

Badfghjk RSAG7.820.9746

Badfghjk TV Motherboard RSAG7.820.9746 Instruction Manual

Model: RSAG7.820.9746 | Compatible with Material Codes 299166/299165

1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of the Badfghjk TV Motherboard, model RSAG7.820.9746. This main board is designed as a direct replacement for display systems requiring material codes 299166 or 299165. It integrates signal processing and power control interfaces for various audio and video equipment.

Please read this manual thoroughly before attempting any installation or service to ensure proper function and safety.

2. SAFETY INFORMATION

- **Power Disconnection:** Always disconnect the television from the main power supply before beginning any installation, removal, or maintenance procedures.
- **Electrostatic Discharge (ESD):** Electronic components are sensitive to static electricity. Use appropriate ESD precautions, such as an anti-static wrist strap, when handling the motherboard.
- **Professional Installation:** Installation should ideally be performed by a qualified technician. Incorrect installation can damage the product or the television.
- **Component Handling:** Avoid touching the surface of integrated circuits and other sensitive components directly. Handle the board by its edges.
- **Ventilation:** Ensure adequate ventilation around the television after installation to prevent overheating.
- **Liquid Exposure:** Keep the motherboard and television away from liquids to prevent short circuits and damage.

3. PRODUCT OVERVIEW

The RSAG7.820.9746 motherboard is a central component for television display systems, managing signal

input, processing, and power distribution. It features a robust FR-4 flame-retardant substrate with a 4-layer PCB design, ensuring durability and stable operation.

3.1 Key Features

- **Precision Compatibility:** Direct replacement for display systems requiring material codes 299166/299165.
- **Multi-Interface Integration:** Supports HDMI, AV, and USB signal processing and power regulation.
- **Industrial Design:** FR-4 flame-retardant substrate with 4-layer PCB for enhanced reliability.
- **Certified Safety:** Compliant with CE/FCC/ROHS standards (Certification No. EMC-2180723).
- **Plug-and-Play Ready:** Pre-configured connectors matching original interface layouts for straightforward installation.

3.2 Component Identification

Refer to the image below for a visual guide to the main components and interfaces on the motherboard.

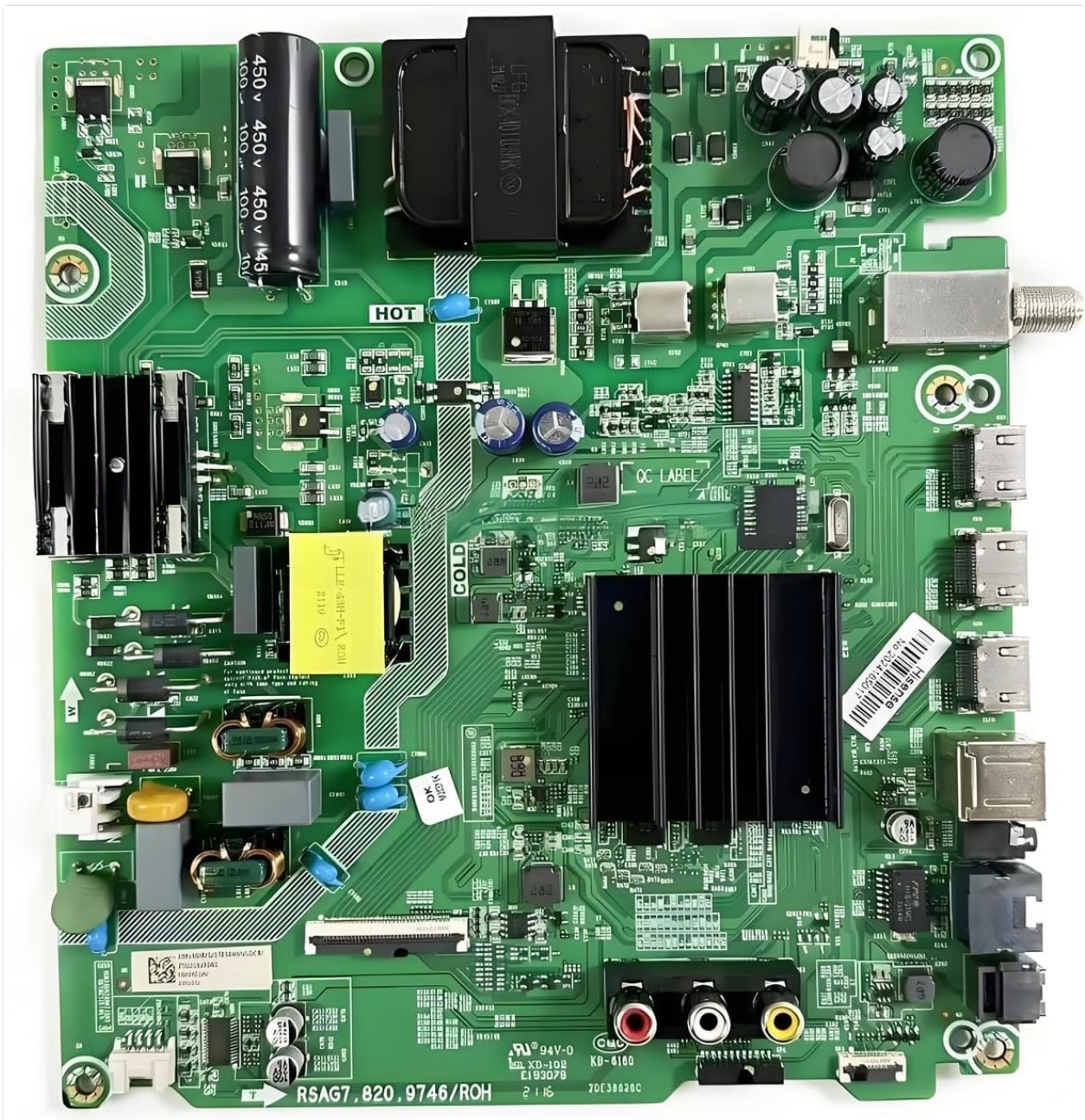


Figure 1: Top view of the Badfghjk TV Motherboard RSAG7.820.9746. This image displays the main components including HDMI, USB, AV input ports, power supply section with capacitors and transformers, and various integrated circuits with heat

sinks. The board is green with clearly labeled sections like "HOT" and "COLD" for power isolation.



Figure 2: Detailed view of the input/output interfaces on the RSAG7.820.9746 motherboard. This close-up highlights the HDMI ports, USB ports, and the red, white, and yellow RCA (AV) input jacks, along with associated circuitry and a heat sink.

4. SPECIFICATIONS

Feature	Detail
Model Number	RSAG7.820.9746
Compatible Material Codes	299166, 299165
Supported Interfaces	HDMI, AV, USB
PCB Type	4-layer FR-4 flame-retardant substrate
Operating Temperature	-20°C to 70°C (-4°F to 158°F)
Certifications	CE, FCC, ROHS (Certification No. EMC-2180723)

Weight	Approximately 0.6 KG (1.32 lbs)
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5. SETUP AND INSTALLATION

This section outlines the general steps for replacing a TV motherboard. Specific procedures may vary depending on the television model. Always refer to your television's service manual for detailed instructions.

1. Preparation:

- Ensure the television is unplugged from all power sources.
- Place the television face down on a soft, clean surface to protect the screen.
- Gather necessary tools: screwdrivers, anti-static wrist strap, plastic prying tools (if needed).

2. Accessing the Motherboard:

- Remove the back cover of the television. Typically, this involves unscrewing multiple screws around the perimeter and sometimes in the center.
- Carefully detach any cables connected to the back cover before fully removing it.

3. Removing the Old Motherboard:

- Before disconnecting, take photos of all cable connections for reference.
- Carefully disconnect all cables from the old motherboard, including power, display panel (LVDS), speakers, and input/output ports.
- Unscrew the mounting screws securing the old motherboard to the television chassis.
- Gently lift and remove the old motherboard.

4. Installing the New Motherboard:

- Align the new RSAG7.820.9746 motherboard with the mounting holes in the television chassis.
- Secure the motherboard with the appropriate screws. Do not overtighten.
- Reconnect all cables to their corresponding ports on the new motherboard, using your reference photos if necessary. Ensure all connections are firm and correctly oriented.
- Pay special attention to the LVDS cable (display panel cable) to ensure it is seated correctly and locked.

5. Testing and Reassembly:

- Before fully reassembling, temporarily plug in the television and power it on to verify basic functionality (e.g., power indicator, display).
- If the television powers on and displays an image, disconnect power again.
- Reattach the back cover, ensuring all screws are replaced.
- Perform a full functional test of all inputs (HDMI, AV, USB) and features.



Figure 3: Angled view of the RSAG7.820.9746 motherboard, showing the arrangement of connectors and components. This perspective helps in identifying specific connection points during installation.

6. OPERATING INSTRUCTIONS

As a replacement component, the Badfghjk TV Motherboard RSAG7.820.9746 operates as part of the television's overall system. Once correctly installed, its function is to process signals and manage power as designed by the television manufacturer.

- **Power On/Off:** The motherboard will power on and off with the television's main power switch or remote control.
- **Input Selection:** Use the television's remote control or physical buttons to select desired input sources (HDMI, AV, USB). The motherboard processes these signals for display.
- **Firmware:** The motherboard comes with pre-installed firmware. Do not attempt to update firmware unless specifically instructed by the television manufacturer or a qualified technician, as incorrect firmware can render the board inoperable.

7. MAINTENANCE

The RSAG7.820.9746 motherboard requires minimal maintenance once installed. Adhering to general electronic device care practices will help ensure its longevity.

- **Dust Removal:** Periodically, and with the television unplugged, gently clean any accumulated dust from the television's interior, especially around the motherboard's heat sinks, using compressed air or a soft brush.
- **Environmental Conditions:** Operate the television within recommended temperature and humidity ranges to prevent stress on electronic components.
- **Avoid Physical Shock:** Protect the television from impacts or drops, which can damage internal components.

8. TROUBLESHOOTING

If you encounter issues after installing the motherboard, review the following common troubleshooting steps. If problems persist, consult a qualified technician.

Problem	Possible Cause	Solution
No power / TV does not turn on	Loose power connection, faulty power supply unit (PSU), incorrect motherboard installation.	Ensure all power cables are securely connected. Verify the PSU is functioning. Recheck motherboard installation, especially power connectors.
No picture / Black screen	Loose LVDS cable, incorrect input source selected, faulty display panel.	Check the LVDS cable connection to both the motherboard and the display panel. Confirm the correct input source is selected. Test with another input device.
No sound	Loose speaker cables, incorrect audio settings, faulty speakers.	Verify speaker cable connections. Check TV audio settings. Test with external audio device.
Input ports not working (HDMI, USB, AV)	Loose cable connection, faulty external device, damaged port.	Ensure cables are fully inserted. Test with a different cable and device. Inspect ports for physical damage.

9. WARRANTY INFORMATION

Specific warranty terms for the Badfghjk TV Motherboard RSAG7.820.9746 are provided by the seller at the time of purchase. Please retain your proof of purchase for any warranty claims. The warranty typically covers manufacturing defects under normal use conditions.

Damage resulting from improper installation, misuse, accidental damage, or unauthorized modifications is generally not covered under warranty.

10. SUPPORT INFORMATION

For technical assistance or support regarding the Badfghjk TV Motherboard RSAG7.820.9746, please contact your original point of purchase or the manufacturer's customer service. When contacting support, please have your product model number (RSAG7.820.9746) and proof of purchase readily available.

Manufacturer: chenweiyin

For general inquiries, you may refer to the [Badfghjk brand page on Amazon](#).

