

X1 3-pin input connector

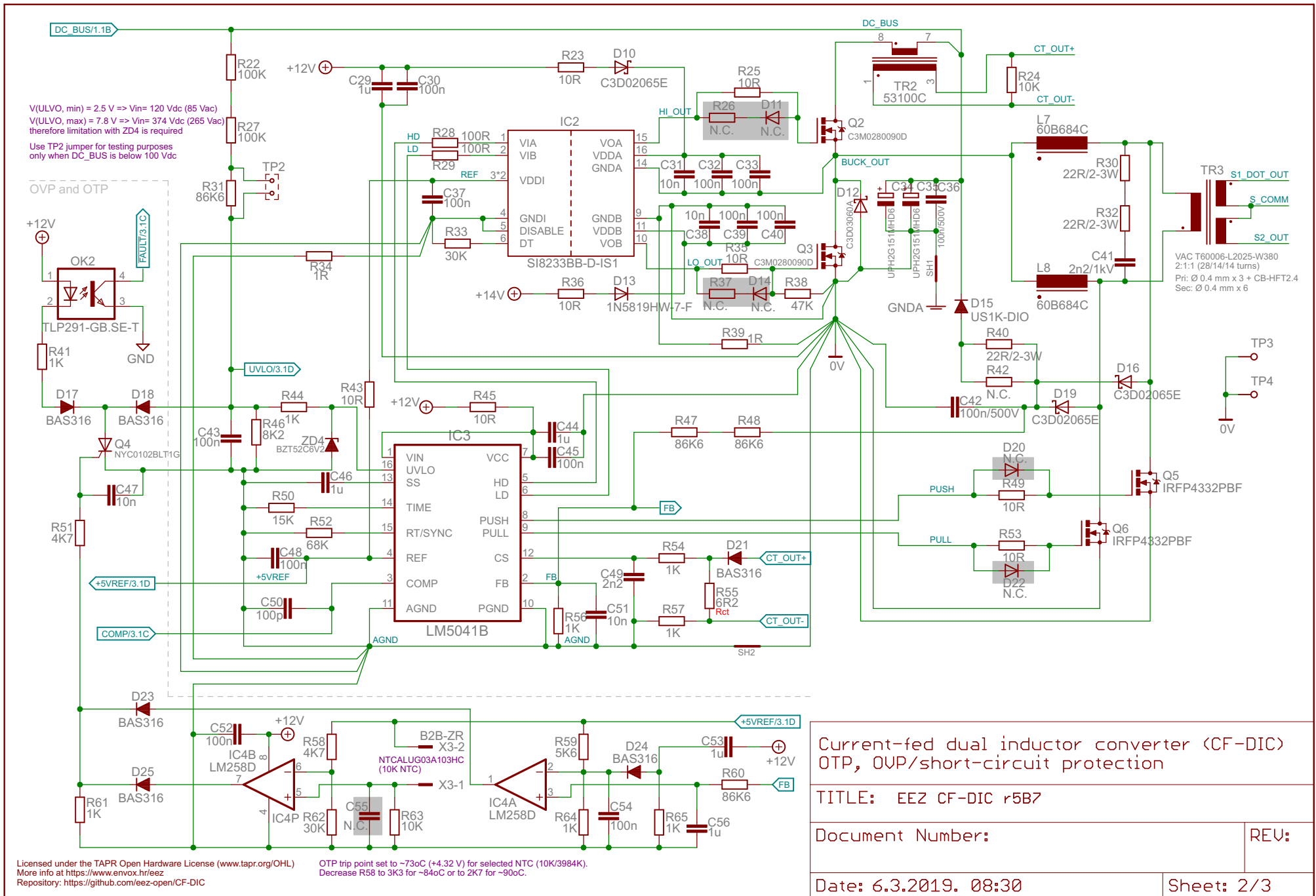
Earth (PE)	1
AC line	2
AC neutral	3

X2 9-pin output connector

+12V	1
12V_GND	2
-12V	3
U_CTRL-	4
U_CTRL+	5
FAULT	6
V+	7
GND	8
V-	9

AC input, QR flyback bias power supply	
TITLE: EEZ CF-DIC r5B7	
Document Number:	REV:
Date: 6.3.2019. 08:30	Sheet: 1/3

Licensed under the TAPR Open Hardware License (www.tapr.org/OHL)
 More info at <https://www.envox.hr/eez>
 Repository: <https://github.com/eez-open/CF-DIC>



Current-fed dual inductor converter (CF-DIC)
OTP, OVP/short-circuit protection

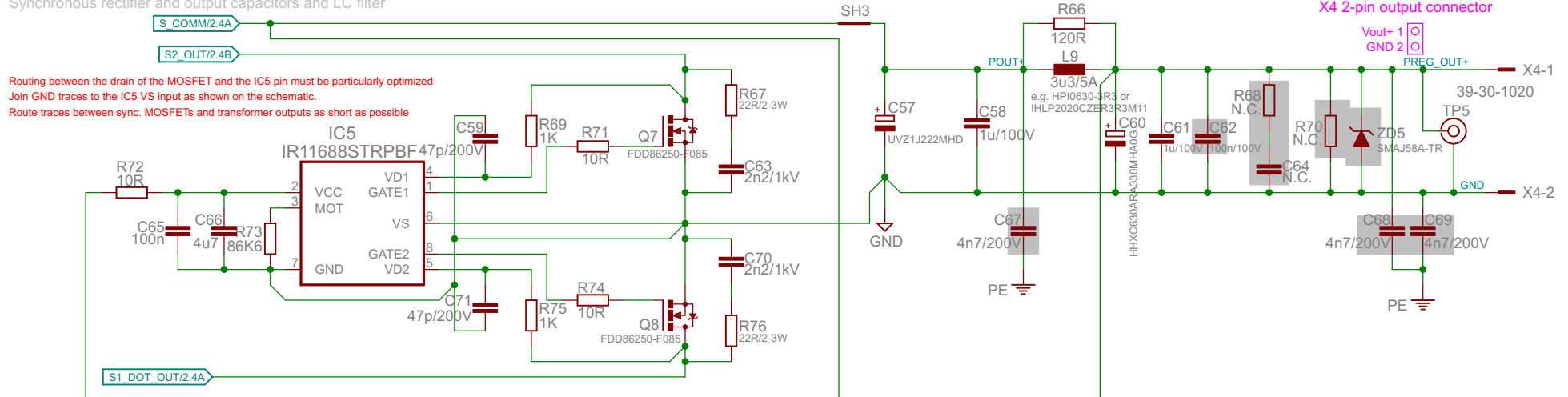
TITLE: EEZ CF-DIC r5B7

Document Number: _____ REV: _____

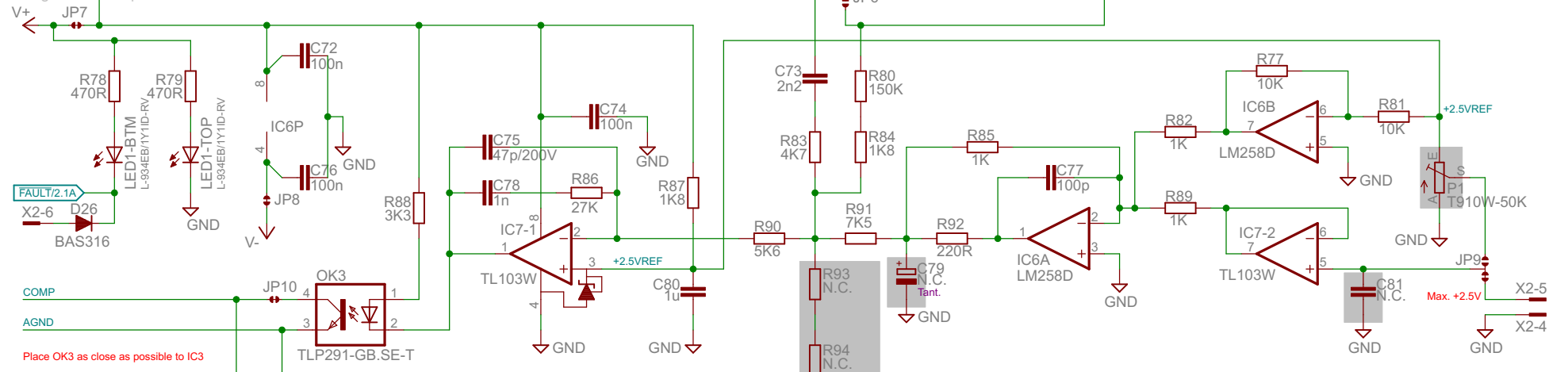
Date: 6.3.2019. 08:30 Sheet: 2/3

Synchronous rectifier and output capacitors and LC filter

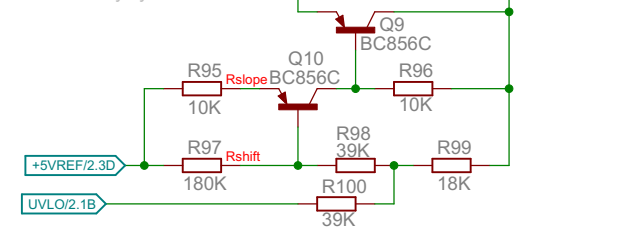
Routing between the drain of the MOSFET and the IC5 pin must be particularly optimized
Join GND traces to the IC5 VS input as shown on the schematic.
Route traces between sync. MOSFETs and transformer outputs as short as possible



Voltage control loop + tracker



Active Duty cycle limiter



CF-DIC secondary side: SR driver NFB with Vout tracker, Duty cycle limiter	
TITLE: EEZ CF-DIC r5B7	
Document Number:	REV:
Date: 6.3.2019. 08:30	Sheet: 3/3