

## How to Make the NSLU2 Autostart on Power-On

Some users do find it a big handicap of the NSLU2 that the unit will stay powered-off after a power failure. There are some HW modifications out there that suggest various hardware hacks to get an automatic start of the NSLU2 after power resumes.

Have a look here: <http://www.nslu2-linux.org/wiki/HowTo/ForcePowerAlwaysOn>

**WARNING:** Doing this modification has the potential to damage the unit and will void your warranty. So you do this at your own risk. If you don't like to take this risk, stop reading here.

The next steps describe how you can upgrade your NSLU2 to this feature by making use of a sub 1€ reset circuitry. You will need some soldering experience and some manual and visual skills as the needed integrated circuit comes in SMD form factor. But there are just 3 connections to be made, so it should be done without too much hassle. My first attempt on modding the NSLU2 was an immediate success.

**STEP 1:** Open the case of the NSLU2. Don't look for screws - there are no. You don't need any tools. Just gently squeeze the dark grey sides with your left hand thumb and forefinger just about where the uppermost rubber foot is on the left hand part of the case, and with your right thumb and forefinger pull the top of the light grey part of the case away from the dark grey part of the case, wiggling the light grey part as you pull it. When the upper part shows a spare do the same with the lower part and slide the two parts of the case apart.



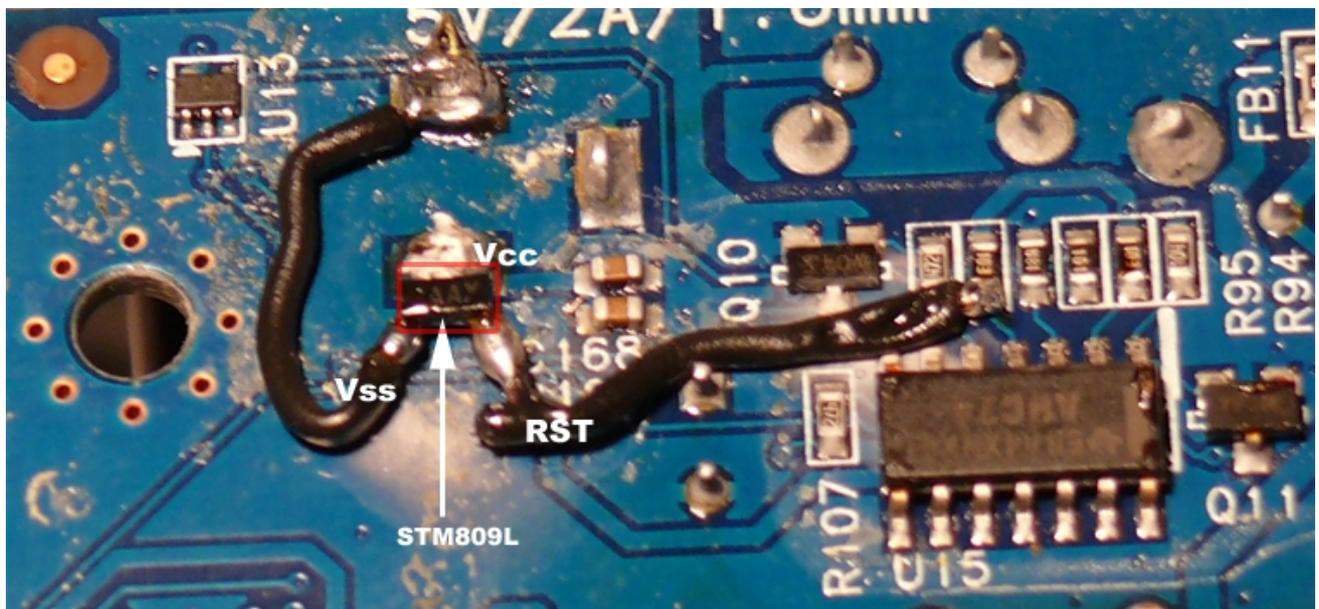
*Pictures from the outside of the NSLU2 and parts of the text how to open the case are taken from <http://www.rwhitby.net/projects/nslu2> by kind permission of Rod Whitby.*

**STEP 2:** The reset circuit I did use is a STM809LWX6F. I bought it at "www.conrad.de". You can find the specs here: [http://www2.produktinfo.conrad.com/datenblaetter/150000-174999/156023-da-01-en-RESET-IC\\_STM809LWX6F.pdf](http://www2.produktinfo.conrad.com/datenblaetter/150000-174999/156023-da-01-en-RESET-IC_STM809LWX6F.pdf)

**STEP 3:** The STM809L has three pins. The pin on the side with just one pin is Vcc. This pin has to be connected to the 5V of the power supply jack. The pins on the other side are Vss and RST. Vss needs to be connected to the ground signal level of the power jack, RST is the reset signal that needs to be connected to the pull-up resistor that keeps the reset input of the CPU inactive. In the picture the pins of the reset circuit are (from left to right) RST, VSS, Vcc.



**STEP 4:** Heat your pinpoint soldering unit and connect the reset circuit to the NSLU2 mainboard. As told in the beginning soldering SMB like parts needs some experience and patience. I connected the Vcc pin directly to the +5V pin of the power jack. Having done this, the reset chip is physically mounted to the board. Next I made the connection of the Vss to ground level of the power jack. The last connection to make was to connect the RST pin with the SMD 2nd SMD resistor in the row in front of chip U15.



**STEP 5:** Done. Put it all together again. When you now attach the power plug to the NSLU2 it should immediately boot. Please try if the power-on/off button is still working as expected. Having passed these tests you now have the feature "auto reboot after power failure" implemented on your NSLU2.