

# INDEX

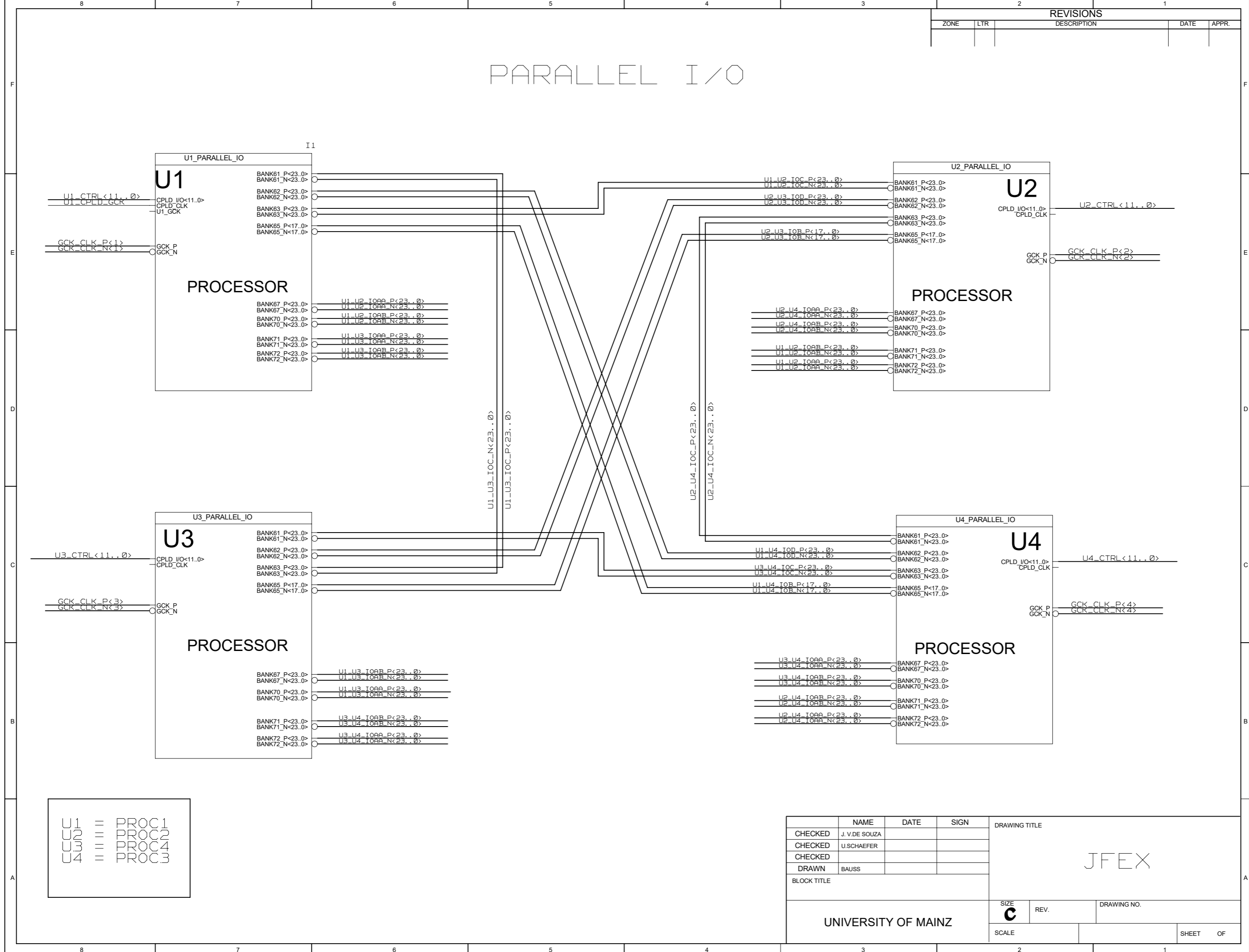
PAGE(S)	FUNCTION
2	PARALLEL I/O BLOCK
3	MGT REAL TIME PATH BLOCK
4	IPBUS, JTAG, POWER, CLOCK, CONFIG, IPMC BLOCK
5	MEZZANINE CONNECTOR
6 - 10	U1 PARALLEL I/O
11	CLOCK LVDS LVCMOS MODUL
12 - 16	U2 PARALLEL I/O
17 - 21	U3 PARALLEL I/O
22 - 26	U4 PARALLEL I/O
27 - 33	U1 MGT REALTIME HIGH SPEED OPTICAL LINKS
34	AC COUPLING HIGH SPEED LINKS
35	AVAGO RECEIVER
36	AVAGO TRANSMITTER
37 - 43	U2 MGT REALTIME HIGH SPEED OPTICAL LINKS
44 - 50	U3 MGT REALTIME HIGH SPEED OPTICAL LINKS
51 - 57	U4 MGT REALTIME HIGH SPEED OPTICAL LINKS
58	ATCA POWER IN AND POWER CONTROL
59	POWERSUPPLY PMBUS CONNECTION
60	POWERSEQUENCING CPLD, VOLTAGE MONITOR, SUPERVISOR
61	POWERSUPPLY BOARDLEVEL
62	POWERSUPPLY U1
63	POWERSUPPLY U2
64	POWERSUPPLY U3
65	POWERSUPPLY U4
66	CPLD CLOCK
67	POWERSUPPLY MIC68400 MODUL
68	POWER DECOUPLING MODUL
69	MGT1 CLOCK
70	MGT2 CLOCK
71	MGT3 CLOCK
72	MGT4 CLOCK
73	GLOBAL CLOCK
74	LHC CLOCK
75	CLOCK CML FANOUT6 AC
76	CLOCK CML FANOUT6 DC
77	CLOCK LVDS FANOUT8
78	CLOCK LVPECL AC
79 - 81	IPMC
82	CONTROL AND CONFIG CPLD
83 - 86	U1, U2, U3, U4 CONFIG
87	IPBUS CONNECTION
88	JTAG CHAIN

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

CHECKED	NAME	DATE	SIGN	DRAWING TITLE		
CHECKED	J. V. DE SOUZA					
CHECKED	U. SCHAEFER					
CHECKED						
DRAWN	BAUSS			JFEX		
BLOCK TITLE						
UNIVERSITY OF MAINZ				SIZE	REV.	DRAWING NO.
				C		
SCALE				SHEET	OF	

# PARALLEL I/O

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

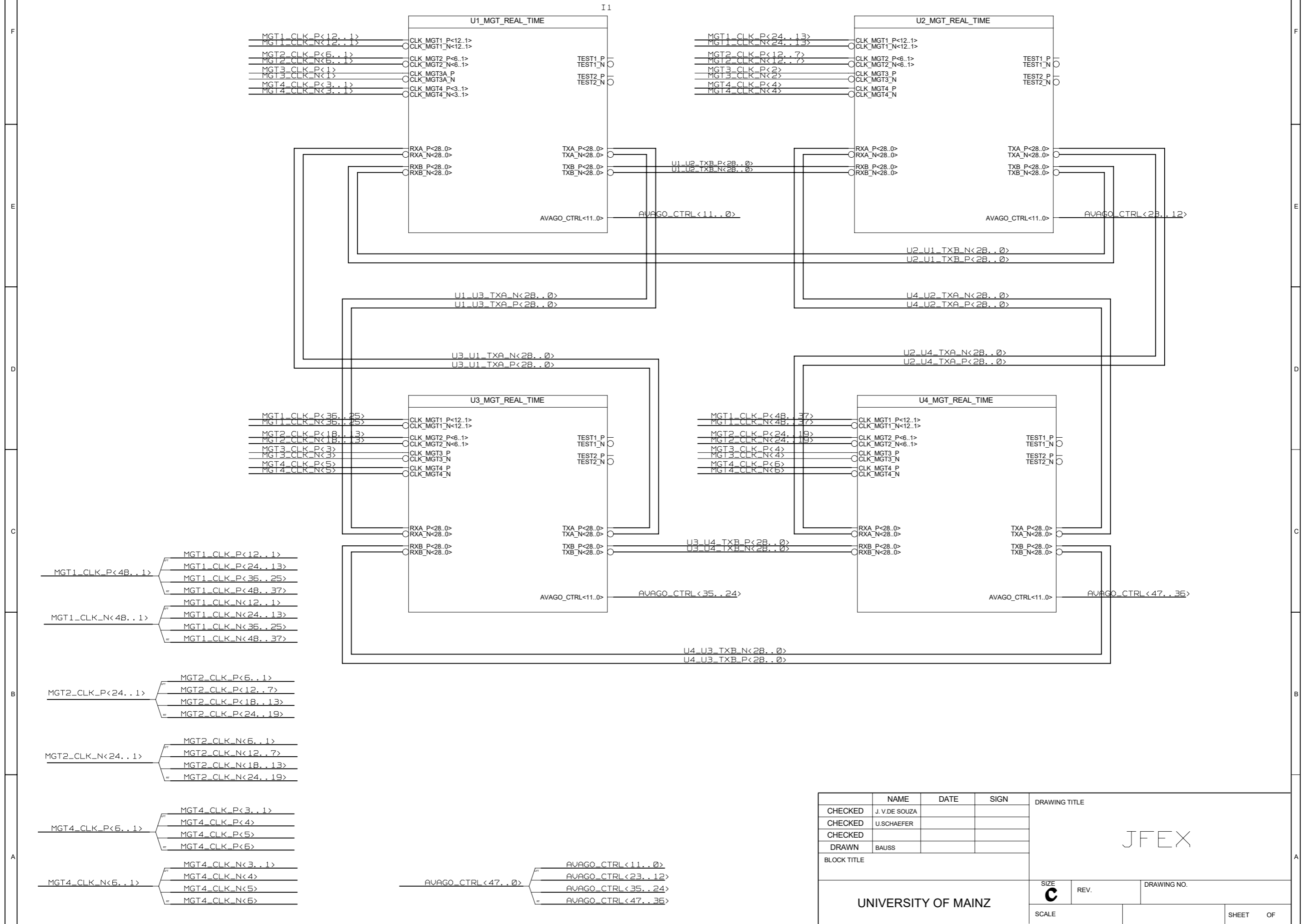


U1 = PROC1  
 U2 = PROC2  
 U3 = PROC4  
 U4 = PROC3

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS			
BLOCK TITLE			
UNIVERSITY OF MAINZ			SIZE
			SCALE
REV.		DRAWING NO.	
SHEET		OF	

# MGT REAL TIME

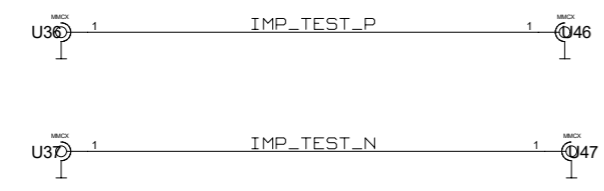
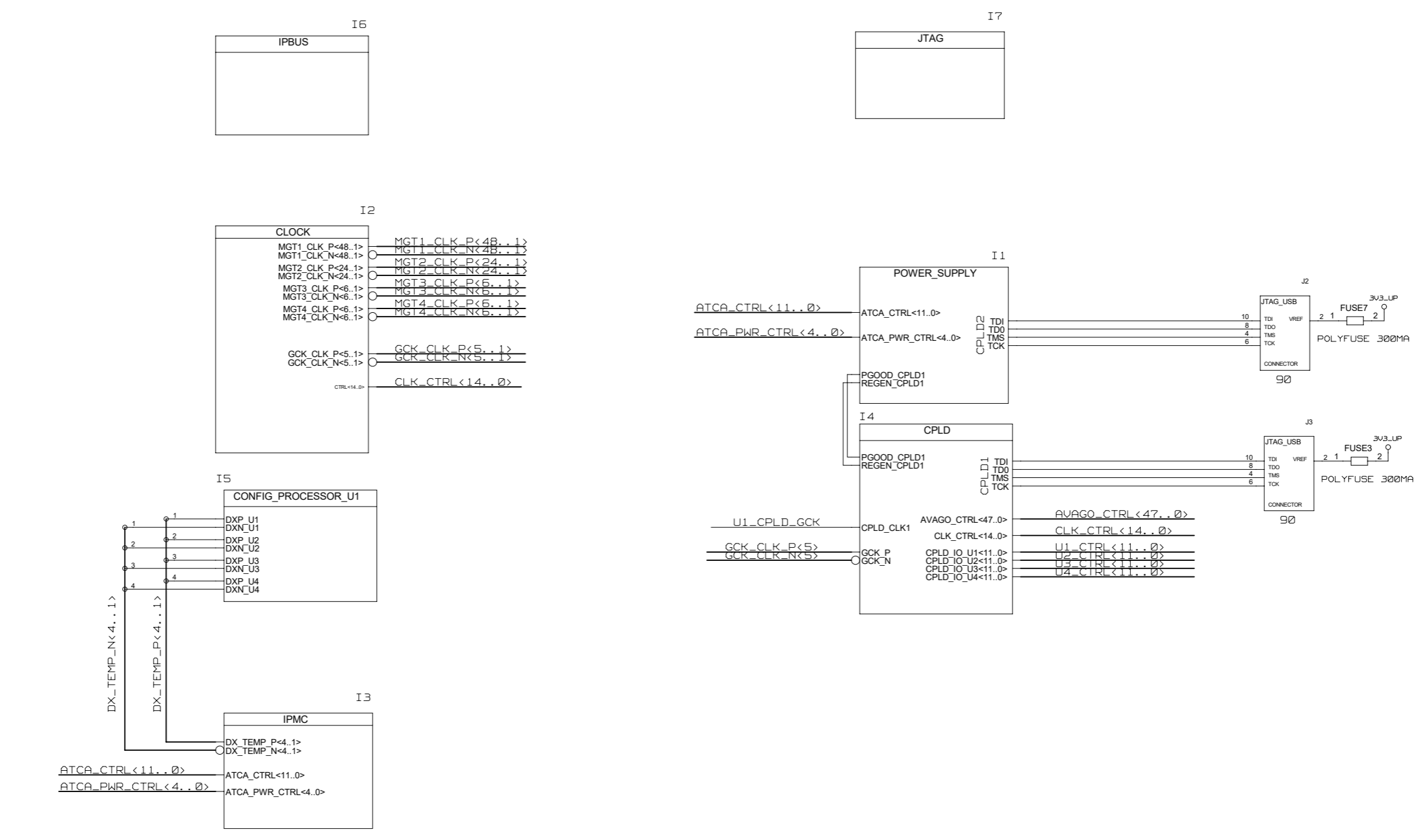
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



NAME	DATE	SIGN	DRAWING TITLE									
CHECKED	J. V. DE SOUZA		JFEX									
CHECKED	U. SCHAEFER											
CHECKED												
DRAWN	BAUSS											
BLOCK TITLE												
UNIVERSITY OF MAINZ			<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">SIZE</td> <td style="width: 20%;">REV.</td> <td style="width: 60%;">DRAWING NO.</td> </tr> <tr> <td style="text-align: center; font-size: 1.5em;">C</td> <td> </td> <td> </td> </tr> <tr> <td>SCALE</td> <td> </td> <td>SHEET OF</td> </tr> </table>	SIZE	REV.	DRAWING NO.	C			SCALE		SHEET OF
SIZE	REV.	DRAWING NO.										
C												
SCALE		SHEET OF										

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

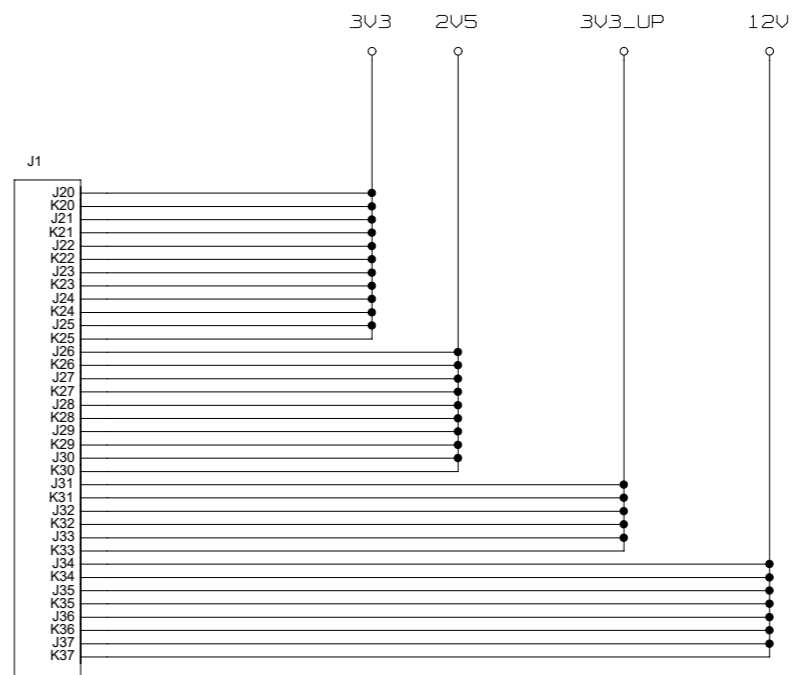
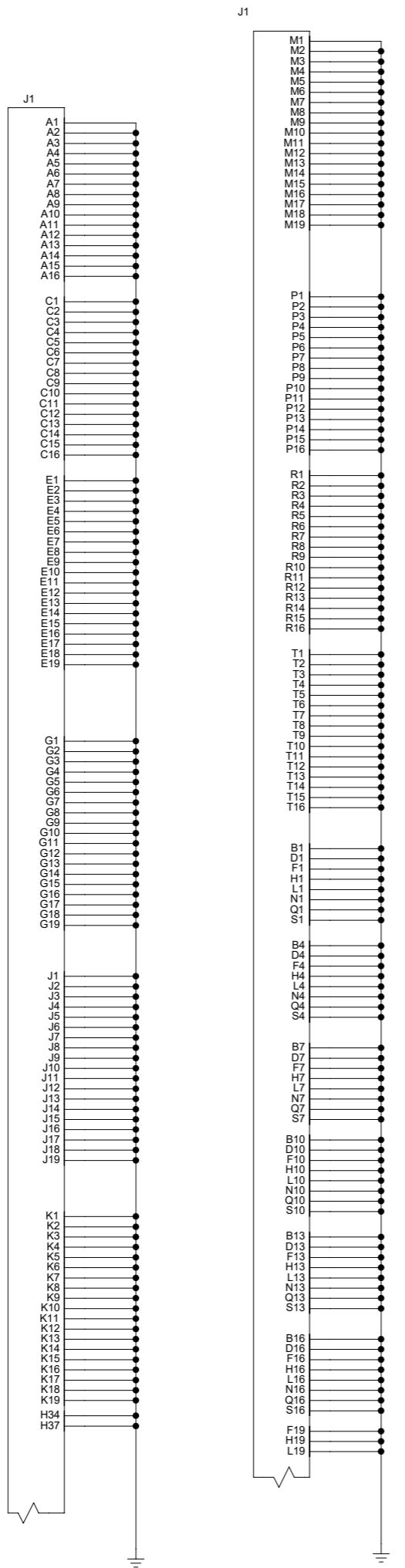
# CLOCK, CONFIG, POWER, JTAG, IPMC



NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA		JFEX
CHECKED	U. SCHAEFER		
CHECKED			
DRAWN	BAUSS		
BLOCK TITLE			
UNIVERSITY OF MAINZ			SIZE: <b>C</b>
SCALE		REV.	DRAWING NO.
SHEET		OF	

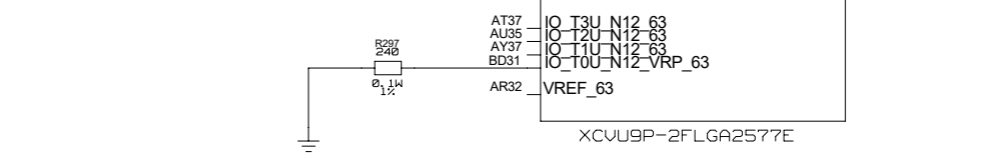
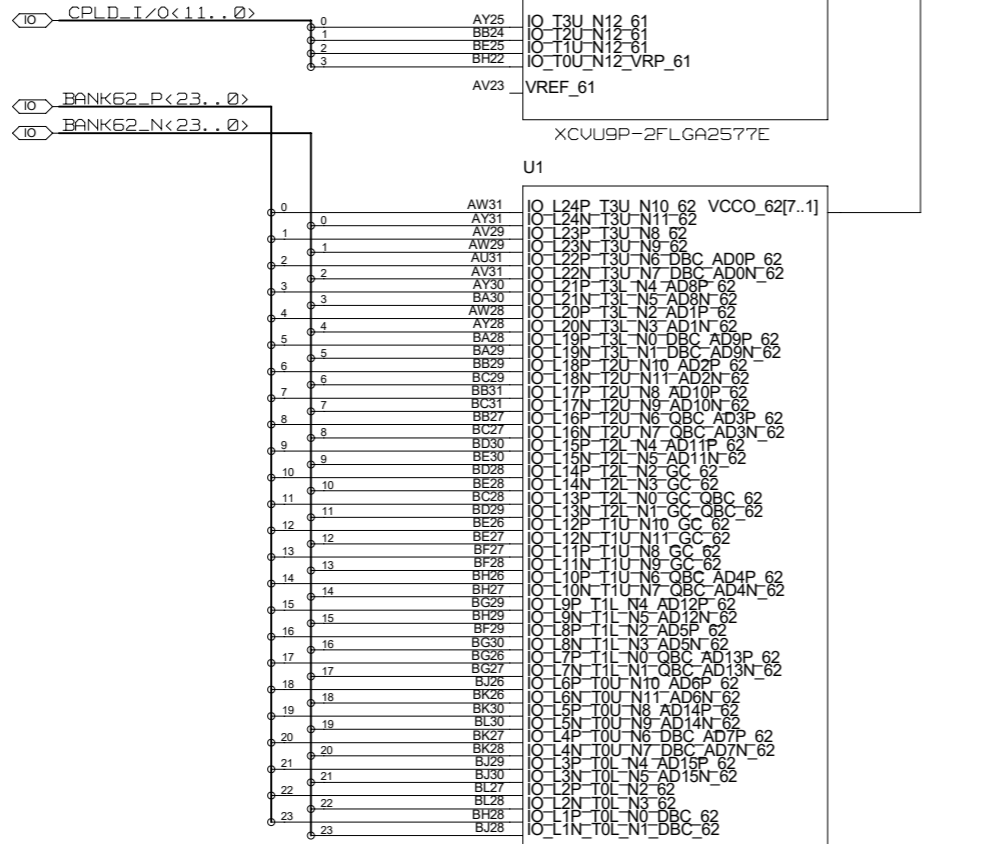
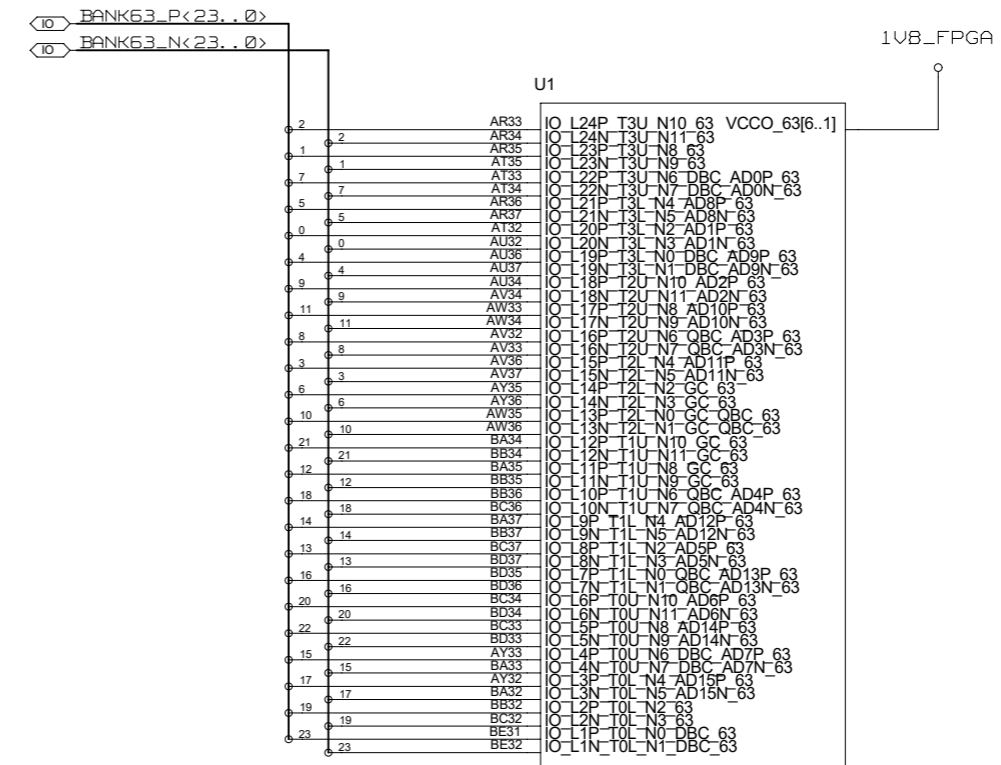
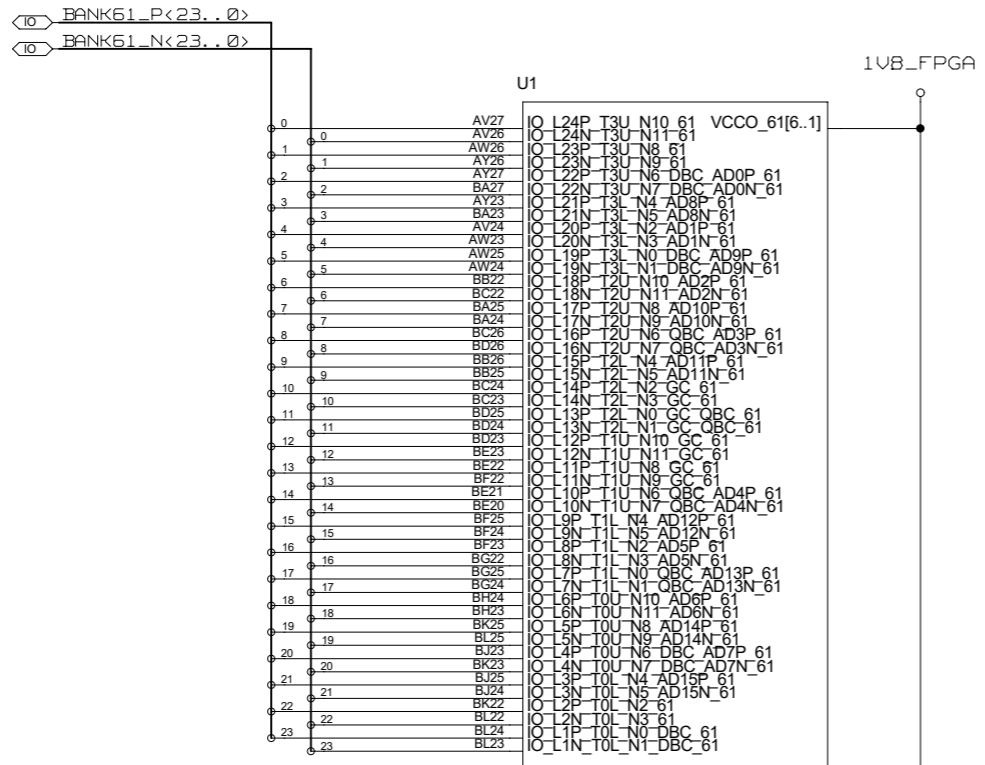
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# MEZZANINE CONNECTOR GND AND VCC



CHECKED	NAME	DATE	SIGN	DRAWING TITLE  <h1>JFEX</h1>		
CHECKED	J. V. DE SOUZA					
CHECKED	U. SCHAEFER					
CHECKED	BAUSS					
DRAWN						
BLOCK TITLE				SIZE	REV.	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>		
SCALE						SHEET OF

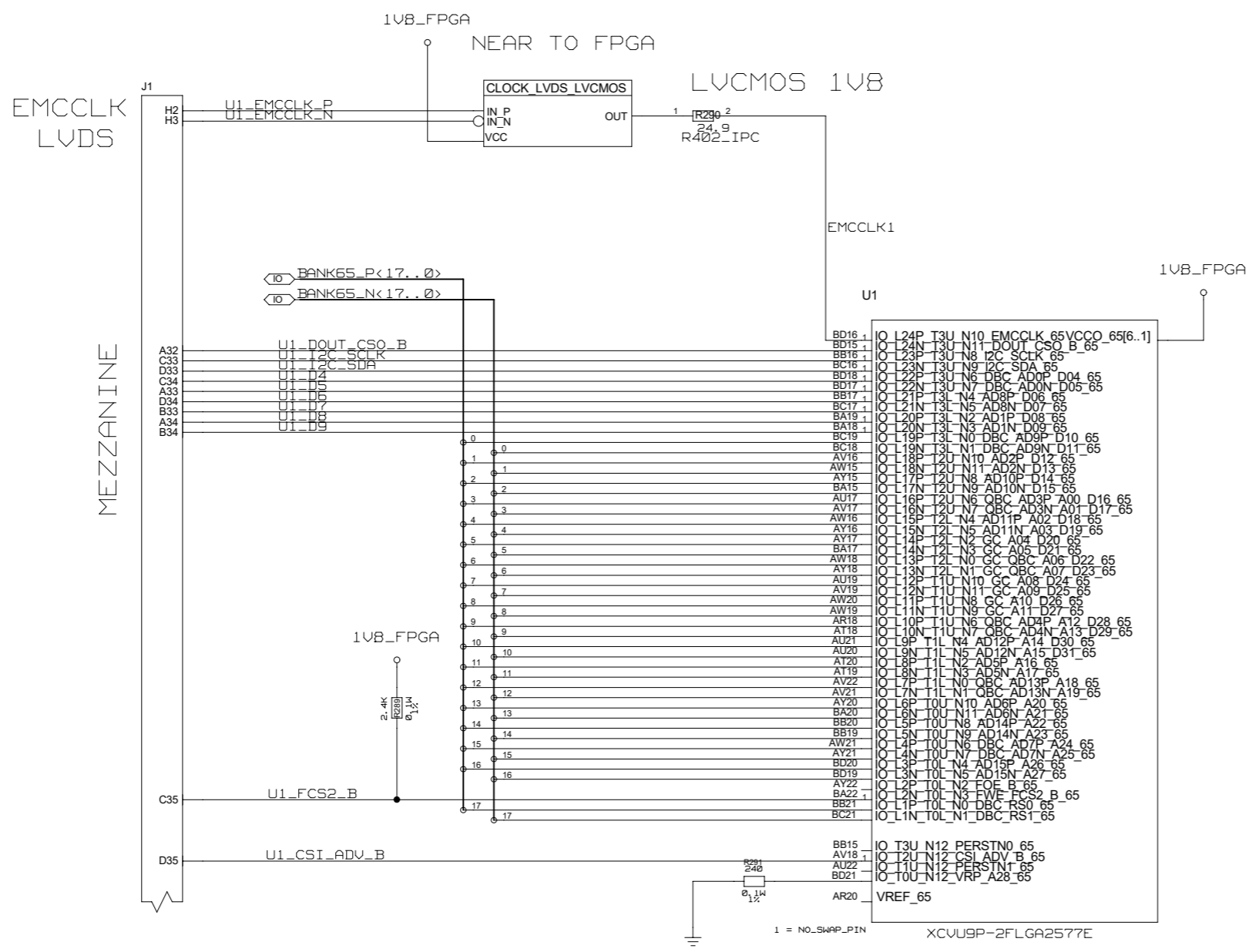
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK  
61  
62  
63

NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J.V.DE SOUZA		JFEX
CHECKED	U.SCHAEFER		
CHECKED			
DRAWN	BAUSS	25.08.2015	
BLOCK TITLE			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
SCALE		SHEET 1 OF 5	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

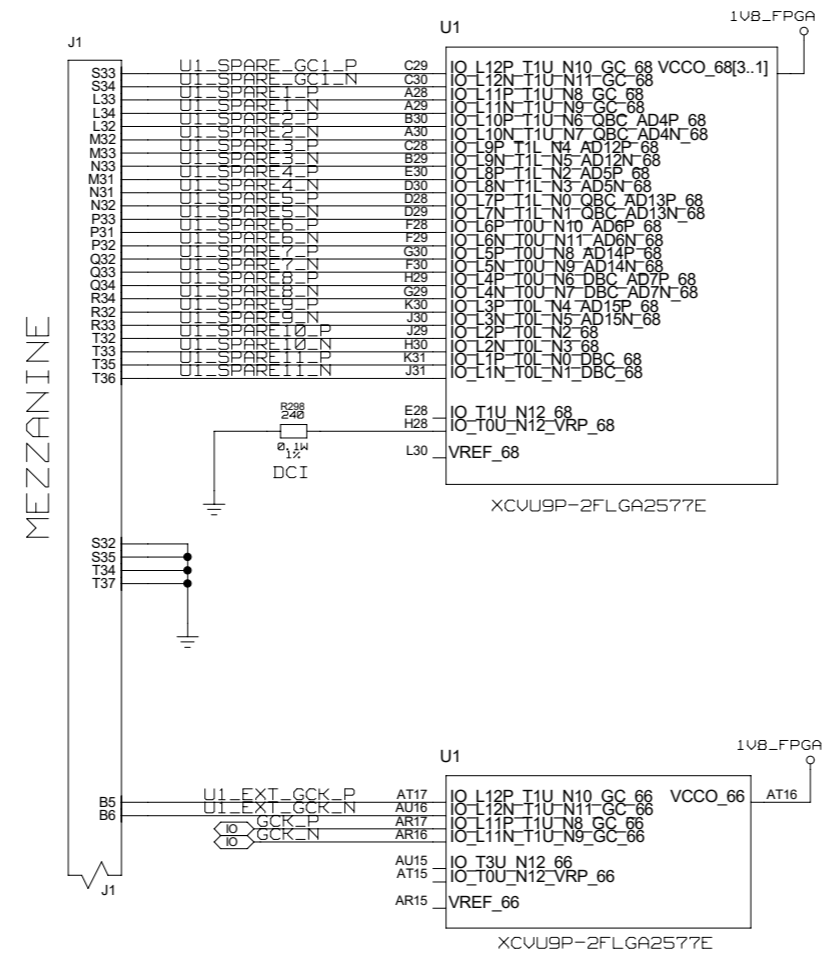


MEZZANINE

BANK  
65

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS	25. 08. 2015		
BLOCK TITLE			
U1_PARALLEL_I/O			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE		SHEET 2 OF 5	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

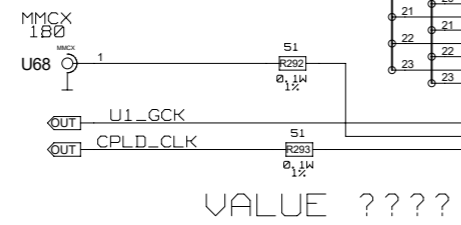
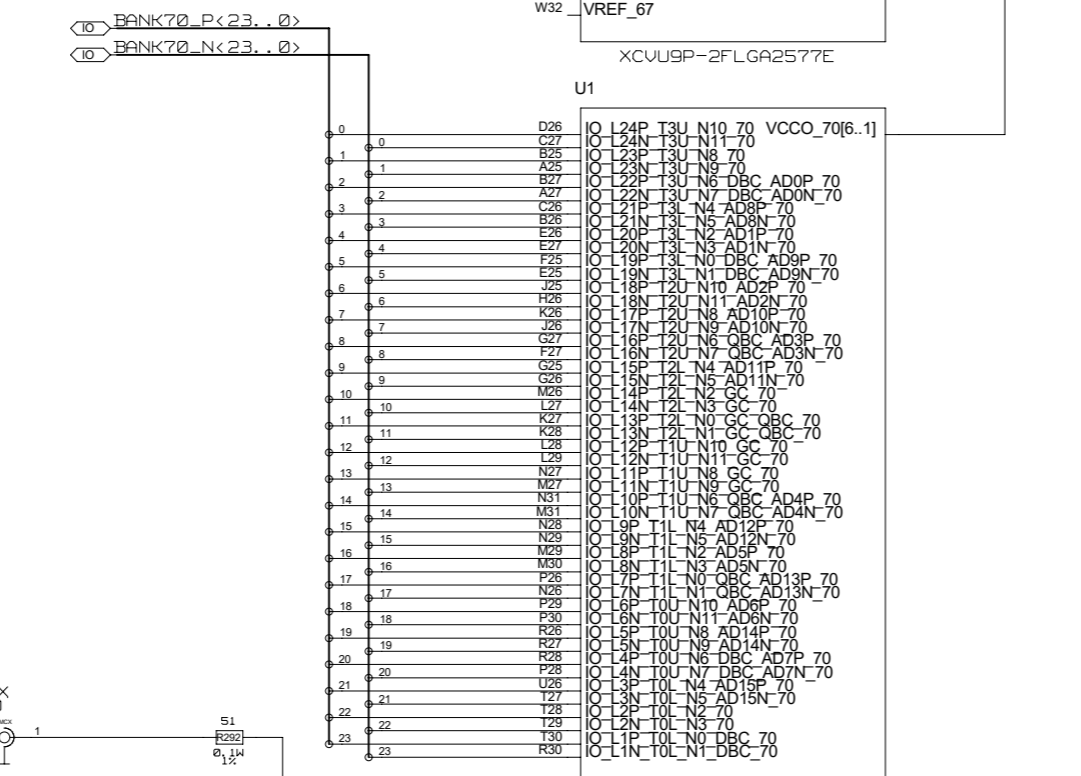
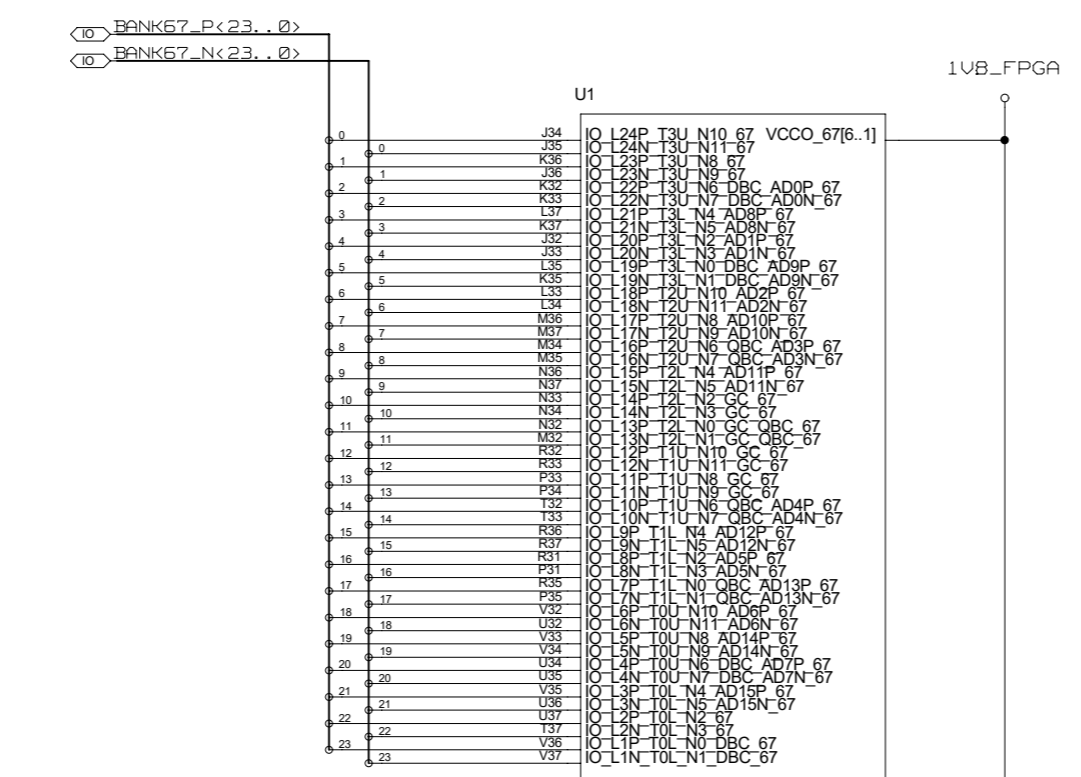


BANK
66
68

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS	25. 08. 2015		
BLOCK TITLE			
U1_PARALLEL_I/O			
UNIVERSITY OF MAINZ			SIZE <b>C</b>
			REV.
			DRAWING NO.
			SCALE
			SHEET 3 OF 5



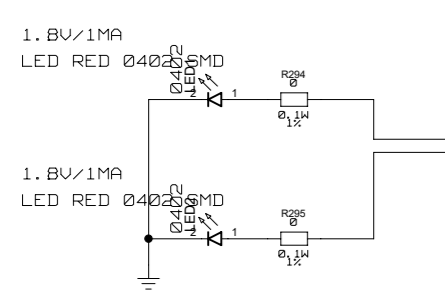
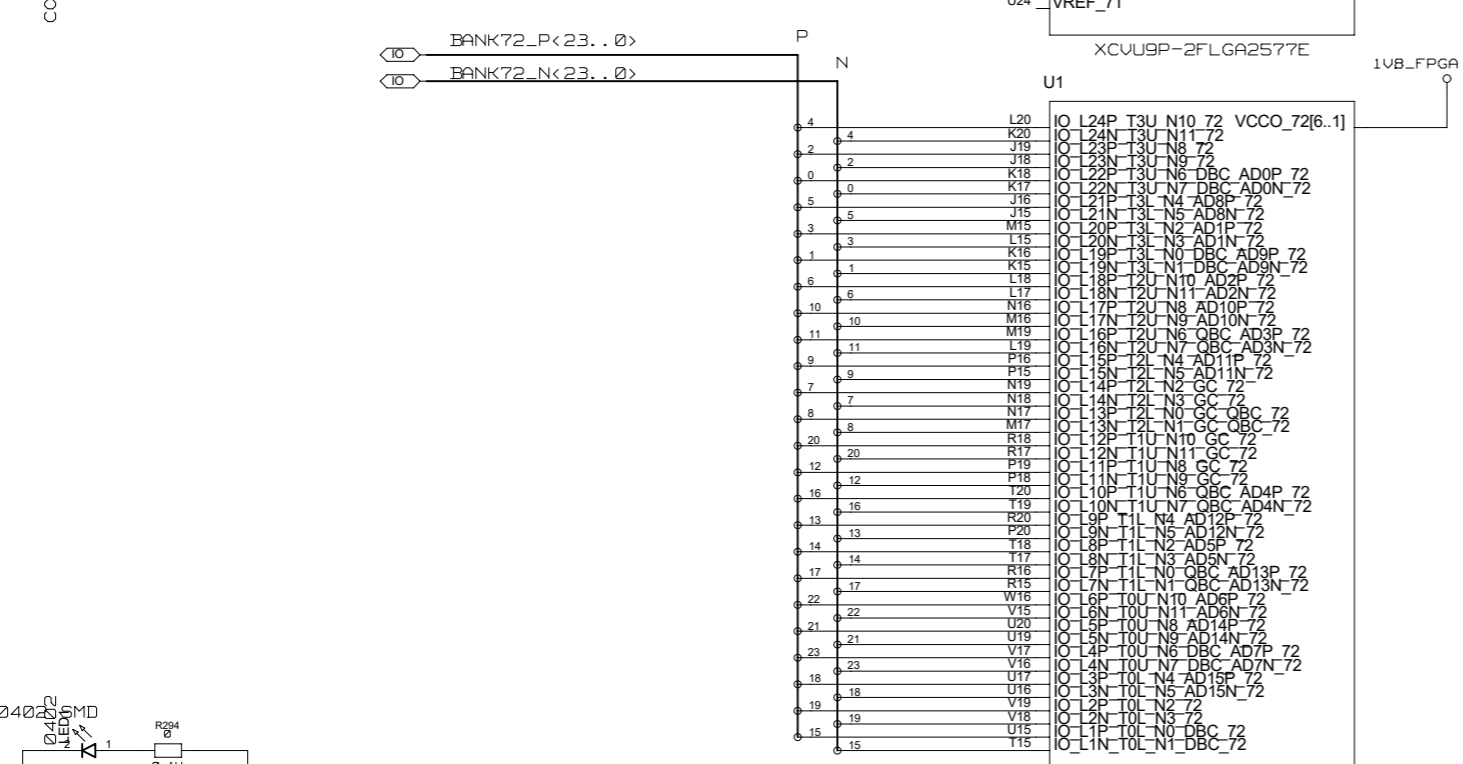
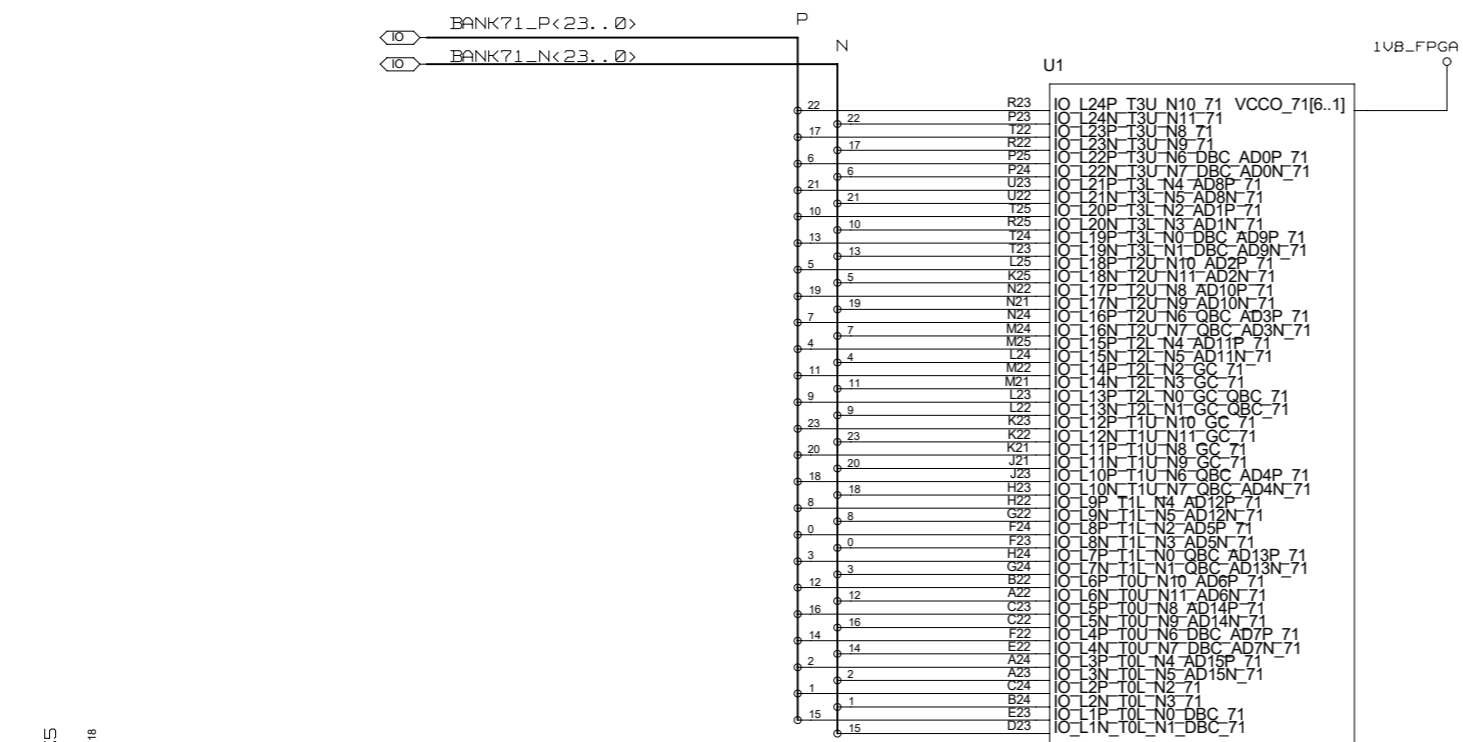
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK  
67  
70

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS	25.08.2015		
BLOCK TITLE			
U1_PARALLEL_I/O			
UNIVERSITY OF MAINZ		SIZE <b>C</b>	DRAWING NO.
SCALE		REV.	SHEET 4 OF 5

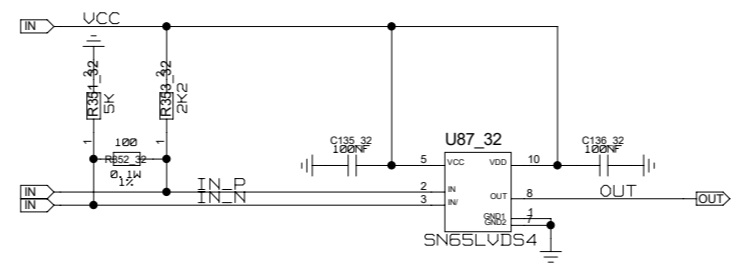
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK  
71  
72

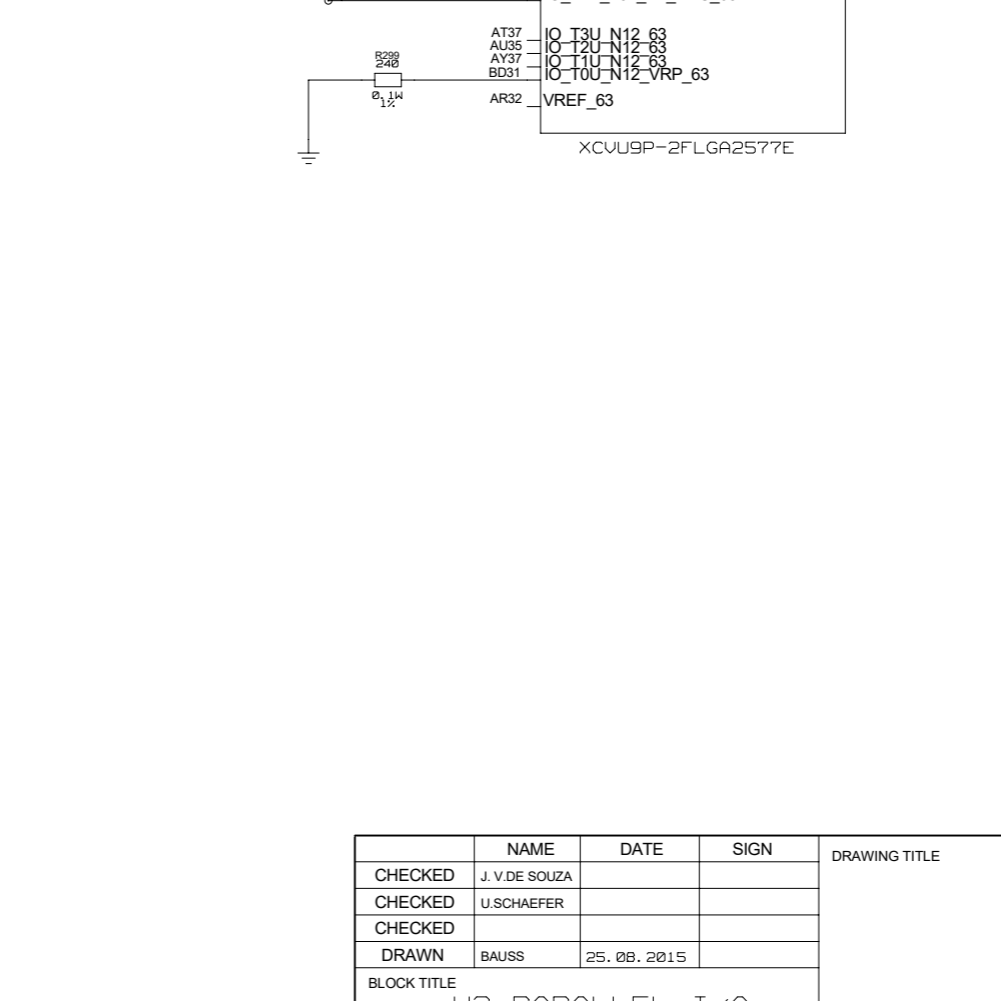
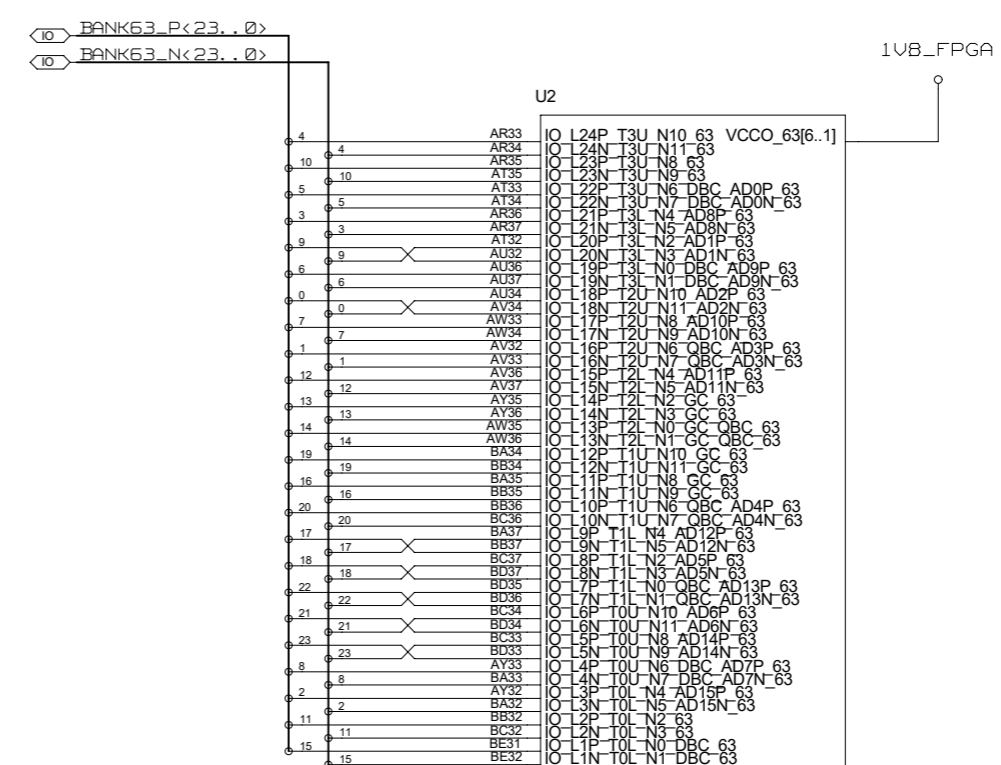
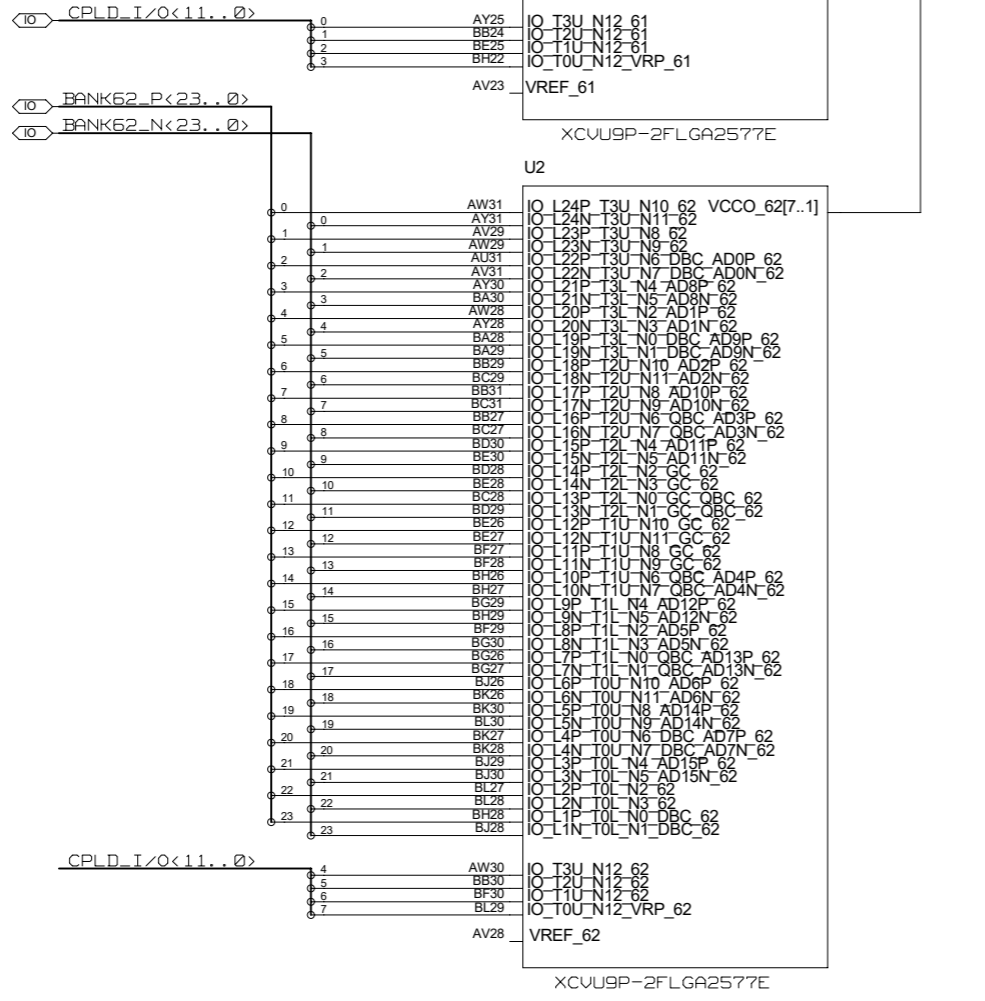
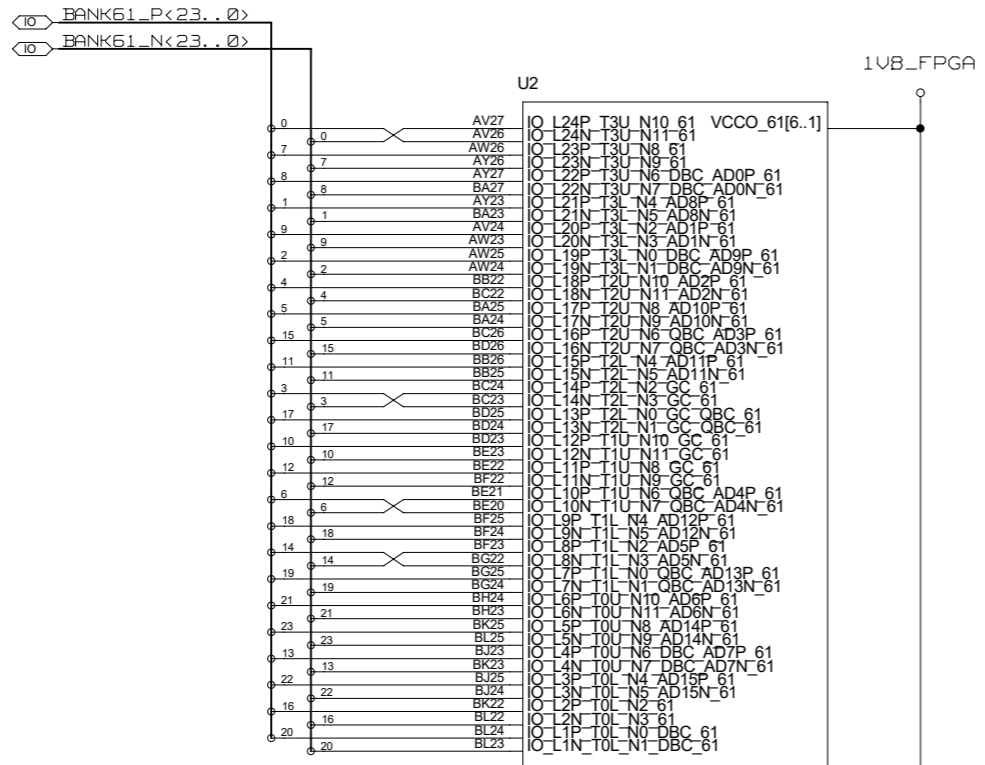
NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS	25.08.2015		
BLOCK TITLE			
U1_PARALLEL_I/O			
UNIVERSITY OF MAINZ		SIZE C	DRAWING NO.
SCALE		REV.	SHEET 5 OF 5

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



CHECKED	NAME	DATE	SIGN	DRAWING TITLE		
CHECKED	J. V. DE SOUZA			JFEX		
CHECKED	U. SCHAEFER					
CHECKED						
DRAWN	BAUSS			BLOCK TITLE		
				CLOCK_LVDS_LVCMOS		
UNIVERSITY OF MAINZ				SIZE	REV.	DRAWING NO.
				C		
				SCALE		SHEET OF

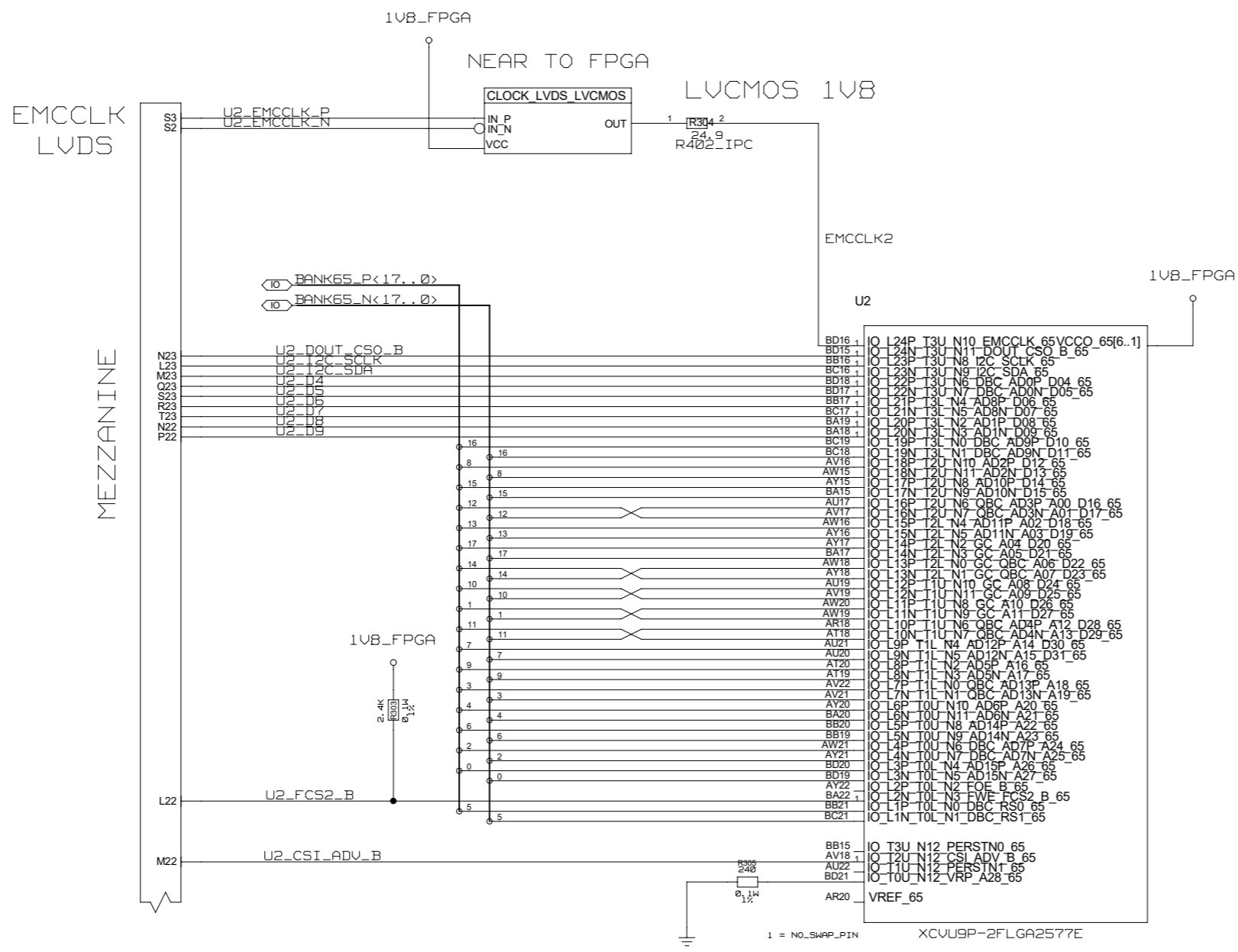
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK  
61  
62  
63

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS	25.08.2015		
BLOCK TITLE			SIZE
U2_PARALLEL_I/O			REV.
UNIVERSITY OF MAINZ			DRAWING NO.
SCALE			SHEET 1 OF 5

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

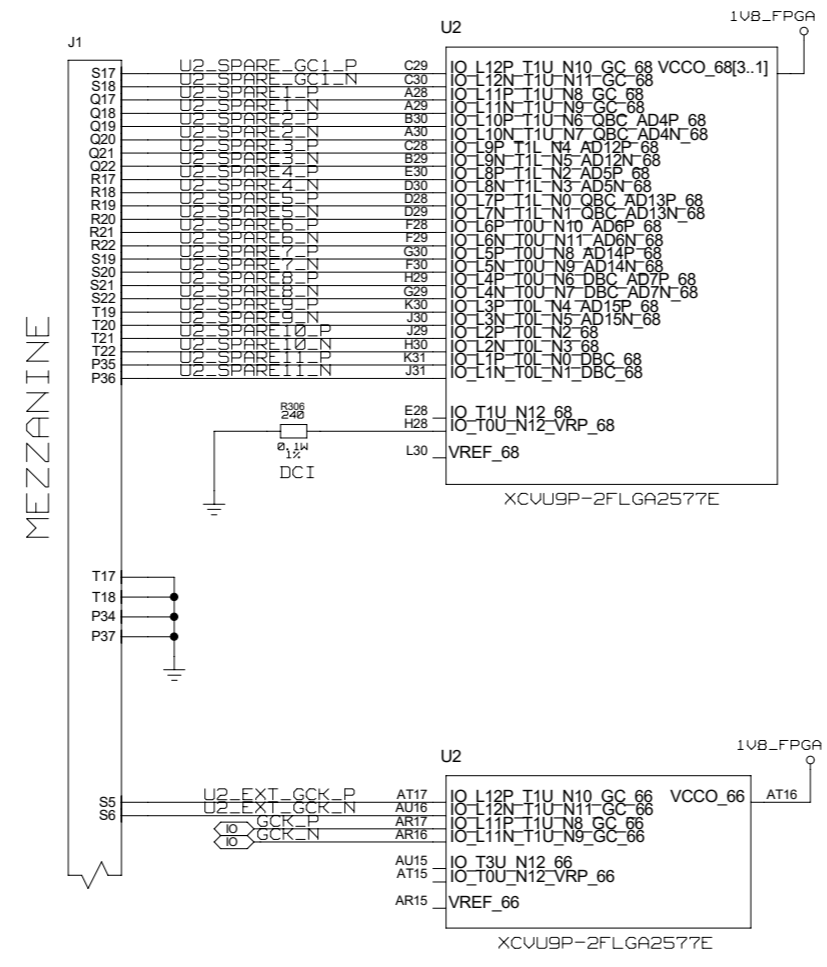


MEZZANINE

BANK  
65

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U.SCHAEFER			
CHECKED			
DRAWN BAUSS	25.08.2015		
BLOCK TITLE			
U2_PARALLEL_I/O			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE			SHEET 2 OF 5

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



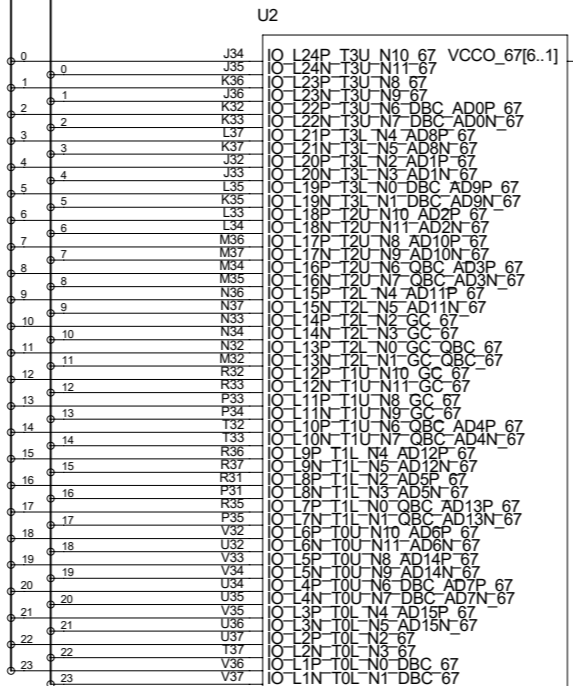
BANK
66
68

NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA		JFEX
CHECKED	U. SCHAEFER		
CHECKED			
DRAWN	BAUSS	25. 08. 2015	
BLOCK TITLE			
U2_PARALLEL_I/O			
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.
SCALE		DRAWING NO.	
		SHEET 3 OF 5	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

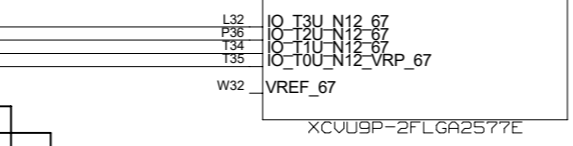
BANK67\_P<23..0>  
BANK67\_N<23..0>

1UB\_FPGA

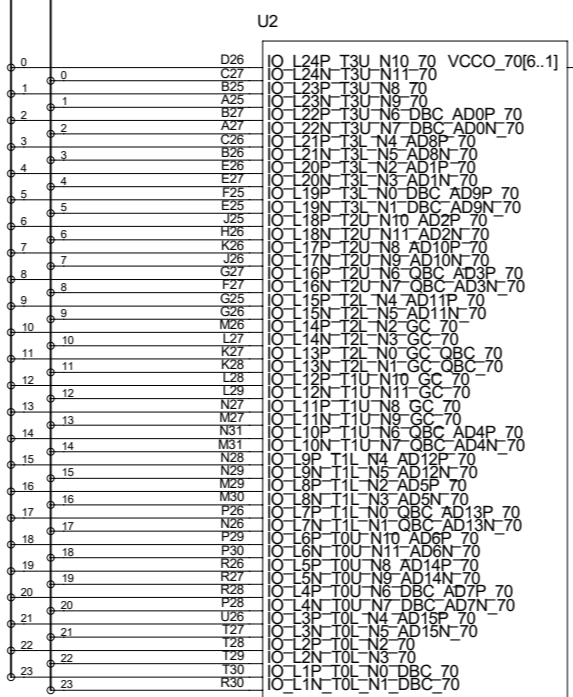


CPLD\_I/O<11..0>

BANK70\_P<23..0>  
BANK70\_N<23..0>



W32 VREF\_67  
XC9599-2FLGA2577E



MMCX 180 U74

CPLD\_CLK

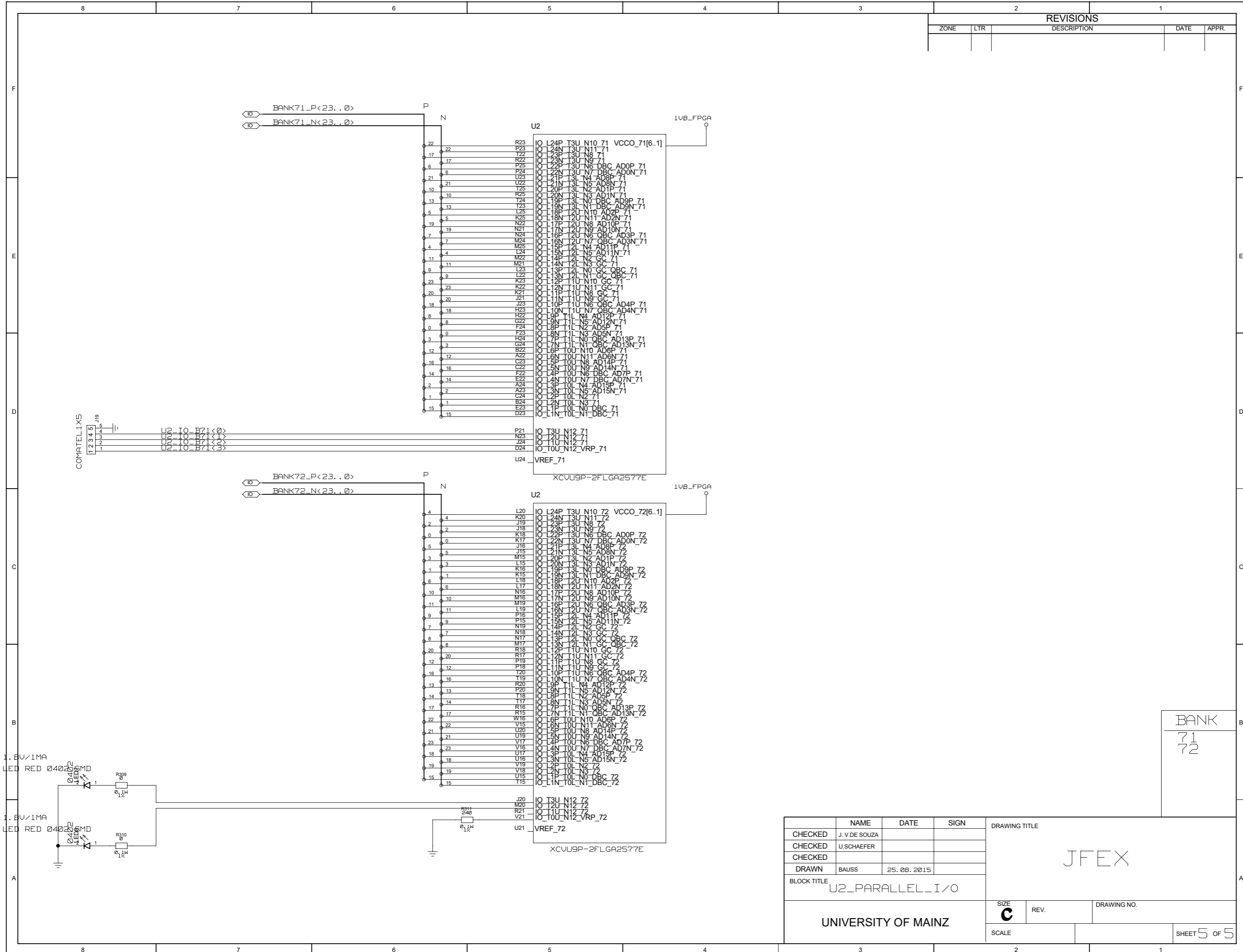
VALUE ????

D25 IO T3U N12 70  
H27 IO T2U N12 70  
J28 IO T1U N12 70  
T31 IO T0U N12\_VRP 70  
U25 VREF\_70  
XC9599-2FLGA2577E

BANK  
67  
70

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS	25. 08. 2015		
BLOCK TITLE			
U2_PARALLEL_I/O			
UNIVERSITY OF MAINZ		SIZE <b>C</b>	DRAWING NO.
SCALE		REV.	SHEET 4 OF 5

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



U2

IO L24P	T3U	N10	71	VCCO_71[6..1]
IO L24N	T3U	N11	71	
IO L23P	T3U	N8	71	
IO L23N	T3U	N9	71	
IO L22P	T3U	N6	DBC	AD0P_71
IO L22N	T3U	N7	DBC	AD0N_71
IO L21P	T3U	N4	AD8P	71
IO L21N	T3U	N5	AD8N	71
IO L20P	T3U	N2	AD1P	71
IO L20N	T3U	N3	AD1N	71
IO L19P	T3U	N0	DBC	AD9P_71
IO L19N	T3U	N10	DBC	AD9N_71
IO L18P	T2U	N10	AD2P	71
IO L18N	T2U	N11	AD2N	71
IO L17P	T2U	N8	AD10P	71
IO L17N	T2U	N9	AD10N	71
IO L16P	T2U	N6	QBC	AD3P_71
IO L16N	T2U	N7	QBC	AD3N_71
IO L15P	T2U	N4	AD11P	71
IO L15N	T2U	N5	AD11N	71
IO L14N	T2U	N3	GC	71
IO L13P	T2U	N0	GC	QBC_71
IO L13N	T2U	N1	GC	QBC_71
IO L12P	T1U	N10	GC	71
IO L12N	T1U	N11	GC	71
IO L11N	T1U	N9	GC	71
IO L10P	T1U	N6	QBC	AD4P_71
IO L10N	T1U	N7	QBC	AD4N_71
IO L9P	T1U	N4	AD12P	71
IO L9N	T1U	N5	AD12N	71
IO L8P	T1U	N2	AD5P	71
IO L8N	T1U	N3	AD5N	71
IO L7N	T1U	N1	QBC	AD13P_71
IO L6P	T0U	N10	AD6P	71
IO L6N	T0U	N11	AD6N	71
IO L5P	T0U	N8	AD14P	71
IO L5N	T0U	N9	AD14N	71
IO L4P	T0U	N6	DBC	AD7P_71
IO L4N	T0U	N7	DBC	AD7N_71
IO L3P	T0U	N4	AD15P	71
IO L3N	T0U	N5	AD15N	71
IO L2N	T0U	N3	71	
IO L1P	T0U	N0	DBC	71
IO L1N	T0U	N1	DBC	71

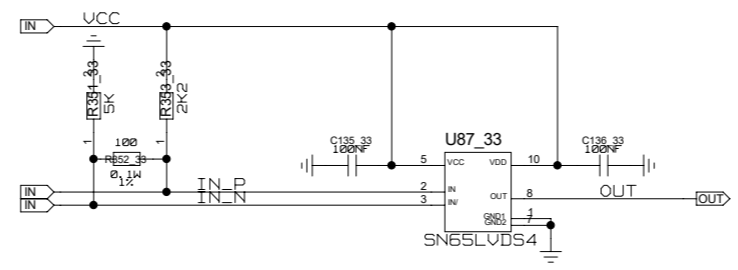
U21

IO L24P	T3U	N10	72	VCCO_72[6..1]
IO L24N	T3U	N11	72	
IO L23P	T3U	N8	72	
IO L23N	T3U	N9	72	
IO L22P	T3U	N6	DBC	AD0P_72
IO L22N	T3U	N7	DBC	AD0N_72
IO L21P	T3U	N4	AD8P	72
IO L21N	T3U	N5	AD8N	72
IO L20P	T3U	N2	AD1P	72
IO L20N	T3U	N3	AD1N	72
IO L19P	T3U	N0	DBC	AD9P_72
IO L19N	T3U	N10	DBC	AD9N_72
IO L18P	T2U	N10	AD2P	72
IO L18N	T2U	N11	AD2N	72
IO L17P	T2U	N8	AD10P	72
IO L17N	T2U	N9	AD10N	72
IO L16P	T2U	N6	QBC	AD3P_72
IO L16N	T2U	N7	QBC	AD3N_72
IO L15P	T2U	N4	AD11P	72
IO L15N	T2U	N5	AD11N	72
IO L14N	T2U	N3	GC	72
IO L13P	T2U	N0	GC	QBC_72
IO L13N	T2U	N1	GC	QBC_72
IO L12P	T1U	N10	GC	72
IO L12N	T1U	N11	GC	72
IO L11N	T1U	N9	GC	72
IO L10P	T1U	N6	QBC	AD4P_72
IO L10N	T1U	N7	QBC	AD4N_72
IO L9P	T1U	N4	AD12P	72
IO L9N	T1U	N5	AD12N	72
IO L8P	T1U	N2	AD5P	72
IO L8N	T1U	N3	AD5N	72
IO L7N	T1U	N1	QBC	AD13P_72
IO L6P	T0U	N10	AD6P	72
IO L6N	T0U	N11	AD6N	72
IO L5P	T0U	N8	AD14P	72
IO L5N	T0U	N9	AD14N	72
IO L4P	T0U	N6	DBC	AD7P_72
IO L4N	T0U	N7	DBC	AD7N_72
IO L3P	T0U	N4	AD15P	72
IO L3N	T0U	N5	AD15N	72
IO L2N	T0U	N3	72	
IO L1P	T0U	N0	DBC	72
IO L1N	T0U	N1	DBC	72

NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA		JFEX
CHECKED	U. SCHAEFER		
CHECKED			
DRAWN	BAUSS	25. 08. 2015	
BLOCK TITLE			
U2_PARALLEL_I/O			
UNIVERSITY OF MAINZ		SIZE <b>C</b>	DRAWING NO.
SCALE			SHEET 5 OF 5

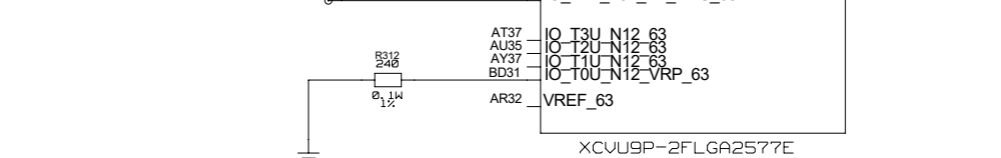
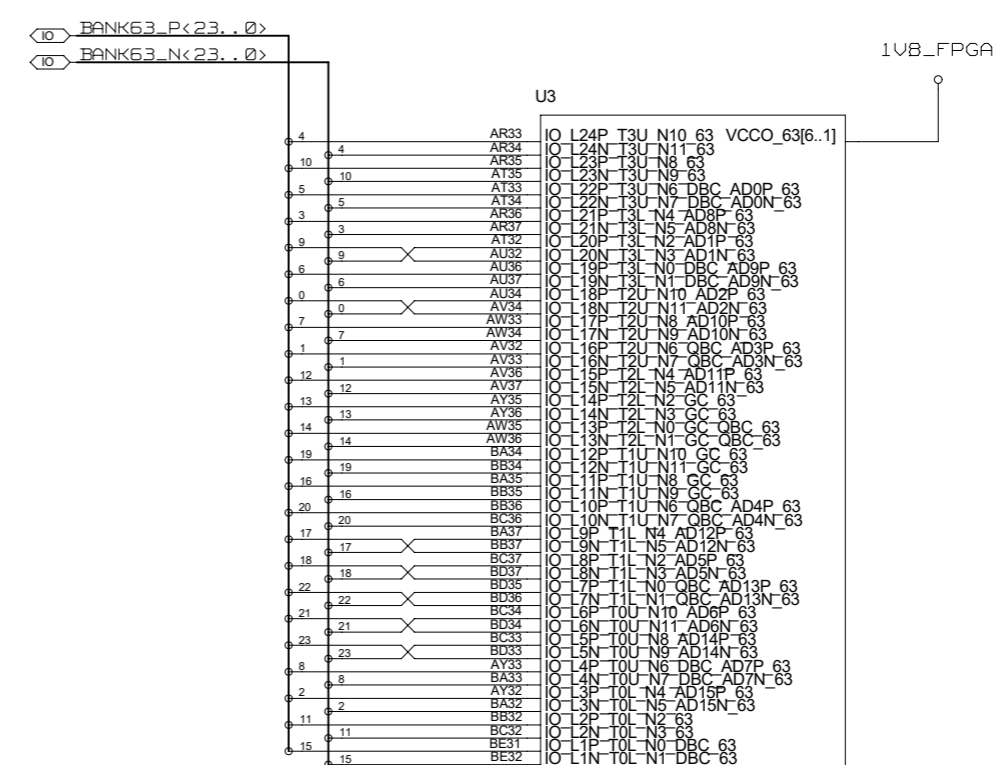
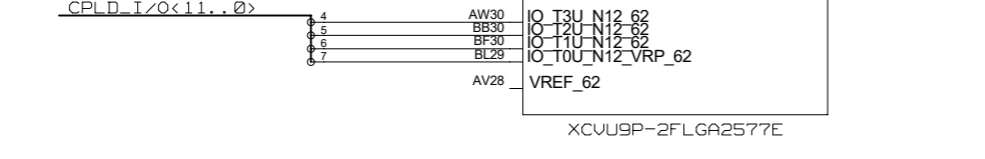
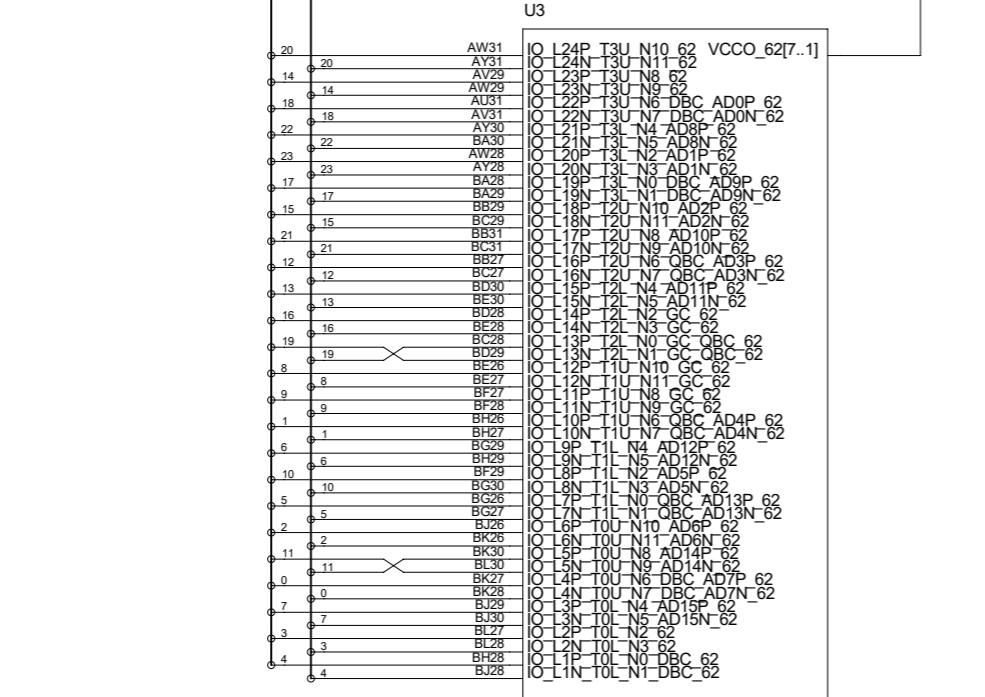
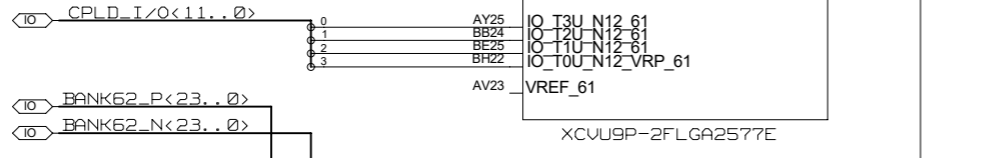
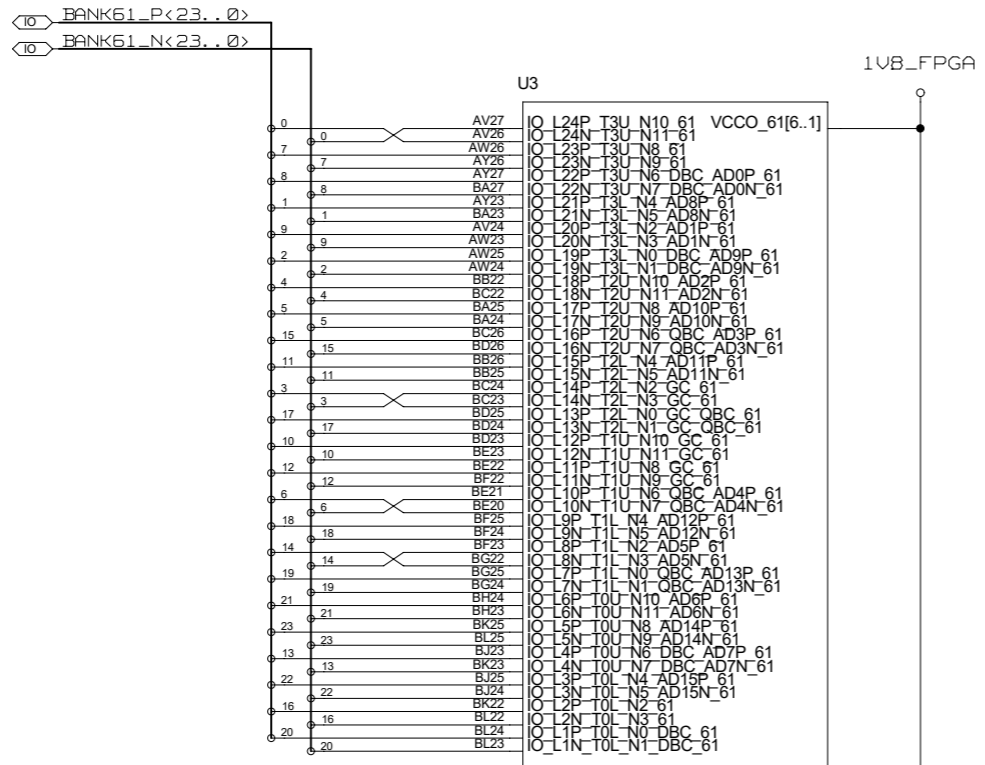


REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



CHECKED	NAME	DATE	SIGN	DRAWING TITLE		
CHECKED	J. V. DE SOUZA			JFEX		
CHECKED	U. SCHAEFER					
CHECKED						
DRAWN	BAUSS			BLOCK TITLE		
				CLOCK_LVDS_LVCMOS		
UNIVERSITY OF MAINZ				SIZE	REV.	DRAWING NO.
				C		
				SCALE		SHEET OF

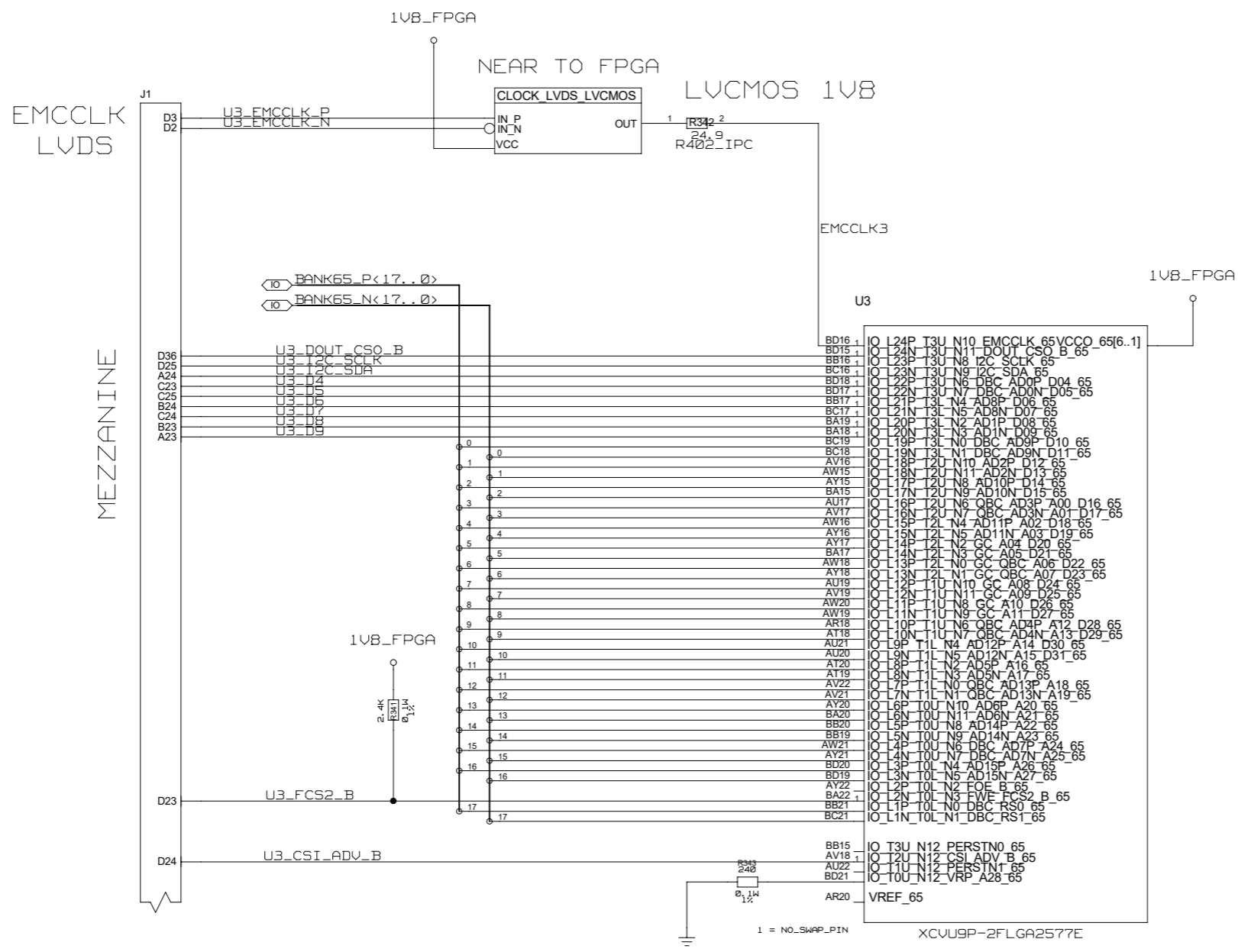
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK  
61  
62  
63

CHECKED	J. V. DE SOUZA	DATE	SIGN	DRAWING TITLE  <b>JFEX</b>
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS	25. 08. 2015		
BLOCK TITLE U3_PARALLEL_I/O				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
				DRAWING NO.
SCALE				SHEET 1 OF 5

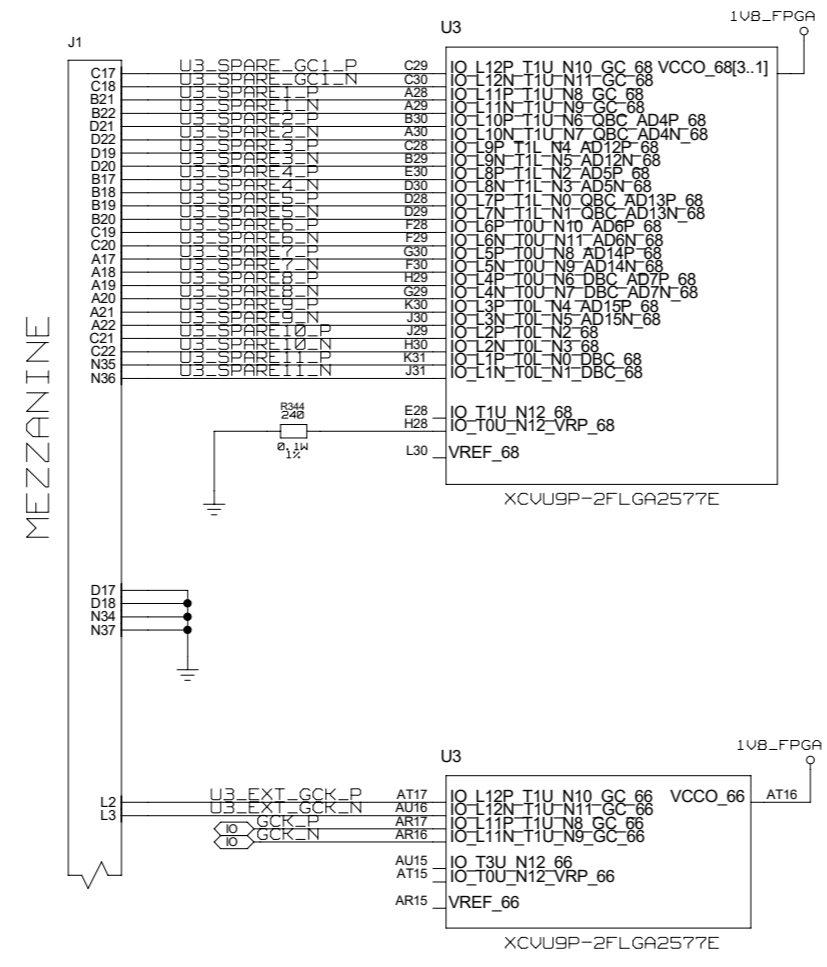
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK  
65

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U.SCHAEFER			
CHECKED			
DRAWN BAUSS	25. 08. 2015		
BLOCK TITLE			
U3_PARALLEL_I/O			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE		SHEET 2 OF 5	

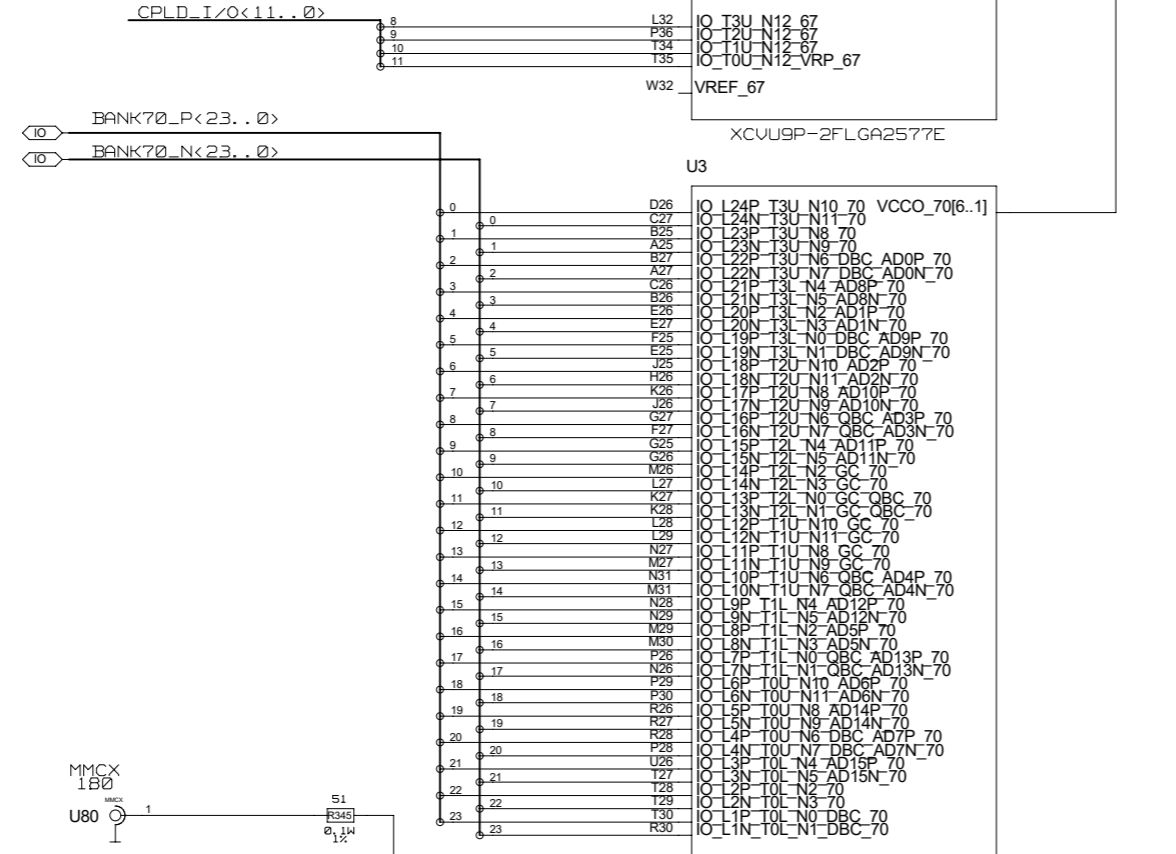
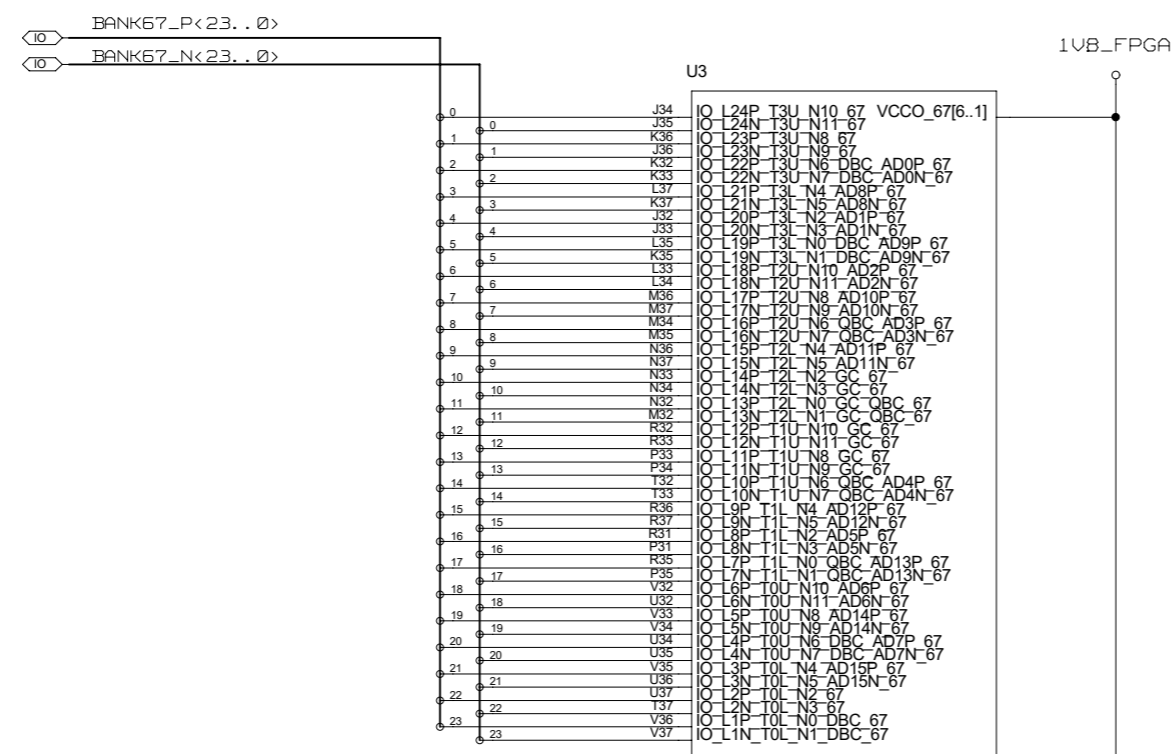
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
66
68

CHECKED	NAME	DATE	SIGN	DRAWING TITLE <b>JFEX</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS	25. 08. 2015		
BLOCK TITLE U3_PARALLEL_I/O				
UNIVERSITY OF MAINZ				SIZE <b>C</b>
				REV.
				DRAWING NO.
				SCALE
				SHEET 3 OF 5

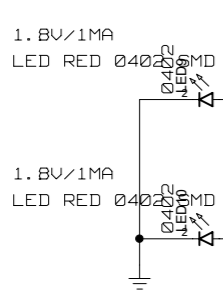
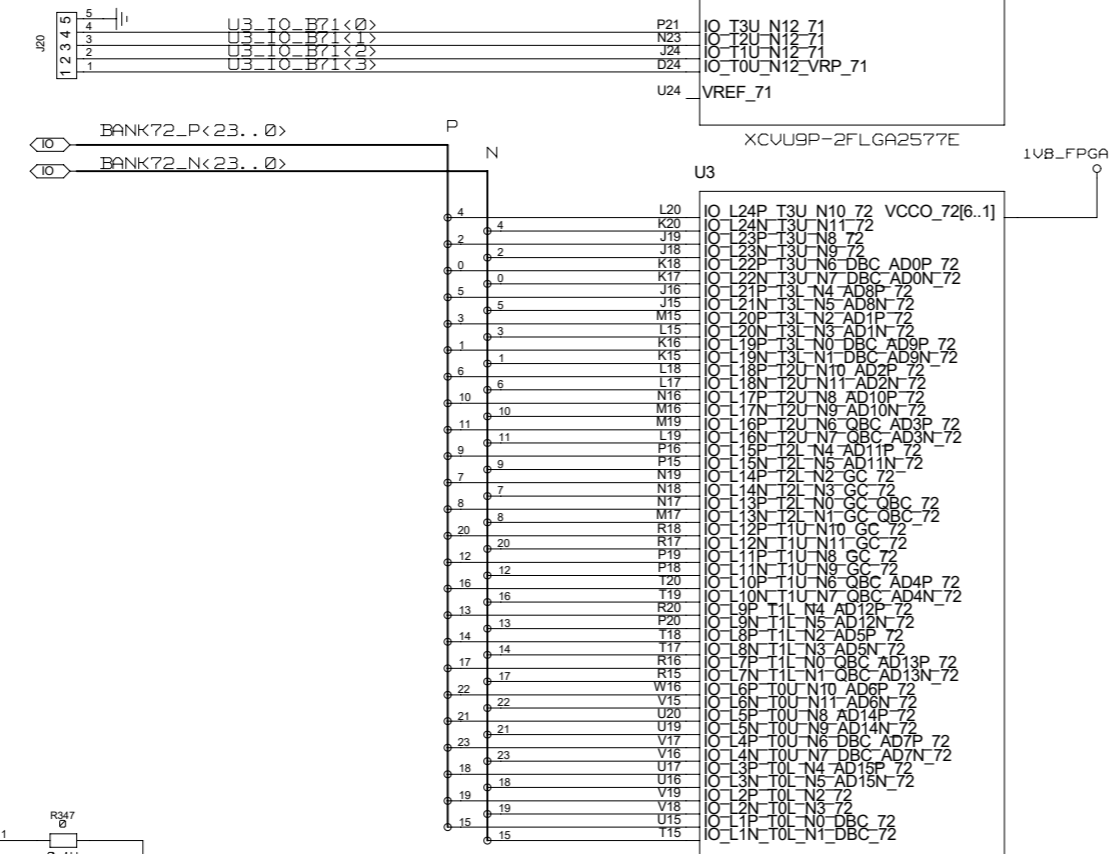
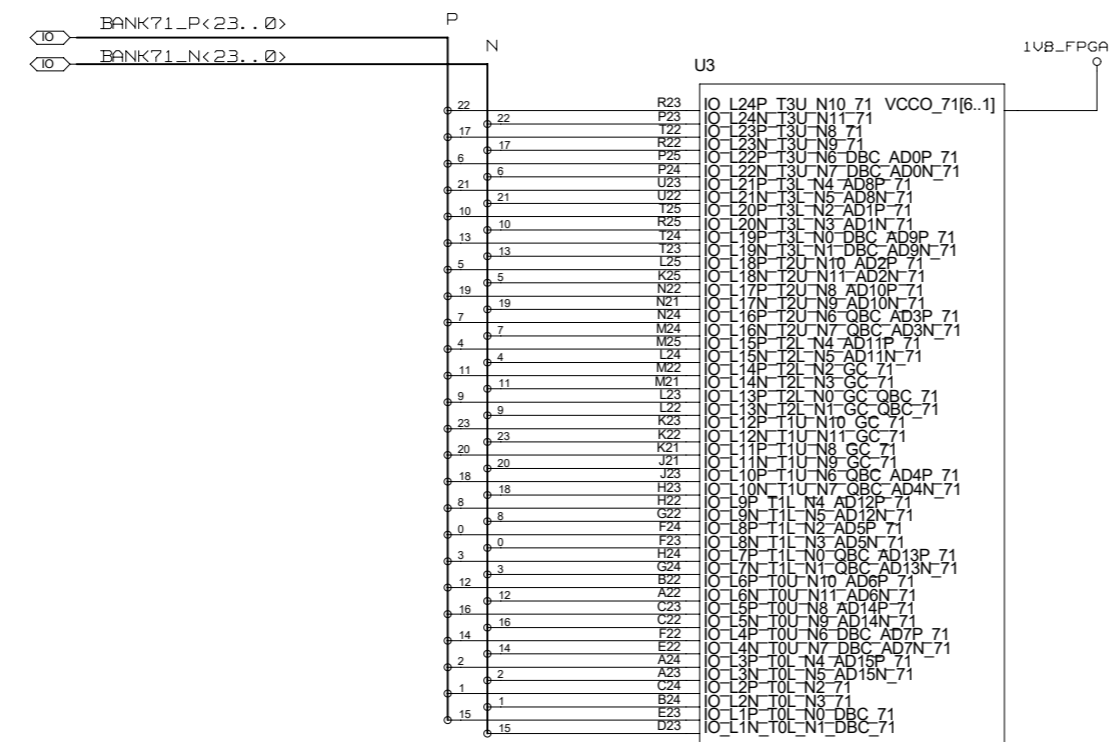
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK  
67  
70

CHECKED	NAME	DATE	SIGN	DRAWING TITLE <b>JFEX</b>
CHECKED	J.V.DE SOUZA			
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS	25.08.2015		
BLOCK TITLE U3_PARALLEL_I/O				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
		SCALE		SHEET 4 OF 5

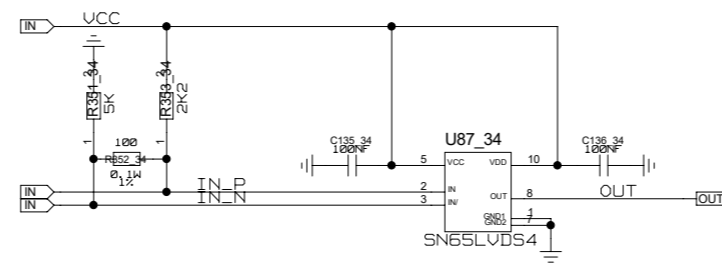
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK  
71  
72

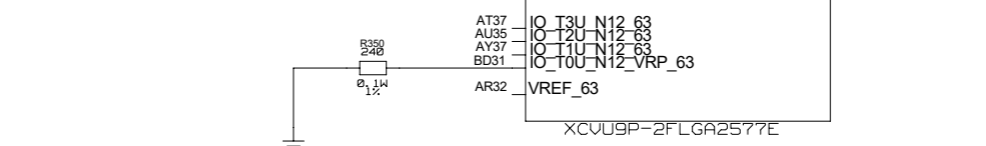
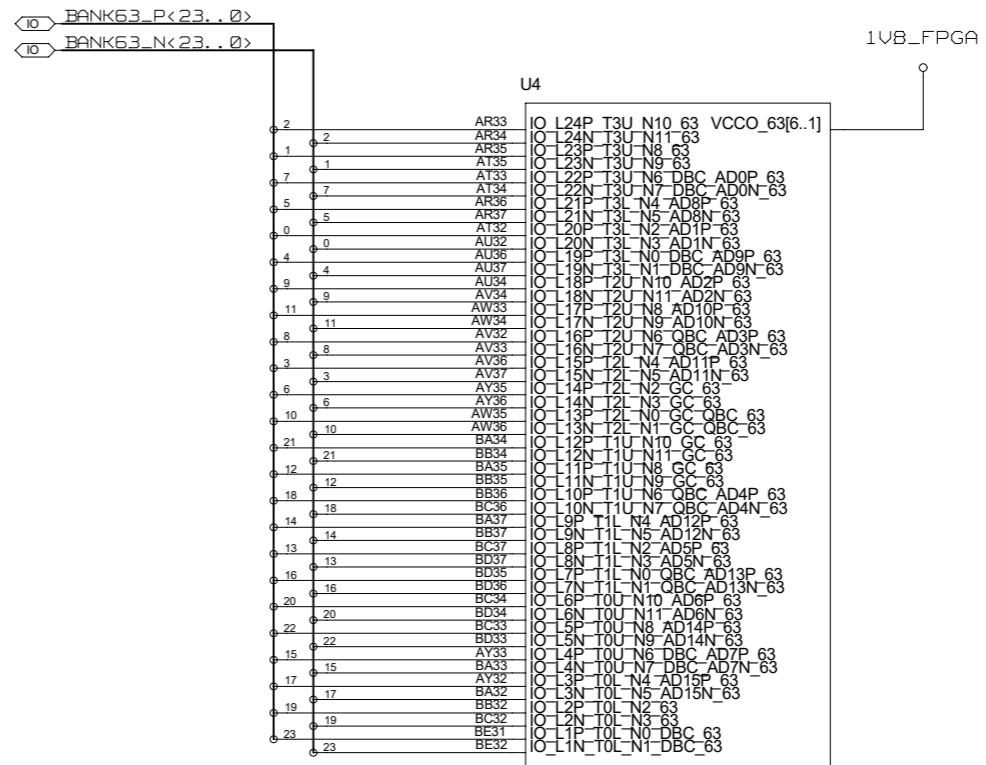
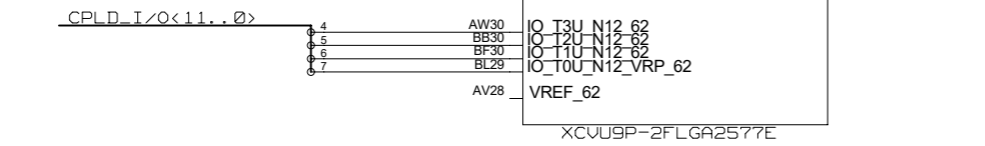
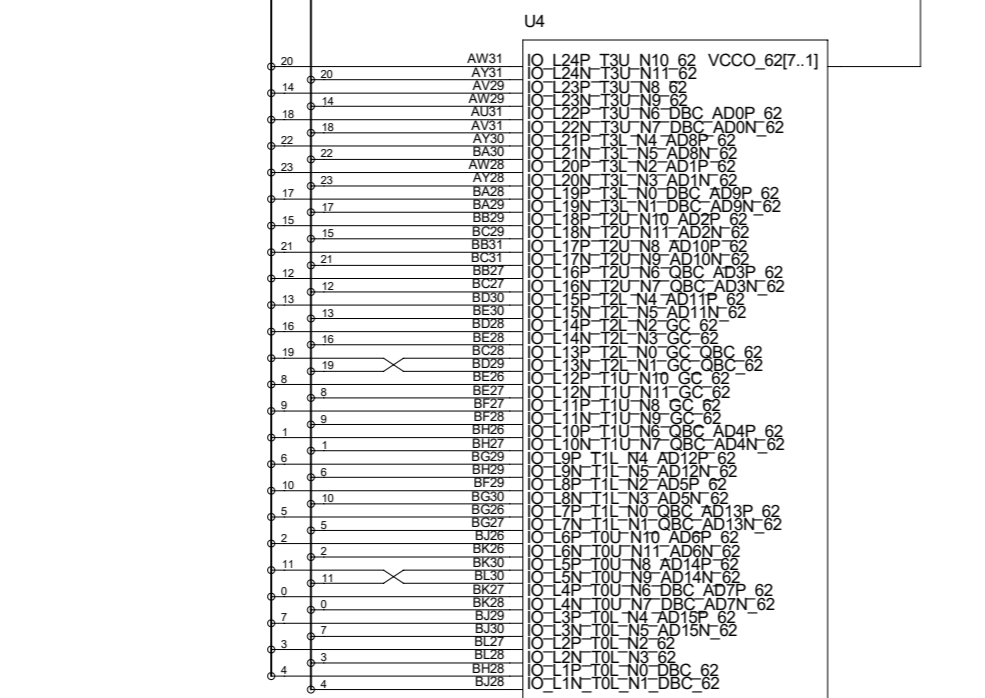
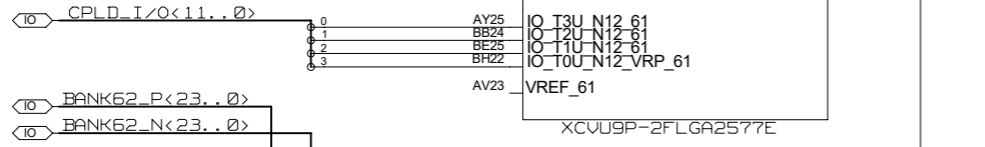
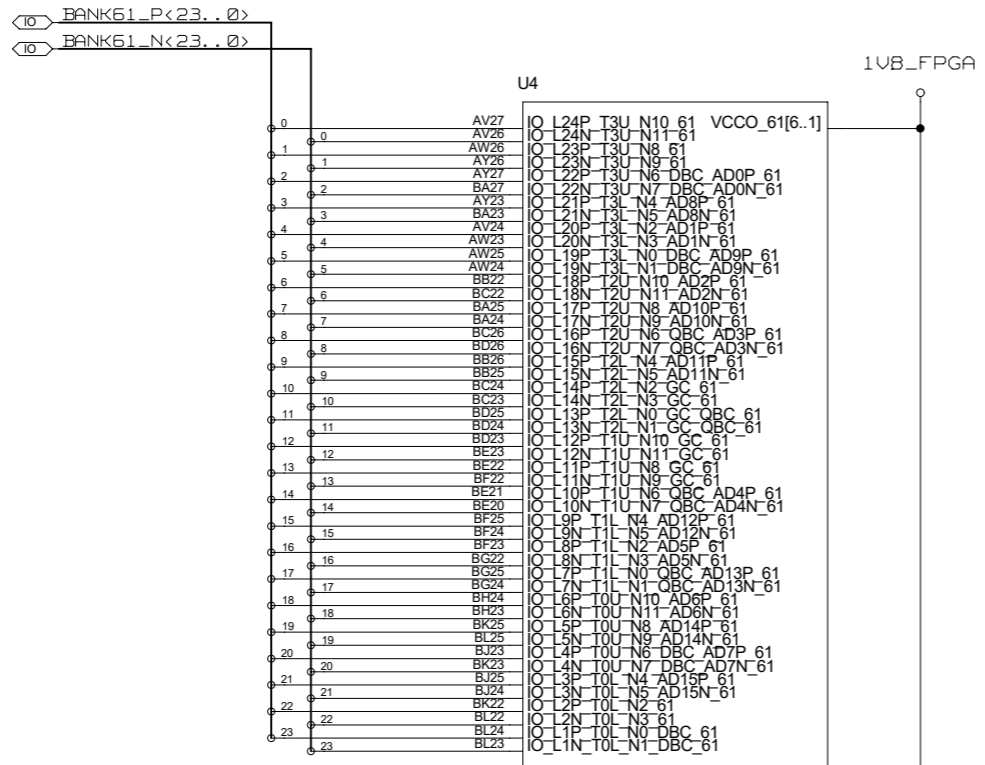
NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS	25.08.2015		
BLOCK TITLE			
U3_PARALLEL_I/O			
UNIVERSITY OF MAINZ		SIZE <b>C</b>	DRAWING NO.
SCALE		REV.	SHEET 5 OF 5

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



CHECKED	J. V. DE SOUZA			DRAWING TITLE  <b>JFEX</b>
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE <b>CLOCK_LVDS_LVCMOS</b>				
<b>UNIVERSITY OF MAINZ</b>		SIZE <b>C</b>	REV.	DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

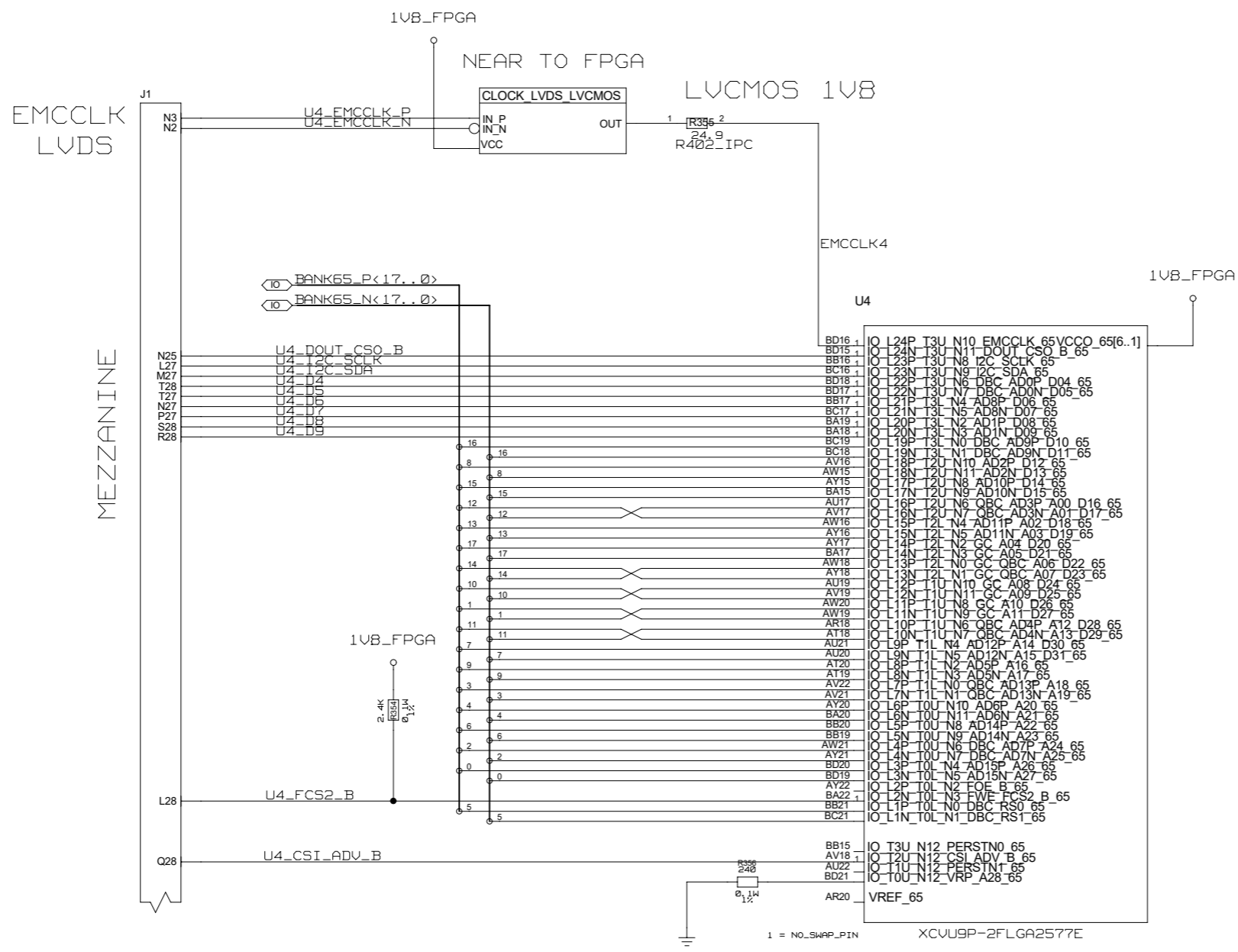


BANK  
61  
62  
63

NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA		JFEX
CHECKED	U. SCHAEFER		
CHECKED			
DRAWN	BAUSS	25.08.2015	
BLOCK TITLE			
U4_PARALLEL_I/O			
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.
SCALE		DRAWING NO.	
			SHEET 1 OF 5



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

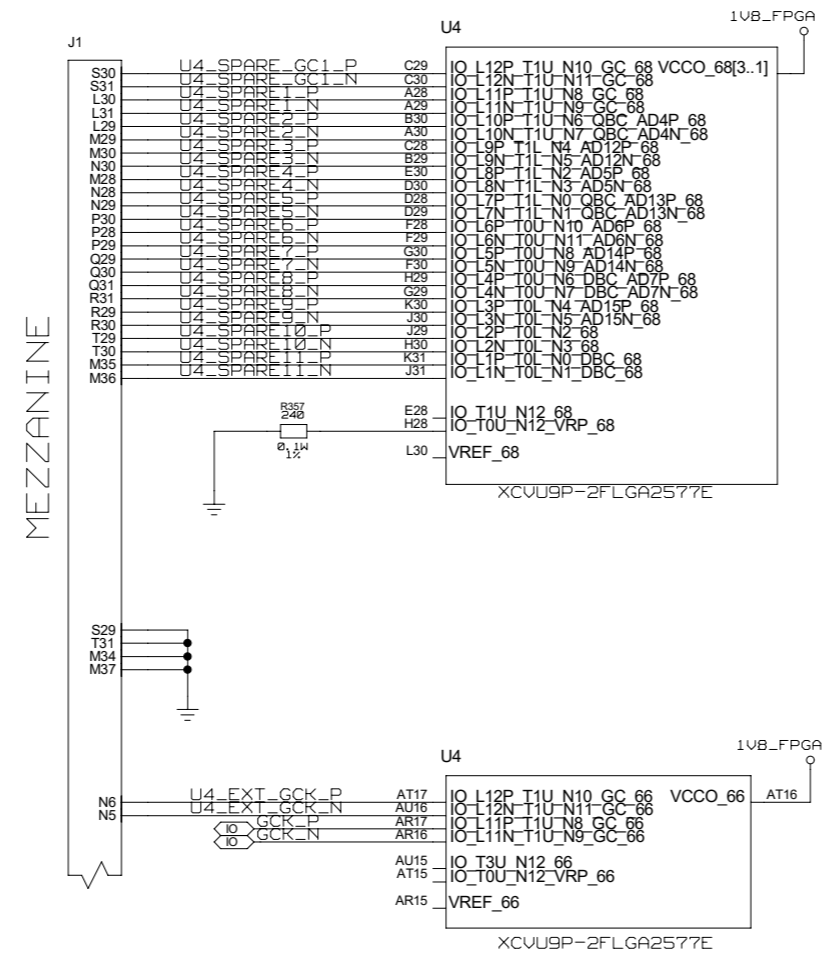


MEZZANINE

BANK  
65

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U.SCHAEFER			
CHECKED			
DRAWN BAUSS	25.08.2015		
BLOCK TITLE			
U4_PARALLEL_I/O			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE			SHEET 2 OF 5

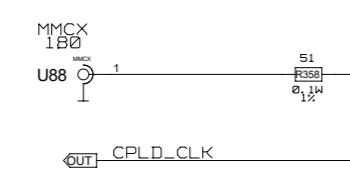
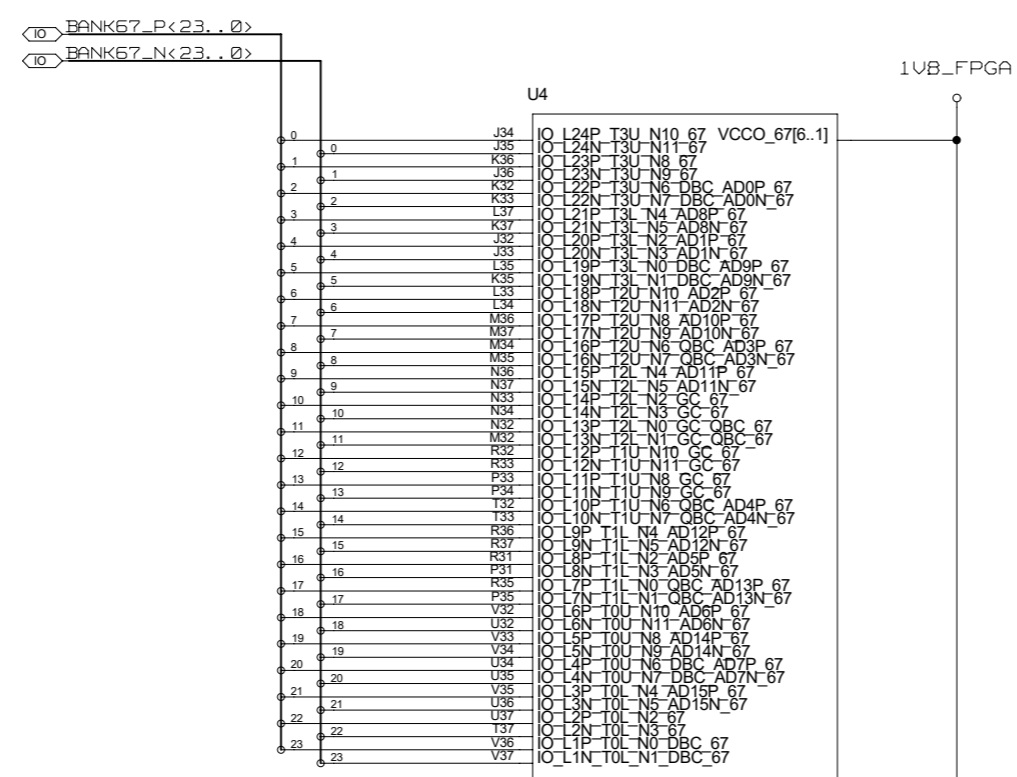
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
66
68

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U.SCHAEFER			
CHECKED			
DRAWN BAUSS	25. 08. 2015		
BLOCK TITLE			
U4_PARALLEL_I/O			
UNIVERSITY OF MAINZ			SIZE C REV. DRAWING NO.
SCALE			SHEET 3 OF 5

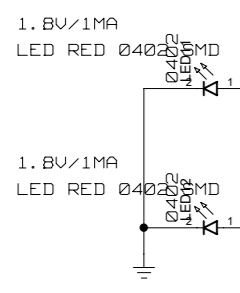
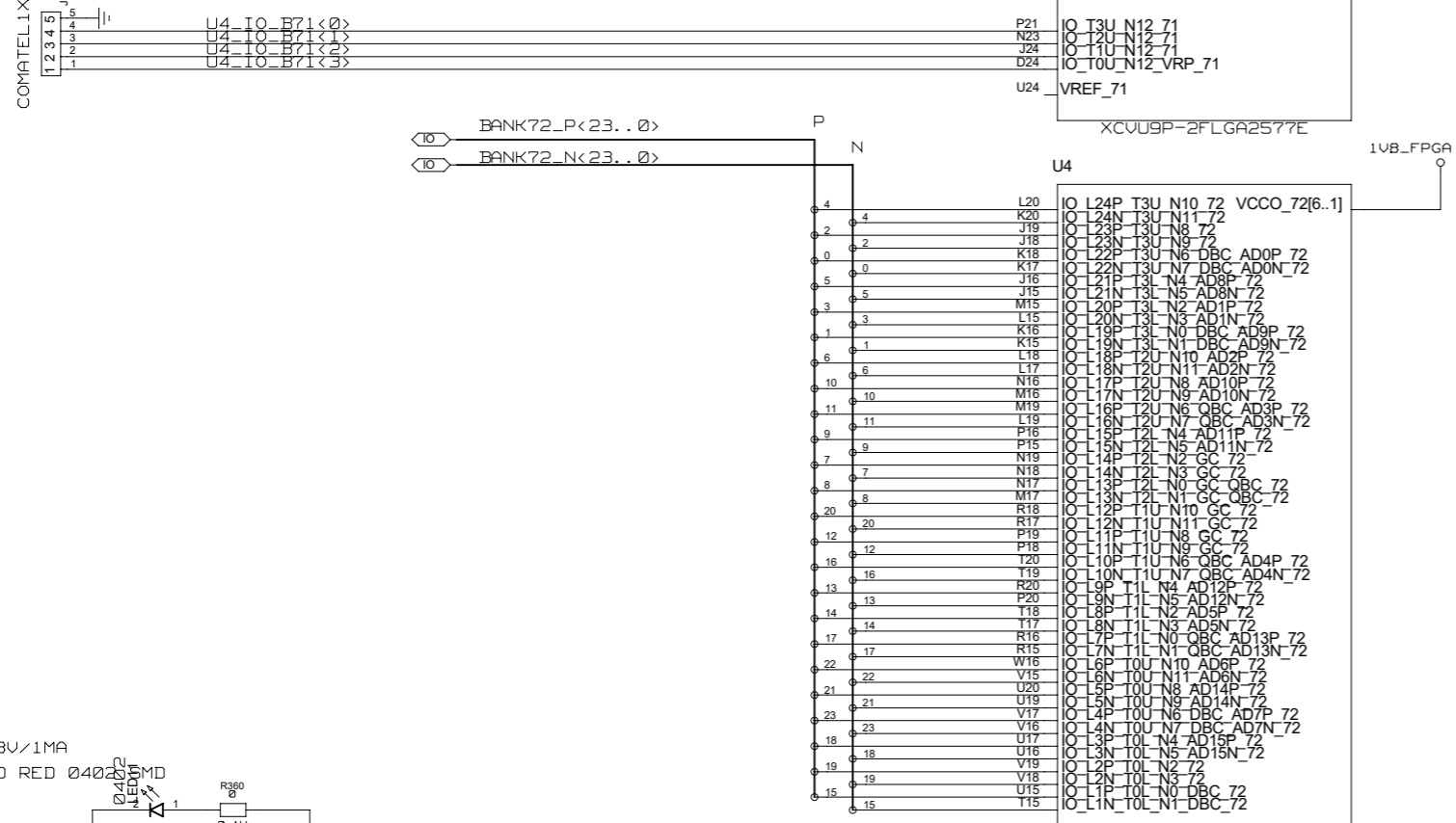
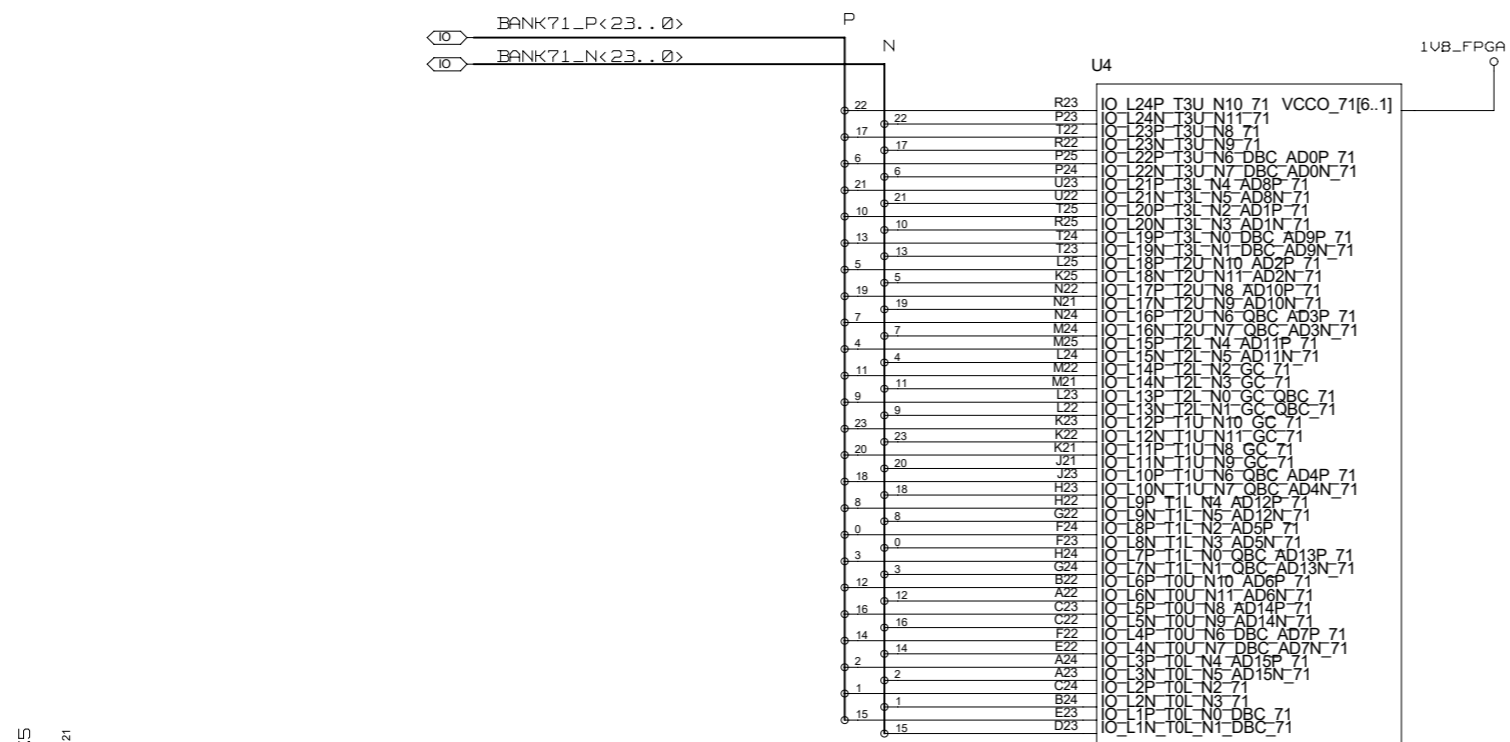
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK  
67  
70

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS	25.08.2015		
BLOCK TITLE			
U4_PARALLEL_I/O			
UNIVERSITY OF MAINZ		SIZE <b>C</b>	DRAWING NO.
SCALE		REV.	SHEET 4 OF 5

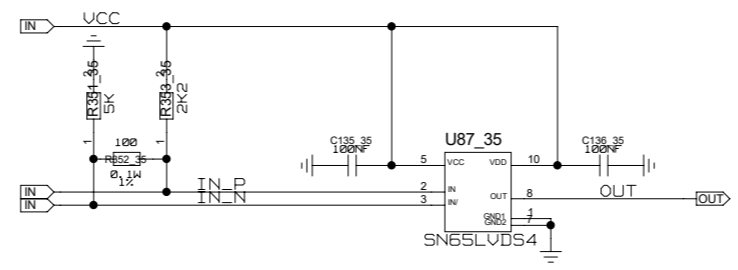
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK  
71  
72

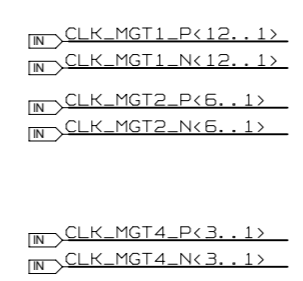
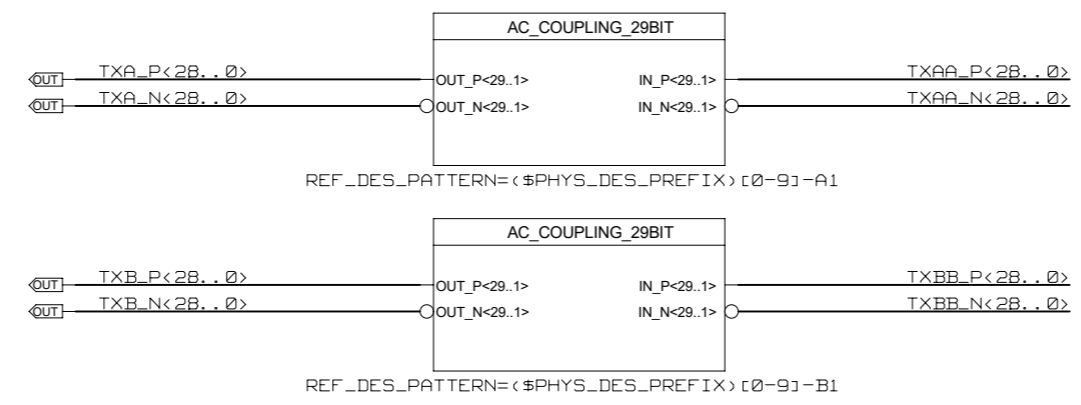
NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS	25.08.2015		
BLOCK TITLE U4_PARALLEL_I/O			
UNIVERSITY OF MAINZ		SIZE <b>C</b>	DRAWING NO.
SCALE		SHEET 5 OF 5	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



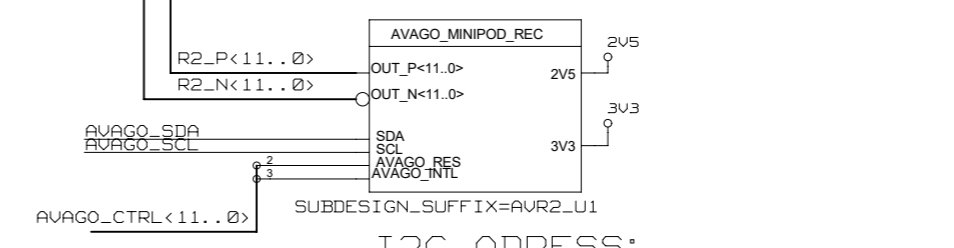
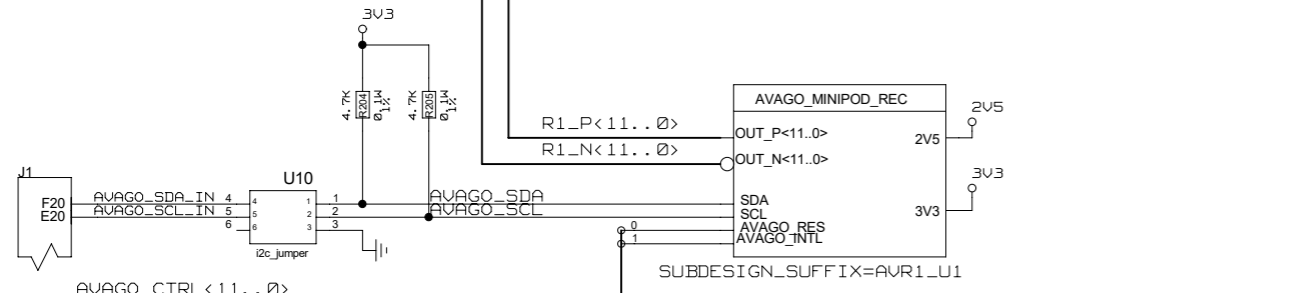
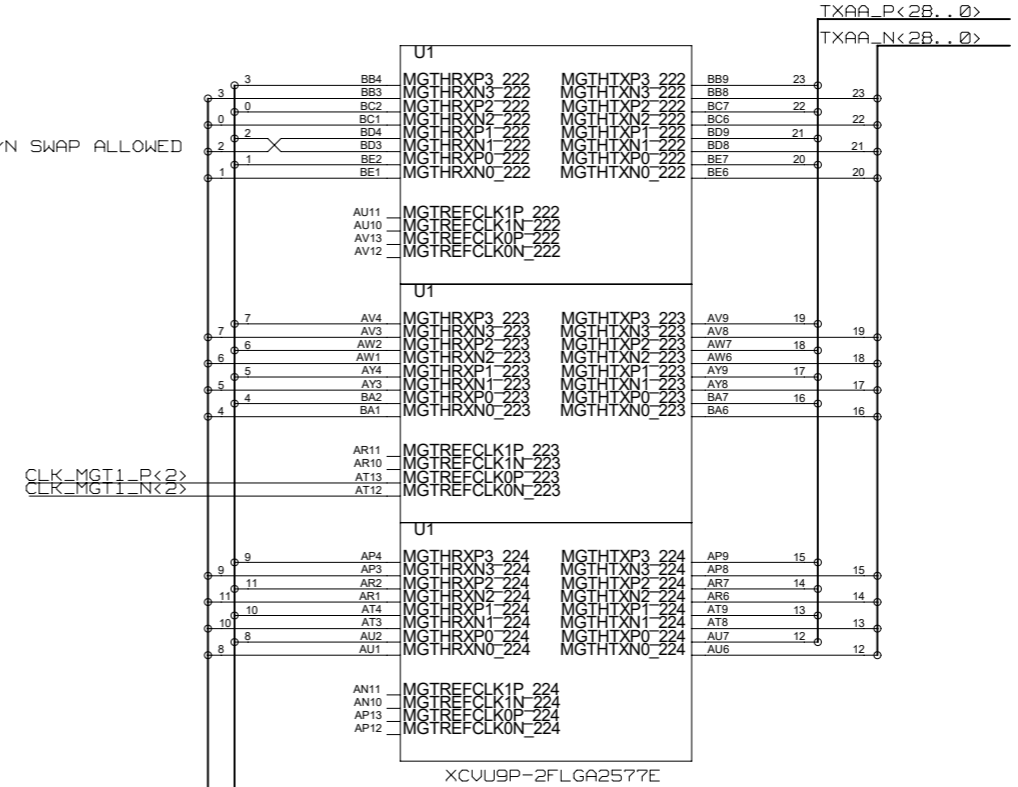
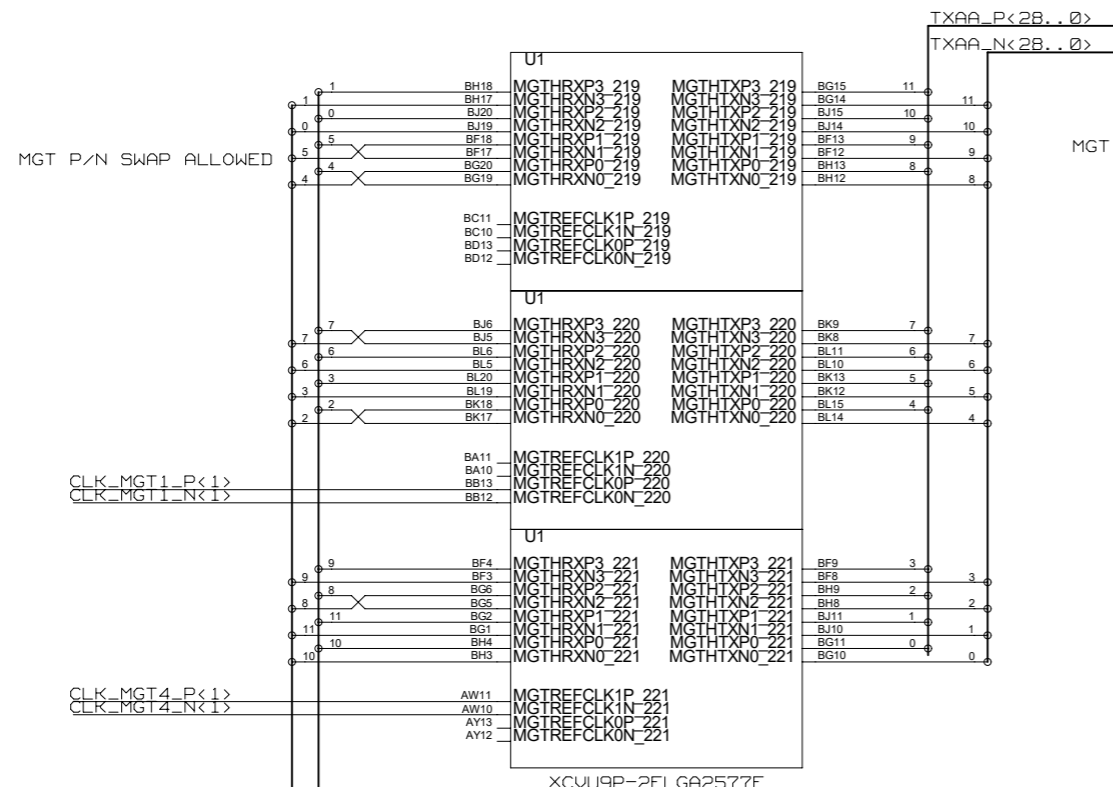
CHECKED	NAME	DATE	SIGN	DRAWING TITLE		
CHECKED	J. V. DE SOUZA			JFEX		
CHECKED	U. SCHAEFER					
CHECKED						
DRAWN	BAUSS			BLOCK TITLE		
				CLOCK_LVDS_LVCMOS		
UNIVERSITY OF MAINZ				SIZE	REV.	DRAWING NO.
				C		
				SCALE		SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



CHECKED	J. V. DE SOUZA			DRAWING TITLE <b>JFEX</b> I/O + AC COUPLING
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U1_MGT_REAL_TIME				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
SCALE				DRAWING NO.
				SHEET 1 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



AVAGO\_CTRL<11..0>  
 AVAGO\_CTRL 0, 2, 4, 6, 8, 10 = AVAGO\_RES\_XX  
 AVAGO\_CTRL 1, 3, 5, 7, 9, 11 = AVAGO\_INTL\_XX

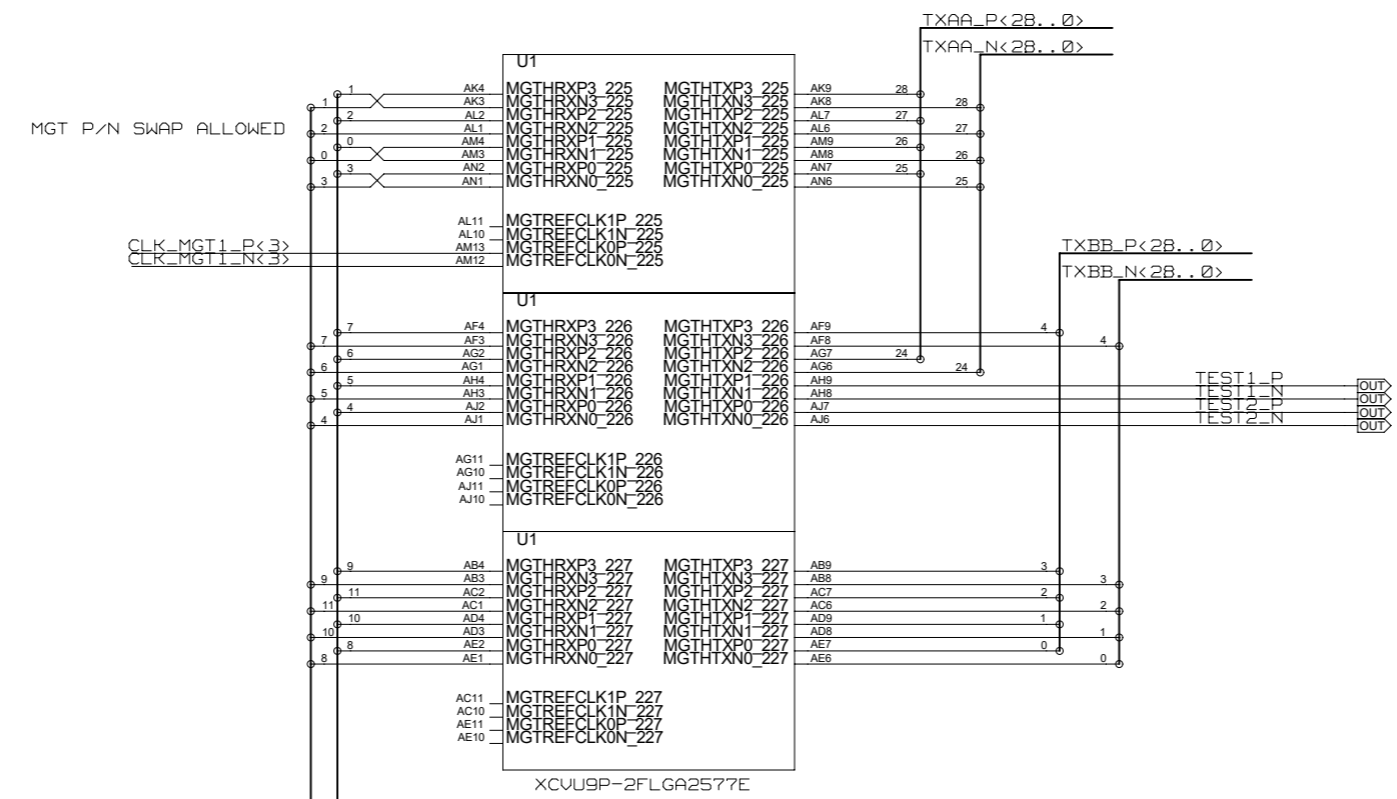
I2C ADDRESS:  
 R3=XXX R4=XXX  
 R5=XXX R6=XXX  
 R7=XXX R8=XXX

I2C ADDRESS:  
 R3=XXX R4=XXX  
 R5=XXX R6=XXX  
 R7=XXX R8=XXX

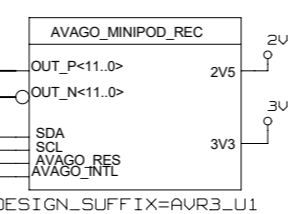
BANK
210
209
208
207
206
205
204
203
202
201
200

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX AVAGO + TXA
CHECKED U.SCHAEFER			
CHECKED			
DRAWN BAUSS	07.08.2015		
BLOCK TITLE			SIZE
U1_MGT_REAL_TIME			REV.
UNIVERSITY OF MAINZ			DRAWING NO.
SCALE			SHEET 2 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



XC9U9P-2FLGA2577E



SUBDESIGN\_SUFFIX=AVR3\_U1

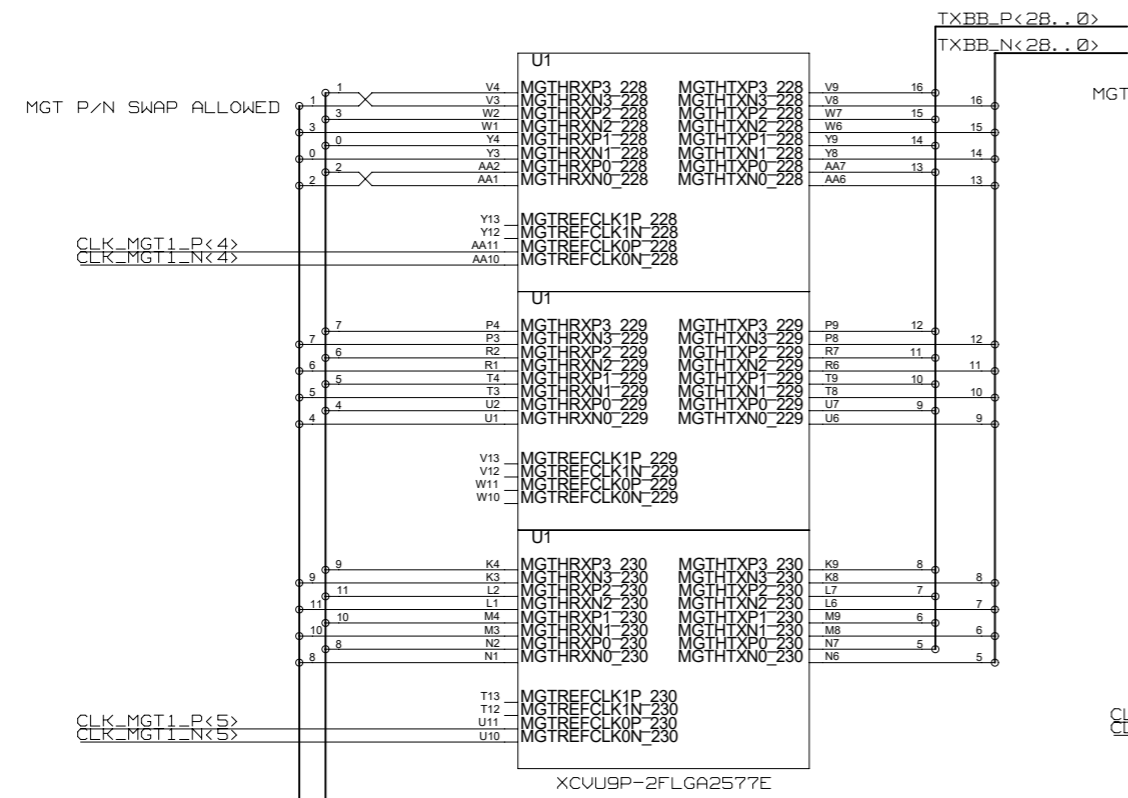
I2C ADDRESS:  
R3=XXX R4=XXX  
R5=XXX R6=XXX  
R7=XXX R8=XXX

BANK  
225  
226  
227

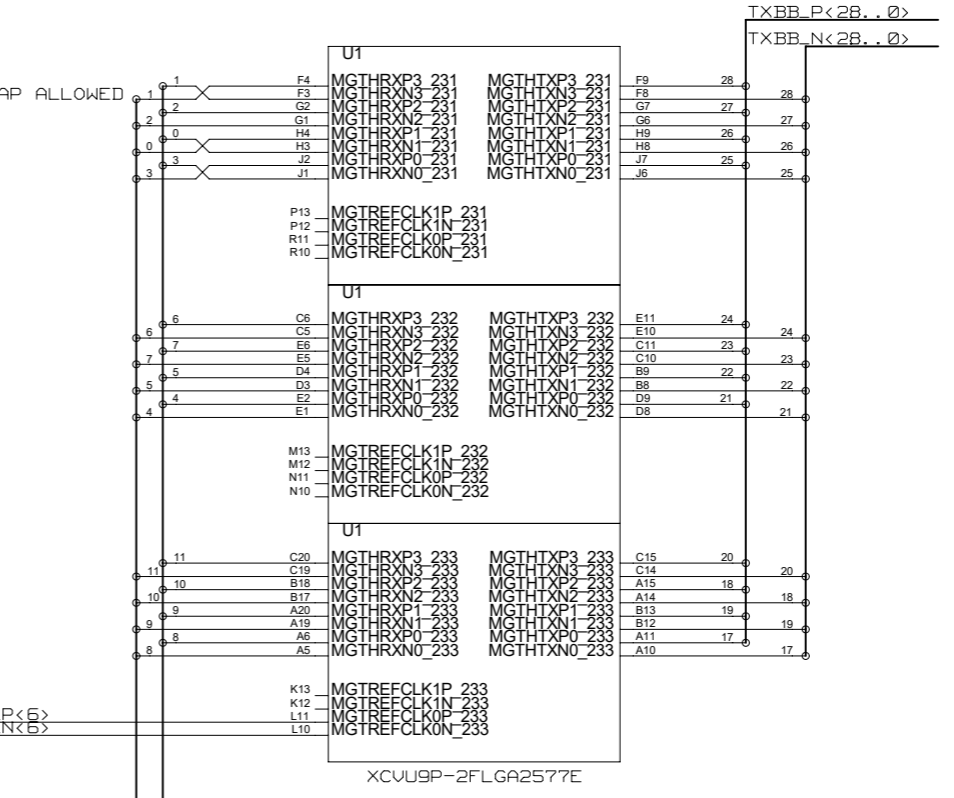
CHECKED	NAME	DATE	SIGN	DRAWING TITLE <b>JFEX AVAGO + TXA + TXB</b>
CHECKED	J.V.DE SOUZA			
CHECKED	U.SCHAEFER			
CHECKED	BAUSS	07.08.2015		
BLOCK TITLE U1_MGT_REAL_TIME				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
SCALE				DRAWING NO.
SHEET 3 OF 7				



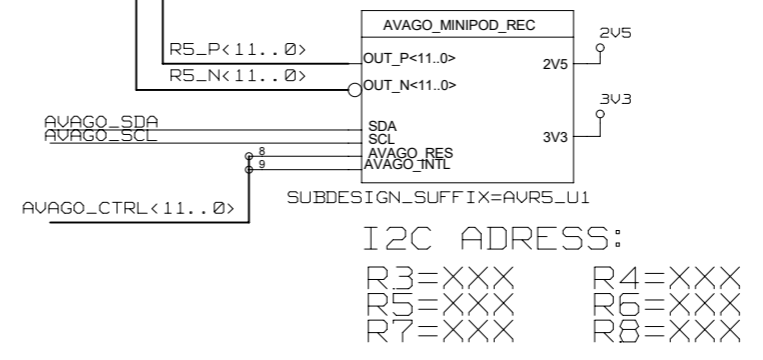
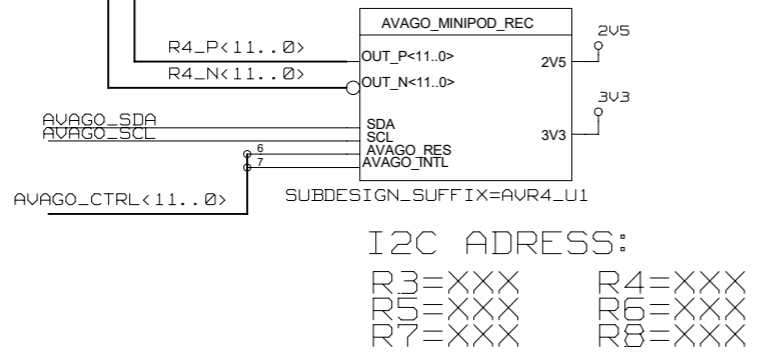
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



MGT P/N SWAP ALLOWED



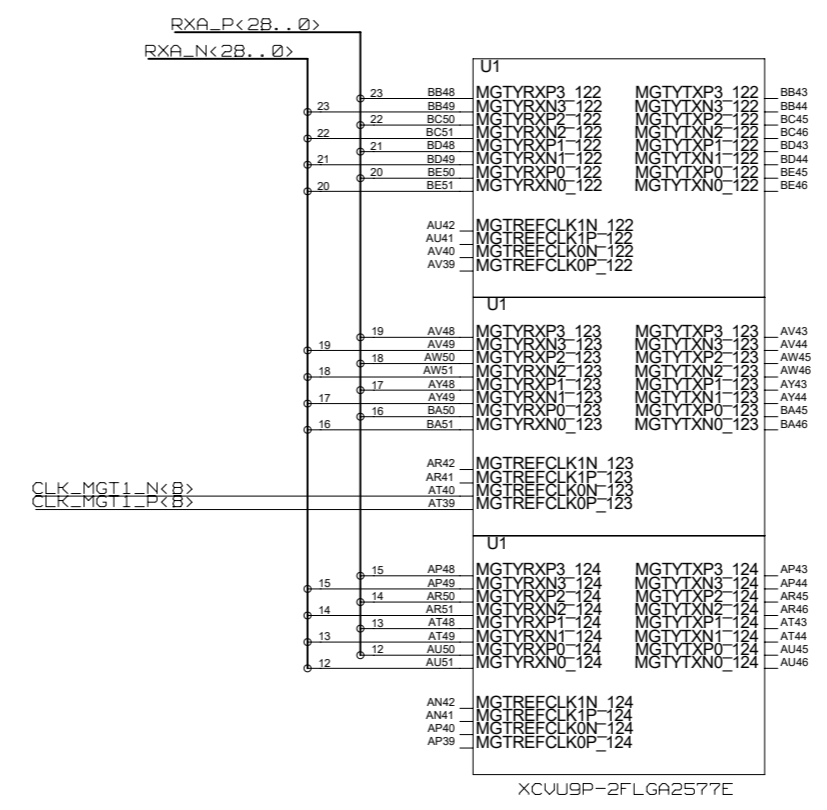
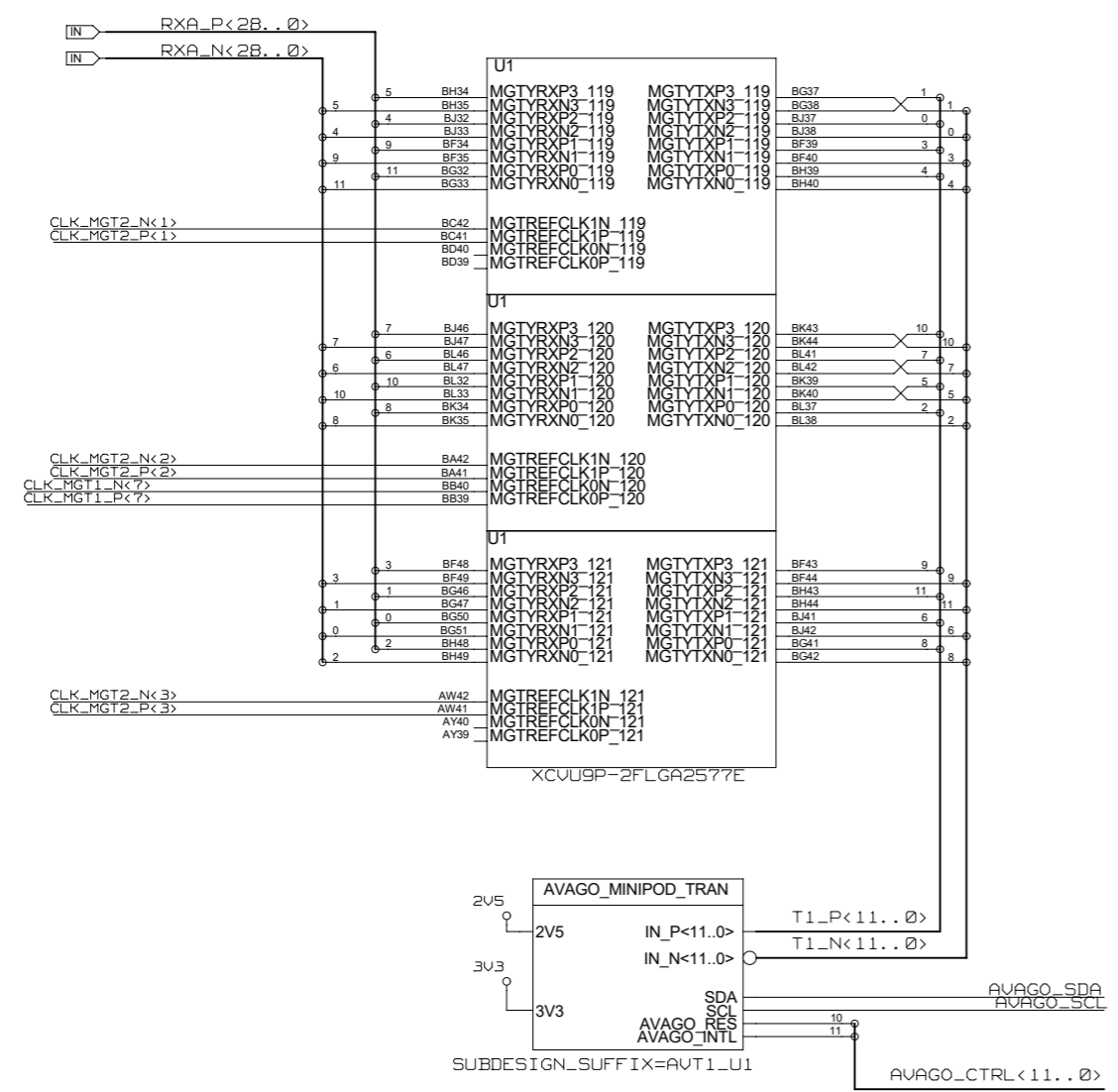
MGT P/N SWAP ALLOWED



BANK  
R3  
R4  
R5  
R6  
R7  
R8

<table border="1"> <tr><th>NAME</th><th>DATE</th><th>SIGN</th></tr> <tr><td>CHECKED</td><td>J.V.DE SOUZA</td><td></td></tr> <tr><td>CHECKED</td><td>U.SCHAEFER</td><td></td></tr> <tr><td>CHECKED</td><td></td><td></td></tr> <tr><td>DRAWN</td><td>BAUSS</td><td>07.08.2015</td></tr> </table>	NAME	DATE	SIGN	CHECKED	J.V.DE SOUZA		CHECKED	U.SCHAEFER		CHECKED			DRAWN	BAUSS	07.08.2015	<table border="1"> <tr><th colspan="2">DRAWING TITLE</th></tr> <tr><td colspan="2">JFEX AVAGO + TXB</td></tr> </table>	DRAWING TITLE		JFEX AVAGO + TXB	
NAME	DATE	SIGN																		
CHECKED	J.V.DE SOUZA																			
CHECKED	U.SCHAEFER																			
CHECKED																				
DRAWN	BAUSS	07.08.2015																		
DRAWING TITLE																				
JFEX AVAGO + TXB																				
<table border="1"> <tr><th colspan="2">BLOCK TITLE</th></tr> <tr><td colspan="2">U1_MGT_REAL_TIME</td></tr> </table>	BLOCK TITLE		U1_MGT_REAL_TIME		<table border="1"> <tr><th>SIZE</th><th>REV.</th><th>DRAWING NO.</th></tr> <tr><td>C</td><td></td><td></td></tr> </table>	SIZE	REV.	DRAWING NO.	C											
BLOCK TITLE																				
U1_MGT_REAL_TIME																				
SIZE	REV.	DRAWING NO.																		
C																				
<table border="1"> <tr><th colspan="2">UNIVERSITY OF MAINZ</th></tr> </table>	UNIVERSITY OF MAINZ		<table border="1"> <tr><th>SCALE</th><th>SHEET 4 OF 7</th></tr> <tr><td></td><td></td></tr> </table>	SCALE	SHEET 4 OF 7															
UNIVERSITY OF MAINZ																				
SCALE	SHEET 4 OF 7																			

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

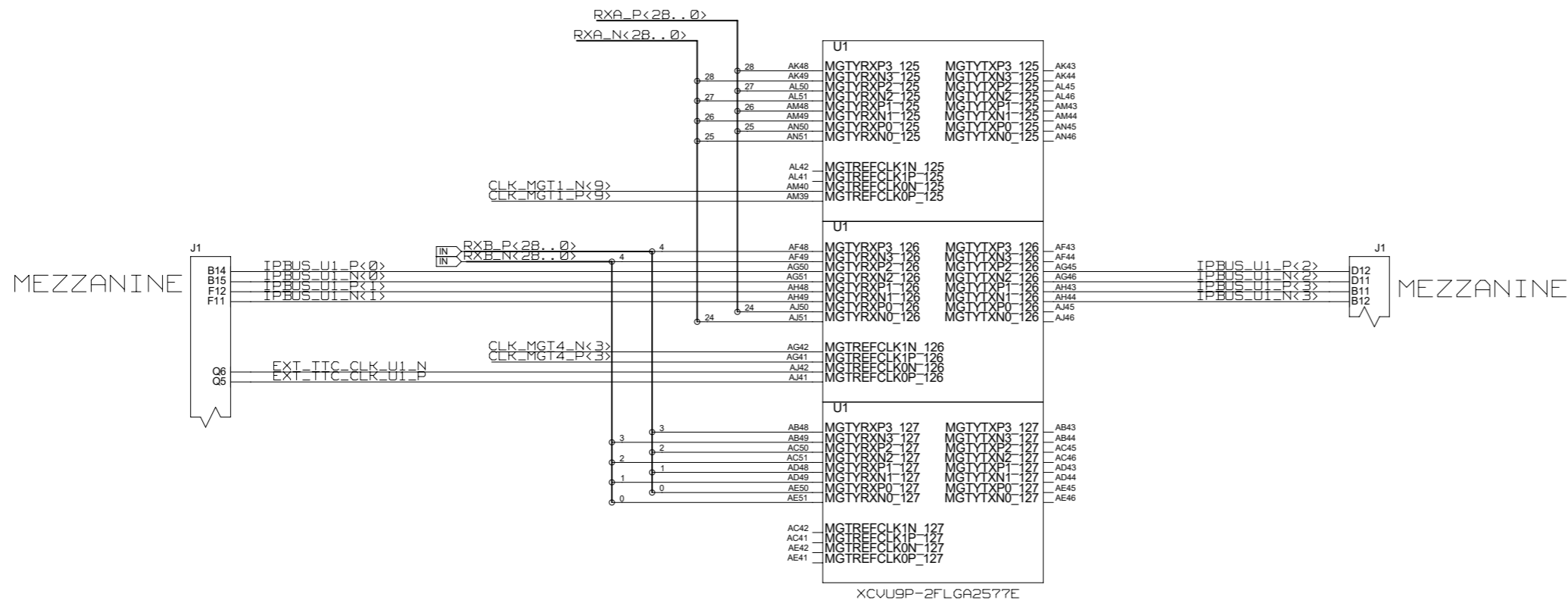


I2C ADDRESS:  
 R3=XXX R4=XXX  
 R5=XXX R6=XXX  
 R7=XXX R8=XXX

BANK
110
120
130
140
150
160
170
180
190
200
210
220
230
240

NAME	DATE	SIGN	DRAWING TITLE		
CHECKED	J.V.DE SOUZA		JFEX AVAGO + RXA		
CHECKED	U.SCHAEFER				
CHECKED					
DRAWN	BAUSS	07.08.2015			
BLOCK TITLE			SIZE	REV.	DRAWING NO.
U1_MGT_REAL_TIME			<b>C</b>		
UNIVERSITY OF MAINZ			SCALE		SHEET 5 OF 7

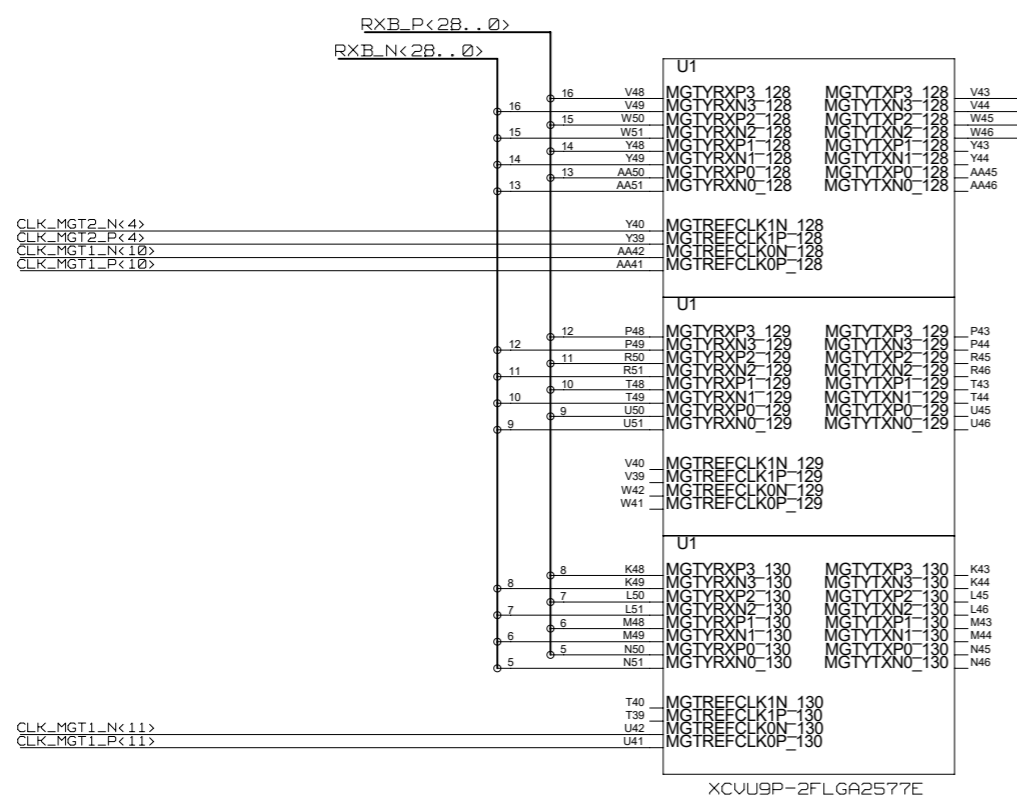
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
125
126
127

CHECKED	J. V. DE SOUZA			DRAWING TITLE <b>JFEX</b> RXA + RXB TXD + IPBUS
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U1_MGT_REAL_TIME				
UNIVERSITY OF MAINZ				SIZE <b>C</b>
				REV.
				DRAWING NO.
				SCALE
				SHEET 6 OF 7

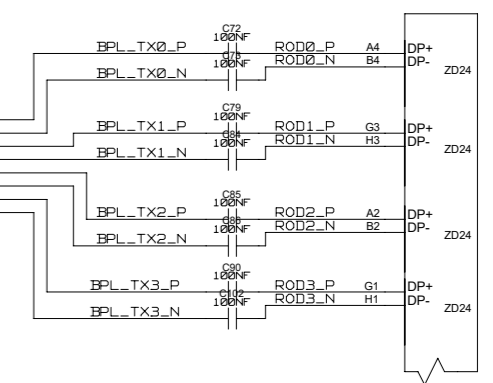
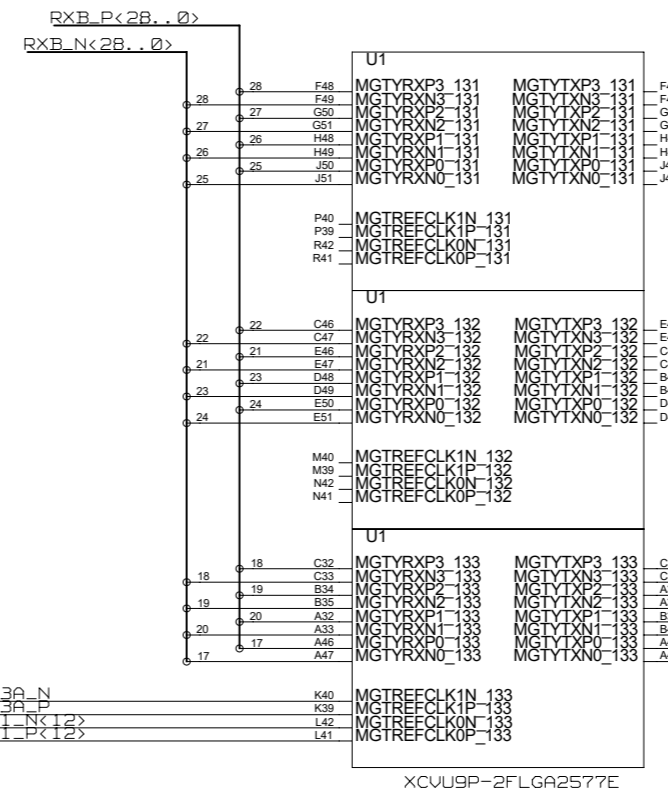
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



PLACE CLOSE TO U2

U45  
U42  
U44  
U43

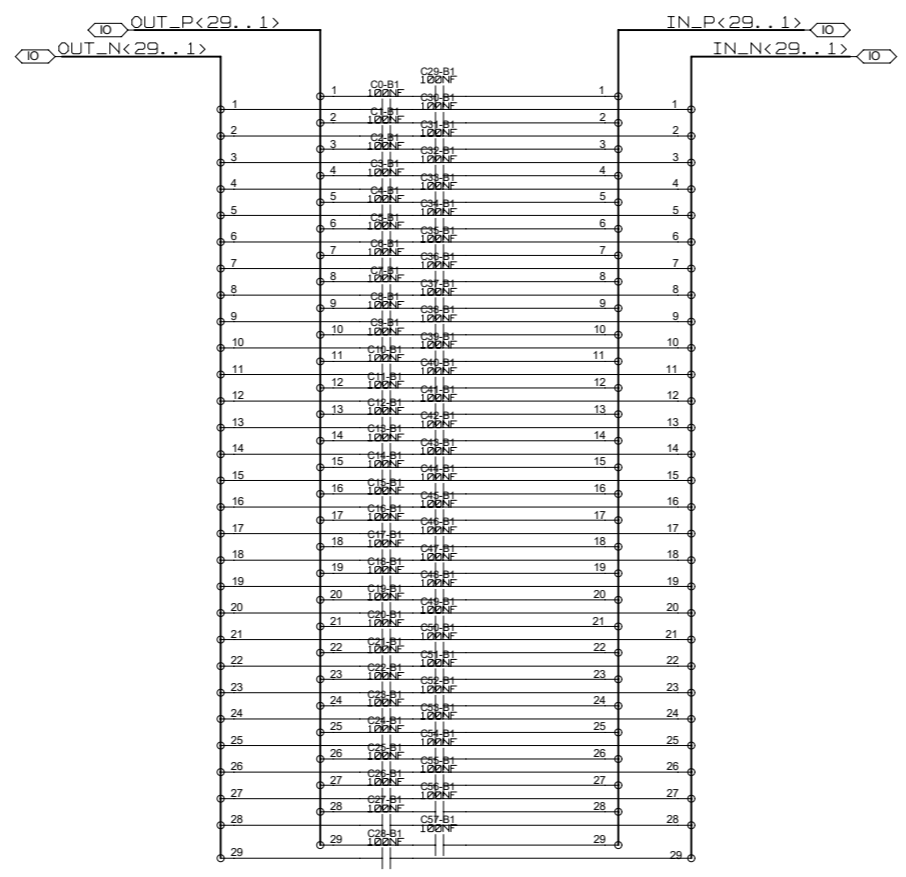
PLACE CLOSE TO U1



BANK
120
1200
12000
120000
1200000
12000000
120000000
1200000000
12000000000
120000000000
1200000000000

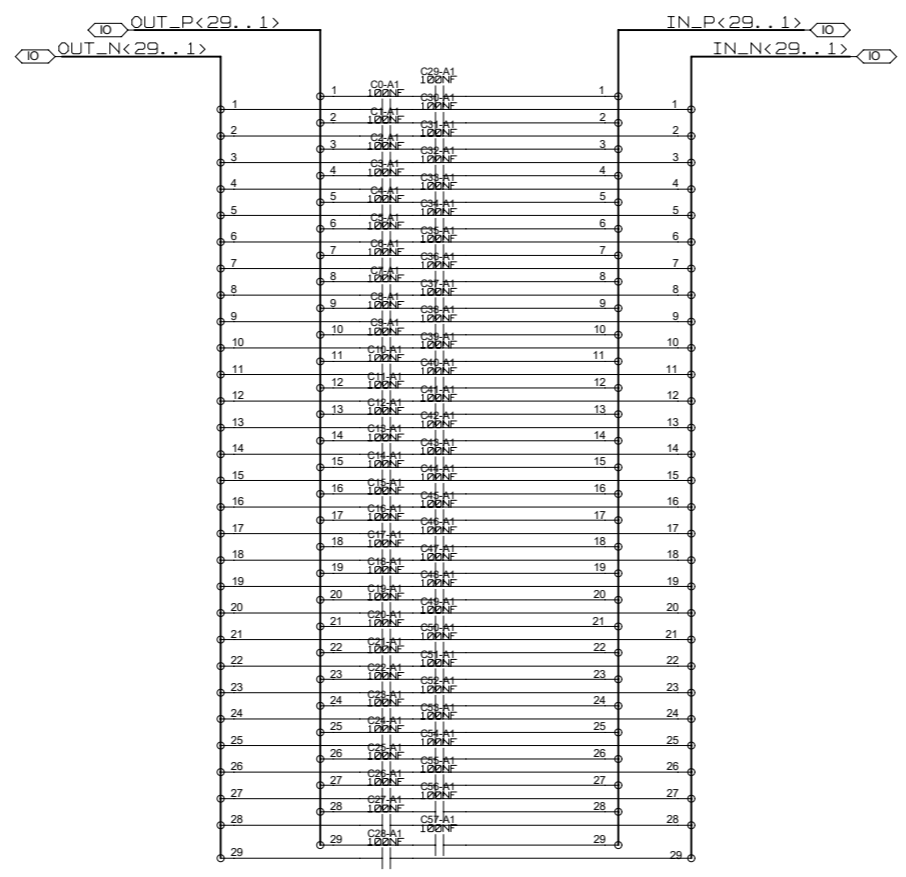
NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA		JFEX RXB + TXC
CHECKED	U. SCHAEFER		
CHECKED			
DRAWN	BAUSS	07.08.2015	
BLOCK TITLE			
U1_MGT_REAL_TIME			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE			SHEET 7 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



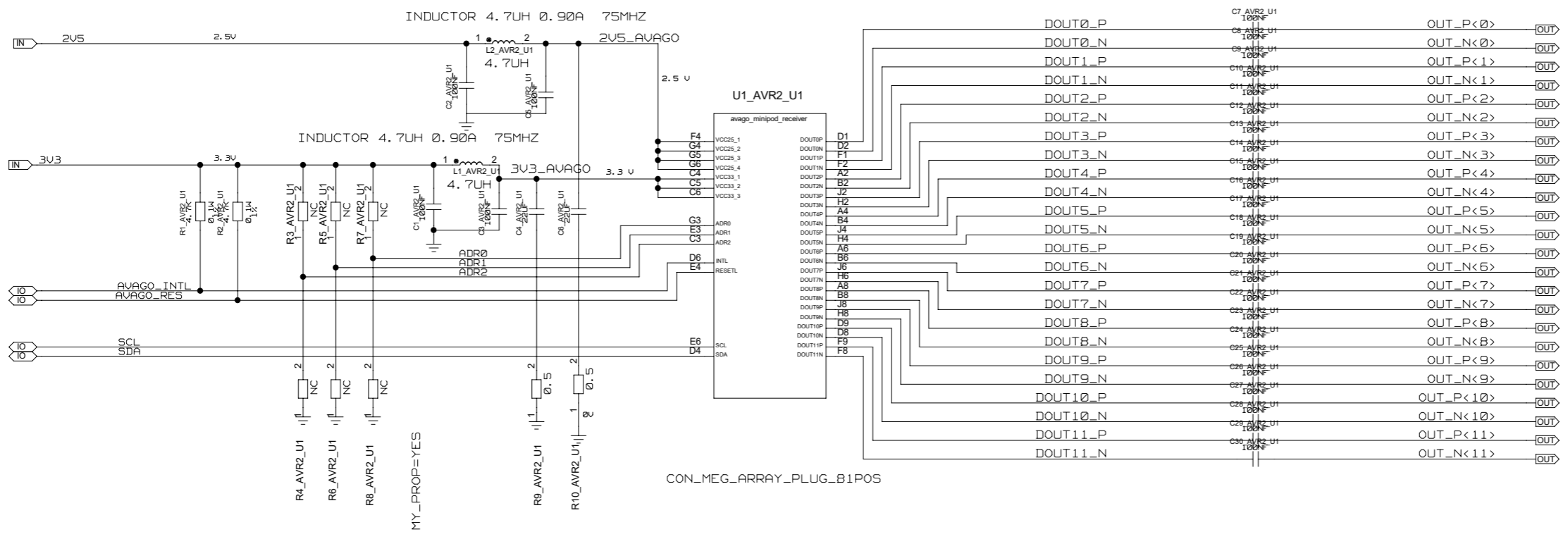
CHECKED	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AC COUPLING 29BIT	
CHECKED	U. SCHAEFER				
CHECKED	BAUSS				
DRAWN	BAUSS			BLOCK TITLE	
UNIVERSITY OF MAINZ				SIZE	DRAWING NO.
SCALE				REV.	
				SHEET	OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



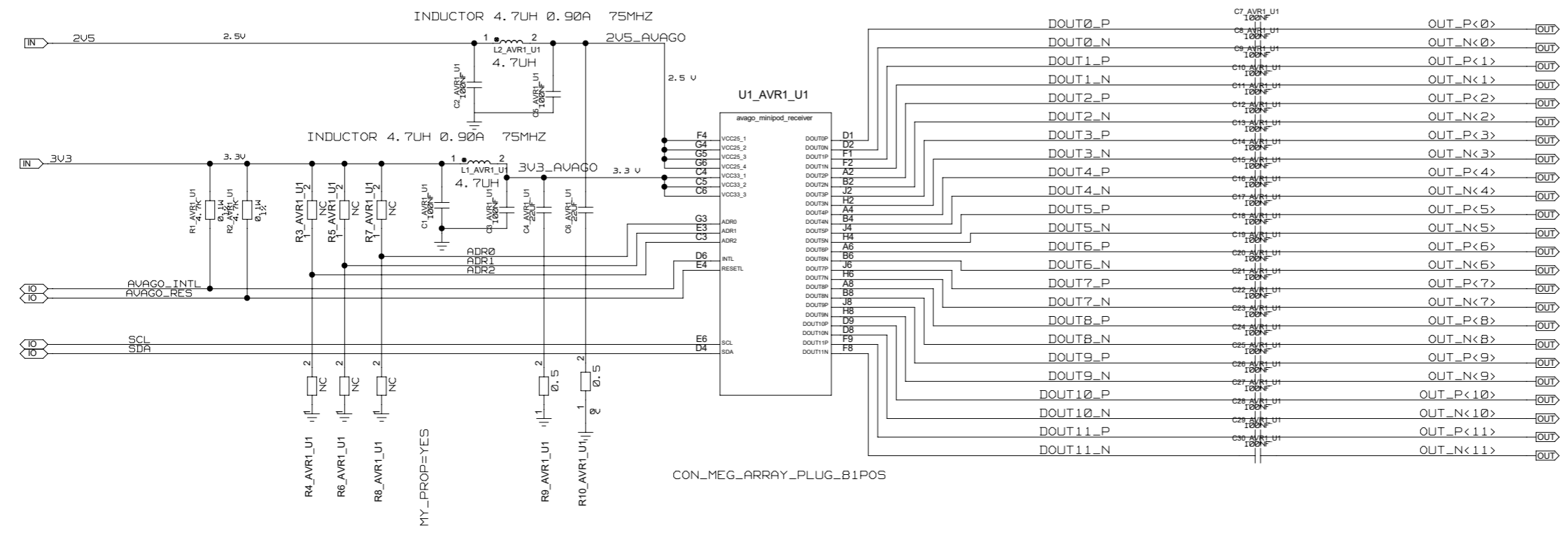
CHECKED	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AC COUPLING 29BIT	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS			DRAWING NO.	
BLOCK TITLE				SIZE	REV.
UNIVERSITY OF MAINZ				<b>C</b>	
				SCALE	
				SHEET	OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA		AVAGO RECEIVER	
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE			SIZE	REV.
UNIVERSITY OF MAINZ			SCALE	DRAWING NO.
				SHEET OF

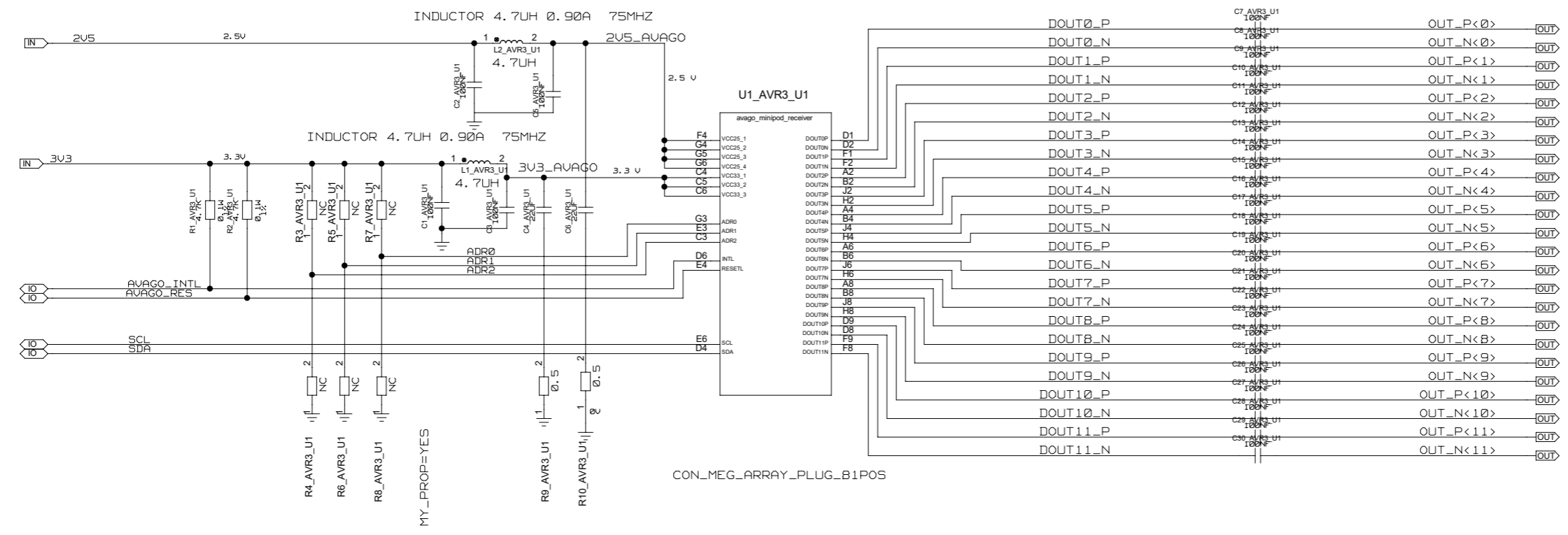
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	REV.
SCALE					SHEET OF

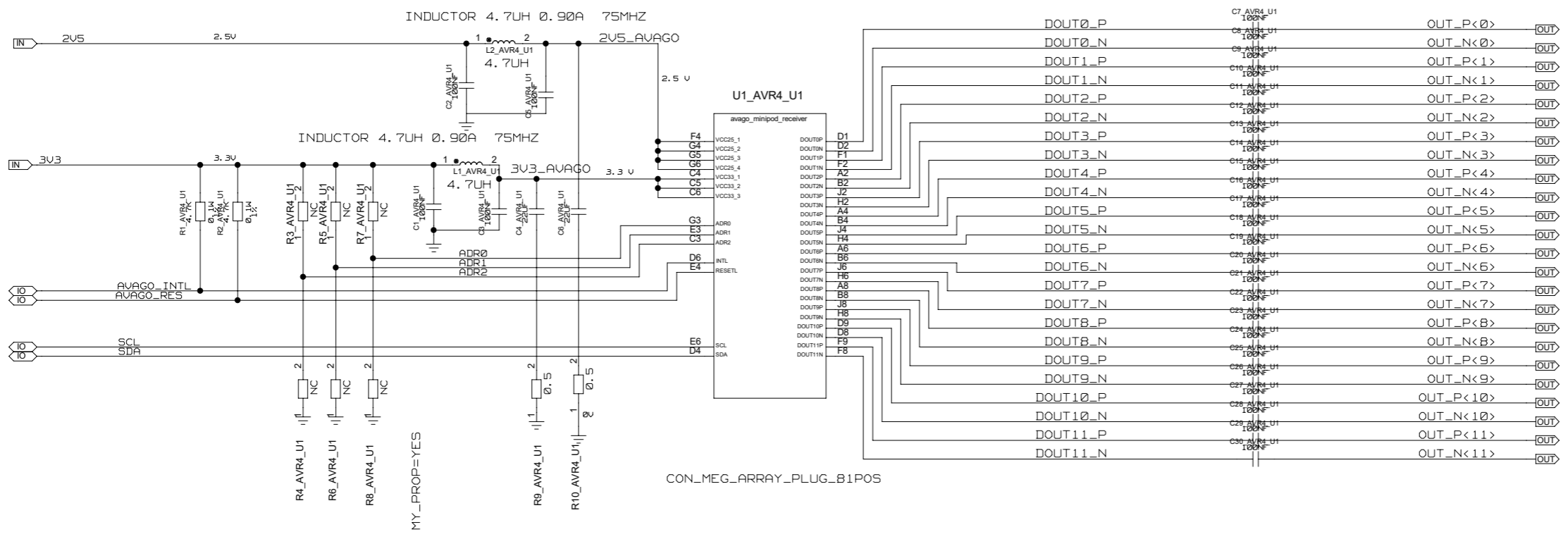


REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



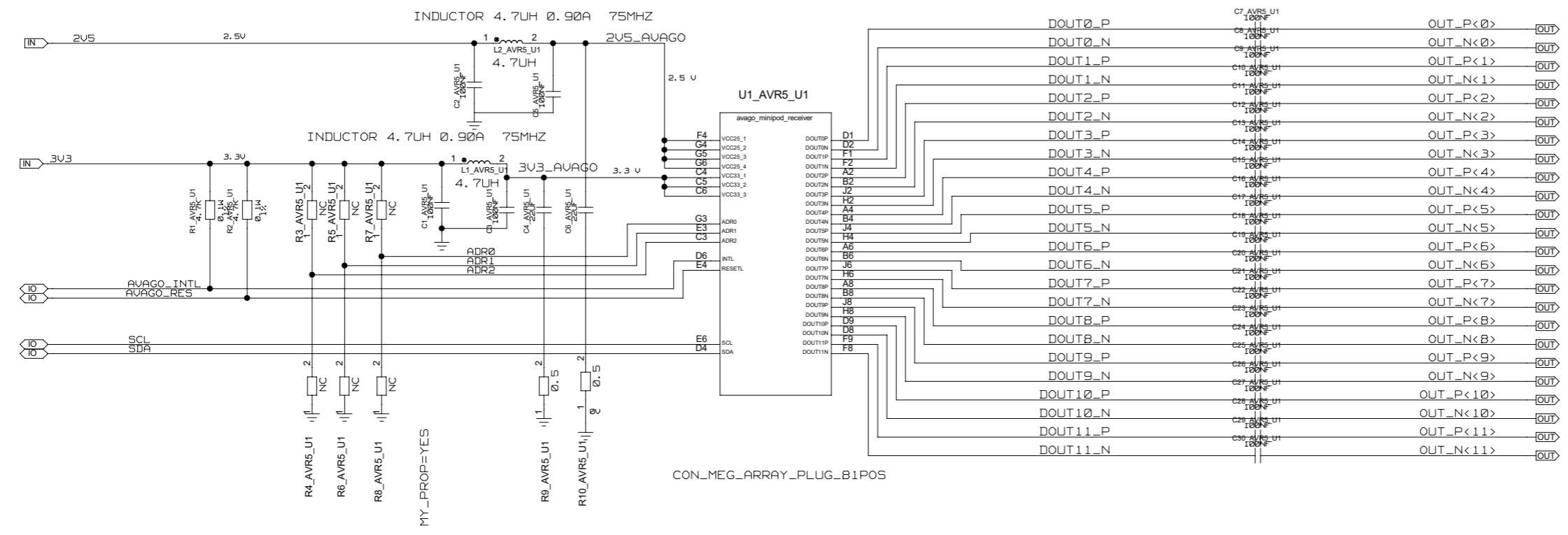
	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	REV.
SCALE					SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



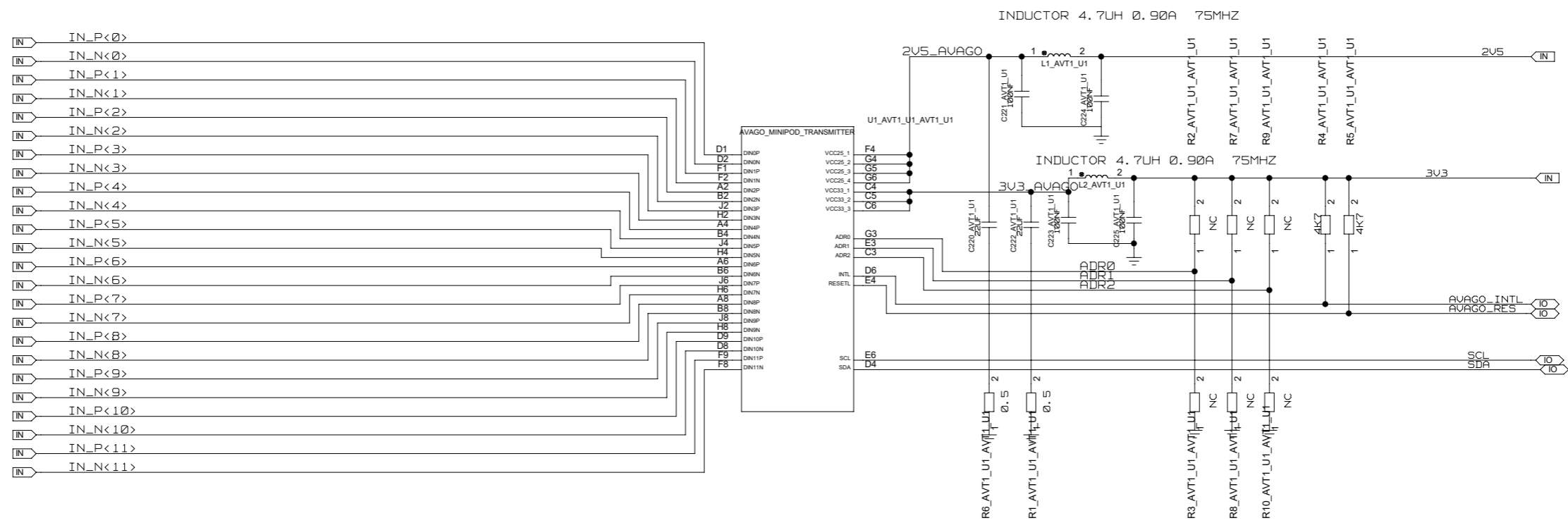
	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	REV.
SCALE					SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	REV.
				SCALE	SHEET OF

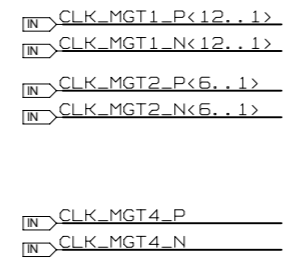
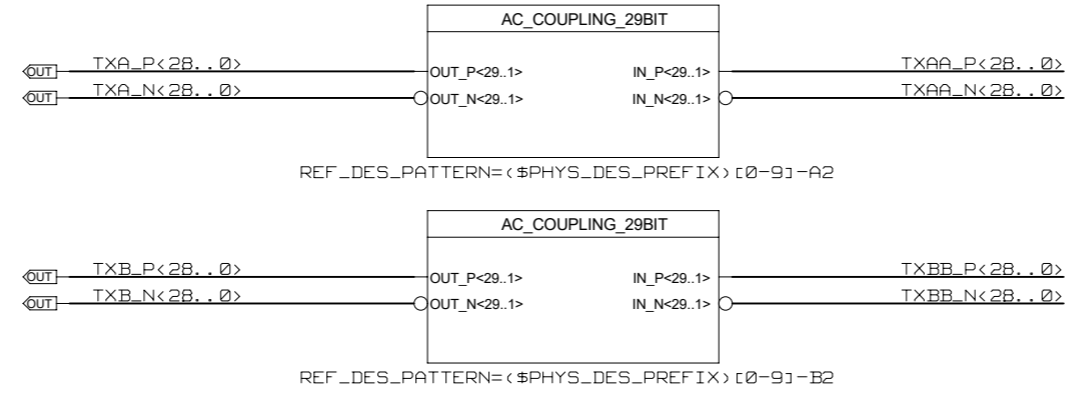
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA		AVAGO TRANSMITTER	
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS		DRAWING NO.	
BLOCK TITLE			SIZE	REV.
UNIVERSITY OF MAINZ			C	
			SCALE	SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

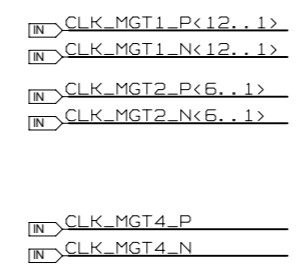
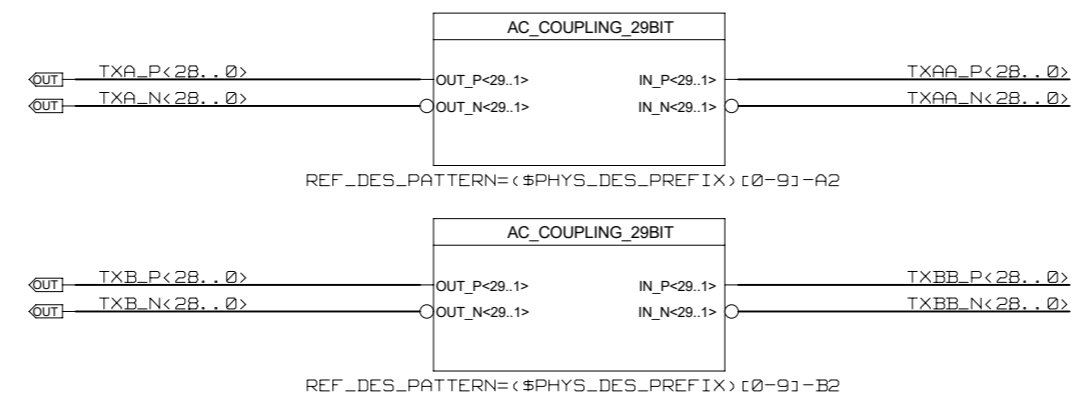
### AC COUPLING



CHECKED	J. V. DE SOUZA			DRAWING TITLE <b>JFEX</b> I/O + AC COUPLING
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U2_MGT_REAL_TIME				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
SCALE				DRAWING NO.
SHEET 1 OF 7				

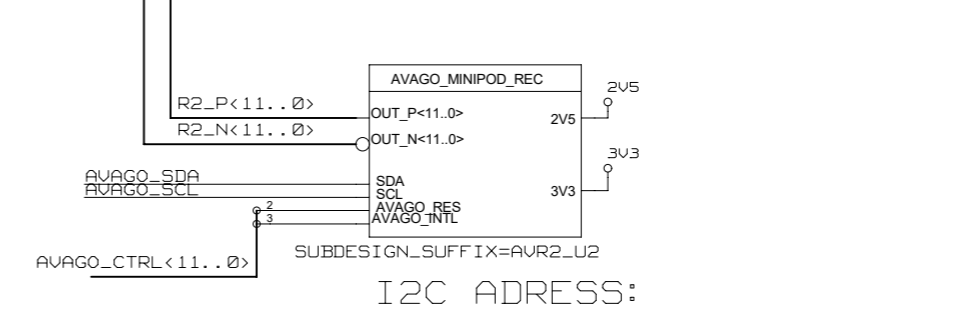
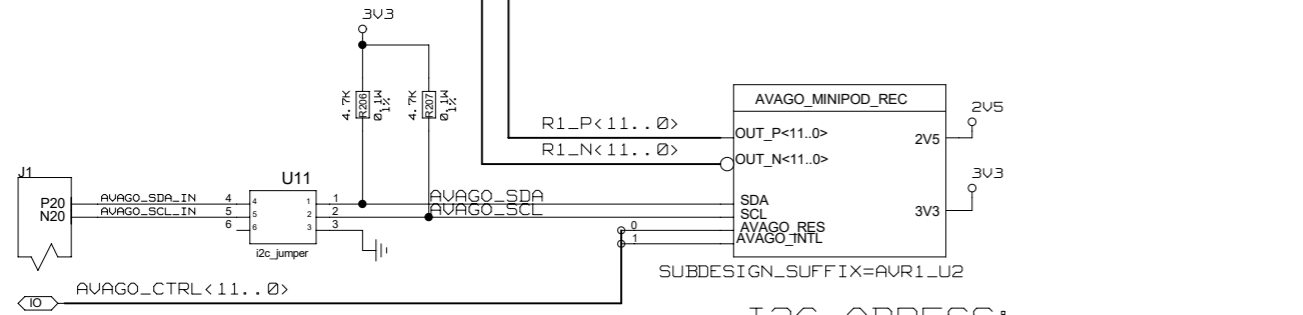
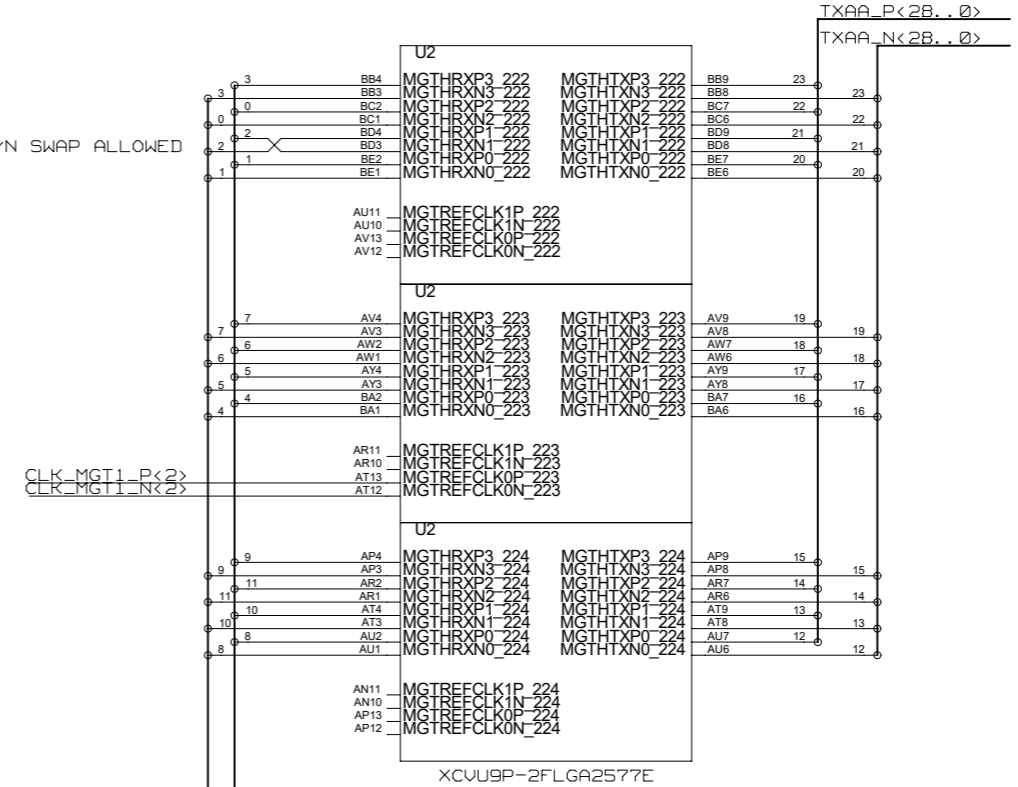
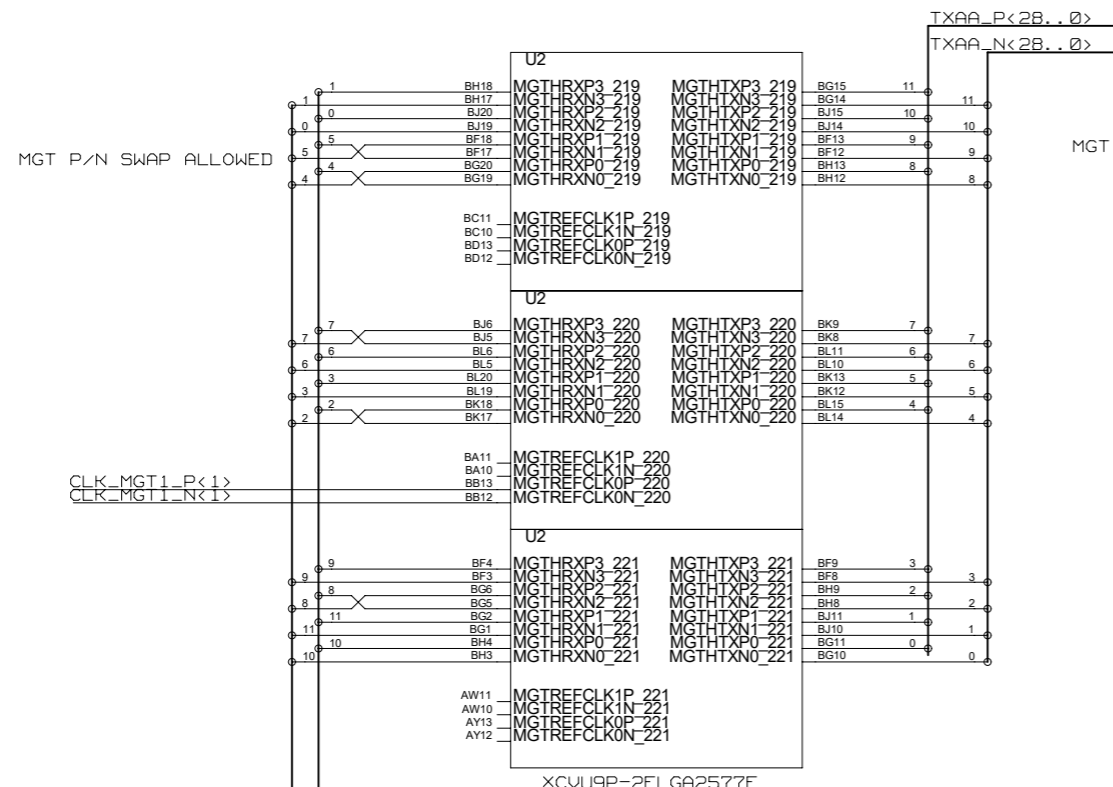
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

### AC COUPLING



CHECKED	J. V. DE SOUZA			DRAWING TITLE <b>JFEX</b> I/O + AC COUPLING
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U2_MGT_REAL_TIME				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
SCALE				DRAWING NO.
				SHEET 1 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



AVAGO\_CTRL <11..0>  
 AVAGO\_CTRL 0, 2, 4, 6, 8, 10 = AVAGO\_RES\_XX  
 AVAGO\_CTRL 1, 3, 5, 7, 9, 11 = AVAGO\_INTL\_XX

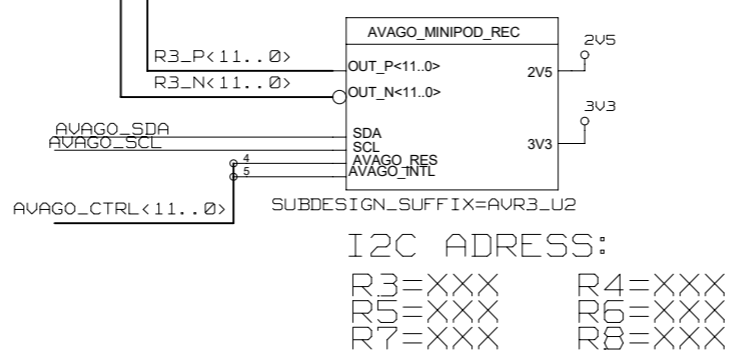
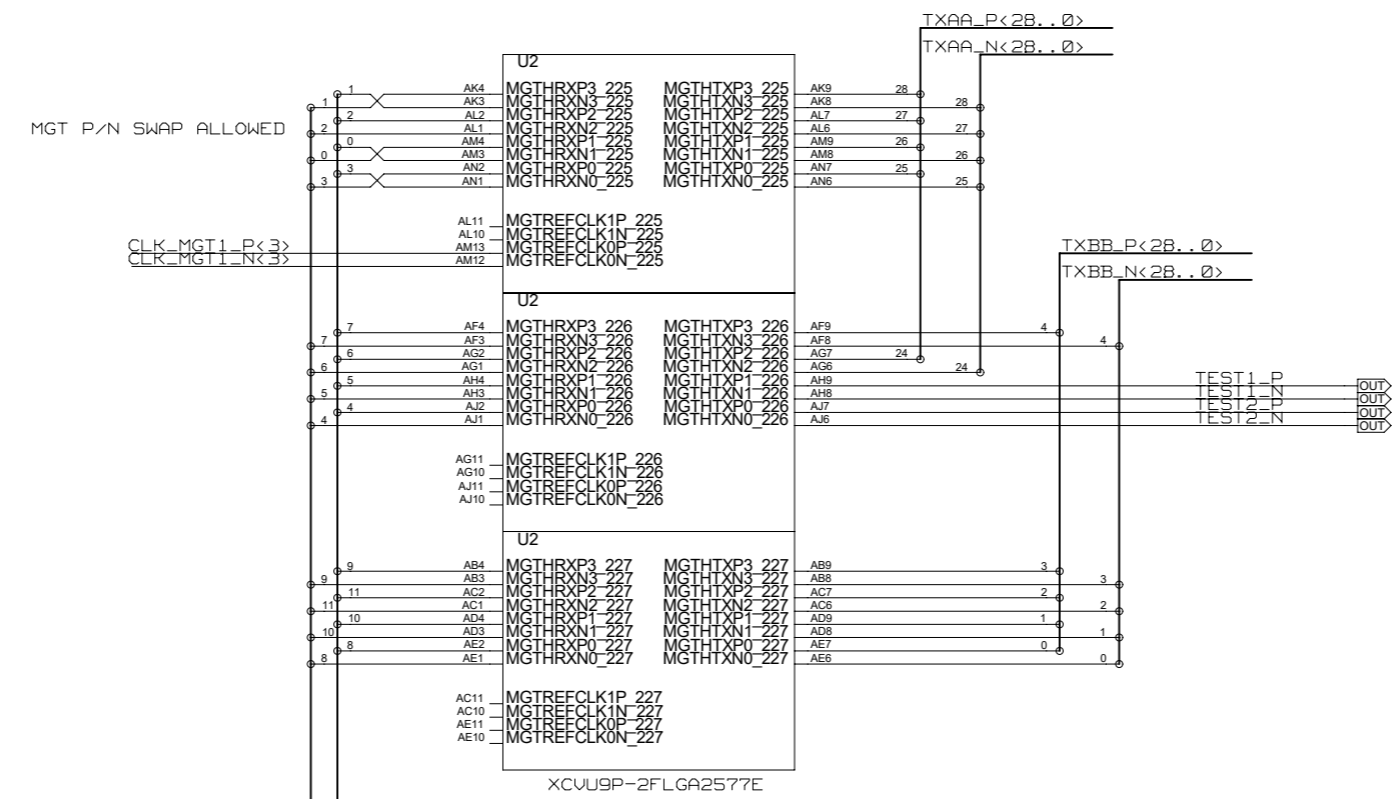
I2C ADDRESS:  
 R3=XXX R4=XXX  
 R5=XXX R6=XXX  
 R7=XXX R8=XXX

I2C ADDRESS:  
 R3=XXX R4=XXX  
 R5=XXX R6=XXX  
 R7=XXX R8=XXX

BANK
210
209
208
207
206
205
204
203
202
201
200

NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA		JFEX AVAGO + TXA
CHECKED	U.SCHAEFER		
CHECKED			
DRAWN	BAUSS	07.08.2015	
BLOCK TITLE			
U2_MGT_REAL_TIME			
UNIVERSITY OF MAINZ		SIZE <b>C</b>	DRAWING NO.
SCALE		REV.	SHEET 2 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

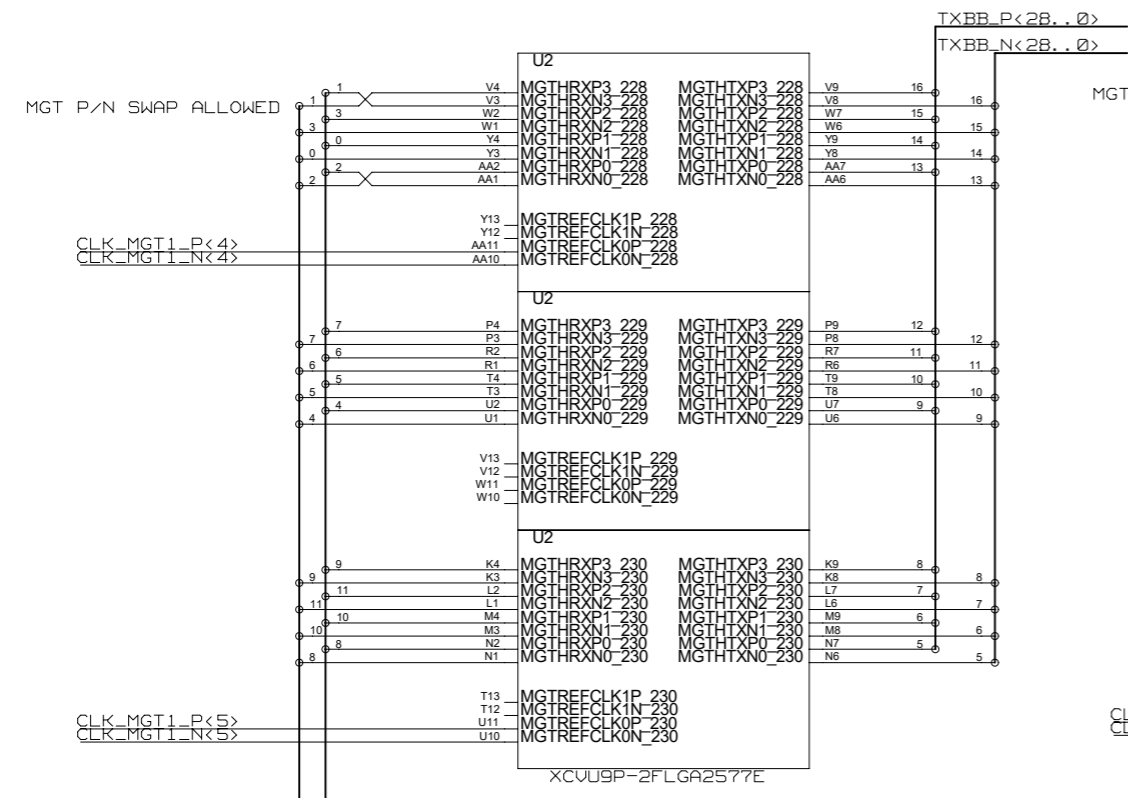


BANK  
225  
226  
227

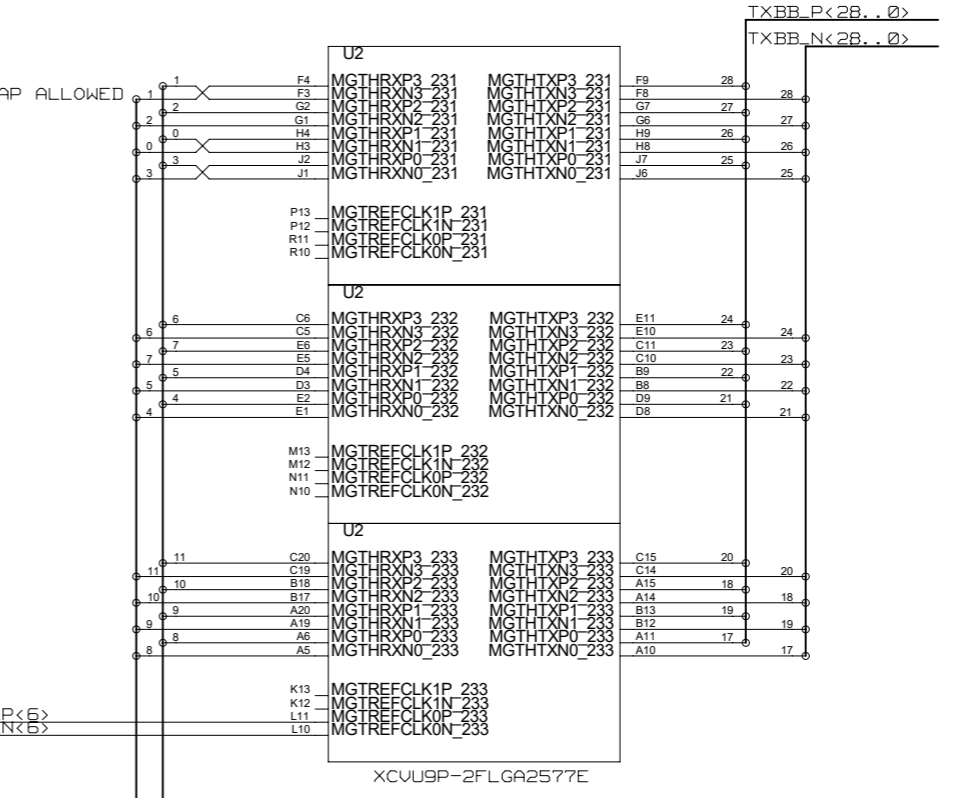
CHECKED	NAME	DATE	SIGN	DRAWING TITLE <b>JFEX AVAGO + TXA + TXB</b>
CHECKED	J.V.DE SOUZA			
CHECKED	U.SCHAEFER			
CHECKED	BAUSS	07.08.2015		
BLOCK TITLE U2_MGT_REAL_TIME				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
SCALE				DRAWING NO.
SHEET 3 OF 7				



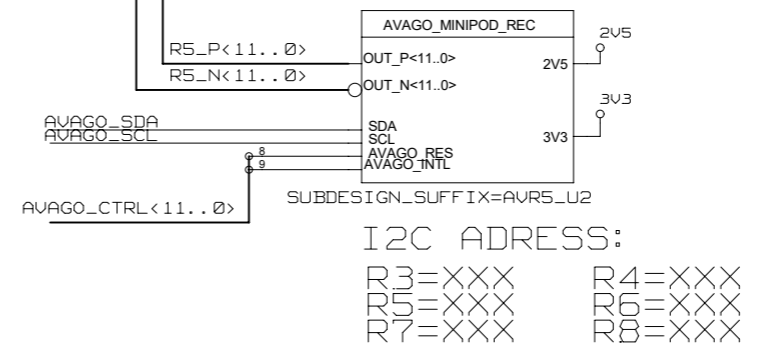
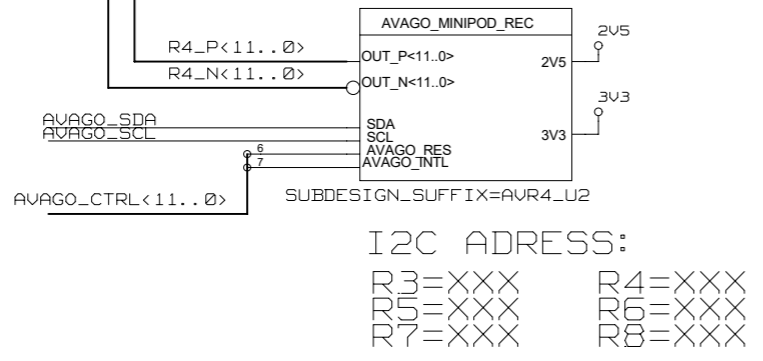
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



MGT P/N SWAP ALLOWED



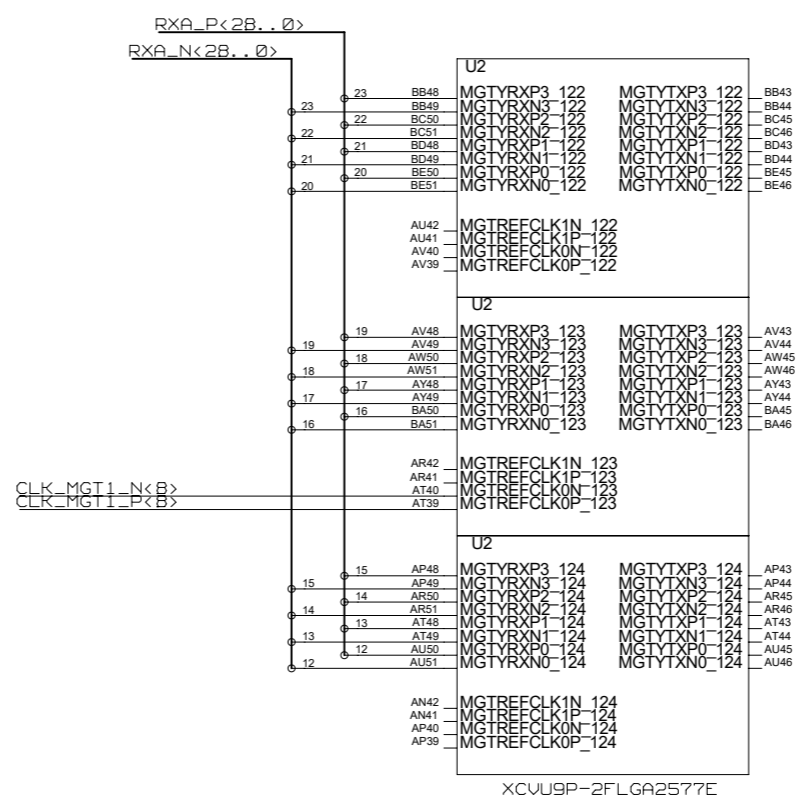
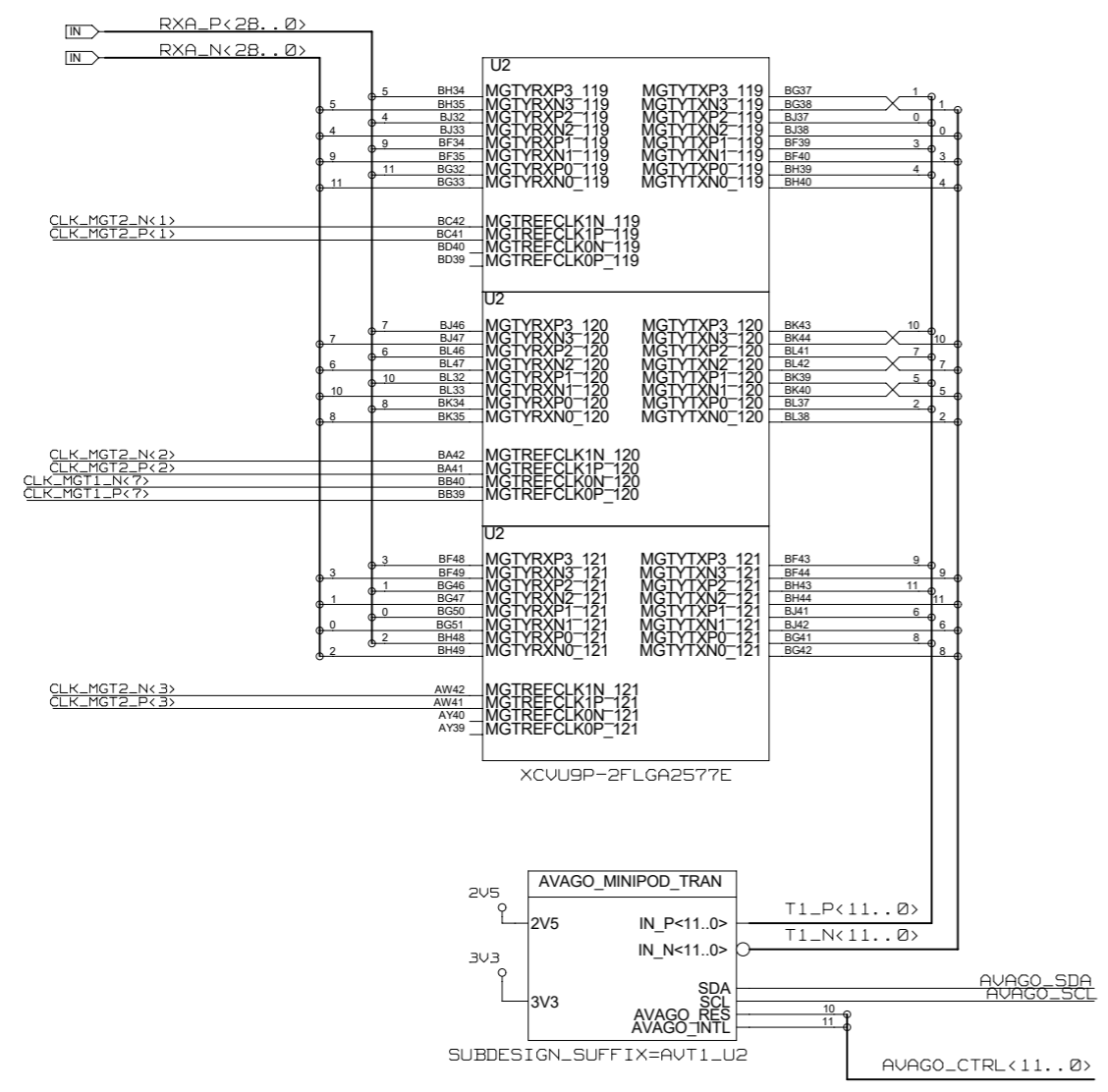
MGT P/N SWAP ALLOWED



BANK  
R3  
R4  
R5  
R6  
R7  
R8

	NAME	DATE	SIGN	DRAWING TITLE <b>JFEX AVAGO + TXB</b>
CHECKED	J.V. DE SOUZA			
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U2_MGT_REAL_TIME				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
SCALE				SHEET 4 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

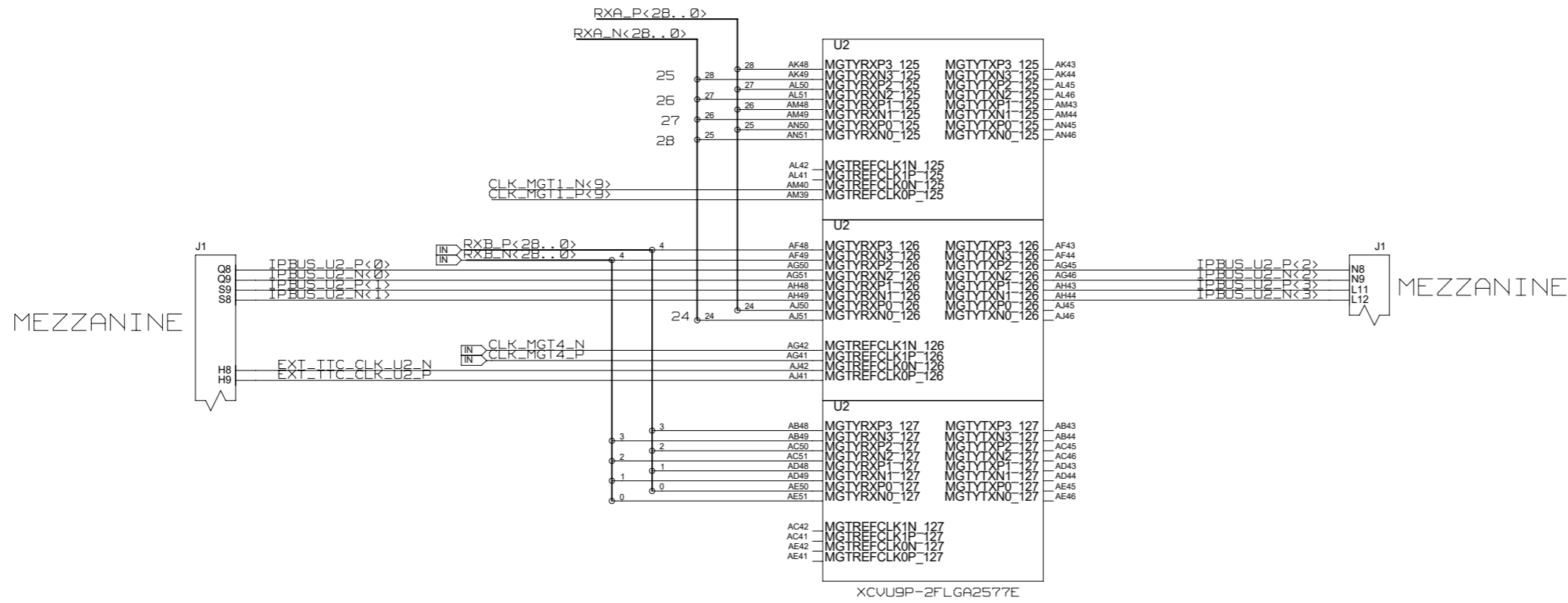


I2C ADDRESS:  
R3=XXX R4=XXX  
R5=XXX R6=XXX  
R7=XXX R8=XXX

BANK
110
120
130
140
150
160
170
180
190

CHECKED	J. V. DE SOUZA			DRAWING TITLE <b>JFEX AVAGO + RXA</b>
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE <b>U2_MGT_REAL_TIME</b>				
UNIVERSITY OF MAINZ				
SIZE <b>C</b>	REV.	DRAWING NO.		
SCALE			SHEET 5 OF 7	

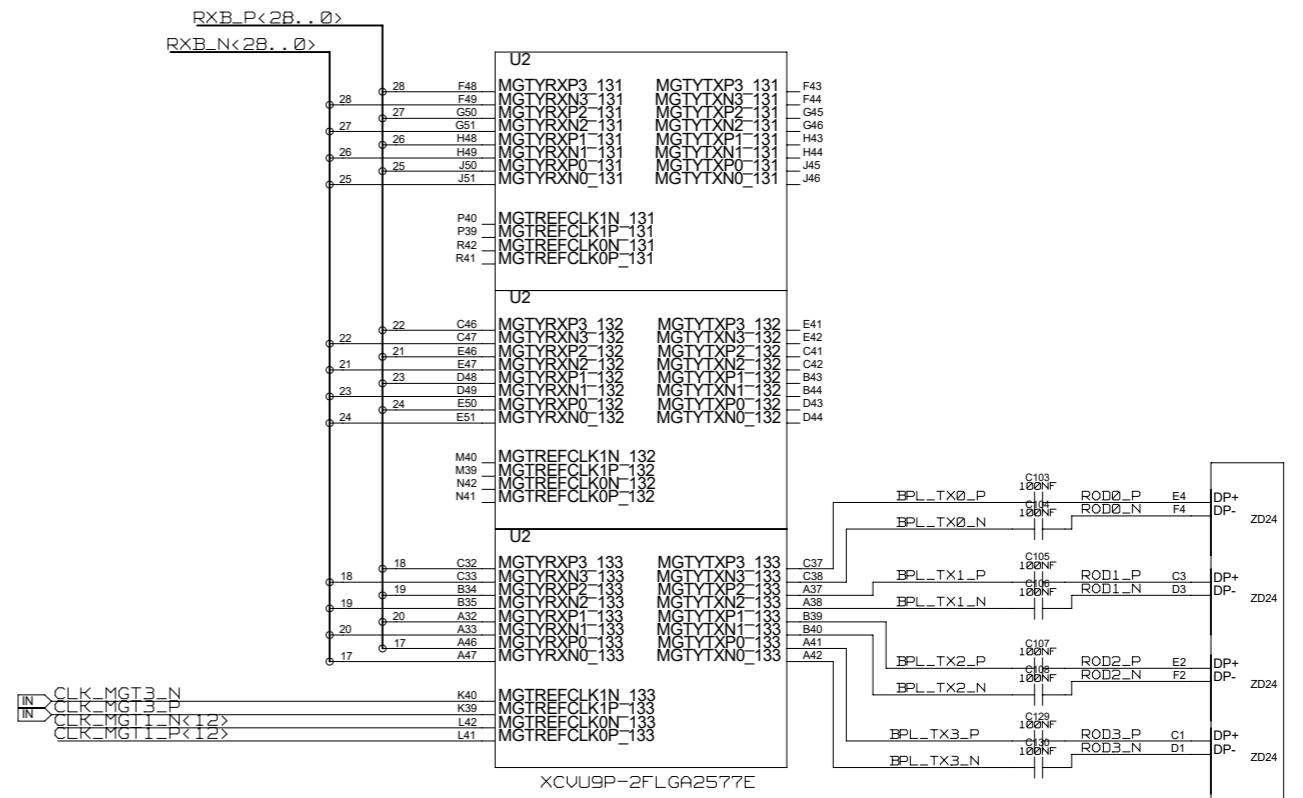
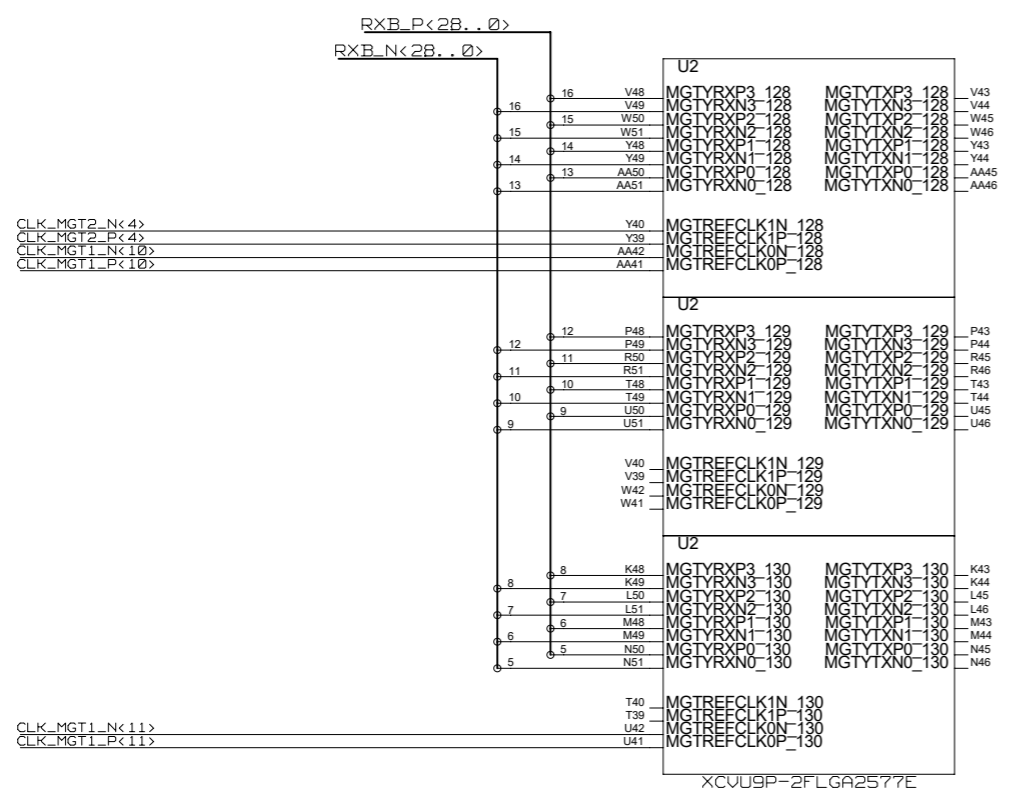
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
125
126
127

<table border="1"> <tr> <th>NAME</th> <th>DATE</th> <th>SIGN</th> </tr> <tr> <td>CHECKED</td> <td>J. V. DE SOUZA</td> <td></td> </tr> <tr> <td>CHECKED</td> <td>U. SCHAEFER</td> <td></td> </tr> <tr> <td>CHECKED</td> <td></td> <td></td> </tr> <tr> <td>DRAWN</td> <td>BAUSS</td> <td>07.08.2015</td> </tr> </table>	NAME	DATE	SIGN	CHECKED	J. V. DE SOUZA		CHECKED	U. SCHAEFER		CHECKED			DRAWN	BAUSS	07.08.2015	<table border="1"> <tr> <td colspan="2">DRAWING TITLE</td> </tr> <tr> <td colspan="2">JFEX</td> </tr> <tr> <td colspan="2">RXA + RXB</td> </tr> <tr> <td colspan="2">TXD + IPBUS</td> </tr> </table>	DRAWING TITLE		JFEX		RXA + RXB		TXD + IPBUS	
NAME	DATE	SIGN																						
CHECKED	J. V. DE SOUZA																							
CHECKED	U. SCHAEFER																							
CHECKED																								
DRAWN	BAUSS	07.08.2015																						
DRAWING TITLE																								
JFEX																								
RXA + RXB																								
TXD + IPBUS																								
<table border="1"> <tr> <td>BLOCK TITLE</td> <td>DRAWING NO.</td> </tr> <tr> <td>U2_MGT_REAL_TIME</td> <td></td> </tr> </table>	BLOCK TITLE	DRAWING NO.	U2_MGT_REAL_TIME		<table border="1"> <tr> <td>SIZE</td> <td>REV.</td> </tr> <tr> <td>C</td> <td></td> </tr> </table>	SIZE	REV.	C																
BLOCK TITLE	DRAWING NO.																							
U2_MGT_REAL_TIME																								
SIZE	REV.																							
C																								
<table border="1"> <tr> <td>UNIVERSITY OF MAINZ</td> <td>SCALE</td> <td>SHEET 6 OF 7</td> </tr> </table>	UNIVERSITY OF MAINZ	SCALE	SHEET 6 OF 7																					
UNIVERSITY OF MAINZ	SCALE	SHEET 6 OF 7																						

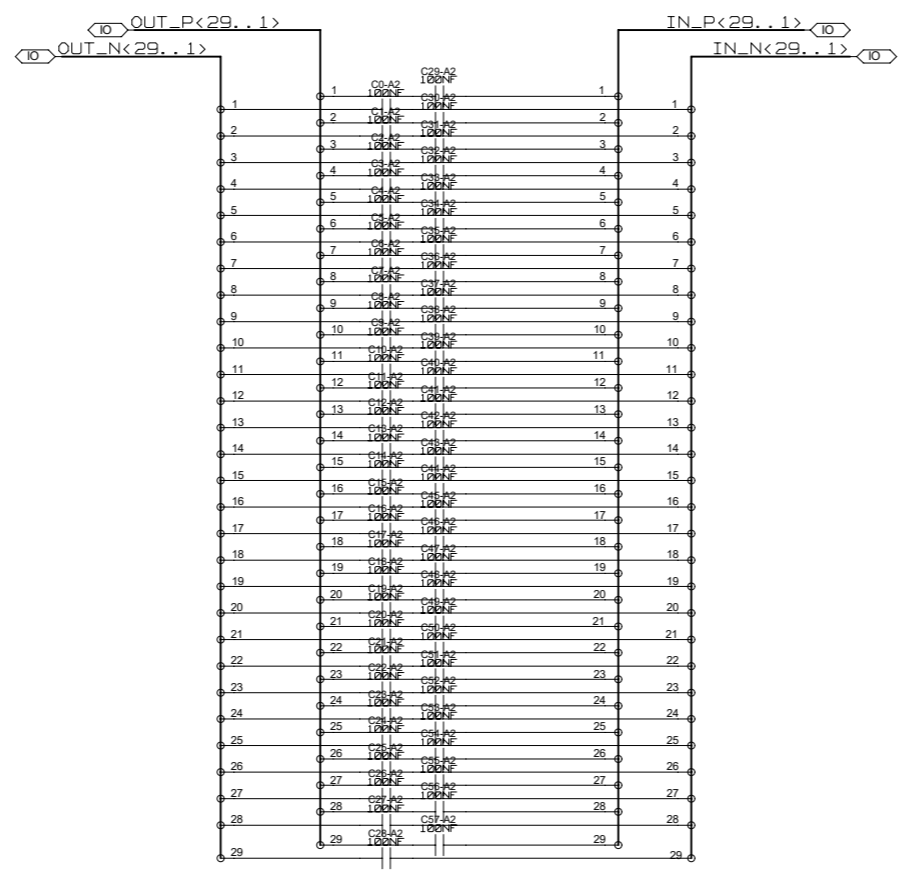
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
128
129
130
131
132
133

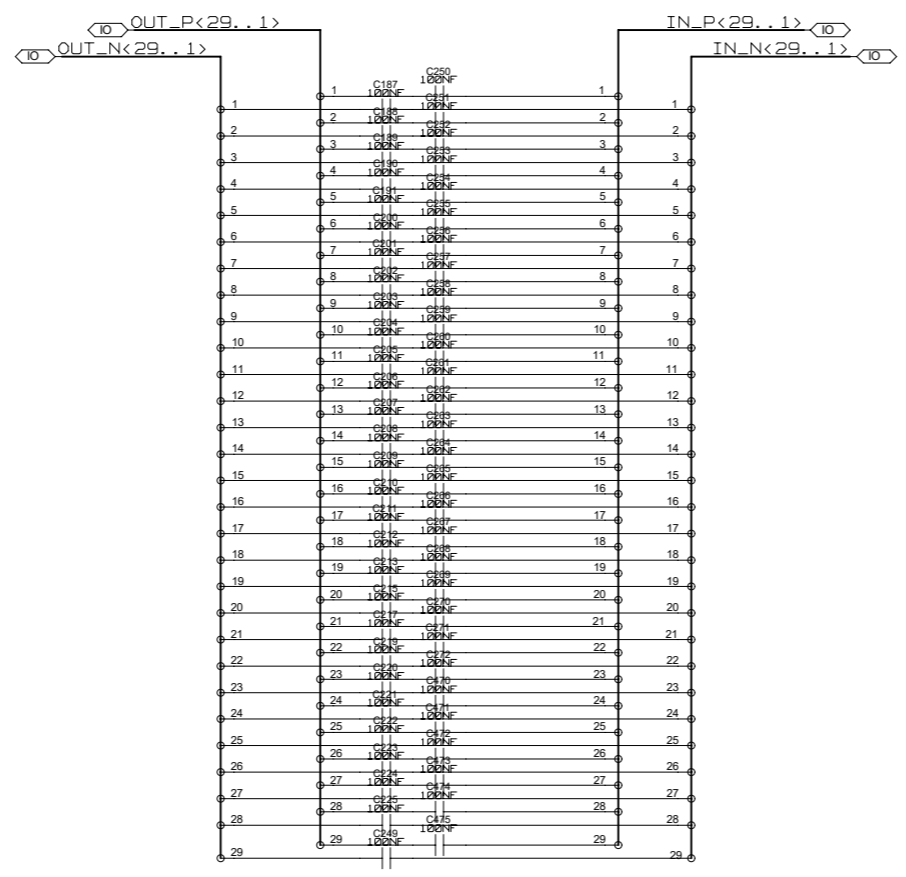
CHECKED	NAME	DATE	SIGN	DRAWING TITLE <b>JFEX RXB + TXC</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED	BAUSS	07.08.2015		
BLOCK TITLE U2_MGT_REAL_TIME				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
SCALE				DRAWING NO.
SHEET 7 OF 7				

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



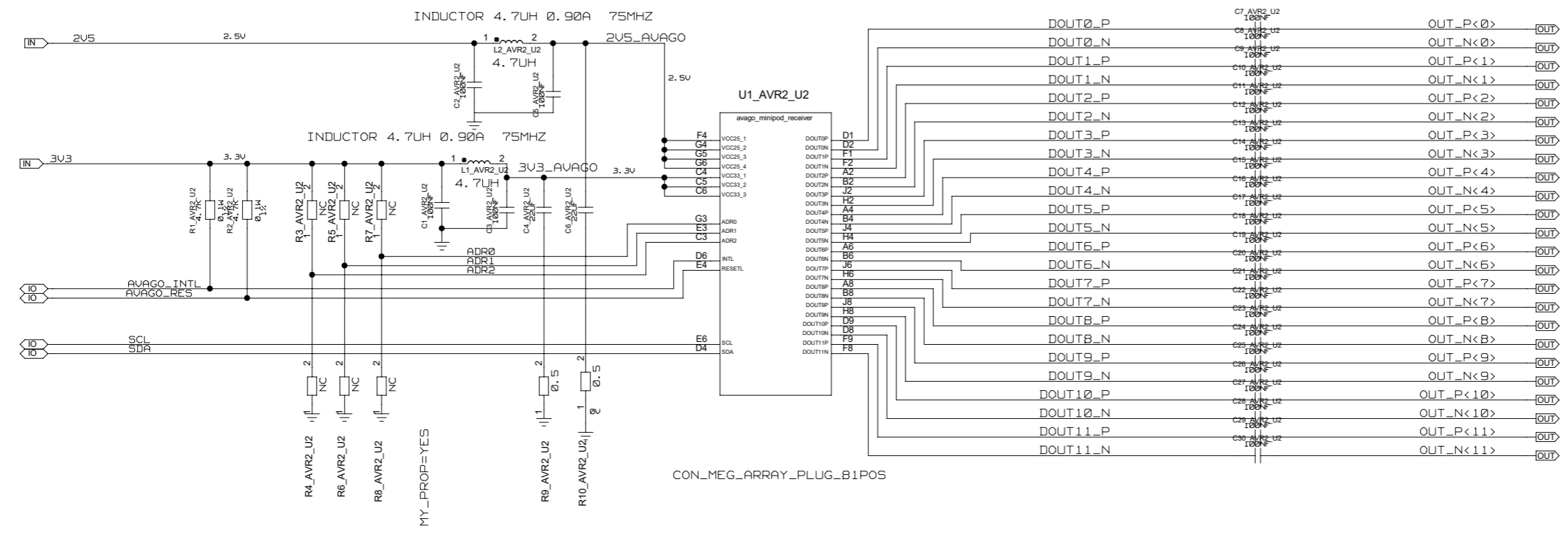
CHECKED	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AC COUPLING 29BIT	
CHECKED	U. SCHAEFER				
CHECKED	BAUSS				
DRAWN	BAUSS			BLOCK TITLE	
UNIVERSITY OF MAINZ				SIZE	DRAWING NO.
				<b>C</b>	REV.
SCALE					SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



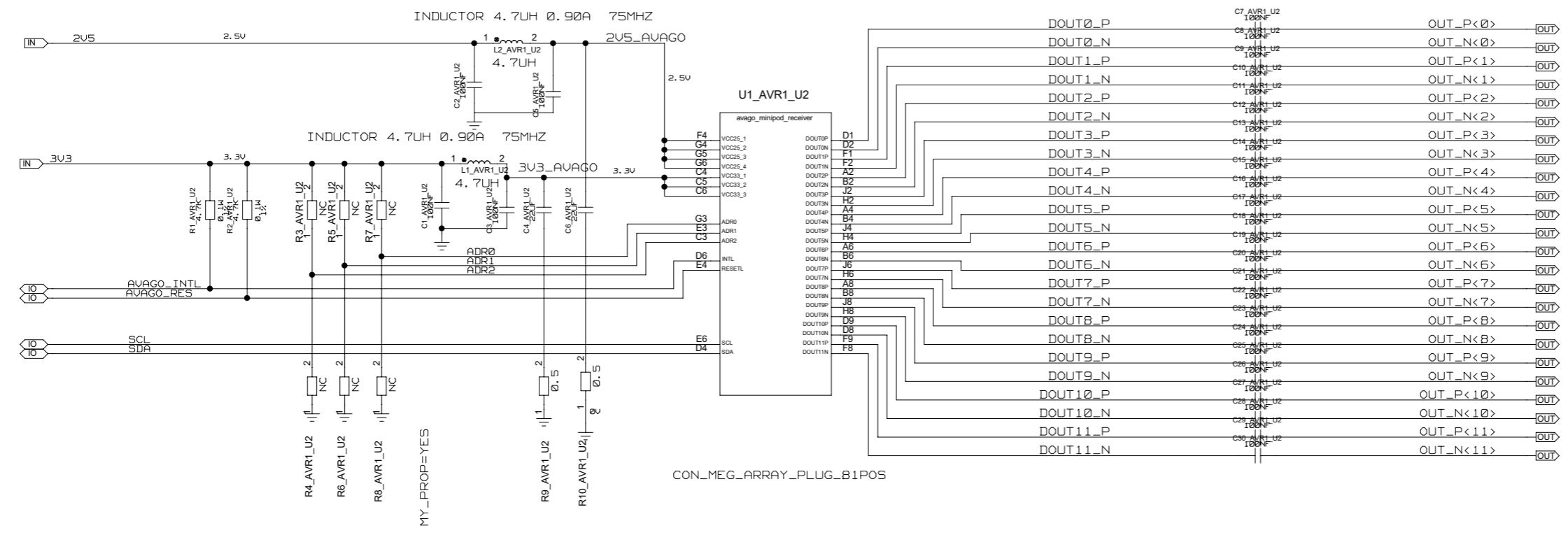
CHECKED	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AC COUPLING 29BIT	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE					
UNIVERSITY OF MAINZ				SIZE	DRAWING NO.
				<b>C</b>	
SCALE				REV.	
				SHEET	OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	REV.
SCALE					SHEET OF

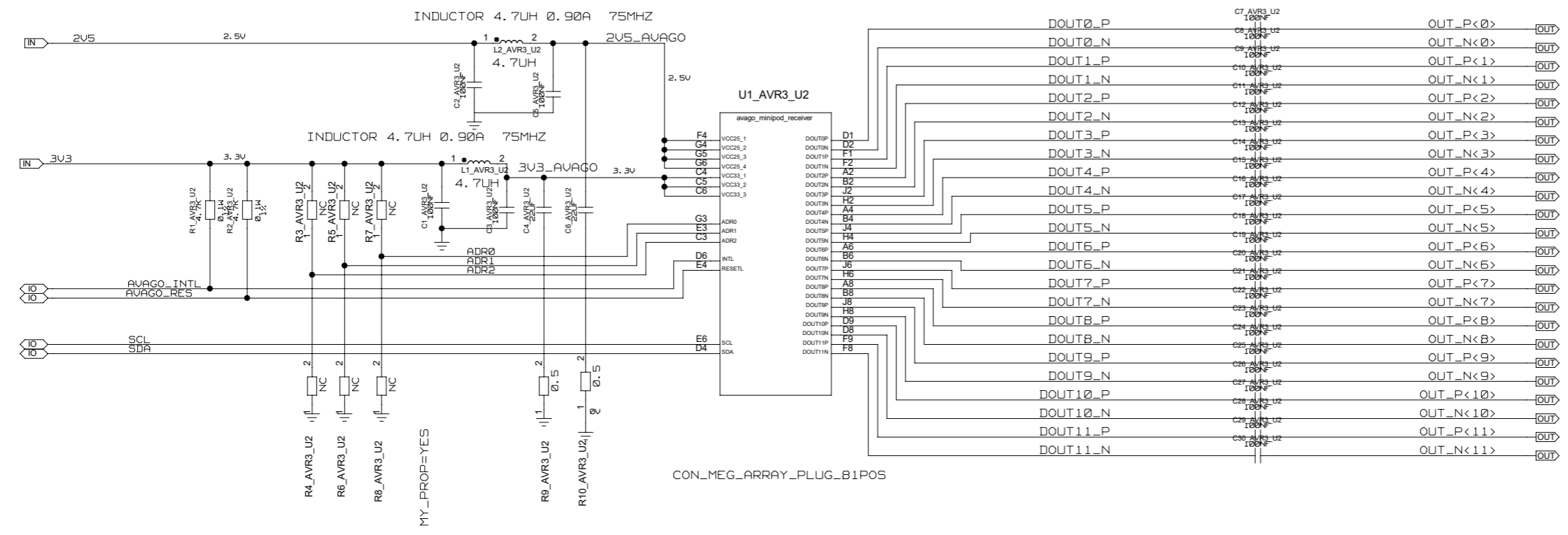
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	REV.
SCALE					SHEET OF

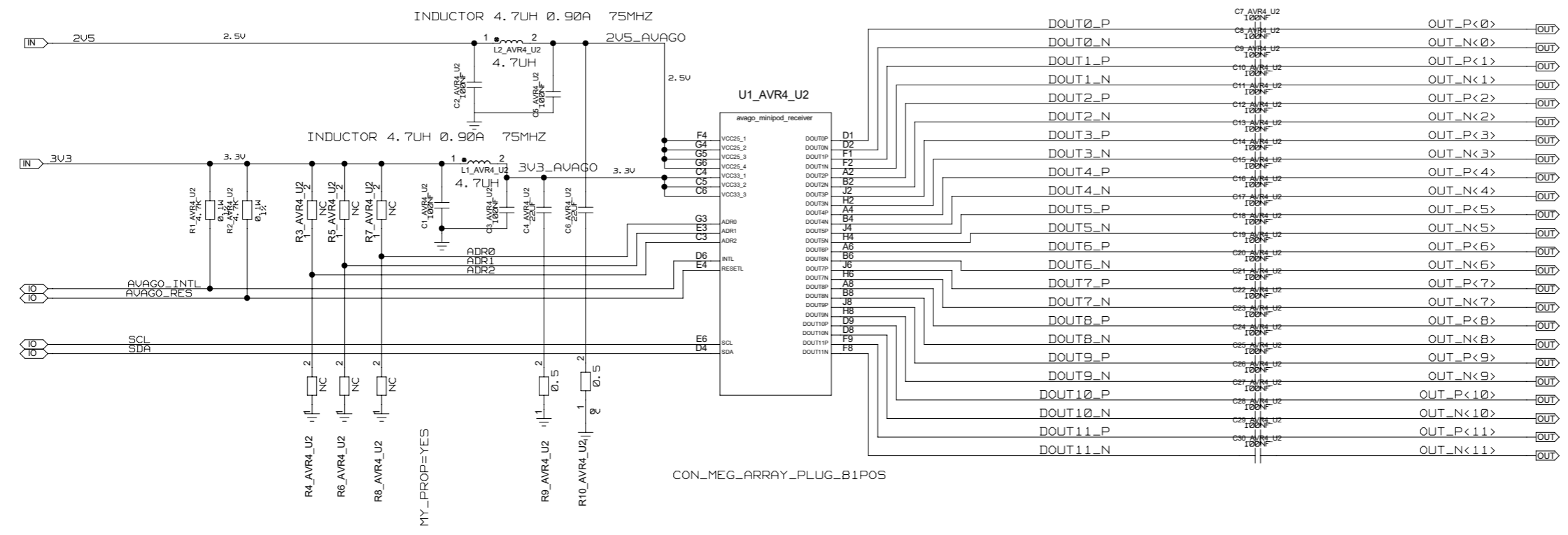


REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



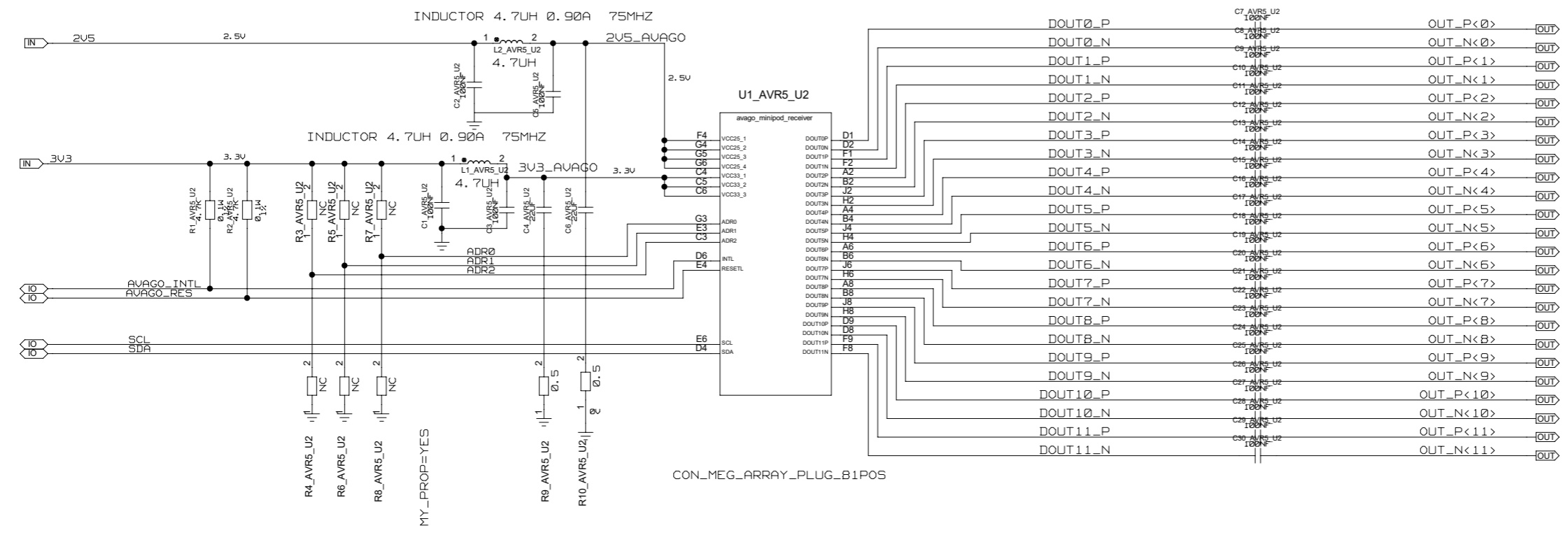
	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	REV.
SCALE					SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



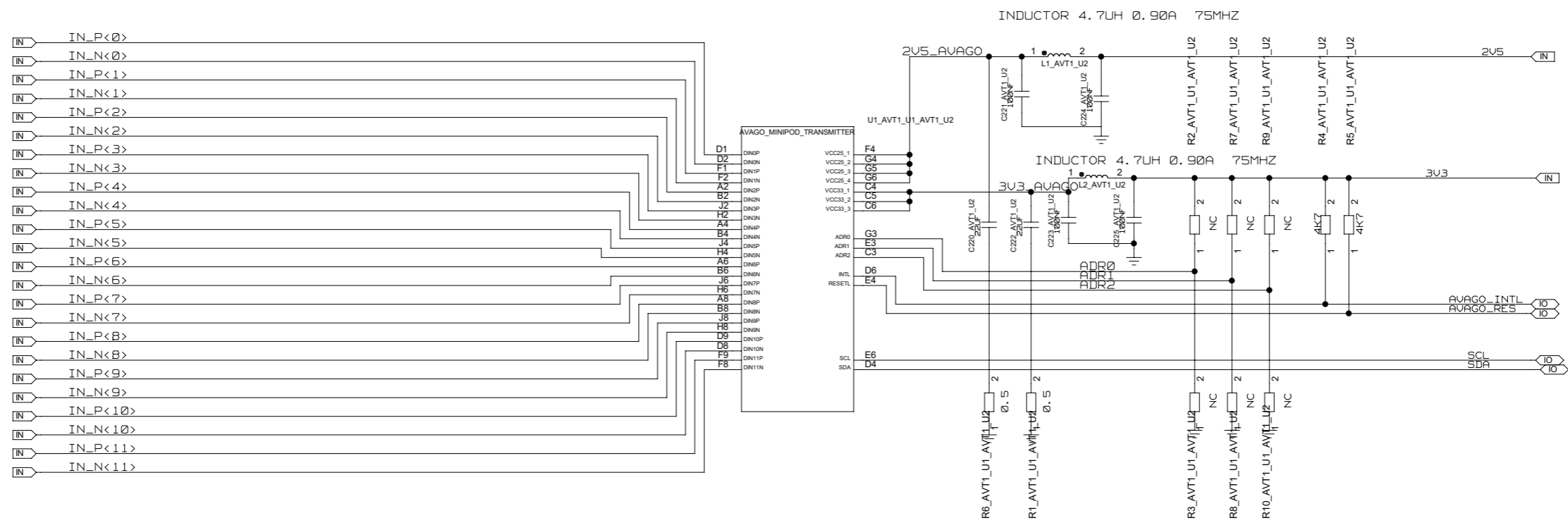
CHECKED	NAME	DATE	SIGN	DRAWING TITLE  <b>AVAGO RECEIVER</b>		
CHECKED	J. V. DE SOUZA					
CHECKED	U. SCHAEFER					
CHECKED	BAUSS					
DRAWN						
BLOCK TITLE				SIZE	REV.	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>		
				SCALE		SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	REV.
				SCALE	SHEET OF

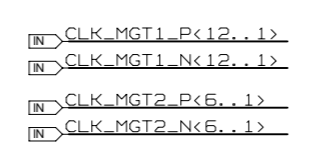
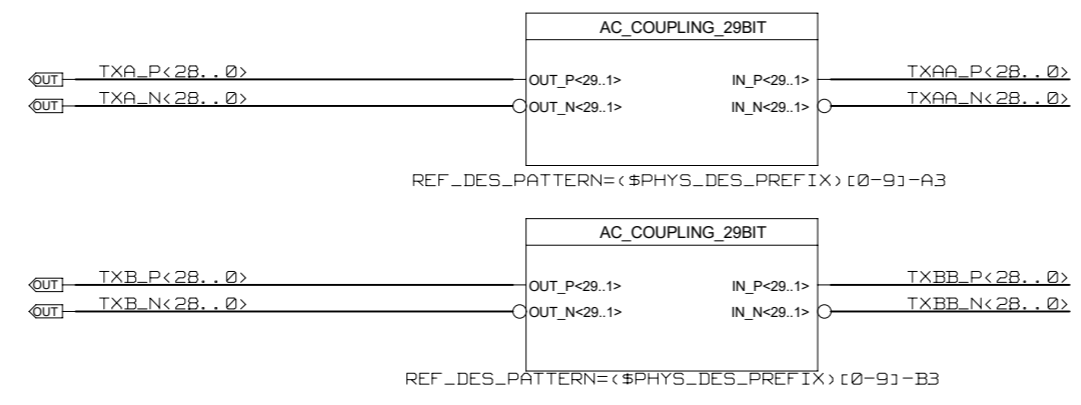
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



CHECKED	NAME	DATE	SIGN	DRAWING TITLE  AVAGO TRANSMITTER	
CHECKED	J. V. DE SOUZA				
CHECKED	U. SCHAEFER				
CHECKED	BAUSS				
DRAWN				DRAWING NO.	
BLOCK TITLE					
UNIVERSITY OF MAINZ				SIZE <b>C</b>	REV.
SCALE				DRAWING NO.	
				SHEET	OF

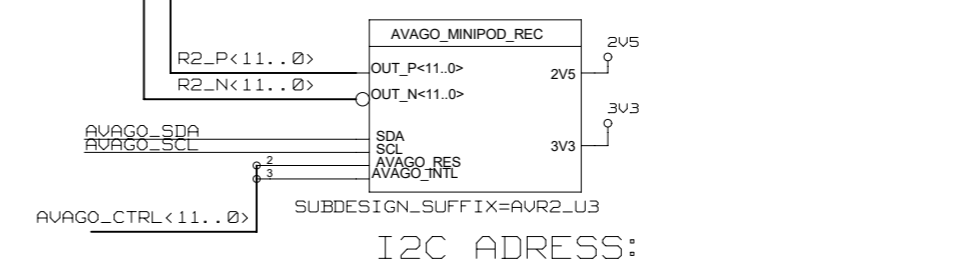
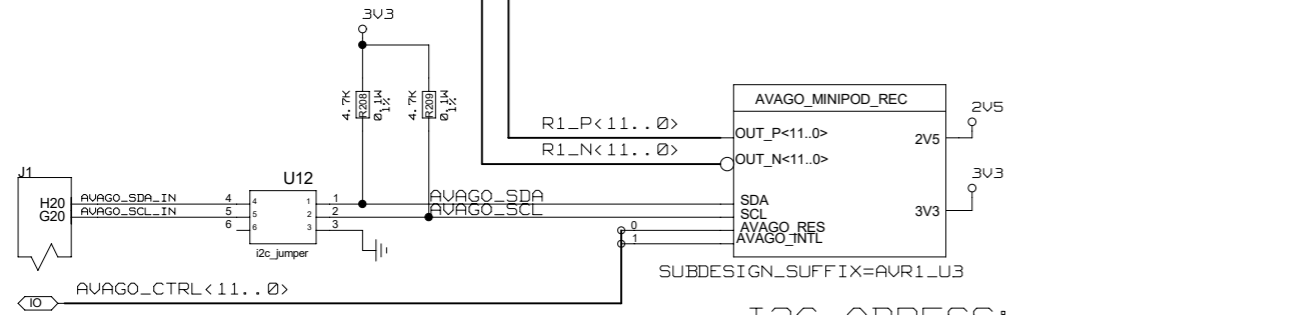
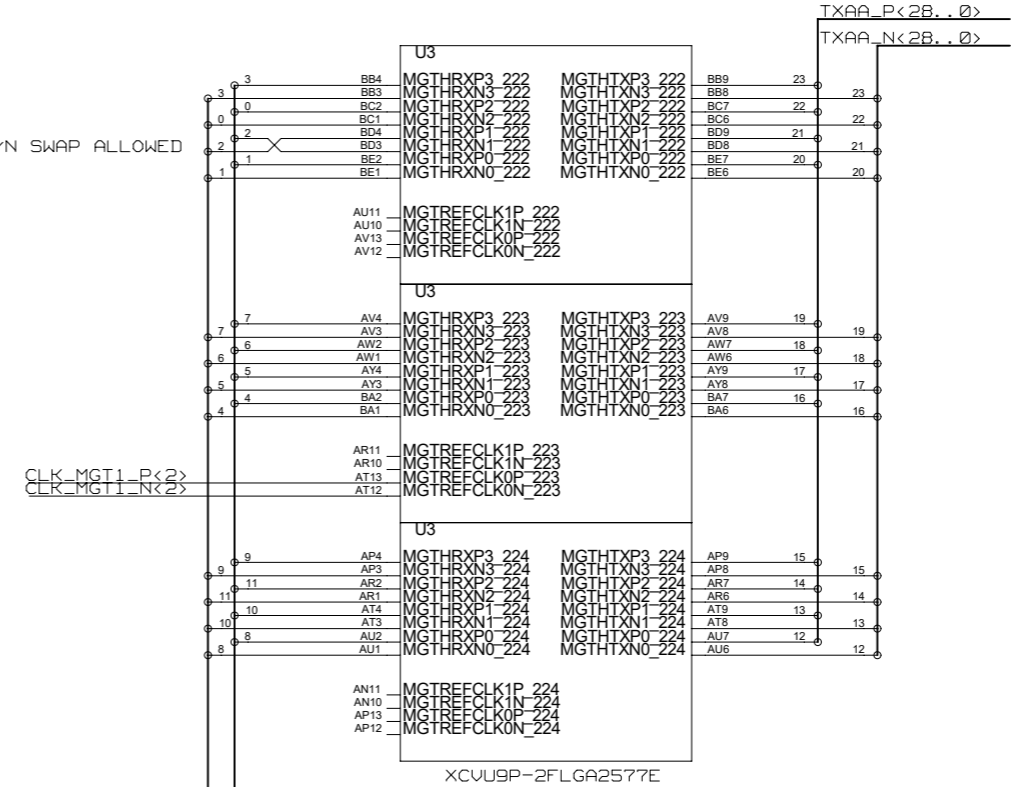
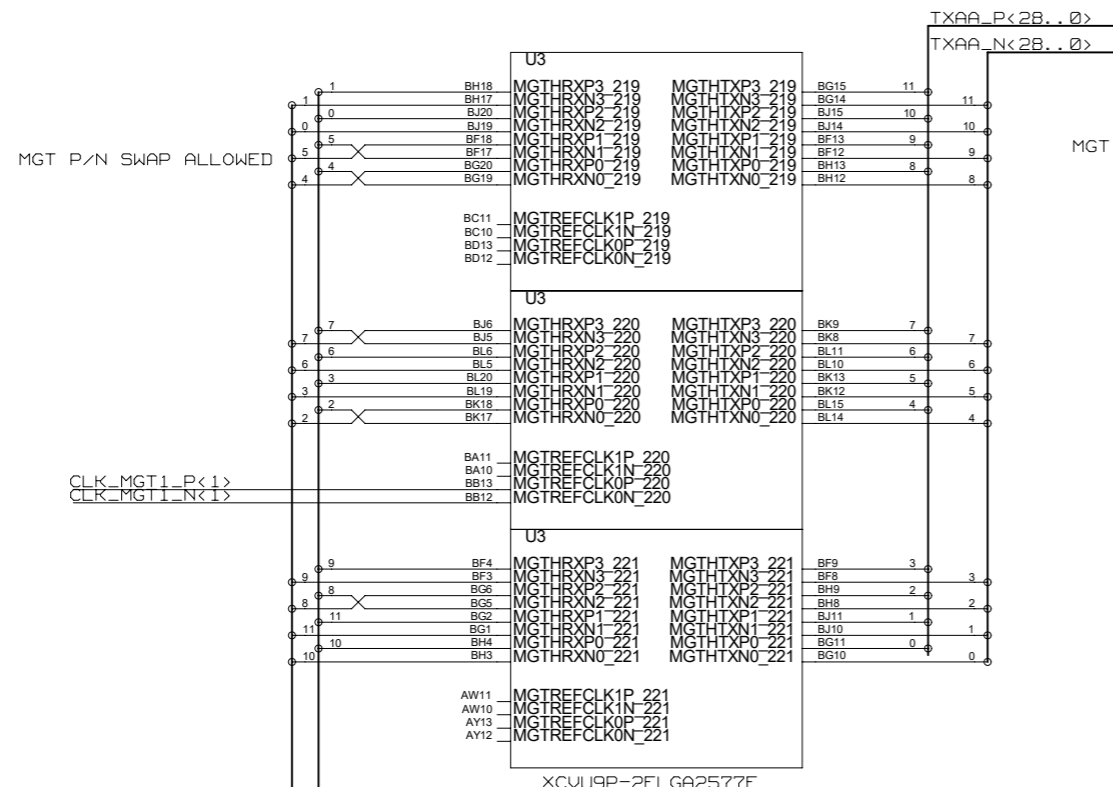
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

### AC COUPLING



CHECKED	J. V. DE SOUZA			DRAWING TITLE <b>JFEX</b> I/O + <b>AC COUPLING</b>
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE <b>U3_MGT_REAL_TIME</b>				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
SCALE				DRAWING NO.
SHEET 1 OF 7				

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



AVAGO\_CTRL<11..0>  
 AVAGO\_CTRL 0, 2, 4, 6, 8, 10 = AVAGO\_RES\_XX  
 AVAGO\_CTRL 1, 3, 5, 7, 9, 11 = AVAGO\_INTL\_XX

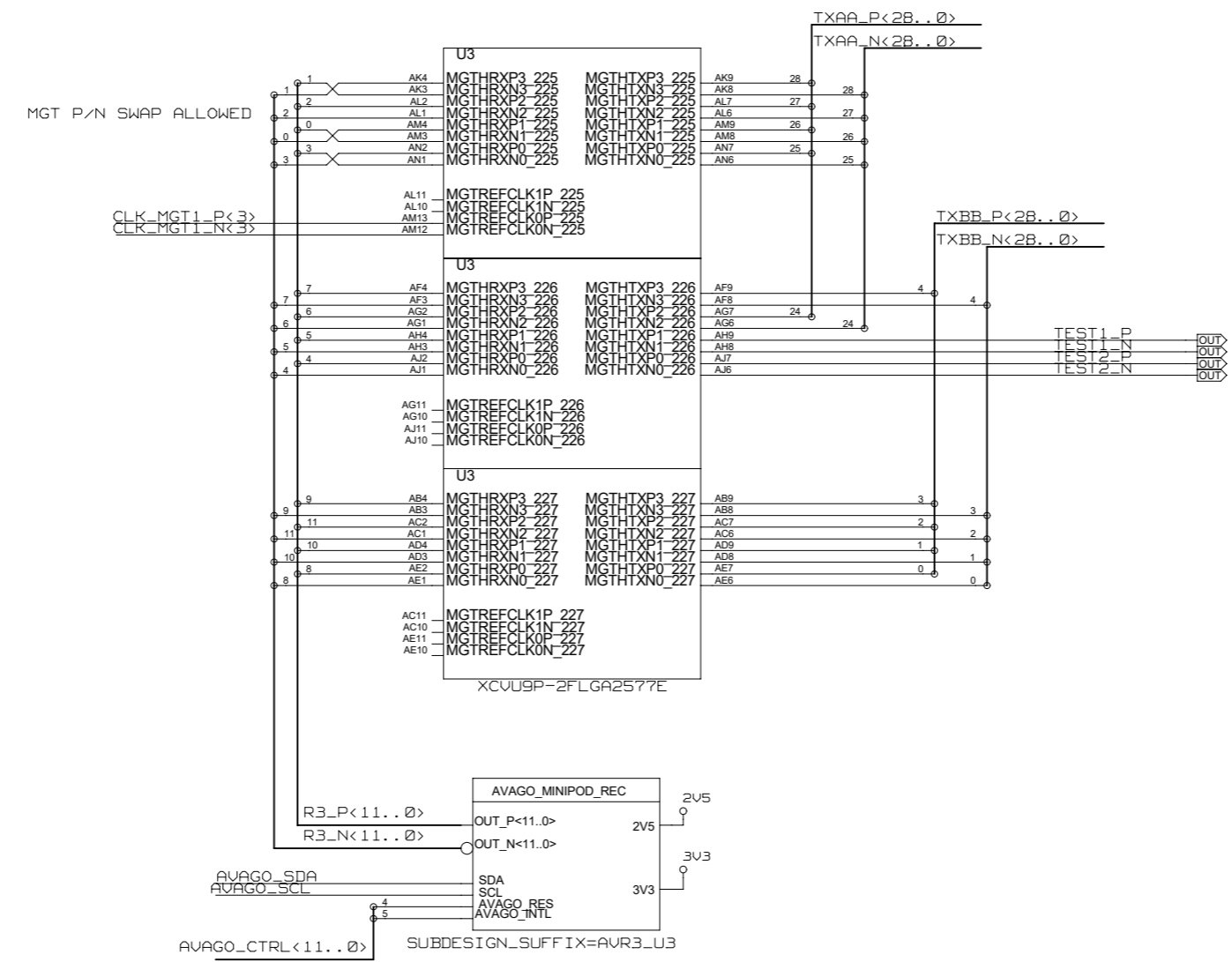
I2C ADDRESS:  
 R3=XXX R4=XXX  
 R5=XXX R6=XXX  
 R7=XXX R8=XXX

I2C ADDRESS:  
 R3=XXX R4=XXX  
 R5=XXX R6=XXX  
 R7=XXX R8=XXX

BANK
210
209
208
207
206
205
204
203
202
201
200

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX AVAGO + TXA
CHECKED U.SCHAEFER			
CHECKED			
DRAWN BAUSS	07.08.2015		
BLOCK TITLE			
U3_MGT_REAL_TIME			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE		SHEET 2 OF 7	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

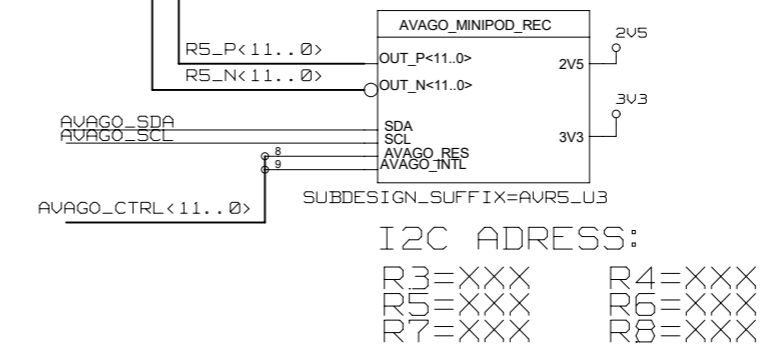
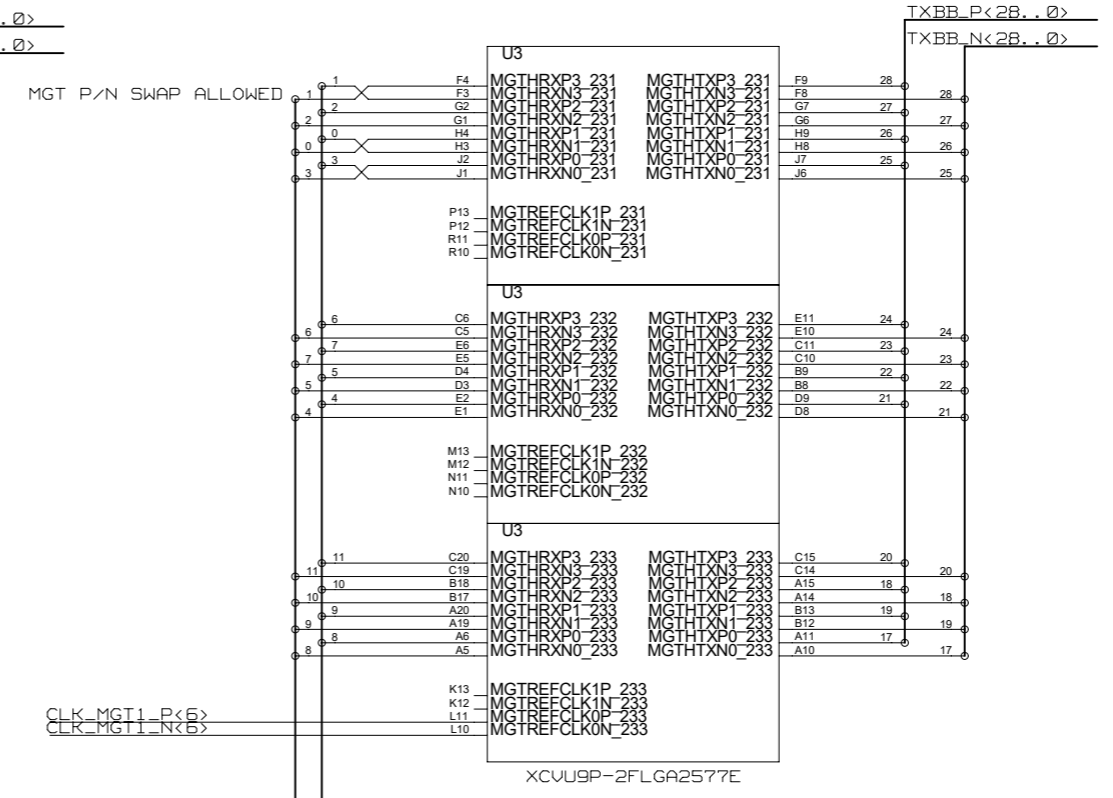
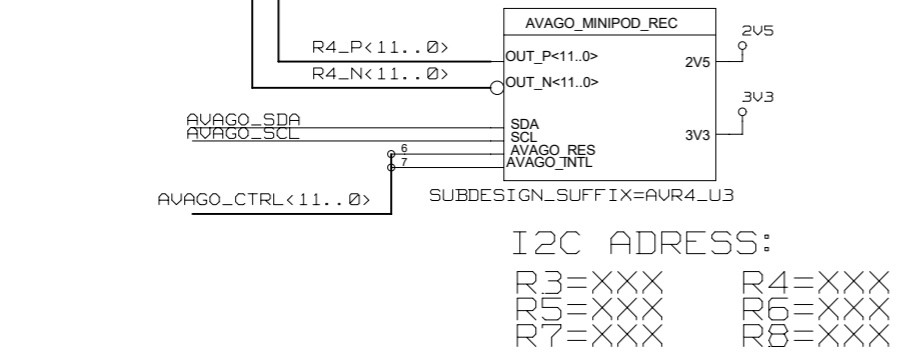
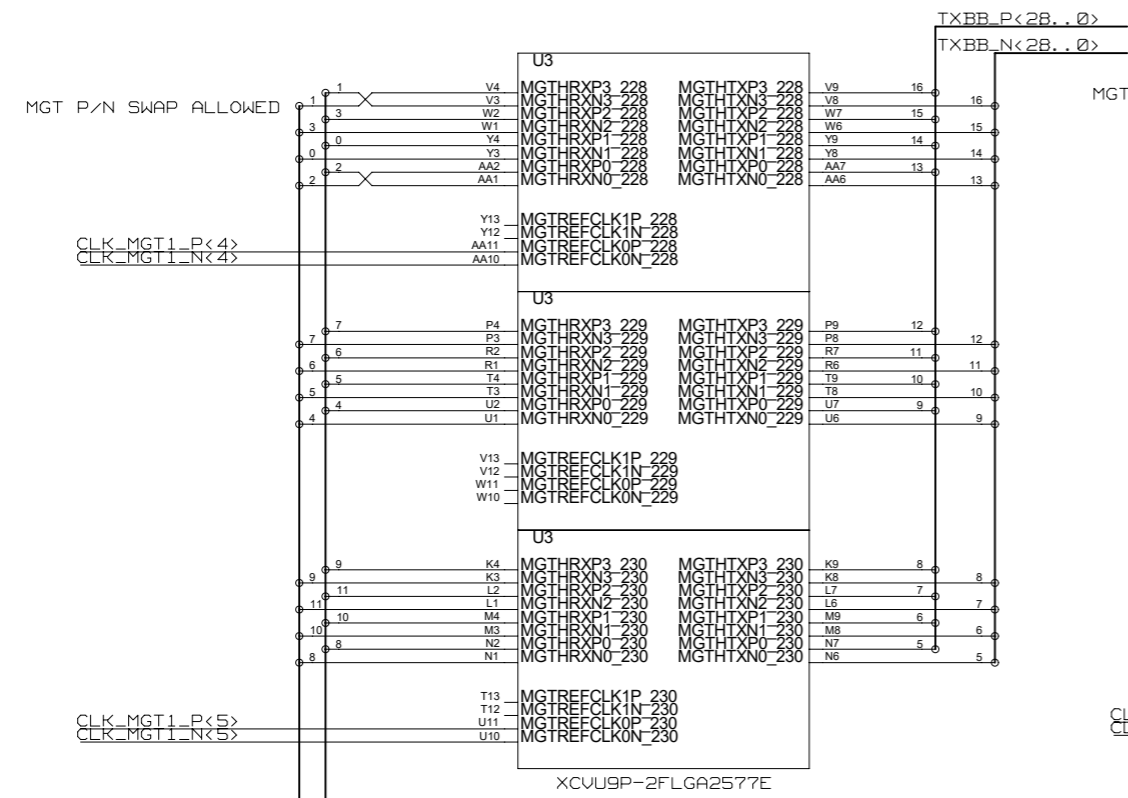


I2C ADDRESS:  
R3=XXX R4=XXX  
R5=XXX R6=XXX  
R7=XXX R8=XXX

BANK  
225  
226  
227

CHECKED	NAME	DATE	SIGN	DRAWING TITLE <b>JFEX AVAGO + TXA + TXB</b>
CHECKED	J.V.DE SOUZA			
CHECKED	U.SCHAEFER			
CHECKED	BAUSS	07.08.2015		
BLOCK TITLE U3_MGT_REAL_TIME				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
SCALE				DRAWING NO.
SHEET 3 OF 7				

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

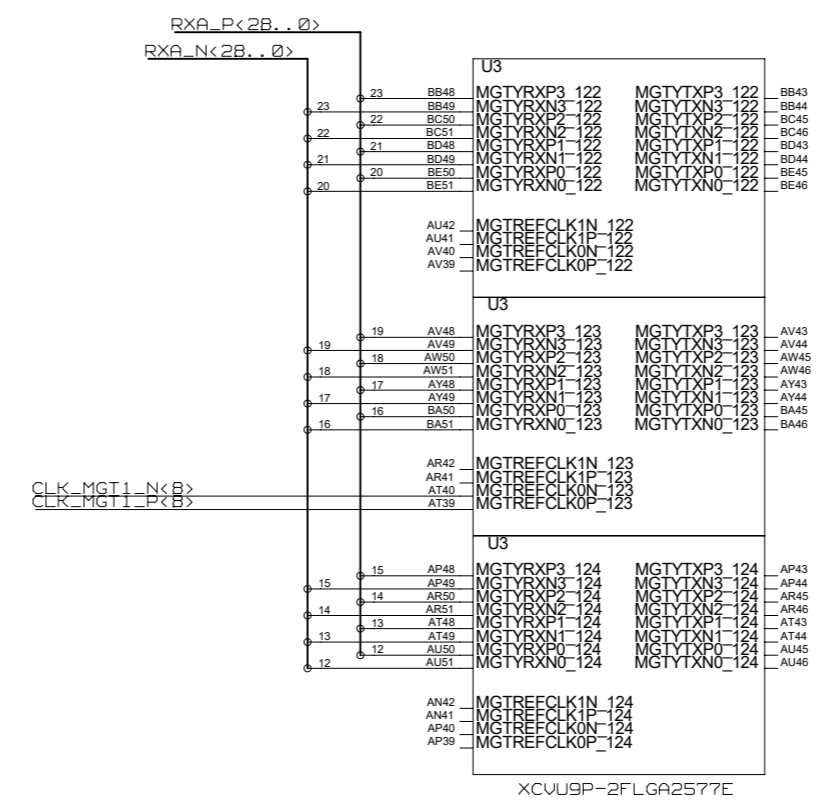
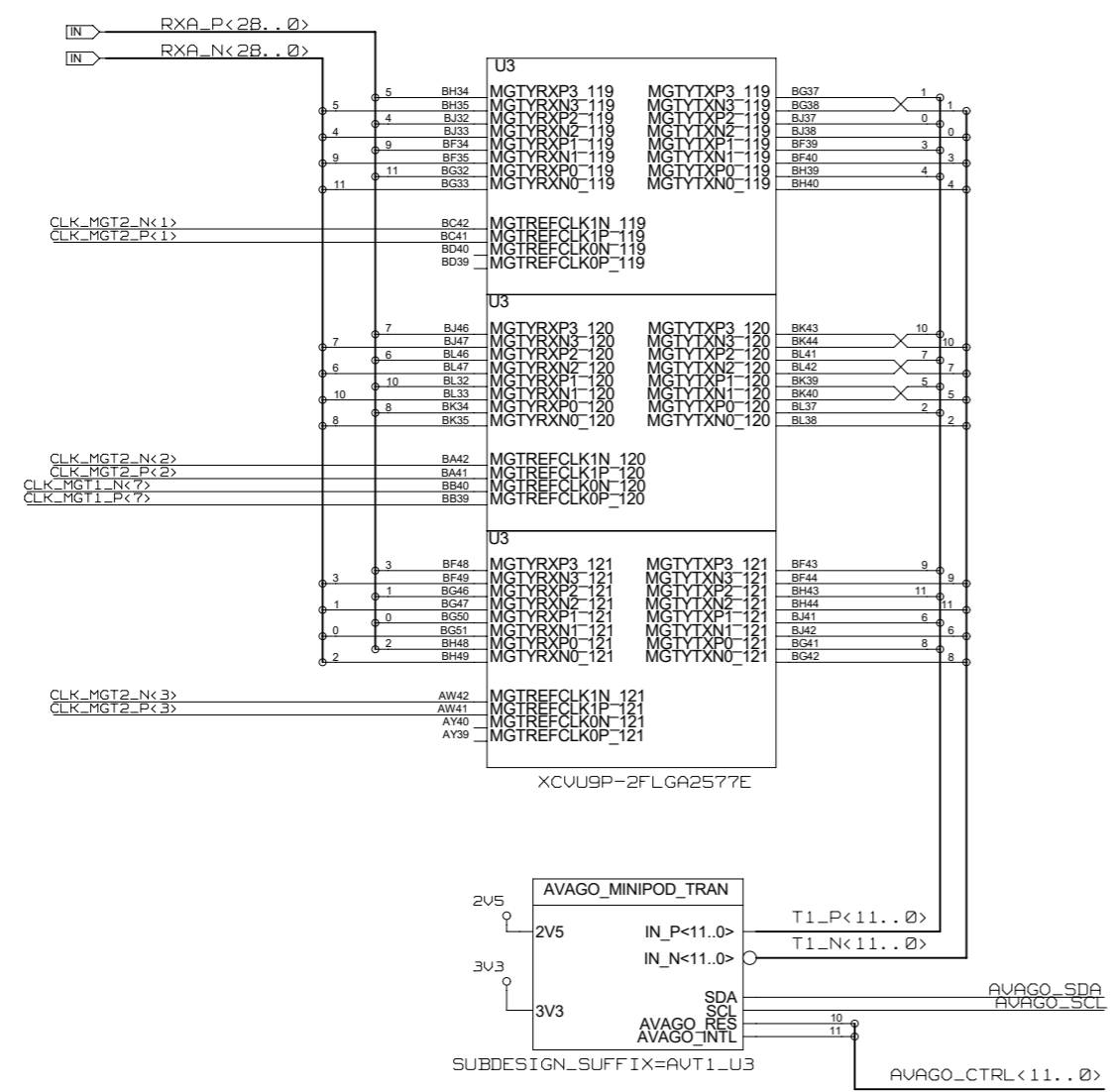


BANK  
R3  
R4  
R5  
R6  
R7  
R8

	NAME	DATE	SIGN	DRAWING TITLE <b>JFEX AVAGO + TXB</b>
CHECKED	J.V.DE SOUZA			
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		BLOCK TITLE U3_MGT_REAL_TIME
UNIVERSITY OF MAINZ				
	SIZE <b>C</b>	REV.	DRAWING NO.	SHEET 4 OF 7
	SCALE			



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

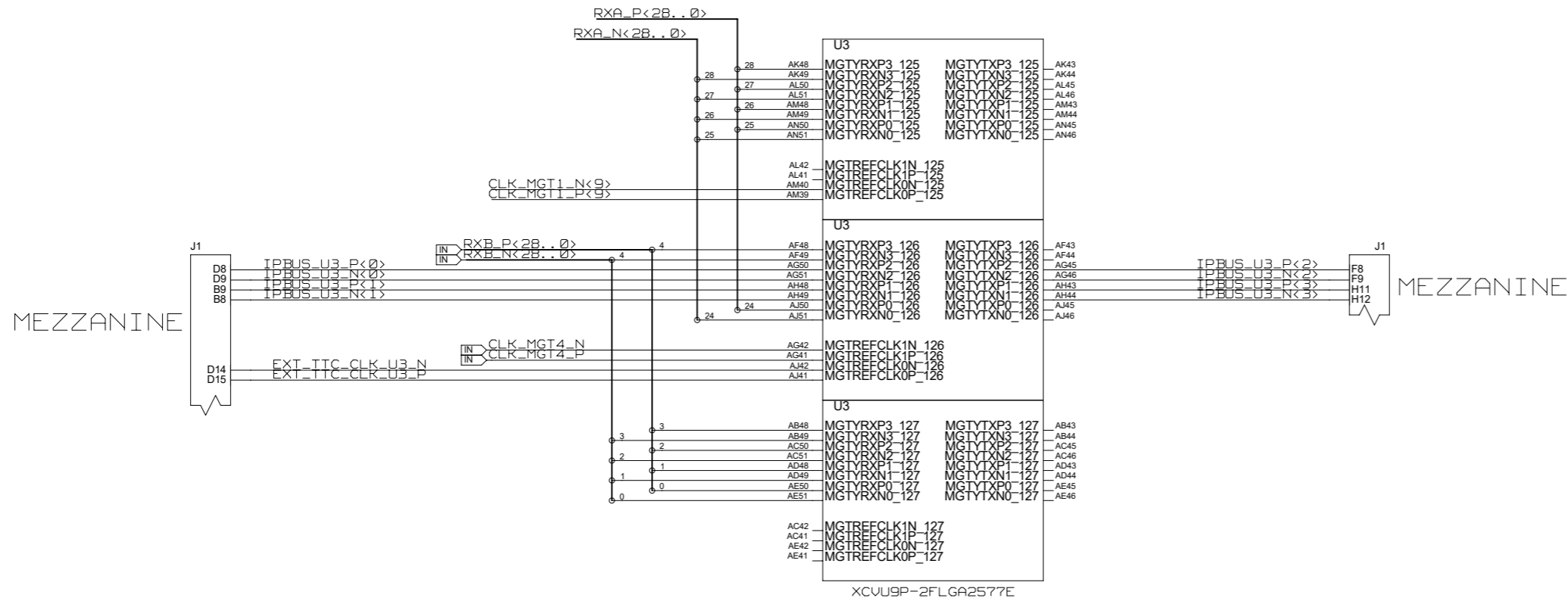


I2C ADDRESS:  
 R3=XXX R4=XXX  
 R5=XXX R6=XXX  
 R7=XXX R8=XXX

BANK
110
120
130
140
150
160
170
180
190
200
210
220
230
240

CHECKED	J. V. DE SOUZA			DRAWING TITLE <b>JFEX AVAGO + RXA</b>
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE <b>U3_MGT_REAL_TIME</b>				
UNIVERSITY OF MAINZ				
SIZE	<b>C</b>	REV.	DRAWING NO.	
SCALE				SHEET 5 OF 7

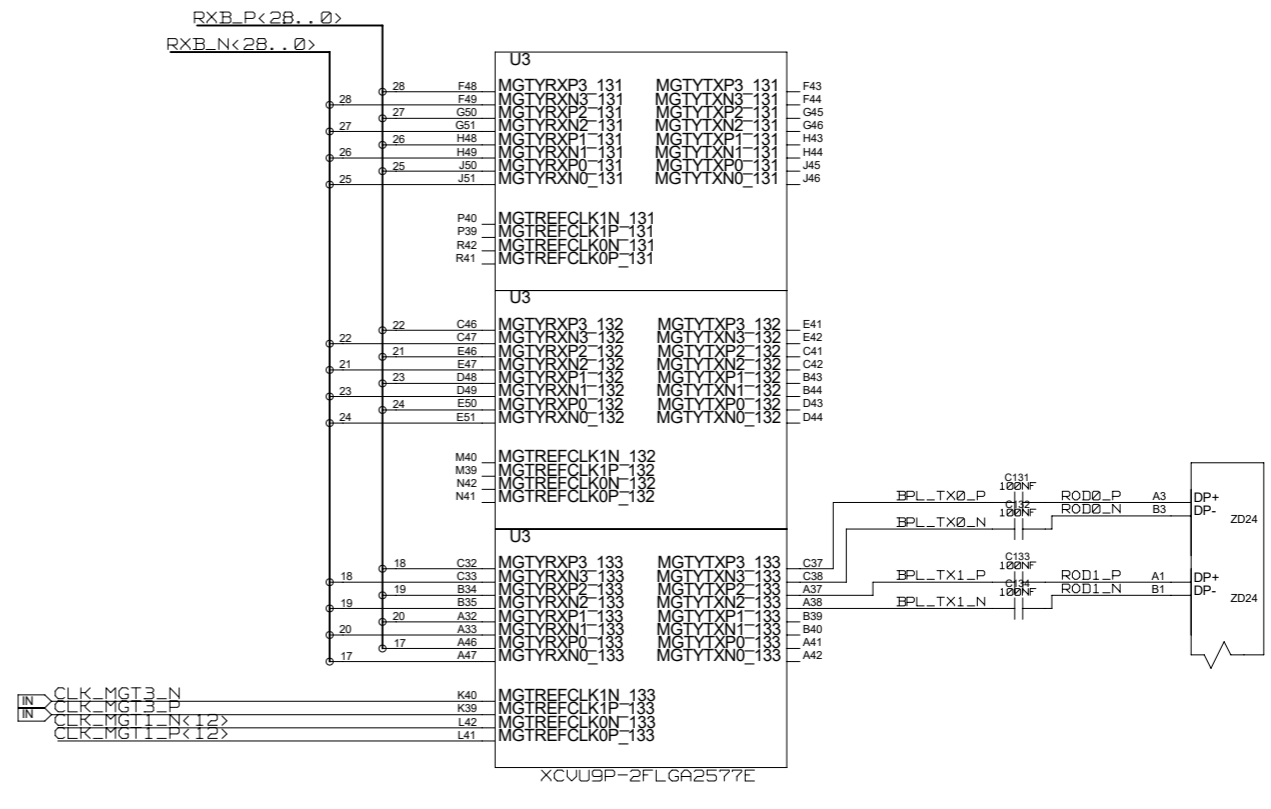
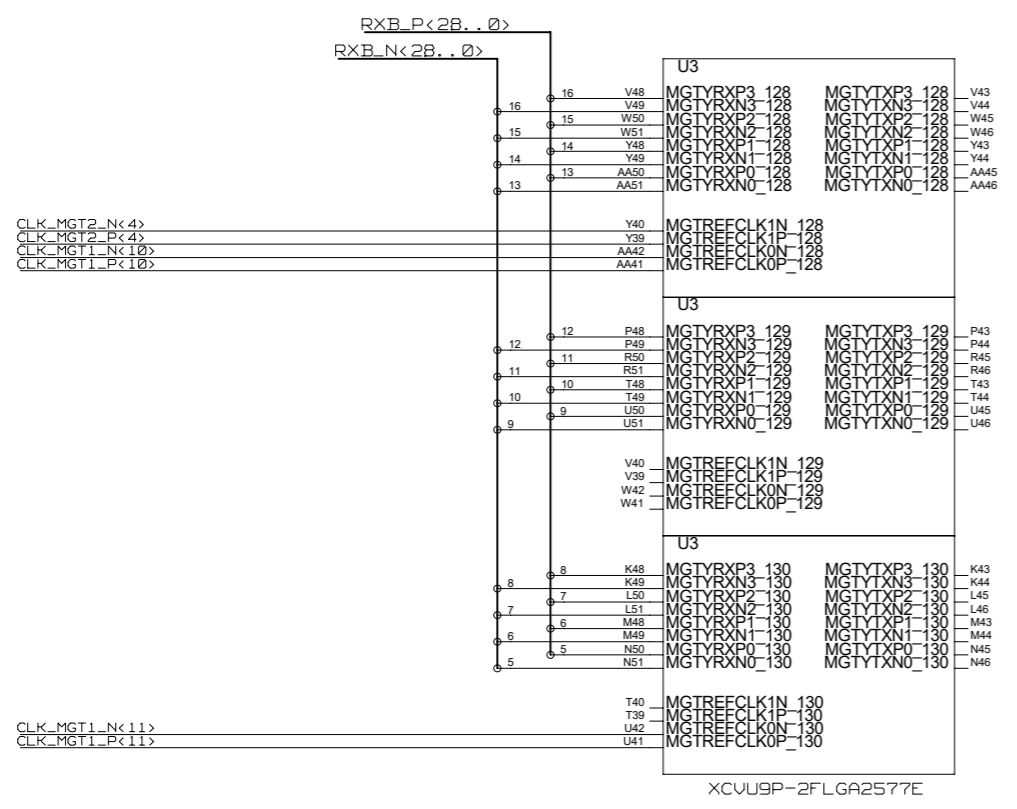
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
125
126
127

CHECKED	J. V. DE SOUZA			DRAWING TITLE <b>JFEX</b> RXA + RXB TXD + IPBUS
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U3_MGT_REAL_TIME				
UNIVERSITY OF MAINZ				SIZE <b>C</b>
				REV.
				DRAWING NO.
				SCALE
				SHEET 6 OF 7

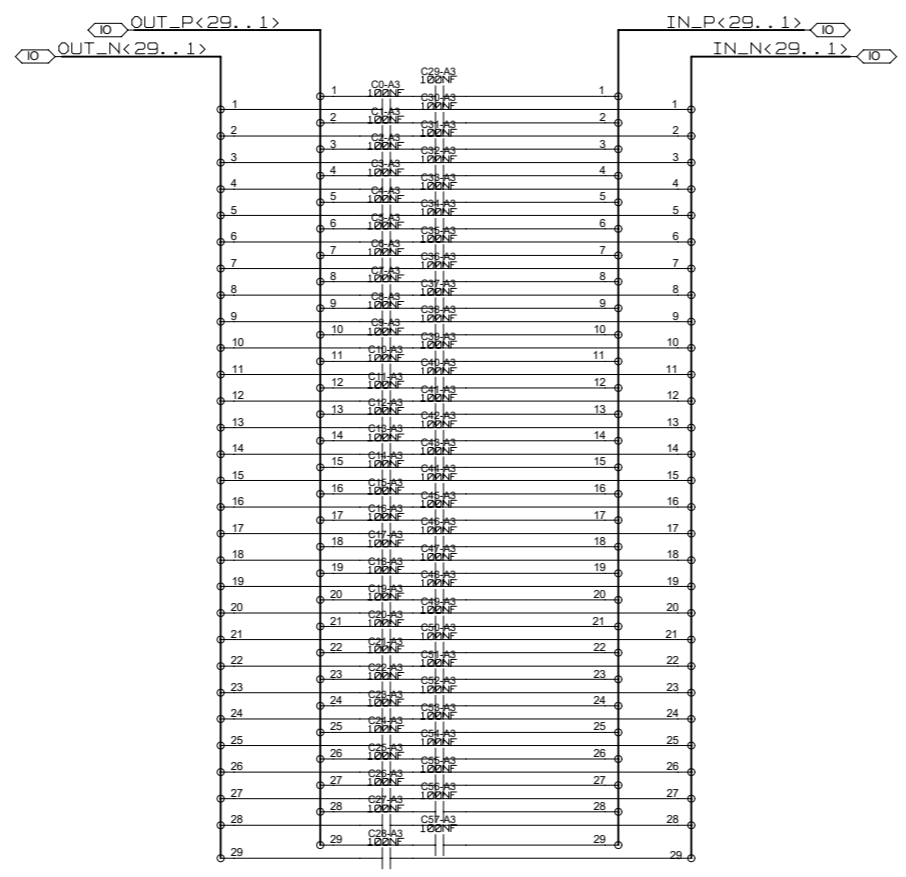
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
128
129
130
131
132
133
134
135
136
137
138

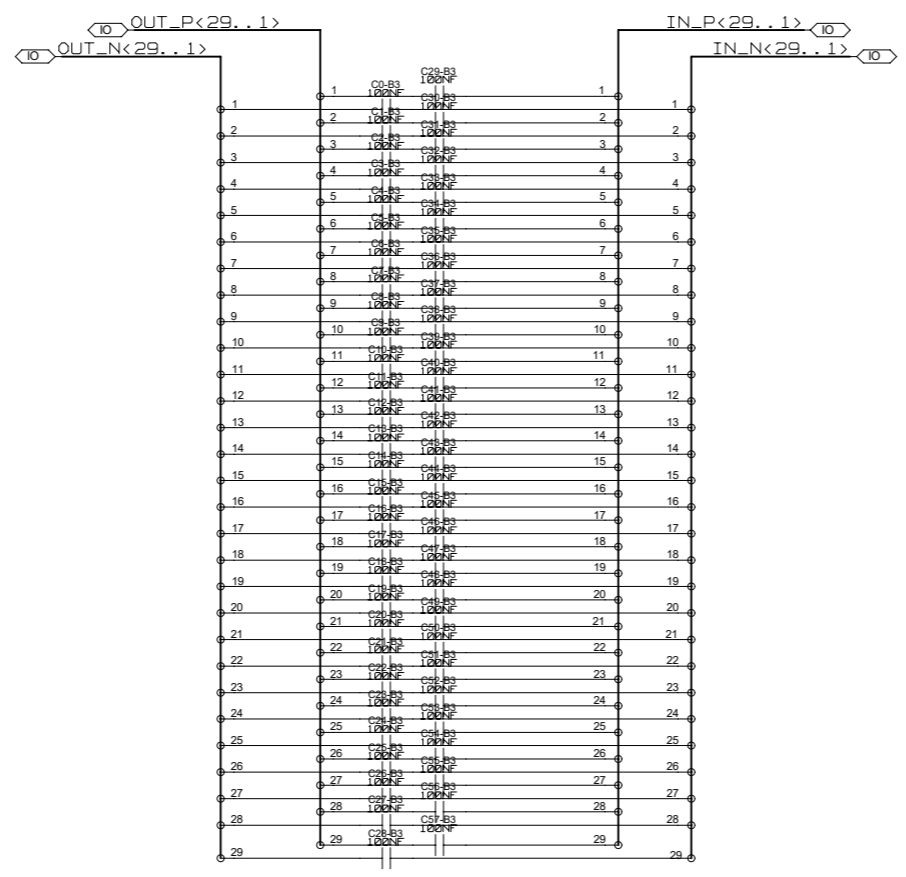
CHECKED	J. V. DE SOUZA			DRAWING TITLE <b>JFEX</b> <b>RXB + TXC</b>
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE <b>U3_MGT_REAL_TIME</b>				
<b>UNIVERSITY OF MAINZ</b>				SIZE <b>C</b>
				REV.
				DRAWING NO.
SCALE				SHEET 7 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



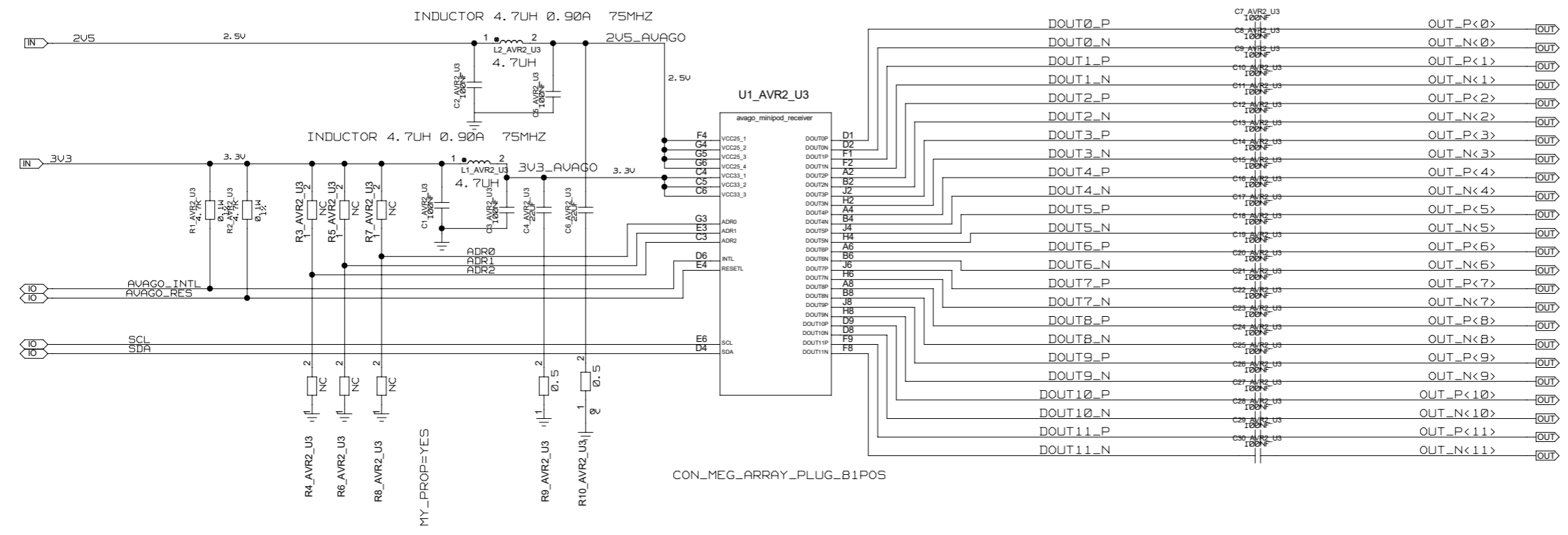
CHECKED	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AC COUPLING 29BIT	
CHECKED	U. SCHAEFER				
CHECKED	BAUSS				
DRAWN	BAUSS			BLOCK TITLE	
UNIVERSITY OF MAINZ				SIZE	DRAWING NO.
				<b>C</b>	REV.
SCALE				SHEET	OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



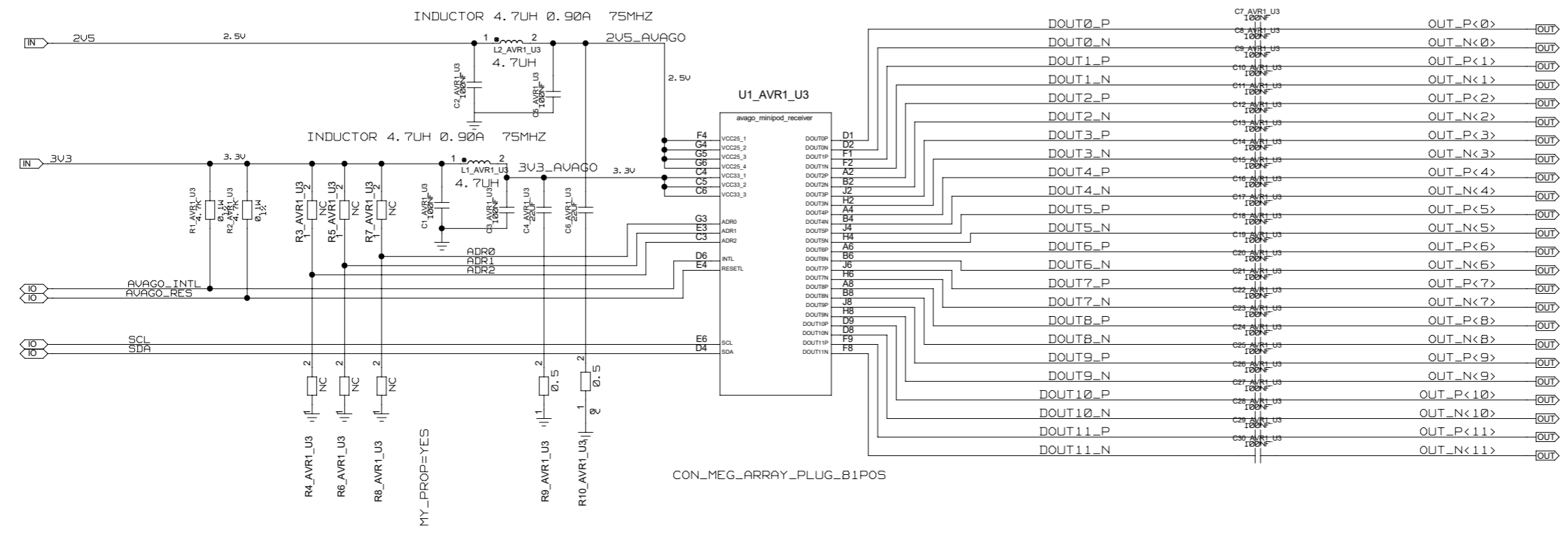
CHECKED	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AC COUPLING 29BIT	
CHECKED	U. SCHAEFER				
CHECKED	BAUSS				
DRAWN	BLOCK TITLE			SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	REV.
SCALE					SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



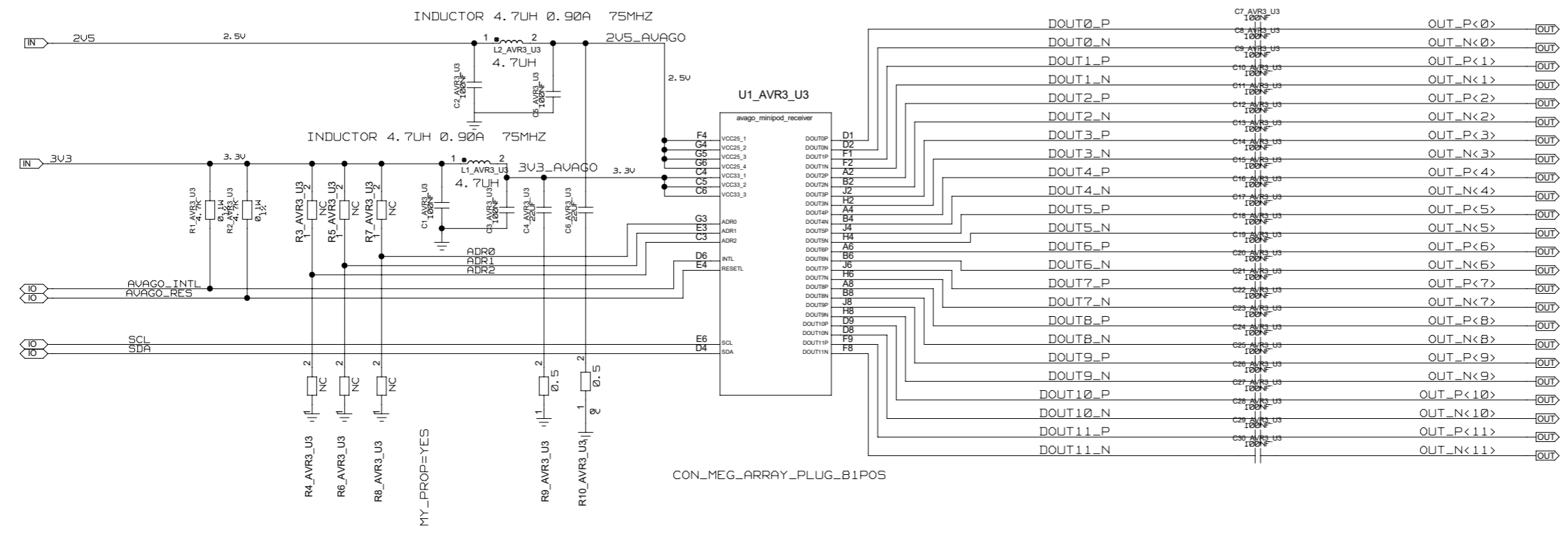
	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b> REV.	
SCALE					SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				SCALE	SHEET OF

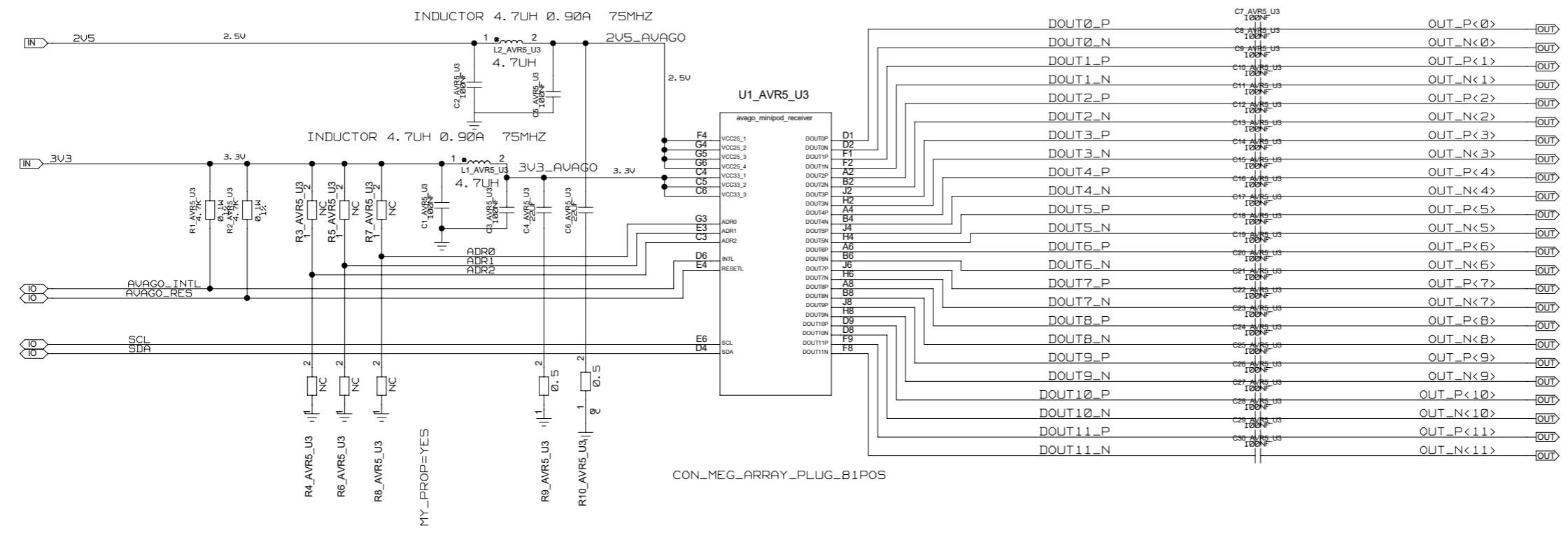
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	REV.
SCALE					SHEET OF

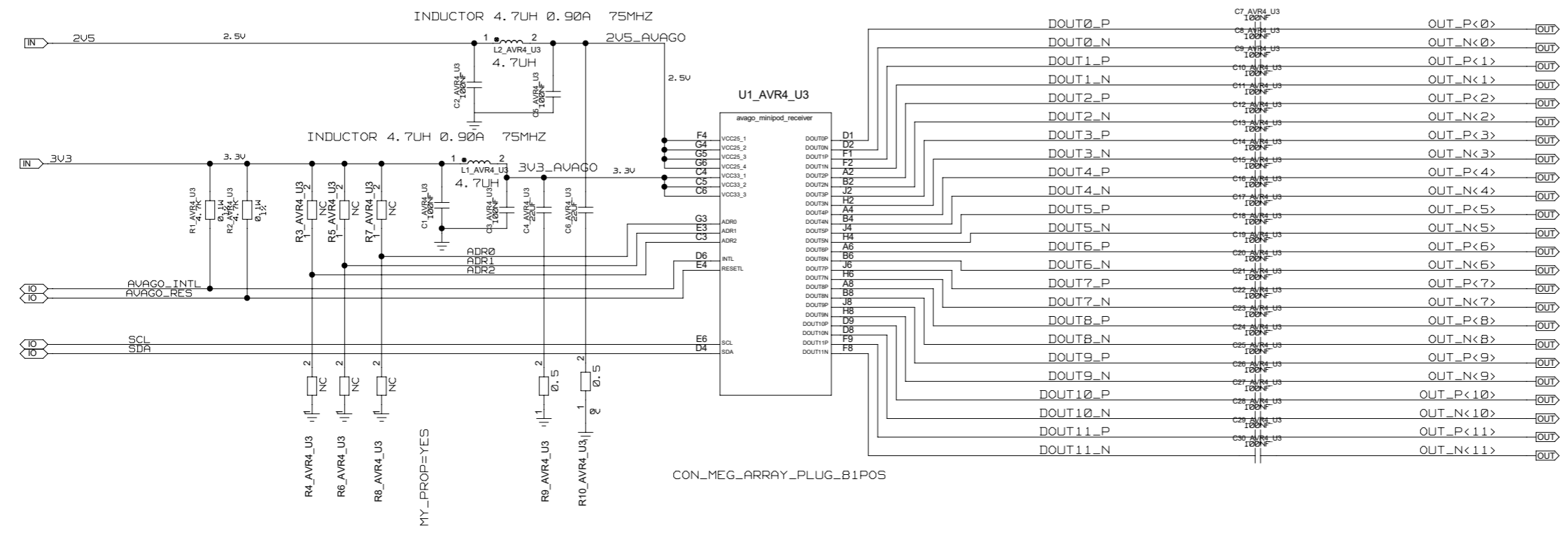


REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



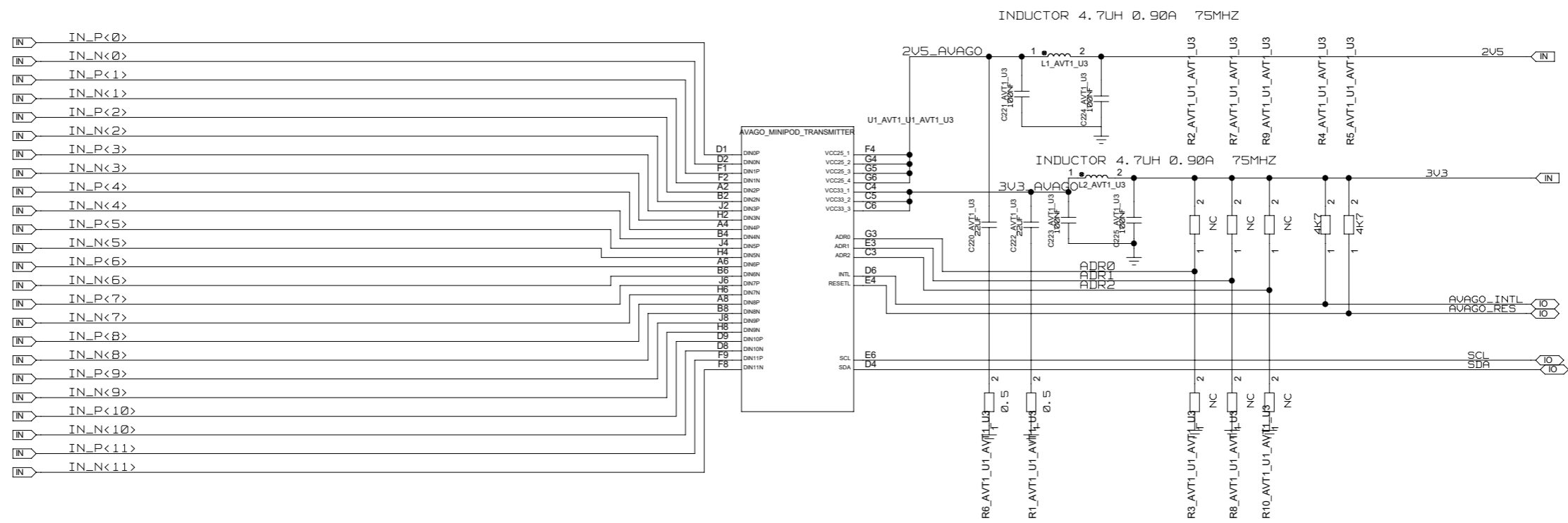
	NAME	DATE	SIGN	DRAWING TITLE  <b>AVAGO RECEIVER</b>	
CHECKED	J. V. DE SOUZA				
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE					
UNIVERSITY OF MAINZ				SIZE <b>C</b>	REV.
				DRAWING NO.	
SCALE				SHEET	OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	REV.
SCALE					SHEET OF

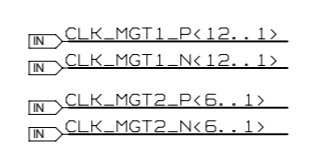
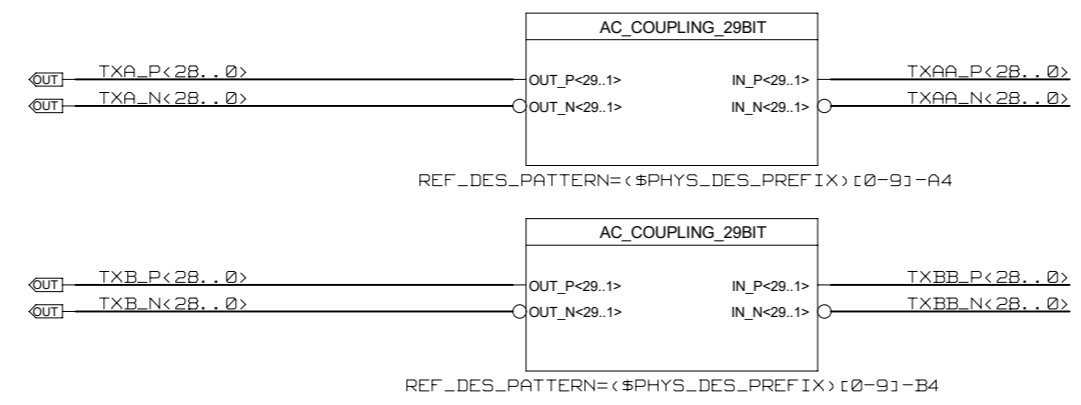
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA		AVAGO TRANSMITTER	
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS		DRAWING NO.	
BLOCK TITLE			SIZE	REV.
UNIVERSITY OF MAINZ			C	
			SCALE	SHEET OF

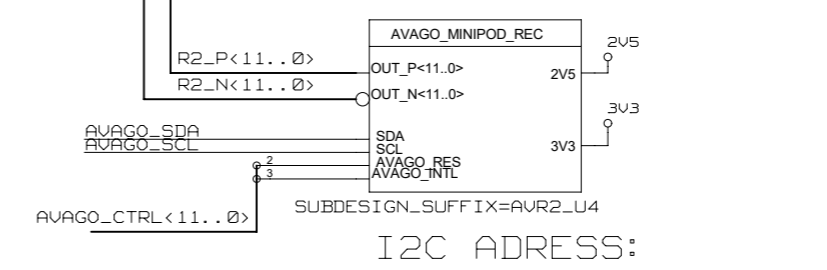
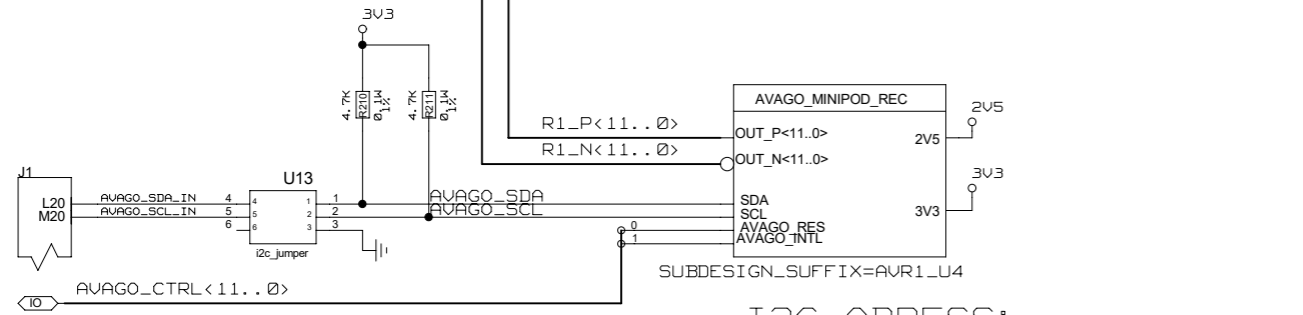
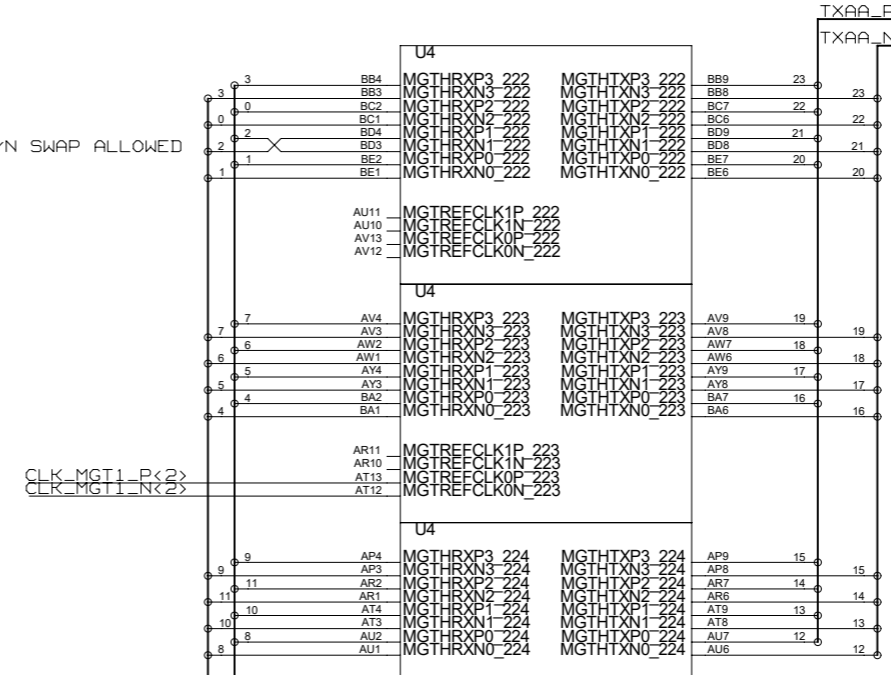
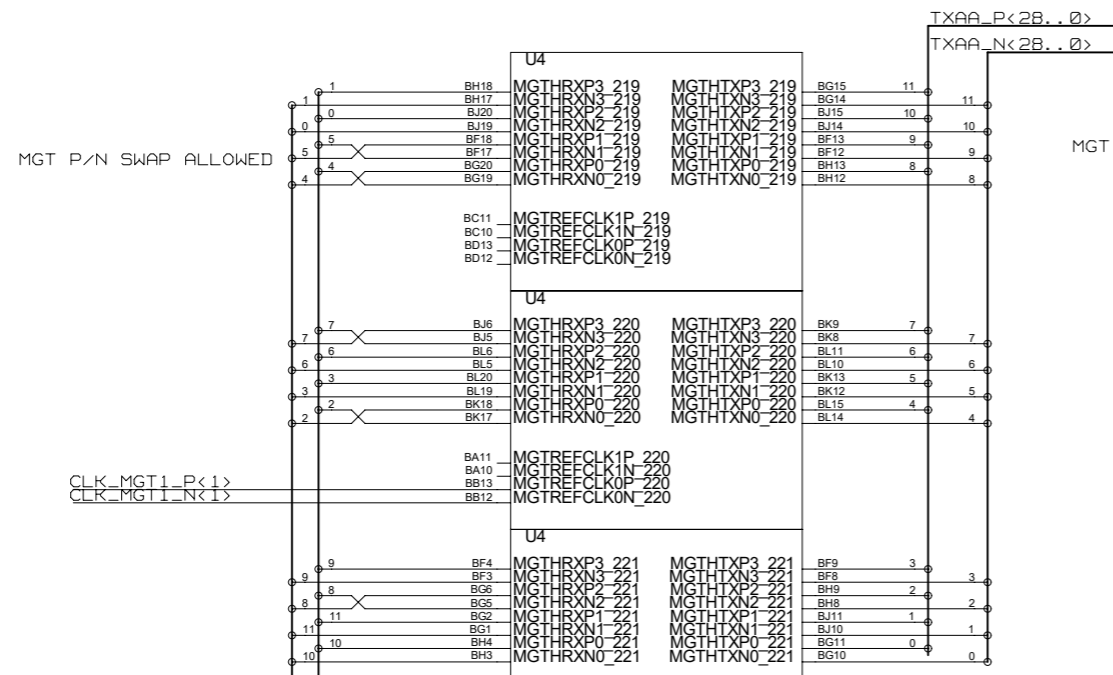
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

### AC COUPLING



CHECKED	J. V. DE SOUZA			DRAWING TITLE <b>JFEX</b> I/O + <b>AC COUPLING</b>
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE <b>U4_MGT_REAL_TIME</b>				
UNIVERSITY OF MAINZ				SIZE <b>C</b>
				REV.
SCALE			DRAWING NO.	SHEET 1 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



AVAGO\_CTRL<11..0>  
 AVAGO\_CTRL 0, 2, 4, 6, 8, 10 = AVAGO\_RES\_XX  
 AVAGO\_CTRL 1, 3, 5, 7, 9, 11 = AVAGO\_INTL\_XX

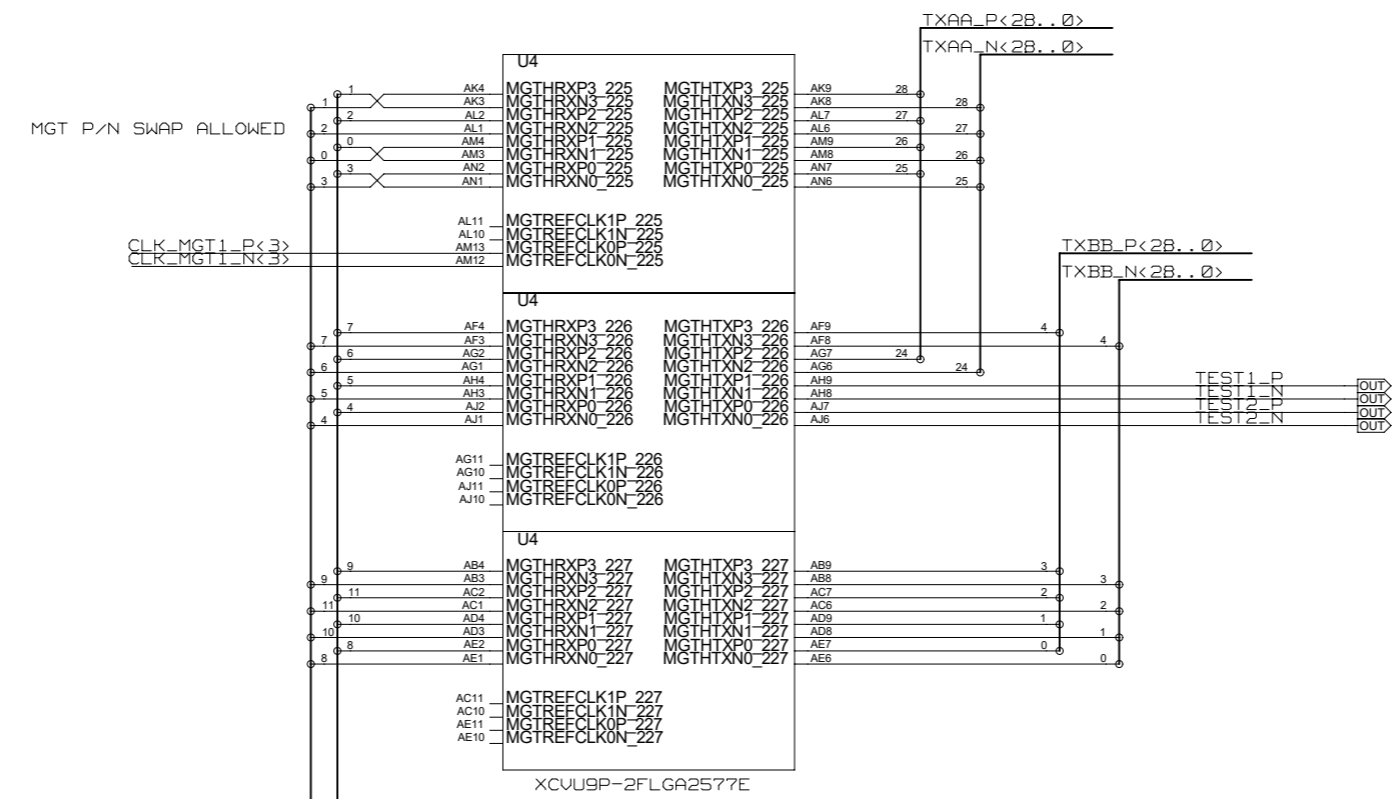
I2C ADDRESS:  
 R3=XXX R4=XXX  
 R5=XXX R6=XXX  
 R7=XXX R8=XXX

I2C ADDRESS:  
 R3=XXX R4=XXX  
 R5=XXX R6=XXX  
 R7=XXX R8=XXX

BANK
210
209
208
207
206
205
204
203
202
201
200

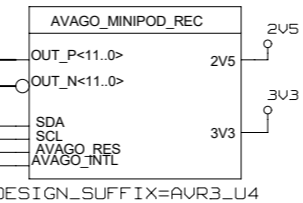
NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA		JFEX AVAGO + TXA
CHECKED	U.SCHAEFER		
CHECKED			
DRAWN	BAUSS	07.08.2015	
BLOCK TITLE			UNIVERSITY OF MAINZ
SIZE	REV.	DRAWING NO.	
SCALE		SHEET 2 OF 7	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



MGT P/N SWAP ALLOWED

XC9U9P-2FLGA2577E



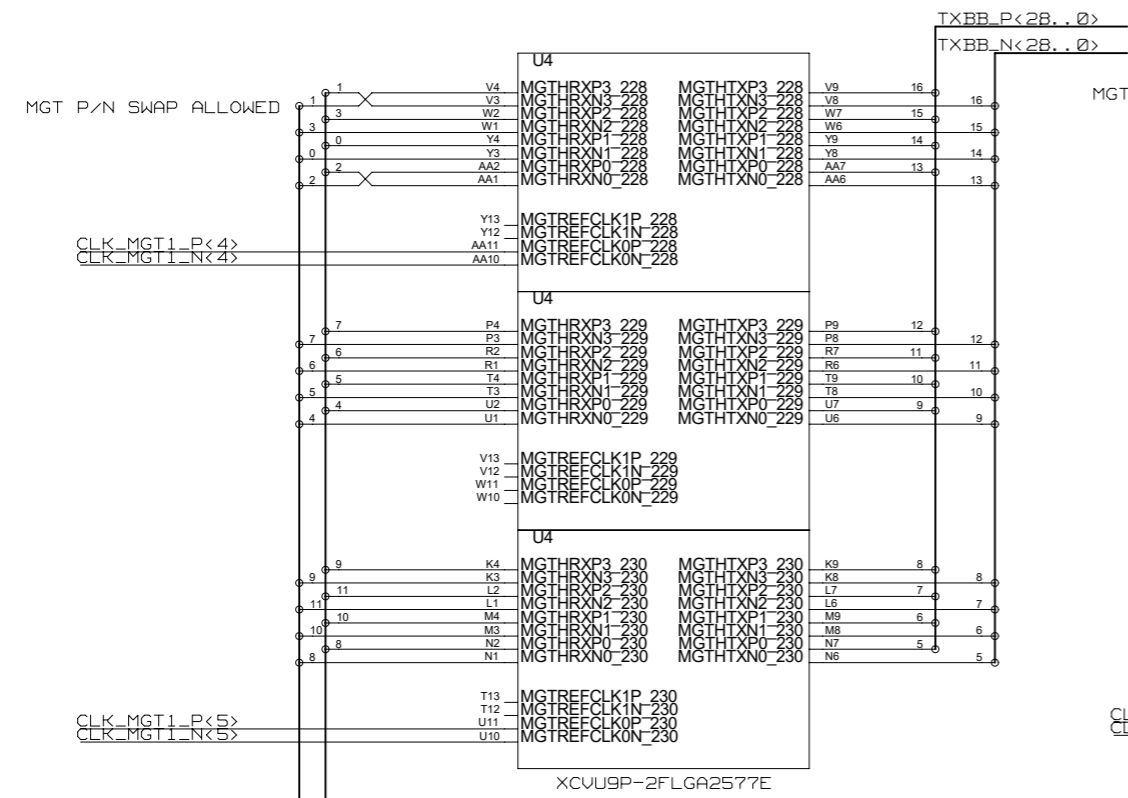
SUBDESIGN\_SUFFIX=AVR3\_U4

I2C ADDRESS:  
R3=XXX R4=XXX  
R5=XXX R6=XXX  
R7=XXX R8=XXX

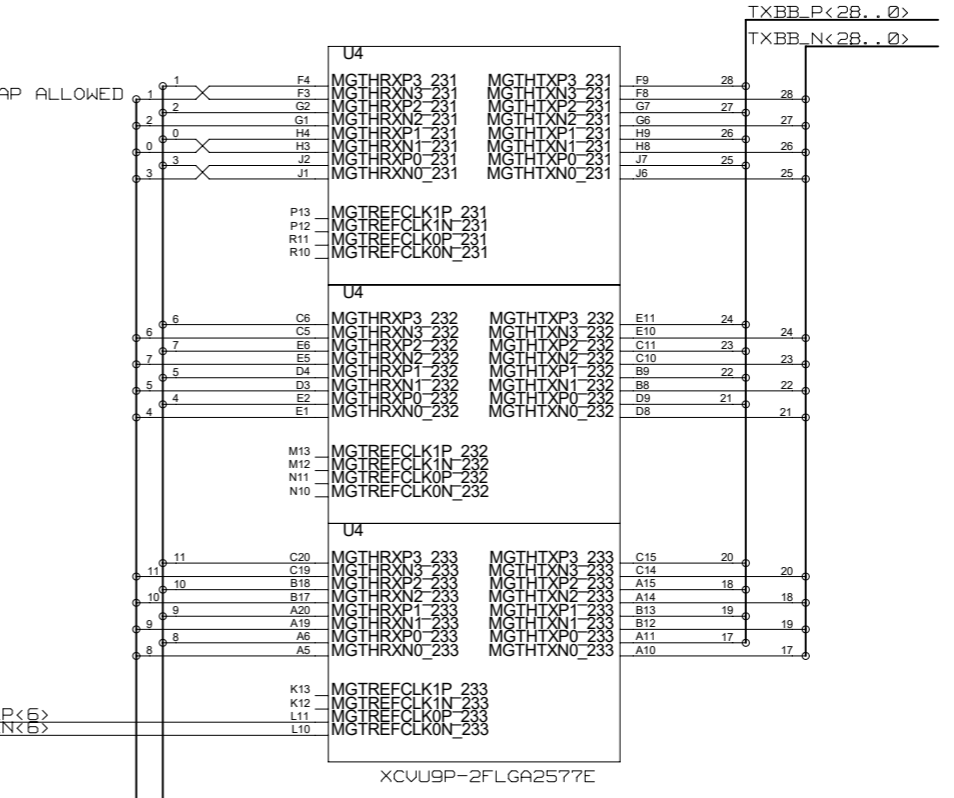
BANK
225
226
227

CHECKED	NAME	DATE	SIGN	DRAWING TITLE <b>JFEX AVAGO + TXA + TXB</b>
CHECKED	J.V. DE SOUZA			
CHECKED	U.SCHAEFER			
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U4_MGT_REAL_TIME				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
SCALE				DRAWING NO.
SHEET 3 OF 7				

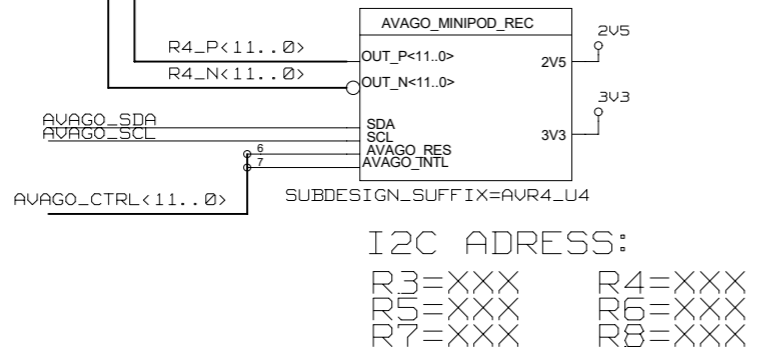
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



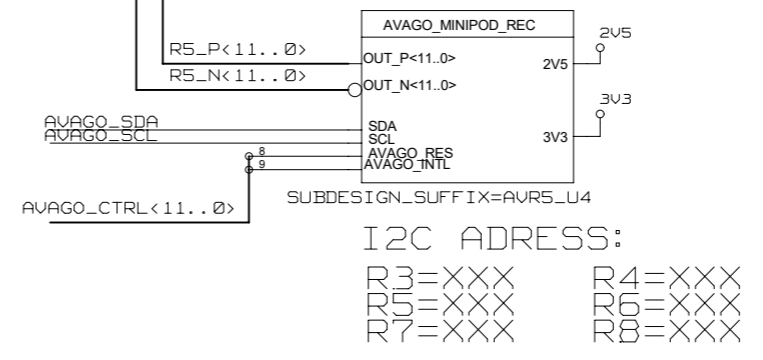
MGT P/N SWAP ALLOWED



MGT P/N SWAP ALLOWED



I2C ADDRESS:  
R3=XXX R4=XXX  
R5=XXX R6=XXX  
R7=XXX R8=XXX

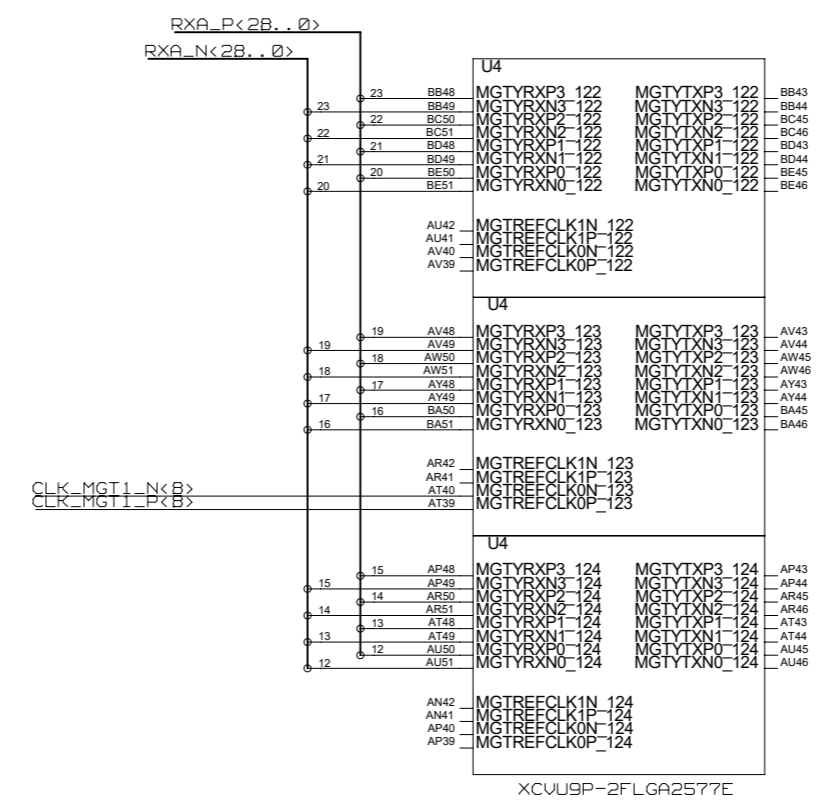
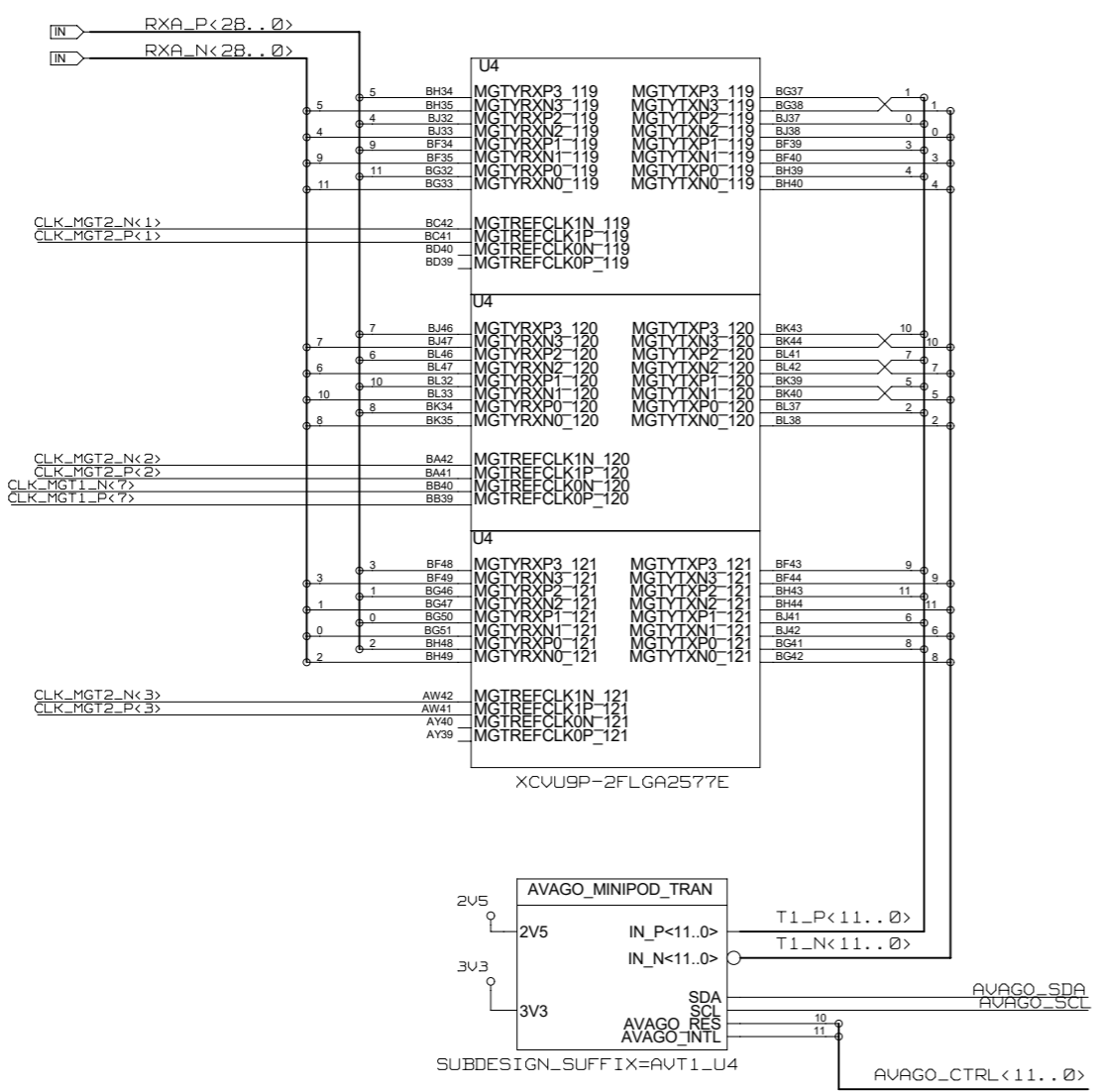


I2C ADDRESS:  
R3=XXX R4=XXX  
R5=XXX R6=XXX  
R7=XXX R8=XXX

BANK  
R3  
R4  
R5  
R6  
R7  
R8

	NAME	DATE	SIGN	DRAWING TITLE <b>JFEX AVAGO + TXB</b>
CHECKED	J.V.DE SOUZA			
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U4_MGT_REAL_TIME				
UNIVERSITY OF MAINZ				
	SIZE <b>C</b>	REV.	DRAWING NO.	
	SCALE			SHEET 4 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



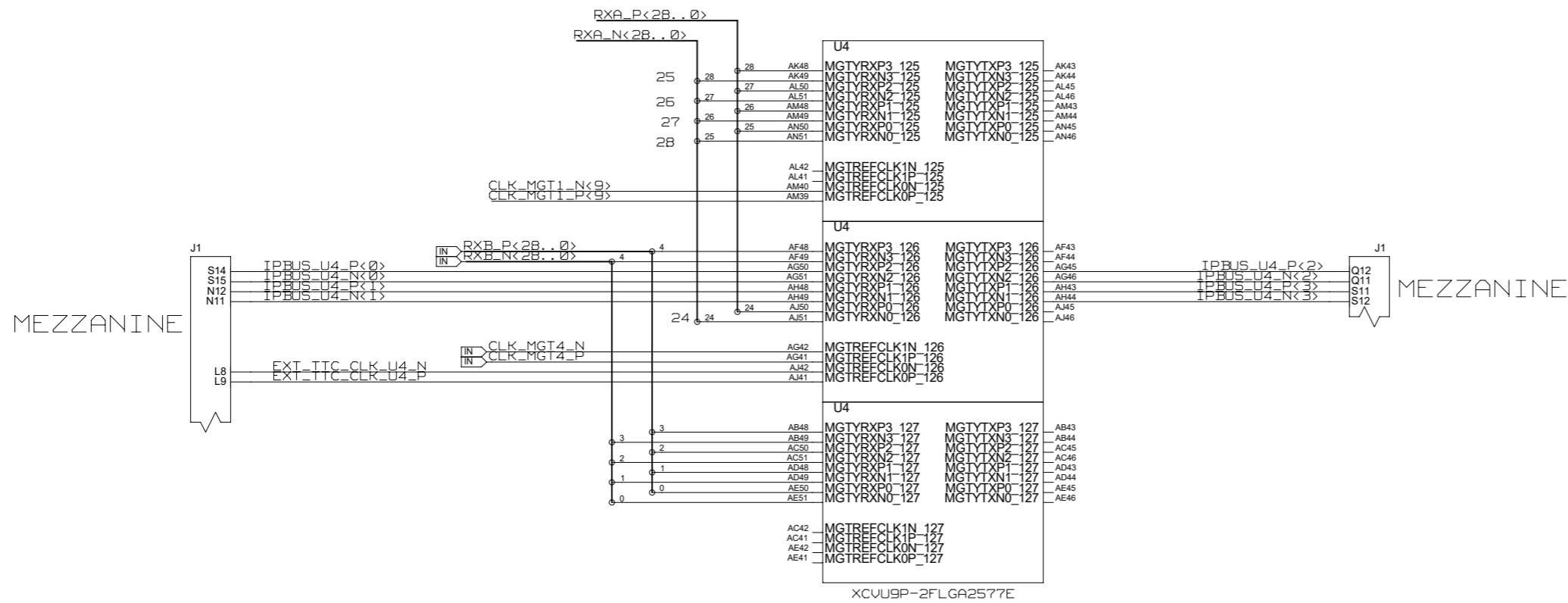
I2C ADDRESS:  
R3=XXX R4=XXX  
R5=XXX R6=XXX  
R7=XXX R8=XXX

BANK
110
120
130
140
150
160
170
180
190
200
210
220
230
240

NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA		JFEX AVAGO + RXA
CHECKED	U. SCHAEFER		
CHECKED			
DRAWN	BAUSS	07.08.2015	
BLOCK TITLE			SIZE
U4_MGT_REAL_TIME			C
UNIVERSITY OF MAINZ			REV.
			DRAWING NO.
SCALE			SHEET 5 OF 7



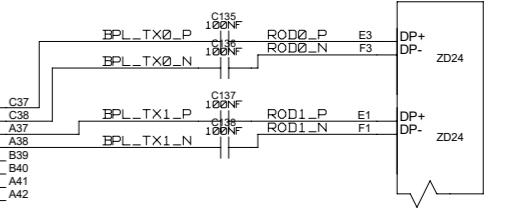
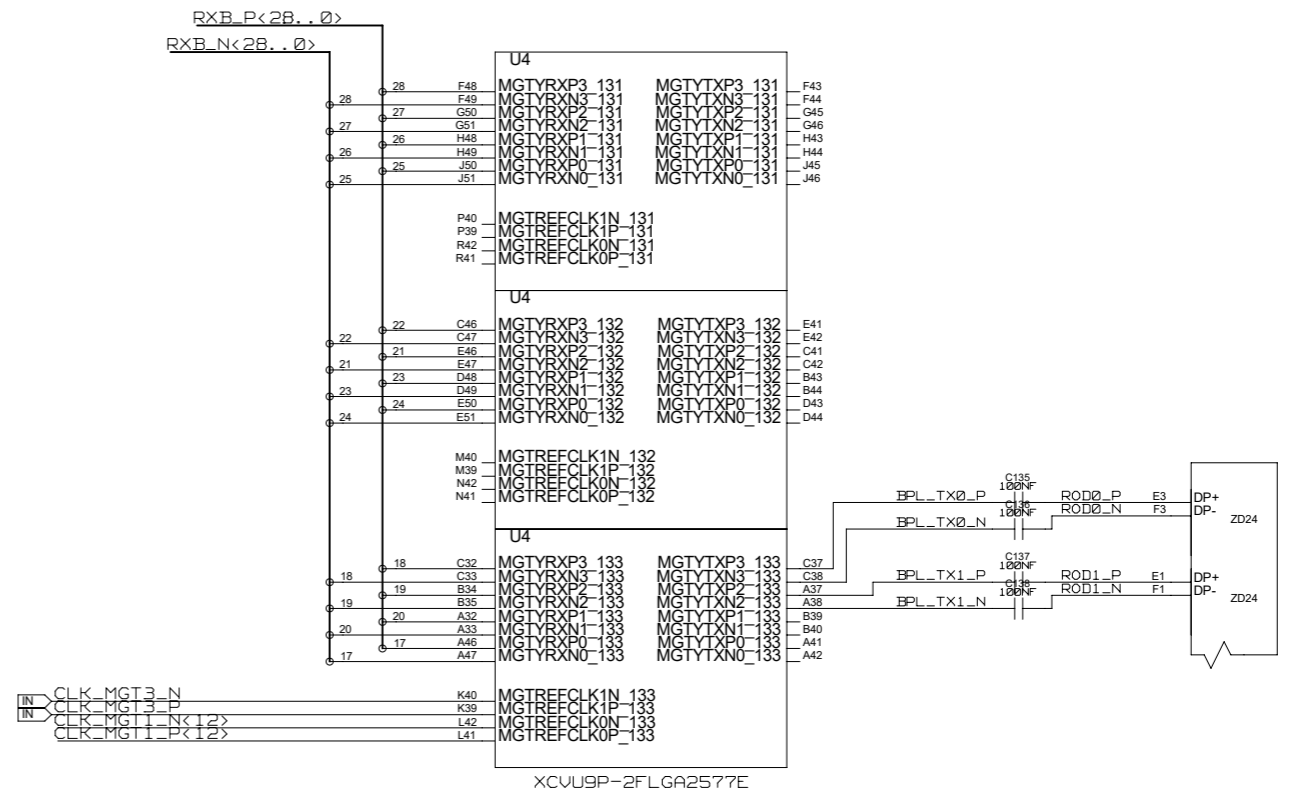
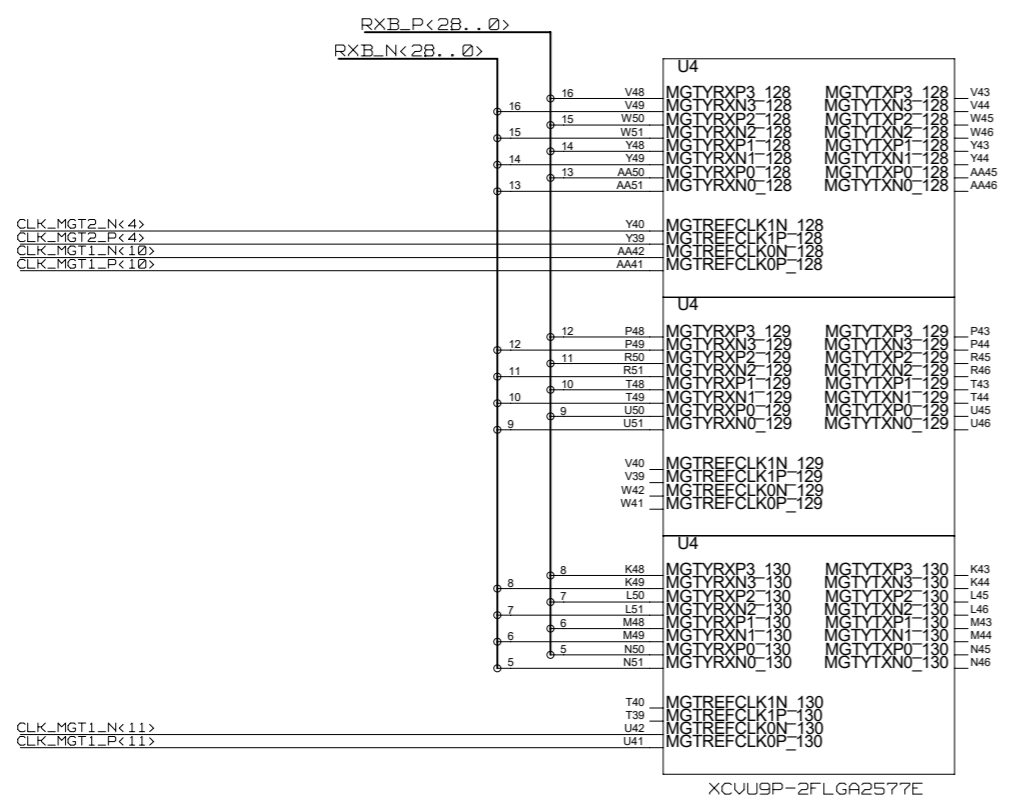
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
125
126
127

CHECKED	J. V. DE SOUZA			DRAWING TITLE <b>JFEX</b> RXA + RXB TXD + IPBUS
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U4_MGT_REAL_TIME				
UNIVERSITY OF MAINZ				SIZE <b>C</b>
				REV.
				DRAWING NO.
				SCALE
				SHEET 6 OF 7

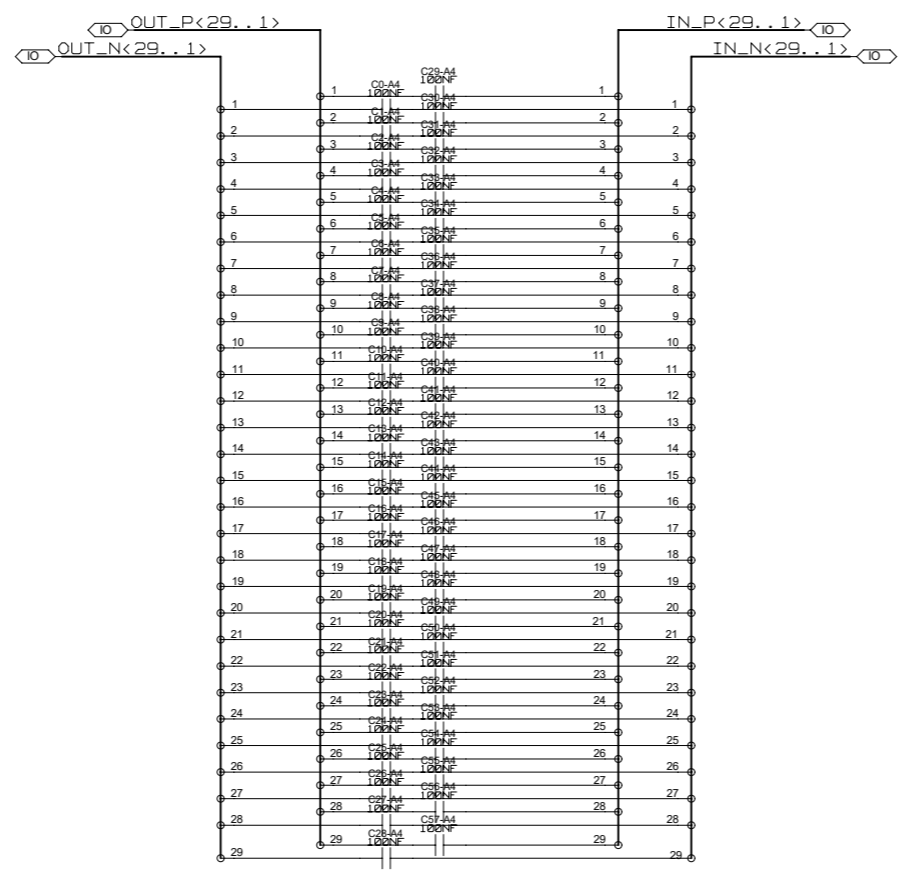
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
128
129
130
131
132
133
134
135

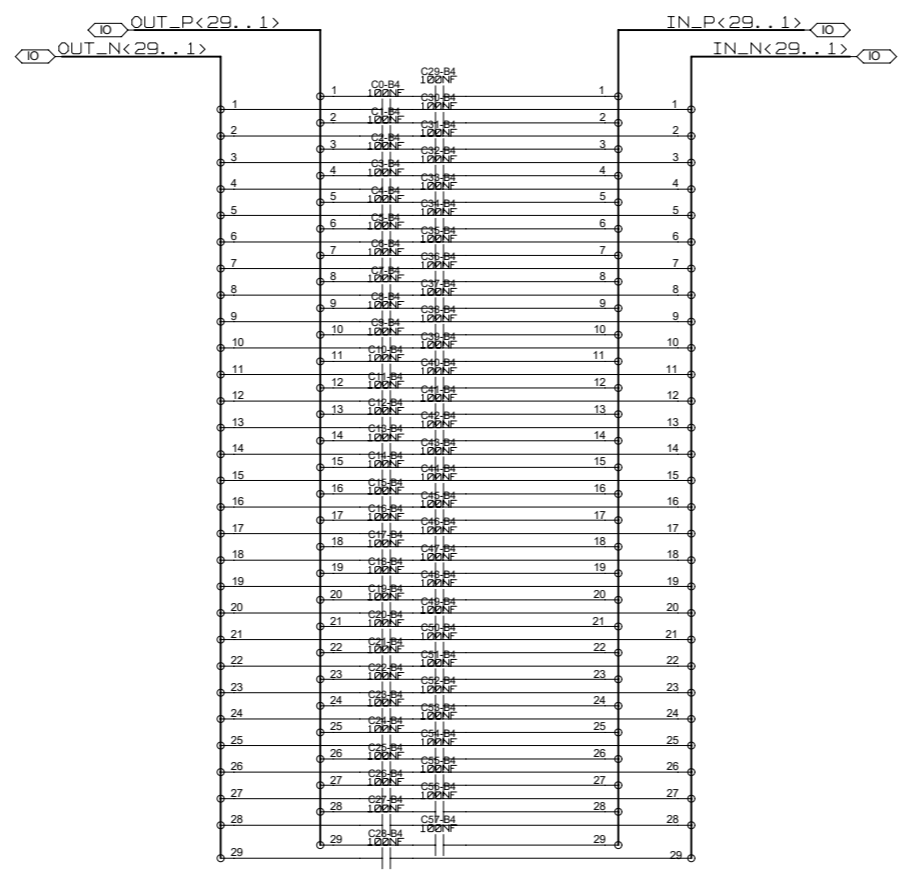
CHECKED	NAME	DATE	SIGN	DRAWING TITLE <b>JFEX</b> <b>RXB + TXC</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U4_MGT_REAL_TIME				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
SCALE				DRAWING NO.
SHEET 7 OF 7				

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



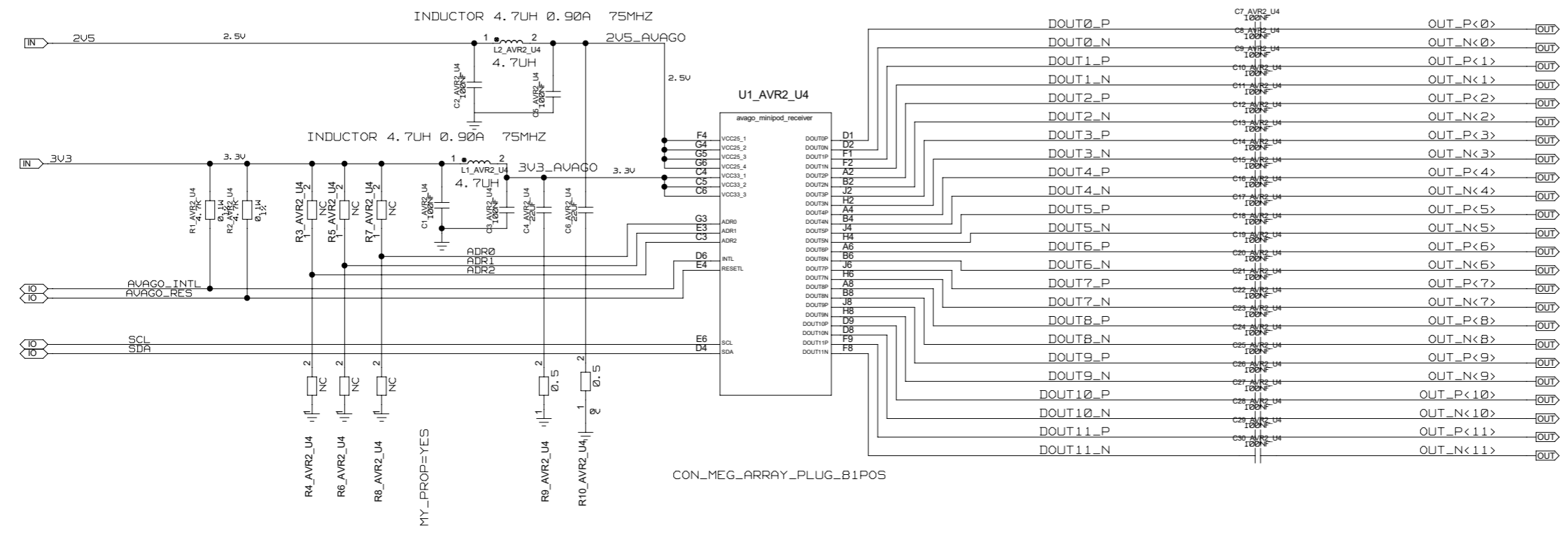
CHECKED	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AC COUPLING 29BIT	
CHECKED	U. SCHAEFER				
CHECKED	BAUSS				
DRAWN	BAUSS			BLOCK TITLE	
UNIVERSITY OF MAINZ				SIZE	DRAWING NO.
				<b>C</b>	REV.
SCALE				SHEET	OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



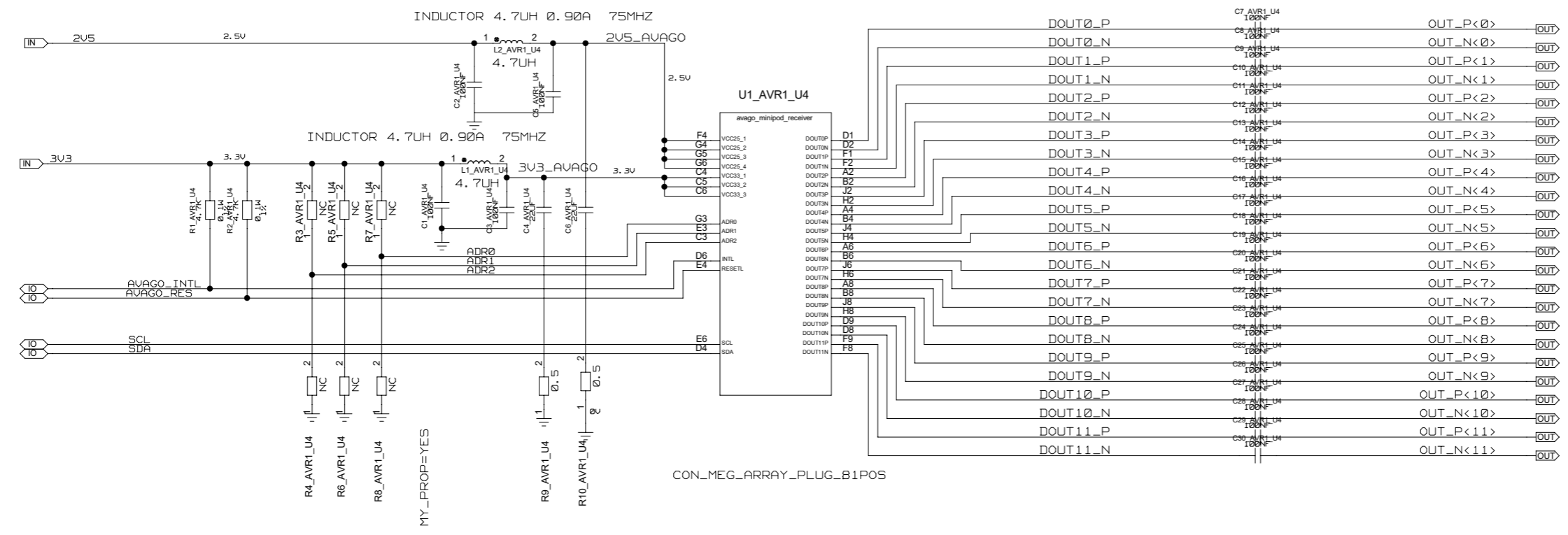
CHECKED	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AC COUPLING 29BIT	
CHECKED	U. SCHAEFER				
CHECKED	BAUSS				
DRAWN	BAUSS			BLOCK TITLE	
UNIVERSITY OF MAINZ				SIZE	DRAWING NO.
				<b>C</b>	REV.
SCALE			SHEET OF		

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



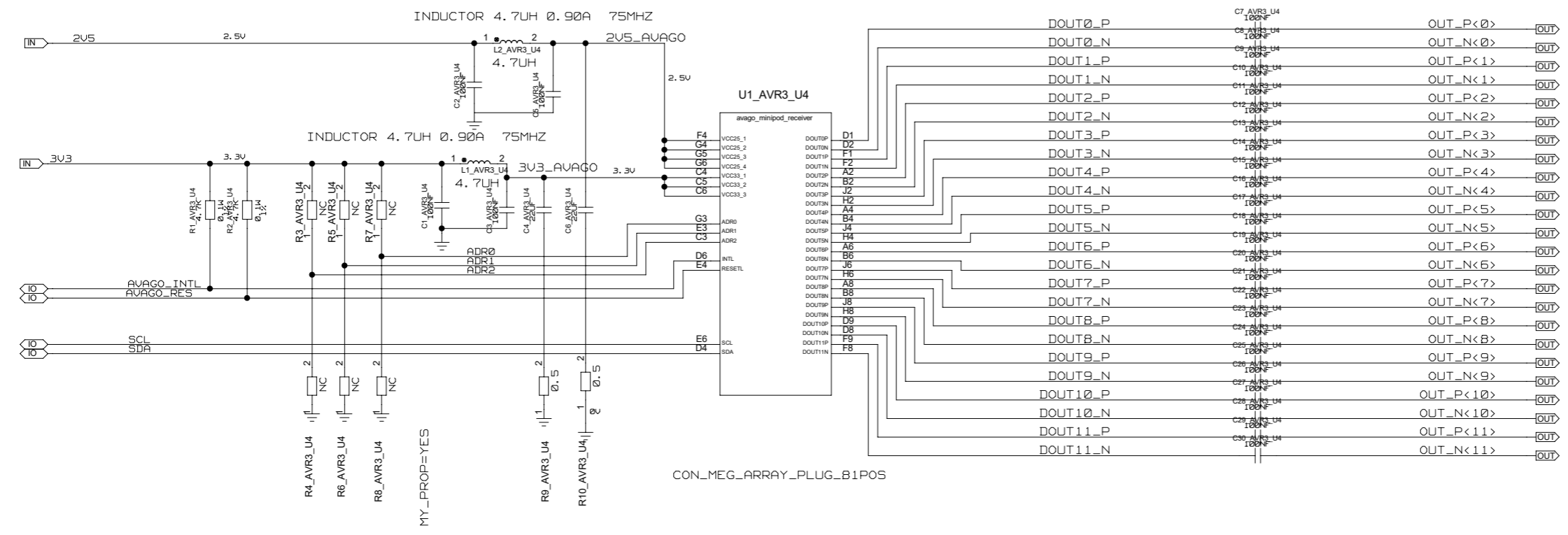
	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				SCALE	SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



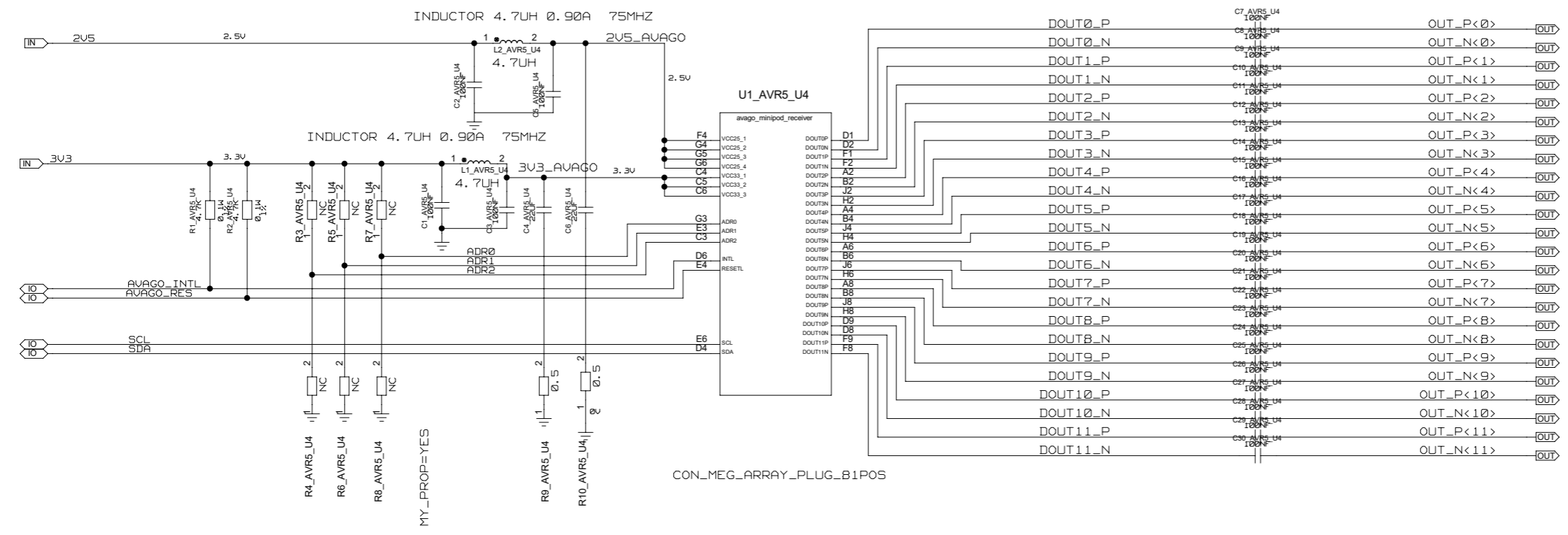
	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	REV.
SCALE					SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



	NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE				AVAGO RECEIVER
UNIVERSITY OF MAINZ			SIZE: <b>C</b> REV.: DRAWING NO.:	
SCALE:		SHEET OF		

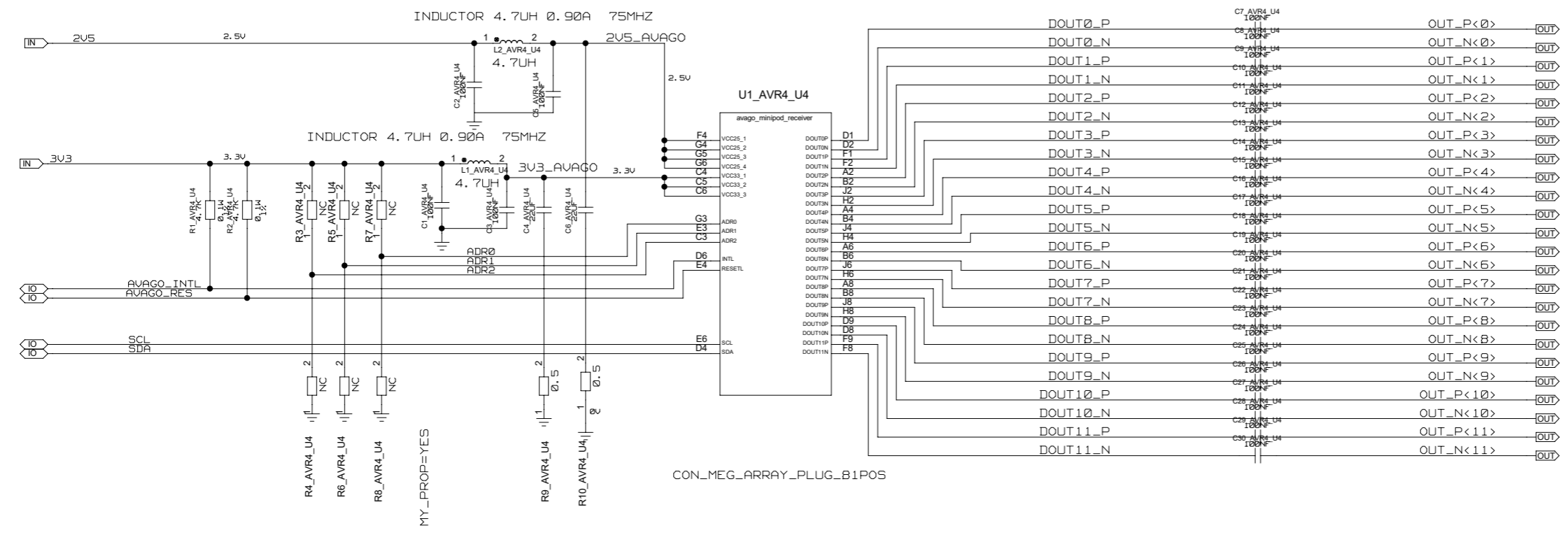
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	REV.
SCALE					SHEET OF

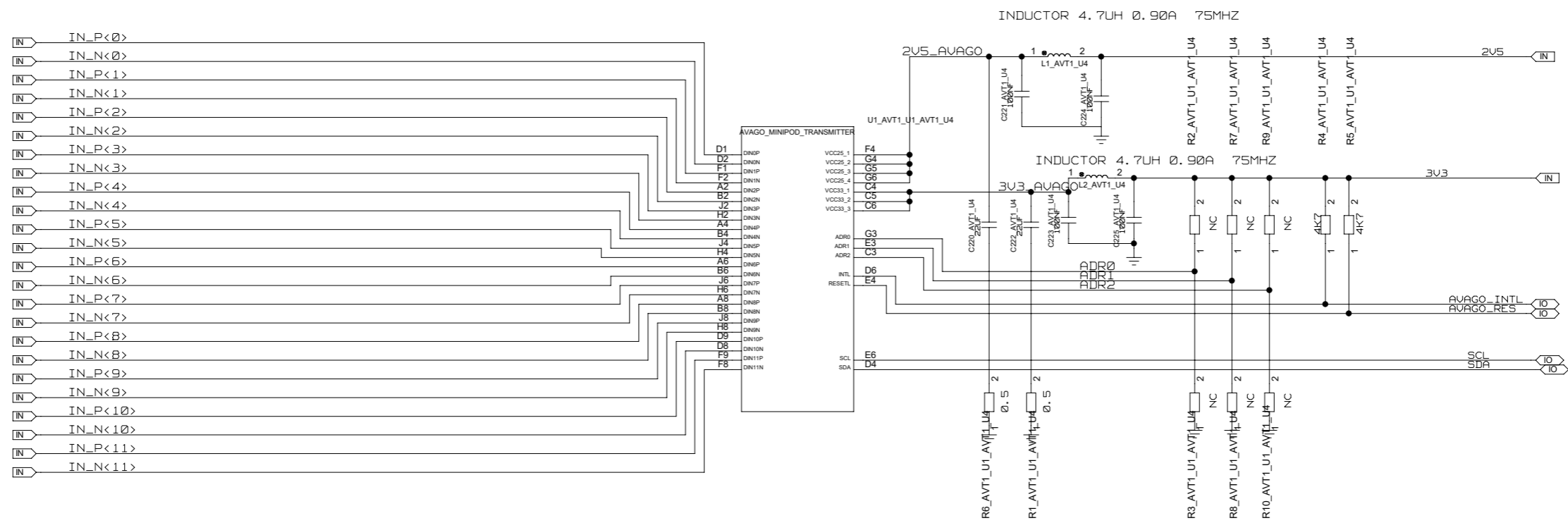


REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO RECEIVER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b> REV.	
SCALE					SHEET OF

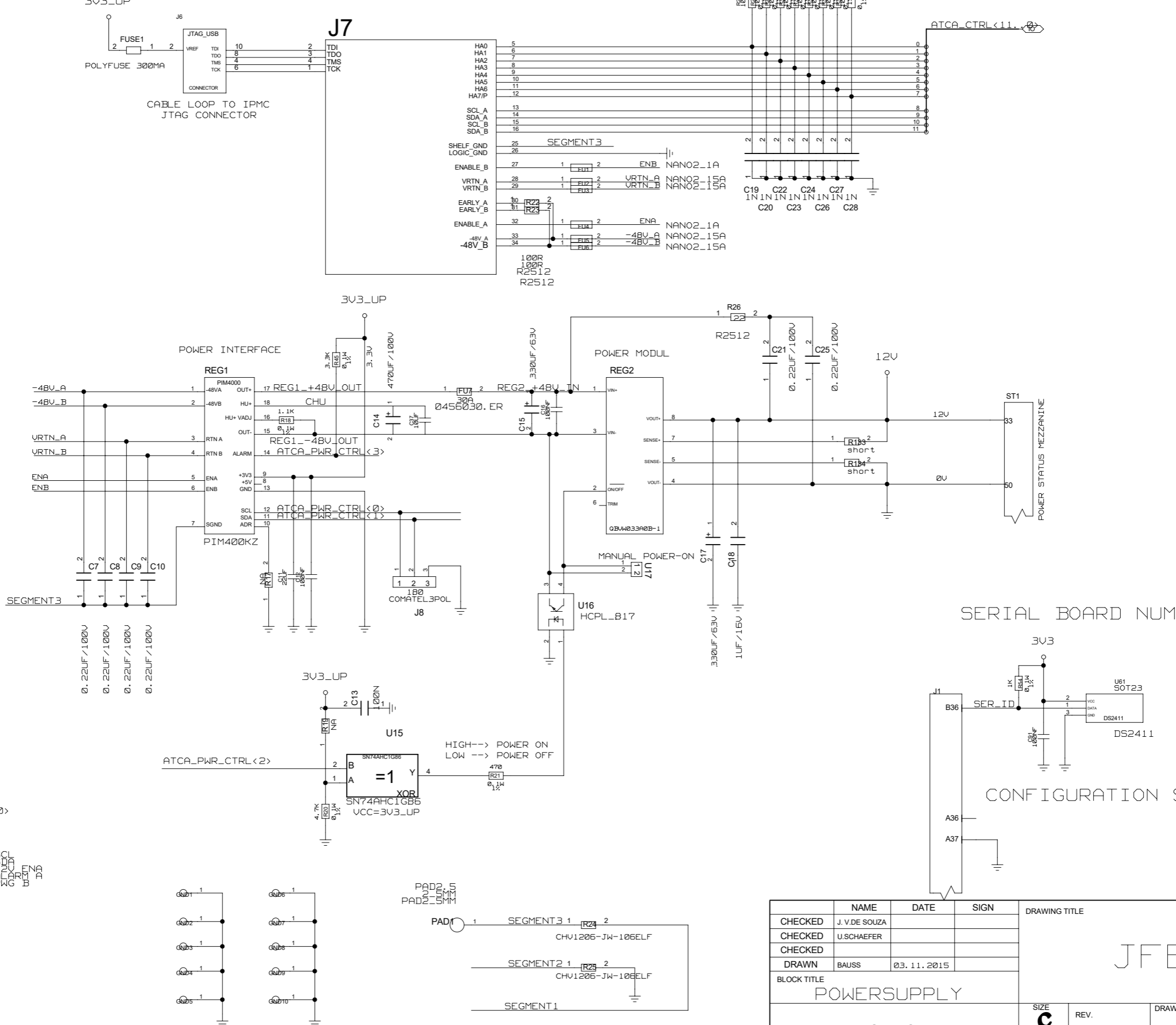
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			AVAGO TRANSMITTER	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE					
UNIVERSITY OF MAINZ				SIZE	
				SCALE	
				REV.	
				DRAWING NO.	
				SHEET	OF

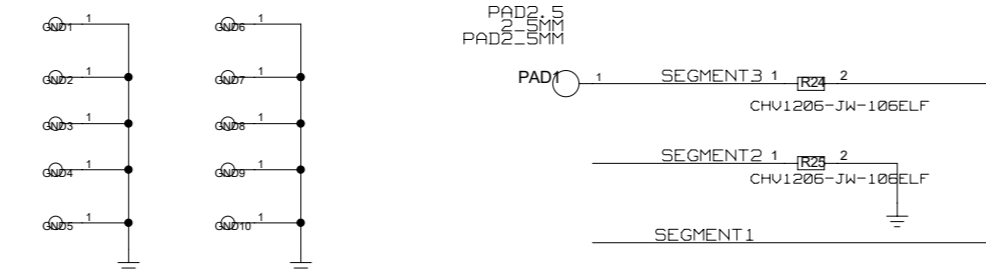
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# ATCA POWER IN & CTRL

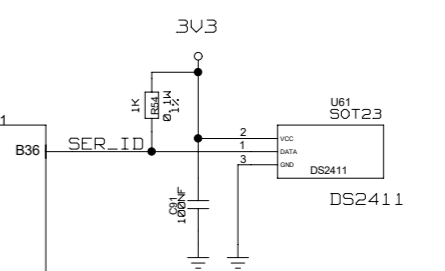


ATCA\_PWR\_CTRL<4..0>

A1 SCL  
 A2 SDA  
 A3 TMS  
 A4 TCK  
 A5 TDI  
 A6 TDO  
 A7 TMS  
 A8 TCK  
 A9 TDI  
 A10 TDO  
 A11 TMS  
 A12 TCK  
 A13 TDI  
 A14 TDO  
 A15 TMS  
 A16 TCK  
 A17 TDI  
 A18 TDO  
 A19 TMS  
 A20 TCK  
 A21 TDI  
 A22 TDO  
 A23 TMS  
 A24 TCK  
 A25 TDI  
 A26 TDO  
 A27 TMS  
 A28 TCK  
 A29 TDI  
 A30 TDO  
 A31 TMS  
 A32 TCK  
 A33 TDI  
 A34 TDO  
 A35 TMS  
 A36 TCK  
 A37 TDI  
 A38 TDO  
 A39 TMS  
 A40 TCK  
 A41 TDI  
 A42 TDO  
 A43 TMS  
 A44 TCK  
 A45 TDI  
 A46 TDO  
 A47 TMS  
 A48 TCK  
 A49 TDI  
 A50 TDO  
 A51 TMS  
 A52 TCK  
 A53 TDI  
 A54 TDO  
 A55 TMS  
 A56 TCK  
 A57 TDI  
 A58 TDO  
 A59 TMS  
 A60 TCK  
 A61 TDI  
 A62 TDO  
 A63 TMS  
 A64 TCK  
 A65 TDI  
 A66 TDO  
 A67 TMS  
 A68 TCK  
 A69 TDI  
 A70 TDO  
 A71 TMS  
 A72 TCK  
 A73 TDI  
 A74 TDO  
 A75 TMS  
 A76 TCK  
 A77 TDI  
 A78 TDO  
 A79 TMS  
 A80 TCK  
 A81 TDI  
 A82 TDO  
 A83 TMS  
 A84 TCK  
 A85 TDI  
 A86 TDO  
 A87 TMS  
 A88 TCK  
 A89 TDI  
 A90 TDO  
 A91 TMS  
 A92 TCK  
 A93 TDI  
 A94 TDO  
 A95 TMS  
 A96 TCK  
 A97 TDI  
 A98 TDO  
 A99 TMS  
 A100 TCK



SERIAL BOARD NUMBER

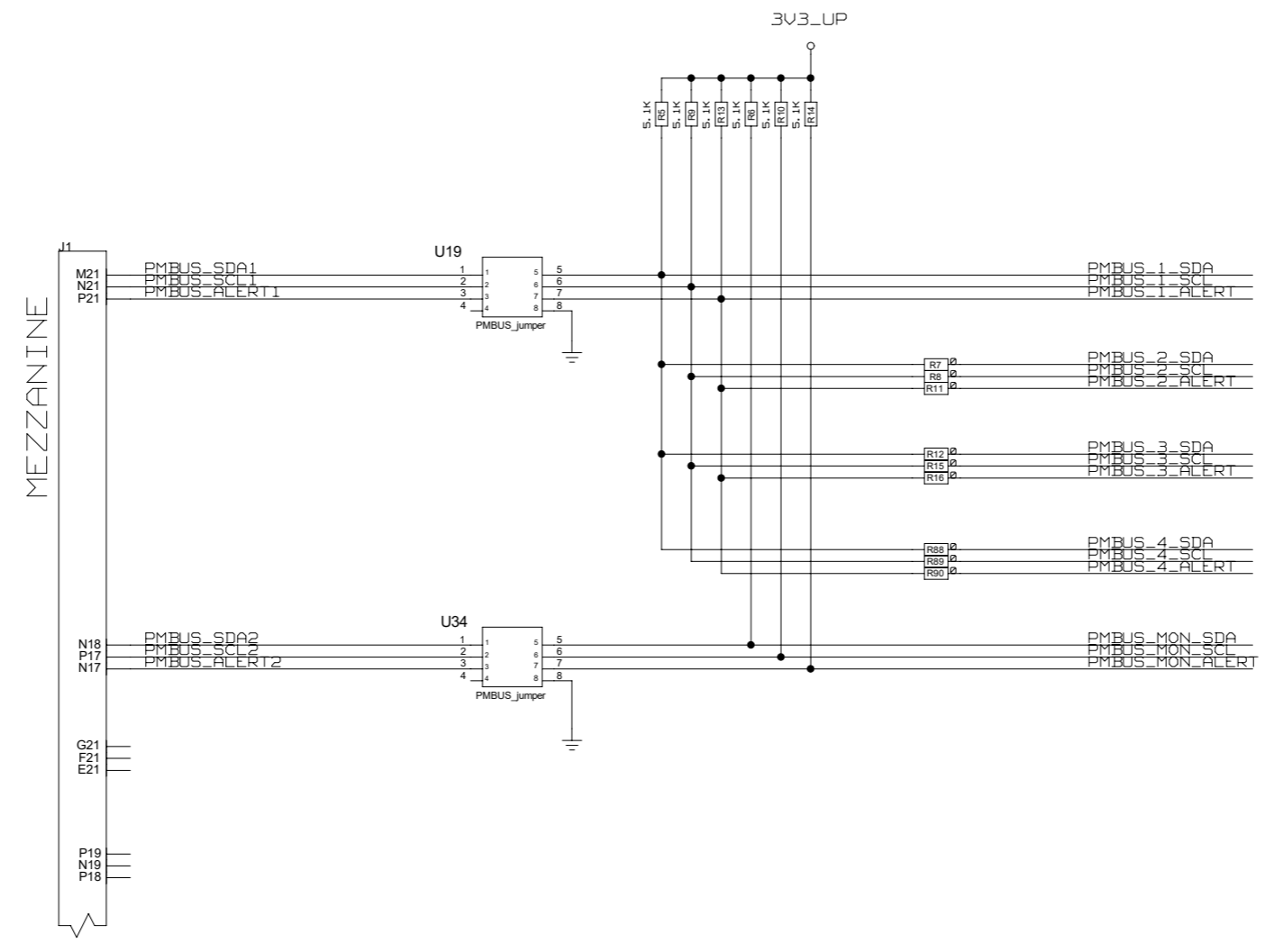


CONFIGURATION SELECT

NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J.V. DE SOUZA		<div style="text-align: center; font-size: 2em; font-weight: bold;">JFEX</div>
CHECKED	U.SCHAEFER		
CHECKED			
CHECKED			
DRAWN	BAUSS	03.11.2015	
BLOCK TITLE			
POWERSUPPLY			
UNIVERSITY OF MAINZ		SIZE <b>C</b>	DRAWING NO.
SCALE			SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# PMBUS CONNECTORS



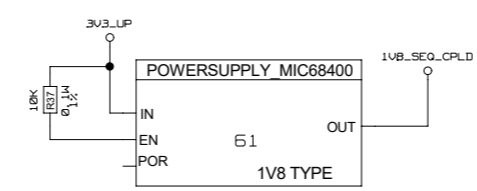
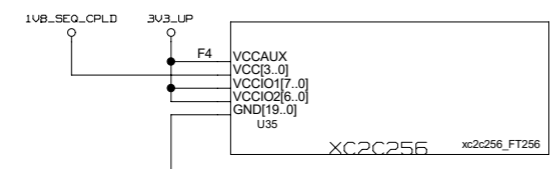
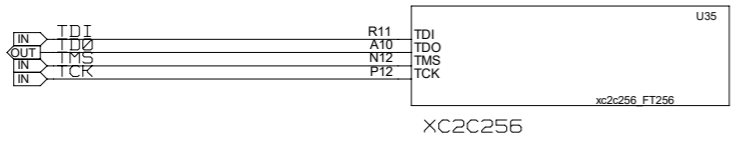
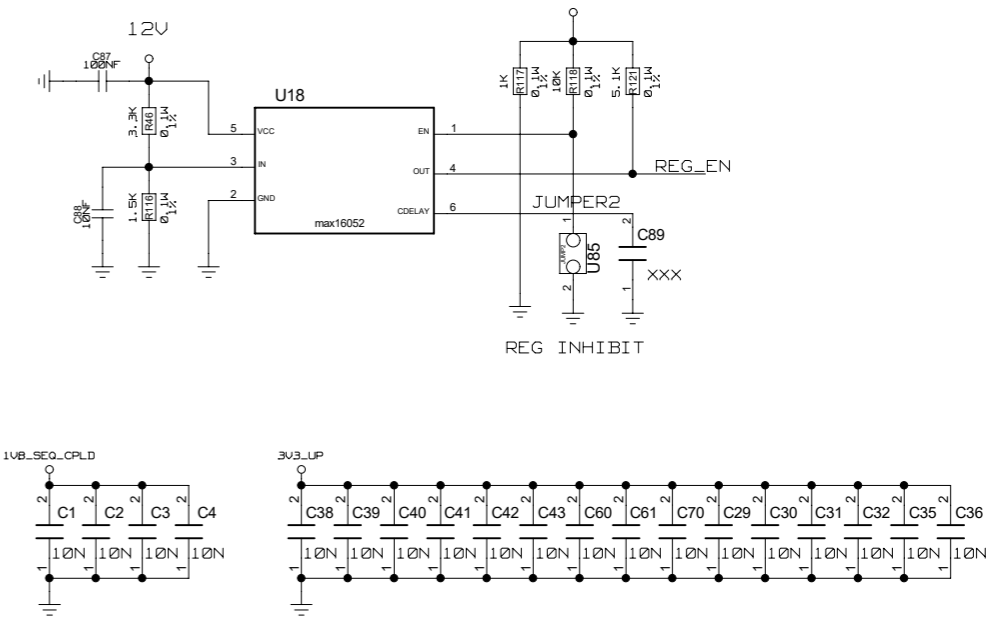
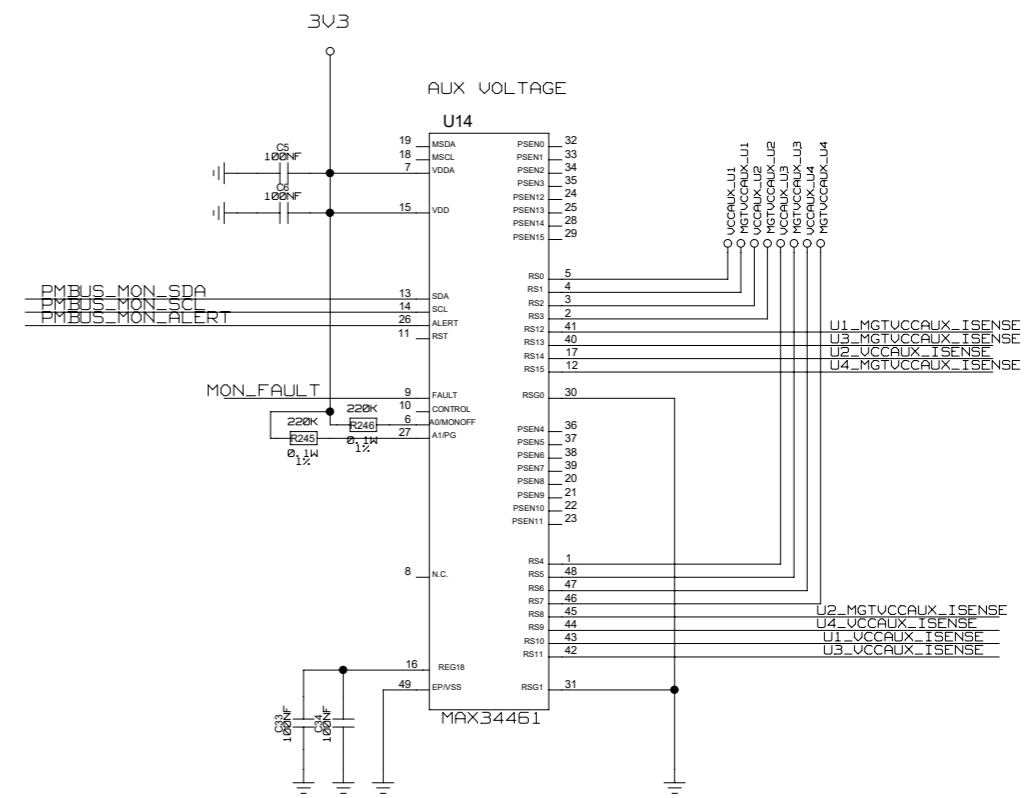
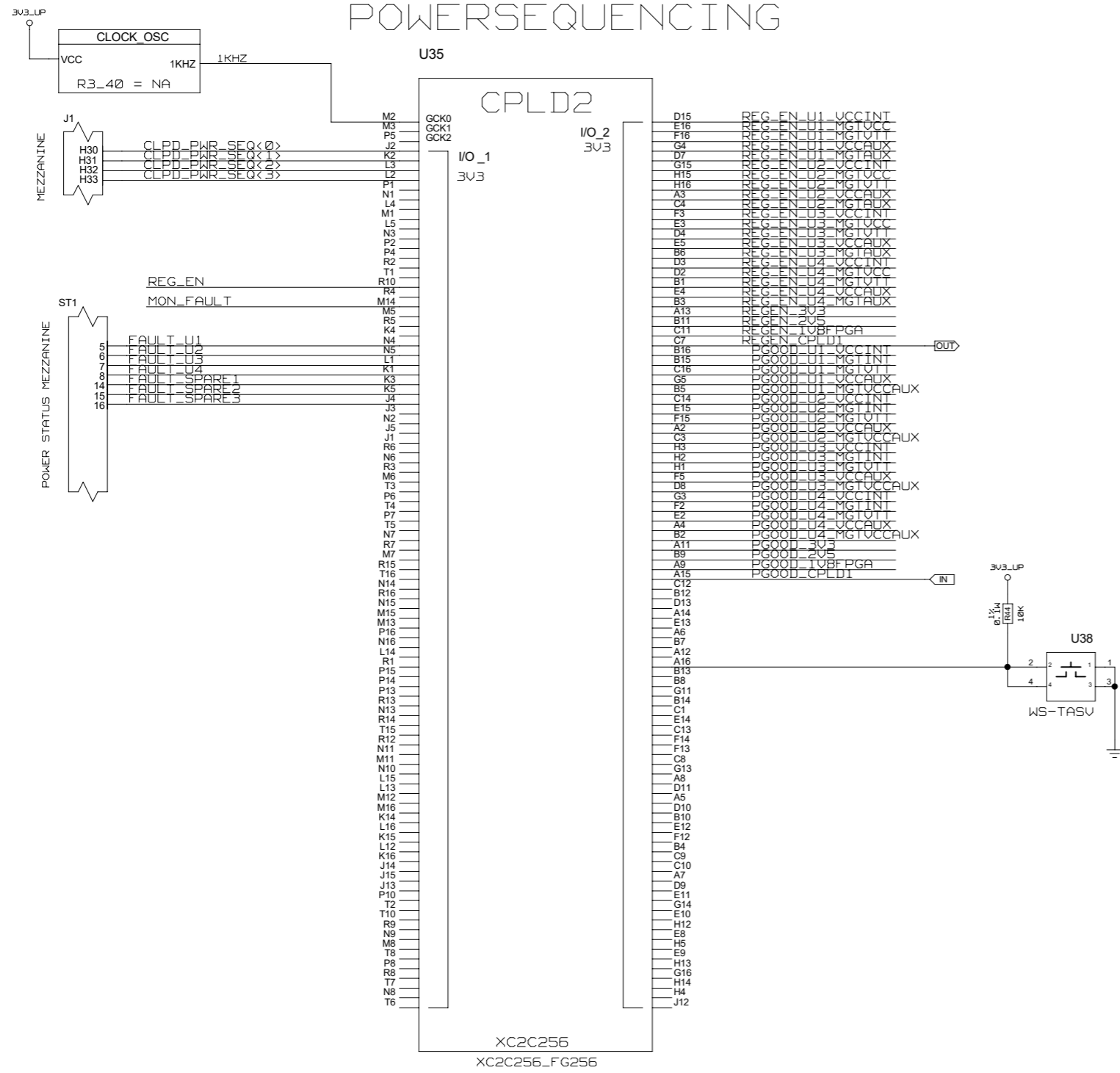
CHECKED	NAME	DATE	SIGN	DRAWING TITLE		
CHECKED	J. V. DE SOUZA			JFEX		
CHECKED	U. SCHAEFER					
CHECKED						
DRAWN	BAUSS			BLOCK TITLE		
				POWERSUPPLY		
UNIVERSITY OF MAINZ				SIZE	REV.	DRAWING NO.
				C		
				SCALE		SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# POWERSEQUENCING

# VOLTAGE MONITORING

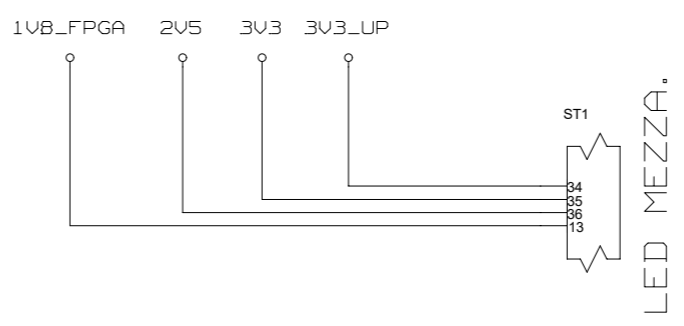
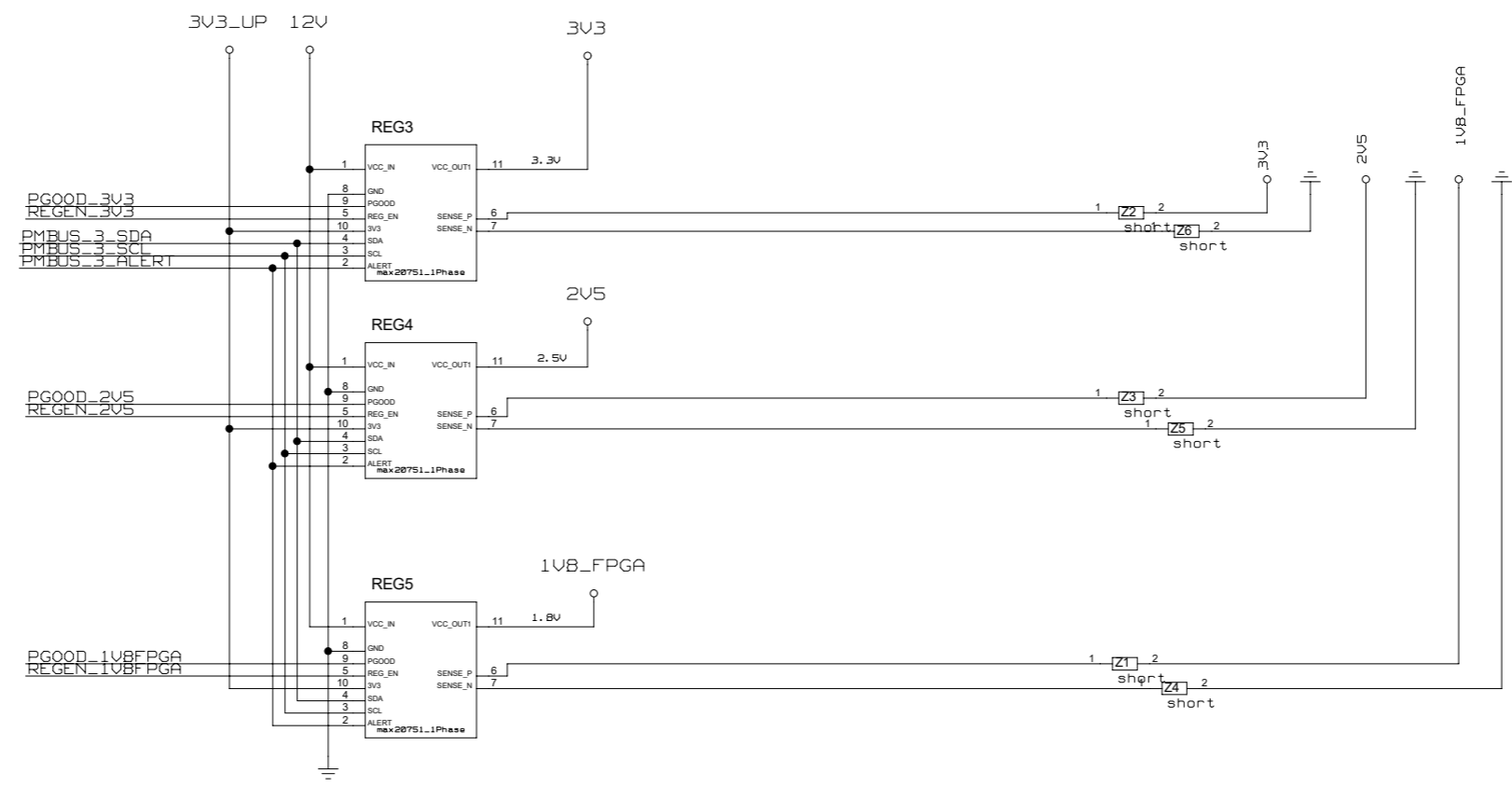
# 12V SUPERVISOR



NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA		JFEX	
CHECKED	U. SCHAEFER			
CHECKED				
CHECKED				
DRAWN	BAUSS		BLOCK TITLE	
			POWERSUPPLY	
			SIZE	DRAWING NO.
			UNIVERSITY OF MAINZ	
			SCALE	SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# BOARDLEVEL 1V8, 2V5, 3V3

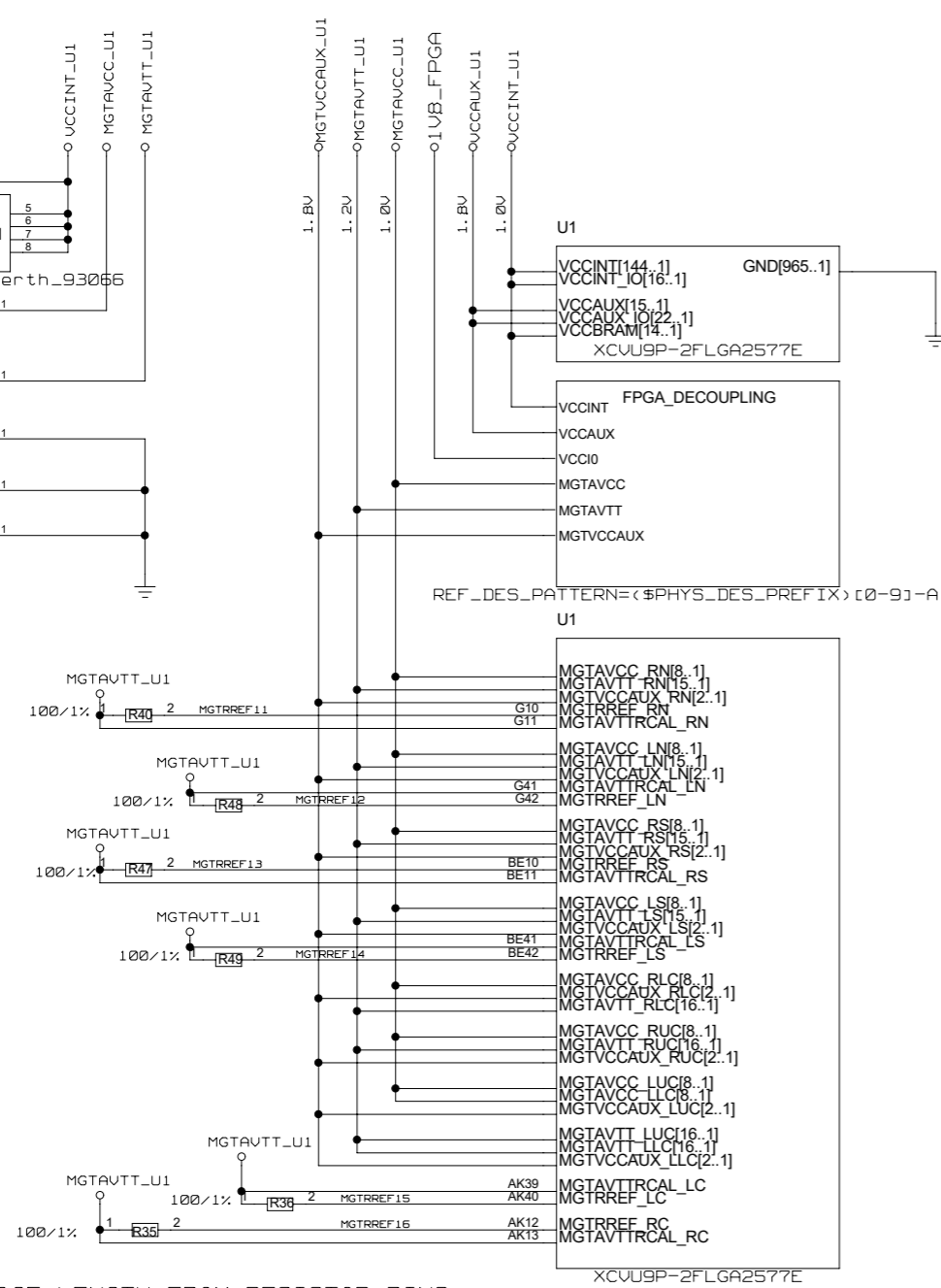
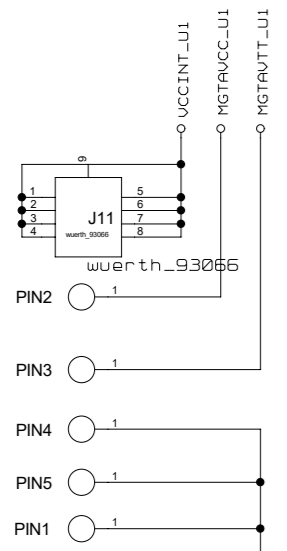


CHECKED	J. V. DE SOUZA			DRAWING TITLE  <h1>JFEX</h1>
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE <h2>POWERSUPPLY</h2>				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
		SCALE		SHEET OF

# POWERSUPPLIES U1 + DECOUPLING U1

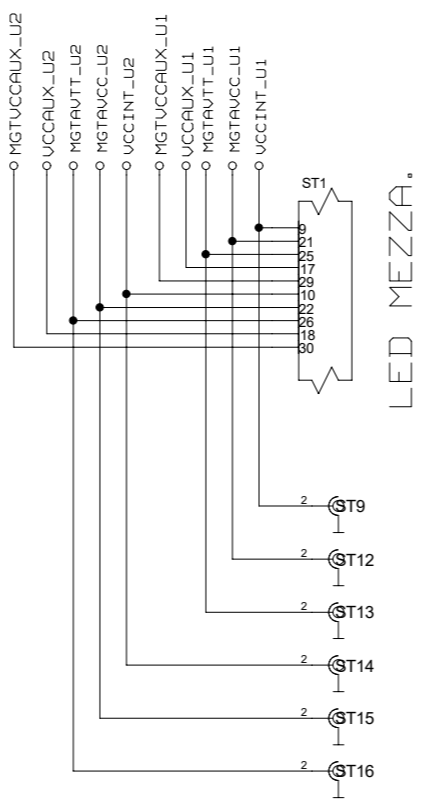
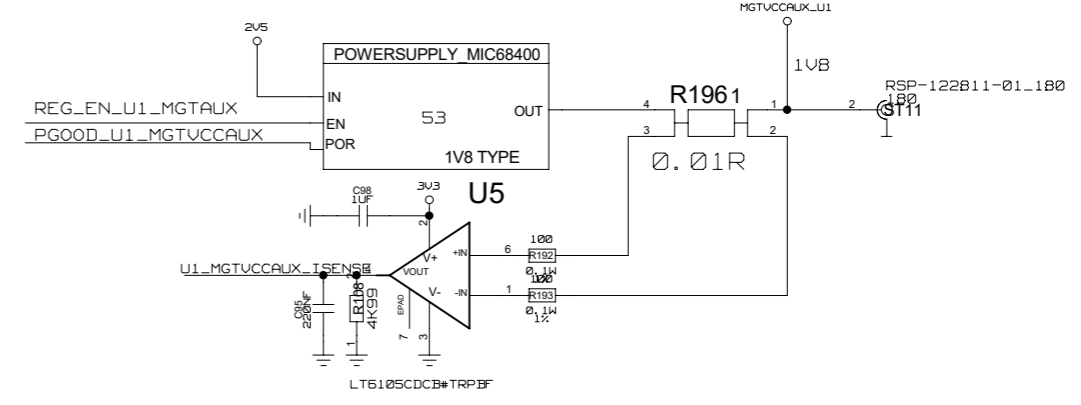
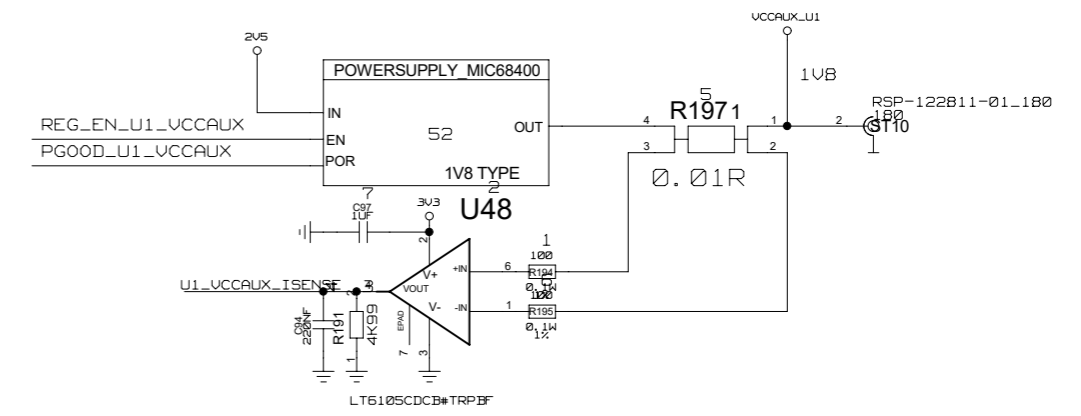
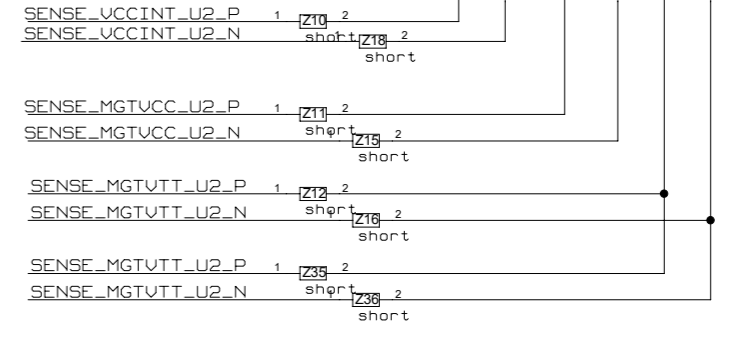
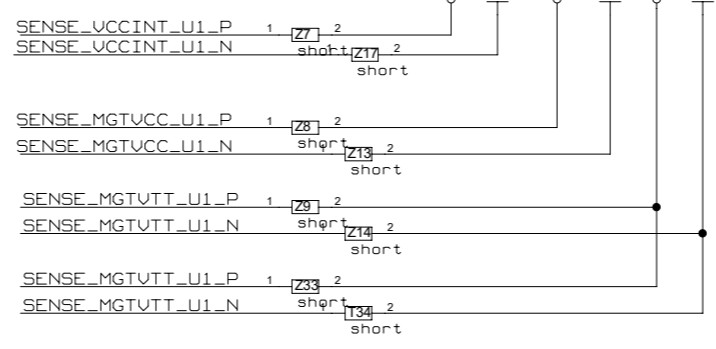
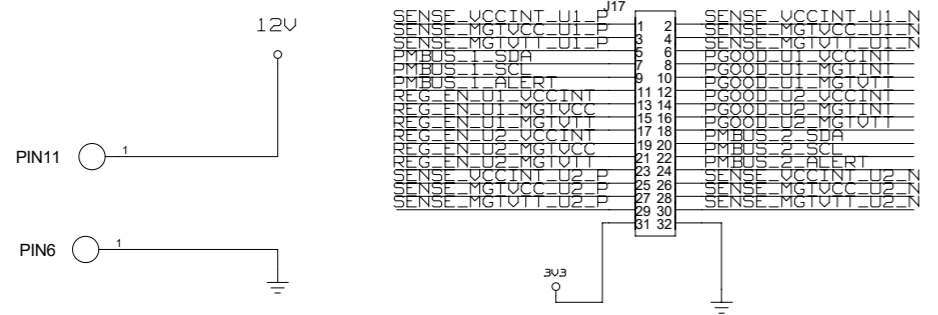
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

## POWERCONNECTORS



TRACE LENGTH FROM RESISTOR PINS TO PIN SAME LENGTH  
UG578 SHEET 324

## POWERPANEL



NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA		
CHECKED	U. SCHAEFER		
CHECKED			
DRAWN	BAUSS		

BLOCK TITLE: POWERSUPPLY

UNIVERSITY OF MAINZ

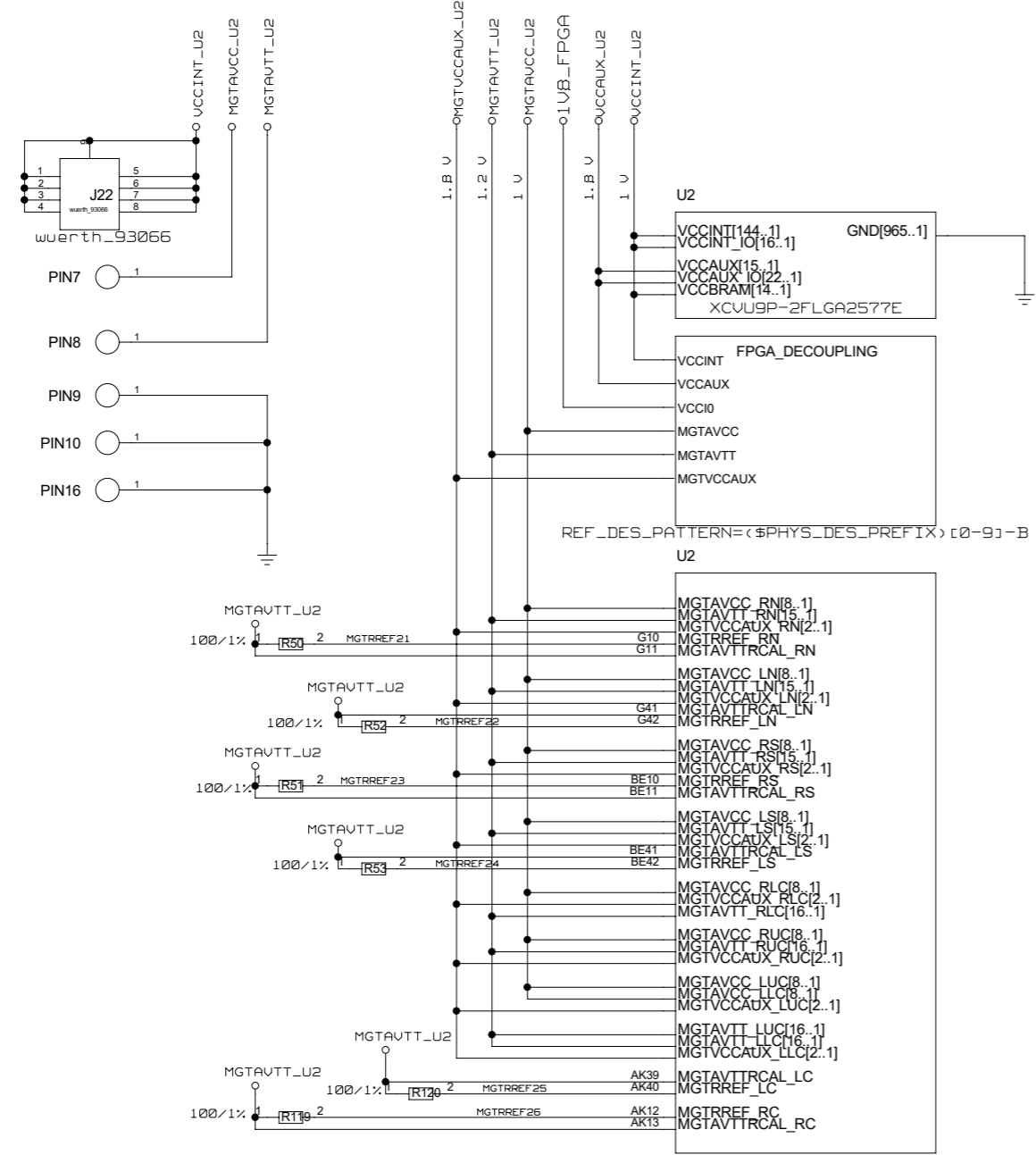
SIZE	REV.	DRAWING NO.
SCALE		SHEET OF

JFEX

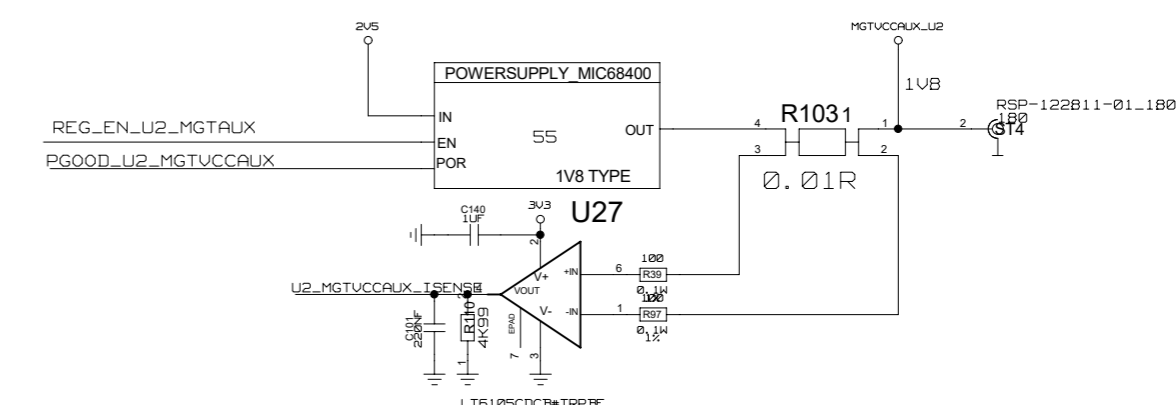
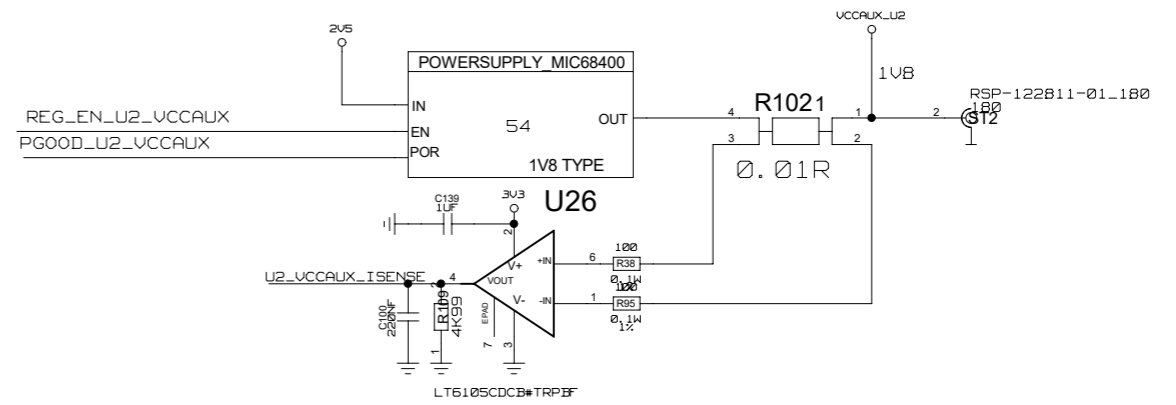
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# POWERSUPPLIES U2 + DECOUPLING U2

## POWERCONNECTORS



TRACE LENGTH FROM RESISTOR PINS  
TO PIN SAME LENGTH  
UG57B SHEET 324



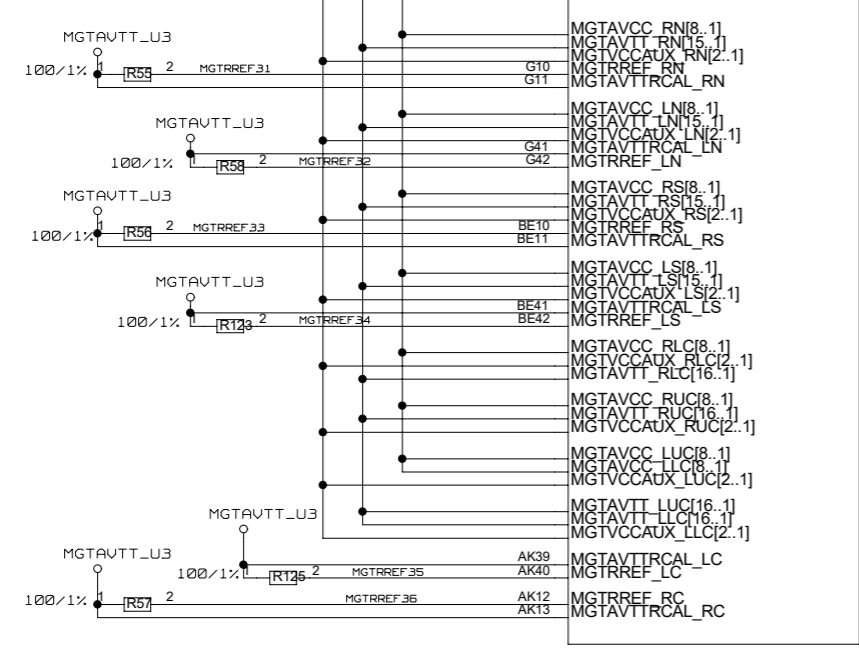
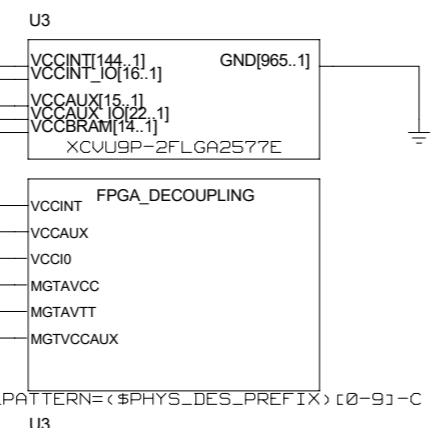
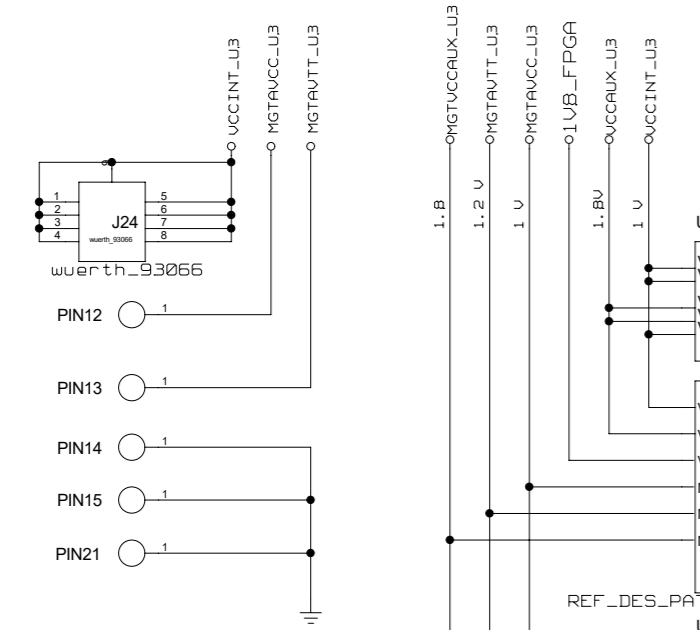
NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS			
BLOCK TITLE			
POWERSUPPLY			
UNIVERSITY OF MAINZ		SIZE C	REV.
		SCALE	DRAWING NO.
			SHEET OF



# POWERSUPPLIES U3 + DECOUPLING U3

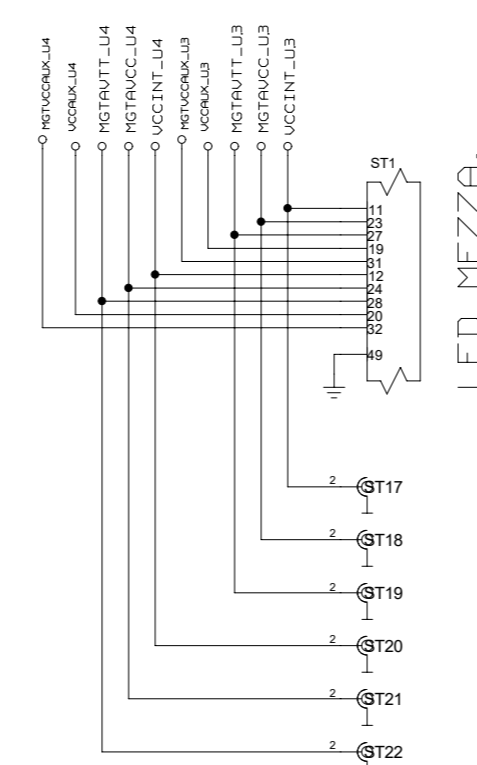
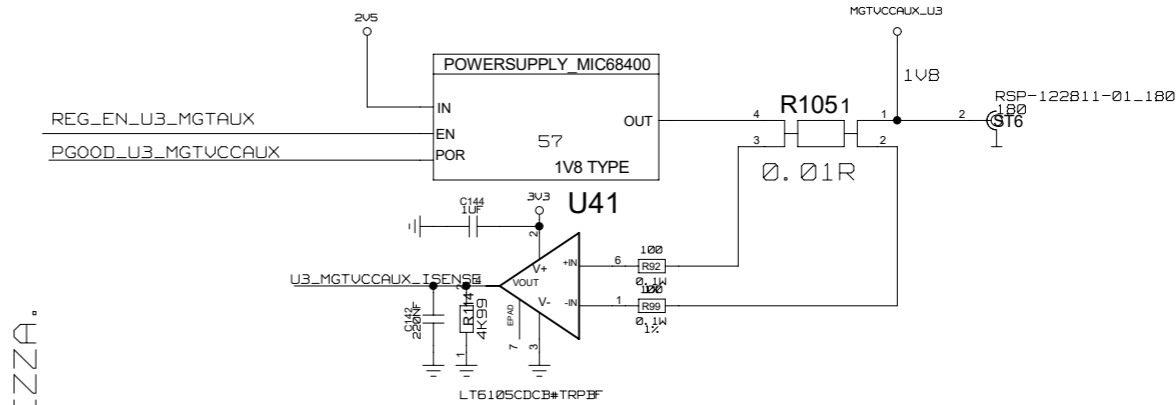
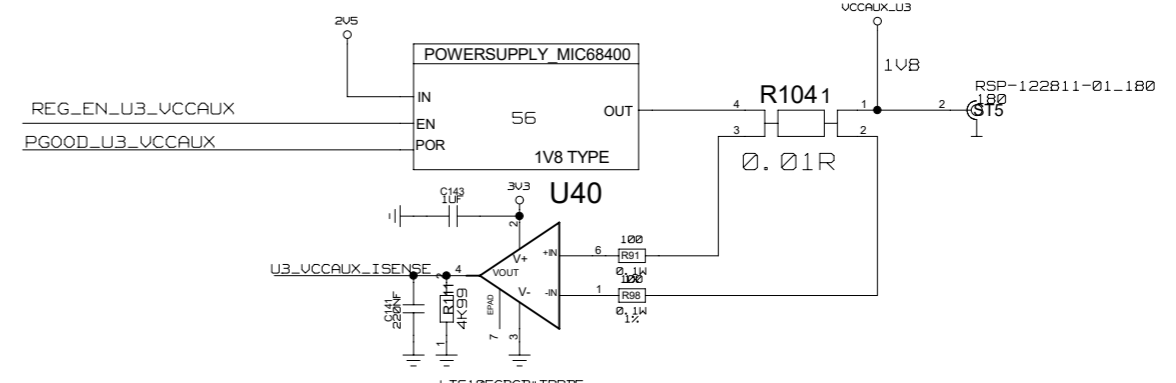
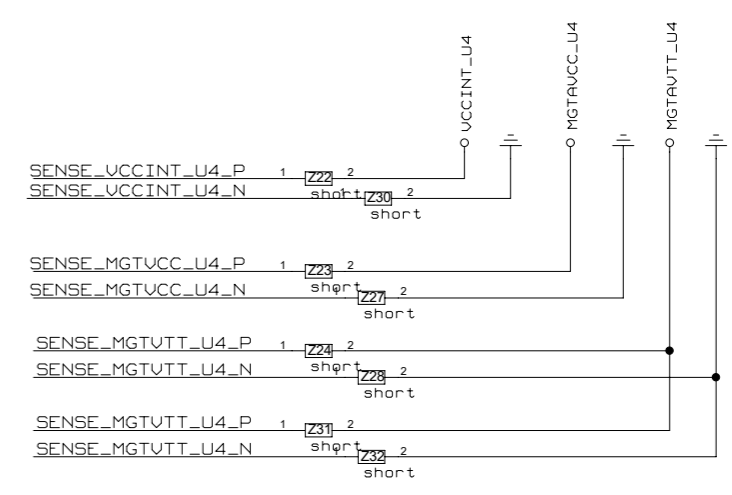
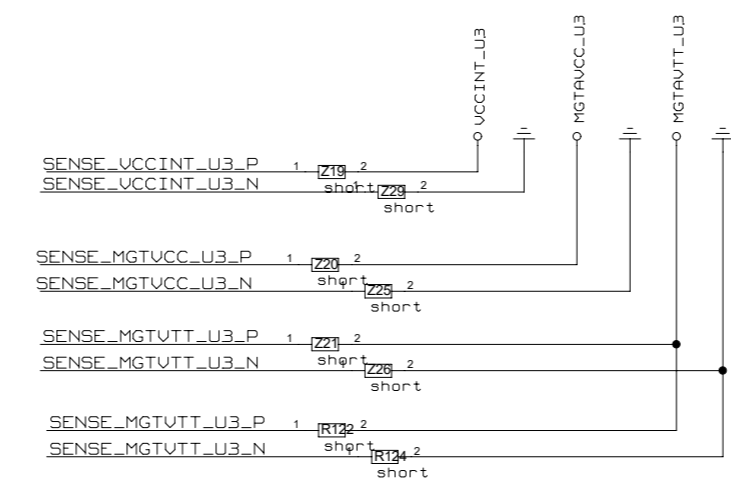
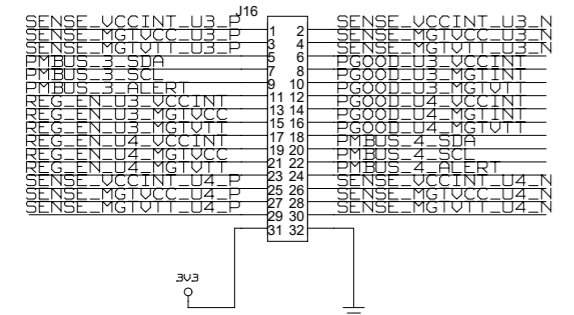
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

## POWERCONNECTORS



TRACE LENGTH FROM RESISTOR PINS TO PIN SAME LENGTH  
UG578 SHEET 324

## POWERPANEL



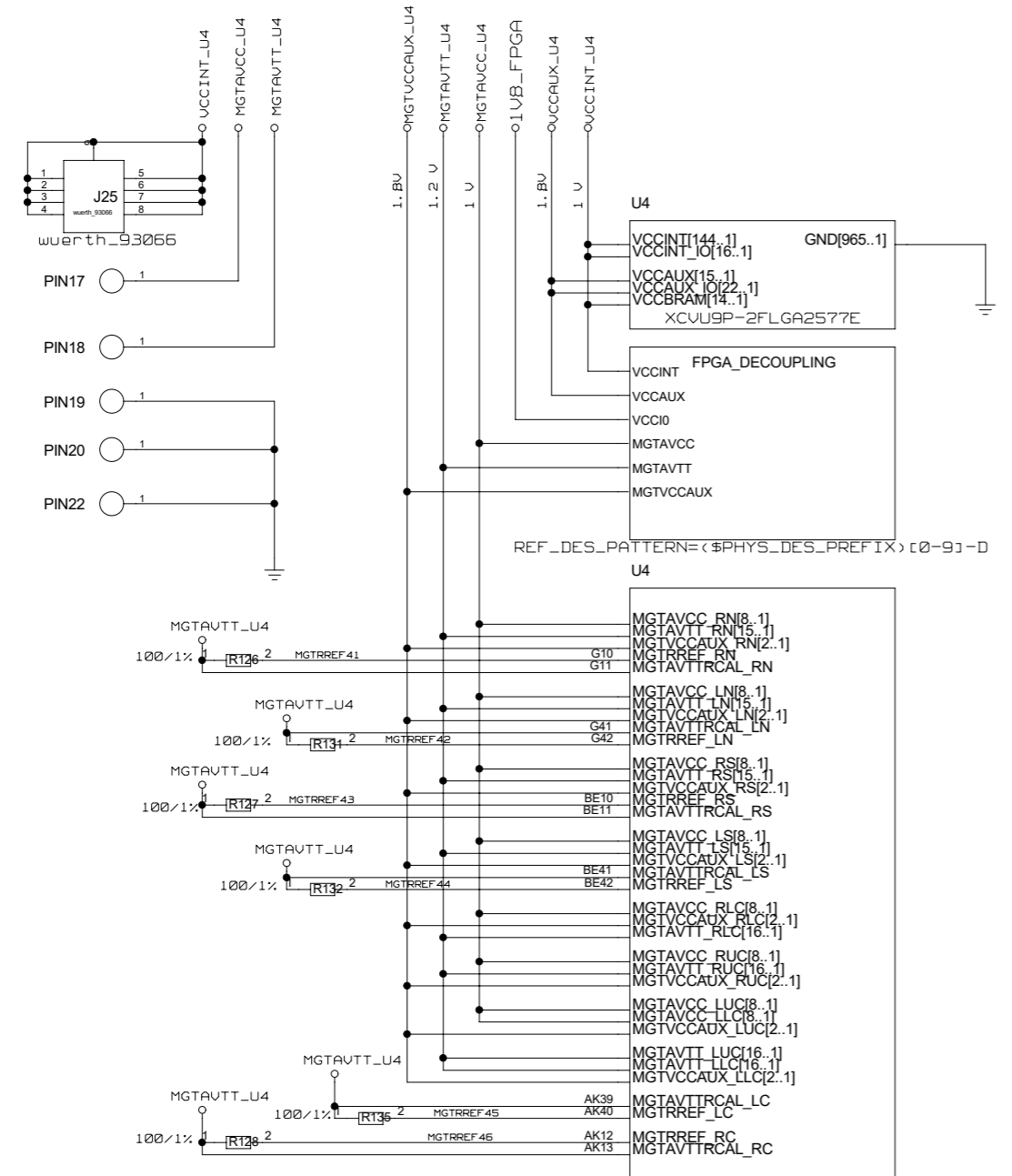
LED MEZZA

NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA		<b>JFEX</b>
CHECKED	U. SCHAEFER		
CHECKED			
DRAWN	BAUSS		
BLOCK TITLE			POWER SUPPLY
UNIVERSITY OF MAINZ		SIZE	DRAWING NO.
		SCALE	SHEET OF

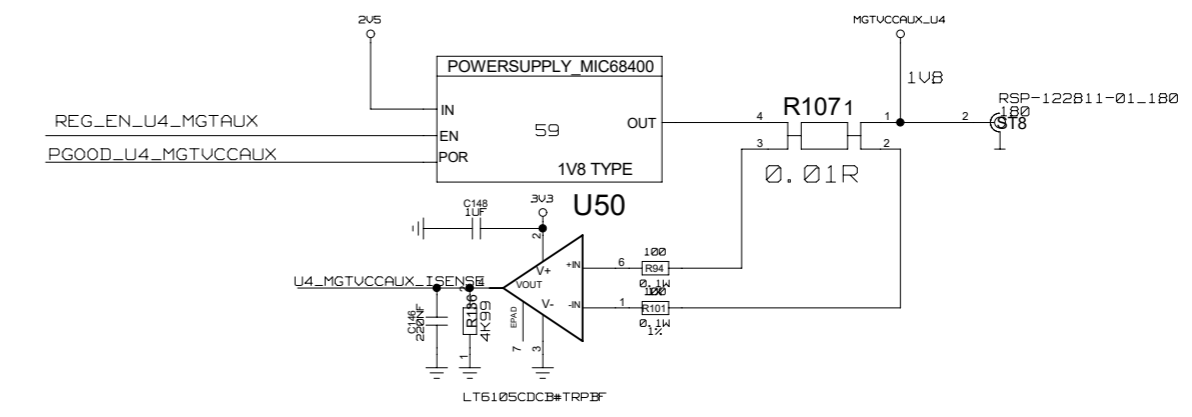
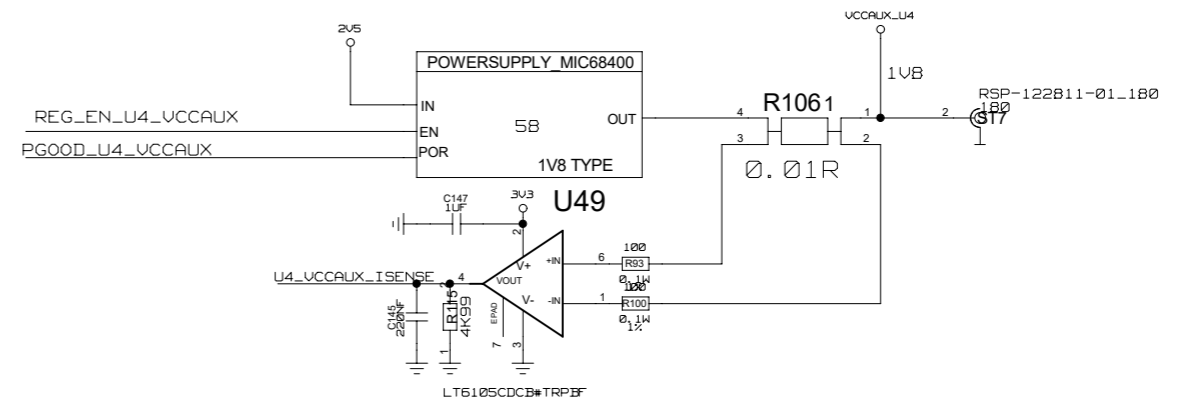
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# POWERSUPPLIES U4 + DECOUPLING U4

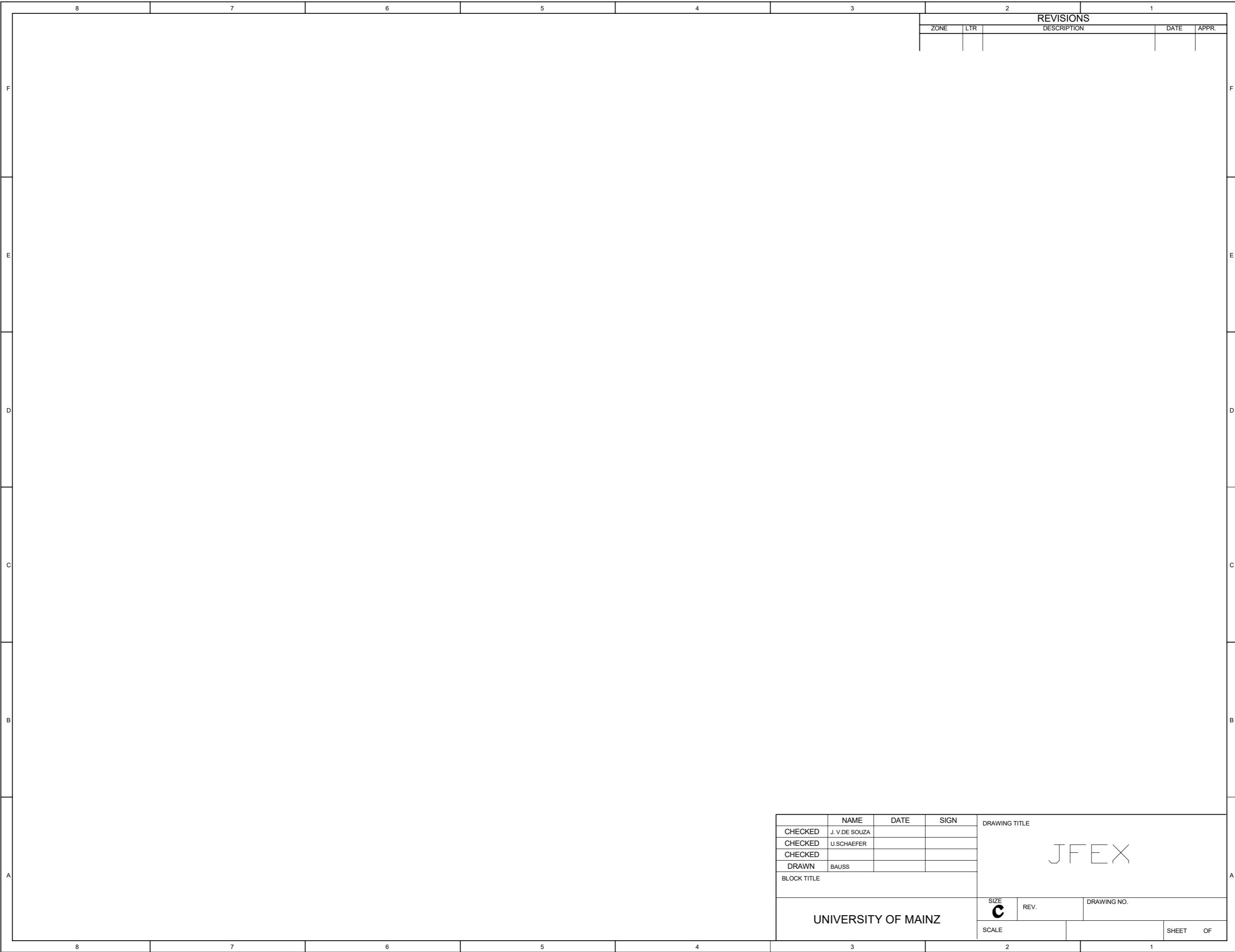
## POWERCONNECTORS



TRACE LENGTH FROM RESISTOR PINS  
TO PIN SAME LENGTH  
UG578 SHEET 324



NAME	DATE	SIGN	DRAWING TITLE									
CHECKED J. V. DE SOUZA			JFEX									
CHECKED U. SCHAEFER												
CHECKED												
DRAWN BAUSS												
BLOCK TITLE	POWERSUPPLY											
UNIVERSITY OF MAINZ			<table border="1"> <tr> <td>SIZE</td> <td>REV.</td> <td>DRAWING NO.</td> </tr> <tr> <td>C</td> <td></td> <td></td> </tr> <tr> <td>SCALE</td> <td></td> <td>SHEET OF</td> </tr> </table>	SIZE	REV.	DRAWING NO.	C			SCALE		SHEET OF
SIZE	REV.	DRAWING NO.										
C												
SCALE		SHEET OF										

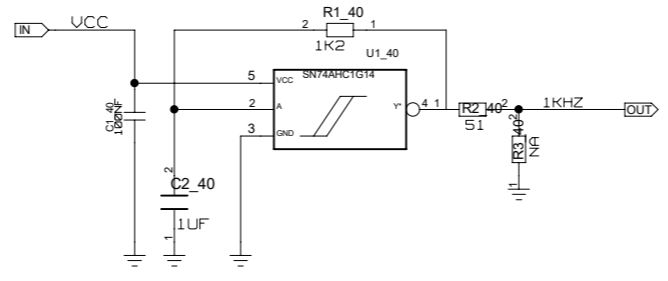


REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			JFEX	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS			BLOCK TITLE	
UNIVERSITY OF MAINZ				SIZE	DRAWING NO.
				<b>C</b>	REV.
SCALE					SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

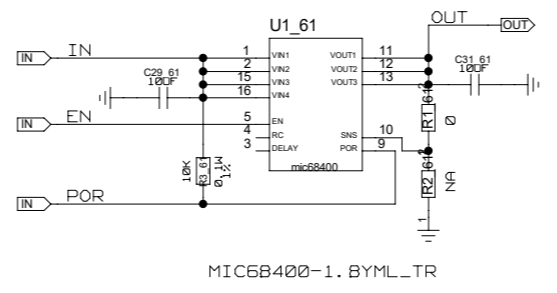
# CPLD CLOCK



CHECKED	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			JFEX	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS			BLOCK TITLE	
UNIVERSITY OF MAINZ				SIZE	DRAWING NO.
				<b>C</b>	REV.
SCALE					SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# POWERSUPPLY\_MIC68400

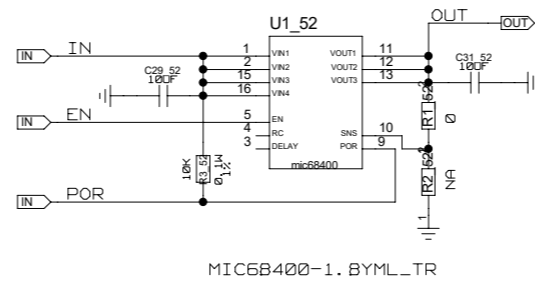


MIC68400-1. BYML\_TR

	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA				
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE					
POWERSUPPLY_MIC68400					
UNIVERSITY OF MAINZ		SIZE	REV.	DRAWING NO.	
		<b>C</b>			
SCALE				SHEET	OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

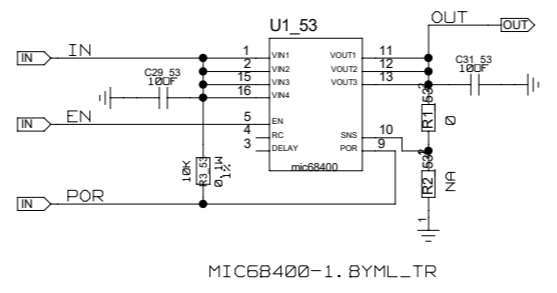
# POWERSUPPLY\_MIC68400



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA				
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE					
POWERSUPPLY_MIC68400					
UNIVERSITY OF MAINZ			SIZE	REV.	DRAWING NO.
			C		
			SCALE		SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

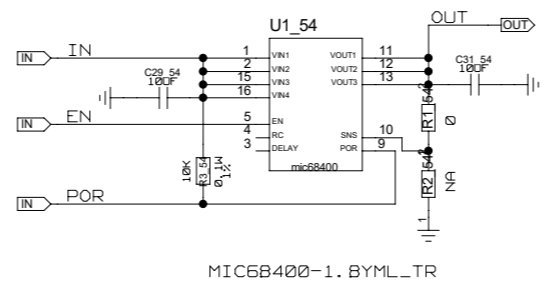
# POWERSUPPLY\_MIC68400



NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA		POWERSUPPLY_MIC68400	
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS		DRAWING NO.	
BLOCK TITLE			SIZE	REV.
UNIVERSITY OF MAINZ			C	
SCALE			SHEET OF	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# POWERSUPPLY\_MIC68400

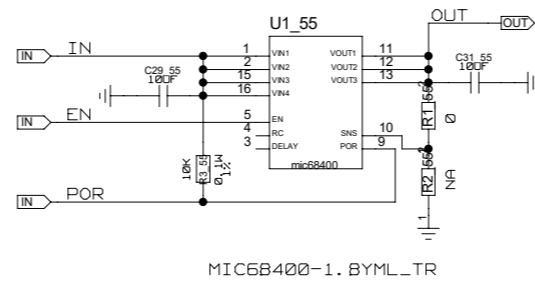


NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA		POWERSUPPLY_MIC68400	
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS		DRAWING NO.	
BLOCK TITLE			SIZE	REV.
UNIVERSITY OF MAINZ			C	
SCALE			SHEET OF	



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

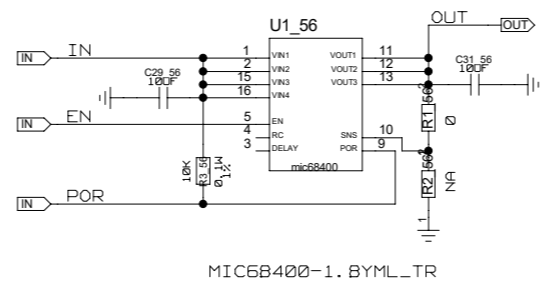
# POWERSUPPLY\_MIC68400



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA				
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE					
POWERSUPPLY_MIC68400					
UNIVERSITY OF MAINZ			SIZE	REV.	DRAWING NO.
			C		
			SCALE		SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

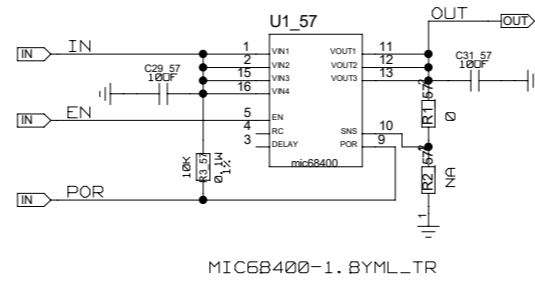
# POWERSUPPLY\_MIC68400



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA				
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE					
POWERSUPPLY_MIC68400					
UNIVERSITY OF MAINZ				SIZE	DRAWING NO.
				<b>C</b>	
				REV.	
				SCALE	
				SHEET	OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

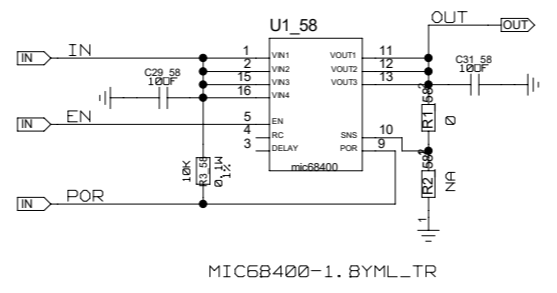
# POWERSUPPLY\_MIC68400



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA				
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE					
POWERSUPPLY_MIC68400					
UNIVERSITY OF MAINZ			SIZE	REV.	DRAWING NO.
			C		
			SCALE		SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

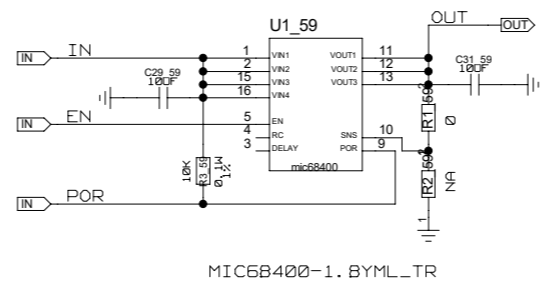
# POWERSUPPLY\_MIC68400



	NAME	DATE	SIGN	DRAWING TITLE		
CHECKED	J. V. DE SOUZA			POWERSUPPLY_MIC68400		
CHECKED	U. SCHAEFER					
CHECKED						
DRAWN	BAUSS			DRAWING NO.		
BLOCK TITLE				SIZE	REV.	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>		
SCALE				SHEET OF		

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

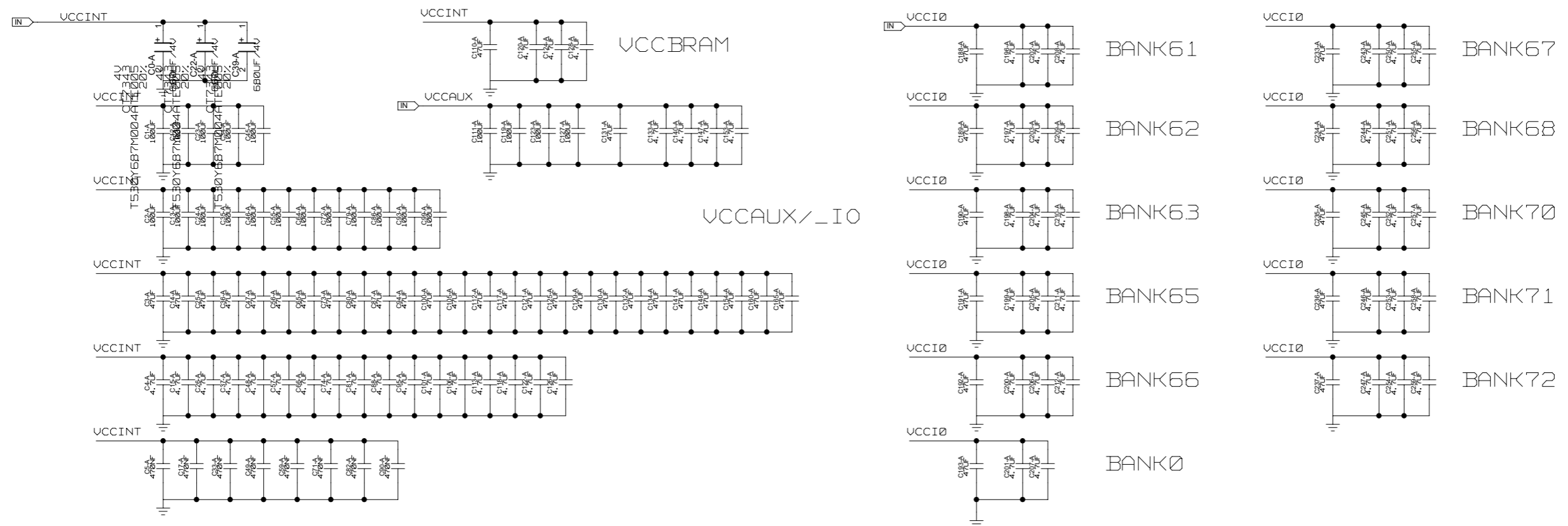
# POWERSUPPLY\_MIC68400



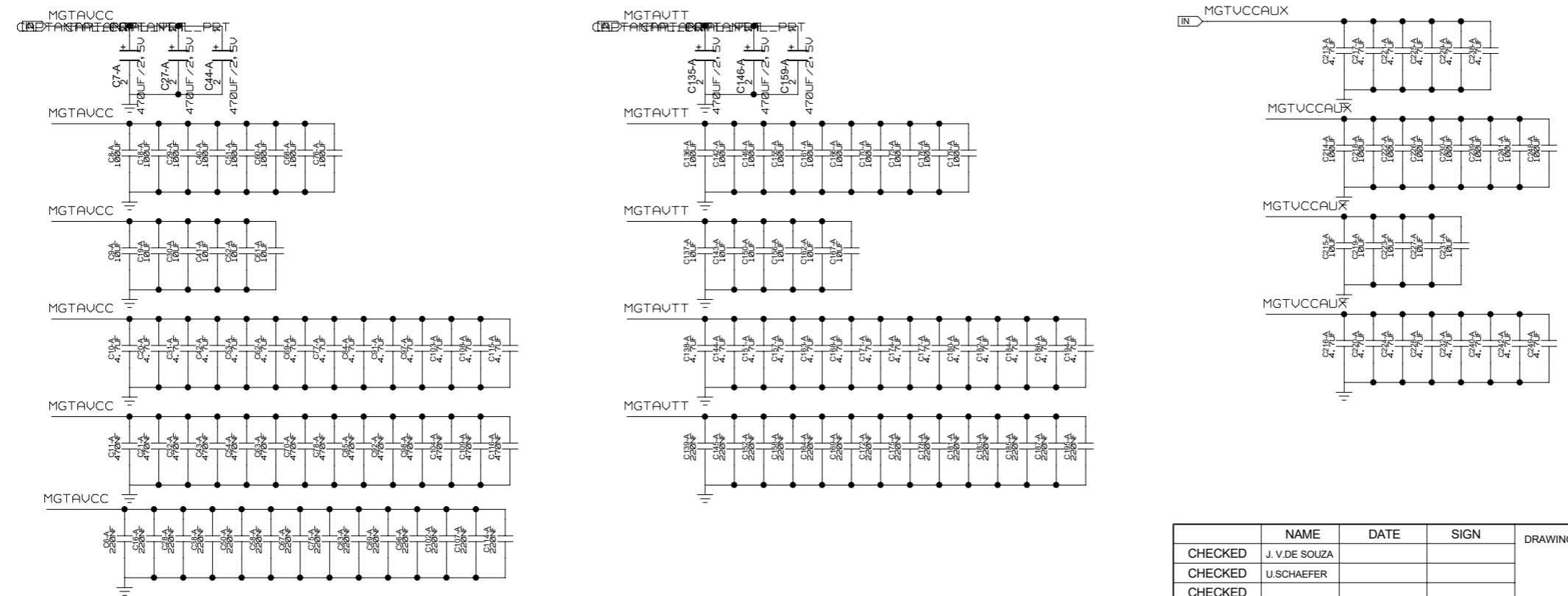
	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA				
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE					
POWERSUPPLY_MIC68400					
UNIVERSITY OF MAINZ			SIZE	REV.	DRAWING NO.
			C		
			SCALE		SHEET OF

# DECOUPLING FPGA

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



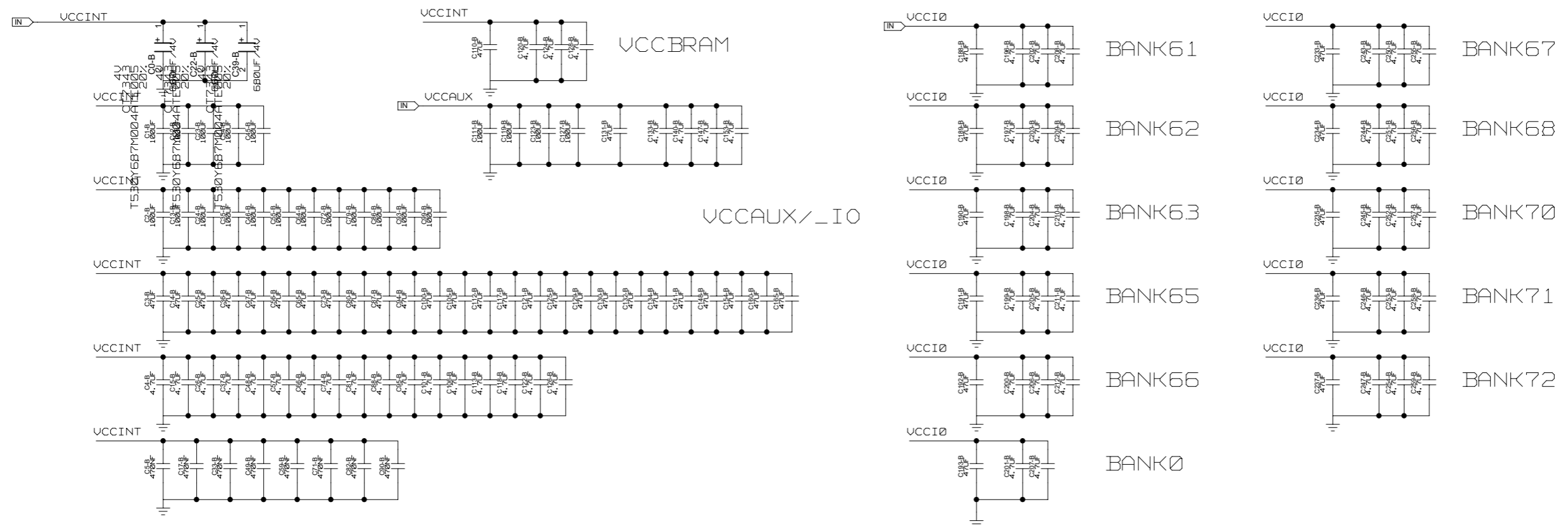
# MGT DECOUPLING



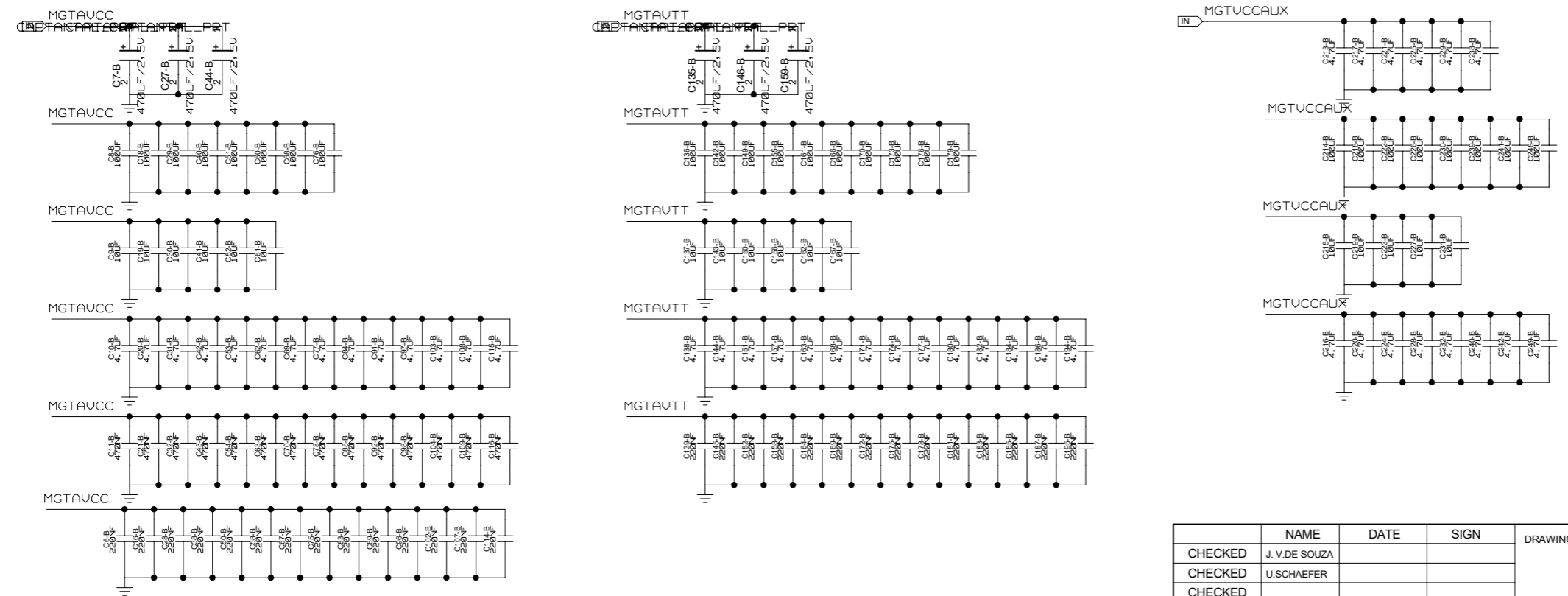
	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			JFEX	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	
				SCALE	SHEET OF

# DECOUPLING FPGA

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



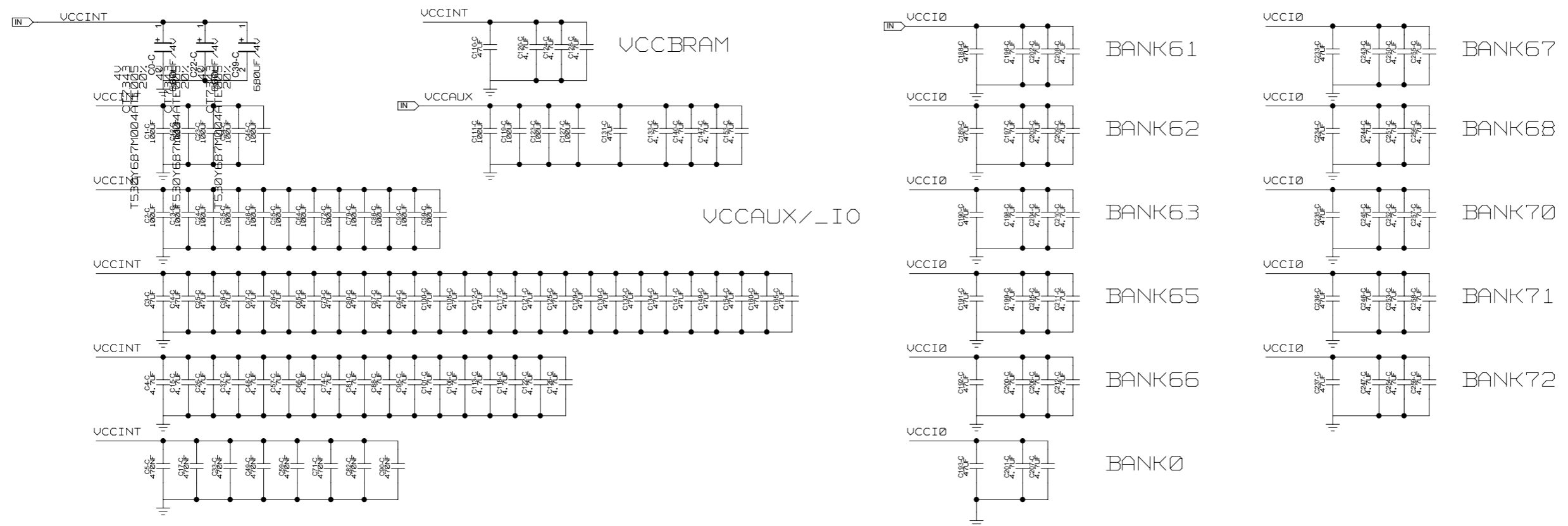
# MGT DECOUPLING



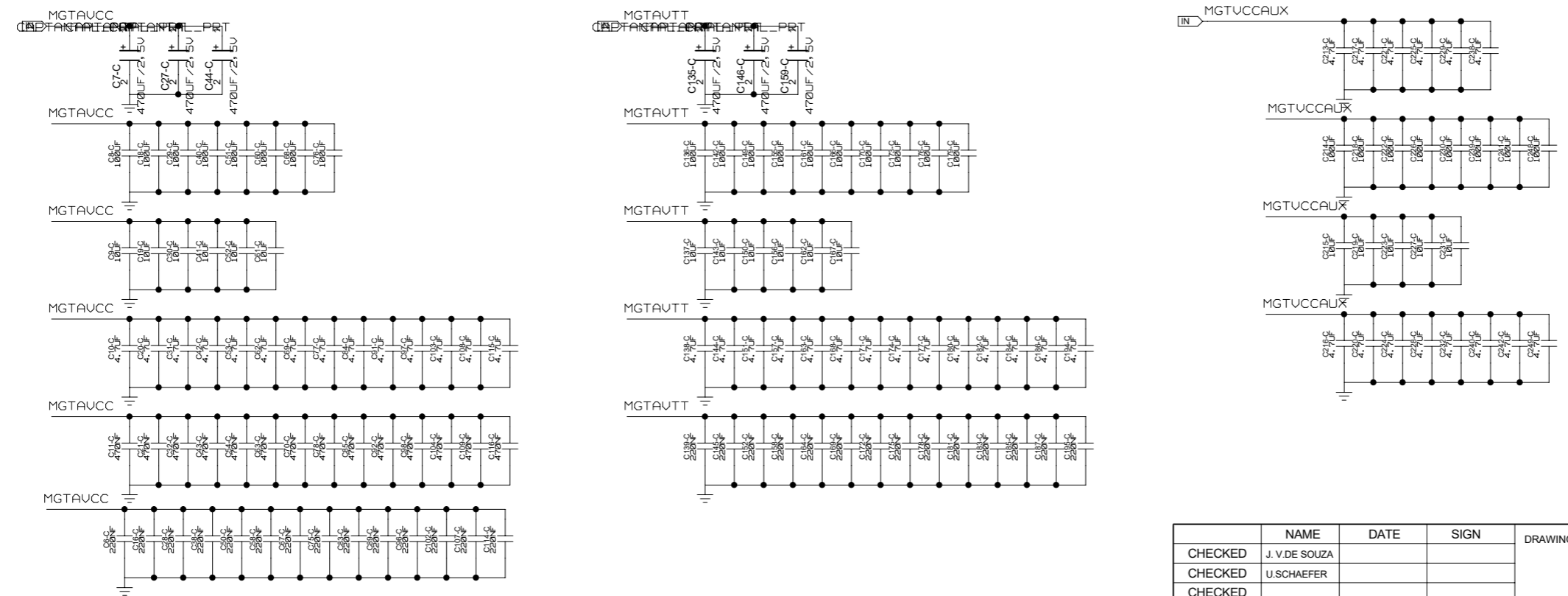
	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			JFEX	
CHECKED	U.SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				<b>C</b>	
SCALE				REV.	
				SHEET	OF

# DECOUPLING FPGA

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



# MGT DECOUPLING

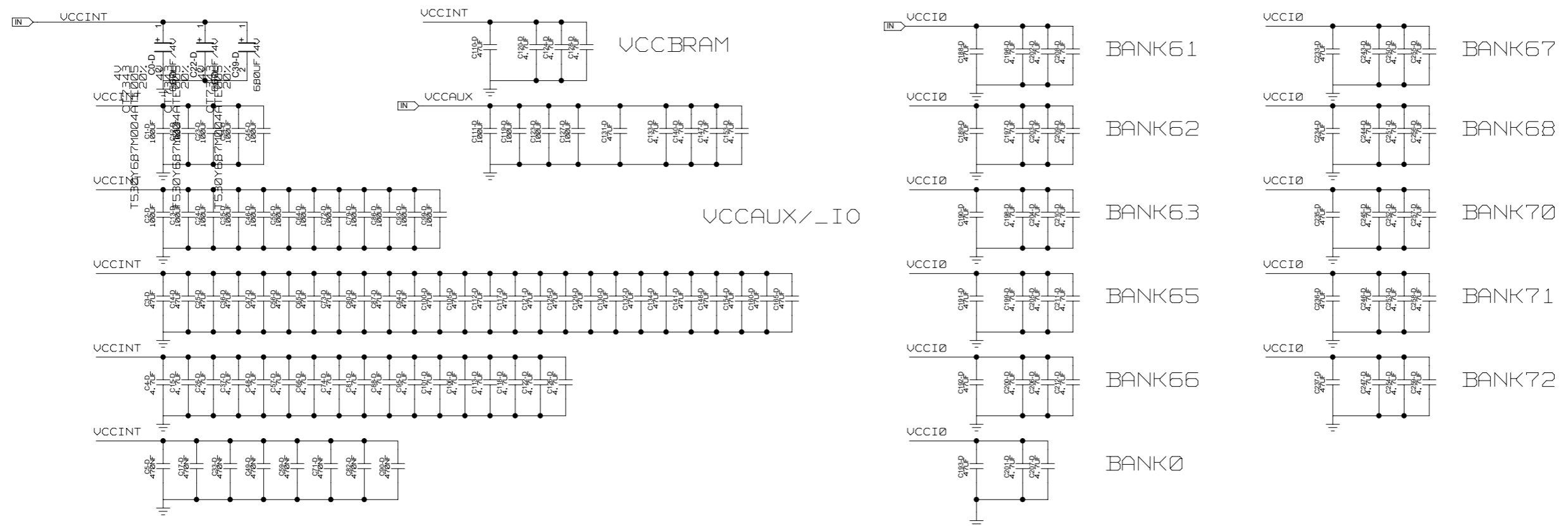


NAME	DATE	SIGN	DRAWING TITLE	
CHECKED J. V. DE SOUZA			JFEX	
CHECKED U. SCHAEFER				
CHECKED				
DRAWN BAUSS				
BLOCK TITLE			SIZE	REV.
UNIVERSITY OF MAINZ			<b>C</b>	
			SCALE	DRAWING NO.
			SHEET	OF

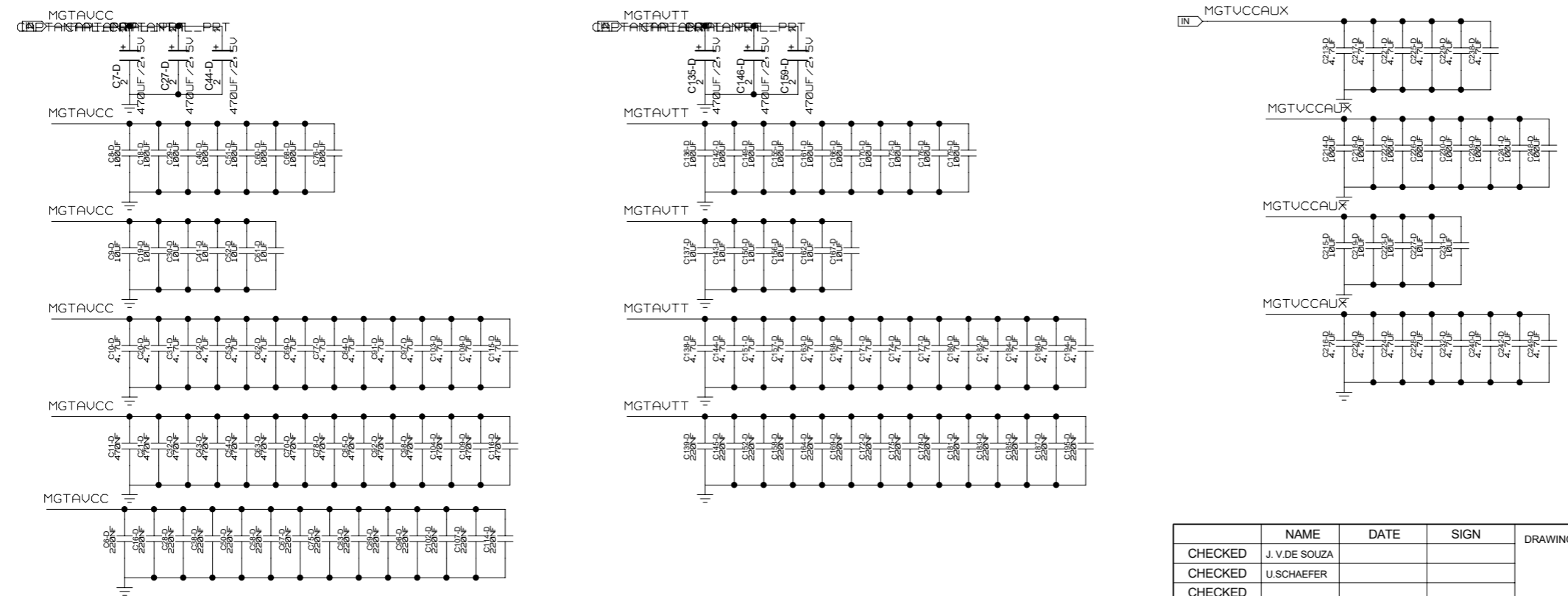


# DECOUPLING FPGA

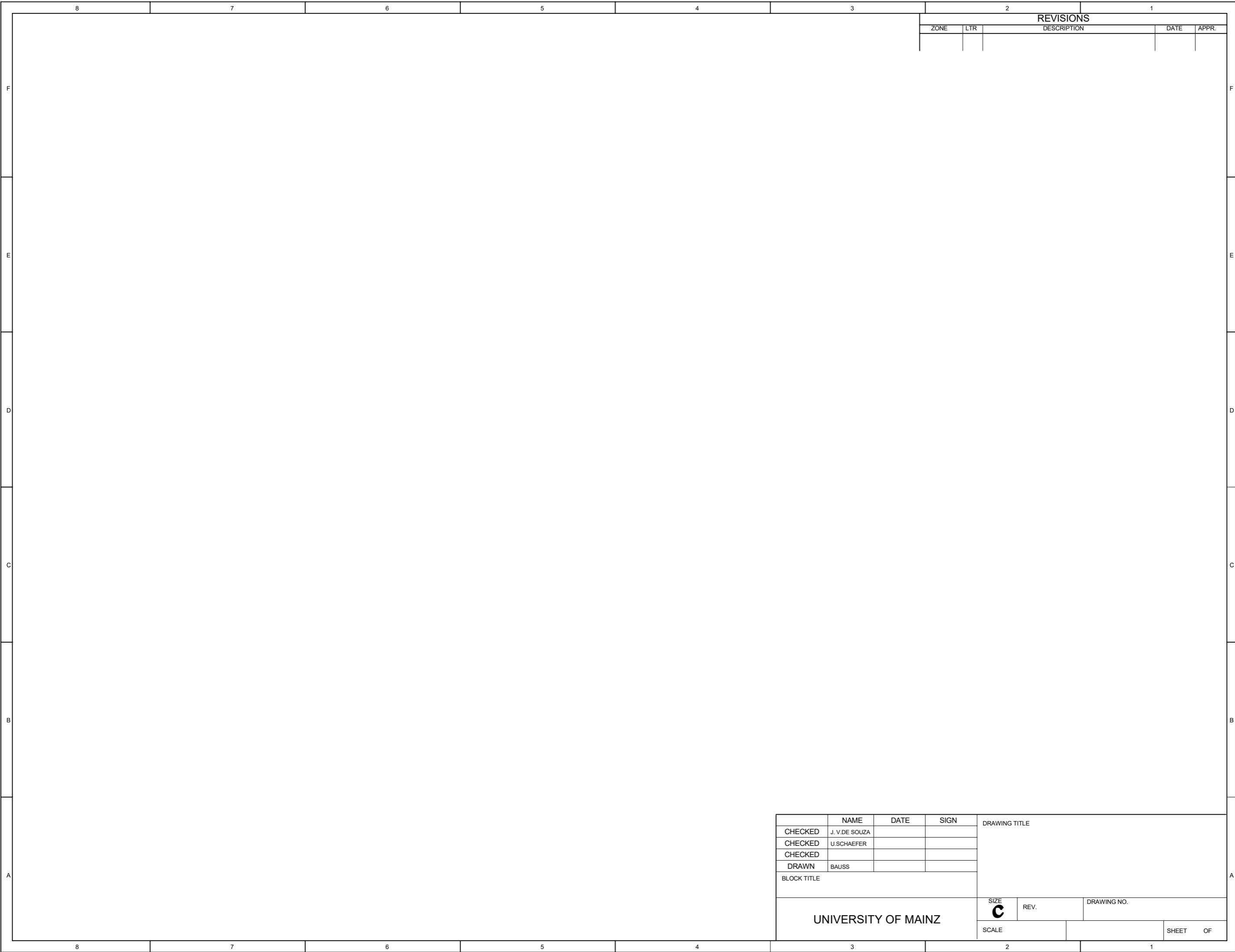
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



# MGT DECOUPLING



NAME	DATE	SIGN	DRAWING TITLE	
CHECKED J. V. DE SOUZA			JFEX	
CHECKED U. SCHAEFER				
CHECKED				
DRAWN BAUSS				
BLOCK TITLE			SIZE	DRAWING NO.
UNIVERSITY OF MAINZ			<b>C</b>	
SCALE			REV.	SHEET OF

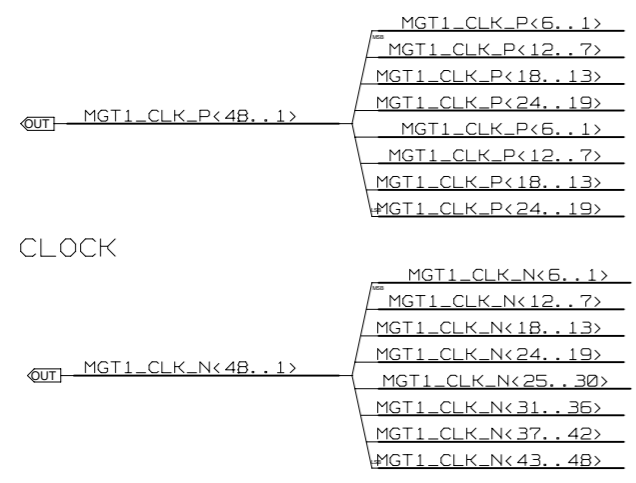
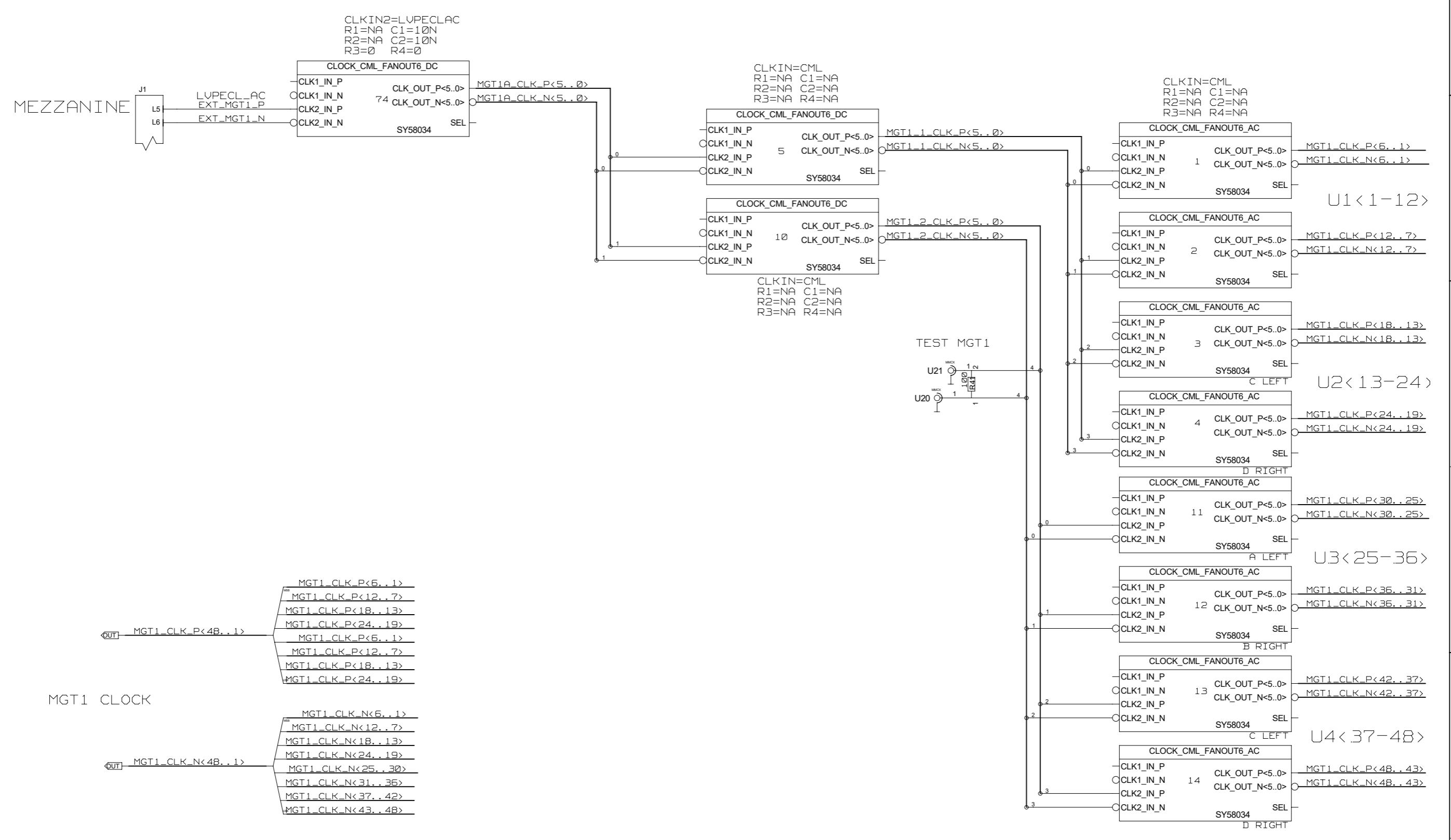


REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA				
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS				
BLOCK TITLE					
UNIVERSITY OF MAINZ			SIZE	REV.	DRAWING NO.
			<b>C</b>		
SCALE				SHEET	OF

# MGT1 CLOCK

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

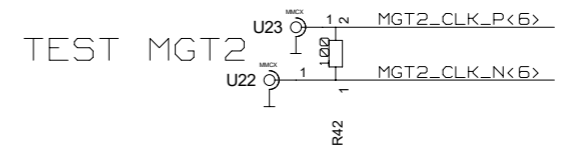
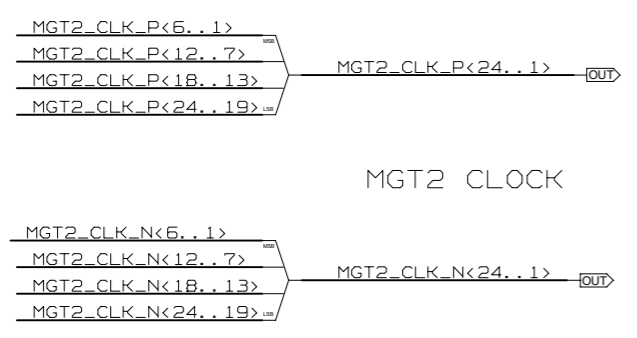
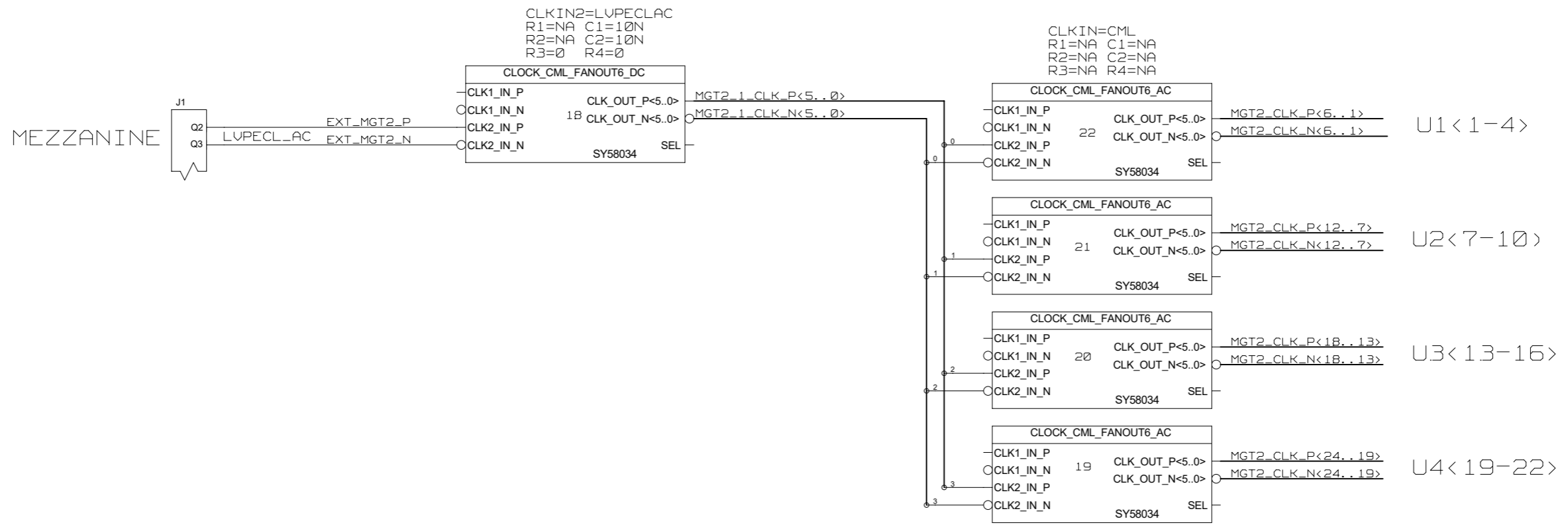


UPDATE PICK & PLACE DATA FOR FANOUT

	NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J.V. DE SOUZA			<b>JFEX</b> MGT1 CLOCK
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS	08.05.2017		
BLOCK TITLE				
CLOCK				
UNIVERSITY OF MAINZ		SIZE	REV.	DRAWING NO.
SCALE				
				SHEET 1 OF 5

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# MGT2 CLOCK

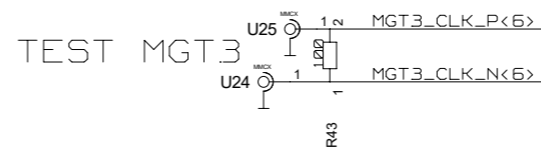
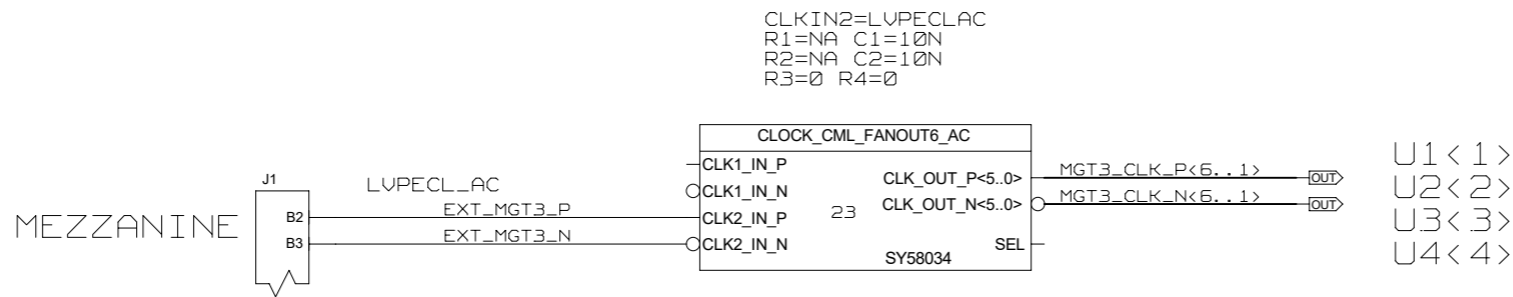


UPDATE PICK & PLACE DATA FOR FANOUT

CHECKED	J.V. DE SOUZA			DRAWING TITLE  <b>JFEX</b> MGT2 CLOCK
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS	08.06.2017		
BLOCK TITLE <b>CLOCK</b>				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
		SCALE		SHEET 2 OF 5

# MGT.3 CLOCK (ROD REFCLK)

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

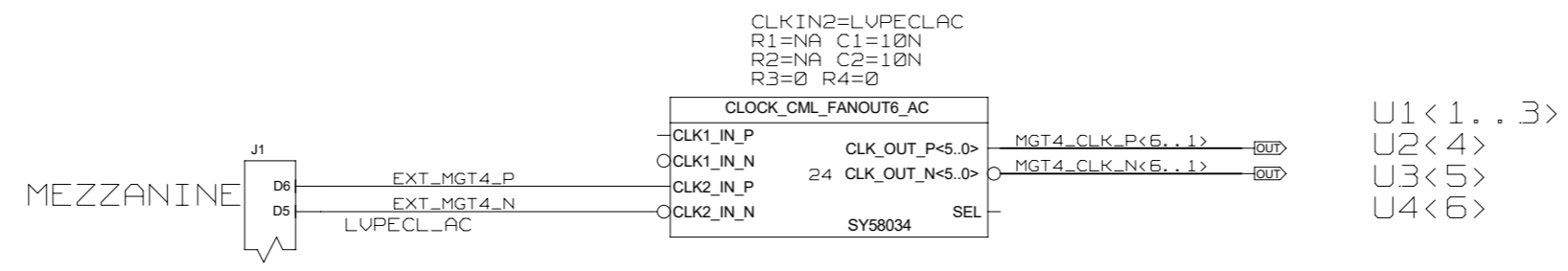


UPDATE PICK & PLACE DATA FOR FANOUT

NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J.V.DE SOUZA		JFEX MGT.3 CLOCK (ROD REFCLK)	
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS	08.06.2017	BLOCK TITLE	
UNIVERSITY OF MAINZ			SIZE	DRAWING NO.
SCALE			REV.	SHEET 3 OF 5

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# MGT4 CLOCK (IPBUS REFCLK)

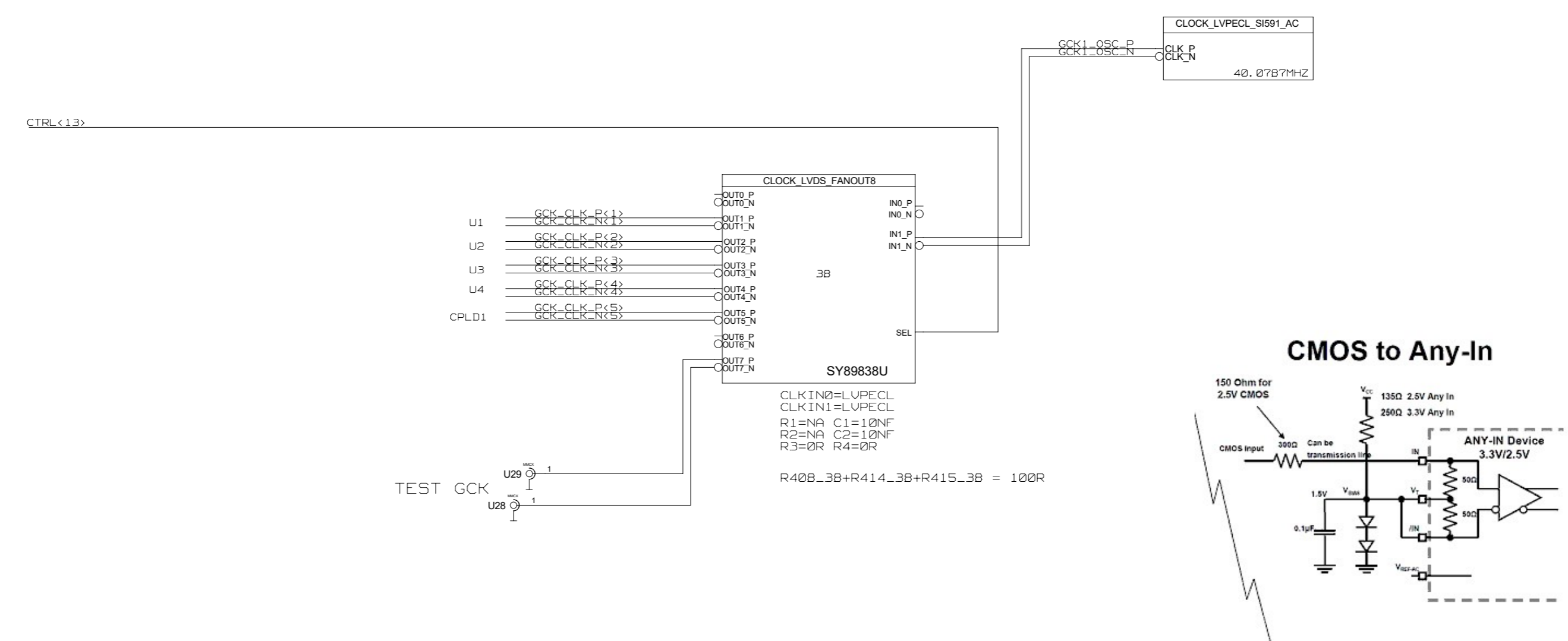


UPDATE PICK & PLACE DATA FOR FANOUT

CHECKED	NAME	DATE	SIGN	DRAWING TITLE <b>JFEX</b> MGT4 CLOCK (IPBUS REFCLK)
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS	08.05.2017		
BLOCK TITLE <b>CLOCK</b>				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
SCALE				SHEET 4 OF 5

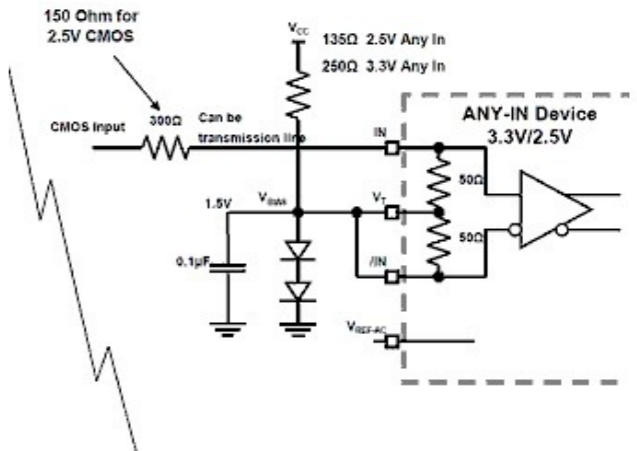
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# GLOBAL CLOCK



CLOCK\_LVPECL\_SI591\_AC  
40.0787MHZ

## CMOS to Any-In



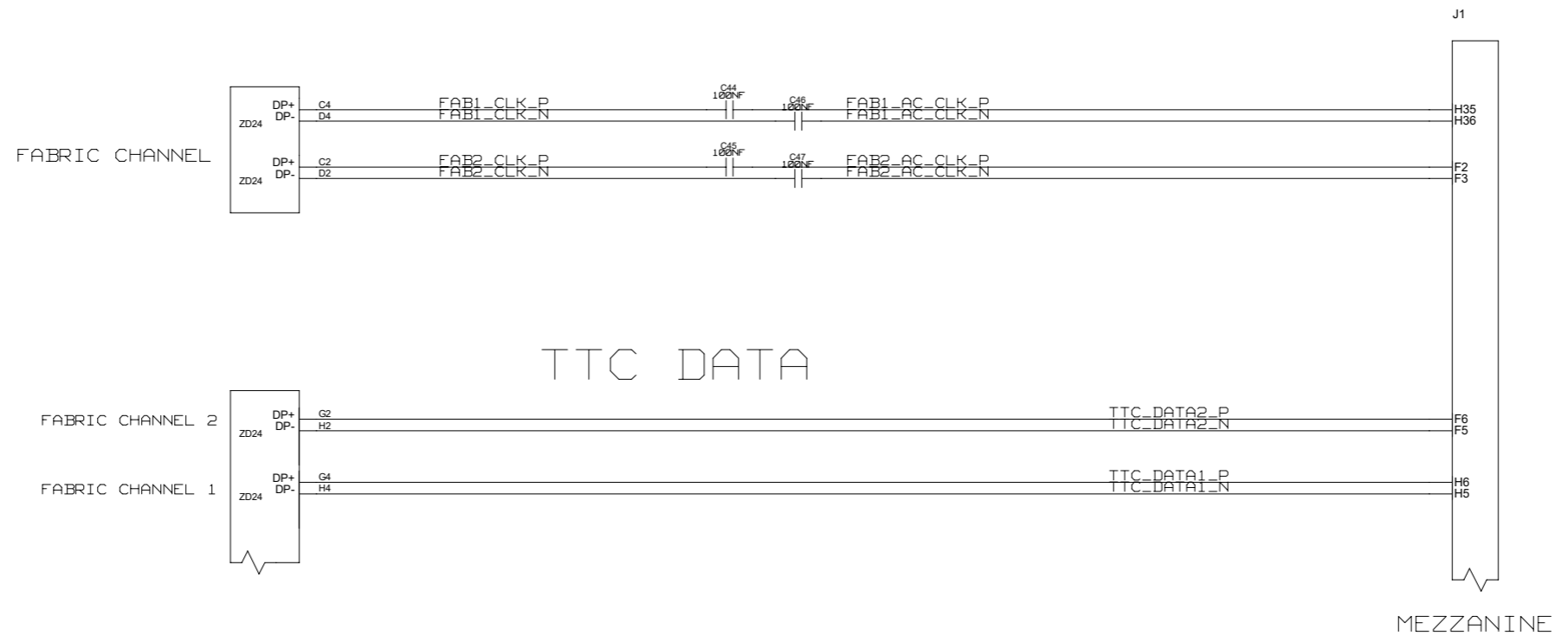
LVDS <OUT> GCK\_CLK\_P<5..1>  
<OUT> GCK\_CLK\_N<5..1>

GCK1 = CLK U1  
GCK2 = CLK U2  
GCK3 = CLK U3  
GCK4 = CLK U4  
GCK5 = CLK CPLD

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX GLOBAL CLOCK
CHECKED U.SCHAEFER			
CHECKED			
DRAWN BAUSS	17. 08. 2015		
BLOCK TITLE CLOCK			
UNIVERSITY OF MAINZ		SIZE C	REV.
SCALE		DRAWING NO.	
			SHEET 5 OF 5

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# LHC1 + LHC2 CLK

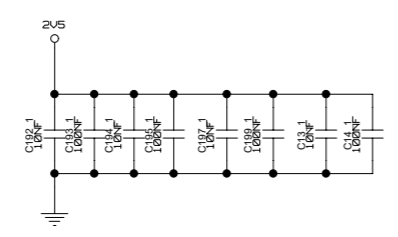
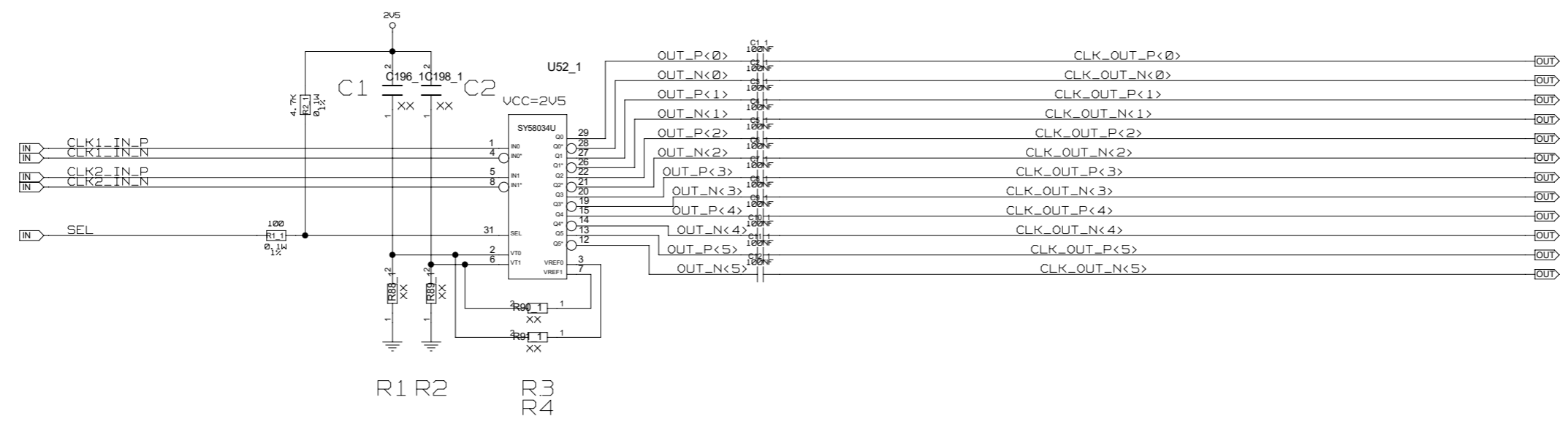


# TTC DATA

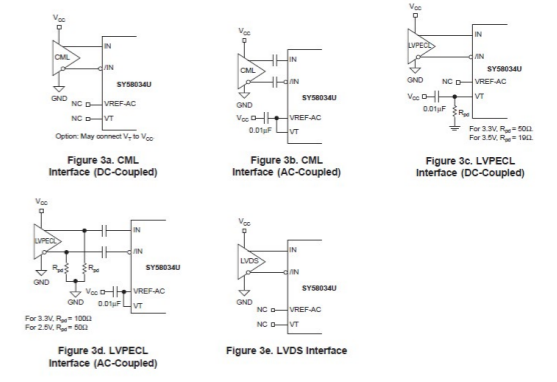
CHECKED	J. V. DE SOUZA			DRAWING TITLE  <b>JFEX</b> TTC DATA
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS	06. 11. 2015		
BLOCK TITLE <b>CLOCK</b>				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
SCALE			DRAWING NO.	SHEET OF



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

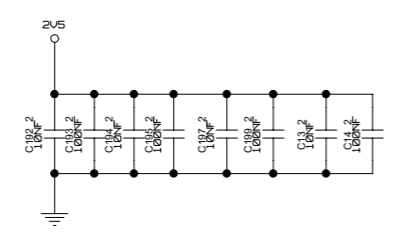
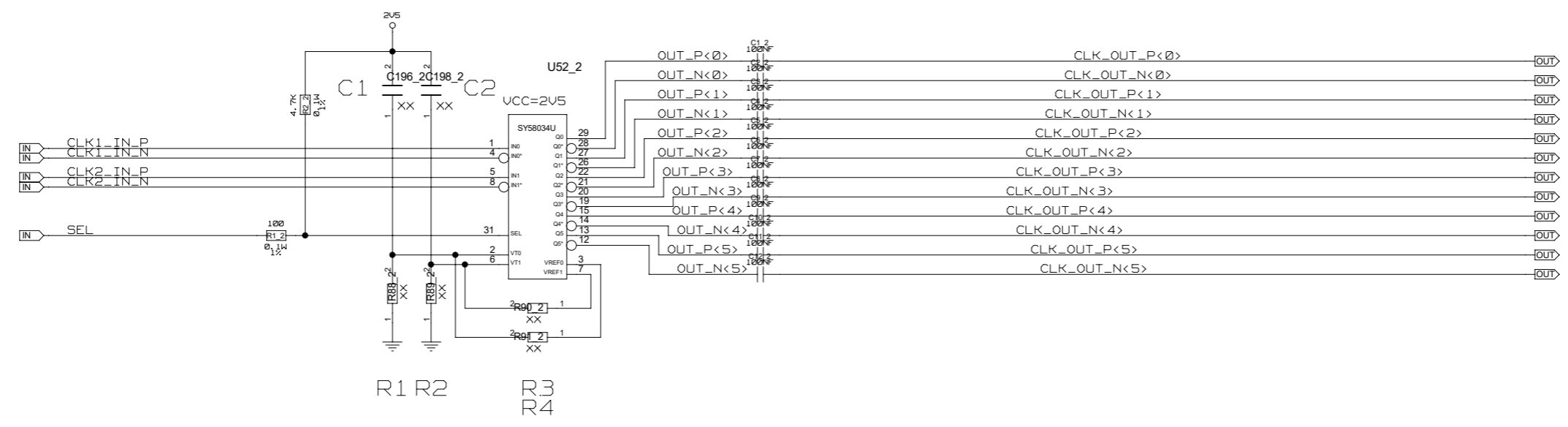


**INPUT INTERFACE APPLICATIONS**

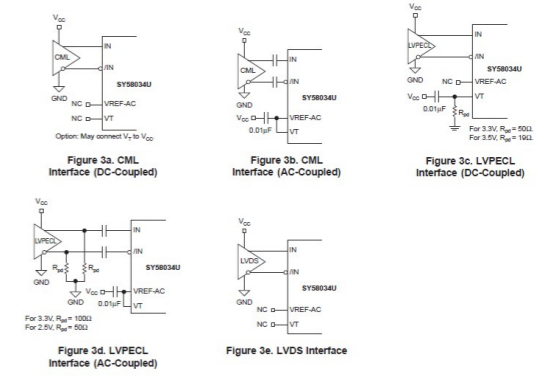


	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED	BAUSS			
DRAWN	BAUSS			BLOCK TITLE CLOCK CML FANOUT6 AC
UNIVERSITY OF MAINZ				SIZE <b>C</b>
				REV.
				DRAWING NO.
				SCALE
				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

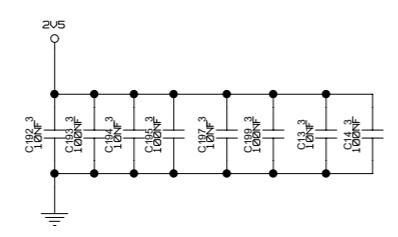
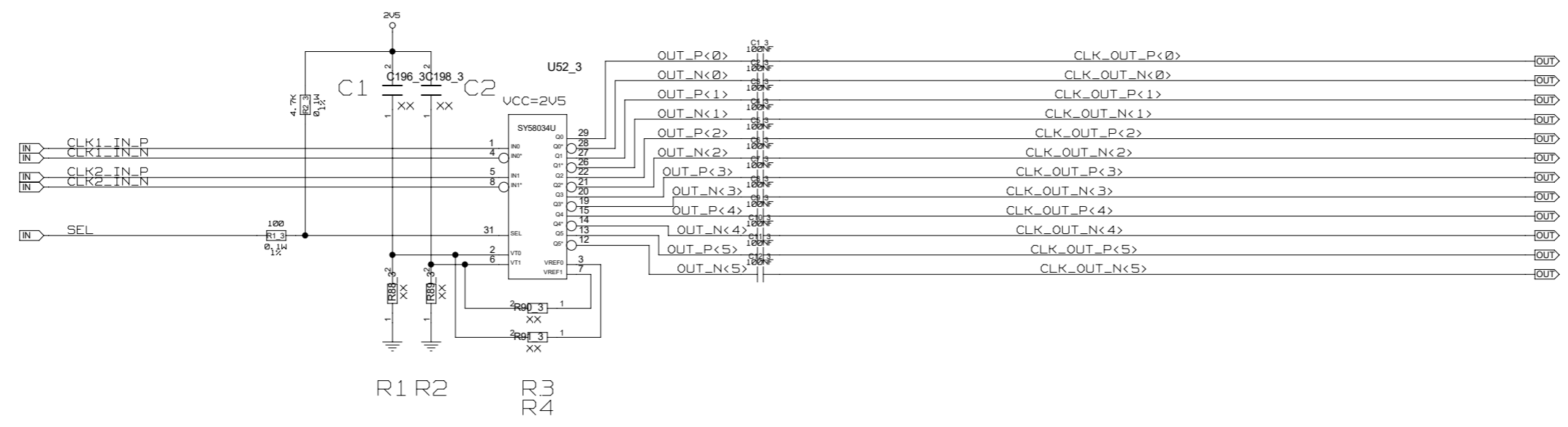


**INPUT INTERFACE APPLICATIONS**

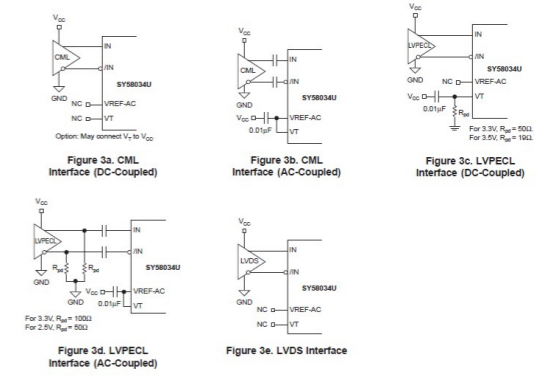


	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE <b>CLOCK CML FANOUT6 AC</b>				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

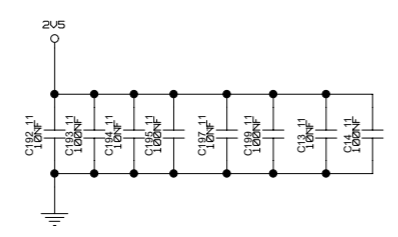
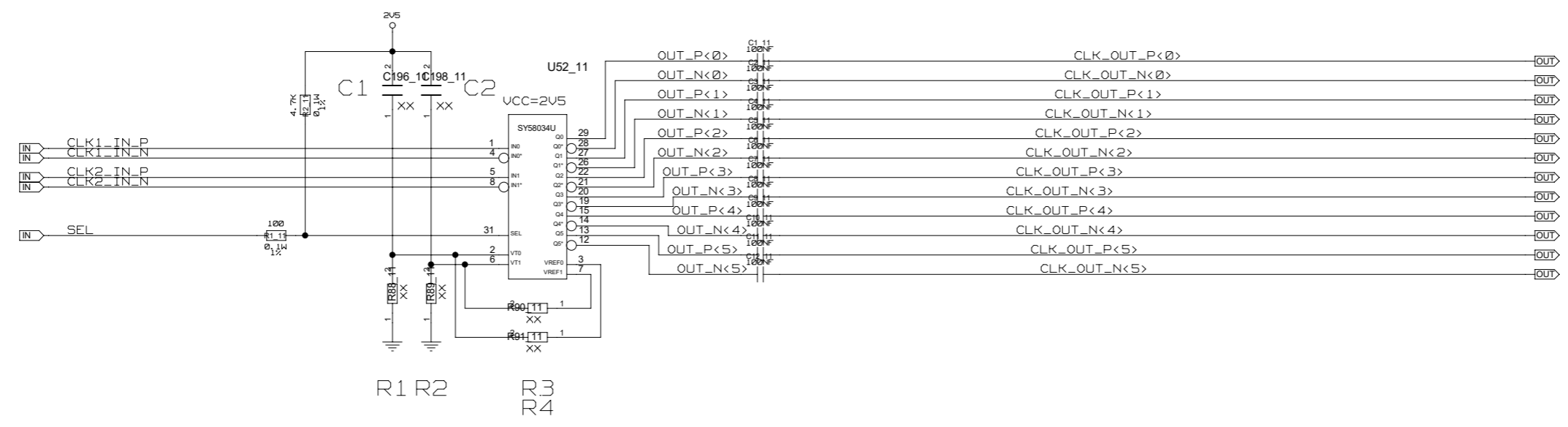


**INPUT INTERFACE APPLICATIONS**

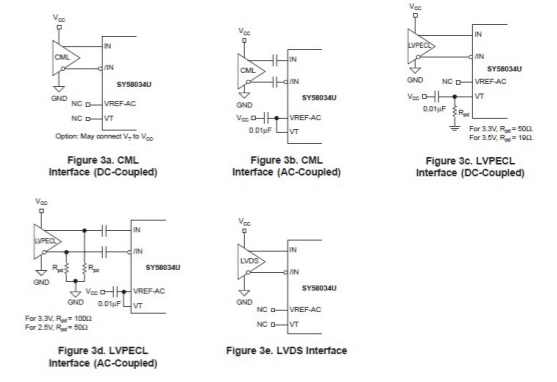


	NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED	BAUSS			
DRAWN	BAUSS			CLOCK
BLOCK TITLE				
CLOCK CML FANOUT6 AC				
UNIVERSITY OF MAINZ		SIZE	REV.	DRAWING NO.
		SCALE		
			SHEET	OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

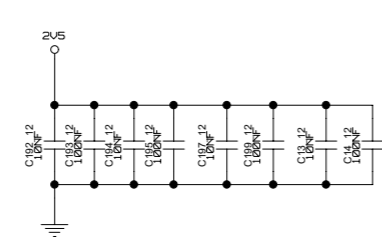
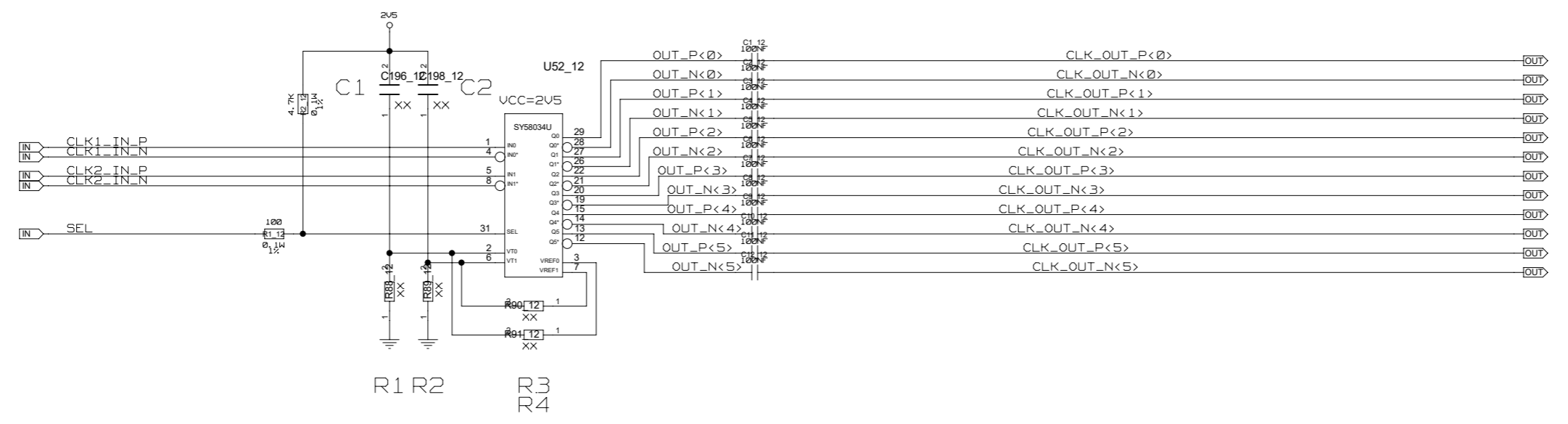


**INPUT INTERFACE APPLICATIONS**

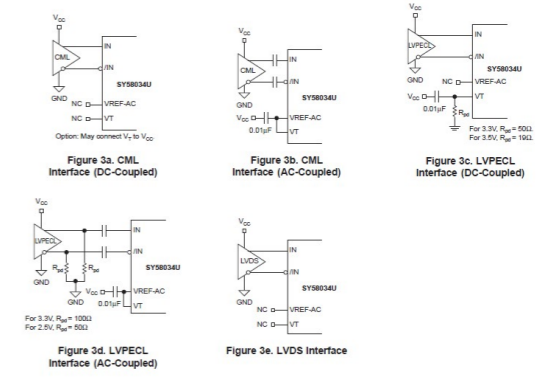


	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE <b>CLOCK CML FANOUT6 AC</b>				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

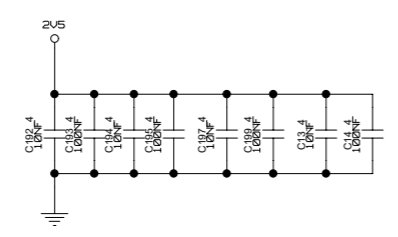
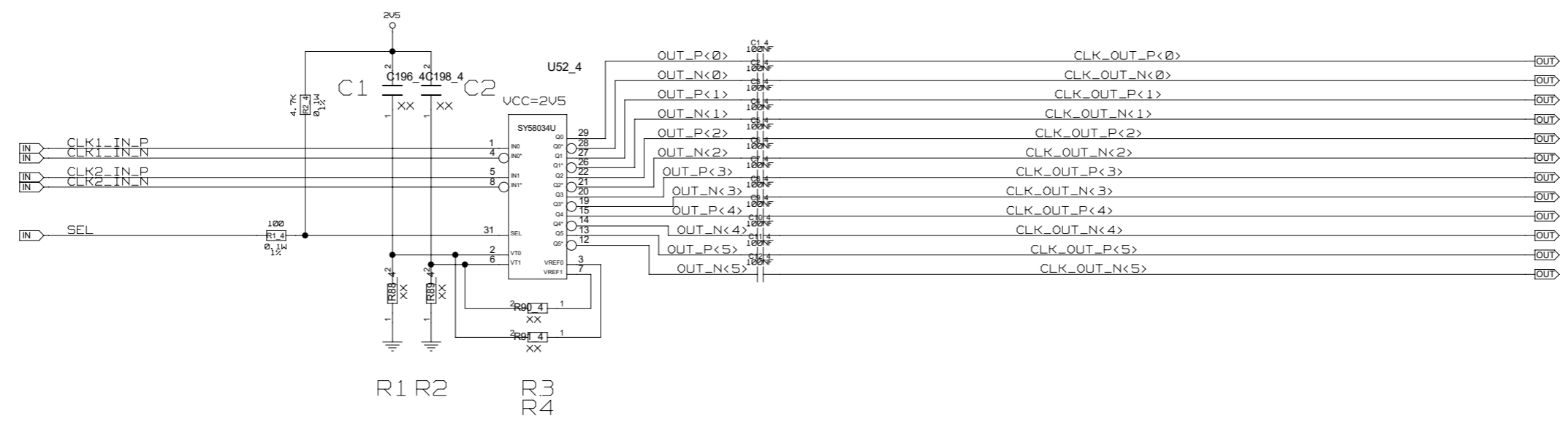


**INPUT INTERFACE APPLICATIONS**

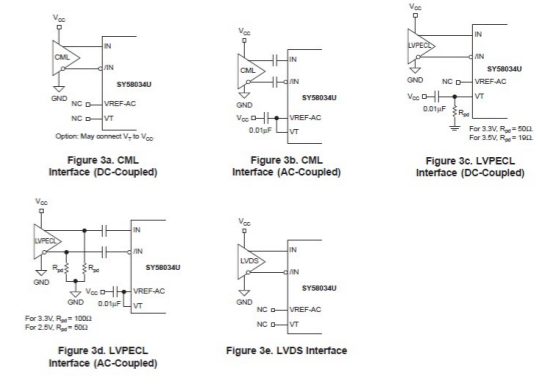


	NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE				CLOCK
CLOCK CML FANOUT6 AC				
UNIVERSITY OF MAINZ		SIZE	REV.	DRAWING NO.
		SCALE		SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

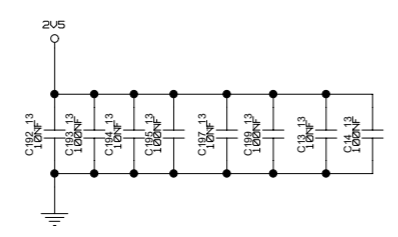
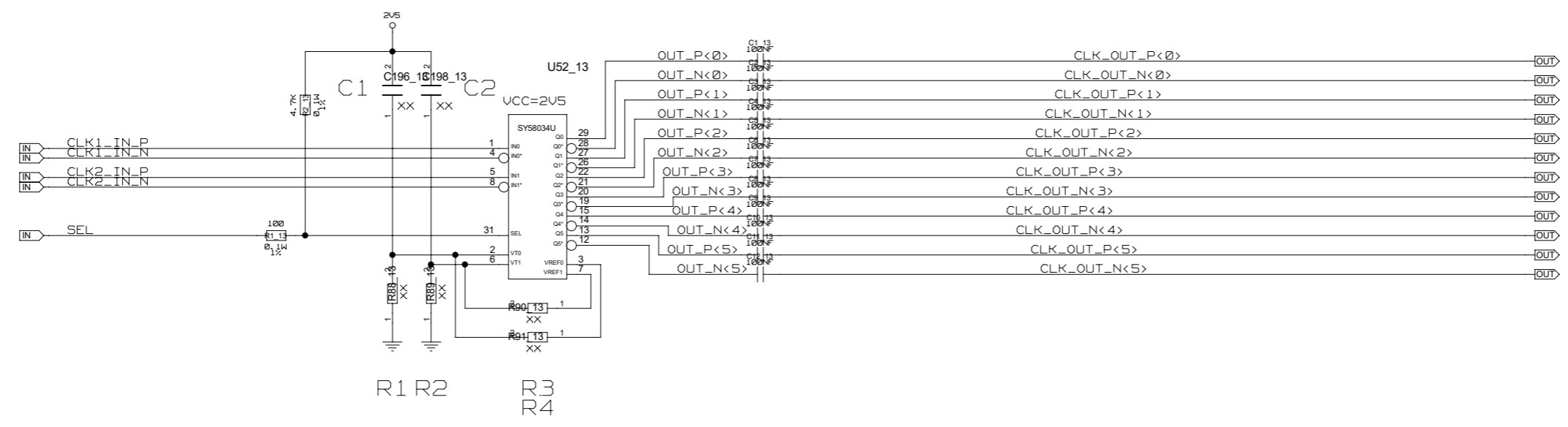


**INPUT INTERFACE APPLICATIONS**

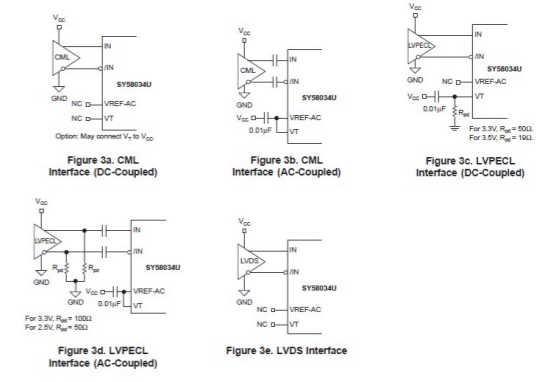


	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE <b>CLOCK CML FANOUT6 AC</b>				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

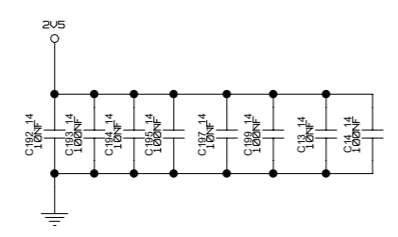
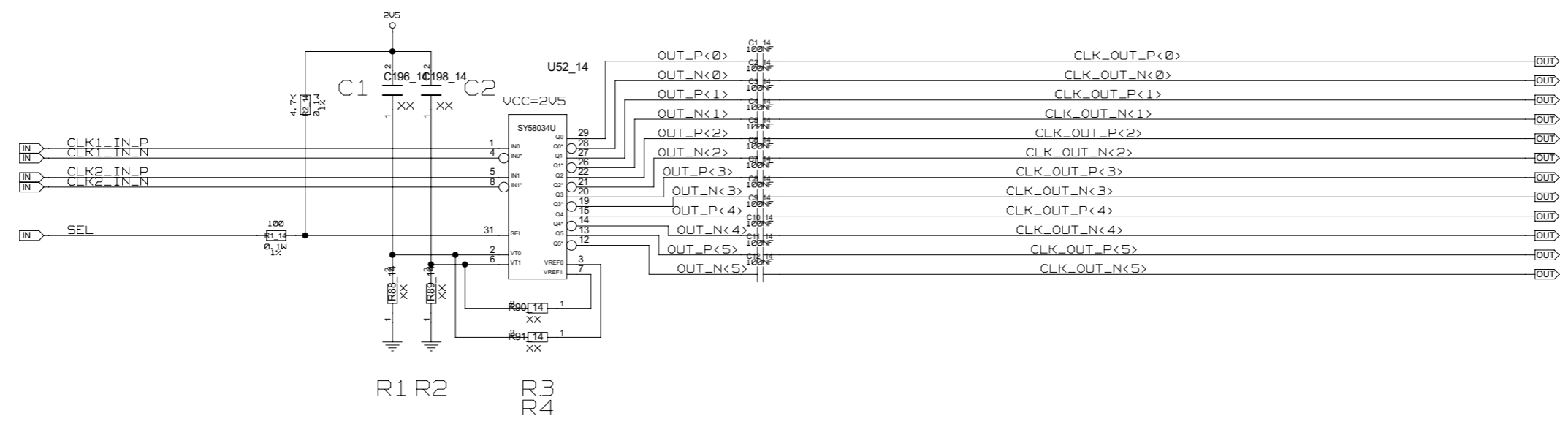


**INPUT INTERFACE APPLICATIONS**

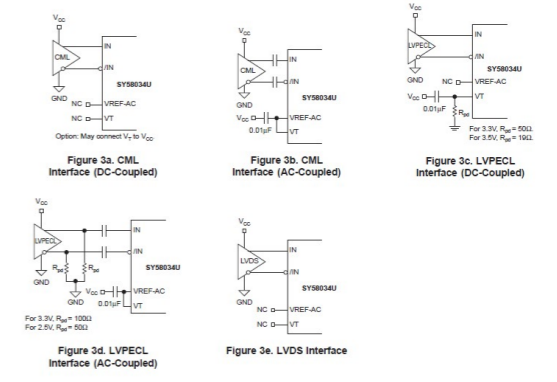


	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE <b>CLOCK CML FANOUT6 AC</b>				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



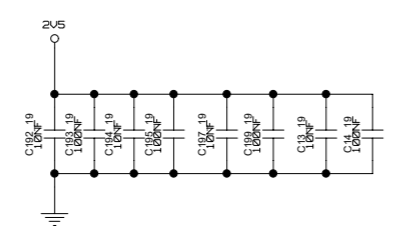
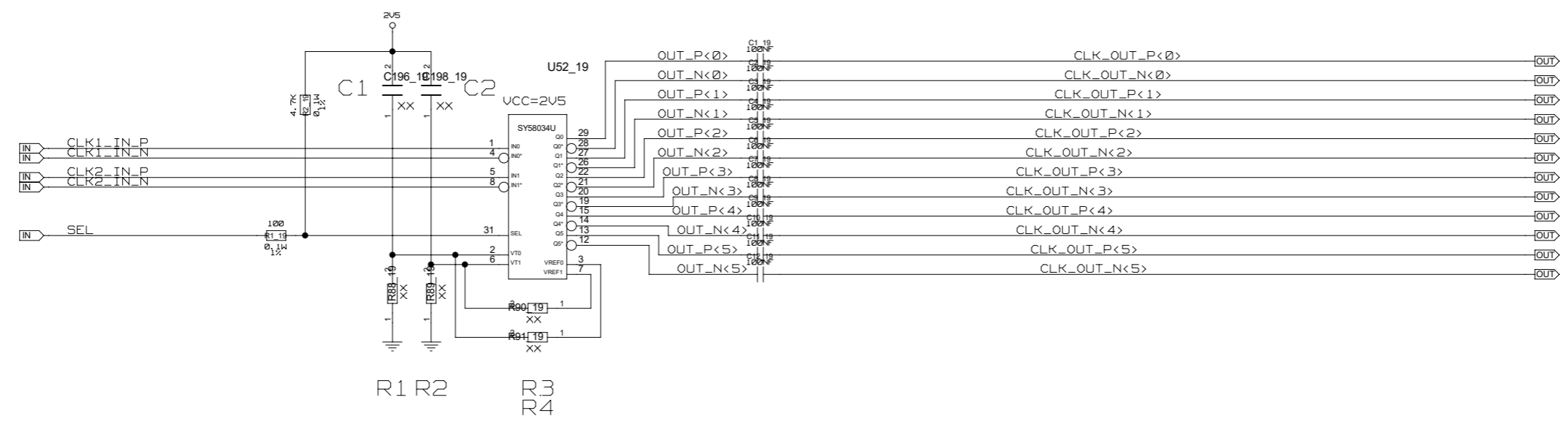
**INPUT INTERFACE APPLICATIONS**



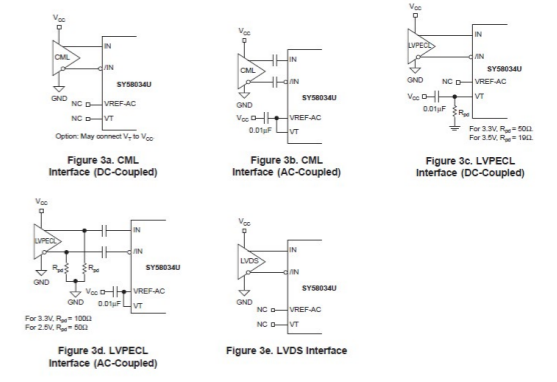
CHECKED	NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA			
CHECKED	U.SCHAEFER			
DRAWN	BAUSS			
BLOCK TITLE				CLOCK
CLOCK CML FANOUT6 AC				
UNIVERSITY OF MAINZ		SIZE	REV.	DRAWING NO.
		SCALE		SHEET OF



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

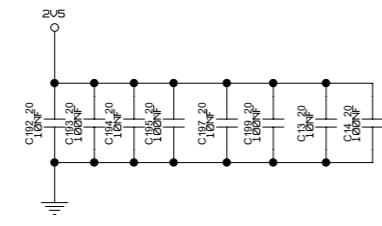
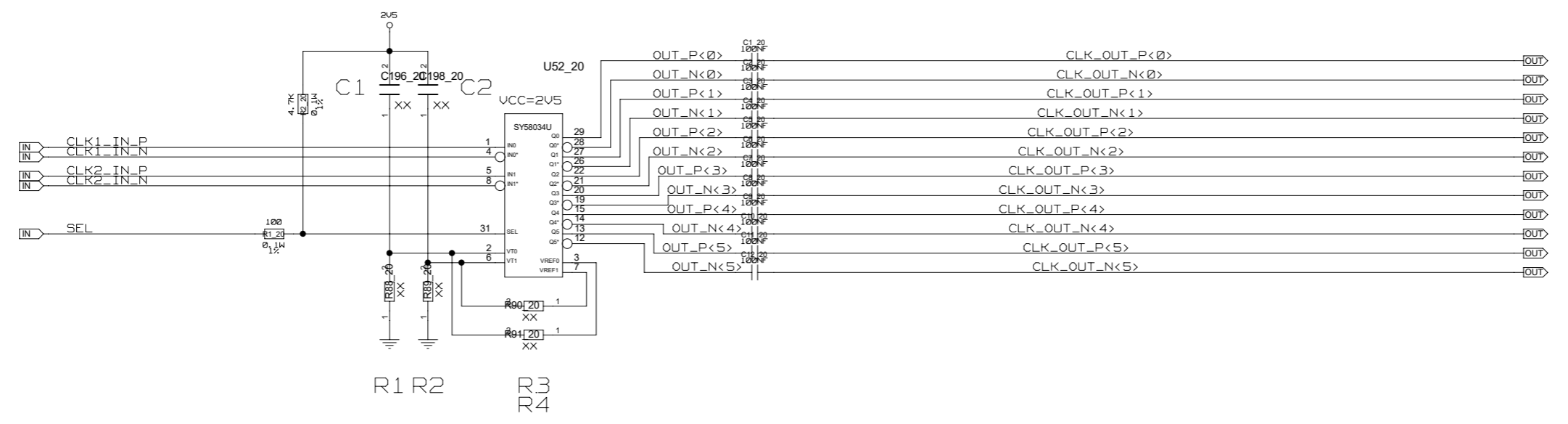


**INPUT INTERFACE APPLICATIONS**

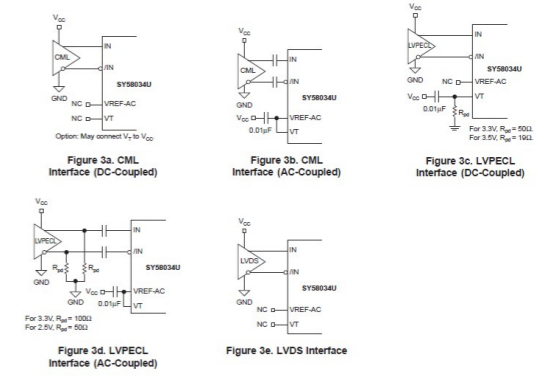


	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE <b>CLOCK CML FANOUT6 AC</b>				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

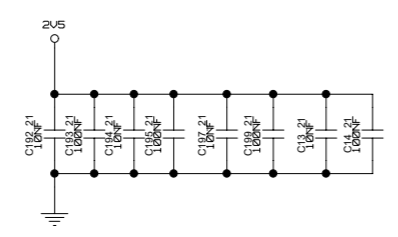
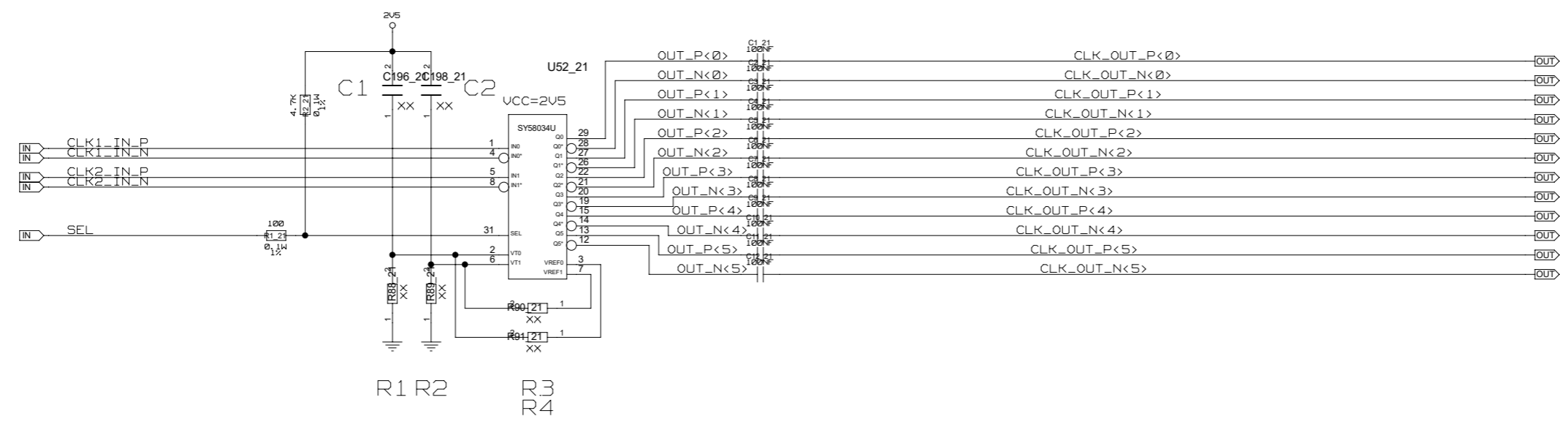


**INPUT INTERFACE APPLICATIONS**

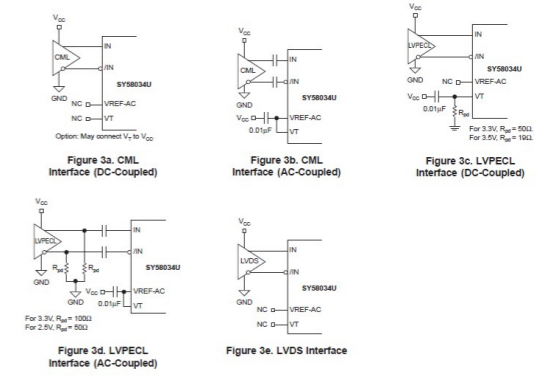


	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE <b>CLOCK CML FANOUT6 AC</b>				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

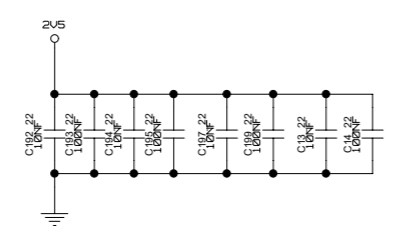
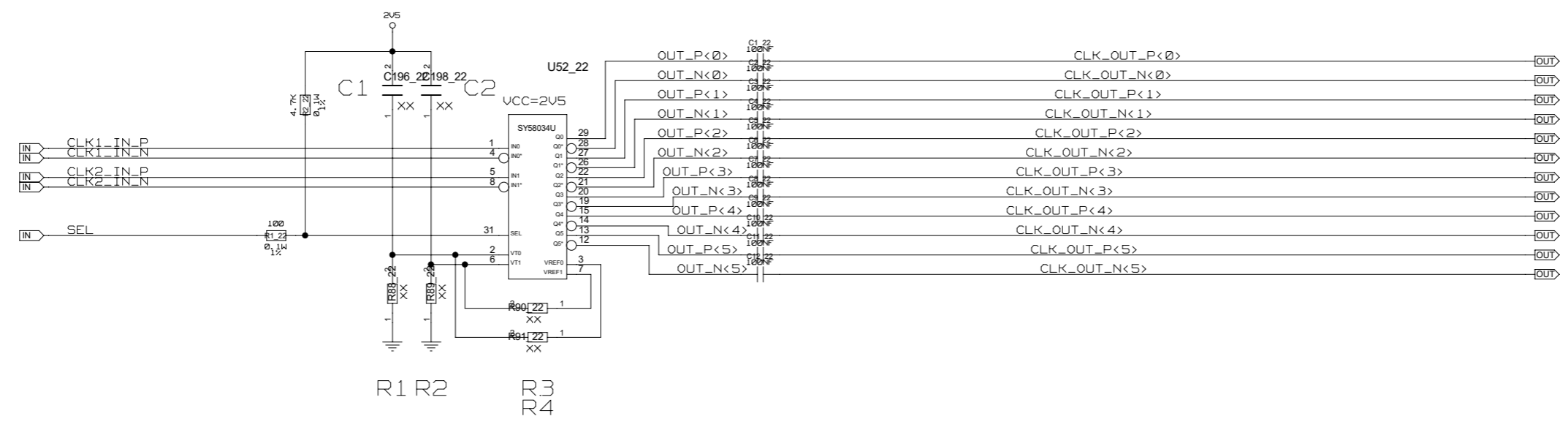


**INPUT INTERFACE APPLICATIONS**

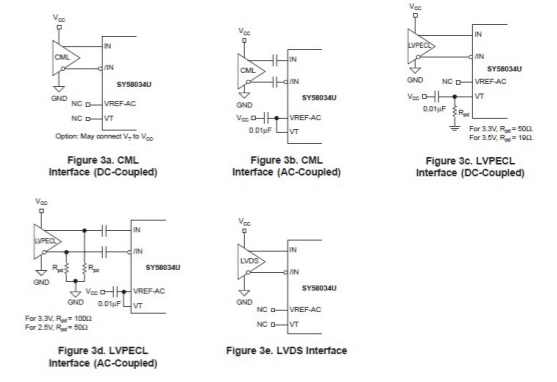


	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED	BAUSS			
DRAWN	BAUSS			BLOCK TITLE <b>CLOCK CML FANOUT6 AC</b>
UNIVERSITY OF MAINZ				
	SIZE	REV.	DRAWING NO.	
	SCALE			SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

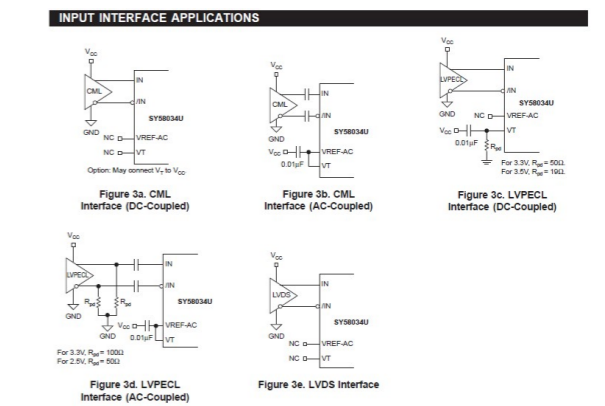
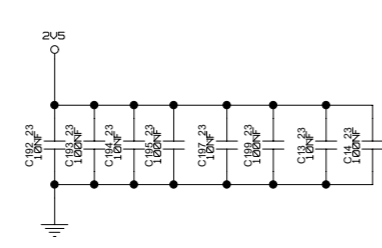
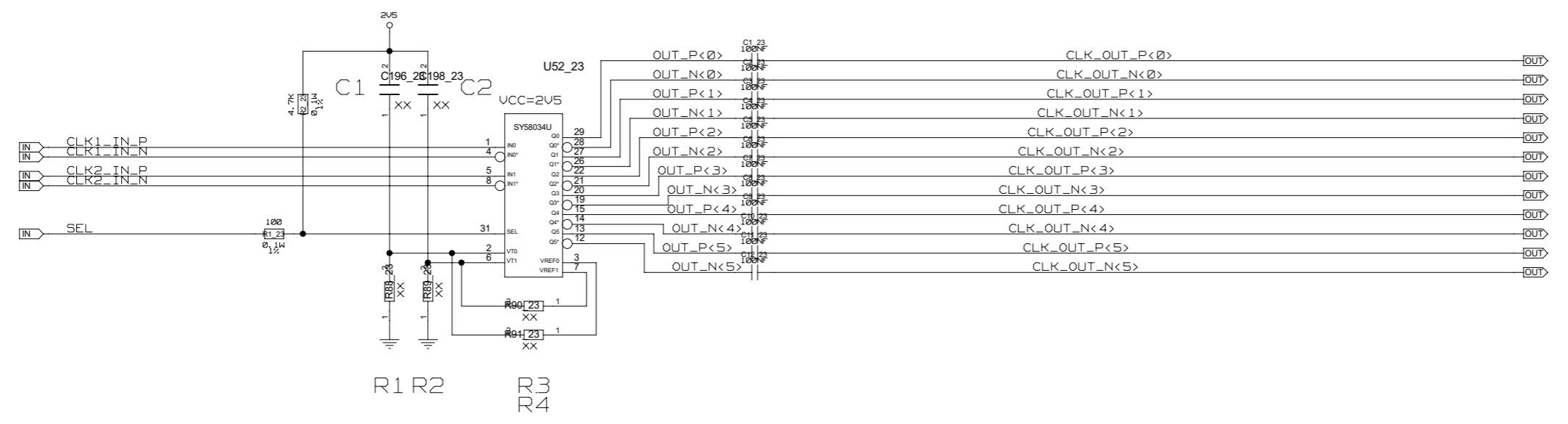


**INPUT INTERFACE APPLICATIONS**



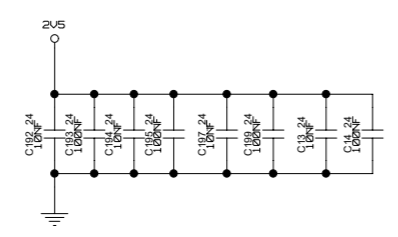
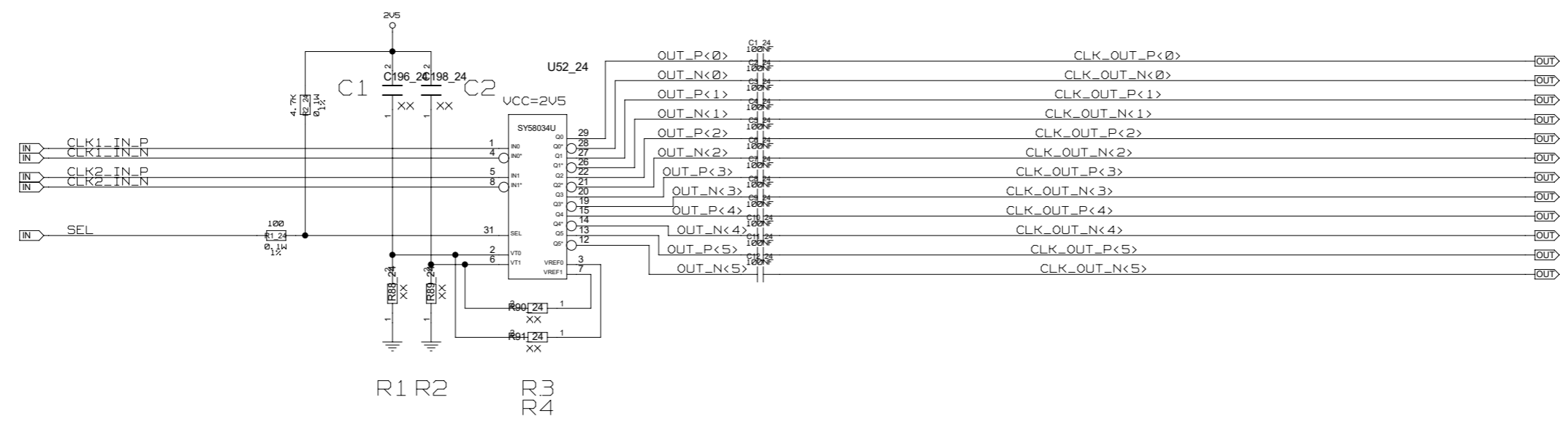
CHECKED	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U.SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE <b>CLOCK CML FANOUT6 AC</b>				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
SCALE				DRAWING NO.
SHEET				OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

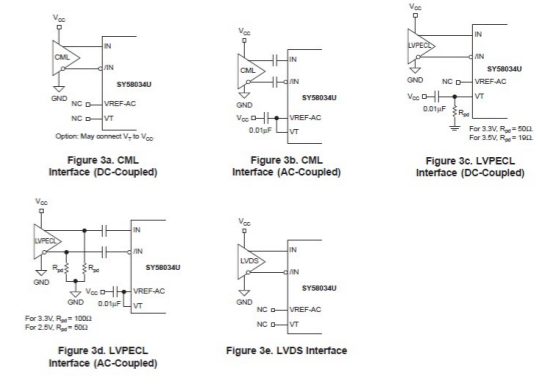


CHECKED	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE <b>CLOCK CML FANOUT6 AC</b>				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

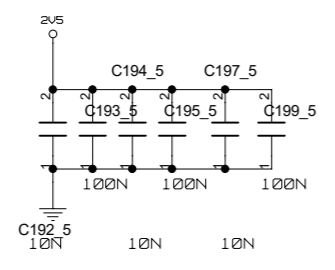
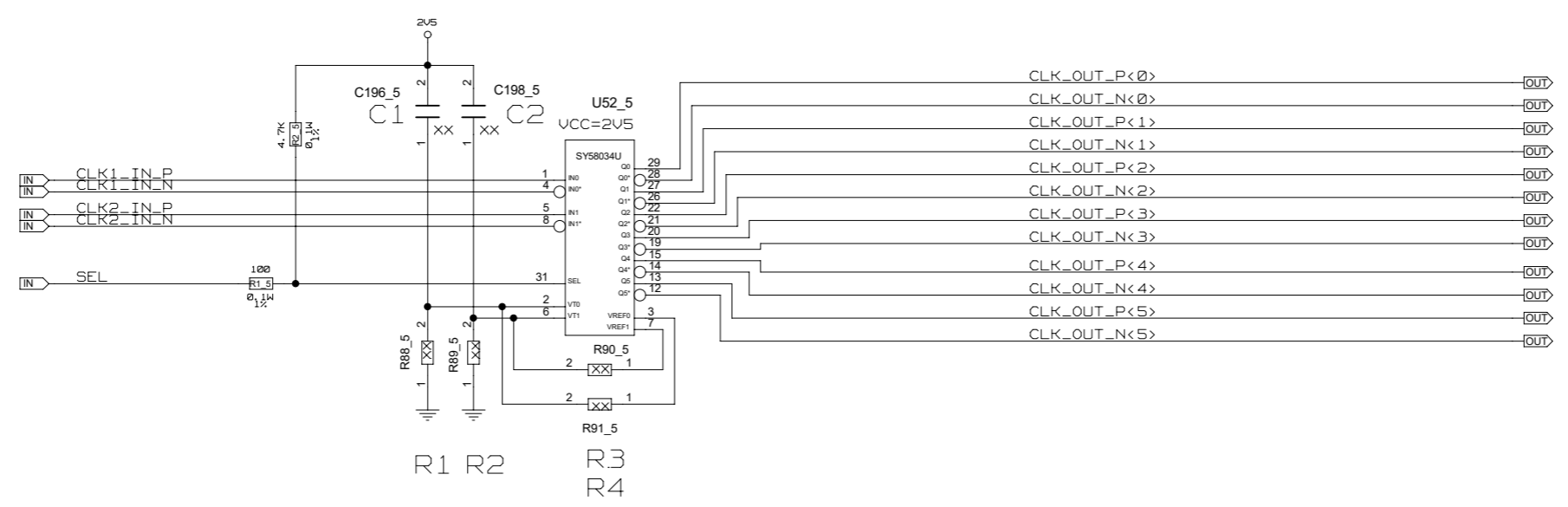


**INPUT INTERFACE APPLICATIONS**

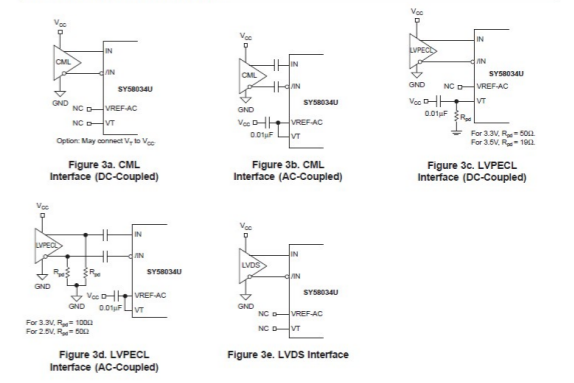


CHECKED	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE <b>CLOCK CML FANOUT6 AC</b>				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

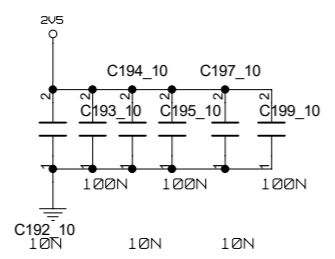
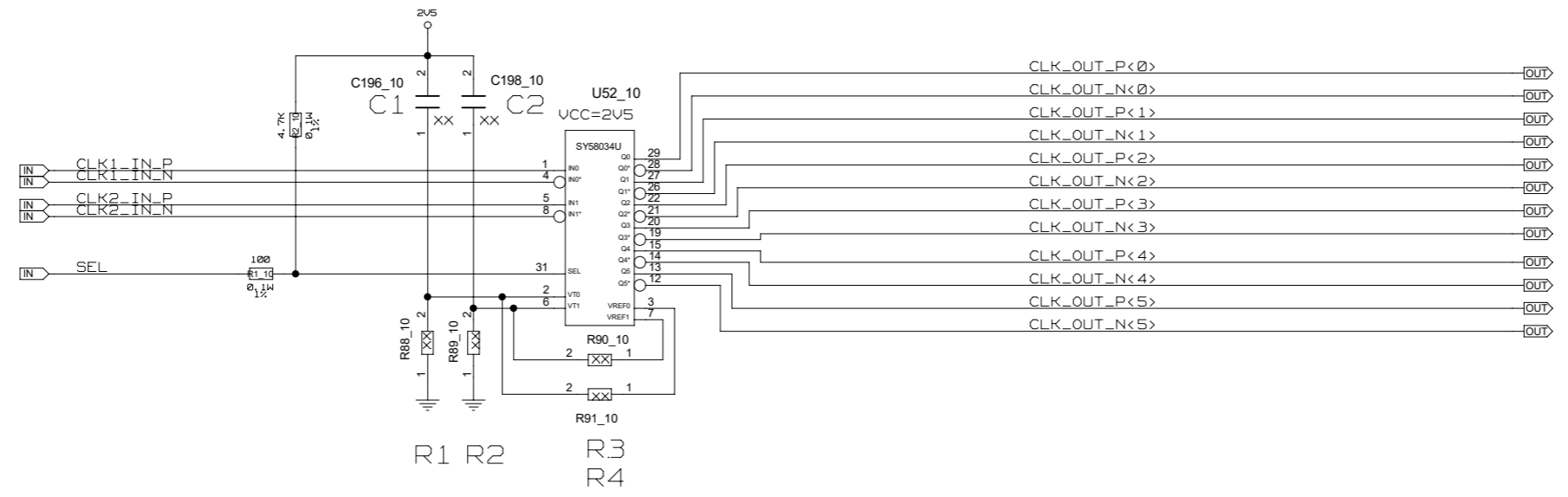


**INPUT INTERFACE APPLICATIONS**

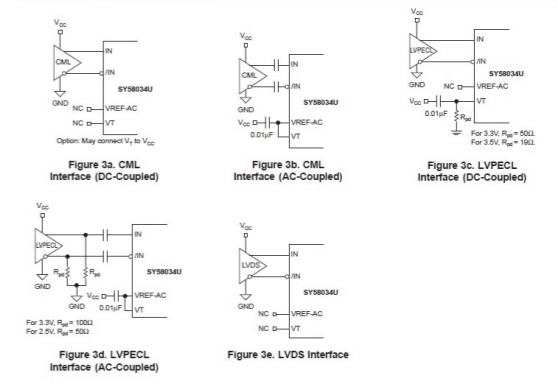


CHECKED	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED	BAUSS			
DRAWN				DRAWING NO.
BLOCK TITLE <b>CLOCK_CML_FANOUT6_DC</b>				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
SCALE		SHEET		OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



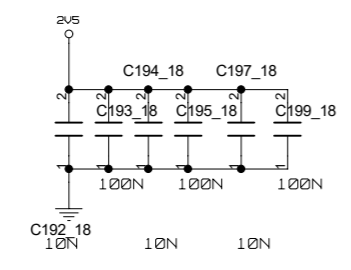
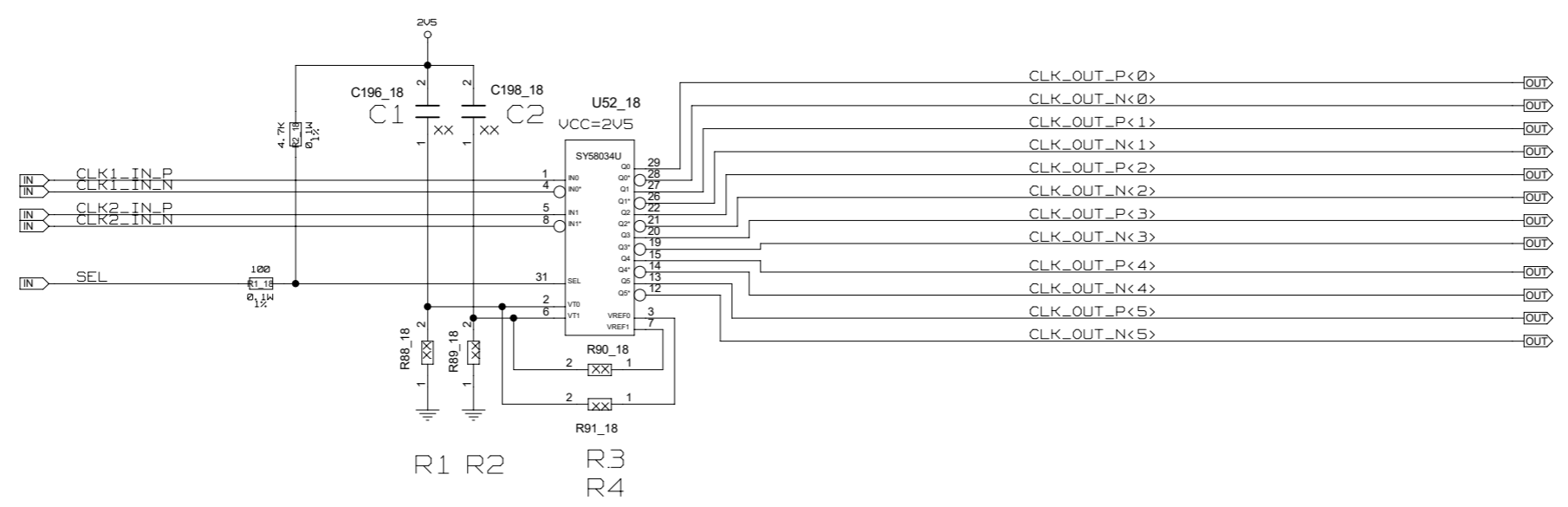
**INPUT INTERFACE APPLICATIONS**



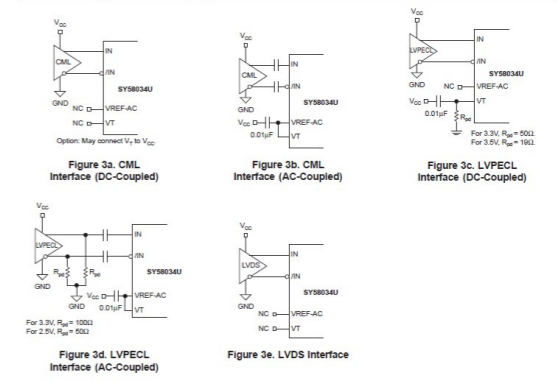
CHECKED	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE <b>CLOCK_CML_FANOUT6_DC</b>				
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.	DRAWING NO.
SCALE				SHEET OF



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

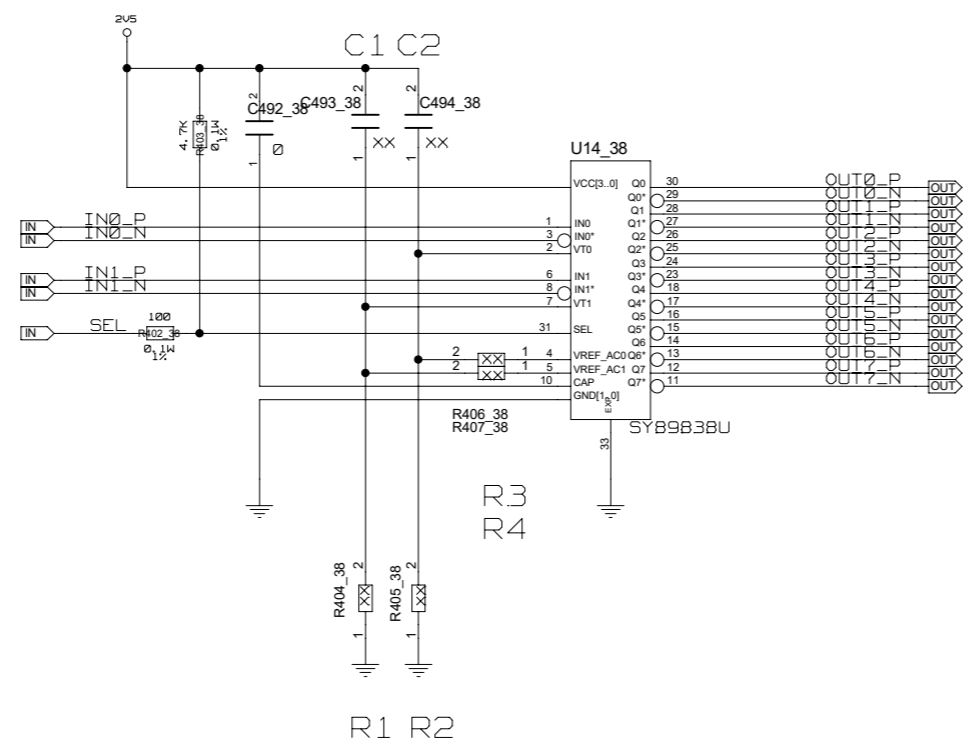


**INPUT INTERFACE APPLICATIONS**

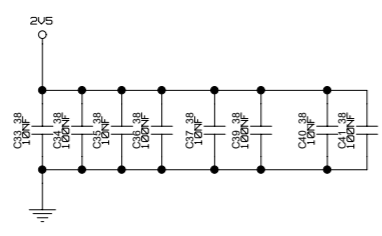


CHECKED	NAME	DATE	SIGN	DRAWING TITLE  <b>CLOCK</b>
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE <b>CLOCK_CML_FANOUT6_DC</b>				SIZE <b>C</b>
UNIVERSITY OF MAINZ				REV.
SCALE				DRAWING NO.
SHEET				OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

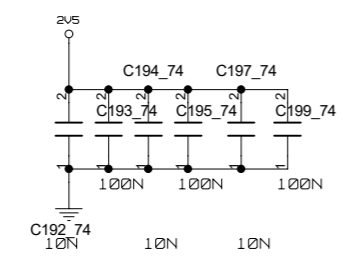
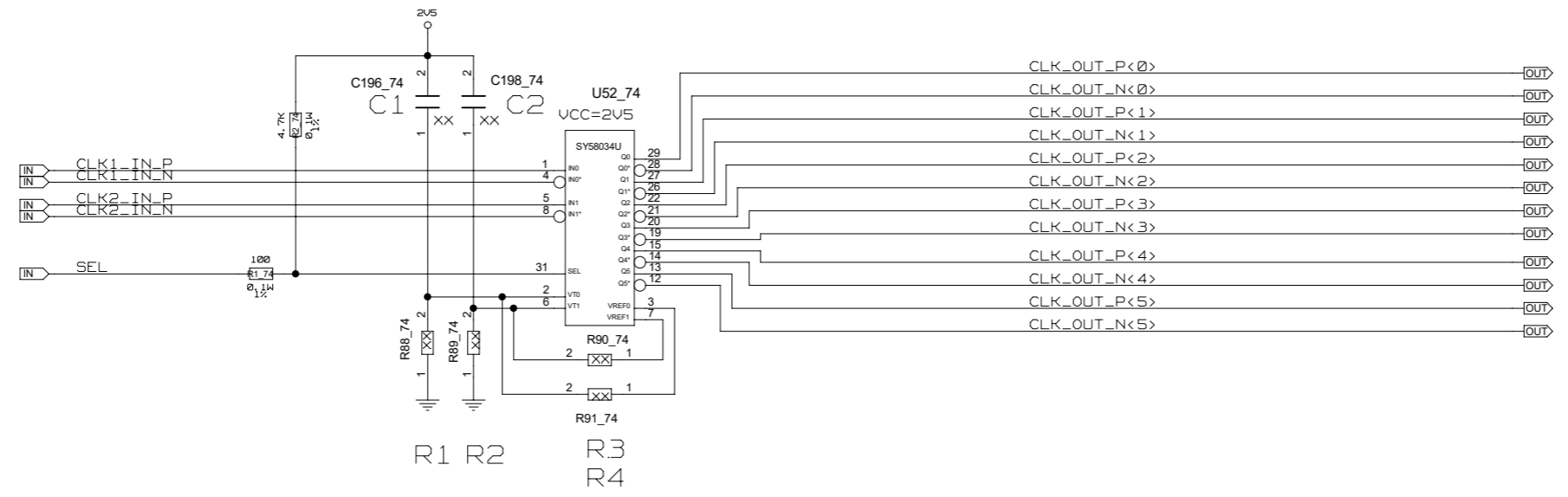


OUT0_P1	2	R408_38
OUT0_N1	2	R408_38
OUT1_P1	2	R409_38
OUT1_N1	2	R409_38
OUT2_P1	2	R410_38
OUT2_N1	2	R410_38
OUT3_P1	2	R411_38
OUT3_N1	2	R411_38
OUT4_P1	2	R412_38
OUT4_N1	2	R412_38
OUT5_P1	2	R413_38
OUT5_N1	2	R413_38
OUT6_P1	2	R414_38
OUT6_N1	2	R414_38
OUT7_P1	2	R415_38
OUT7_N1	2	R415_38

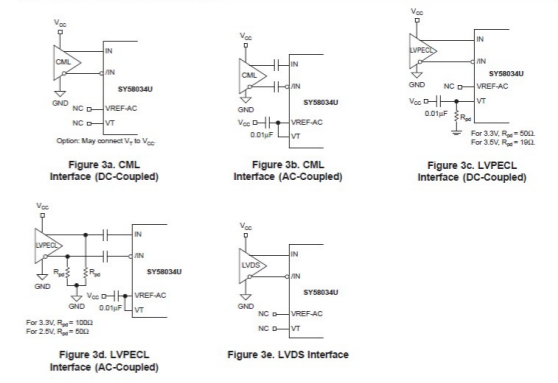


NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA		CLOCK	
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS			
BLOCK TITLE			SIZE	REV.
CLOCK_LVDS_FANOUT8			C	
UNIVERSITY OF MAINZ			SCALE	DRAWING NO.
				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

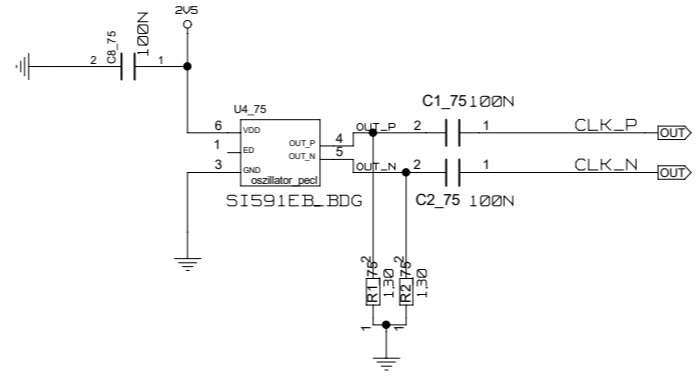


**INPUT INTERFACE APPLICATIONS**



CHECKED	NAME	DATE	SIGN	DRAWING TITLE		
CHECKED	J. V. DE SOUZA			CLOCK		
CHECKED	U. SCHAEFER					
CHECKED	BAUSS					
DRAWN	BAUSS			BLOCK TITLE CLOCK_CML_FANOUT6_DC		
UNIVERSITY OF MAINZ				SIZE <b>C</b>	REV.	DRAWING NO.
SCALE						SHEET OF

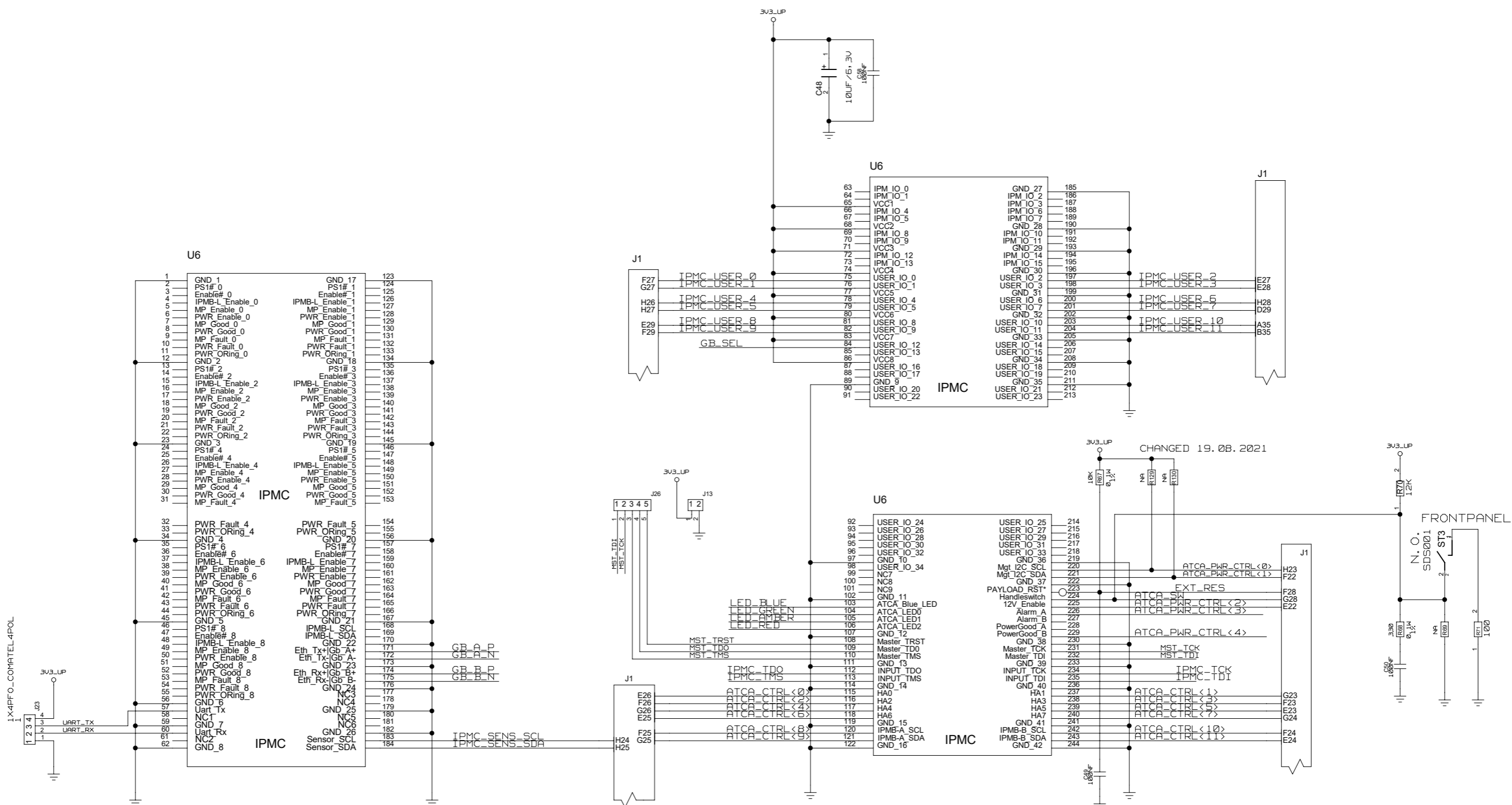
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



CHECKED	NAME	DATE	SIGN	DRAWING TITLE		
CHECKED	J. V. DE SOUZA			CLOCK		
CHECKED	U. SCHAEFER					
CHECKED						
DRAWN	BAUSS			BLOCK TITLE		
				CLOCK_LVPECL_AC		
UNIVERSITY OF MAINZ				SIZE	REV.	DRAWING NO.
				C		
				SCALE		SHEET OF

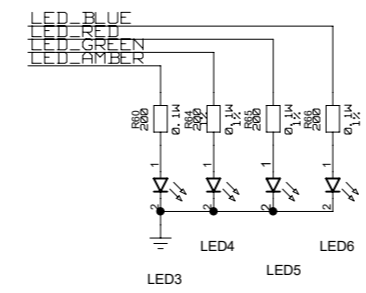
# IPMC CONNECTOR MOLEX\_87782-3003

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



ATCA\_HA<0..7> BACKPLANE + MEZZANINE  
 ATCA\_A/B\_SCL/SDA BACKPLANE + MEZZANINE

ATCA\_CTRL<11..0>  
 ATCA\_PWR\_CTRL<4..0>

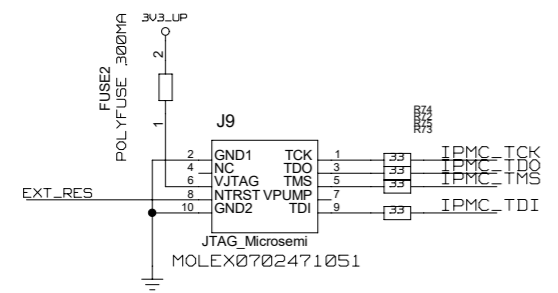


NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U.SCHAEFER			
CHECKED			
DRAWN BAUSS	30.10.2015		
BLOCK TITLE			SIZE
UNIVERSITY OF MAINZ			REV.
			DRAWING NO.
			SCALE
			SHEET OF

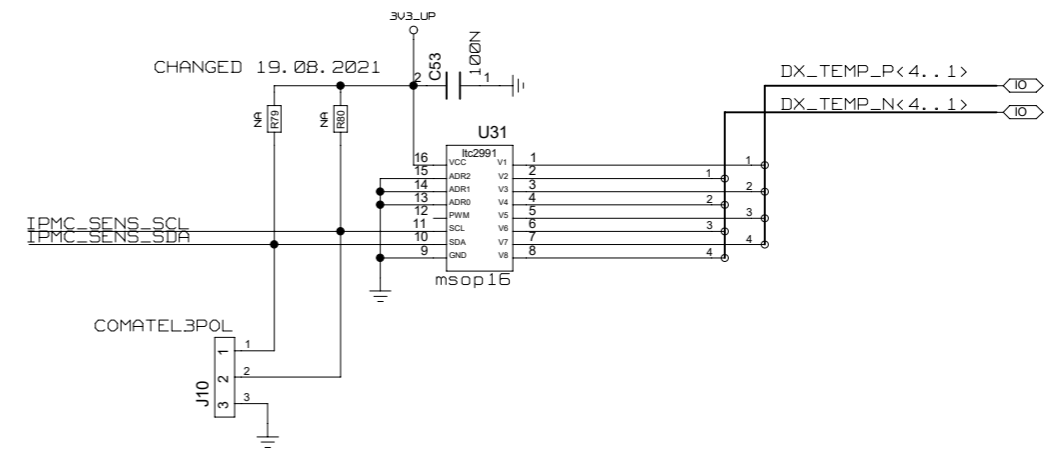
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# IPMC CONTROL

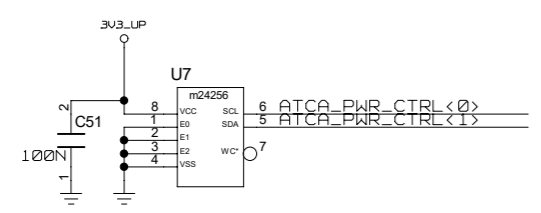
## IPMC JTAG PORT FRONT PANEL



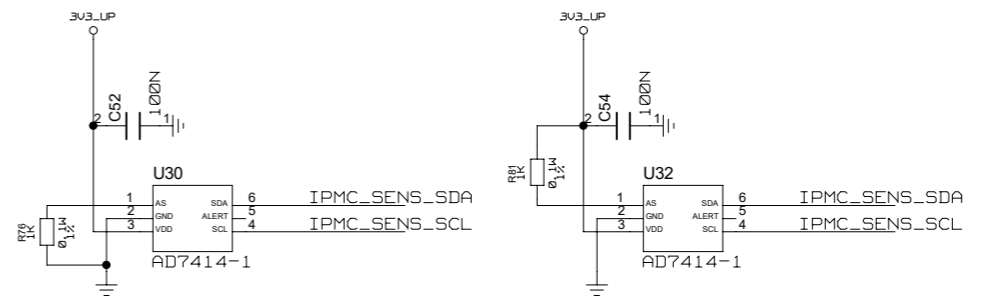
## I2C FPGA TEMPERATURE



## MEMORY



## I2C BOARDTEMP

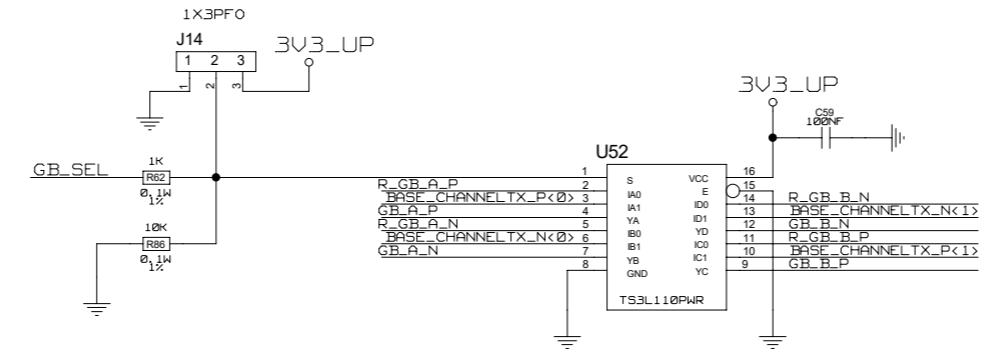


NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS	23.07.2015		
BLOCK TITLE			
IPMC			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE		SHEET	OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

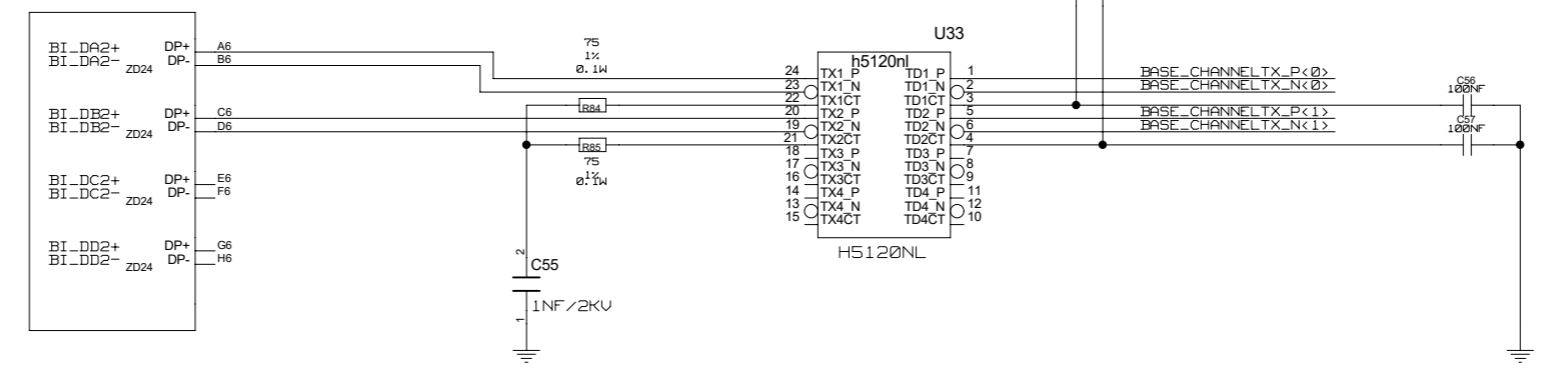
# IPMC CONTROL

## ETHERNET SWITCH

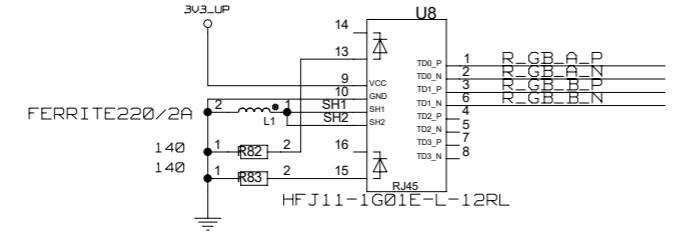


- S LOW -> YX = IX0 (RJ45 FRONT-PANEL)
- S HIGH -> YX = IX1 (BASE CHANNEL2)

## BACKPLANE BASE CHANNEL2

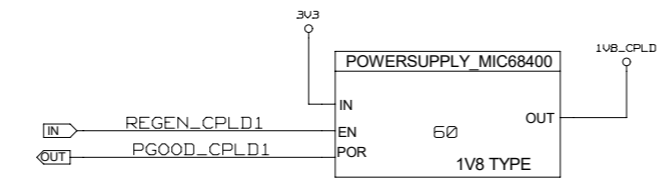
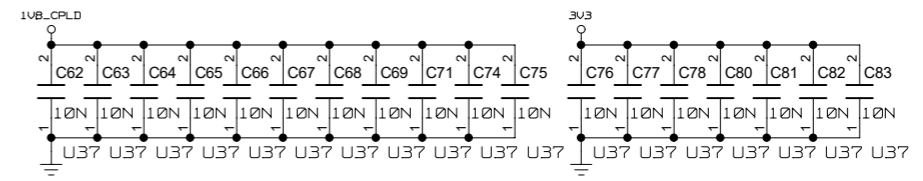
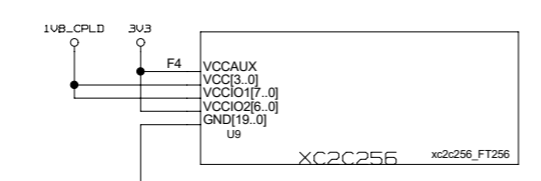
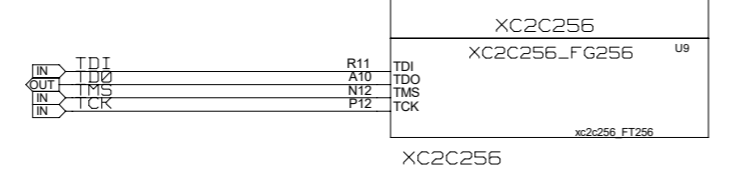
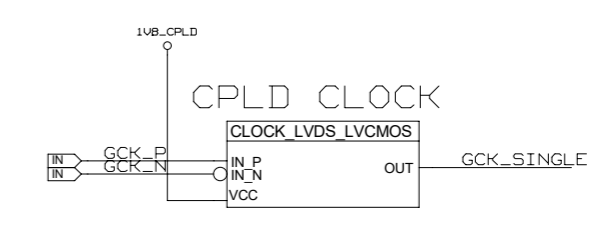
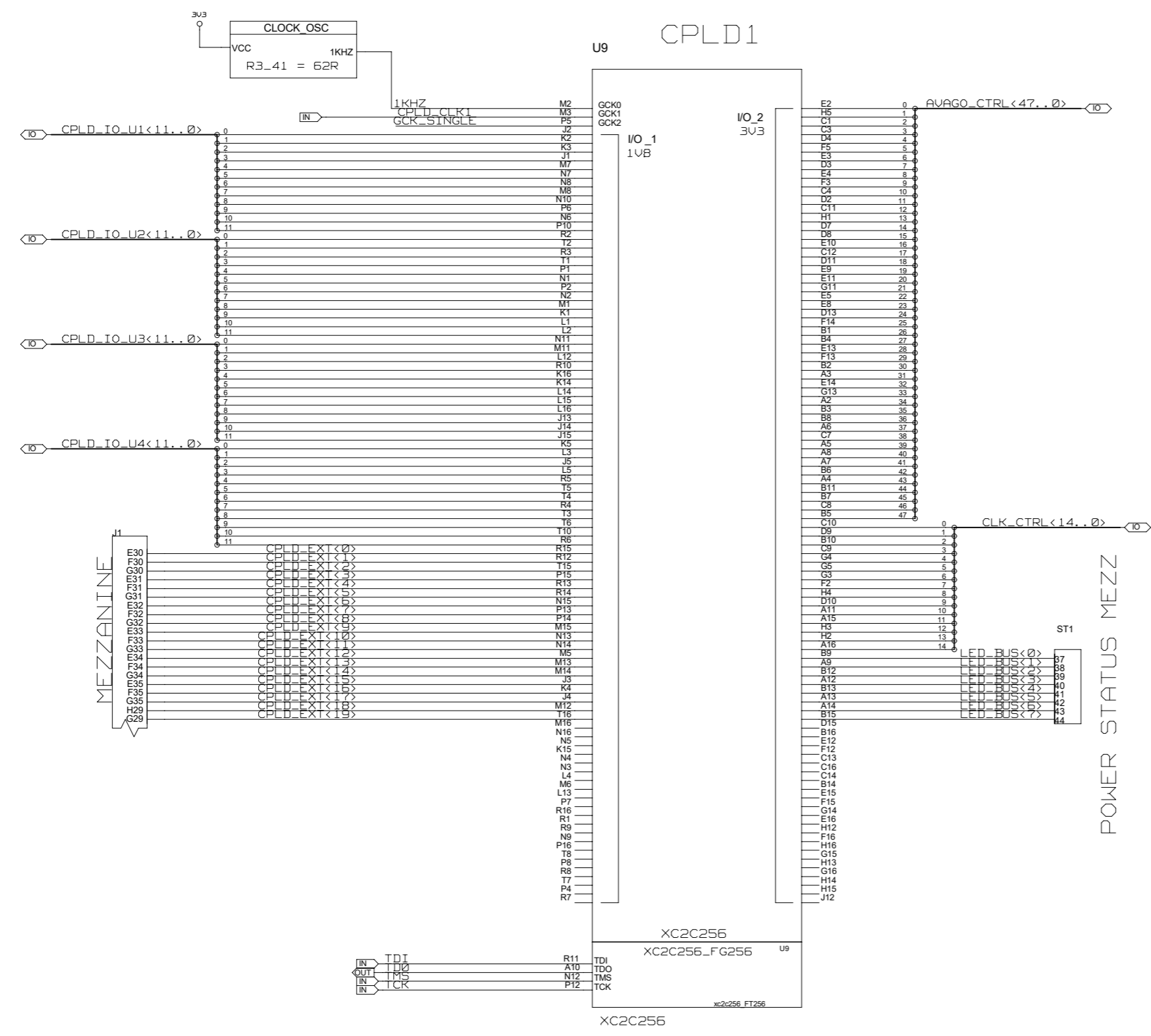


## RJ45 FRONT PANEL



NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS			
BLOCK TITLE			
IPMC			
UNIVERSITY OF MAINZ		SIZE <b>C</b>	REV.
		SCALE	DRAWING NO.
			SHEET OF

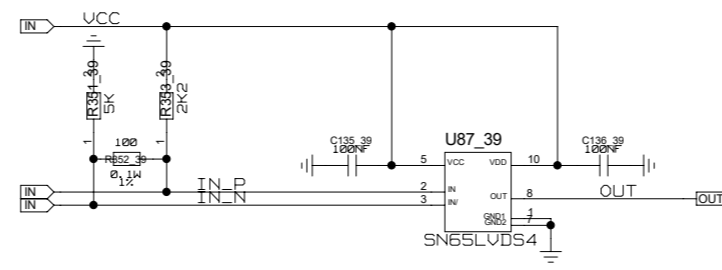
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA		JFEX CONTROL AND CONFIG CPLD
CHECKED	U.SCHAEFER		
CHECKED			
DRAWN	BAUSS	22.07.2015	
BLOCK TITLE			
CPLD			
UNIVERSITY OF MAINZ		SIZE <b>C</b>	DRAWING NO.
SCALE		SHEET 1 OF 1	



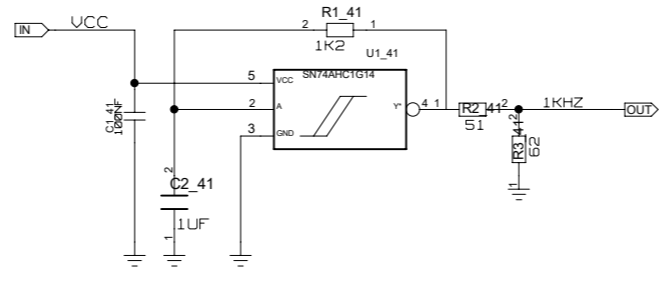
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



CHECKED	NAME	DATE	SIGN	DRAWING TITLE		
CHECKED	J. V. DE SOUZA			JFEX		
CHECKED	U. SCHAEFER					
CHECKED	BAUSS					
DRAWN	BAUSS			BLOCK TITLE		
				CLOCK_LVDS_LVCMOS		
UNIVERSITY OF MAINZ				SIZE	REV.	DRAWING NO.
				<b>C</b>		
				SCALE		SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

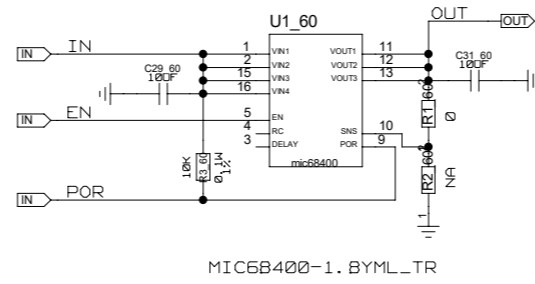
# CPLD CLOCK



CHECKED	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			JFEX	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS			DRAWING NO.	
BLOCK TITLE				SIZE	REV.
UNIVERSITY OF MAINZ				<b>C</b>	
				SCALE	SHEET OF

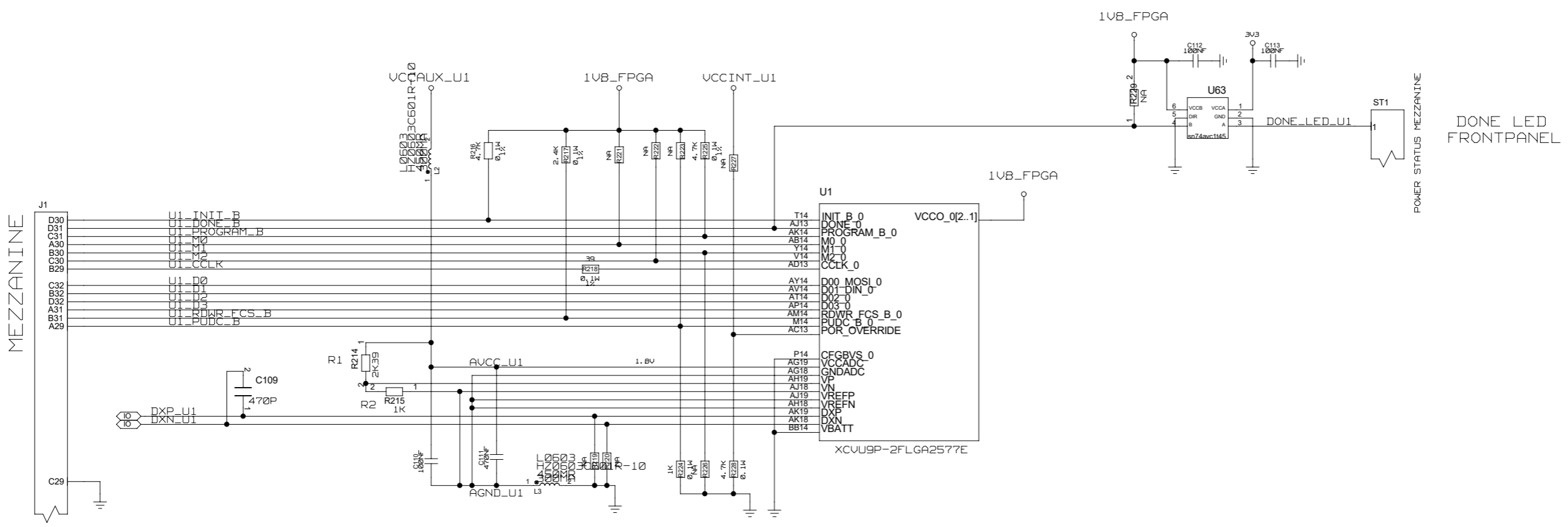
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# POWERSUPPLY\_MIC68400



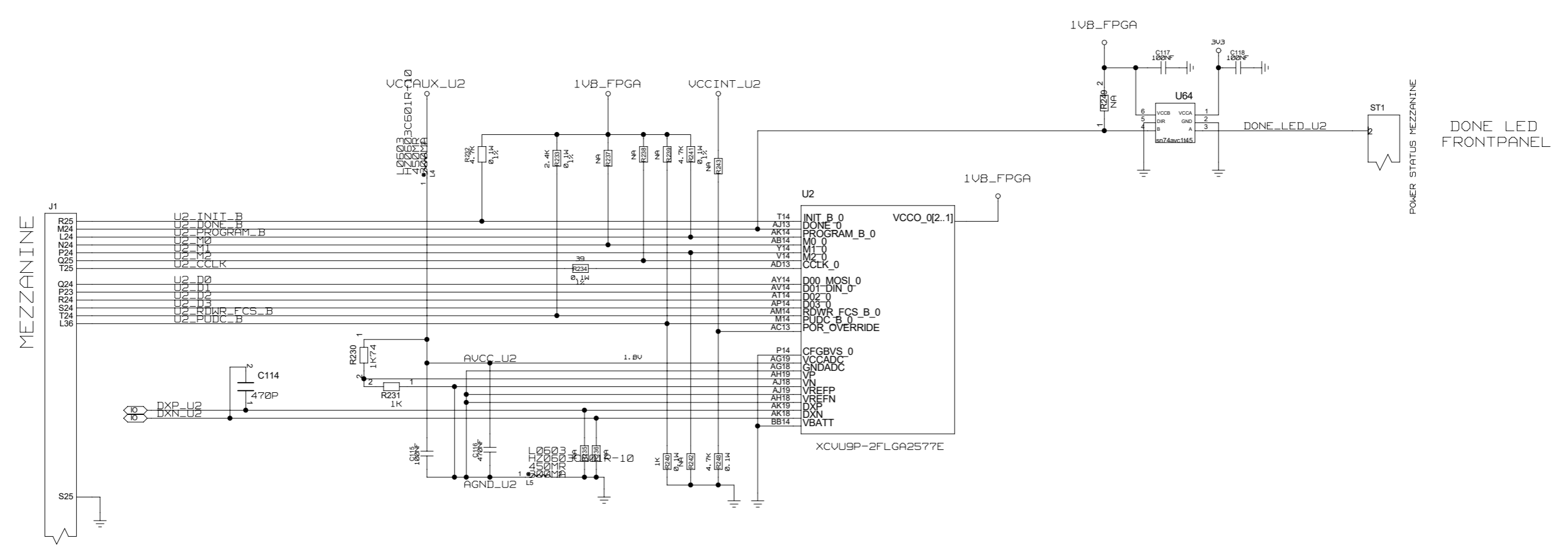
	NAME	DATE	SIGN	DRAWING TITLE		
CHECKED	J. V. DE SOUZA					
CHECKED	U. SCHAEFER					
CHECKED						
DRAWN	BAUSS					
BLOCK TITLE				SIZE	REV.	DRAWING NO.
POWERSUPPLY_MIC68400				<b>C</b>		
UNIVERSITY OF MAINZ				SCALE		SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



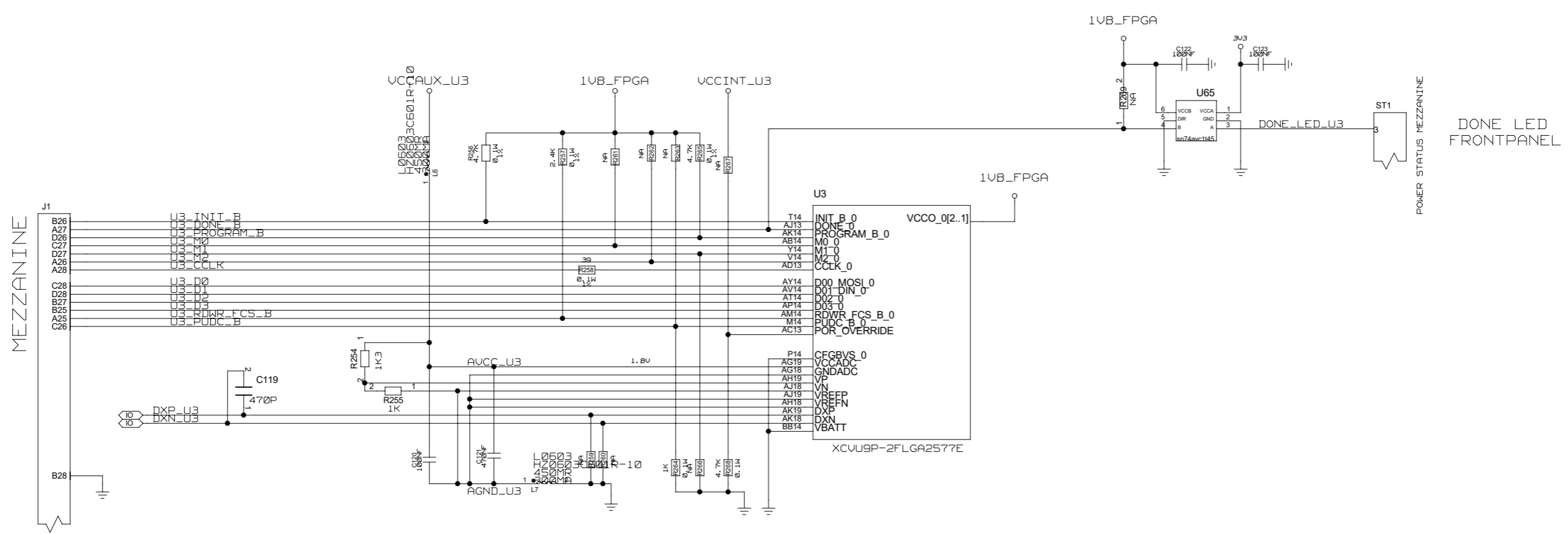
NAME	DATE	SIGN	DRAWING TITLE	
CHECKED J. V. DE SOUZA			JFEX	
CHECKED U.SCHAEFER				
CHECKED				
DRAWN BAUSS	17. 09. 2015		BLOCK TITLE	
UNIVERSITY OF MAINZ			SIZE <b>C</b>	DRAWING NO.
SCALE			REV.	SHEET 1 OF 1

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



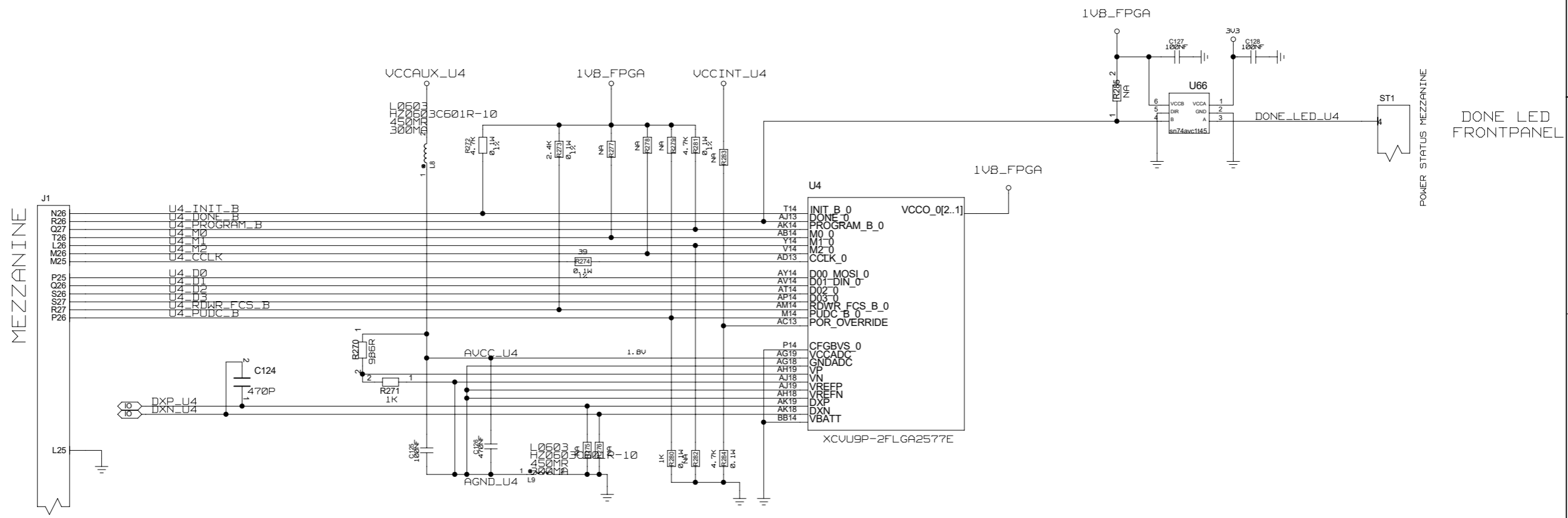
NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U.SCHAEFER			
CHECKED			
DRAWN BAUSS			
BLOCK TITLE			
CONFIGURATION PROCESSOR U2			
UNIVERSITY OF MAINZ		SIZE <b>C</b>	DRAWING NO.
SCALE		REV.	SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			JFEX	
CHECKED	U. SCHAEFER				
CHECKED					
DRAWN	BAUSS			DRAWING NO.	
BLOCK TITLE				SIZE	REV.
CONFIGURATION PROCESSOR U3				<b>C</b>	
UNIVERSITY OF MAINZ				SCALE	SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



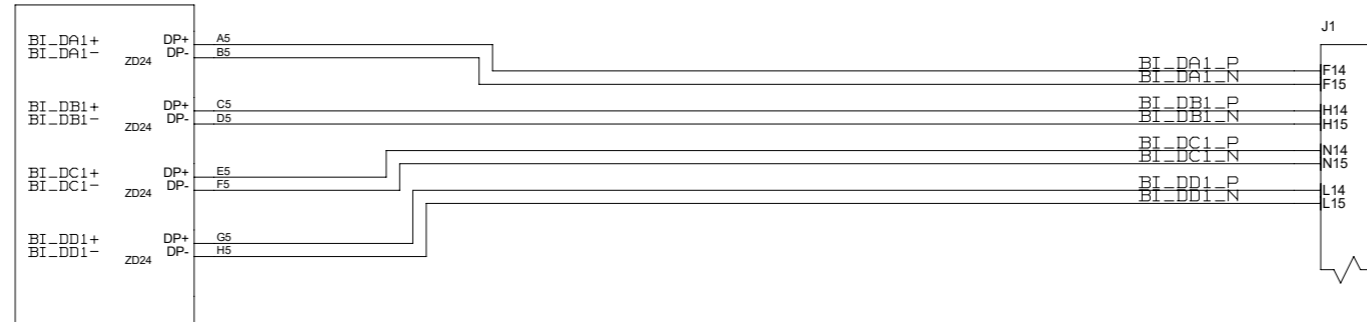
NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS			
BLOCK TITLE			
CONFIGURATION PROCESSOR U4			
UNIVERSITY OF MAINZ		SIZE	DRAWING NO.
		SCALE	SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# IPBUS

BACKPLANE BASE CHANNEL 1

MEZZANINE

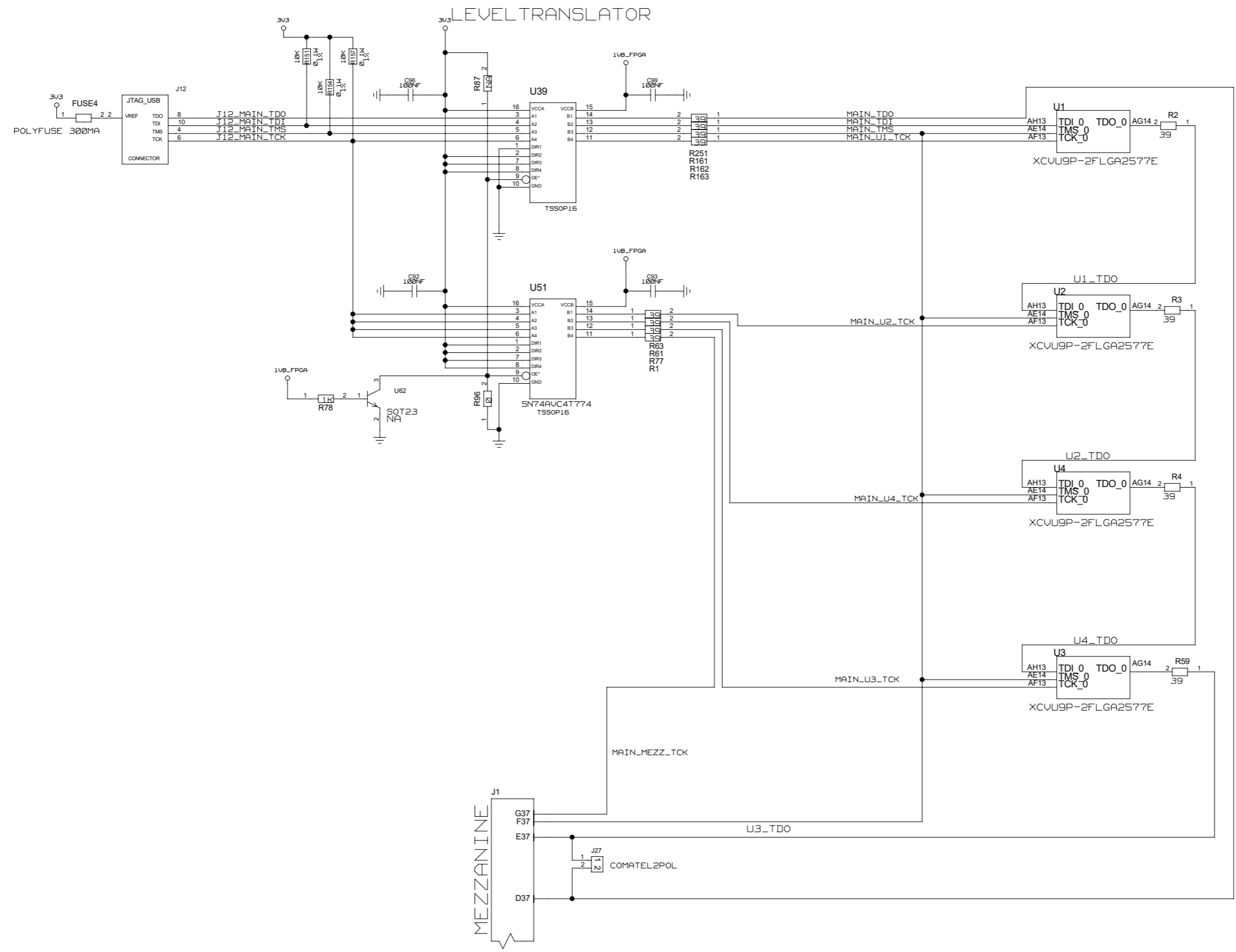


CHECKED	J. V. DE SOUZA			DRAWING TITLE
CHECKED	U. SCHAEFER			
CHECKED				
DRAWN	BAUSS	05. 11. 2015		
BLOCK TITLE				JFEX
IPBUS				
UNIVERSITY OF MAINZ		SIZE	REV.	DRAWING NO.
		<b>C</b>		
		SCALE		SHEET OF



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

# JTAG CHAIN



NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED			
DRAWN BAUSS	08.05.2017		
BLOCK TITLE			
JTAG			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE		SHEET OF	