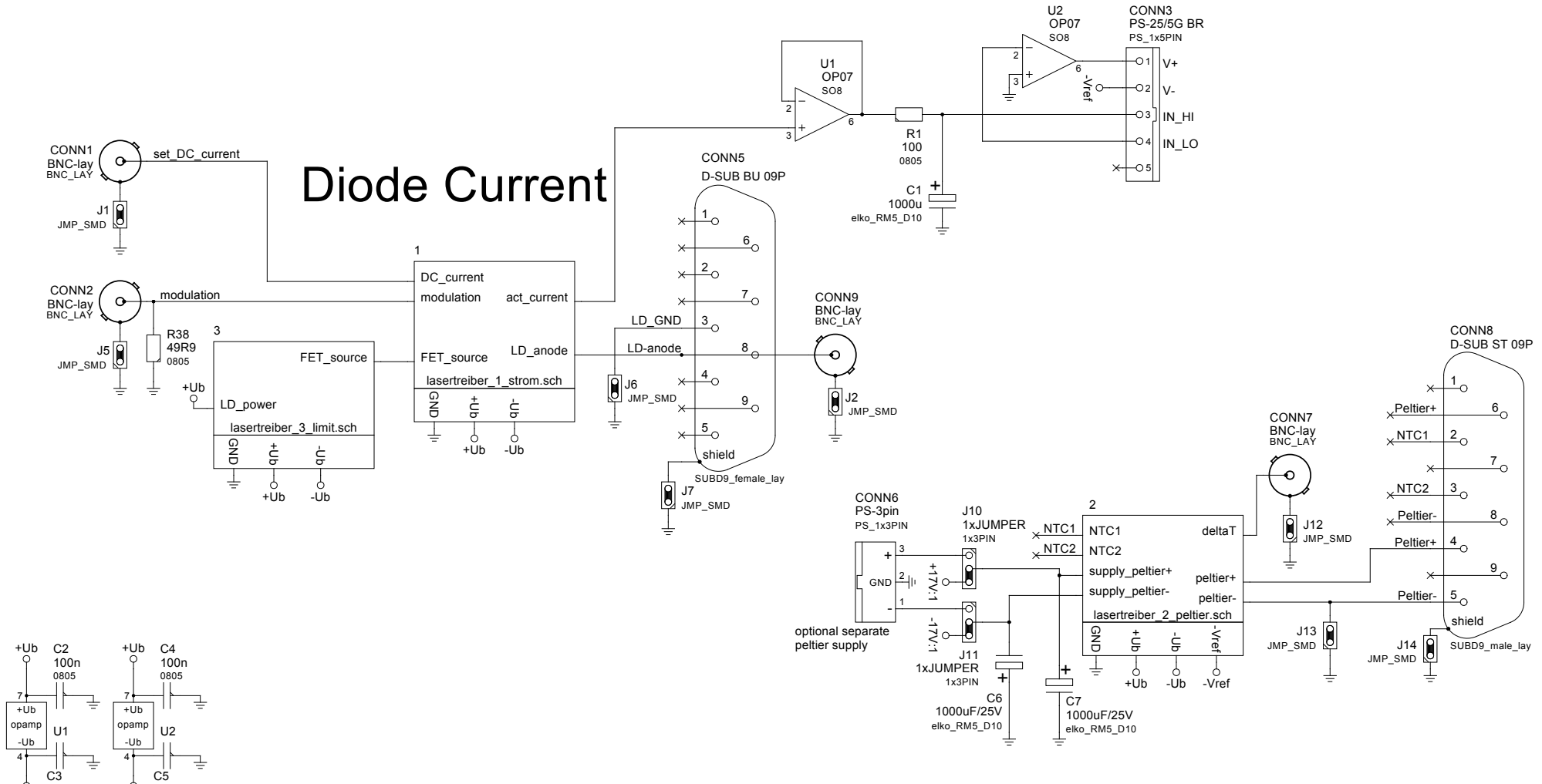
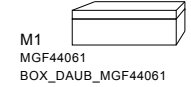
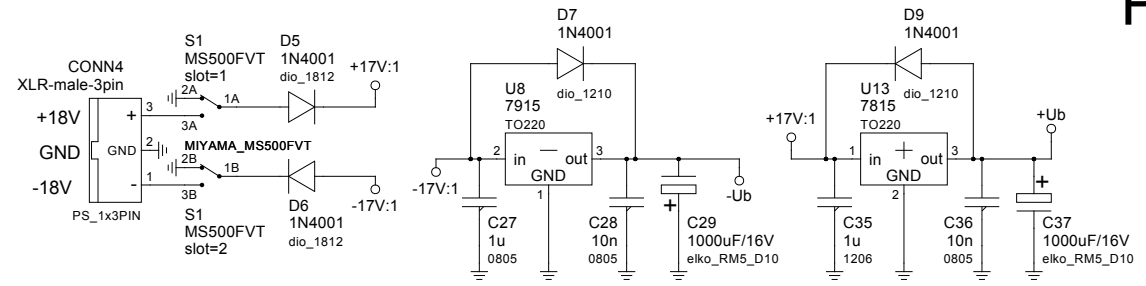
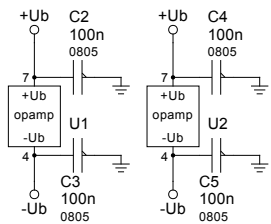


# LCD-Display

# Diode Current



# Peltier Current

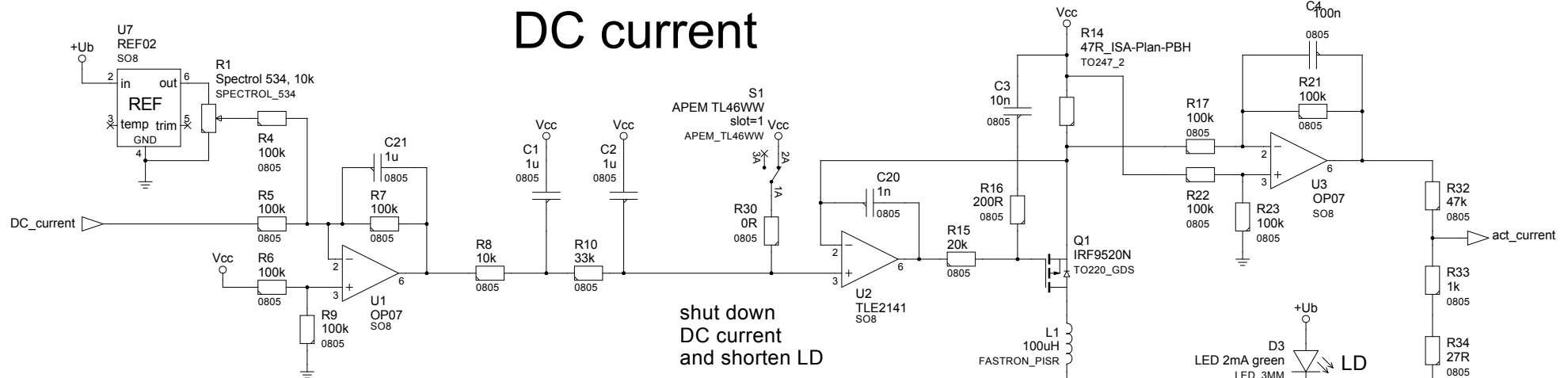


BNC-LAY = Telegaertner J01001A0037

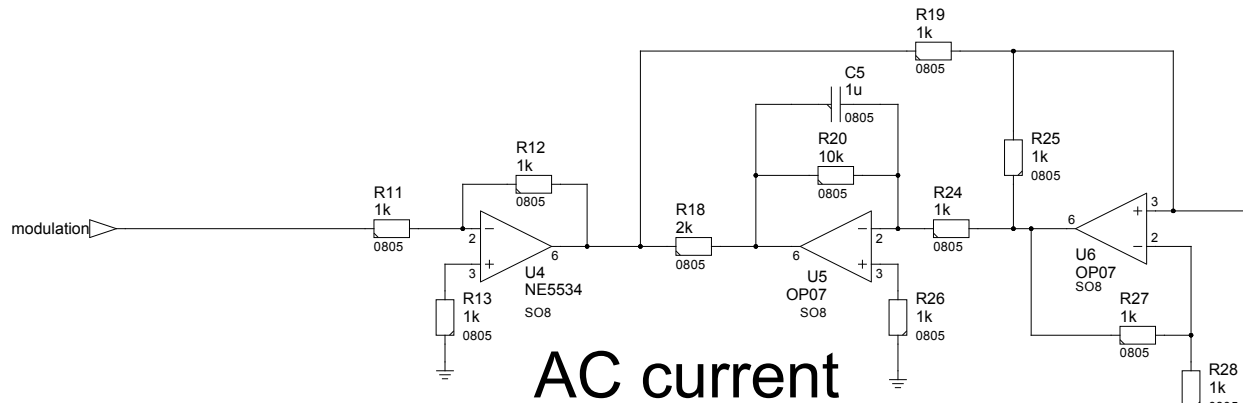
<h2 style="text-align: center;">Lasertreiber (master)</h2>		2.3
		REV.:
TITLE		01.04.2016
FILE: lasertreiber_0_master.sch		DATE:
DRAWN BY: <-(kmk)->		PAGE: 1/4

set DC current

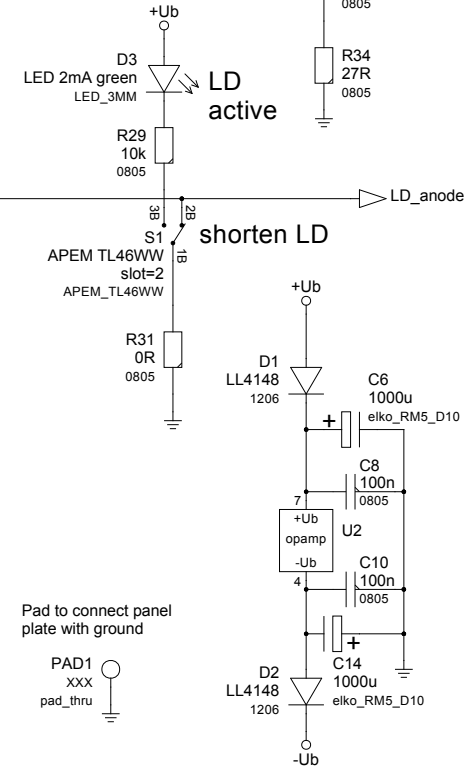
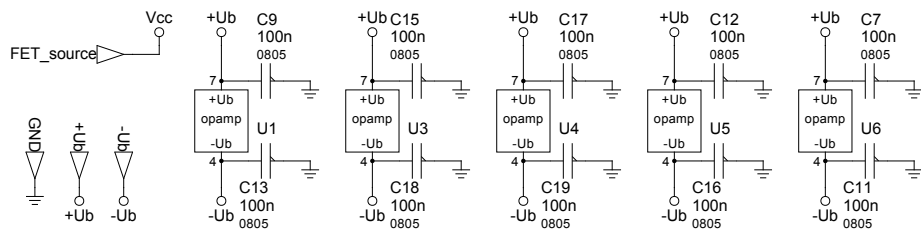
# DC current



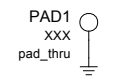
shut down  
DC current  
and shorten LD



# AC current

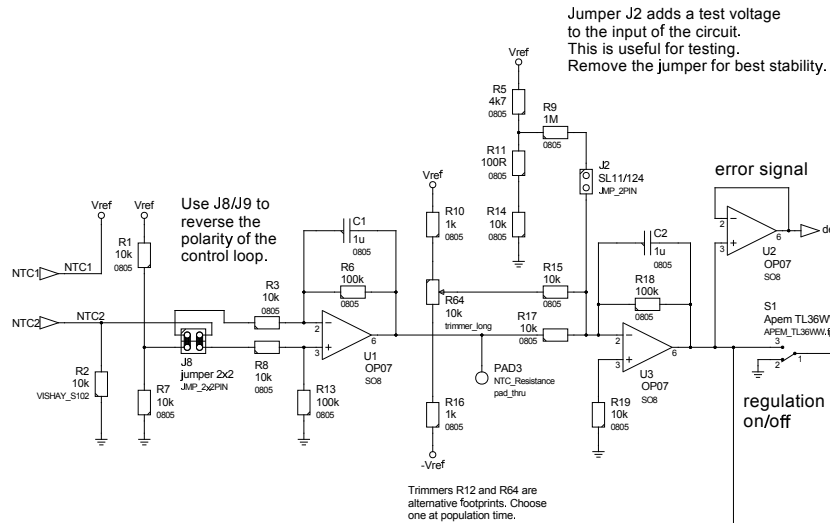


Pad to connect panel plate with ground



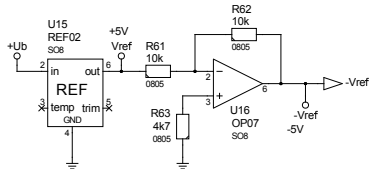
<p>For 200 mA:                  * R14 = 22 kΩ                  * R32 = 33 kΩ                  * R33 = 910 Ω                  * R34 = 680 Ω</p>	<h2 style="text-align: center;">Lasertreiber (Strom)</h2>		2.3
	TITLE: Lasertreiber		REV.:
	PROJECT: lasertreiber_1_strom.sch		DATE: 01.04.2016
FILE:		-<(kmk)>-	PAGE: 2/4

value in parenthesis ----> Do not populate  
value with asterisk ----> value may have to be changed

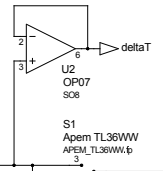


R1 should match the actual value of the ntc resistor at the desired temperature. R4 and R7 should match the nominal value of the ntc resistor. Use a precision resistor at R2 instead of R4 for lower drift.

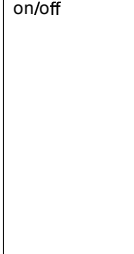
precision voltage reference



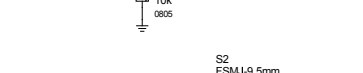
error signal



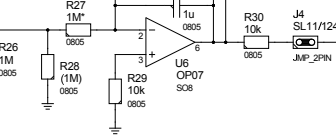
regulation on/off



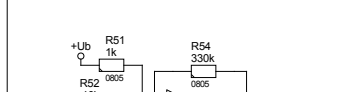
Proportional



Integrator



positive error



negative error

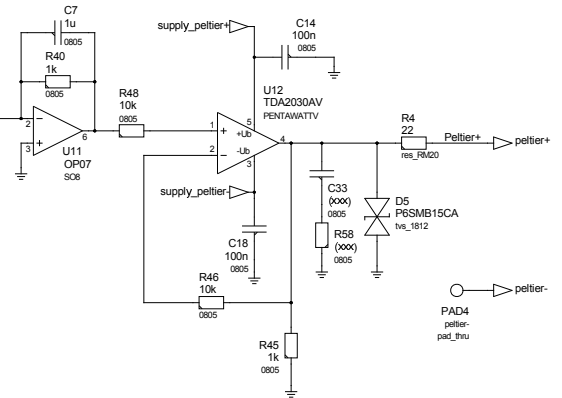
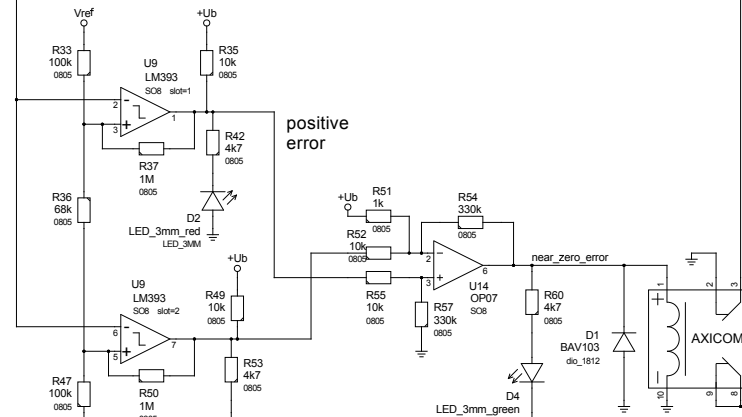
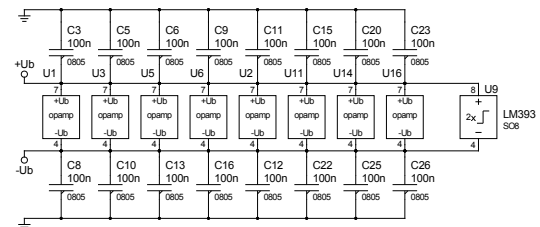
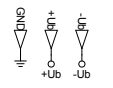


near zero error

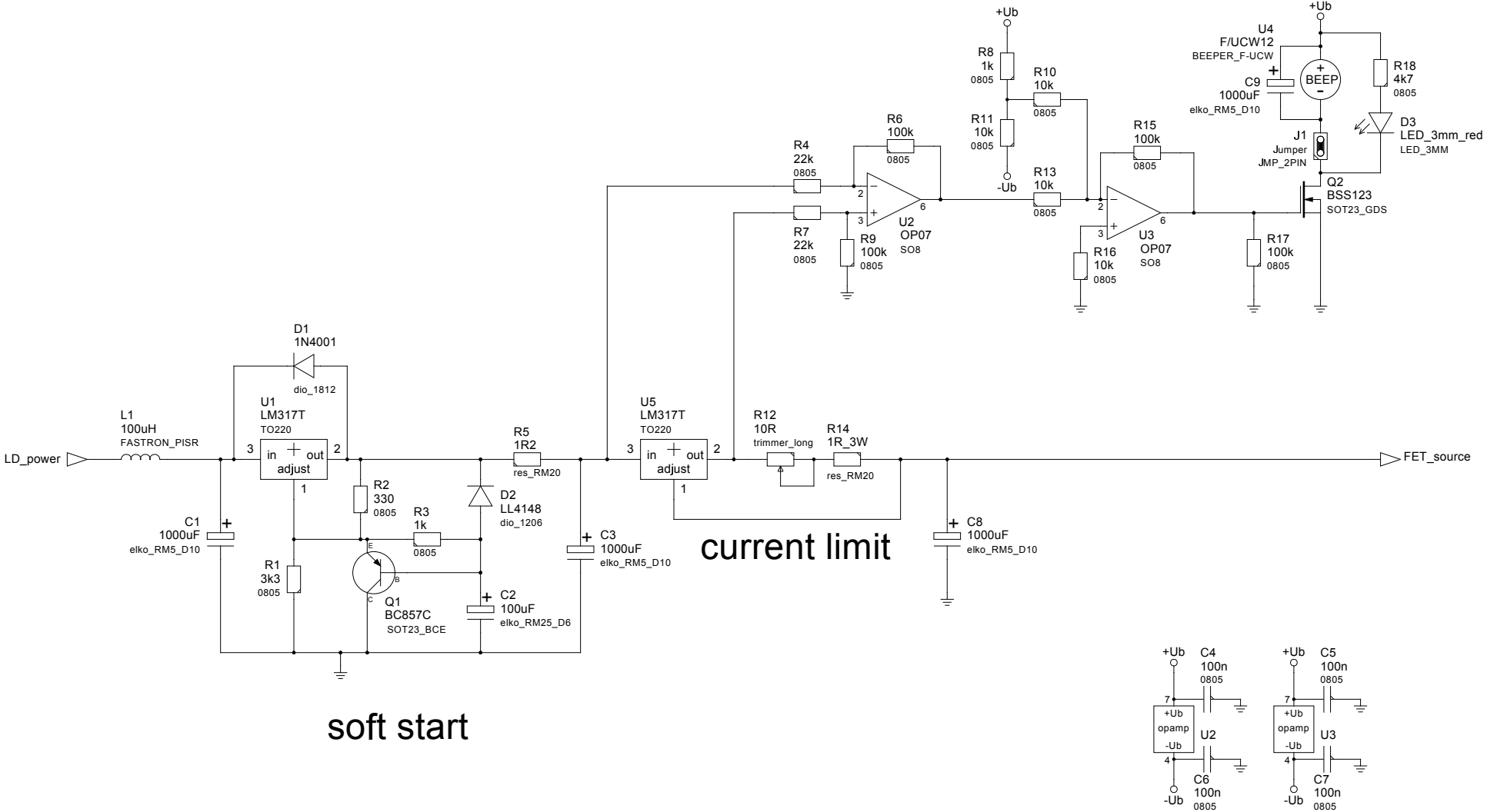


Lasertreiber (Peltier)

TITLE	lasertreiber_2_peltier.sch	REV.	2.3
FILE	lasertreiber_2_peltier.sch	DATE	01.04.16
DRAWN BY	-<(kmk)>-	PAGE	3/4



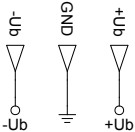
# Warn, when beyond the limit



soft start

current limit

value in parenthesis ----> Do not populate  
 value with asterix ----> value may have to be changed



TITLE		Lasertreiber (Limit)		REV.: 2.3
				DATE: 28.11.13
FILE: lasertreiber_3_limit.sch	DRAWN BY: -(kmk)-		DATE:	PAGE: 4/4