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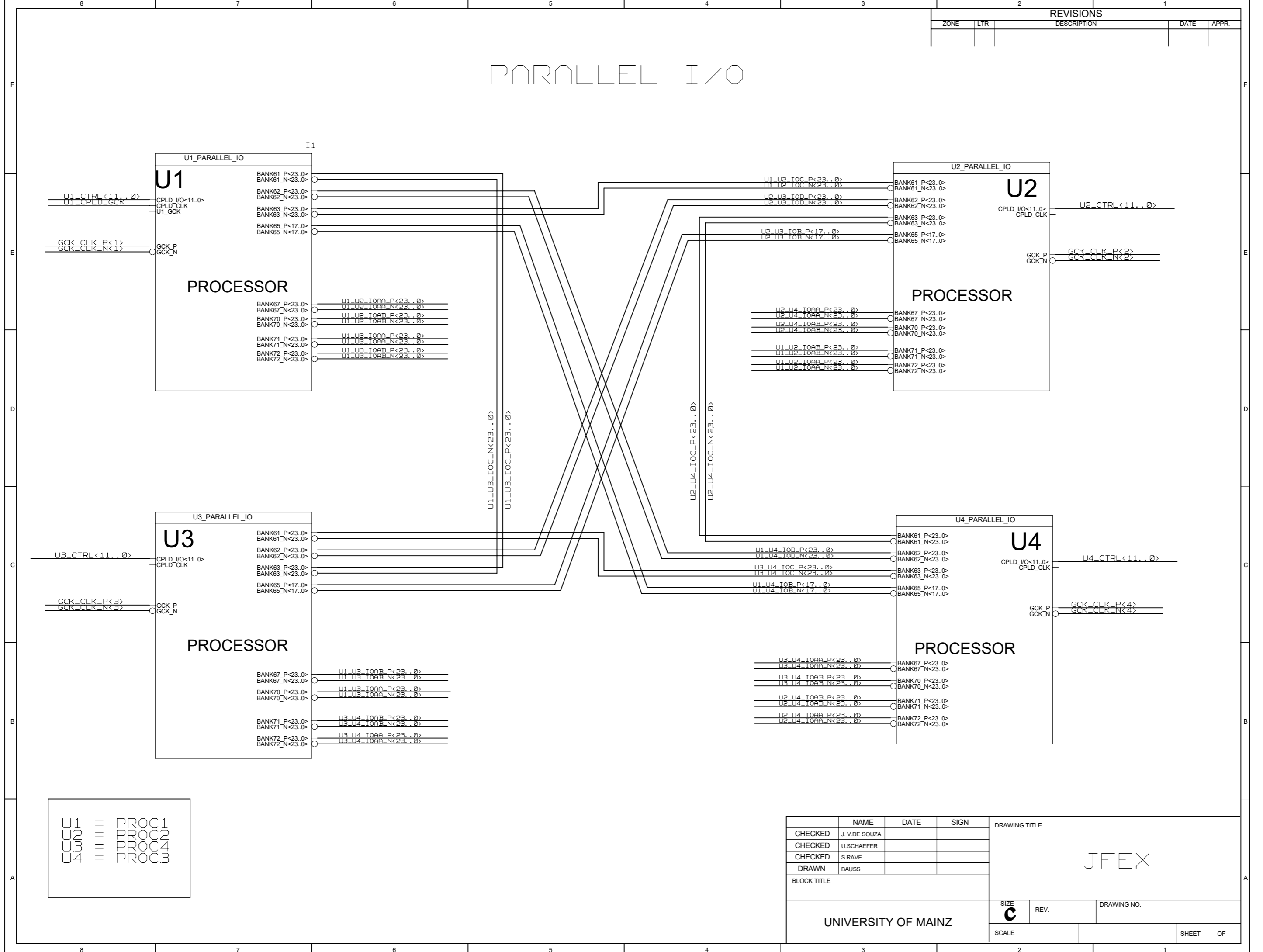
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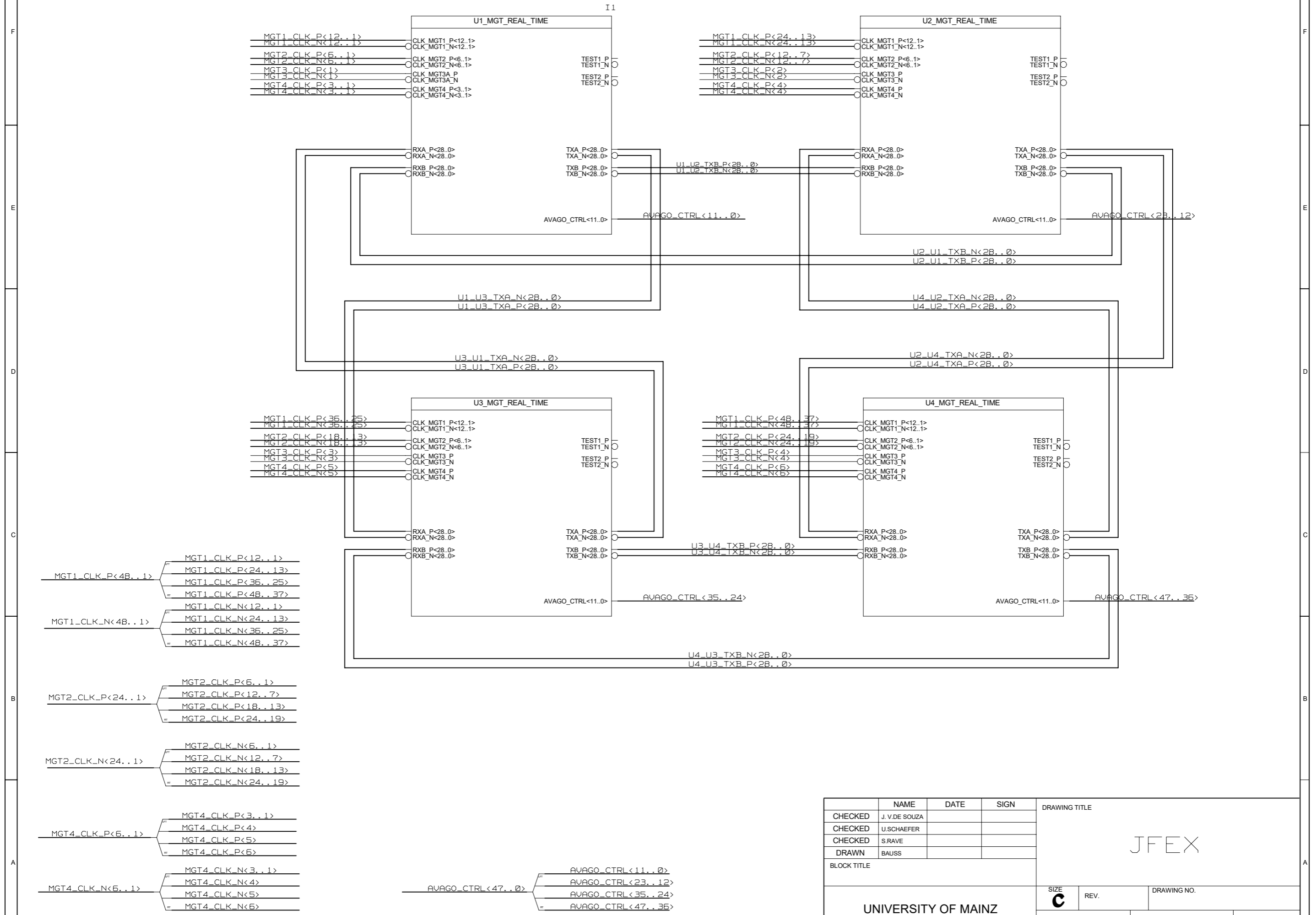


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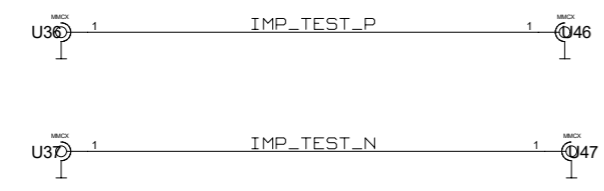
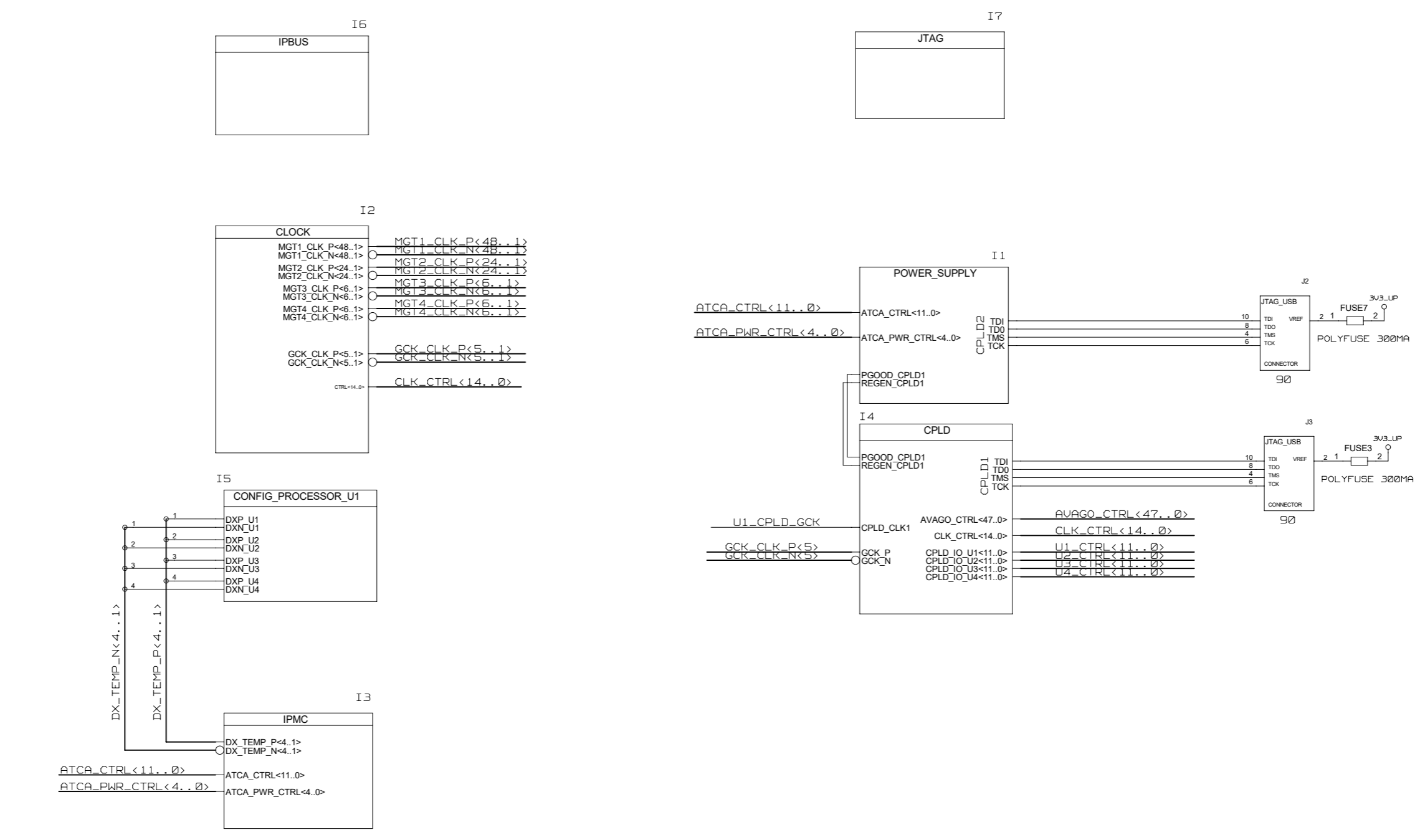
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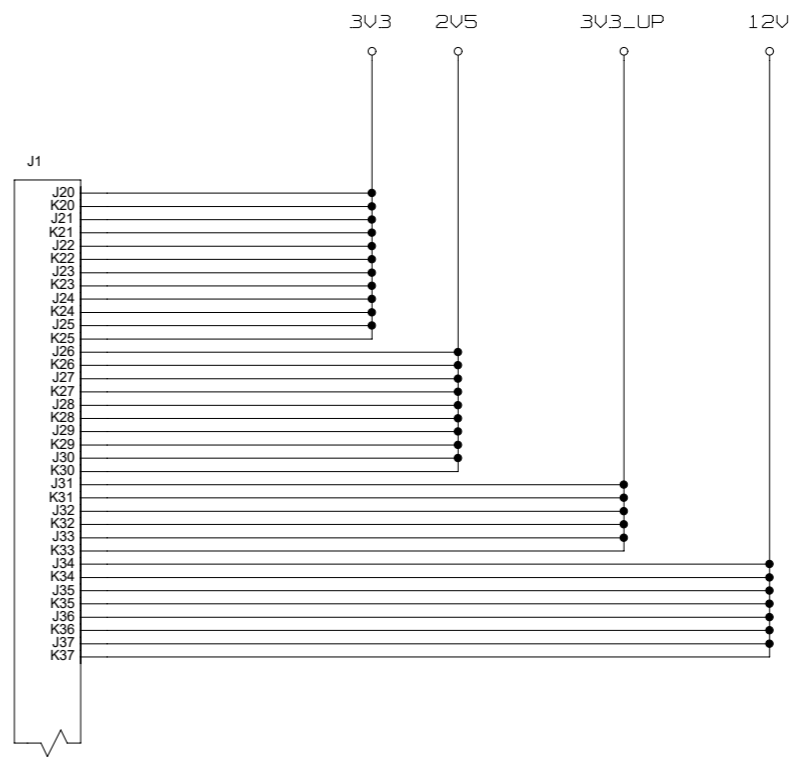
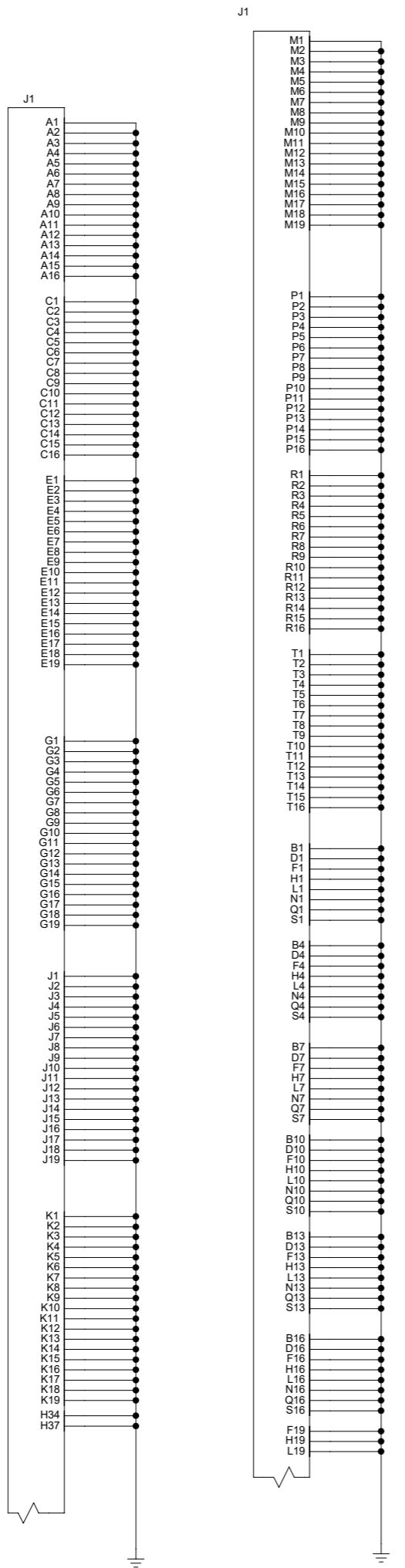
CLOCK, CONFIG, POWER, JTAG, IPMC



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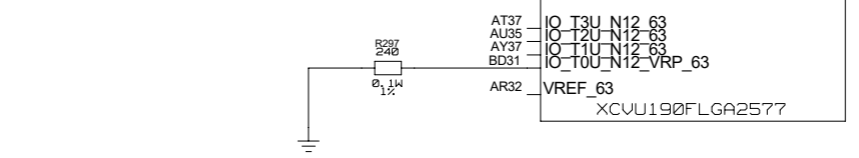
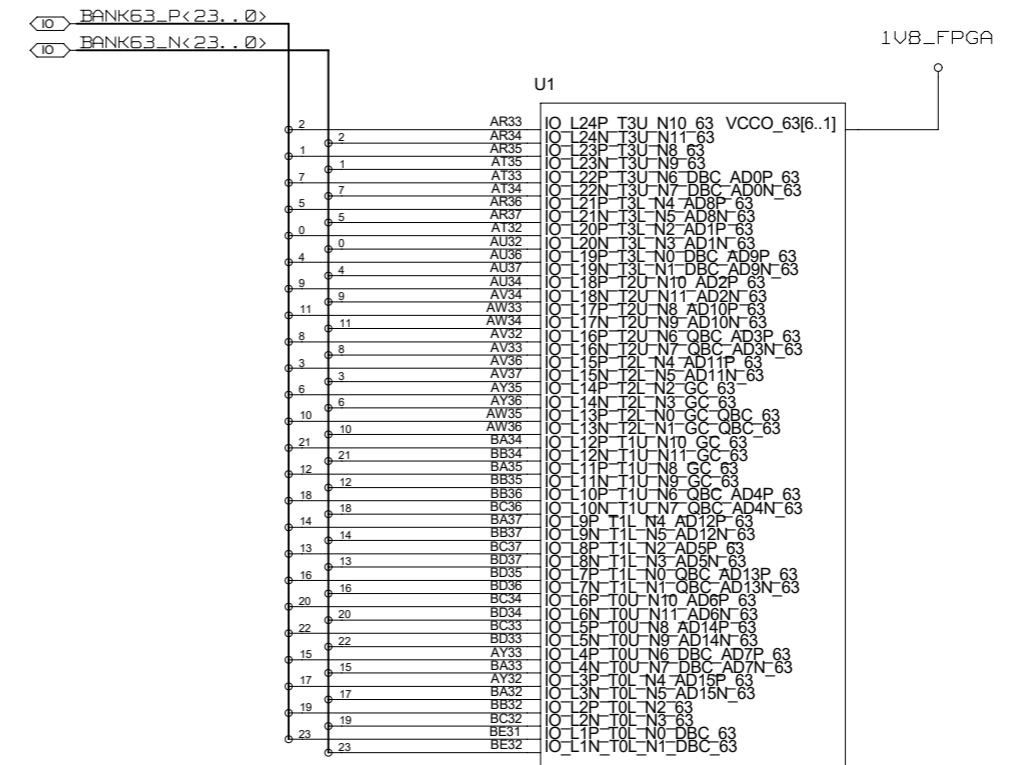
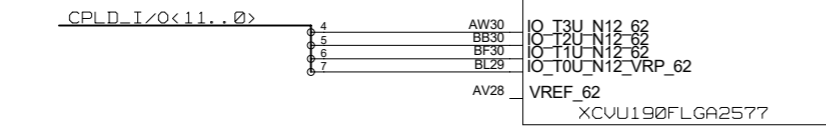
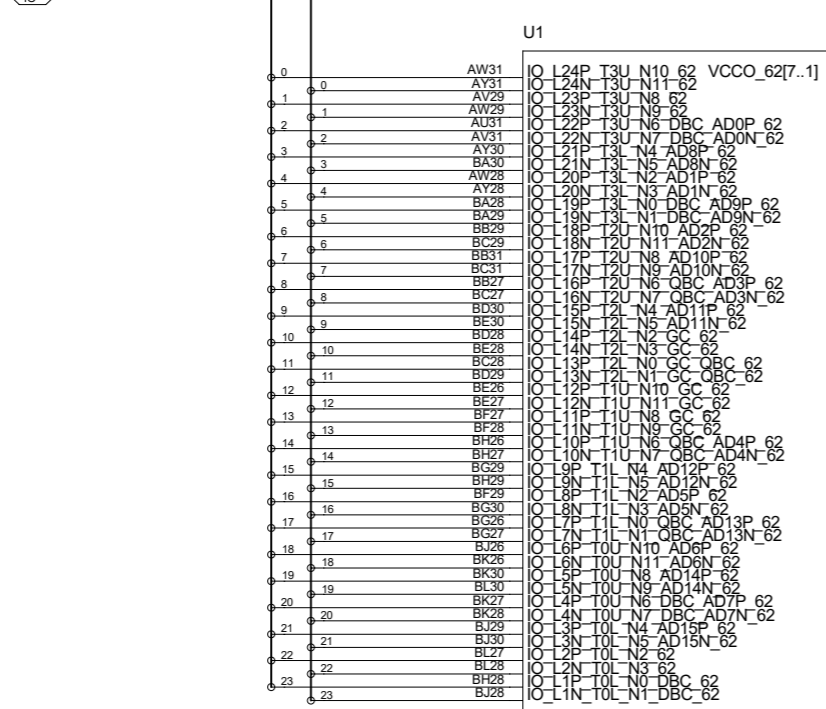
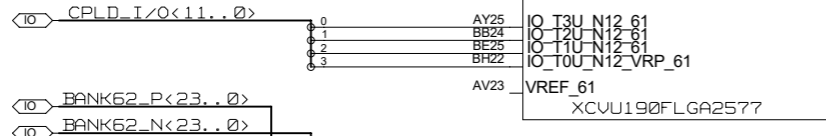
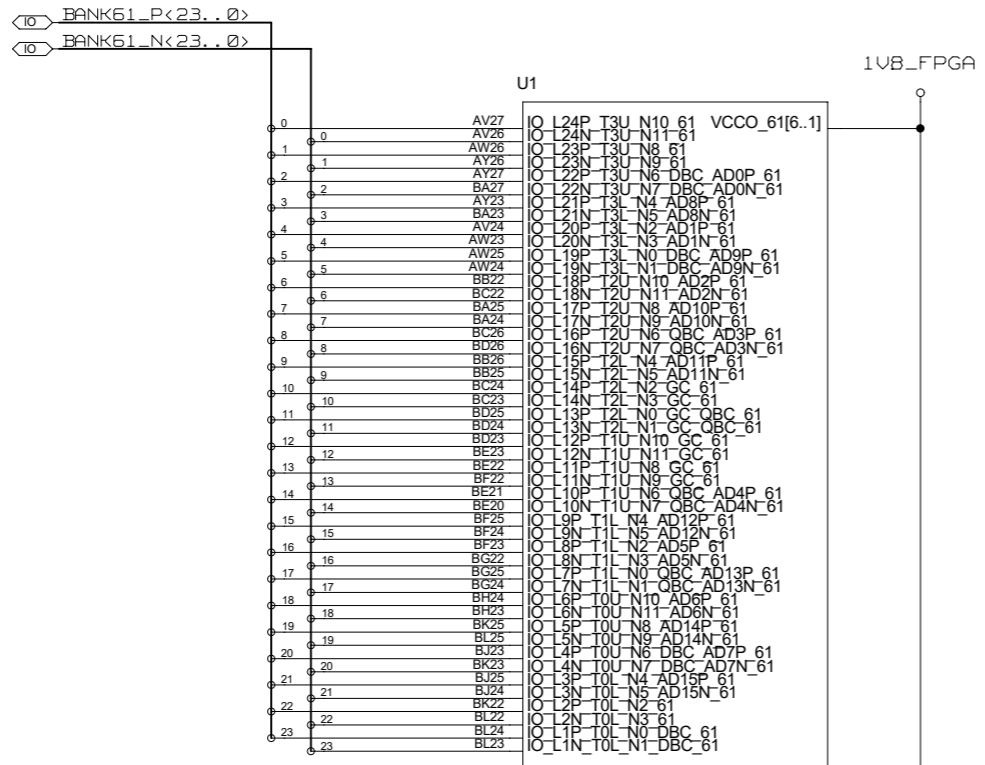
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MEZZANINE CONNECTOR GND AND VCC



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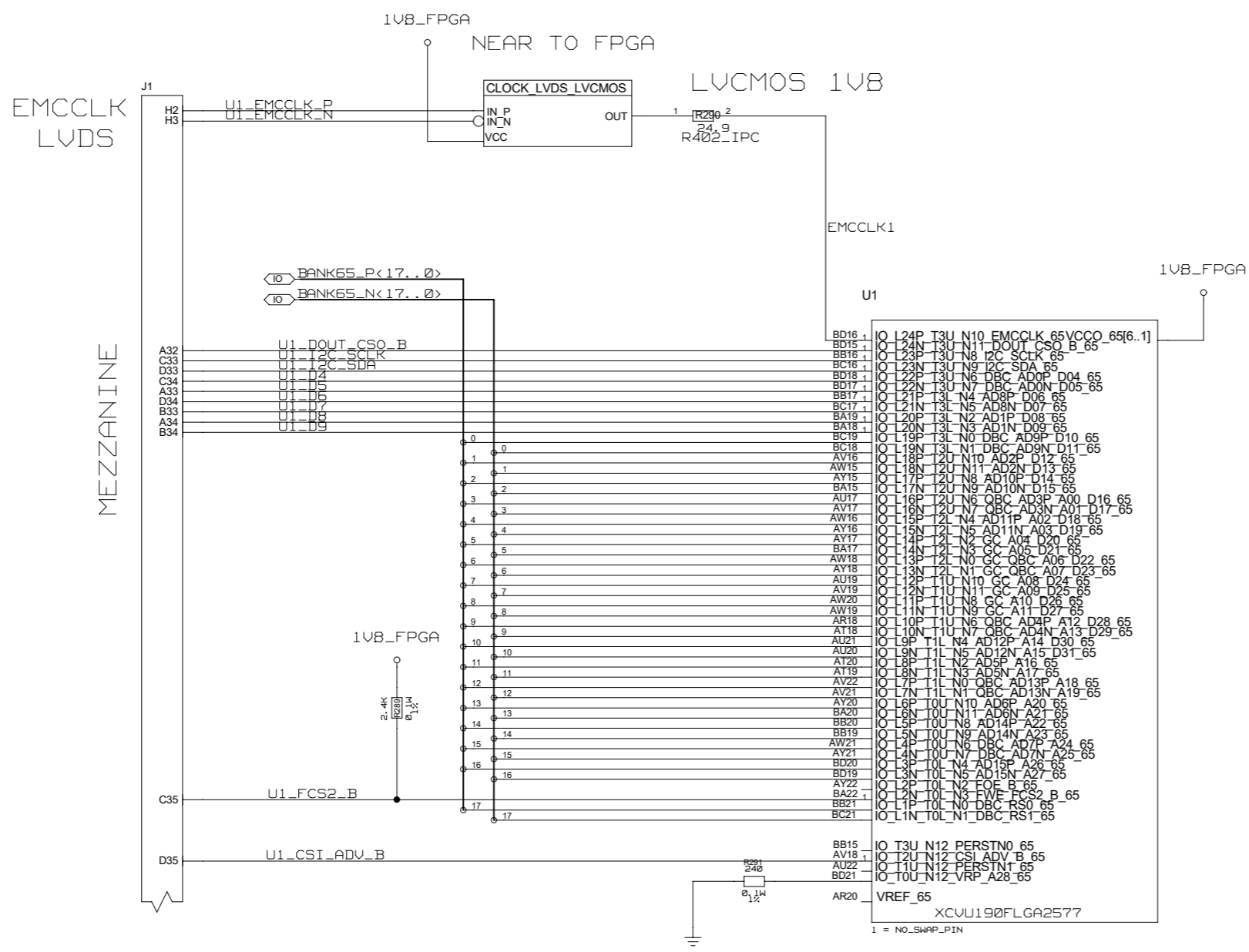
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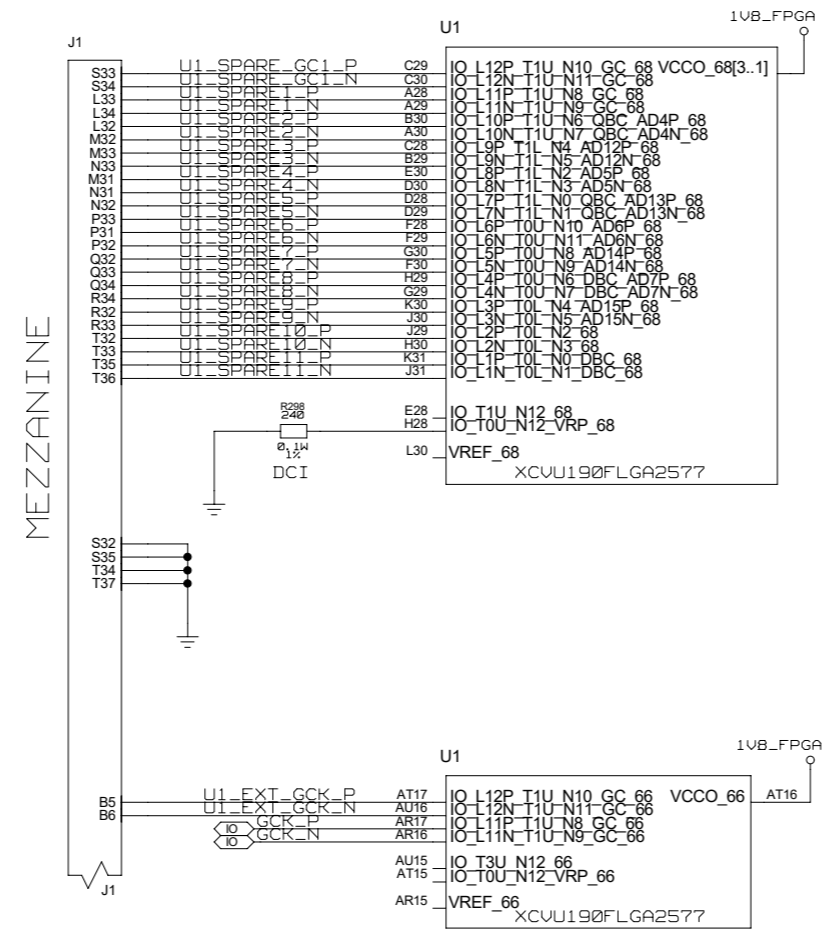
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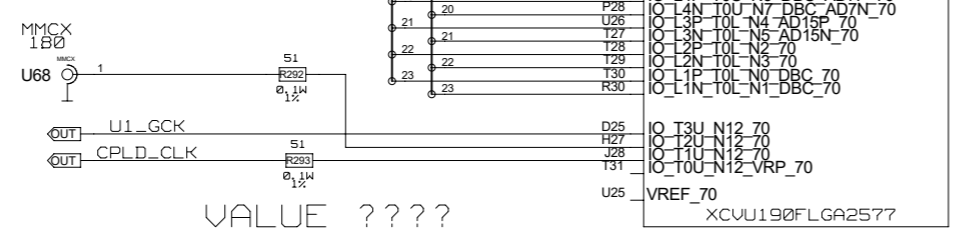
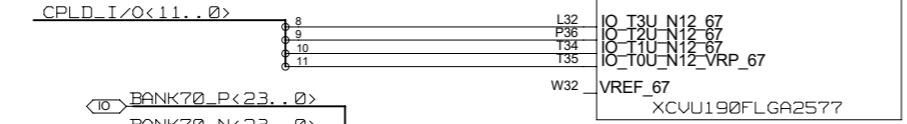
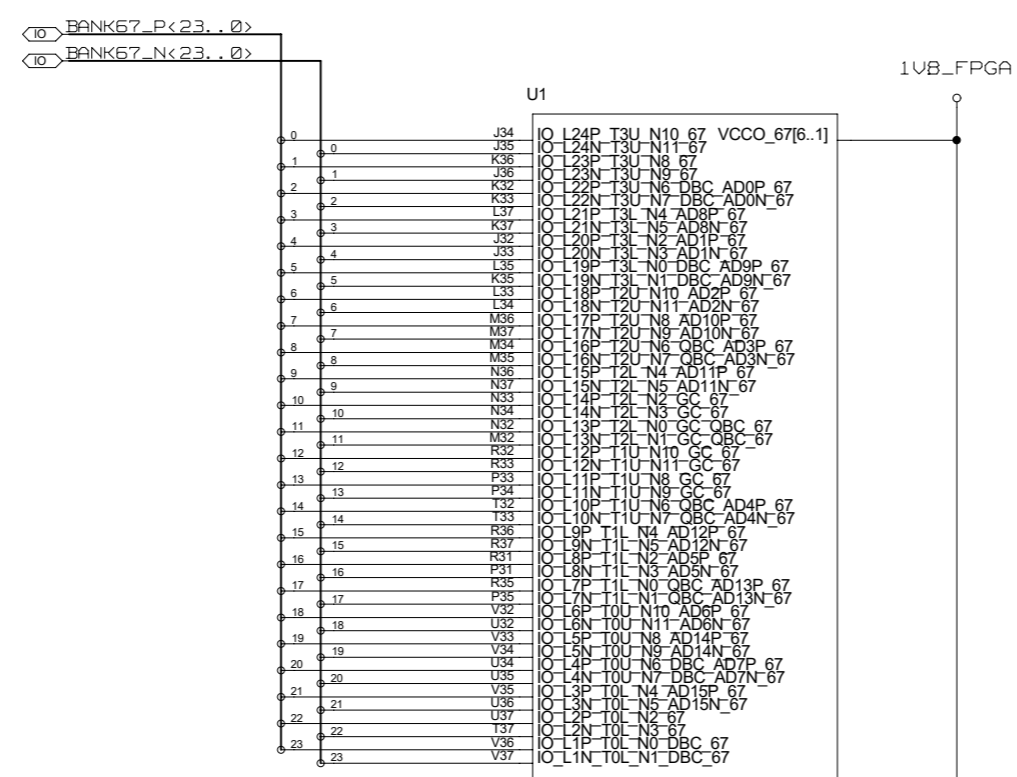
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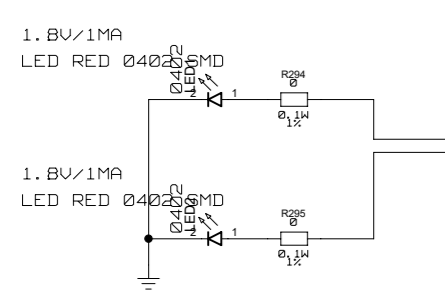
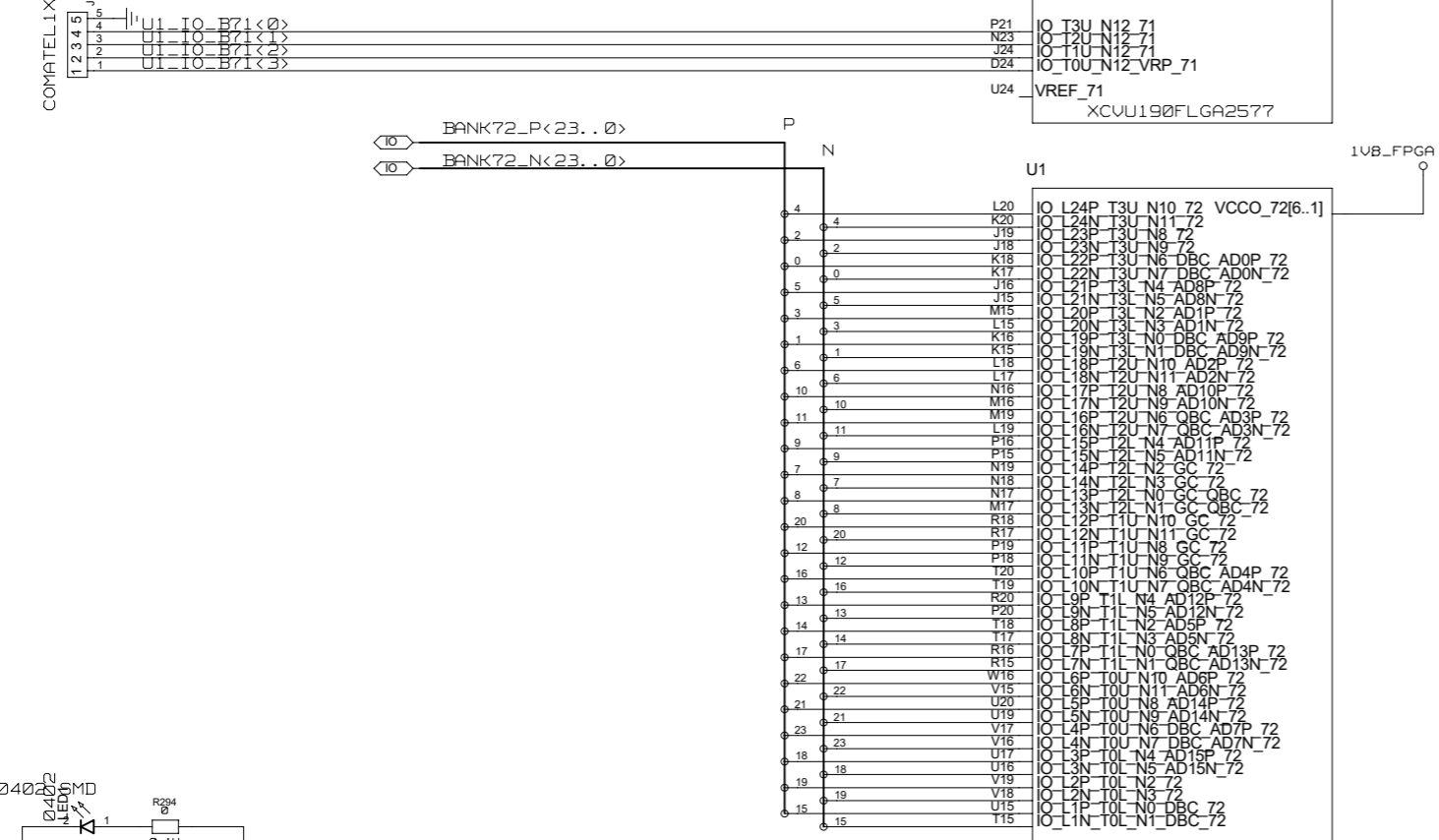
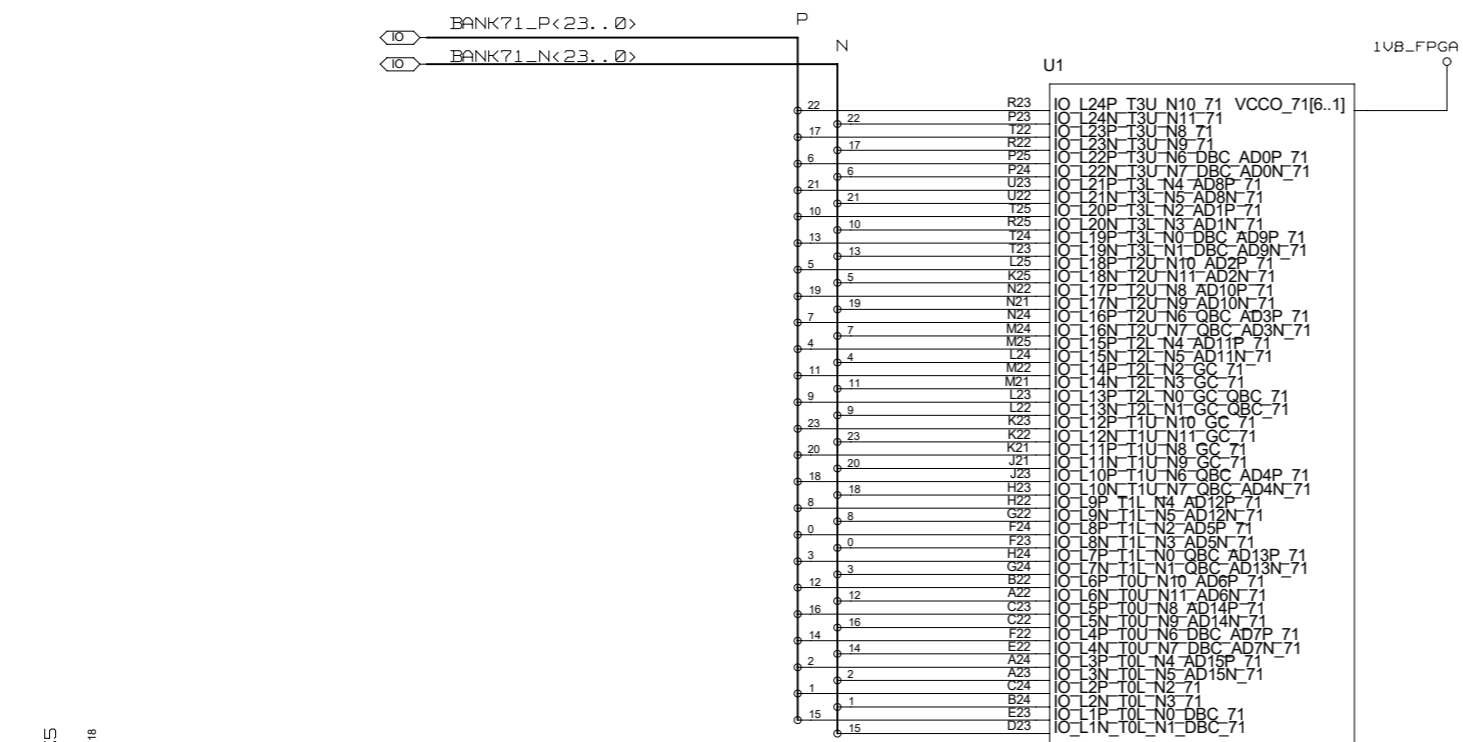
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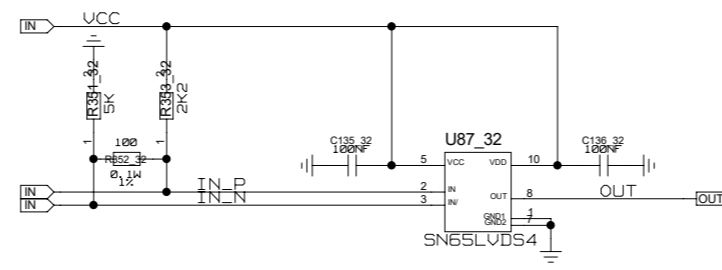
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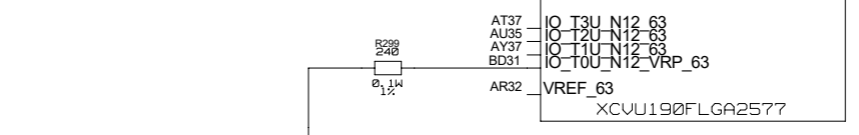
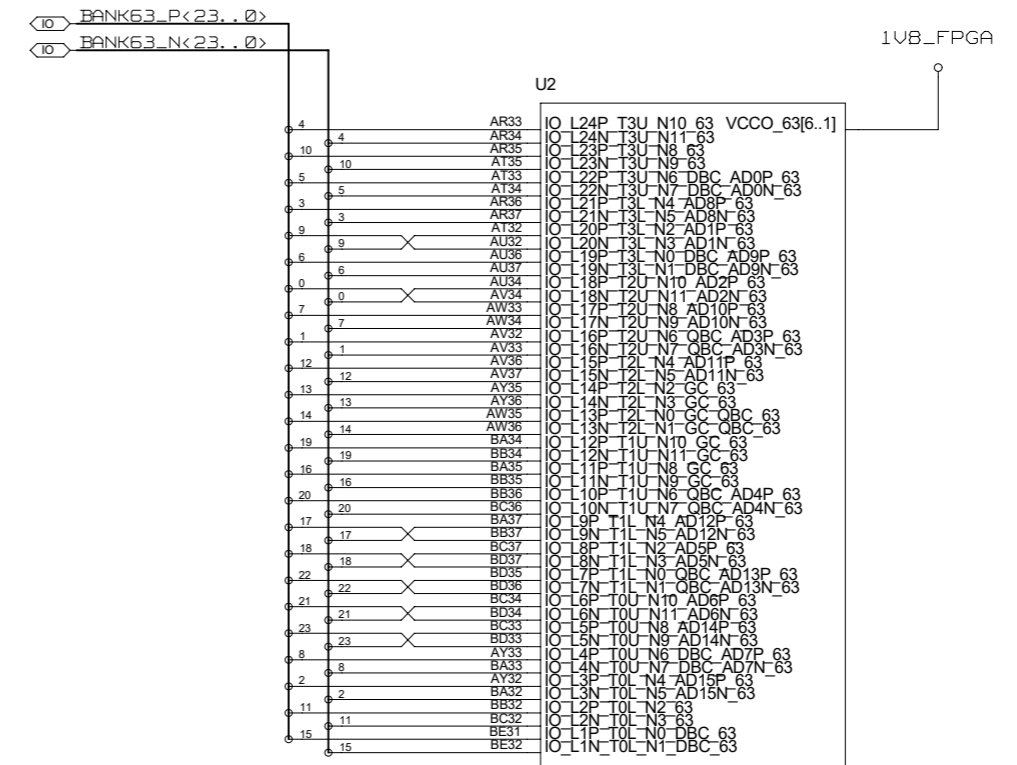
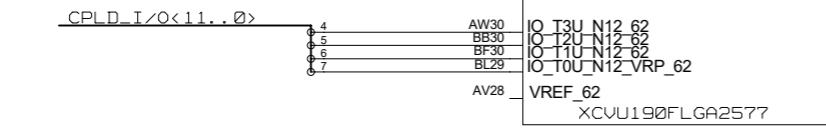
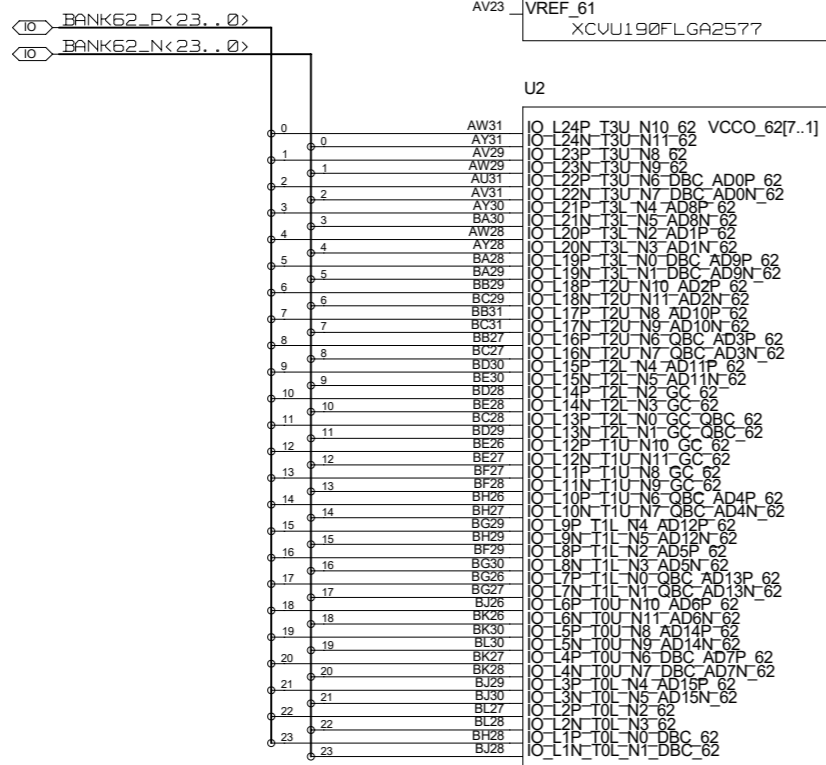
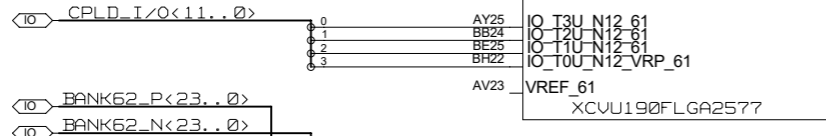
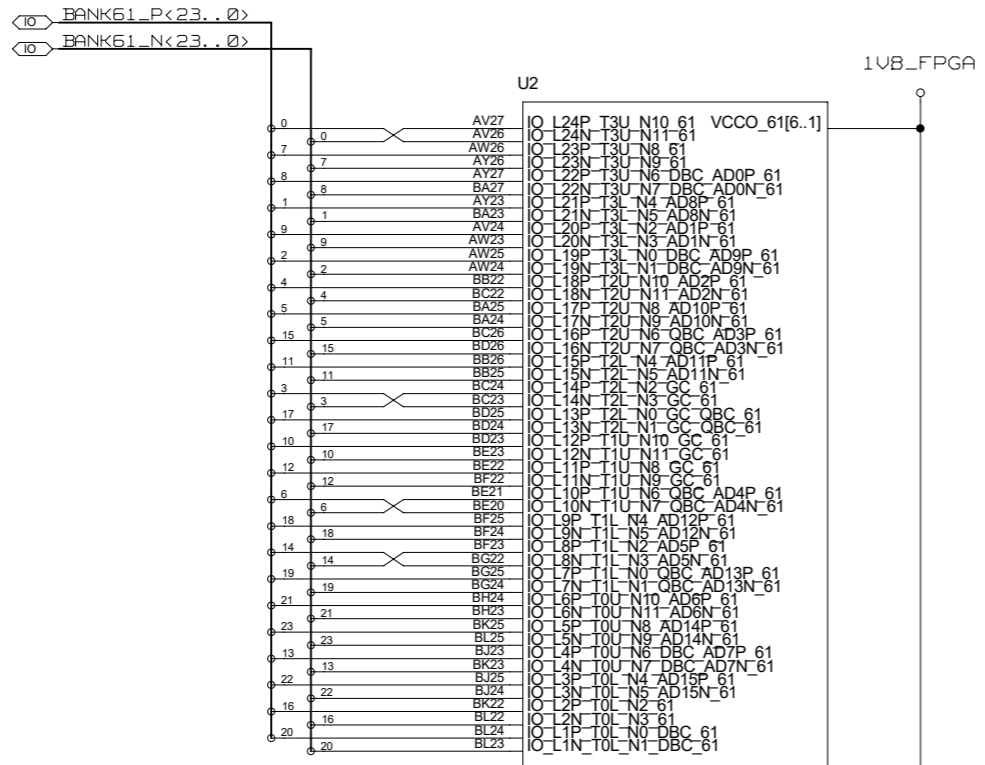
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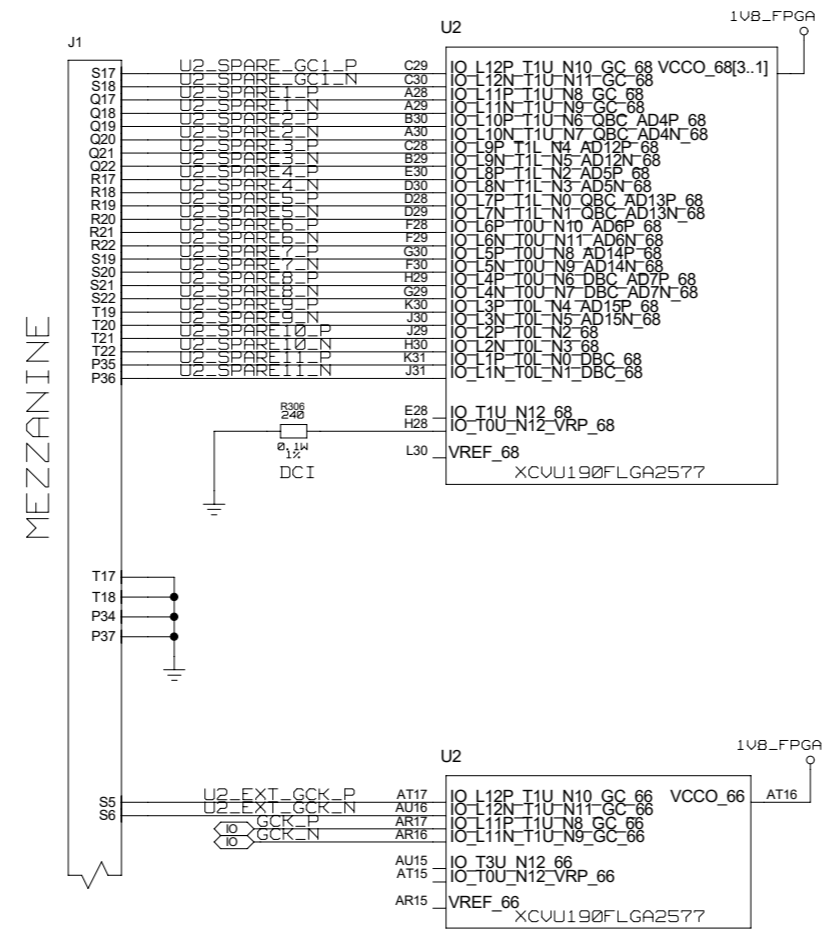
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MEZZANINE

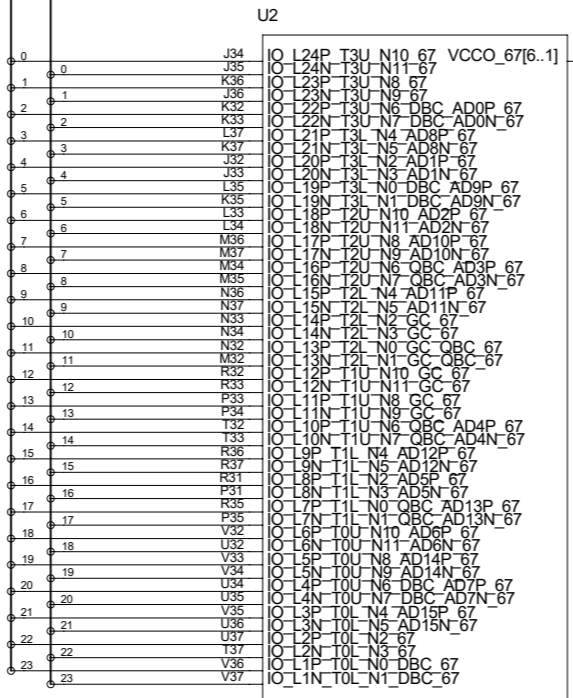
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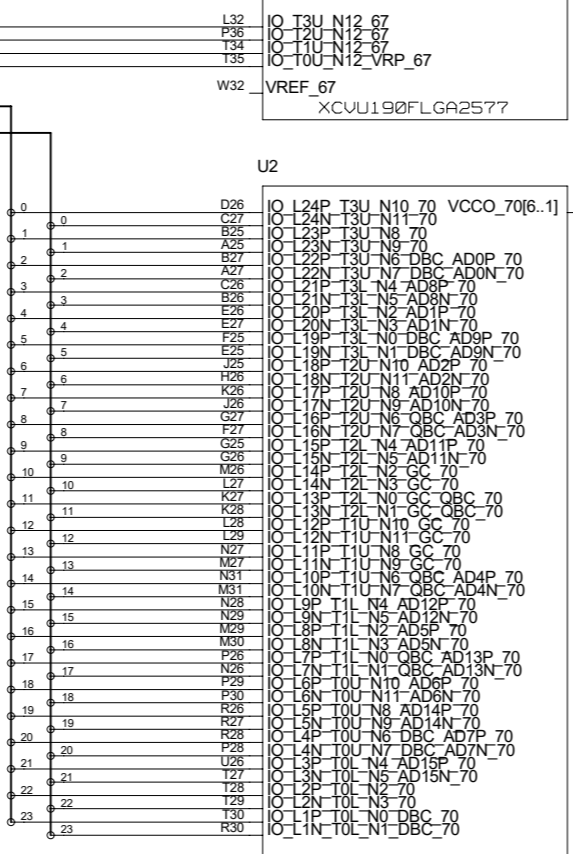
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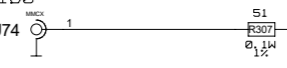


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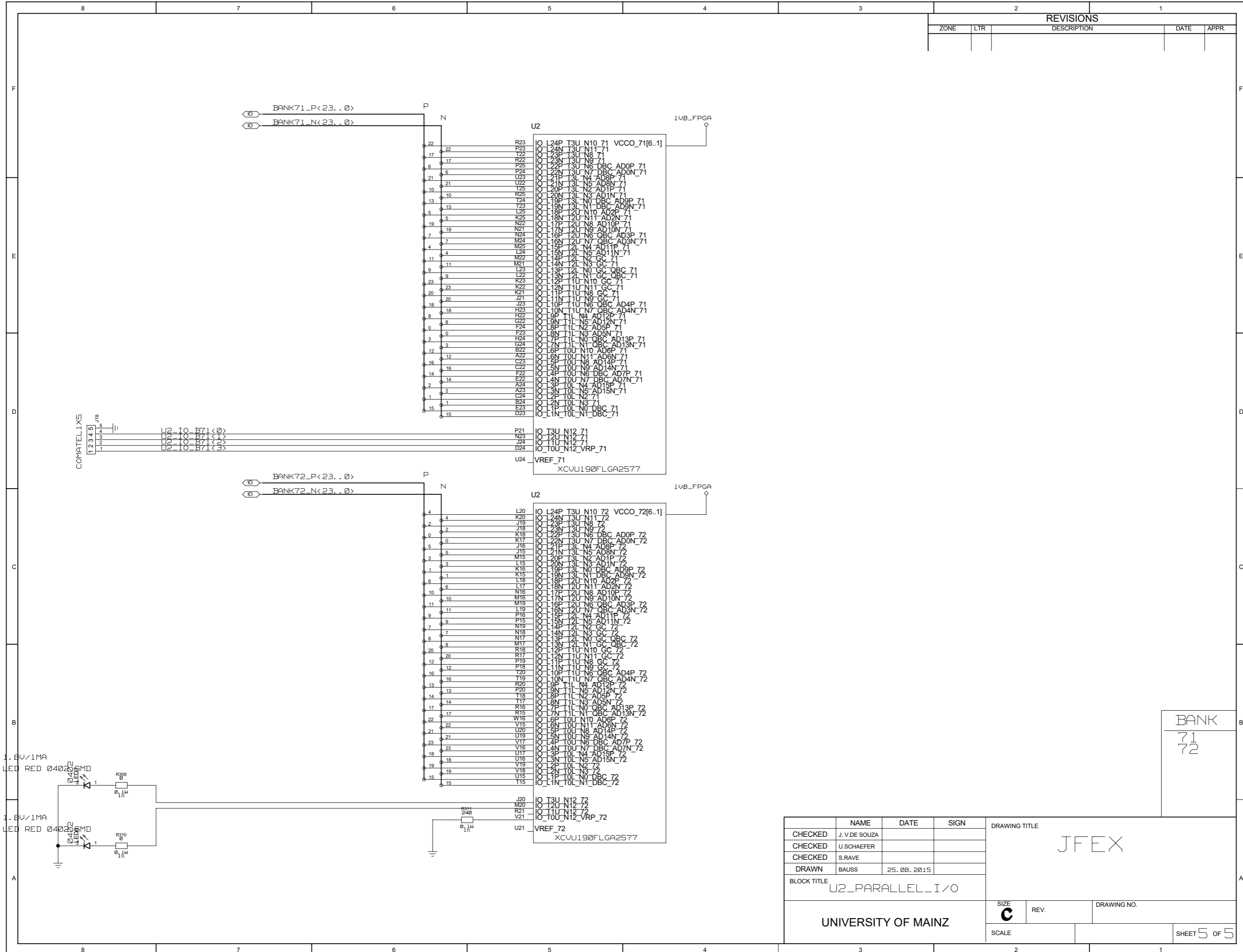
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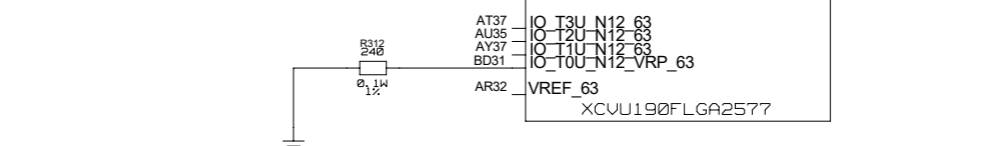
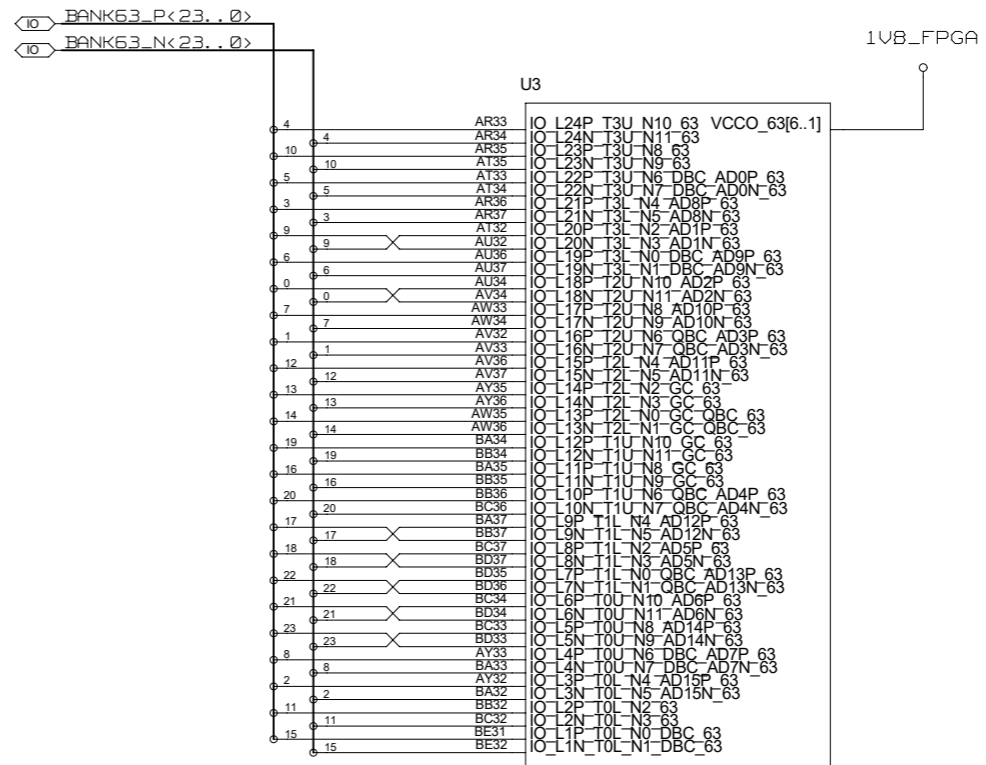
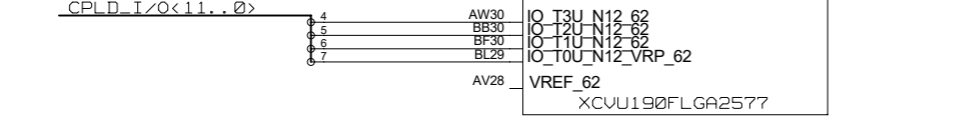
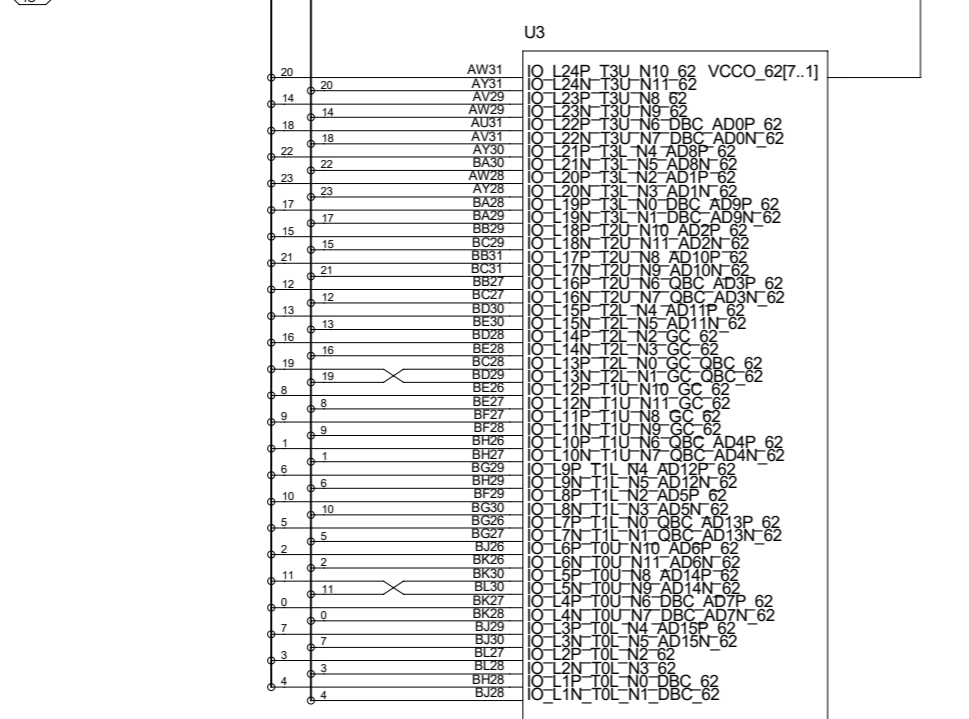
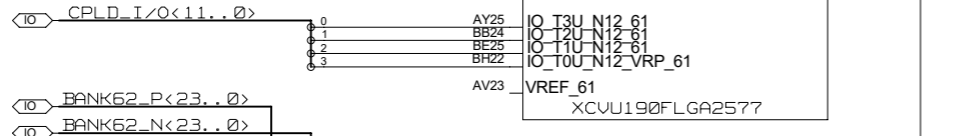
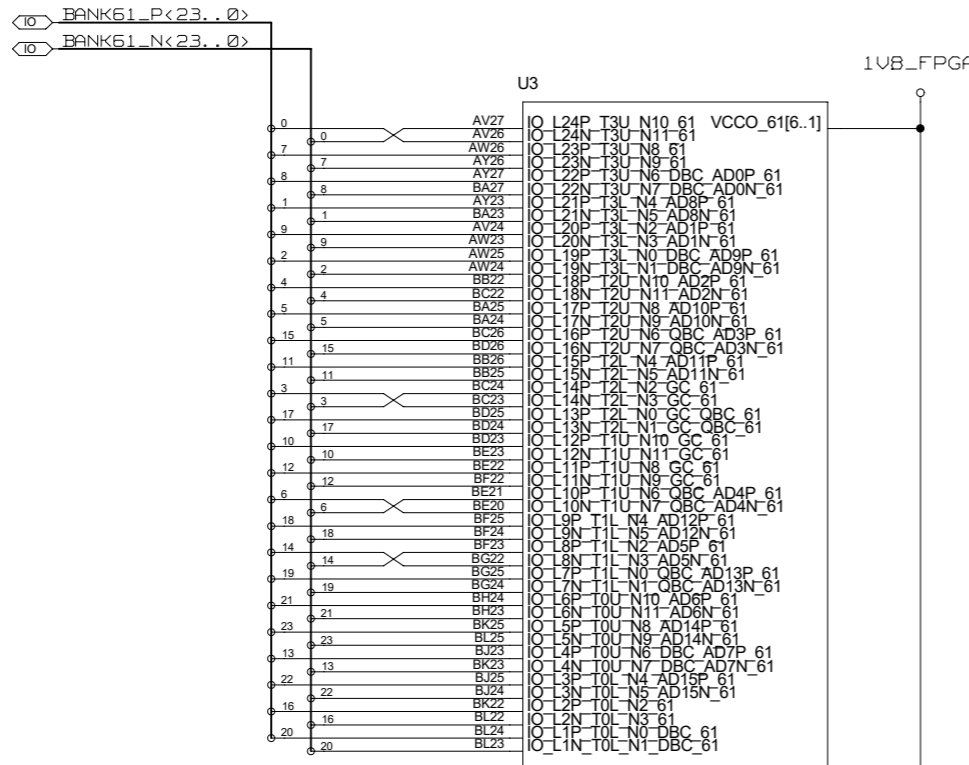
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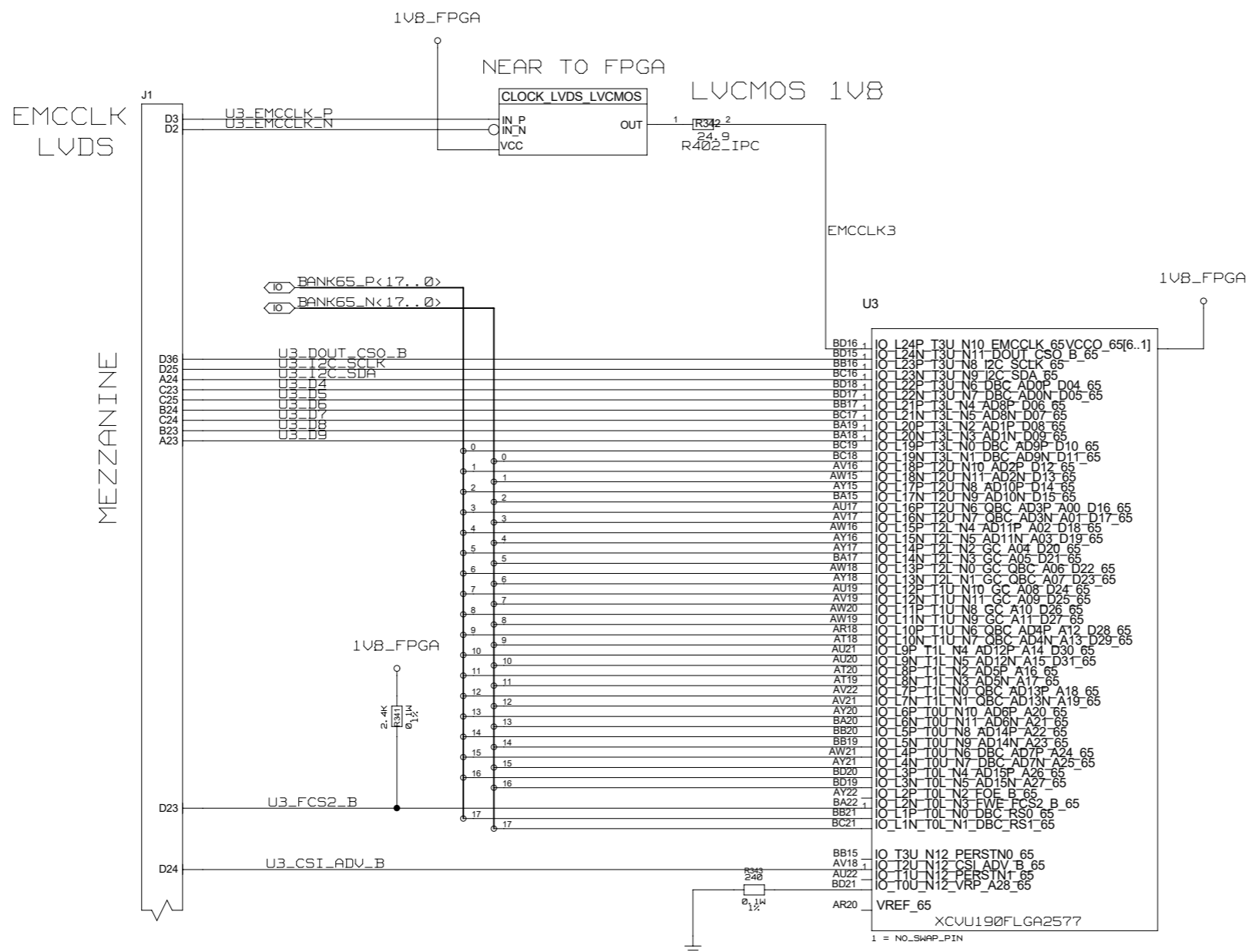
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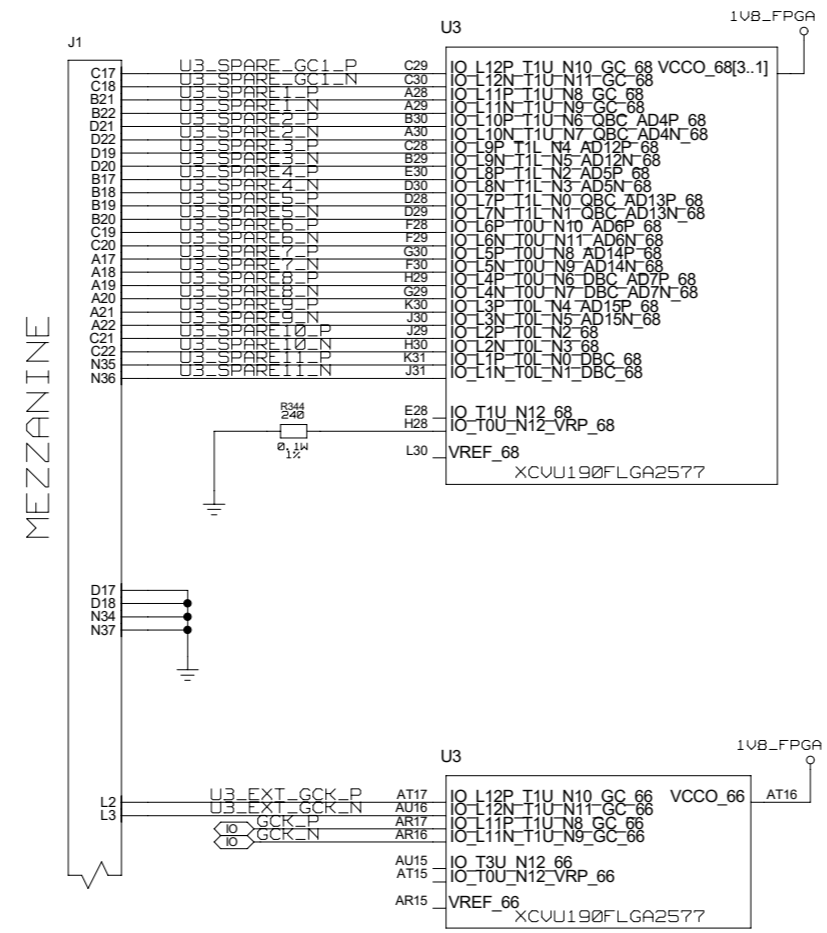
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BC17	IO	L21N	T3U	N5	AD8N_D07_65
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AY18	IO	L13N	T2U	N1	GC_OBC_A07_D23_65
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BB21	IO	L1P	T0L	N0	DBC_RS0_65
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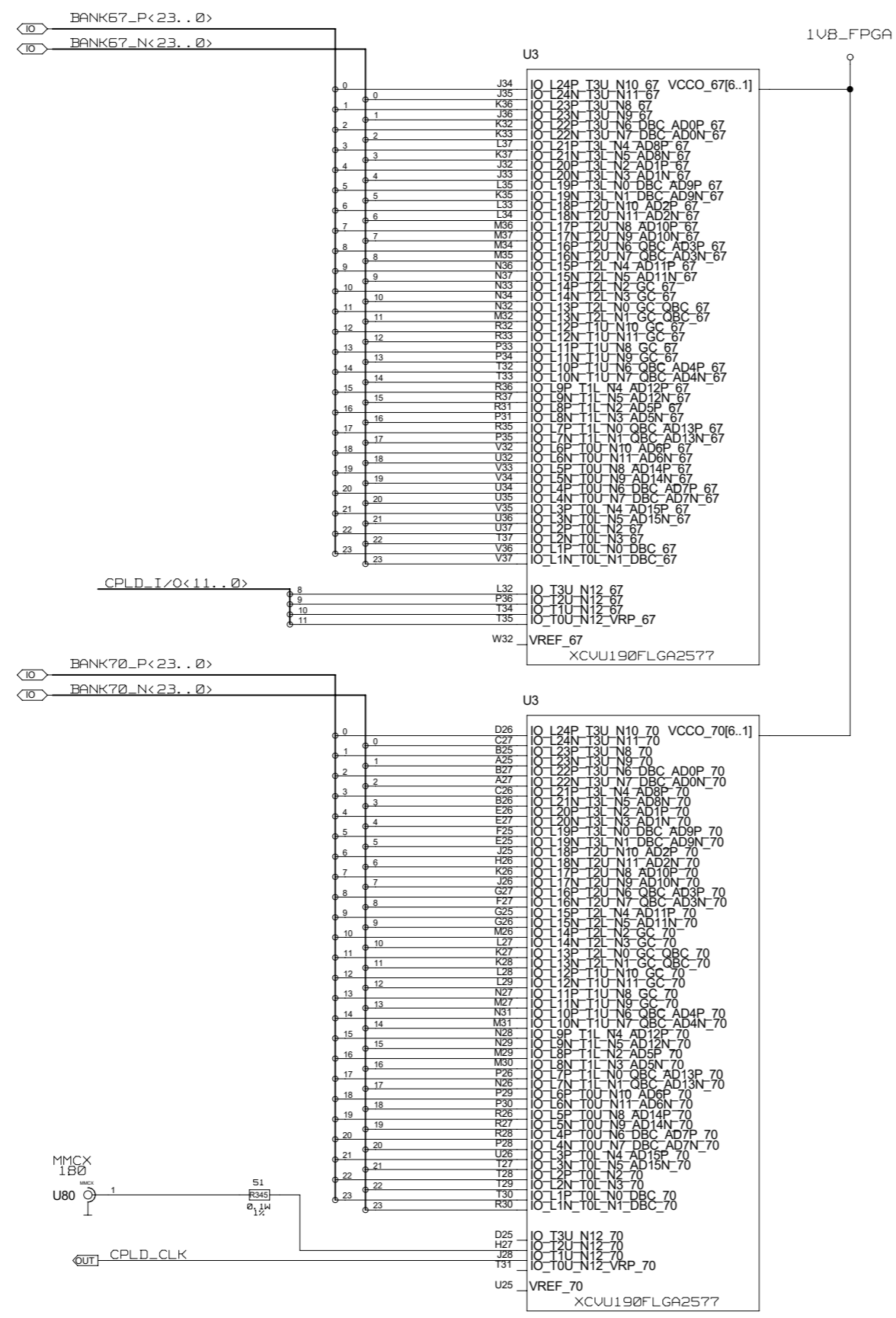
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CHECKED S. RAVE			
DRAWN BAUSS	25. 08. 2015		
BLOCK TITLE			
U3_PARALLEL_I/O			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE		SHEET 3 OF 5	

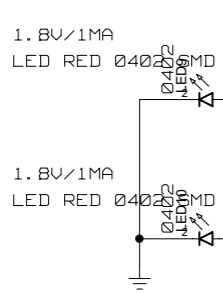
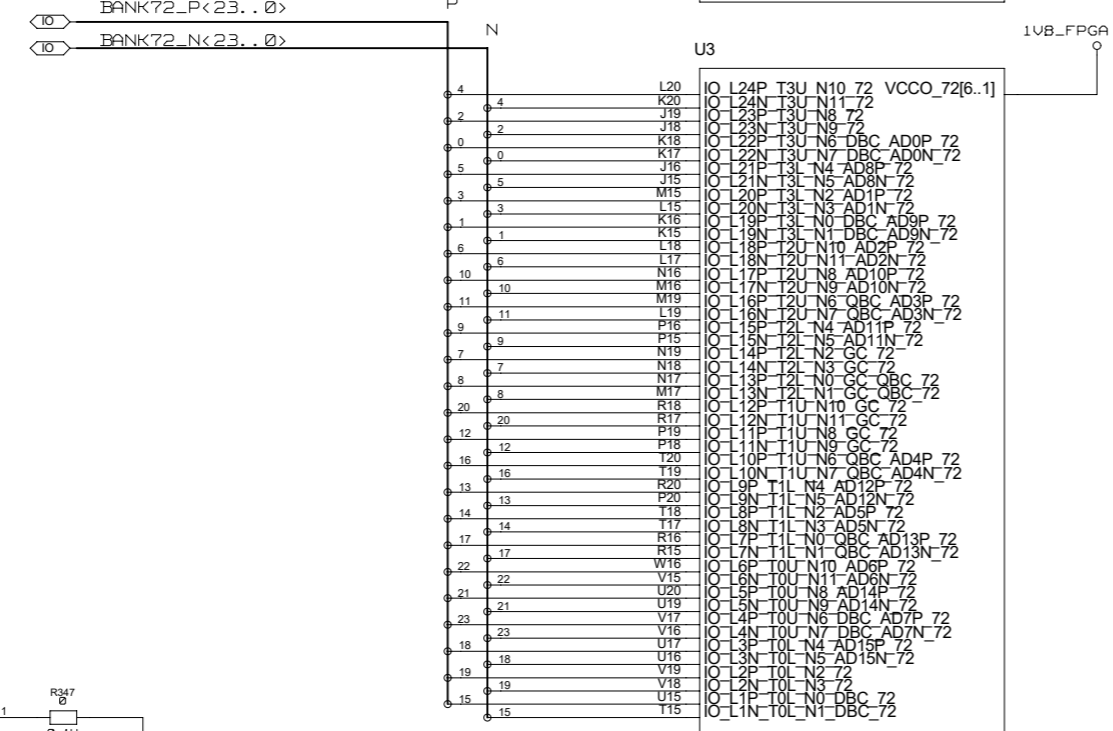
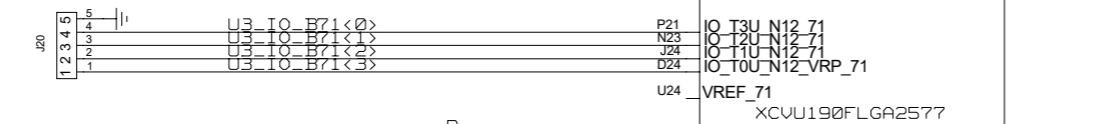
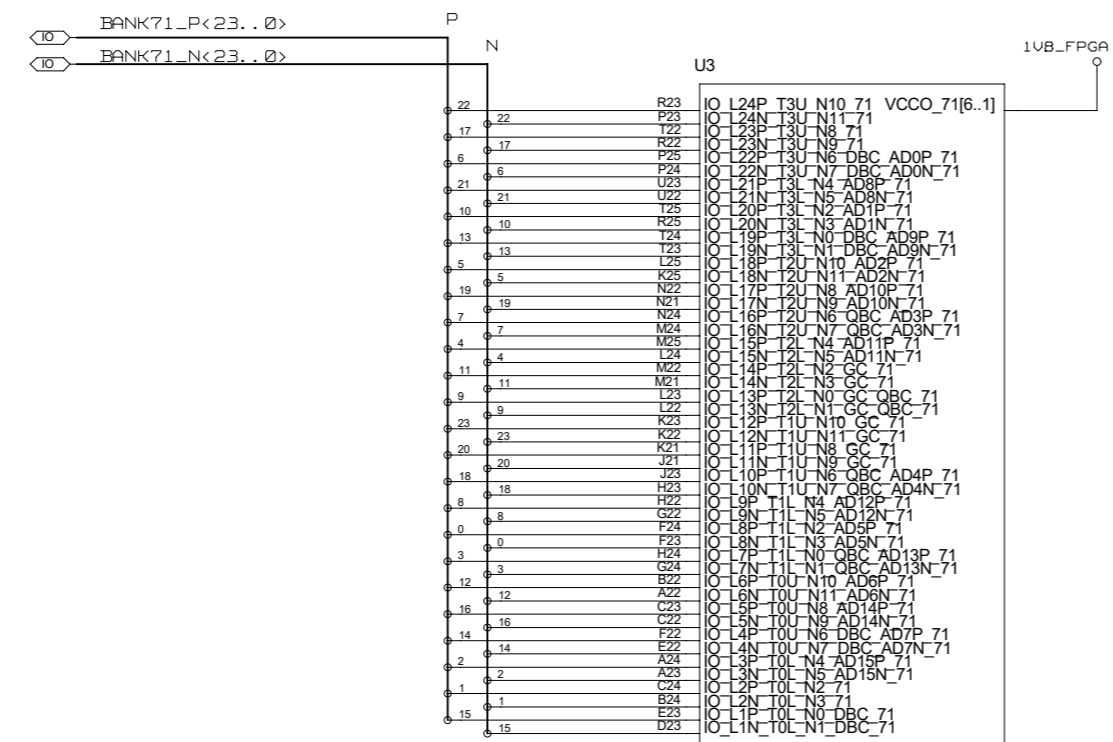
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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	REV.	DRAWING NO.
		C		
SCALE				SHEET 4 OF 5

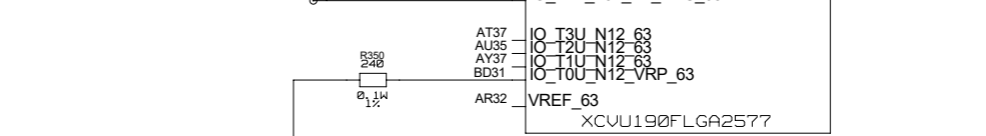
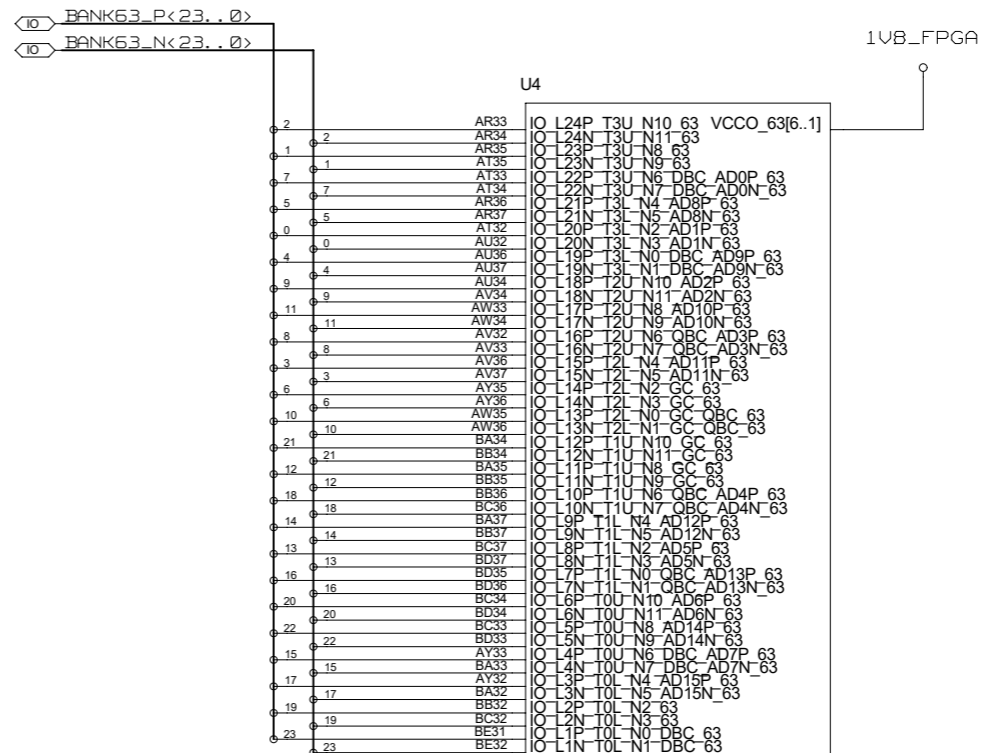
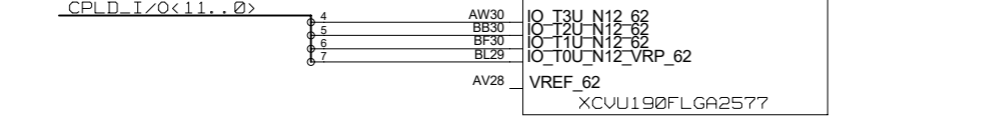
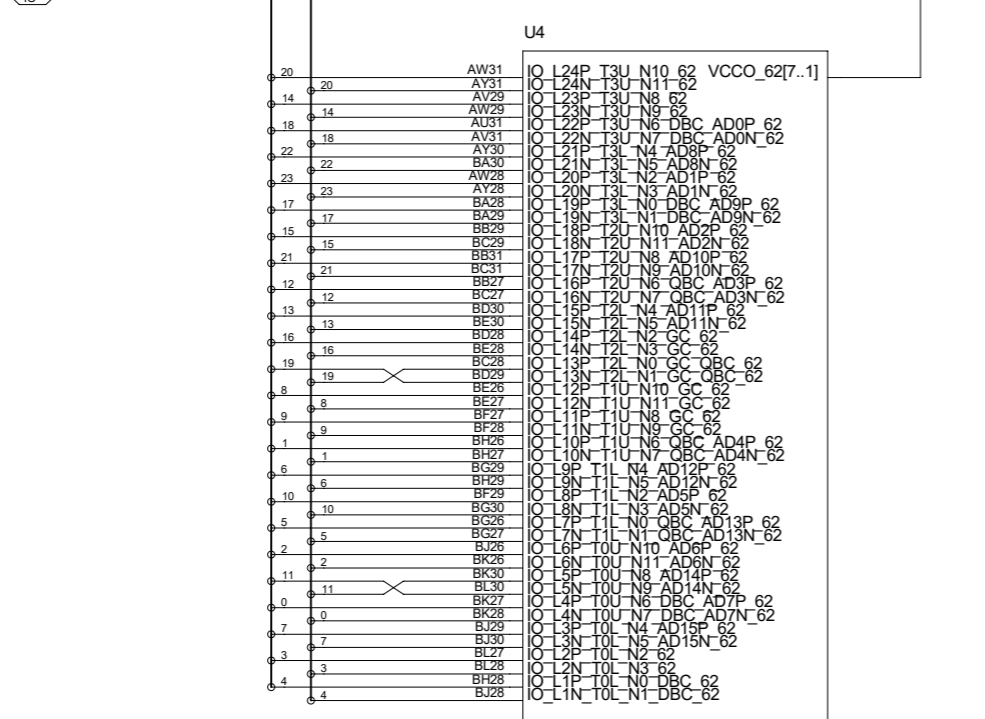
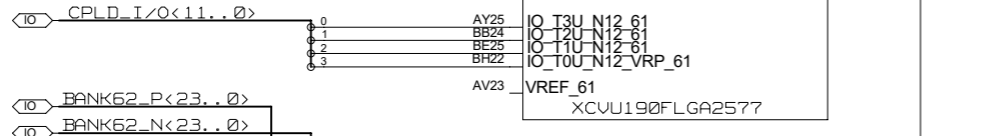
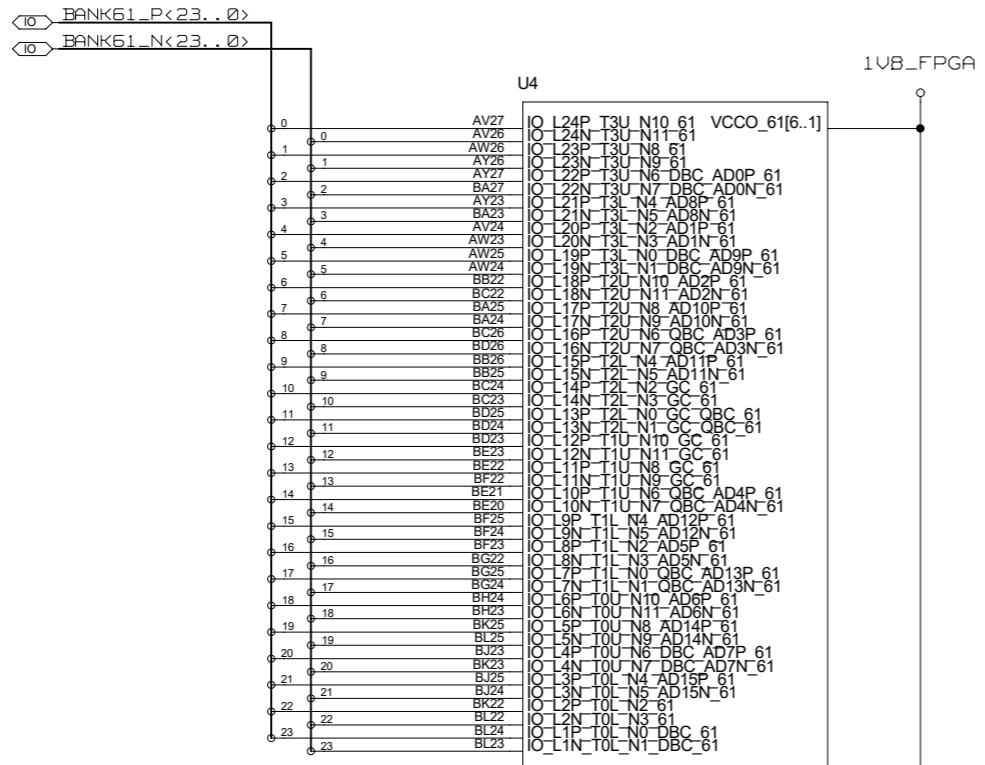
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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	DRAWING NO.
		SCALE	SHEET 5 OF 5

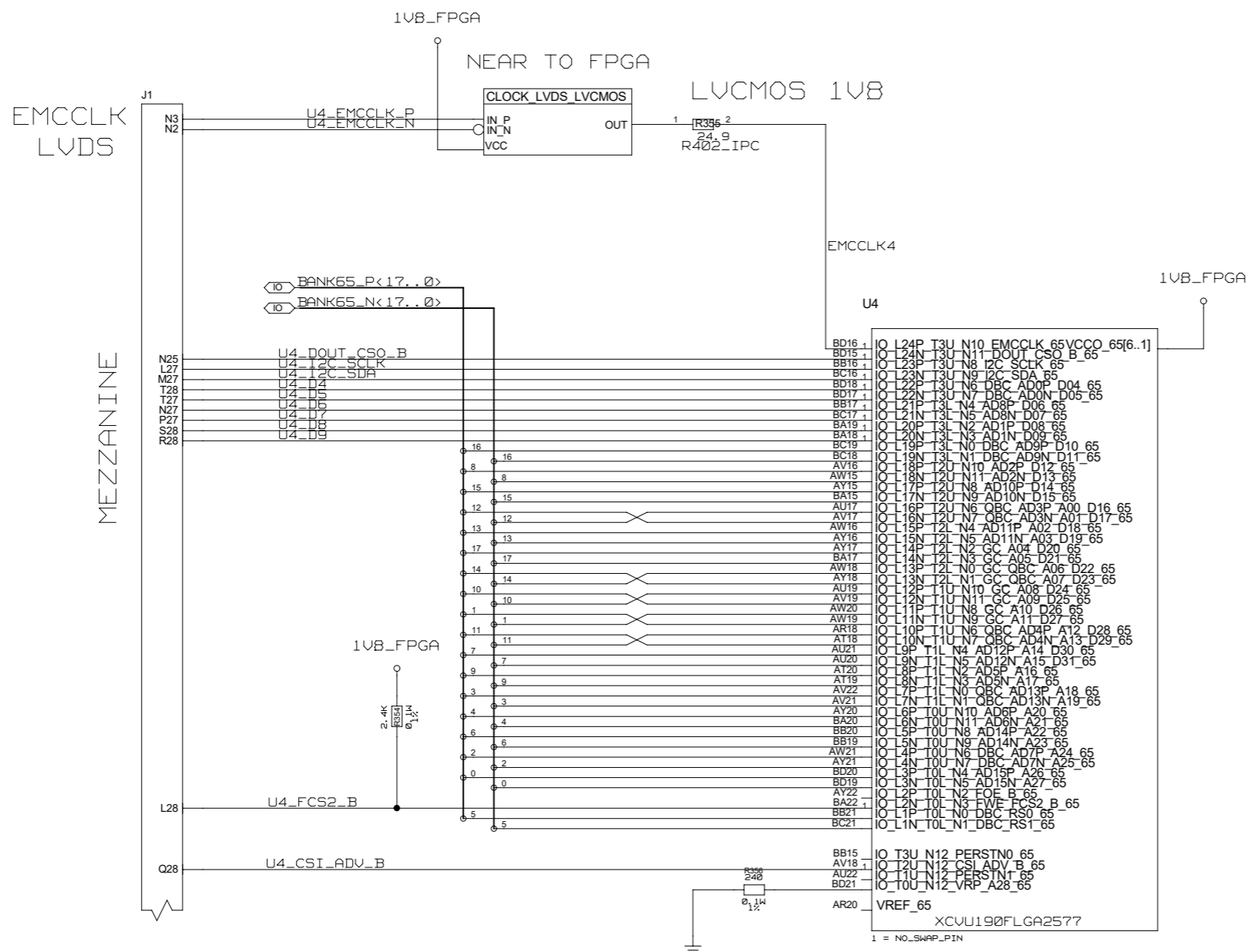
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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61
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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.



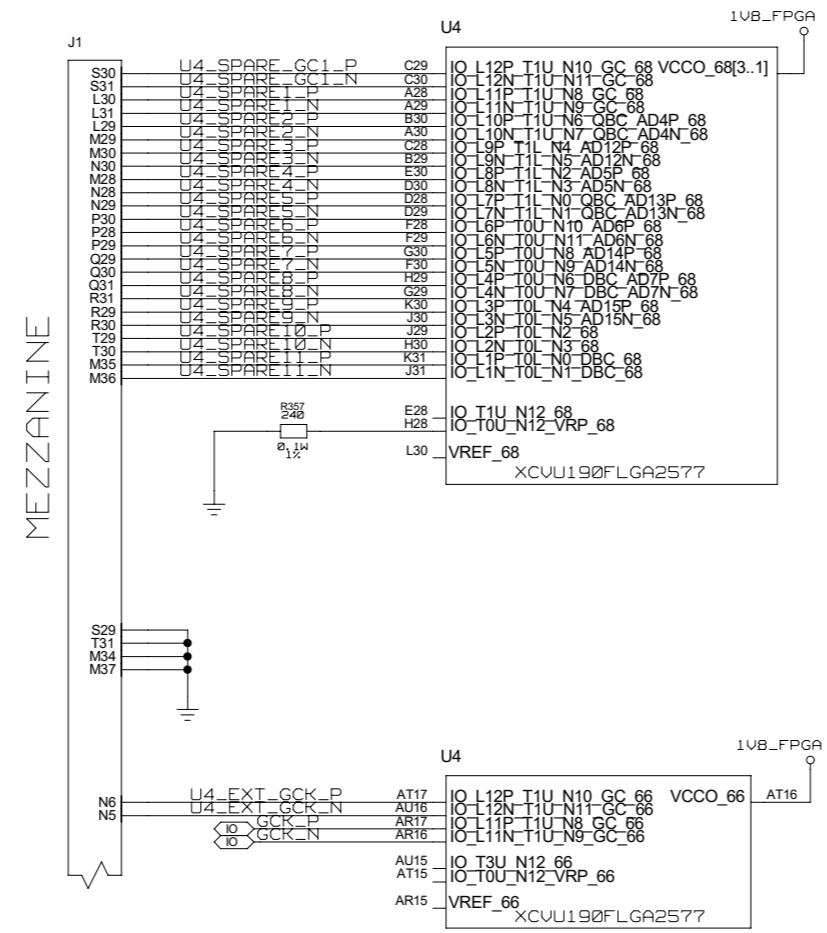
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BB16	IO	L23P	T3U	N8	I2C_SCLK_65
BC16	IO	L23N	T3U	N9	I2C_SDA_65
BD18	IO	L22P	T3U	N6	DBC_AD0P_D04_65
BD17	IO	L22N	T3U	N7	DBC_AD0N_D05_65
BB17	IO	L21P	T3U	N4	AD8P_D06_65
BC17	IO	L21N	T3U	N5	AD8N_D07_65
BA19	IO	L20P	T3U	N2	AD1P_D08_65
BA18	IO	L20N	T3U	N3	AD1N_D09_65
BC19	IO	L19P	T3U	N0	DBC_AD9P_D10_65
BC18	IO	L19N	T3U	N1	DBC_AD9N_D11_65
AV16	IO	L18P	T2U	N10	AD2P_D12_65
AW15	IO	L18N	T2U	N11	AD2N_D13_65
AY15	IO	L17P	T2U	N8	AD10P_D14_65
BA15	IO	L17N	T2U	N9	AD10N_D15_65
AU17	IO	L16P	T2U	N6	OBC_AD3P_A00_D16_65
AV17	IO	L16N	T2U	N7	OBC_AD3N_A01_D17_65
AW16	IO	L15P	T2U	N4	AD1P_A02_D18_65
AY16	IO	L15N	T2U	N5	AD1N_A03_D19_65
AY17	IO	L14P	T2U	N2	GC_A04_D20_65
BA17	IO	L14N	T2U	N3	GC_A05_D21_65
AW18	IO	L13P	T2U	N0	GC_OBC_A06_D22_65
AY18	IO	L13N	T2U	N1	GC_OBC_A07_D23_65
AU19	IO	L12P	T1U	N10	GC_A08_D24_65
AV19	IO	L12N	T1U	N11	GC_A09_D25_65
AW20	IO	L11P	T1U	N8	GC_A10_D26_65
AW19	IO	L11N	T1U	N9	GC_A11_D27_65
AR18	IO	L10P	T1U	N6	OBC_AD4P_A12_D28_65
AT18	IO	L10N	T1U	N7	OBC_AD4N_A13_D29_65
AU21	IO	L9P	T1L	N4	AD12P_A14_D30_65
AU20	IO	L9N	T1L	N5	AD12N_A15_D31_65
AT20	IO	L8P	T1L	N2	AD5P_A16_65
AT19	IO	L8N	T1L	N3	AD5N_A17_65
AV22	IO	L7P	T1L	N0	OBC_AD13P_A18_65
AV21	IO	L7N	T1L	N1	OBC_AD13N_A19_65
AY20	IO	L6P	T0U	N10	AD6P_A20_65
BA20	IO	L6N	T0U	N11	AD6N_A21_65
BB20	IO	L5P	T0U	N8	AD14P_A22_65
BB19	IO	L5N	T0U	N9	AD14N_A23_65
AW21	IO	L4P	T0U	N6	DBC_AD7P_A24_65
AY21	IO	L4N	T0U	N7	DBC_AD7N_A25_65
BD20	IO	L3P	T0L	N4	AD15P_A26_65
BD19	IO	L3N	T0L	N5	AD15N_A27_65
AY22	IO	L2P	T0L	N2	FOE_B_65
BA22	IO	L2N	T0L	N3	FWF_FCS2_B_65
BB21	IO	L1P	T0L	N0	DBC_RS0_65
BC21	IO	L1N	T0L	N1	DBC_RS1_65
BB15	IO	T3U	N12	PERSTN0_65	
AV18	IO	T2U	N12	CSI_ADV_B_65	
AU22	IO	T1U	N12	PERSTN1_65	
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65

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CHECKED	U.SCHAEFER			
CHECKED	S.RAVE			
DRAWN	BAUSS	25.08.2015		
BLOCK TITLE U4_PARALLEL_I/O				SIZE C
UNIVERSITY OF MAINZ				REV.
				DRAWING NO.
				SCALE
				SHEET 2 OF 5

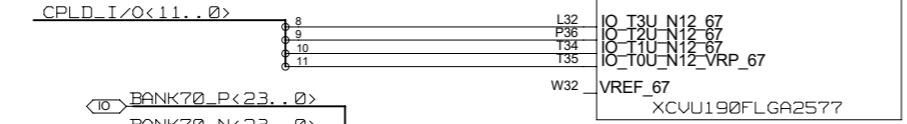
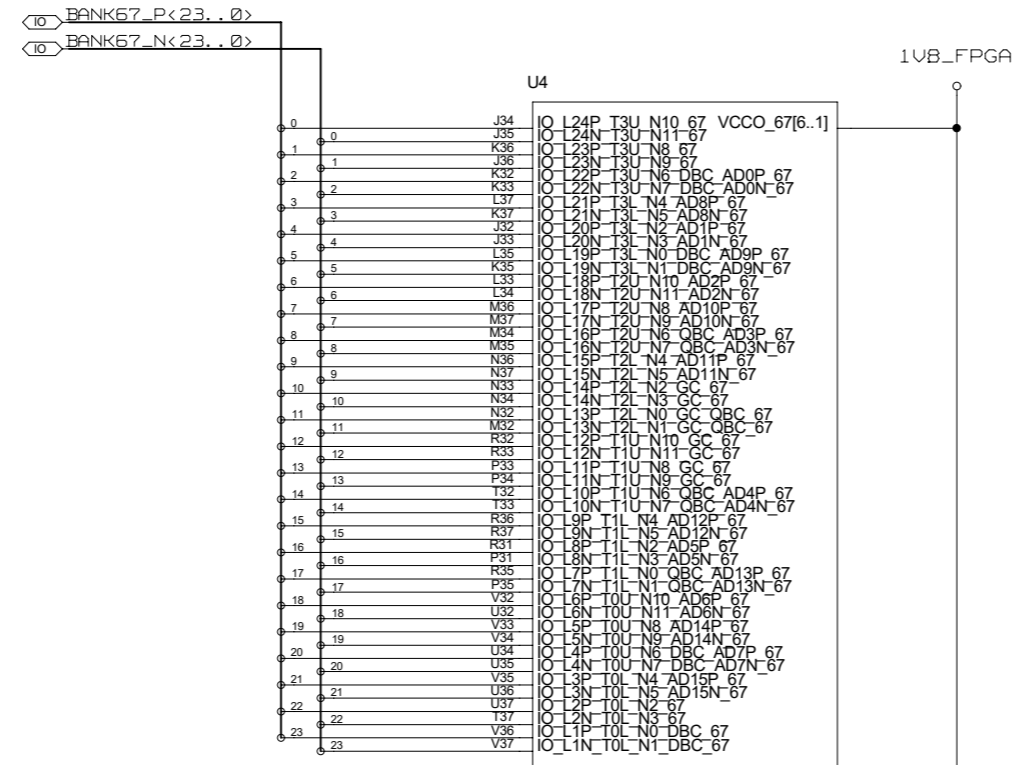
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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

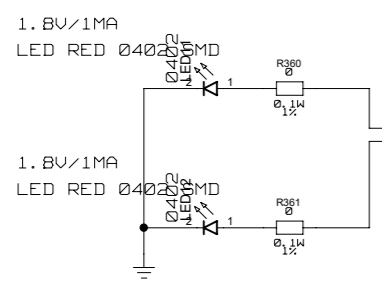
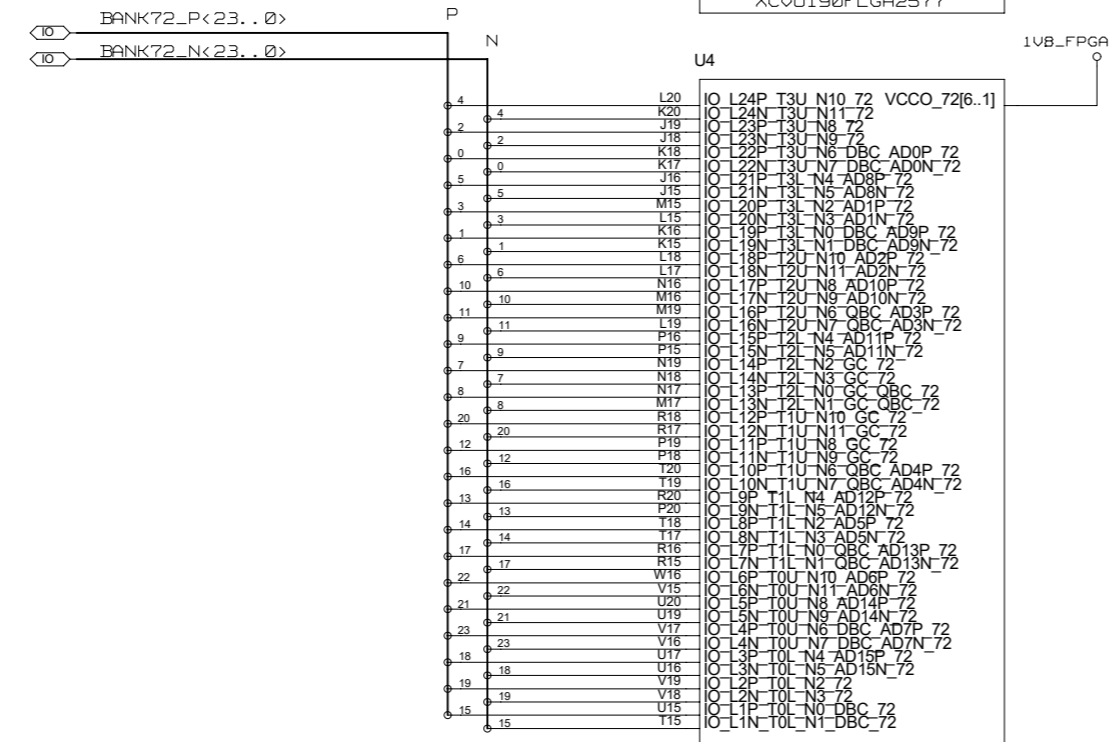
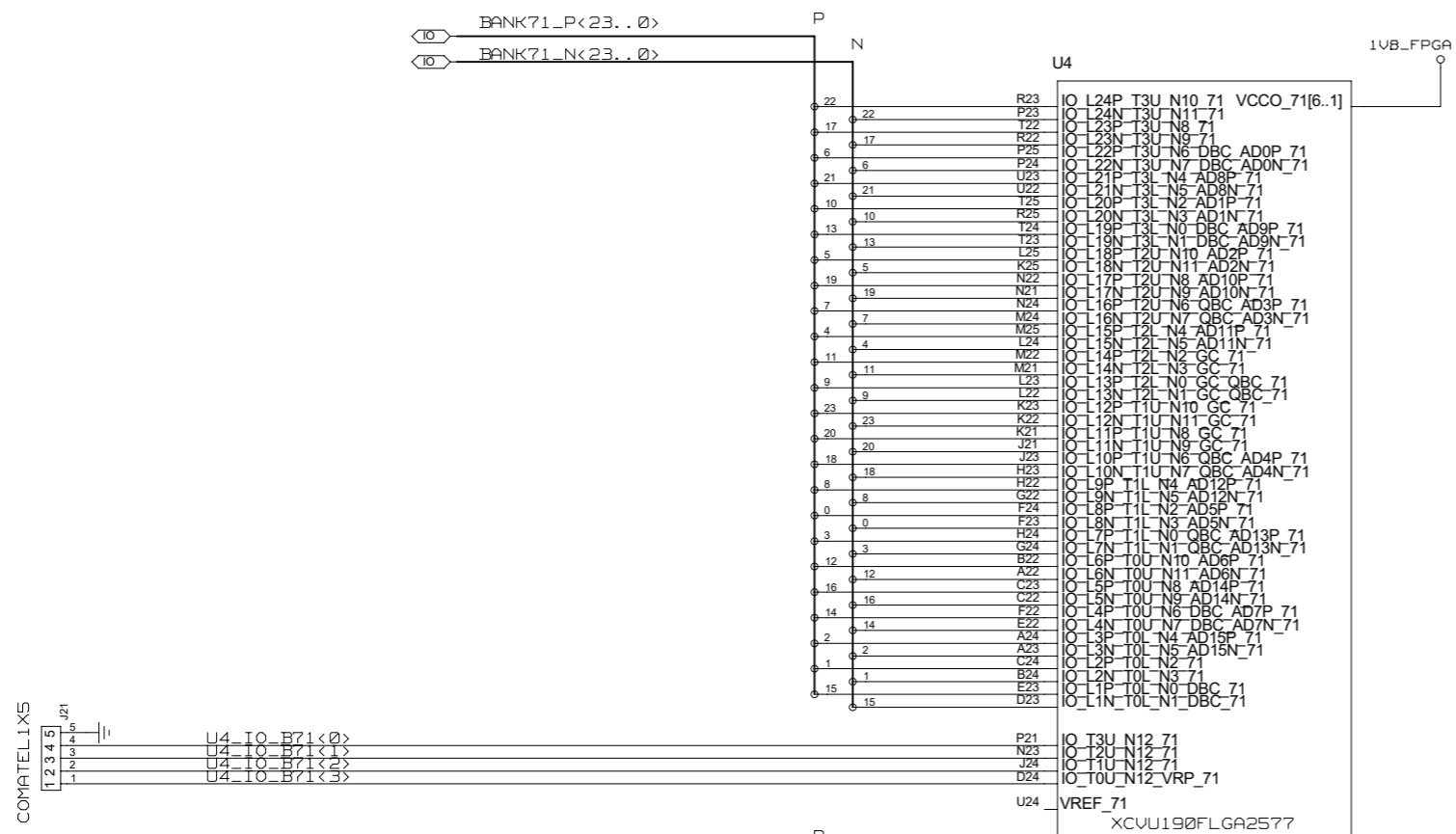
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
67
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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 4 OF 5

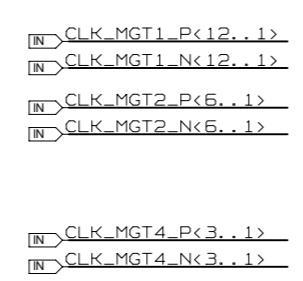
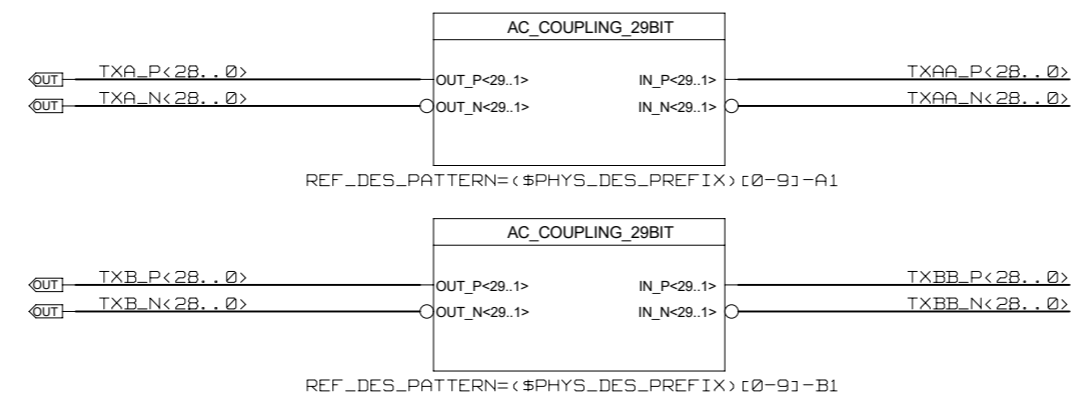
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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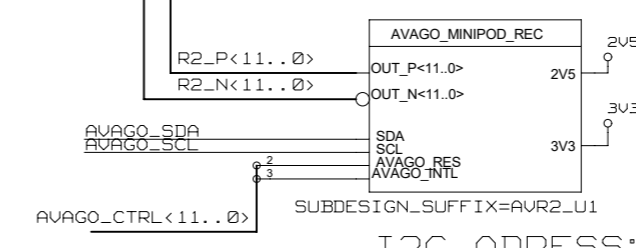
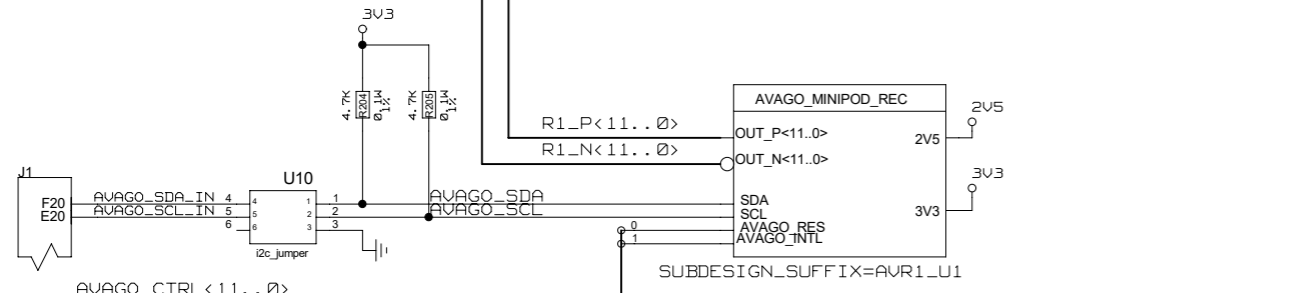
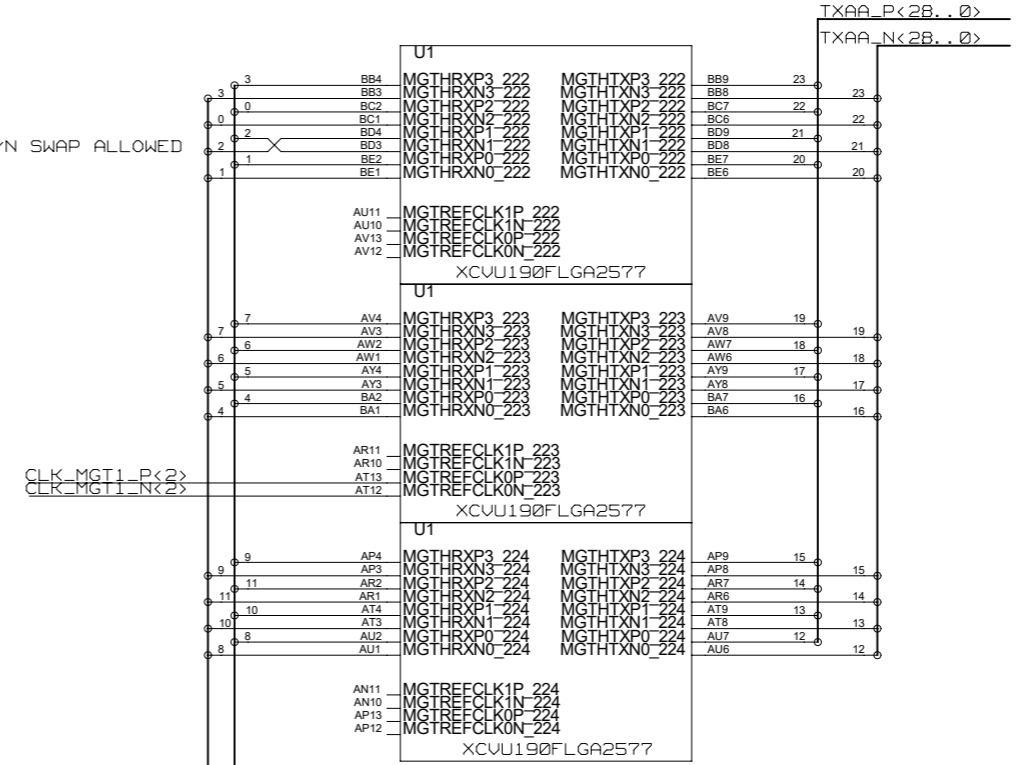
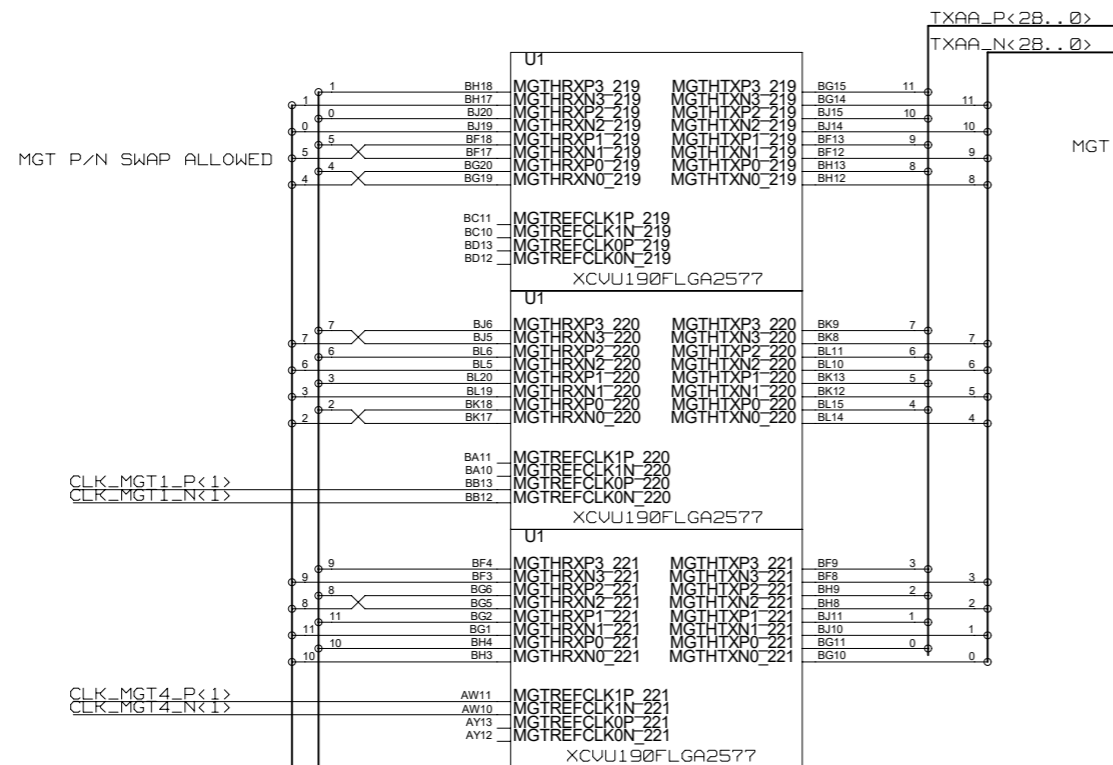
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CHECKED U. SCHAEFER			
CHECKED S. RAVE			
DRAWN BAUSS	25.08.2015		
BLOCK TITLE			U4_PARALLEL_I/O
UNIVERSITY OF MAINZ			SIZE C
			REV.
			DRAWING NO.
			SCALE
			SHEET 5 OF 5

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.



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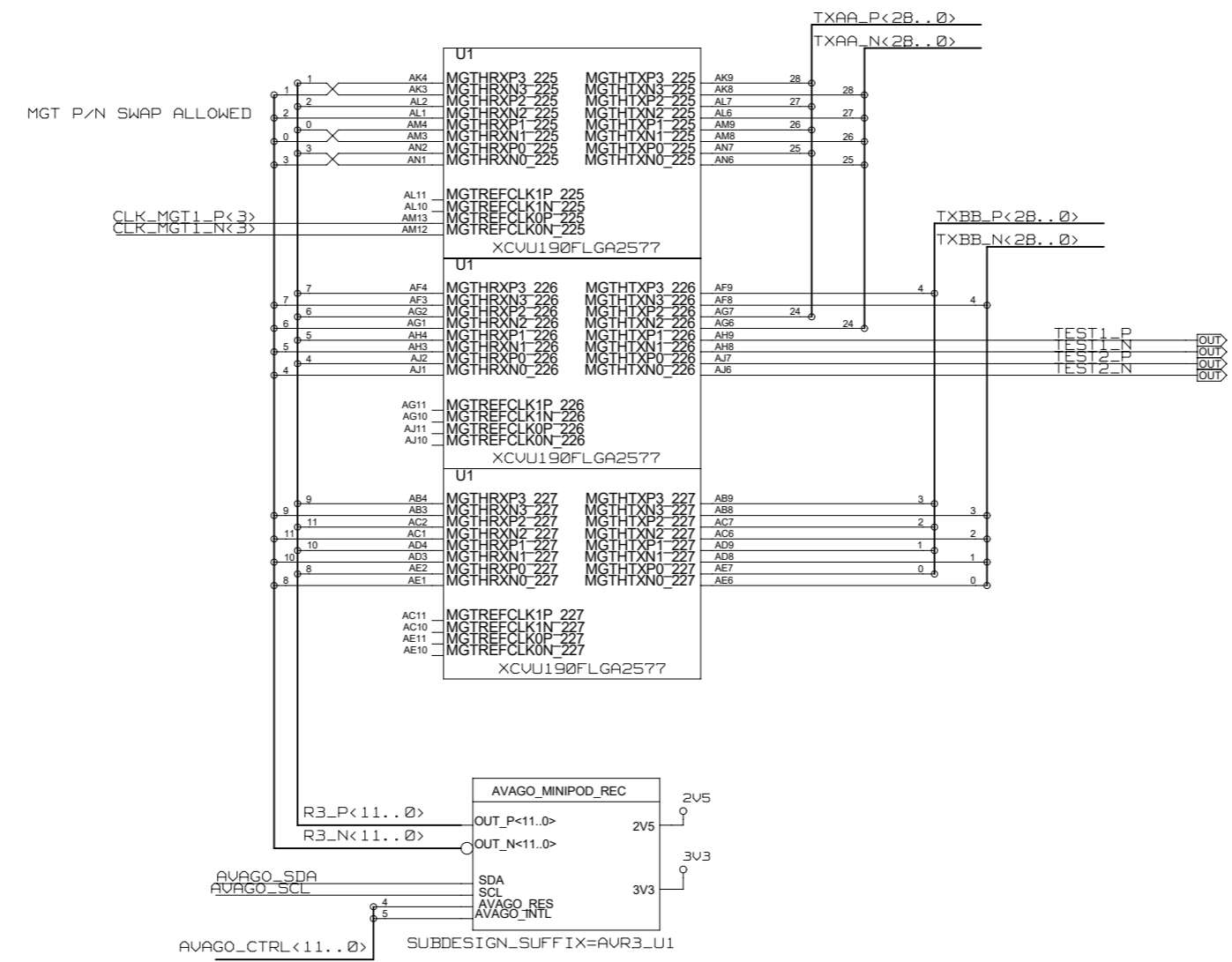
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I2C ADDRESS:
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NAME	DATE	SIGN	DRAWING TITLE
CHECKED J.V.DE SOUZA			AVAGO + TXA
CHECKED U.SCHAEFER			
CHECKED S.RAVE			
DRAWN BAUSS	07.08.2015		
BLOCK TITLE			
U1_MGT_REAL_TIME			
UNIVERSITY OF MAINZ		SIZE C	REV.
		SCALE	DRAWING NO.
		SHEET 2 OF 7	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

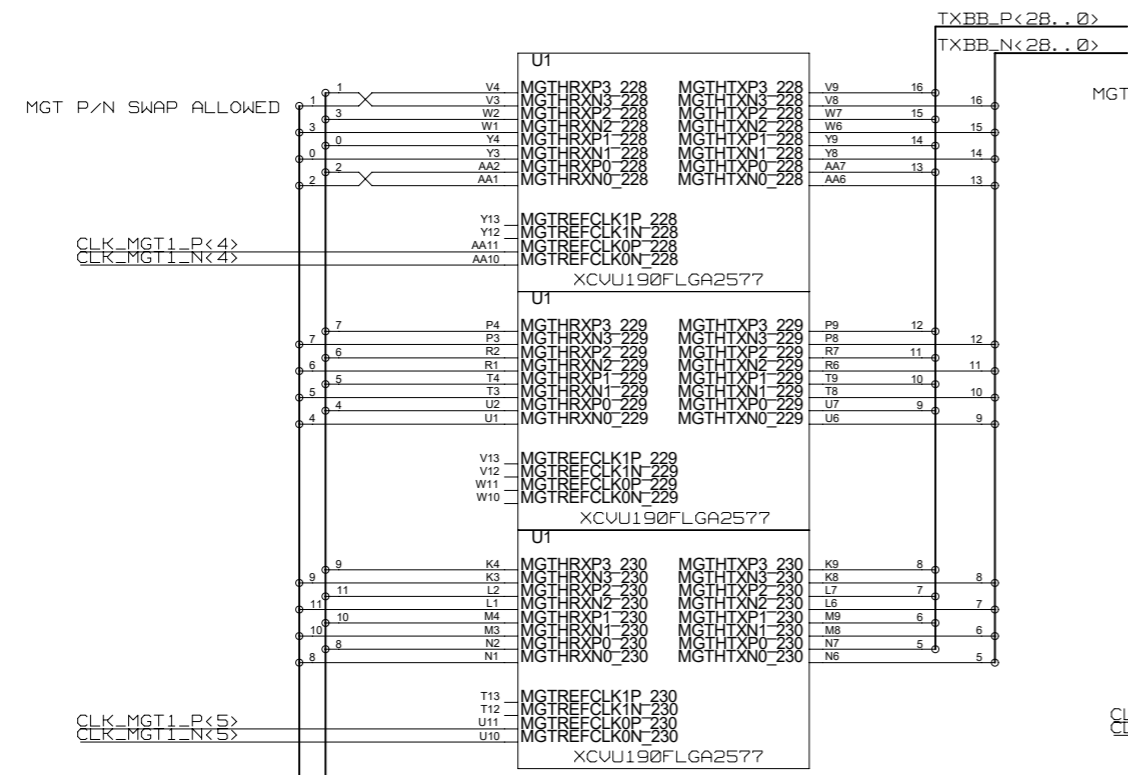


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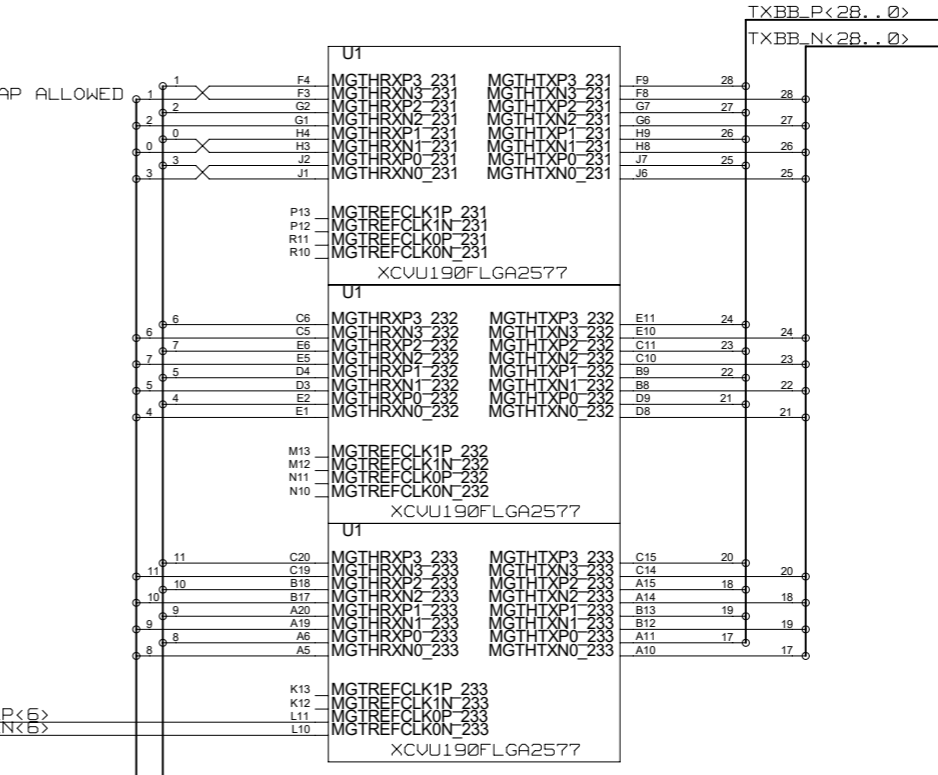
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NAME	DATE	SIGN	DRAWING TITLE
CHECKED J.V.DE SOUZA			AVAGO + TXA + TXB
CHECKED U.SCHAEFER			
CHECKED S.RAVE			
DRAWN BAUSS	07.08.2015		
BLOCK TITLE			DRAWING NO.
U1_MGT_REAL_TIME			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE			SHEET 3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

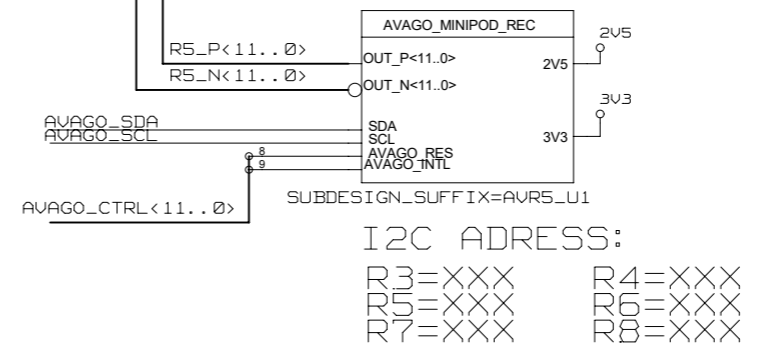
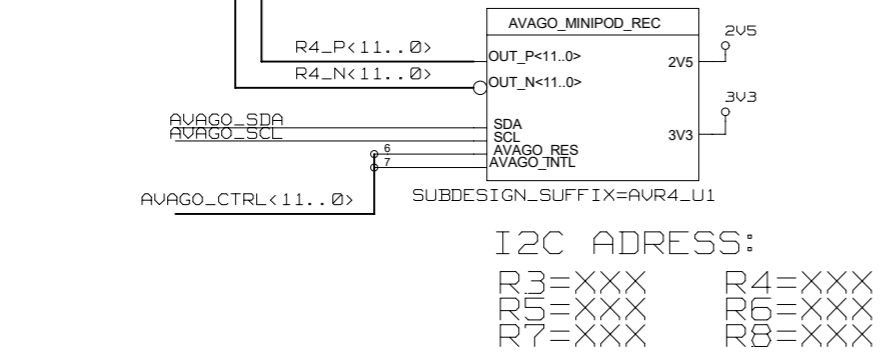
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



MGT P/N SWAP ALLOWED



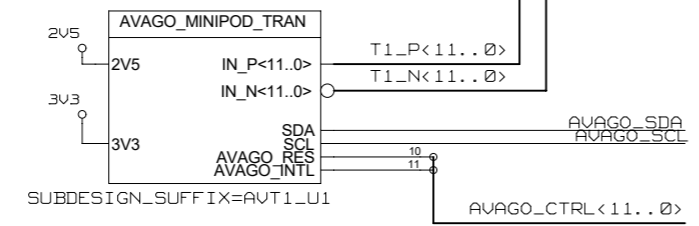
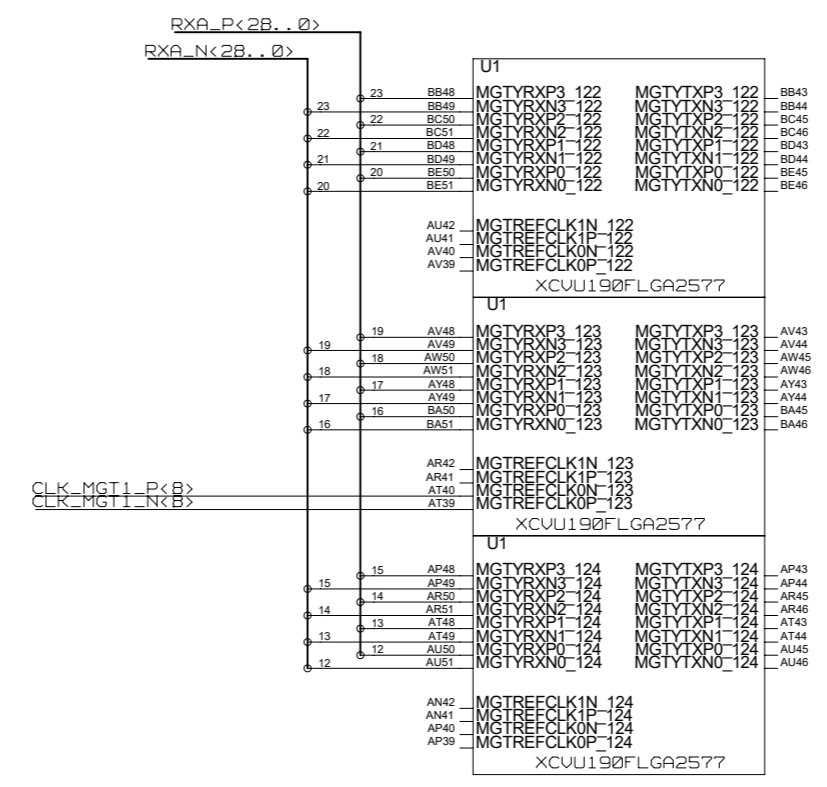
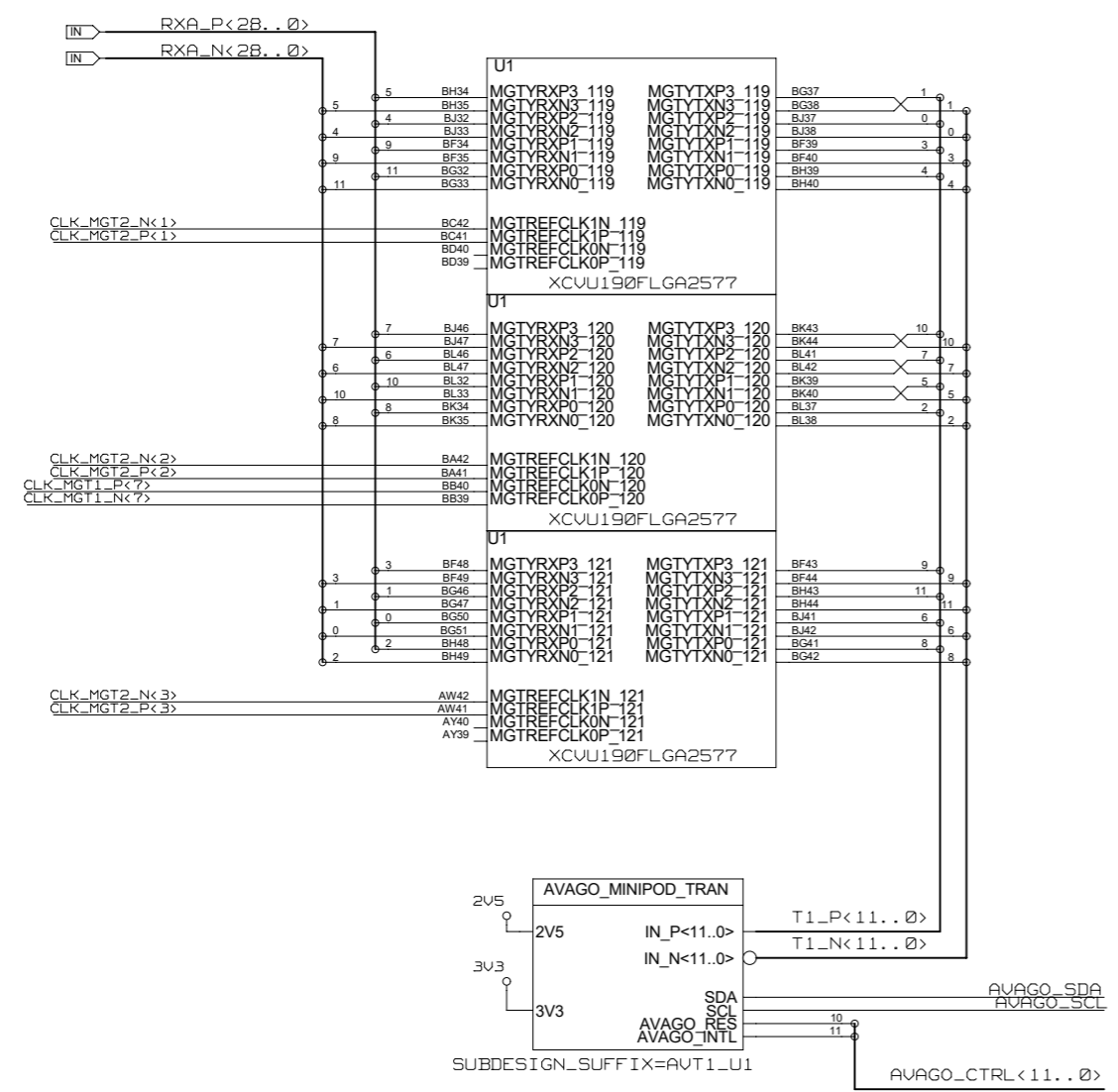
MGT P/N SWAP ALLOWED



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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			
U1_MGT_REAL_TIME			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE			SHEET 4 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

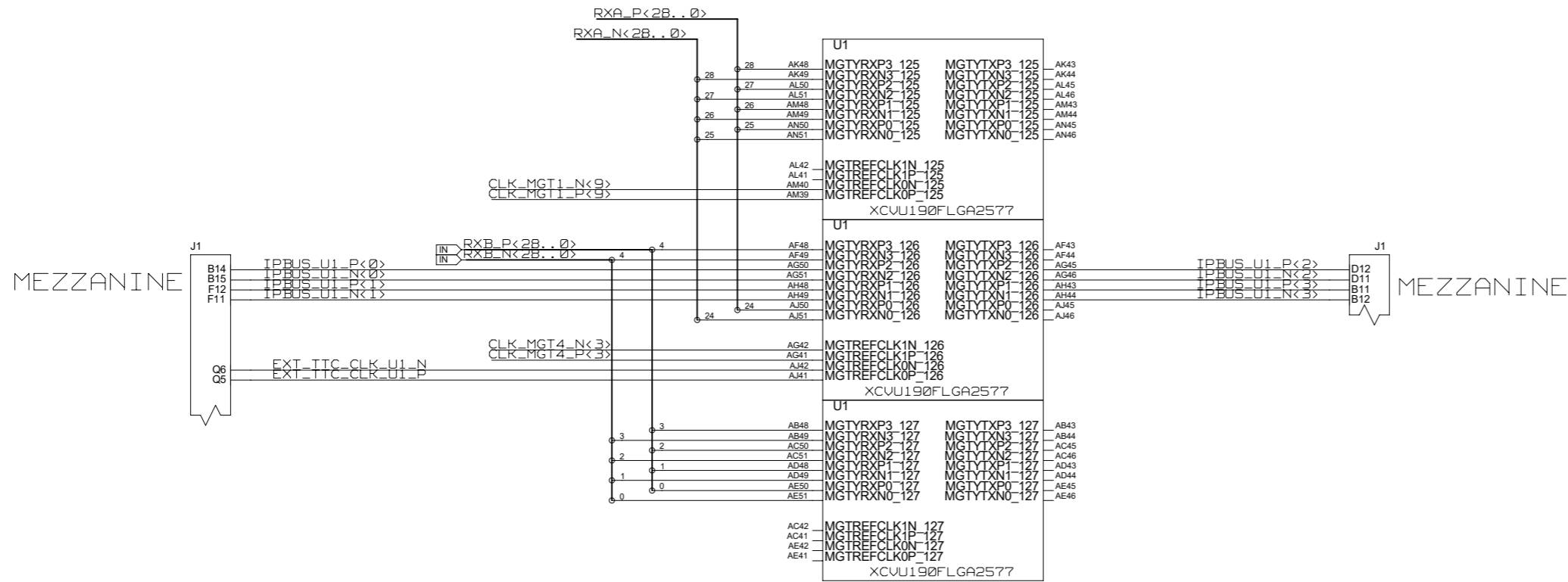


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CHECKED	J.V.DE SOUZA			DRAWING TITLE AVAGO + RXA
CHECKED	U.SCHAEFER			
CHECKED	S.RAVE			
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U1_MGT_REAL_TIME				
UNIVERSITY OF MAINZ				SIZE C
				REV.
				DRAWING NO.
				SCALE
				SHEET 5 OF 7

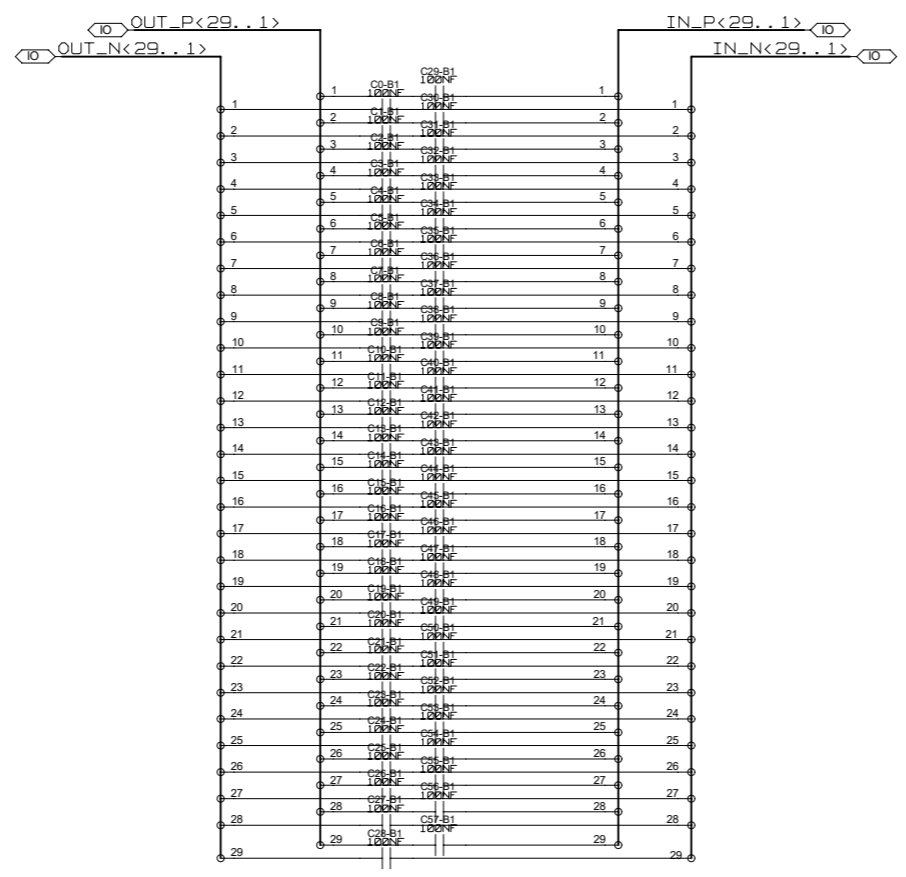
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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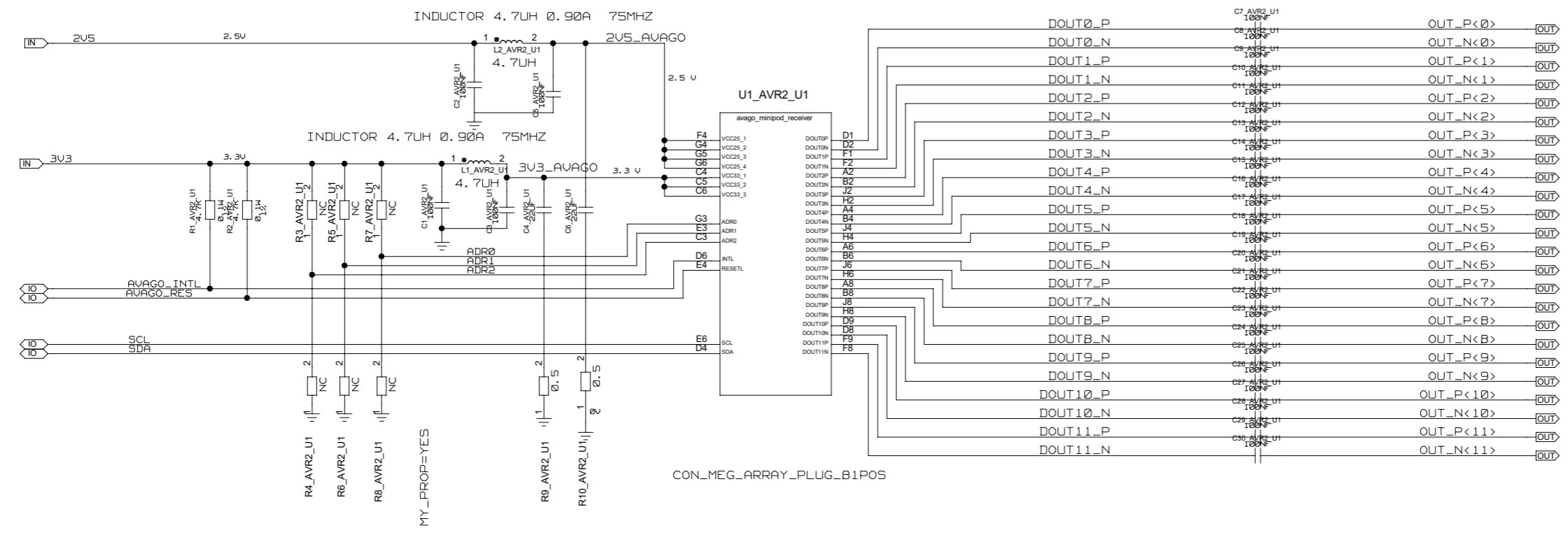
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CHECKED	U. SCHAEFER			
CHECKED	S. RAVE			
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U1_MGT_REAL_TIME				
UNIVERSITY OF MAINZ				SIZE C
				REV.
				DRAWING NO.
				SCALE
				SHEET 6 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



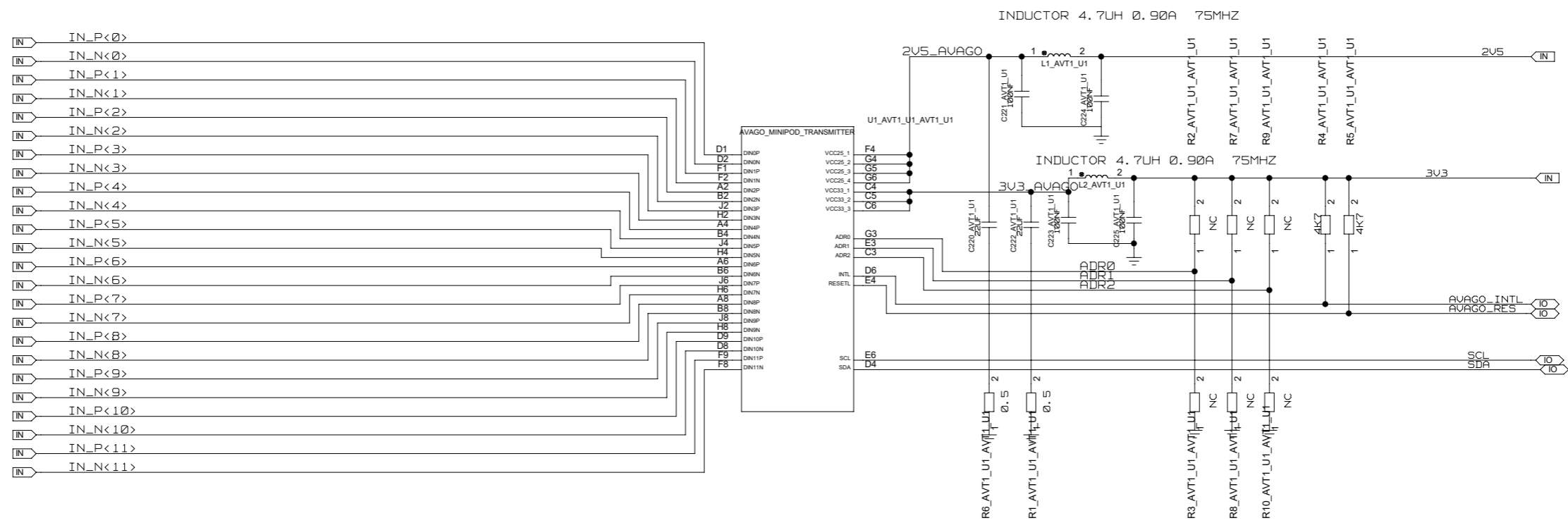
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CHECKED	U. SCHAEFER				
CHECKED	S. RAVE				
DRAWN	BAUSS				
BLOCK TITLE					
UNIVERSITY OF MAINZ				SIZE C	REV.
				SCALE	DRAWING NO.
			SHEET	OF	

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					
UNIVERSITY OF MAINZ				SIZE C	REV.
				DRAWING NO.	
SCALE				SHEET	OF

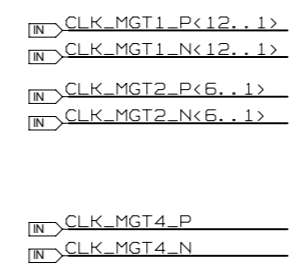
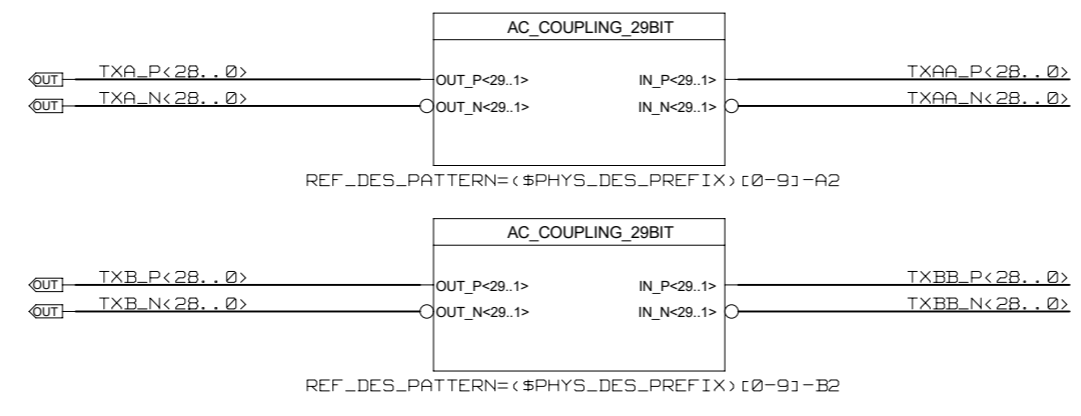
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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

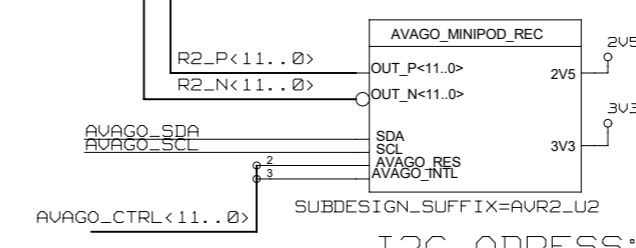
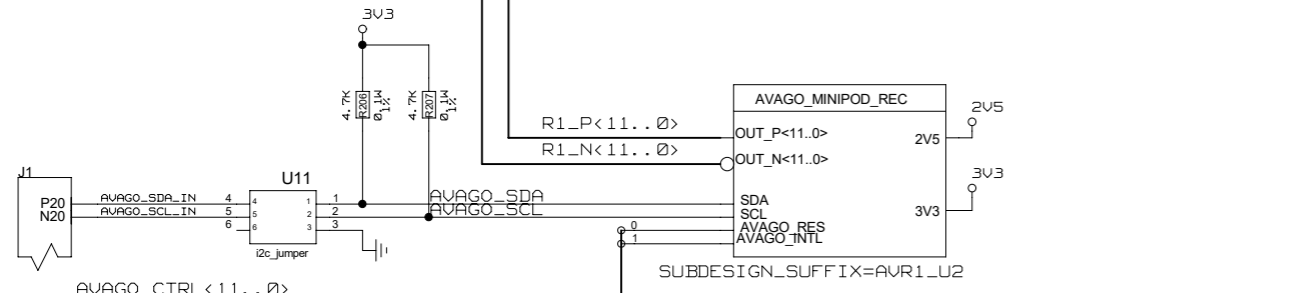
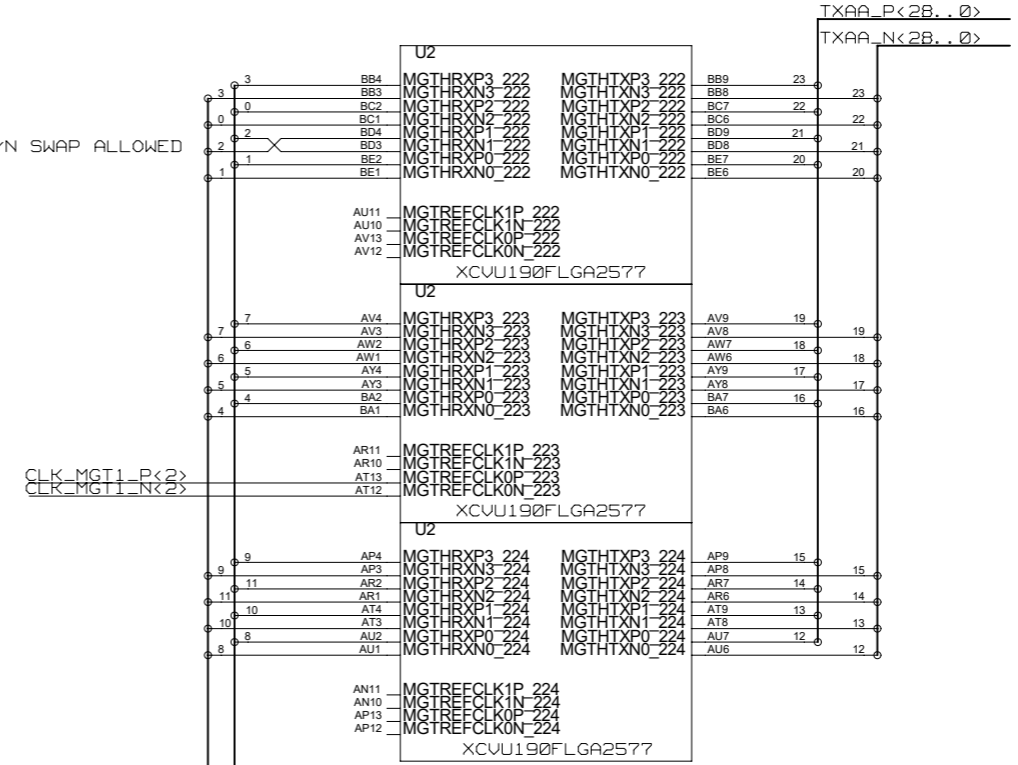
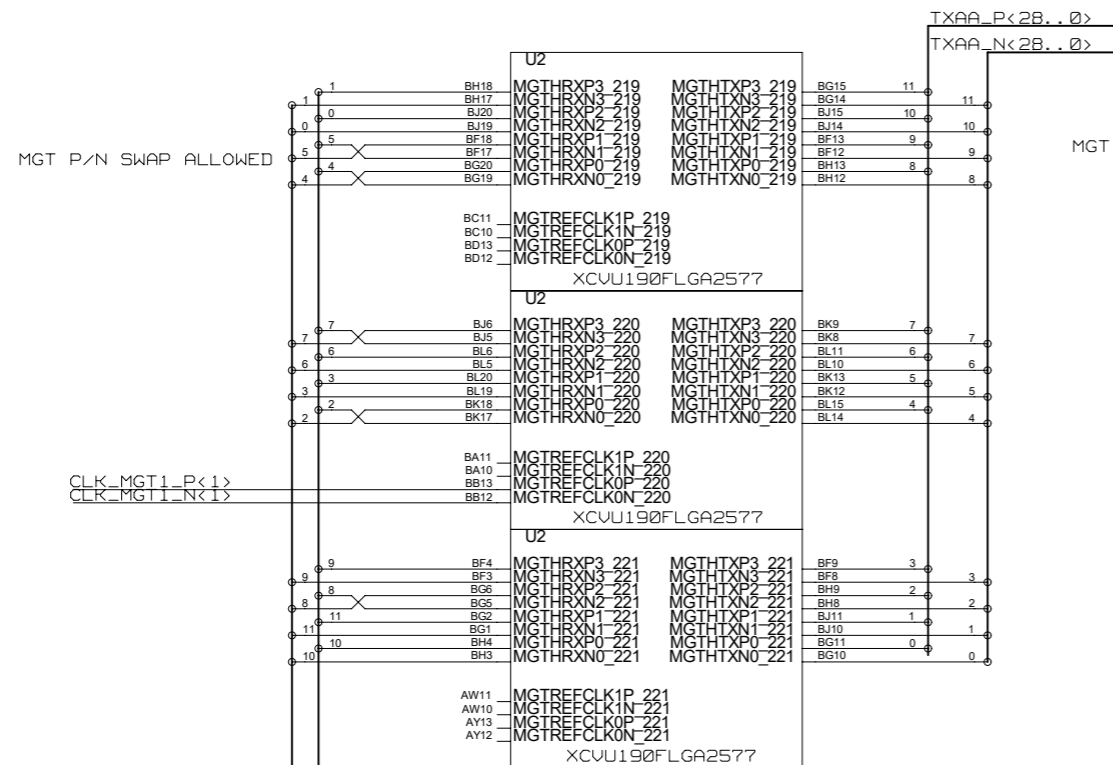
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

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.



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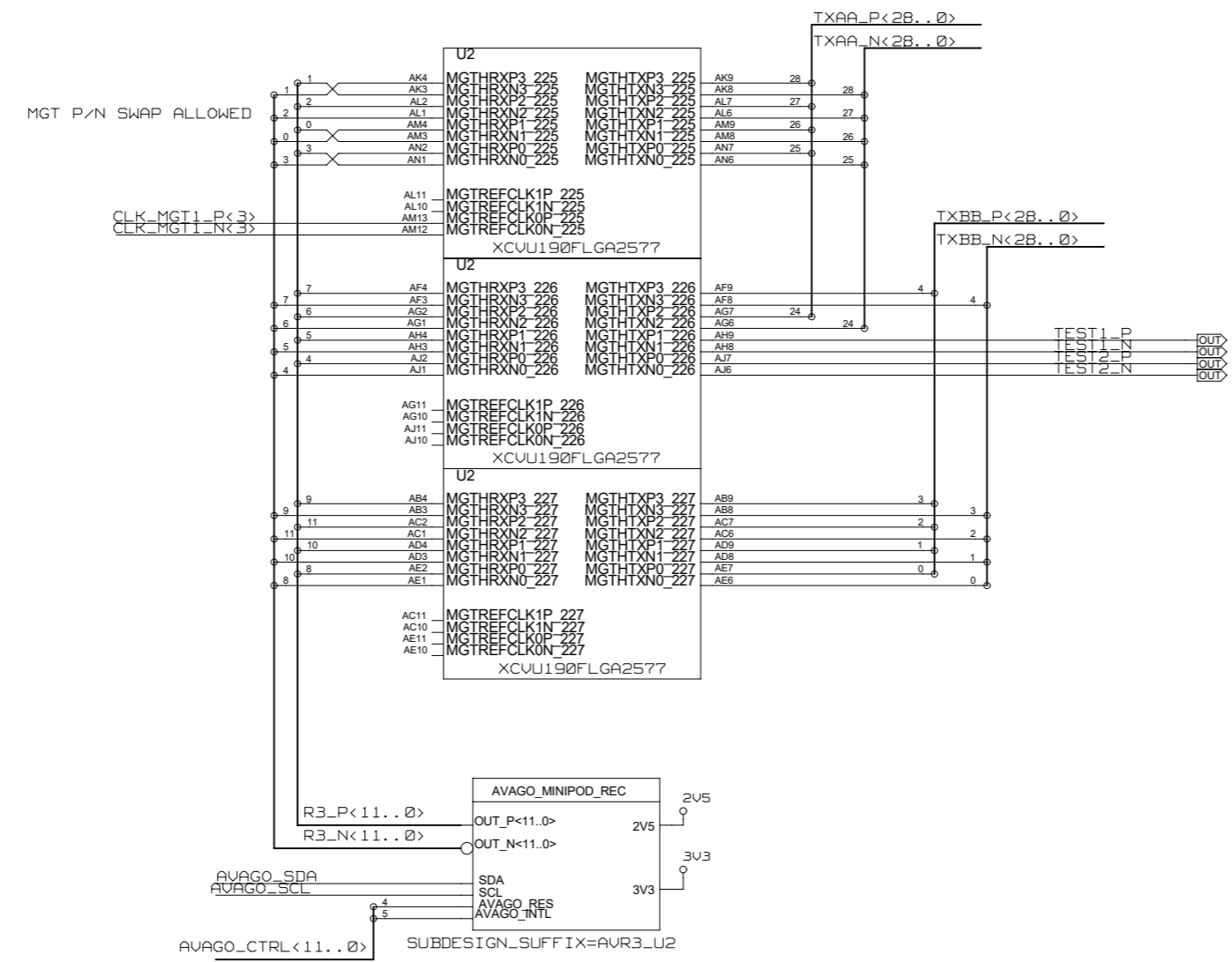
I2C ADDRESS:
 R3=XXX R4=XXX
 R5=XXX R6=XXX
 R7=XXX R8=XXX

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

BANK
210
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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.



AVAGO_MINIPOD_REC

OUT_P<11..0> 2V5

OUT_N<11..0> 2V5

SDA 3V3

SCL 3V3

AVAGO_RES 3V3

AVAGO_INTL 3V3

SUBDESIGN_SUFFIX=AVR3_U2

I2C ADDRESS:

R3=XXX R4=XXX

R5=XXX R6=XXX

R7=XXX R8=XXX

BANK

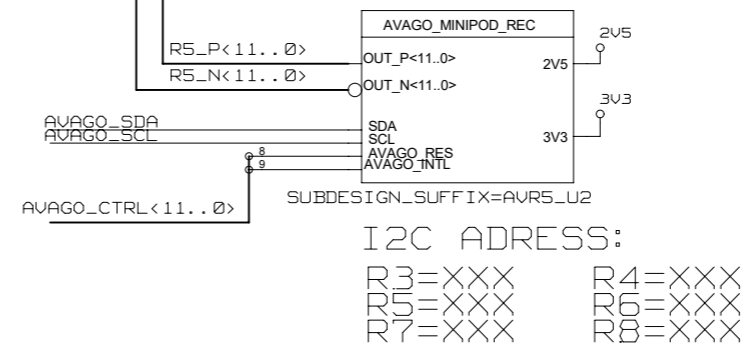
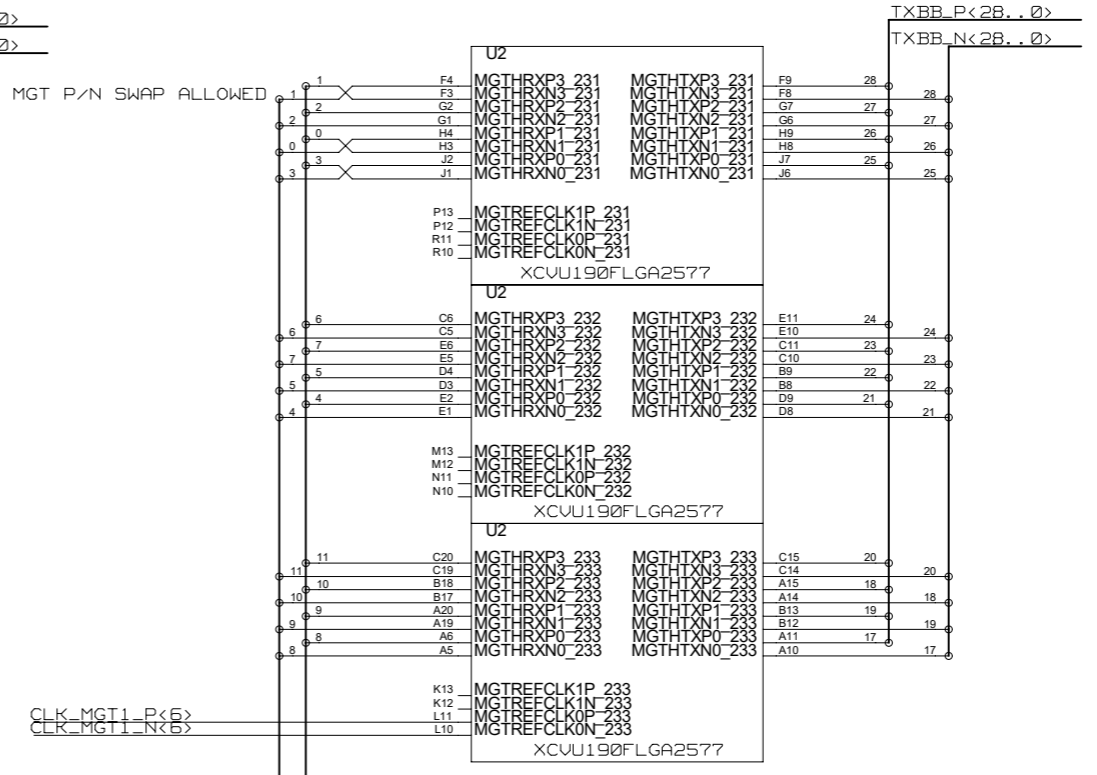
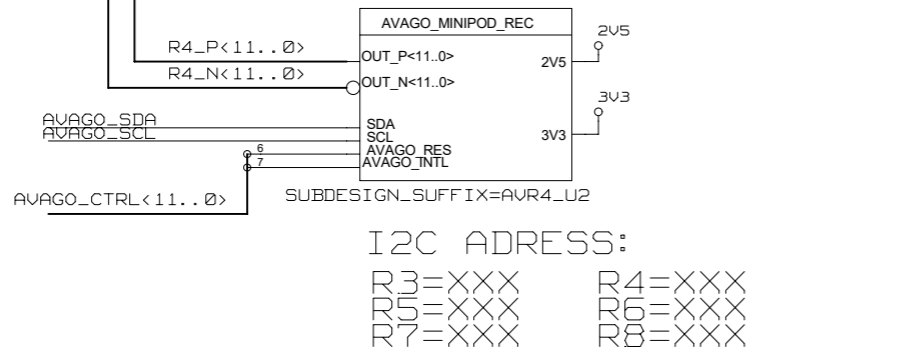
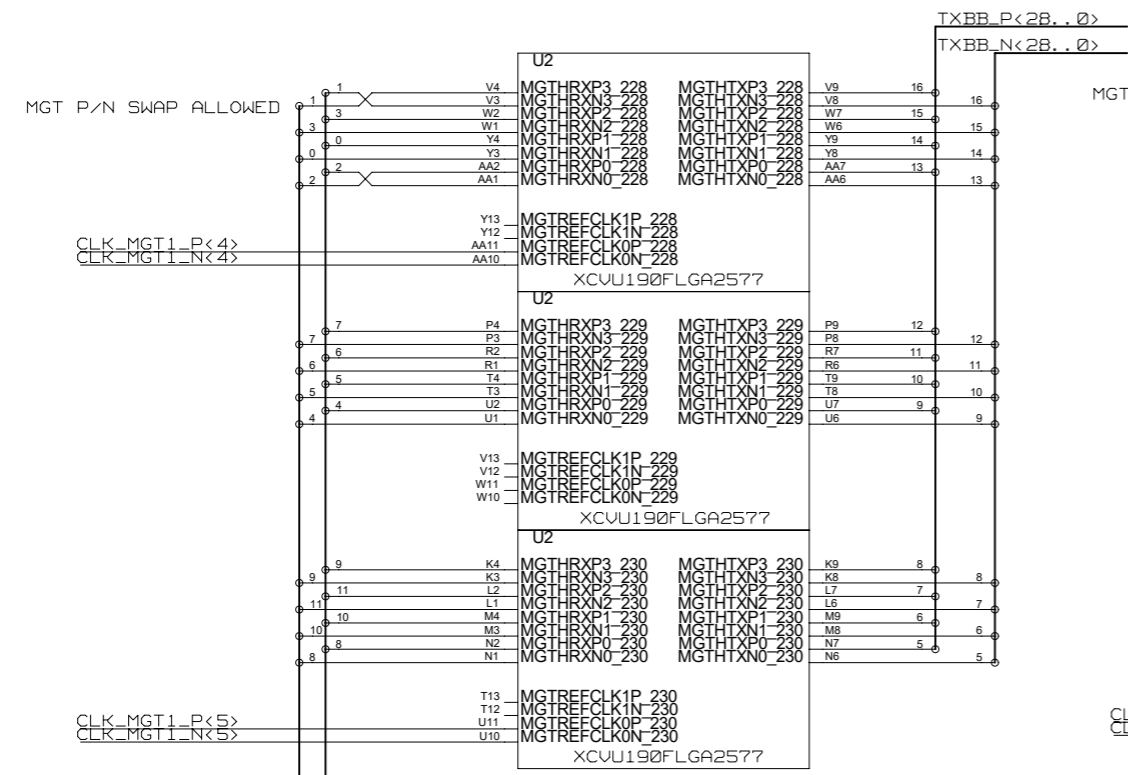
225

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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	REV.	DRAWING NO.	
C			
SCALE			SHEET 3 OF 7

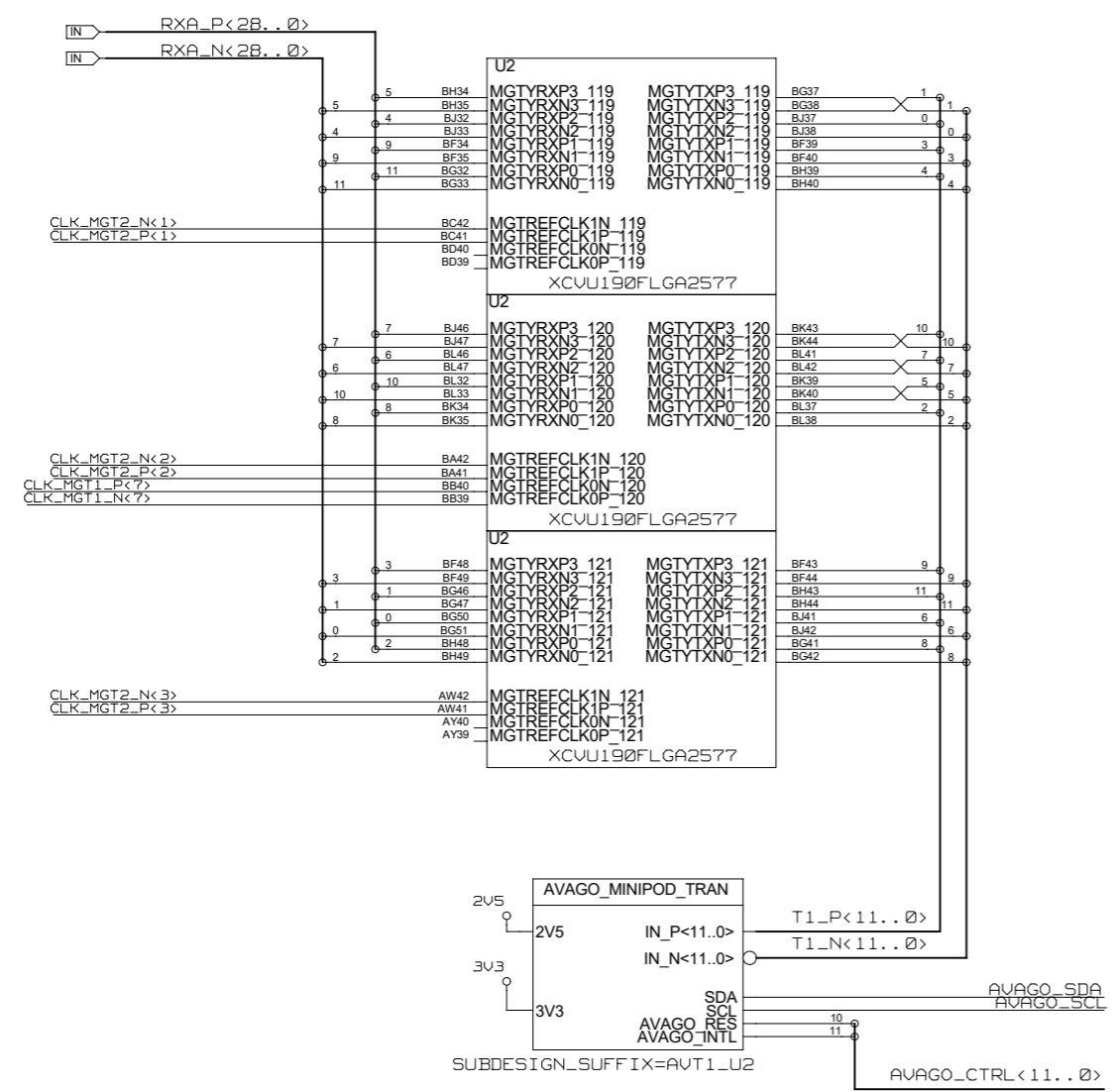
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



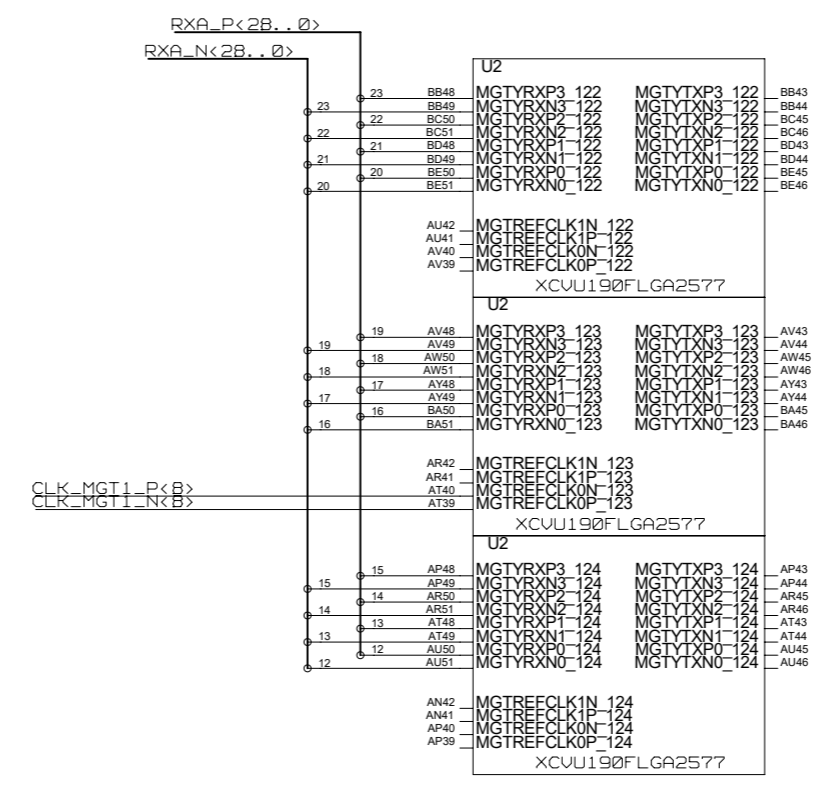
BANK
R3
R4
R5
R6
R7
R8

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	REV.	DRAWING NO.	
C			
SCALE			SHEET 4 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



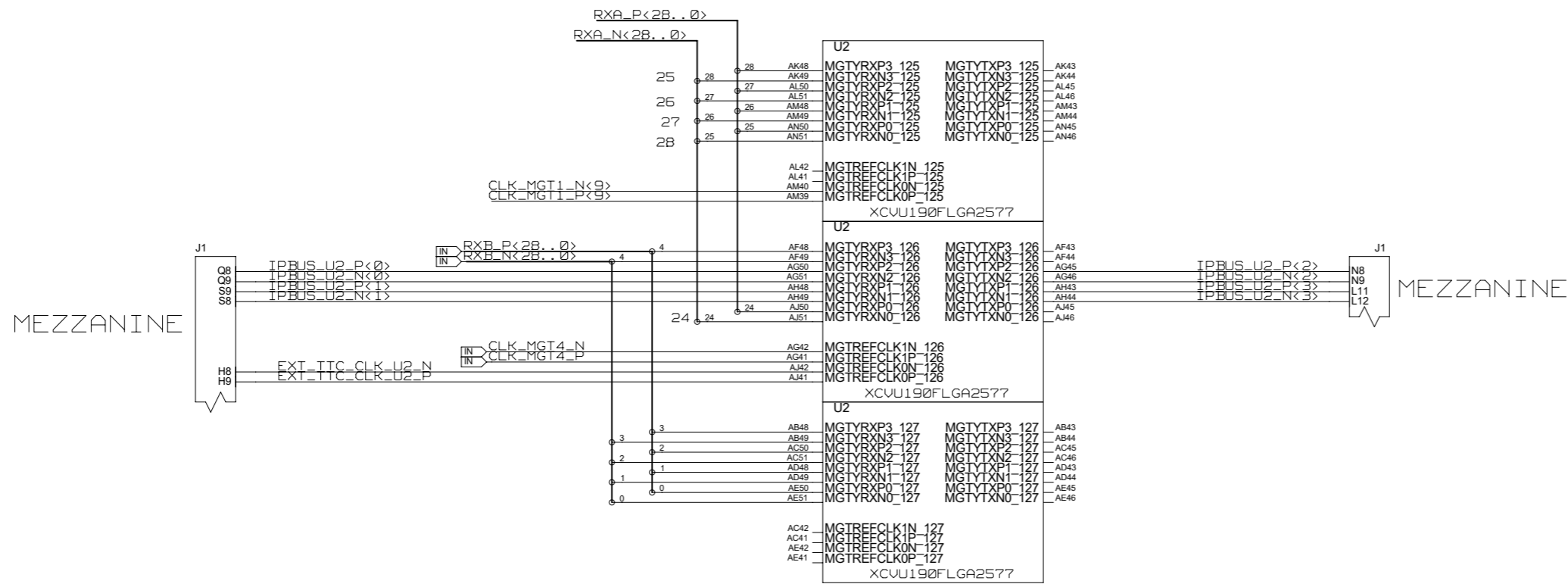
I2C ADDRESS:
R3=XXX R4=XXX
R5=XXX R6=XXX
R7=XXX R8=XXX



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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

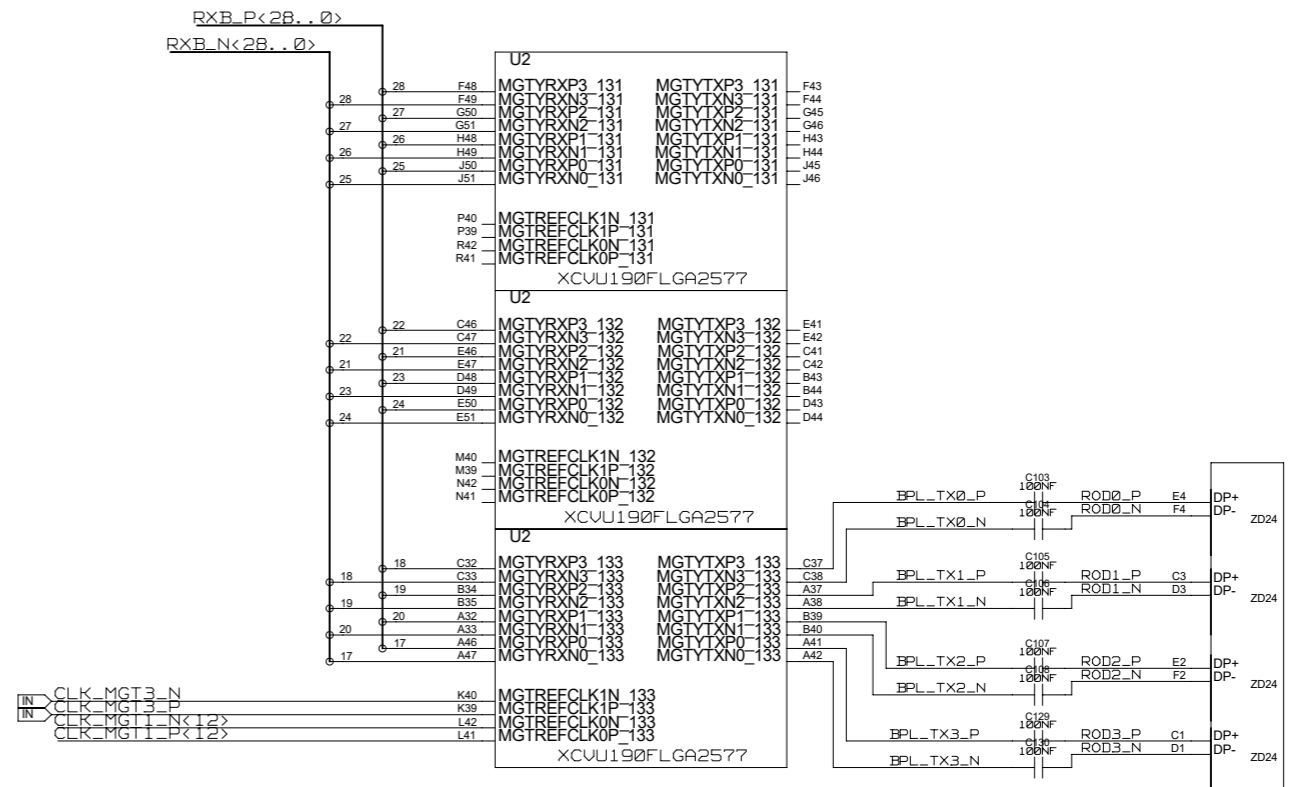
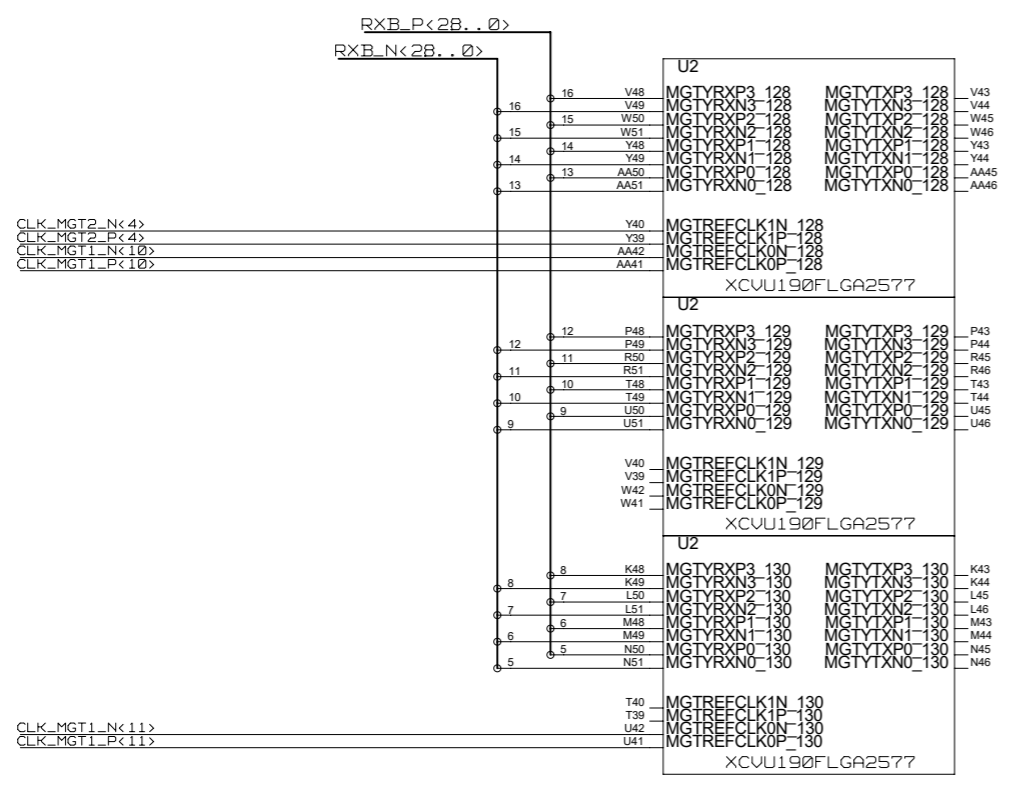
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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.

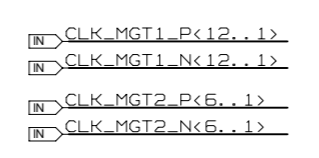
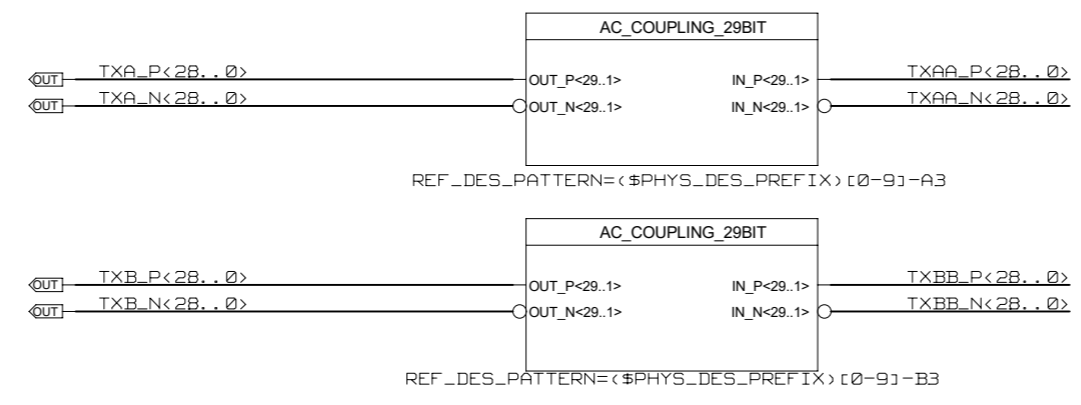


BANK
128
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NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			RXB + TXC
CHECKED U. SCHAEFER			
CHECKED S. RAVE			
DRAWN BAUSS	07.08.2015		
BLOCK TITLE			
U2_MGT_REAL_TIME			
UNIVERSITY OF MAINZ		SIZE C	REV.
SCALE		DRAWING NO.	
			SHEET 7 OF 7

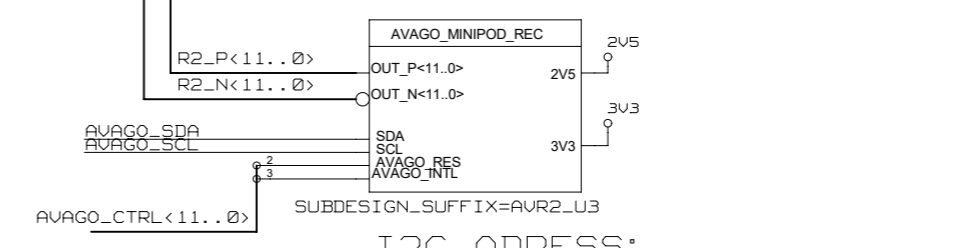
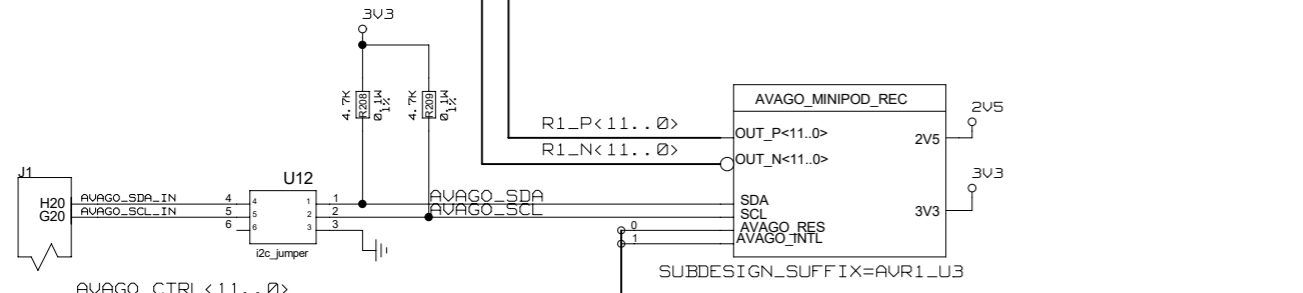
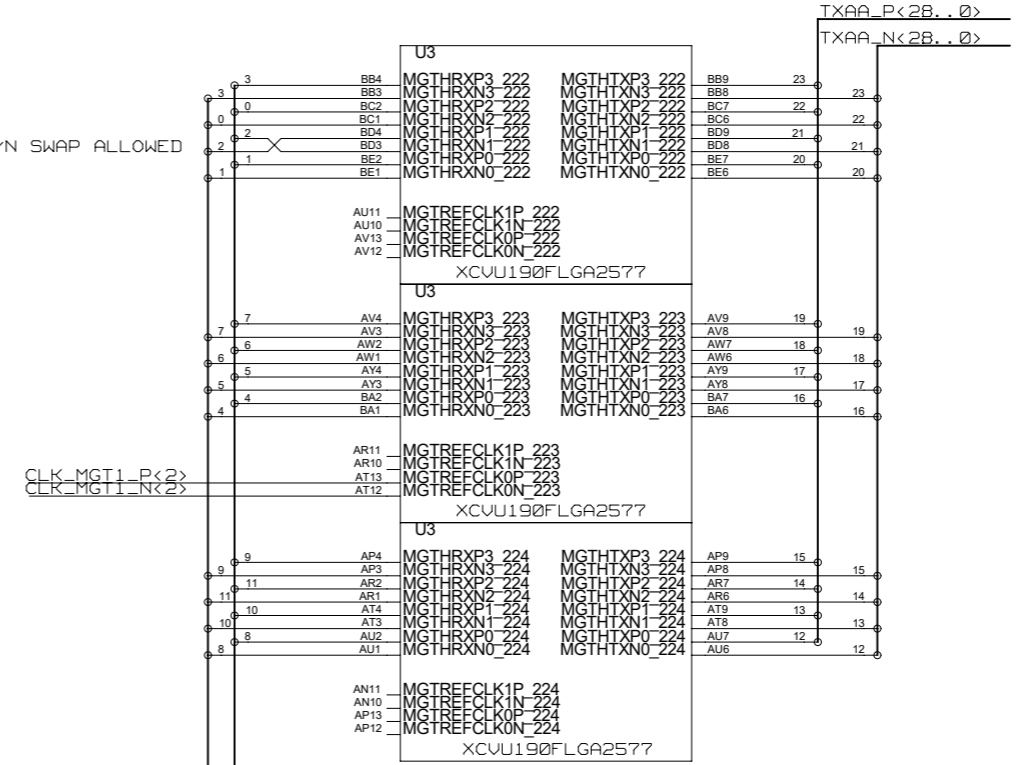
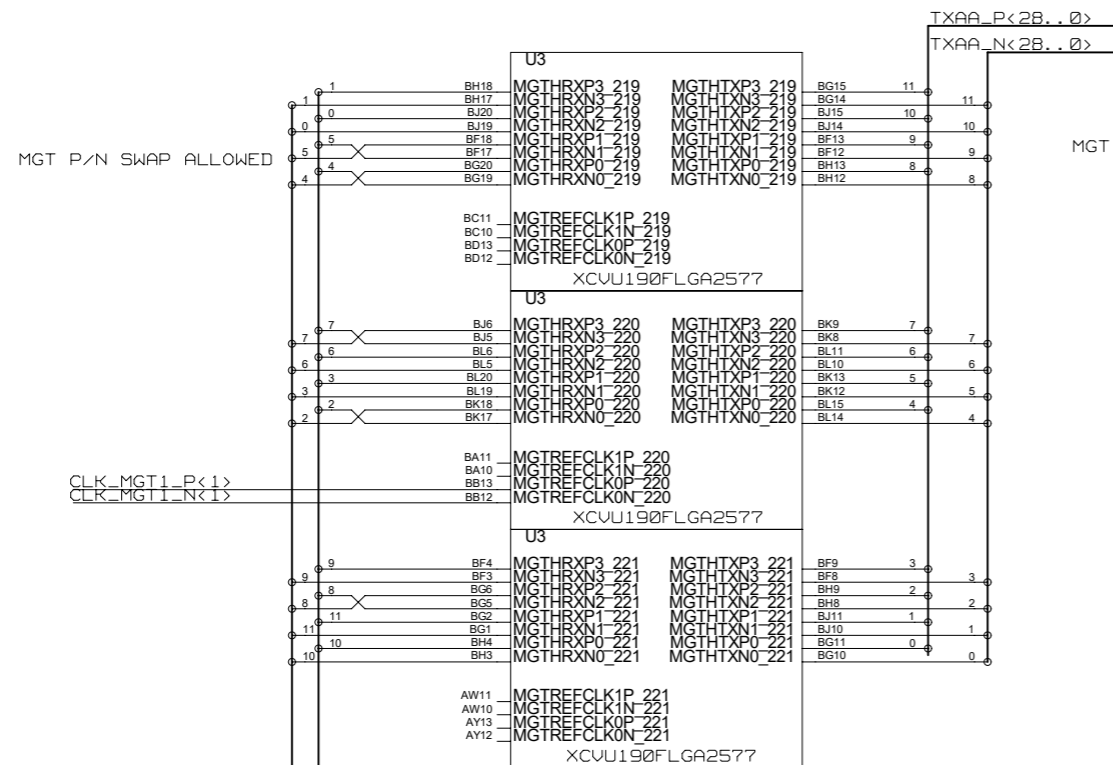
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

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

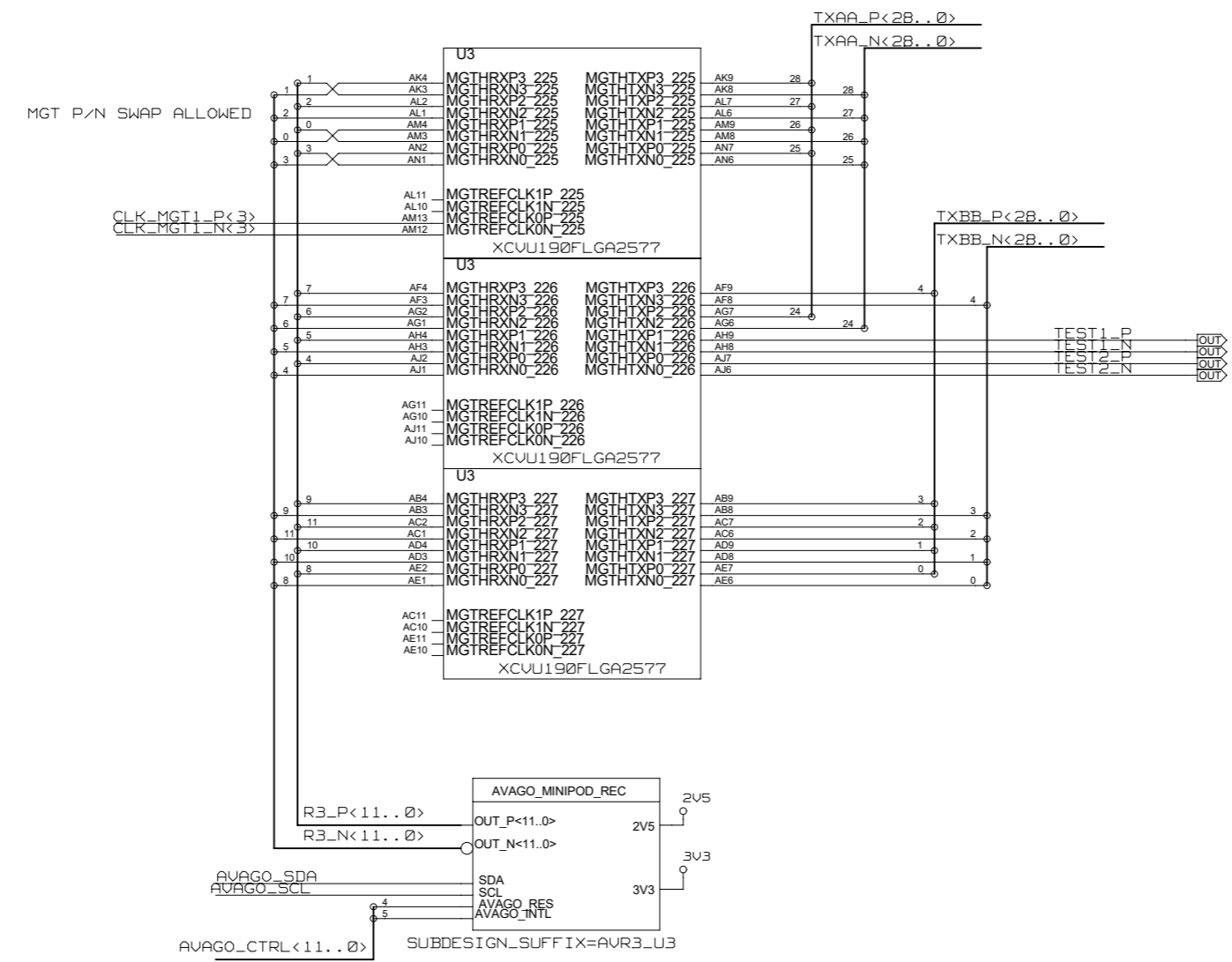
I2C ADDRESS:
 R3=XXX R4=XXX
 R5=XXX R6=XXX
 R7=XXX R8=XXX

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

BANK
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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
U3_MGT_REAL_TIME			
SIZE	REV.	DRAWING NO.	
SCALE		SHEET 2 OF 7	

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

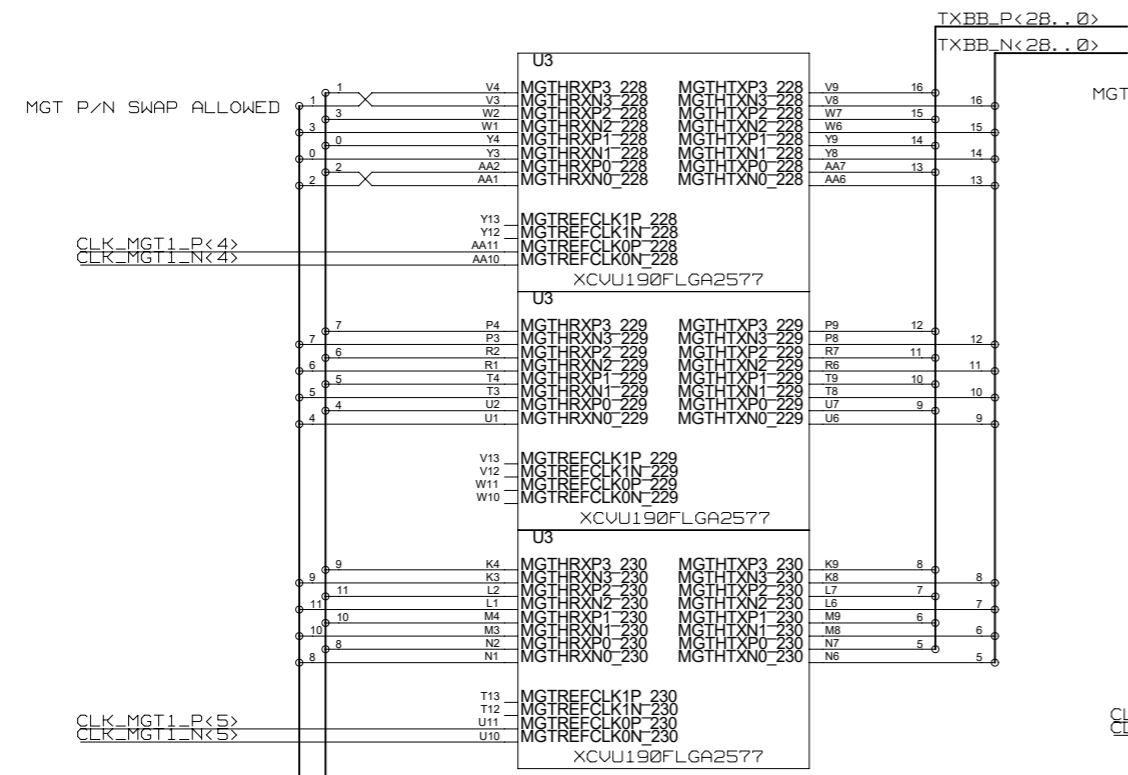


I2C ADDRESS:
R3=XXX R4=XXX
R5=XXX R6=XXX
R7=XXX R8=XXX

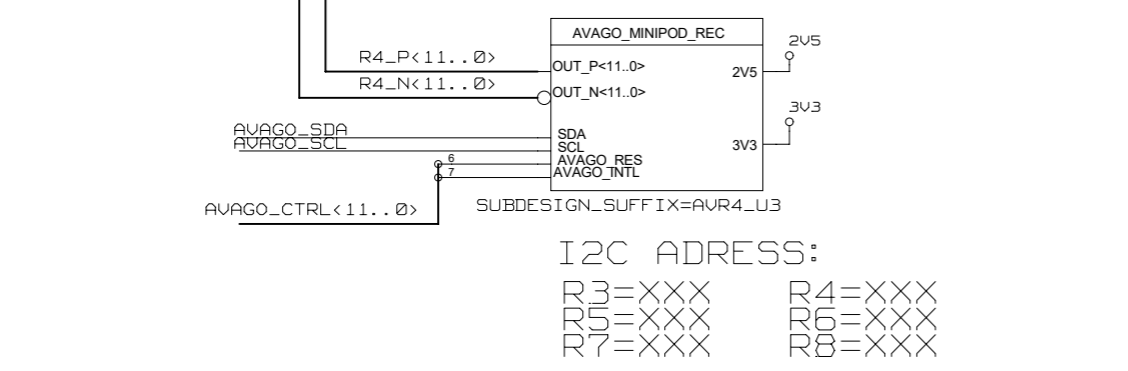
BANK
225
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227

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			
U3_MGT_REAL_TIME			
UNIVERSITY OF MAINZ		SIZE C	REV.
SCALE		DRAWING NO.	
SHEET 3 OF 7			

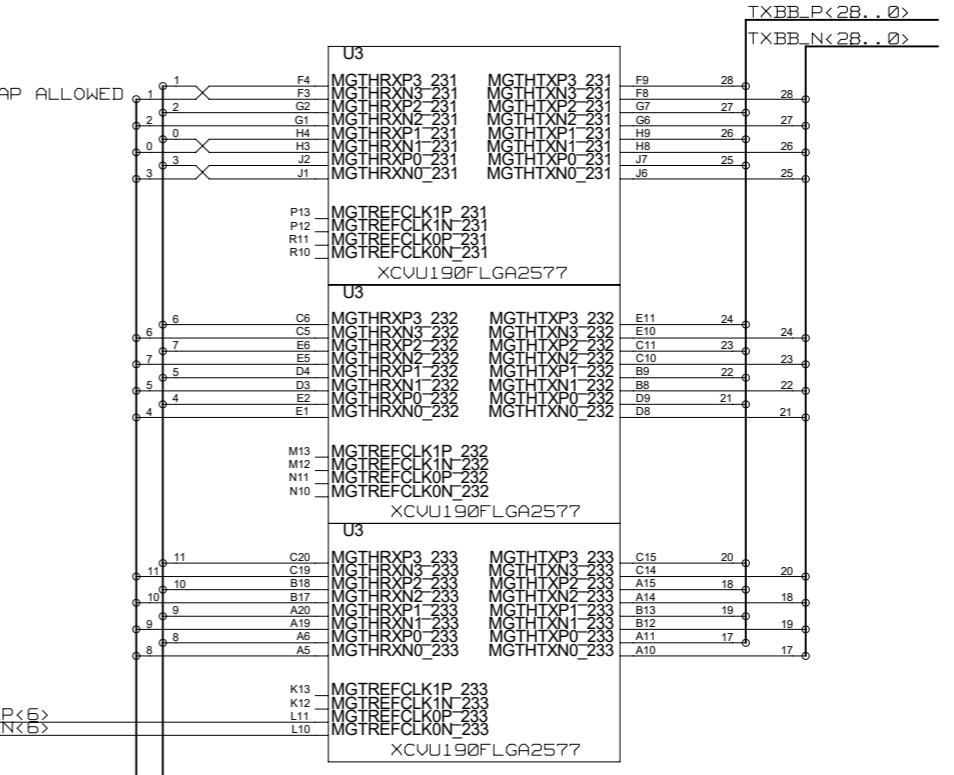
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



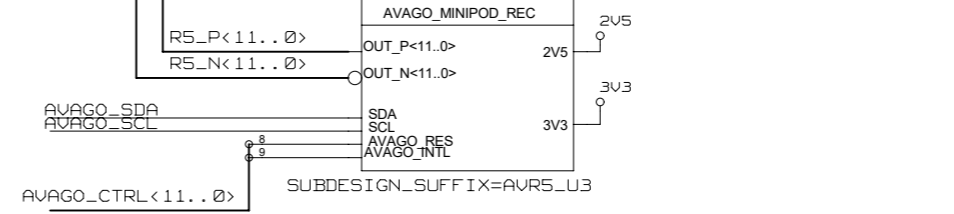
MGT P/N SWAP ALLOWED



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



MGT P/N SWAP ALLOWED

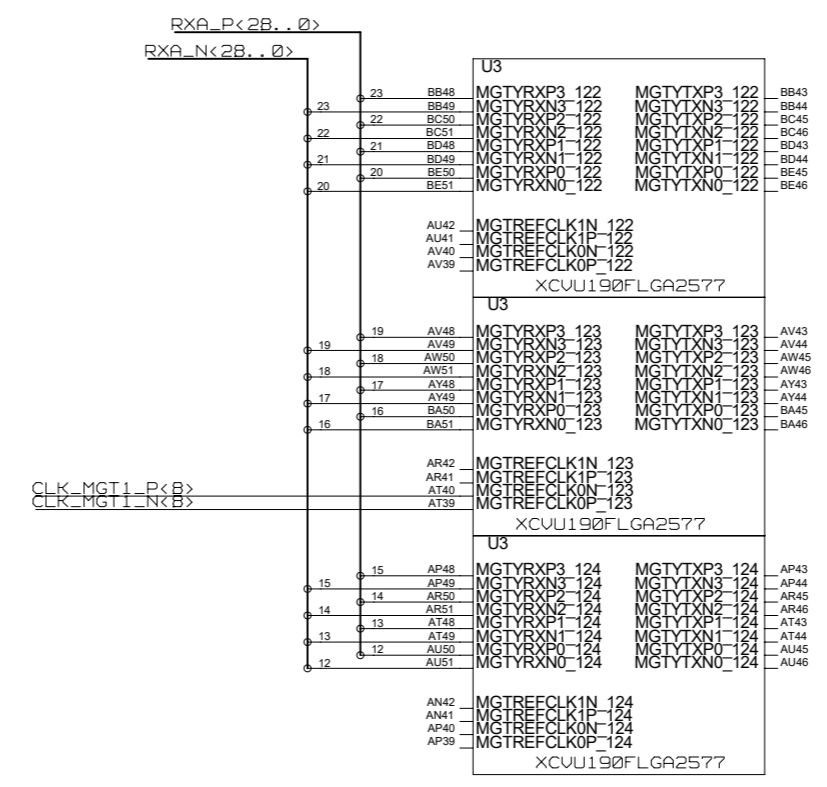
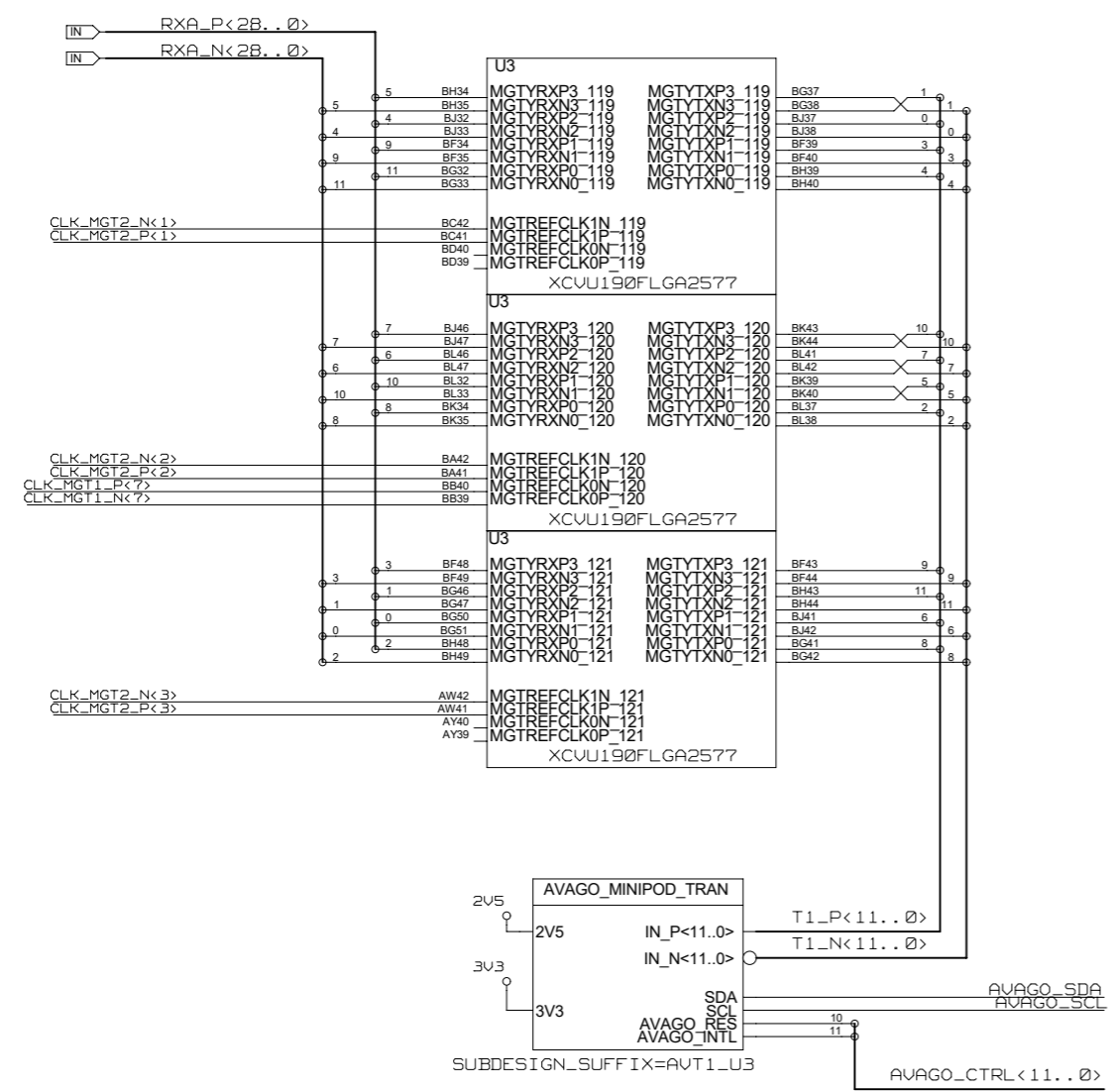


I2C ADDRESS:
R3=XXX R4=XXX
R5=XXX R6=XXX
R7=XXX R8=XXX

BANK
R3
R4
R5
R6
R7
R8

NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J. V. DE SOUZA		AVAGO + TXB
CHECKED	U.SCHAEFER		
CHECKED	S.RAVE		
DRAWN	BAUSS	07.08.2015	
BLOCK TITLE			DRAWING NO.
U3_MGT_REAL_TIME			
UNIVERSITY OF MAINZ			SHEET 4 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

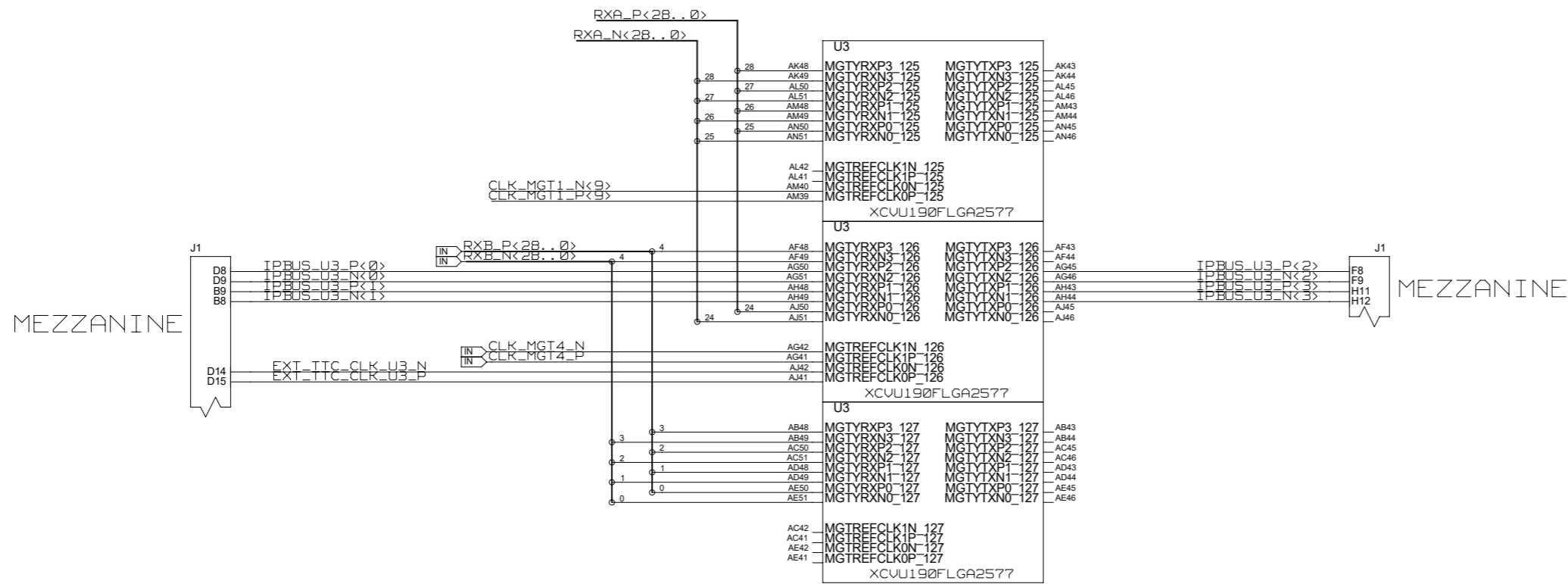


I2C ADDRESS:
R3=XXX R4=XXX
R5=XXX R6=XXX
R7=XXX R8=XXX

BANK
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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	C	REV.	DRAWING NO.	
SCALE				SHEET 5 OF 7

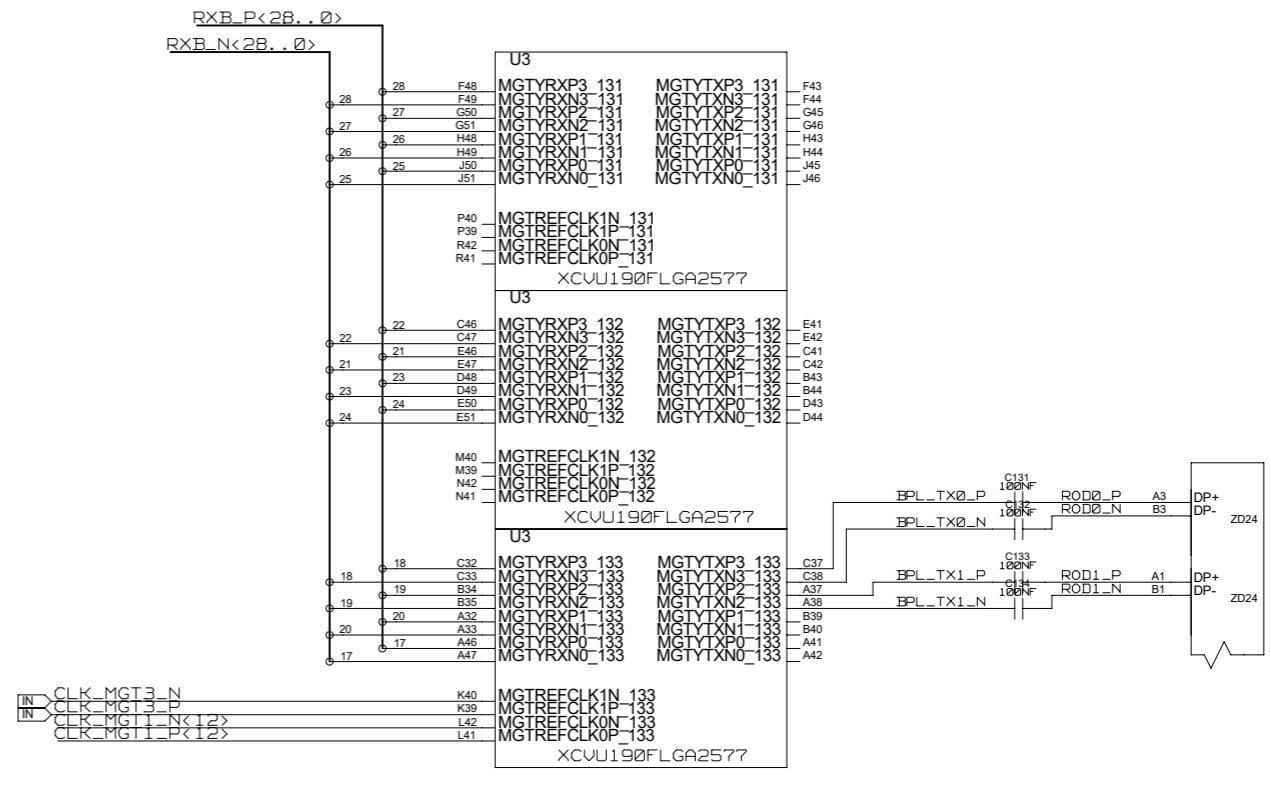
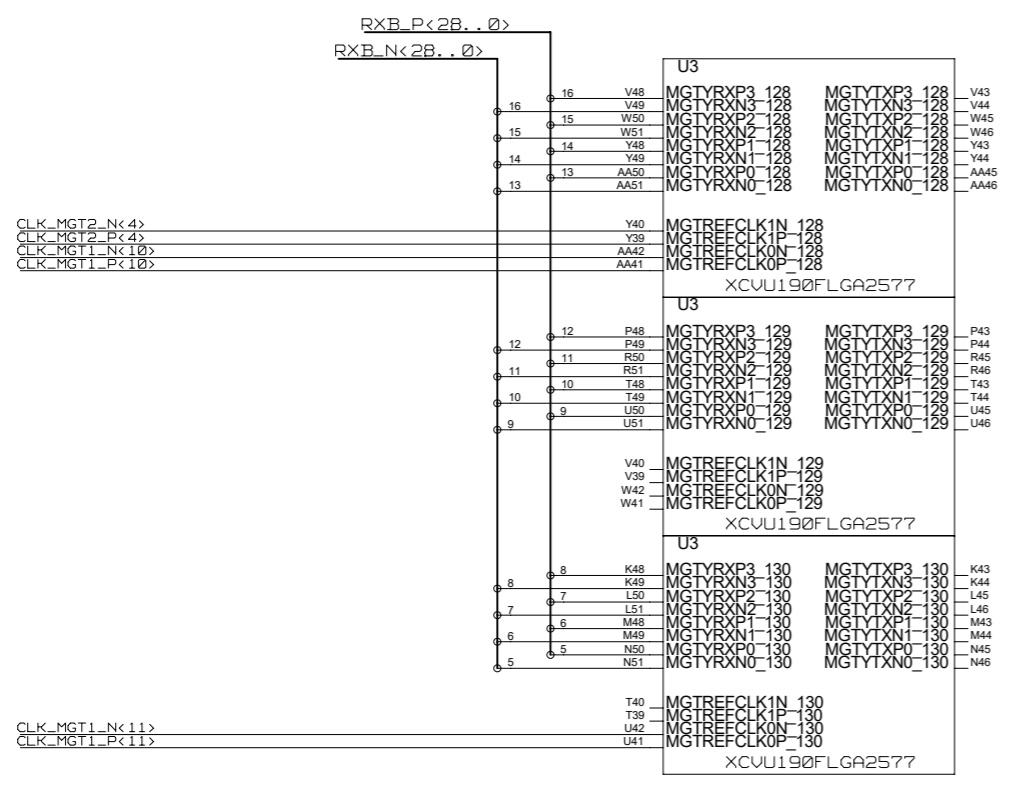
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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.

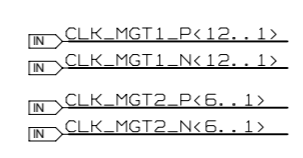
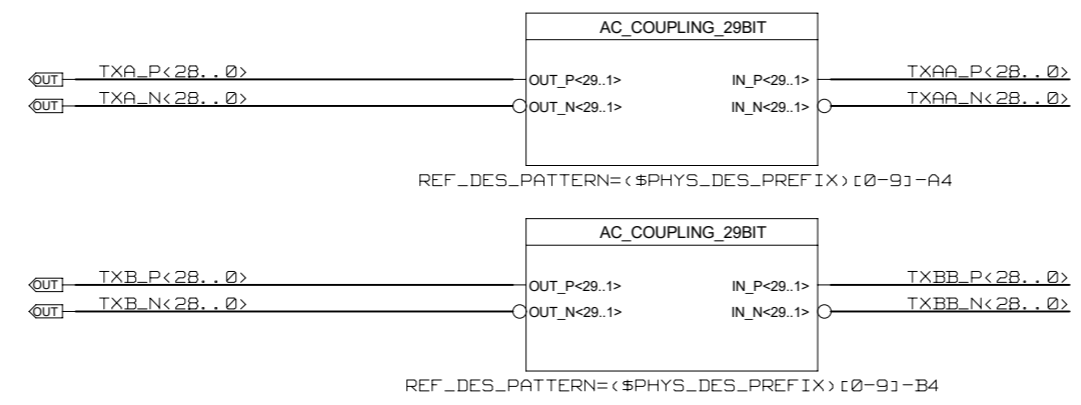


BANK
128
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CHECKED	J. V. DE SOUZA			DRAWING TITLE RXB + TXC
CHECKED	U. SCHAEFER			
CHECKED	S. RAVE			
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U3_MGT_REAL_TIME				
UNIVERSITY OF MAINZ		SIZE C	REV.	DRAWING NO.
SCALE				SHEET 7 OF 7

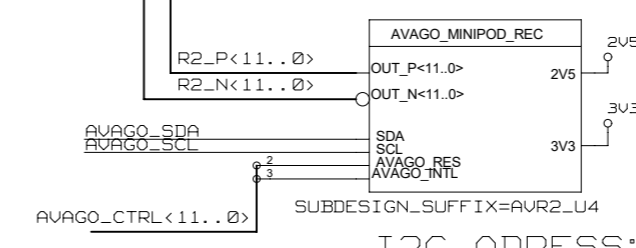
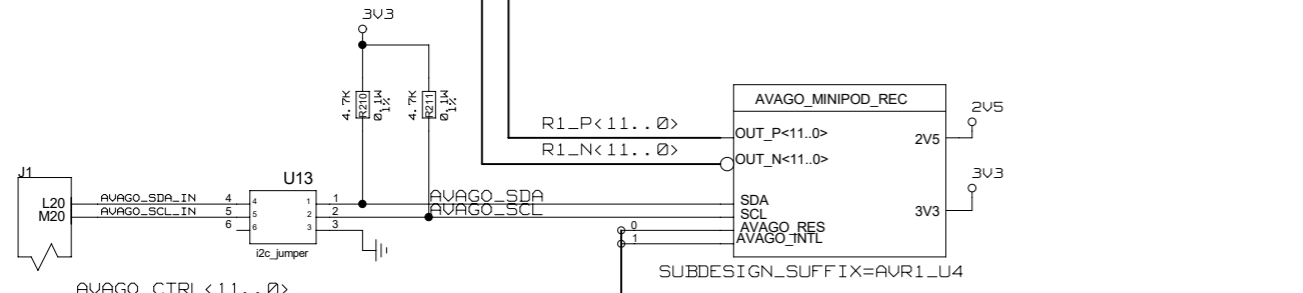
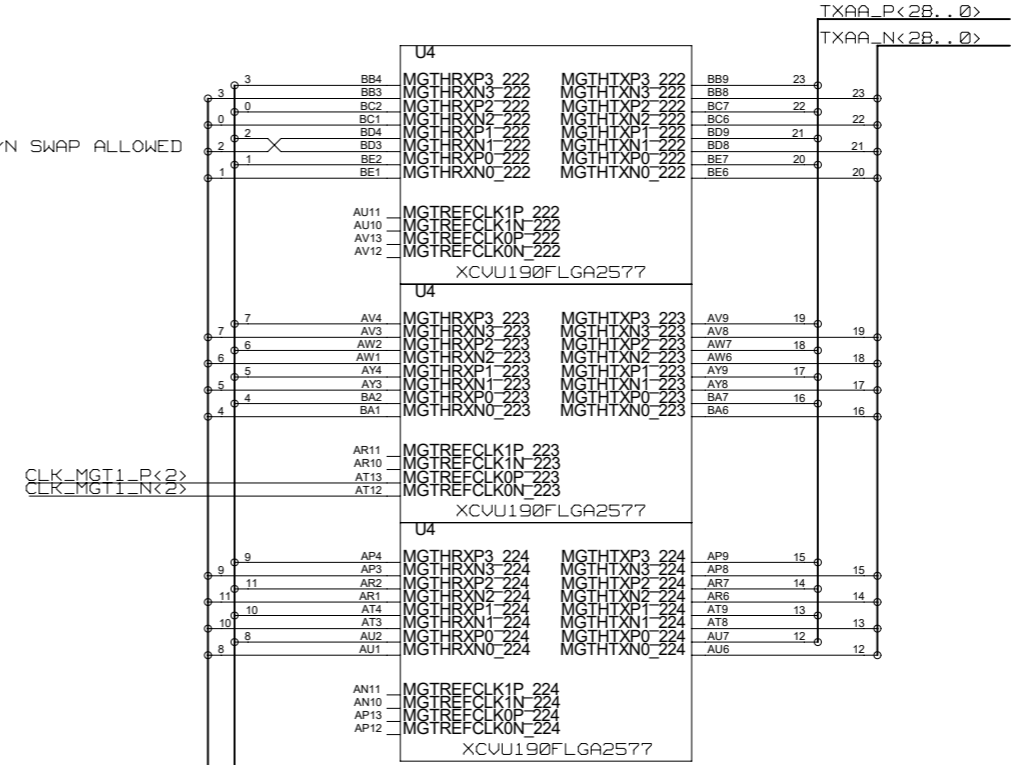
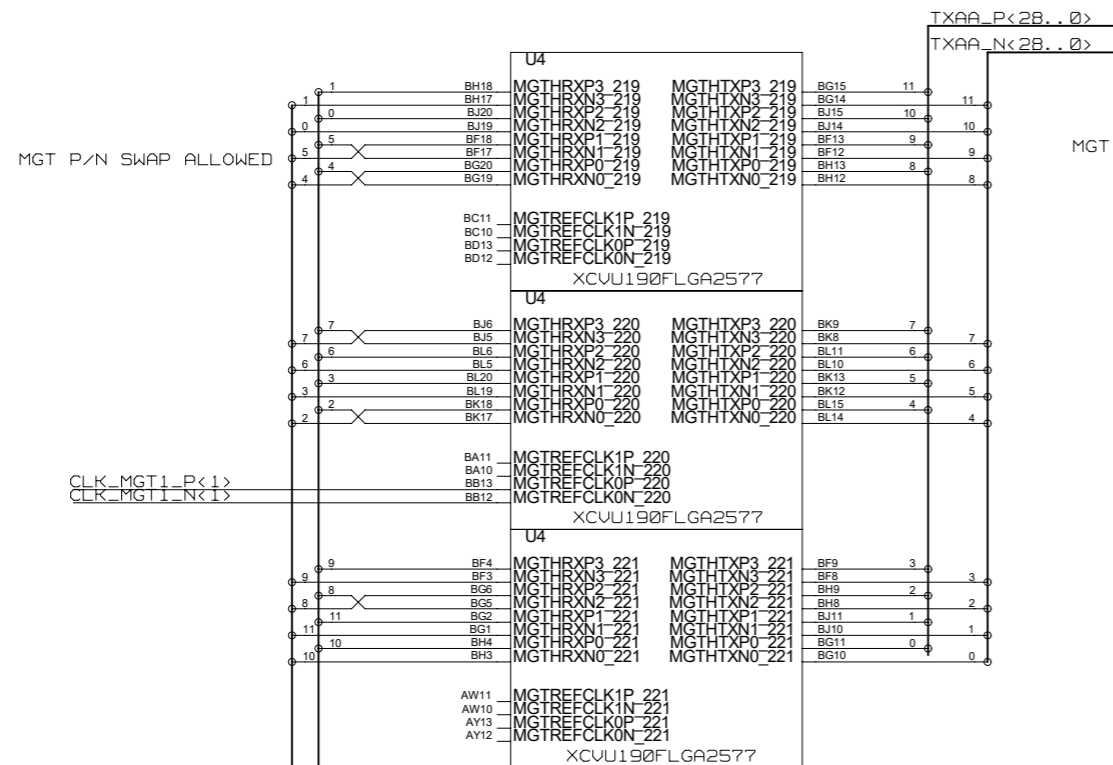
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

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

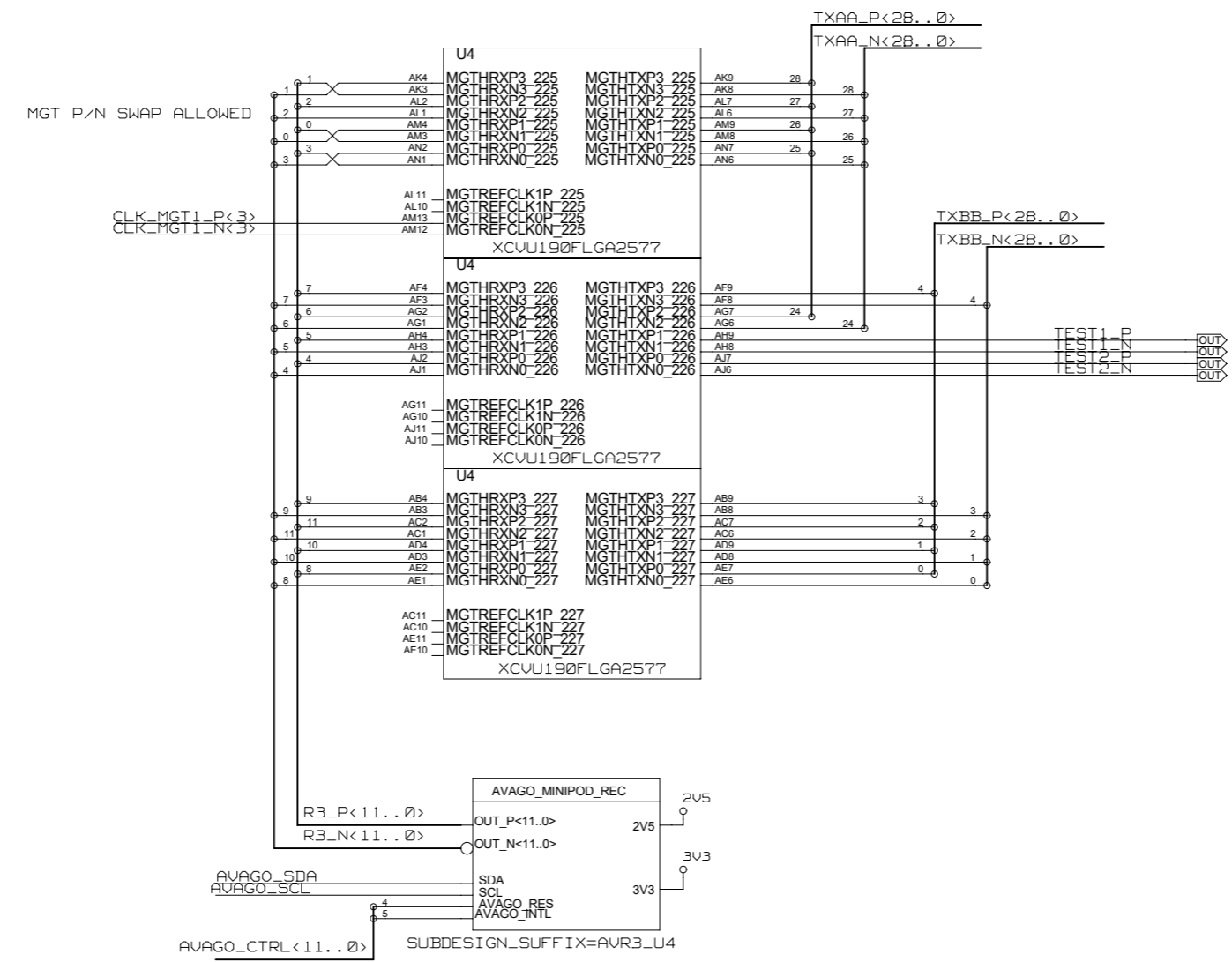
I2C ADDRESS:
 R3=XXX R4=XXX
 R5=XXX R6=XXX
 R7=XXX R8=XXX

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

BANK
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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.



AVAGO_MINIPOD_REC

OUT_P<11..0> 2V5

OUT_N<11..0> 2V5

SDA 3V3

SCL 3V3

AVAGO_RES

AVAGO_INTL

AVAGO_CTRL<11..0>

SUBDESIGN_SUFFIX=AVR3_U4

I2C ADDRESS:

R3=XXX R4=XXX

R5=XXX R6=XXX

R7=XXX R8=XXX

BANK

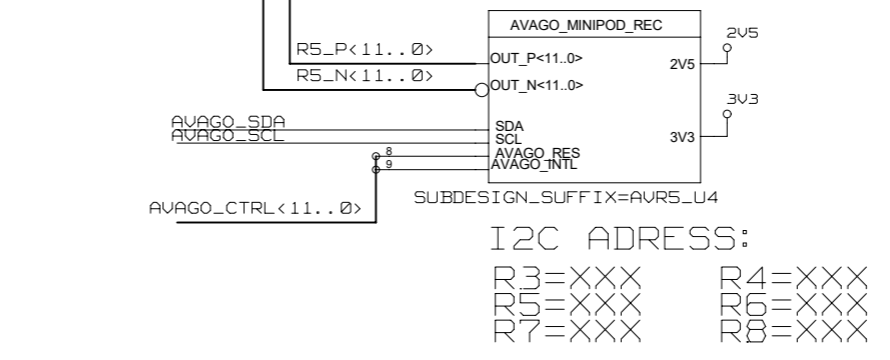
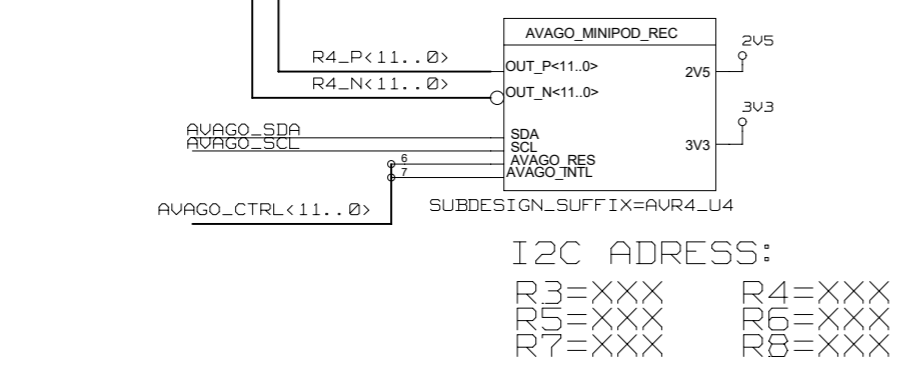
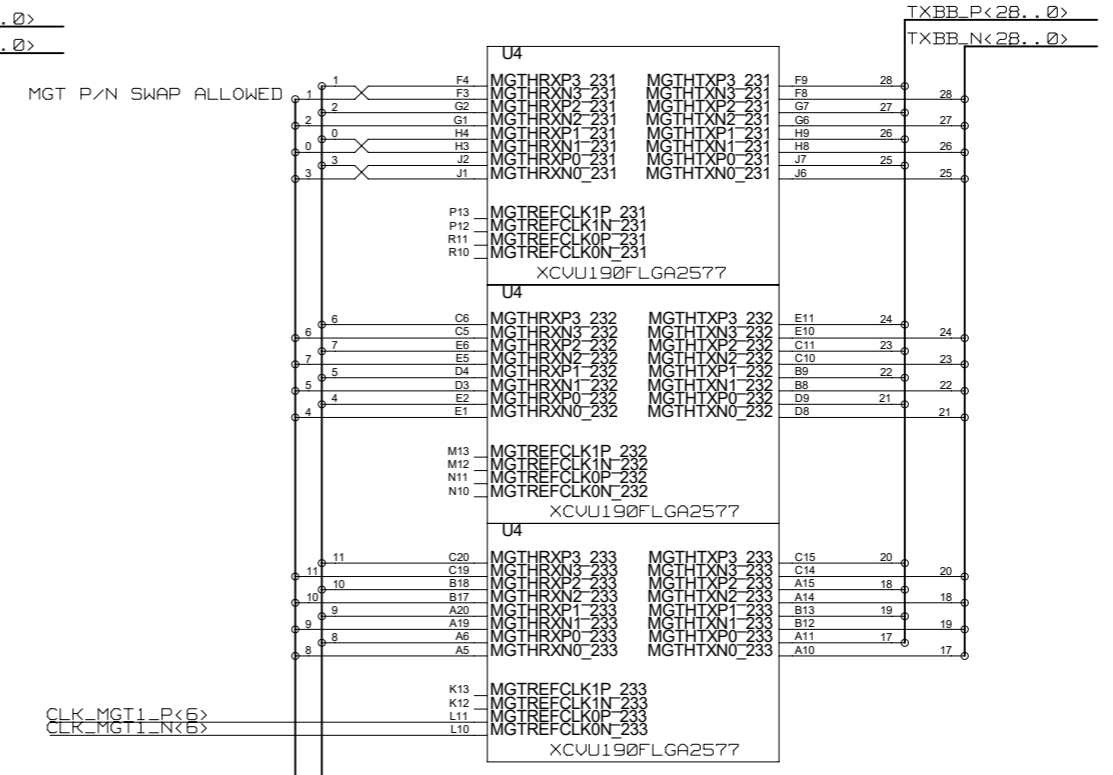
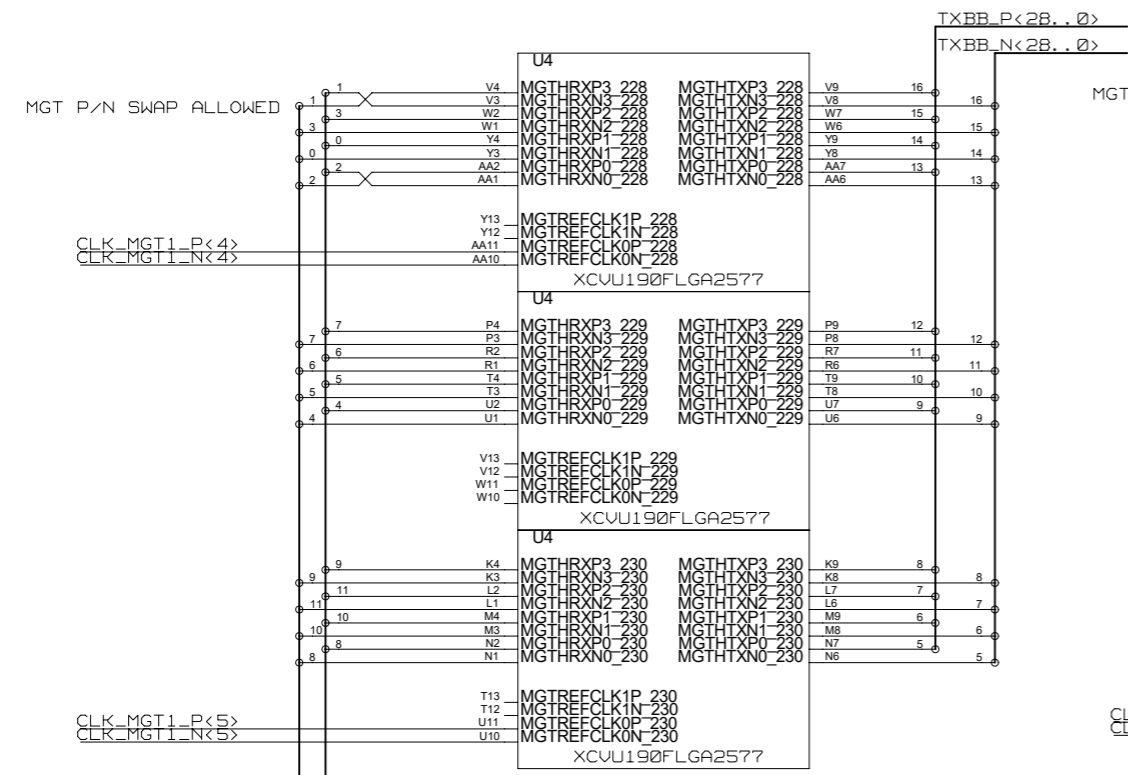
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NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J.V.DE SOUZA		AVAGO + TXA + TXB
CHECKED	U.SCHAEFER		
CHECKED	S.RAVE		
DRAWN	BAUSS	07.08.2015	
BLOCK TITLE			DRAWING NO.
U4_MGT_REAL_TIME			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE			SHEET 3 OF 7

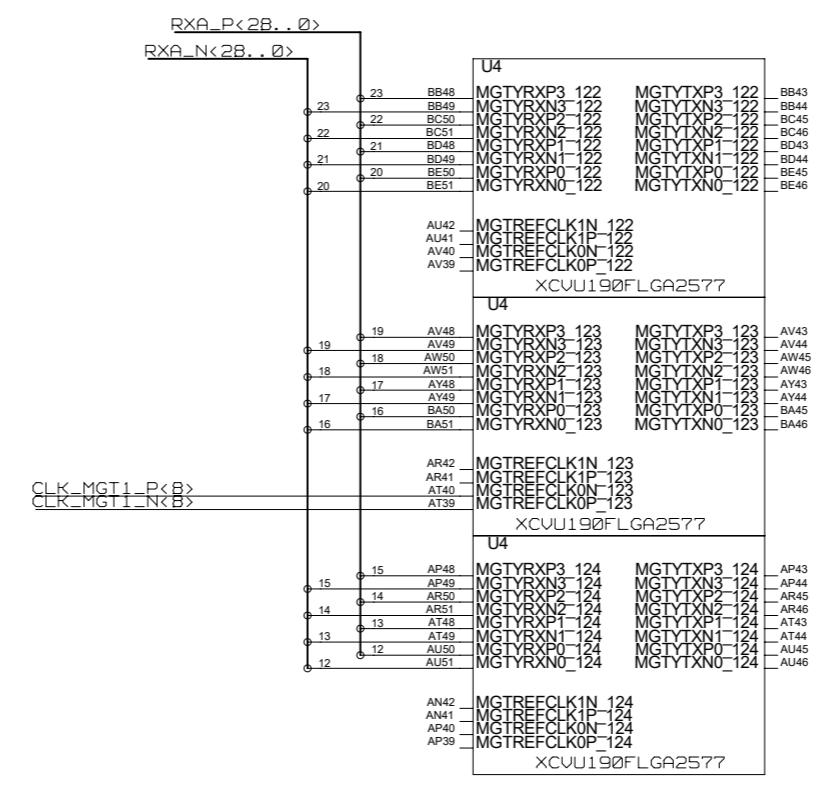
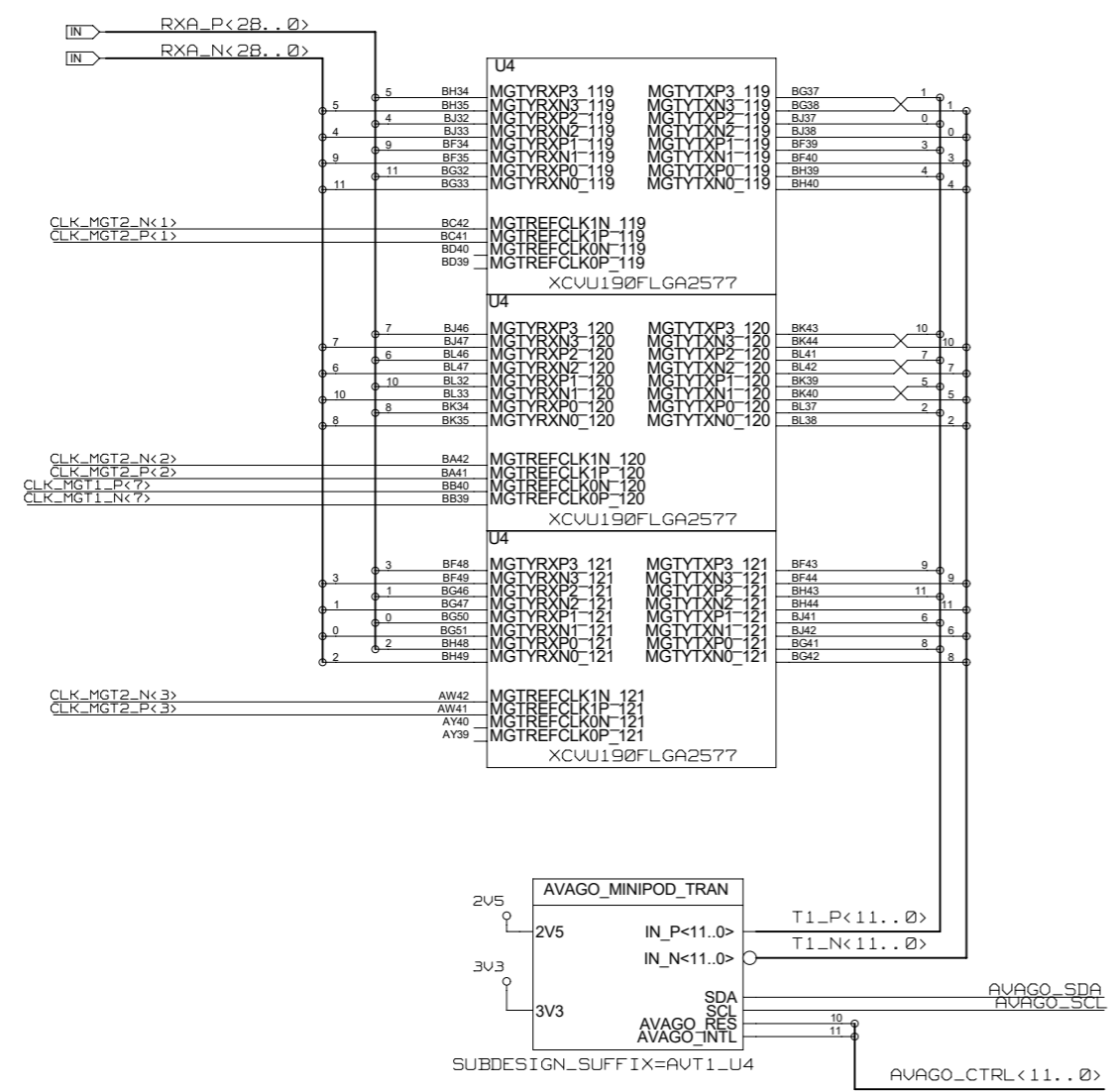
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK

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			
U4_MGT_REAL_TIME			
UNIVERSITY OF MAINZ		SIZE C	DRAWING NO.
		SCALE	SHEET 4 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

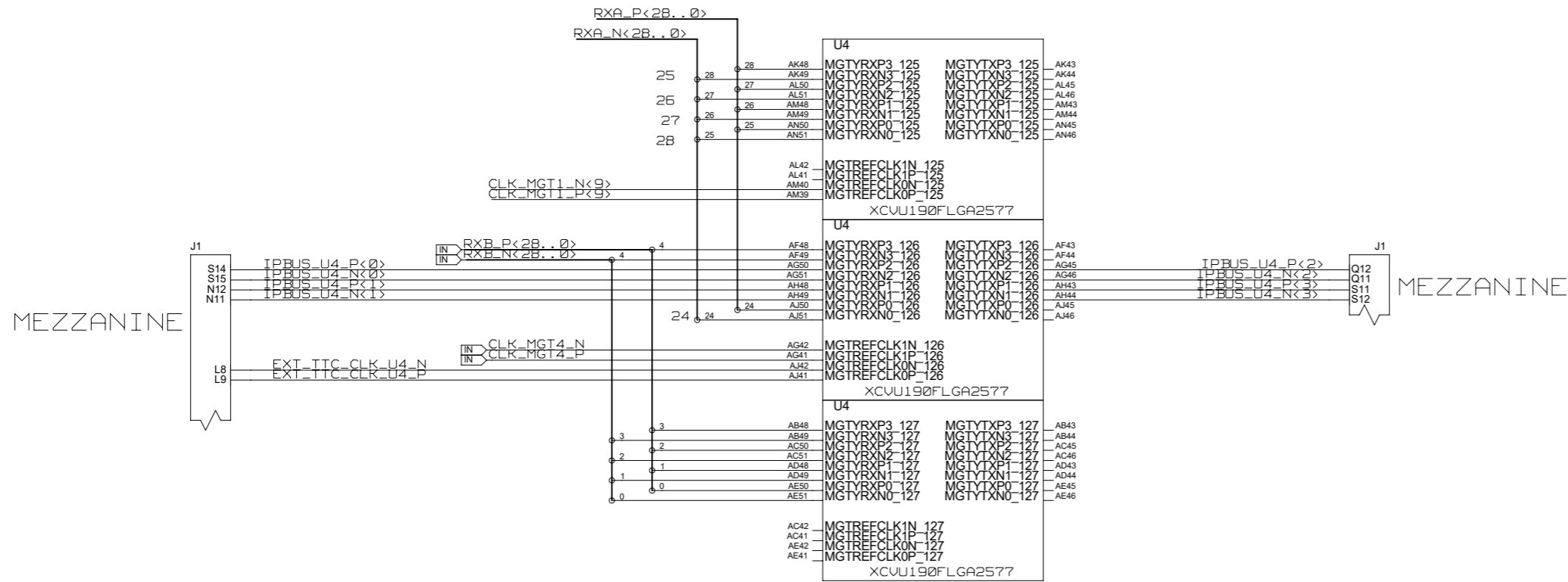


I2C ADDRESS:
R3=XXX R4=XXX
R5=XXX R6=XXX
R7=XXX R8=XXX

BANK
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CHECKED	J.V.DE SOUZA			DRAWING TITLE AVAGO + RXA
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 5 OF 7

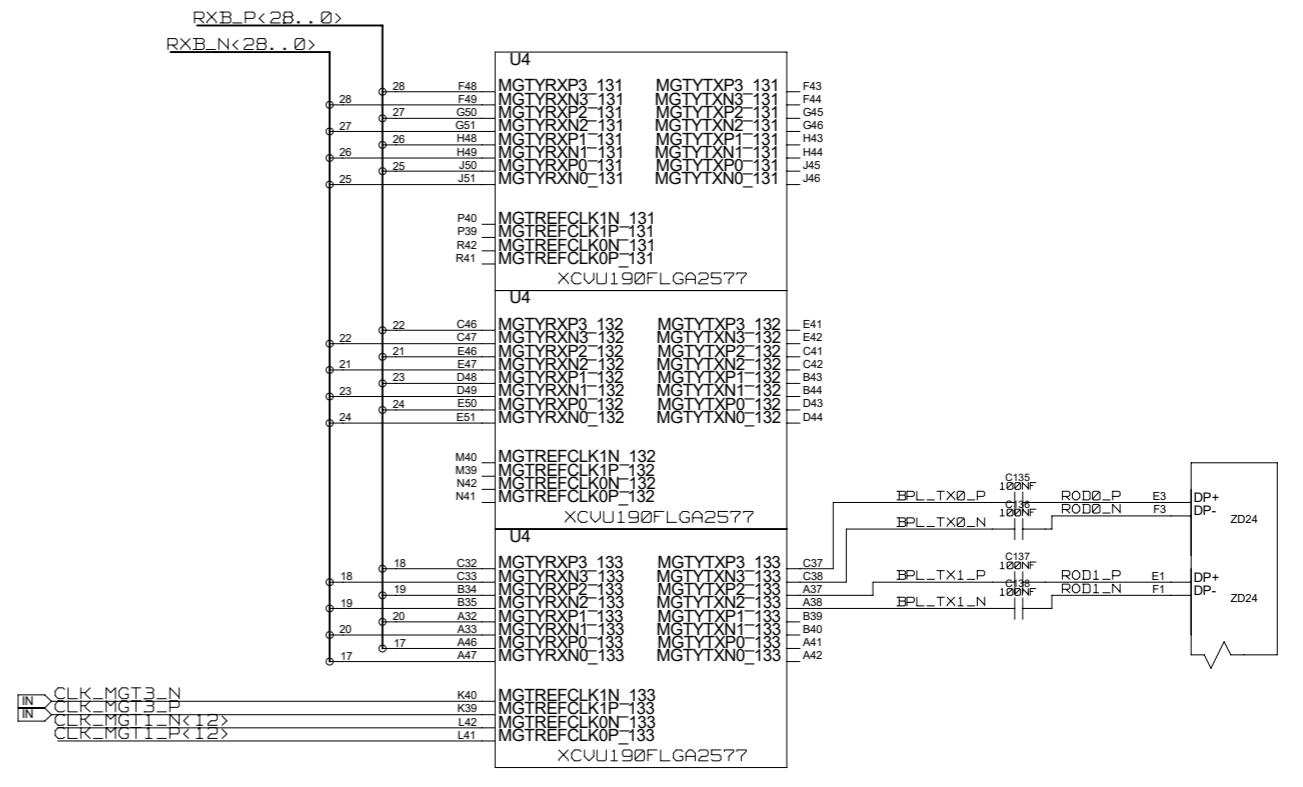
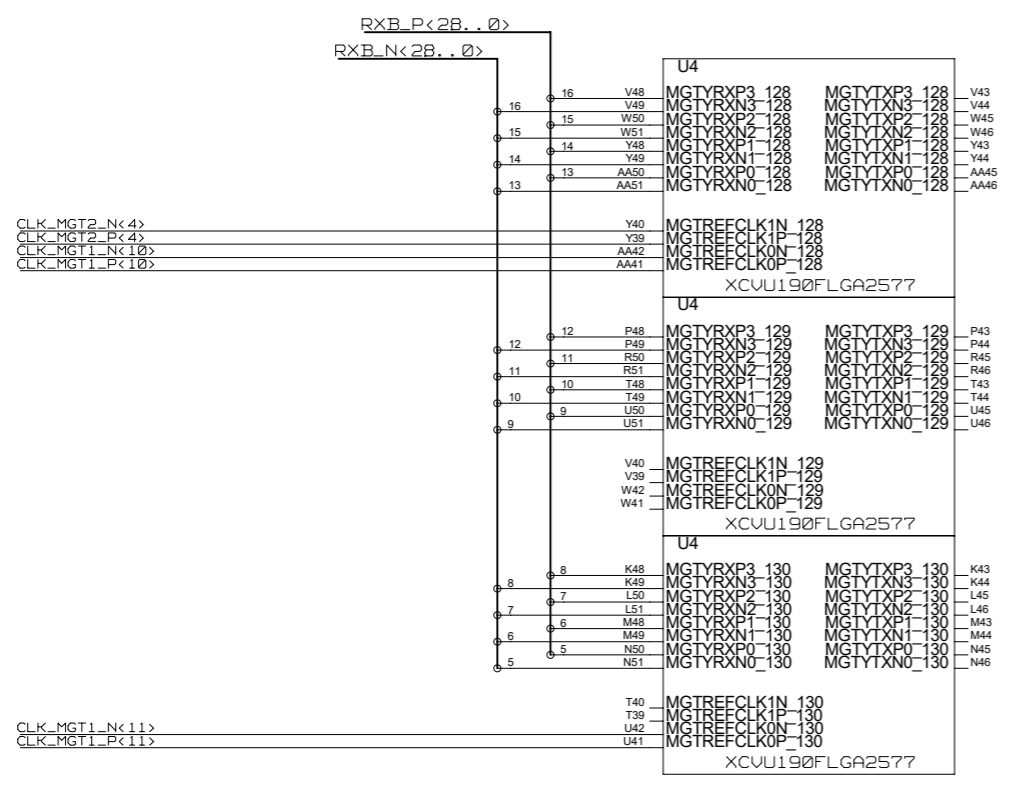
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



BANK
125
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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.

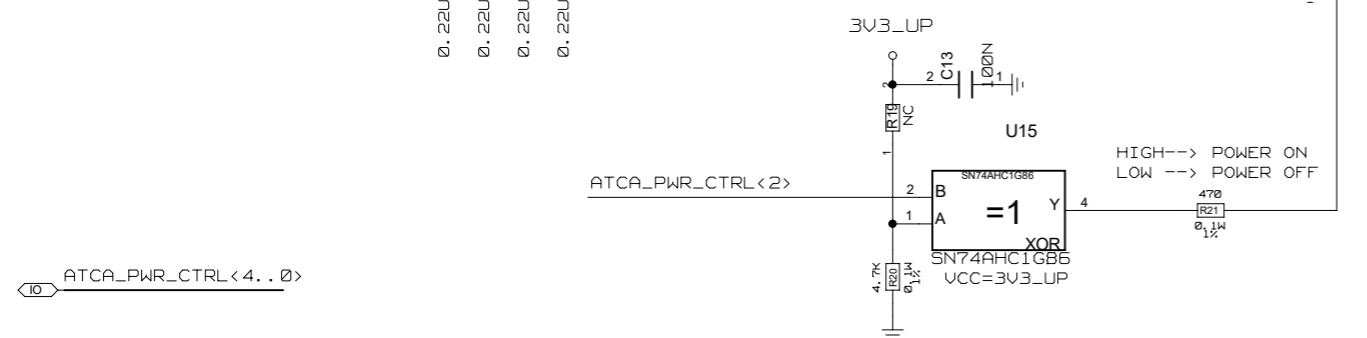
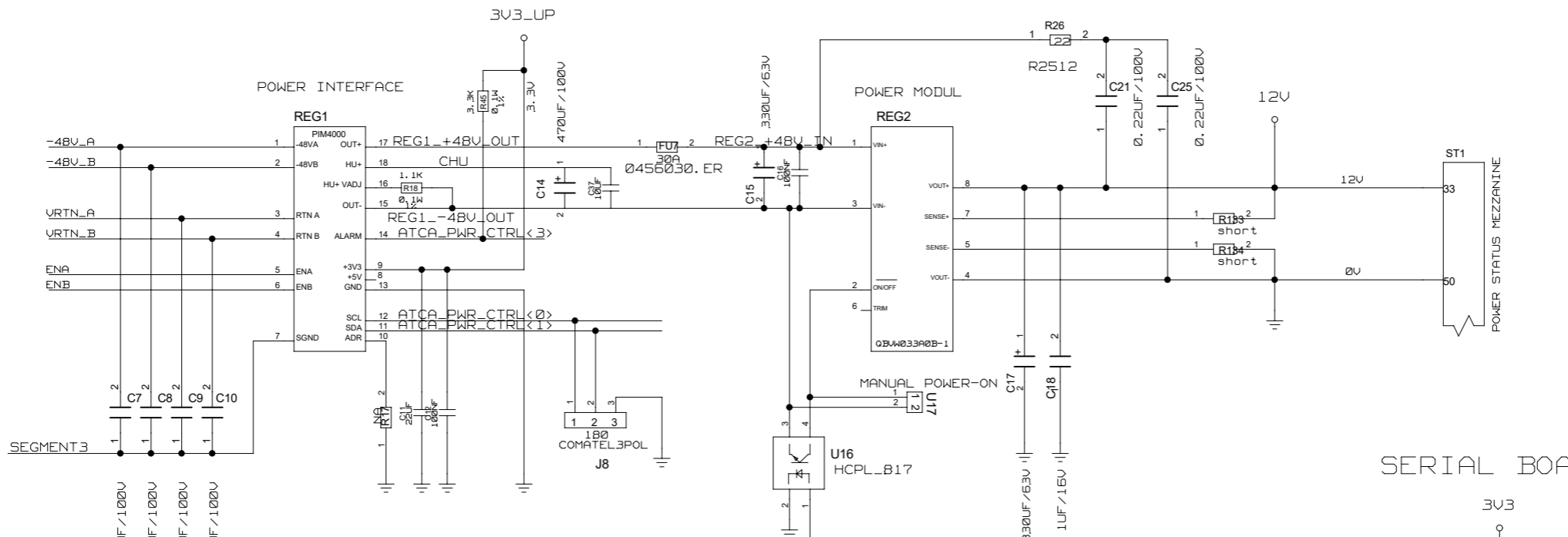
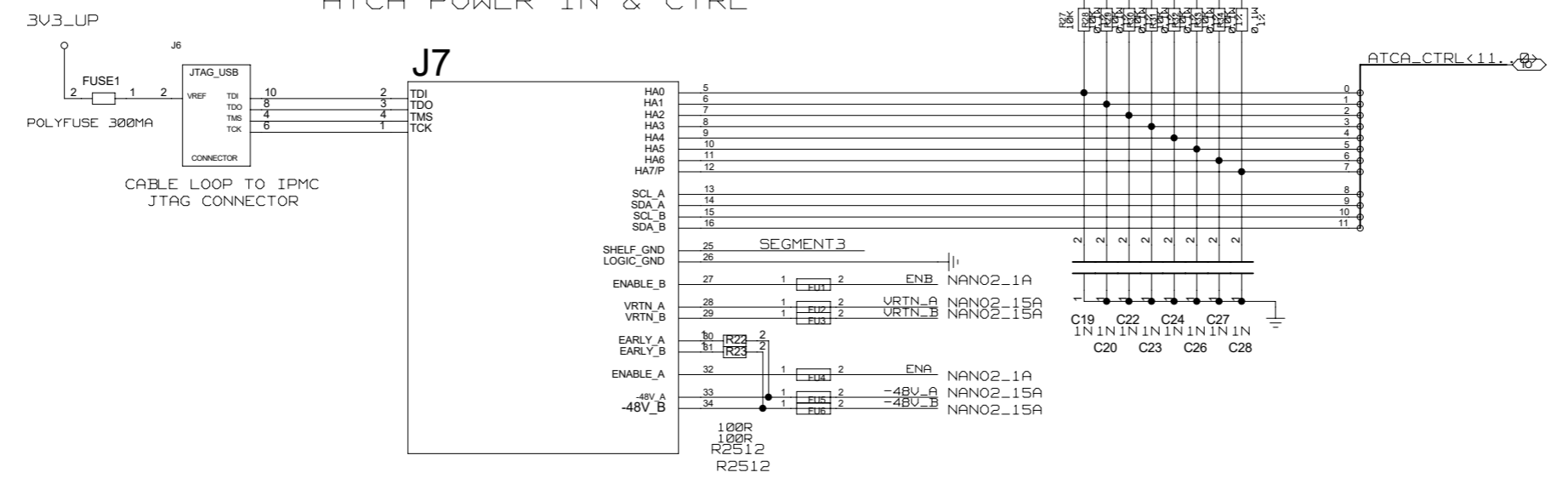


BANK
128
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CHECKED	J. V. DE SOUZA			DRAWING TITLE RXB + TXC
CHECKED	U. SCHAEFER			
CHECKED	S. RAVE			
DRAWN	BAUSS	07.08.2015		
BLOCK TITLE U4_MGT_REAL_TIME				
UNIVERSITY OF MAINZ		SIZE C	REV.	DRAWING NO.
SCALE				SHEET 7 OF 7

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

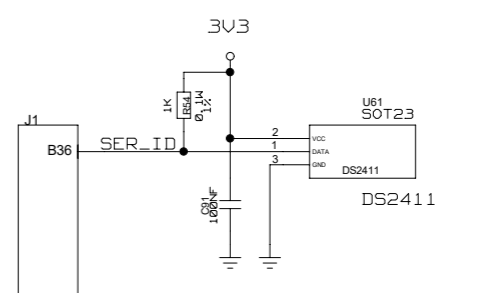
ATCA POWER IN & CTRL



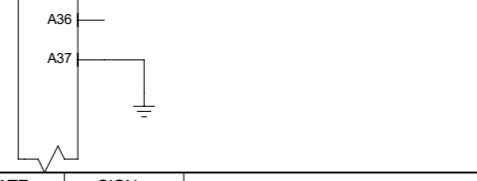
ATCA_PWR_CTRL<4>



SERIAL BOARD NUMBER



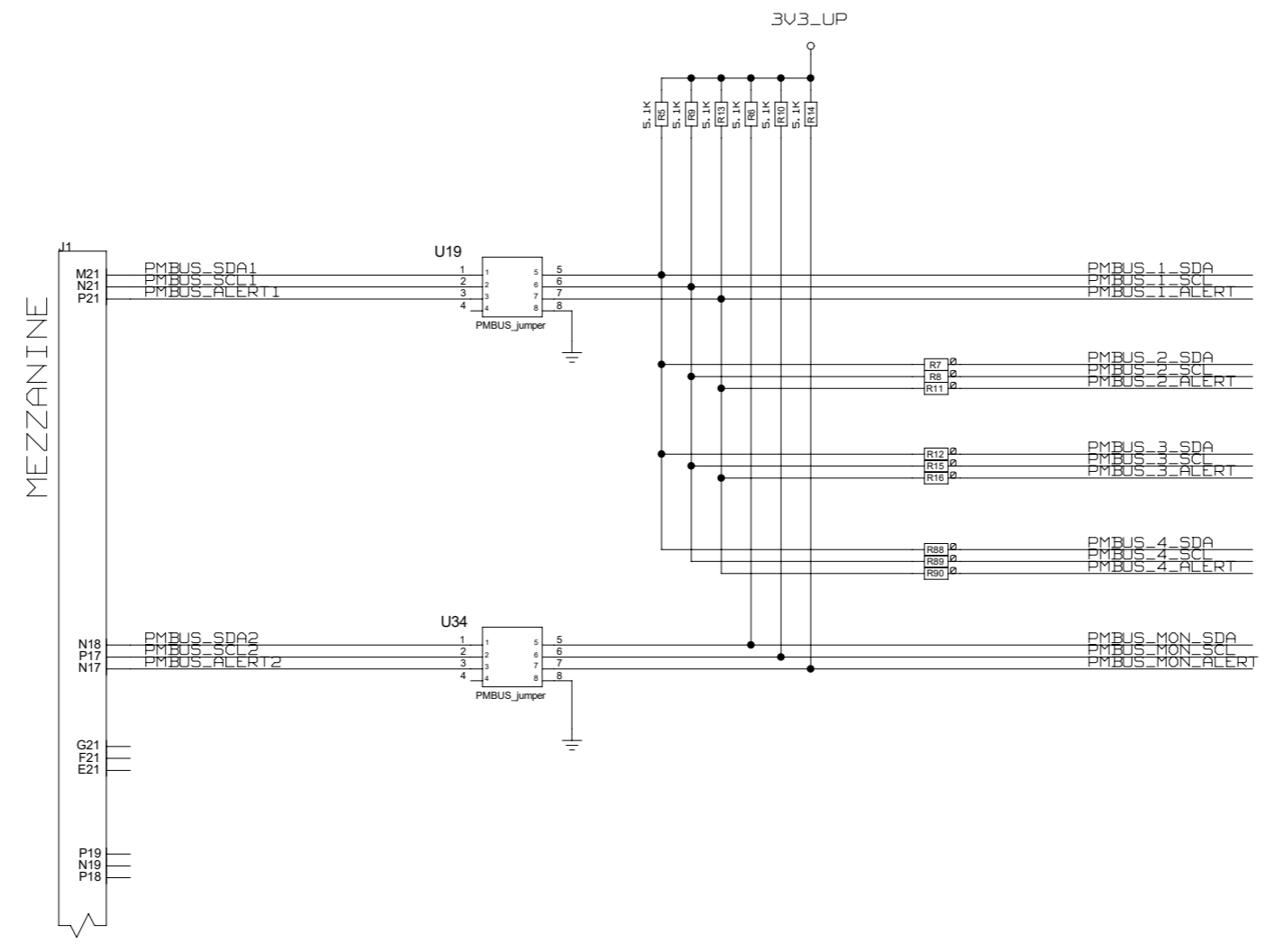
CONFIGURATION SELECT



NAME	DATE	SIGN	DRAWING TITLE
CHECKED J.V. DE SOUZA			JFEX
CHECKED U.SCHAEFER			
CHECKED S.RAVE			
DRAWN BAUSS	03.11.2015		
BLOCK TITLE			
POWERSUPPLY			SIZE
UNIVERSITY OF MAINZ			REV.
			DRAWING NO.
SCALE			SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

PMBUS CONNECTORS



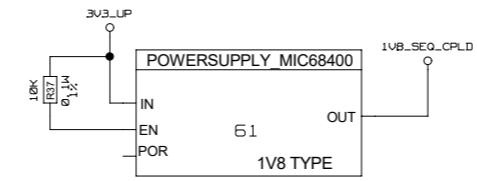
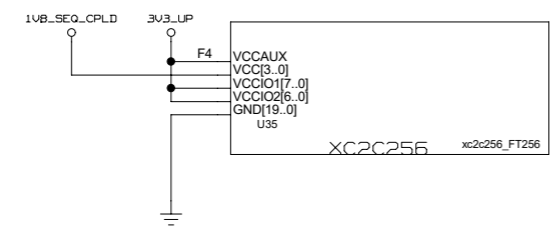
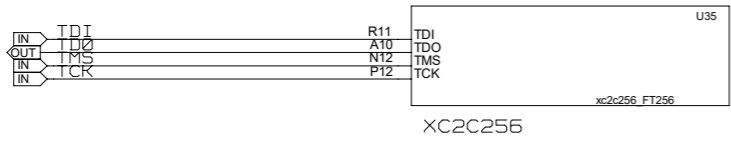
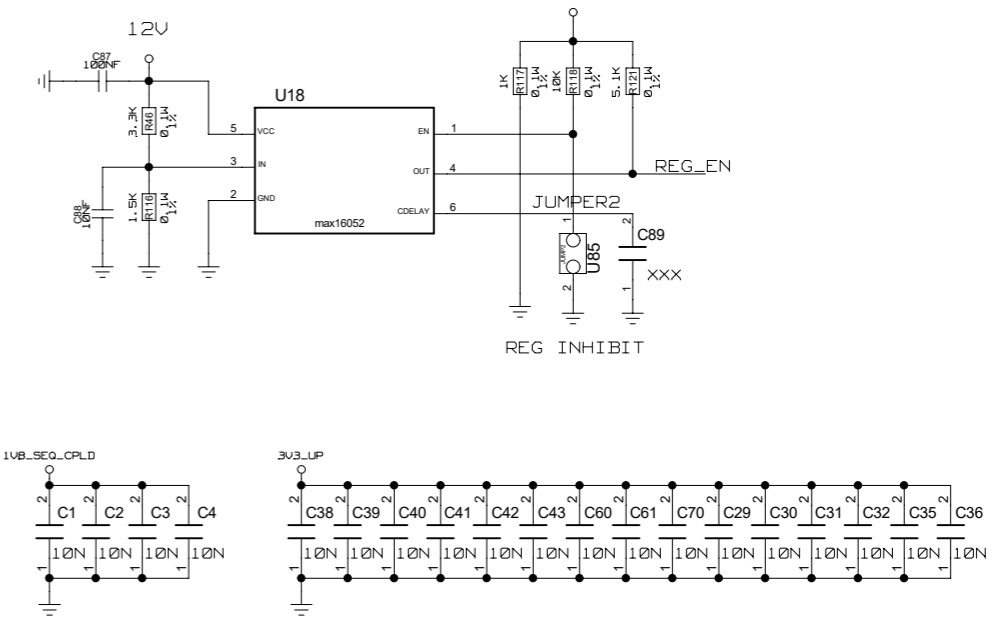
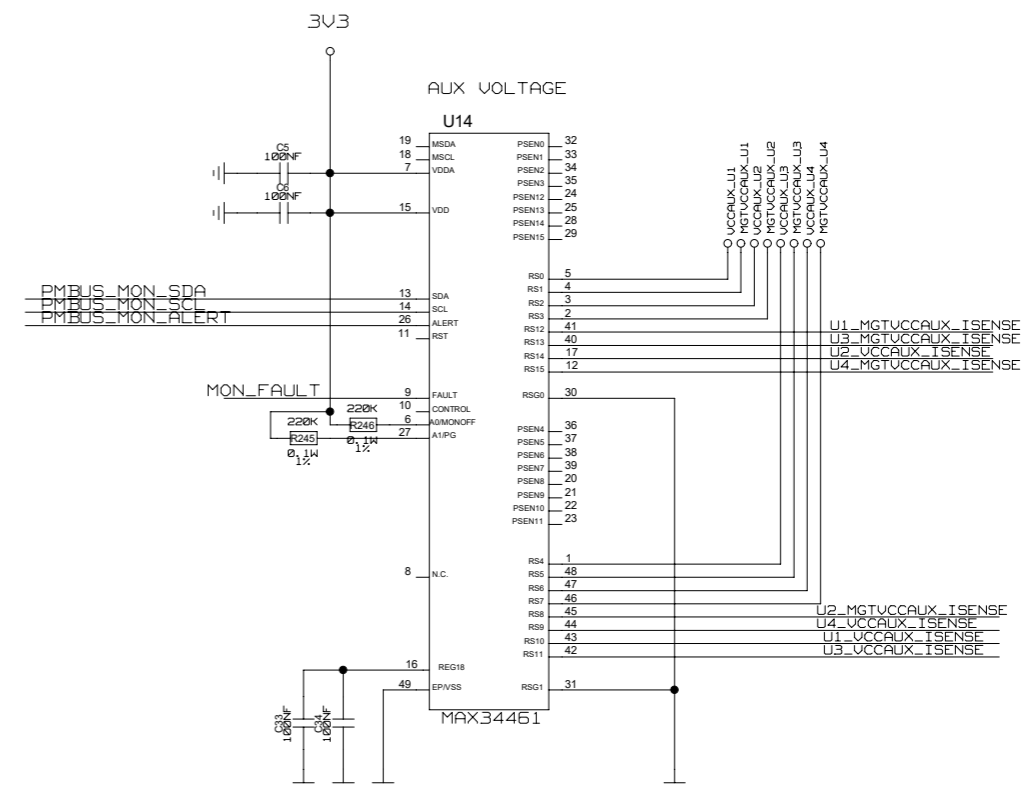
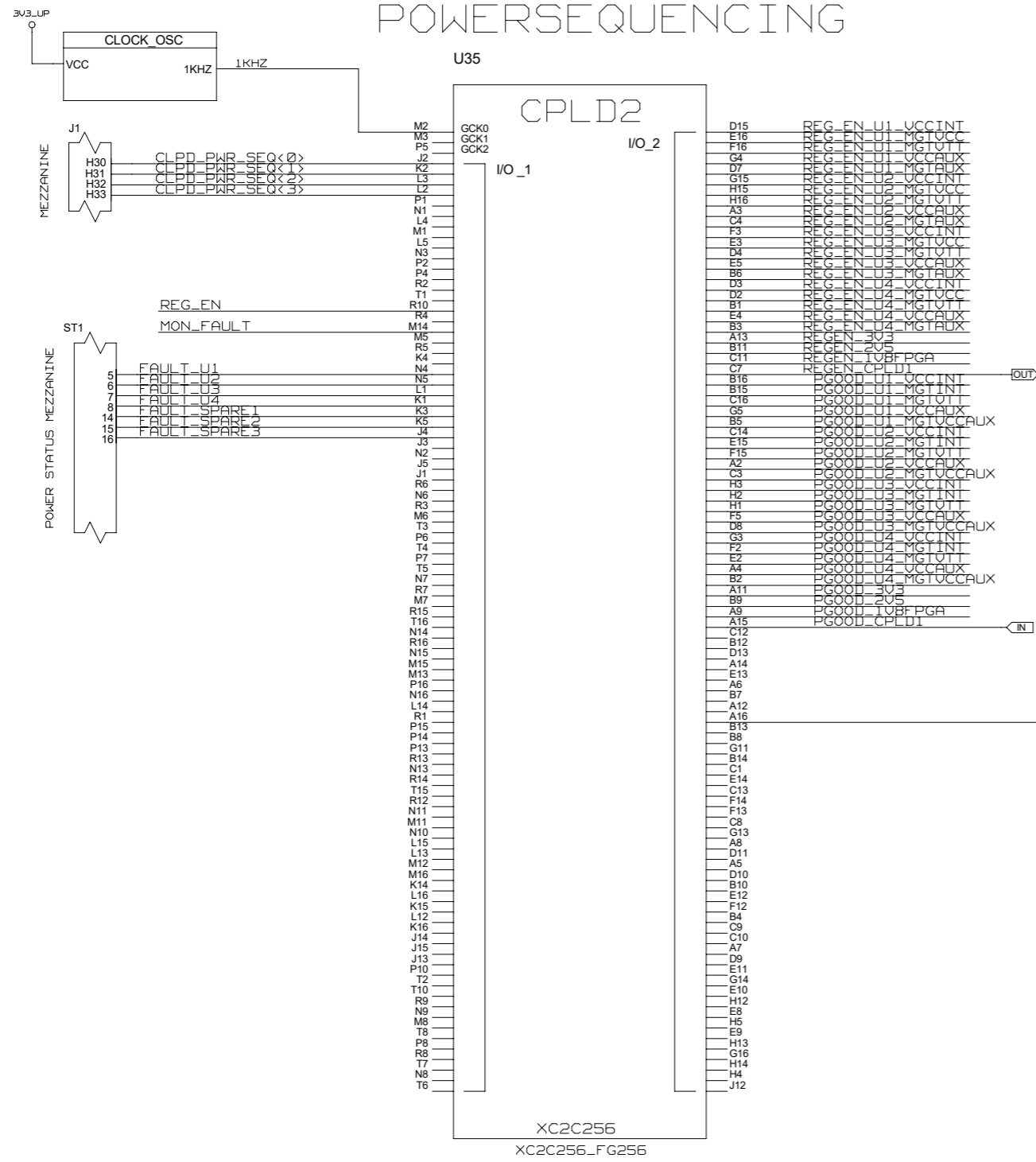
CHECKED	J. V. DE SOUZA			DRAWING TITLE JFEX
CHECKED	U. SCHAEFER			
CHECKED	S. RAVE			
DRAWN	BAUSS			
BLOCK TITLE POWERSUPPLY				SIZE C
UNIVERSITY OF MAINZ				REV.
				DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

POWERSEQUENCING

VOLTAGE MONITORING

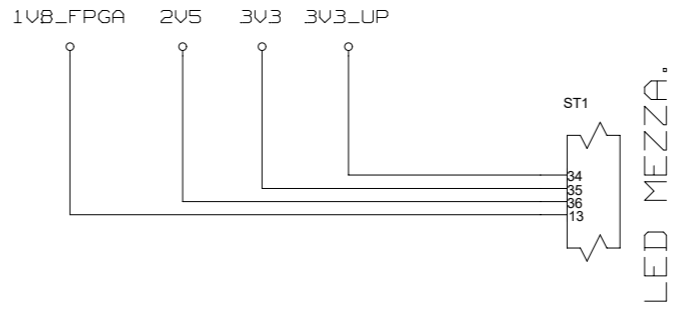
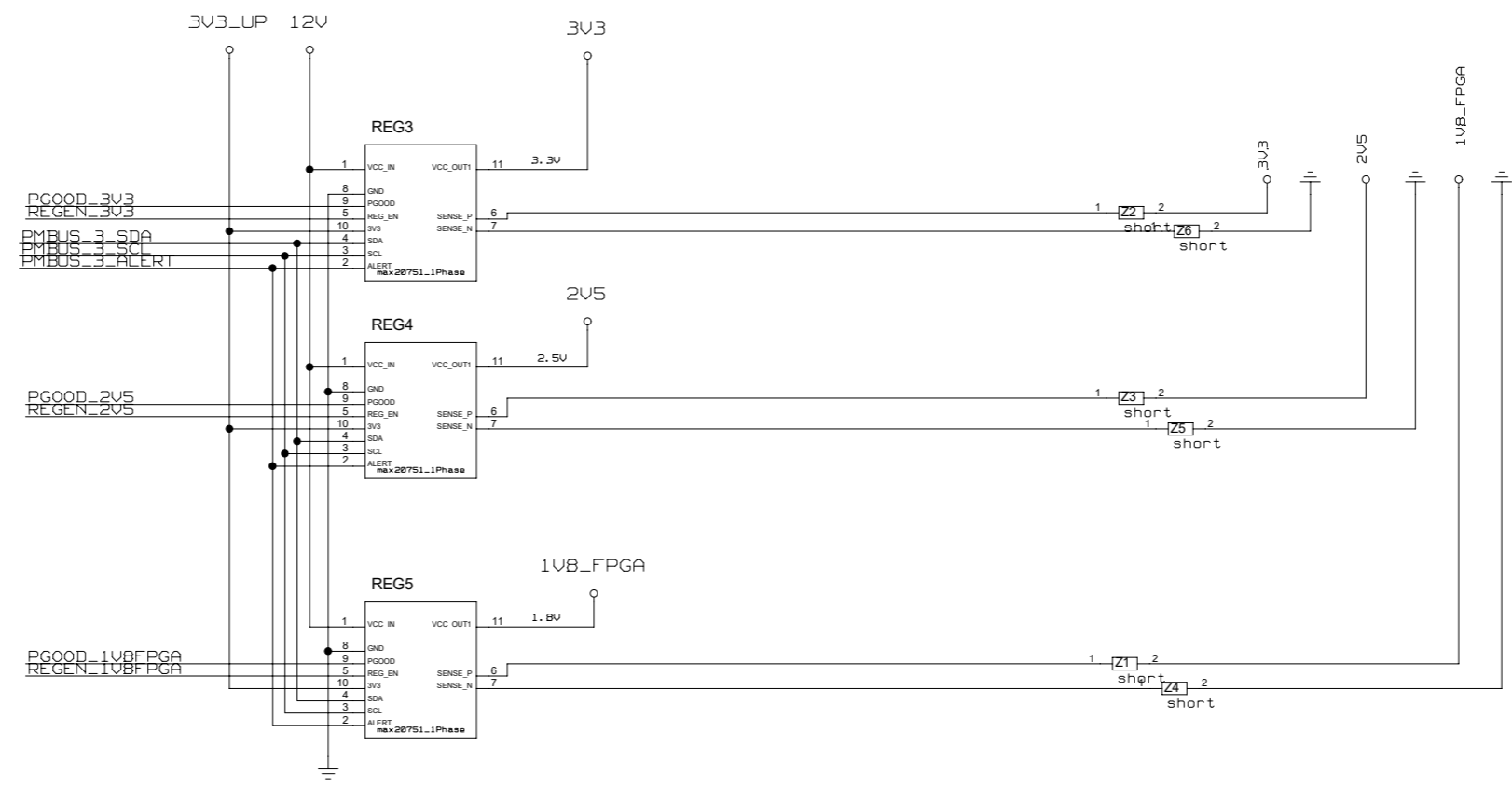
12V SUPERVISOR



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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

BOARDLEVEL 1V8, 2V5, 3V3

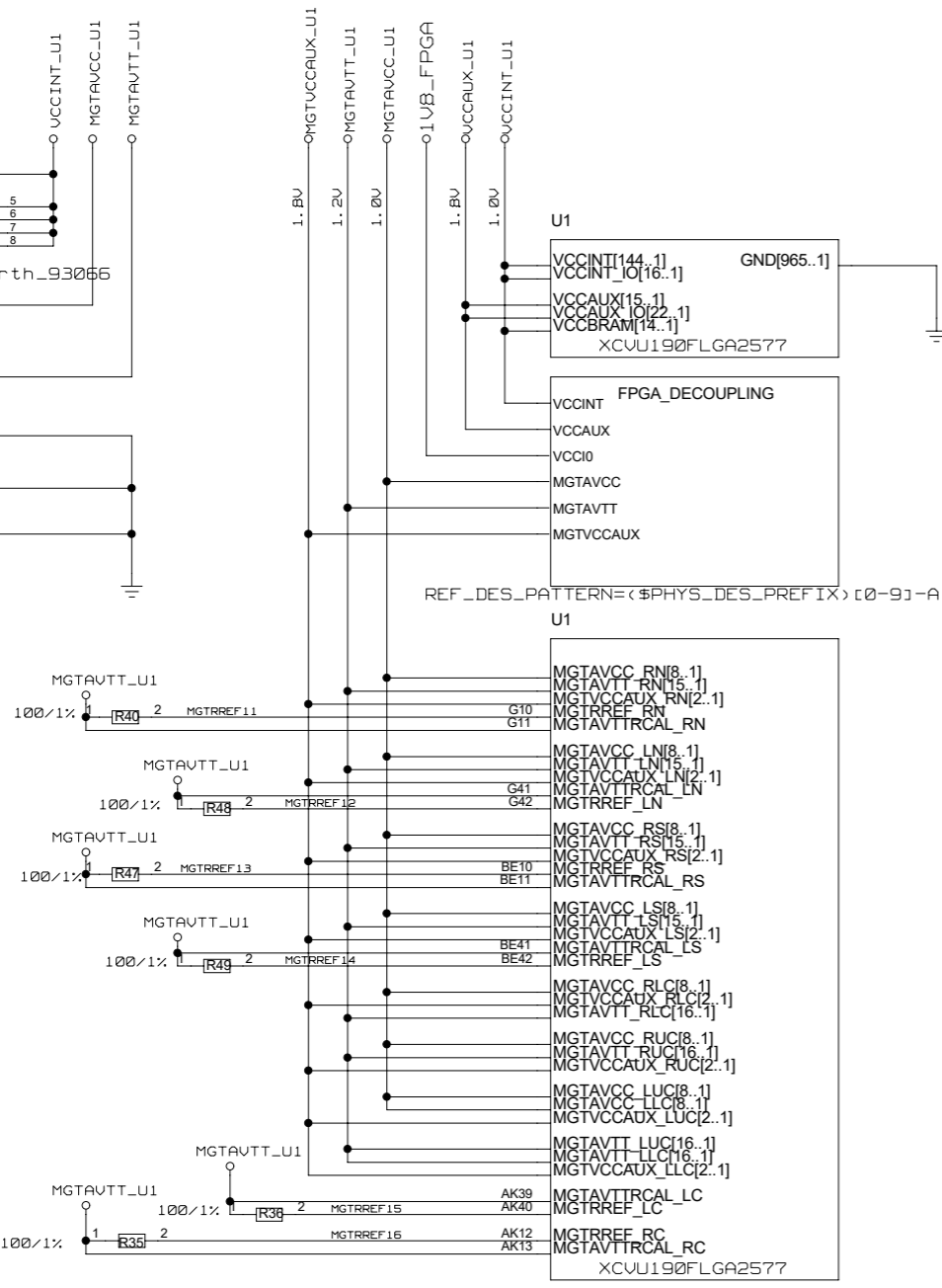
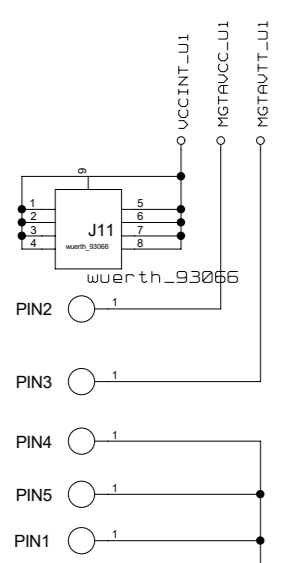


NAME	DATE	SIGN	DRAWING TITLE
CHECKED J. V. DE SOUZA			JFEX
CHECKED U. SCHAEFER			
CHECKED S. RAVE			
DRAWN BAUSS			
BLOCK TITLE			
POWERSUPPLY			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE		SHEET	OF

POWERSUPPLIES U1 + DECOUPLING U1

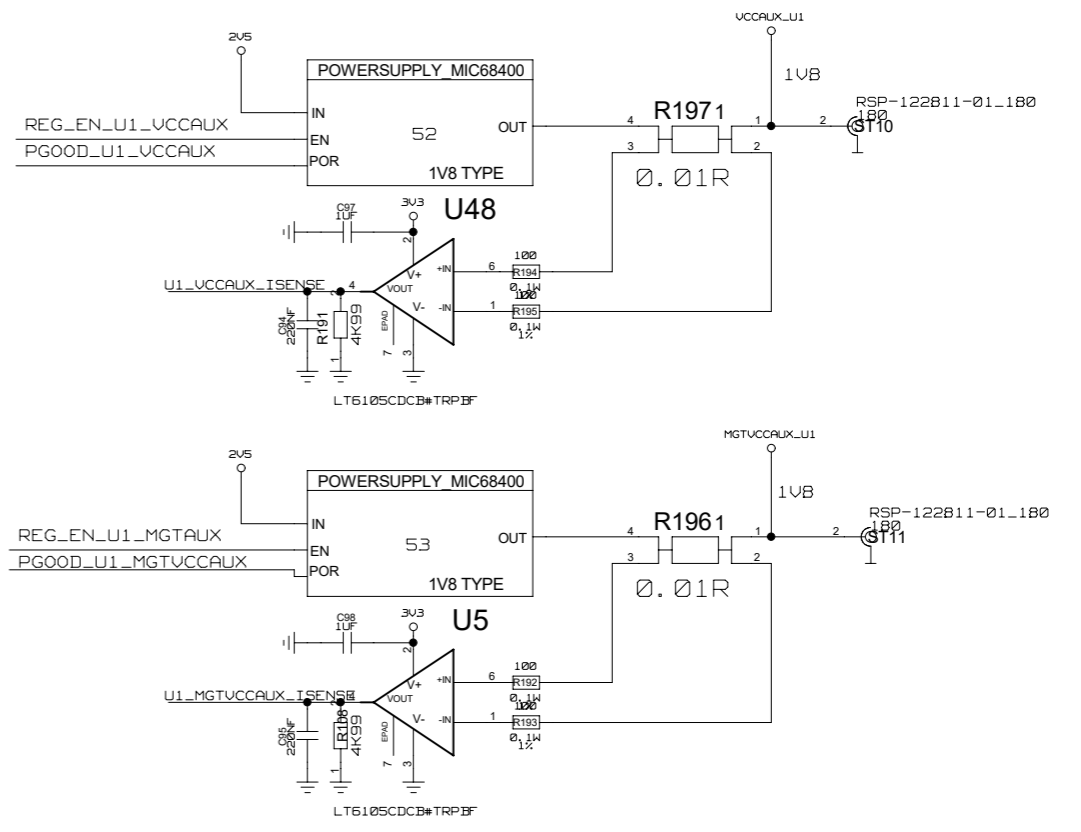
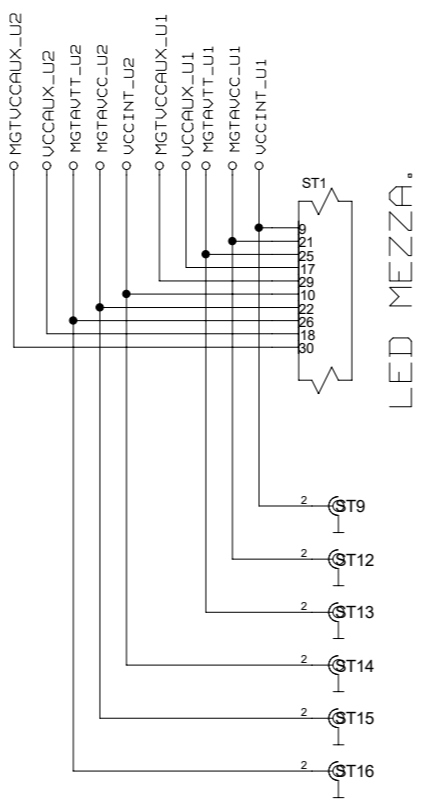
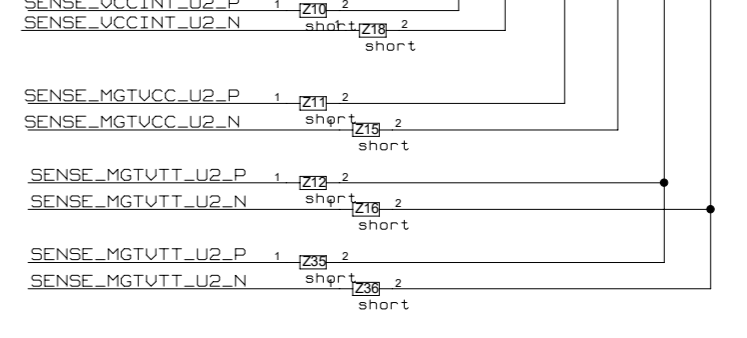
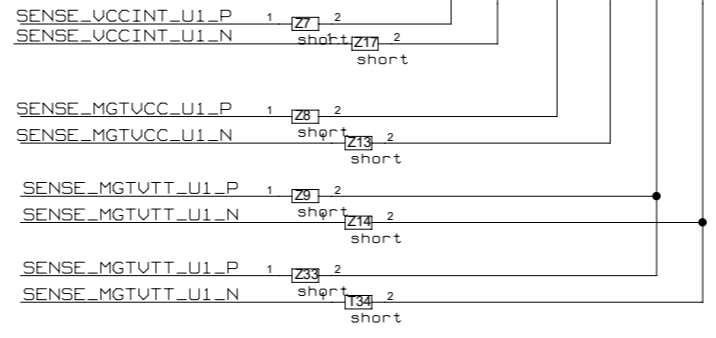
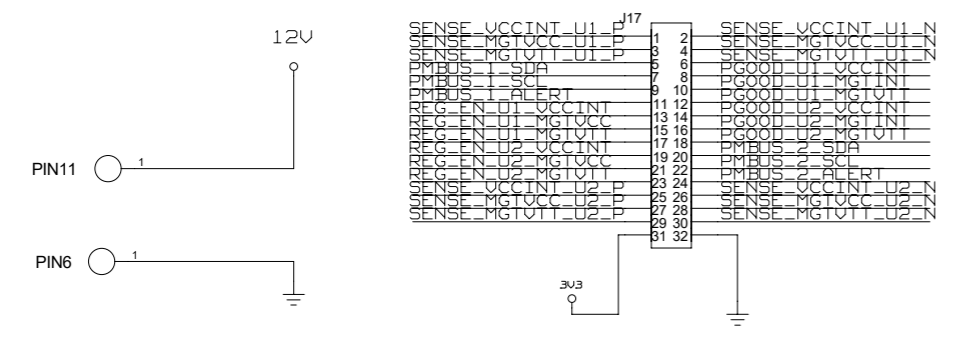
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

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		

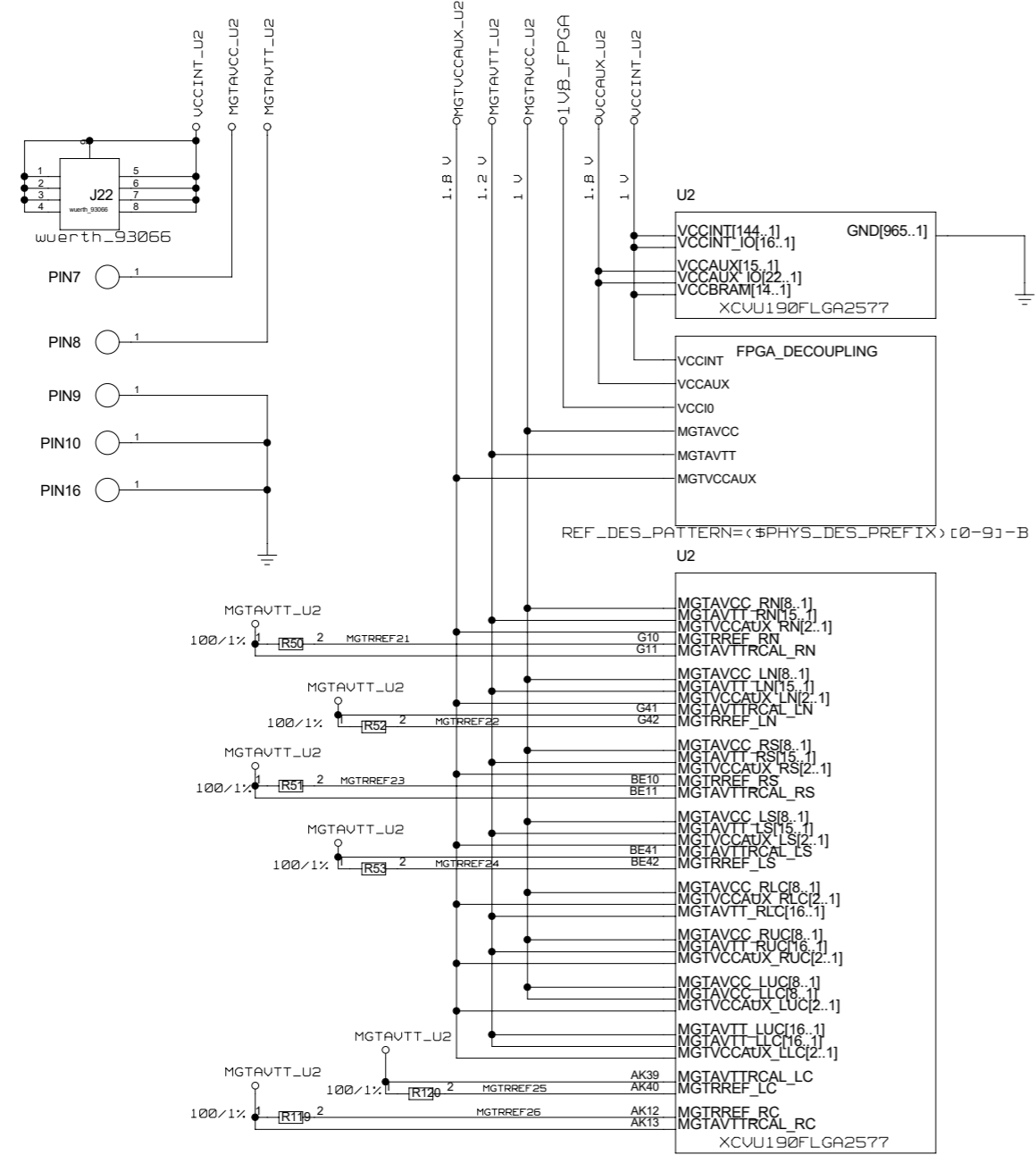
BLOCK TITLE		DRAWING NO.	
POWERSUPPLY			
UNIVERSITY OF MAINZ		SIZE	REV.
		SCALE	SHEET OF

JFEX

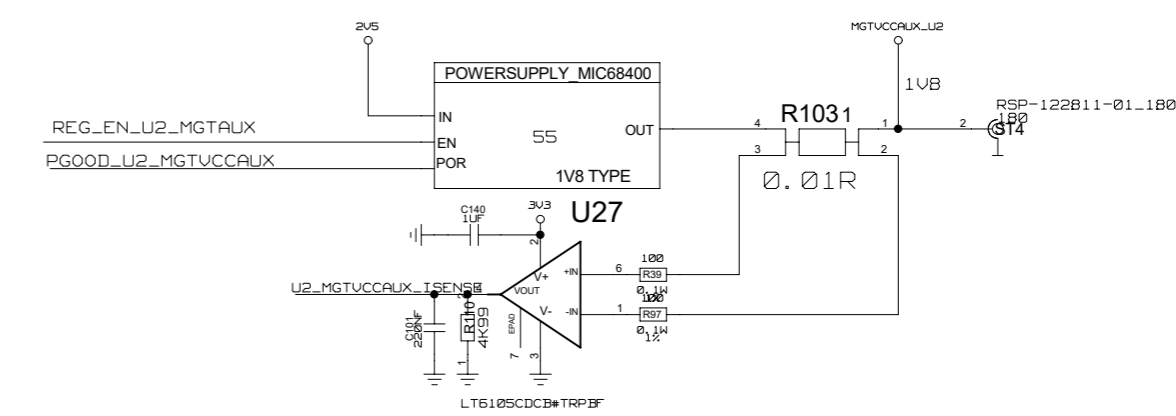
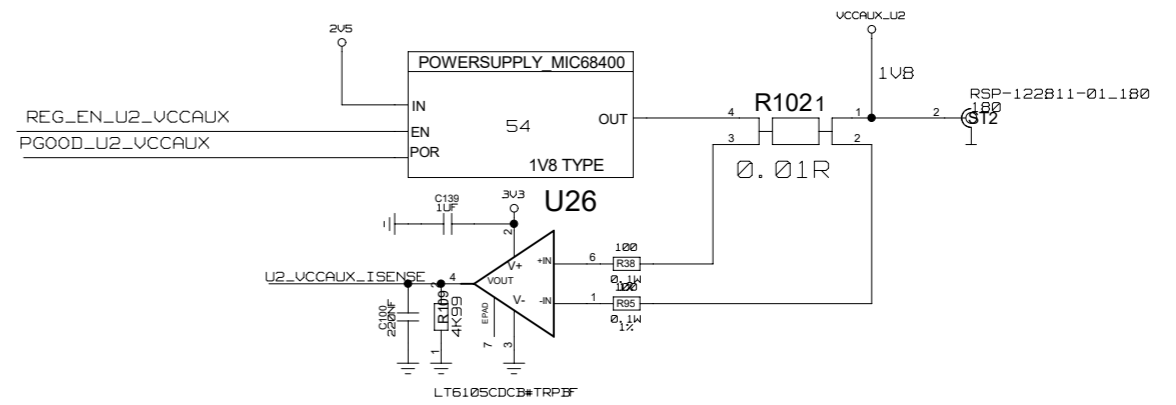
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

POWERSUPPLIES U2 + DECOUPLING U2

POWERCONNECTORS



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

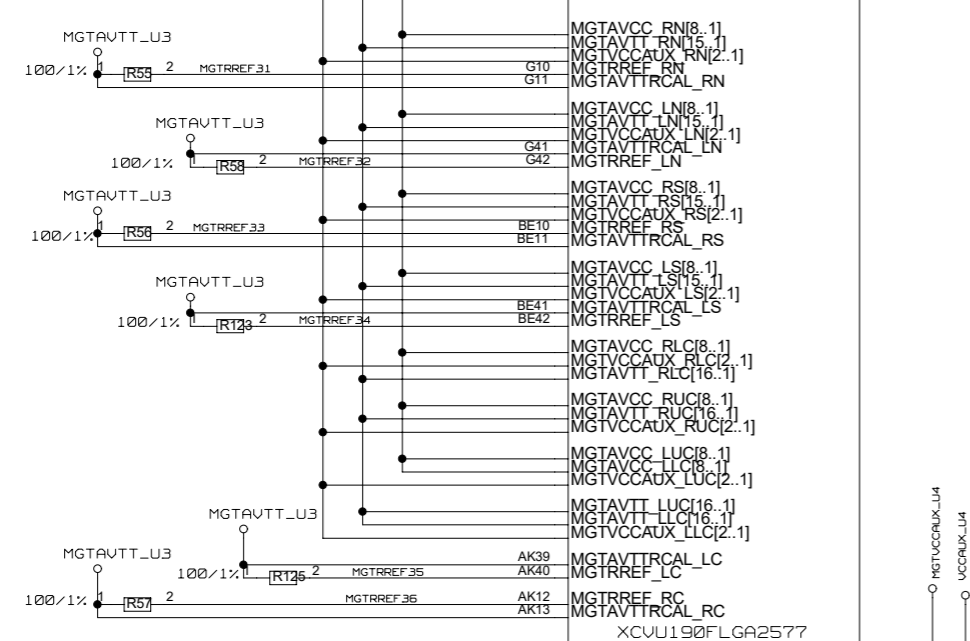
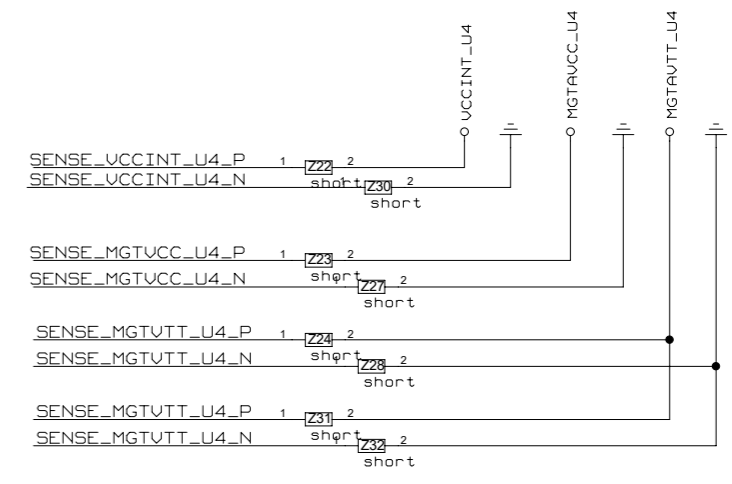
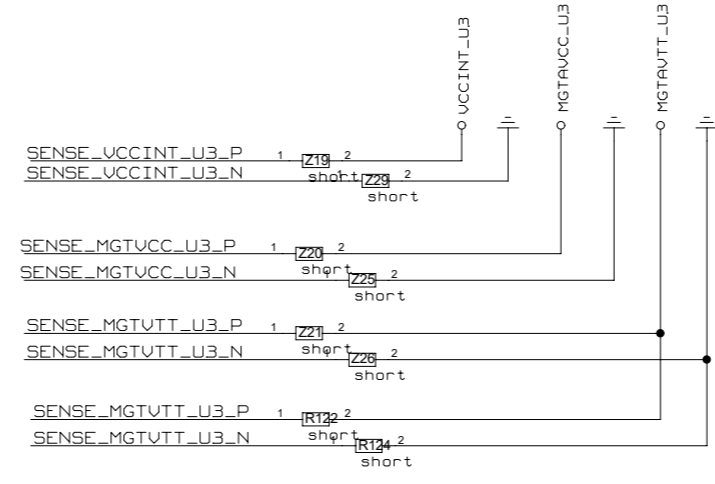
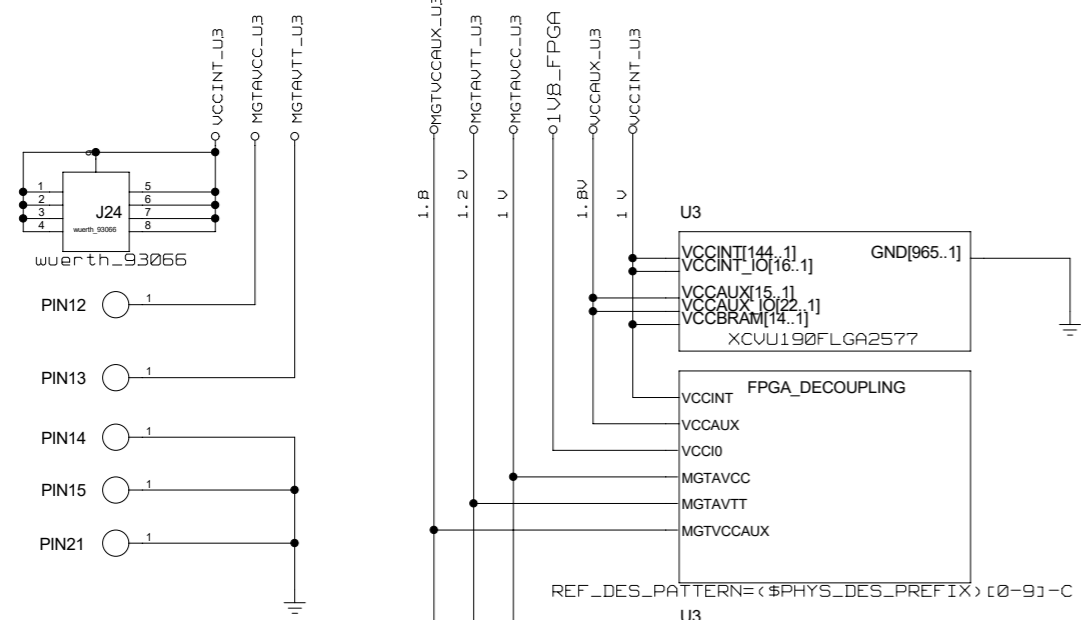


NAME	DATE	SIGN	DRAWING TITLE
CHECKED J.V.DE SOUZA			JFEX
CHECKED U.SCHAEFER			
CHECKED S.RAVE			
DRAWN BAUSS			
BLOCK TITLE			
UNIVERSITY OF MAINZ			SIZE C REV. DRAWING NO.
SCALE		SHEET OF	

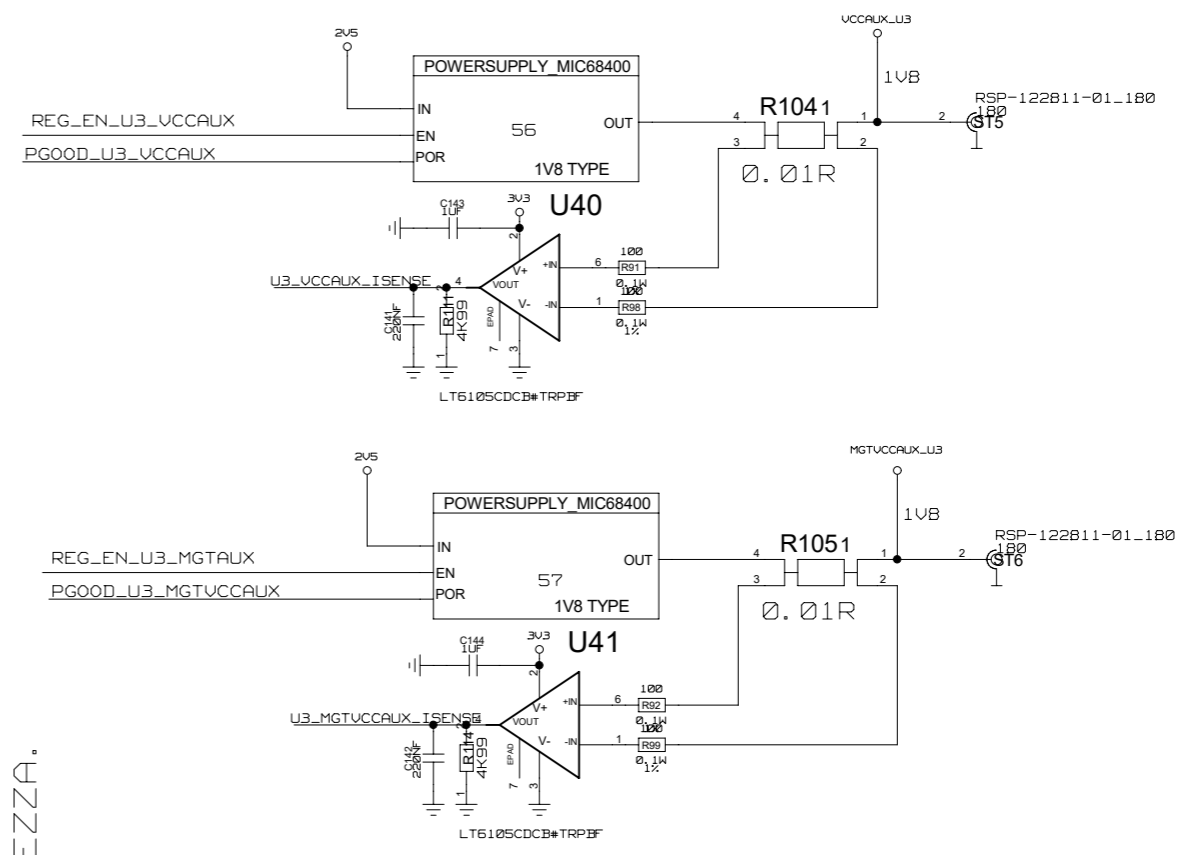
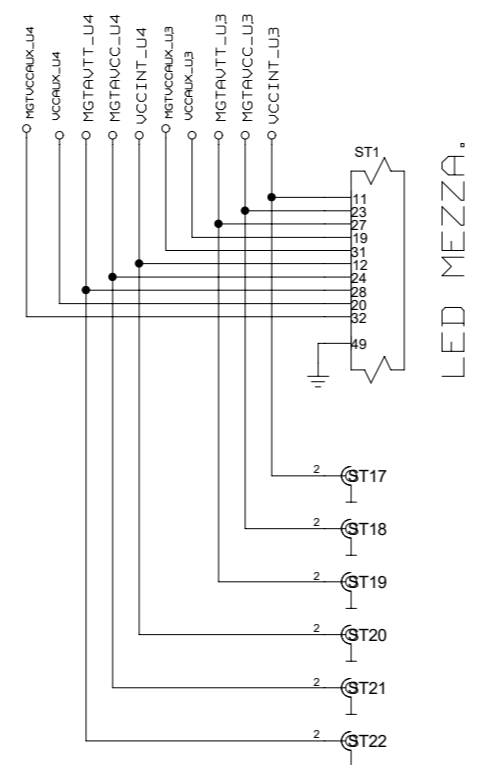
POWERSUPPLIES U3 + DECOUPLING U3

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

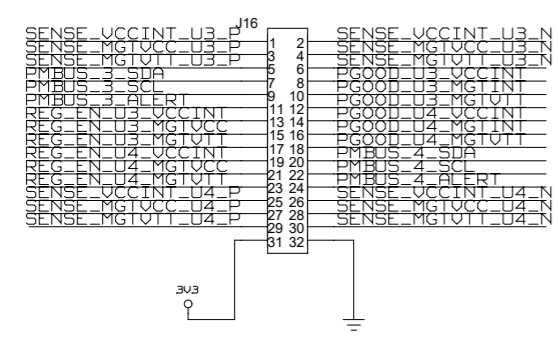
POWERCONNECTORS



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



POWERPANEL

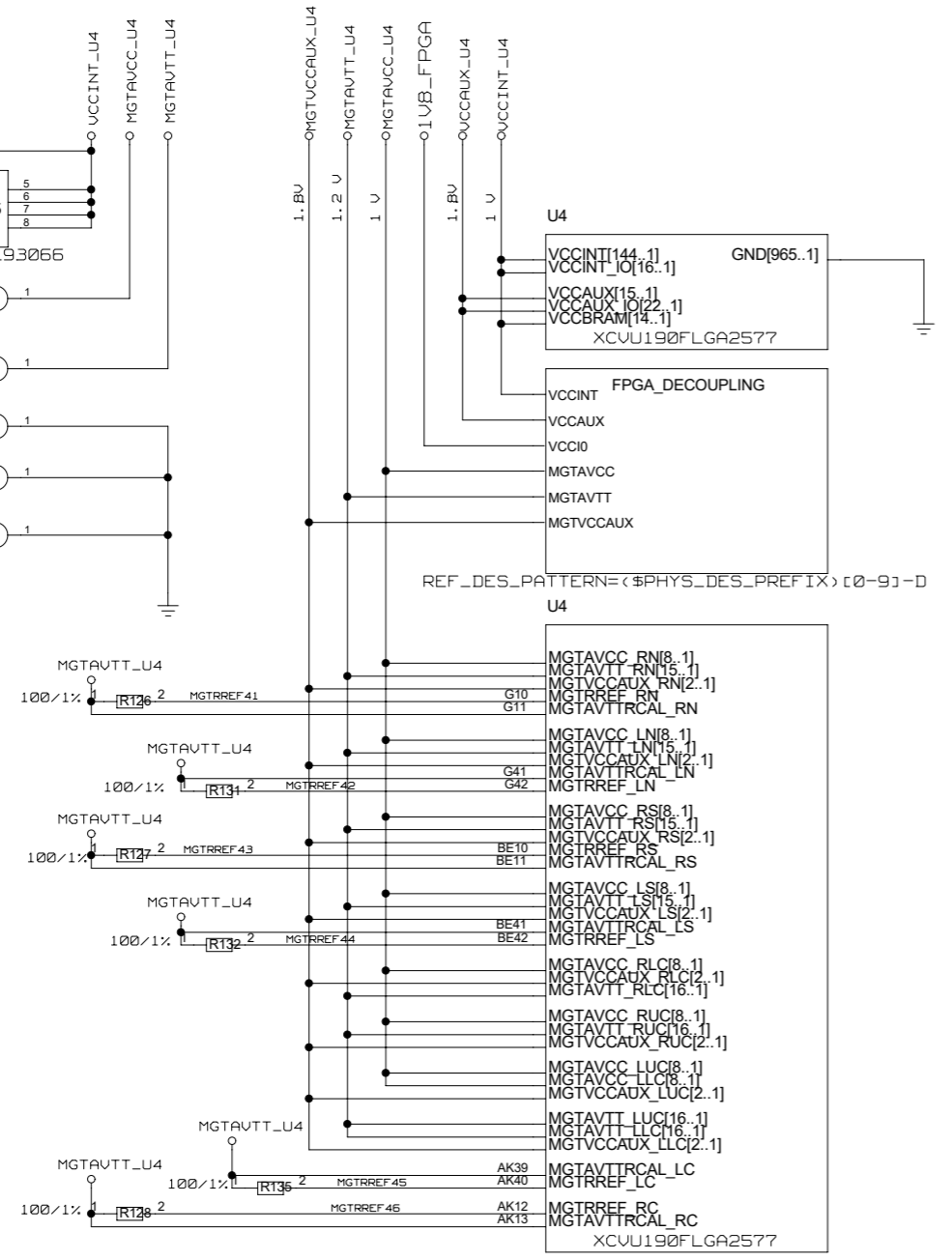
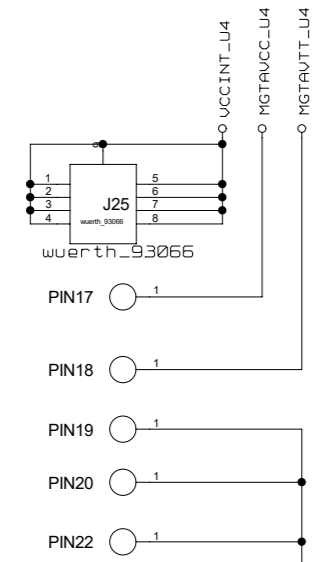


NAME	DATE	SIGN	DRAWING TITLE
CHECKED J.V. DE SOUZA			JFEX
CHECKED U.SCHAEFER			
CHECKED S.RAVE			
DRAWN BAUSS			
BLOCK TITLE			
UNIVERSITY OF MAINZ			SIZE C
			REV.
			DRAWING NO.
			SCALE
			SHEET OF

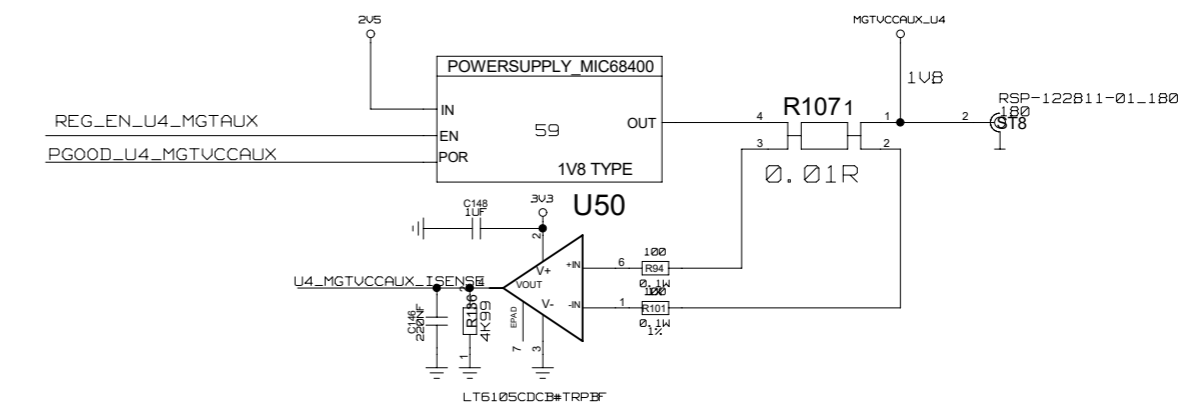
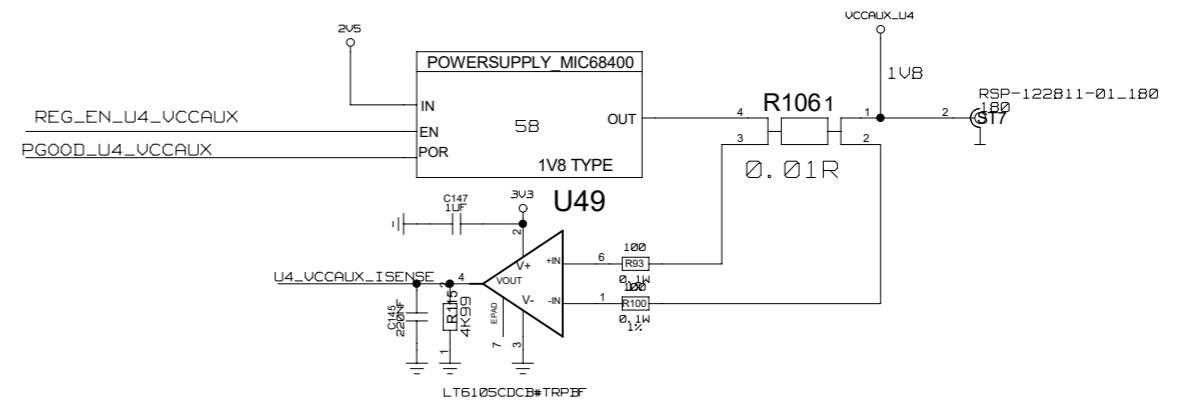
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

POWERSUPPLIES U4 + DECOUPLING U4

POWERCONNECTORS



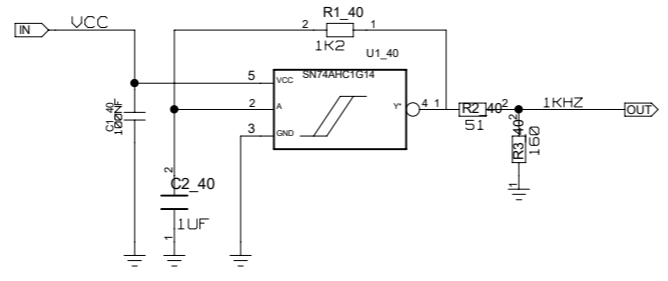
TRACE LENGTH FROM RESISTOR PINS
TO PIN SAME LENGTH
UG576 SHEET 297



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.

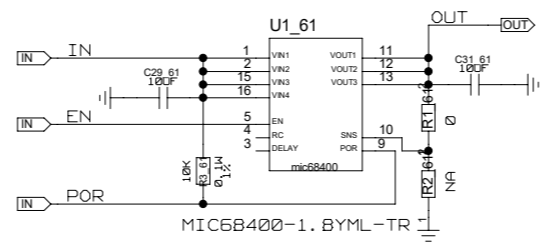
CPLD CLOCK



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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

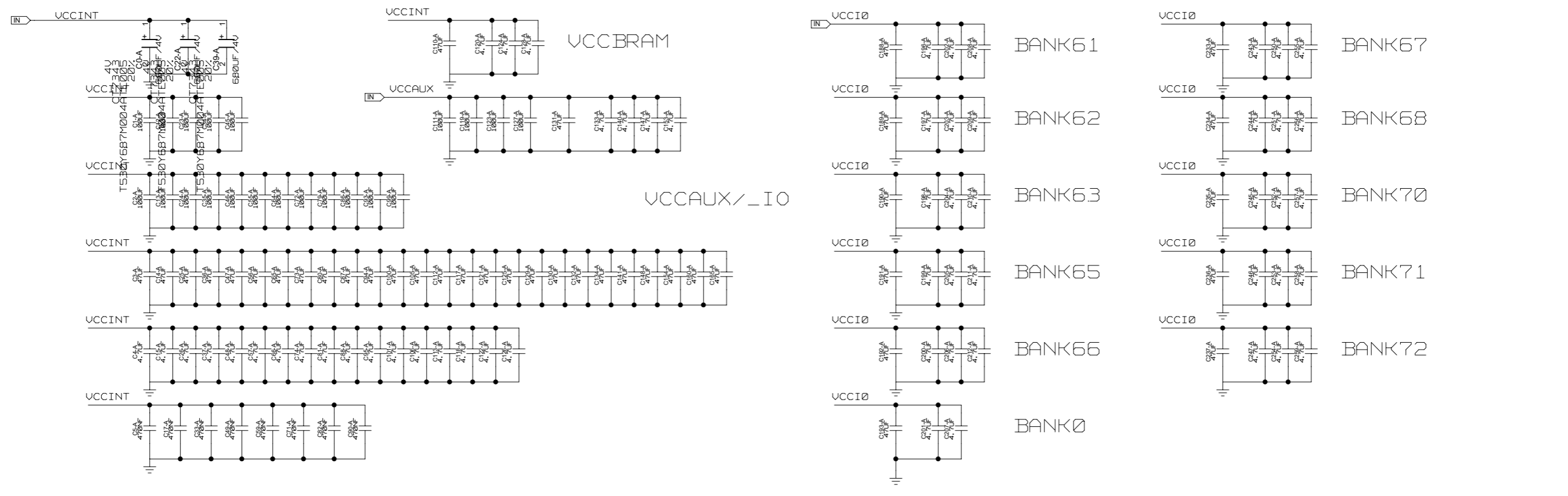
POWERSUPPLY_MIC68400



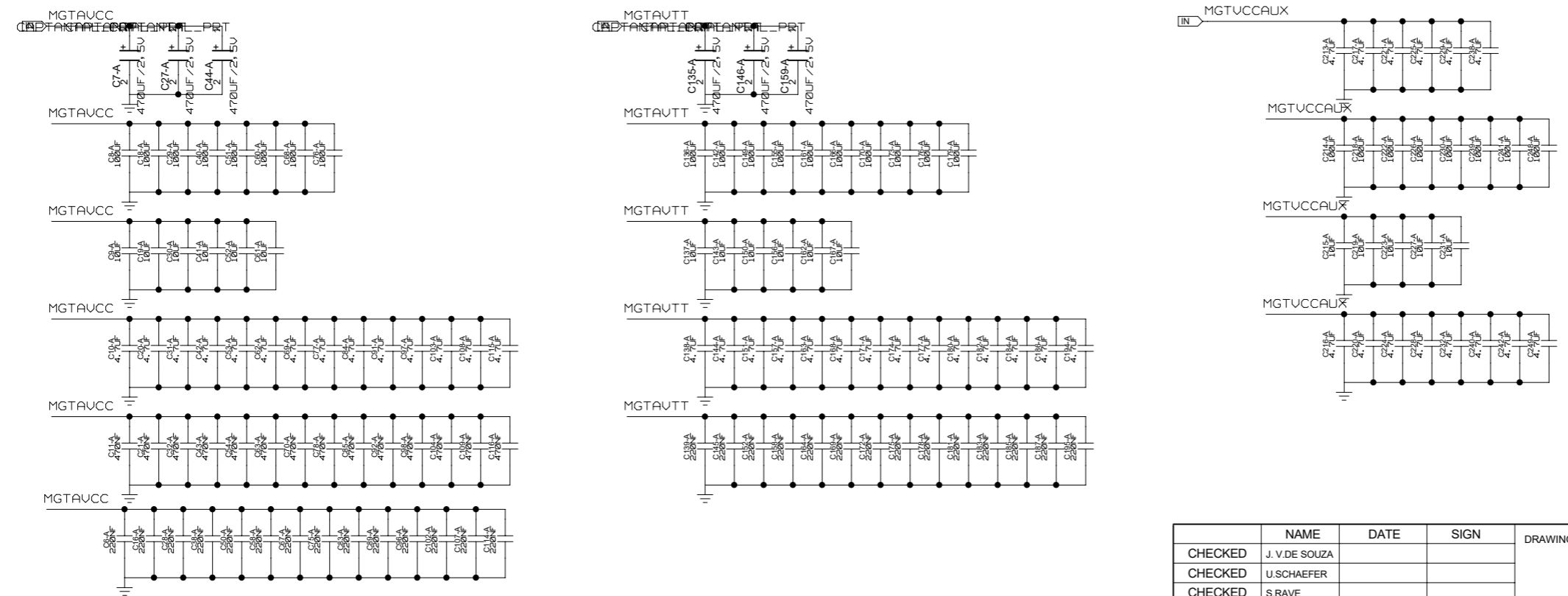
NAME	DATE	SIGN	DRAWING TITLE	
CHECKED J. V. DE SOUZA			POWERSUPPLY_MIC68400	
CHECKED U. SCHAEFER				
CHECKED S. RAVE				
DRAWN BAUSS				
BLOCK TITLE			SIZE	DRAWING NO.
UNIVERSITY OF MAINZ			C	
SCALE			REV.	
				SHEET OF

DECOUPLING FPGA

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



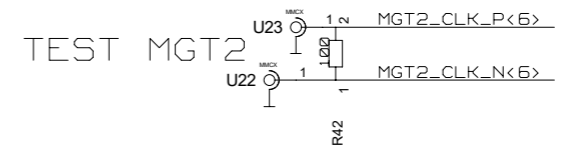
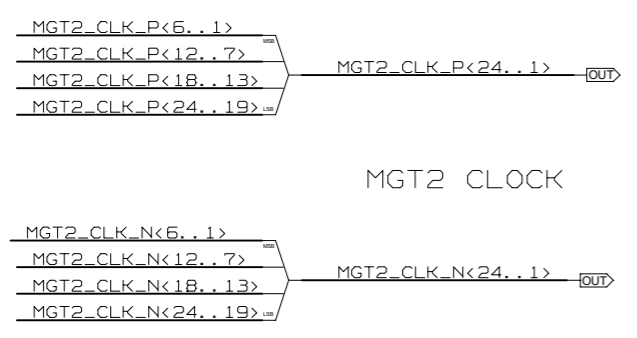
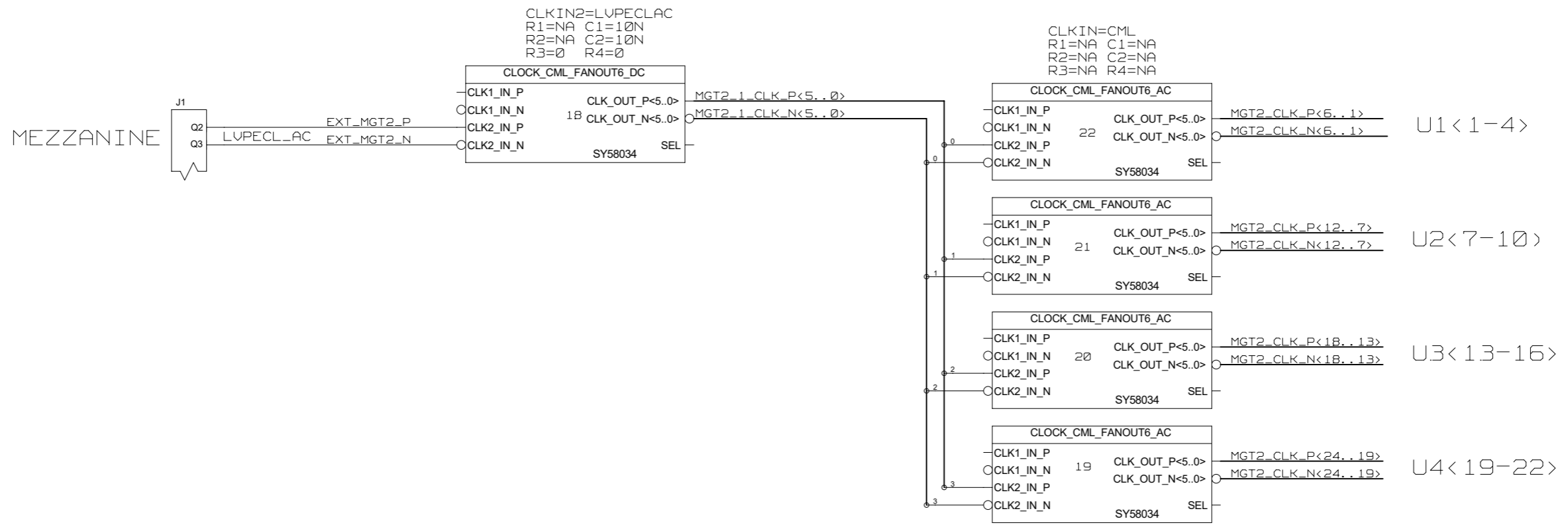
MGT DECOUPLING



	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	DRAWING NO.
				C	
SCALE				REV.	SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

MGT2 CLOCK

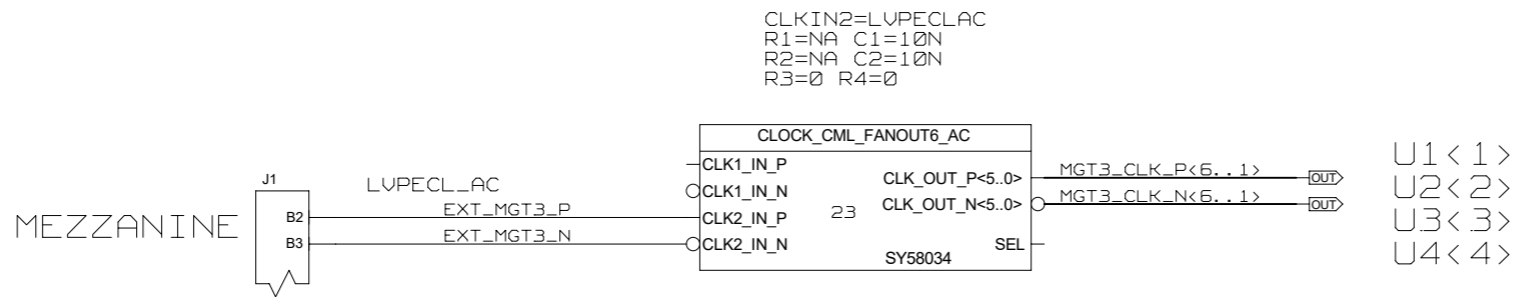


UPDATE PICK & PLACE DATA FOR FANOUT AND MUX

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.

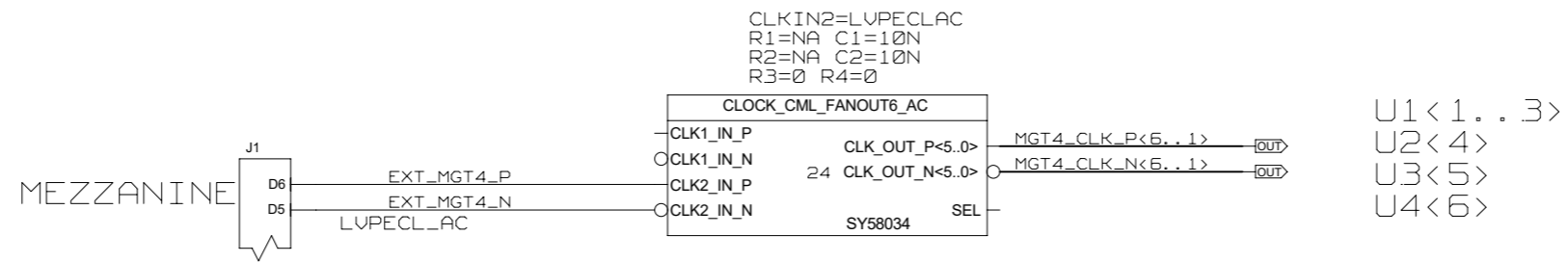


UPDATE PICK & PLACE DATA FOR FANOUT AND MUX

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

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

MGT4 CLOCK (IPBUS REFCLK)

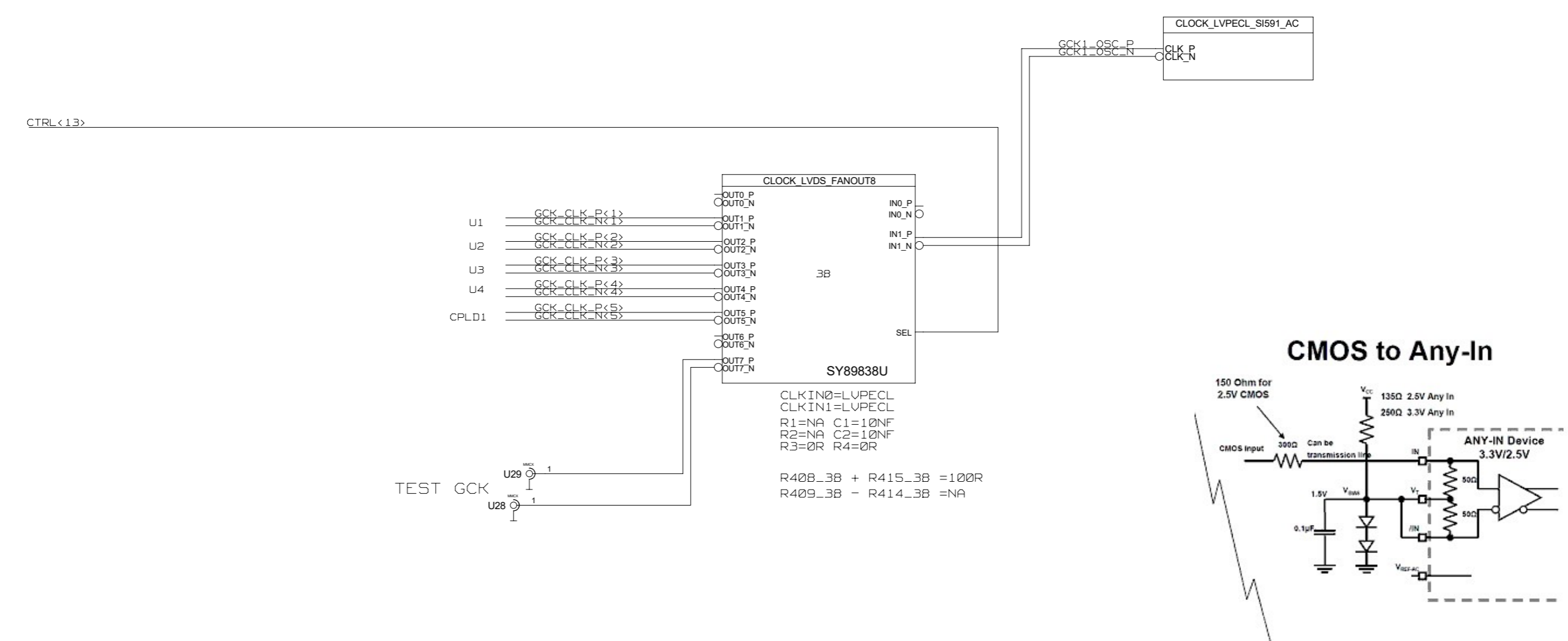


UPDATE PICK & PLACE DATA FOR FANOUT AND MUX

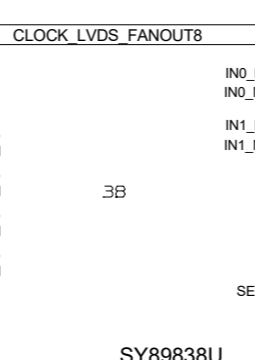
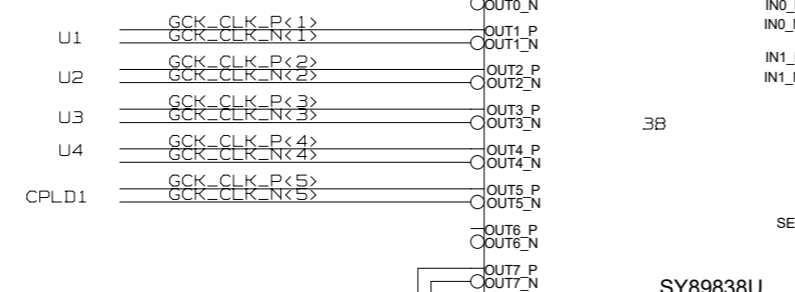
	NAME	DATE	SIGN	DRAWING TITLE
CHECKED	J.V.DE SOUZA			JFEX
CHECKED	U.SCHAEFER			
CHECKED	S.RAVE			
DRAWN	BAUSS	08.05.2017		MGT4 CLOCK (IPBUS REFCLK)
BLOCK TITLE				CLOCK
UNIVERSITY OF MAINZ				SIZE C REV. DRAWING NO.
SCALE				SHEET 4 OF 5

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

GLOBAL CLOCK



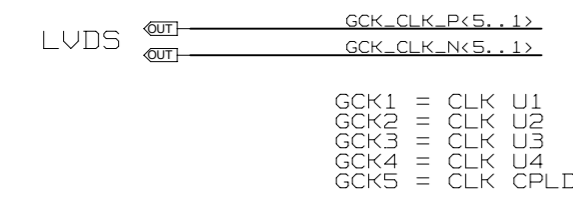
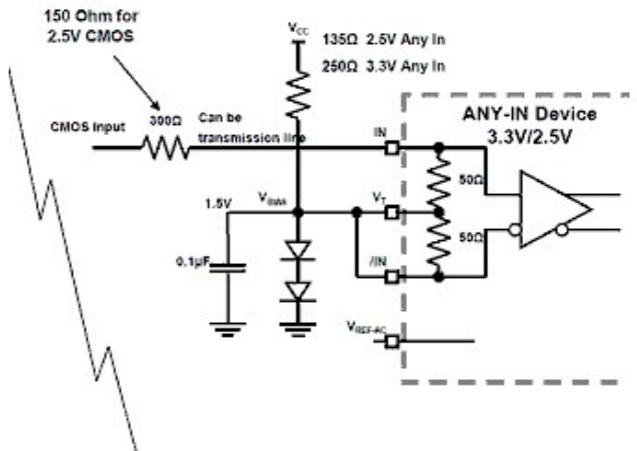
CTRL<1,3>



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



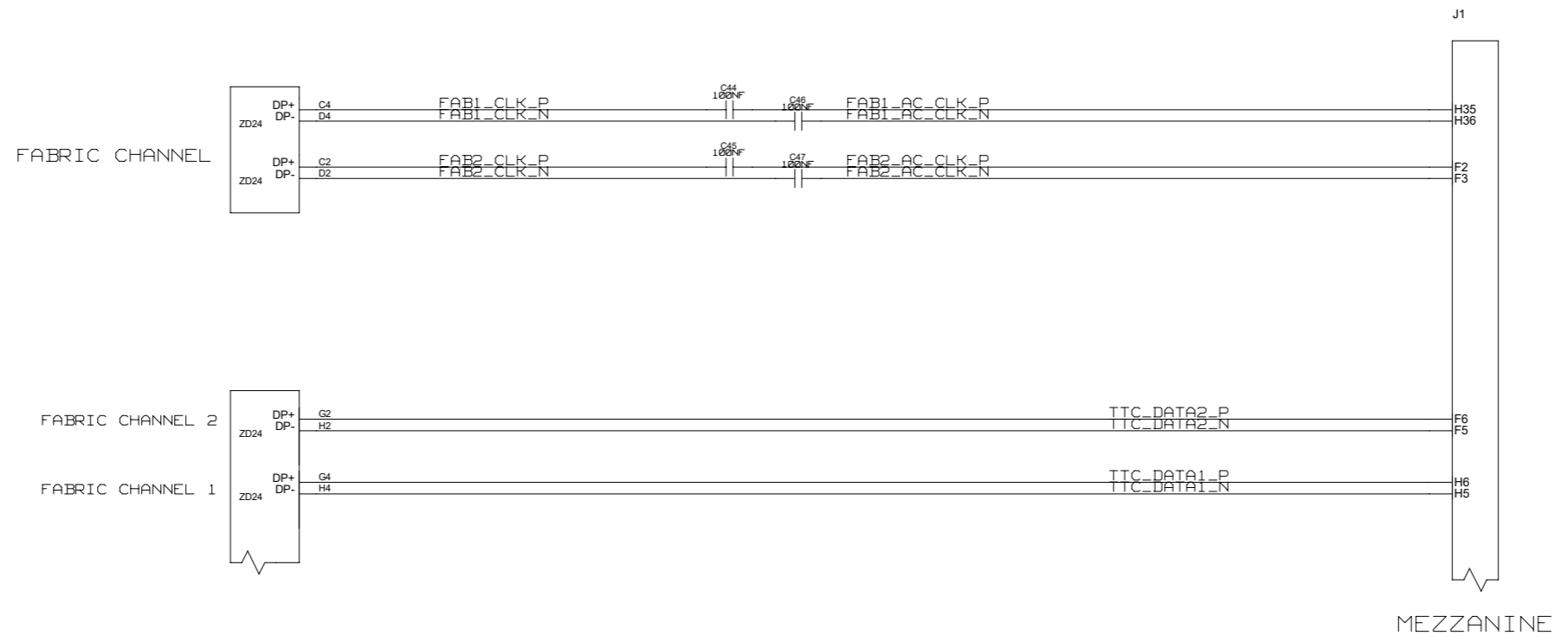
CMOS to Any-In



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			SIZE
CLOCK			REV.
UNIVERSITY OF MAINZ			DRAWING NO.
SCALE			SHEET 5 OF 5

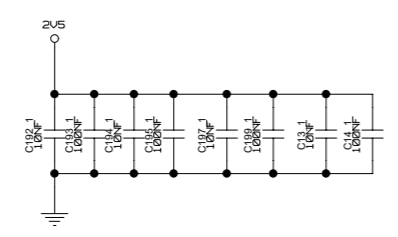
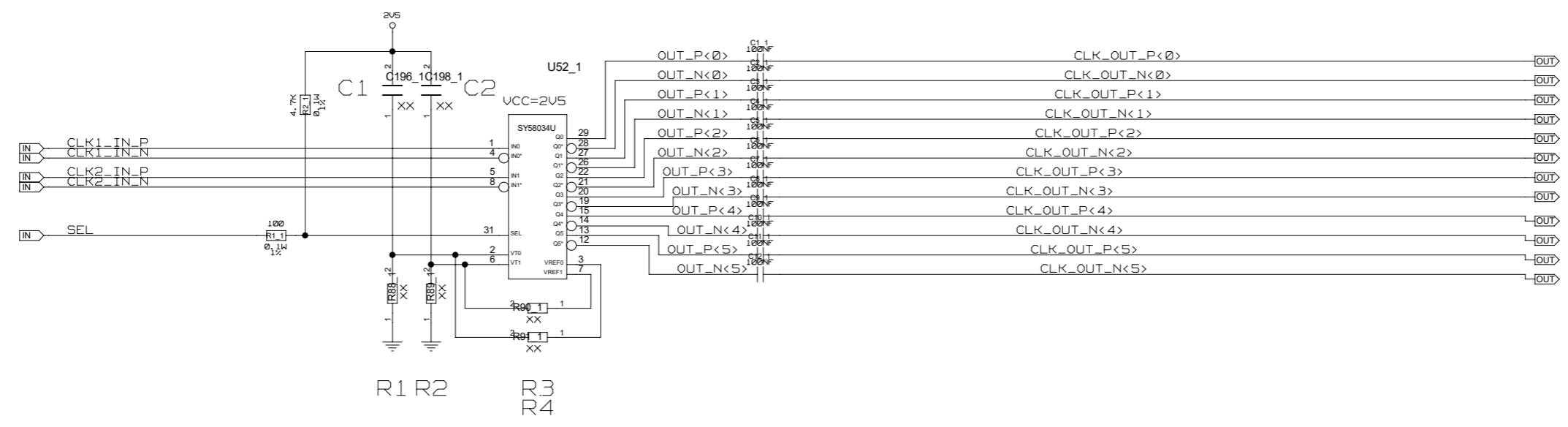
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

LHC1 + LHC2 CLK

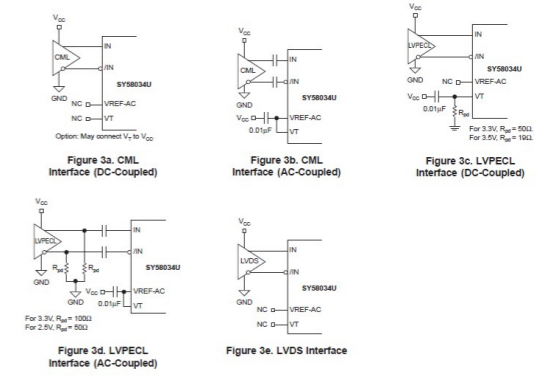


CHECKED	J. V. DE SOUZA			DRAWING TITLE JFEX TTC DATA
CHECKED	U. SCHAEFER			
CHECKED	S. RAVE			
DRAWN	BAUSS	06. 11. 2015		
BLOCK TITLE CLOCK				
UNIVERSITY OF MAINZ				SIZE C
				REV.
SCALE			DRAWING NO.	SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

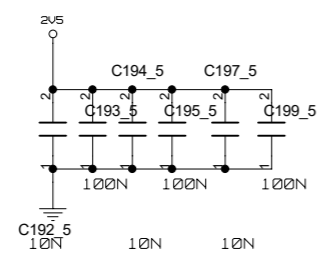
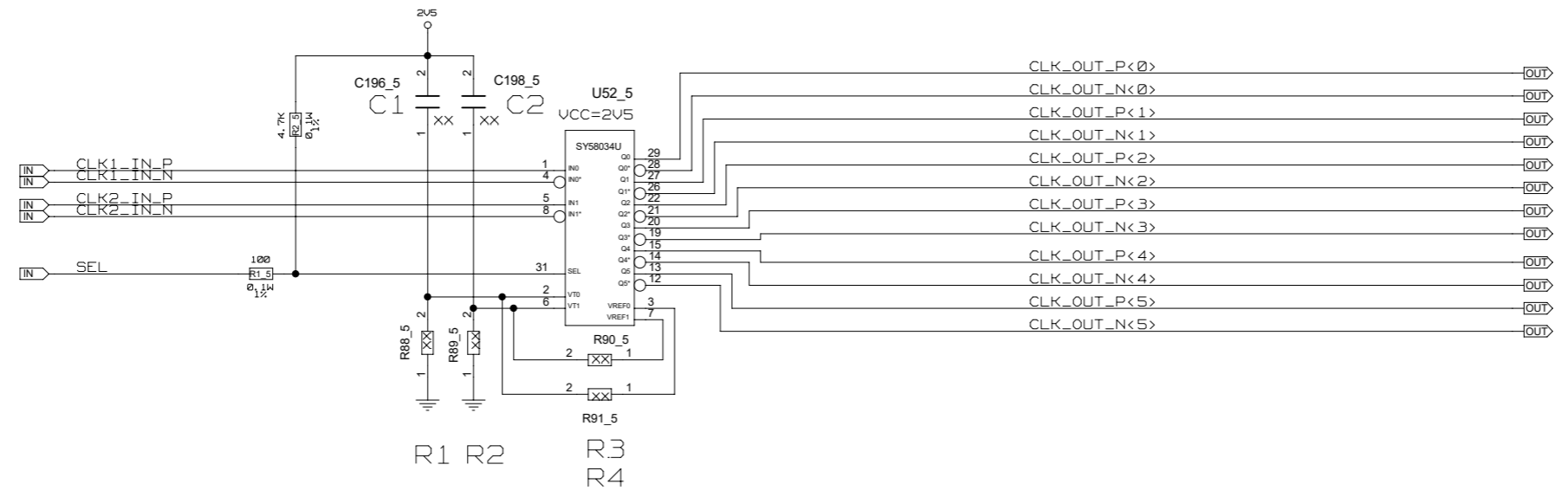


INPUT INTERFACE APPLICATIONS

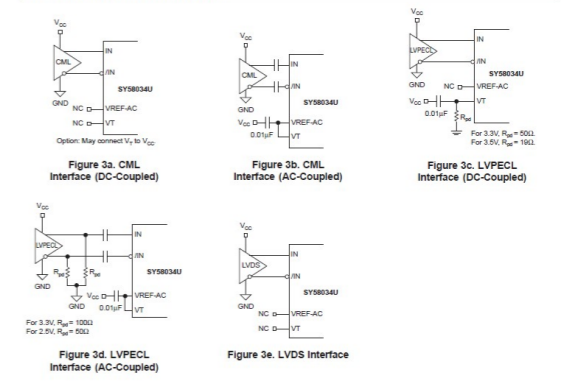


	NAME	DATE	SIGN	DRAWING TITLE CLOCK
CHECKED	J. V. DE SOUZA			
CHECKED	U. SCHAEFER			
CHECKED	S. RAVE			
DRAWN	BAUSS			
BLOCK TITLE CLOCK CML FANOUT6 AC				
UNIVERSITY OF MAINZ		SIZE C	REV.	DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

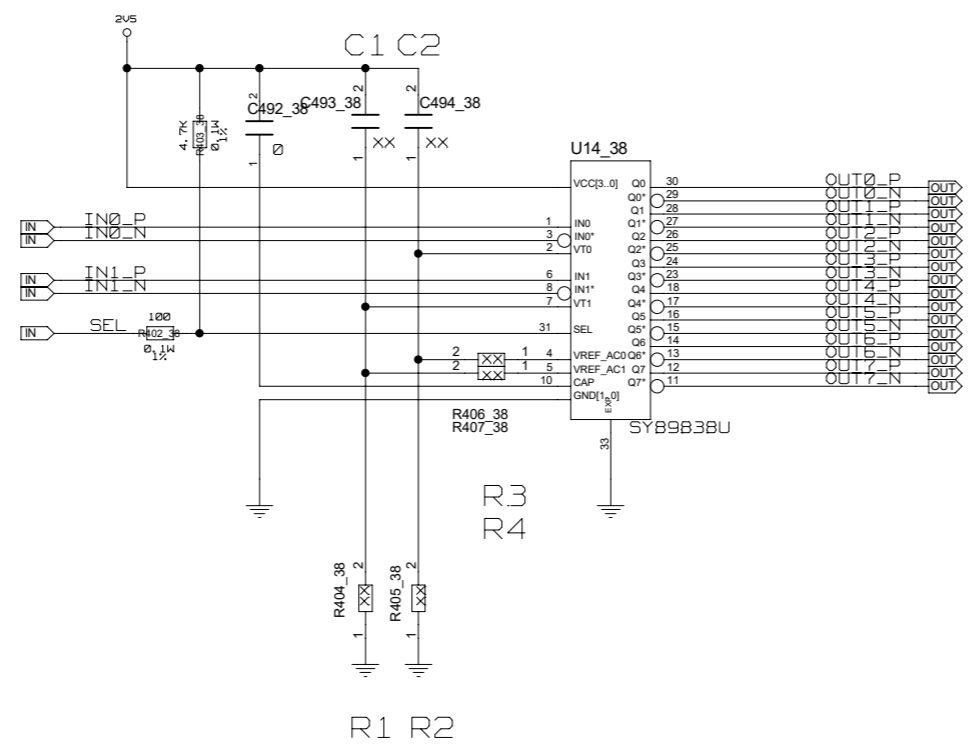


INPUT INTERFACE APPLICATIONS

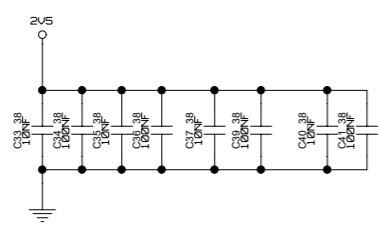


CHECKED	J. V. DE SOUZA			DRAWING TITLE CLOCK
CHECKED	U.SCHAEFER			
CHECKED	S.RAVE			
DRAWN	BAUSS			
BLOCK TITLE CLOCK_CML_FANOUT6_DC				
UNIVERSITY OF MAINZ		SIZE C	REV.	DRAWING NO.
SCALE				SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

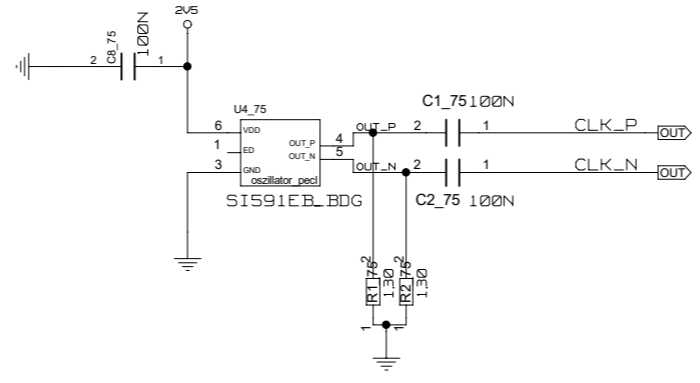


OUT0_P1	2	R408_38
OUT0_N	2	R408_38
OUT1_P1	2	R409_38
OUT1_N	2	R409_38
OUT2_P1	2	R410_38
OUT2_N	2	R410_38
OUT3_P1	2	R411_38
OUT3_N	2	R411_38
OUT4_P1	2	R412_38
OUT4_N	2	R412_38
OUT5_P1	2	R413_38
OUT5_N	2	R413_38
OUT6_P1	2	R414_38
OUT6_N	2	R414_38
OUT7_P1	2	R415_38
OUT7_N	2	R415_38



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

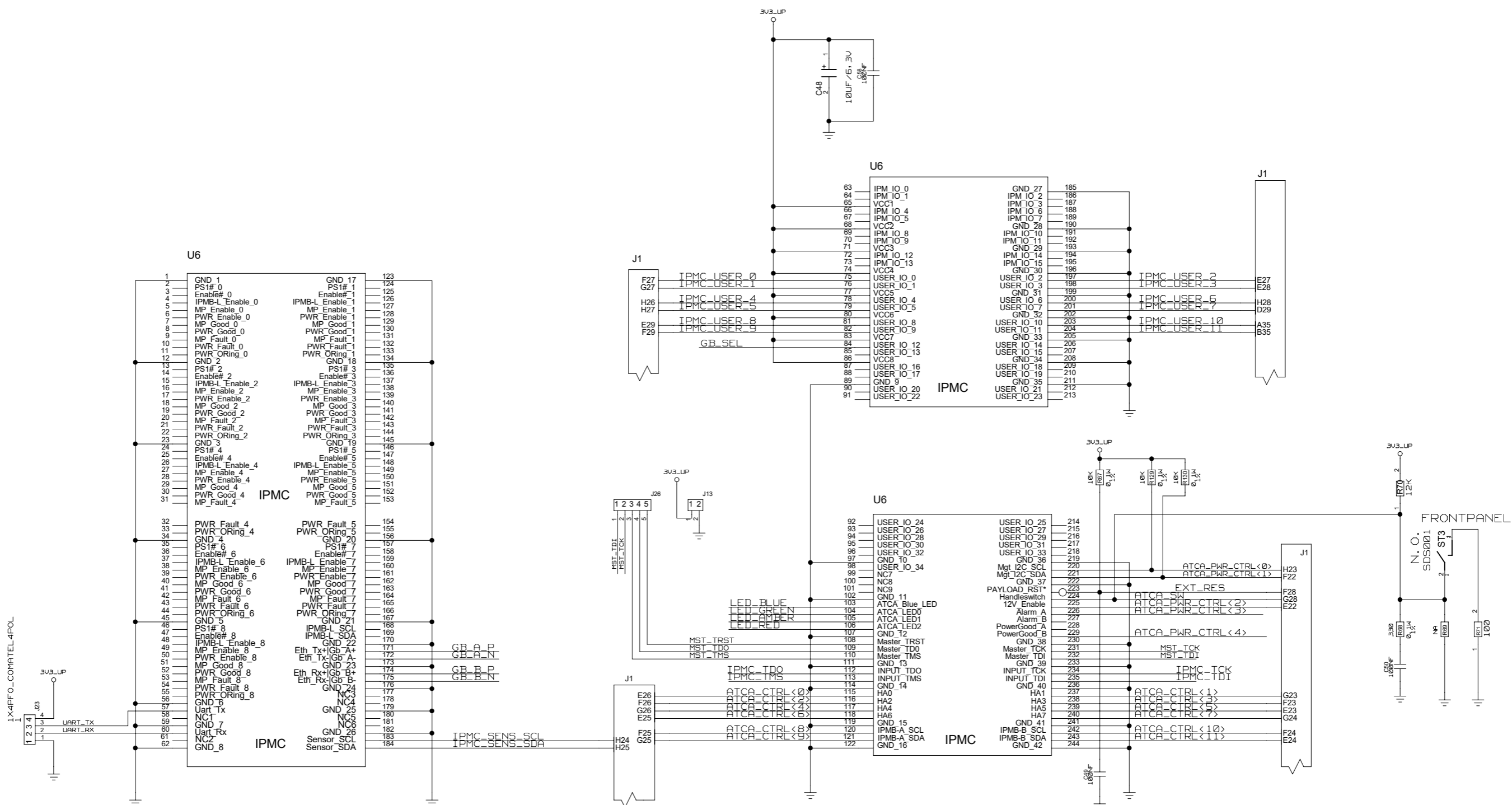
REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



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

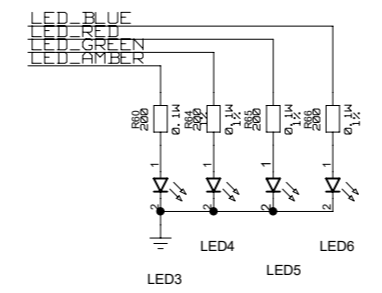
IPMC CONNECTOR MOLEX_87782-3003

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



ATCA_HA<0..7> BACKPLANE + MEZZANINE
 ATCA_A/B_SCL/SDA BACKPLANE + MEZZANINE

ATCA_CTRL<11..0>
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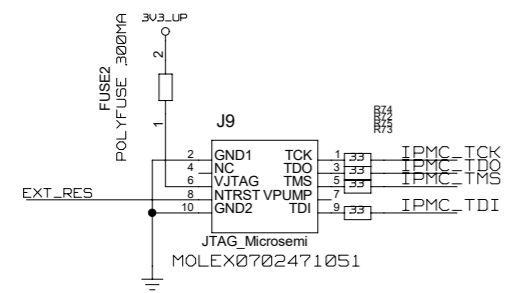


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CHECKED U.SCHAEFER			
CHECKED S.RAVE			
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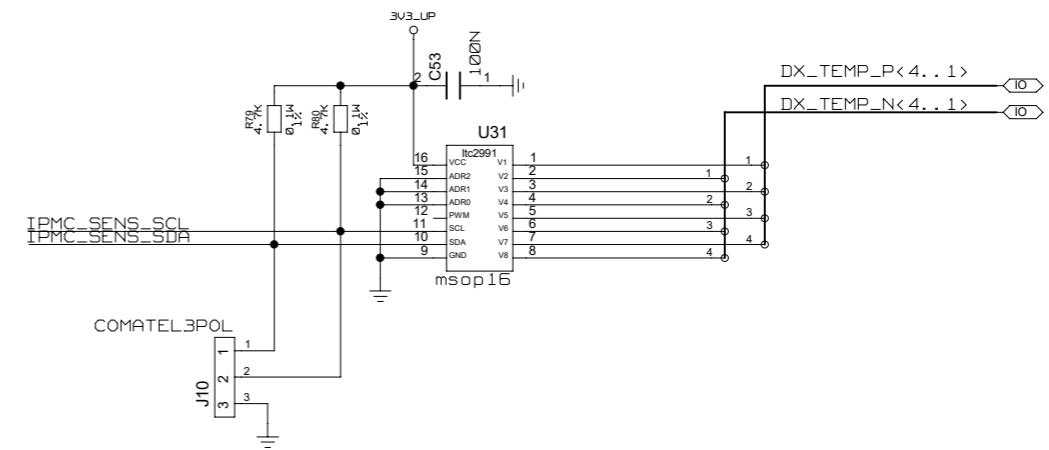
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ZONE	LTR	DESCRIPTION	DATE	APPR.

IPMC CONTROL

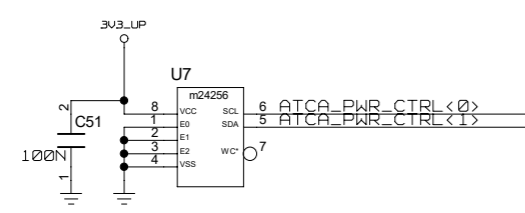
IPMC JTAG PORT FRONT PANEL



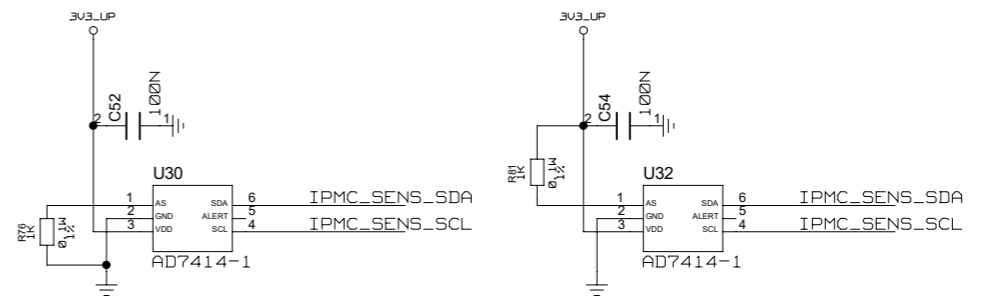
I2C FPGA TEMPERATURE



MEMORY



I2C BOARDTEMP

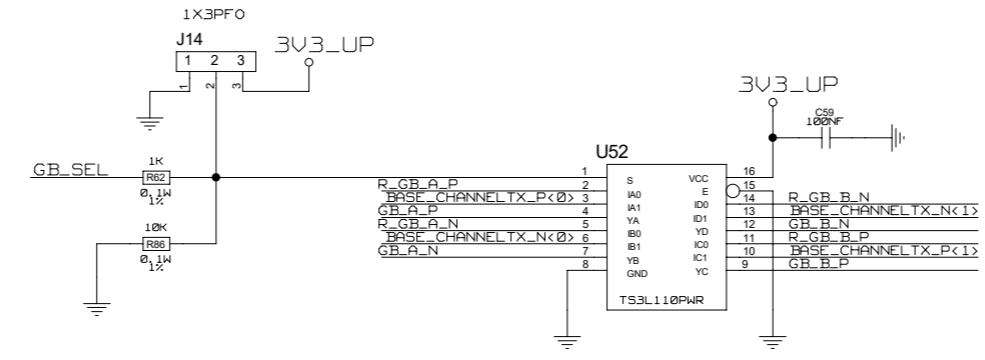


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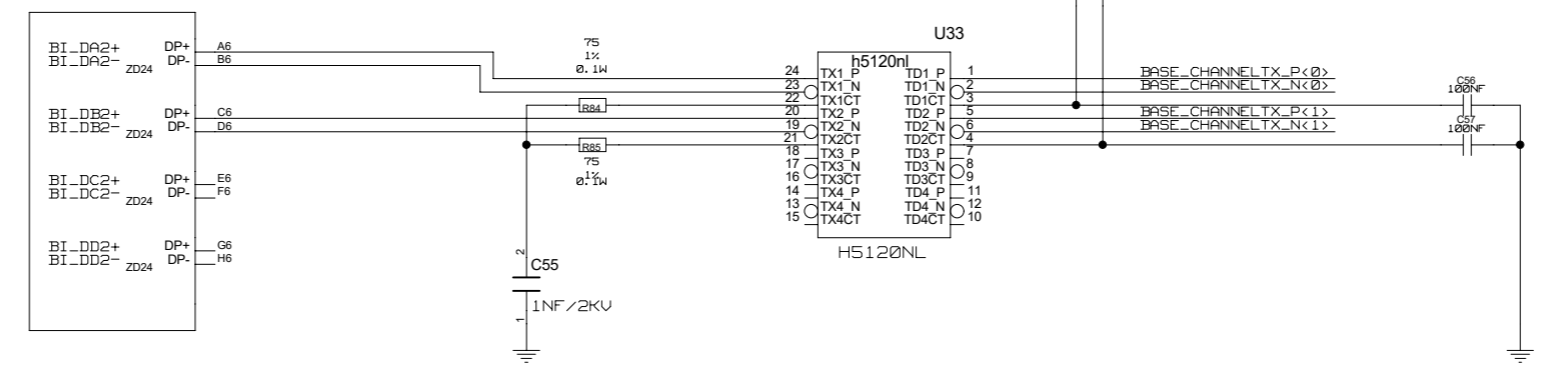
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ZONE	LTR	DESCRIPTION	DATE	APPR.

IPMC CONTROL

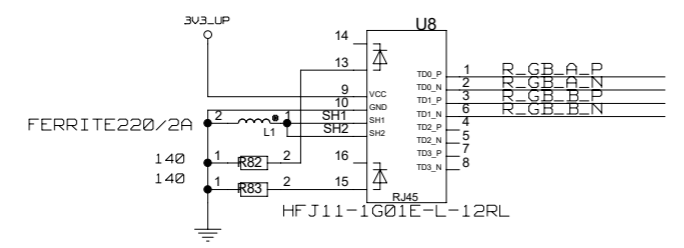
ETHERNET SWITCH



BACKPLANE BASE CHANNEL2

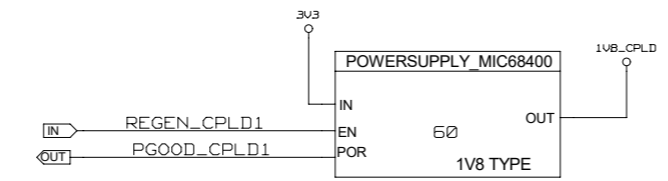
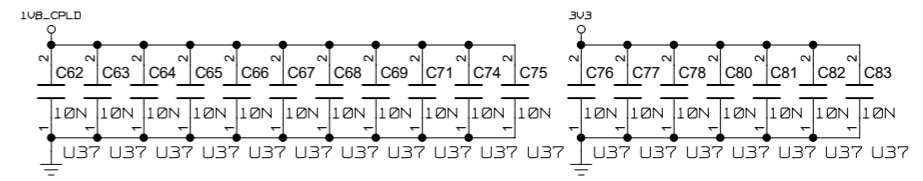
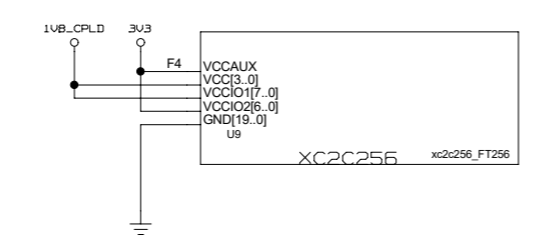
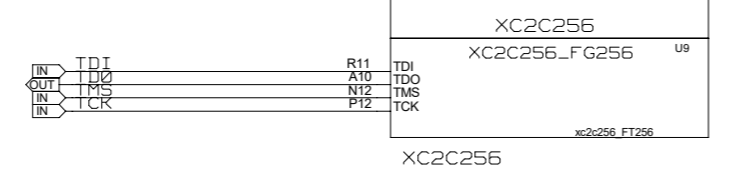
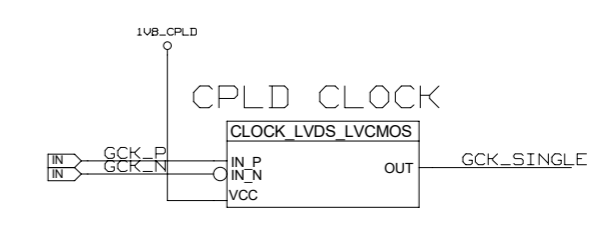
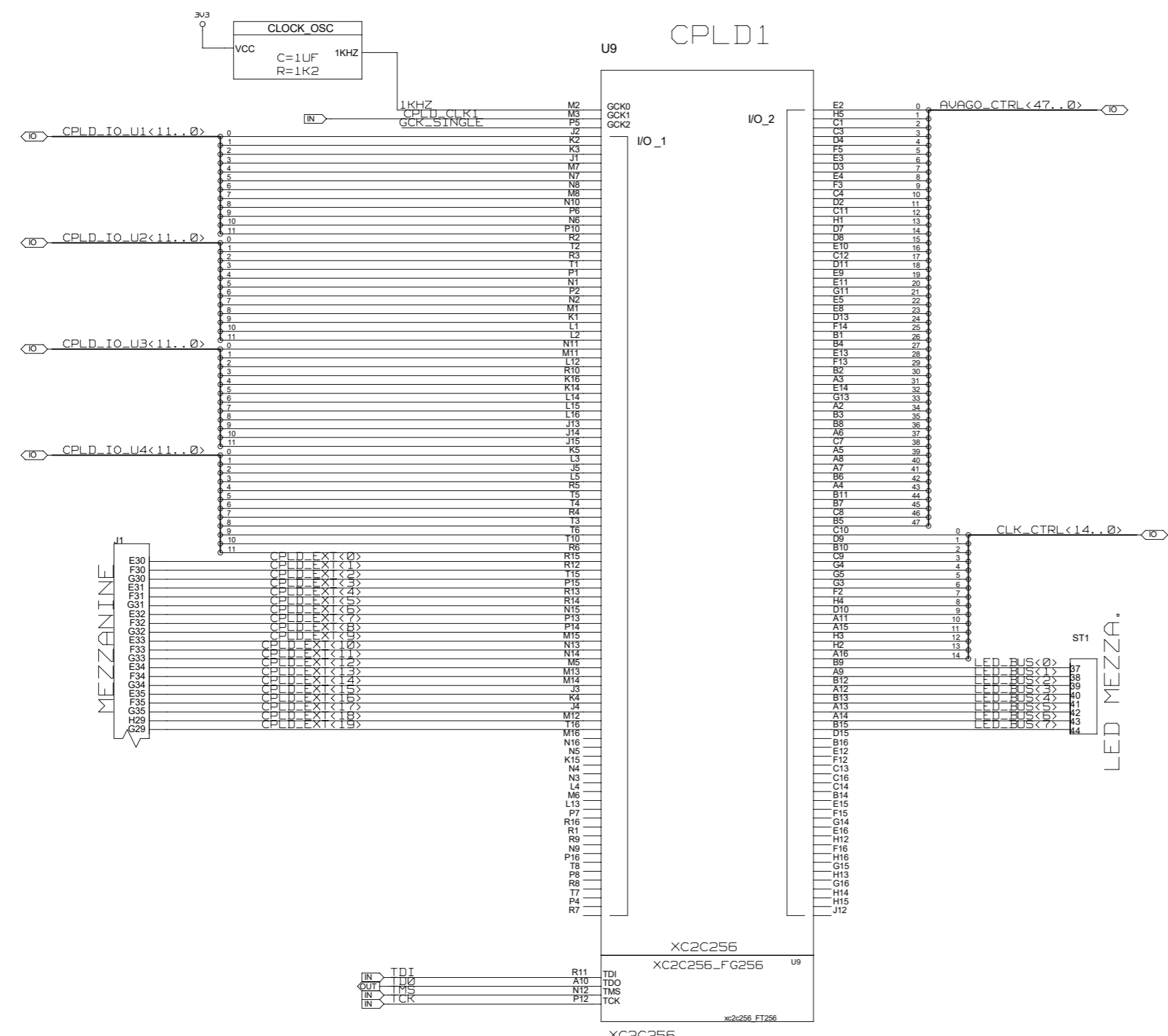


RJ45 FRONT PANEL



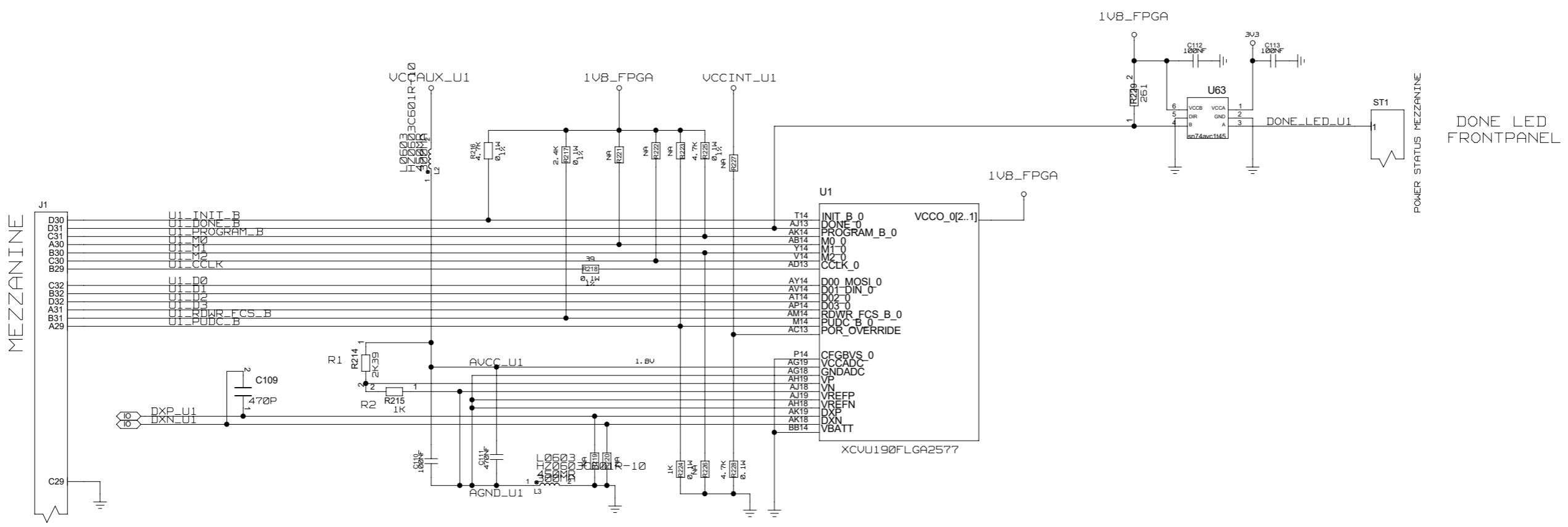
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CHECKED U. SCHAEFER			
CHECKED S. RAVE			
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IPMC			
UNIVERSITY OF MAINZ		SIZE C	REV.
		SCALE	DRAWING NO.
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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



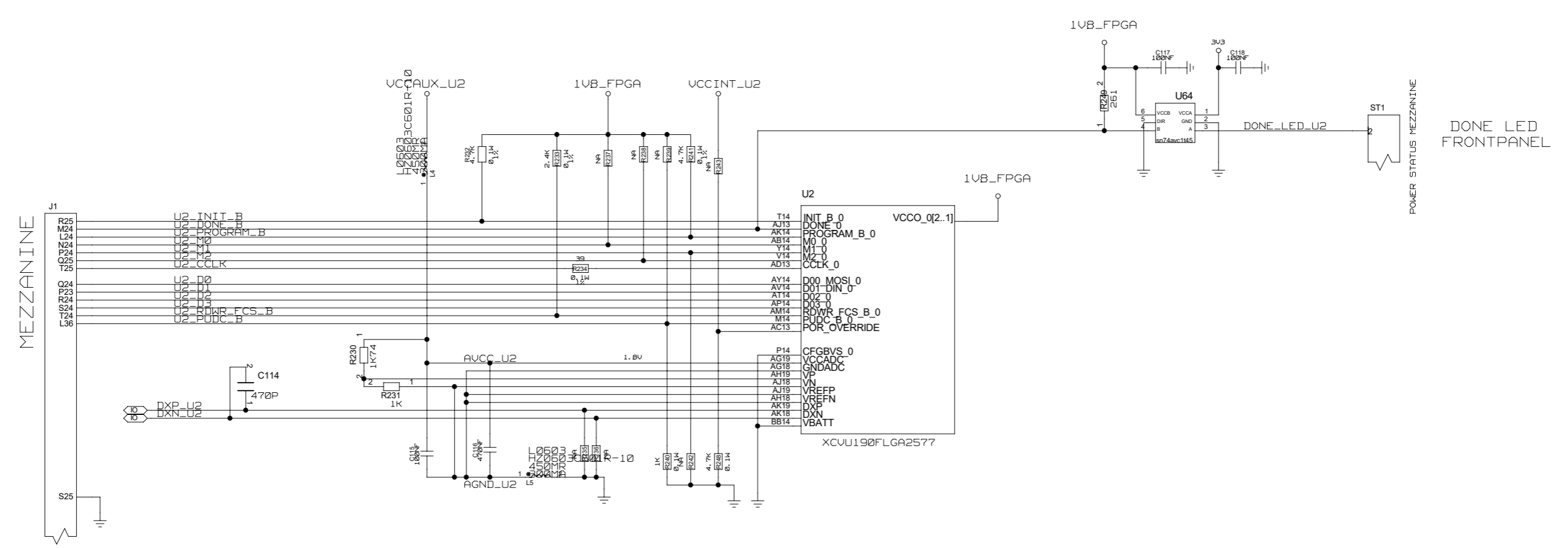
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CHECKED U. SCHAEFER			
CHECKED S. RAVE			
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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



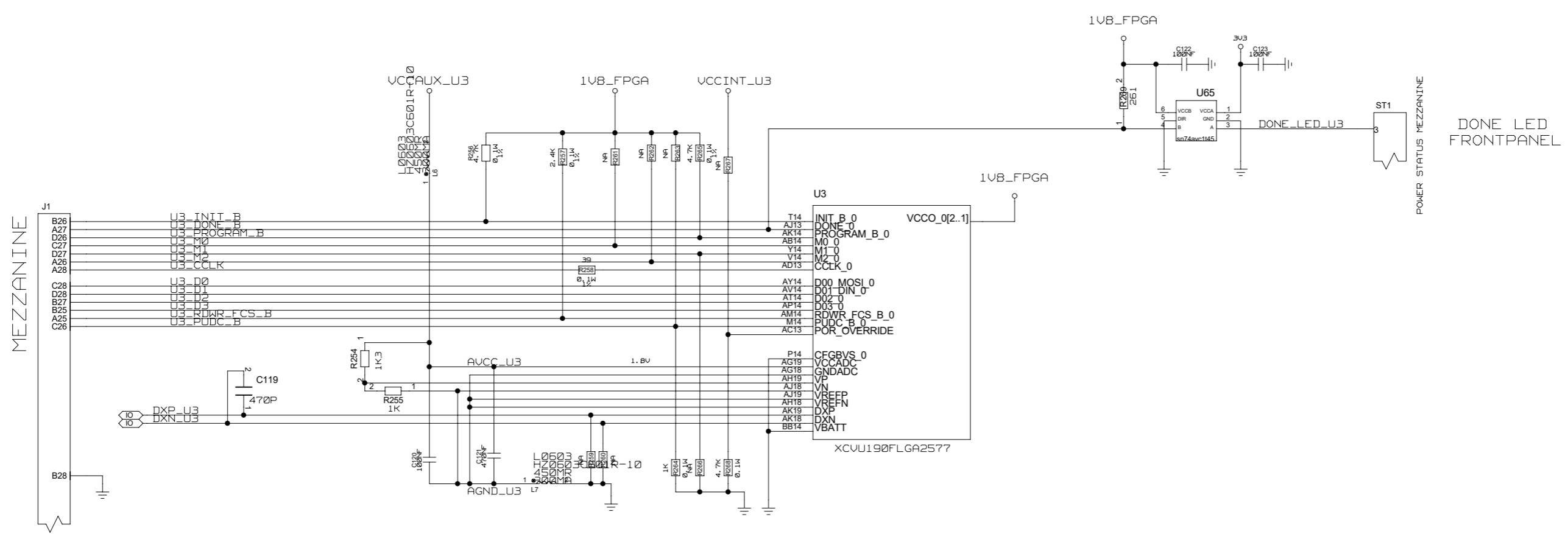
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CHECKED S. RAVE				
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CONFIGURATION PROCESSOR U1			C	
UNIVERSITY OF MAINZ			SCALE	DRAWING NO.
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REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



NAME	DATE	SIGN	DRAWING TITLE	
CHECKED J. V. DE SOUZA			JFEX	
CHECKED U. SCHAEFER				
CHECKED S. RAVE				
DRAWN BAUSS				
BLOCK TITLE			DRAWING NO.	
CONFIGURATION PROCESSOR U2			SIZE	REV.
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			SCALE	SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

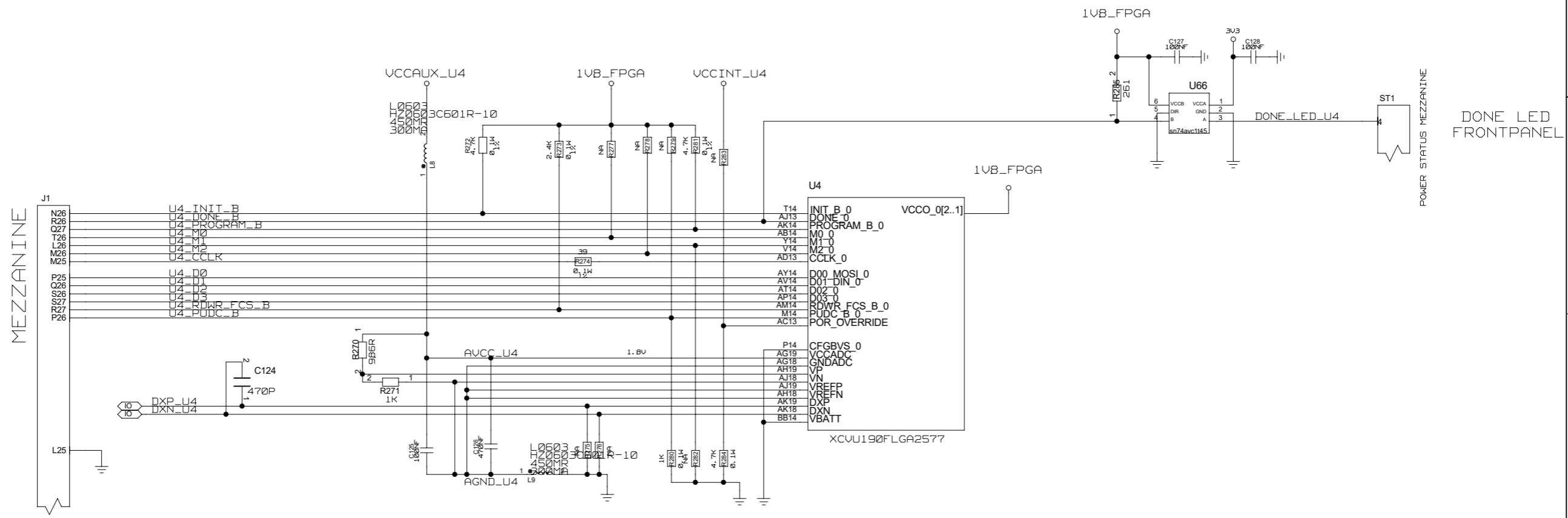


MEZZANINE

DONE_LED FRONTPANEL

	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	REV.	DRAWING NO.	
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SCALE				SHEET	OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.



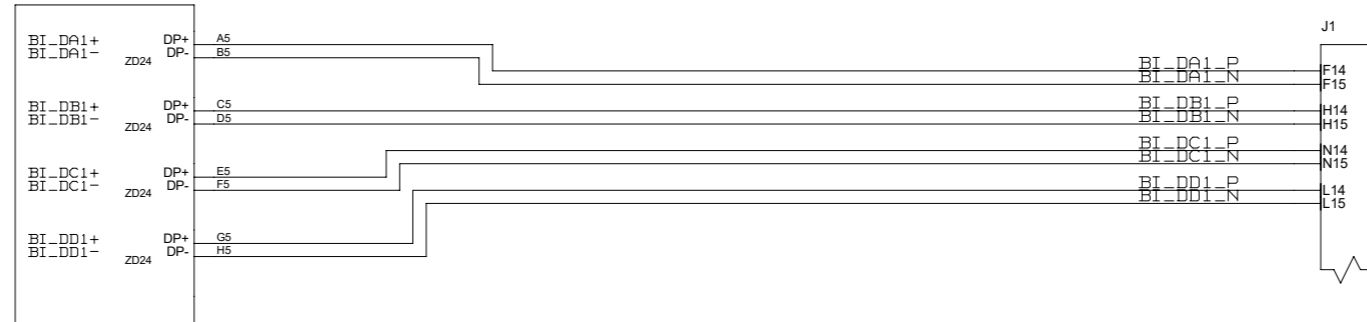
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CHECKED S. RAVE			
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BLOCK TITLE			
CONFIGURATION PROCESSOR U4			
UNIVERSITY OF MAINZ		SIZE	DRAWING NO.
		C	
SCALE	REV.		SHEET OF

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPR.

IPBUS

BACKPLANE BASE CHANNEL 1

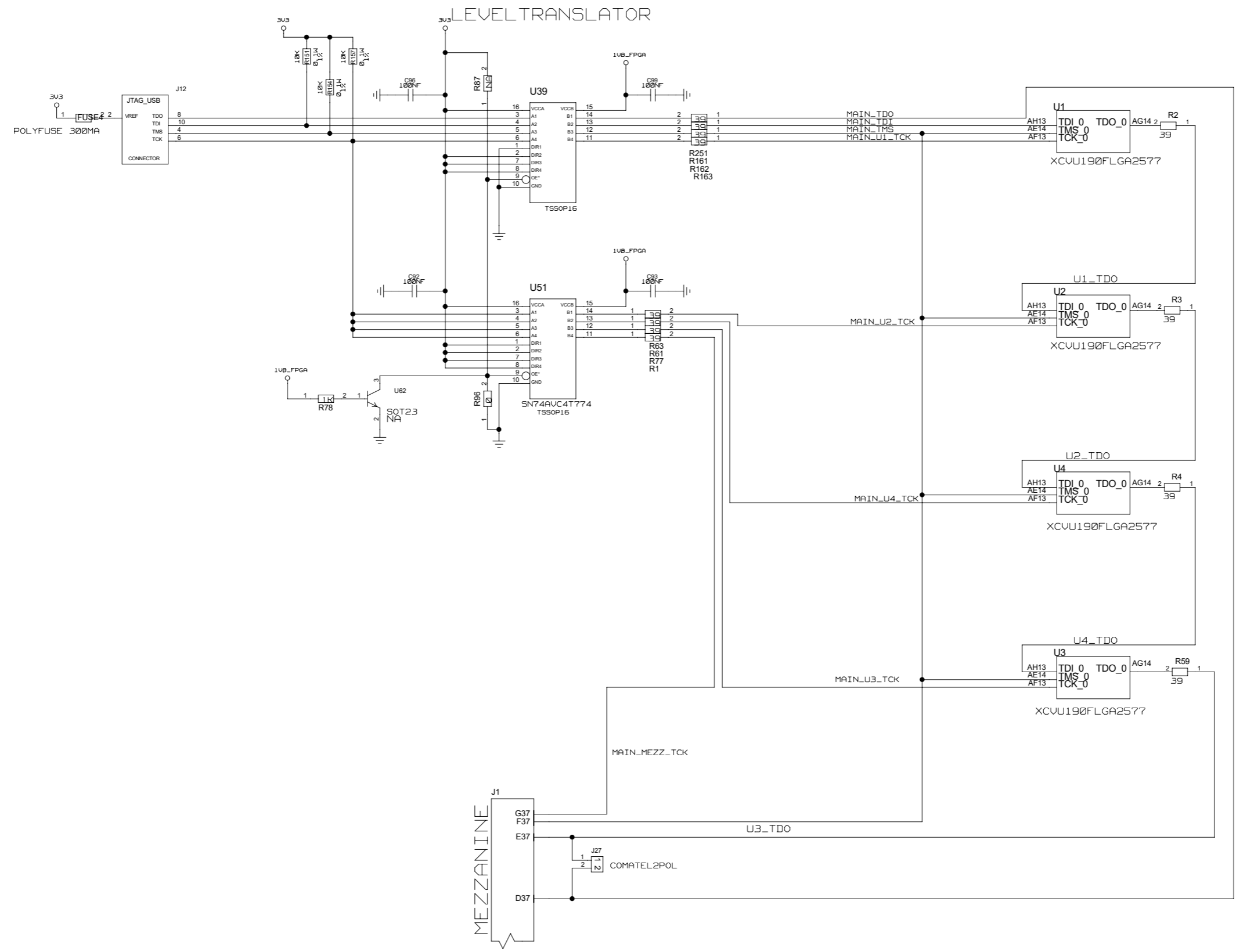
MEZZANINE



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	DRAWING NO.
			C	REV.
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 S. RAVE			
DRAWN BAUSS	08.05.2017		
BLOCK TITLE			
JTAG			
UNIVERSITY OF MAINZ			
SIZE	REV.	DRAWING NO.	
C			
SCALE		SHEET OF	