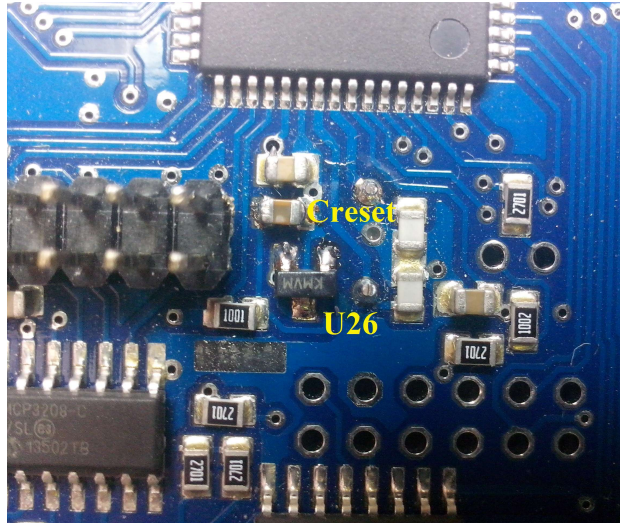# VEMS v3 genboard optional reset circuits
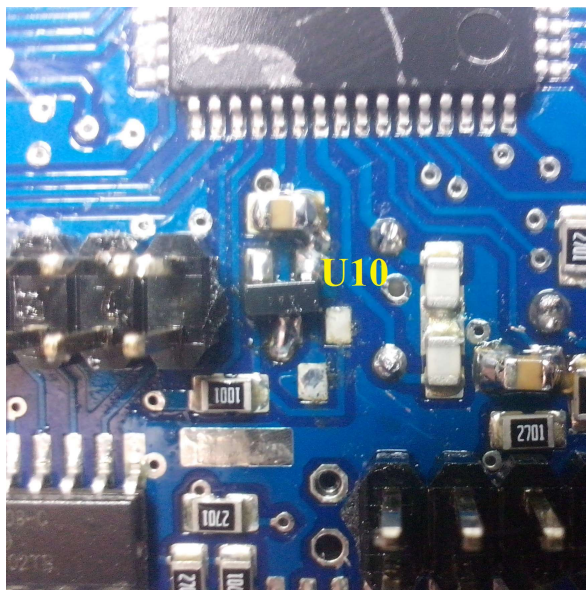
- **MCP131**

    Creset is optional, adds an additional +40 msec delay on top of appr 120msec delay of MCP131. If you already have the capacitor Creset do NOT remove it, and apply U26=MCP131.

    Creset = 1uF
    U26 = MCP131

- **MAX809 or MCP809**

    If you do NOT have the Creset prefer MAX809 or MCP809 which provides more than 200 msec delay (some atmega needs it for startup 100% of the time, even with slow rising power).

    U10 = MAX809 or MCP809

- **SCK pullup**
    Pullup resistor between SCK and +5V (at ISP / SD card header) always needed. 4k7 or 2k7