After receiving my PokeyMax yesterday, I faced to an issue, by using it in one of my 600XL.

After installing the PokeyMax, the 600XL lacks while booting up from different Sources (SIO2SD, SIO2PC, real 1050/XF551).
Sometimes it boots a short sequence and stops and go on booting and stops and so on...(finally Error 138)

Thanks to "tf_hh" and "Jurek", for the proper hint:
The reason for it are two filter capacitors (C89/C90) connected to SIO Data_IN / Data_OUT (see attached pictures)
After removing both caps, the 600XL boots up perfectly with the PokeyMax 😎!

I´ve had this issue two times now - and removing the caps won´t help. I remove them by default to enable Pokey-divisor 0...2 and prevent the user from having issues with longer SIO chains and Speedy 1050 drives or other.
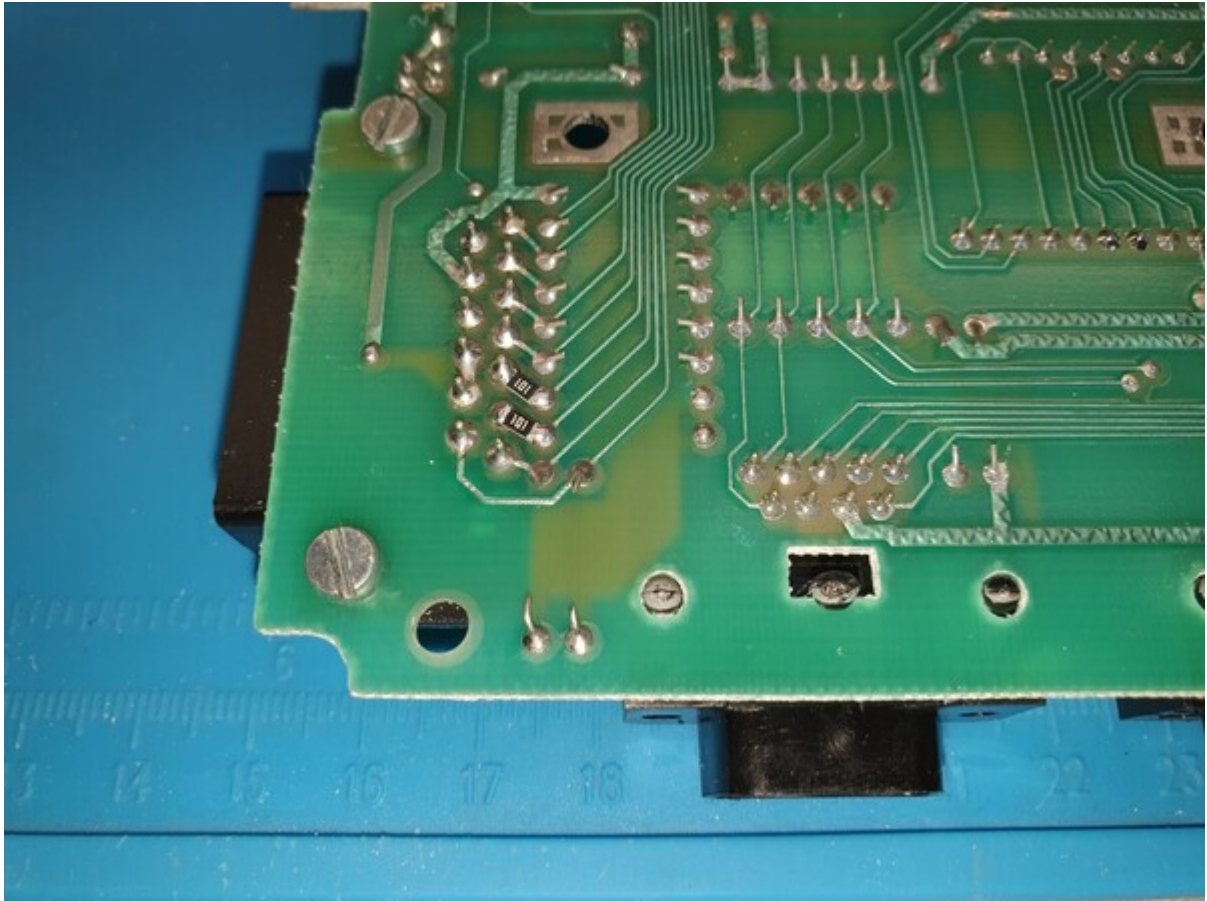
So I was digging a little bit deeper and found the real culprit. The voltage for a "low" (0) is too high. With some SIO devices and PokeyMAX there´s 0.85 or higher the lowest voltage for "low". The old genuine POKEY doesn´t have a problem with it, but PokeyMAX doesn´t recognize it as a "low".

Because this problem only was on the 600XL found so far, I compared the circuits and... all XL/XE computers have 100R limiting resistors in line with Data_in and Data_Out, but the 600XL not. So I install them and... PokeyMAX works fine in three different 600XL, with or without the capacitors mentioned above.

Here´s a good way to install them:

Use a dremel or similar tool and cut the traces between SIO jack pin 3 and 5 and their capacitors.

Install to resistors (1206 case) 100R between SIO jack and pad for the caps. Done.