# **Your LCD Display Repair Solutions**

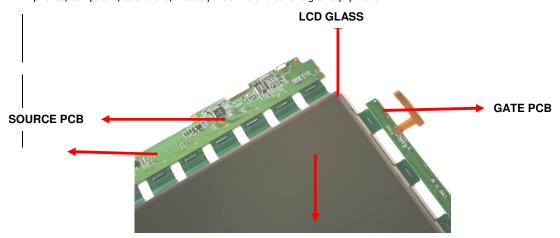


## www.febaLCDrepair.com



## **LCD Panel Repair**

Feba Electronics 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.

## 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. We are proud to point out that we have trained staff and quality machines.

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



## **Backlight UReplacement**

For getting image from Lcd panel, There is a light source in the back side of the Lcd glass. Power of this constant light source needs to be kept in same level by an electronics circuit. This light source and the electronics circuit which controls the light source is called as BACKLIGHT Unit. Feba use high brightness and high contrast backlight to replace your defective backlights. These backlights increases display contrast and brightness. These also provide clearer and sharper images. If contrast is out of adjustment or If there is blur, disappear images, image tremble on your lcd panel, The electronics circuit or the light source needs to be replacement.

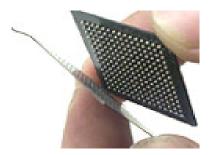
## **Electronics Circuit Board Repair on LCD panels**

- 1. Gate PCB Repair (BGA IC)
- 2. Source PCB Repair (BGA IC)

There are two electronics circuit boards on LCD panel. These electronics circuit boards , Gate and Source PCBs ,determine and control images on LCD panel. New technological BGA, QFP and SMD electronic components are used on electronics circuit boards.

BGA component drives on the right conductivity between electronics circuit and component with small solder balls.

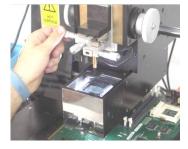




Reballing, Removing and replacement of BGAs on PCB requires specialized equipment. We have this special BGA equipment that process removing and replacement of BGA, QFP and SMD electronic components in our laboratories. Our laboratories are fully equiped with new technological equipments and measurement tools.

If There is lacking image or If all caracters are in white colors or not getting image on your LCD monitors, laptops , LCD TV; Probably electronics circuit board of your LCD panel can be defective.

All PCB repairs can be carried out in accordance with RoHS directives.





## **Applicable Repair on LCD Glass**

- ♣ If your LCD screen has a stuck or dead pixel ( a point on the creen that is allways lit or allways dark ), it is usually due to a transistor malfuction or uneven distribution of liquid in the liquid crystal display (TFT LCD). This can be often fixed.
- ♣ Active Line repair for thin-film-transistor liquid crystal display (ITO layer)
- ♣ Color filter defect repair ( Illuminating dark dot on color filter )

