



A13-OLinuXino-WIFI-DEV
step-by-step VGA hardware fix



All boards produced by Olimex LTD are ROHS compliant

This document applies ONLY to the very first batch of A13-OLinuXino-WIFI-DEV boards, which were sold with a problem in the VGA output with shipping costs covered by OLIMEX. As written on our page prior to selling the boards:

THIS BOARD IS NOW IN REV-B (DEVELOPER EDITION DEDICATED FOR EARLY DEVELOPERS ONLY) THE SOFTWARE SUPPORT IS NOT PERFECT ESPECIALLY VGA VIDEO.

Note that all further boards have the VGA output fixed.

Following the procedures in this document the owners of these boards can apply a hardware fix which will solve the problem. Note that good engineering skills are required, if you can't manage to do proper soldering, unsoldering, cutting or you lack the proper tools – ask a friend.

There are three additional components that we will need:

- 1) A transistor – NMOS, SOT-23 package (we used BSS138)**
- 2) A resistor – 1k Ohms**
- 3) A piece of wire**

Also tools for soldering and a sharpie for cutting.

Following the picture (the picture shows the fix applied) below we need to do 4 steps:

STEP 1 – Cut carefully the wire under R19 (which is not mounted) using a sharp knife or a proper tool. **IMPORTANT: if you don't disconnect the wire the workaround will not work.**

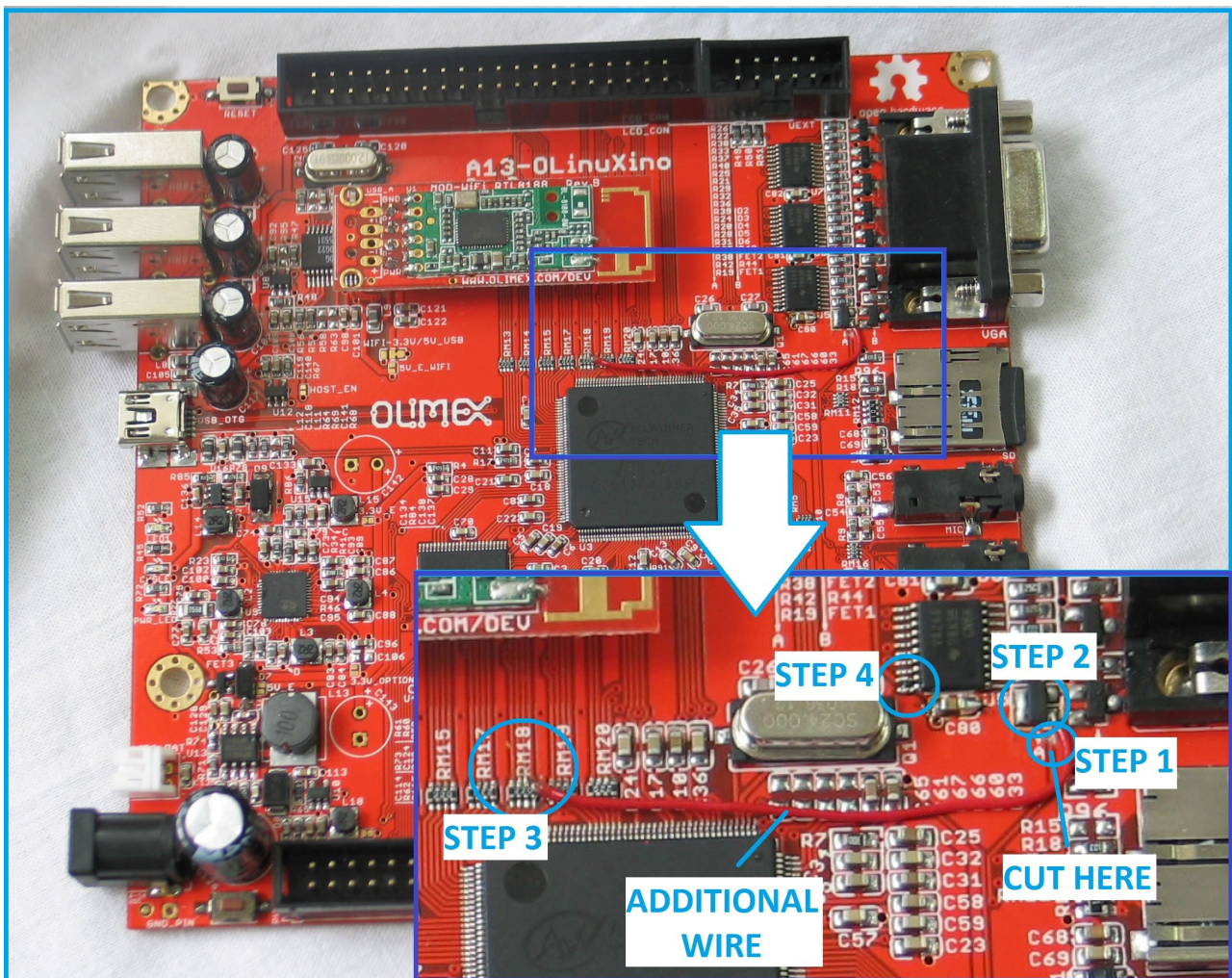
STEP 2 – 1. Unsolder R42 (over R19 pads);

2. On the now clear pads of R19 and R42 we solder the transistor mentioned in requirements – BSS138 or any NMOS transistor in SOT-23 package – its gate should be on the R19 right pad (check the picture how the transistor is situated);

3. Solder one end of the wire to the gate of the transistor

STEP 3 – Solder the other end of the wire to the 4th resistor of resistor matrix RM18 (RM18G4 on the schematics)

STEP 4 – Solder a 1k Ohms resistor between pin19 and pin20 of the U5.



You can find how the changed part looks on the schematics:

