**OLD Parts for assembling the driver circuit board**

Suppliers:

**Capacitors:**

1x 0,1 µF

https://www.mouser.de/Passive-Components/Capacitors/Ceramic-Capacitors/MLCCs-Multilayer-Ceramic-Capacitors/Multilayer-Ceramic-Capacitors-MLCC-SMD-SMT/\_/N-bkrdv?P=1z0wqusZ1yx4aw4Z1yzmou0&Keyword=capacitor&FS=True

1x 10 µF (tantalum) 10 µF (MLCC or tantalum 1206)   
https://www.mouser.de/Passive-Components/Capacitors/Tantalum-Capacitors/Tantalum-Capacitors-Solid-SMD/\_/N-75hr4?P=1z0wrkrZ1yzmotyZ1yzt832Z1yx4aw4

**Resistors:**

1x 2,2 kOhm (Better Reichelt)

[https://www.conrad.de/de/o/smd-widerstaende-0241260.html?tfo\_ATT\_LOV\_RESISTOR\_DESIGN=0805&tfo\_ATT\_RESISTANCE\_VALUE\_NUM=2200%20%CE%A9](https://www.conrad.de/de/o/smd-widerstaende-0241260.html?tfo_ATT_LOV_RESISTOR_DESIGN=0805&tfo_ATT_RESISTANCE_VALUE_NUM=2200 Ω)

2x 150 Ohm (Better Reichelt)

https://www.conrad.de/de/o/smd-widerstaende-0241260.html?tfo\_ATT\_RESISTANCE\_VALUE\_NUM=150%20%CE%A9&tfo\_ATT\_LOV\_RESISTOR\_DESIGN=0805

1x 27 kOm (Better Reichelt)

<https://www.mouser.de/Passive-Components/Resistors/_/N-5g9n?P=1yzmou0Z1yzekj3>

1x 12 kOhm (Better Reichelt)

<https://www.mouser.de/Passive-Components/Resistors/_/N-5g9n?P=1yzmou0Z1yzeki4>

**Transistor:**

1x PNP

https://www.conrad.de/de/f/sot23-1724883.html?tfo\_ATT\_LOV\_MODEL\_TRANSISTORS=PNP

**Hex-Inverter:**

1x (Better Reichelt SMD HC 04 Inverter, Hex)

https://www.conrad.de/de/search.html?search=74HC04D&category=%1Ft12%1Fc1202469

**Voltage regulator:**

**Reference:**

https://tcd1304.wordpress.com/driving-circuit-and-pcb/

### Parts and components -> download all datasheets -> check 0603 dimensions

##### Drive circuit:

* C₃, C₄ 100 nF (MLCC 0805)
* C₂ 10 µF (MLCC or tantalum 1206) -> check dimension
* R₄, R₄ 150 Ω (0805)
* R₃ 2.2 kΩ (0805)
* U₂ 74HC04D (SOIC-14) Note: Hex inverter -> check direction
* T₁ 2SA1015 / 2SA1162 (SOT-23) Note: Transistor

##### LDO: low noise low drop-out voltage regulator

* U₁ LT1761-BYP (SOT-23-5)  
  Note: High efficiency, step down, DC-DC converter  
  Low Noise, Low Dropout Micropower Regulator
* R₂ 27 kΩ (0805)
* R₁ 12 kΩ (0805)
* C₁ 10 nF (MLCC 0805) -> check dimension
* C₅ 1 µF (MLCC 0805) -> check dimension

The LDO is an additional circuit to produce, low noise and smoother(?) power supply