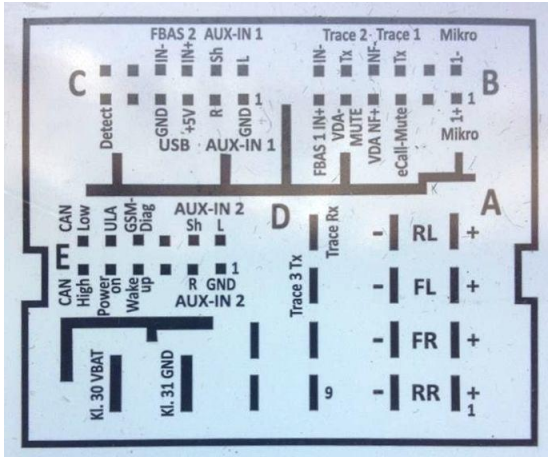
MANUAL FOR INSTALLATION OF MIB STD2 PQ UNITS

So you want to install MIB STD2 PQ infotainment unit, designed for some PQ family models after face-lifting, in pre-lift PQ car. This is possible but you have to keep in mind some issues.

MIB STD2 PQ units can be equipped with several options. Before you buy the unit connect it to the power supply (ONLY power supply, no other connections – see picture 1, connector KL31 to the ground and KL30 to +12V) and:

1. Make sure after powering on the unit doesn't display Component Protection warning message.
2. Enter each of the features and check if they are active – if there is no reaction after pressing key or menu button or you get a message that feature can be unlocked by the dealer then the feature is NOT active.



Picture 1

Let's assume you have found the radio that is not locked with component protection and has all the required features activated. Can you be sure that everything is fine? Unfortunately, not. The radio might have been stolen and therefore can be blacklisted in GeKo database. Unfortunately there's no way to have it checked having only the serial number (at least I don't know how to manage it this way) so to be on the safe side follow mentioned below rules:

1. If you can't examine the radio personally ask supplier to send you detailed pictures – including the one showing label that contains model and serial numbers.
2. NEVER buy a radio from any entity or private person that doesn't want to issue the invoice or sell agreement.
3. ALWAYS make sure both model and serial numbers are printed in the invoice or sell agreement.

What is Component Protection? It's the mechanism to enable unit working in a car in which it was officially installed. This is done by assigning unit to VIN of your car which is done by the dealer using on-line tools. Unfortunately there's no way I know to match if you install it in the car for which it has not been designed.

Generally speaking the unit can be locked with Component Protection in two ways:

1. If you install it in the car equipped with dashboard (instruments) that manages Component Protection feature then it's locked within few seconds.
2. If you install it in the car with older dashboard, that doesn't manage Component Protection, or you power the radio outside any car, then internal timer is started. It counts every second of operation and stores in it EEPROM. When it reaches approx. 8 hours then radio locks itself with Component Protection. That's why if you install it in the car with older dashboard then everything is fine and you can drive happy for next few hours - but when you reach 8 hours radio locks itself.

You have to keep in mind that the timer mentioned in 2nd scenario cumulates the time when unit was active, e.g. if you drive 1 hour each day then at the end of day 8 your radio will be locked. When buying the unit you can never be sure how much time has been left – if you're lucky it might be close to 8 hours, if you're not it might be single minutes ☹

Patch protects the unit against second case. When it is installed it reads the value of the timer and restores it every time the unit is restarted. That's why it is so important to buy the radio that has been powered outside donor car for as little time as possible - if you buy the radio that has only 30 minutes of operations left (I.e. that was already running for 7.5 hours) then even with patch it will lock itself every 30 minutes and you have to restart it by holding power button pushed for couple of seconds.

Against first case of Component Protection scenario you can protect by installing CAN filter that blocks exchange of Component Protection frames between radio and dashboard. Please keep in mind that you don't need a filter if your instruments cluster doesn't manage Component Protection. How to find if it does? First patch the radio, then install it in the car – if it shows Component Protection warning message after several seconds since powering on then you have to use the CAN filter – just unplug the unit, plug-in the filter and re-connect the unit (so the filter is connected between the radio and QuadLock connector).

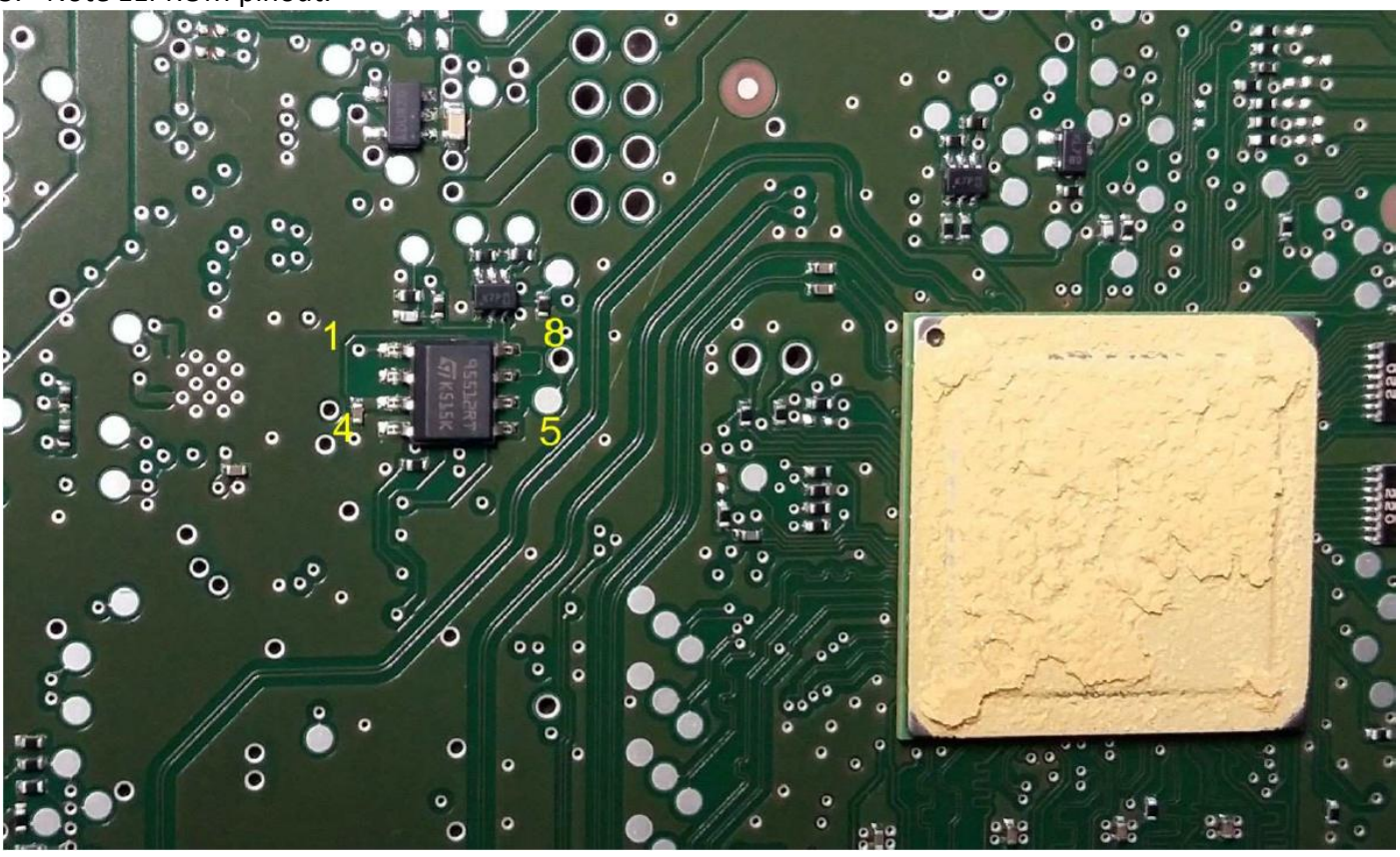
If you have bought unit that is already locked with Component Protection you have to unlock it and activate all required features (unlocking Component Protection deactivates all the features so they have to be activated again). This is not a piece of cake and under regular circuimstances require you to visit dealer with both radio and car that has such unit factory installed (although this does not have to be the original donor car). Pls keep in mind that unit cannot be unlocked if it is blacklisted in GeKo database!!!

Let's start patching procedure now!

1. Disassemble the unit and remove mainboard.

2. Locate EEPROM located on the lower side of the mainboard.

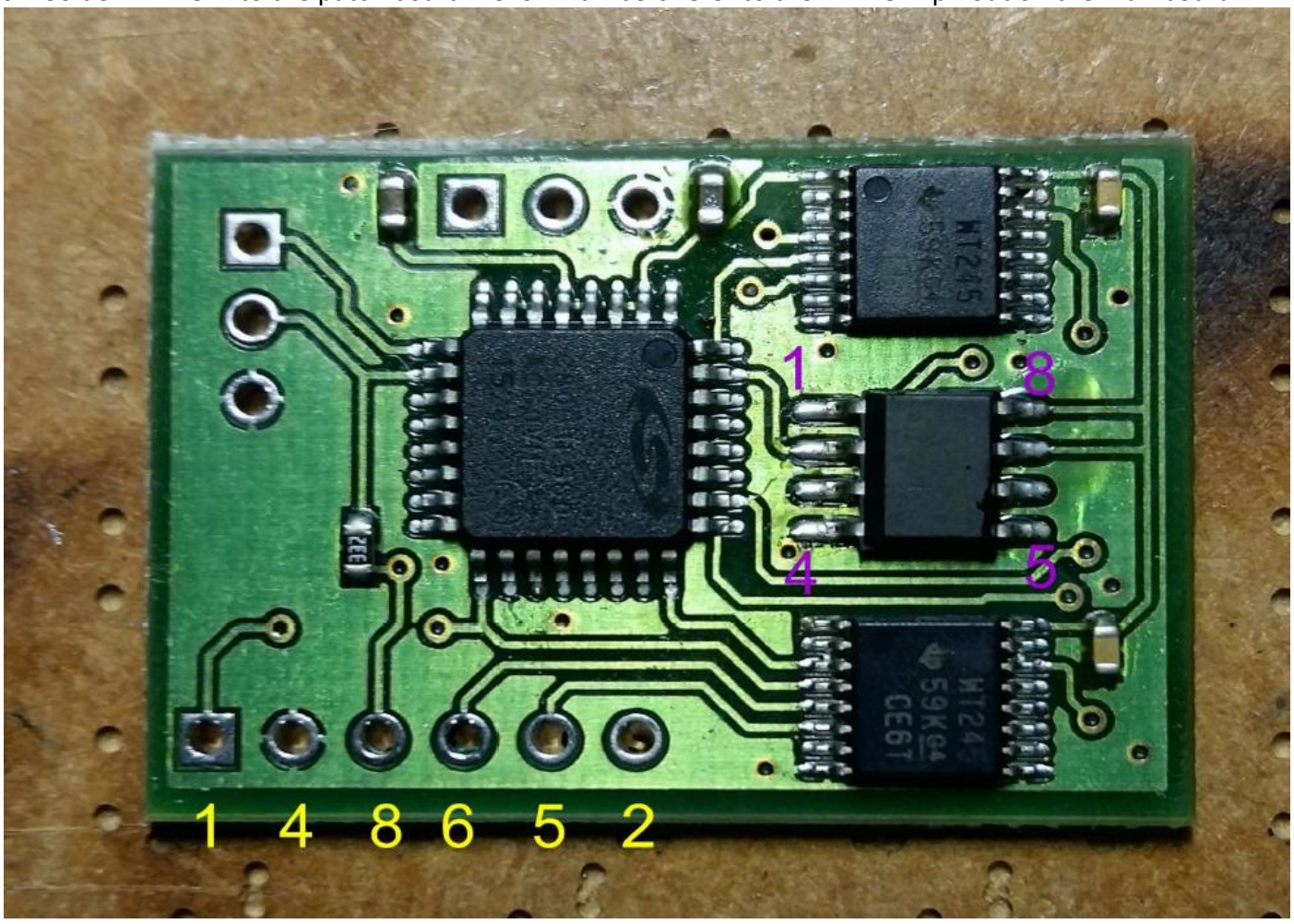
3. Note EEPROM pinout.



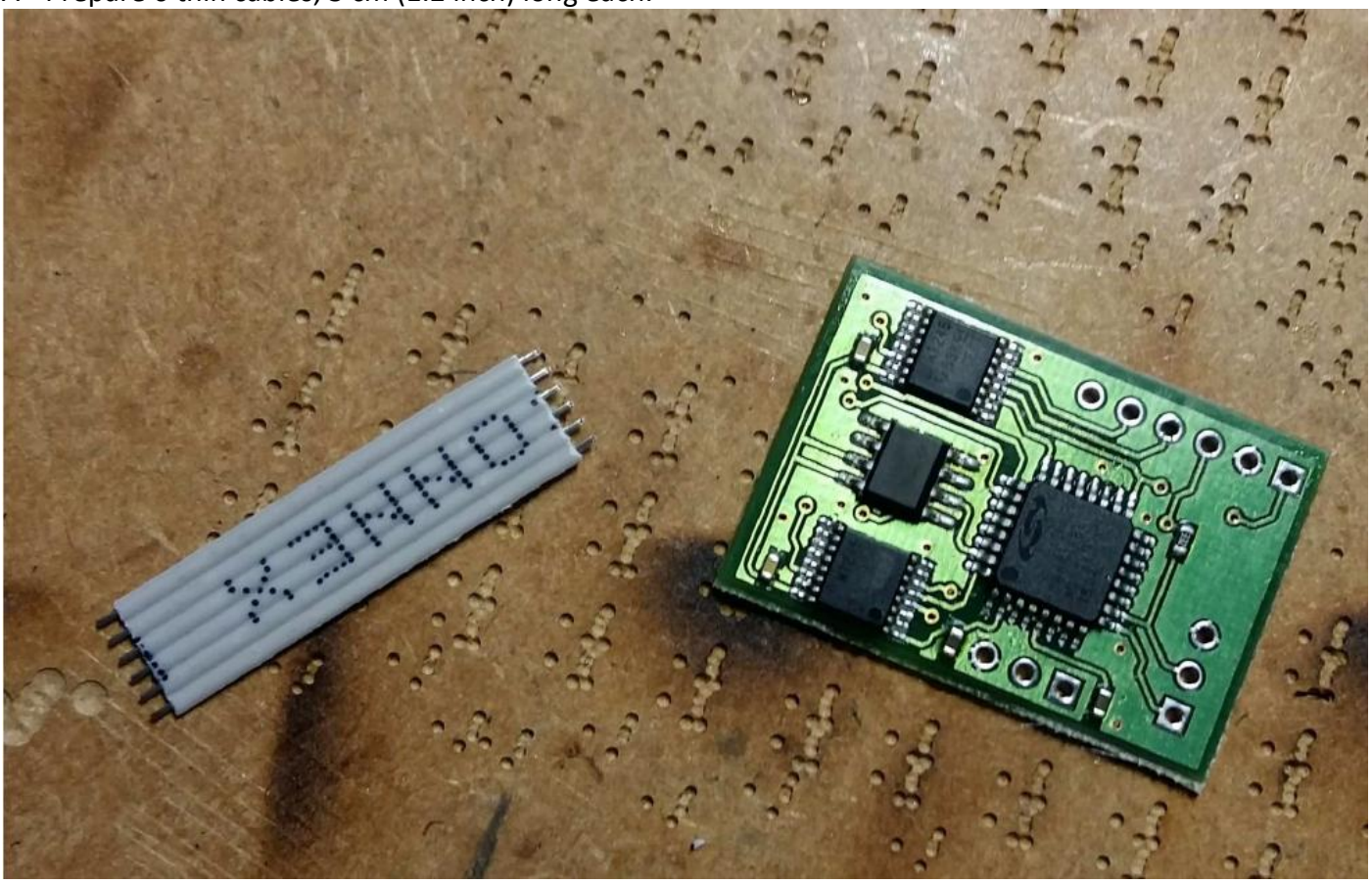
4. Using Hot Air soldering tool resolder EEPROM and take it out of mainboard.

5. Read EEPROM content and save it somewhere for security reasons (in case you break anything).

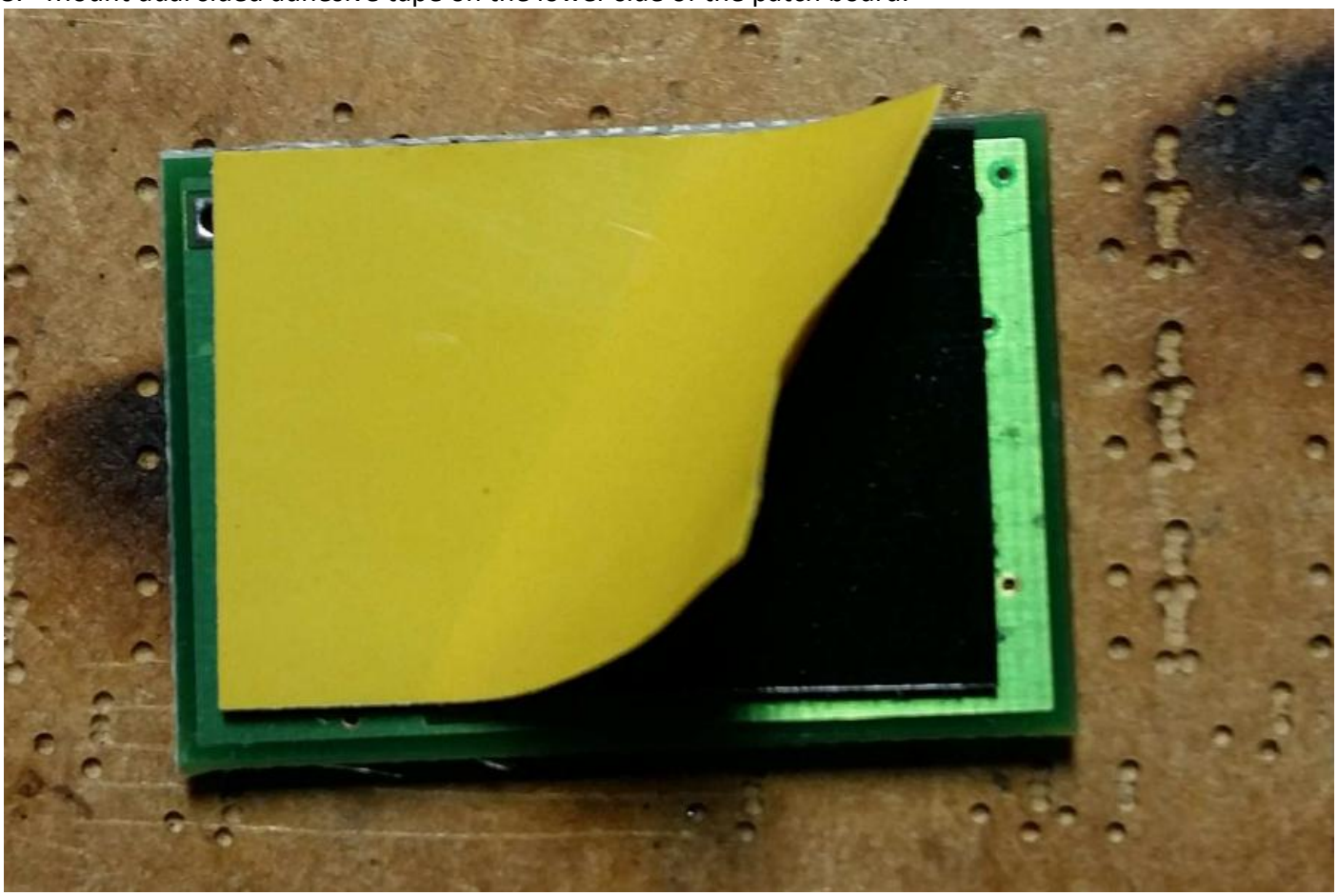
6. Solder EEPROM to the patch board. Yellow numbers refer to the EEPROM pinout on the mainboard.



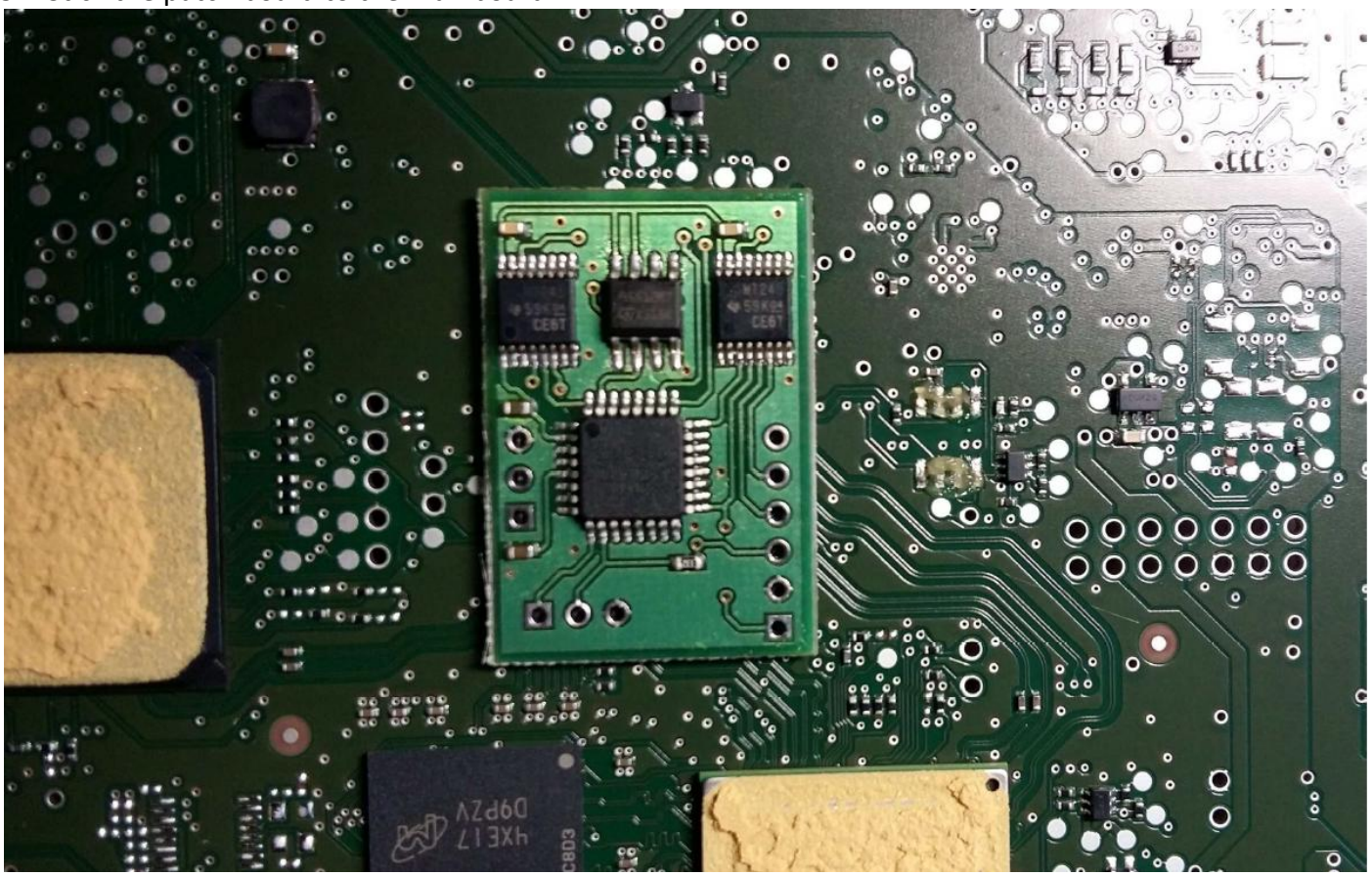
7. Prepare 6 thin cables, 3 cm (1.2 inch) long each.



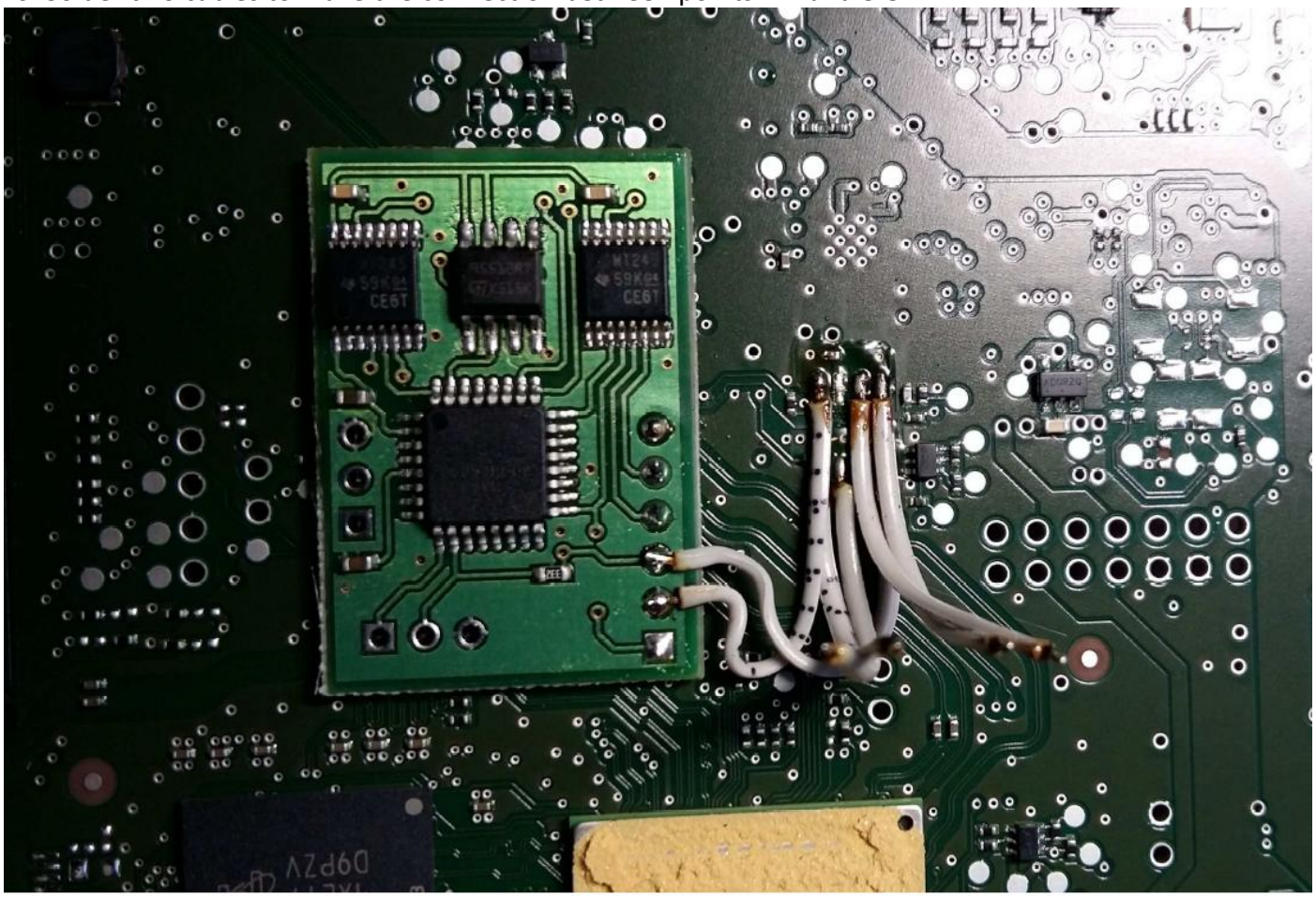
8. Mount dual sided adhesive tape on the lower side of the patch board.



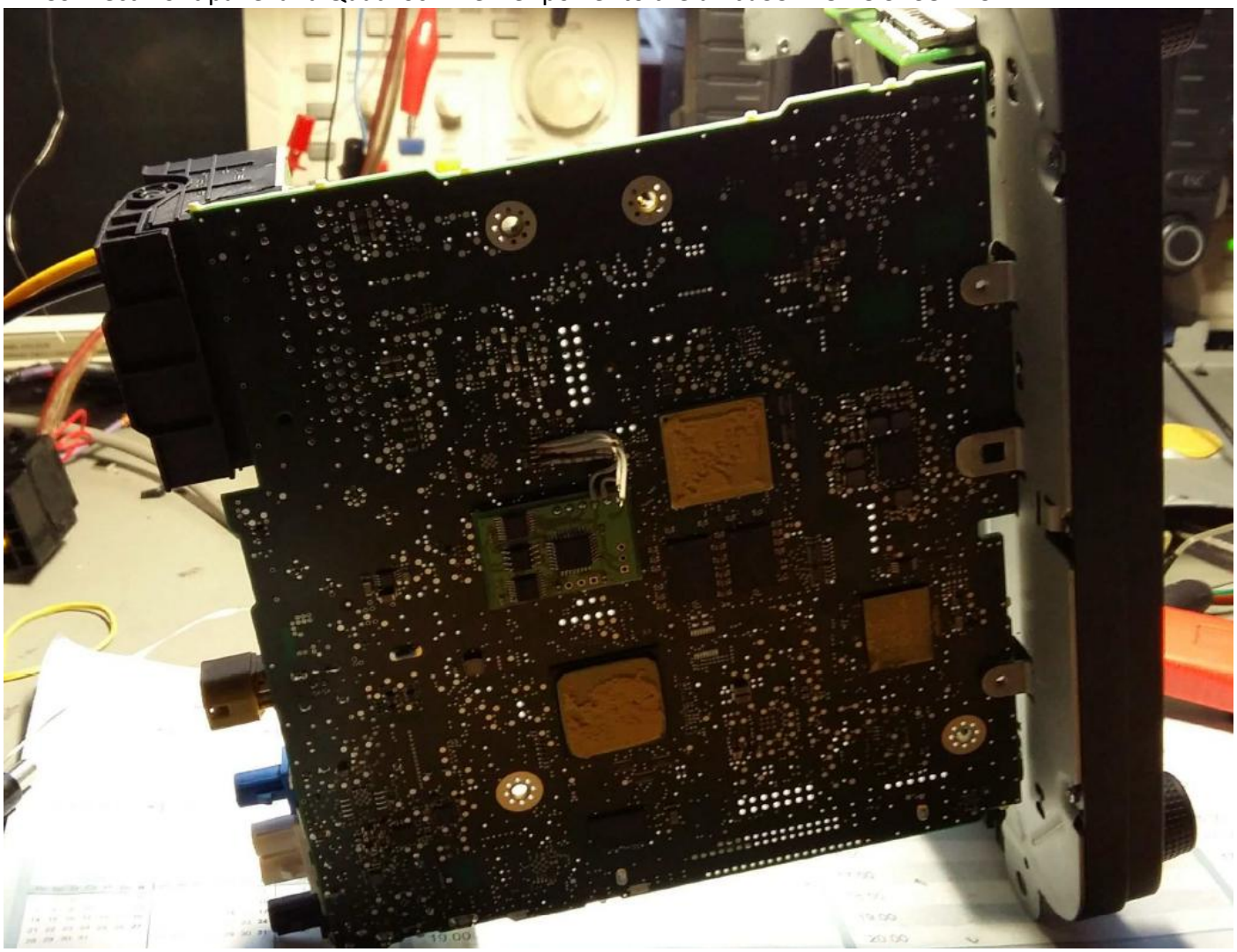
9. Stick the patch board to the mainboard



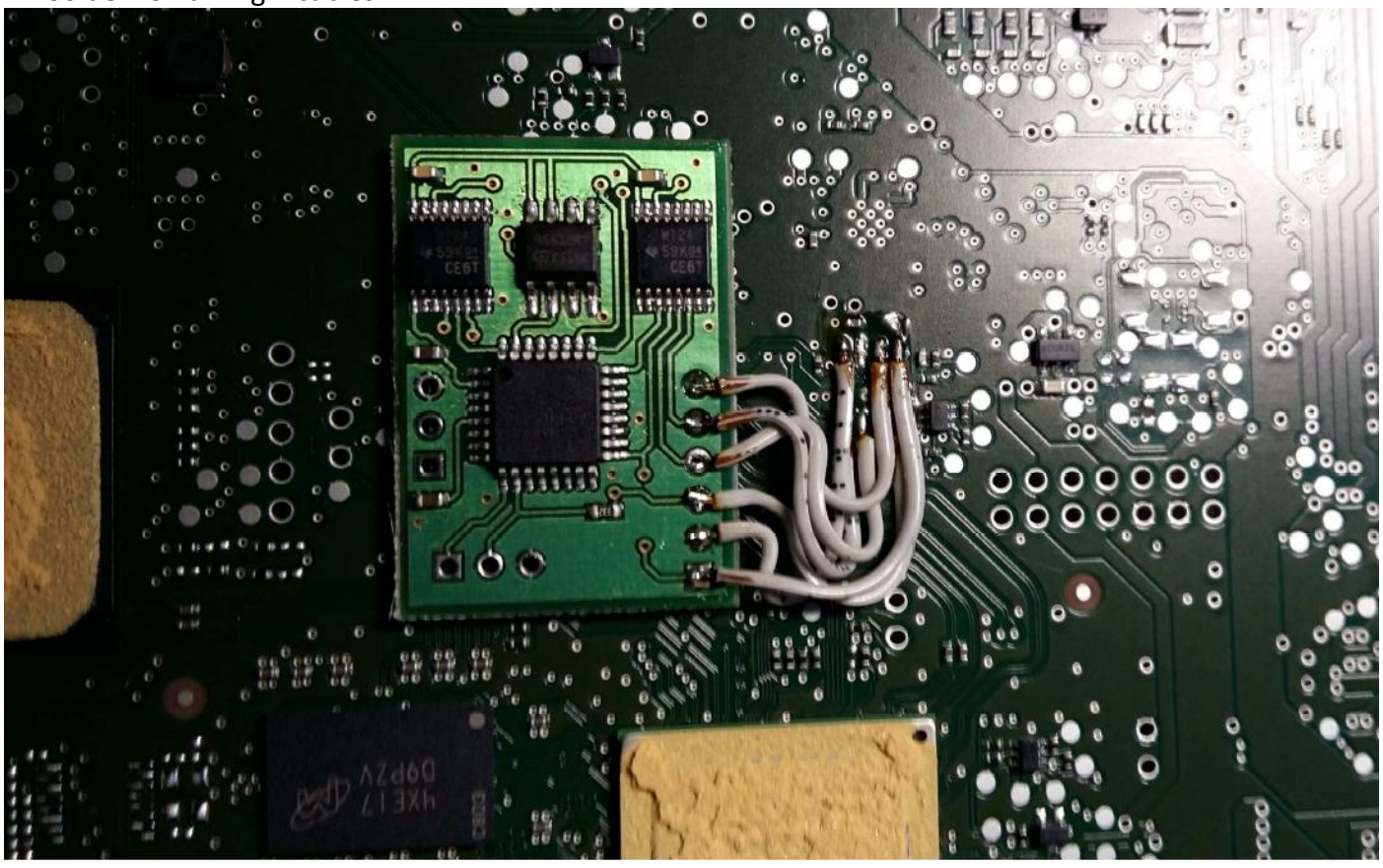
10. Solder two cables to make the connection between points 4-4 and 8-8



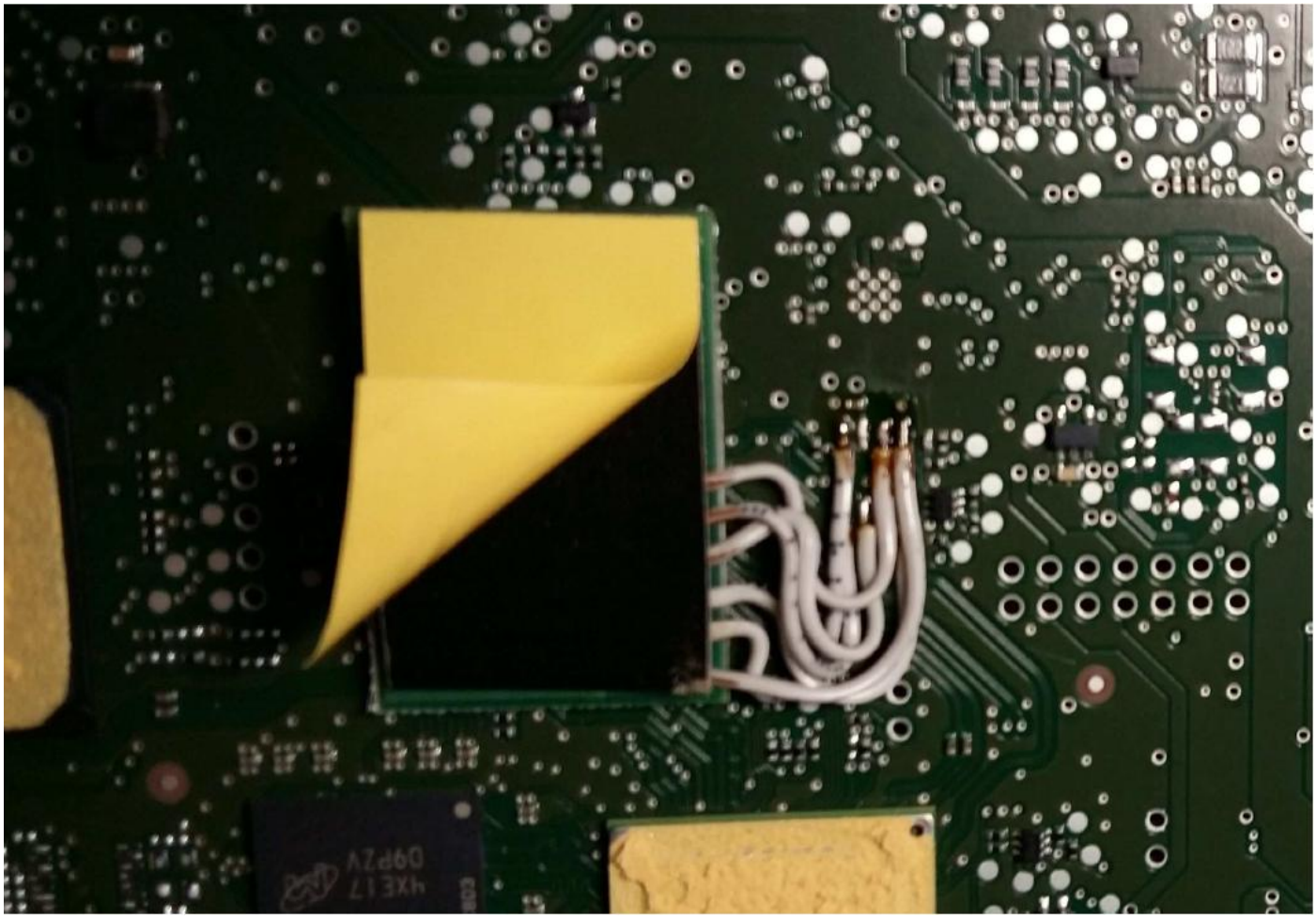
11. Connect front panel and QuadLock. Deliver power to the unit JUST FOR 3 SECONDS.



12. Solder remaining 4 cables.



13. Cover the upper side of patch board with double sided adhesive tape.



14. Mount the mainboard in the chassis.

15. Connect front panel.

16. Plug-in QuadLock connector.

17. Turn on the unit.

18. Check if all the functions work correctly.