMPS outputs ~1000 Volts to energize the bulbs then the voltage drops to ~ 500 volts for run operation. The SMPS switching frequency is around 90 KHz.

The first step for verifying inverter board operation is to confirm the 24 volt supply is present. An oscilloscope can also be used to verify the SMPS circuit is oscillating. Simply holding the oscilloscope probe in the area of the switching transformer will show screen activity if the switching action is taking place. Measuring the SMPS output with standard equipment is not recommended as this is high voltage and at a high frequency.

Model/s: Samsung LN40A650A1FXZA, LN46A650A1FXZA,

LN40A750R1FXZC, LN46A750R1FXZA, LN40A750R1FXZA LCD TV

Symptom: Unit tries to start with melody but cycles off and back on.

Repair/Solution:

If the unit tries to turn on and makes the start-up melody but then immediately shuts off and starts again, unplug the LVDS cable and apply power again. If the set stays on, replace the T-Con board.

Model/s: Samsung LNT4071FX/XAA, LNT4671FX/XAA,

LNT5271FX/XAA LCD TV

Symptom: Video Stuttering or Hesitation

Repair/Solution:

The customer may complain that the video has a stutter or hesitation when viewing regular programming, either standard definition or high definition.

To fix, go into the customer menu, select Picture, then scroll to Auto Motion Plus 120Hz and select Off.

This enhancement circuit works for some movies, but can introduce severe hesitations and ghosting on regular programming. The customer should also be informed that this does not affect the 120Hz operation of the panel. The panel operates at 120Hz regardless of this setting.

Model/s: Samsung LN52A650A1FXZA, LN40A650A1FXZA,

LN46A650A1FXZA, LN52A650A1FXZC, LN46A650A1FXZC LCD TV

Symptom: Will not turn on, cycles on and off with start-up melody, no backlights

Repair/Solution:

If the set will try to turn on and the start-up melody sounds but no backlight

appears and the set cycles off and on every 5 to 10 seconds, unplug the LVDS cable from the T-Con/FRC board. If the set then runs and the backlights come on and stay on, replace the defective T-Con/FRC board.

Model/s:

LNT4069FX/XAA,LNT4066FX/XAA,LNT4669FX/XAA,LNT4071FX/XAA,
LNT4671FX/XAA,LNT5271FX/XAA,LNT4065FX/XAA,LNT4665FX/XAA,
LNT5265FX/XAA,LNT4061FX/XAA,LNT4661FX/XAA

Symptom: Unit cycles on and off several times before starting.

Repair/Solution:

If the unit will cycle on and off several times before turning on and then playing fine, check the power supply carefully for filter capacitors with bulged tops.

Replace the capacitors or power supply to correct the issue.

Model: Samsung 32 Inches LCD TV

Symptom: Hissing or Hum noise of the SMPS in 32 inches LCD TV

There may be a sort of hissing noise in the SMPS for 32" LCD TV. The noise occurs when the set is in the stand by condition. The SMPS code is BN96-03057A and defective SMPS version is the "REV 1.1".

Repair/Solution:

Replace the SMPS to new version (V1.2 or latest version).

Model: Samsung 26, 32 & 37 Inches LCD TV Year 2009 Europe models

Symptom: No Power, No picture or no backlight.

Cause: DP805 Diode (MUR360).

Repair/Solution:

Change DP805 from MUR360 to 31GF6 diode on IP boards.

=> MUR360 risk range: 0907*/0908*/0909* marked on diode.

1. Change MUR360 Diode to 31GF6 Diode

2. Marking a dot on yellow box after changing this diode.

Model/s: Samsung LN26B460B2DXZA; LN26B360C5DXZA;

LN26B457C6HXZA; LN32B460B2DXZA; LN32B360C5DXZA;

LN32B540P8DXZA; LN32B457C6HXZA; LN32B530P7FXZA;

LN32B550K1FXZA; LN37B530P7FXZA; LN37B550K1FXZA;

LN37B650T1FXZA

Symptom: No Backlight but sound ok.

TV will power up but have no backlight operation (No display). Sound is ok.

Procedure:

1. Verify that the TV is within the serial number range by checking the ninth

digit in the serial number (i.e. AZ4D3CTS5 Ninth digit is a 5).

2. If the digit is 4 or 5, check the number on the diode itself to verify whether it

has already been replaced.

3. If the diode has “0907”, “0908” or “0909” on its case (refer to photos 1 & 2),

replace with new (Part number 0402-001415).

Verify the cause of the symptom by measuring (in circuit) across the diode

(location DP805) (see photos 3 through 6). If the resistance measures between

500 and 600 ohms, the diode is good and therefore the symptom is being caused by a different reason. If the resistance measurement approaches zero ohms

(shorted) the diode is defective and needs to be replaced using part number

0402-001415.

Repair/Solution:

There are two versions of the IP board with different physical layouts (refer to

photo 7 and 8 for part location) using the same diode type. Replace the diode

using standard soldering methods for a lead-free application. If the diode is not

available, order the IP Board.

Model: Samsung LN32C350D1DXZA LCD TV

Symptom: Multiple Vertical lines.

Repair/Solution:

Try to call out the OSD Menu, the multiple vertical lines that do not go through the OSD menu. If the symptom does not affect the OSD menu (as shown above) or does not appear in the test picture, replace the mainboard only. Do not replace the LVDS or T-Con board or the LCD Panel.

Model: Samsung LN-52A850 LCD TV

Symptom: The image breaks up or doubles images on the right side of the screen.

Repair/Solution:

Replace T-CON board and problem solved.

Model: Samsung LN46B530P7NXZA LCD TV

Symptom: There is colour distortion on objects or people's faces.

Repair/Solution:

The LVDS cable can cause this if it isn't seated correctly. Check the position of the LVDS cable and the contacts. If it is seated correctly, replace the LVDS cable.

Model: Samsung LNT4661FX/XAA LCD TV

Symptom: Half of the screen is black or purple on all inputs.

Repair/Solution:

When call out the OSD menu, the problem also affects the OSD menu, replace

the LCD panel.

Model: Samsung LNT5271FX LCD TV

Symptom: Left side of the screen is dark. The right side of the screen have horizontal lines with distorted video.

Repair/Solution:

The symptom also affects the OSD Menu, so replace the T-CON board then problem solved.

Model: Sharp LC32P55E LCD TV

Symptom: Dead after start-up. Bang-noise was head before.

Repair/Solution:

Replace R751 (0.1R/2W), IC704, D762, D725 and C725 (470pF/3K) in PSU.

Model: Sharp LC32P55E LCD TV

Symptom: Red LED light appears for a seconds, relay clicks then dead.

Repair/Solution:

The resistor R751 was blown. Replace the IC704 & R751.

Model: SHARP LCD TV Repair tips

Symptom: The Sharp LCD TV still under protection mode?

The Sharp LCD TV always has the protection mode come out. Normally, the repairer will first check the inverter board, after that power board (PSU), if still can't get any result, and then they will check the signal board/mainboard. Even you change the inverter or PSU board, the LCD TV still under protection mode. Actually the LCD TV has been fixing by the repairer, but they don't know the TV still remember the past protection mode inside the memory. So, now you

need to know how to clear this protection error inside the LCD TV memory.

Repair/Solution:

Press & hold the CHANNEL DOWN & VOLUME UP buttons, and then power ON the LCD TV. The LCD TV Protection Error has been clear & solved the TV problem.

Model: Sharp LC-52BD80U LCD TV

Symptom: Display has horizontal lines, White Display or Flashing/Flickering picture.

Cause: LCD Driver PWB ribbon cables may be damaged.

Repair/Solution:

When servicing units due to an occurrence mentioned above, check and if necessary replace the LCD Driver PWB ribbon cable.

Model: LG 27LC2R Chassis LP61A LCD TV

Symptom: No backlight.

Repair/Solution:

Check the SMD fuse F1 on inverter board for open circuit.

Model: LG 32LC56 LCD TV

Symptom: Picture divided into several parts. Display distortion.

Repair/Solution:

Replace T-CON board (Part Number: 218394).

Model: LG 32LC56ZC LCD TV

Symptom: No start-up. Standby LED flashes from red to green.

Repair/Solution:

Replace the C202, C206, C217 and C218 (2200uf/10v all), and C226

(470uf/25v).

Model: LG 32LE2RZJ Chassis LP61A LCD TV

Symptom: Remotes control no functions at all.

Repair/Solution:

Replace SMD capacitor at output of IR receiver.

Model: LG 37LE2R Chassis LP61A LCD TV

Symptom: No start-up.

Repair/Solution:

Replace SMD regulator TL431 (U130) in PSU.

Model: LG 32LC45 LCD TV

Symptom: "No Signal" displayed. No sound and no picture. Backlight and

OSD menu is ok. LED is green color light.

Repair/Solution:

Try to update firmware if not then replace main signal board.

Model: LG 47LY95 Chassis LD75A LCD TV

Symptom: Negative picture and no sound.

Voltage output low at pin 7 of connector P202.

Repair/Solution:

Check Q202 (AP72T02GH), U203 (APU3037M), Q203 (AP60T03GH) and

connector P202 in PSU. Also check or replace C221, C222, C223 and C232.

Model: LG 47LF66 LCD TV

Symptom: No power

Repair/Solution:

Change the C202, C206 and C217 (all 2200uf/10v) on IP board (Inverter Power Supply Board).

Model: LG 37LF66 LCD TV

Symptom: No power

IC U500 (ICE3B1565J) is short circuit and fusible resistor FB501 (2.2R) open circuit.

Repair/Solution:

Check safety resistor for open circuit. Replace D501 (UF4007), 3.6v zener diode ZD502 (1N5227) and C508 (33uF/50v).

Model: LG 32LC56ZC LCD TV

Symptom: No start-up. Standby LED flashes from red to green

Repair/Solution:

Check or replace C202, C206, C217, C218 (all 2200uF/10v) and C226 (470uF/25v).

Model: LG 32LC56 LCD TV

Symptom: Picture divided into several parts. Distorted picture

Repair/Solution:

Replace T-CON (Part Number: 218394).

Model: LG 32LC56ZC LCD TV

Symptom: Stuck in standby mode.

Repair/Solution:

Check & change C204. If the pcb board discolored around R208 resistor then replace PSU.

Model: Logik LCXW32HDI LCD TV

Symptom: No sound or picture. The front controls light up & relay clicks.

Repair/Solution:

Check or replace R65 (2M) around U3 PSU for open circuit.

Model: Panasonic TX-32LED7FM LCD TV

Symptom: Dead.

Repair/Solution:

Replace the resistor R850 (820K/0.25W).

Model: Panasonic TX-32LED7FM Chassis GLP22M LCD TV

Symptom: Enter Service Mode.

Repair/Solution:

1. Press F button to access volume setting.

2. Press V- button on set until volume reaches minimum.

3. While still holding V- button press 0 button three times on remote control.

4. Press 1 and 2 buttons to scroll through the menu.

5. Press 3 and 4 buttons to select an adjustment.

62) Model: Panasonic TC32LX85 LCD TV

Symptom: TV does not respond from remote control signal

Cause: Leaky lines filter FL4036.

Repair/Solution:

Replace FL4036 (Part#: JOHAYY000011).

Model: Panasonic TC-32LX600 LCD TV

Symptom: Colour distorted with patches around object, sometimes happened after running for 4 hours.

Cause: Digital signal processing error

Repair/Solution:

Try to reflow or replace IC4001.

Model: Panasonic TC-26LX85 & TC-32LX85 LCD TV

Symptom: Sound distortions, mostly noticeable during commercial programming

Cause: Some stations send out of the specs signal causing sound distortion in higher frequencies.

Repair/Solution:

Software upgrade is needed if unit has serial number before specified below:

**82330746 for TC26LX85

**82340342 for TC32LX85

Perform the upgrade following below steps:

1. Turn on TV and insert SD card into SD card slot.

2. Using remote control‘s left/right arrow button, select YES to start the download.

3. When upgrade was completed, the screen will change

4. Unplug the TV from AC line and plug it back after several seconds. Power on the TV and it is back to normal now.

Model: Philips 32PF3320/10 Chassis LC4.5 EAA LCD TV

Symptom: "F" is displayed on screen

Repair/Solution:

TV is in factory mode. To quit the factory mode, press both "VOLUME" "-" keys and "PROGRAM" "-" for 5 seconds simultaneously.

Model: Philips Chassis BJ3.0E LA LCD TV

Symptom: Switches off for a second or two intermittently. Relay clicks and standby LED remains green. When the TV switches off intermittently with green LED lit, TV wills no sound or no picture.

Repair/Solution:

Please check the 27MHz KDS quartz crystal (SSB, item 1H00). If all yellow marked crystals bearing with a "5E", "5J" or "5K" batch number just direct replaced it. Also replace all the silver marked crystals bearing with a "6D" batch number.

Model: Philips 42PF7621/D10 LCD TV

Symptom: High pitched noise coming from LCD power supply

Repair/Solution:

Check or replace 5025, 5026 and 5027 on LCD power supply and glue them if necessary.

Model: Philips 23MW9010/37 LCD TV

Symptom: No sound.

Repair/Solution:

Defective sound output IC7731 (AN7522).

Model: Philips 23PF9966/37 LCD TV

Symptom: Picture jitter if contrast function is used.

Repair/Solution:

Replace transistor 7563 on Scalar mainboard.

Model: Philips 42PF7621/D10 LCD TV

Symptom: Stuck in standby. TV switches to protection mode. Green LED flashes.

Repair/Solution:

Replace capacitors 2540 and 2544 (both 10nF). Change to both with 220nF.

Model: Philips Chassis BJ3.0E_LA LCD TV

Symptom: Switches off for a second or two intermittently.

Relay clicks and standby LED remains green. TV switches off intermittently with green LED on, no sound or picture.

Repair/Solution:

Check 27MHz KDS quartz crystal (SSB, item 1H00). Replace all yellow marked crystals (made in China) bearing a "5E", "5J" or "5K" batch number. Also replace all silver marked crystals (made in Taiwan) bearing a "6D" batch number. Note: Replace crystals with order code 242254301397.

Model: Polaroid FLM3232 LCD TV

Symptom: No startup.

Repair/Solution:

Replace Z9 zener diode with NTEPN4990 in the PSU.

Model: Samsung LE27T51B LCD TV

Symptom: Dark frame with color stripes.

Repair/Solution:

Its looks like the unstable voltage problem. Check and replace UP4 (L1117DG)

on T-CON board.

Model: Samsung LE32R73BD LCD TV

Symptom: No picture and no OSD menu. Backlight ok.

Repair/Solution:

Reflow LVDS socket on screen driver PCB and mainboard PCB.

Model: Samsung LE32R74BD LCD TV

Symptom: TV dead. Pulsating noise came from PSU and LED light flashes.

Repair/Solution:

Check schottky diode DM854 (MBRF1545CT) in PSU for short circuit.

Model: Samsung LN32A330J1DXZA, LN32A330J1NXZA LCD TV

Symptom: The TV takes longer to power on than normal.

The TV takes longer to power on than normal. You may hear several clicks while the TV attempts to power on.

Cause: The electrolytic in the capacitors on the power supply board over time will dry out causing the power supply to shut down during its initial power on cycle.

Repair/Solution:

Refer to the capacitor cross reference guide below for the list of the capacitors that should be replaced.

Model/s: Samsung LN40A650A1FXZA, LN46A650A1FXZA,

LN40A750R1FXZC, LN46A750R1FXZA, LN40A750R1FXZA LCD TV

Symptom: Unit tries to start with melody but cycles off and back on.

Repair/Solution:

If the unit tries to turn on and makes the start-up melody but then immediately shuts off and starts again, unplug the LVDS cable and apply power again. If the set stays on, replace the T-Con board.

Model/s: Samsung LNT3242HX/XAA, LNS2651DX/XAA LCD TV

Symptom: Picture is lost; sound OK after MAIN PCB was replaced

Repair/Solutions:

If you get the symptoms after replacing MAIN PCB and made all correct setups in "OPTION BYTE":

- Lost picture after 5-10 minutes but sound OK, picture comes back if you restart the TV but just to be lost again after the same interval or

- Picture is lost intermittently every 10-20 sec. and comes back itself, again sound OK.

You may not have to come back with another Main PCB, this may be corrected just by moving the connection between inverter and SMPS on the SMPS board. If it was on A-CNM803 move it to S-CNM802 or vice versa from S-CNM802 to A-CNM803 on the SMPS board. If this is not working then use a new MAIN PCB. This may be applied to other LCD models too.

Model: Samsung LNS4041DX/XAA LCD TV

Symptom: Unit Continually Cycling On and Off. Set turns on and off in a continuous cycle. Play the melody each time.

Repair/Solutions: First, check the power supply voltages, if missing, replace the power PCB. Next unplug the lvds cable. If the set continues to cycle, replace the main pcb. If the cycling stops, replace the lcd panel. Part numbers are version dependent, so be sure to check the set's version.

Model: Samsung LNS4051DX/XAA LCD TV

Symptom: Clicking repeatedly TV will not turn on

Cure/Solutions:

Found 2 electrolytic 100uf at 16v capacitors on the 5v line C115 and C123 bad.

Or replace the power supply.

Model: Samsung LNS4051DX/XAA LCD TV

Symptom: Dead Backlight Flashes On then Off.

Repair/Solution:

UNIT WOULD FLASH ON THEN OFF AND AUDIO WOULD WORK.

YOU COULD SEE VIDEO WITH A FLASHLIGHT. SOMETIMES UNIT

WOULD STAY ON AND RUN IF YOU CYCLED ON AND OFF MANY

TIMES. FOUND BAD SOLDER CONNECTION ON IP BOARD TI801 ON

PRIMARY SIDE. RESOLDERED AND CORRECTED PROBLEM.

Model: Samsung LNS4692DX/XAA LCD TV

Symptom: No video TV but has backlight and audio. TV will not come on.

Repair/Solution:

Found pico fuse open at cp1 on the T-CON PCB. If shorted CP1 with a wire

jumper, TV comes on and runs fine. Replace the Pico fuse or T-CON PCB.

Model/s: Samsung LNT3242HX/XAA, LNT3232HX/XAA LCD TV

Symptom: Can’t power on.

Repair/Solution:

TV would not come on. Removed the back and as soon as we did the set came

on. Found glue was around cables on the smps. Cleaned glue off and cleaned

the terminals. Set operates normally.

Model: Samsung LNT3253HX/XAA LCD TV

Symptom: After a few minutes when TV warms-up picture becomes distorted

Repair/Solution:

10-15 minutes after you turned on the unit panel warms-up and picture becomes distorted. If you just push the TV's frame picture becomes even more distorted. On the back of the panel the CONTROL ASIC area is very hot. Replace the panel to fix the problem.

Model/s: Samsung LNT4065FX/XAA, LNT4665FX/XAA,

LNT5265FX/XAA, LNT4061FX/XAA, LNT4661FX/XAA LCD TV

Symptom: Blue screen without signal. If provide with signal the blue screen will flash white short horizontal lines.

Repair/Solution:

Refit or replace LVDS cable, check if the cable not strangled by the metal cover and loosen up the screws of the cover.

Model: EVESHAM ALQEM37SX with 17MB15 Chassis LCD TV

Symptom: No start-up, the TV screen lights up, then switches back to standby mode.

Repair/Solution:

Please check or direct replace the C877 and C878 on PSU board for open circuits. Sometime these caps will check well, but would breaks down when under load.

Model: GOODMANS GTV26WLCD LCD TV

Symptom: Shuts down and LED blinks.

Repair/Solution:

Replace the C877 and C878 (both 15nF/630V) near heatsink, at top left corner of PSU.

Model: GOODMANS GTV32W22HD AVZOOO Chassis LM LCD TV

Symptom: Dark picture. OSD bounces.

Repair/Solution:

Replace the C2042 and C2044 (680uf) in PSU.

Model: Grundig GULENAR32HDIP with Chassis L9 LCD TV

Symptom: Stuck in standby mode, LED light is blue color.

Repair/Solution:

The blue LED always stays on, even when appliance is on standby mode.

Capacitor C931 (1000uF) replaced but the TV is still dead with 12v and 24v ok.

Check and replace diode D300 on the right-hand side, on middle-top of the main board. The problem solved.

Model/s: Hisense LCD4204EU LCD TV

Symptom: Dead after a Bang Noise.

Repair/Solution:

Replace chopper drive STRX6769, RE038 (10R) and RE032 (150R) in primary PSU.

Model: Hisense TLM4788P LCD TV

Symptom: Dead.

TV power on, testing the PSU secondary output voltage +12V, +5V_M & +24V all are = 0V no output. After that, testing the standby voltage +5V_S also same as 0V! That's mean it was the standby voltage supply section malfunction.

Checking the NE521 (STR-A6351) pin 7 & 8 has 300V, but pin 3 is 0V.

Normally this Power IC Vcc pin has about 15V.

Repair/Solution:

Check the corresponding components on Vcc line and found that RE523 was

open and other parts are normal. Replaced a new RE523 resistor, the TV is ok.

Model: Hitachi 32LD6200_A_B_C LCD TV

Symptom: Set fails to power on/switch on.

If MB11-6 Main board is used instead of the original Main board MB11-2 the

unit won't switch on.

Unit switches off immediately and a clicking noise comes from the Power

Regulator Board.

Repair/Solution:

Replace the LVDS cable (p/n: VS30041693) and add a 47uF (p/n: VS30000396,

CAP EL47UF16V) electrolytic capacitor to Power Regulation Board.

Model: Hitachi 32LD6200_A_B_C LCD TV

Symptom: Unit does not switch on or fails to power on.

Unit does not work, standby LED not lighting.

Cause: Working of Pixelworks controller IC21 depends on ambient

temperature. If IC is heated externally the unit starts to work normally.

Repair/Solution:

Replace Ferrite bead L500 and L501 with a jumper wire without the ferrite rod.

Model: Hitachi 32LD6600_A_B_C LCD T V

Symptom: No picture, but sound ok.

Cause: Dry joints on components S627 and S629 near connector PL308 on the

main board.

Repair/Solution:

Re-solder components S627 and S629; also check other components for dry joints near the connector.

Model: Hitachi 32LD7200 LCD TV

Symptom: Distorted Sound/Audio.

Sound is distorted when the set is first switched on. After a while the fault clears and the set works normally.

Repair/Solution:

Try to re-solder first, if still the same then replace Joint PWB. p/n: TP01336.

Model: Hitachi 32LD7200 LCD TV

Symptom: Mechanical Noise from Screen in Dynamic Mode

Cause: Low back light setting on Dynamic mode.

Backlight settings are different for each mode:

DYNAMIC: 12

NATURAL: 15

CINEMA: 10

Repair/Solution:

Increase backlight settings in Dynamic mode from 12 to 20.

If similar noise problem occurs on other modes, adjust backlight levels to the position in which noise becomes the minimum.

Model: Hitachi 37LD6600, 37LD6600A LCD TV.

Symptom: Mechanical Noise from Screen Only in CINEMA MODE

Cause: High back light setting on Cinema mode.

Backlight settings are different for each mode:

DYNAMIC: 00

NATURAL: 50

CINEMA: 100

Repair/Solution:

Reduce backlight settings in Cinema mode from 100 to 59 as follows.

Enter Service Mode with the remote control,

PRESS MENU

4725 OR 1267 OR 1461 (there are 3 different software versions, only one code

will work)

Service Menu will appear, Select PIC ADJUST and enter with VOL+

A second service menu will appear, the bottom adjustment in the menu is Back

Light setting and will be set to 100.

From the Mode Heading select CINEMA mode.

Select Back Light and reduce the setting to 59.

To memorise and exit Service Mode press Standby.

Model: Hitachi 37LD6600, 37LD6600A LCD TV

Symptom: No sound or intermittent sound

Repair/Solution:

Pins of headphone socket touching the chassis. Trim these pins and problem

solved.

Model: Hitachi L32A01, L32A01A, L32H01E, L32H01EA, L32H01U,

L32H01UA, 32LD8D20E_EA, 32LD8D20U, 32LD8D20UA LCD TV

Symptom: Audio is distorted constantly and may have some background noise

Repair/Solution:

Replace D845 and D846 (both UF5402 3A/200V 150A, part number:

VS30009366) on the power supply board (PSU).

Model: Hitachi 26LD6200 LCD TV

Symptom: Audio noise may be heard from speakers when unit is in Tuner

mode and the volume control is set to near minimum.

Repair/Solution:

Add four SMD jumpers on the Amp board to positions J100, J101, J102 and

J103 (JUMPER SMD 0603 R).

Model/s: Hitachi 26LD6600 & 26LD6600A, 32LD6600_A_B_C,

37LD6600 LCD TV

Tip: Burn in Mode when replacing Main PCB

When replacing the main PCB on these models, the new part may be in the

'burn in' mode from manufacture. This will result in the image on screen

flashing different colours.

To exit the burn in mode:

Use the remote control:

1. Press menu button

2. Press the following button sequence: 4,7,2,5:

3. Go to “OPTIONS” and then set “BURN IN MODE” to either ON or OFF.

Model: Hitachi 22LD4200 LCD TV

Symptom: Green horizontal line flashing across the screen intermittently.

Repair/Solution:

Remove resistor R149 on the Input signal board (Signal processing-analogue)

and replace it with Jumper SMD (0 ohm, part number: VS30001734).

Model/s: Hitachi 26LD6600 & 26LD6600A_B_C_D, 37LD6600,

37LD6600A, 37LD8600, 37LD8700C, 37LD8700U LCD TV

Tip: Hotel Mode

To enter the hotel mode of these model LCD TV:

1. Press Menu

2. Press the following buttons in sequence: 1,3,2,5

Model: Hitachi 28LD5200E LCD TV

Symptom: Intermittent Color or no color.

- Colour drops out after the unit has been running for two to three hours.

Repair/Solution:

Resolder capacitor C510 and other components in its vicinity.

Model: Hitachi 26LD6600 & 26LD6600A, 32LD6600_A_B_C LCD TV

Symptom: No sound/audio.

Cause: Sound setting may have been lost in the memory and defaulted to zero.

Repair/Solution:

Reinstate sound settings as follows:

Enter Service mode.

Press Menu then 4,7,2,5.

Go to Audio menu.

Select Sound 2 and enter the following values:

FM PRESCALER 15

NICAM PRESCALE AVL ON 35

SCART PRESCALE AVL ON 14

SCART VOLUME AVL ON 122

GO TO STANDBY TO MEMORISE SETTINGS

Model: Hitachi 22LD4500U, 22LD4500UK LCD TV

Symptom: No sound or very low sound on terrestrial and no sound on Digital or any AV inputs.

Repair/Solution:

This is a software/firmware problem. Replace memory IC302 Type 24LC16 (part number: VS20167612). All customer controls are set to minimum on the new IC. Please reset language and all picture controls to normal after replacing the IC.

Model/s: Hitachi L32VP03E, L32VP03U LCD TV

Symptom: No switch on from standby mode.

If the TV is switched into standby when it has been running for some time and is warm, it will not come out of standby until the set has cooled completely.

Repair/Solution:

Replace the crystal X104 (XTAL 14.318MHZ 20PF 20PPM SMD ROHS, part number: VS30054926) on the main pcb/main logic board, the system control section.

Model/s: Hitachi 32LD6200_A_B_C, 32LD6600_A_B_C LCD TV

Symptom: Picture Display Problem.

Cause: Various picture problems can be caused by poor connection of the LVDS cable on connector PL103 on the Main board.

Repair/Solution:

Remove LVDS cable from connector PL103 and reinsert carefully.

Make sure both end of the LVDS cable are inserted properly between PL103

and the display panel.

Model/s: Hitachi 26LD6600 & 26LD6600A_B_C_D, 32LD8A10,

37LD6600, 37LD6600A & 37LD8500, 37LD8550, 37LD8600, 37LD8700C,

37LD8700CA, 37LD8700U, 37LD8700UA, 37LD8A20, 37LD8D10,

37LD8D20E, 37LD8D20U LCD TV

Symptom: Poor image quality or solarisation of image.

As shown in the images below.

This phenomenon may be intermittently and only displayed after a number of hours/days.

Cause: The glue on the LDVS cable heats up over time and the properties change and creating a contact problem within the cable and the PCB. This causes permanent or intermittent picture problems

Repair/Solution:

Remove the LDVS cable and clean the connections at the LCD control panel. If this step still not solves the problem, then replace the LVDS cable.

1) Part: VS30044366 CABLE 30P/130 QDIA UL20276

Reference:

LVDS

CABLE

LCD-PANEL<->PWB MAIN. To fit models:

26LD6600, 26LD6600B, 26LD6600C, 26LD6R10,

32LD8700CB, 32LD8700UB

2) Part: VS30044576 CABLE 30P/150 LVDS+FER UL20276

Reference:

LVDS

CABLE

LCD-PANEL<->PWB MAIN. To fit models:

(26LD6600A, 32LD6600, 32LD6600A)

3) Part: VS30044866 CABLE 30P/150 LVDS 32CMOB1

Reference: LVDS

PL103 <-> SCREEN V320B1-L01. To fit models :

32LD6600B, 32LD8A10, 32LD8600, 32LD8700C,

32LD8700TU, 32LD8700U

4) Part: VS30042003 CABLE CONNECTOR LVDS 30P/230

Reference: LVDS

CONNECTOR MAIN <-> PANEL. To fit models :

32LD6600C, 37LD6600, 37LD6600A, 37LD8600

5) Part: VS30053003 CABLE LVDS 30P/150 W/DC+F UL20

Reference: LVDS

CONNECTOR MAIN <-> PANEL. To fit model:

26LD6600D

6) Part: VS30051803 CABLE LVDS 30P/180 32CMOB1

Reference: LVDS

ÄPL103 <-> SCREEN V320B1-L04. To fit models:

32LD8A10A, 32LD8600A, 32LD8700CA,

32LD8700TU, 32LD8700UA

7) Part: VS30054878 CABLE LVDS 30P/130 UL20276

Reference:

LVDS

CABLE

To fit model : 32LD8600B

8) Part: VS30048584 CABLE LVDS 30P/230

Reference:

LVDS

CABLE

To fit models : 37LD8A20, 37LD8D10,

37LD8D20E, 37LD8D20U, 37LD8500, 37LD8550,

37LD8600, 37LD8700C, 37LD8700U

9) Part: VS30051781 CABLE LVDS 41P/230 37"HIT

Reference: LVDS To fit models: 37LD8700CA_UA, 37LD8600A.

Model: Hitachi 32LD6600 LCD TV

Symptom: Solarisation of the image.

Repair/Solution:

Replace X600, 6MHz Crystal (P/N: VS30006662) on signal processinganalogue

section.

Model: Hyundai Imagequest HQL260WR LCD TV

Symptom: Shuts down after a few minutes

Three 1000uf electronic capacitors in PSU replaced unsuccessfully.

Repair/Solution:

Change opto-coupler IC PC102-2. The problem solved.

Model: Hyundai Imagequest HQL260WR LCD TV

Symptom: Slow start-up problem.

Repair/Solution:

Replace the capacitor C109, C110 and C111 (all 1000uf/35v). Also check SMD

resistor R56 and R57 (both 22K) for dry joints.

Model: JVC LT32DX7B LCD TV

Symptom: No functions after lightning strike.

Repair/Solution:

The primary voltage 300v is present. But secondary voltage output was only 21

volt. Replace standby transformer T9201.

Model: KONKA LC42AS28 LCD TV

Symptom: Display show “No Input Signal” message only.

Try call out the OSD Menu, but it is response slowly about after 1 minutes then the OSD came out. Even try other signal input like AV also same problem, but when input the YPbPr signal, it can show the display properly. But their responses to call out the OSD Menu still the same, slowly to come out.

Repair/Solution:

Since the signal YPbPr display ok but the AV and TV show error message “No Signal Input”, so problem will be the Video/Audio processor N401 (TDA15063HI) or their corresponding components failure. Testing the voltage supply pin 84 (Vcc=8V normal value), it only show = 0V! Check the Vcc supply line corresponding components and found R811 open. After replaced this R811 resistor, the TV was back to normal now. Even the OSD Menu also working properly. That’s mean the N401 not working will affect the N400 (24C16) to Read/Writer data and cause it to slowly came out OSD Menu.

Model: Konka LC-TM3719 LCD TV

Symptom: After power on the TV, but it is stuck in standby mode.

Try using the remote control and the TV front panel button also not function.

The power LED still show the red colour light only.

Repair/Solution:

After replaced and program the N502 (24LC32) and the N405 (W39L040 AP70Z), the TV is working properly now.

Model: Hisense TLM3226 LCD TV (T-CON: ChiMei V320B1-C03)

Symptom: No Display

The TV sound normal and it can control by the remote control. Backlight is present but the screen no display and look like grey screen (because the backlight was working).

Repair/Solution:

This lcd panel using ChiMei V320B1-C03 T-CON board. So first check their Vcc input and other voltage values. Vcc input 5V ok, voltage regulator output 2.5V & 3.3V normal. When measuring the VDA, VGH & VGL voltage found all not output 0V only.

It was shows that their DC-DC section is not working. After analysis the ir DC-DC section, it is using the UP1 IC (AT1380A) as a DC-DC IC. The UP1 pin4, on/off switch is control by the T-CON main chipset U3 (CM2681A-KQ) pin 63.

Usually when the TV on, T-CON board IC U3 (CM2681A-KQ) pin63 (PWRON) will output a signal logic high (3.3V), through QP3 inverse the signal to logic low and reach to UP1 pin4. After that, UP1, DC-DC section starting working and generates VDA, VGH & VGL voltage outputs.

But for this T-con board, even the TV was power on, but their U3 (CM2681A-KQ) pin 63 still is logic low 0V. Normally this U3 pin 63 will follow by TV power on and off, their voltage range is between 0V~3.3V. Even disconnect the U3 pin63 with other corresponding components, this pin63 also not different still 0V. Suspect their U3 (CM2681A-KQ) damage, after replace U3 the TV was back to normal now.

Model: Hisense TLM3201 LCD TV

Symptom: No Display but sound and other function properly.

Repair/Solution:

This model of LCD has using two type of LCD panel. These LCD Panel are QD32HL01 and another one is QD32HL03.

For this LCD TV symptom, no display, the QD32HL01 LCD panel their T-CON board Q300 open circuit causing the TV no display. This Q300 function as an on/off switch for DC-DC section. Direct replace Q300 with FDN339AN and the problem solved.

For the LCD panel using QD32HL03, their T-CON board D304 (BAV99LT1) opened circuit and causing the TV no display. This D304 is using on the VGH circuit line. After replace D304 the TV problem solved.

Model: Hisense TLM40V68P LCD TV (T-CON Board: V400H1-C01)

Symptom: Display White Screen only.

The other function like sound and remote control are ok and working properly.

Repair/Solution:

This LCD TV panel take a bit long time to start-up the display. But the TV display white screen only. Since all other function normal, so the suspicion section is the T-con board.

Starts measuring this T-con board and found that their VGHP voltage is missing, 0V but other voltage testing points are normal. Normally this VGHP has about 19.5V. Power off the TV, using Multimeter ohm range to measure their VGHP point with GND and the values is 0 ohm! That's mean the VGH P circuit line has component shorted. First check the circuit line filter caps, when remove that capacitor CP19, the VGHP circuit line ohm values are back to normal. After testing this CP19 and found it was shorted. After replace CP19 on the T-con board, the problem still remains the same! When checking the VGHP circuit line, it is still 0V. Forward to UP1 pin10, here can measure the 2.25V and 5VAC output. VAA testing point has about 13V, so to confirm that the DP5 is open circuit. After removed DP5 and using Multimeter to testing this component, double confirm that DP5 is opened circuit. After changed both components, the TV appear the display perfectly.

Model: Hisense TLM4288 LCD TV

Symptom: Screen fully of vertical color lines and then no display.

When power on the TV, it is ok but after half an hour, the screen was changed to vertical color lines. And it also appears some horizontal bar on the screen. Some time it can back to normal and change to vertical lines and then the TV no display. But their sound, backlight and the remote control, all function working properly.

Repair/Solution:

For this LCD TV symptom, so the suspicion parts will be the LVDS cable or their T-con board problem. This TV symptom was because of the mainboard LVDS signal are not match with timing control in the T-con board. First checking the LVDS cable both sides contact pins are clean and no any dirty on the pins. After that checking their cable continuity and it is ok. So the other part is the T-con board.

After testing T-con board all voltages normal and stable, so the problem should be in the LVDS connector and their signals processing section. Since this TV symptom was occur after half an hour, so it could be the components dry joints or heat sensitive. So after power on the TV, try to using a plastic rod to pressing the T-con. When the plastic rod pressing on the LVDS connector socket, the TV screen back to normal! So the culprit is the LVDS connector socket dry joints. After resolder the LVDS connector socket, the LCD TV is ok, even after burn test about 4 hours it's still working properly.

Model: LG LC370W01-A5K1 T-con Board

Symptom: Grey Screen, No display

Repair/Solution:

This T-con board Vin is use 12V as input voltage. Found their Vcc input SMD fuse KT opened and looks like other components has shorted in the circuits. Measure the Vin line ohm values is normal. After that checking the other voltage output lines ohm values and found that VDD with GND has 0 ohm! That's mean something was shorted to ground. Finally found that C130 filter cap was short circuit. After replace SMD fuse KT and C130 filter cap, the TV is back to normal.

Model: LG LC420W02-B6 LCD Panel with 6870C-0046B T-con Board

Symptom: Screen Show Negative Display with Full Red Color

Repair/Solution:

The LVDS cable is ok. For this type of display symptom, you must try to slowly minimum the Contrast feature. If after minimum or closed the feature of Contrast and display back to normal (have colors), that's mean, the problem was in the T-con board and it is causing by timing control not working properly. If after minimum the Contrast feature, the display is missing color, so the problem was in the mainboard. Since this is T-con board problem, so concentrate to testing it. Normally if Timing Control section work, it must have: 1) Correct Vcc input (from DC-DC section supply), 2) Panel setting (this setting data was store in the EEPROM IC), 3) Data communication EEPROM with Timing Control IC must stable. 4) If the Timing Control IC defective it also can effected. Their voltage input is normal and corresponding components also no problem. So try to find another junk board to remove both EEPROM U2 & U5 (both 24Y02) to this T-con board. After power on the TV, yes the problem solved!

Model: Sony 37 inches LCD TV with AUO T370XW02 T-CON Board

Symptom: The Character normal, but the picture area when it is bright, their edges got other color banding.

Look like the LVDS cable contact problem. When it is brighter, their symptom becomes serious. If turn the Contrast down to 50%, the character and picture back to normal! From this method we know that it is not the mainboard problem but it could be LVDS cable or T-CON board.

Repair/Solution:

Check the LVDS cable both contact pins and also using an eraser to wipe clean both side. But it is not help. So suspect the T-CON board problem. From the symptom on the screen, if the problem is T-CON board, then it could be their Gamma circuit's lines problem.

Found this T-CON board had 22 testing point, GAMMA1~GAMMA22. Where their normal GAMMA circuit lines voltage level are decrement way. After testing their voltage points, found GAMMA1 till GAMMA20 are using decrement way it was from 15V till 3V, but the GAMMA21 voltage point was about 8V! It should be 3V or below. Tracing this GAMMA21 line and it is from the AS15-F DC-DC &

Gamma IC. So trace this line corresponding components, but all looks good. So decide to replace the IC AS15-F and problem solved!

Note: The AS15 series of DC-DC IC (14+1 Channel Voltage Buffers IC) have higher damage rates on the T-con board. When you check the T-con board with this IC, power off the TV and use the finger touch on this IC. If you feel it is warm only, then it should be good. But if you feel it is extremely hot on the IC surface, that's mean this IC is gone and need to be replace. The AS15-HG can use as an equivalent of AS15-G and same as the AS15-F & AS15-HF. Their different is only theAS15-HG built in the heatsink inside bottom of IC body.

Model: Sony KLV32S400A LCD TV

Symptom: Negative Picture, Display Distortion or White Screen

This model of TV has the above symptoms and all are because of their T-con board problem.

Repair/Solution:
This model LCD TV, their T-con board has very high damage rates on the U6 IC (AS15-F or AS15-xx series IC). When power off the TV, try to use the finger to touch U6 IC and you will feeling it is extremely hot! After replace this IC, the problem solved.

Model: ACER AL2671W LCD TV

Symptom: Dead.

Repair/Solution:

After change power supply IC (TNY264PN) and resistor R60 (10R/0.33W,

NFR type) the problem solved.

Model: ACER AL2671W LCD TV

Symptom: No start-up and the LED light is orange color.

Repair/Solution:

After changed capacitor C380 but the problem remains the same. Standby PSU functions and standby 5v present. The voltage appears at pin PSON in the PSU after switch on but PSU does not start. Actually they are three 330K SMD resistors in series in the PSU which supply voltage for DLA001. Check if resistors are high resistive values.

Model: Acer AL2671W LCD TV

Symptom: No start-up. Orange LED light.

Repair/Solution:

Check C380 (100uf.16v) under heatsink, next to U42 and U61 on signal PCB

for capacity loss.

Model: Acer AT3201W LCD TV

Symptom: No function on user control and remote control.

When SCART module has been removed remote control reaction ok.

Repair/Solution:

Replaced electrolytic capacitors C348 and C350 (both 220uF/16v) on

mainboard.

Model: Bush IDLCD26TV05HD Chassis L9 (Beko) LCD TV

Symptom: No backlight and no picture. Sound ok and can be intermittently.

Repair/Solution:

Replace C512, C513 (both 1000uF/35v) and C519 (220uF/35v) in PSU. Change

a 1000uF/16v capacitor on the signal board. The location of this capacitor is on

the far right-hand side near the top of that board.

Model: BUSH LCD26TV006HDX LCD TV

Symptom: No display. The standby LED light is flashing.

Repair/Solution:

The capacitor C315 (1000uF/25v) is supplied higher rated, and it is a little

bigger so use longer leads don't fit close to board. Be careful when soldering

you don't accidentally remove the tiny surface mount resistors on back of board.

Model: BUSH LCD32TV005HD APH000 Chassis BEKO LM LCD TV

Symptom: Picture appears for a few seconds after switch on, and then the TV switches off again.

Repair/Solution:

Check C2042 and C2044 (both 680uf/35v) in PSU for capacity loss or bad ESR value.

Model: BUSH LCD32TV005HD APH000 Chassis BEKO LM LCD TV

Symptom: No Picture and no backlight. The TV front control buttons were working but remote control does not function.

Repair/Solution:

Replace IR receiver, where this part is short circuit.

Model: BUSH LCD32TV022HD with 17MB15 Chassis LCD TV

Symptom: Intermittently no start-up or dead after a few hours.

Repair/Solution:

The PSU replaced and EEPROM IC re-solders, but not helps. Try to re-solder IC220 (SDA5550) and IC224 on main board the TV is back to normal.

Model: Bush IDLCD26TV05HD Chassis L9 LCD TV

Symptom: No Backlight

They are no 24v to the inverter board after a while. Sensitive to power supply tapping.

Repair/Solution:

Check & replace SMD 27v zener diode (red with yellow bands). The diode is located in primary side of the 24v chopper transformer supply, near pin5-8 of

the SMD POWER IC (UC3843A). This PSU board part number is GDP002 ZR1910R NETZTEIL SPS 180W 24/5 12/5 PFC 2pin (LISH).

Model: Changhong LT2618 LCD TV

Symptom: Stuck in standby mode.

The power LED light is red colour only. Check their standby voltage on J806 pin 4 & 5 is about = 5.2V, that's mean the PSU has been supply 5V to the mainboard. Using the remote control to start-up the TV and found that socket J806 pin 1 received an ON signal and it is sent from CPU. That's mean the CPU is working properly. Testing the power supply secondary out voltage for 24V and 12V lines both also = 0V. So the TV can't start-up is not causes by the standby section, that is PSU primary section. Check the power IC IC801 (STR6759N) pin 4 (Vcc) is about ~11V. Continue checking the 12V & 24V lines corresponding components.

Repair/Solution:

Finally found that 24V output voltage was shorted to ground and the failure component is D841 shorted. After replaced D841 the TV is start-up and working properly now.

Model: Changhong LT4018P LCD TV

Symptom: Dead.

Normally this type of problem is causes by the PSU section or their output voltage loading side short circuit. Check PSU primary side has 300V there but nothing on secondary output. After power off TV, testing each voltage output lines with multimeter ohm range and found that the +5V line was shorted to ground.

Repair/Solution:

One by one disconnect the line was connected to +5V source and found that the USB module has been short circuit. Disconnect the USB module and power on the TV, the TV is working properly. Try to checking the USB module and found their cables connect between mainboard and USB module was shorted. After replaced the USB module cable the TV is fully working now.

Model: Changhong LT3218 LCD TV

Symptom: Display white screen, but sound ok.

This LCD TV is using the AUO LCD panel. Where their T-CON voltage supply Vcc is using 5V. Testing their actual VCC voltage was show 4.7V only. Suspect the Vcc voltage is a bit out of their range, then using the external 5V connect to T-CON. Power on the TV and the display is ok now.

Repair/Solution:

Check the T-CON Vcc pin corresponding components and found that C504 is leaking and need to replace a new one. After replaced C504, this TV is ok.

Model: Dell W2600 LCD TV

Symptom: OSD Menu locks after 10 minutes

Repair/Solution:

Change regulator IC (LM1117 DT-2.5) on mainboard.

Model: Dell W2600 LCD TV

Symptom: Intermittent or Erratic functions.

Sometime the TV locks-up problems, shuts down, no start-up and no remote control or front panel functions.

Repair/Solution:

Re-solder or reflow system ROM chip IC1234 and all regulators IC on the mainboard.

Model/s: Dell W2600 LCD TV

Symptom: No start-up after warm-up.

Repair/Solution:

Replace capacitor (10uf/50v) on small board mounted to power supply next to mainboard power connector.

Model: AMOI 32K1 LCD TV

Symptom: No Display and No Sound

Repair/Solution:

When press on the standby mode button, LED light change from Red to Blue color but no backlight. Try to using a wire with a resistor connect the 3.3V to BL_ON signal, their backlight and screen logo AMOI are present but all front buttons and control no functions.

Remove the mainboard EEPROM IC 24C32, using a programmer to empty their Data and then solder it back to mainboard. The problem solved!

Model: Changhong LT32700 LCD TV

Symptom: TV stuck on standby mode.

After the AC power supply to the TV, standby LED light on with yellow color. When press the power on switch or remote control power on, the TV still remain the same yellow color LED light and can't start-up.

Repair/Solution:

Check the PSU output, their standby 5V is present but no any POWER_ON signal present. Checking their mainboard voltage regulator IC output and found U1 (LM1084-2.5) output voltage as 4V! Actually it should be output 2.5V instead of 4V. After replace U1 the TV is working now.

Model: Hisense TLM3237D LCD TV

Symptom: TV Power On then Shut Down

Repair/Solution:

Check the PSU board standby 5V STB normal and stable. But their POWER_ON signal is unstable, change in between 0~4.8V. Normally this POWER_ON signal is about 4.6V for this TV. So the problem was in mainboard or CPU section. Check their mainboard Voltage Regulator IC output voltages all normal and stable. Empty the U11 (24C32) EEPROM but not help. Testing the SCL & SDA line voltages it shows in between 0V~3.3V. Test the crystal Y2 (14.318MHz) it have 1.5V and another side is 1.7V. Use the ISP Programmer to program the correct version firmware into the mainboard flash memory U10 (PS25VF040). Power on the TV and the TV is working! After that, using remote control to control the TV function and their setting but it is hard to operate and slow motion to change function. Power off TV and then power it on again, the TV back to their original fault! Replace a new flash memory U10 (Cannot use the empty flash memory and it will can't start-up the TV, must using the ISP Programmer to copy their firmware into it) and solder it back to mainboard. Finally the problem solved!

Model: Hisense TLM40V68PK LCD TV

Symptom: 1) Pop up OSD Menu Randomly

2) Front panel buttons sometime no function

3) When TV in standby mode, can't use the remote control to power on (start-up) the TV.

4) Auto power on of power off the LCD TV.

Repair/Solution:

All these symptoms were causing by the ESD protection component call it as MLV (Multi-Layer Varistor). It is look like a small SMD diode and its function as an ESD protection & surge noise. How to testing it? Yes, this type of components normally they are using much in mainboard. So you can use the diode range to compare their values. If one of that MLV values different much or shorted, then you can direct remove it and power on the TV. If the problem solved, then you can find another MLV from a junk mainboard to replace it.

Conclusion: No wonder what brands or models of your LCD TV, if you're facing the above LCDTV symptom and haven't find out what was wrong, then you can try to check these MLV components inside their corresponding circuit lines. Some time on the signal input line, it is not one MLV defective, but maybe 2 or 3 units. For example, I had repaired an LCD TV with VGA port signal input no display problem. After checking their signal R, G, B, SDA & SCL lines got 3 MLVs shorted. Normally one MLV will using in one signal line, but this LCD TV VGA input signal got 3 MLV of them shorted and affect the VGA mode no display symptom.

Model: Konka LC32ES62 LCD TV

Symptom: TV Randomly Can't Start-up, LED light blinking non-stop with Red and Green color). Or when TV heat the backlight flickering till no backlight/cut off and the sound remain ok.

Repair/Solution:
This TV is using the IP (Inverter Power Supply board) board with LG LCD Panel. Find a resistor R756 in IP board and modify it to 3.3K ohm and problem solved.

Model: LG 32LG30R-TA LCD TV

Symptom: Stuck in standby mode

Repair/Solution:

When the AC power on, Red LED light lit. Using remote control to power on the TV, LED light change to Blue color but PSU no 12V, 16.5V & 24V output. PFC big filter capacitor has 380V there. Remove the ZD111, ZD112 & C108 on the PSU board near U102 (NCP1396A). It is a power supply design bugs, so after remove these components, problem solved.

Model: LG Chassis LA73A LCD TV

32LB4DS-UA, 32LB9D-UA, 32LB4DS-UA, 37LB5DF-UC, 42LB5DF-UC, 47LB5DF, 47LC7DF-UB, 47LY3DF-UA, 52LB5DF-UC

Symptom:
a) Auto Power on and Power Off

b) Auto Channel Up and Down

c) Auto OSD Menu display

Repair/Solution:

Check or replace EMI filter on these location: L729, L730, L741, L742, L743, L744, L746, L747, L751, L752, and L753.

Model: LG 42LK520-UA, 42LK530-UA, 42LK550-UA LCD TV

Symptom: When power on the LCD TV, there is no display

Cause: Because the Height of embo is low, when assembling C/PCB to the module, it can have a scratch on the bottom on T-con board.

- Thermal pad press the C/PCB

- PCB bottom (scratch point) is short with C/Bottom (Ground)

- Because of the over-current, it will make the mainboard damage.

Repair/Solution:

Temporary solution is to add isolation cushion sheet between Embo and C/PCB.

Model: LG 32LG700H, 37LG700H & 42LG700H LCD TV

Symptom: Power itself On/Off.

Cause: Touch IC sensor malfunction

Repair/Solution:

IR assembly C104 change from 2pF to 12pF.

Model: Philips 20PF5120/93 Chassis ML1.1A AA LCD TV

Symptom: Randomly No Display but Sound Normal

Repair/Solution:

Find this R54 (54.9K ohm) resistor and replace it with a 75K ohm resistor on mainboard.

Model: Philips 32PF7321/93 Chassis LC4.31A AA LCD TV

Symptom: Sound Distorted

Repair/Solution:

Replace 2013 ceramic capacitor from 1.5nF to 10nF/50V ceramic capacitor.

Model: Philips 42TA2000/93 Chassis TPT1.0A LA LCD TV

Symptom: Display and Backlight flickering

Repair/Solution:

If capacitor on position 2083 positive pin is 24V and drops to ~20V, so measuring the capacitor on 2079, 2081 & 2082 with ESR tester or replace these 4 capacitor at the same time and problem solved.

Model: Samsung LE40R76B LCD TV

Symptom: Some vertical lines on the TV screen. But sound is ok.

Repair/Solution:

Check the PSU output voltages all ok. After that checking their T-con board Vcc input and Voltage regulator IC. Found that 2.5V Voltage Regulator IC no output. After replaced it the TV screen is ok now.

Model: Samsung UNxxC9000 LED TV

Symptom: The UNxxC9000 LED TV power up sequence

Repair/Solution:

This power up sequence can help you troubleshoot the UNxxC9000, here is the power up:

a. When the AC cord is plugged in, the voltage on the STBY pin goes to 5.3V.

b. The MCU (Microcontroller, Micon &etc) on the mainboard actively looks for the user to press Power On switch from remote control or the TV itself.

c. When a user presses Power, the MCU sends a “High” voltage (0-1.2V transition) to the SMPS/PSU via Power_On/Off pin to activate the rest of the voltages.

d. After the 0-1.2V transition on the POWER_On/Off pin, the following voltages are activated on CNM801 and the “Melody” plays.

- Vamp= 18VDC

- OD_On/Off= 3.3V

- D5.3V = 5V

- D12V = 13V

e) Approximately two seconds later, 5V is applied to the BLU_On/Off pin.

f) Once the BLU_On/Off pin is activated, the LED arrays turn on. CNL801 supplies high voltage to the LED arrays. The following voltages are activated on CNL801 (with respect to chassis GND):

- BOT1+ = 170VDC

- BOT1- = 45VDC

- TOP1- = 45VDC

- TOP1+ = 170VDC

- TOP2+ = 170VDC

- TOP2- = 45VDC

- BOT2- = 45VDC

- BOT2+ = 170VDC

g) High voltage is applied to the panel LED arrays though connectors CN401 and CN402:

Pin 1 and 12

-Approximately 170VDC (when referenced to the chassis GND).

-Voltage varies when referenced to connector GND.

Pin 6 and 7

-GND (effective).

-Approximately 45VDC when the backlight is lowest.

-GND Pins

-GND Potential is highest when signal is >90% duty cycle (almost DC).

-GND Potential is lowest when signal is <10% duty cycle (almost GND).

-Level is controlled by the mainboard though the Bot_Dim and Top_Dim pins on connector CNM801

Model: Samsung LN19C350DXZA LCD TV

Symptom: Display is completely Green color only.

Repair/Solution:

LVDS cable not properly inserted or dirty in the contact pins. Clean the LVDS cable contact pins and connect it back properly.

Model: Samsung UN46C6300SF LED TV

Symptom: No Power

Repair/Solution:

This ICB801 (ICE3BR1765J) Power IC is defective on the PSU board.

Model: Sharp LC26SA1E, LC26SD1E, LC32SA1E, LC32SD1E, LC42SA1E, LC42SD1E LCD TV

Symptom: No Display, Sound Problem or Various operational key issues

Repair/Solution:

If after checking the whole PCB boards in TV still not solve the problem, it could be software issues.

Update the main software to the latest version, following the instructions in the service manual. Or using an ISP Programmer to empty their EEPROM IC first, if problem still the same, then you should program their flash memory by ISP Programmer with the working firmware.

Model: Sharp LC46D78UN & LC52D78UN LCD TV

Symptom: HDMI Connectivity Issues: No Sound or No Display When Turned On

In some cases, when connected via HDMI to an external audio amplifier or set top box an interruption to the sound and display may result when the TV us turned off and back on. This may occur due to current leakage from the HDMI-SW IC VHISII9287+-1Q on the mainboard.

Repair/Solution:

When the TV set requires service due to the above mentioned symptom, replace C1614 (0.1uF, 104 ceramic capacitor) on the mainboard with a 1K ohm1/16W resistor to reduce the leakage effect or just replace the mainboard.

Model: Sharp LCD-37GA5 LCD TV

Symptom: Stuck in Standby mode.

The LED light lit with Red color and its show on standby mode. Even press the power on button or using remote control also cannot power up the TV.

Repair/Solution:

After testing the PSU board, their standby 5V present and BL_ON signal (3.16V) was sent from mainboard to inverter board. And then their main chipset, Vcc voltage, clock or crystal waveform and reset circuit all normal, so that's mean their main chipset is working properly. But their POWER_ON signal is missing and not present on the switch transistor to drive the RL701 to start-up the PSU.

From the previous experience, if all section in good condition but still no start-up, then it could be their MCU chipset or external flash memory (or their firmware corrupted) defective. Because of the Sharp LCDTV have lots of this problem was causing by their flash memory firmware corrupted. So checking the flash memory firmware first and found it was in IC3001 (L64) position. After solder it out, using an ISP programmer to backup their original firmware first. In case it is not the flash memory problem, then you can program it back to original version firmware. After that, find a correct version & working firmware and using the ISP programmer to program it into the L64 flash memory IC. Solder back this L64 flash memory into the mainboard. Power on this Sharp LCD-37GA5 LCD TV and it is working perfectly now! Problem solved and confirmed it was the firmware corrupted till it can't start-up the power supply.

Model: Skyworth 24E60HR LED TV

Symptom: No Backlight or Display Dim

Repair/Solution:

This symptom is a common fault for this LED TV. Their problem was causing by LED Inverter/Drive board. When testing the LED Drive board C1 voltage, it is just 24V only. That's mean their LED Drive board not working. Try to re-solder the LED Drive board U01, U02 and their surrounding components. After solder the board, their LED backlight is working now.

Model: Skyworth 55LED10 Chassis 8K81 LED TV

Symptom: Hard to start-up the TV when first time power it on.

When this LED TV every day first time power on, it is hard to start-up the TV. Check their 24V is ok but 12V output just have about 6~7 V only.

Repair/Solution:

This TV is using the ChiMei lcd panel and their PSU board is use 168P55PTQC-00. The PSU 12V output is from 24V through a DC-DC circuit generated. Change the R212 from 10 ohm to 0 ohm and R214 from 10 ohm to 4.7 ohm.

Model: SONY KLV-26S550A, KLV-32S550A, KLV-37S550A LCD TV

Symptom: Flashing and Jittering Display

When watching certain channels in RF mode, the picture may be flashing and jittering intermittently.

Cause: Abnormal signal condition- the problem channel has a wider H-sync width compared to the SECAM standard signal (difference up to 1,2us)

Repair/Solution:

Update the firmware to the latest version. In case of a 32 inch panel, first check the panel type before updating.

Model: Sony KLV-32G480A LCD TV

Symptom: No Display but sound ok and backlight working.

The screen has a "TV" character on the screen but no display, just black screen.

Repair/Solution:

Since this LCD TV sound and backlight ok, so the problem should be on the mainboard. Using volt meter testing the T-CON board Vcc line and it has 12V there. So the problem could be the mainboard

Scaler IC, MCU, Flash memory, EERPOM or T-CON board. After testing the Scaler IC & MCU corresponding circuits like reset, Vcc and crystal all looking well. So try to check the flash memory & eeprom IC. Found these ICs were beneath of the mainboard. The IC3001 is 25L08 flash memory IC and IC3002 is 24C64 eeprom IC. So start the easy one, remove IC3002 (24C64) and using programmer to save their original data first and then erase this eeprom IC till it empty and all show "FF" on the programmer software. Solder 24C64 eeprom IC back to mainboard and power on the LCD TV. The TV screen can show a perfect display now and problem solved!

Model: Samsung LA32R91B LCD TV

Symptom: TV brightness and contrast features automatically change to 100% (maximum).

Even using the remote control adjusts it to 50%, but in a short time it will automatically change to 100% of brightness and contrast.

Solution/Cure:

Found some bulged electrolytic capacitors on the line of DC supply to mainboard. After replaced these electrolytic caps, the symptom was getting better but not completely. Even disconnect the front control panel and checking their circuit line till mainboard also normal. It is no any leakage ceramic caps in that circuit line. So it will suspect the flash memory, eeprom IC or the MCU. So starting from the easy way first, checking the eeprom IC. This eeprom IC is beneath of the mainboard and it is using 24C256BN (SMD SOP-8, 8 pins IC). Yes, this eeprom IC (AT24C256C) can be as a replacement for 24C256BN. After replaced a new blank eeprom IC, the Samsung LA32R91B LCD TV problem solved!

Model: V315B3-C01T-con Board:

a) Symptom: TV No Display but Sound Ok and the backlight working.

Check the T-con board and found that SMD fuse burnt. If this type of symptom doesn't just put another fuse to power on the TV, it may damage seriously again.

Repair/Solution:

Since the SMD fuse burnt, must using the Multimeter checking Vcc input line with GND ohm values. The values show it is normal, continue checking the other voltages lines like VGL, VGH, VDA & etc. Finally found VDA line to GND was shorted and it was 0 ohm. Disconnect the both FPC cables, VDA line still remain shorted. Now checking their VDA line corresponding components and found the CP12 shorted. After remove CP12, VDA line ohm values back to normal and testing this CP12 was confirm it had shorted. After replace SMD fuse and CP12, the VDA output 15.9V and TV is working properly.

b) Symptom: No Display but Sound Ok and the backlight is working

Repair/Solution:
Check the Vin have 12V input and other voltages lines also normal except VDA line is 0V. Because of the T-con board DC-DC voltage control by the timing control, as follows: VDD25, VDD18 => VDA => VGL =>VGH, the VDA is control by TPS65161 pin 27 output logic high/low signal (voltage) to QP1 (P-ch MOSFET) pin 4, when signal logic low received the MOSFET is switch ON and the VDA voltage has output and reaching to the GAMMA correction IC.

Test the QP1 MOSFET, pins 1, 2 & 3 have 15.9V. It had proved that the VDA voltage is present. Testing MOSFET pin 4 is logic low signal, but pins 5, 6, 7 & 8 no VDA output! Remove and testing the QP1 MOSFET and found it had opened circuit. After replace QP1, the VDA got 15.9V output and display back to normal.

Note: If don't have the QP1 on hand, temporary can just using a wire connect QP1 pins 1 and 8, so it will bypass the QP1 switch function and testing T-con board is ok or not.

c) Symptom: Screen Shows Vertical Color Stripes. The stripes are slowly to increase.

Repair/Solution:

The vertical color stripes is slowly increase till full screen of vertical color stripes. This symptom could be the VGH circuit abnormal. Check the VGHP has 21V but VGH is 0.3V only instead of 21V. Testing QP7 (2N7002) pin 2 is logic high, pin 6 has 21V. For testing purpose, try to using a wire connect QP7 pin 6 to pin 4. After connected the wire, the VGH has 21V output now and display show perfectly. After replace the QP7, display is working properly now.

d) Symptom: Screen Fully of Vertical Stripes and Sometime NO Display

Repair/Solution:

From the above symptom, it could be one of the DC-DC circuits abnormal and causing this problem. Check the DC-DC circuits and found that VGH voltage not stable and it is about 4.6V only. After some time, the DC-DC circuits all voltages will no output (No Display) and need to power off and then on it again the voltages will come. When the no voltages output, power off the TV, using the finger touch the IC and feeling their temperature is a bit high but not extremely hot. Suspect the FPC cables problem; remove both CN1 & 2 and measure the VGH voltage still not stable. So the problem is still in VGH circuit line. Check the VGH line corresponding components, by disconnecting the CP19, CP43 and found that when removed CP43, the VGH voltage line is back to 21V! Replace CP43 with 1uF/50V, the T-con problem solved.

Model: Changhong LT2612 LCD TV (T-con: SVA 260PW023S)

Symptom: No Display and the screen full of Vertical color lines

Repair/Solution:

Normally this type of TV symptom was causing by the T-CON board or LCD panel. This LCD Tv using SVA 260PW023S T-CON board. Check the T-con board Vcc voltage input had 5V, and the AVDD had 3.3V. The lcd panel driving voltage VGH & VGL are nothing. Suspect their DC-DC circuit lines having problem. Check the VGH line with GND with ohm range, it had 300 ohm only. But VGL line with GND

had above 36K ohm! So suspect the VGH circuit line filter capacitor leakage. Found three SMD chocolate color filter caps on the VGH line and two of three filter caps were leakage, another good one got 3.3uF. Because of they are three same size and color filter caps, so using one normal electrolytic capacitor 10uF/50V to replace it. Power on the TV their display is back to normal now.

Model: Changhong LT24720FX LCD TV

Symptom: Display poor image with whitish tail or ghosting

Repair/Solution:

Normally this type of symptom was causing by the T-CON board or LCD panel. So starting testing their T-CON board voltage and found that VGH voltage has 2.3V only. The correct VGH voltage for this T-Con board should be about 25V. At the same time found a burnt component on the T-con and the location is R100. That's mean it is a burnt resistor and can't saw any value there. Using multimeter ohm range to checking the R100 pin ohm values to GND (ground) is about +/- 500K ohm. This is let us know, the R100 position not because of other components short circuit and causing it burnt. Use a 1M ohm variable resistor (VR), starting from the highest ohm first and then slowly decreases the ohm values until the VGH reach 25V and the display also change to normal. So check on that VR and found it is about 100K ohm, after that changed a SMD resistor with values 100K ohm to R100. The VGH line got 25V now and the display image also back to normal now. The TV problem solved!

Model: ChiMei V320B1-L06 LCD Panel with T-con board V320B1-C03

Symptom: Screen fully with Vertical Color Lines

Repair/Solution:

This T-con board Vcc voltage is present. Check VDA voltage is 11.2V only. That's mean their DC-DC circuit not working. Since their DC-DC IC AT1380A is control by the Timing Control chipset (CM2681A), when checking their switch on signal from CM2681A, it is no any signal from it. After that checking the CM2681A voltage supply IC N7 (2.5V voltage regulator IC) and found that has 0.9V volt output only instead of 2.5V! After replace this N7 IC , the screen is back to normal now.

Model: Hisense TLM-3233D LCD TV

Symptom: No Display but Blue Screen with Two Vertical White Bars

Repair/Solution:

When power on this lcd tv, the screen show no display but blue screen with two vertical white bars. The two vertical white bars will flash but no any content inside. The LCD TV can hear the sound and

remote control to change channel properly. Try other video signals input like AV and PC also same results. Even try to call out the OSD menu also same problem too.

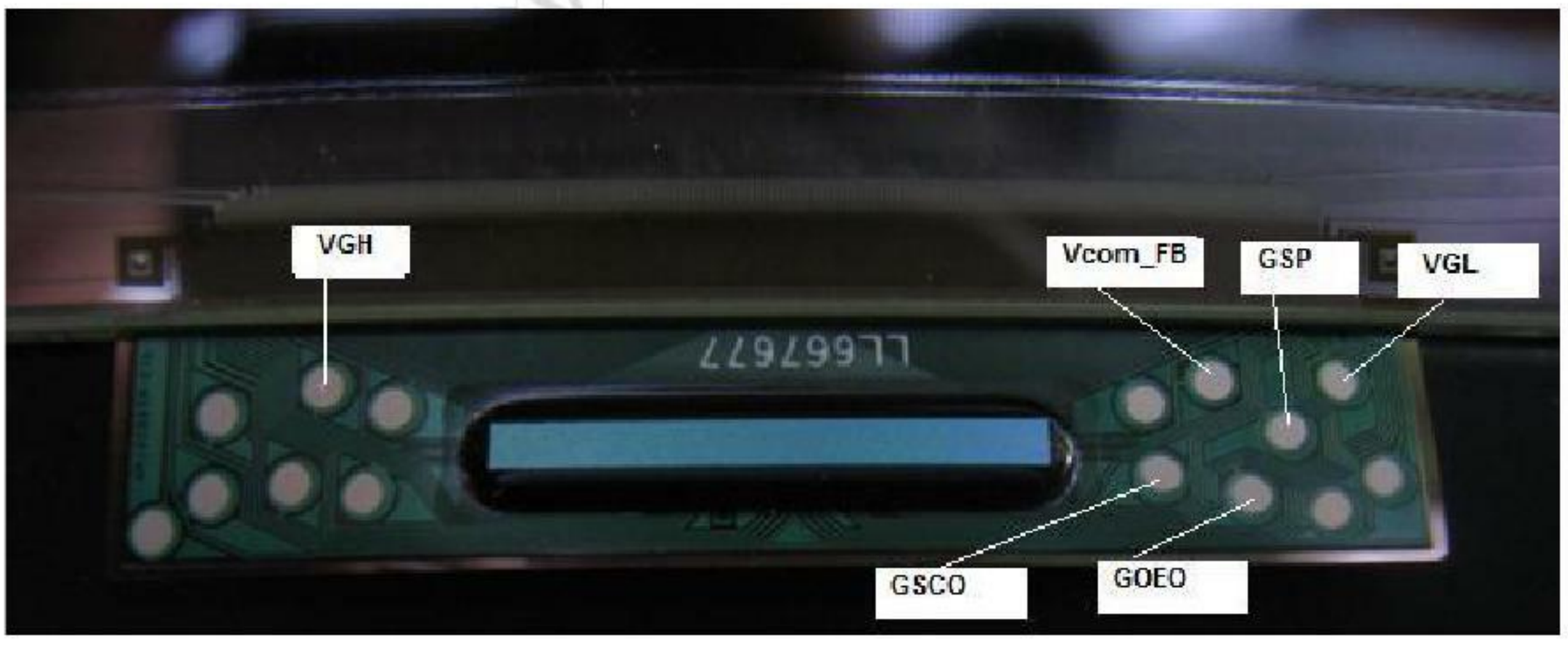
Since the LCD TV cannot show the OSD menu and the TV got sound and change channel properly, so that the mainboard is normal. After observation this lcd tv, found that the problem could be in the T-CON board or LCD panel.

Check LVDS and FPC cables, they are show as normal, then check the T-CON board voltages. All voltages in T-CON board are ok, so that i will suspect the T-CON board mainchip (N39) or their memory chip (N31) defective. I got the junk T-CON board with same part number, but their DC-DC chip was burnt. So the mainchip and memory IC can be use. Because of the N39 (CM2681) have many pins and the memory IC N31 (24LC128) only have 8 pins, so that I choose to replace the N31 first. After replace the N31, I try to power on the TV, and it was show display perfectly!

Since this N31 is a memory IC, does that mean IC itself damage or just the firmware corrupt and caused this problem happen? To find out this answer, I use my programmer to copy the working memory IC firmware and write it into the original memory IC. Do you guess what has happen? Yes, the LCD TV working perfectly too! So the problem solved and it was causing by the firmware corrupted.

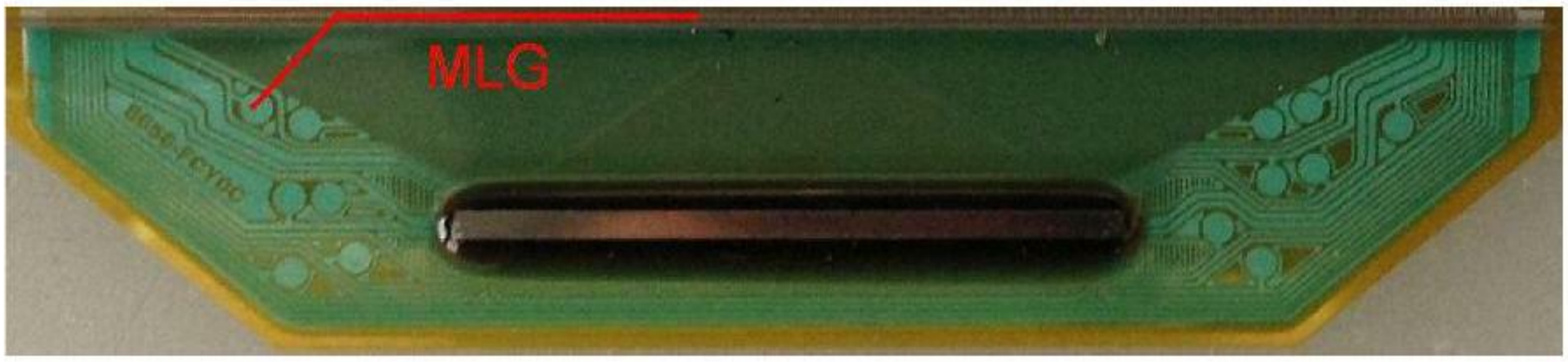
Conclusion: The T-CON board memory chip or their firmware corrupt also can cause the screen problem. So that we need to save their firmware and must prepare some junk boards of T-con board, mainboard and inverter board for future use.

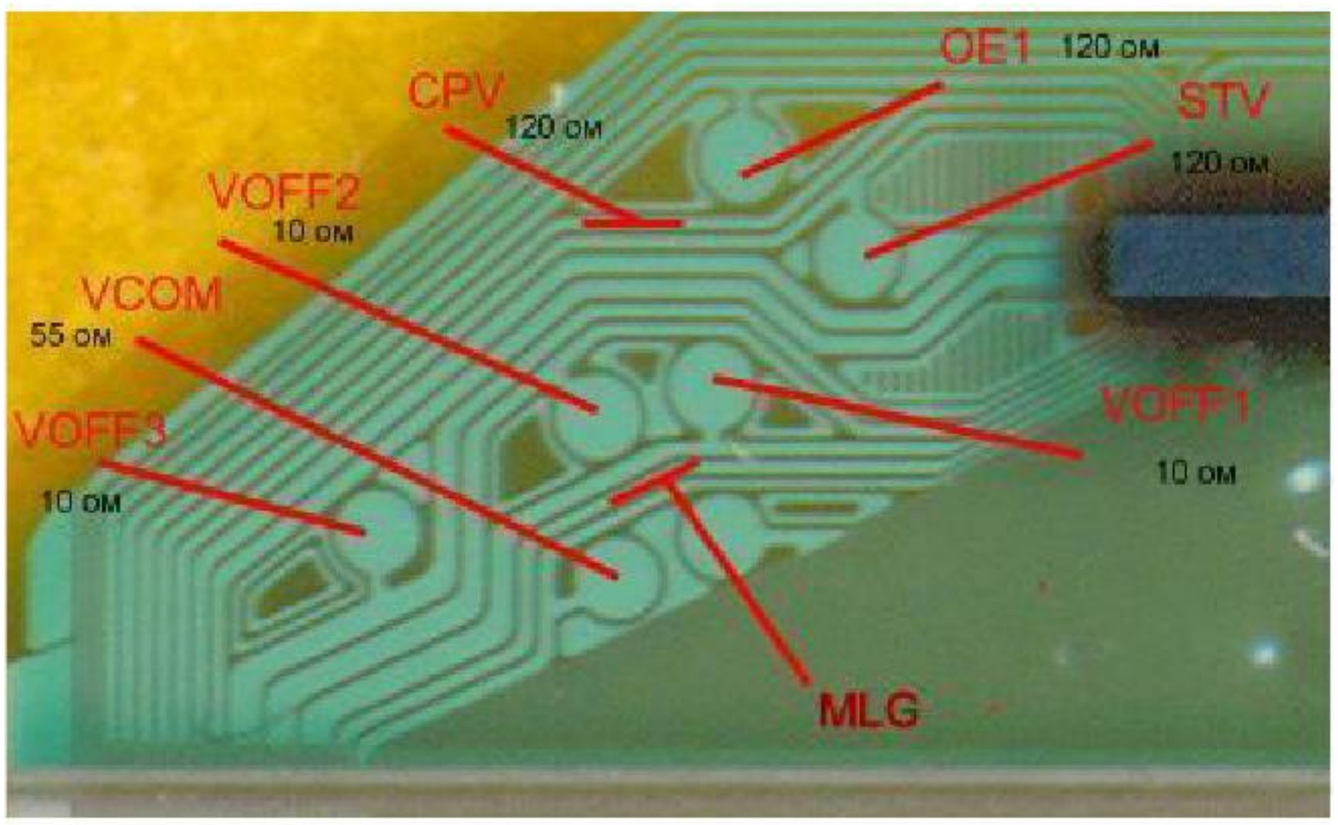
Panel LC420W02 (SL) (L1) Tcon LC420W02 - SLA 1 Tab HM10G005M - C1L driver LL667677



HT215F01-100X0.0 -Tcon 110CCUKR4-00D - Driver 8656-FCY0C

White spot which gradually increases and is transformed into a blue screen or in a weak horizontal, continuous, thin strips, then partly in the vertical, sometimes seen a weak schedule. Open MLG, there were a few such cases, as the lobe of the penny no, we have to carefully solder to the road. If caused by the lines VOFF1 / VOFF2 / VOFF3 recommended for T-CON to temporarily remove R238 and R237, to avoid confusion. Contacts loop: \ 1.2 - CB \ 6 -OE1 \ 7 -SPV \ 8 -STV \ 11 -VOFF3 \ 12 -VOFF2 \ 13 -VOFF1 \ 14 -MLG \ 15 -VCOM \ 6.9.14. Supplement that penny MLG on the petal also have (see. the second photo)

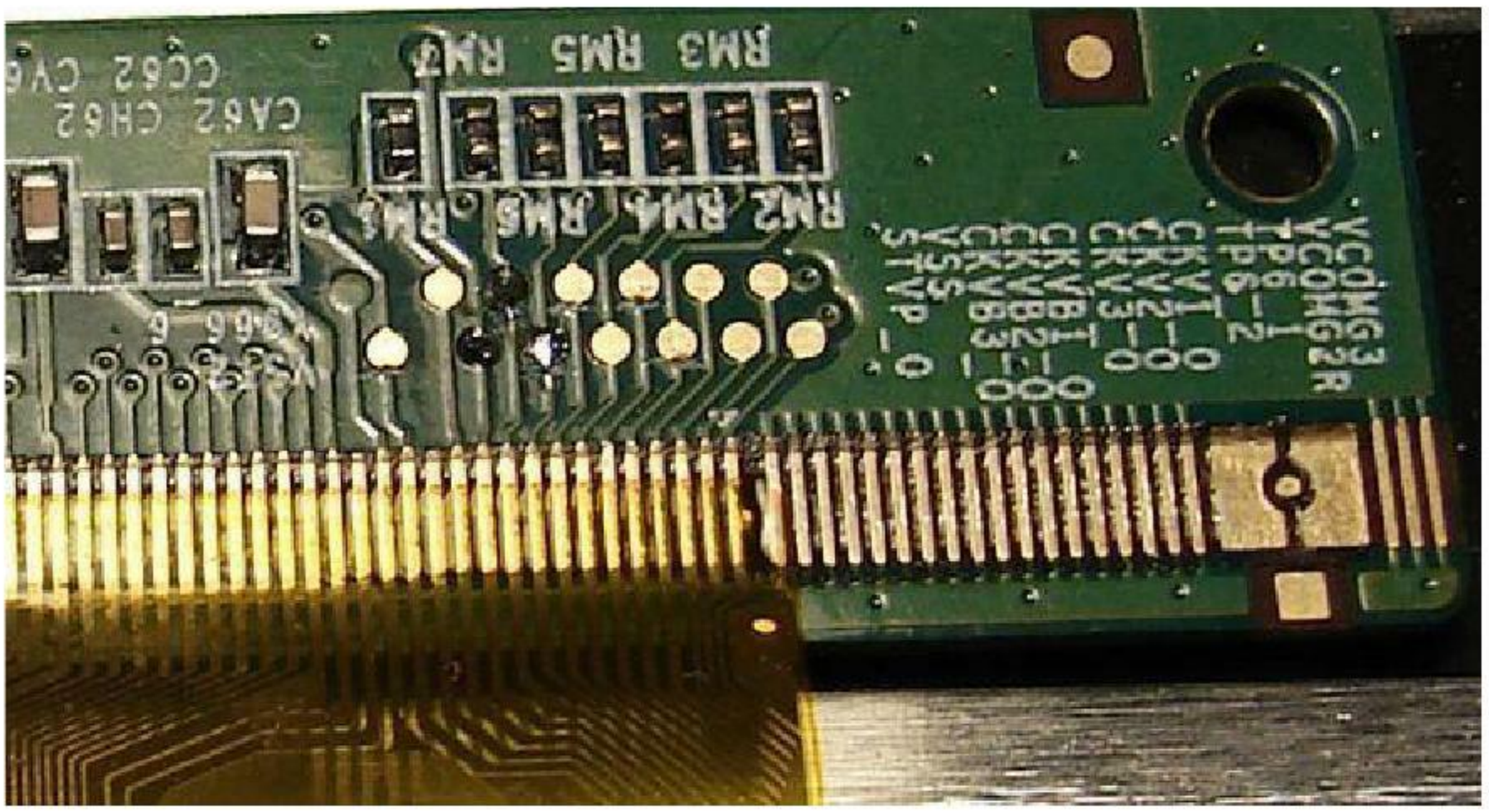




LED SAMSUNG UE40D5520RW Panel LTJ400HM03-L0 strap right not serviceable 11Y400HFSR4LV0.3RIGHT

Problem for Personnel jumping circumcision saved, the picture is perfectly recovered

CKV1 0/ 0 CKV2/ CKVB1 0 /0 CKVB2/ STVP



V315B5 LE3 CMO T-CON V315B5-CE3 CWD NT39530H-C5203A Connections

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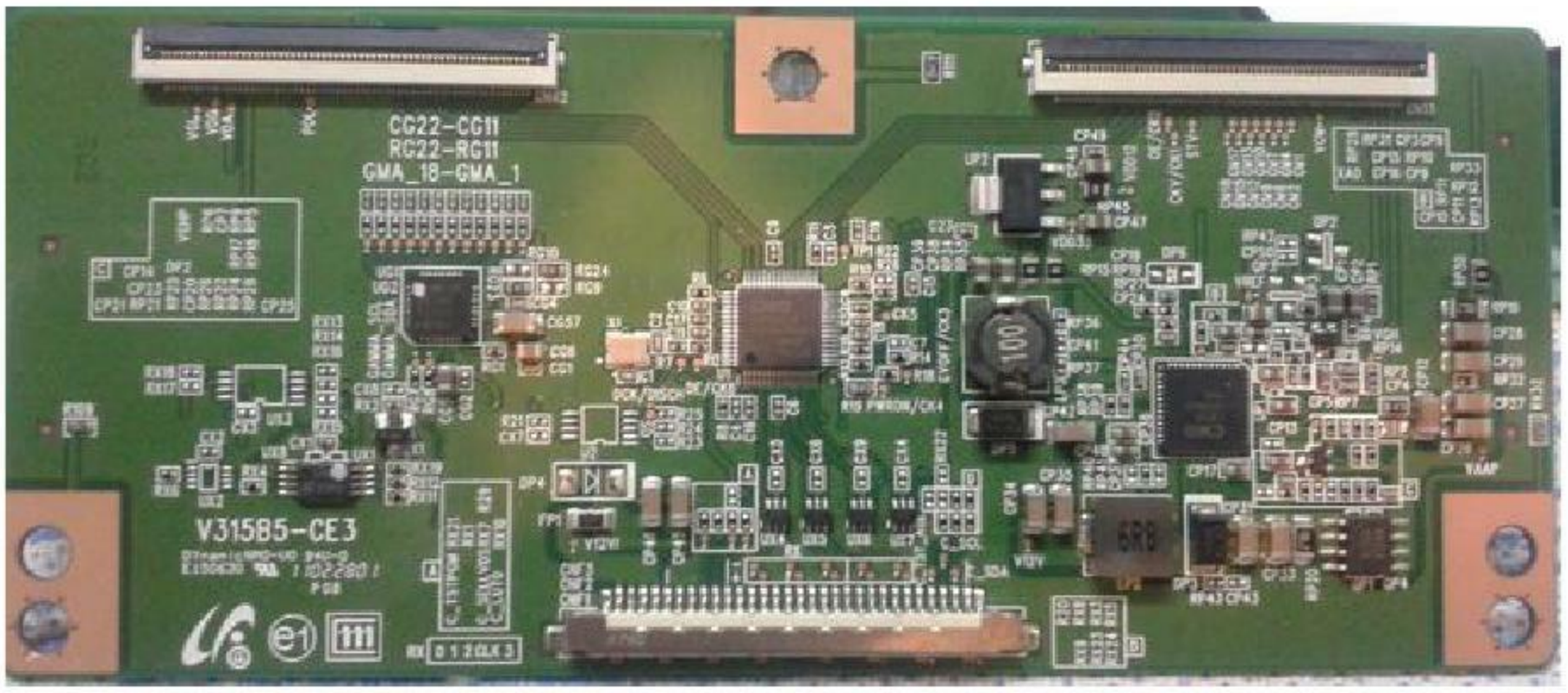
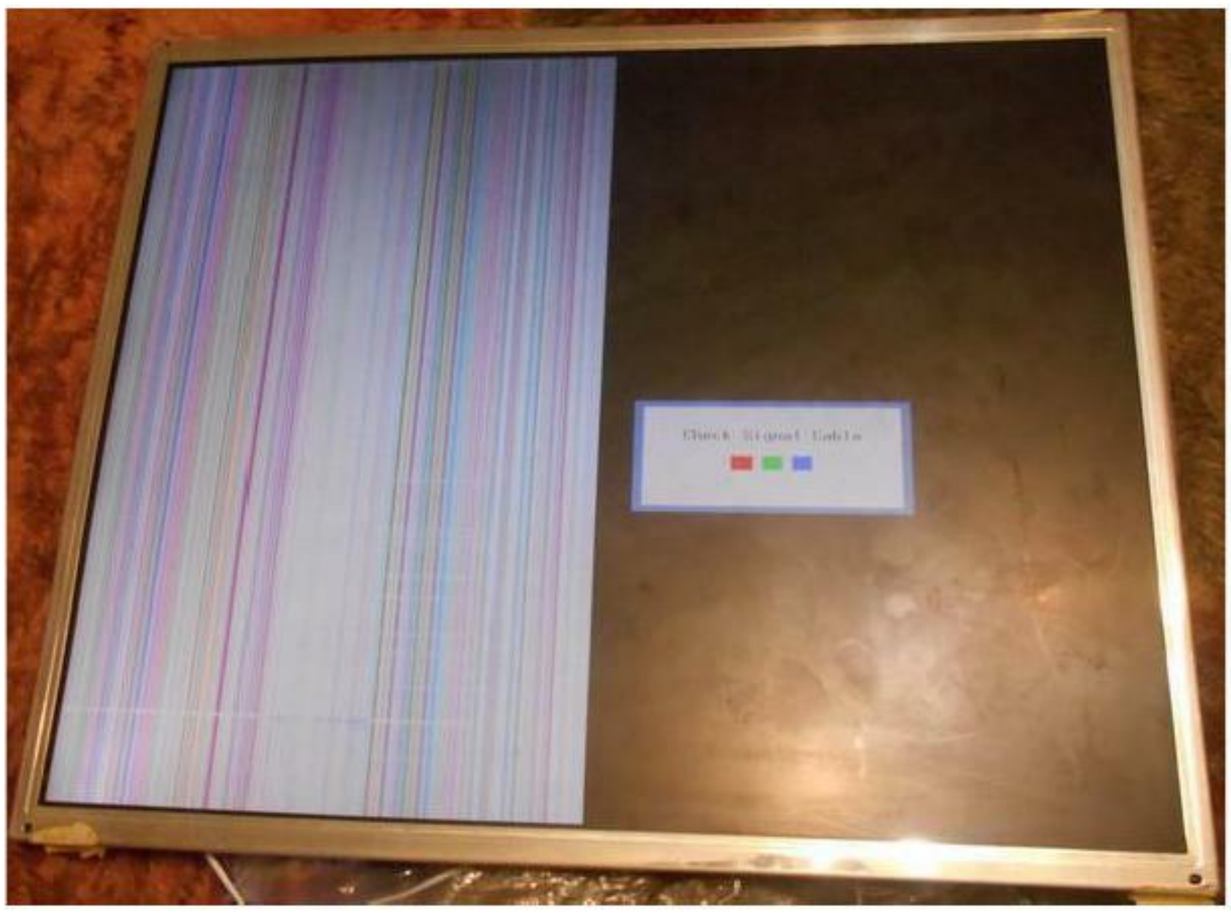
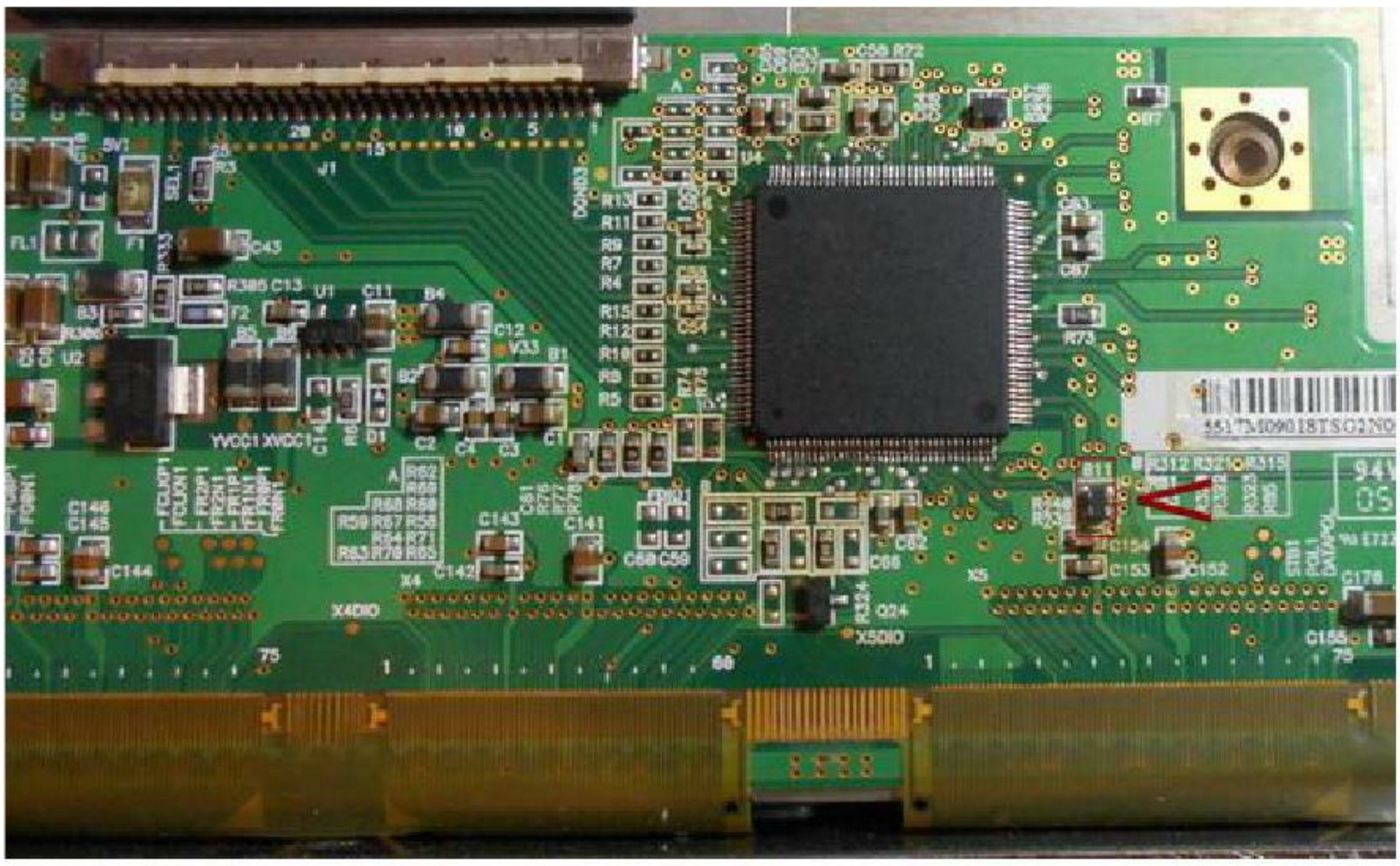
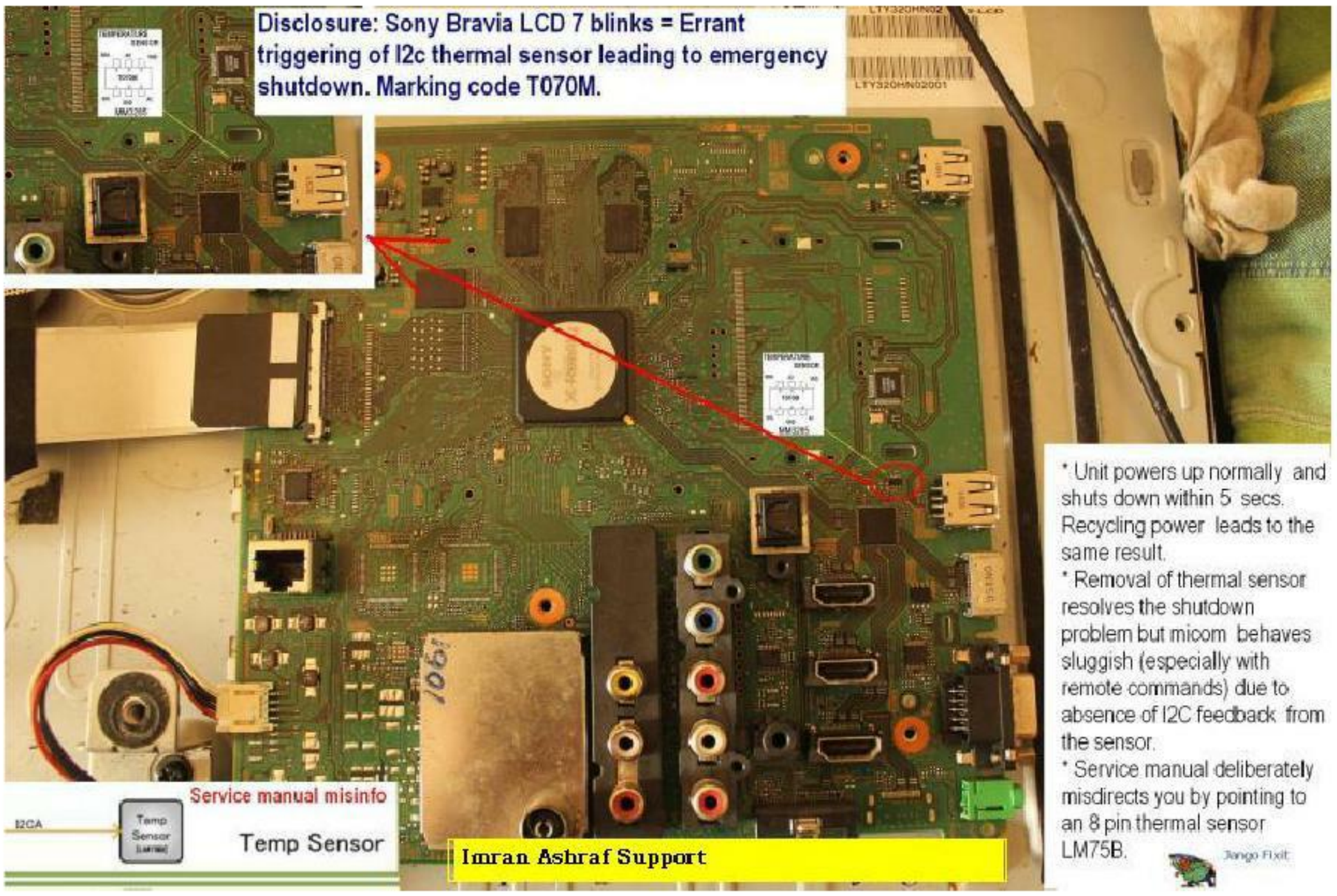


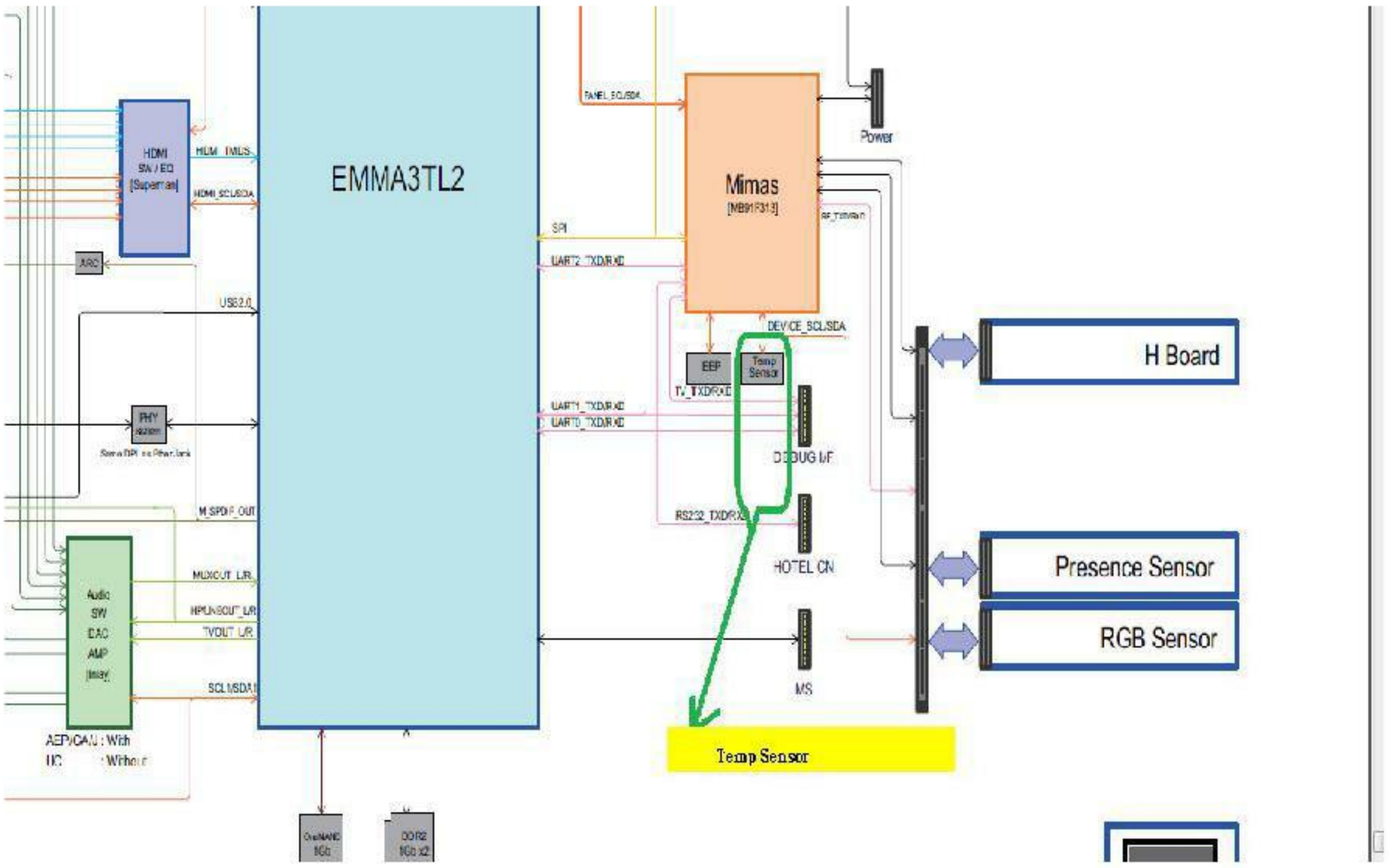
Maybe someone will come in handy Panel M170EN05 left half in vertical stripes. In the search for the causes I decided to pull the LVDS-controller for good luck Standing there AU30707 (KZ4E064M14 0502 A033). This is not found, I put the AUO-003 (0542T055 4K005). Strips left, but the other half worked. After replacing the **assembly B11** marks in picture with red left AUO-003 - Matrix works. It can be concluded that they are interchangeable.





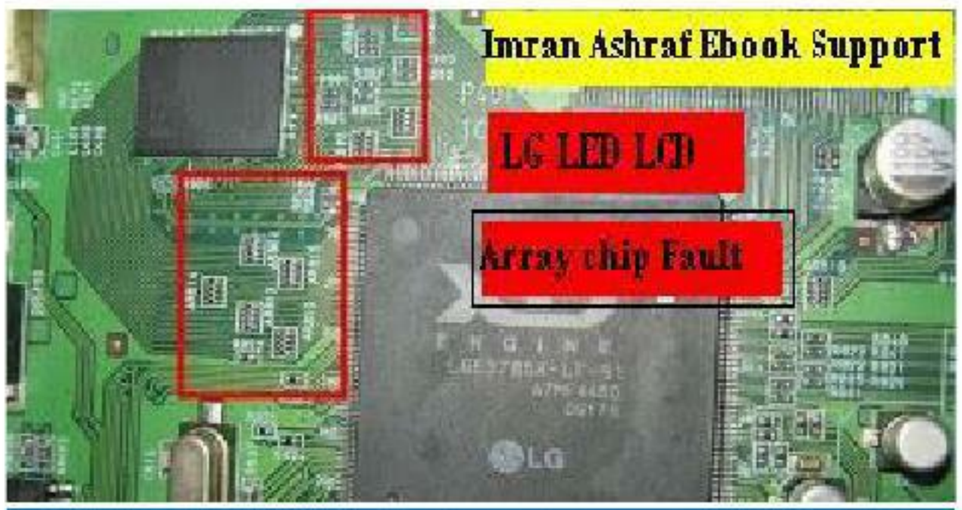
SONY Bravia KDL55EX710 LCD Blinks 7 Times



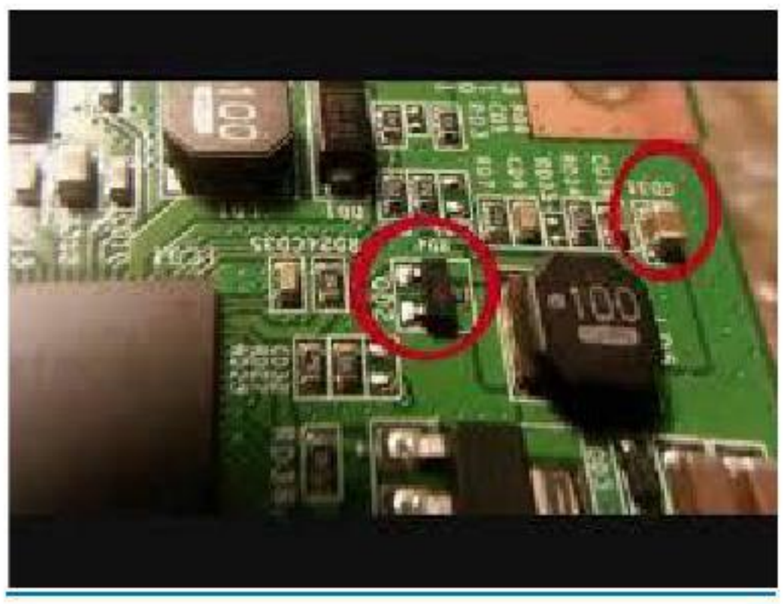


LG LED Dead Set with good voltages at main board.

Solution replace all arraychips types resistor or jumper with wire.



Samsung UN46D6000 - No picture / Sound OK problem - FIXED. BN95-00497B, BN41-01662A as shown in Picture.



Akira Dead LED TV with no function Replace main chip all works fine

LTA 320WT-LF2 Connections