TFT MODULE MODIFICATION

RVA15MD-NUC64

HB, IPS, 1.54” display module modification document
Rev. 1.0
2026-02-11

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1. REVISION RECORD

REV NO.	REV DATE	CONTENTS	REMARKS
1.0	2026-02-11	Initial release	

2. CONTENTS

3. PURPOSE OF MANUAL

The purpose of this manual is to present the correct hardware handling procedures for the board and to describe the necessary modifications that must be made directly on the hardware when switching from the **CB071RB** board to the **WBA65RI** board and vice versa, ensuring proper functionality and compatibility between both versions.,

This document is intended to support engineers and technicians during the hardware adaptation process, helping to minimize the risk of damage and configuration errors. It also serves as a reference for understanding layout and connection differences between the two board versions, facilitating efficient implementation and testing in various hardware setups.

This document complements the official datasheets of the CB071RB and WBA65RI boards. It focuses exclusively on the hardware modification steps required for cross-compatibility between the two board revisions.

4. COMPATIBLE BOARDS

The 1.54 display besides the boards described in this manual is compatible with the below list:

- H503RB
- U083RC
- G071RB
- WB55RG
- U385RG
- C092RC

5. SAFETY AND HANDLING

Important:

- Always perform modifications with power disconnected.
- Use ESD protection (wrist strap, grounded surface).
- Recommended tools: fine-tip soldering iron (≤ 350°C), magnification, flux, tweezers.
- Verify solder joints visually and electrically after modification.

6. GUIDE CB071RB -> WBA65RI

View of the starting position.

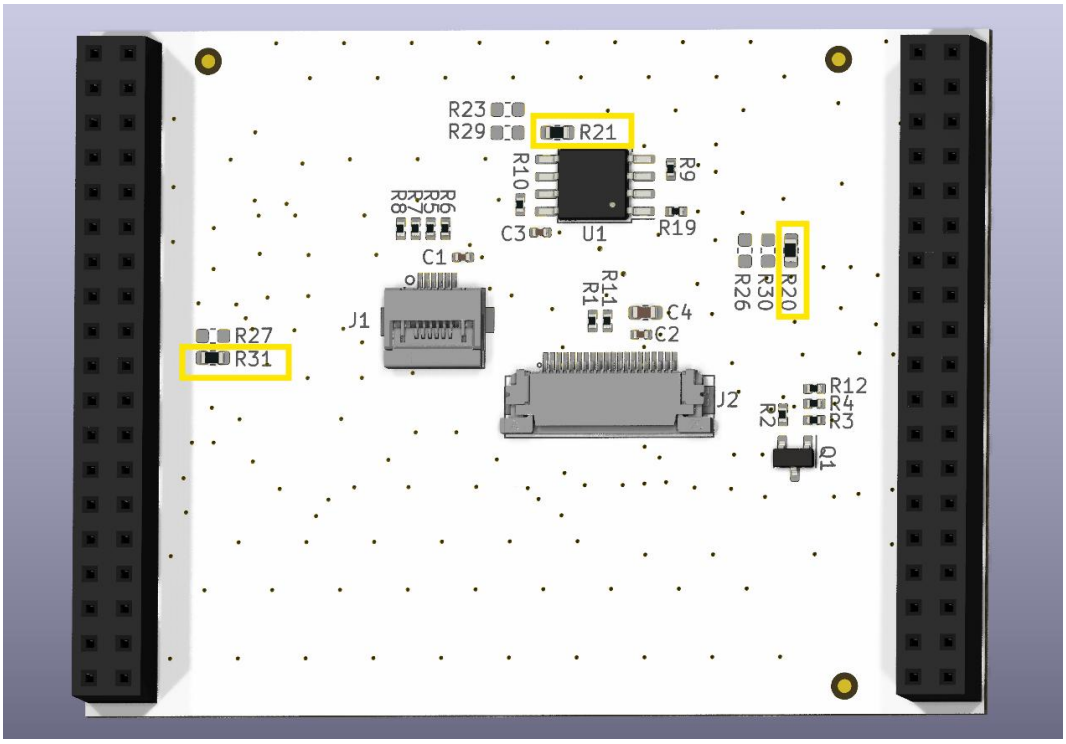


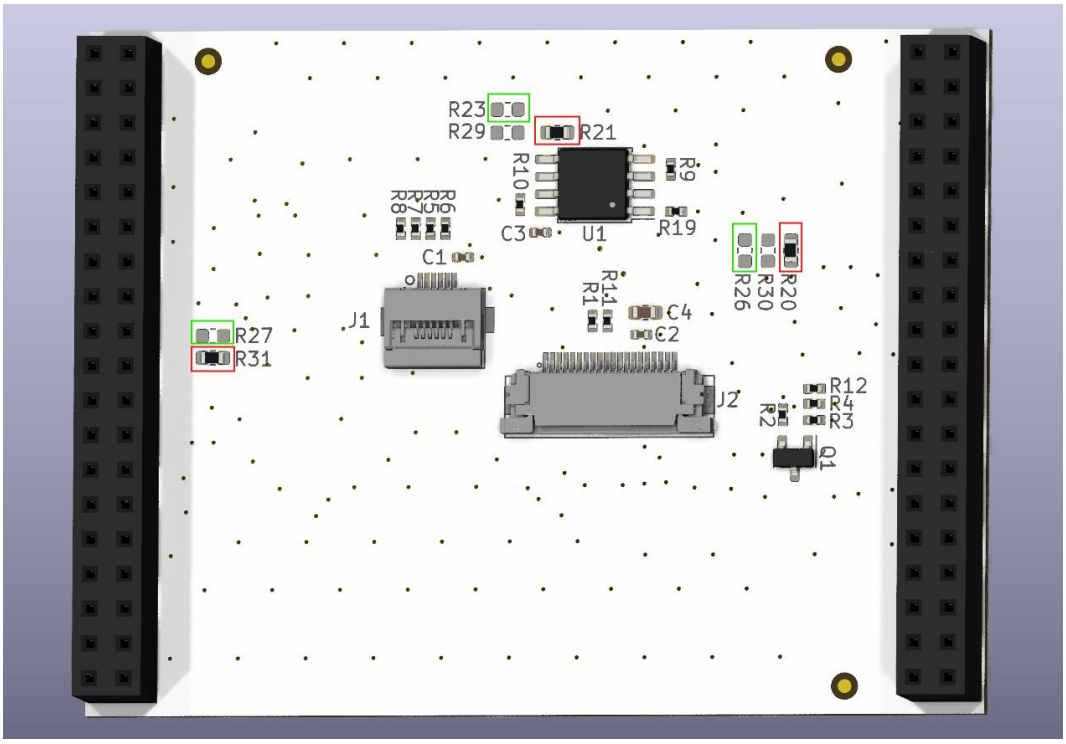
Figure 1: RVA15MD-NUC64A (CB071RB) – resistor locations

To make it work with WBA65RI please follow the instructions provided below.

Procedure:

1. Identify the RVA15MD-NUC64A board (CB071RB).
2. Desolder resistor **R20** and move it to **R26** position.
3. Desolder resistor **R21** and move it to **R23** position.
4. Desolder resistor **R31** and move it to **R27** position.
5. Verify continuity between corresponding pads.
6. Clean flux residues.
7. Proceed with visual inspection and power-up test.

*In case the resistor is lost the used type and value is 0R 0603.



Red color desolder, Green color solder (Back view of RVA15MD-NUC64A)

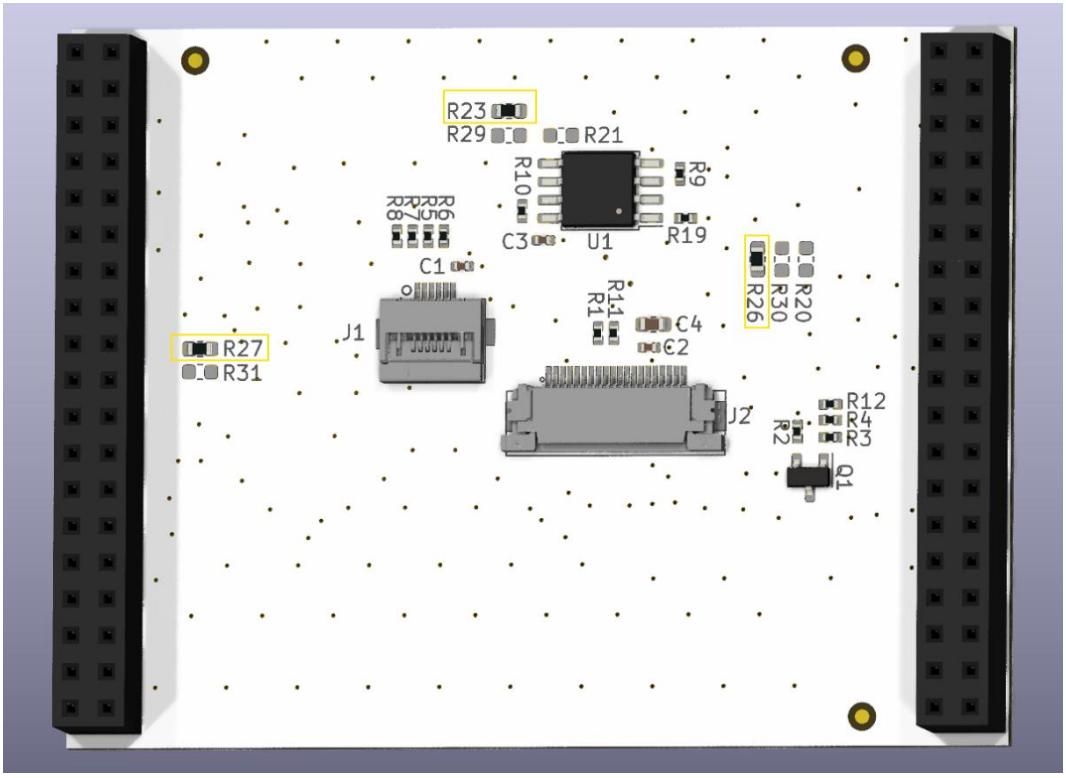


Figure 2: RVA15MD-NUC64B (WBA65RI) – resistor locations

7. GUIDE WBA65RI -> CB071RB

View of the starting position.

Below presented is the view of the Nucleo RVA15MD-NUC64B (WBA65RI)

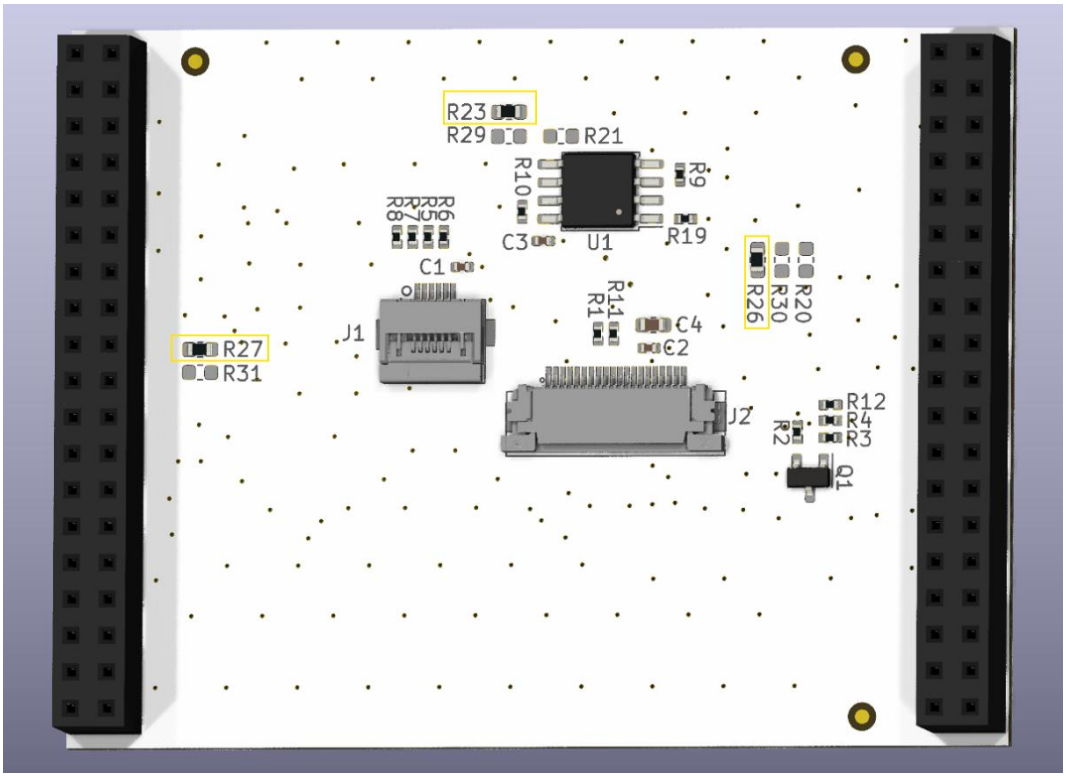


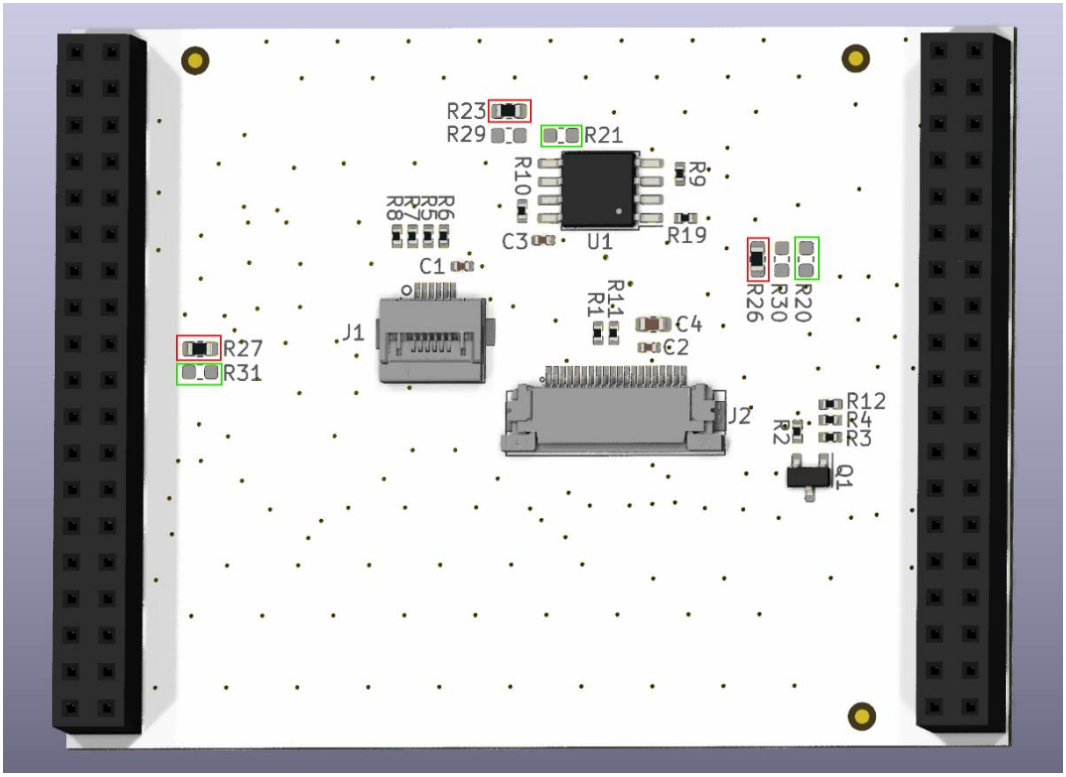
Figure 3: RVA15MD-NUC64B (WBA65RI) – resistor locations

To make it work with CB071RB please follow the instructions provided below.

Procedure:

1. Identify the RVA15MD-NUC64A board (WBA65RI).
2. Desolder resistor **R26** and move it to **R20** position.
3. Desolder resistor **R23** and move it to **R21** position.
4. Desolder resistor **R27** and move it to **R31** position.
5. Verify continuity between corresponding pads.
6. Clean flux residues.
7. Proceed with visual inspection and power-up test.

*In case the resistor is lost the used type and value is 0R 0603.



Red color desolder, Green color solder (Back view of RVA15MD-NUC64B)

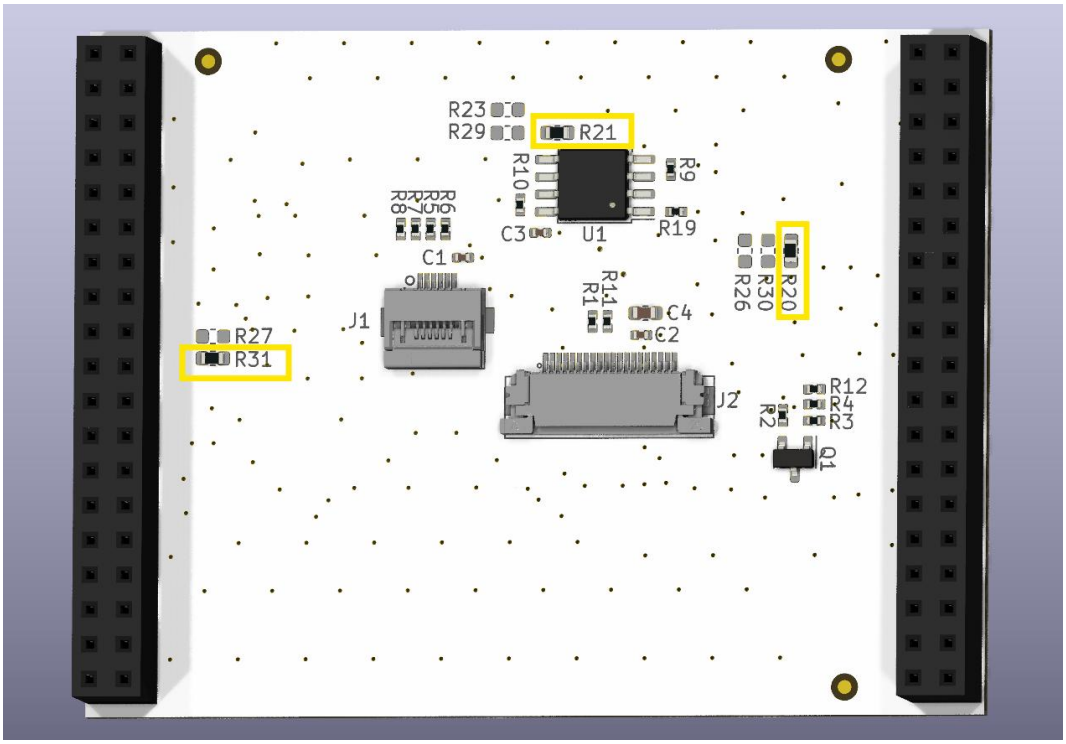


Figure 4: RVA15MD-NUC64A (CB071RB) – resistor locations