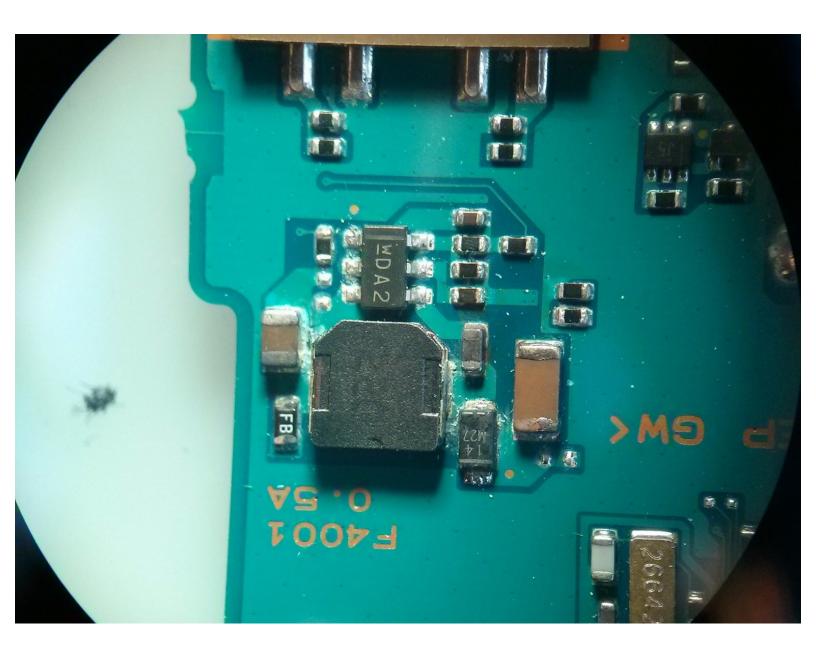


PSP E1000 LED Driver Circuit Component Replacement

Figuring out and repairing the LED driver circuit.

Written By: Steven



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INTRODUCTION

My nephew brought me his PSP after watering it.

I found the PSP was working exept the LCD backlight.

So I disassambled the device and searched for water marks. I found the marks directly on the LED driver circuit. After cleaning and checking the 0.5A fuse (was OK) I dicided to find out the chip. It took me some time to find the correct chip. It was a TB62752AFUG LED driver. It's a step up converter with current output. It can deliver up to 40V.

Because I cound not find out, which device was broken, I ordert all part (exept the resistors) reworked them.

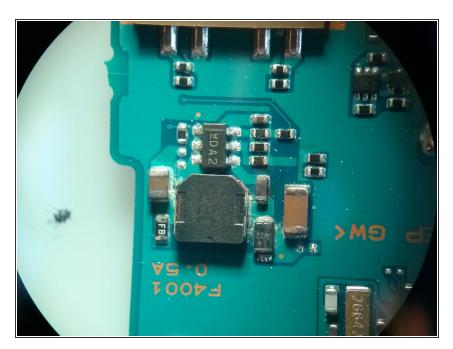
After reassabling the whole device, the backlight was working fine again and my nephew was happy.



PARTS:

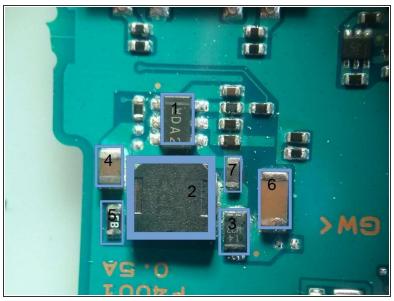
- TB62752AFUG (1)
- CDPH45D13FHF-220MC (1)
- 742792609 (1)
- MSS1P4-M3/89A (1)
- 2.2uF/6.3V/X5R/0805 (1)
- 1.0uF/50VX5R/1206 (1)

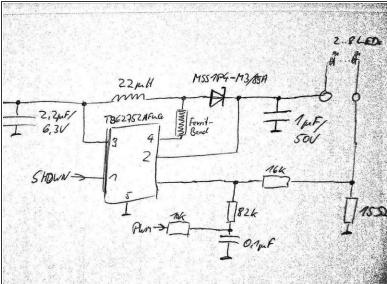
Step 1 — Backlight electronic after water damage



this picture was made after cleaning

Step 2





- it took me some time to find the right chip:
 - 1 TB62752AFUG
 - 2 Inductor 22μH/0.66A
 - 3 MSS1P4-M3/89A
 - 4 2.2μF / 6,3V
 - 5 Fuse 0.5A 0603
 - 6 1.0μF / 50V
 - 7 Ferrite bead 30Ohm/3A