

# LIVESTOCK ELECTRONICS

## STARTUP MOD

### What is it?

The startup mod is a simple fix for early versions of Bang modules that occasionally did not start up with **Doepfer PSU's**. Attention this mod requires soldering a 3.3nF capacitor!

### What are my options?

**A.** If you do not feel certain about completing this mod, please contact Livestock Electronics about returning the Teensy board and getting a modded Teensy board free of charge. Please note that our warranty policy applies here as stated on: [www.livestockelectronics.com/support](http://www.livestockelectronics.com/support). I.E. The Teensy board must be distributed with a Bang module, must be in working order and return shipping costs are for buyer.

**B.** If you are certain about completing this mod, please follow the instructions below:

Tools needed:

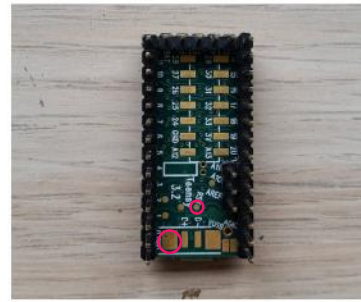
- Soldering Iron
- Soldering Tin
- 3.3nF Ceramic Capacitor (unpolarized, 16V or higher)
- Cutter

### Additional info:

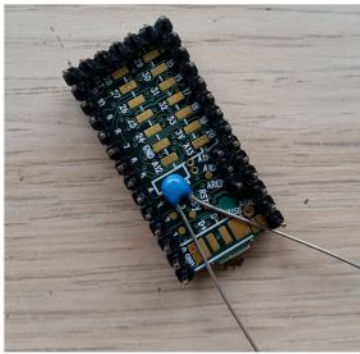
Do not use a different capacitor value as you will either not fix the issue or have issues updating the firmware!



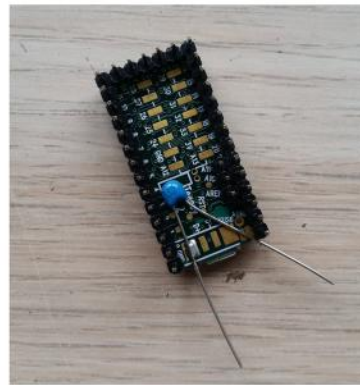
1. Remove the Teensy board and place it on its back.



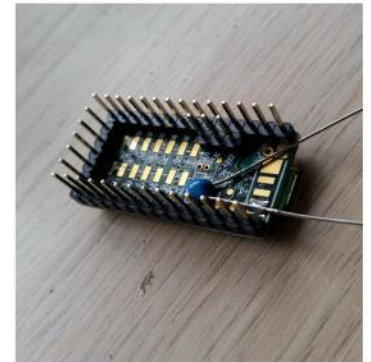
2. Locate the pads (GND & RST) you will be soldering as highlighted above in pink.



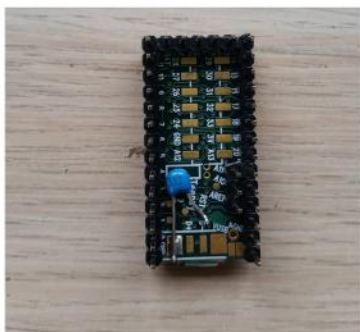
3. Place the 3.3nF so one leg is on the GND pad (big pad on the left), and the other leg is above the RST pad.



4. Solder the capacitor to the GND pad. Make sure the GND pad is only connected to the capacitor and is not touching any of the other pads!!!



5. Solder the other leg to the RST pin. Take a look from the side to make sure it is really touching!



6. Cut the remaining parts of the capacitor legs.

7. Place the Teensy back on the module. Make sure it is positioned correctly and facing the right direction before powering up. See the image on the right!

