

[Manuals.plus](#) /

› [U/D](#) /

› Tcon Board lg tv 6870C-0505A for LG 42 49 55inch Logic Board (TCON 6870C-0505A 42 inch)

U/D 6870C-0505A

Instruction Manual for LG TV T-Con Board 6870C-0505A

Model: 6870C-0505A

INTRODUCTION

This manual provides essential information regarding the U/D T-Con Board, model 6870C-0505A, designed for various LG TV models (42, 49, and 55 inches). It covers product identification, installation considerations, and important troubleshooting guidance to ensure proper use and diagnosis.

IMPORTANT NOTICE: PRODUCT IDENTIFICATION

It is critical to correctly identify the T-Con board required for your television. The part number **6870C-0505A** must precisely match the number on the original board in your TV. Purchasing based solely on TV model number is not recommended, as different TV models may use various circuit boards. Always verify the part number directly from the existing board.

6870C-0505A

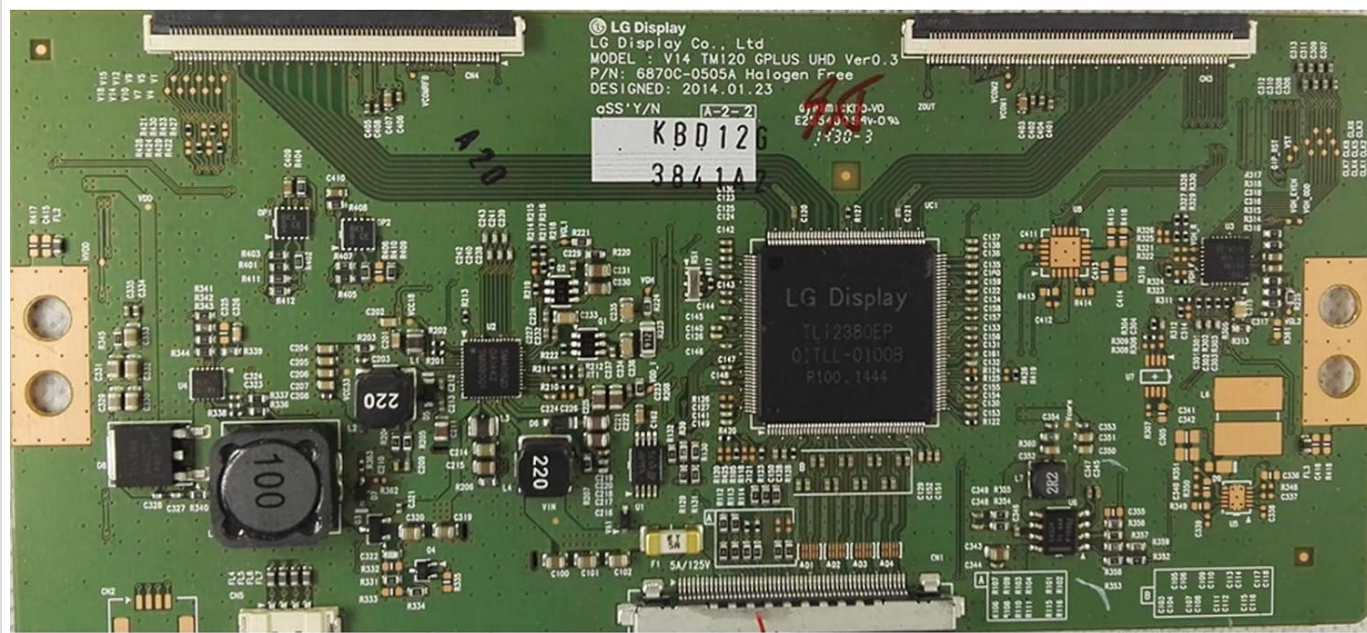


Figure 1: T-Con Board 6870C-0505A with visible part number. Ensure this number matches your original board.

PRODUCT OVERVIEW

The T-Con (Timing Controller) board is a vital component in LCD and LED televisions, responsible for processing video signals from the main board and converting them into signals that drive the liquid crystal display panel. This specific board, model 6870C-0505A, is designed for compatibility with certain LG TV models.

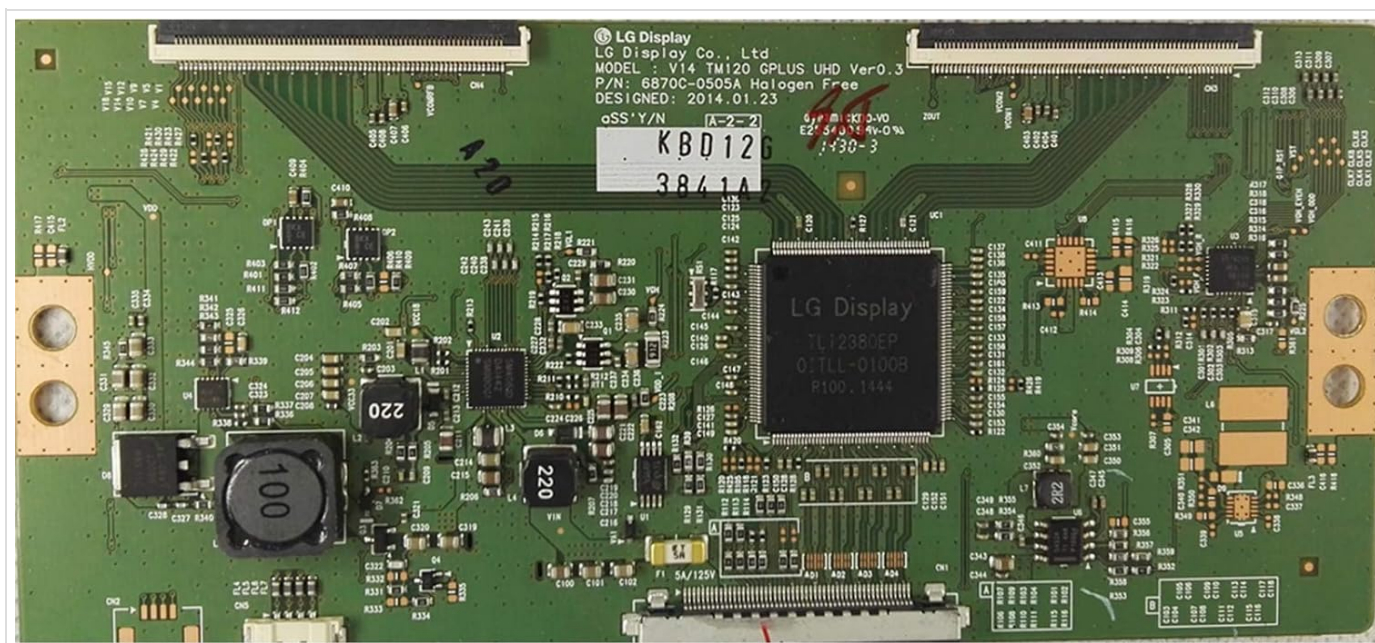


Figure 2: General view of the 6870C-0505A T-Con Board.

SETUP AND INSTALLATION

Installation of a T-Con board requires technical knowledge and careful handling of electronic components. It is recommended that

installation be performed by a qualified technician to prevent damage to the board or the television.

- **Safety First:** Always disconnect the television from the power supply before beginning any installation or repair work.
- **Static Precautions:** Wear an anti-static wrist strap and work on an anti-static mat to prevent electrostatic discharge (ESD) damage to sensitive electronic components.
- **Component Matching:** As previously stated, ensure the part number 6870C-0505A on the new board matches your original board exactly.
- **Careful Handling:** Handle the board by its edges. Avoid touching the integrated circuits or connectors directly.
- **Connection Verification:** Ensure all ribbon cables and connectors are securely and correctly seated after installation. Improper connections can lead to display issues or further damage.

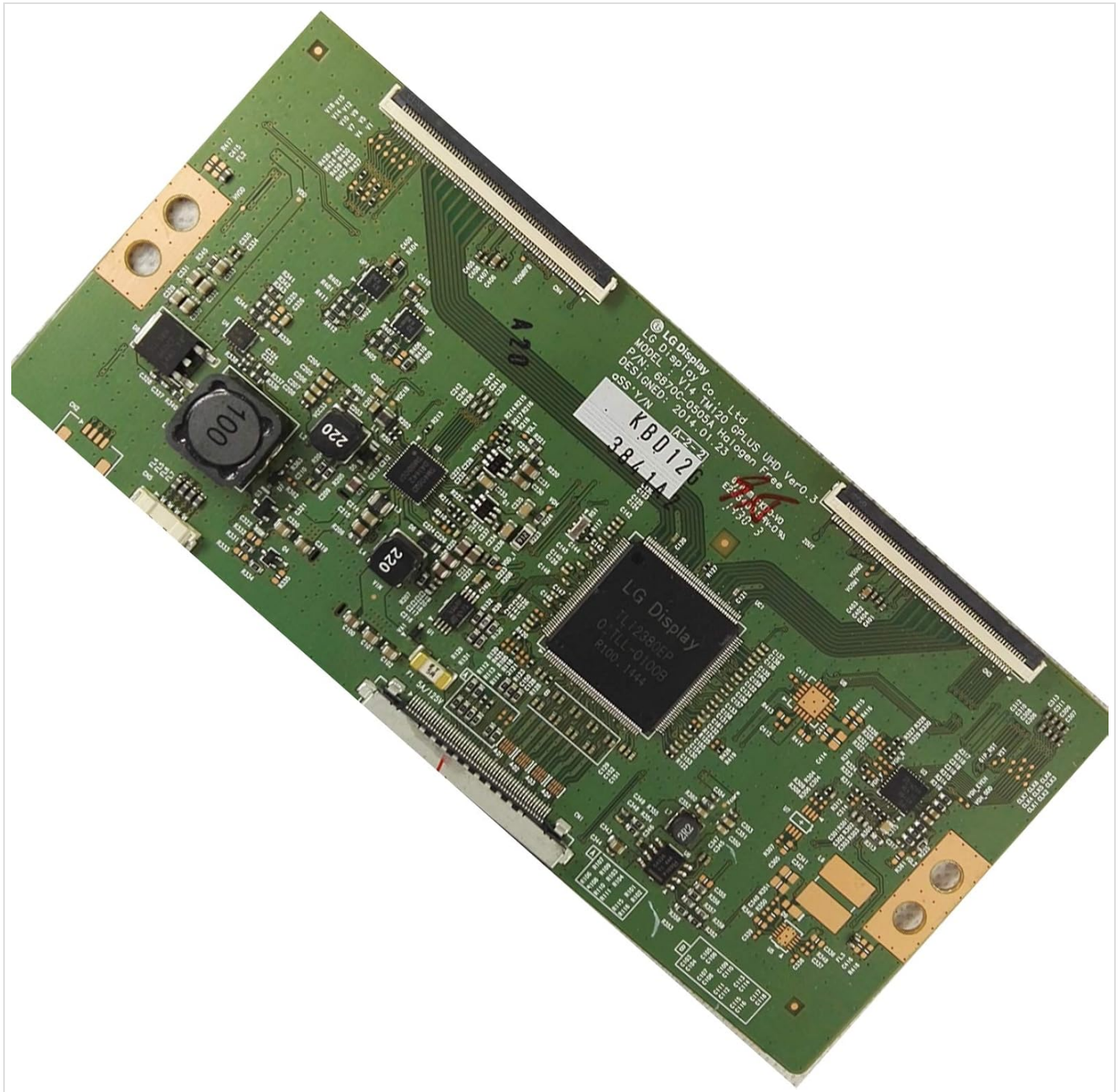


Figure 3: Angled view of the T-Con Board, illustrating connector locations.

OPERATING PRINCIPLES

Once installed, the T-Con board operates automatically as part of the television's display system. It receives digital video data from the main board and converts it into analog voltages that control the individual pixels on the LCD panel, ensuring the correct image

is displayed. There are no user-adjustable settings on the T-Con board itself.

MAINTENANCE

The T-Con board is a sealed electronic component and does not require routine maintenance. To prolong the life of your television and its components:

- Ensure adequate ventilation around the television to prevent overheating.
- Keep the television free from dust and moisture.
- Avoid physical shocks or impacts to the television.

TROUBLESHOOTING

Before replacing the T-Con board, it is crucial to accurately diagnose the television's issue. Many display problems are often misattributed to the T-Con board.

Common Misconceptions: Screen Lines

It is important to note that **horizontal and vertical lines on the screen are almost never caused by a faulty T-Con board.** These types of lines typically indicate a defective LCD panel (screen) itself, which is a separate and often more costly repair. If your TV displays persistent horizontal or vertical lines, or other severe panel defects, replacing the T-Con board will not resolve the issue. The images below illustrate common screen problems that are indicative of a defective LCD panel, not a T-Con board issue.

Please see the pictures below. These fault pictures are screen problems, not tcon problems.



Seeing these phenomena, please do not buy tcon.

Figure 4: Examples of screen defects (horizontal/vertical lines, severe distortion) that are typically caused by a defective LCD panel, not the T-Con board.

Symptoms of a Potentially Faulty T-Con Board:

While less common for simple lines, a T-Con board issue might manifest as:

- No picture, but sound is present.
- Picture with incorrect colors or washed-out appearance.
- Picture flickering or intermittent display.
- Negative image or solarized picture.

If you are unsure about diagnosing your TV's issue, it is highly recommended to consult with a professional TV repair technician.

SPECIFICATIONS

Feature	Detail
---------	--------

Model Number	6870C-0505A
Compatibility	LG TVs (42, 49, 55 inch models) - <i>Verify part number match</i>
Manufacturer	U/D
Item Weight	1.44 ounces
Package Dimensions	6.57 x 4.57 x 0.67 inches
Condition	Tested and guaranteed to work properly (pulled from broken screen TVs)

WARRANTY AND SUPPORT

For any questions regarding diagnosis, compatibility, or issues with your purchased T-Con board, please contact the seller directly. It is recommended to reach out before making a purchase if you are uncertain about the correct part for your TV. This logic board has been tested and is guaranteed to work properly. Please ensure proper installation and diagnosis to avoid issues.