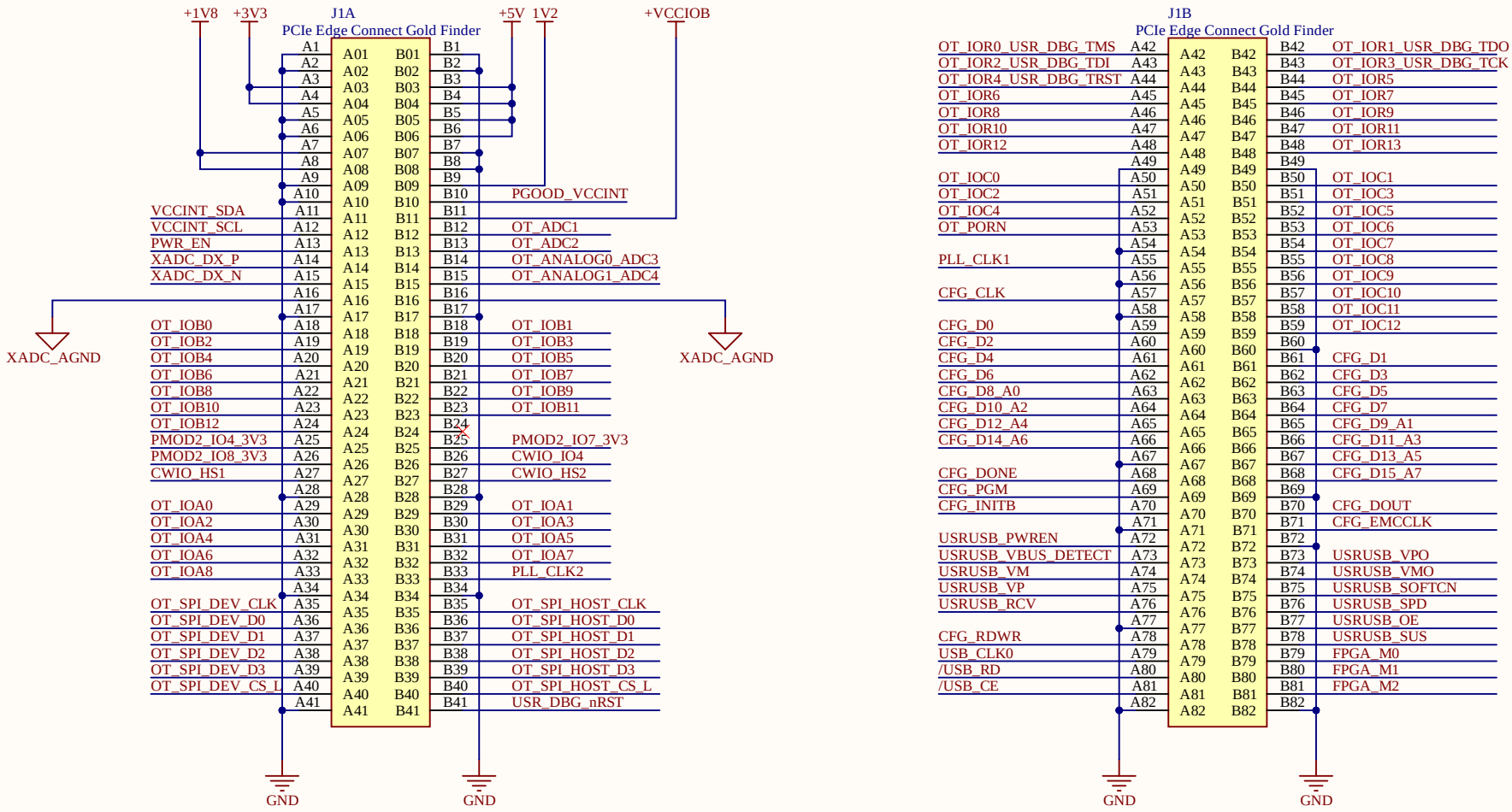

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Rev: 3	Project: CW341	License:	
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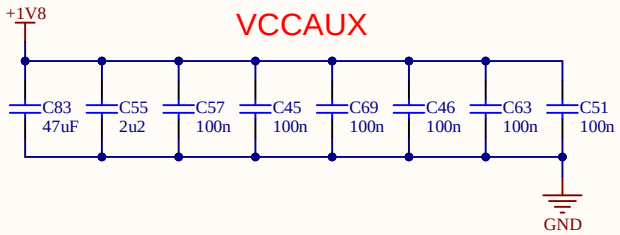
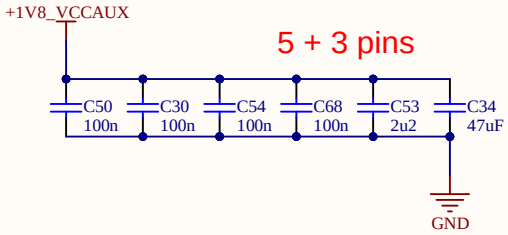
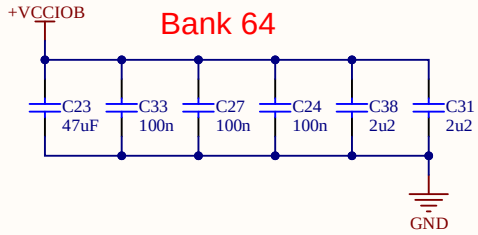
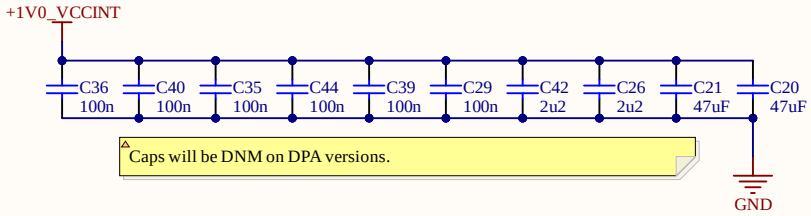
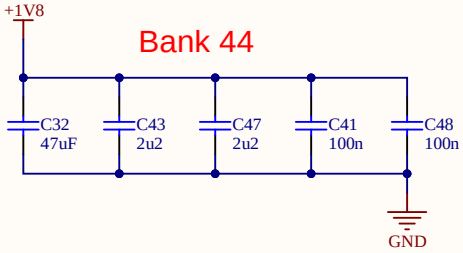
FPGA Decoupling

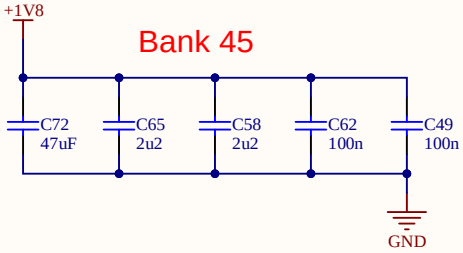


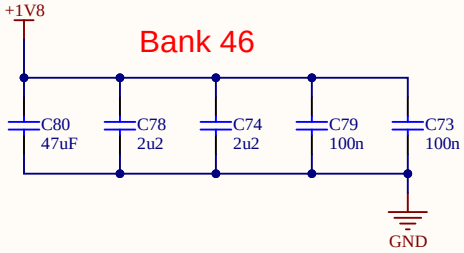


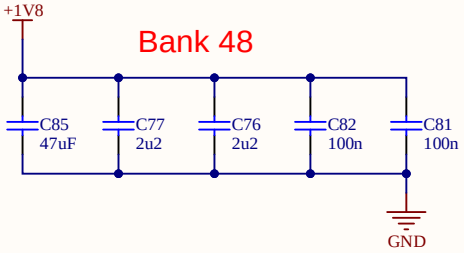


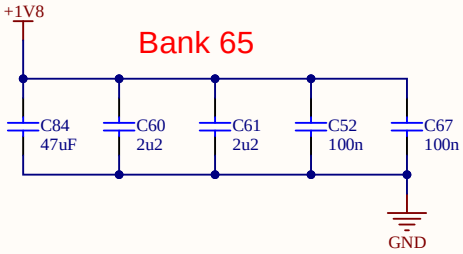


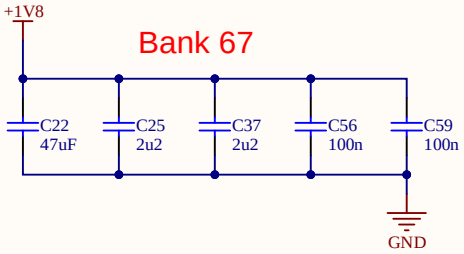


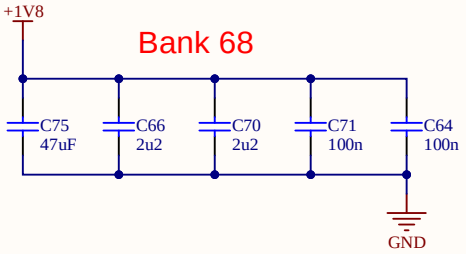












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Rev: 3	Project: CW341	License:	
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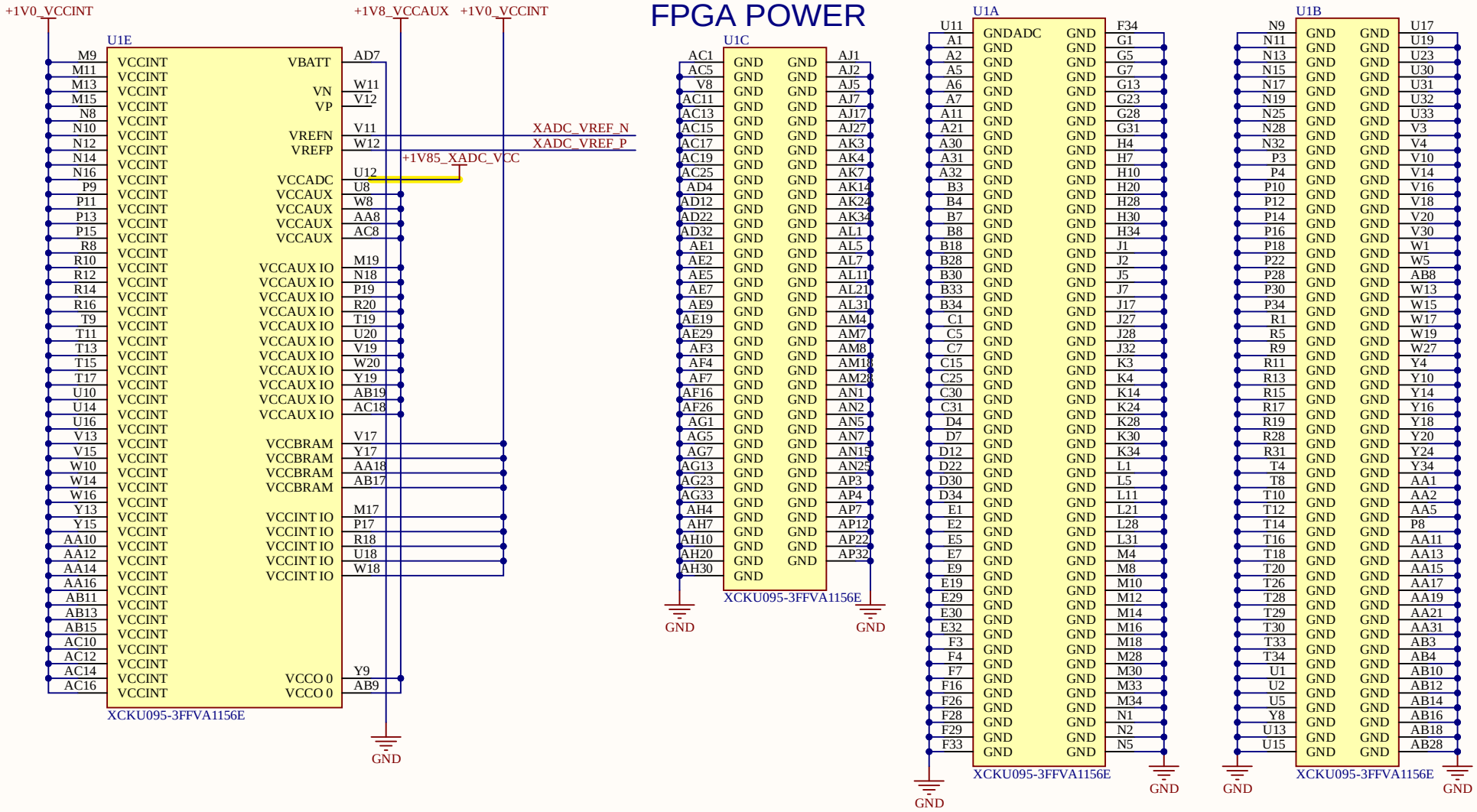
FPGA POWER



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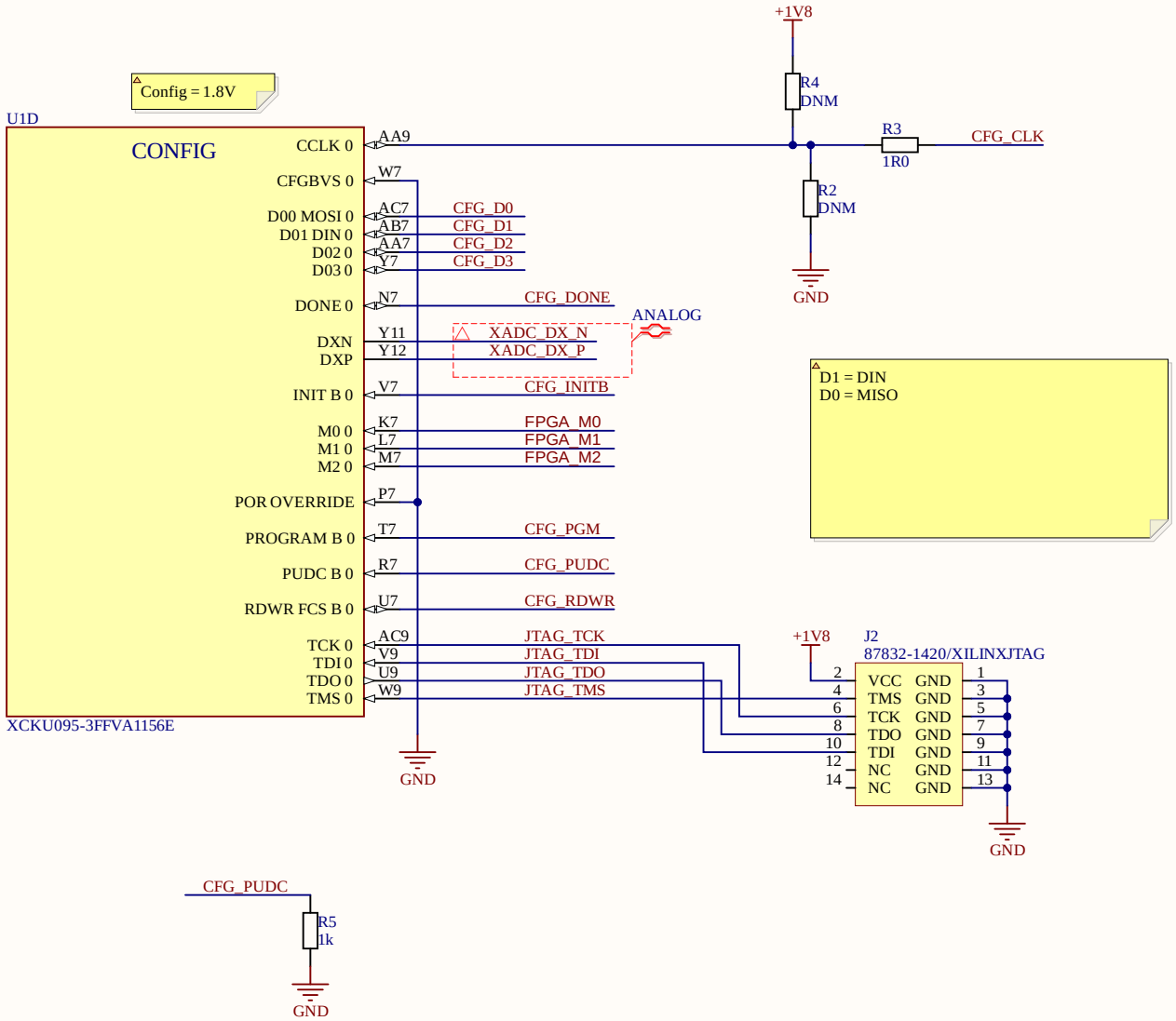

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File: CW341_FPGA_CFG.SchDoc			

FPGA MGT Interface

U1P

BANK 129

R33	MGTHRXP0 129	MGTHTXN0 129	T32
N33	MGTHRXP1 129	MGTHTXN1 129	P32
L33	MGTHRXP2 129	MGTHTXN2 129	M32
J33	MGTHRXP3 129	MGTHTXN3 129	K32
		MGTREFCLK0N 129	R30
R34	MGTHRXN0 129	MGTREFCLK0P 129	R29
N34	MGTHRXN1 129	MGTREFCLK1N 129	N30
L34	MGTHRXN2 129	MGTREFCLK1P 129	N29
J34	MGTHRXN3 129		
T31	MGTHTXP0 129		
P31	MGTHTXP1 129		
M31	MGTHTXP2 129		
K31	MGTHTXP3 129		

XCKU095-3FFVA1156E

U1Q

BANK 130

H31	MGTHTXP0 130	MGTHRXN0 130	G34
G29	MGTHTXP1 130	MGTHRXN1 130	F32
D31	MGTHTXP2 130	MGTHRXN2 130	E34
B31	MGTHTXP3 130	MGTHRXN3 130	C34
		MGTREFCLK0N 130	L30
H32	MGTHTXN0 130	MGTREFCLK0P 130	L29
G30	MGTHTXN1 130	MGTREFCLK1N 130	J30
D32	MGTHTXN2 130	MGTREFCLK1P 130	J29
B32	MGTHTXN3 130		
G33	MGTHRXP0 130		
E31	MGTHRXP1 130		
E33	MGTHRXP2 130		
C33	MGTHRXP3 130		

XCKU095-3FFVA1156E

U1R

BANK 224

AF5	MGTREFCLK0N 224	MGTHTXN0 224	AN3
AF6	MGTREFCLK0P 224	MGTHTXN1 224	AM5
AD5	MGTREFCLK1N 224	MGTHTXN2 224	AL3
AD6	MGTREFCLK1P 224	MGTHTXN3 224	AK5
		MGTHTXP0 224	AN4
AP1	MGTHRXN0 224	MGTHTXP1 224	AM6
AM1	MGTHRXN1 224	MGTHTXP2 224	AL4
AK1	MGTHRXN2 224	MGTHTXP3 224	AK6
AJ3	MGTHRXN3 224		
AP2	MGTHRXP0 224		
AM2	MGTHRXP1 224		
AK2	MGTHRXP2 224		
AJ4	MGTHRXP3 224		

XCKU095-3FFVA1156E

U1S

BANK 225

AB5	MGTREFCLK0N 225	MGTHTXN0 225	AH5
AB6	MGTREFCLK0P 225	MGTHTXN1 225	AG3
Y5	MGTREFCLK1N 225	MGTHTXN2 225	AE3
Y6	MGTREFCLK1P 225	MGTHTXN3 225	AC3
		MGTHTXP0 225	AH6
AH1	MGTHRXN0 225	MGTHTXP1 225	AG4
AF1	MGTHRXN1 225	MGTHTXP2 225	AE4
AD1	MGTHRXN2 225	MGTHTXP3 225	AC4
AB1	MGTHRXN3 225		
AH2	MGTHRXP0 225		
AF2	MGTHRXP1 225		
AD2	MGTHRXP2 225		
AB2	MGTHRXP3 225		

XCKU095-3FFVA1156E

U1T

BANK 226

Y1	MGTHRXN0 226	MGTHTXP0 226	AA4
V1	MGTHRXN1 226	MGTHTXP1 226	W4
T1	MGTHRXN2 226	MGTHTXP2 226	U4
P1	MGTHRXN3 226	MGTHTXP3 226	R4
		MGTREFCLK0N 226	V5
Y2	MGTHRXP0 226	MGTREFCLK0P 226	V6
V2	MGTHRXP1 226	MGTREFCLK1N 226	T5
T2	MGTHRXP2 226	MGTREFCLK1P 226	T6
P2	MGTHRXP3 226		
AA3	MGTHTXN0 226		
W3	MGTHTXN1 226		
U3	MGTHTXN2 226		
R3	MGTHTXN3 226		

XCKU095-3FFVA1156E

U1U

BANK 227

M1	MGTHRXN0 227	MGTHTXP0 227	N4
K1	MGTHRXN1 227	MGTHTXP1 227	L4
H1	MGTHRXN2 227	MGTHTXP2 227	J4
F1	MGTHRXN3 227	MGTHTXP3 227	G4
		MGTREFCLK0N 227	P5
M2	MGTHRXP0 227	MGTREFCLK0P 227	P6
K2	MGTHRXP1 227	MGTREFCLK1N 227	M5
H2	MGTHRXP2 227	MGTREFCLK1P 227	M6
F2	MGTHRXP3 227		
N3	MGTHTXN0 227		
L3	MGTHTXN1 227		
J3	MGTHTXN2 227		
G3	MGTHTXN3 227		

XCKU095-3FFVA1156E

U1V

BANK 228

E3	MGTHRXN0 228	MGTHTXP0 228	F6
D1	MGTHRXN1 228	MGTHTXP1 228	D6
B1	MGTHRXN2 228	MGTHTXP2 228	C4
A3	MGTHRXN3 228	MGTHTXP3 228	B6
		MGTREFCLK0N 228	K5
E4	MGTHRXP0 228	MGTREFCLK0P 228	K6
D2	MGTHRXP1 228	MGTREFCLK1N 228	H5
B2	MGTHRXP2 228	MGTREFCLK1P 228	H6
A4	MGTHRXP3 228		
F5	MGTHTXN0 228		
D5	MGTHTXN1 228		
C3	MGTHTXN2 228		
B5	MGTHTXN3 228		

XCKU095-3FFVA1156E

U1W

E31	MGTAVCC L	MGTAVTT R	AM3
F30	MGTAVCC L	MGTAVTT R	AL2
H29	MGTAVCC L	MGTAVTT R	AH3
J31	MGTAVCC L	MGTAVTT R	AG2
N31	MGTAVCC L	MGTAVTT R	AD3
P29	MGTAVCC L	MGTAVTT R	AC2
C6	MGTAVCC R	MGTAVTT R	Y3
E6	MGTAVCC R	MGTAVTT R	W2
G6	MGTAVCC R	MGTAVTT R	T3
J6	MGTAVCC R	MGTAVTT R	R2
L6	MGTAVCC R	MGTAVTT R	M3
N6	MGTAVCC R	MGTAVTT R	L2
U6	MGTAVCC R	MGTAVTT R	H3
W6	MGTAVCC R	MGTAVTT R	G2
AC6	MGTAVCC R	MGTAVTT R	D3
AE6	MGTAVCC R	MGTAVTT R	C2
AG6	MGTAVCC R	MGTAVTT L	R32
AJ6	MGTAVCC R	MGTAVTT L	P33
AL6	MGTAVCC R	MGTAVTT L	L32
AN6	MGTAVCC R	MGTAVTT L	K33
K29	MGTVCCAUX L	MGTAVTT L	H33
M29	MGTVCCAUX L	MGTAVTT L	G32
R6	MGTVCCAUX R	MGTAVTT L	D33
AA6	MGTVCCAUX R	MGTAVTT L	C32
		MGTAVTTRCAL L	A33
		MGTAVTTRCAL R	AP6
		MGTRREF L	A34
		MGTRREF R	AP5

XCKU095-3FFVA1156E

GND

From UG576 regarding MGTAVCC, MGTAVTT, MGTVCCAUX pins:

If all of the Quads in a power supply group are not used, the associated pins can be left unconnected or tied to GND (unless the RCAL circuit is in that Quad).

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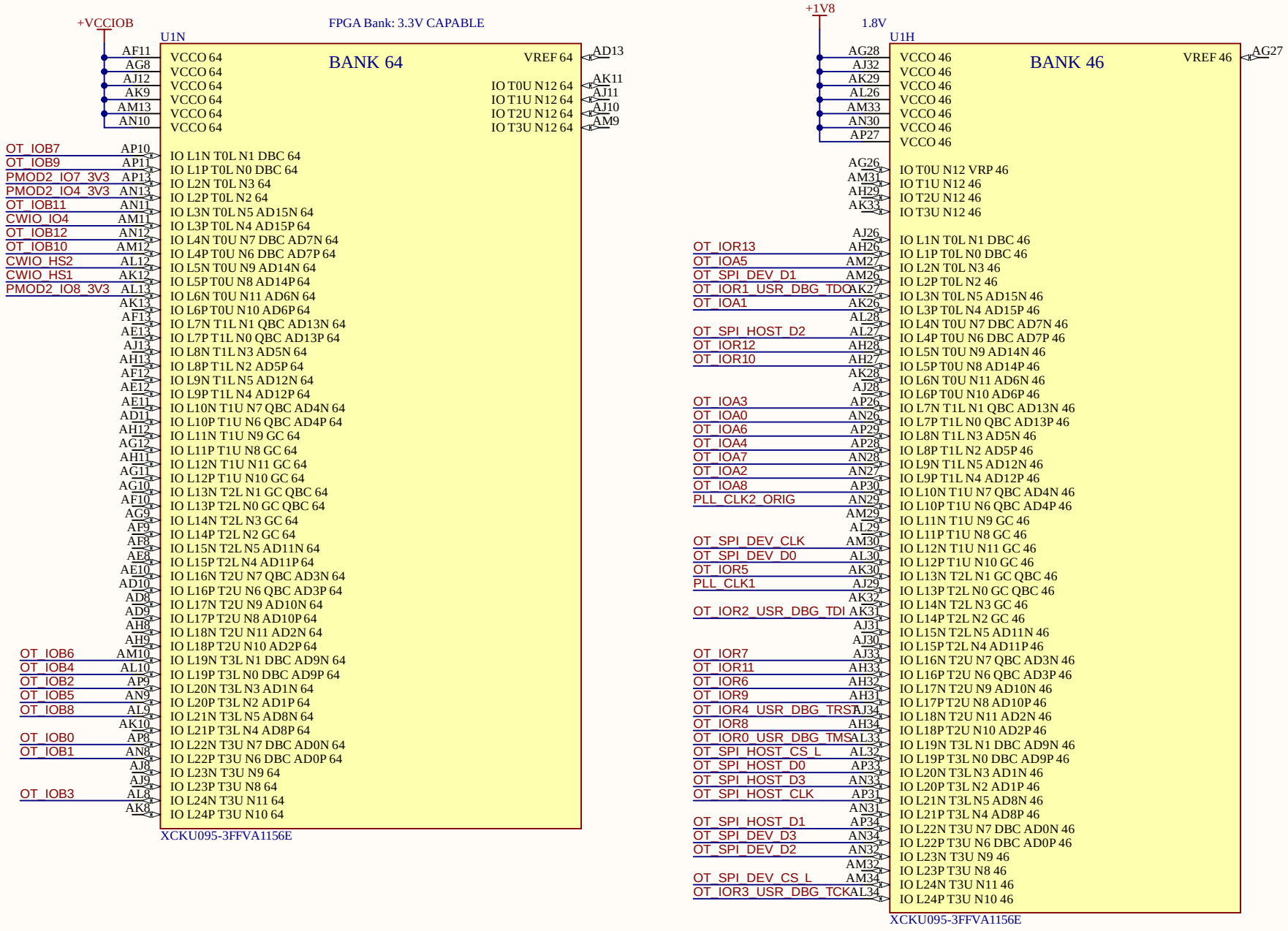
File: CW341_FPGA_MGT.SchDoc			



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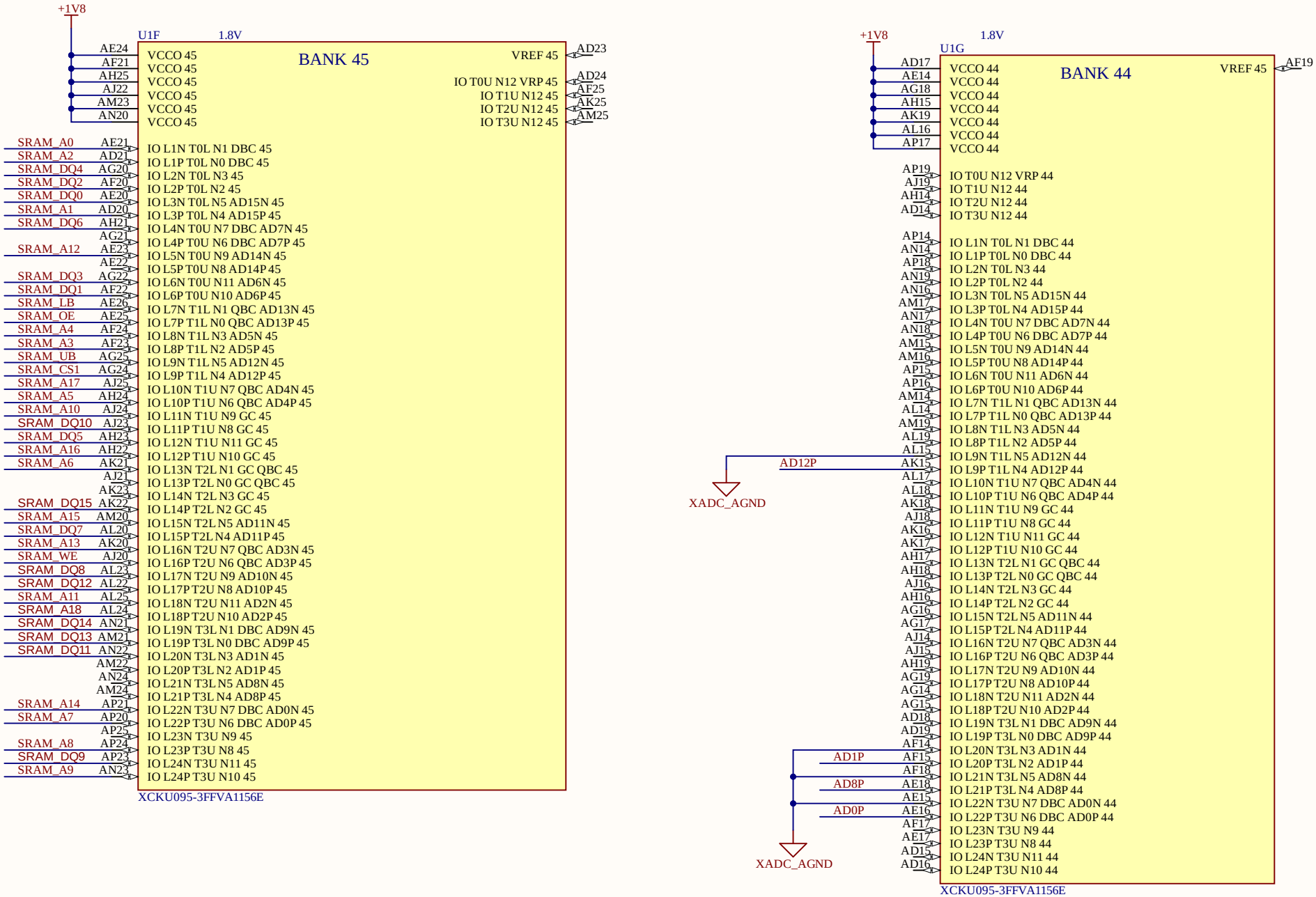
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U1F
1.8V
BANK 45
XCKU095-3FFVA1156E
AE24 VCCO 45
AF21 VCCO 45
AH25 VCCO 45
AJ22 VCCO 45
AM23 VCCO 45
AN20 VCCO 45
VREF 45 AD23
IO T0U N12 VRP 45 AD24
IO T1U N12 45 AF25
IO T2U N12 45 AK25
IO T3U N12 45 AM25
SRAM_A0 AE21 IO L1N T0L N1 DBC 45
SRAM_A2 AD21 IO L1P T0L N0 DBC 45
SRAM_DQ4 AG20 IO L2N T0L N3 45
SRAM_DQ2 AF20 IO L2P T0L N2 45
SRAM_DQ0 AE20 IO L3N T0L N5 AD15N 45
SRAM_A1 AD20 IO L3P T0L N4 AD15P 45
SRAM_DQ6 AH21 IO L4N T0U N7 DBC AD7N 45
AG21 IO L4P T0U N6 DBC AD7P 45
SRAM_A12 AE23 IO L5N T0U N9 AD14N 45
AE22 IO L5P T0U N8 AD14P 45
SRAM_DQ3 AG22 IO L6N T0U N11 AD6N 45
SRAM_DQ1 AF22 IO L6P T0U N10 AD6P 45
SRAM_LB AE26 IO L7N T1L N1 QBC AD13N 45
SRAM_OE AE25 IO L7P T1L N0 QBC AD13P 45
SRAM_A4 AF24 IO L8N T1L N3 AD5N 45
SRAM_A3 AF23 IO L8P T1L N2 AD5P 45
SRAM_UB AG25 IO L9N T1L N5 AD12N 45
SRAM_CS1 AG24 IO L9P T1L N4 AD12P 45
SRAM_A17 AJ25 IO L10N T1U N7 QBC AD4N 45
SRAM_A5 AH24 IO L10P T1U N6 QBC AD4P 45
SRAM_A10 AJ24 IO L11N T1U N9 GC 45
SRAM_DQ10 AJ23 IO L11P T1U N8 GC 45
SRAM_DQ5 AH23 IO L12N T1U N11 GC 45
SRAM_A16 AH22 IO L12P T1U N10 GC 45
SRAM_A6 AK21 IO L13N T2L N1 GC QBC 45
AJ21 IO L13P T2L N0 GC QBC 45
AK23 IO L14N T2L N3 GC 45
SRAM_DQ15 AK22 IO L14P T2L N2 GC 45
SRAM_A15 AM20 IO L15N T2L N5 AD11N 45
SRAM_DQ7 AL20 IO L15P T2L N4 AD11P 45
SRAM_A13 AK20 IO L16N T2U N7 QBC AD3N 45
SRAM_WE AJ20 IO L16P T2U N6 QBC AD3P 45
SRAM_DQ8 AL23 IO L17N T2U N9 AD10N 45
SRAM_DQ12 AL22 IO L17P T2U N8 AD10P 45
SRAM_A11 AL25 IO L18N T2U N11 AD2N 45
SRAM_A18 AL24 IO L18P T2U N10 AD2P 45
SRAM_DQ14 AN21 IO L19N T3L N1 DBC AD9N 45
SRAM_DQ13 AM21 IO L19P T3L N0 DBC AD9P 45
SRAM_DQ11 AN22 IO L20N T3L N3 AD1N 45
AM22 IO L20P T3L N2 AD1P 45
AN24 IO L21N T3L N5 AD8N 45
AM24 IO L21P T3L N4 AD8P 45
SRAM_A14 AP21 IO L22N T3U N7 DBC AD0N 45
SRAM_A7 AP20 IO L22P T3U N6 DBC AD0P 45
AP25 IO L23N T3U N9 45
SRAM_A8 AP24 IO L23P T3U N8 45
SRAM_DQ9 AP23 IO L24N T3U N11 45
SRAM_A9 AN23 IO L24P T3U N10 45
+1V8
1.8V
U1G
BANK 44
XCKU095-3FFVA1156E
AD17 VCCO 44
AE14 VCCO 44
AG18 VCCO 44
AH15 VCCO 44
AK19 VCCO 44
AL16 VCCO 44
AP17 VCCO 44
VREF 45 AF19
AP19 IO T0U N12 VRP 44
AJ19 IO T1U N12 44
AH14 IO T2U N12 44
AD14 IO T3U N12 44
AP14 IO L1N T0L N1 DBC 44
AN14 IO L1P T0L N0 DBC 44
AP18 IO L2N T0L N3 44
AN19 IO L2P T0L N2 44
AN16 IO L3N T0L N5 AD15N 44
AM17 IO L3P T0L N4 AD15P 44
AN17 IO L4N T0U N7 DBC AD7N 44
AN18 IO L4P T0U N6 DBC AD7P 44
AM15 IO L5N T0U N9 AD14N 44
AM16 IO L5P T0U N8 AD14P 44
AP15 IO L6N T0U N11 AD6N 44
AP16 IO L6P T0U N10 AD6P 44
AM14 IO L7N T1L N1 QBC AD13N 44
AL14 IO L7P T1L N0 QBC AD13P 44
AM19 IO L8N T1L N3 AD5N 44
AL19 IO L8P T1L N2 AD5P 44
AL15 IO L9N T1L N5 AD12N 44
AD12P AK15 IO L9P T1L N4 AD12P 44
XADC_AGND
AL17 IO L10N T1U N7 QBC AD4N 44
AL18 IO L10P T1U N6 QBC AD4P 44
AK18 IO L11N T1U N9 GC 44
AJ18 IO L11P T1U N8 GC 44
AK16 IO L12N T1U N11 GC 44
AK17 IO L12P T1U N10 GC 44
AH17 IO L13N T2L N1 GC QBC 44
AH18 IO L13P T2L N0 GC QBC 44
AJ16 IO L14N T2L N3 GC 44
AH16 IO L14P T2L N2 GC 44
AG16 IO L15N T2L N5 AD11N 44
AG17 IO L15P T2L N4 AD11P 44
AJ14 IO L16N T2U N7 QBC AD3N 44
AJ15 IO L16P T2U N6 QBC AD3P 44
AH19 IO L17N T2U N9 AD10N 44
AG19 IO L17P T2U N8 AD10P 44
AG14 IO L18N T2U N11 AD2N 44
AG15 IO L18P T2U N10 AD2P 44
AD18 IO L19N T3L N1 DBC AD9N 44
AD19 IO L19P T3L N0 DBC AD9P 44
AF14 IO L20N T3L N3 AD1N 44
AD1P AF15 IO L20P T3L N2 AD1P 44
AF18 IO L21N T3L N5 AD8N 44
AD8P AE18 IO L21P T3L N4 AD8P 44
AE15 IO L22N T3U N7 DBC AD0N 44
AD0P AE16 IO L22P T3U N6 DBC AD0P 44
AF17 IO L23N T3U N9 44
AE17 IO L23P T3U N8 44
AD15 IO L24N T3U N11 44
AD16 IO L24P T3U N10 44
XADC_AGND
Title: Kintex IO Banks
Approved: YES
Rev: 3
Project: CW341 .
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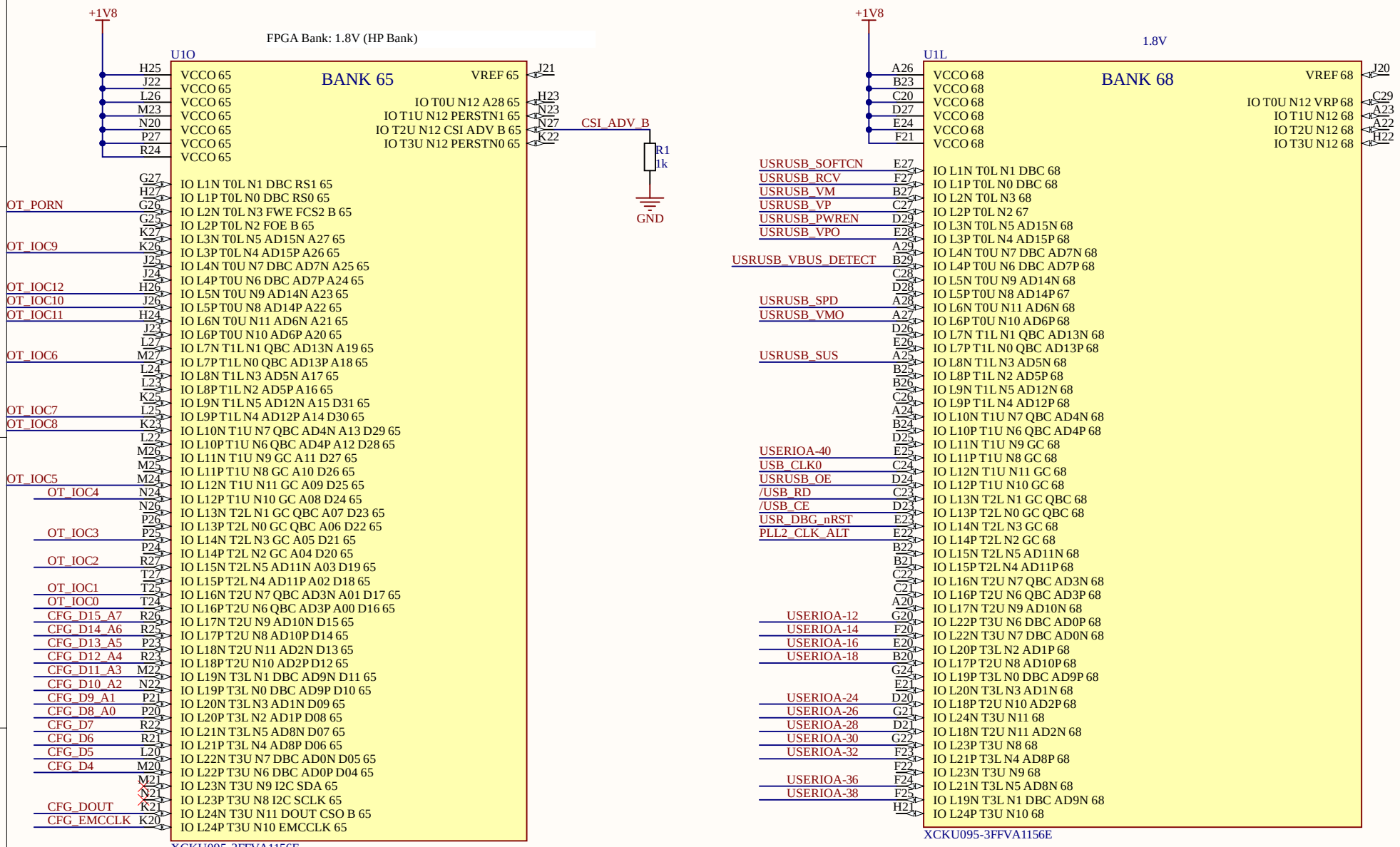

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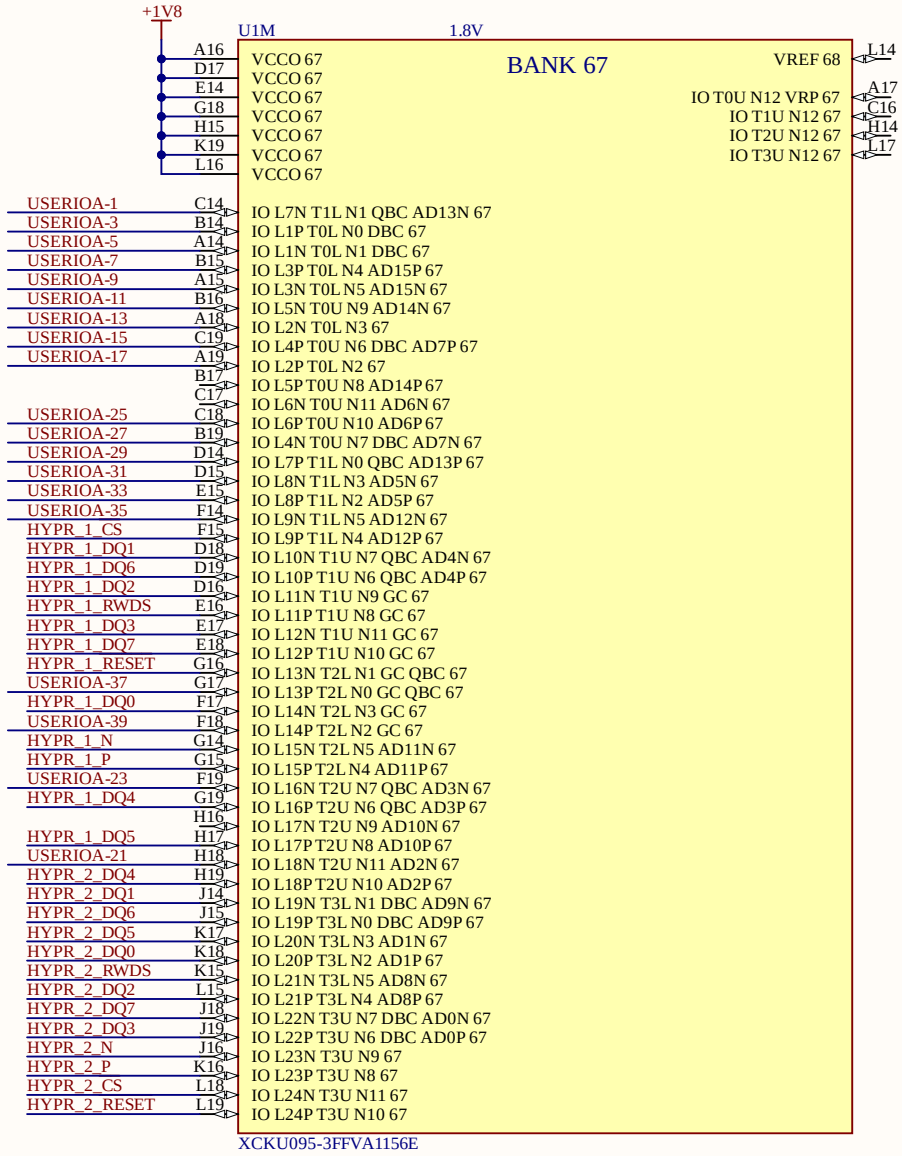

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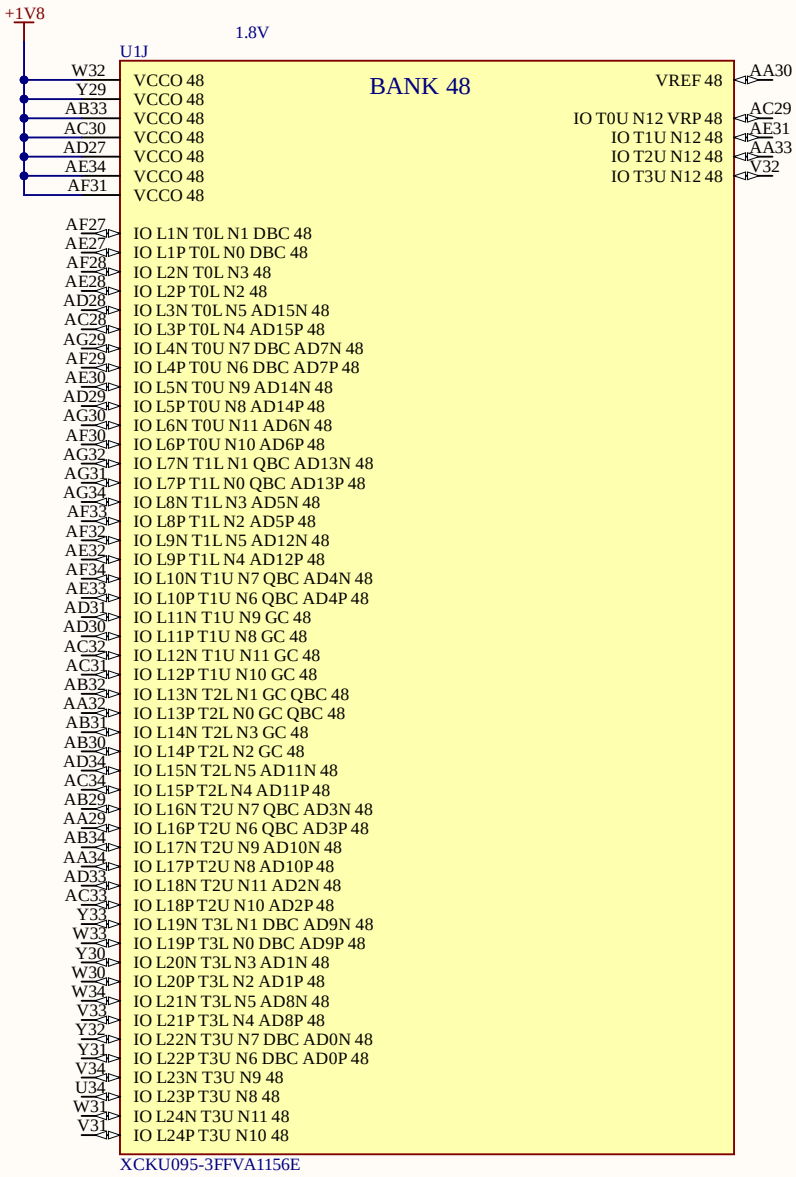

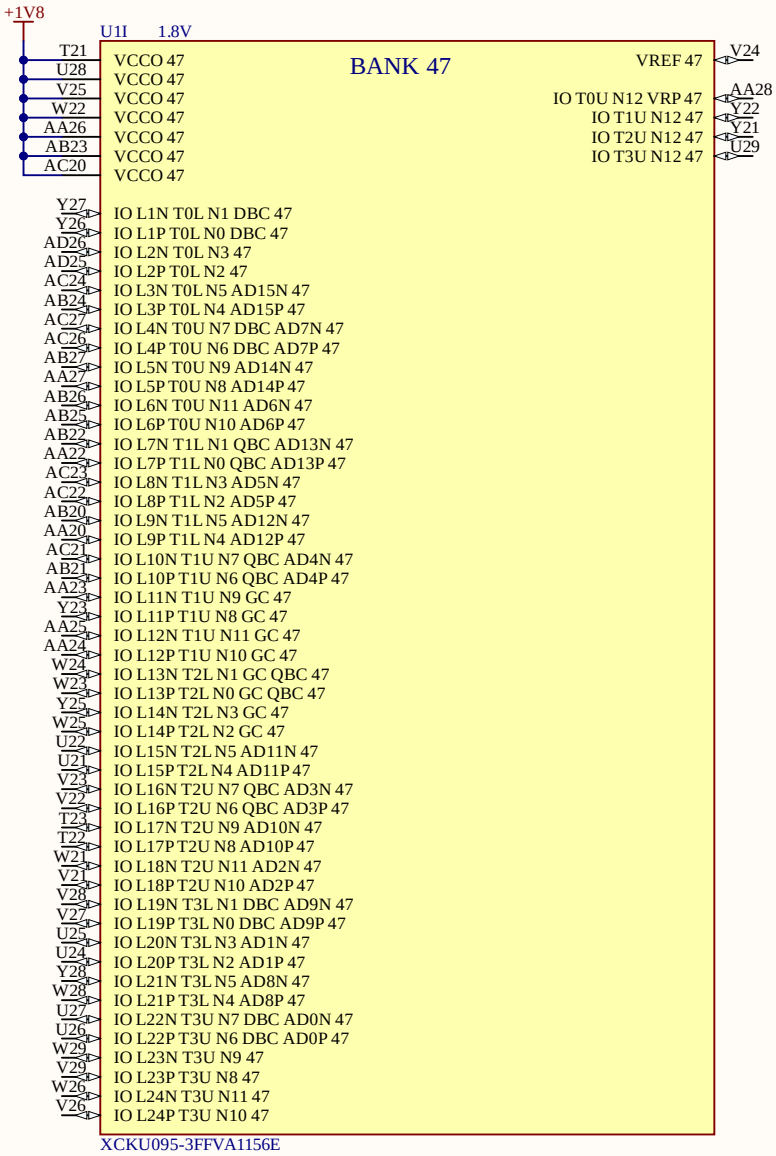

Title: **Kintex IO Banks**		Approved: YES	NewAE Technology
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File: CW341_FPGAIO_5.SchDoc			

MH1

4-40 MH, Tight Fit

MH2

4-40 MH, Tight Fit

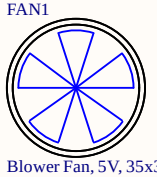
MH4

4-40 MH, Tight Fit

MH6

4-40 MH, Tight Fit

FAN1



Blower Fan, 5V, 35x35mm

Fan mounted top or bottom side of board. Blower style to pass over "open die top".

Optional heatsink-mounted fan also support - 30x30mm should screw into heatsink, otherwise mounting bracket needed.

HS1

ATS-FPX035035015-56-C2-R0

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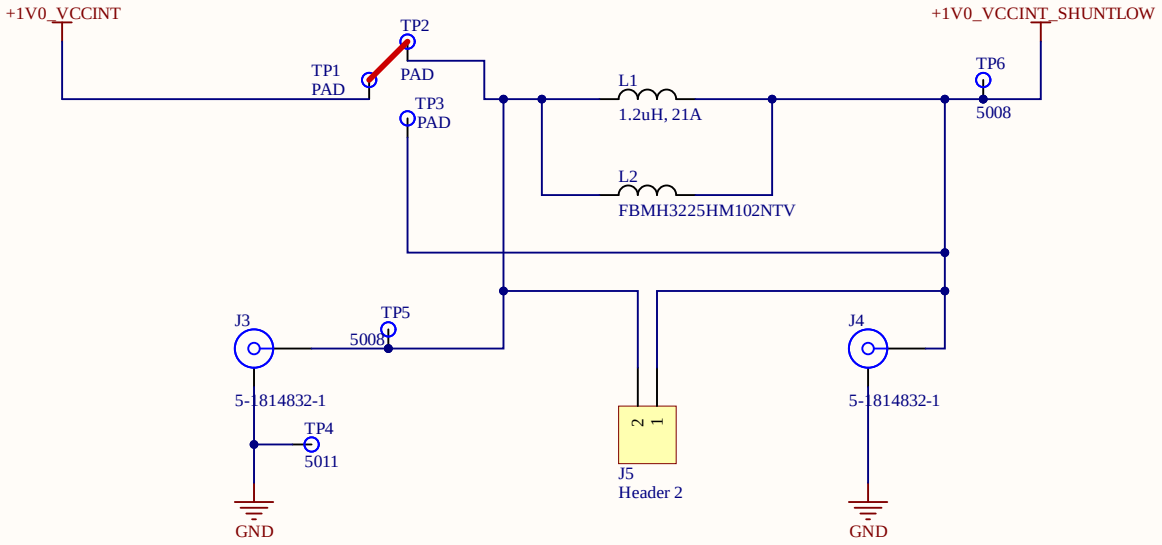
File: CW341_HeatsinkFan.SchDoc			



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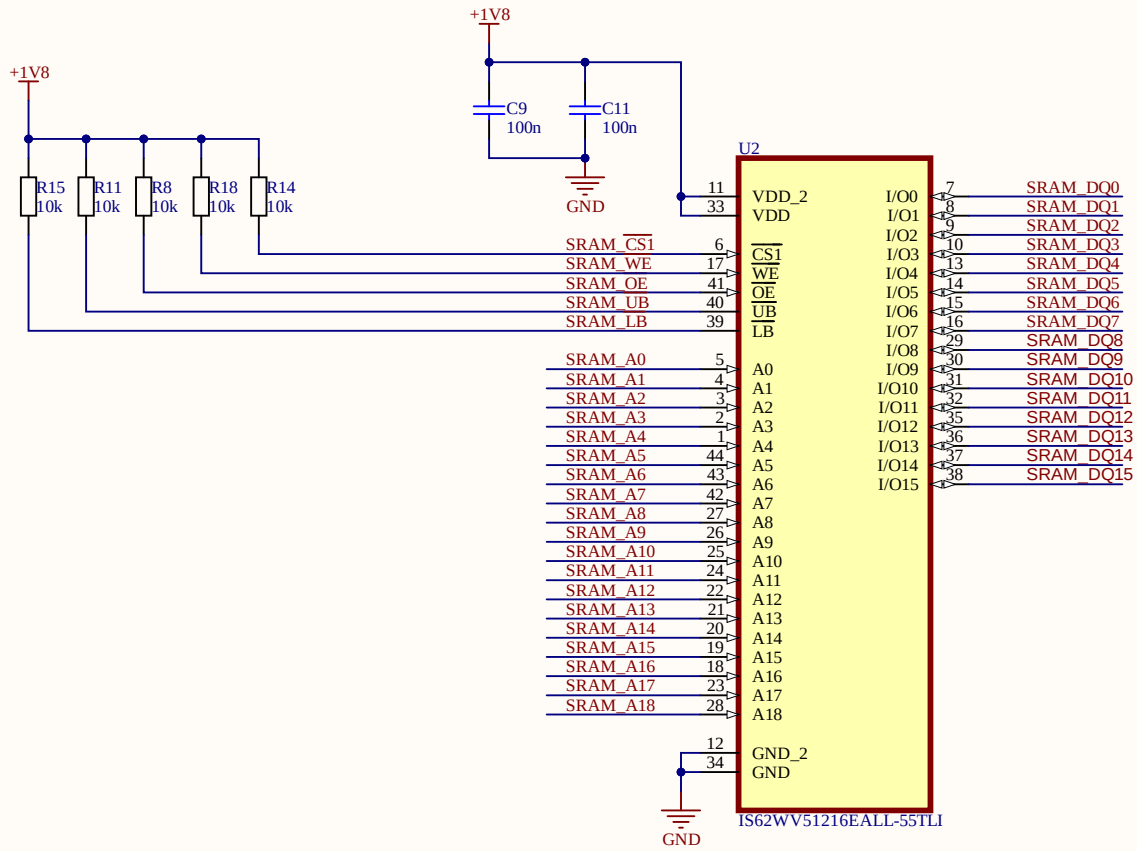

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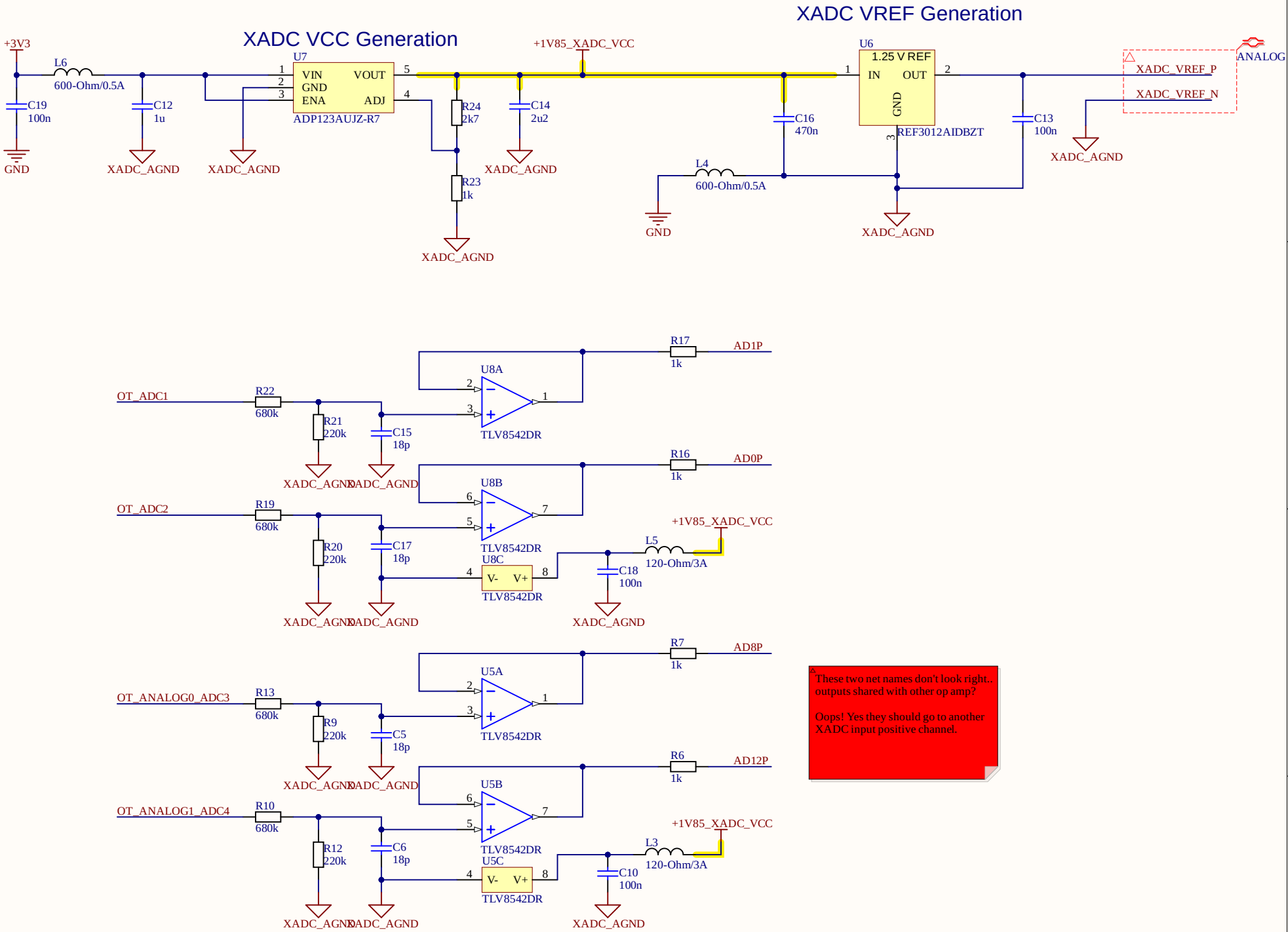

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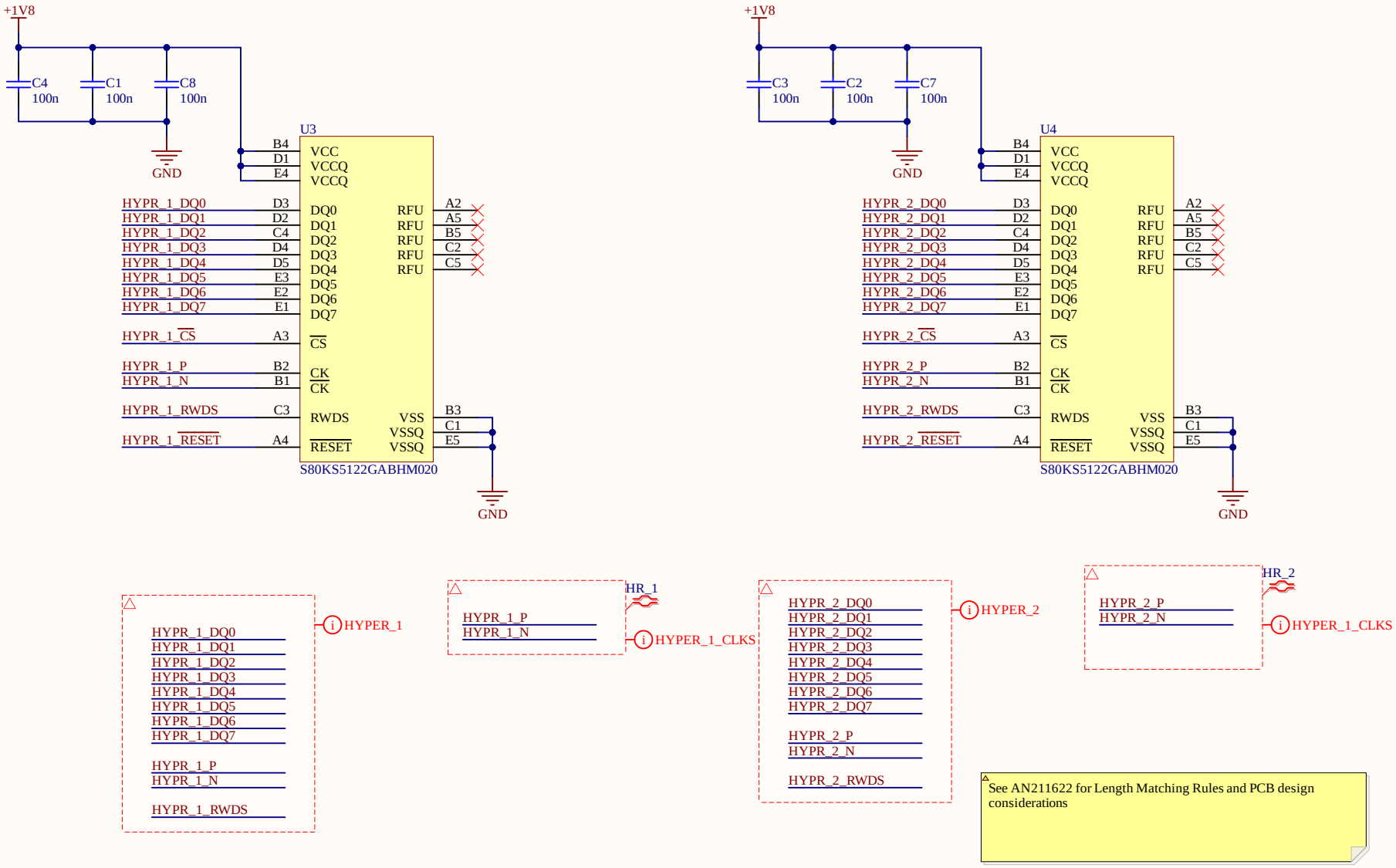

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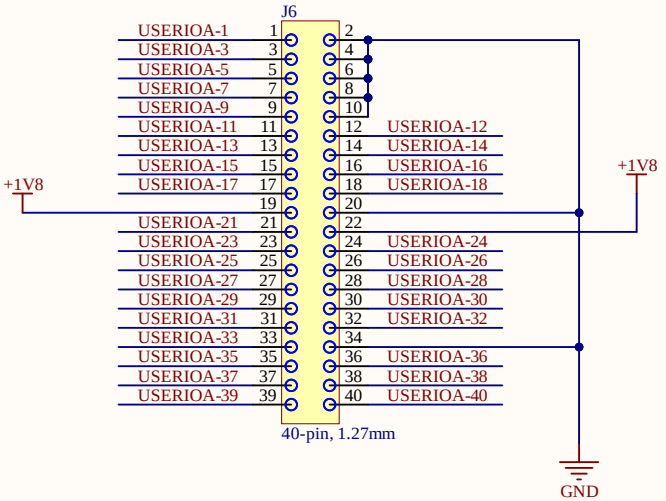

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