

INDEX

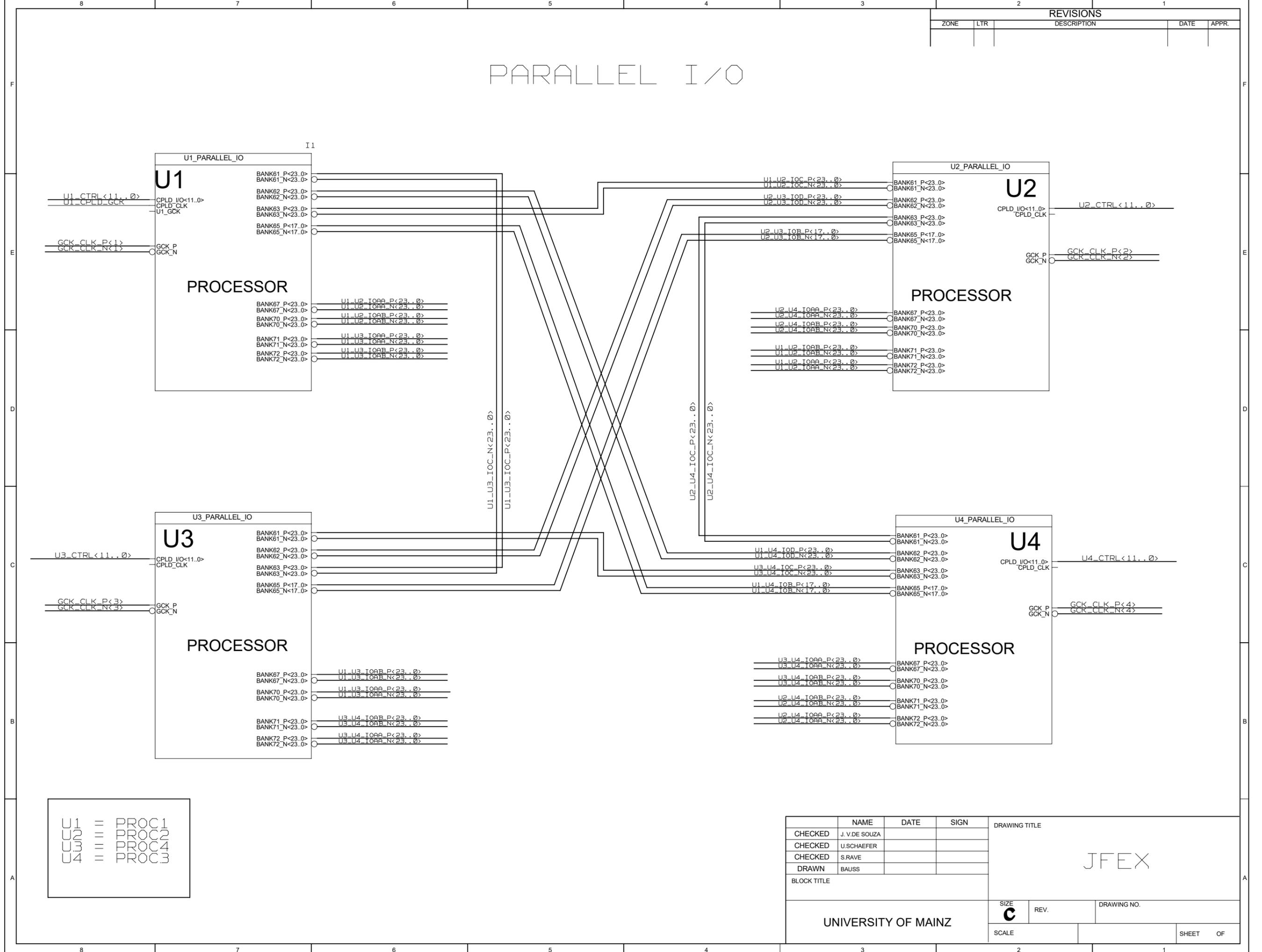
PAGE(S)	FUNCTION
2	PARALLEL I/O BLOCK
3	MGT REAL TIME PATH BLOCK
4	IPBUS, JTAG, POWER, CLOCK, CONFIG, IPMC BLOCK
5	MEZZANINE CONNECTOR
6 - 10	U1 PARALLEL I/O
11	CLOCK LVDS LVCMOS MODUL
12 - 16	U2 PARALLEL I/O
17 - 21	U3 PARALLEL I/O
22 - 26	U4 PARALLEL I/O
27 - 33	U1 MGT REALTIME HIGH SPEED OPTICAL LINKS
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	S. RAVE			
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.

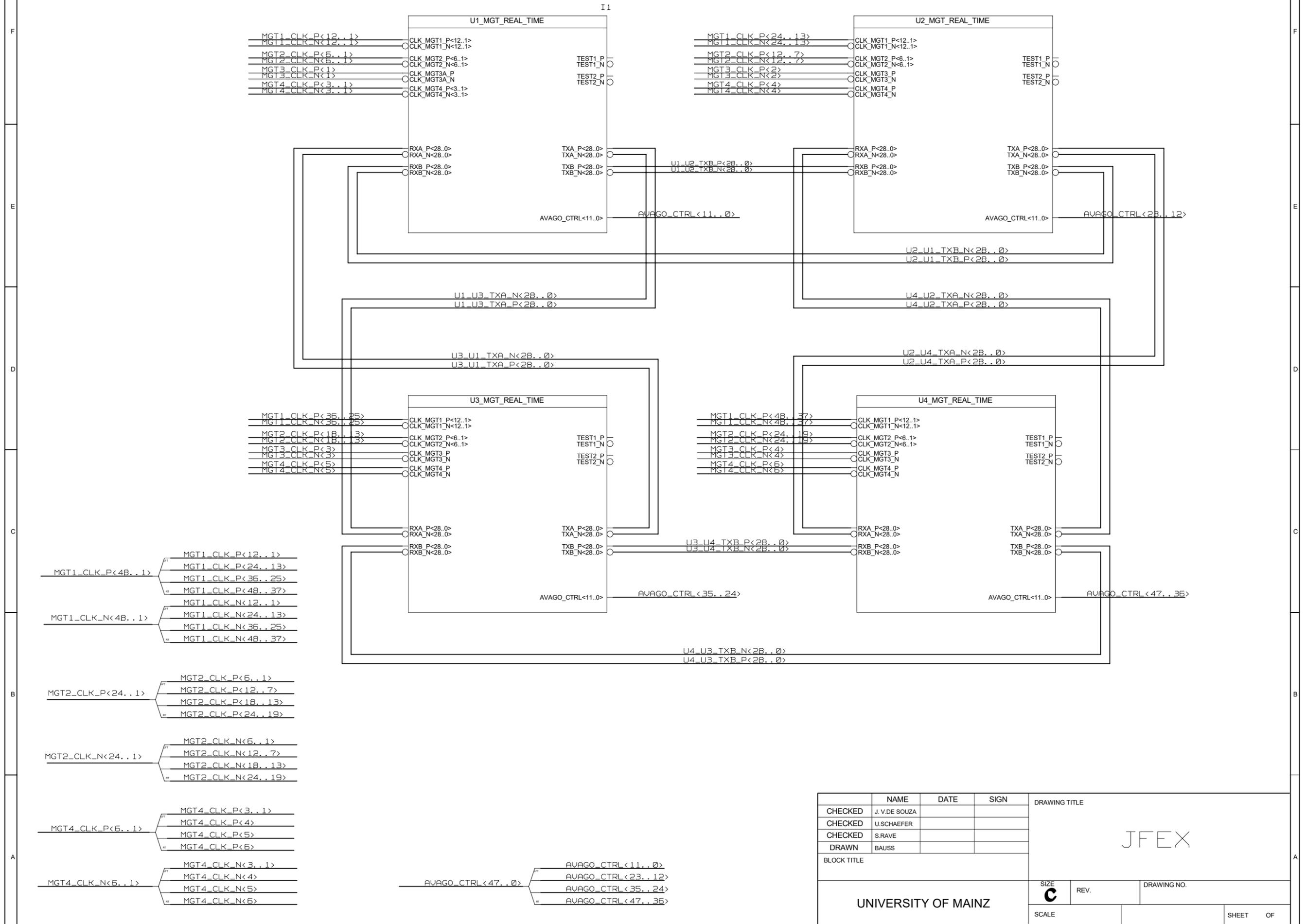


U1 = PROC1
 U2 = PROC2
 U3 = PROC4
 U4 = PROC3

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

MGT REAL TIME

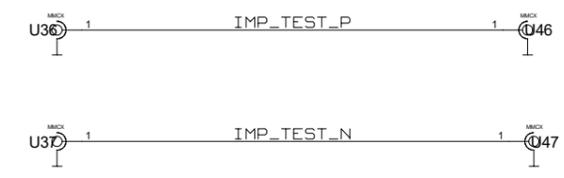
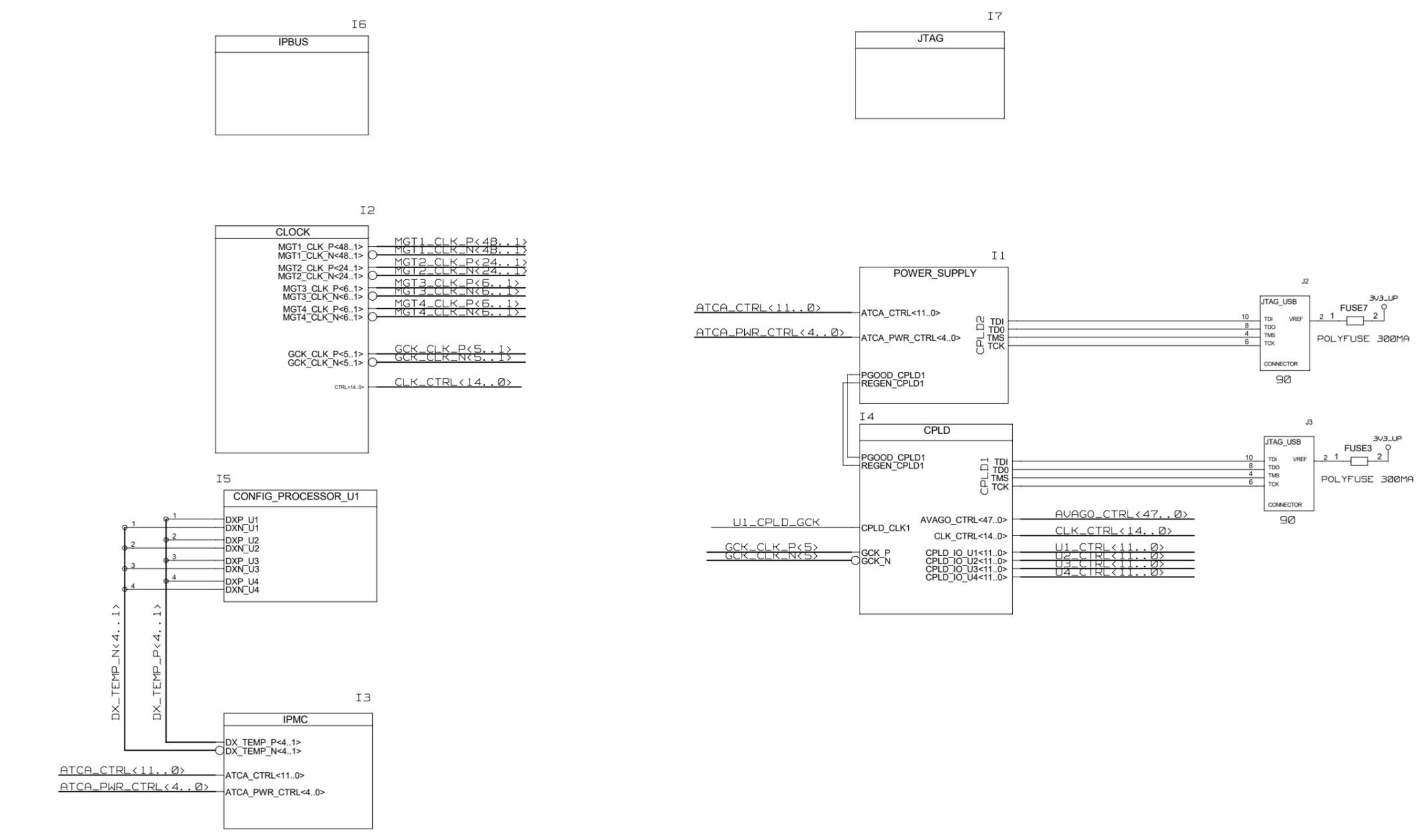
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

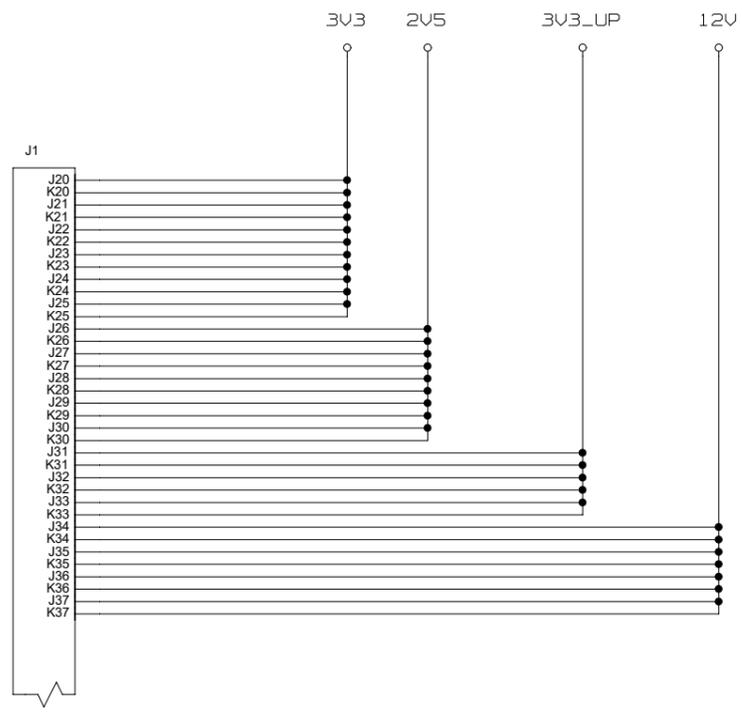
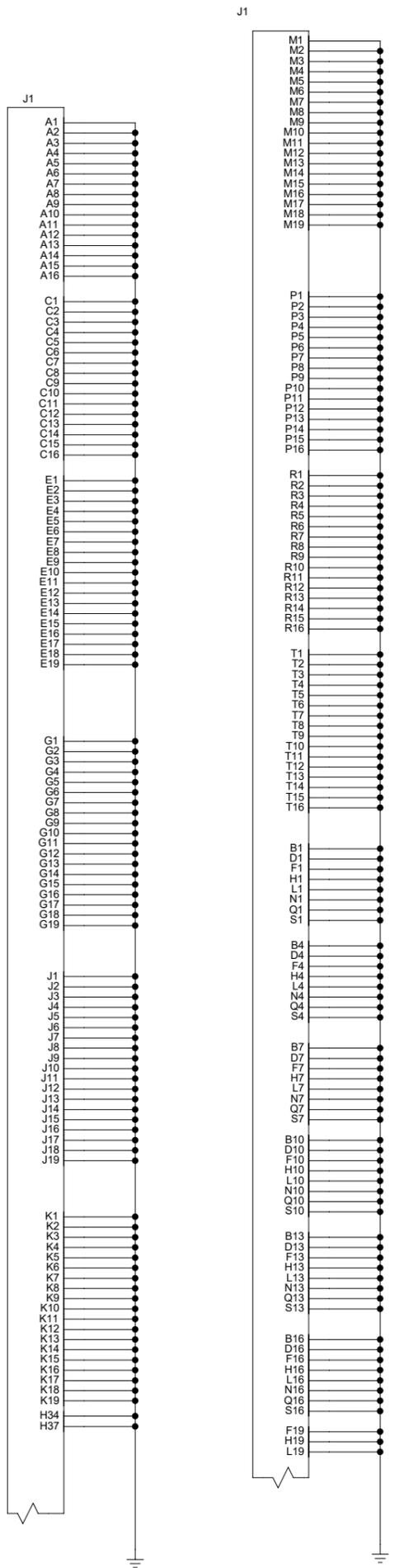
CLOCK, CONFIG, POWER, JTAG, IPMC



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

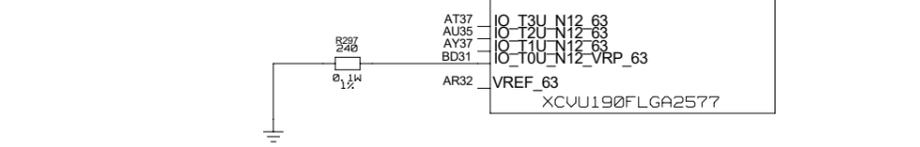
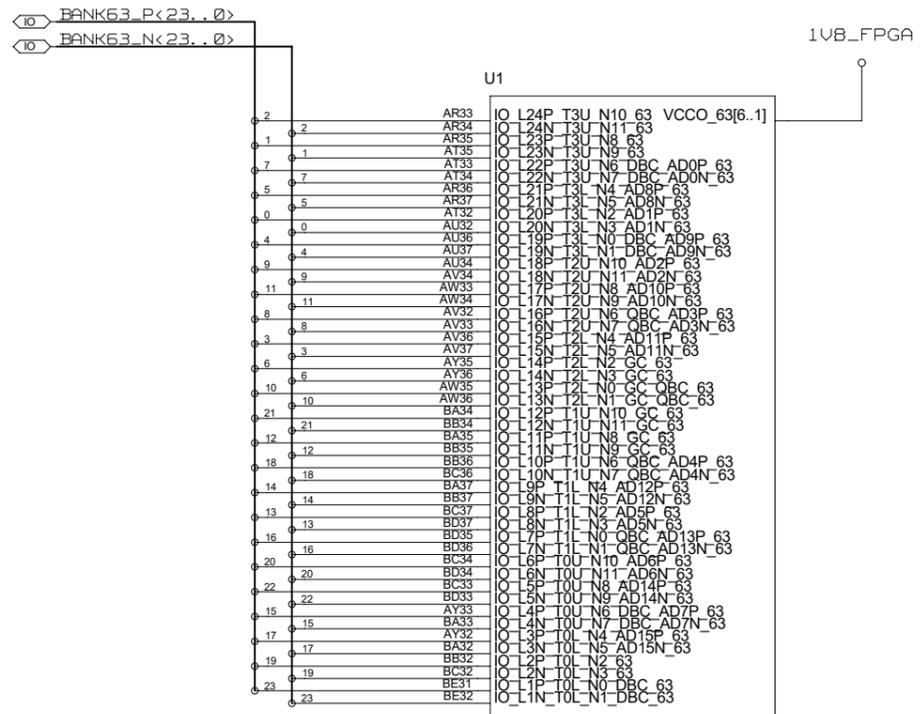
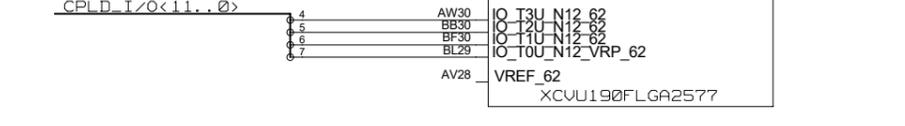
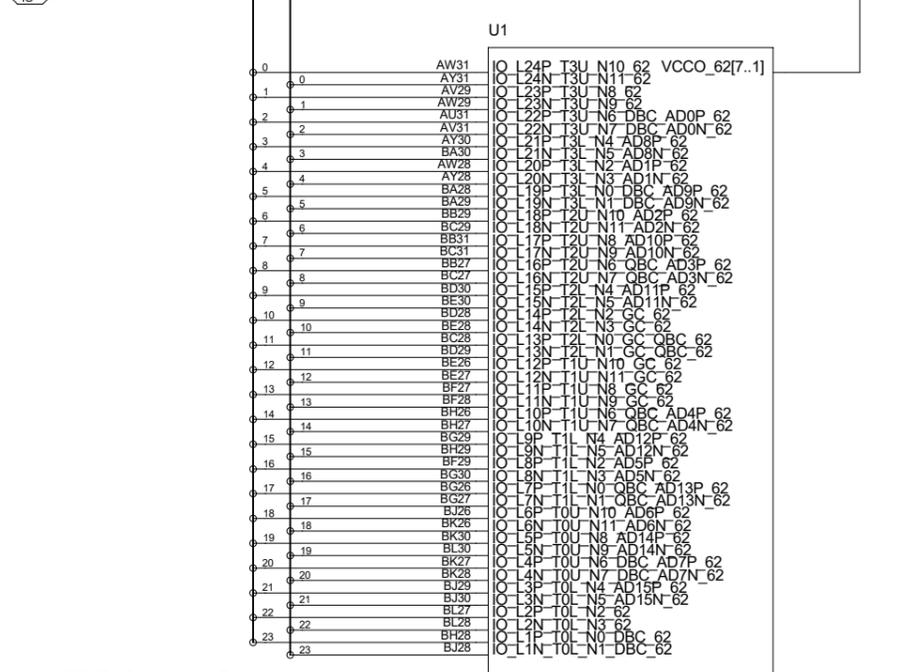
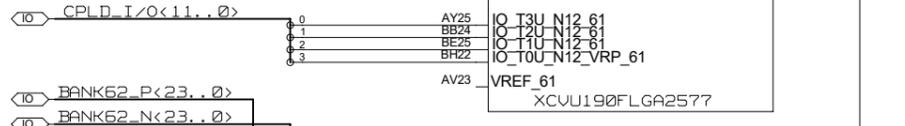
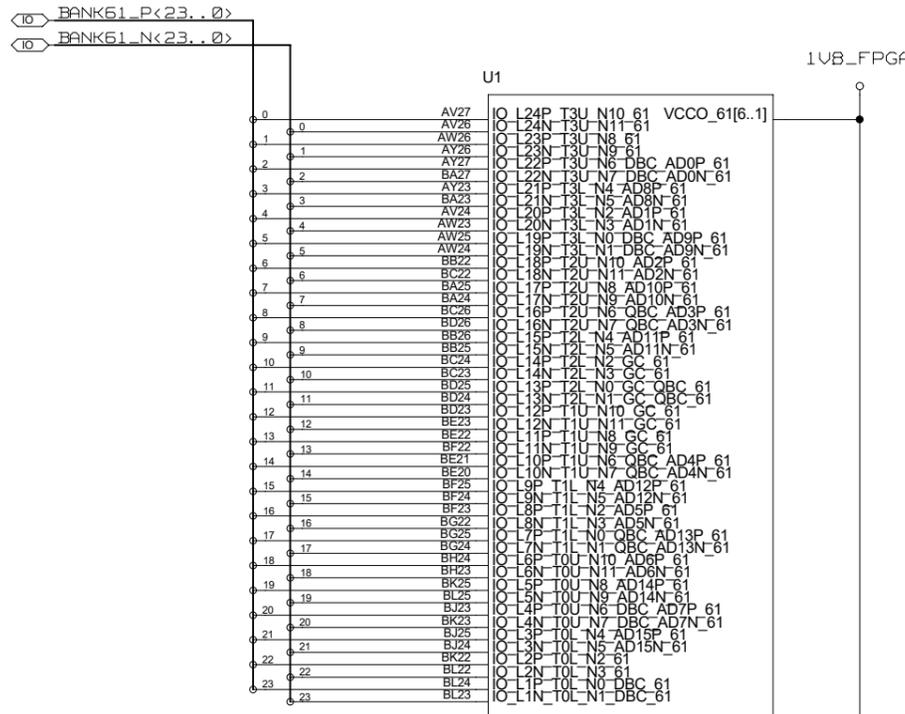
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

MEZZANINE CONNECTOR GND AND VCC



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

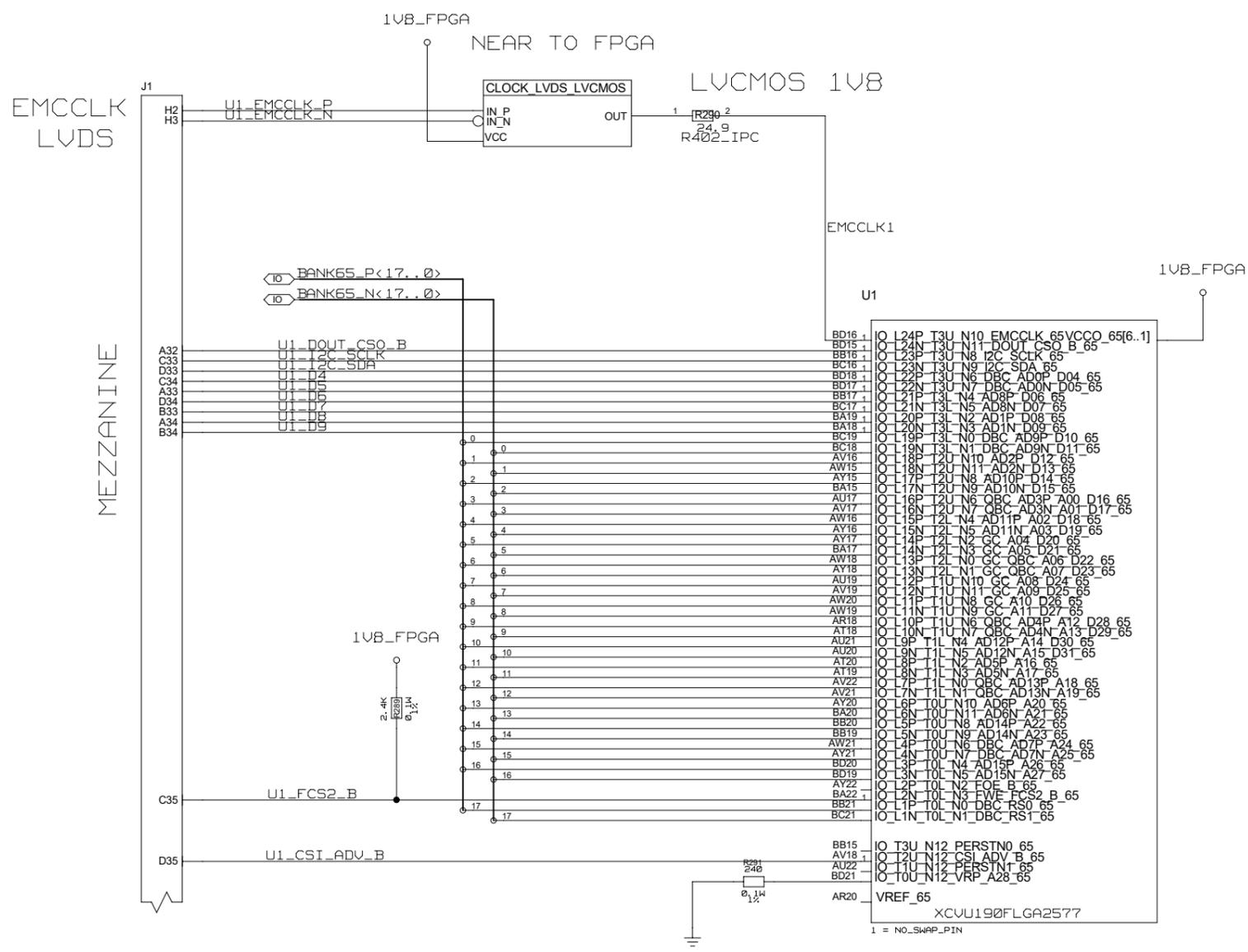
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
61
62
63

NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J.V.DE SOUZA		JFEX
CHECKED	U.SCHAEFER		
CHECKED	S.RAVE		
DRAWN	BAUSS	25.08.2015	
BLOCK TITLE			
U1_PARALLEL_I/O			
UNIVERSITY OF MAINZ		SIZE C	REV.
SCALE		DRAWING NO.	
		SHEET 1 OF 5	

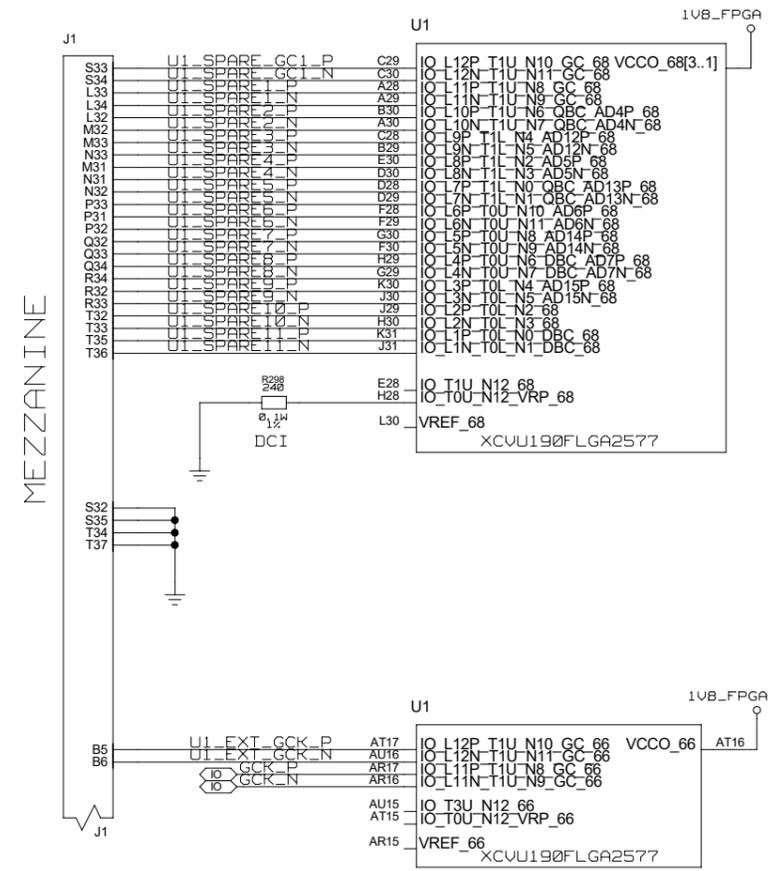
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
65

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED S. RAVE			
DRAWN BAUSS	25.08.2015		
BLOCK TITLE			
U1_PARALLEL_I/O			
UNIVERSITY OF MAINZ			SIZE C
			REV.
SCALE			DRAWING NO.
			SHEET 2 OF 5

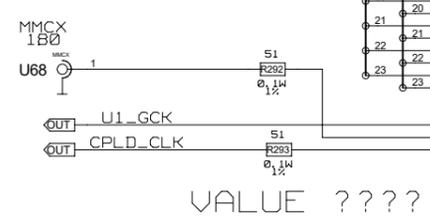
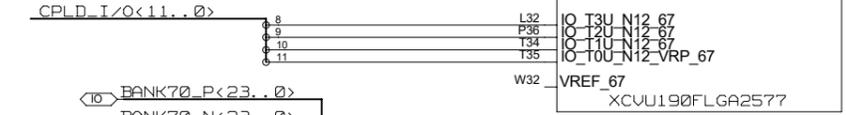
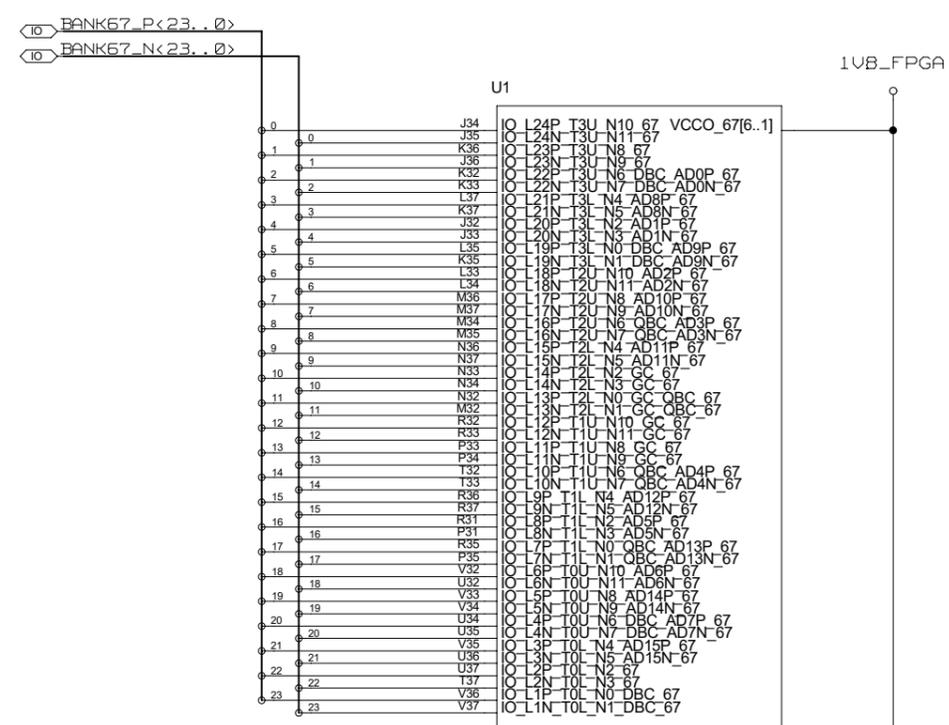
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
66
68

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

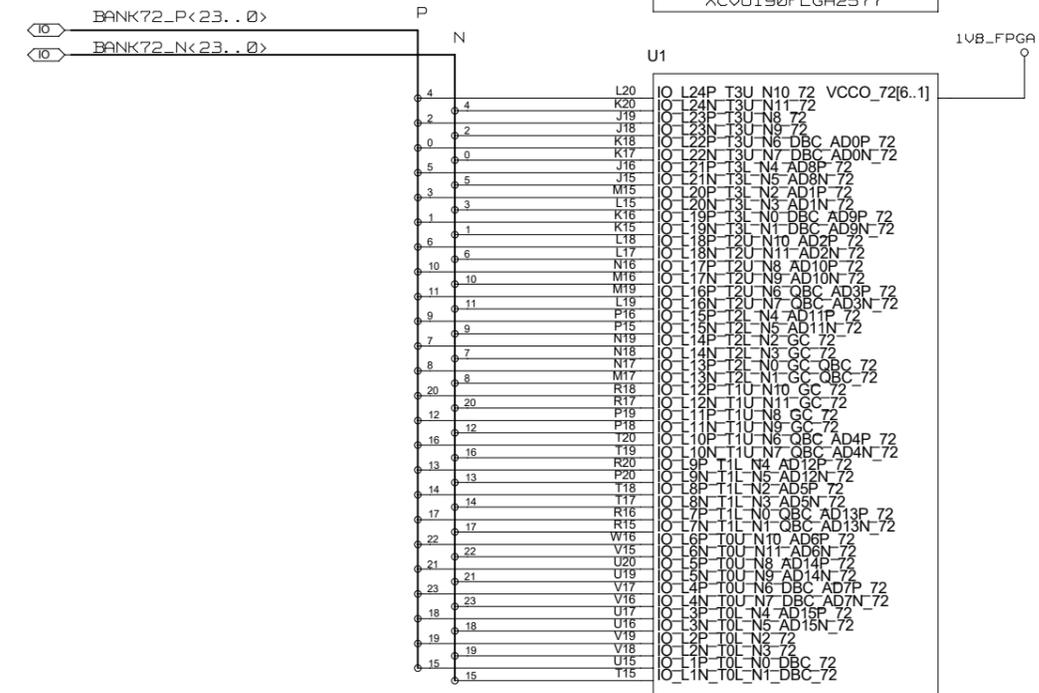
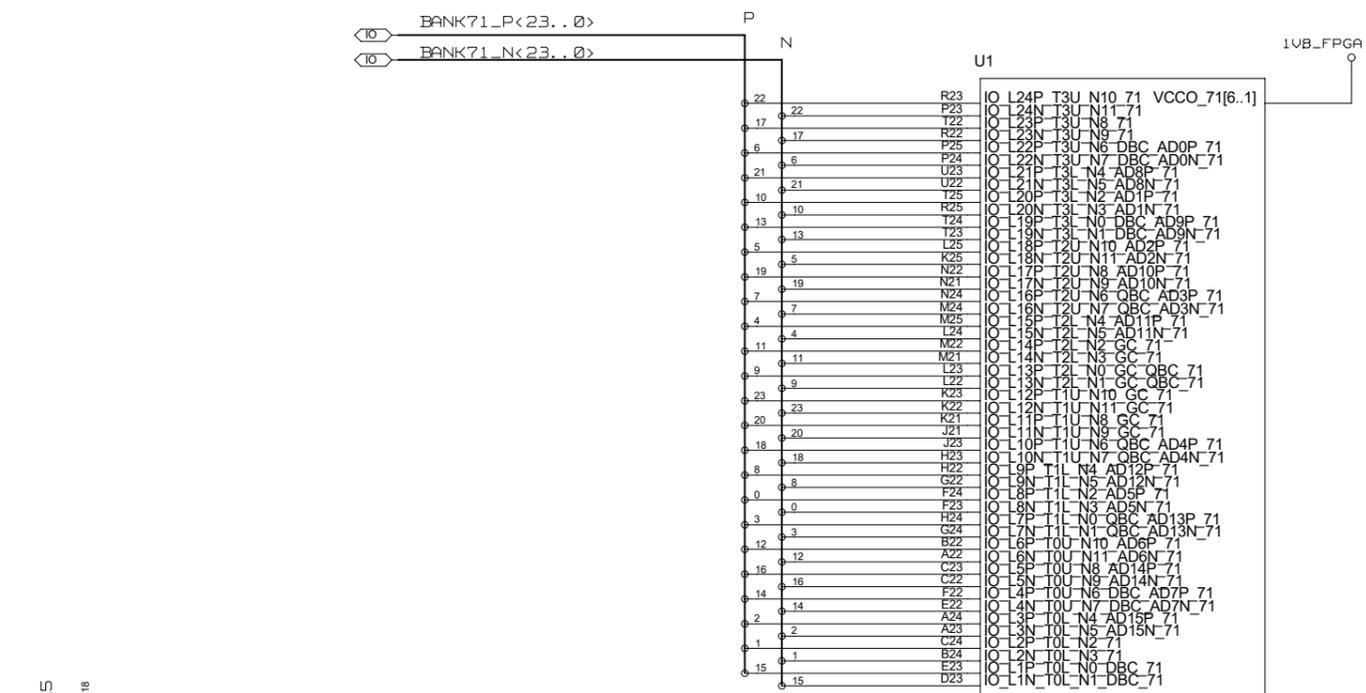
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



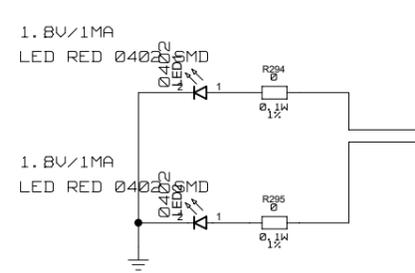
BANK
67
70

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

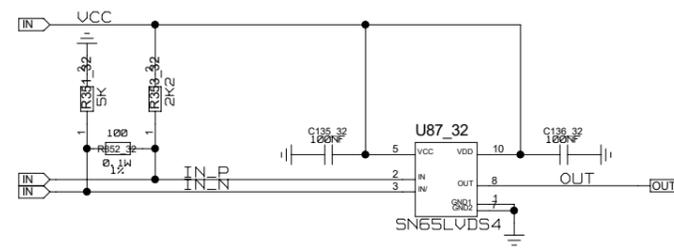


BANK
71
72



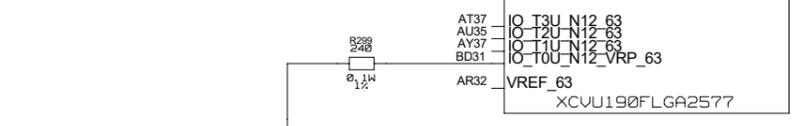
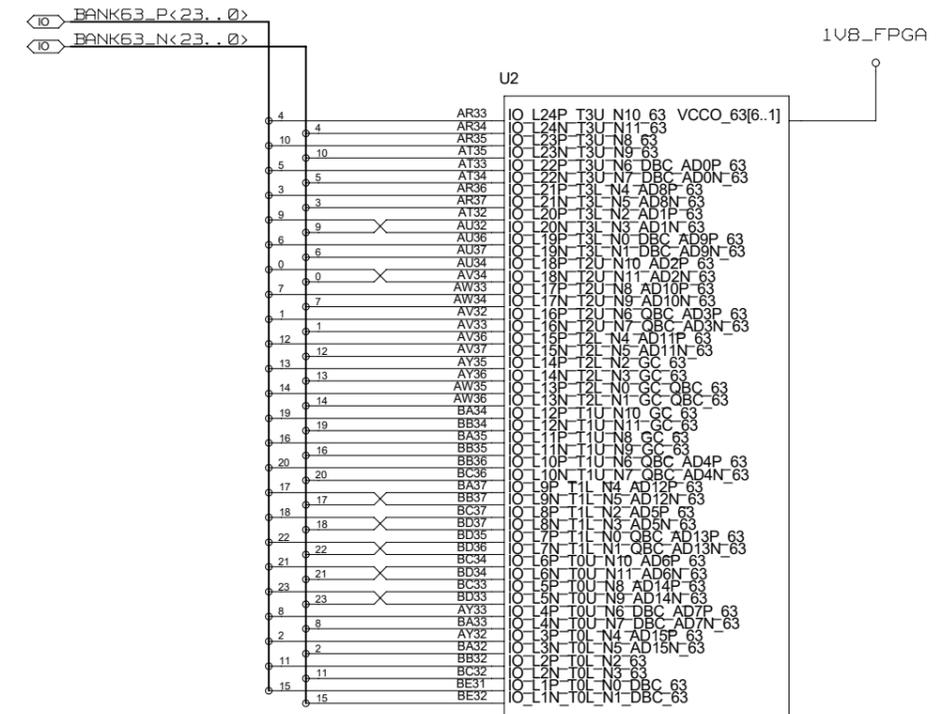
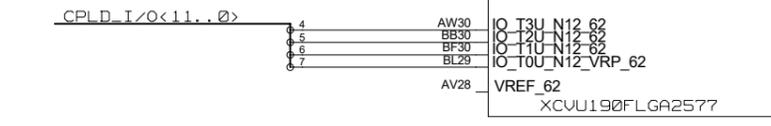
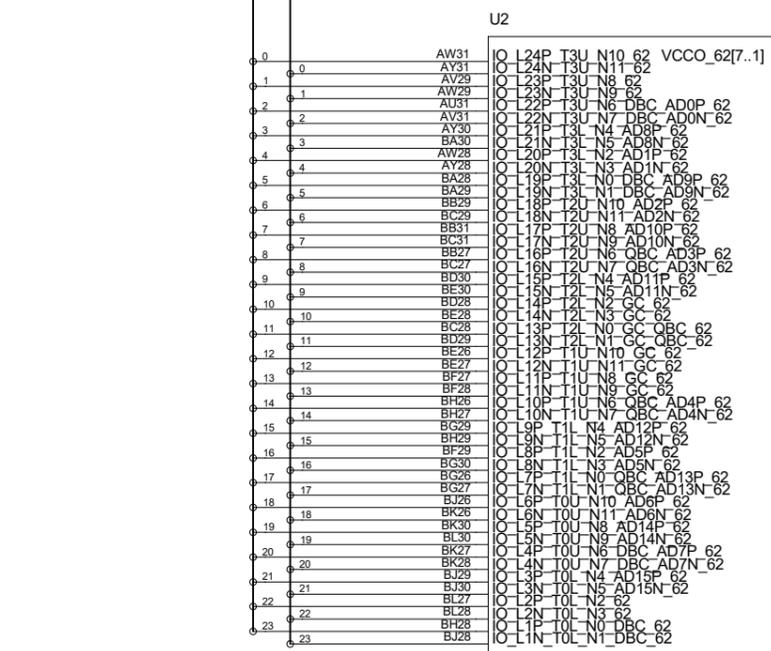
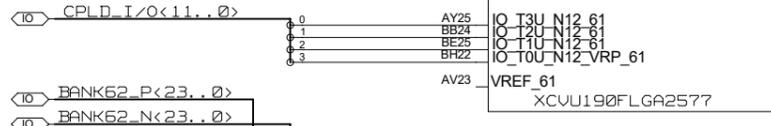
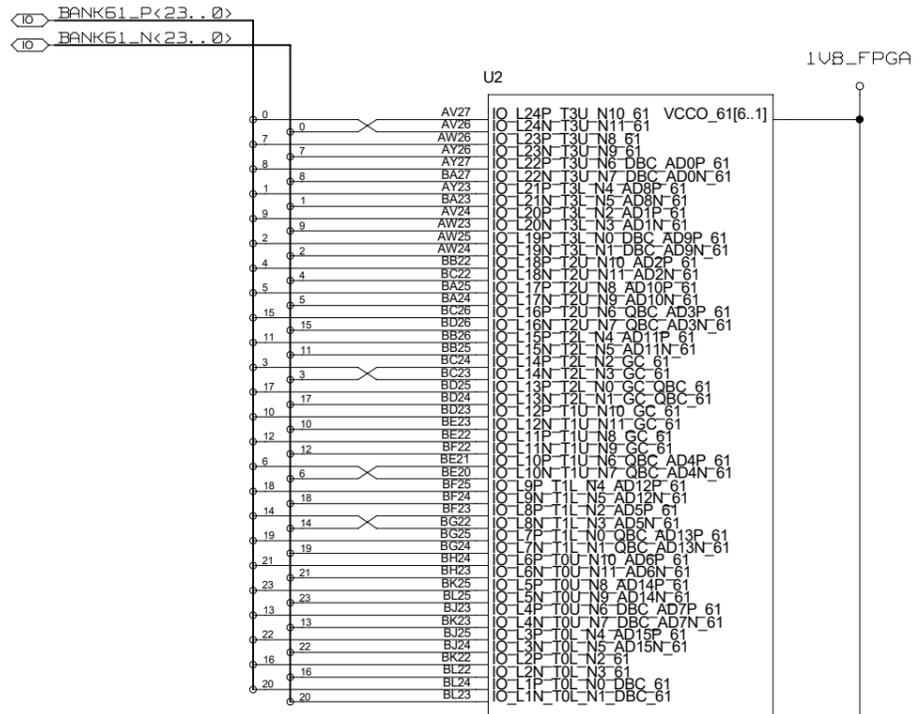
NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED S. RAVE			
DRAWN BAUSS	25. 08. 2015		
BLOCK TITLE			
U1_PARALLEL_I/O			
UNIVERSITY OF MAINZ		SIZE C	DRAWING NO.
SCALE		SHEET 5 OF 5	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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

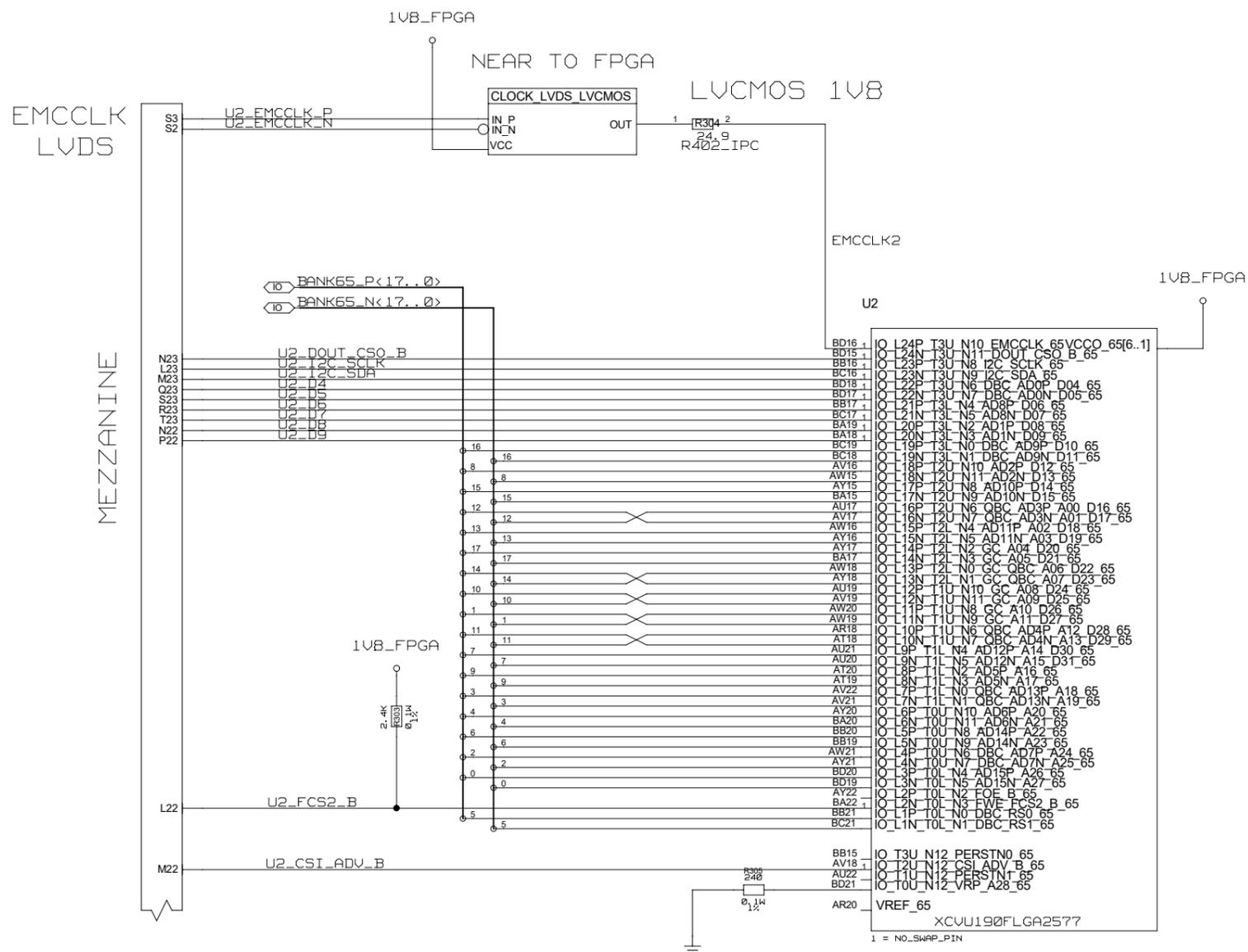
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
61
62
63

CHECKED	J. V. DE SOUZA	DATE	SIGN	DRAWING TITLE JFEX
CHECKED	U. SCHAEFER			
CHECKED	S. RAVE			
DRAWN	BAUSS	25. 08. 2015		
BLOCK TITLE U2_PARALLEL_I/O				SIZE C
UNIVERSITY OF MAINZ				REV.
SCALE				DRAWING NO.
				SHEET 1 OF 5

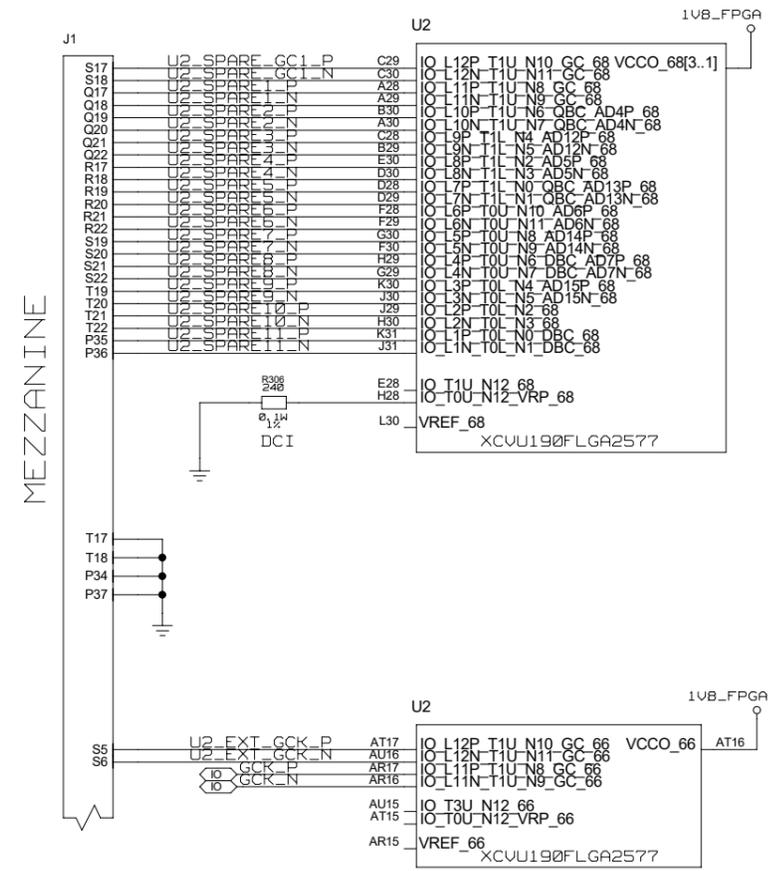
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
65

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U.SCHAEFER			
CHECKED S.RAVE			
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.



MEZZANINE

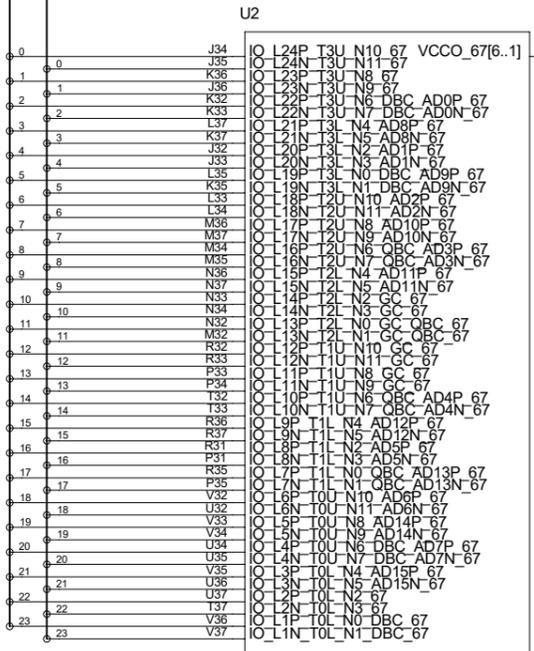
BANK
66
68

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

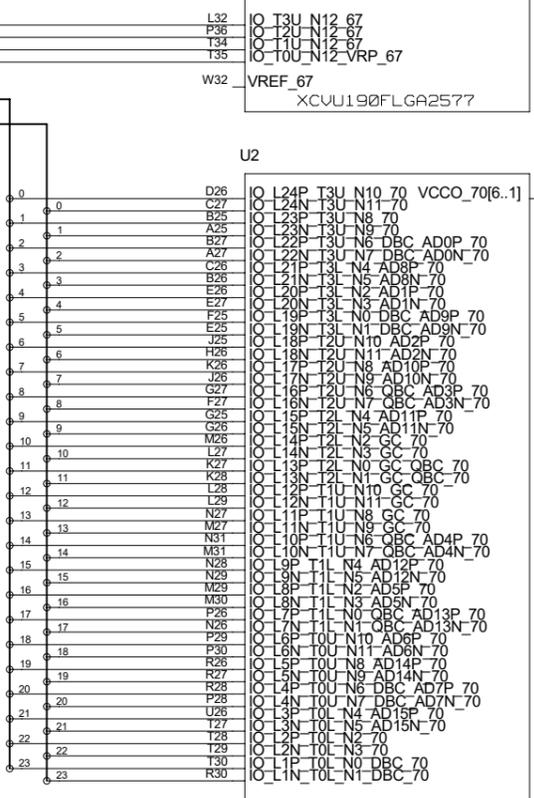
BANK67_P<23..0>
BANK67_N<23..0>

1UB_FPGA



CPLD_I/O<11..0>

BANK70_P<23..0>
BANK70_N<23..0>



MMCX
180
U74

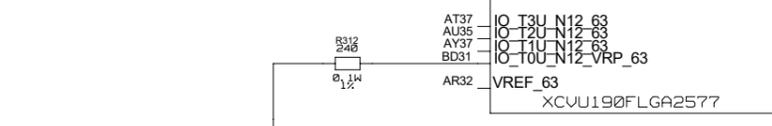
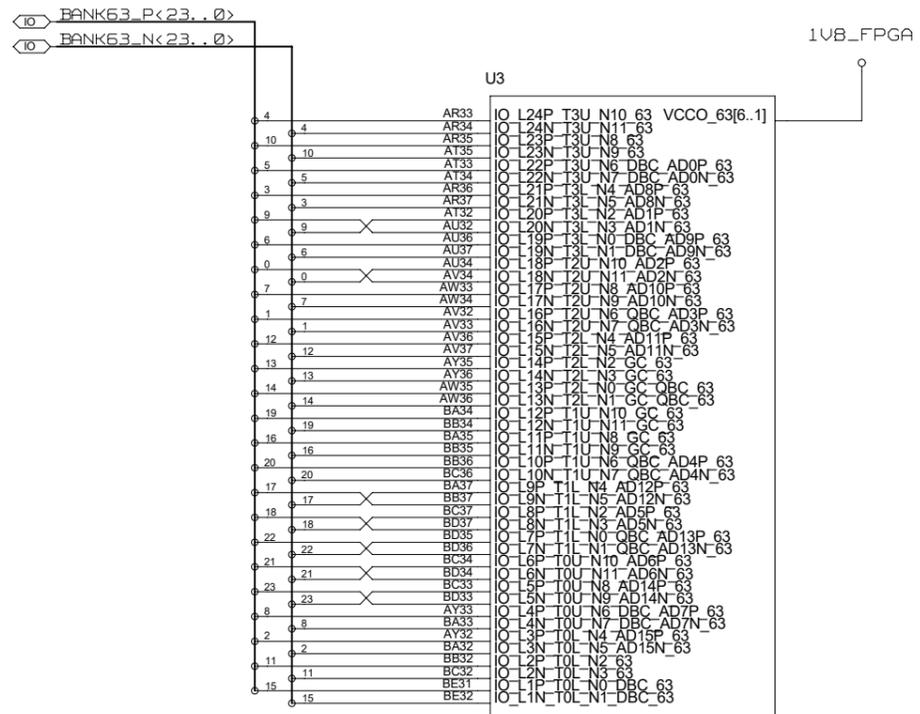
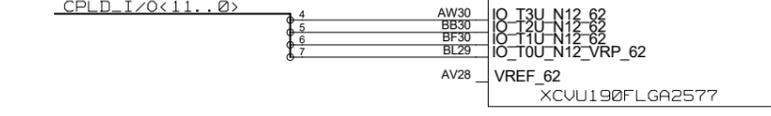
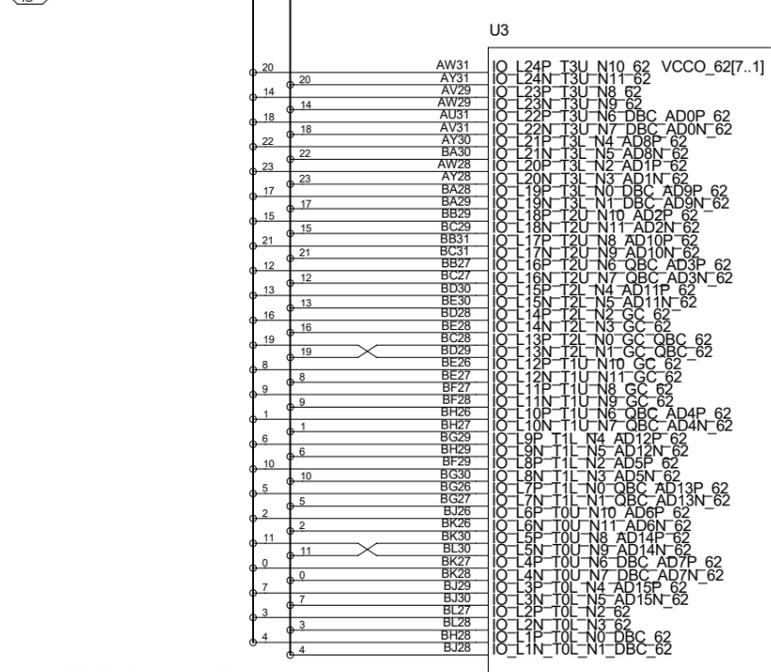
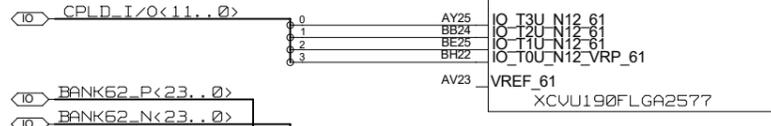
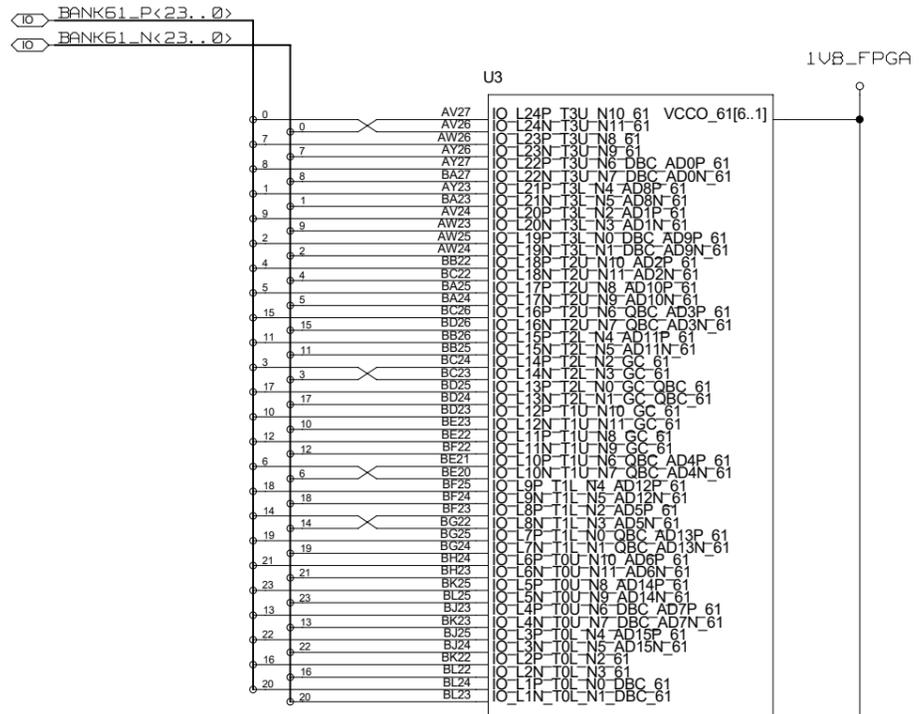
CPLD_CLK

VALUE ????

BANK
67
70

NAME	DATE	SIGN	DRAWING TITLE	
CHECKED J.V.DE SOUZA			JFEX	
CHECKED U.SCHAEFER				
CHECKED S.RAVE				
DRAWN BAUSS	25.08.2015		BLOCK TITLE	
			U2_PARALLEL_I/O	
UNIVERSITY OF MAINZ			SIZE C	DRAWING NO.
			SCALE	SHEET 4 OF 5

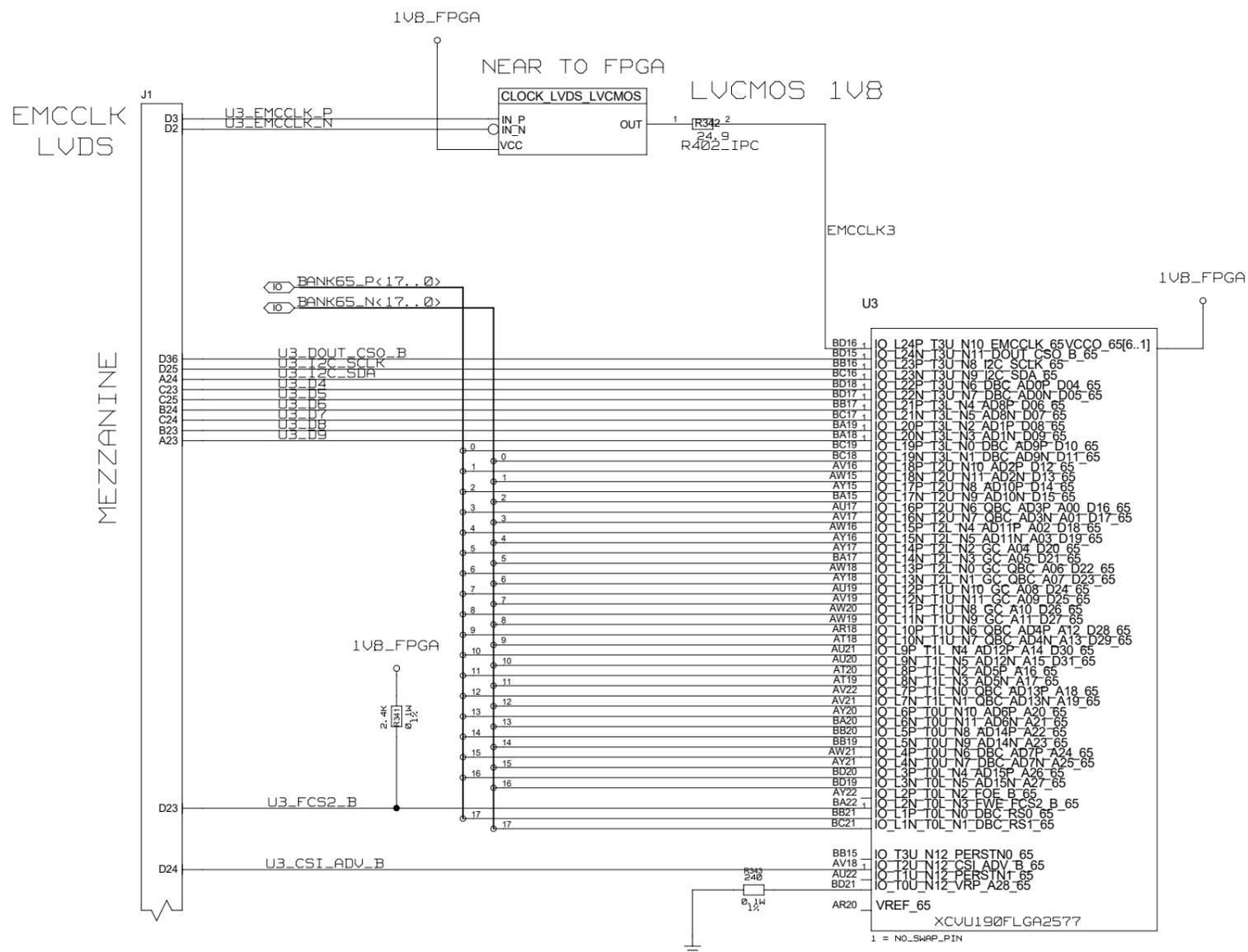
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
61
62
63

CHECKED	J. V. DE SOUZA			DRAWING TITLE JFEX
CHECKED	U. SCHAEFER			
CHECKED	S. RAVE			
DRAWN	BAUSS	25.08.2015		
BLOCK TITLE U3_PARALLEL_I/O				
UNIVERSITY OF MAINZ		SIZE C	REV.	DRAWING NO.
		SCALE		SHEET 1 OF 5

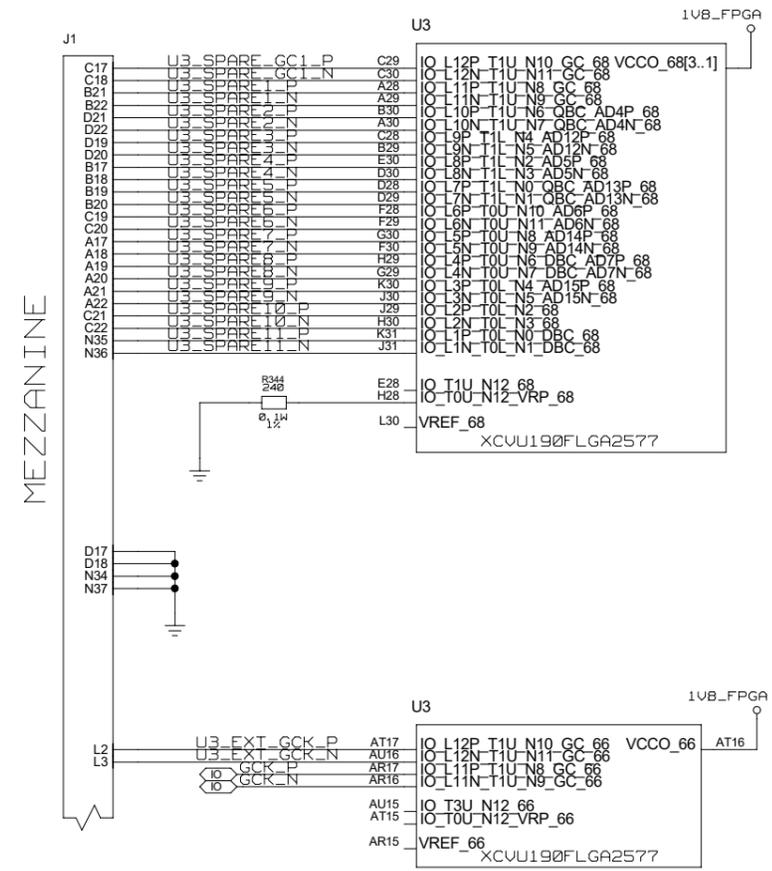
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
65

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U.SCHAEFER			
CHECKED S.RAVE			
DRAWN BAUSS	25.08.2015		
BLOCK TITLE			
U3_PARALLEL_I/O			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE		SHEET 2 OF 5	

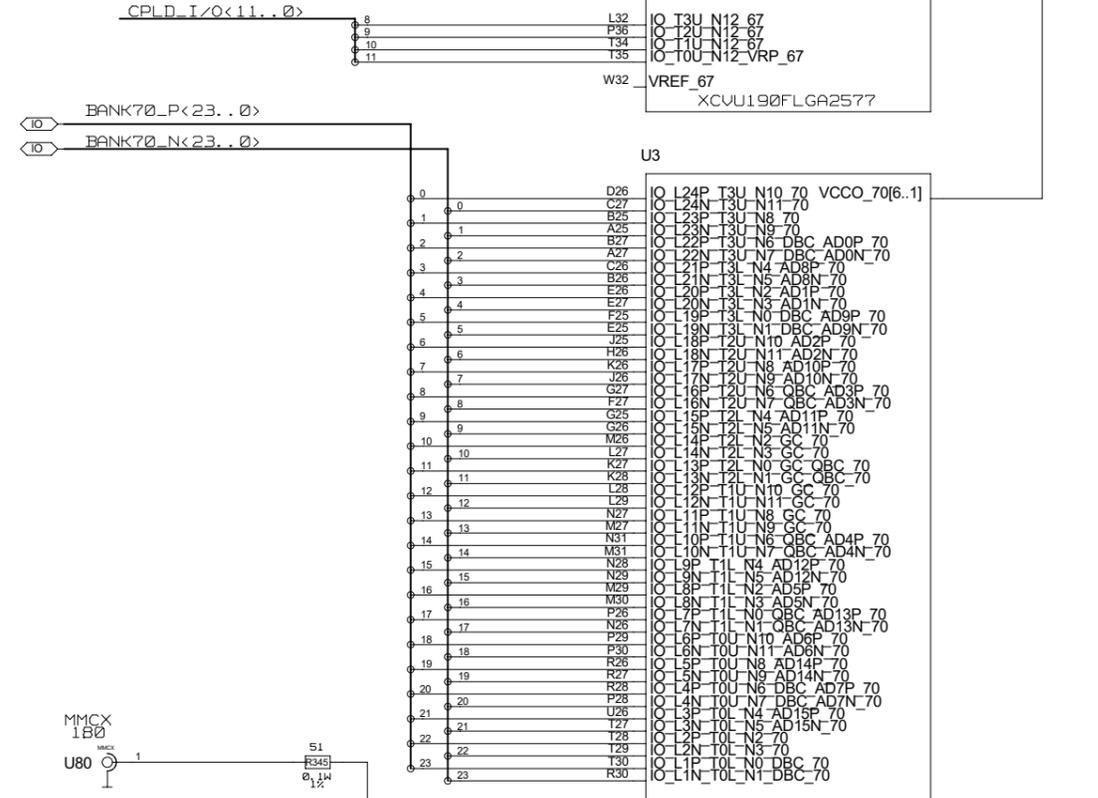
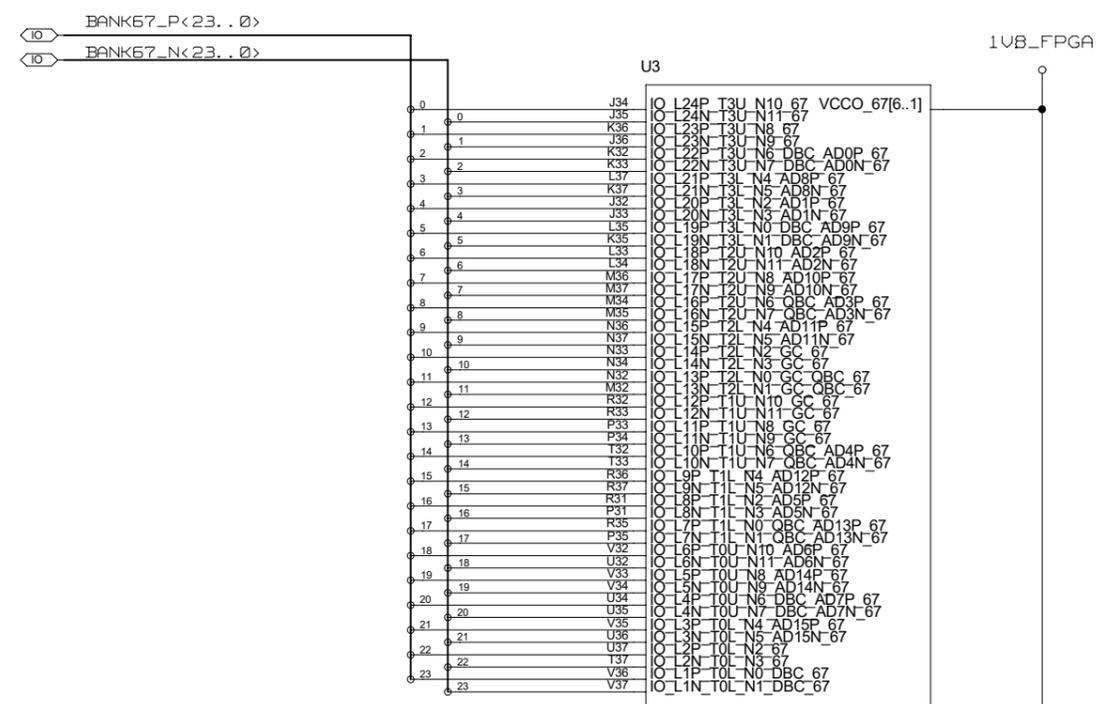
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
66
68

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

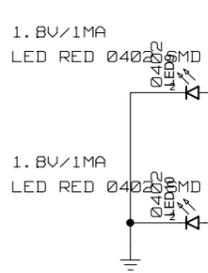
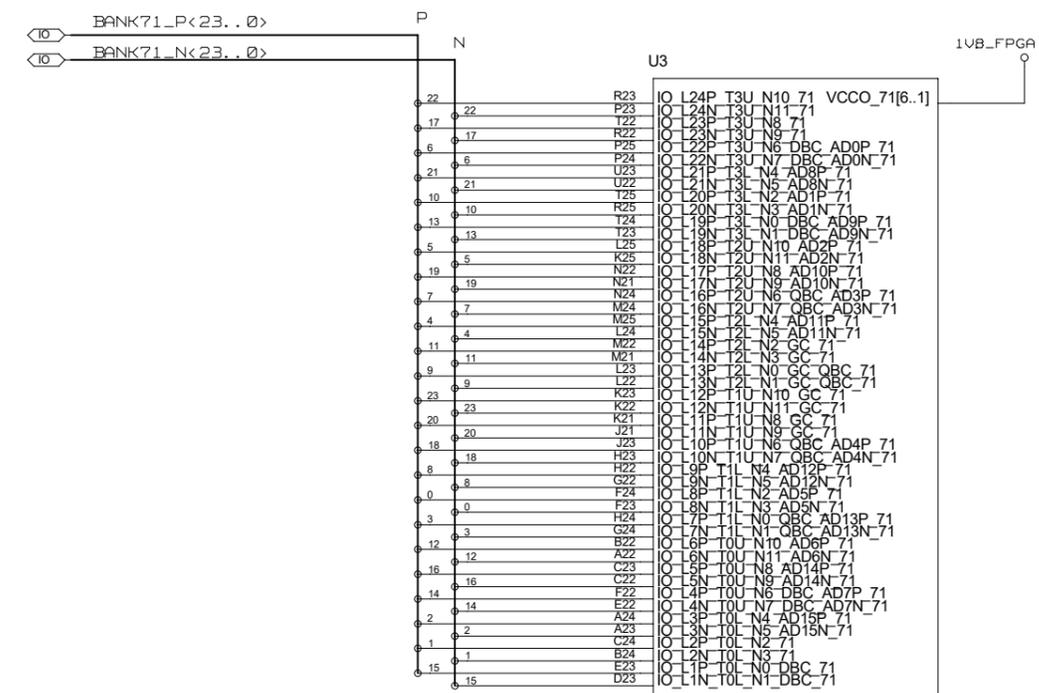
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
67
70

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

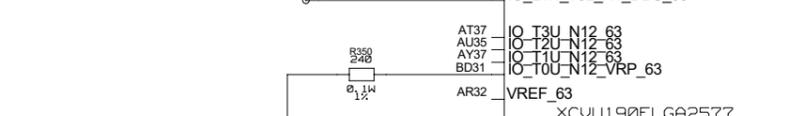
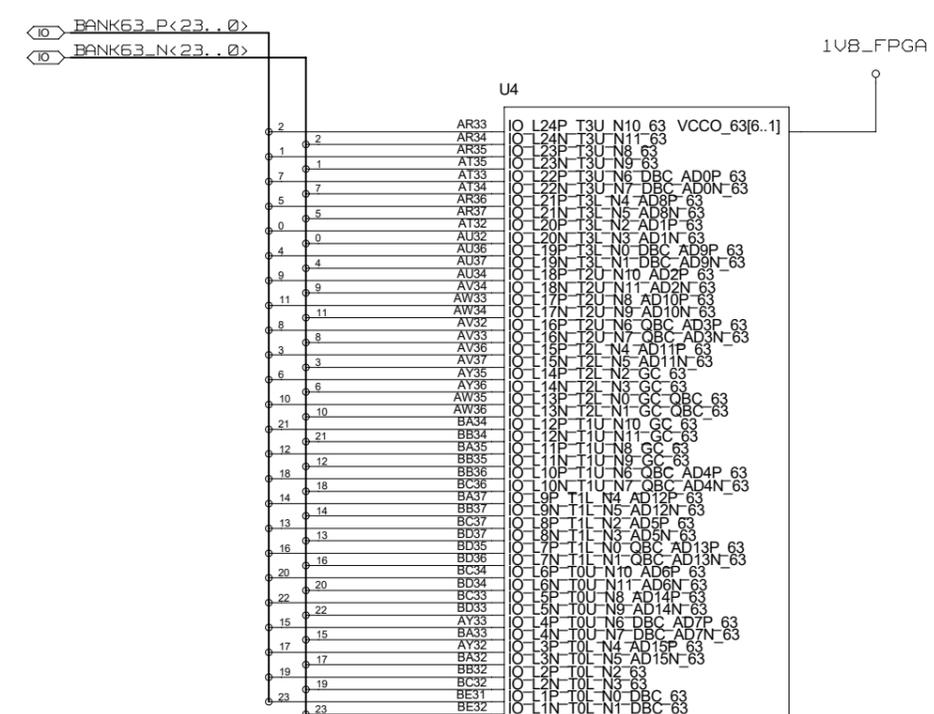
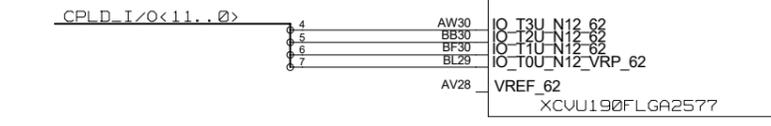
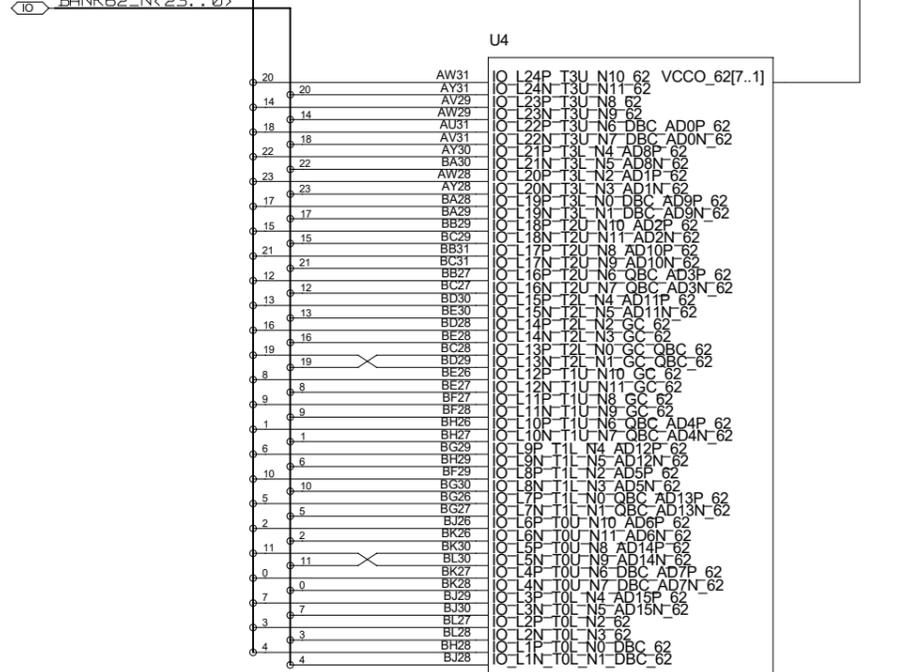
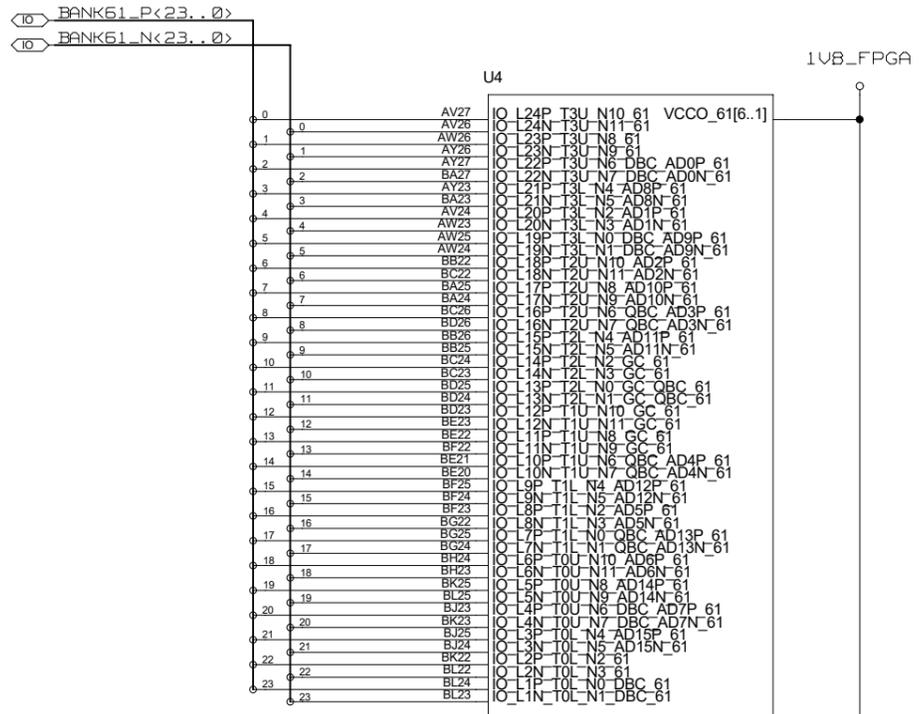
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
71
72

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

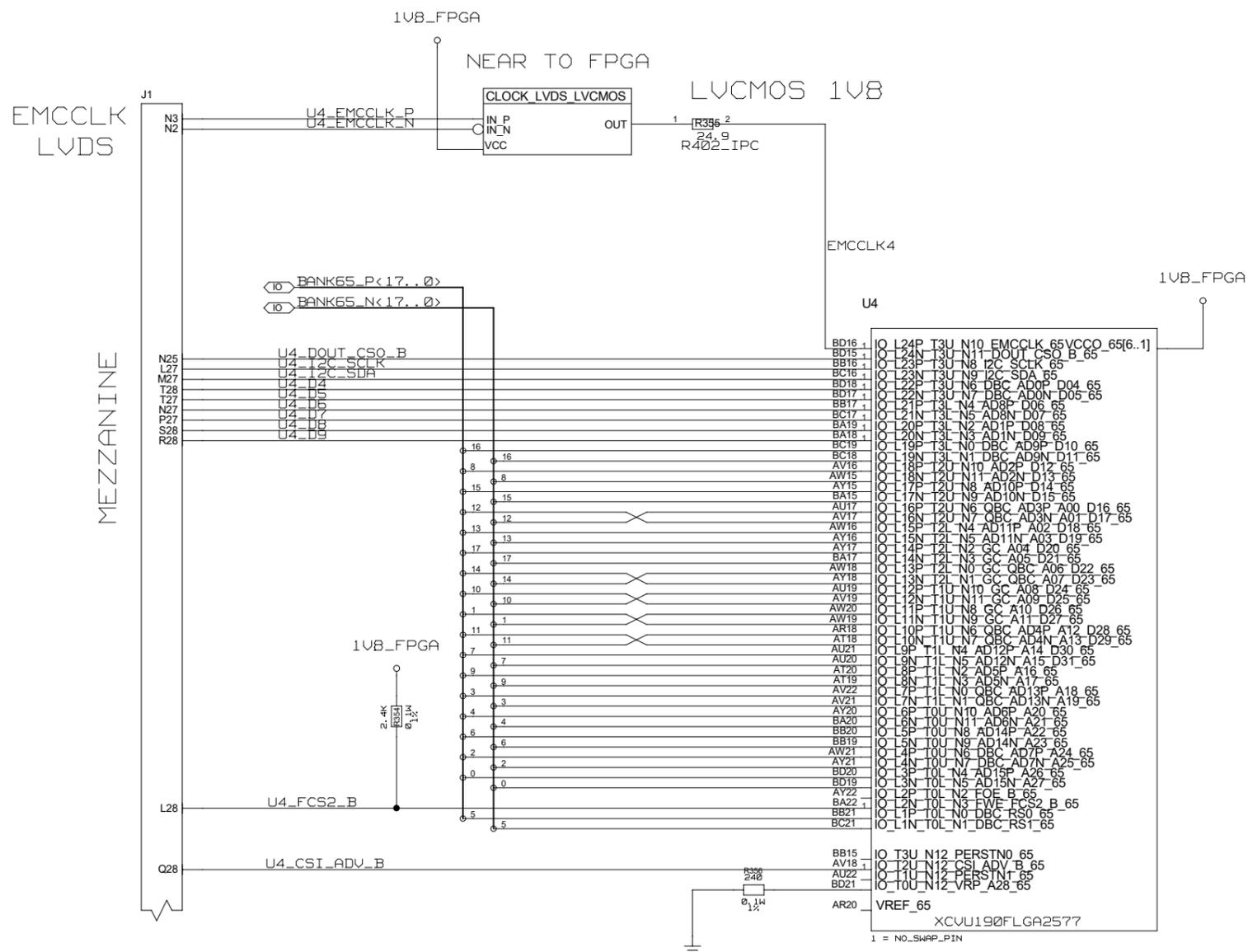
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
61
62
63

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

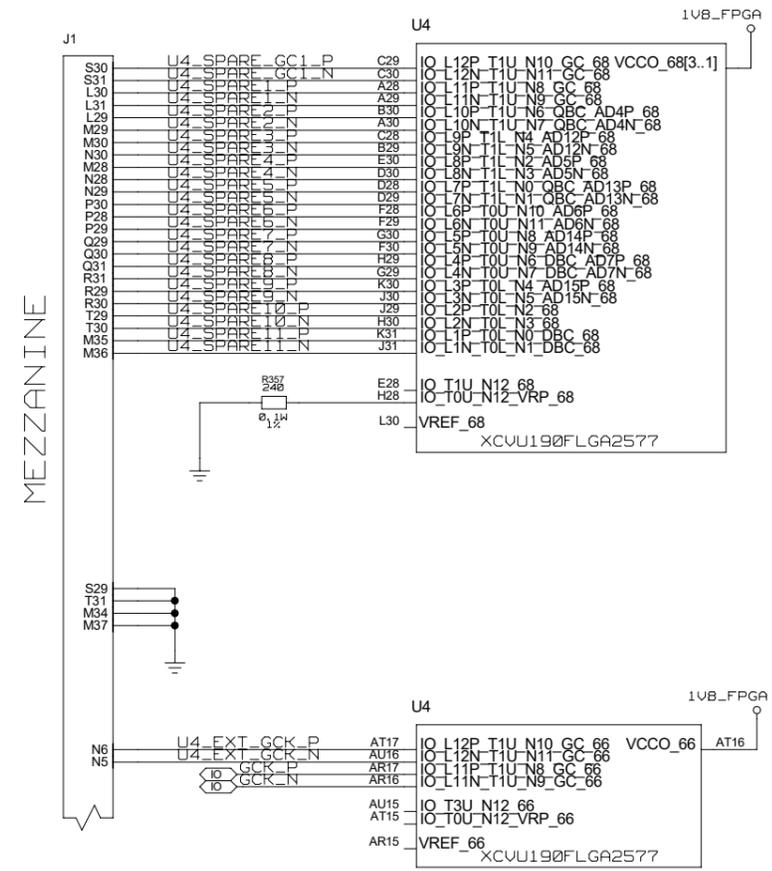
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
65

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

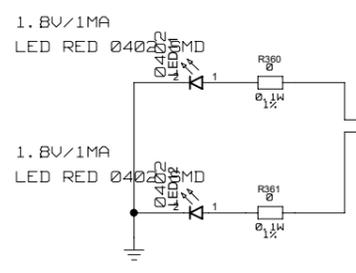
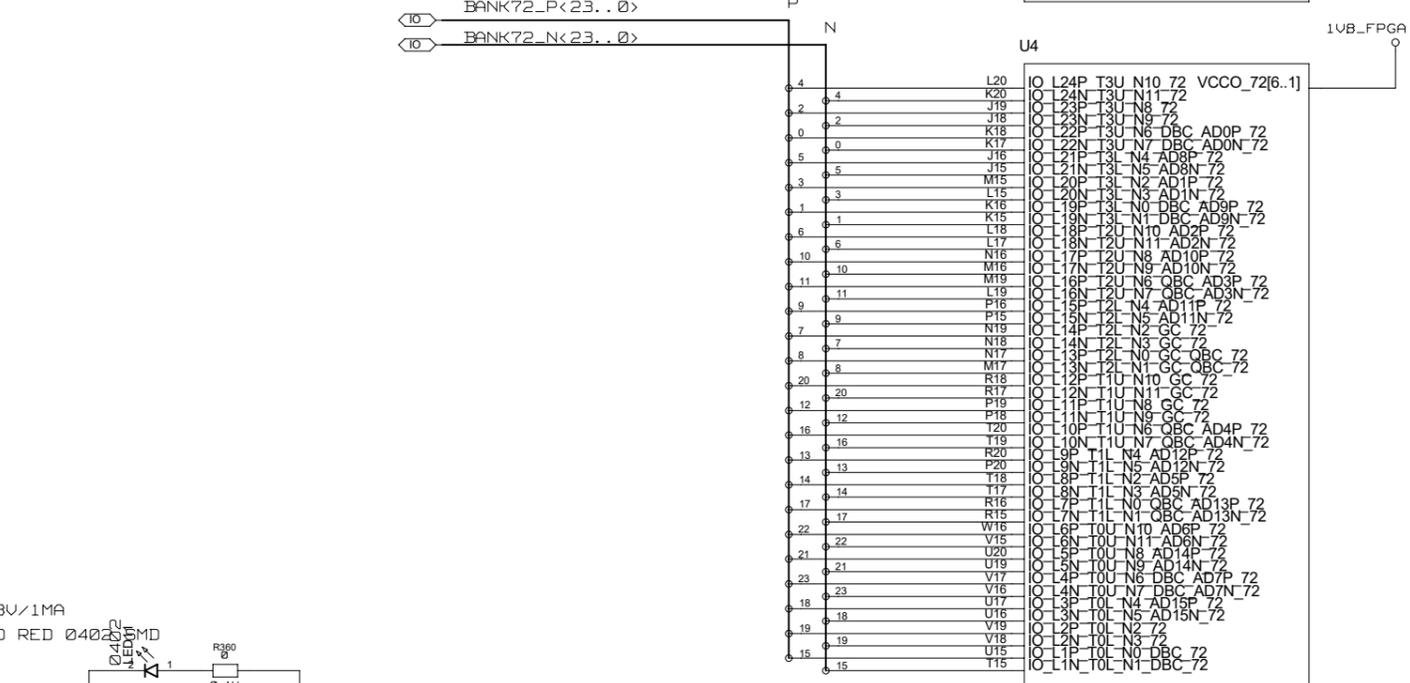
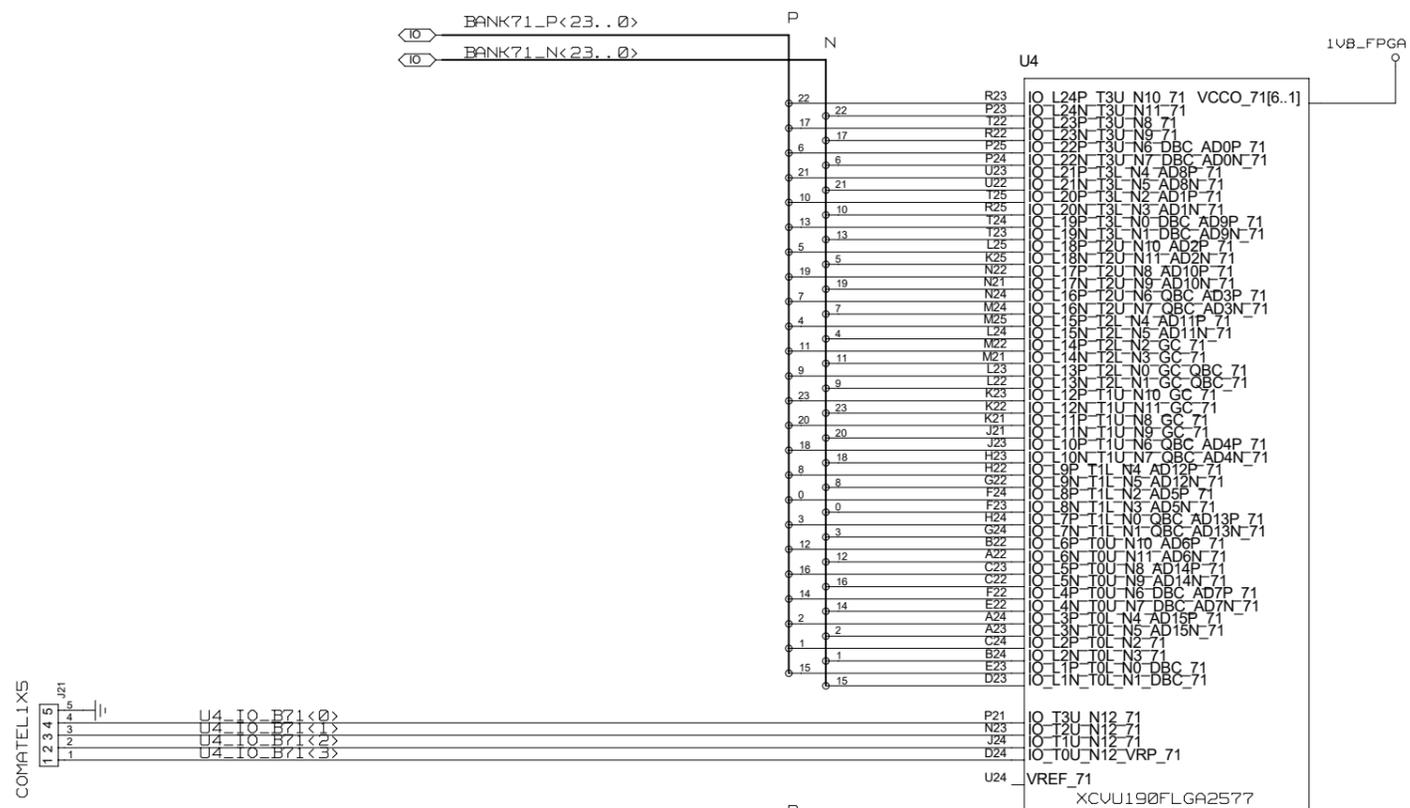
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
66
68

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

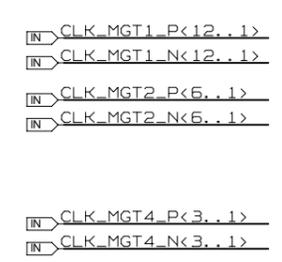
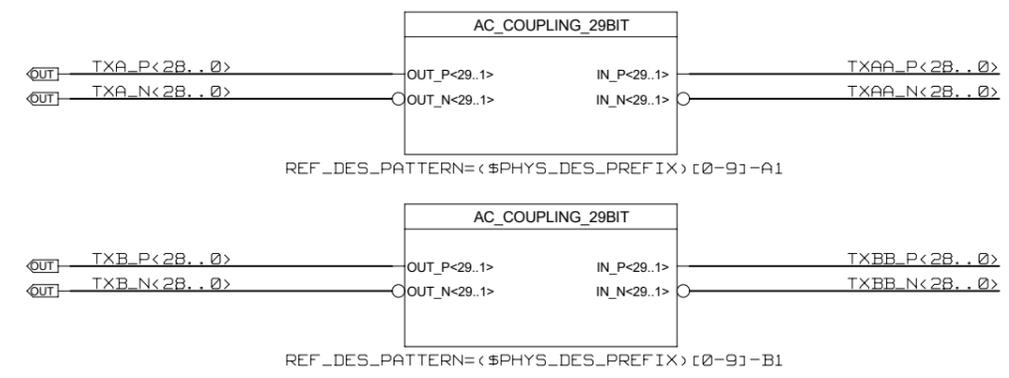
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
71
72

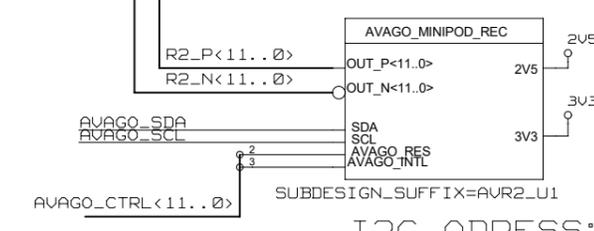
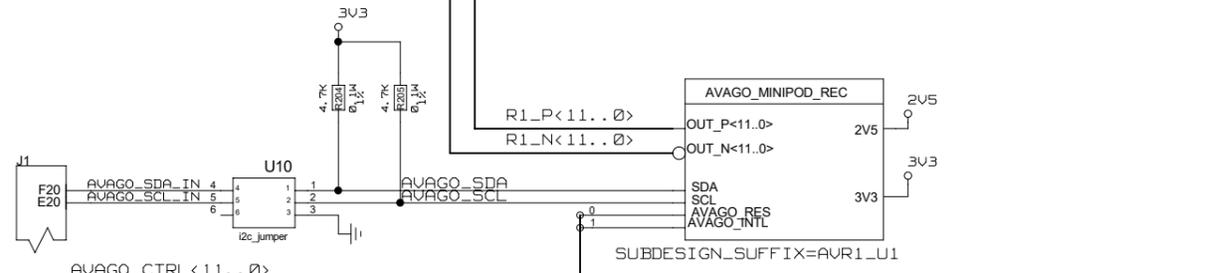
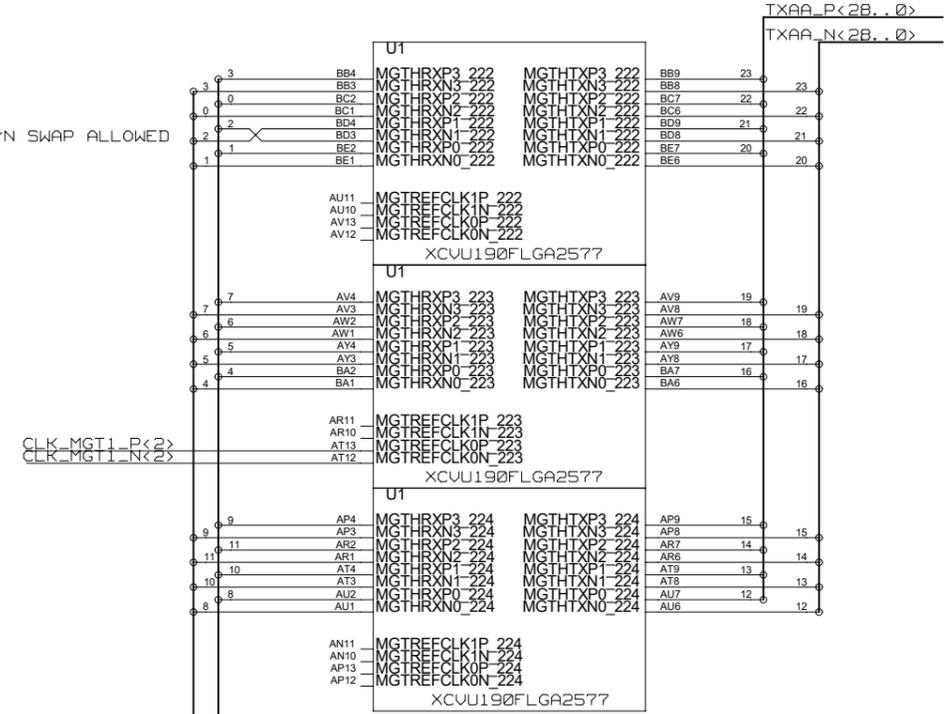
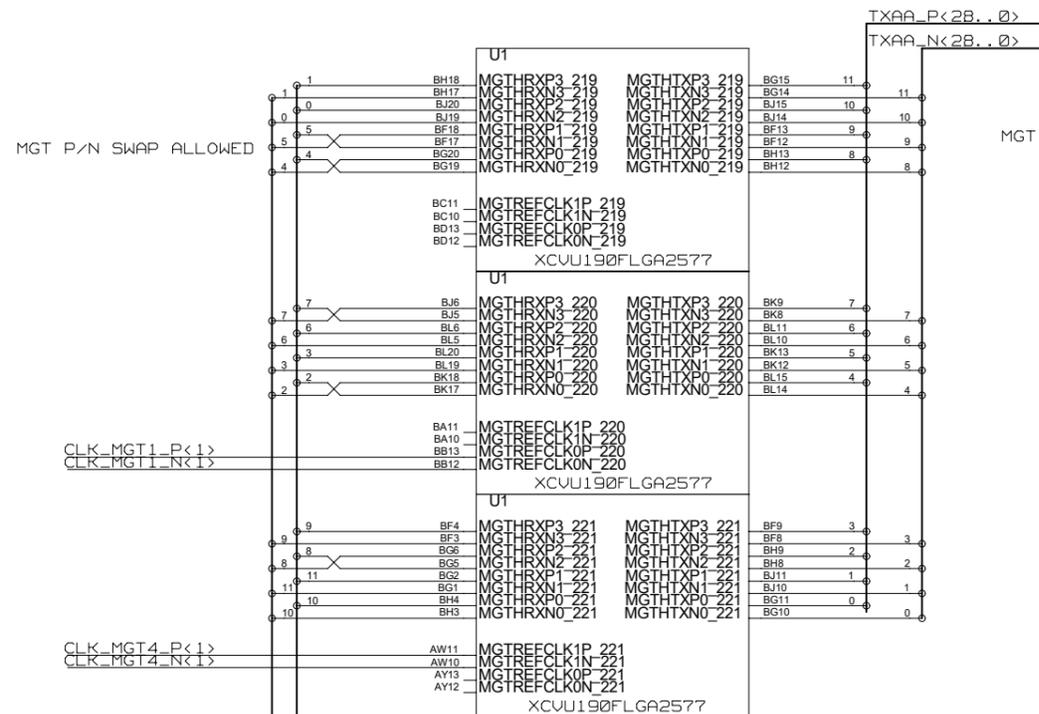
NAME	DATE	SIGN	DRAWING TITLE
CHECKED J.V. DE SOUZA			JFEX
CHECKED U.SCHAEFER			
CHECKED S.RAVE			
DRAWN BAUSS	25.08.2015		
BLOCK TITLE			
U4_PARALLEL_I/O			
UNIVERSITY OF MAINZ		SIZE C	DRAWING NO.
SCALE		REV.	SHEET 5 OF 5

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



CHECKED	J.V.DE SOUZA			DRAWING TITLE I/O + AC COUPLING
CHECKED	U.SCHAEFER			
CHECKED	S.RAVE			
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U1_MGT_REAL_TIME				SIZE C
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

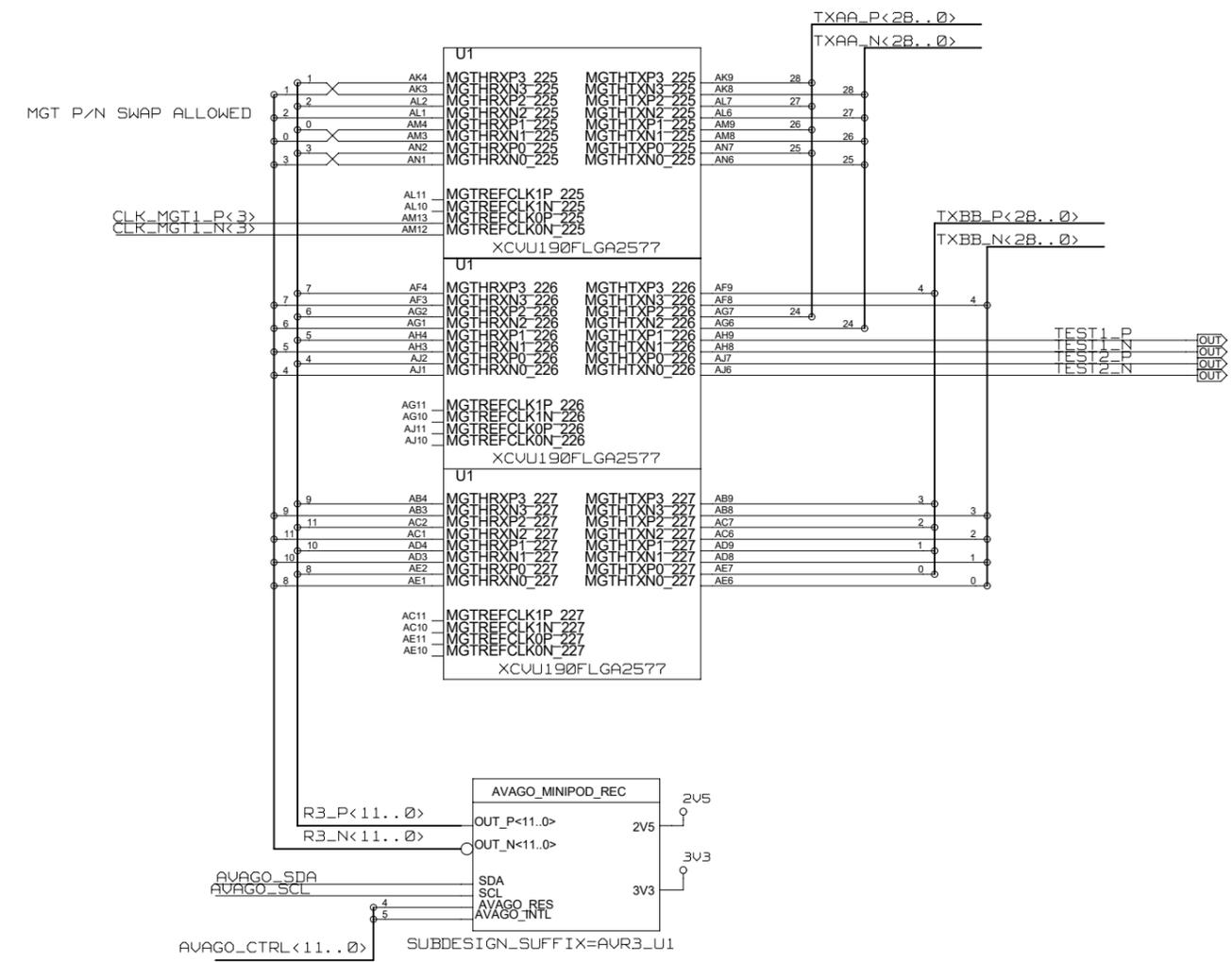
I2C ADDRESS:
 R3=XXX R4=XXX
 R5=XXX R6=XXX
 R7=XXX R8=XXX

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			AVAGO + TXA
CHECKED U.SCHAEFER			
CHECKED S.RAVE			
DRAWN BAUSS	07.08.2015		
BLOCK TITLE			
U1_MGT_REAL_TIME			
UNIVERSITY OF MAINZ		SIZE C	REV.
		SCALE	DRAWING NO.
		SHEET 2 OF 7	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

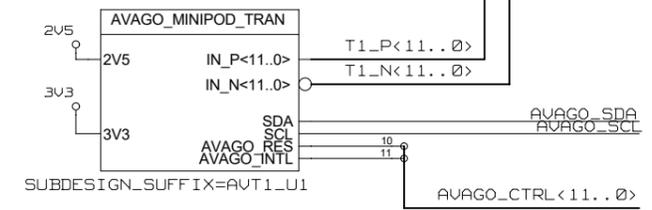
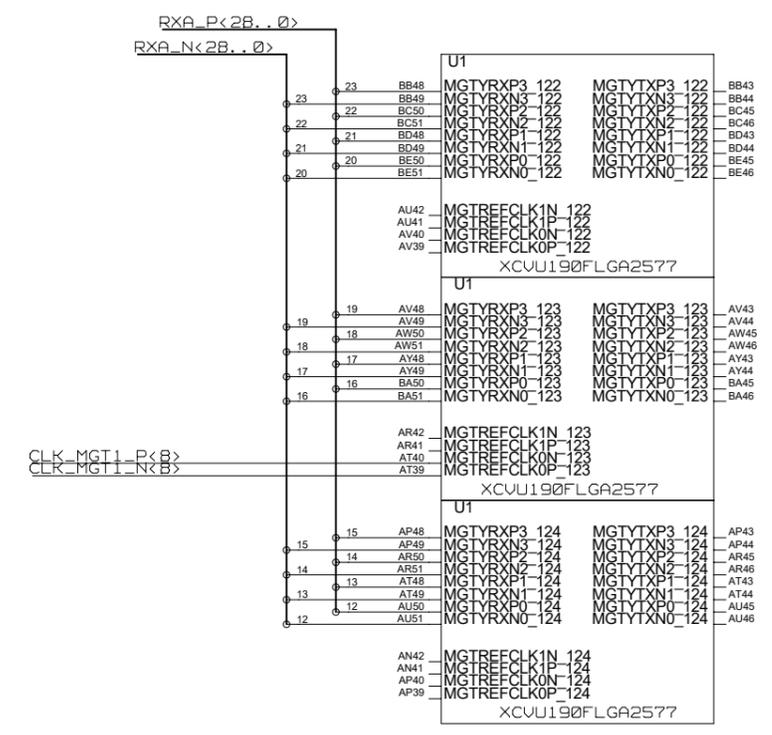
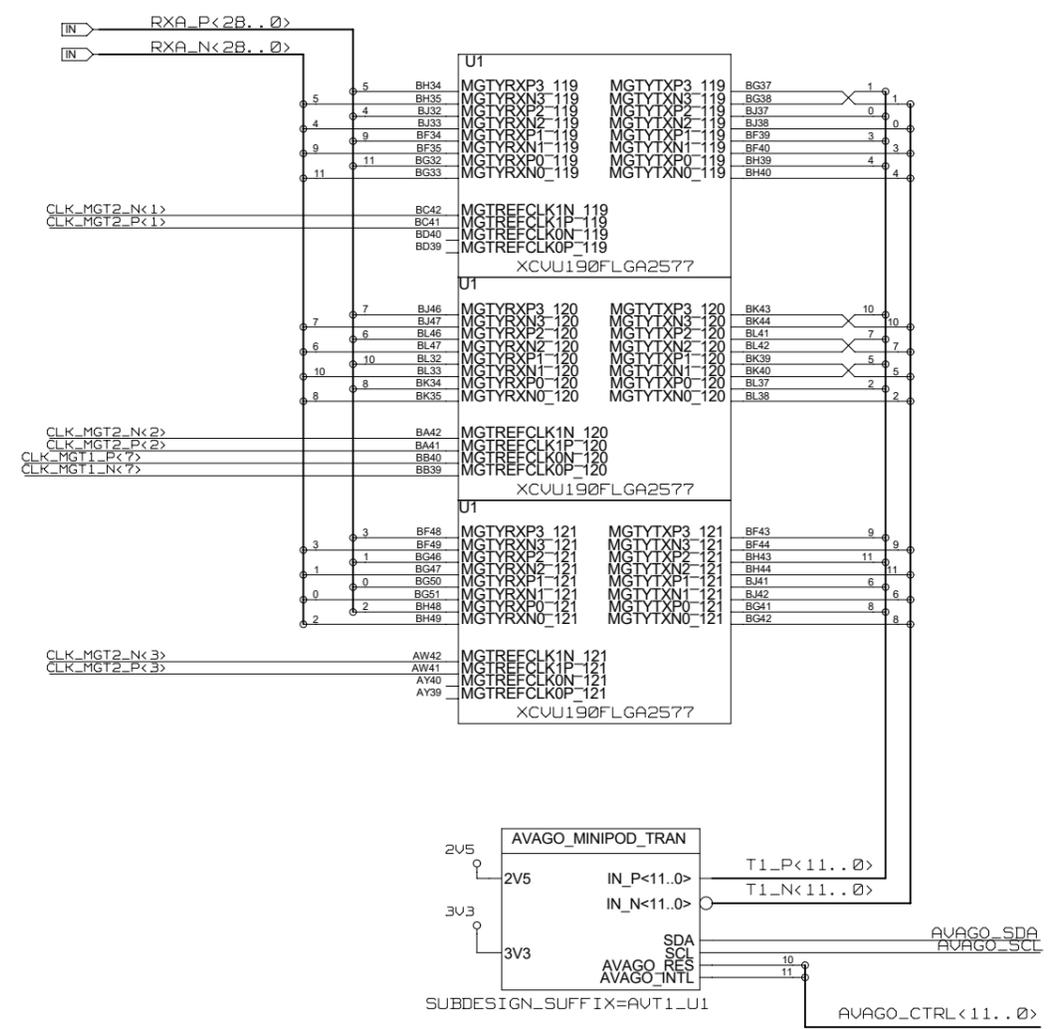


I2C ADDRESS:
R3=XXX R4=XXX
R5=XXX R6=XXX
R7=XXX R8=XXX

BANK
225
226
227

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

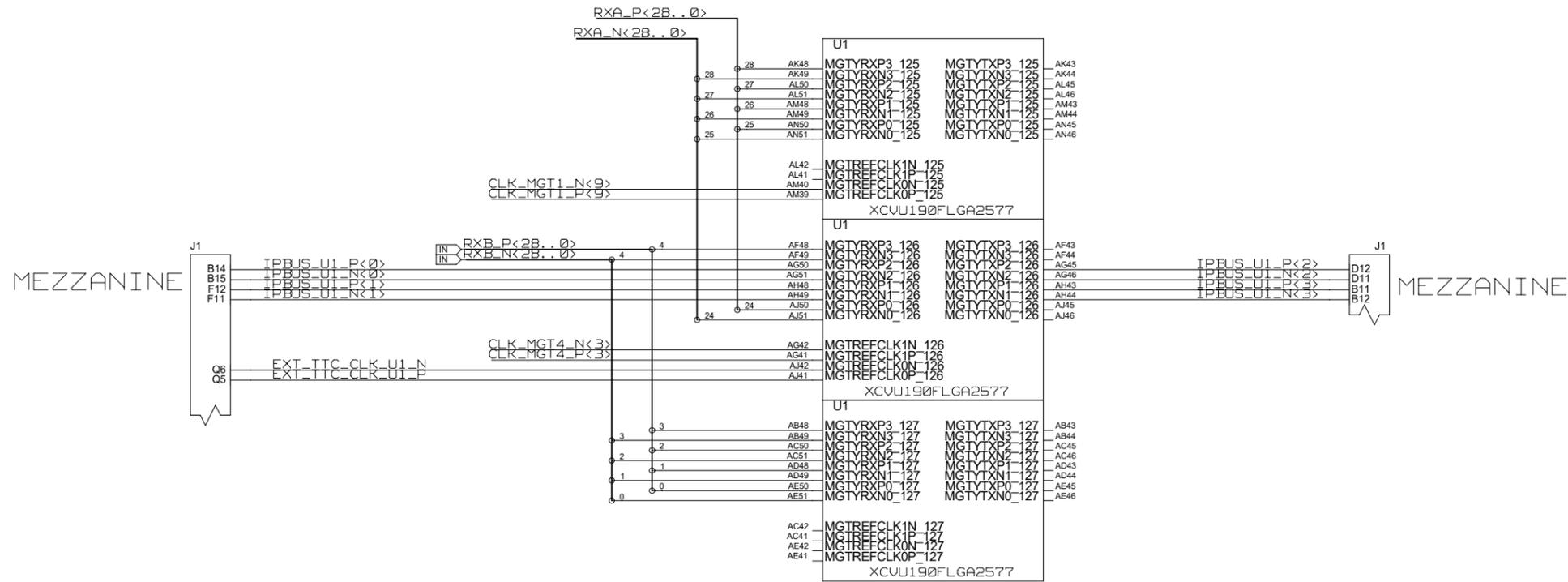


I2C ADDRESS:
R3=XXX R4=XXX
R5=XXX R6=XXX
R7=XXX R8=XXX

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		AVAGO + RXA
CHECKED	U.SCHAEFER		
CHECKED	S.RAVE		
DRAWN	BAUSS	07.08.2015	
BLOCK TITLE			UNIVERSITY OF MAINZ
SIZE	REV.	DRAWING NO.	
SCALE		SHEET 5 OF 7	

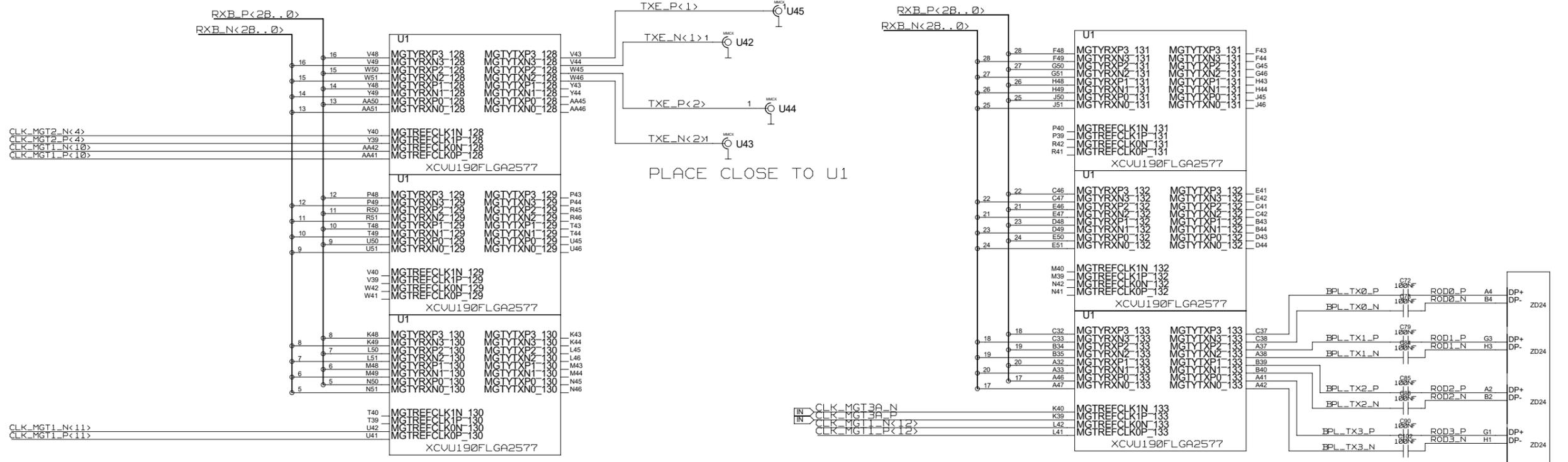
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
125
126
127

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

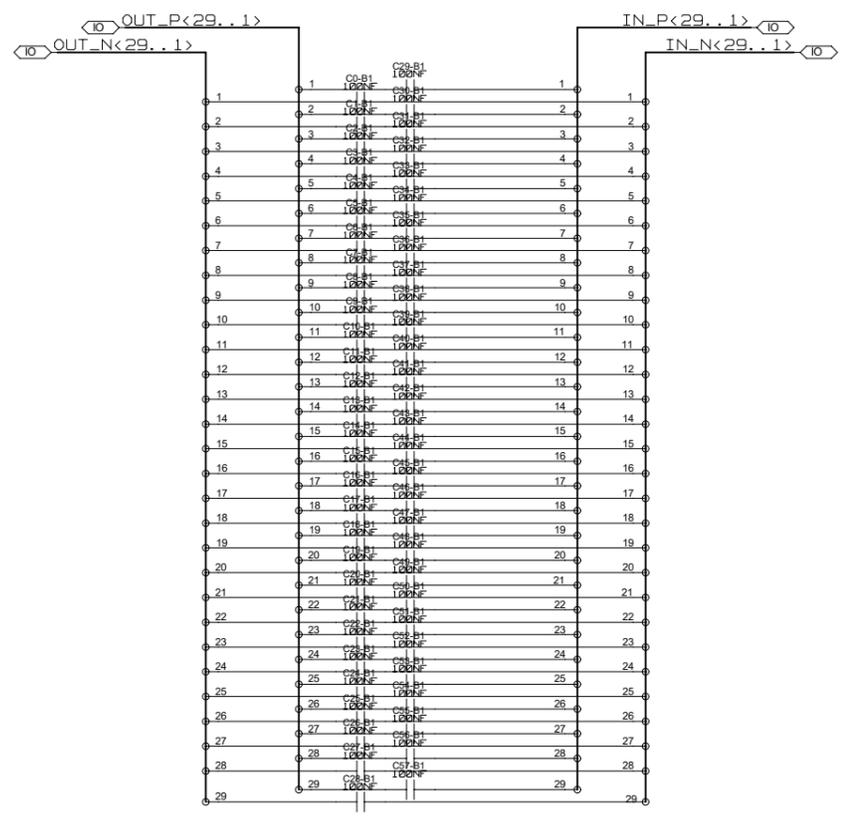
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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

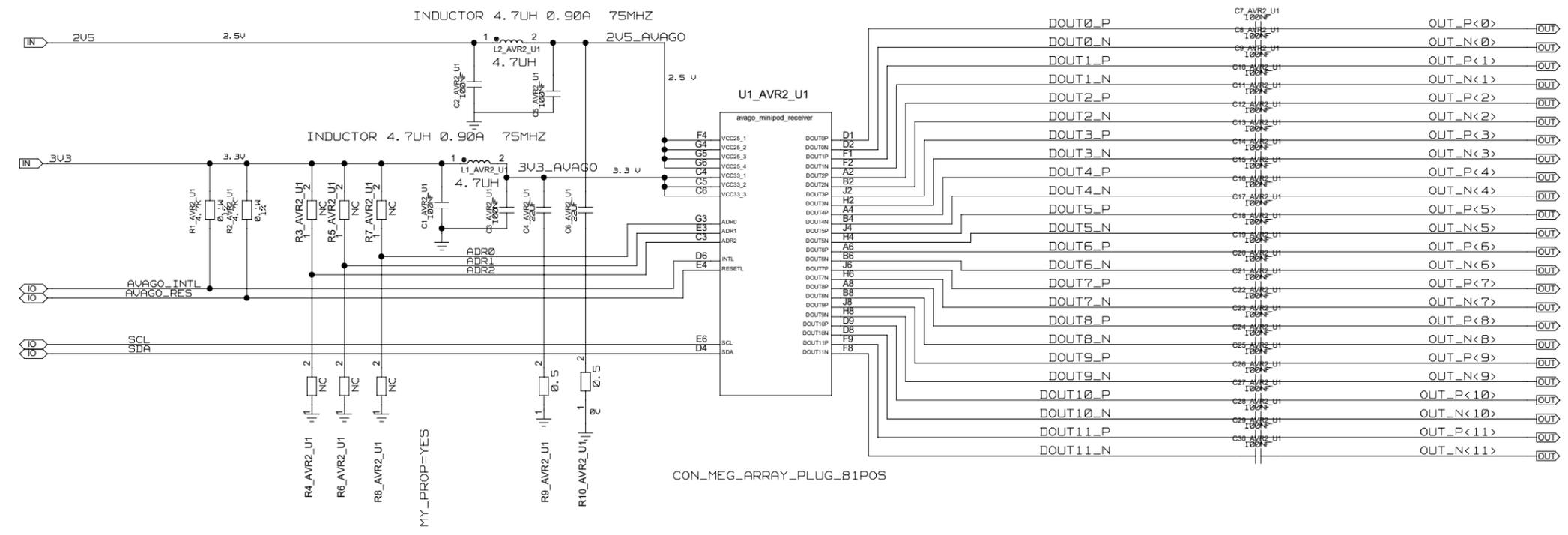
NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			RXB + TXC
CHECKED U. SCHAEFER			
CHECKED S. RAVE			
DRAWN BAUSS	07.08.2015		
BLOCK TITLE			
U1_MGT_REAL_TIME			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE		SHEET 7 OF 7	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



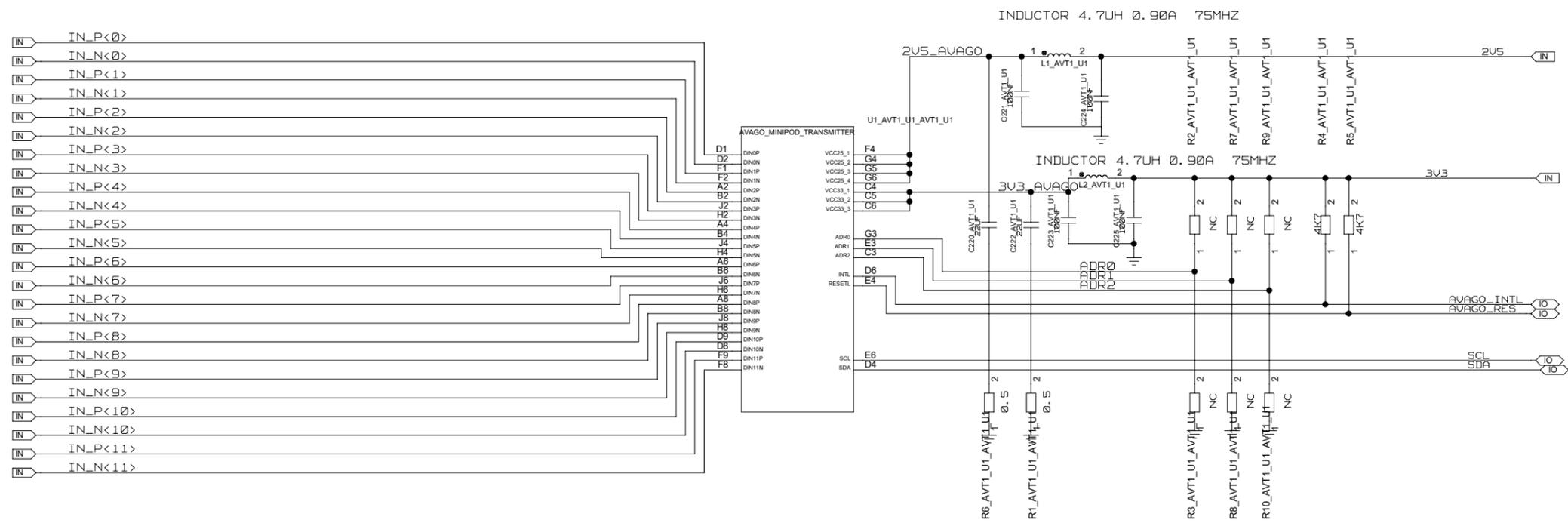
CHECKED	J. V. DE SOUZA			DRAWING TITLE AC COUPLING 29BIT	
CHECKED	U.SCHAEFER				
CHECKED	S.RAVE				
DRAWN	BAUSS				
BLOCK TITLE					
UNIVERSITY OF MAINZ				SIZE C	REV.
				SCALE	DRAWING NO.
			SHEET	OF	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



CHECKED	J. V. DE SOUZA			DRAWING TITLE AVAGO RECEIVER		
CHECKED	U. SCHAEFER					
CHECKED	S. RAVE					
DRAWN	BAUSS					
BLOCK TITLE				SIZE	REV.	DRAWING NO.
UNIVERSITY OF MAINZ				C		
				SCALE		SHEET OF

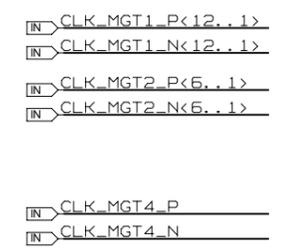
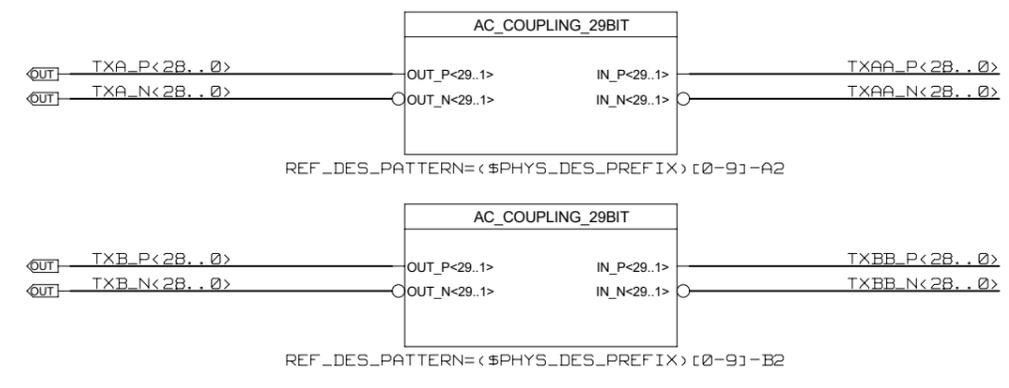
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

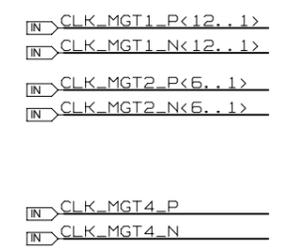
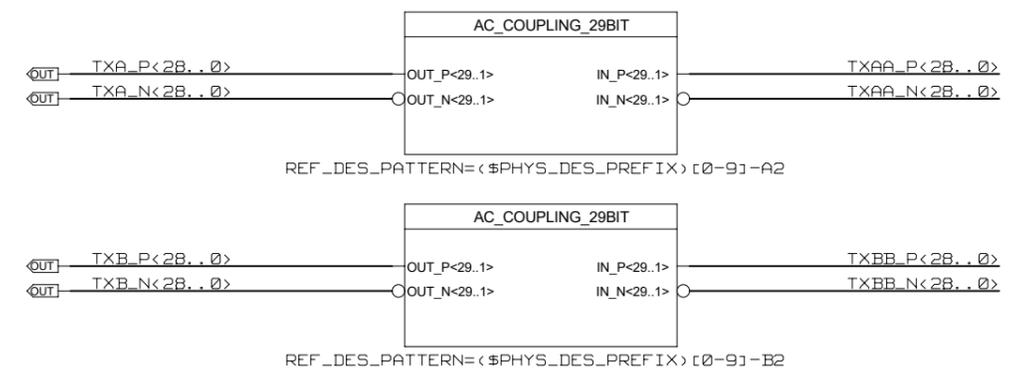
AC COUPLING



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

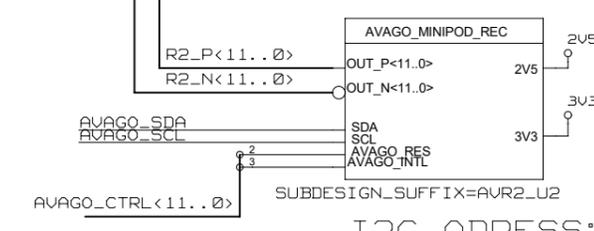
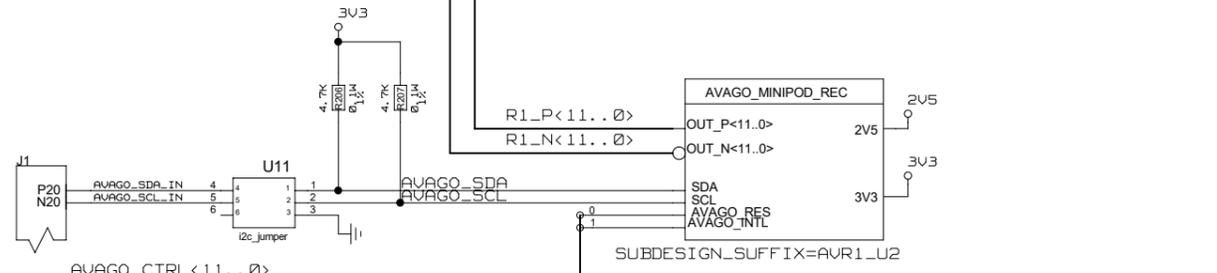
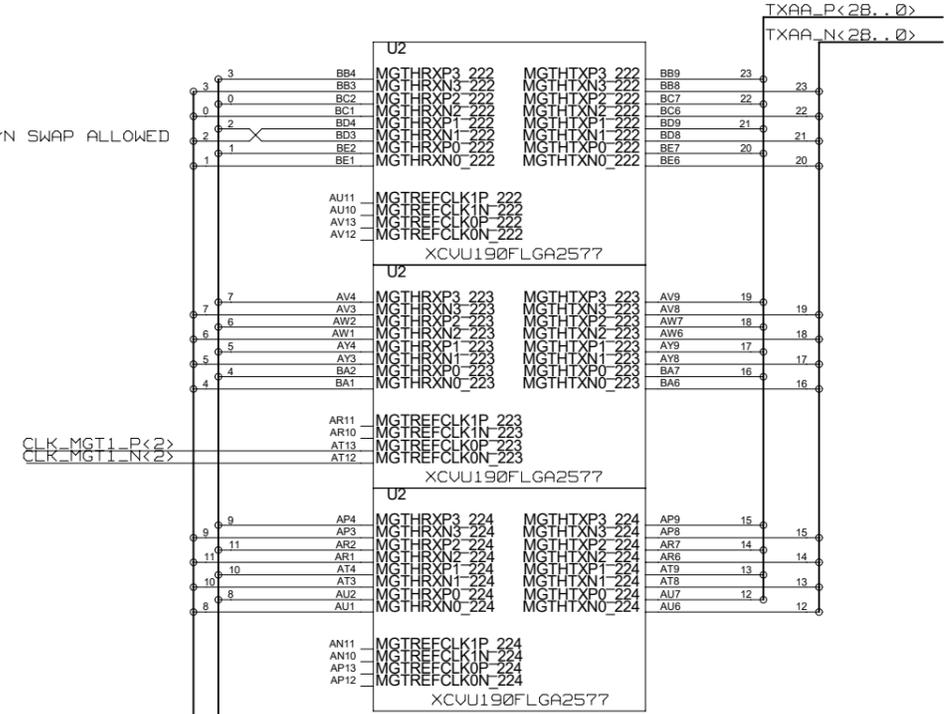
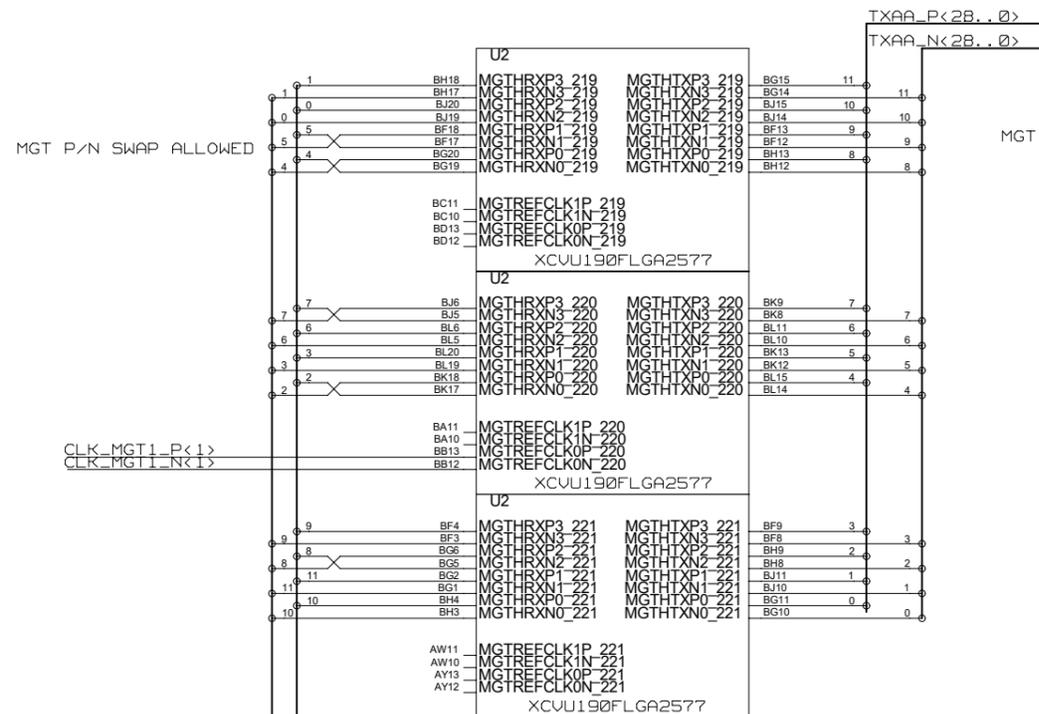
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

AC COUPLING



CHECKED	J.V.DE SOUZA			DRAWING TITLE I/O + AC COUPLING
CHECKED	U.SCHAEFER			
CHECKED	S.RAVE			
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U2_MGT_REAL_TIME				SIZE C
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

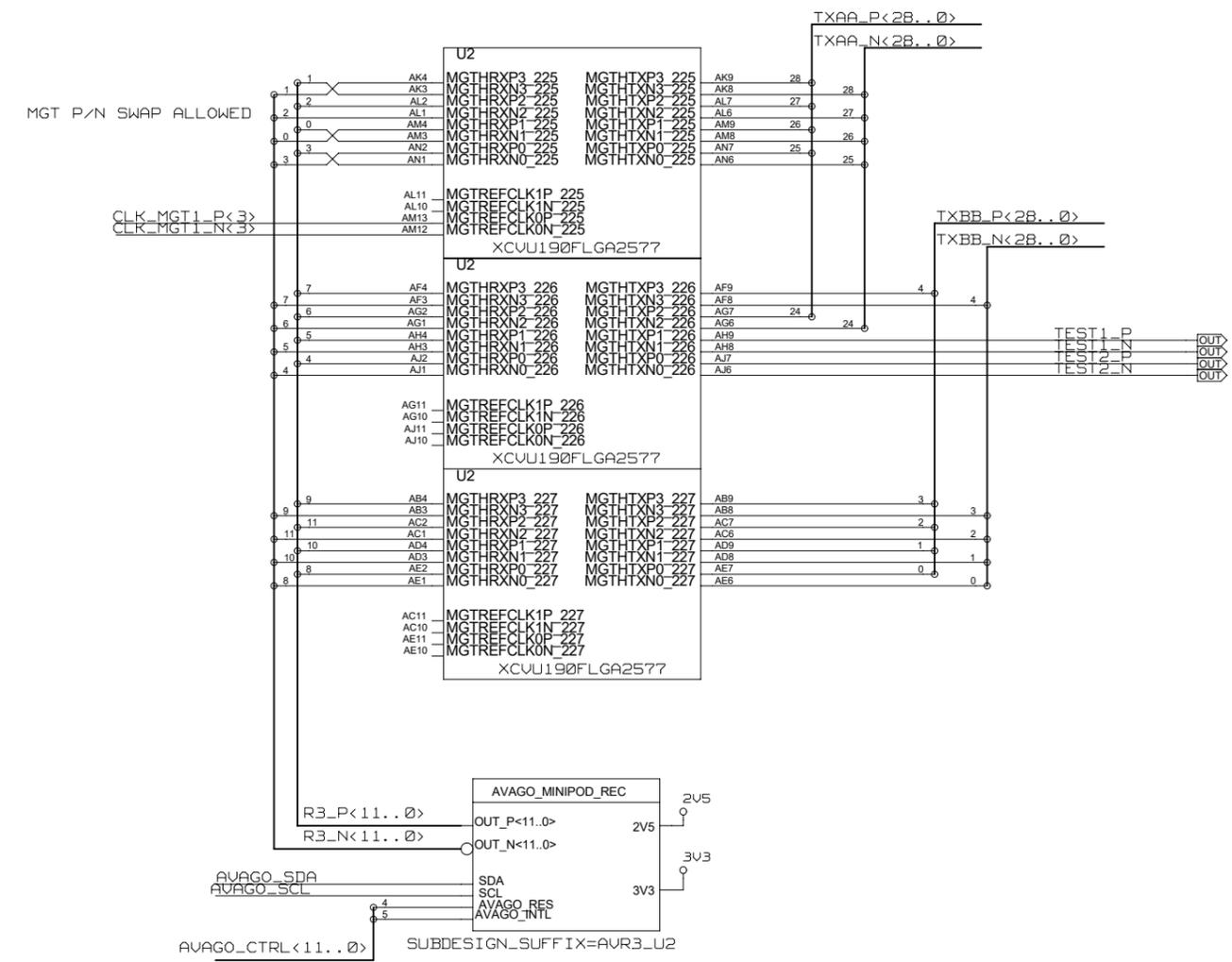
I2C ADDRESS:
 R3=XXX R4=XXX
 R5=XXX R6=XXX
 R7=XXX R8=XXX

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			AVAGO + TXA
CHECKED U.SCHAEFER			
CHECKED S.RAVE			
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.

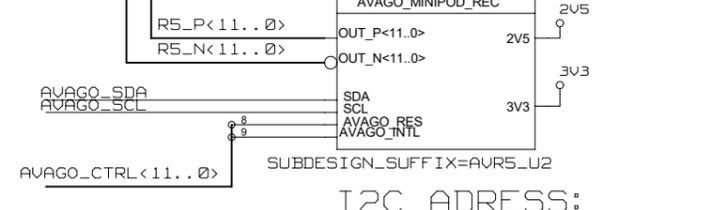
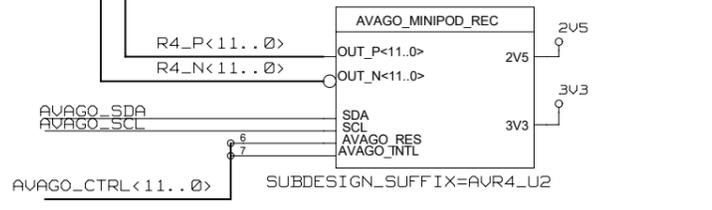
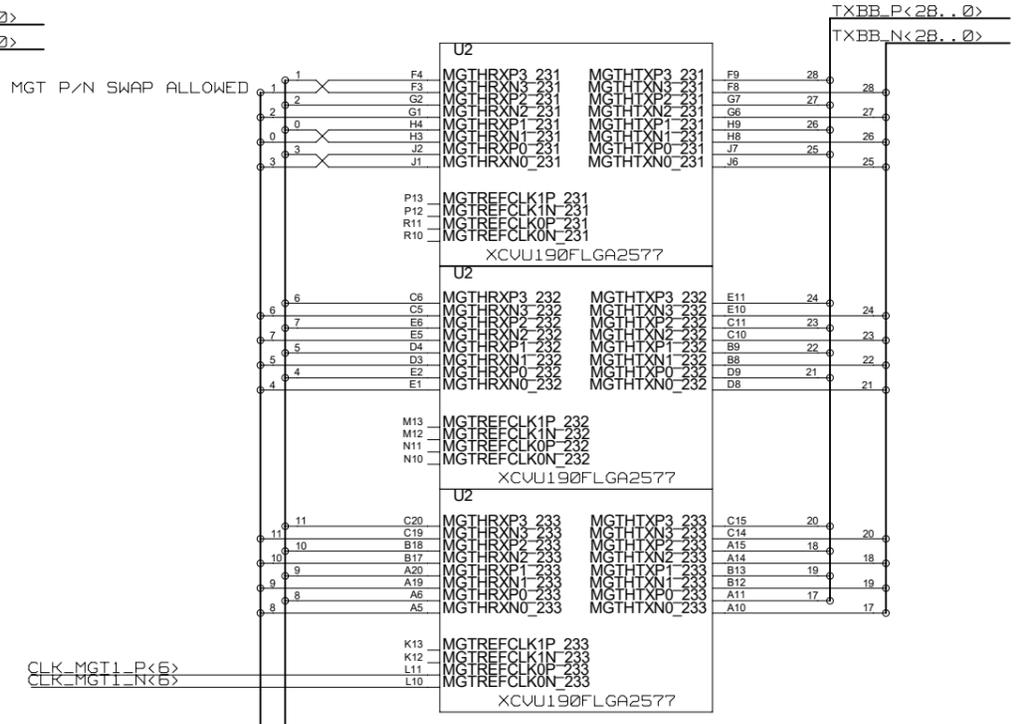
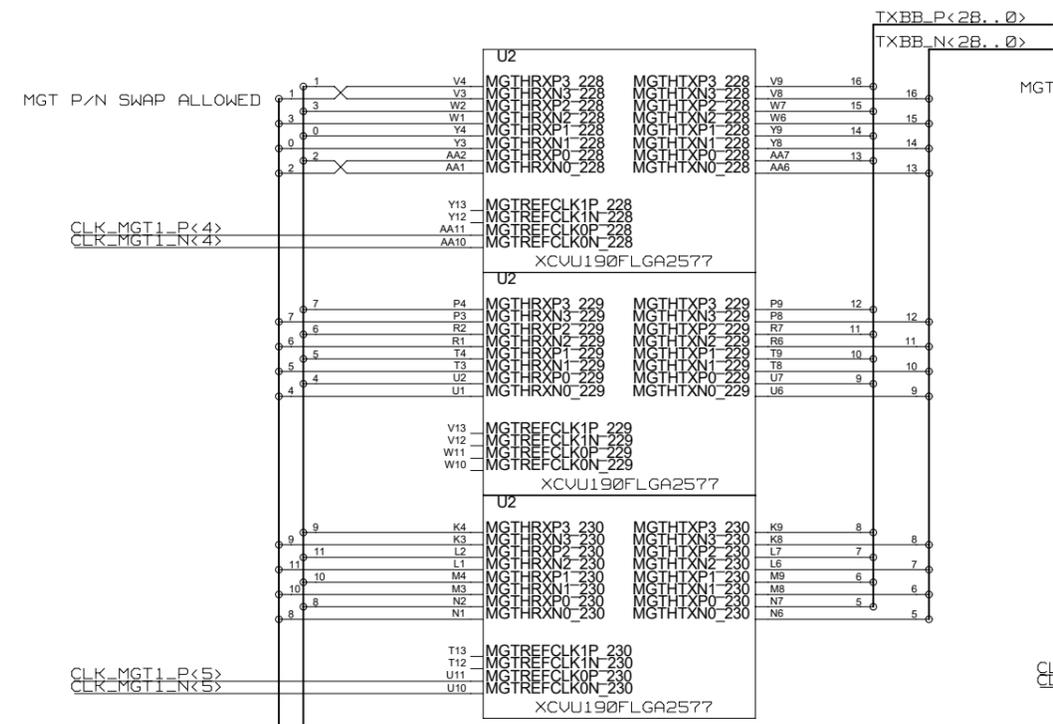


I2C ADDRESS:
R3=XXX R4=XXX
R5=XXX R6=XXX
R7=XXX R8=XXX

BANK
225
226
227

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

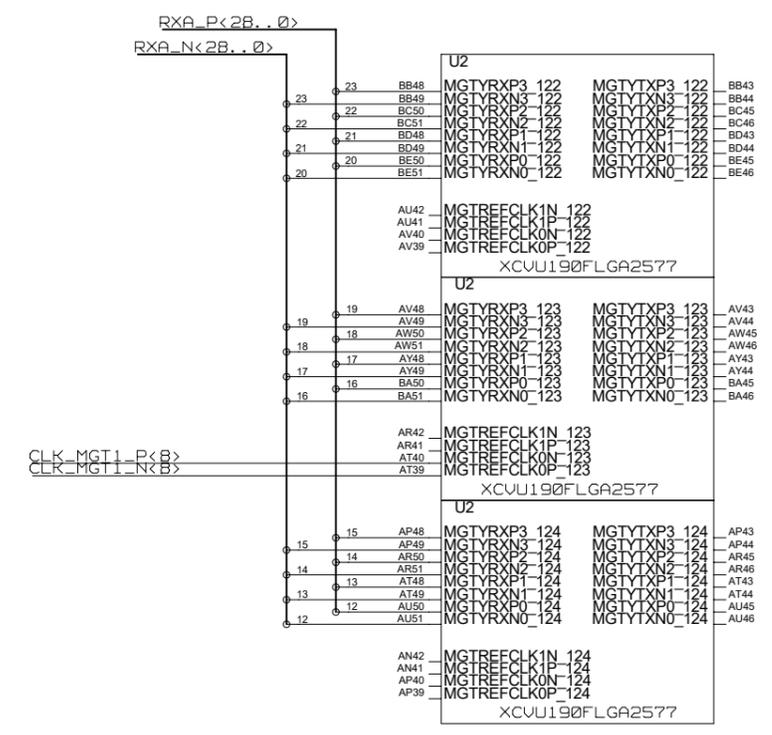
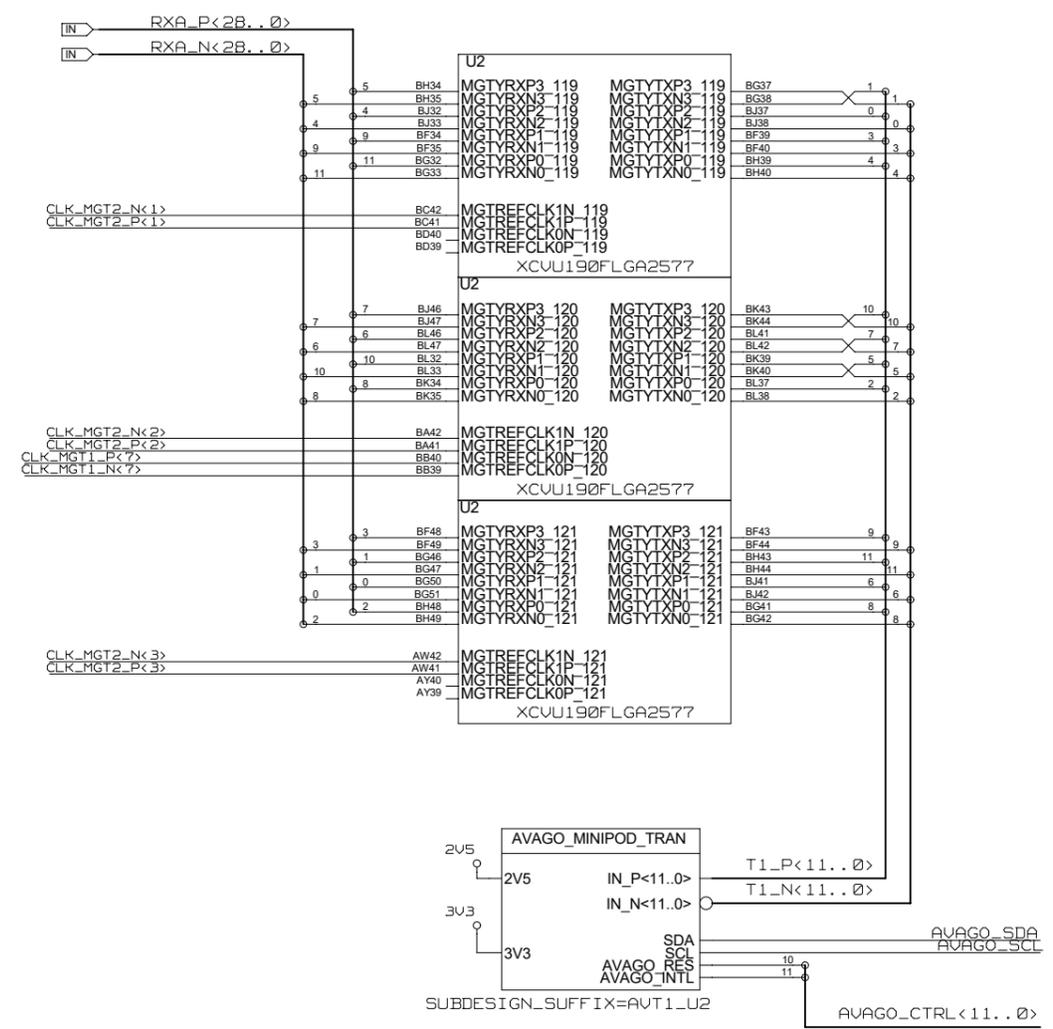
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
R3
R4
R5
R6
R7
R8

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

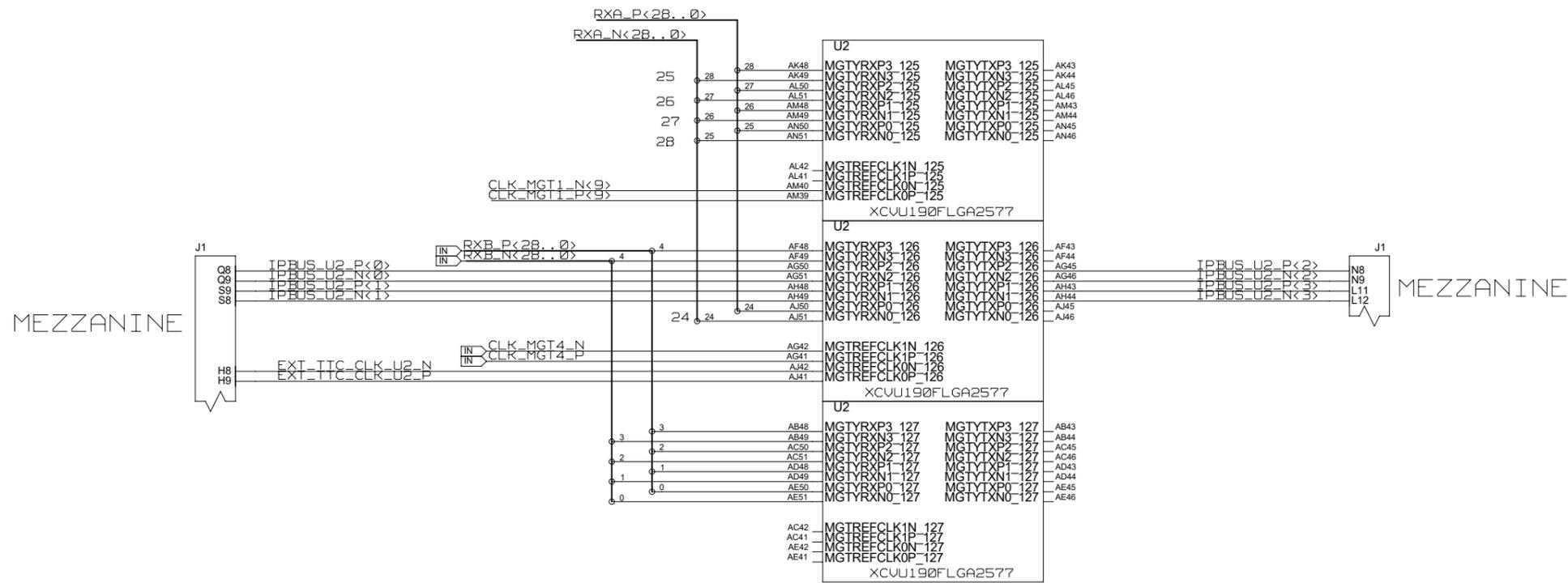


I2C ADDRESS:
R3=XXX R4=XXX
R5=XXX R6=XXX
R7=XXX R8=XXX

BANK
110
120
130
140
150
160
170
180
190

NAME	DATE	SIGN	DRAWING TITLE		
CHECKED	J.V.DE SOUZA		AVAGO + RXA		
CHECKED	U.SCHAEFER				
CHECKED	S.RAVE				
DRAWN	BAUSS	07.08.2015			
BLOCK TITLE			SIZE	REV.	DRAWING NO.
U2_MGT_REAL_TIME			C		
UNIVERSITY OF MAINZ			SCALE		SHEET 5 OF 7

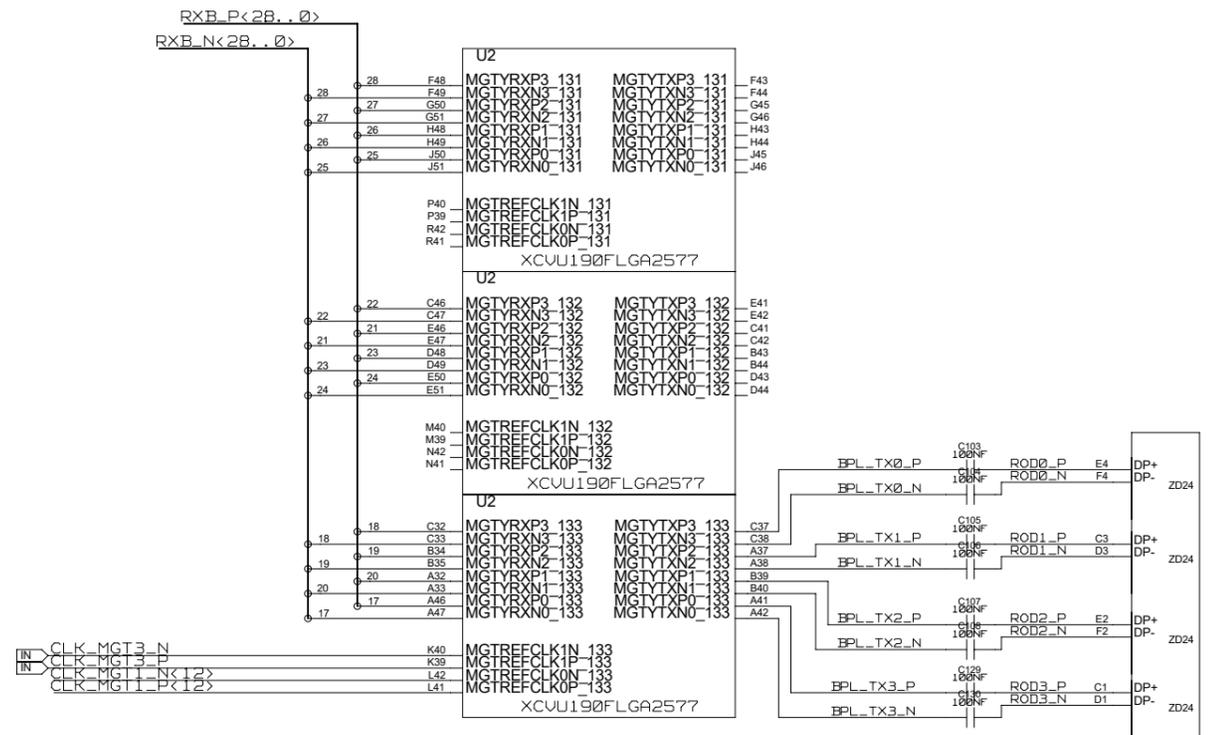
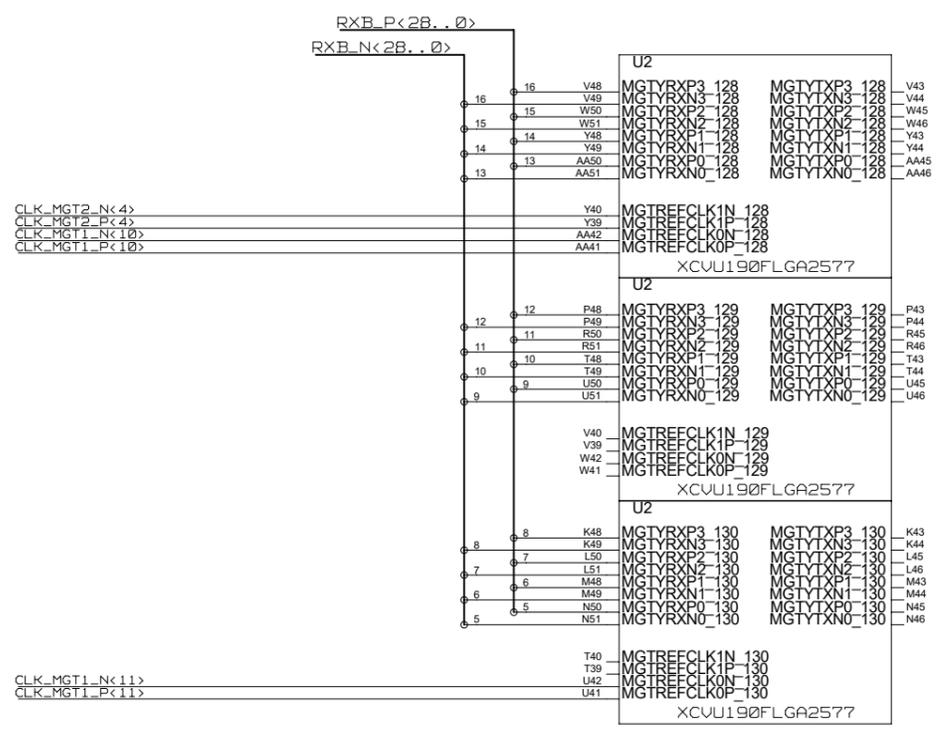
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
125
126
127

CHECKED	J. V. DE SOUZA			DRAWING TITLE RXA + RXB TXD + IPBUS
CHECKED	U. SCHAEFER			
CHECKED	S. RAVE			
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U2_MGT_REAL_TIME				
UNIVERSITY OF MAINZ				SIZE C
				REV.
				DRAWING NO.
				SCALE
				SHEET 6 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

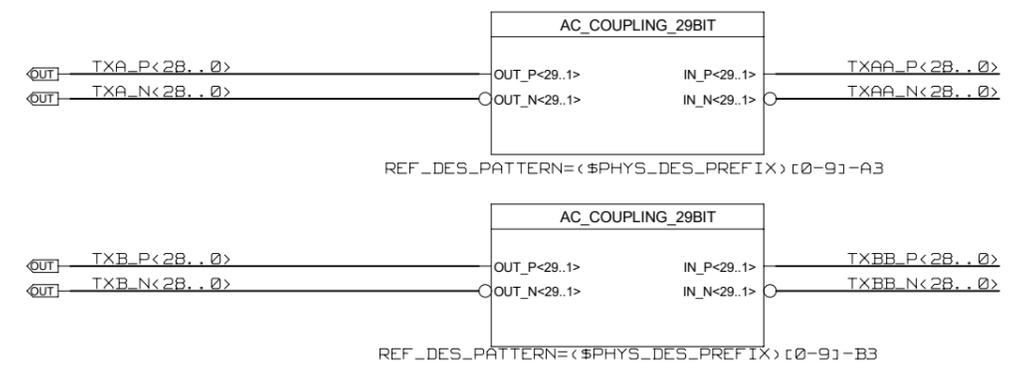


BANK
128
129
130
131
132
133
134
135
136
137
138

NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			RXB + TXC
CHECKED U. SCHAEFER			
CHECKED S. RAVE			
DRAWN BAUSS	07.08.2015		
BLOCK TITLE			
U2_MGT_REAL_TIME			
UNIVERSITY OF MAINZ		SIZE C	REV.
		SCALE	DRAWING NO.
			SHEET 7 OF 7

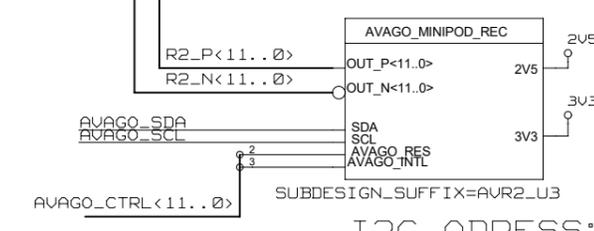
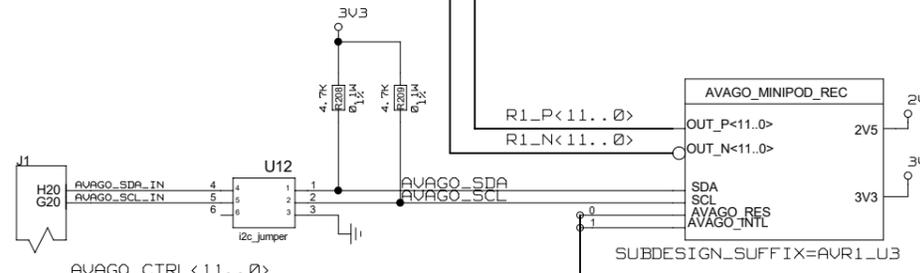
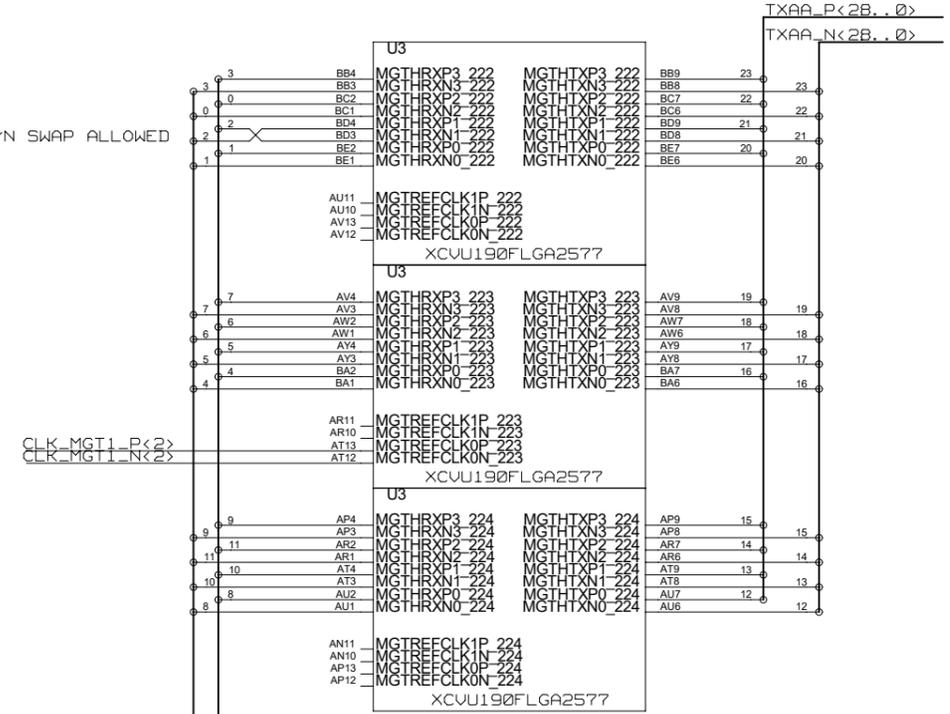
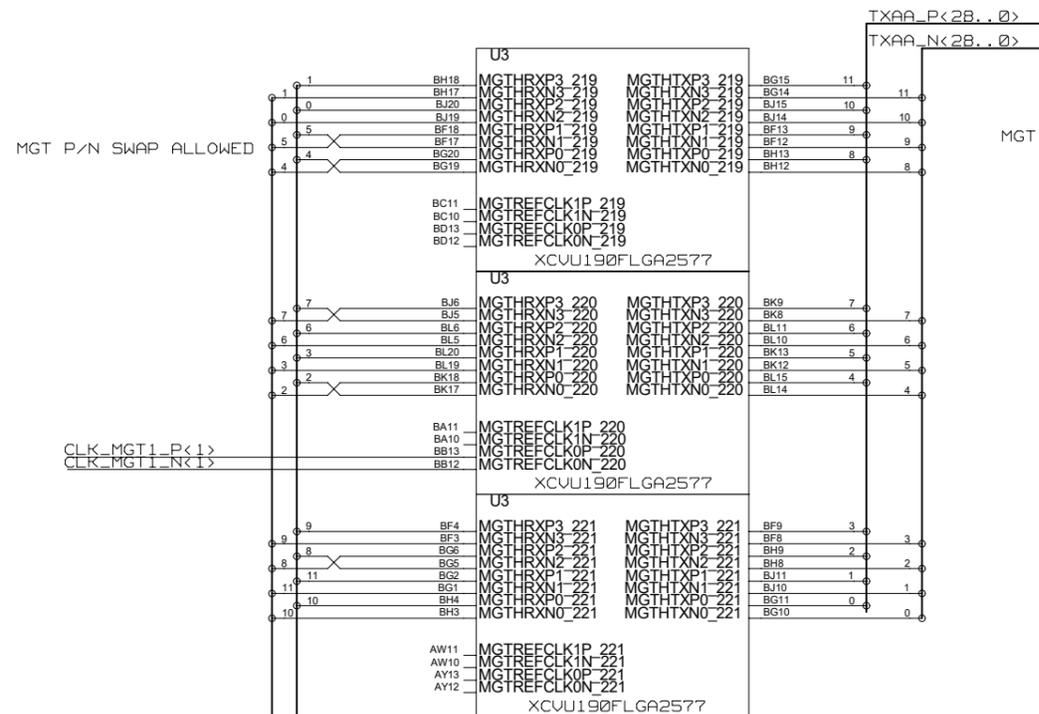
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

AC COUPLING



CHECKED	J.V.DE SOUZA			DRAWING TITLE I/O + AC COUPLING
CHECKED	U.SCHAEFER			
CHECKED	S.RAVE			
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U3_MGT_REAL_TIME				SIZE C
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

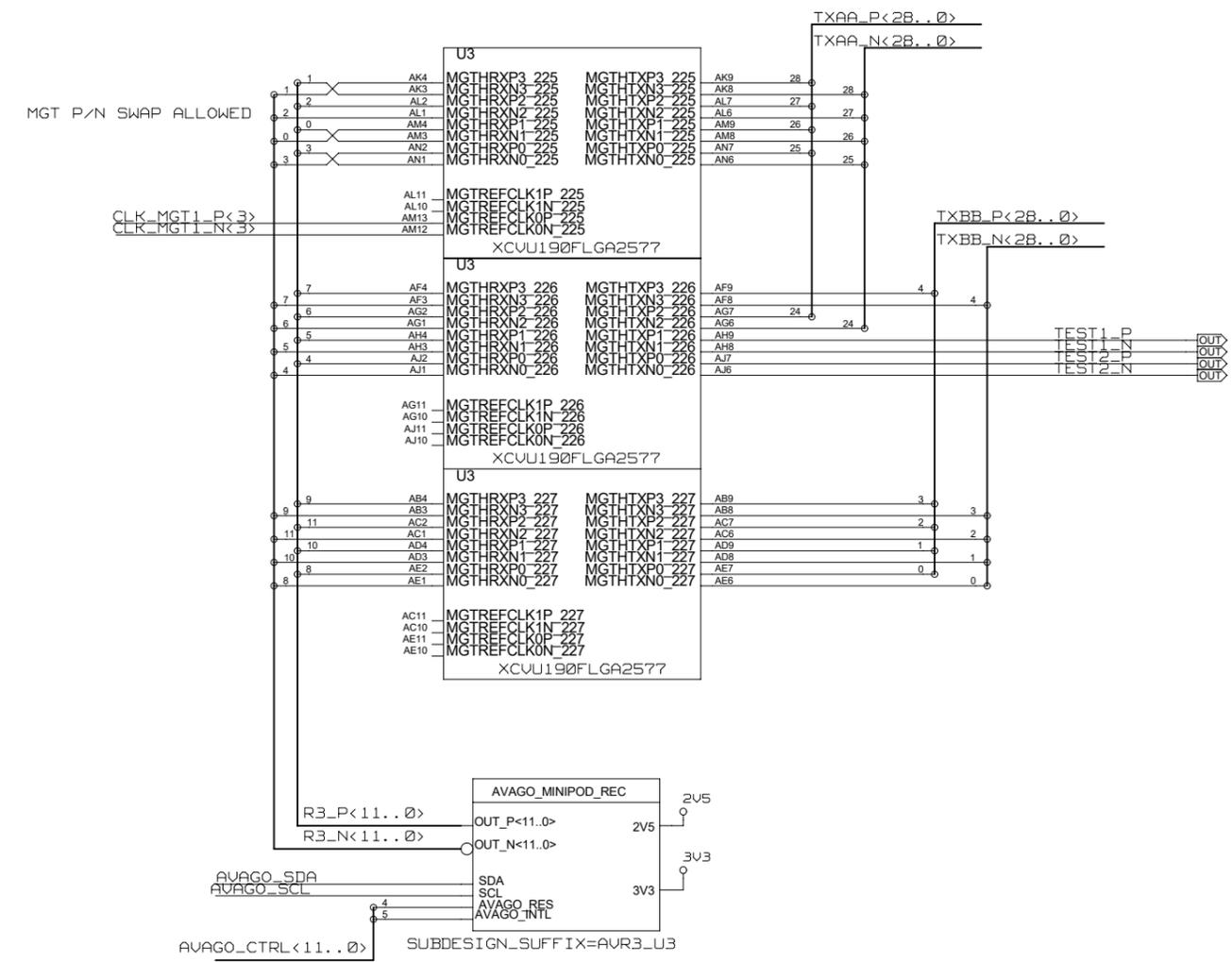
I2C ADDRESS:
 R3=XXX R4=XXX
 R5=XXX R6=XXX
 R7=XXX R8=XXX

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			AVAGO + TXA		
CHECKED U.SCHAEFER					
CHECKED S.RAVE					
DRAWN BAUSS	07.08.2015				
BLOCK TITLE			SIZE	REV.	DRAWING NO.
U3_MGT_REAL_TIME			C		
UNIVERSITY OF MAINZ			SCALE		SHEET 2 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



I2C ADDRESS:

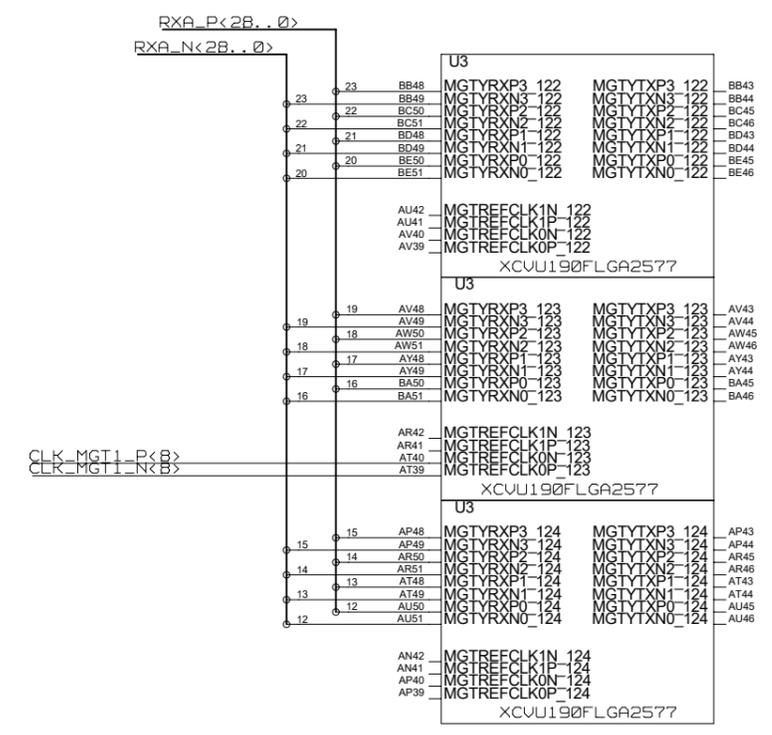
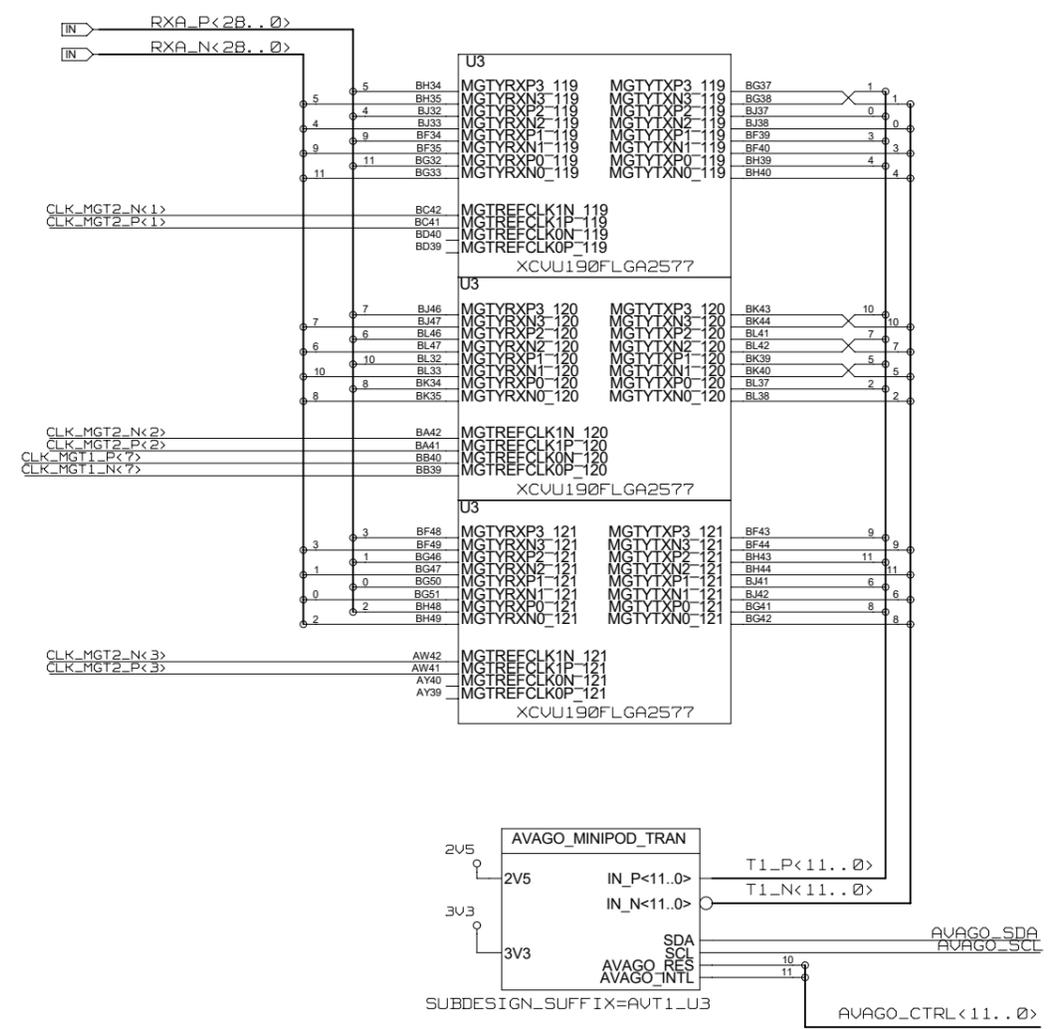
R3=XXX	R4=XXX
R5=XXX	R6=XXX
R7=XXX	R8=XXX

BANK

225
226
227

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

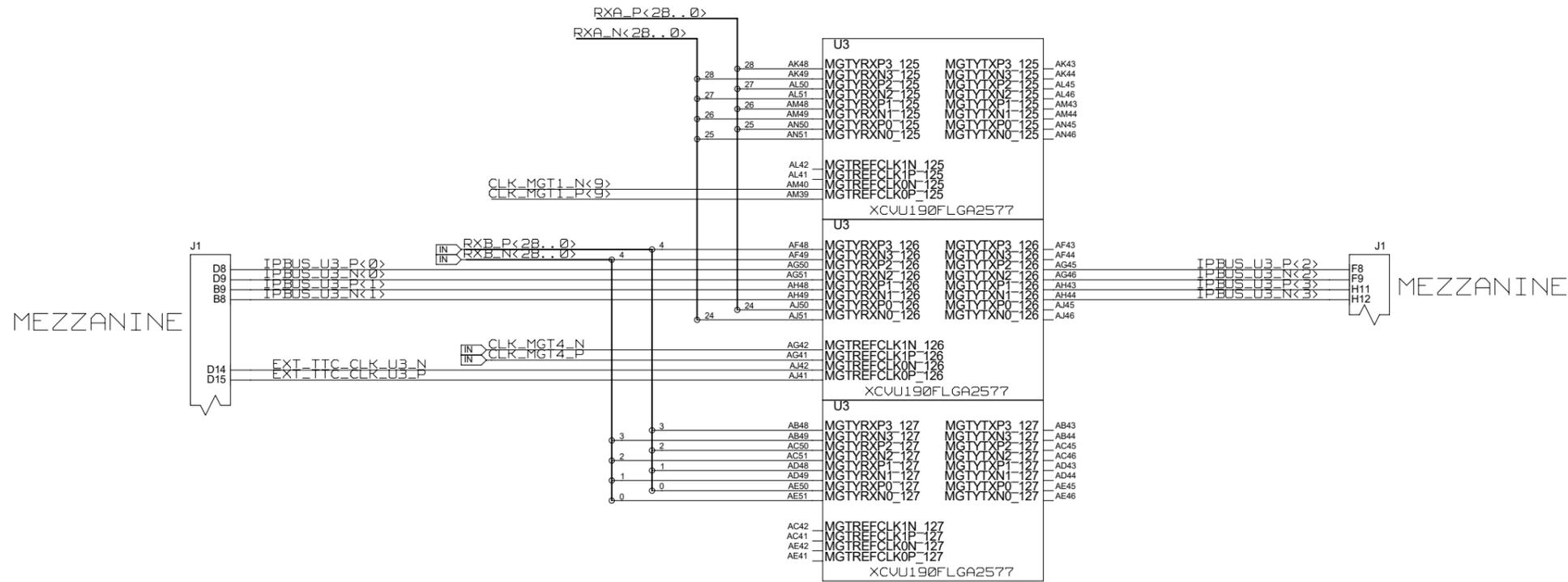


I2C ADDRESS:
R3=XXX R4=XXX
R5=XXX R6=XXX
R7=XXX R8=XXX

BANK
110
120
130
140
150
160
170
180
190

CHECKED	J.V.DE SOUZA			DRAWING TITLE AVAGO + RXA
CHECKED	U.SCHAEFER			
CHECKED	S.RAVE			
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U3_MGT_REAL_TIME				
UNIVERSITY OF MAINZ				
SIZE	REV.	DRAWING NO.		
SCALE				SHEET 5 OF 7

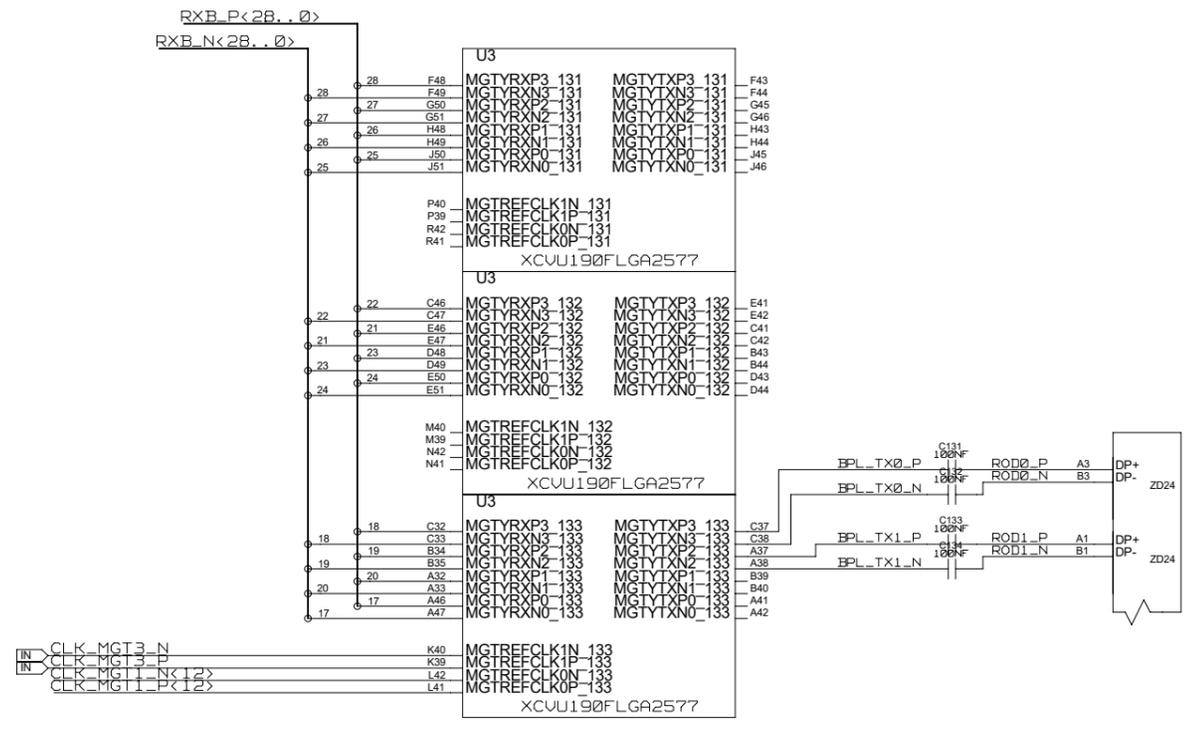
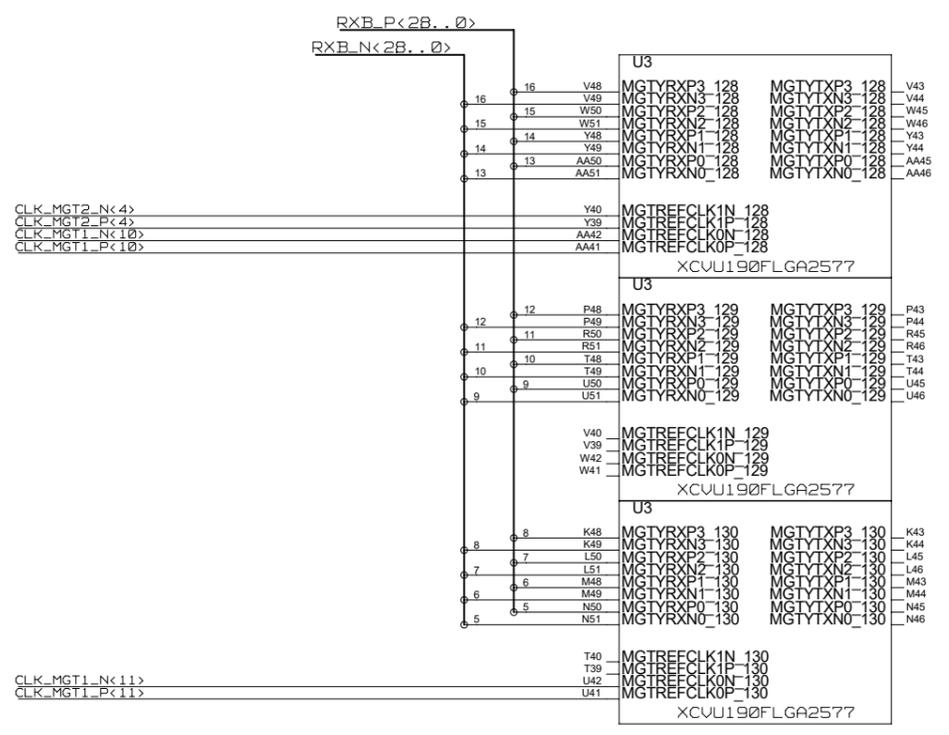
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
125
126
127

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

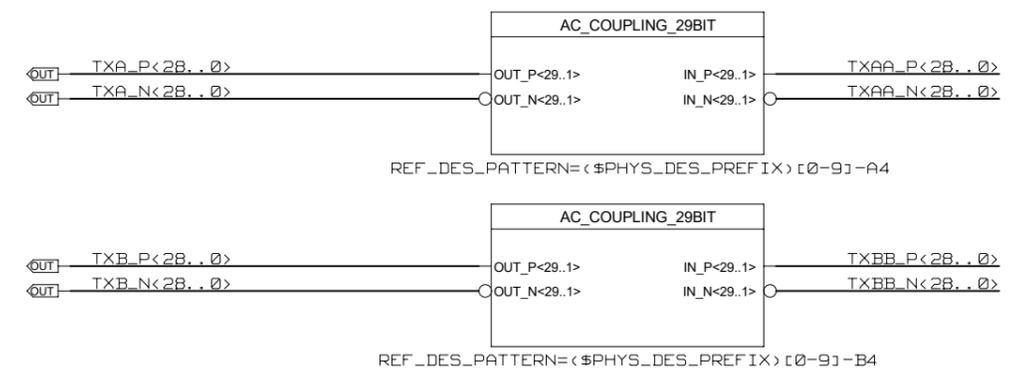


BANK
128
129
130
131
132
133
134
135
136
137
138

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

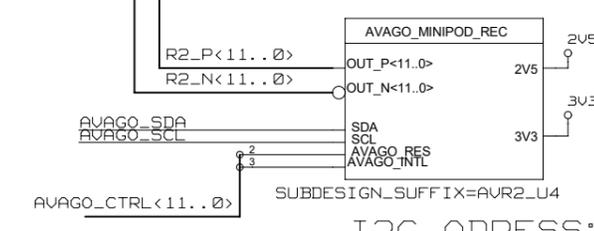
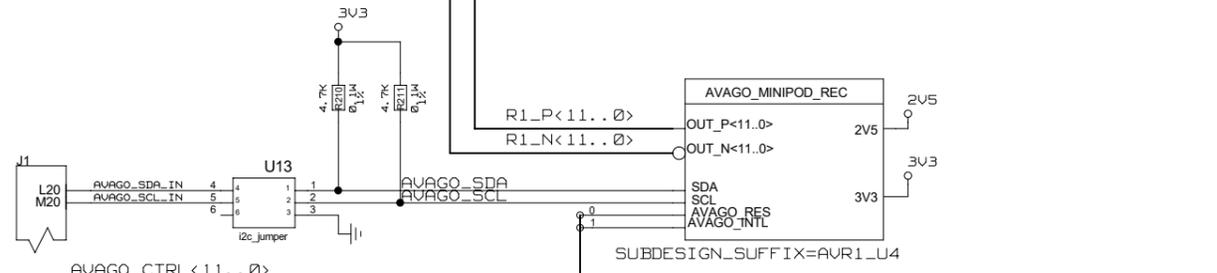
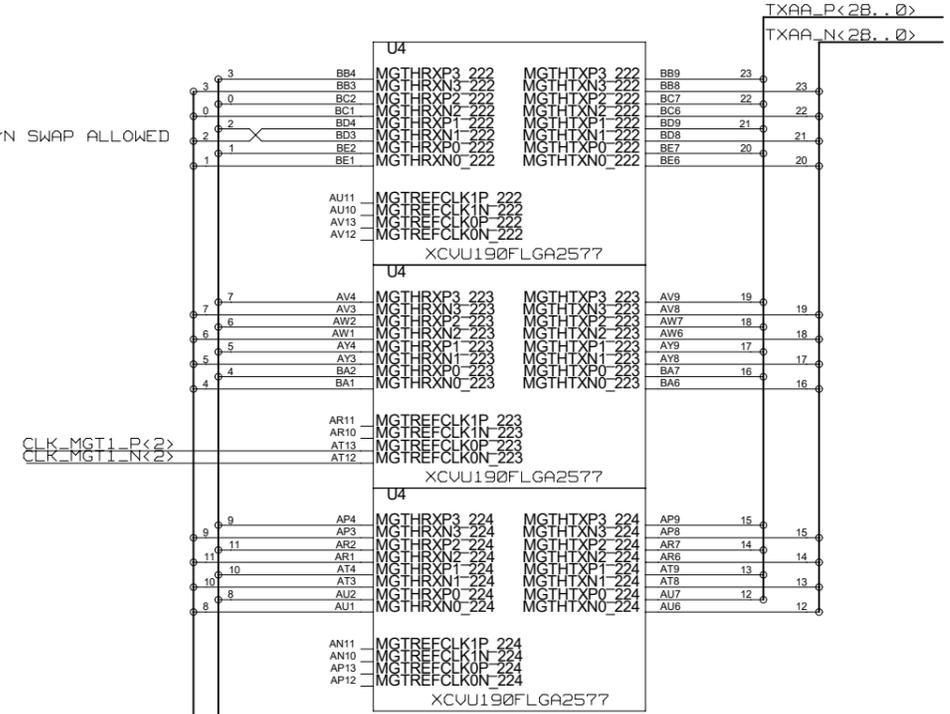
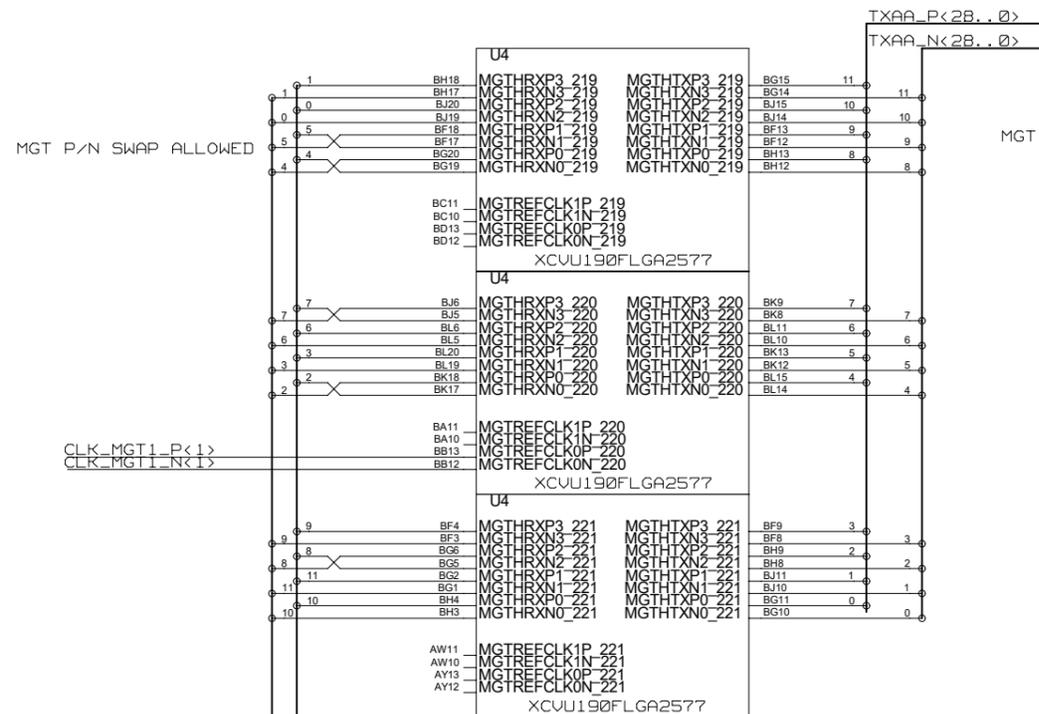
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

AC COUPLING



CHECKED	J.V.DE SOUZA			DRAWING TITLE I/O + AC COUPLING
CHECKED	U.SCHAEFER			
CHECKED	S.RAVE			
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U4_MGT_REAL_TIME				SIZE C
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

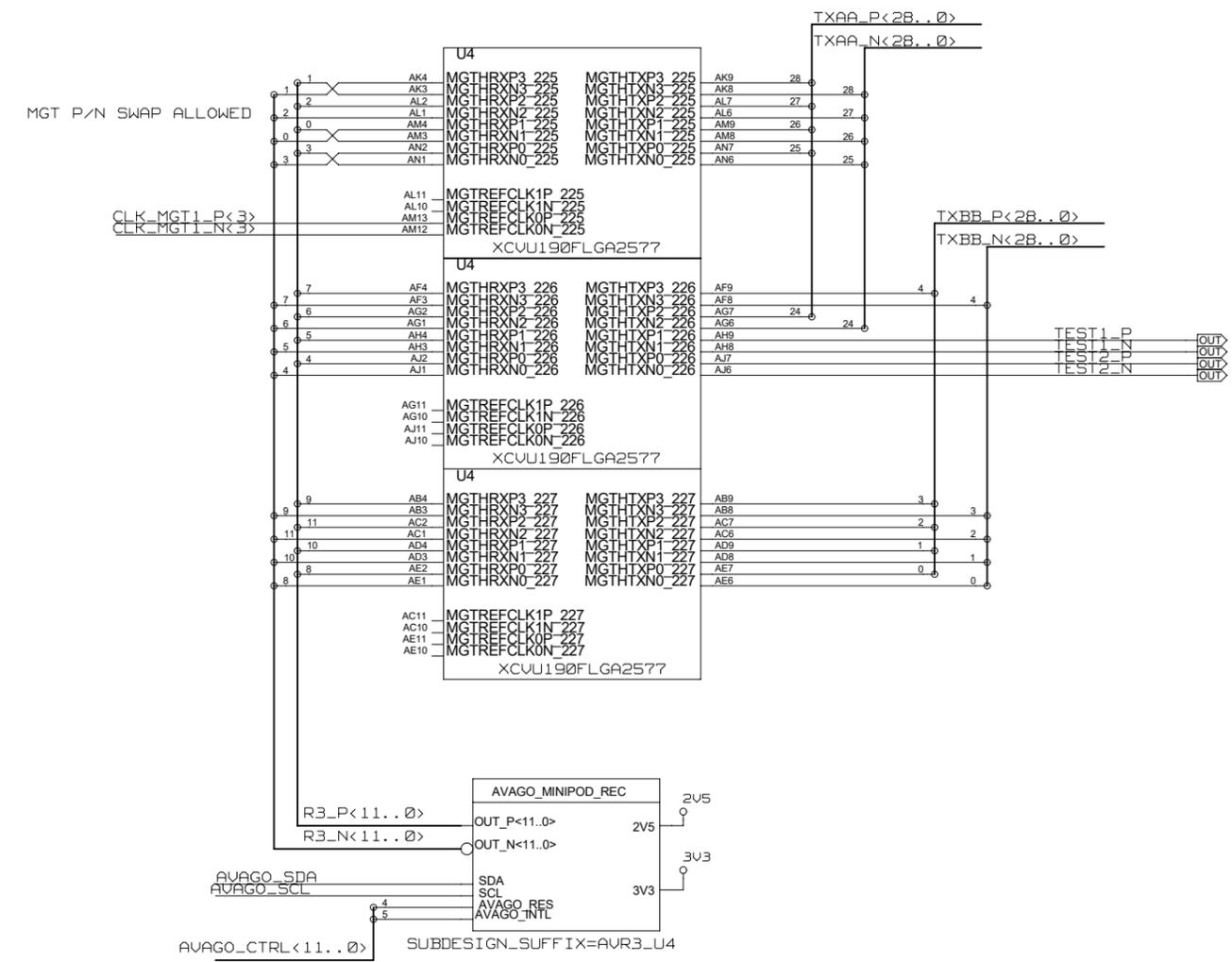
I2C ADDRESS:
 R3=XXX R4=XXX
 R5=XXX R6=XXX
 R7=XXX R8=XXX

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			AVAGO + TXA		
CHECKED U.SCHAEFER					
CHECKED S.RAVE					
DRAWN BAUSS	07.08.2015				
BLOCK TITLE			SIZE	REV.	DRAWING NO.
U4_MGT_REAL_TIME			C		
UNIVERSITY OF MAINZ			SCALE		SHEET 2 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



I2C ADDRESS:

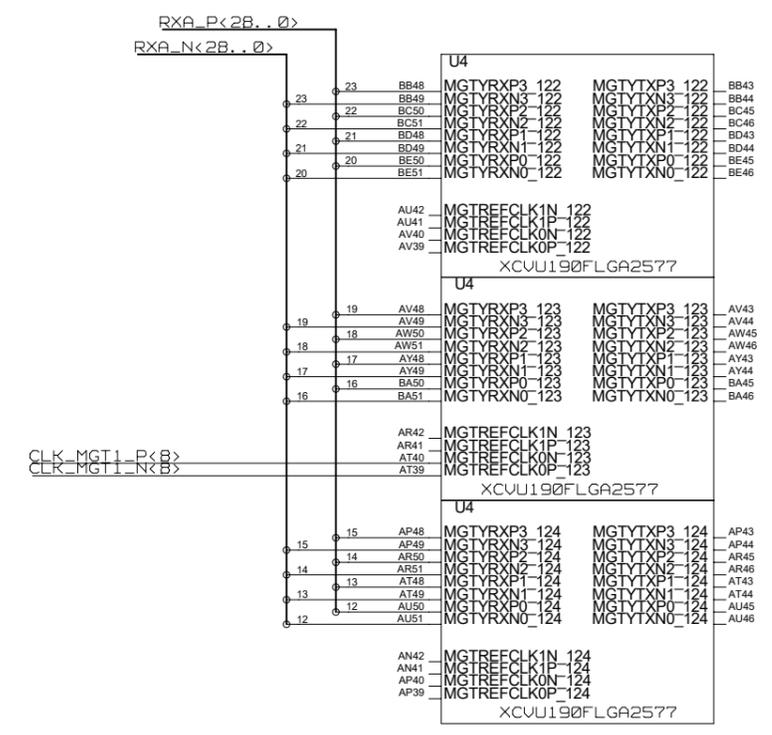
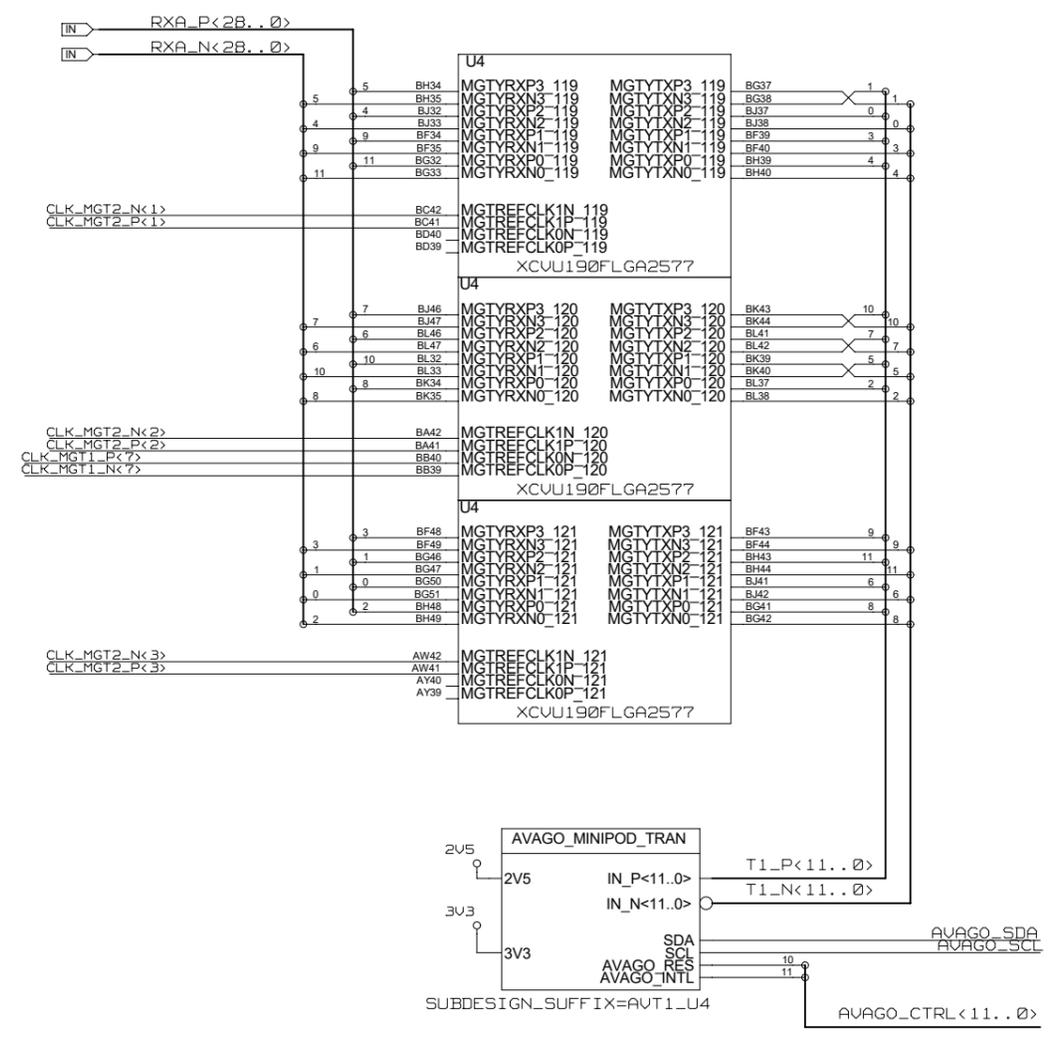
R3=XXX	R4=XXX
R5=XXX	R6=XXX
R7=XXX	R8=XXX

BANK

225
226
227

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

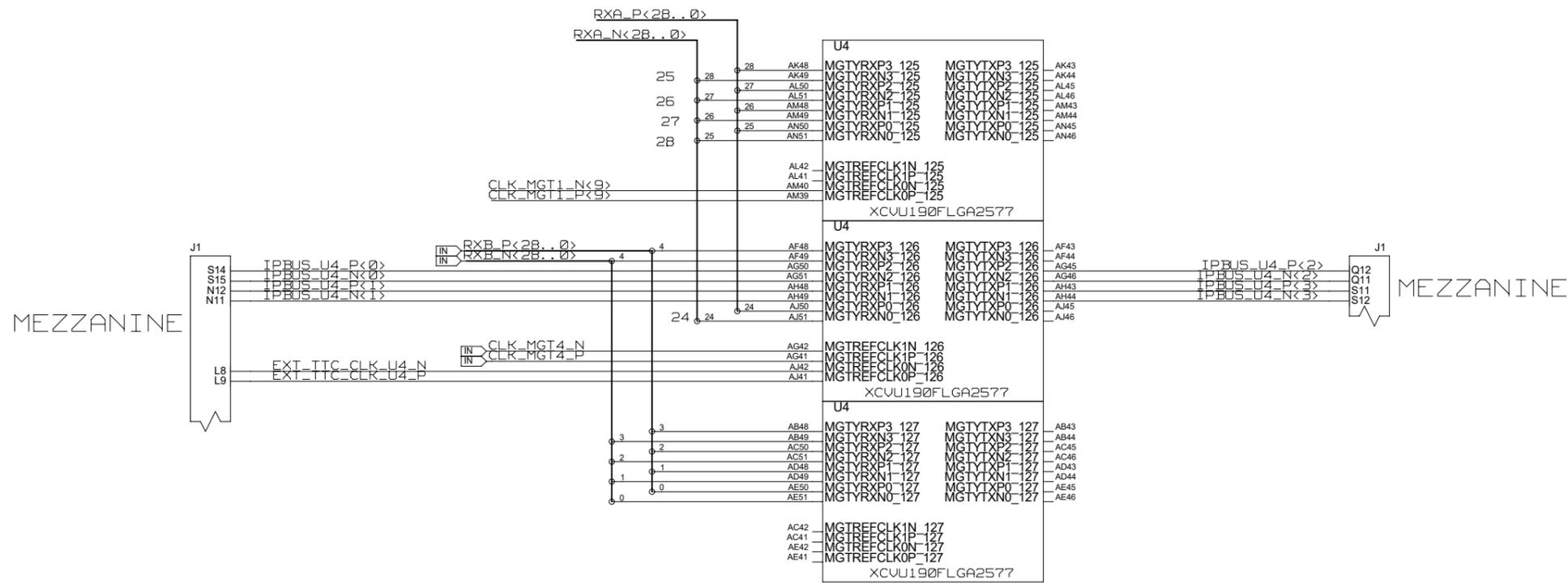


I2C ADDRESS:
R3=XXX R4=XXX
R5=XXX R6=XXX
R7=XXX R8=XXX

BANK
110
120
130
140
150
160
170
180
190

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

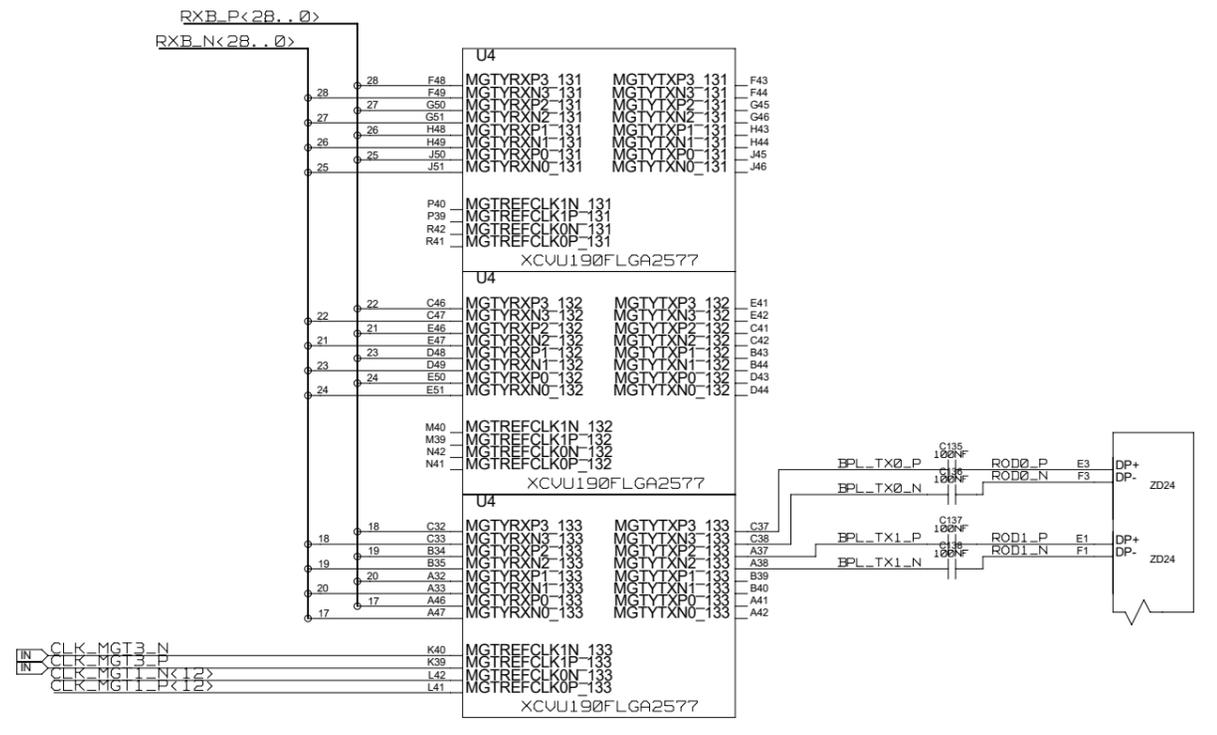
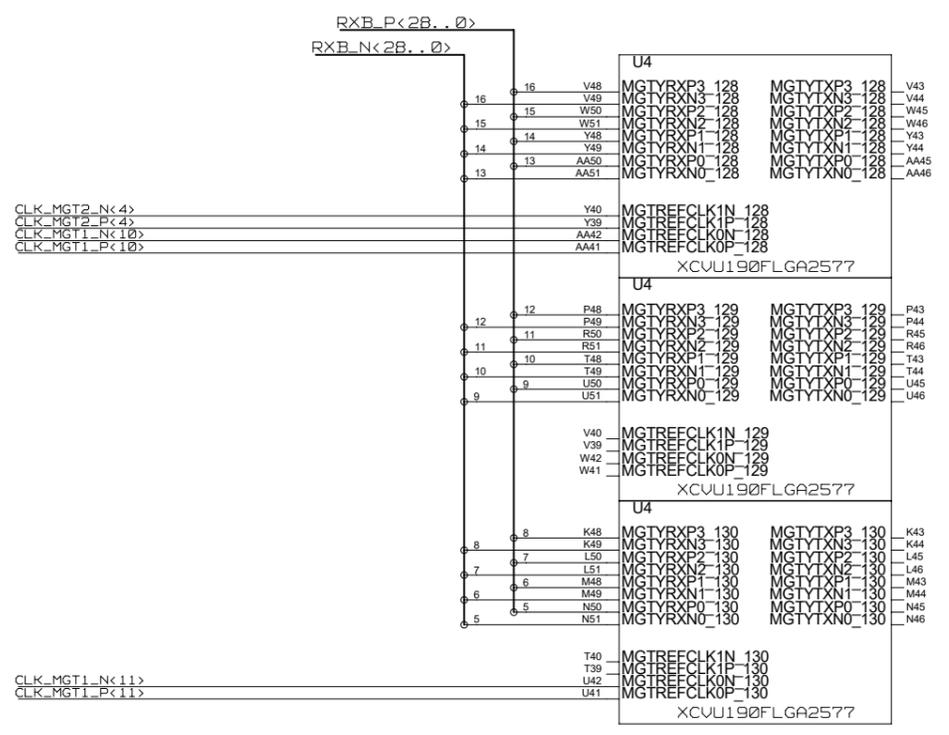
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
125
126
127

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

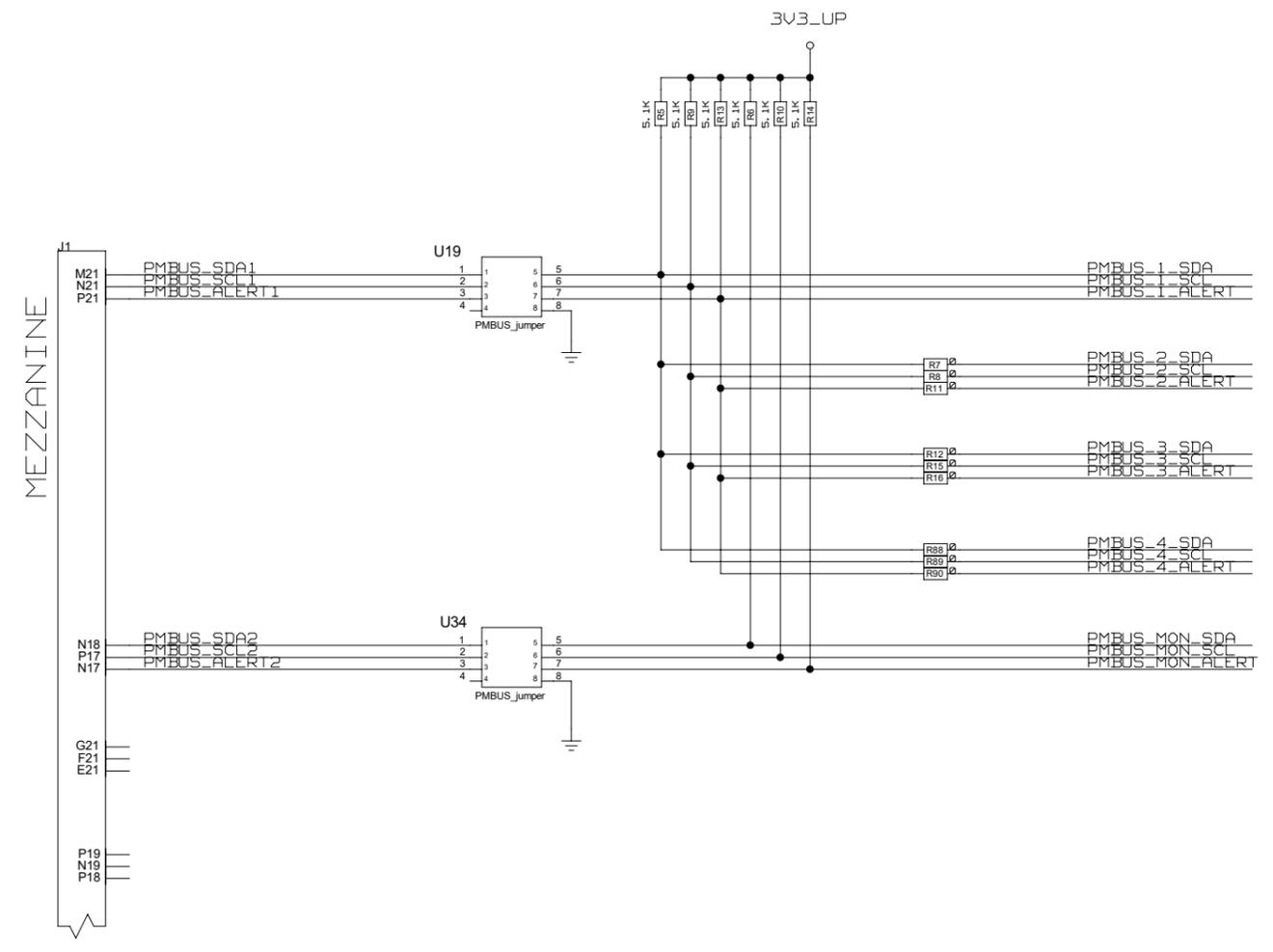


BANK
128
129
130
131
132
133

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

PMBUS CONNECTORS



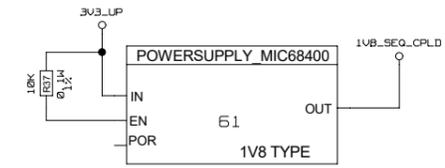
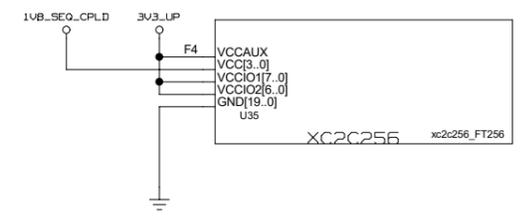
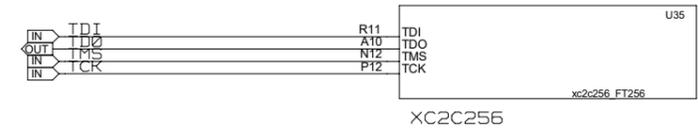
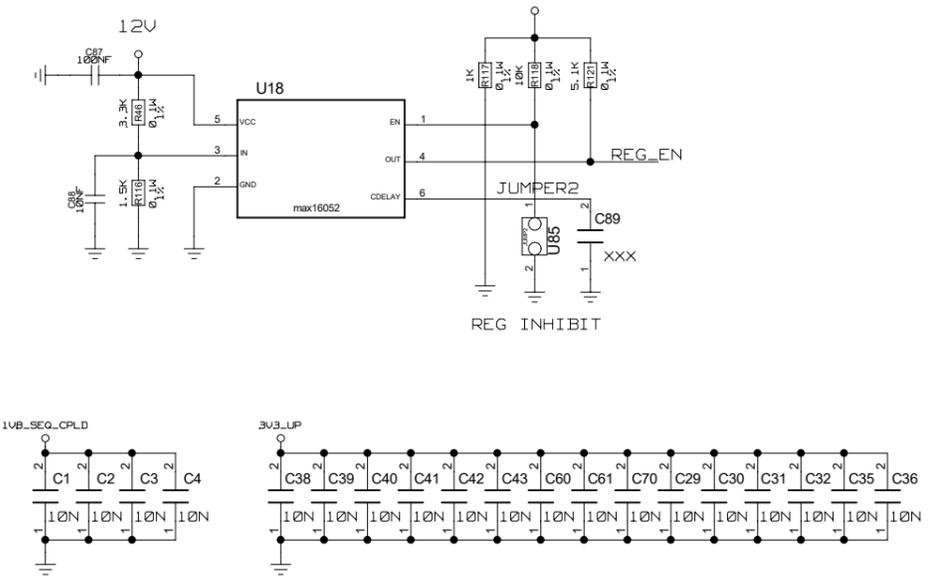
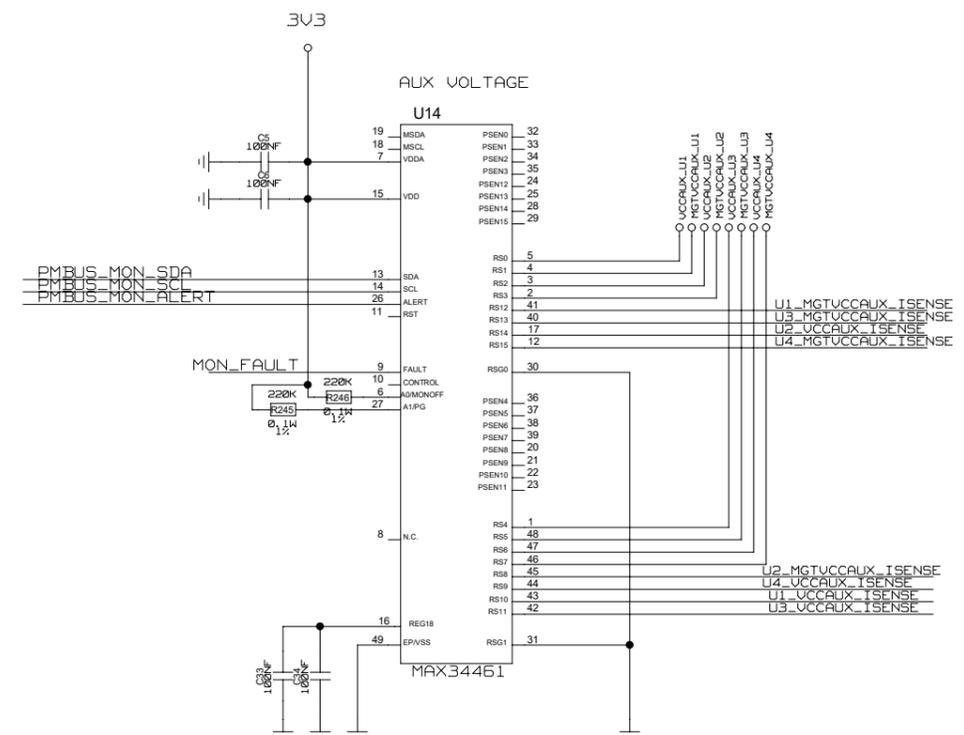
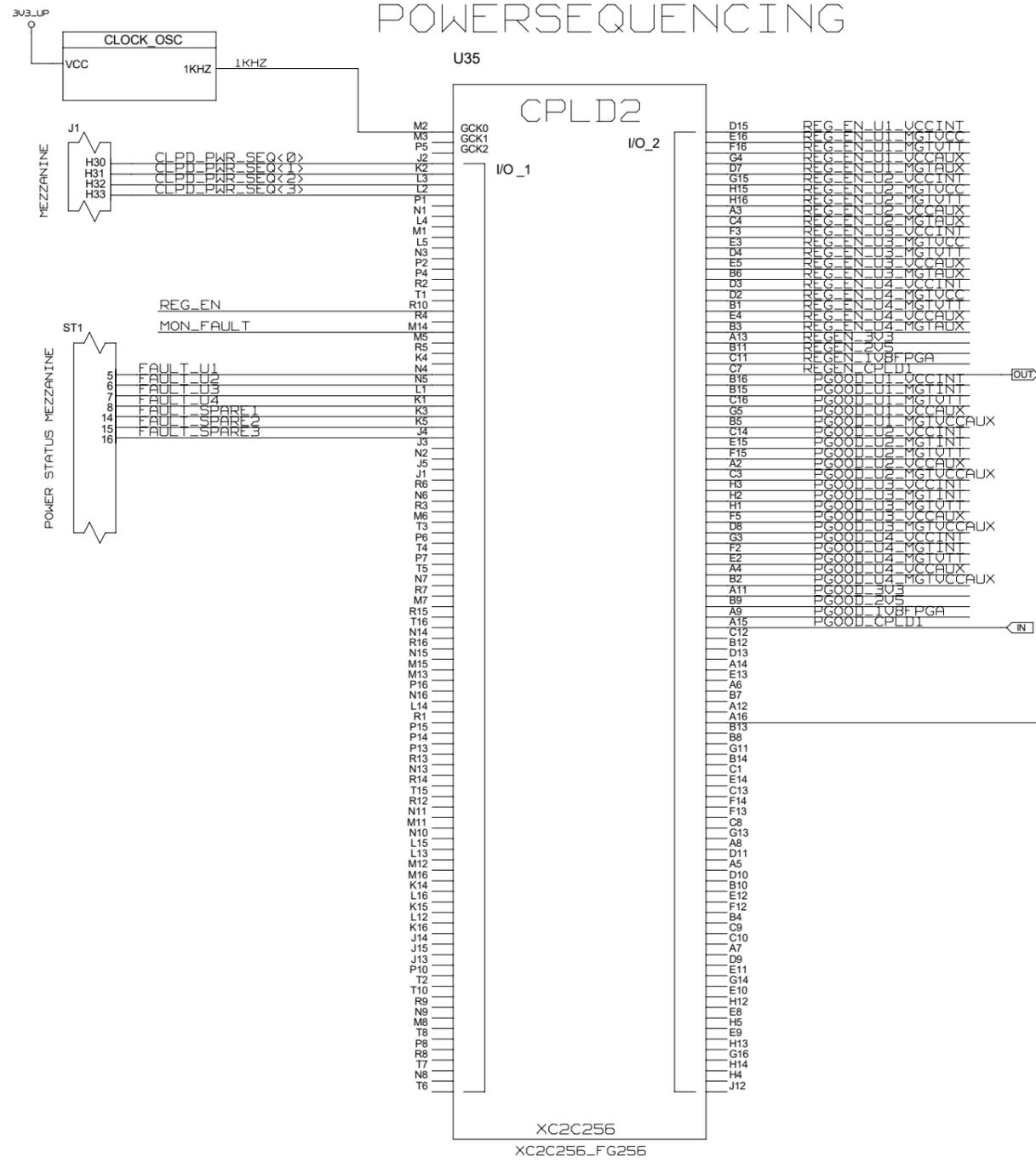
CHECKED	J. V. DE SOUZA			DRAWING TITLE JFEX
CHECKED	U. SCHAEFER			
CHECKED	S. RAVE			
DRAWN	BAUSS			
BLOCK TITLE POWERSUPPLY				
UNIVERSITY OF MAINZ				SIZE C
				REV.
				DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

POWERSEQUENCING

VOLTAGE MONITORING

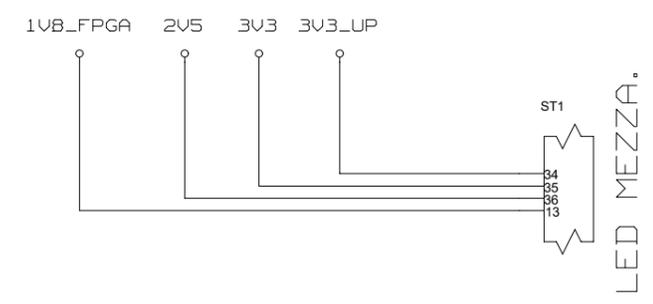
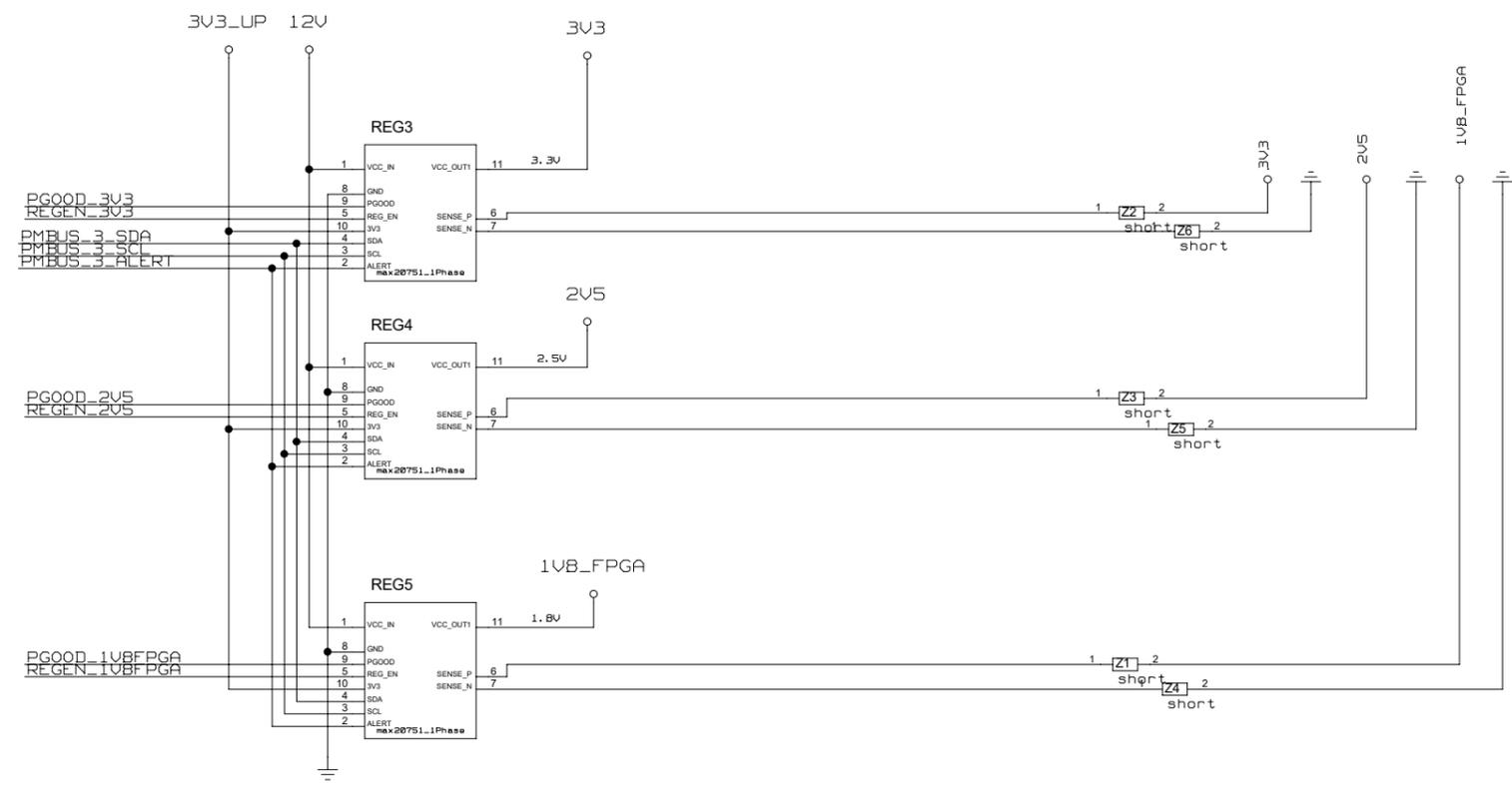
12V SUPERVISOR



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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

BOARDLEVEL 1V8, 2V5, 3V3

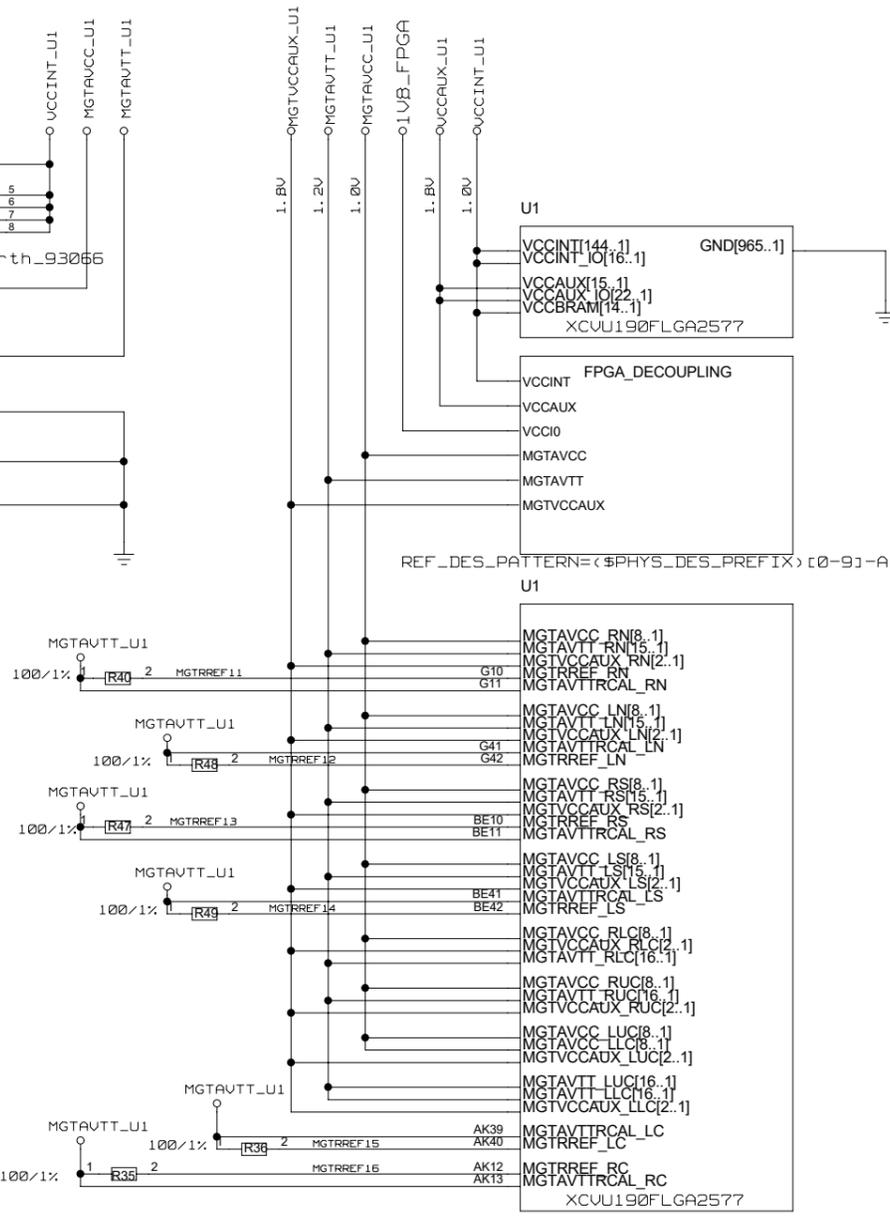
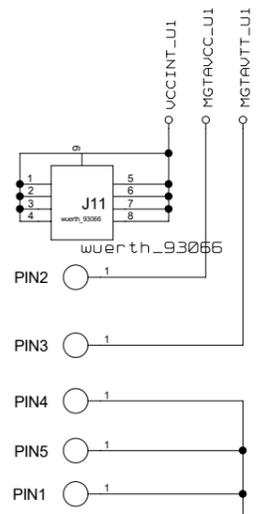


NAME	DATE	SIGN	DRAWING TITLE	
CHECKED J. V. DE SOUZA			JFEX	
CHECKED U. SCHAEFER				
CHECKED S. RAVE				
DRAWN BAUSS				
BLOCK TITLE			SIZE	REV.
POWERSUPPLY			DRAWING NO.	
			UNIVERSITY OF MAINZ	
SCALE			SHEET	OF

POWERSUPPLIES U1 + DECOUPLING U1

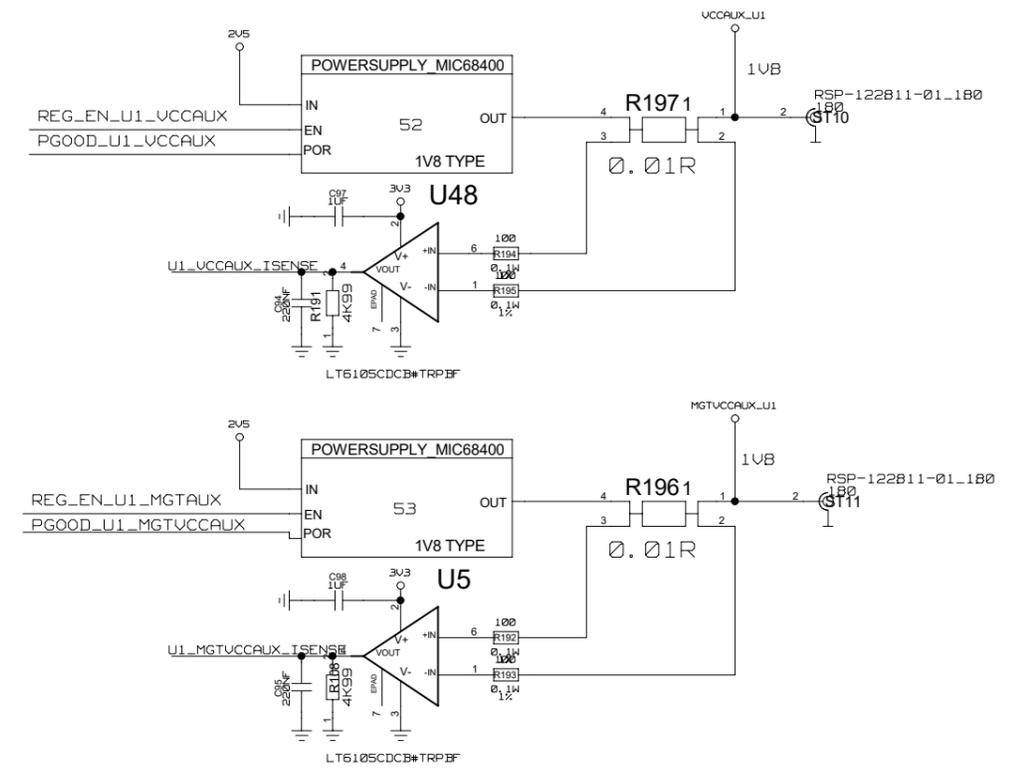
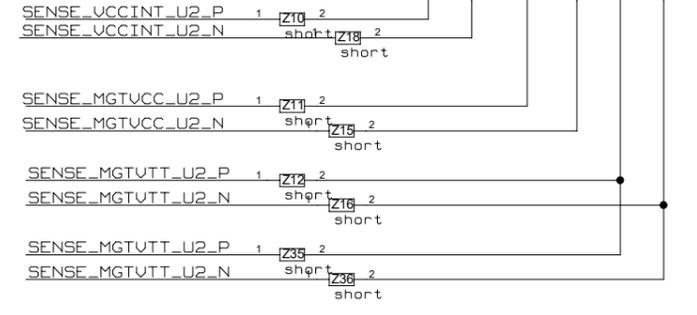
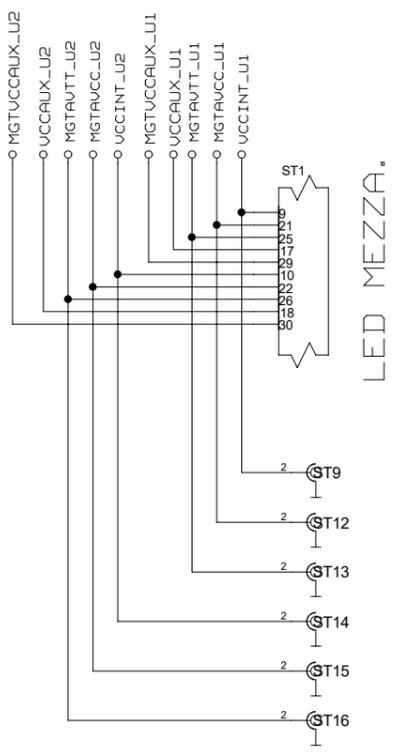
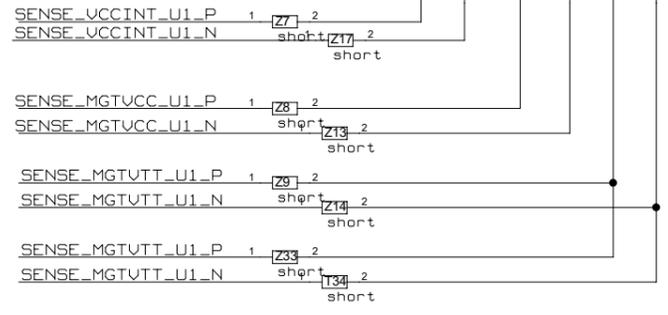
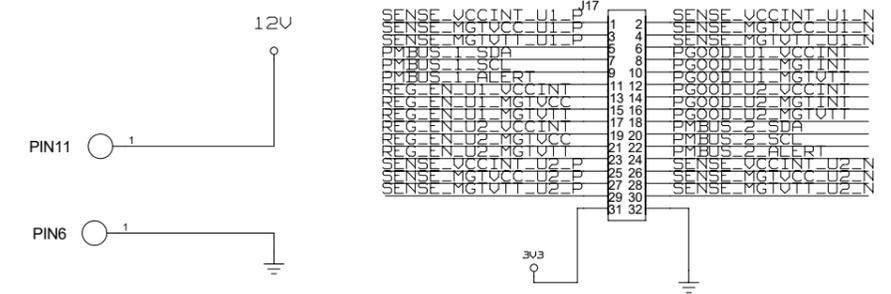
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

POWERCONNECTORS



TRACE LENGTH FROM RESISTOR PINS
TO PIN SAME LENGTH
UG576 SHEET 297

POWERPANEL



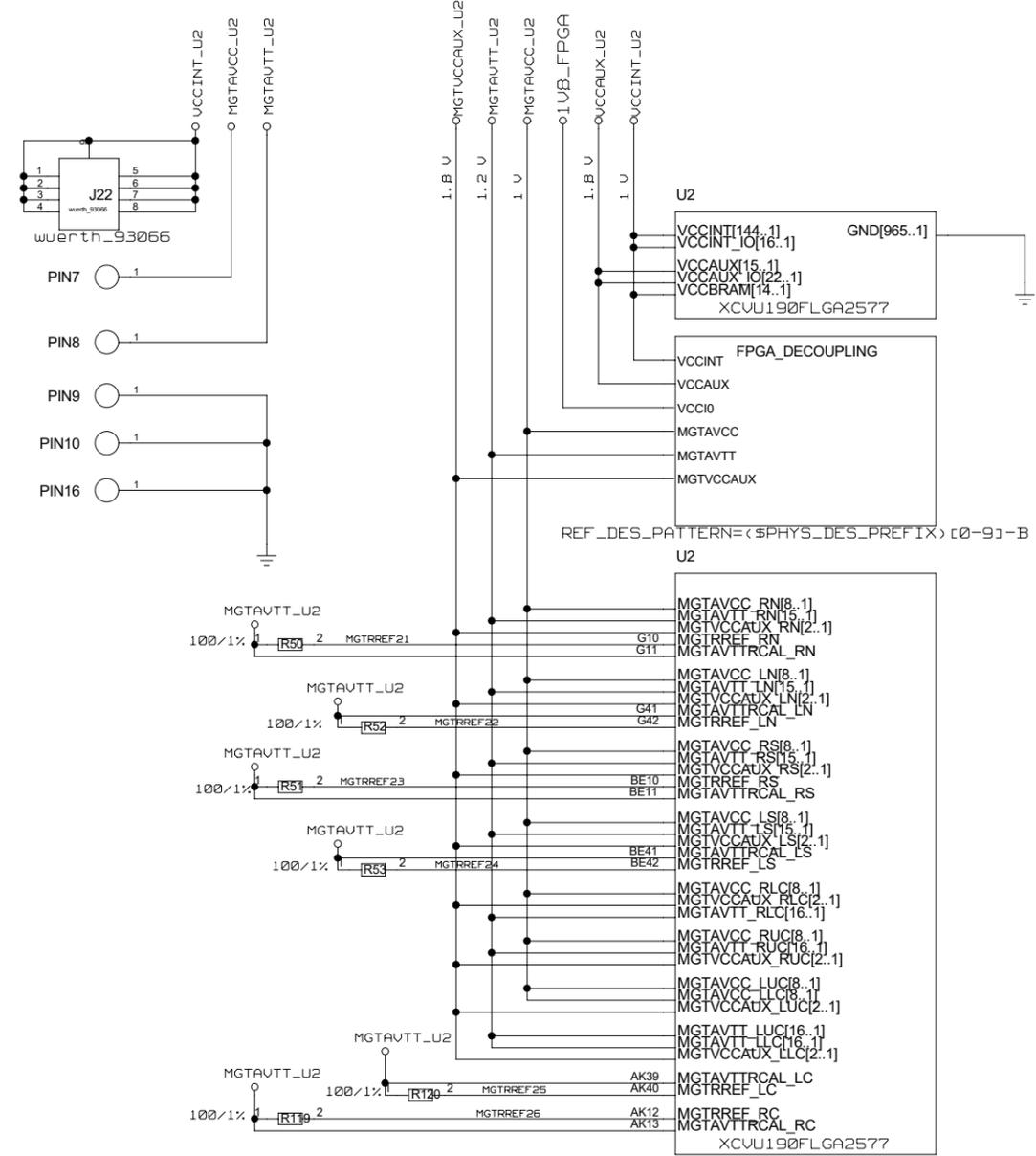
NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA		
CHECKED	U. SCHAEFER		
CHECKED	S. RAVE		
DRAWN	BAUSS		

BLOCK TITLE		DRAWING NO.	
POWERSUPPLY			
UNIVERSITY OF MAINZ		SCALE	SHEET OF

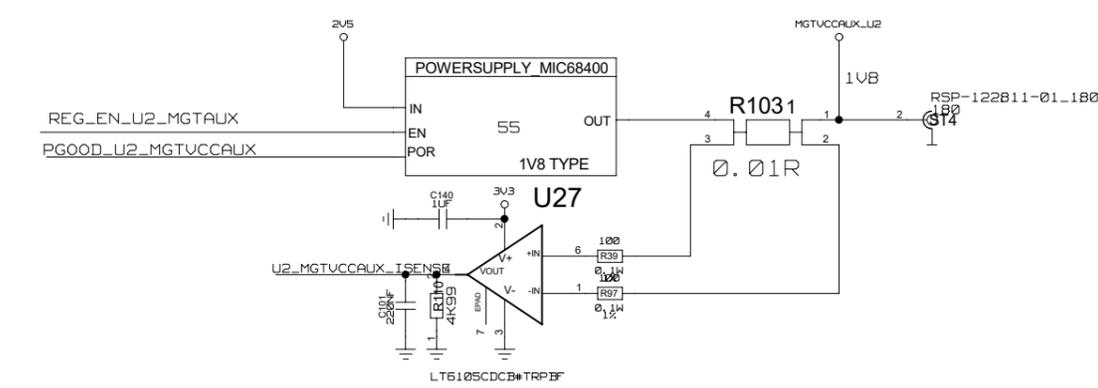
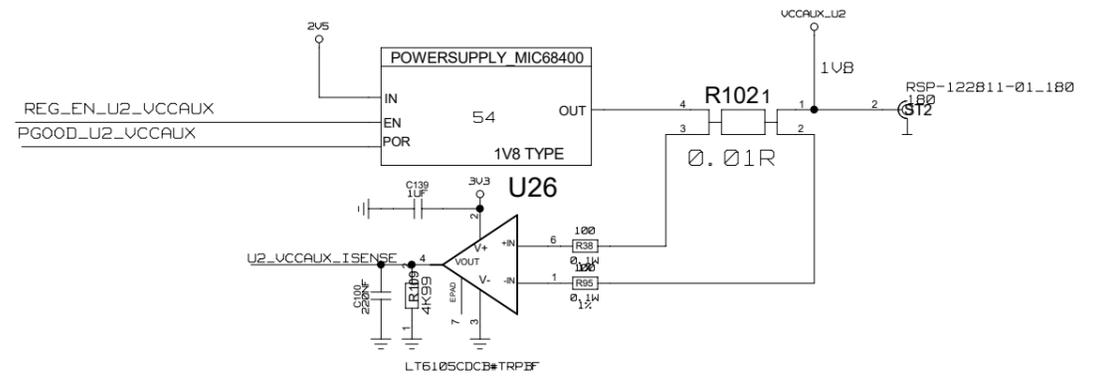
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

POWERSUPPLIES U2 + DECOUPLING U2

POWERCONNECTORS



TRACE LENGTH FROM RESISTOR PINS
TO PIN SAME LENGTH
UG576 SHEET 297

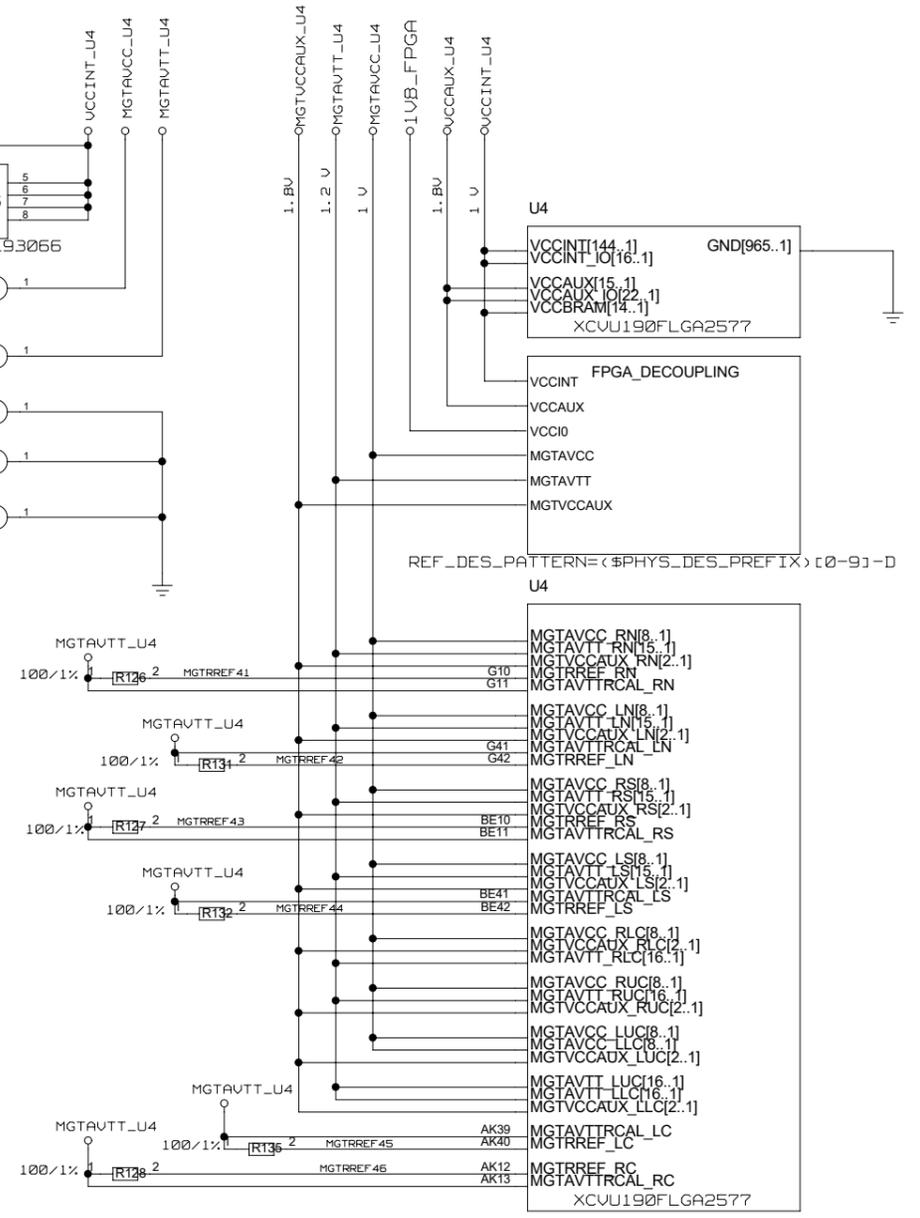
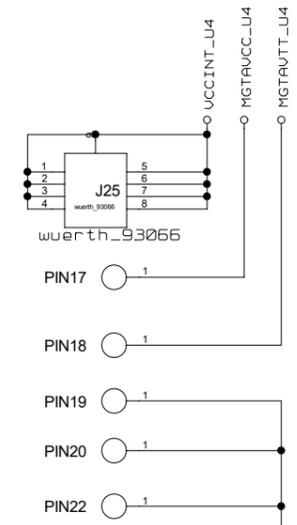


NAME	DATE	SIGN	DRAWING TITLE
CHECKED J.V.DE SOUZA			<p style="text-align: center; font-size: 2em;">JFEX</p>
CHECKED U.SCHAEFER			
CHECKED S.RAVE			
DRAWN BAUSS			
BLOCK TITLE			
UNIVERSITY OF MAINZ			<p>SIZE C REV. DRAWING NO.</p> <p>SCALE SHEET OF</p>

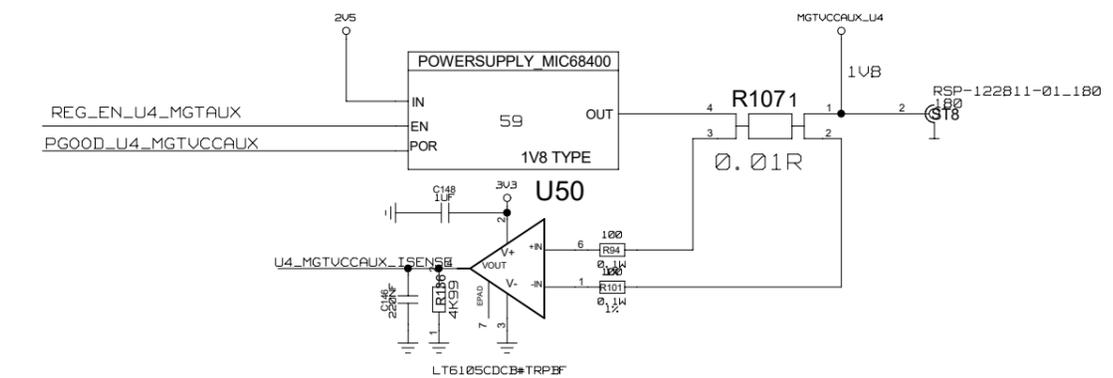
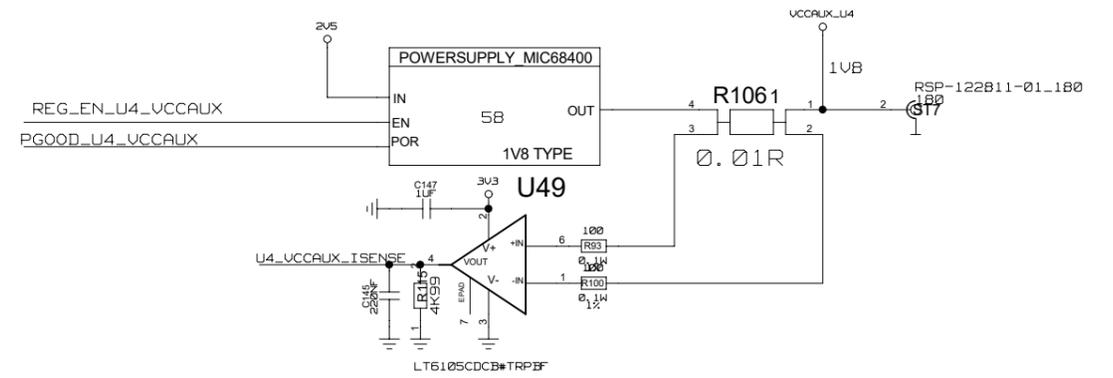
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

POWERSUPPLIES U4 + DECOUPLING U4

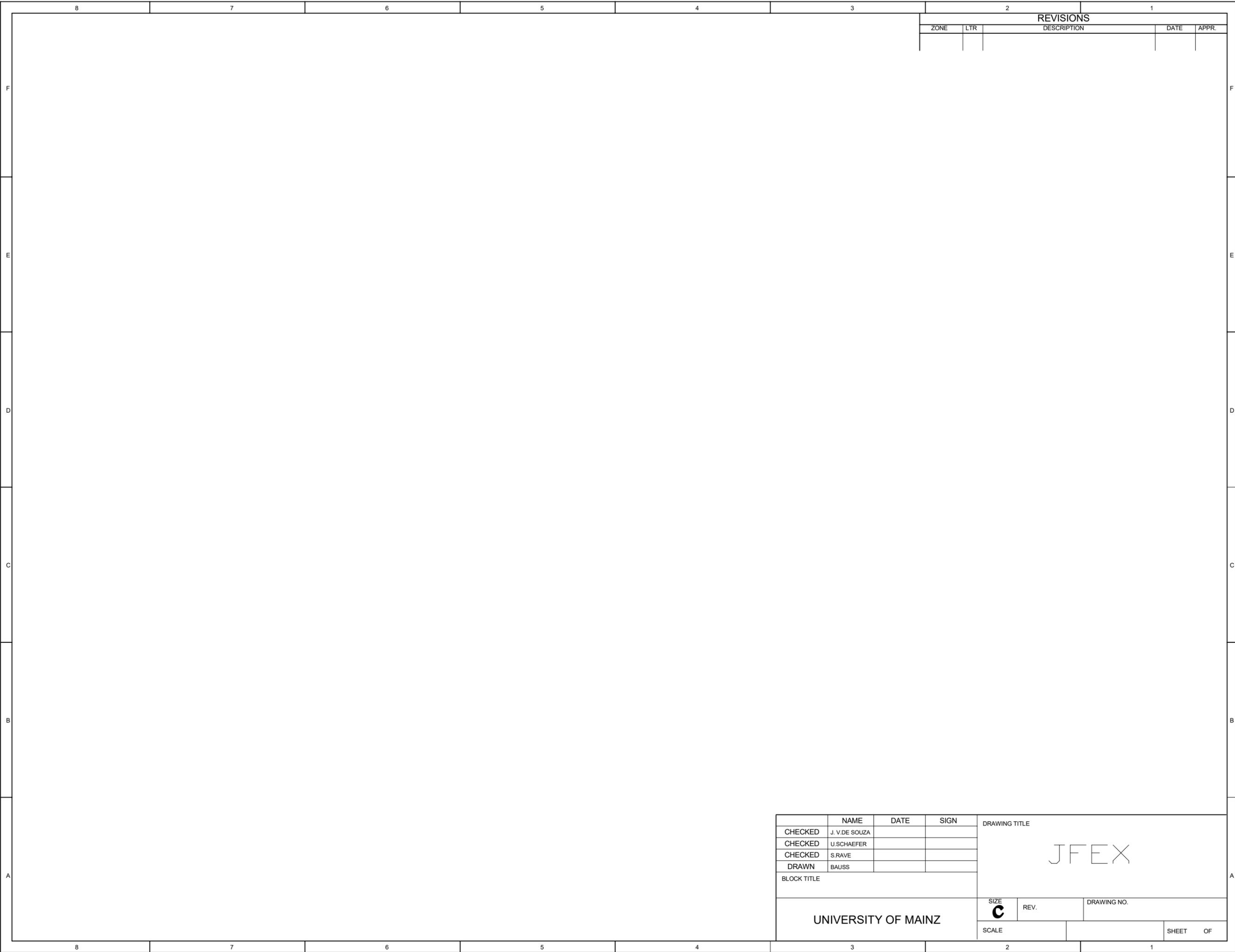
POWERCONNECTORS



TRACE LENGTH FROM RESISTOR PINS
TO PIN SAME LENGTH
UG576 SHEET 297



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

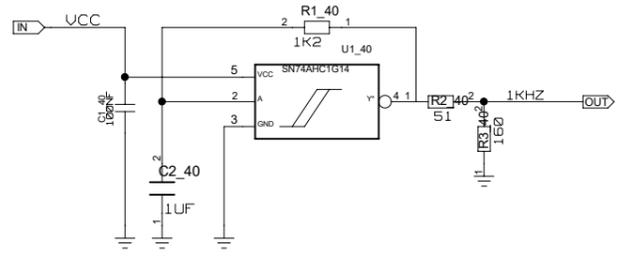


REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

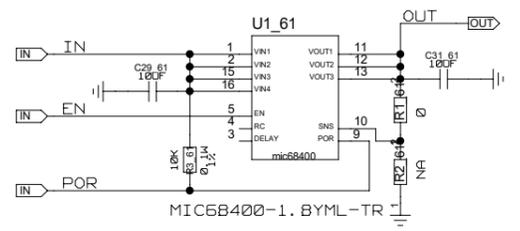
CPLD CLOCK



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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

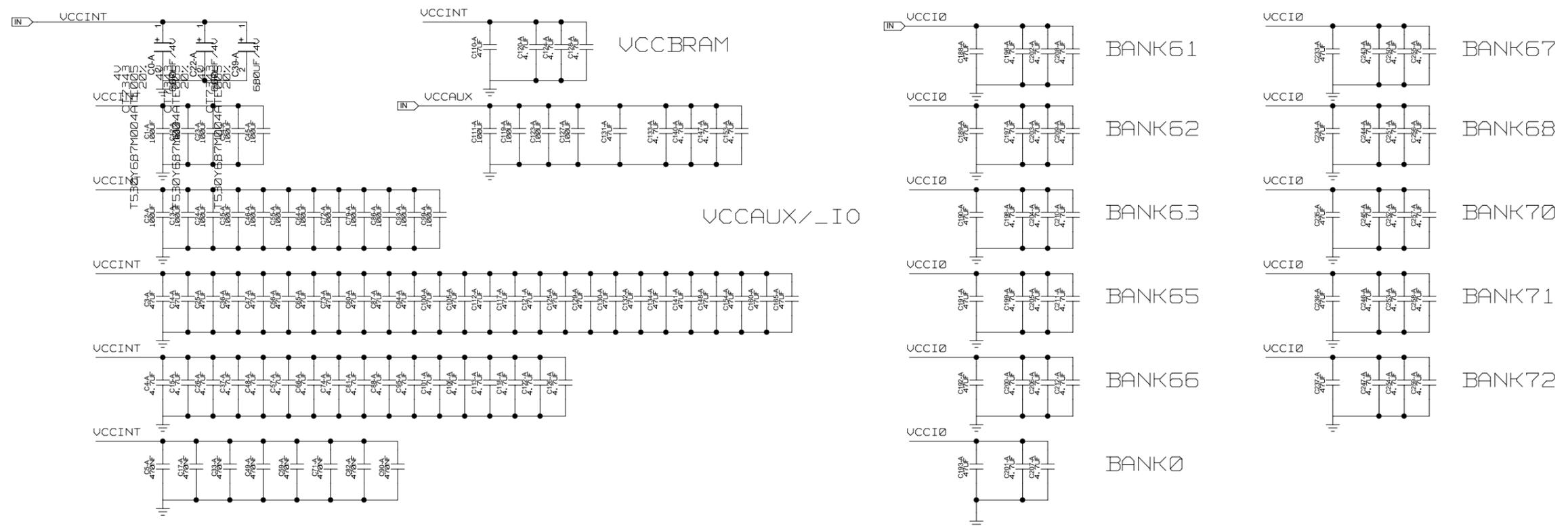
POWERSUPPLY_MIC68400



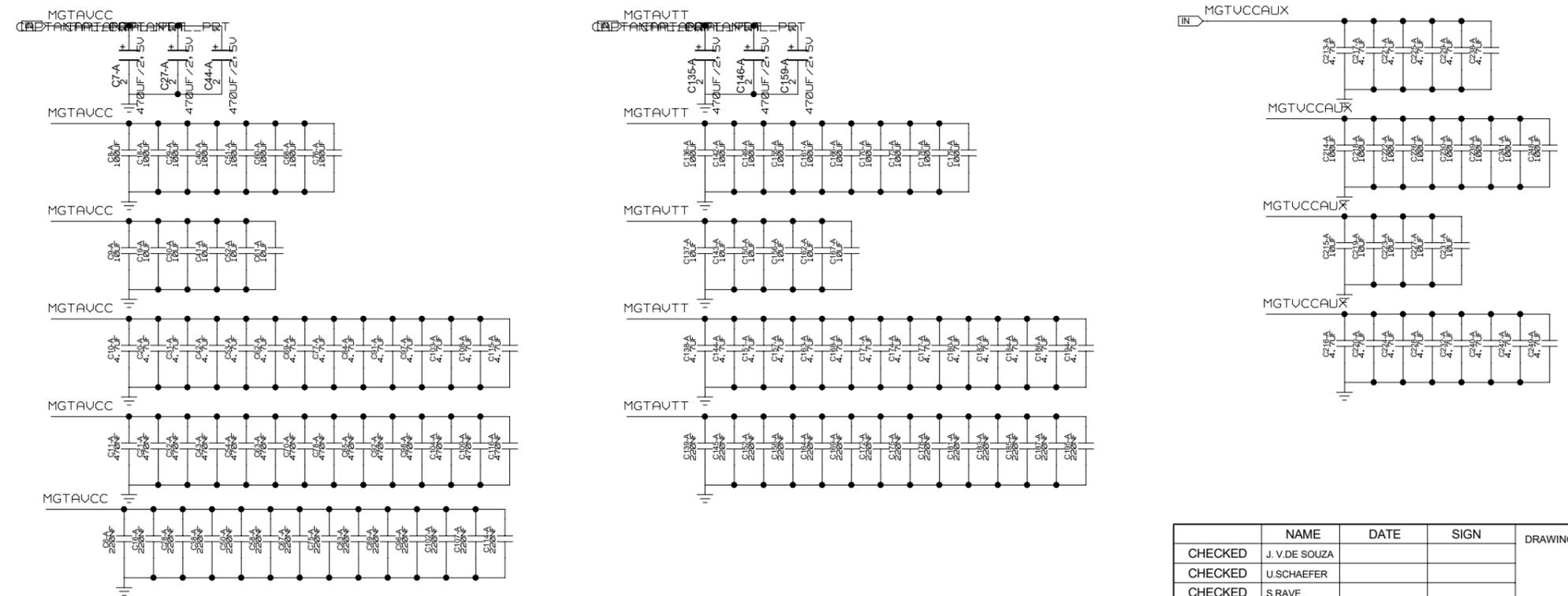
	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			POWERSUPPLY_MIC68400	
CHECKED	U. SCHAEFER				
CHECKED	S. RAVE				
DRAWN	BAUSS				
BLOCK TITLE				SIZE	DRAWING NO.
UNIVERSITY OF MAINZ				C	
SCALE				REV.	
				SHEET	OF

DECOUPLING FPGA

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



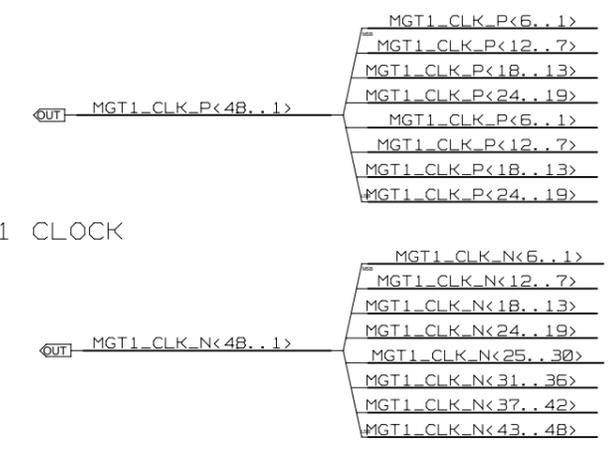
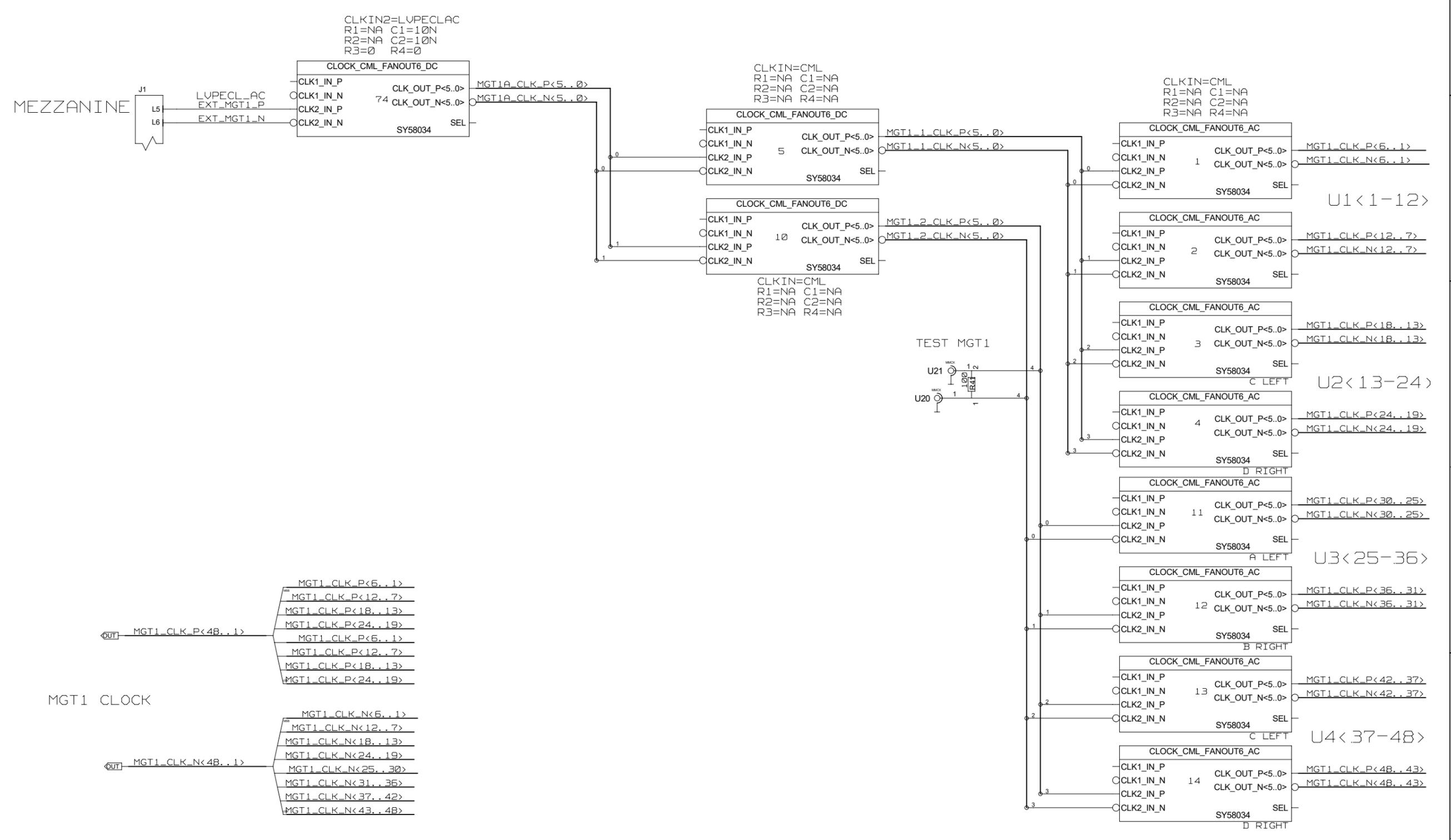
MGT DECOUPLING



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

MGT1 CLOCK

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

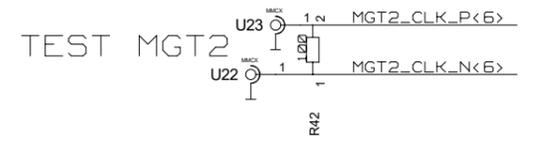
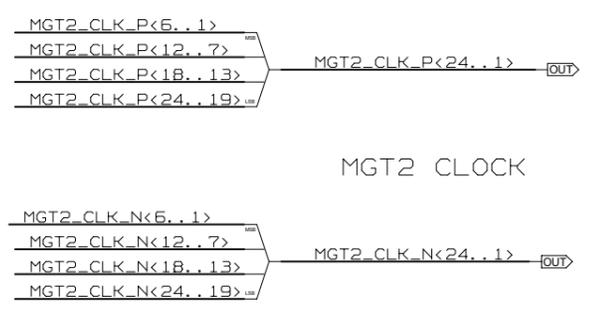
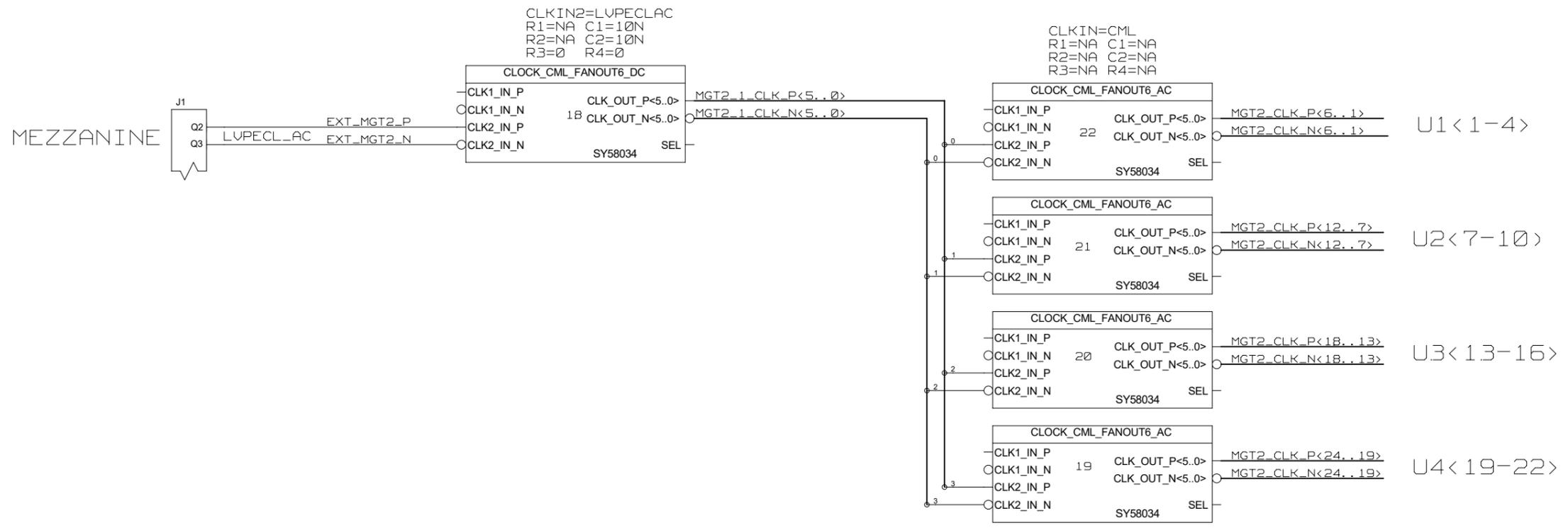


UPDATE PICK & PLACE DATA FOR FANOUT AND MUX

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

MGT2 CLOCK

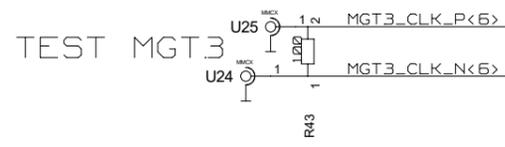
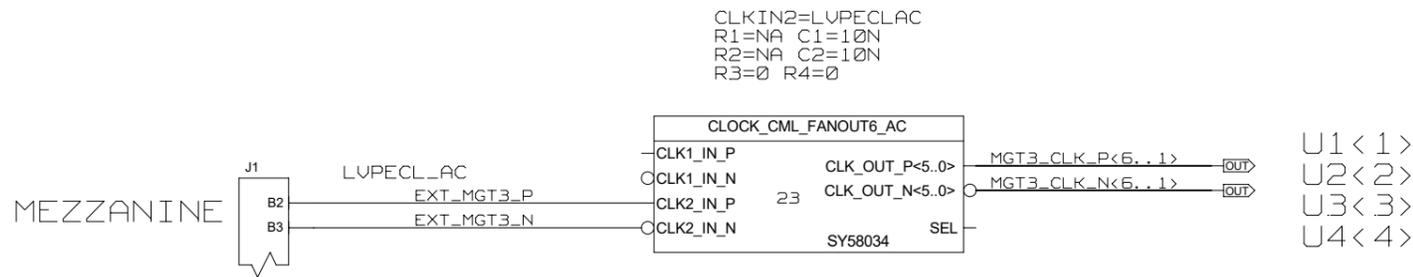


UPDATE PICK & PLACE DATA FOR FANOUT AND MUX

CHECKED	J.V. DE SOUZA			DRAWING TITLE JFEX MGT2 CLOCK
CHECKED	U.SCHAEFER			
CHECKED	S.RAVE			
DRAWN	BAUSS	08.05.2017		
BLOCK TITLE CLOCK				
UNIVERSITY OF MAINZ		SIZE C	REV.	DRAWING NO.
SCALE				SHEET 2 OF 5

MGT.3 CLOCK (ROD REFCLK)

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

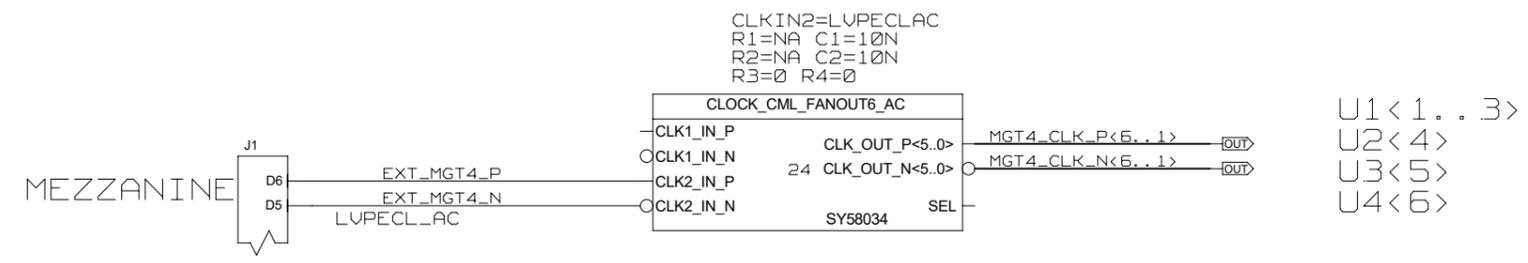


UPDATE PICK & PLACE DATA FOR FANOUT AND MUX

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

MGT4 CLOCK (IPBUS REFCLK)

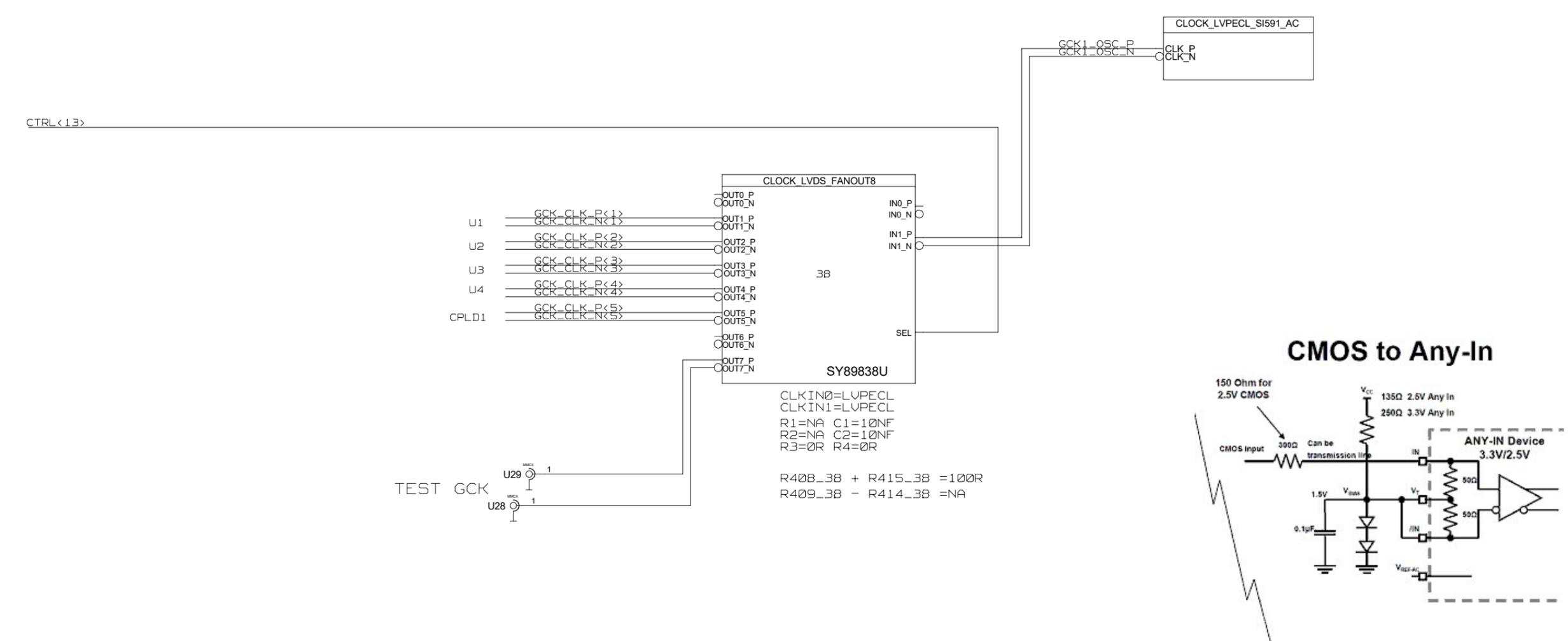


UPDATE PICK & PLACE DATA FOR FANOUT AND MUX

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

GLOBAL CLOCK



CTRL<1,3>

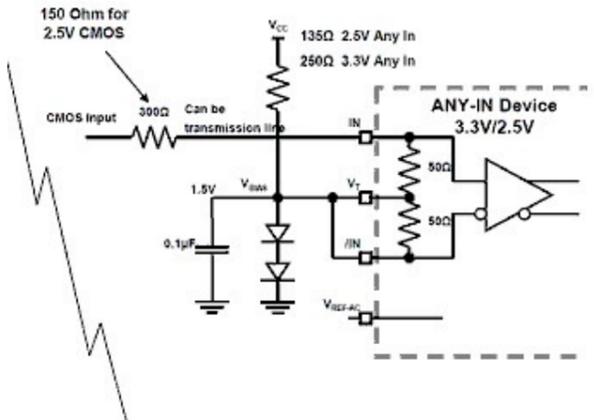
- U1 GCK_CLK_P<1> GCK_CLK_N<1>
- U2 GCK_CLK_P<2> GCK_CLK_N<2>
- U3 GCK_CLK_P<3> GCK_CLK_N<3>
- U4 GCK_CLK_P<4> GCK_CLK_N<4>
- CPLD1 GCK_CLK_P<5> GCK_CLK_N<5>

CLOCK LVDS FANOUT8
 3B
SY89838U

CLKIN0=LVPECL
 CLKIN1=LVPECL
 R1=NA C1=10NF
 R2=NA C2=10NF
 R3=0R R4=0R
 R408_3B + R415_3B =100R
 R409_3B - R414_3B =NA

TEST GCK
 U29 1
 U28 1

CMOS to Any-In



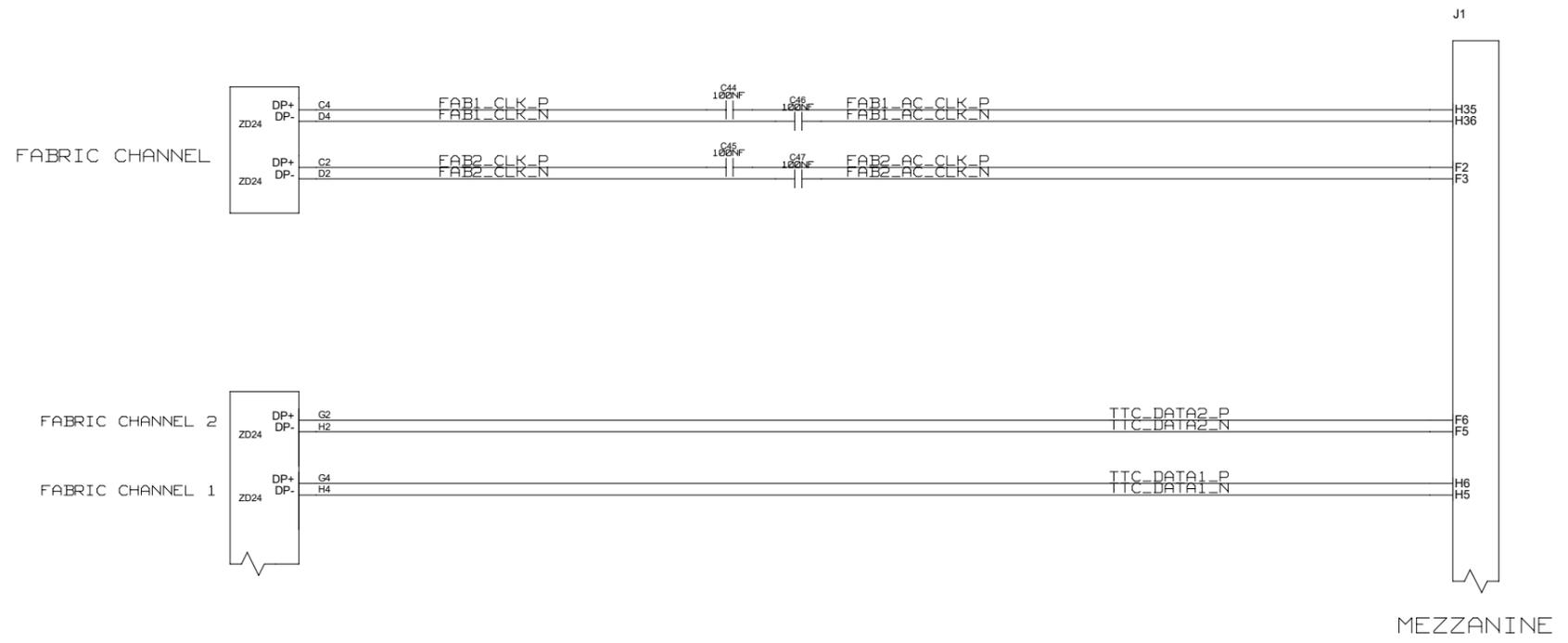
LVDS <OUT> GCK_CLK_P<5..1>
 <OUT> GCK_CLK_N<5..1>

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 S.RAVE			
DRAWN BAUSS	17. 08. 2015		
BLOCK TITLE			CLOCK
UNIVERSITY OF MAINZ			SIZE C
SCALE			REV.
DRAWING NO.			SHEET 5 OF 5

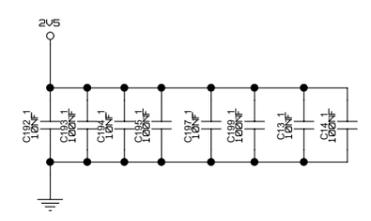
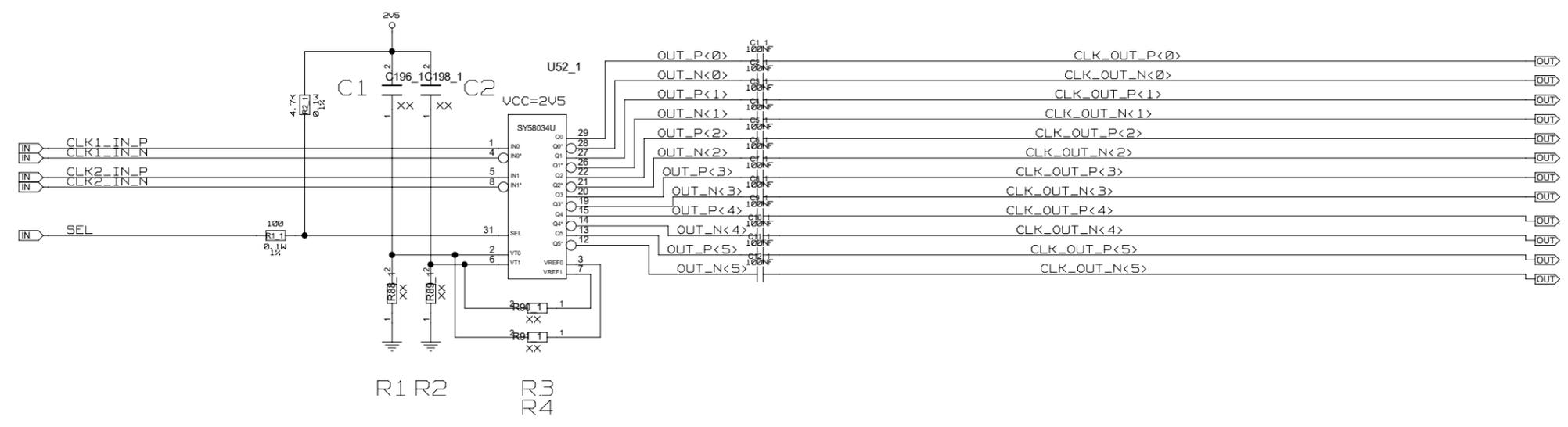
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

LHC1 + LHC2 CLK

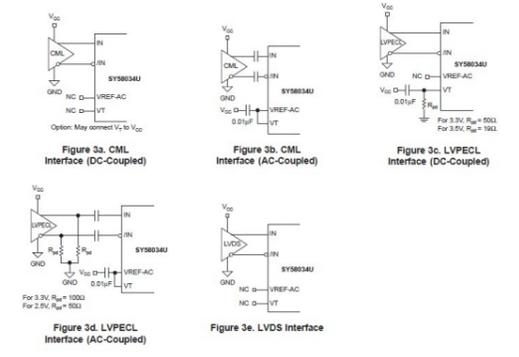


CHECKED	J. V. DE SOUZA			DRAWING TITLE JFEX TTC DATA
CHECKED	U. SCHAEFER			
CHECKED	S. RAVE			
DRAWN	BAUSS	06. 11. 2015		
BLOCK TITLE CLOCK				
UNIVERSITY OF MAINZ				SIZE C
				REV.
SCALE				DRAWING NO.
				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

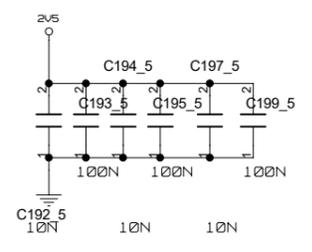
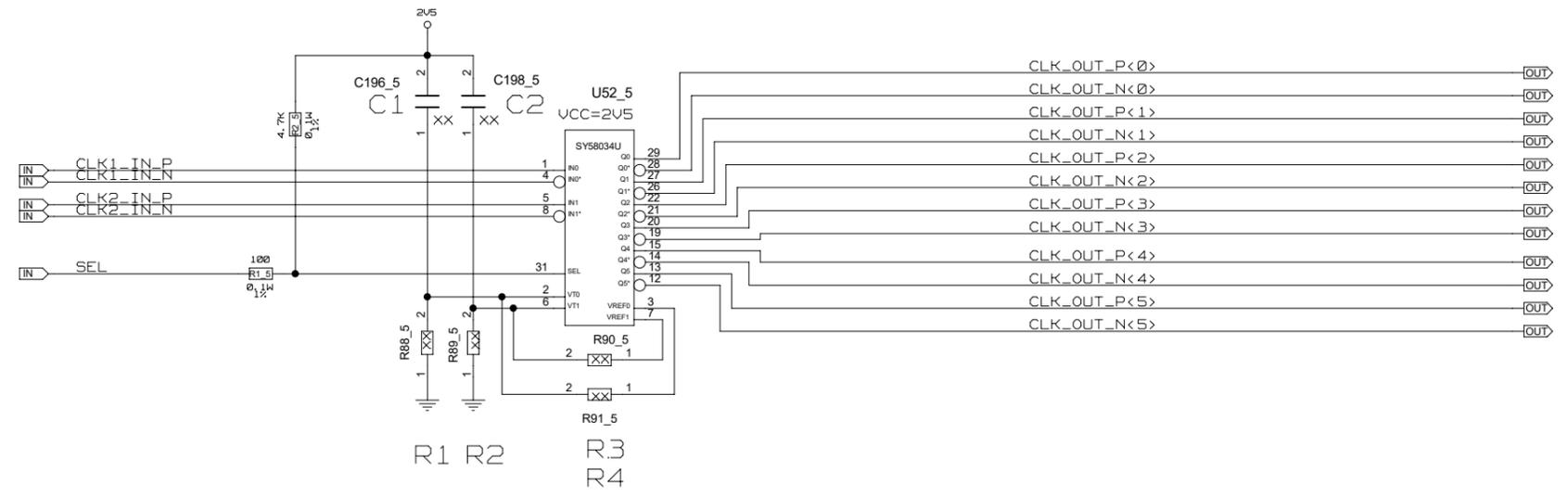


INPUT INTERFACE APPLICATIONS

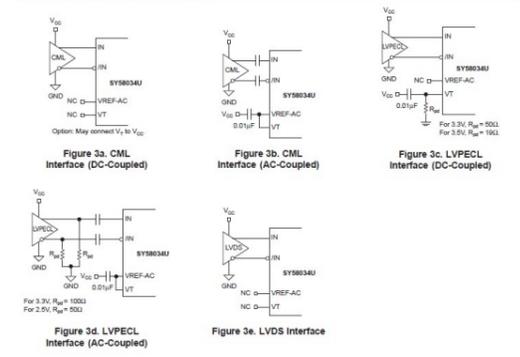


	NAME	DATE	SIGN	DRAWING TITLE CLOCK
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED	S. RAVE			
DRAWN	BAUSS			
BLOCK TITLE CLOCK CML FANOUT6 AC				
UNIVERSITY OF MAINZ		SIZE C	REV.	DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

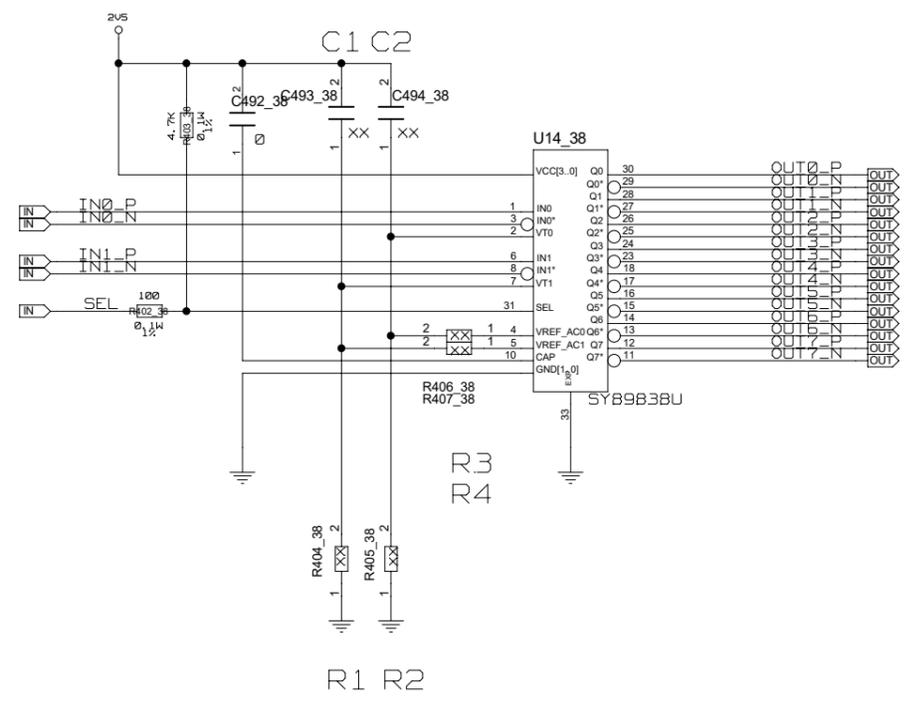


INPUT INTERFACE APPLICATIONS

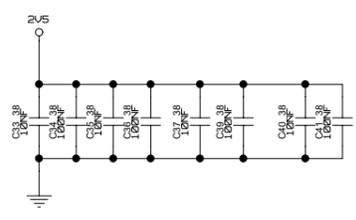


CHECKED	J. V. DE SOUZA			DRAWING TITLE CLOCK
CHECKED	U. SCHAEFER			
CHECKED	S. RAVE			
DRAWN	BAUSS			
BLOCK TITLE CLOCK_CML_FANOUT6_DC				
UNIVERSITY OF MAINZ		SIZE C	REV.	DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

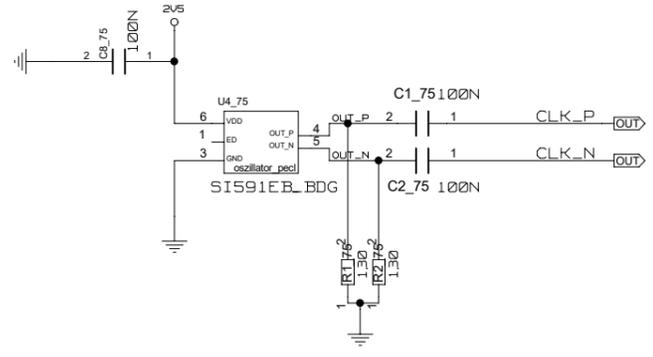


OUT0_P	2	R408_38
OUT0_N	2	R408_38
OUT1_P1	2	R409_38
OUT1_N	2	R409_38
OUT2_P1	2	R410_38
OUT2_N	2	R410_38
OUT3_P1	2	R411_38
OUT3_N	2	R411_38
OUT4_P1	2	R412_38
OUT4_N	2	R412_38
OUT5_P1	2	R413_38
OUT5_N	2	R413_38
OUT6_P1	2	R414_38
OUT6_N	2	R414_38
OUT7_P1	2	R415_38
OUT7_N	2	R415_38



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

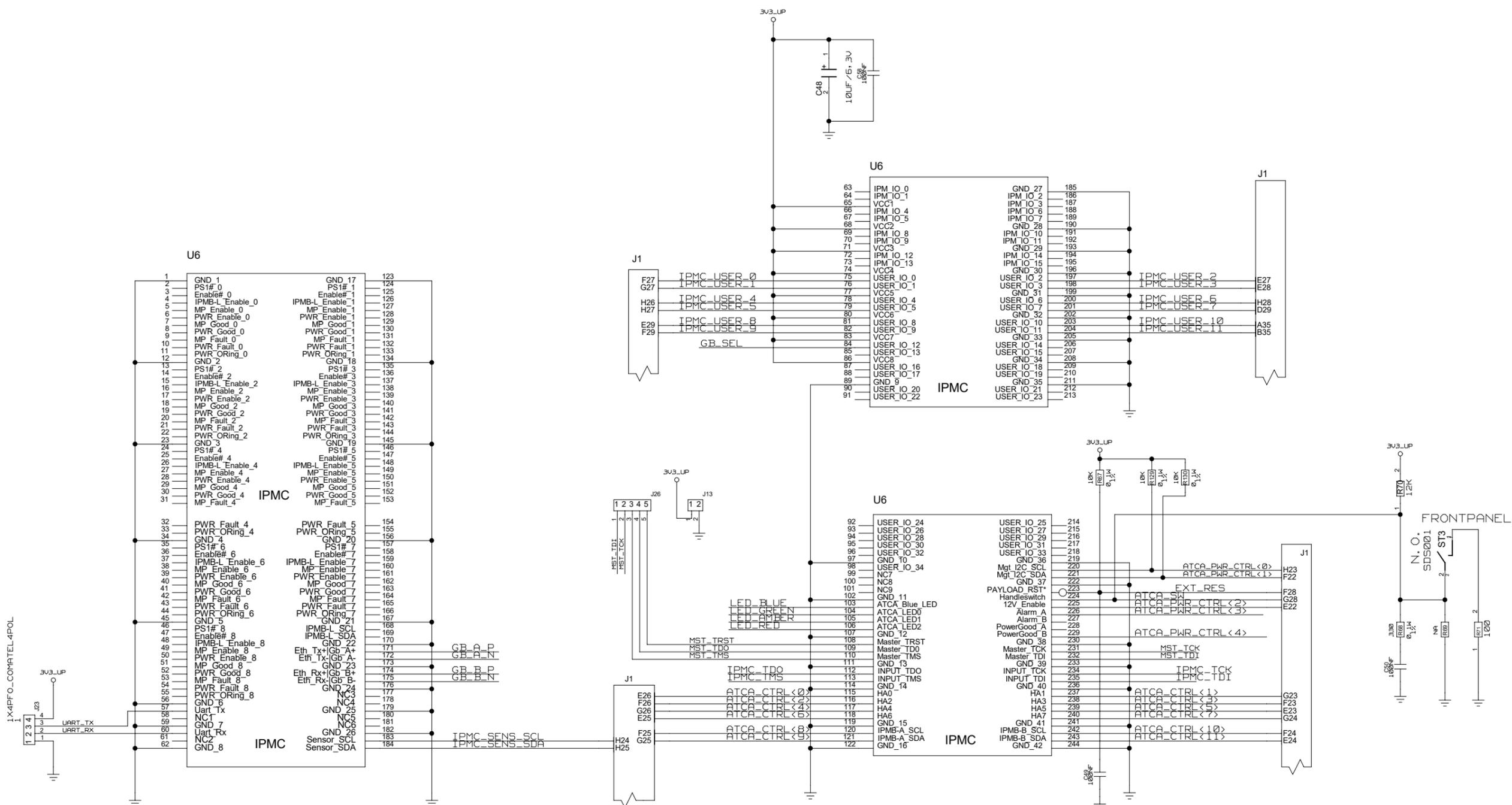
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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

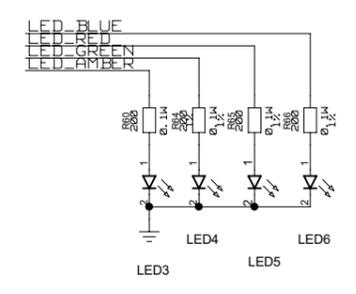
IPMC CONNECTOR MOLEX_87782-3003

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>

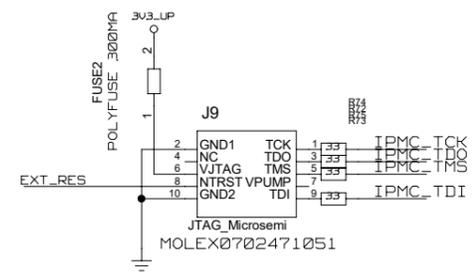


NAME	DATE	SIGN	DRAWING TITLE
CHECKED J.V.DE SOUZA			JFEX
CHECKED U.SCHAEFER			
CHECKED S.RAVE			
DRAWN BAUSS	30.10.2015		
BLOCK TITLE	IPMC		
UNIVERSITY OF MAINZ			SIZE: C REV.: DRAWING NO.: SCALE: SHEET OF

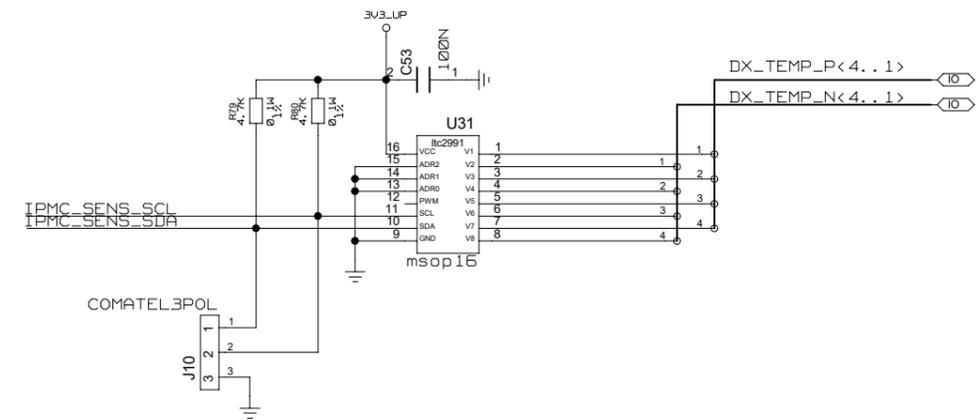
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

IPMC CONTROL

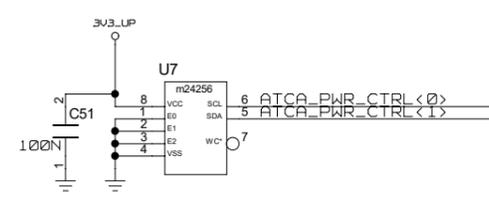
IPMC JTAG PORT FRONTPANEL



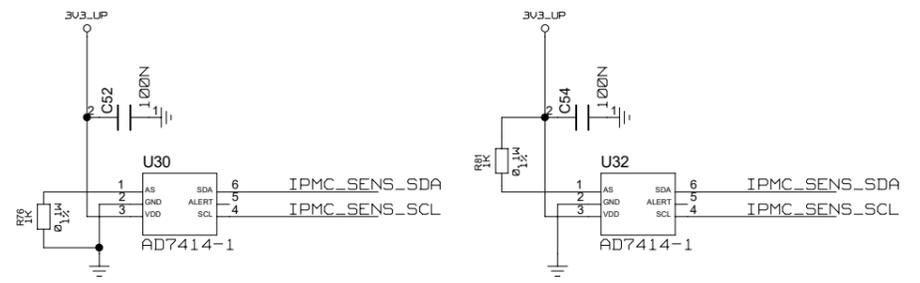
I2C FPGA TEMPERATURE



MEMORY



I2C BOARDTEMP

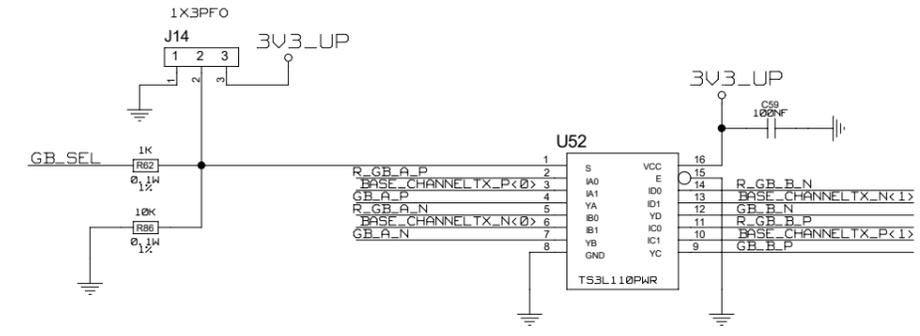


	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J.V. DE SOUZA			JFEX	
CHECKED	U.SCHAEFER				
CHECKED	S.RAVE				
DRAWN	BAUSS	23.07.2015			
BLOCK TITLE				DRAWING NO.	
IPMC				SIZE	REV.
UNIVERSITY OF MAINZ				SCALE	SHEET OF

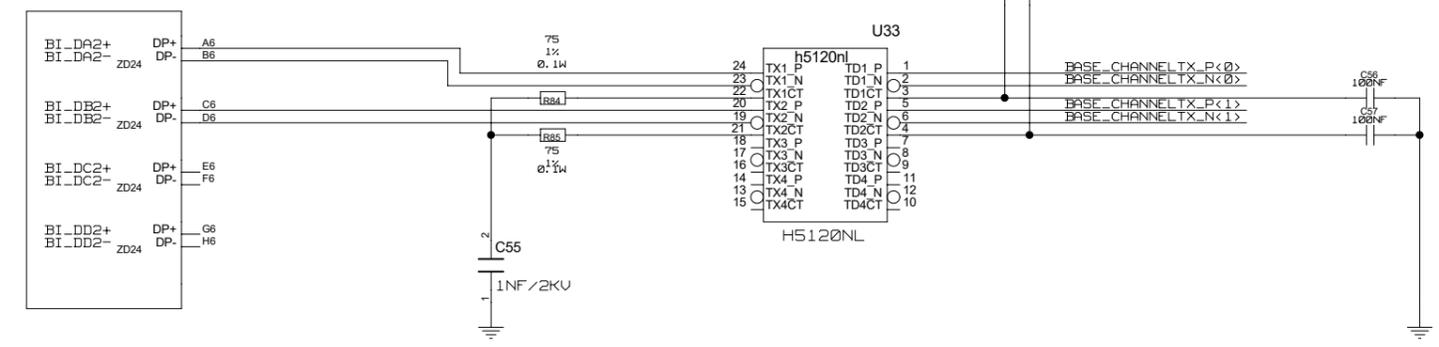
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

IPMC CONTROL

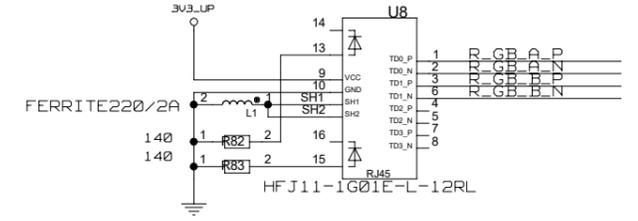
ETHERNET SWITCH



BACKPLANE BASE CHANNEL2

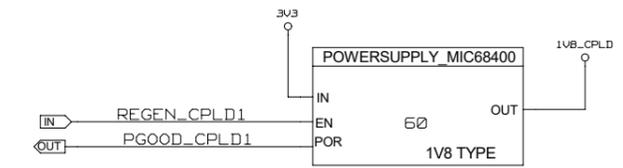
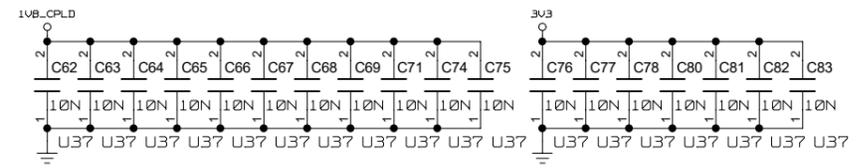
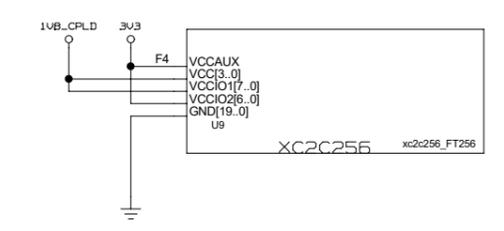
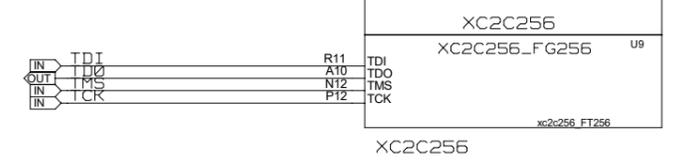
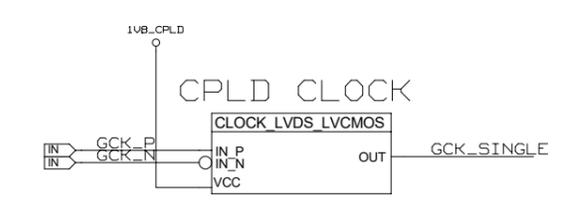
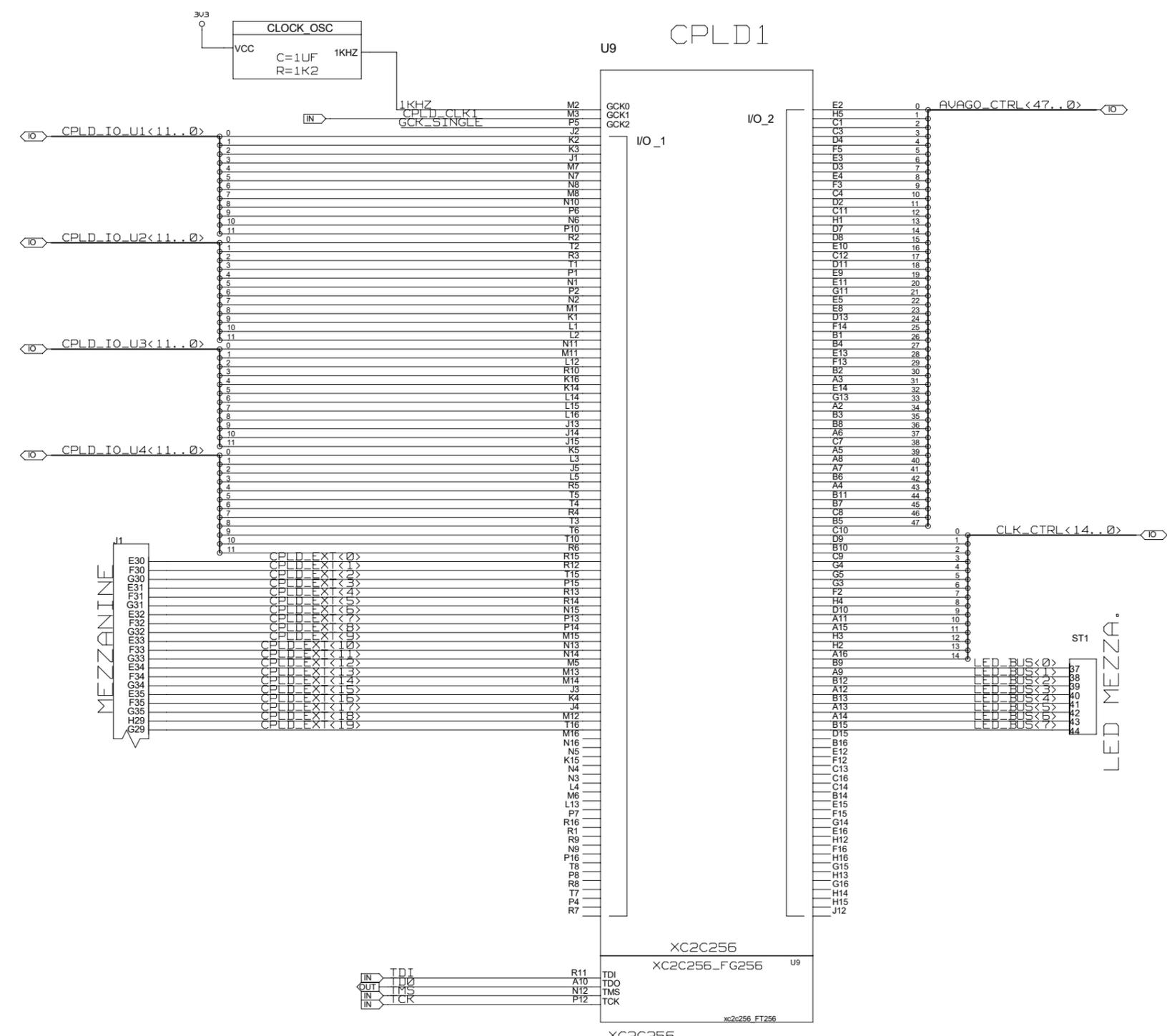


RJ45 FRONT PANEL



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

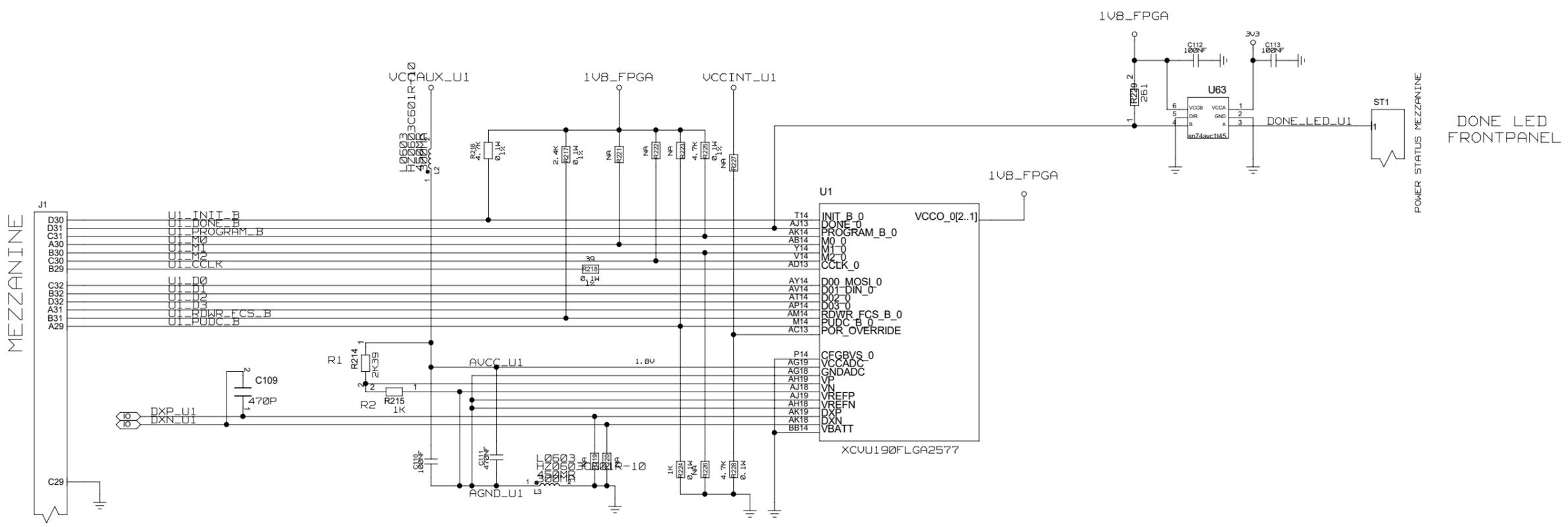
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J.V.DE SOUZA		
CHECKED	U.SCHAEFER		
CHECKED	S.RAVE		
DRAWN	BAUSS	22.07.2015	

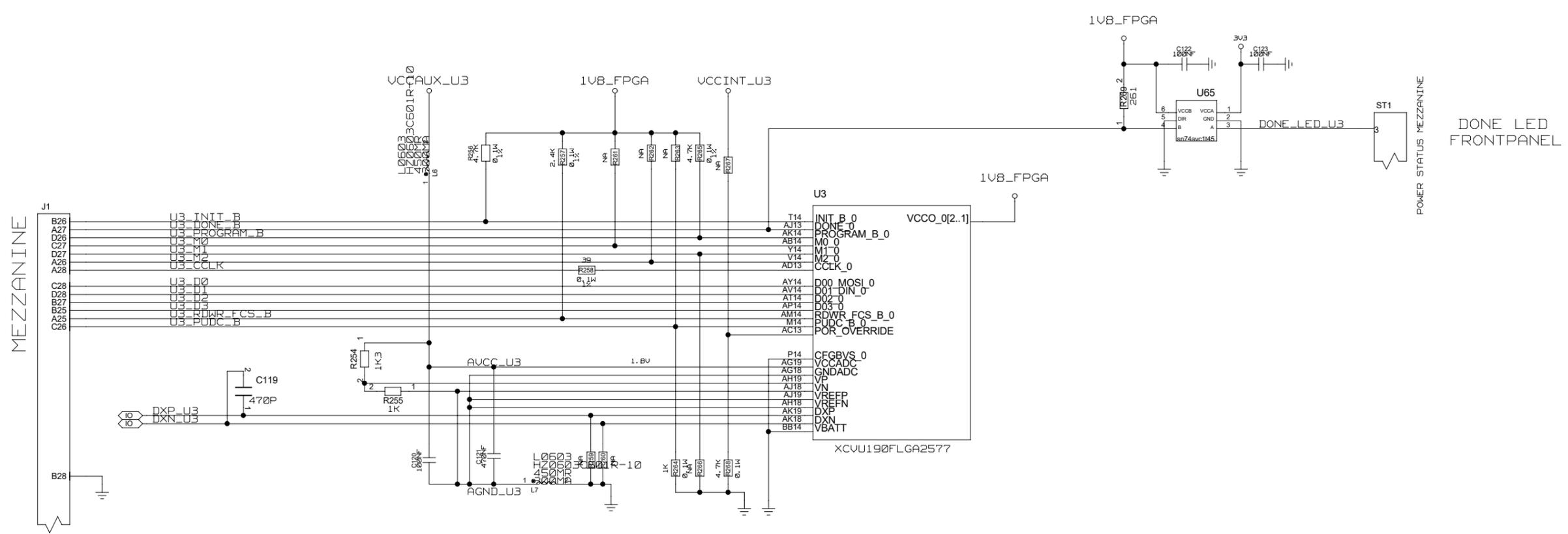
BLOCK TITLE			DRAWING NO.	
CPLD				
UNIVERSITY OF MAINZ			SCALE	SHEET 1 OF 1

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



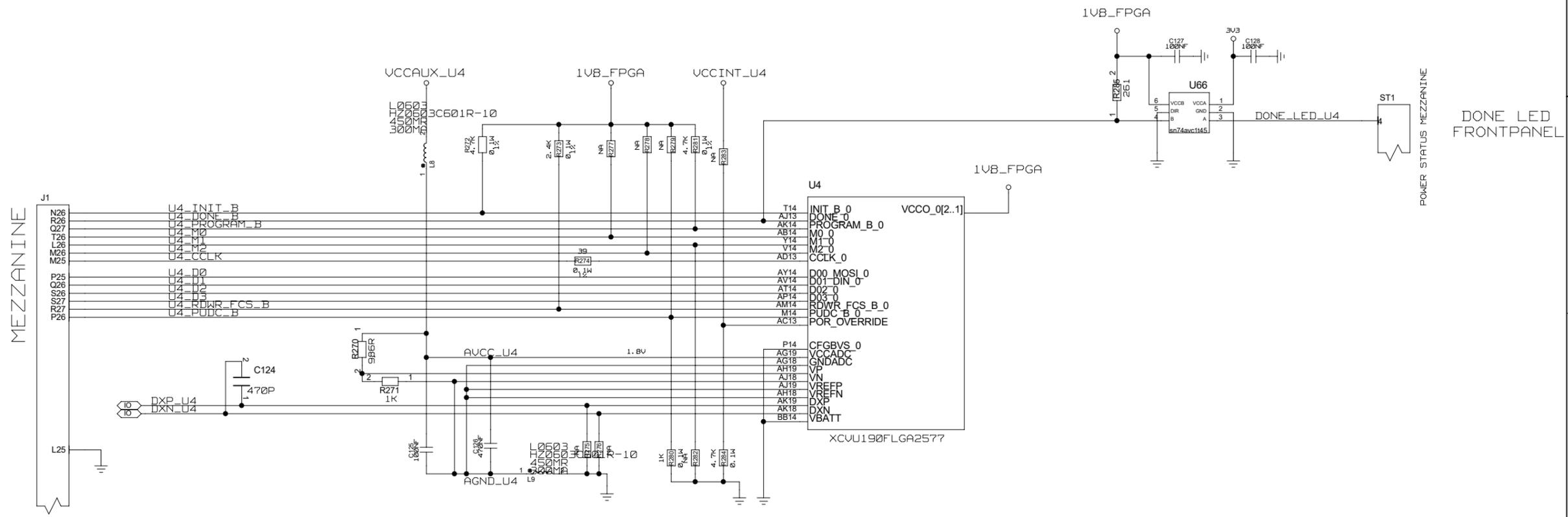
	NAME	DATE	SIGN	DRAWING TITLE	
CHECKED	J. V. DE SOUZA			JFEX	
CHECKED	U. SCHAEFER				
CHECKED	S. RAVE				
DRAWN	BAUSS	17. 09. 2015			
BLOCK TITLE				SIZE	REV.
CONFIGURATION PROCESSOR U1				C	
UNIVERSITY OF MAINZ				SCALE	DRAWING NO.
				SHEET 1 OF 1	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



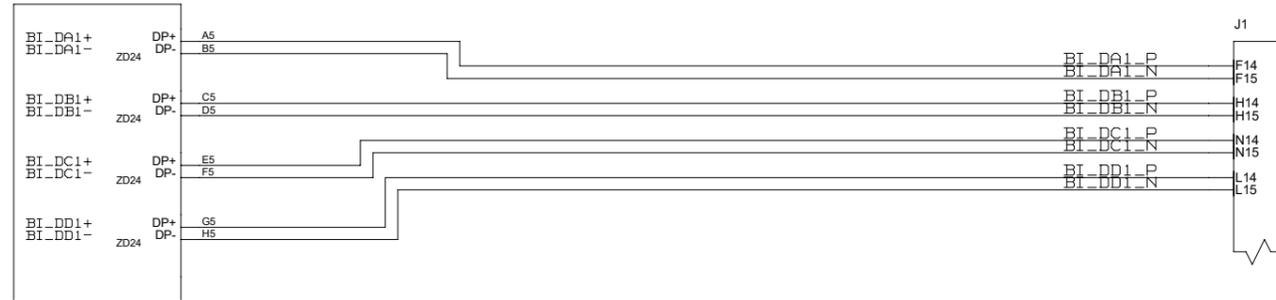
NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED S. RAVE			
DRAWN BAUSS			
BLOCK TITLE			
CONFIGURATION PROCESSOR U4			
UNIVERSITY OF MAINZ		SIZE	DRAWING NO.
		SCALE	SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

IPBUS

BACKPLANE BASE CHANNEL 1

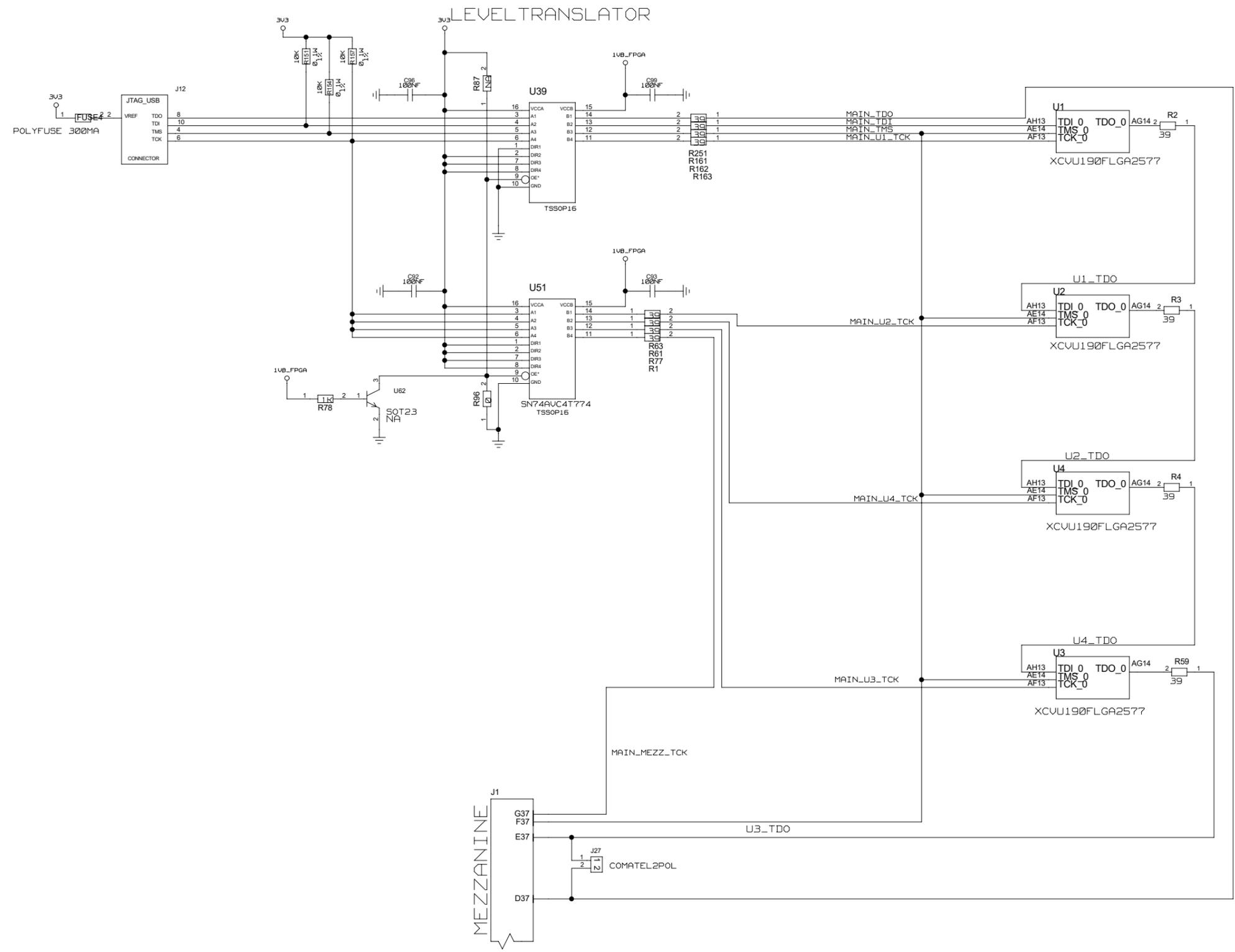
MEZZANINE



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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

JTAG CHAIN



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