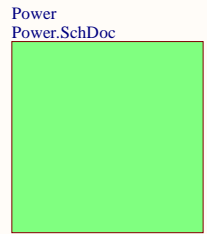
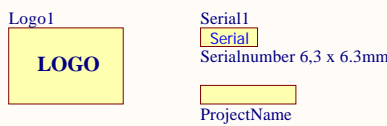
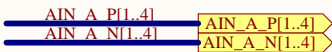
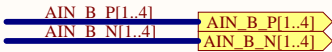
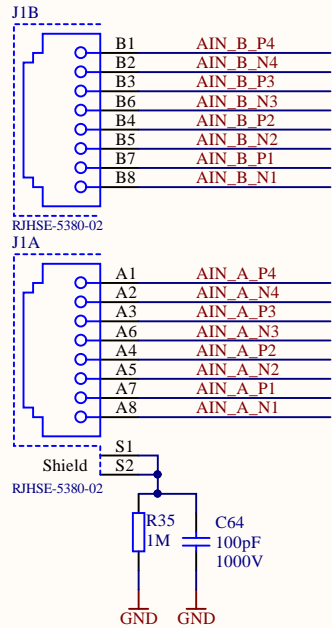


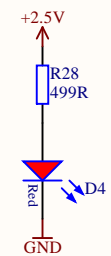
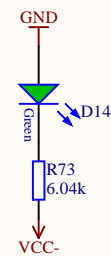
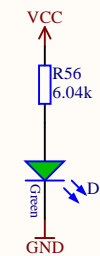
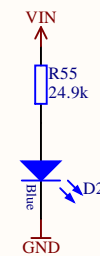
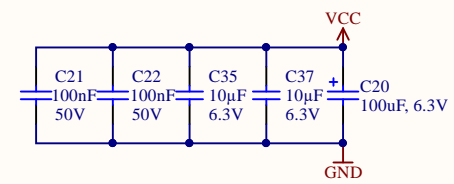
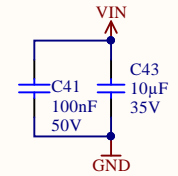
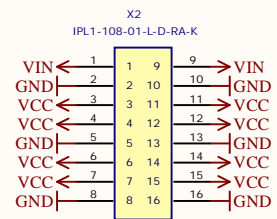
OUT_P1	ADC_IN_A_P1
OUT_N1	ADC_IN_A_N1
OUT_P2	ADC_IN_A_P2
OUT_N2	ADC_IN_A_N2
OUT_P3	ADC_IN_A_P3
OUT_N3	ADC_IN_A_N3
OUT_P4	ADC_IN_A_P4
OUT_N4	ADC_IN_A_N4

OUT_P5	ADC_IN_B_P1
OUT_N5	ADC_IN_B_N1
OUT_P6	ADC_IN_B_P2
OUT_N6	ADC_IN_B_N2
OUT_P7	ADC_IN_B_P3
OUT_N7	ADC_IN_B_N3
OUT_P8	ADC_IN_B_P4
OUT_N8	ADC_IN_B_N4





When using the VIN on the power connector X1, use pin 2 and 10 as return ground

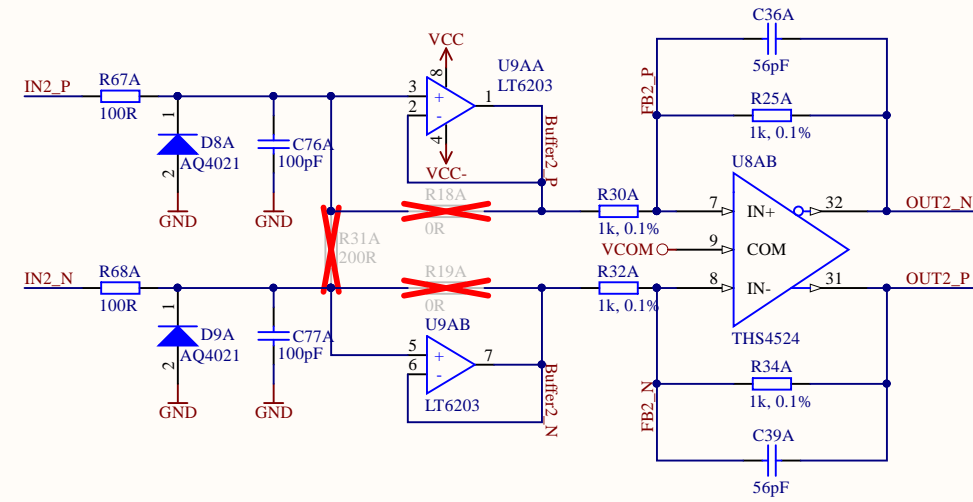
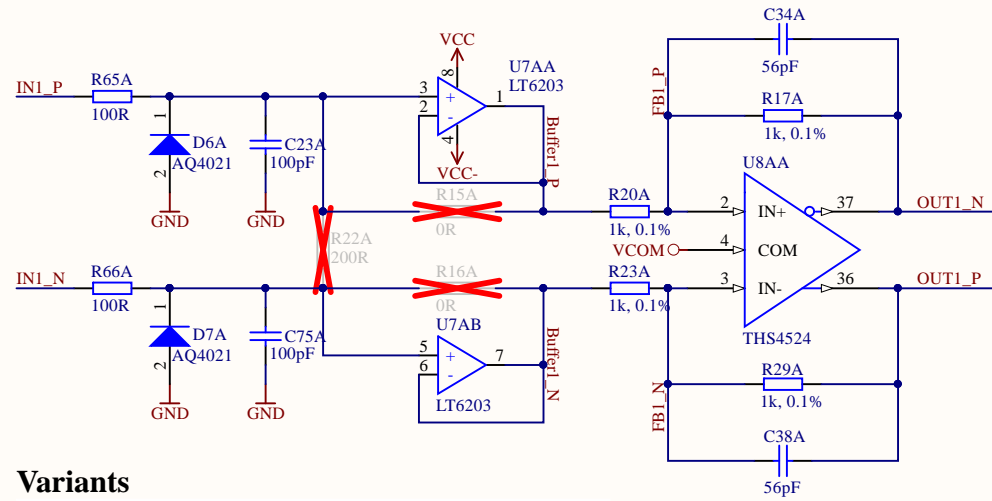


Title AnalogConnector.SchDoc		TU München Arcisstraße 21 80333 München GERMANY	
Size: A4	Revision: 3v03	Sheet 2 of 14	Author: Simon Lukas
Date: 24.09.2020 Time: 08:28:15		Project: UltraZohm_ADC.PrjPCB	



! Use at least 0.1% precision resistors for R20, R23, R17, R29

! Use TVS-diodes GBL05CI in bidirectional configuration

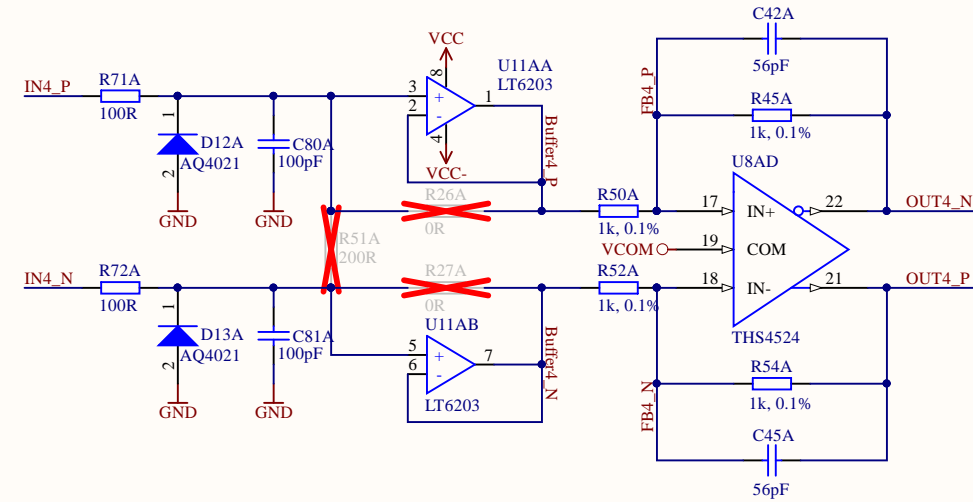
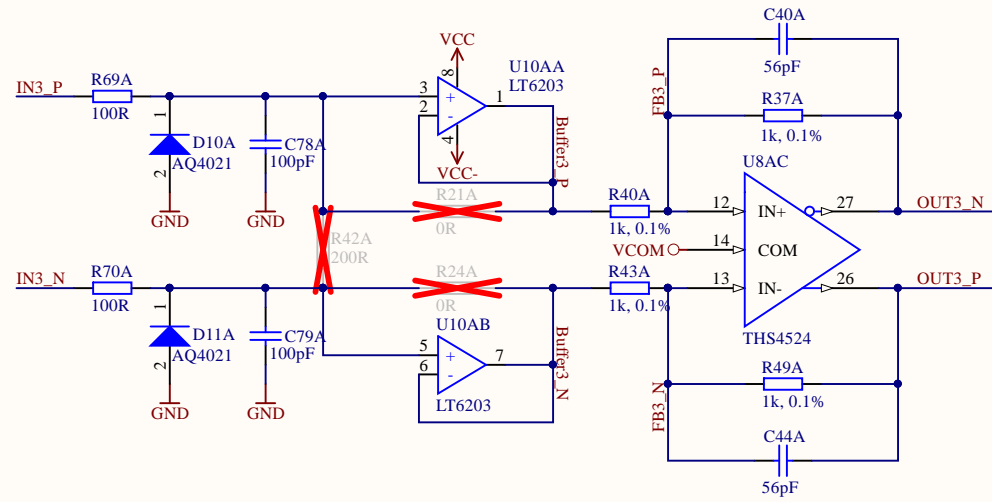


Variants

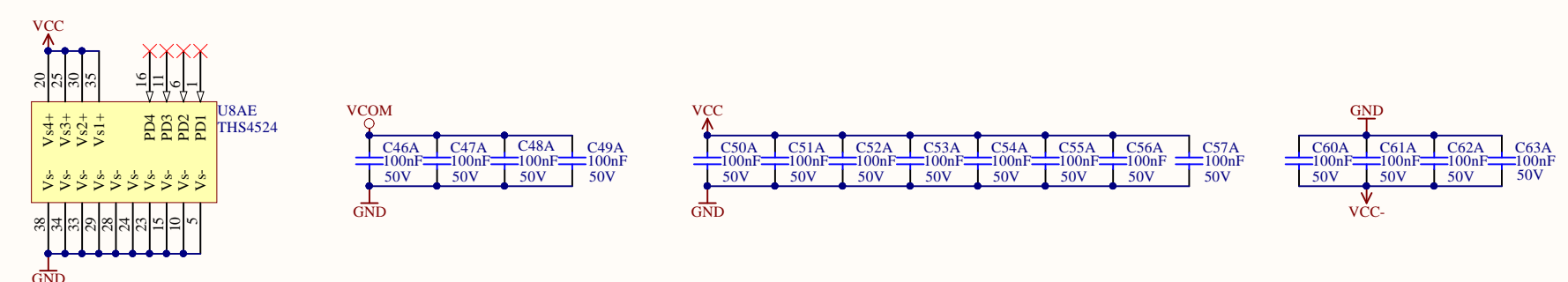
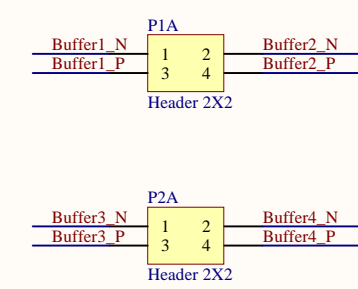
Without buffer: R15,R16 = 0R; U7 = dnp
R65,R66 = 100R; R22 = dnp

With buffer: R15,R16 = dnp; U7 = placed
R65,R66 = 100R; R22 = dnp

Current signal: R15,R16 = dnp; U7 = placed
R65,R66 = 0R; R22 measurement shunt

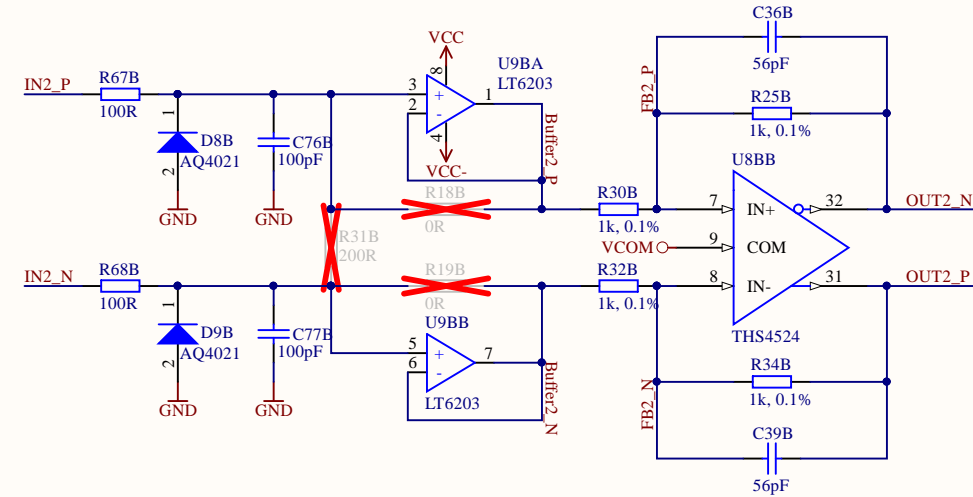
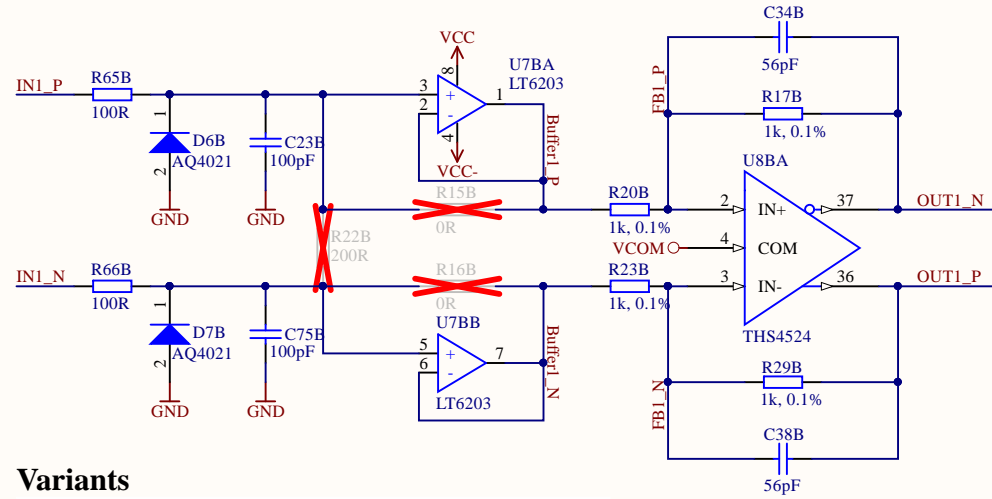


IN P[1..4]	IN P[1..4]
IN N[1..4]	IN N[1..4]
OUT P[1..4]	OUT P[1..4]
OUT N[1..4]	OUT N[1..4]
IN1_P	IN P1
IN1_N	IN N1
IN2_P	IN P2
IN2_N	IN N2
IN3_P	IN P3
IN3_N	IN N3
IN4_P	IN P4
IN4_N	IN N4
OUT1_P	OUT P1
OUT1_N	OUT N1
OUT2_P	OUT P2
OUT2_N	OUT N2
OUT3_P	OUT P3
OUT3_N	OUT N3
OUT4_P	OUT P4
OUT4_N	OUT N4
FB1_P	
FB1_N	
FB2_P	
FB2_N	
FB3_P	
FB3_N	
FB4_P	
FB4_N	
Buffer1_P	
Buffer2_P	
Buffer3_P	
Buffer4_P	
Buffer1_N	
Buffer2_N	
Buffer3_N	
Buffer4_N	



! Use at least 0.1% precision resistors for R20, R23, R17, R29

! Use TVS-diodes GBL05CI in bidirectional configuration



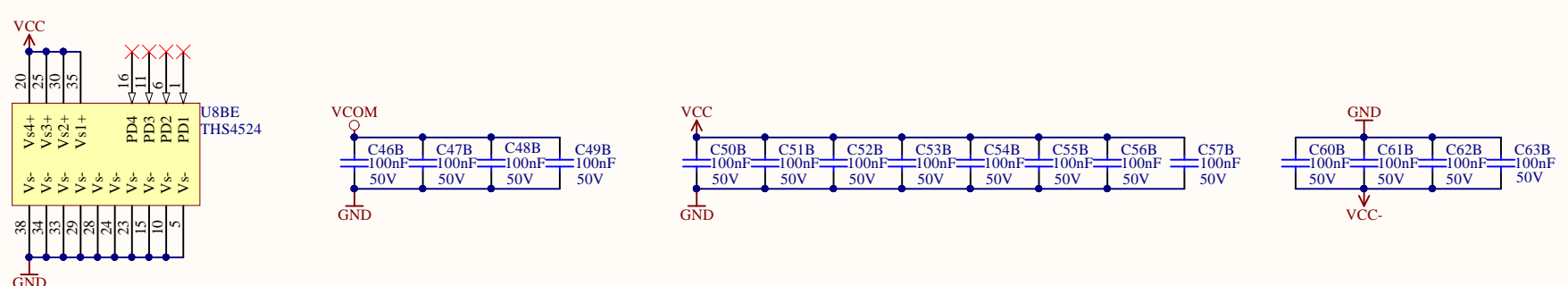
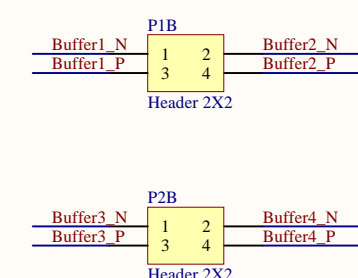
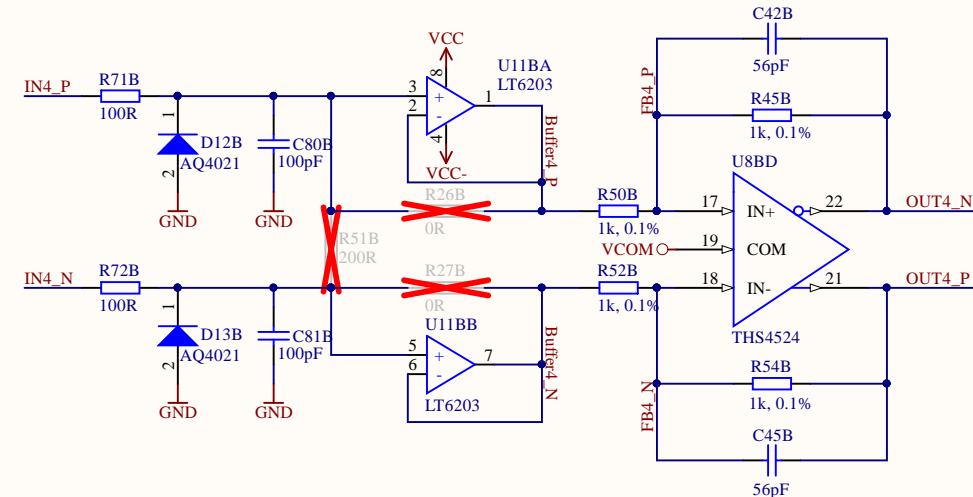
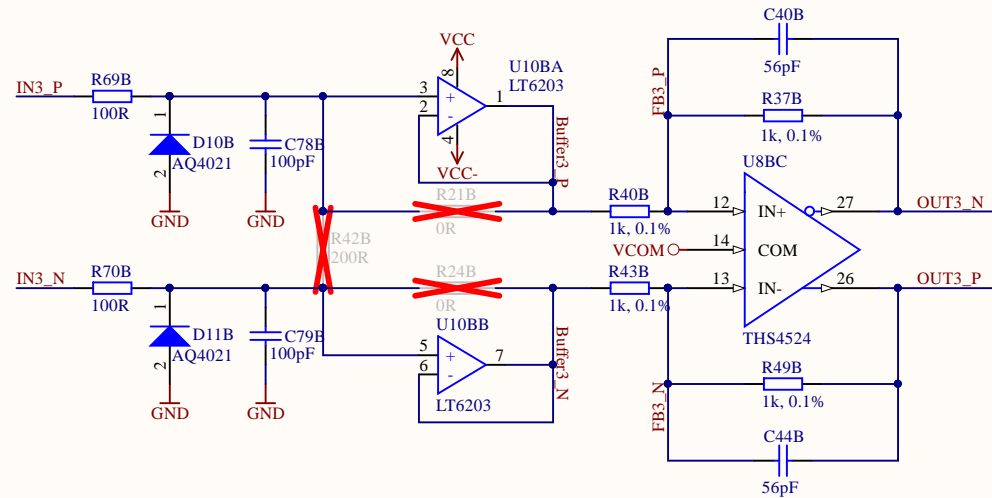
Variants

Without buffer: R15,R16 = 0R; U7 = dnp
R65,R66 = 100R; R22 = dnp

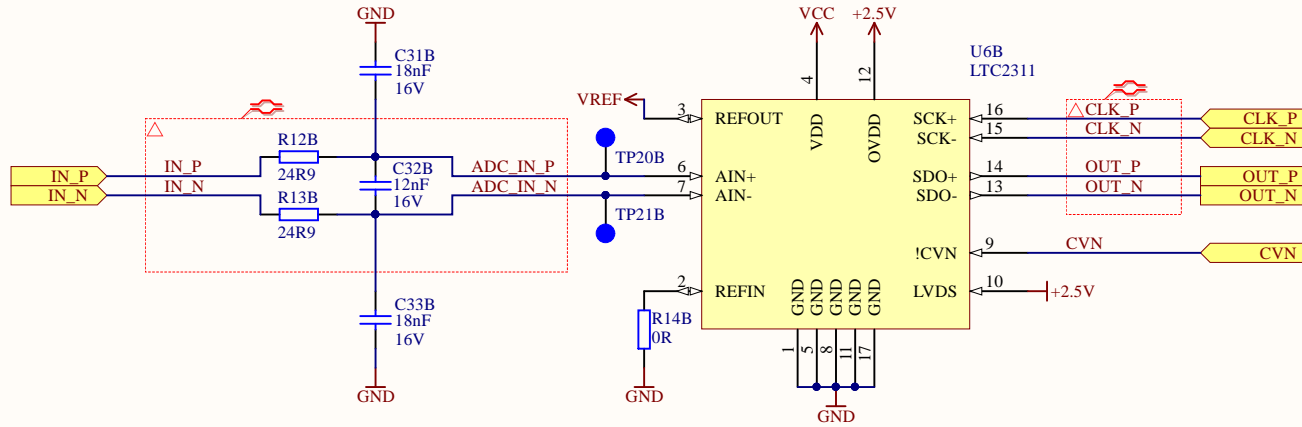
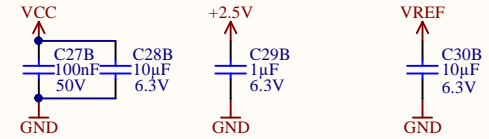
With buffer: R15,R16 = dnp; U7 = placed
R65,R66 = 100R; R22 = dnp

Current signal: R15,R16 = dnp; U7 = placed
R65,R66 = 0R; R22 measurement shunt

IN P[1..4]	IN P[1..4]
IN N[1..4]	IN N[1..4]
OUT P[1..4]	OUT P[1..4]
OUT N[1..4]	OUT N[1..4]
IN1_P	IN P1
IN1_N	IN N1
IN2_P	IN P2
IN2_N	IN N2
IN3_P	IN P3
IN3_N	IN N3
IN4_P	IN P4
IN4_N	IN N4
OUT1_P	OUT P1
OUT1_N	OUT N1
OUT2_P	OUT P2
OUT2_N	OUT N2
OUT3_P	OUT P3
OUT3_N	OUT N3
OUT4_P	OUT P4
OUT4_N	OUT N4
FB1_P	
FB1_N	
FB2_P	
FB2_N	
FB3_P	
FB3_N	
FB4_P	
FB4_N	
Buffer1_P	
Buffer2_P	
Buffer3_P	
Buffer4_P	
Buffer1_N	
Buffer2_N	
Buffer3_N	
Buffer4_N	

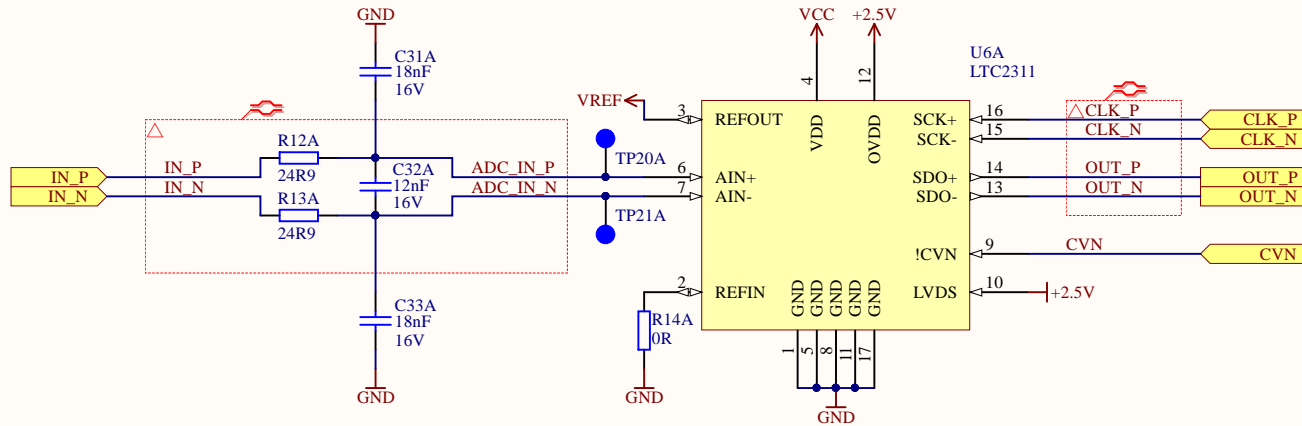
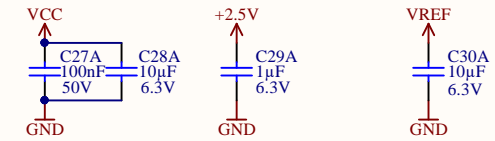


ADC can provide internal 4.096V reference. For that purpose R14 has to be replaced by 10u capacitor



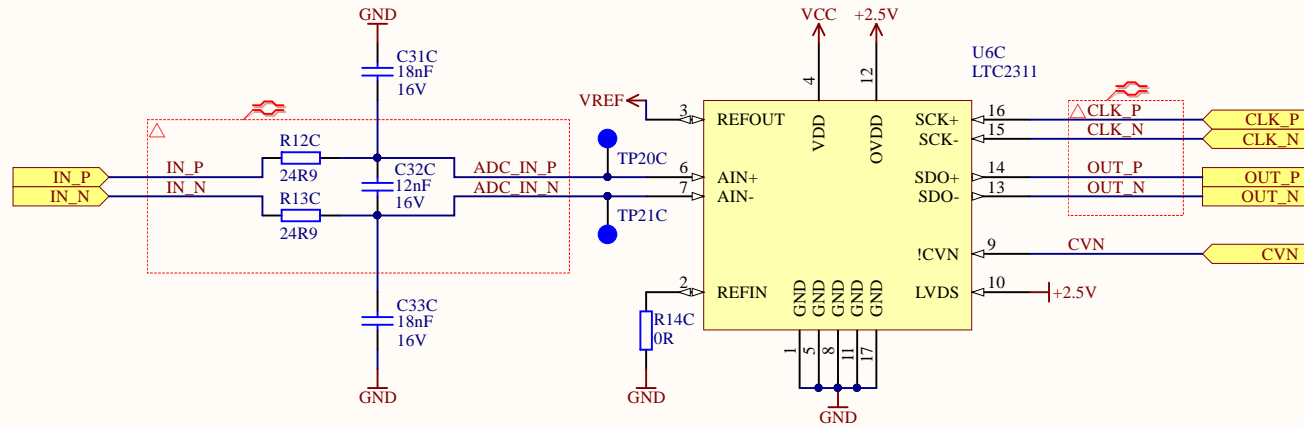
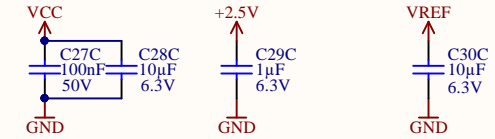
Title ADC.SchDoc		TU München Arcisstraße 21 80333 München GERMANY		
Size: A4	Revision: 3v03			
Date: 24.09.2020	Time: 08:28:16	Sheet 4.1 of 14	Author: Simon Lukas	
Project: UltraZohm_ADC.PrjPCB				

ADC can provide internal 4.096V reference. For that purpose R14 has to be replaced by 10u capacitor



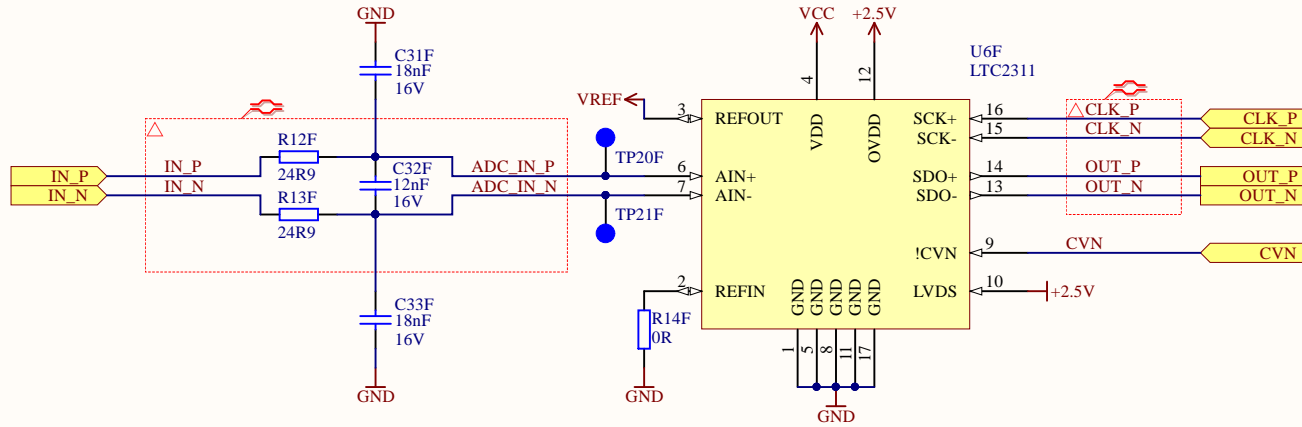
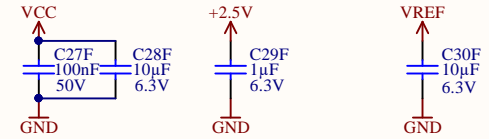
Title ADC.SchDoc		TU München Arcisstraße 21 80333 München GERMANY		
Size: A4	Revision: 3v03			
Date: 24.09.2020	Time: 08:28:16	Sheet 4.1 of 14	Author: Simon Lukas	
Project: UltraZohm_ADC.PrjPCB				

ADC can provide internal 4.096V reference. For that purpose R14 has to be replaced by 10u capacitor



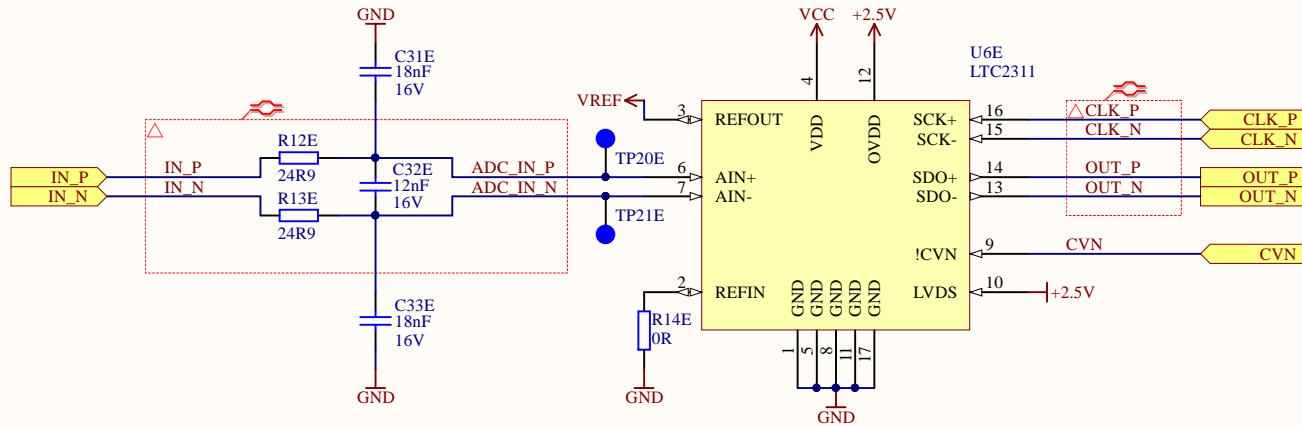
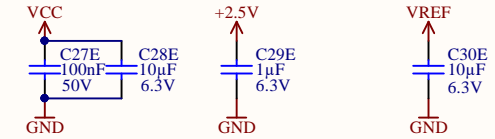
Title ADC.SchDoc		TU München Arcisstraße 21 80333 München GERMANY		
Size: A4	Revision: 3v03			
Date: 24.09.2020	Time: 08:28:16	Sheet 4.2 of 14	Author: Simon Lukas	
Project: UltraZohm_ADC.PrjPCB				

ADC can provide internal 4.096V reference. For that purpose R14 has to be replaced by 10u capacitor



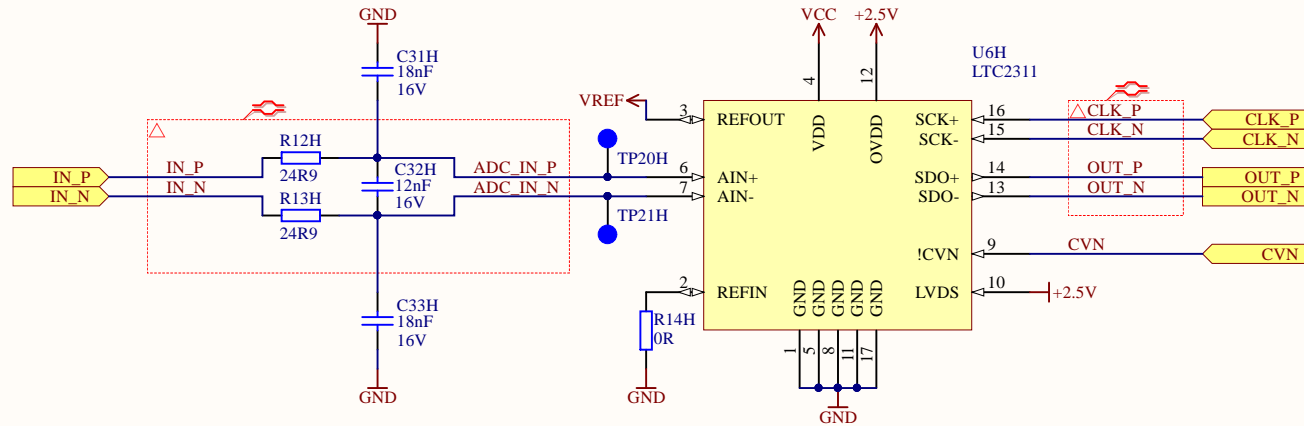
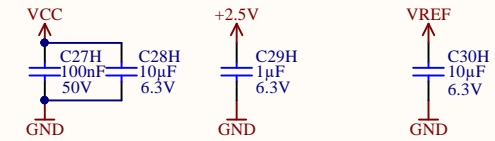
Title ADC.SchDoc		TU München Arcisstraße 21 80333 München GERMANY		
Size: A4	Revision: 3v03			
Date: 24.09.2020	Time: 08:28:16	Sheet 4.3 of 14	Author: Simon Lukas	
Project: UltraZohm_ADC.PrjPCB				

ADC can provide internal 4.096V reference. For that purpose R14 has to be replaced by 10u capacitor



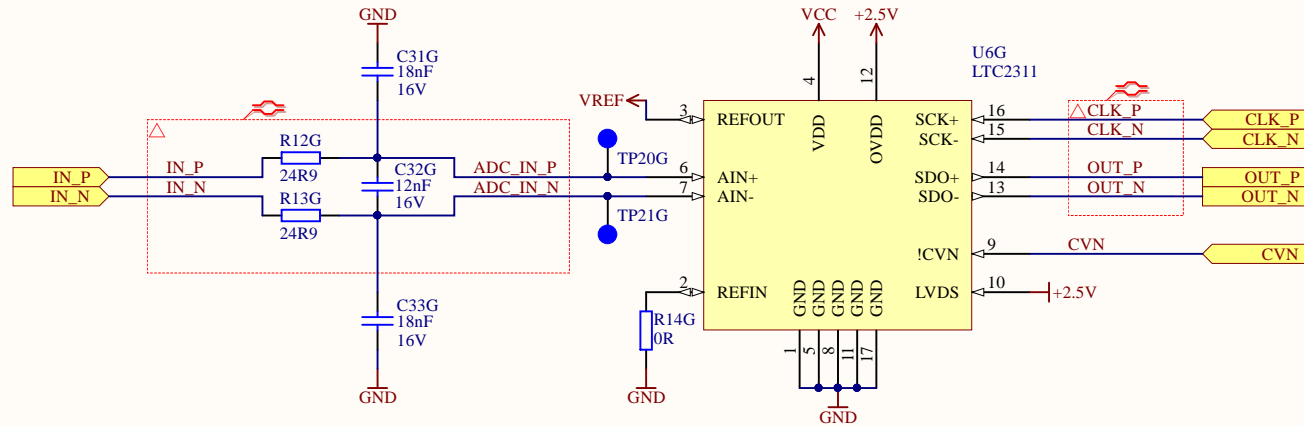
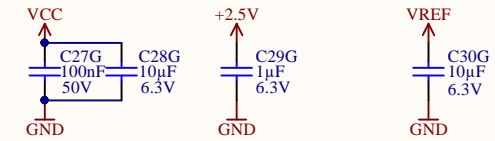
Title ADC.SchDoc		TU München Arcisstraße 21 80333 München GERMANY		
Size: A4	Revision: 3v03			
Date: 24.09.2020	Time: 08:28:17	Sheet 4.3 of 14	Author: Simon Lukas	
Project: UltraZohm_ADC.PrjPCB				

ADC can provide internal 4.096V reference. For that purpose R14 has to be replaced by 10u capacitor



Title ADC.SchDoc		TU München Arcisstraße 21 80333 München GERMANY		
Size: A4	Revision: 3v03			
Date: 24.09.2020	Time: 08:28:17	Sheet 4.4 of 14	Author: Simon Lukas	
Project: UltraZohm_ADC.PrjPCB				

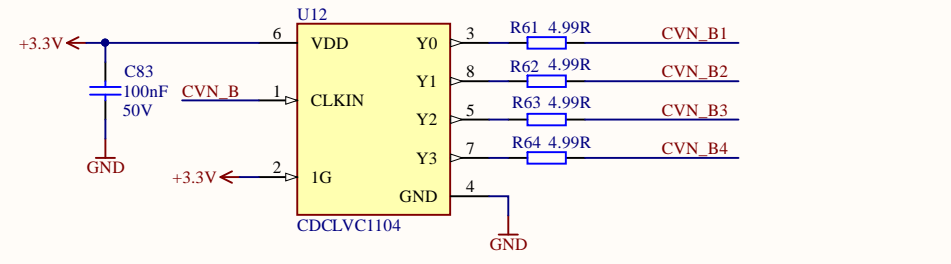
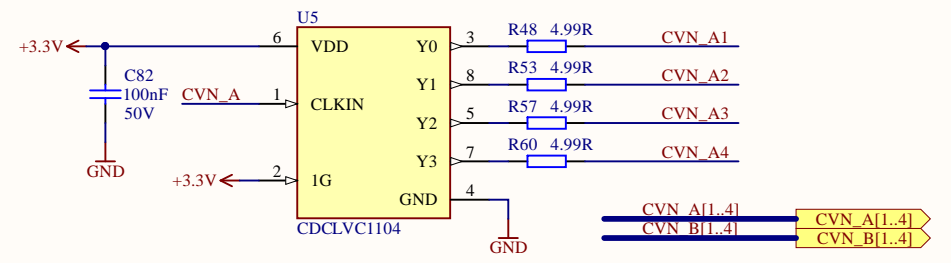
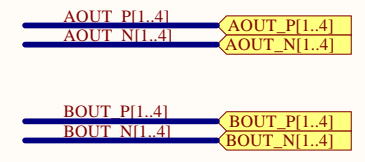
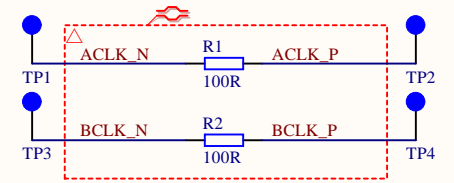
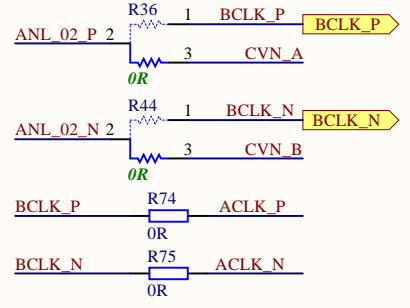
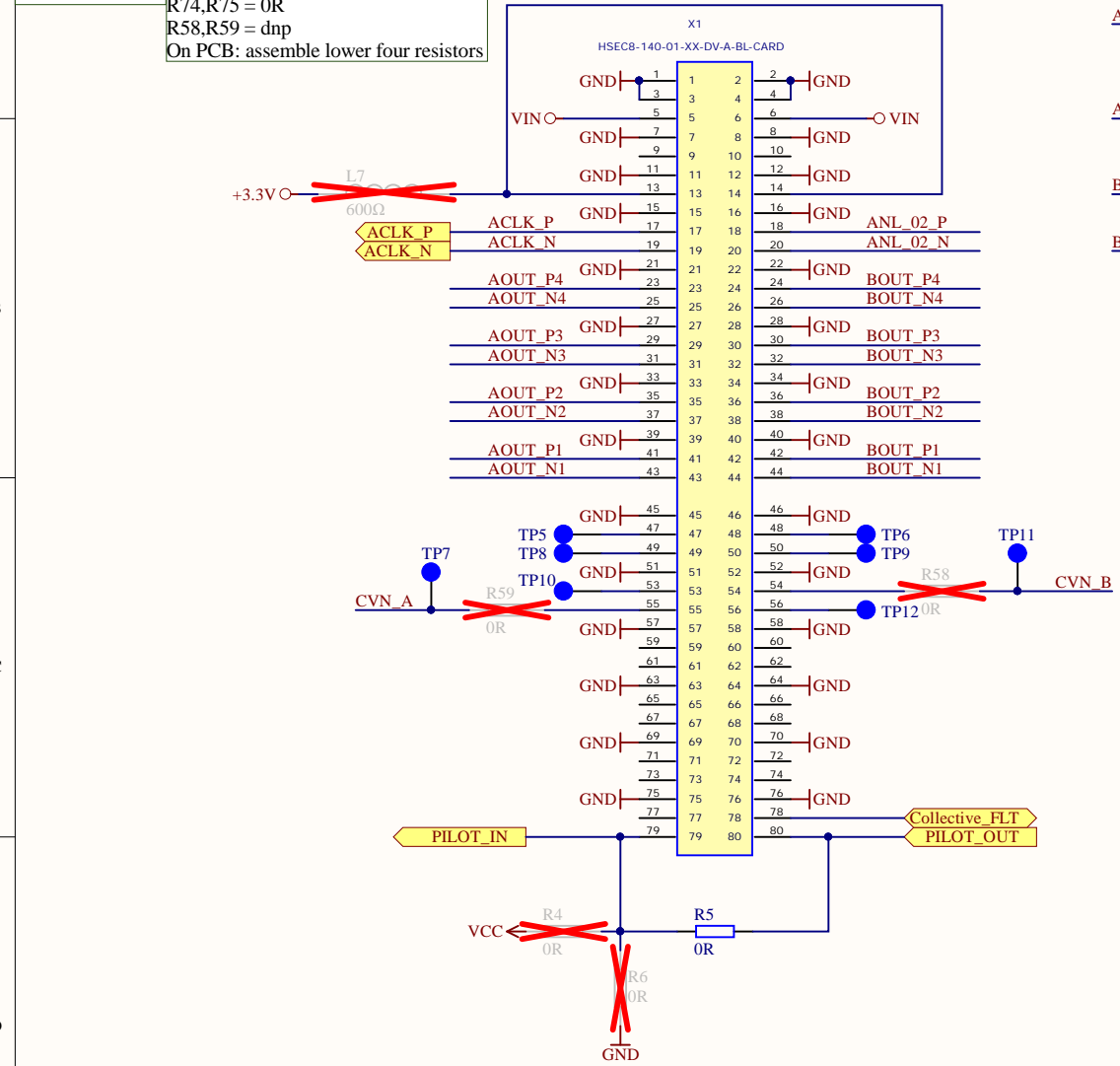
ADC can provide internal 4.096V reference. For that purpose R14 has to be replaced by 10u capacitor

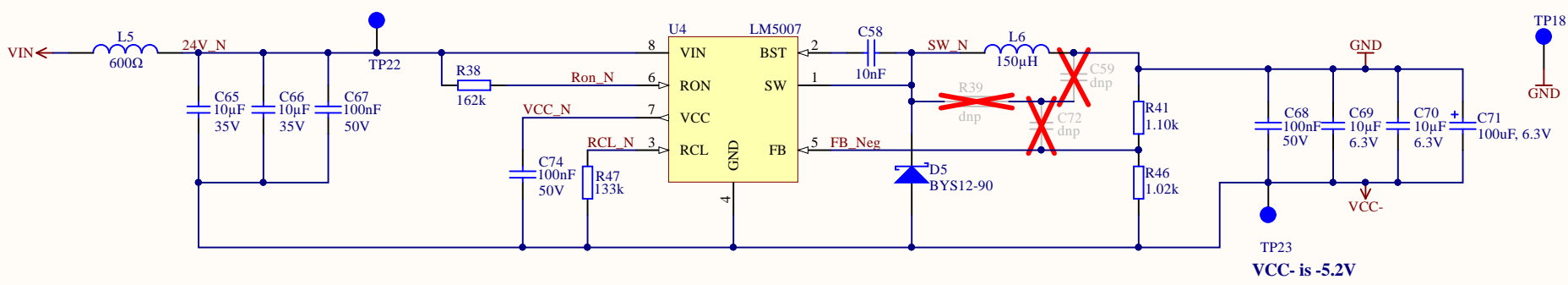
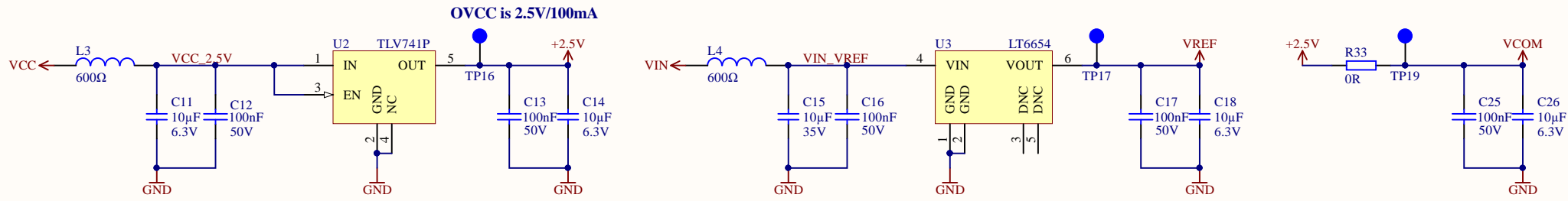
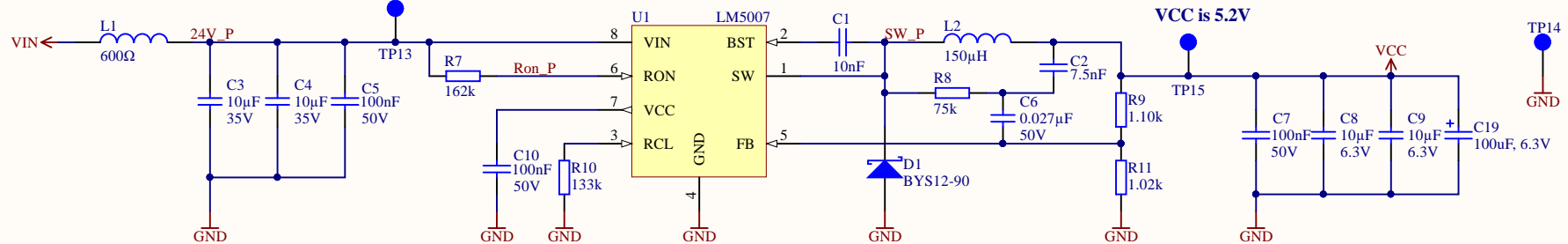


Title ADC.SchDoc		TU München Arcisstraße 21 80333 München GERMANY		
Size: A4	Revision: 3v03			
Date: 24.09.2020	Time: 08:28:17	Sheet 4.4 of 14	Author: Simon Lukas	
Project: UltraZohm_ADC.PrjPCB				

Shared Conversion
 R36 = up ANL_02_P -- BCLK_P
 R44 = up ANL_02_N -- BCLK_N
 R74,R75 = dnp
 R58,R59 = 0R
 On PCB: assemble upper two resistors

Single Clock Pair
 R36 = down ANL_02_P -- CVN_A
 R44 = down ANL_02_N -- CVN_B
 R74,R75 = 0R
 R58,R59 = dnp
 On PCB: assemble lower four resistors





LT6655 is available in 1.25V/2.048V/2.5V/3V/3.3V/4.096V/5V

If the internal reference from LTC2311 (4.096V) is used, U3 must not be fitted

For +/-5.0V rails use 1kOhm resistors (CRCW06031K00JNEAC) for R6, R8, R12, R14

Title Power.SchDoc		TU München Arcisstraße 21 80333 München GERMANY	
Size: A4	Revision: 3v03	Sheet 6 of 14	
Date: 24.09.2020	Time: 08:28:17		
Project: UltraZohm_ADC.PrjPCB			

