

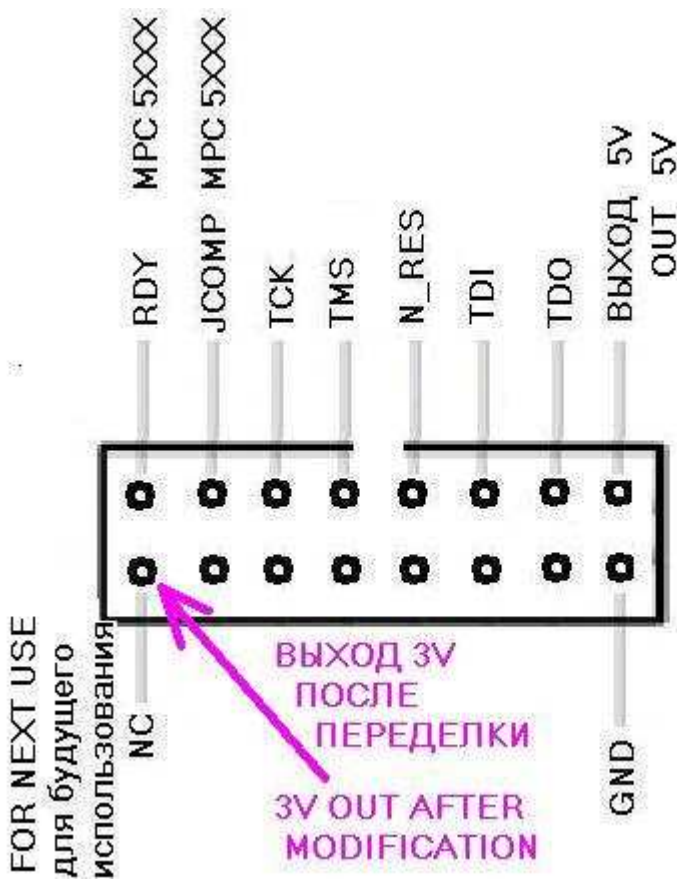
MAC/MPC Programmer Modification

This modification intended to address the issue with CONTINENTAL airbag units from RENAULT / DACIA based on SPC560P50 chip.

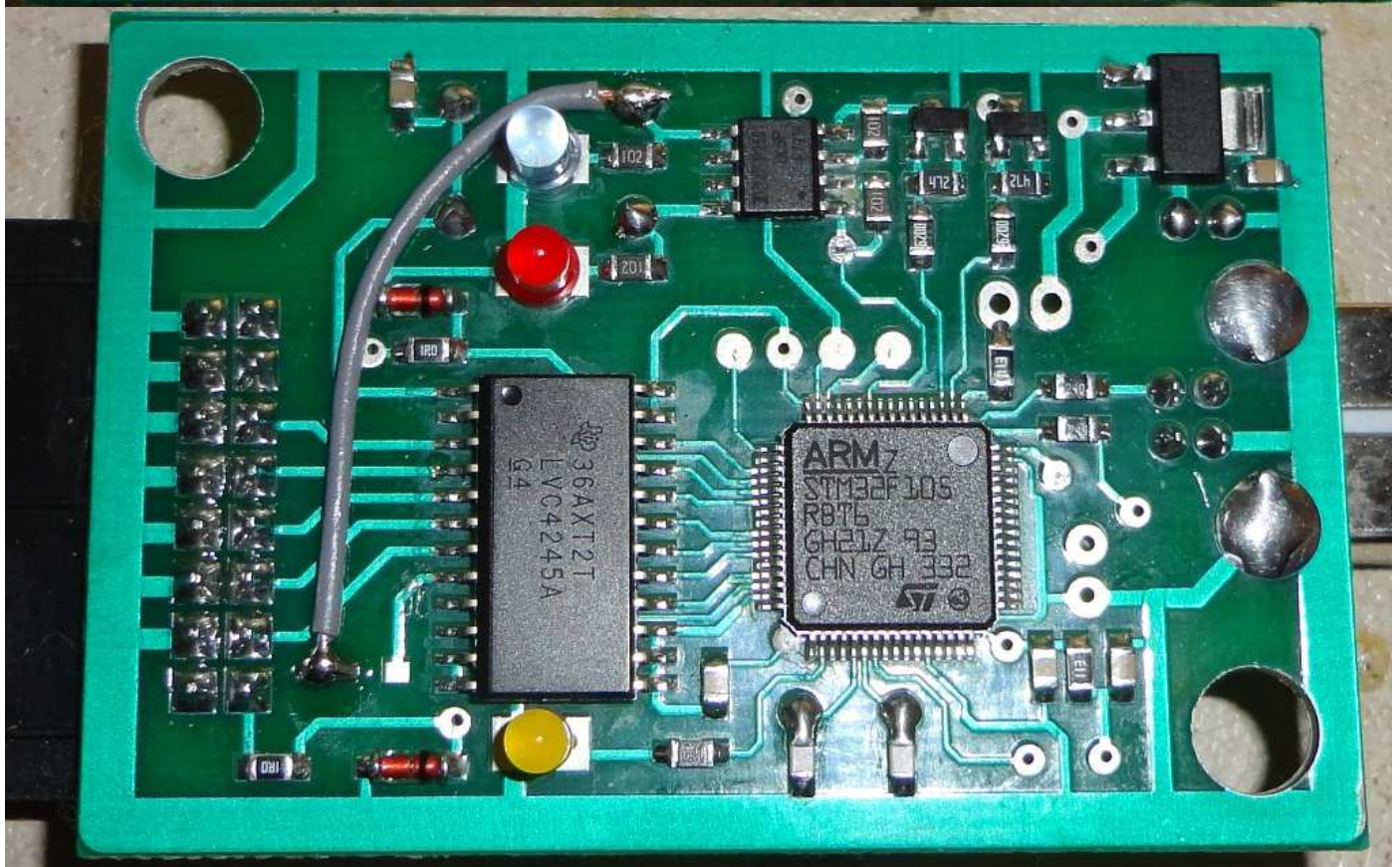
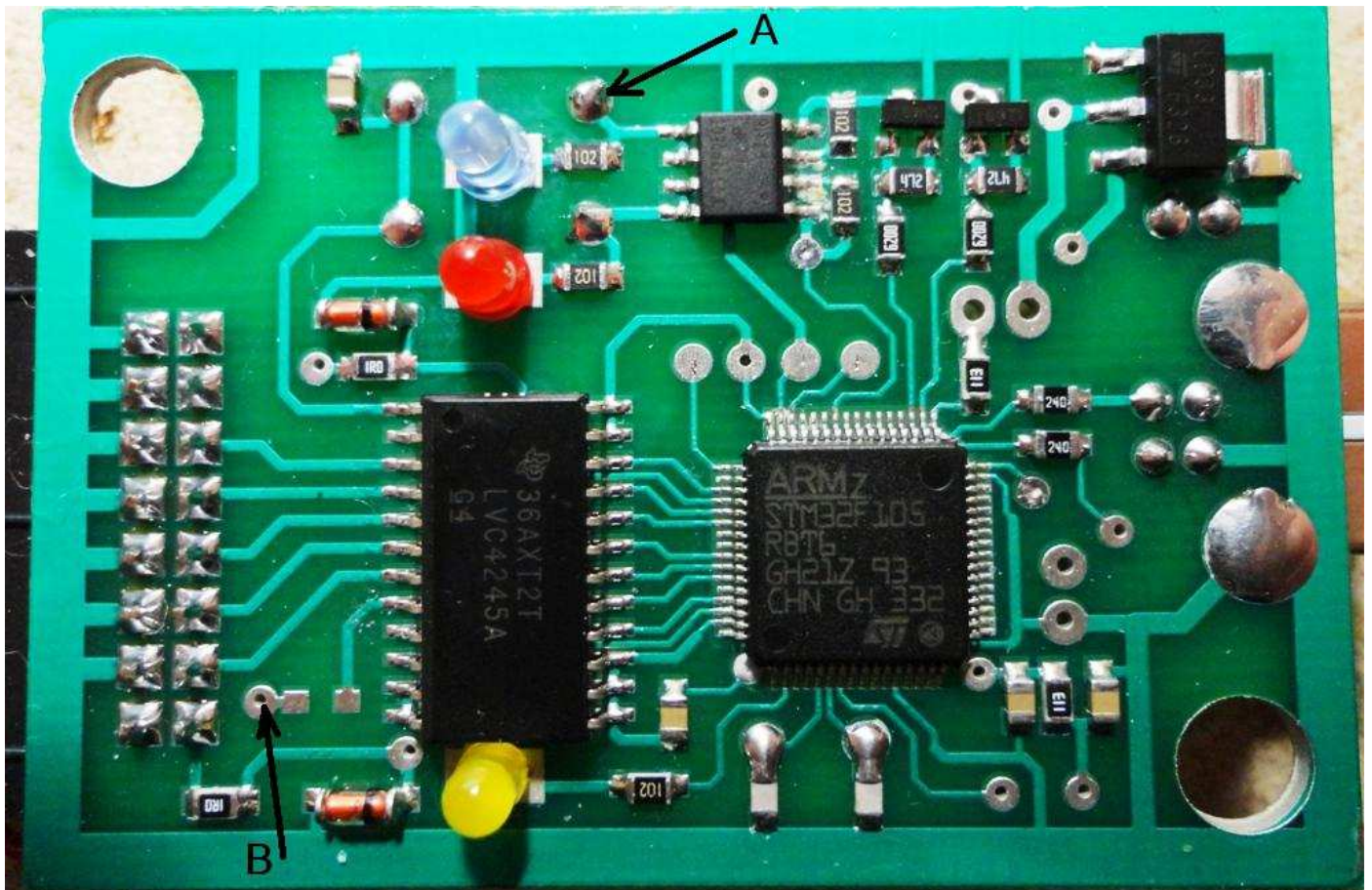
It was reported by several users that after read attempt such unit manifests malfunction via diagnostics. After getting such unit for the tests we found that it is related to the powering of the unit. Previously we suggested to supply power externally. But as it turned out for the proper operation power must be provided by the programmer itself, and no external 12V should be supplied.

Modification transforms previously unused pin into +3V output in the connector. For modification you need to open programmer's case, extract the PCB and connect points A and B with a wire as pictured.

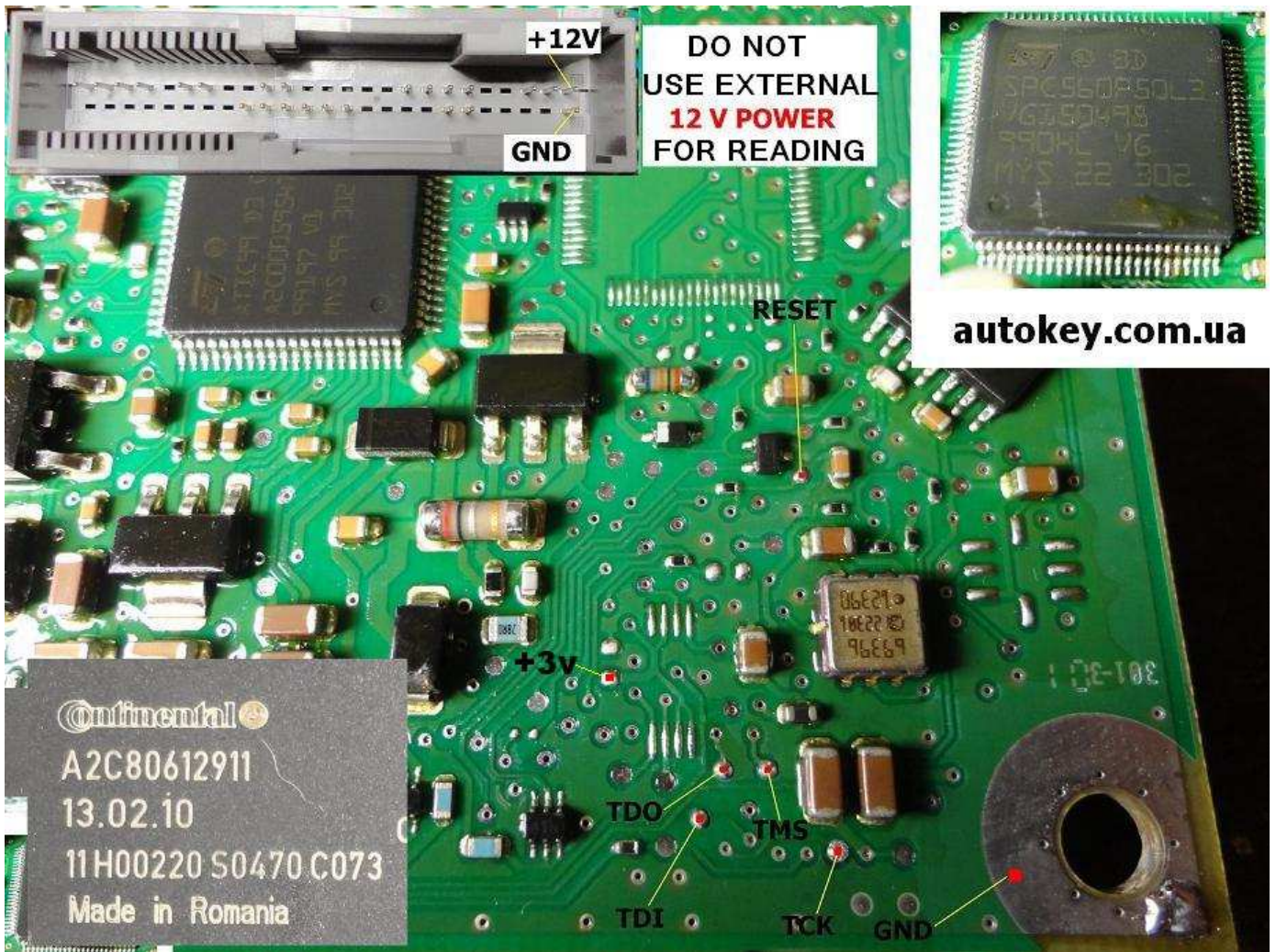
Here is a connector pinout with a new +3V OUT pin:



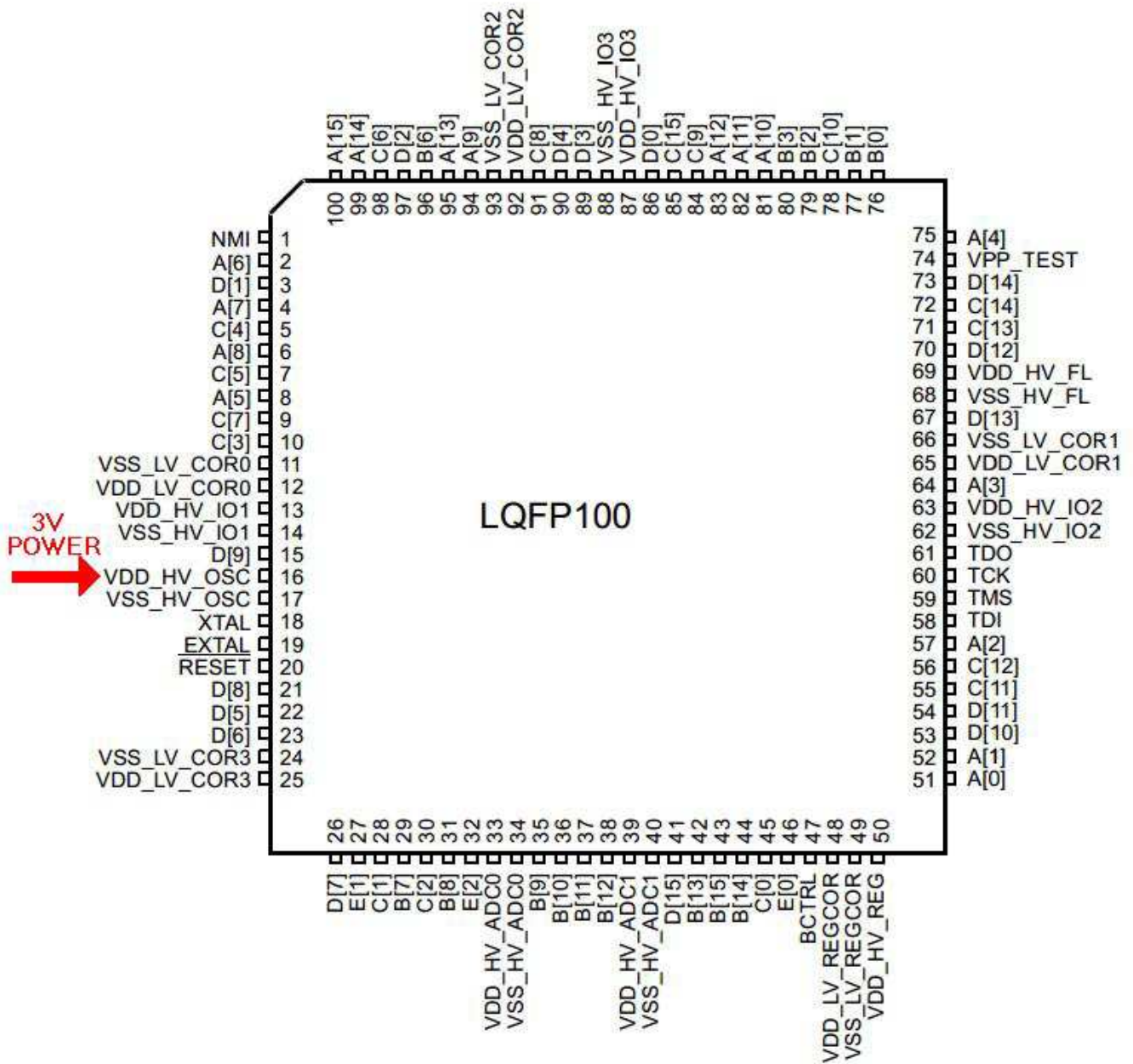
Points A and B before and after connection:



Now programmer can supply +3V power to the unit automatically. Updated connection diagram is shown below. Note that you shouldn't supply external +12V for reading.



Here is how +3V supplied to the MCU:



After this improvement you can read DATA FLASH safely without danger of its modification by the unit's firmware located in the CODE FLASH section.

But if you power the unit on with +12V for some time (even without programmer connection), then remove +12V and try to read DATA FLASH you will notice lot of different bytes. These bytes were modified by unit's firmware and presumably mean logged error. Such units automatically register error in the data flash when powered without connection to the other vehicle's units (extracted from a car and powered on desk).

