

ArduiBox NodeMCU

Version 1.1

construction manual

Rev.	Date	Description
A	2018-01-04	First Release

Tools:

*agregulated soldering iron
(25..40W) with small tip*



*a wet sponge to clean the
tip*



thin solder wire



Side cutting pliers



Needle nose pliers



Medium cross slot screwdriver



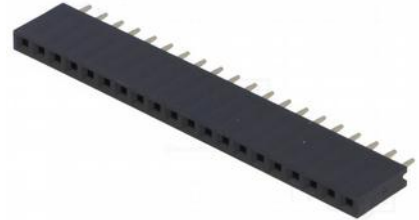
Parts Basic Version:



2x
2pole terminal block



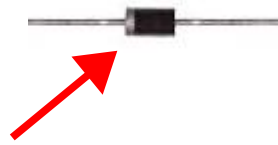
2x
3pole terminal block



2x
20pole female header



2x
self-tapping screws

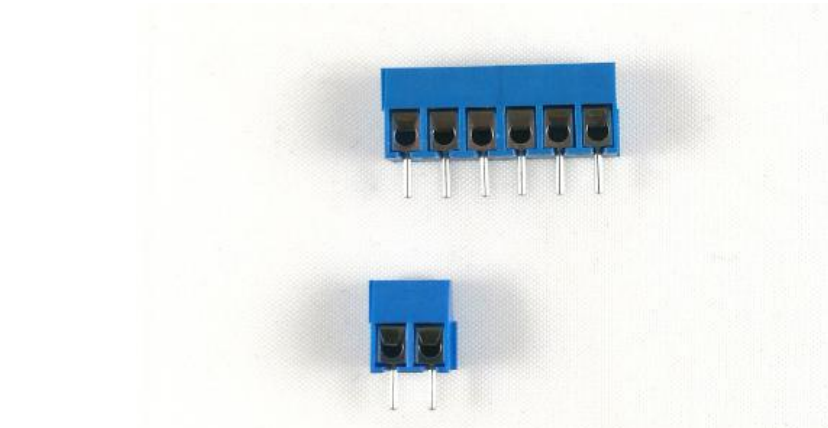


cathode

1x
Schottky diode
SB260
(D2)

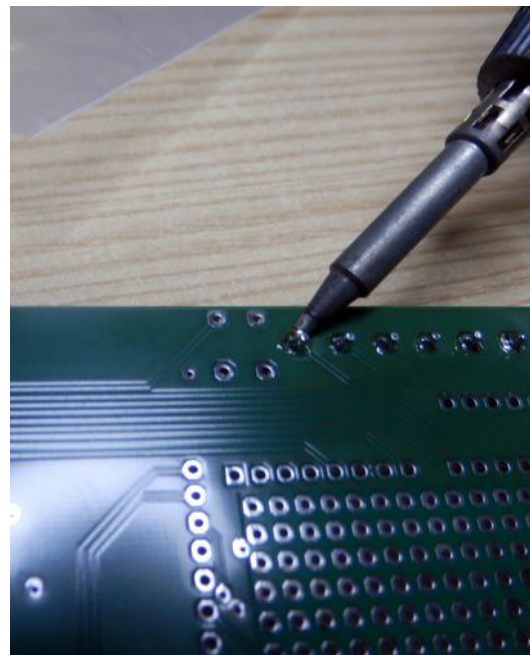
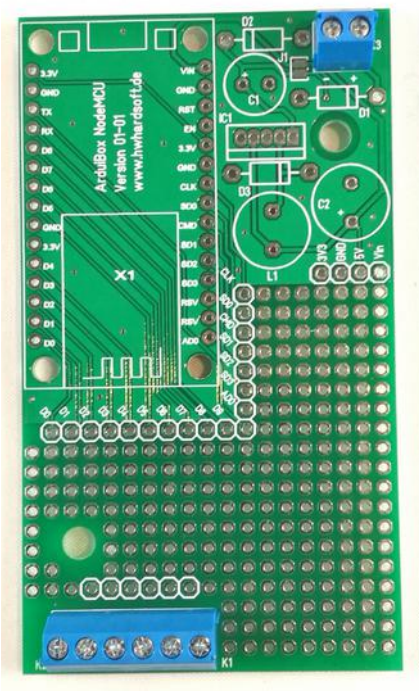
1.) Prepare the terminal blocks

Find the terminal blocks, they're grey or blue and come in 3-pin and 2-pin shapes. We'll need to slide two 3-pin blocks together:

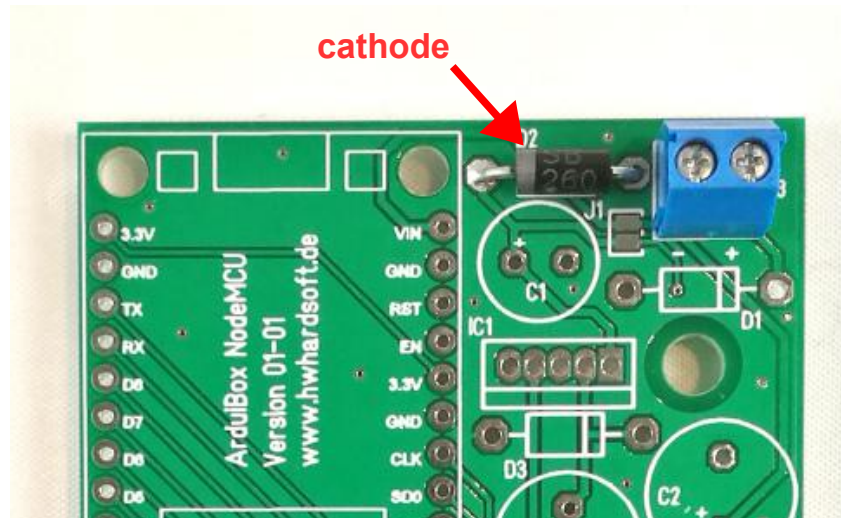


2.) Place and solder terminal blocks

We've to put the blocks into the proto plate. Make sure you place them so that the open ends are facing out as shown:

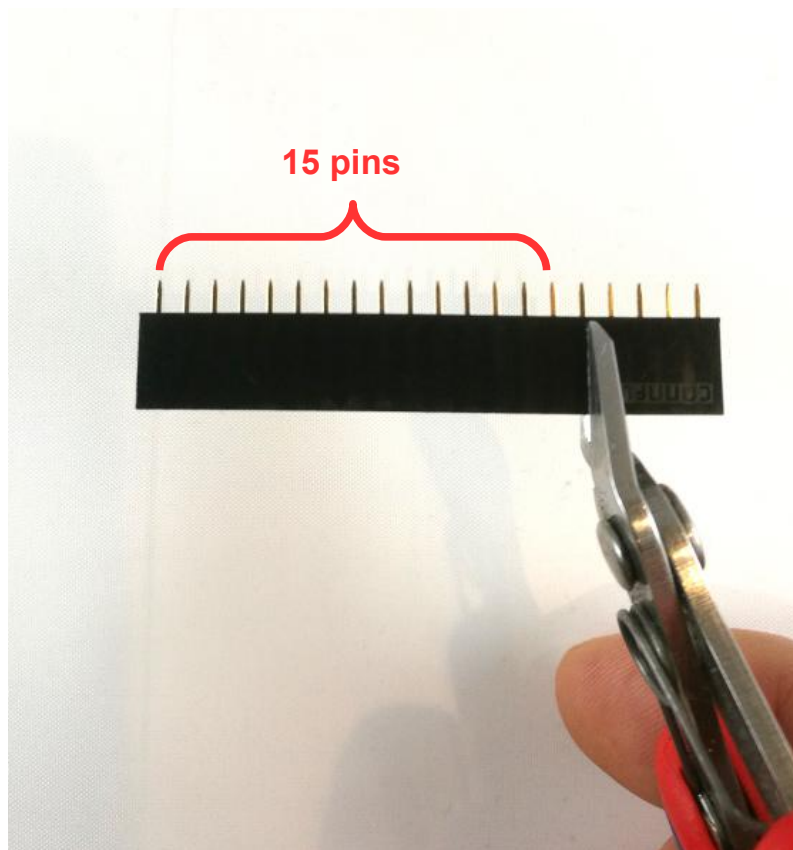


3.) Place and solder the schottky diode D2



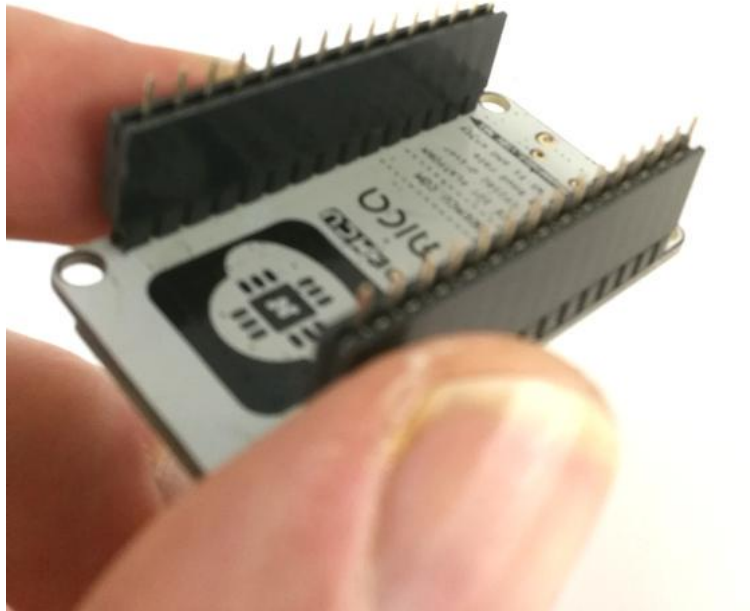
4.) Preparation of the female headers for NodeMCU

Depending from the situation on the market we sell the kits with longer female header. You have to cut these headers to 15 pins:

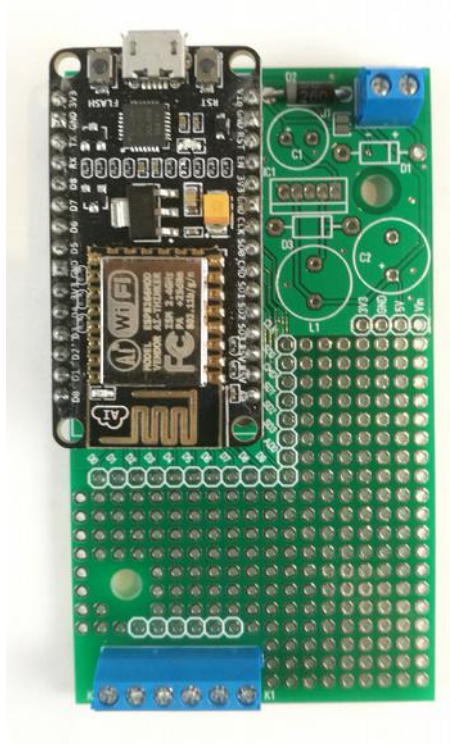


5.) *Prepare the NodeMCU:*

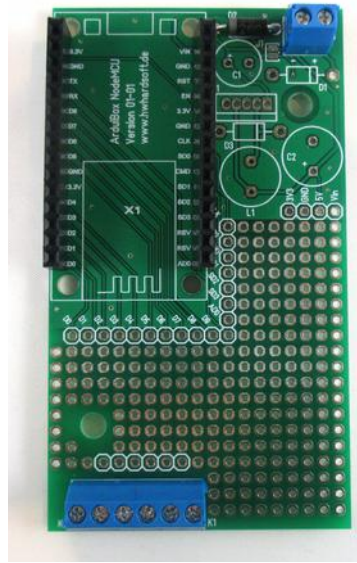
Plug both female headers onto the male headers of the NodeMCU



6.) *Place and Solder the NodeMCU:*

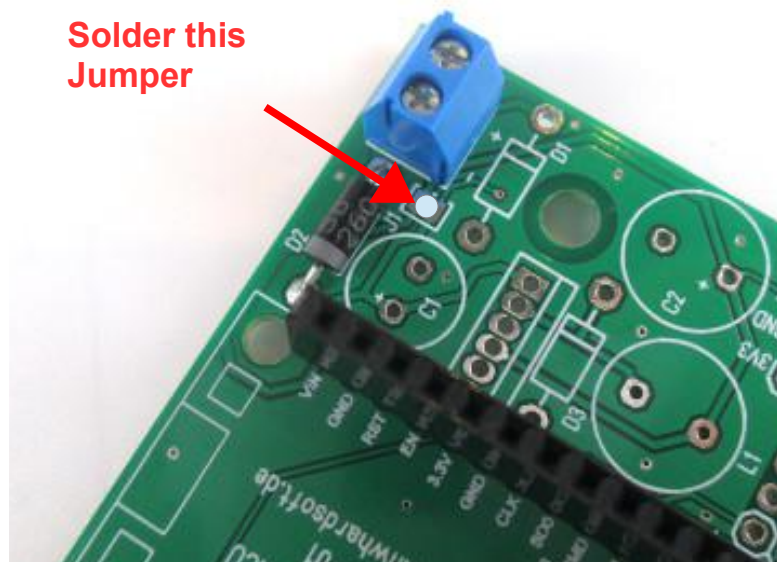


7.) *Remove the NodeMCU:*




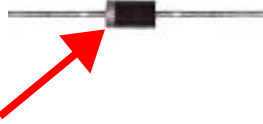




8.) *Solder Jumper J1 (optional):*

Perform this step only if you really don't want to use the additional voltage regulator of the standard kit. If you want to use the power socket of the NodeMCU this step is unnecessary also.

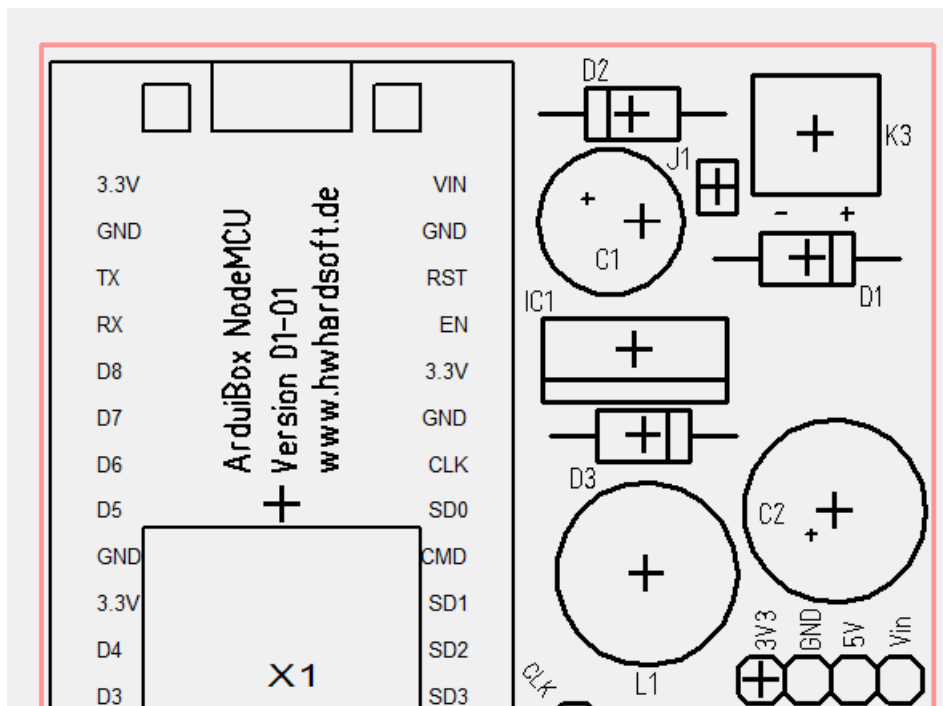
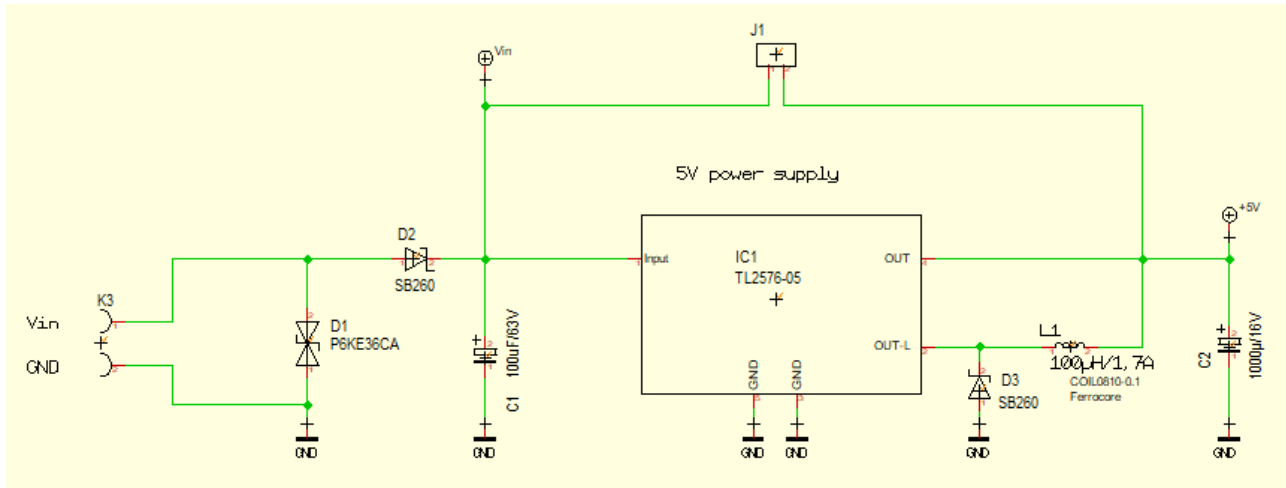


Perform the next steps only if you have the standard kit (includes the parts of the voltage regulator). Otherwise continue with step 14.

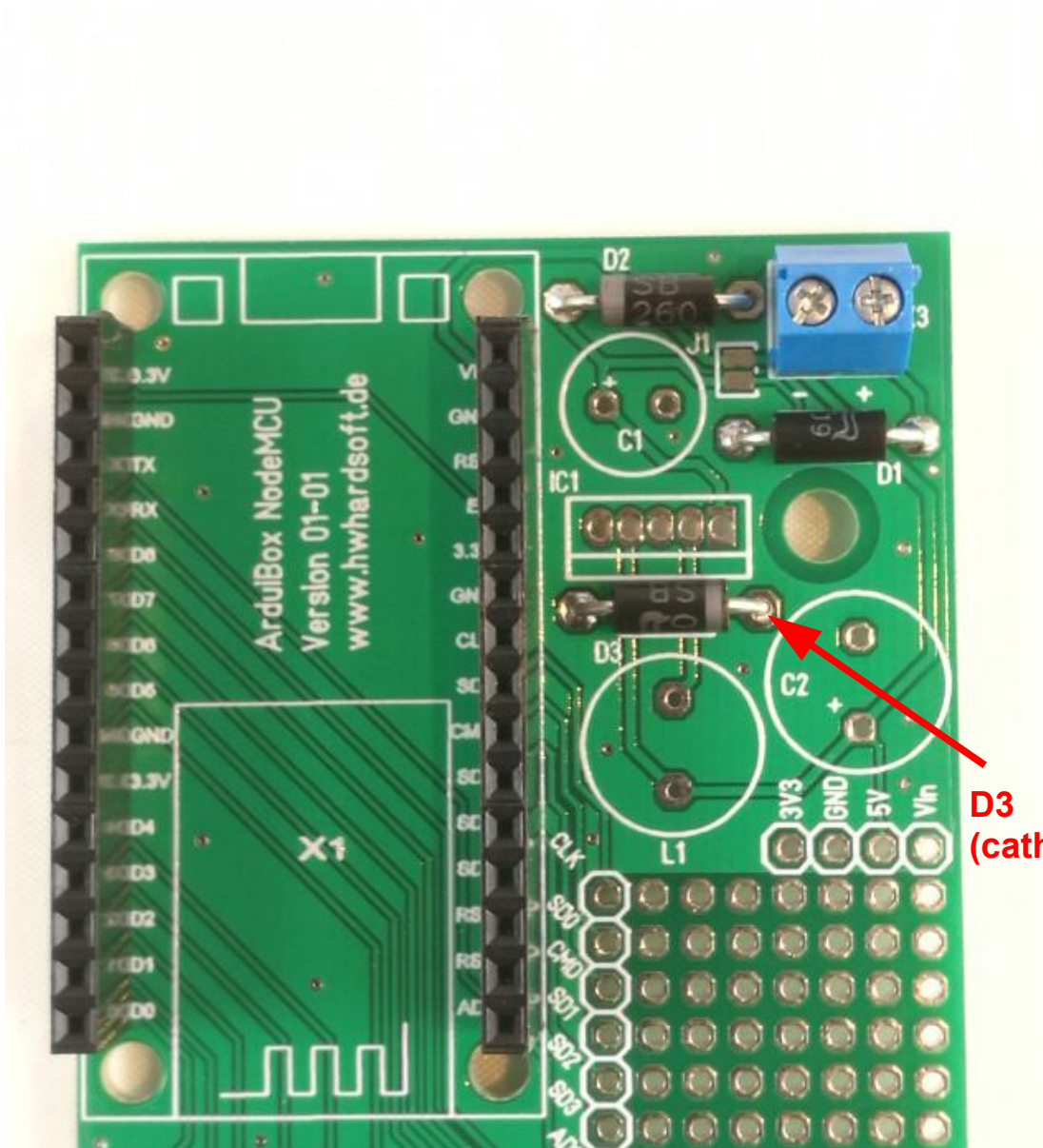
Additional parts of Standard Version:

 <p>1x inductor 100uH/1.7A (L1)</p>	 <p>cathode</p> <p>1x Schottky diode SB260 (D3)</p>	 <p>1x overvoltage limiting diode P6KE36CA (D1)</p>
 <p>1x voltage regulator TL2576-5 (IC1)</p>	 <p>1x electrolytic capacitor 100uF/63V (C1)</p>	 <p>1x electrolytic capacitor 1000uF/16V (C2)</p>

Power supply circuit:



9.) Assemble Diode D3 and D1



Please Note: D1 has no polarity!

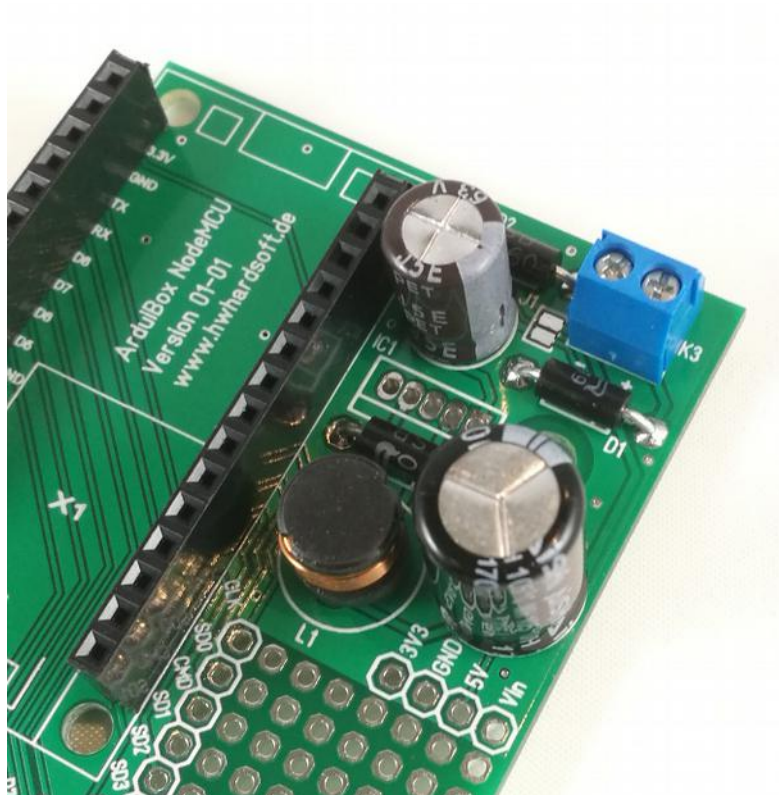
10.) Assemble electrolytic capacitor C1



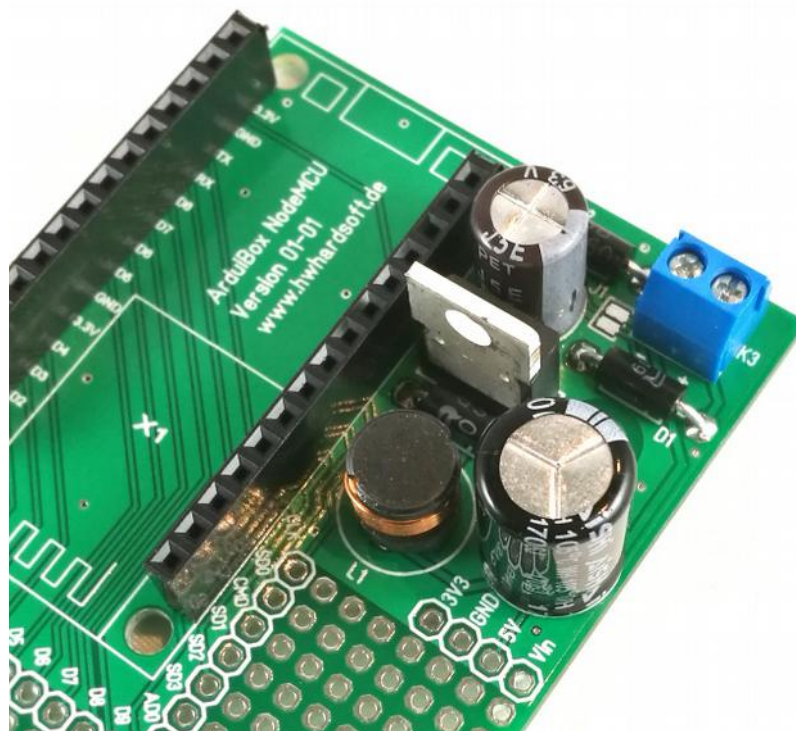
11.) Assemble inductor L1



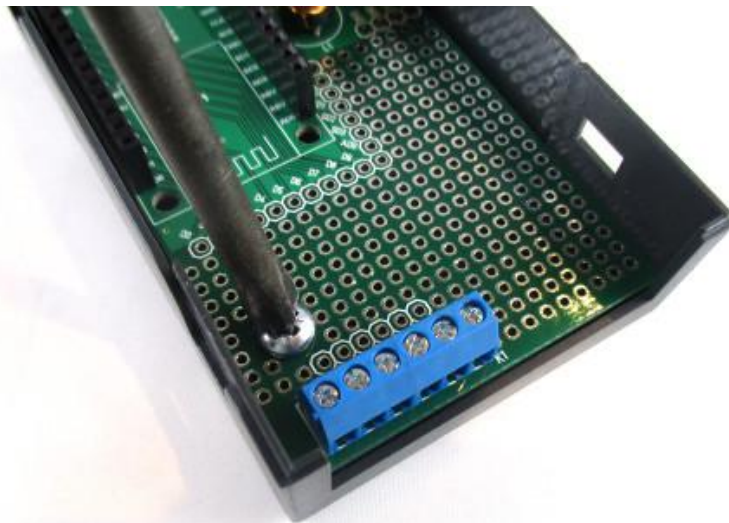
12.) Assemble electrolytic capacitor C2



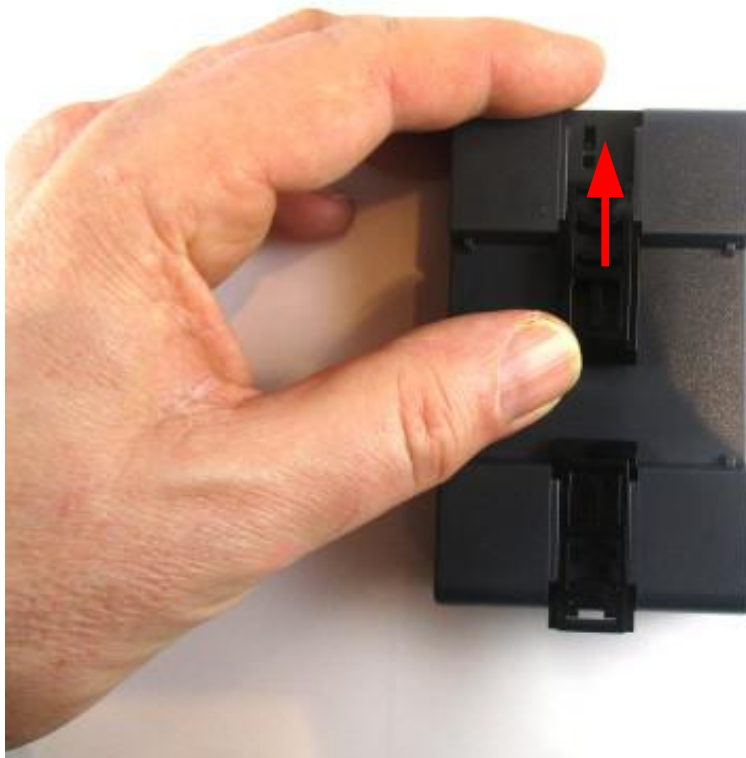
13.) Assemble voltage regulator IC1



14.) Mount the pcb into the bottom shell



15.) Mount the 2 holders for the din rail



Please take care to mount the holder from the inner channel to the outside!

16.) Mount the NodeMCU again!



16.) Mount the top shell



Finish!