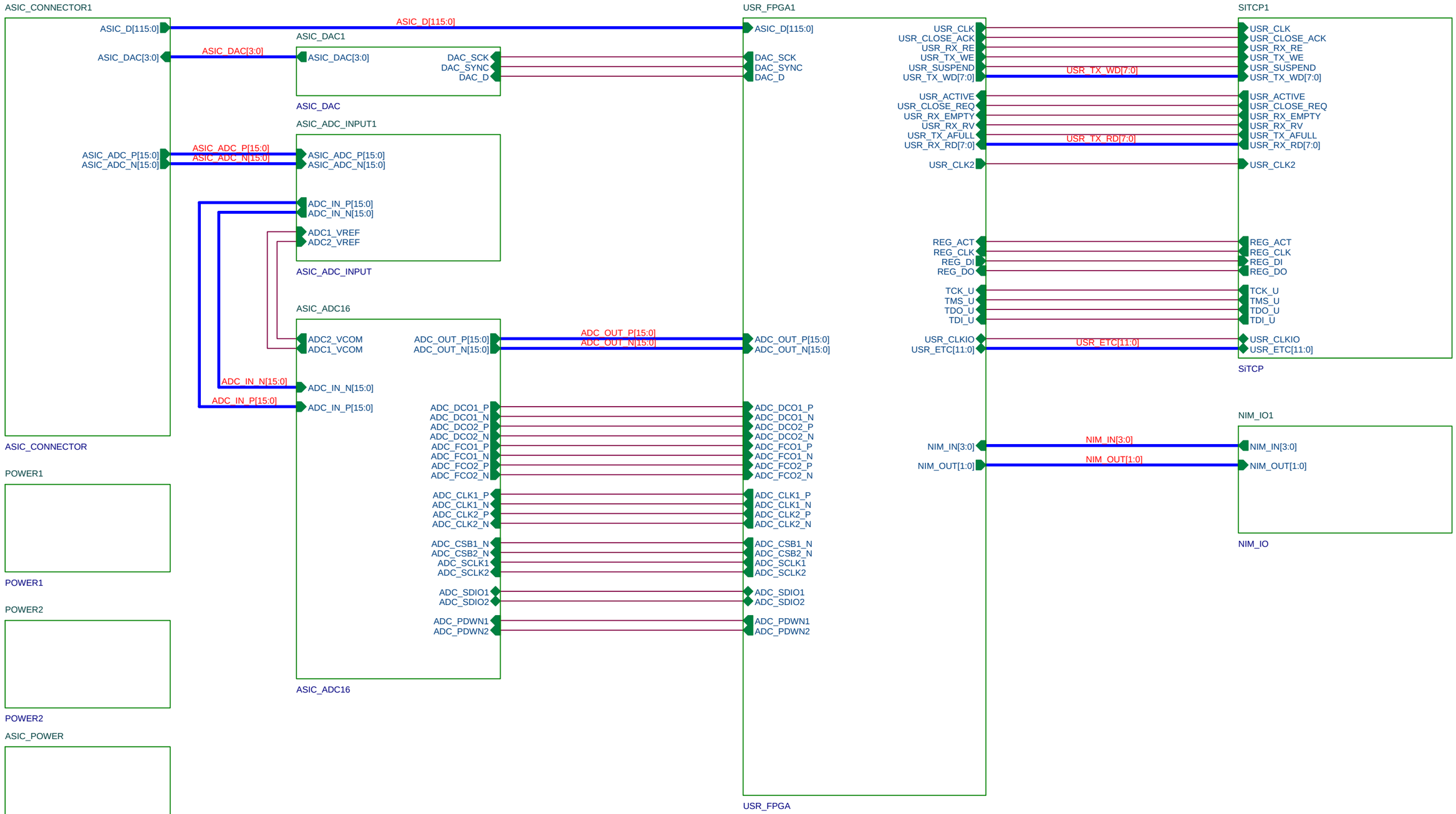

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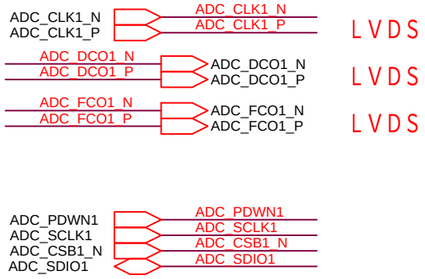

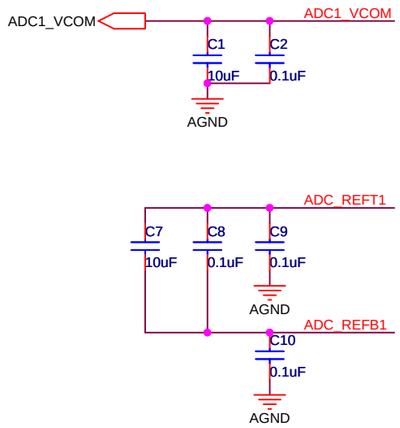

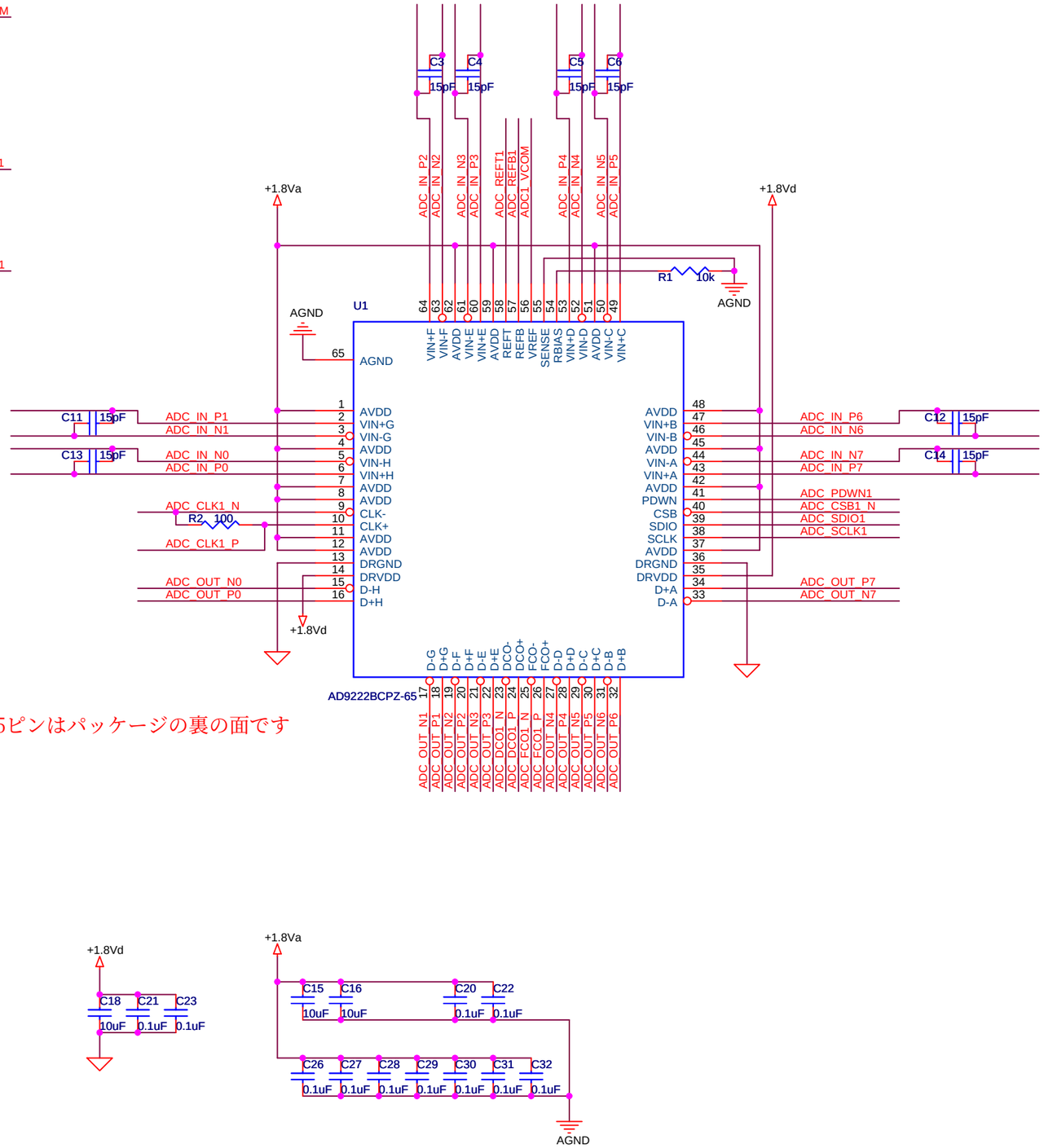

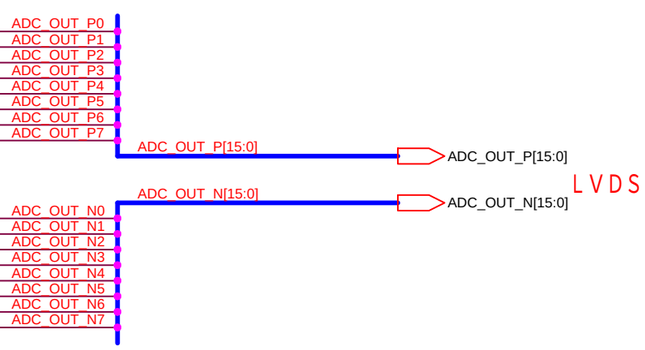

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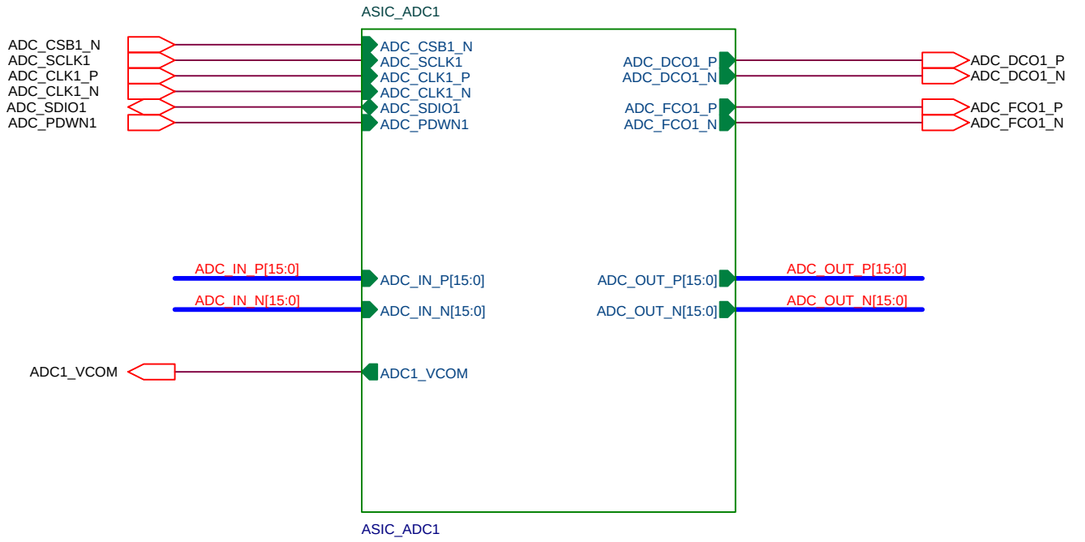

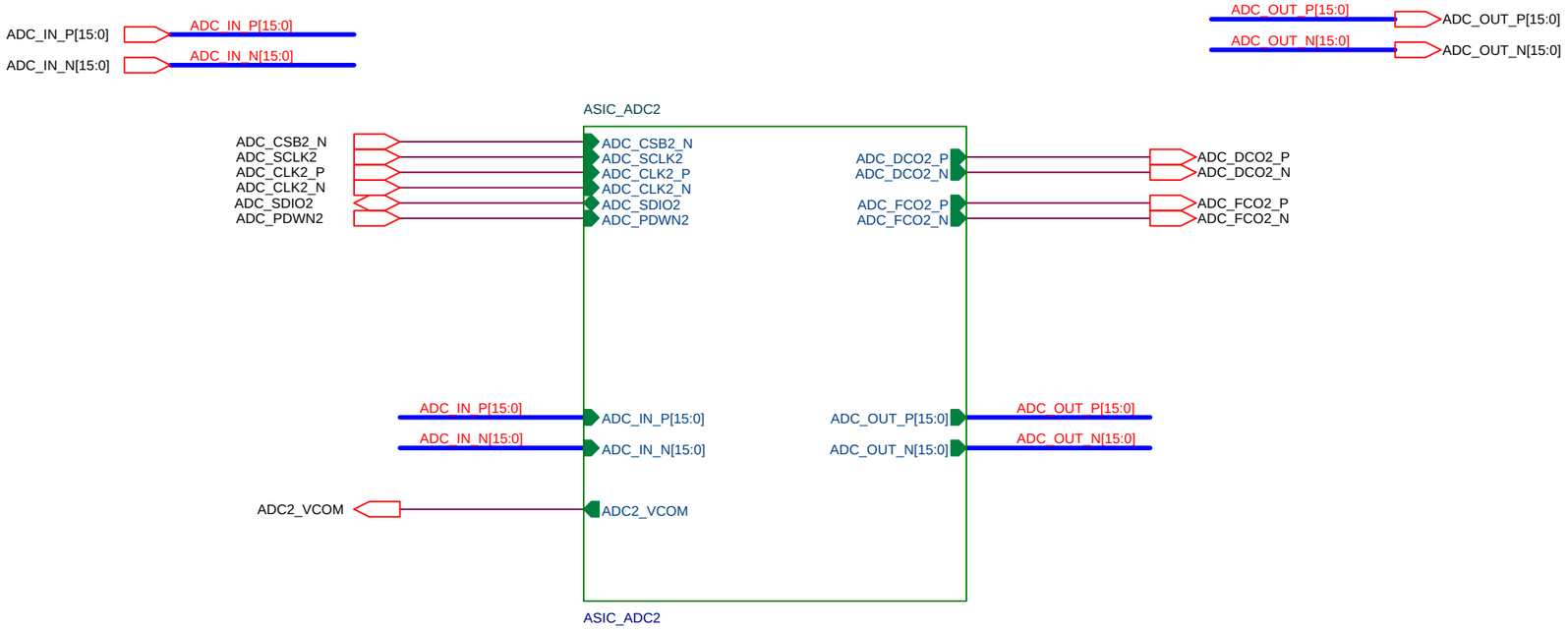

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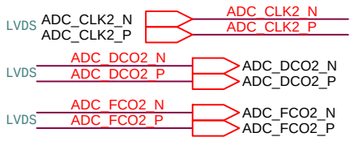
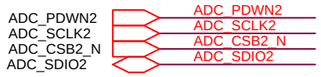
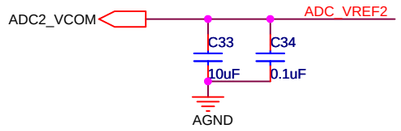


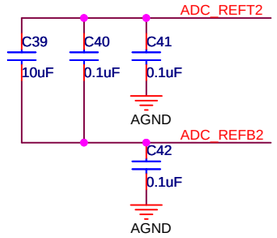
LVDS

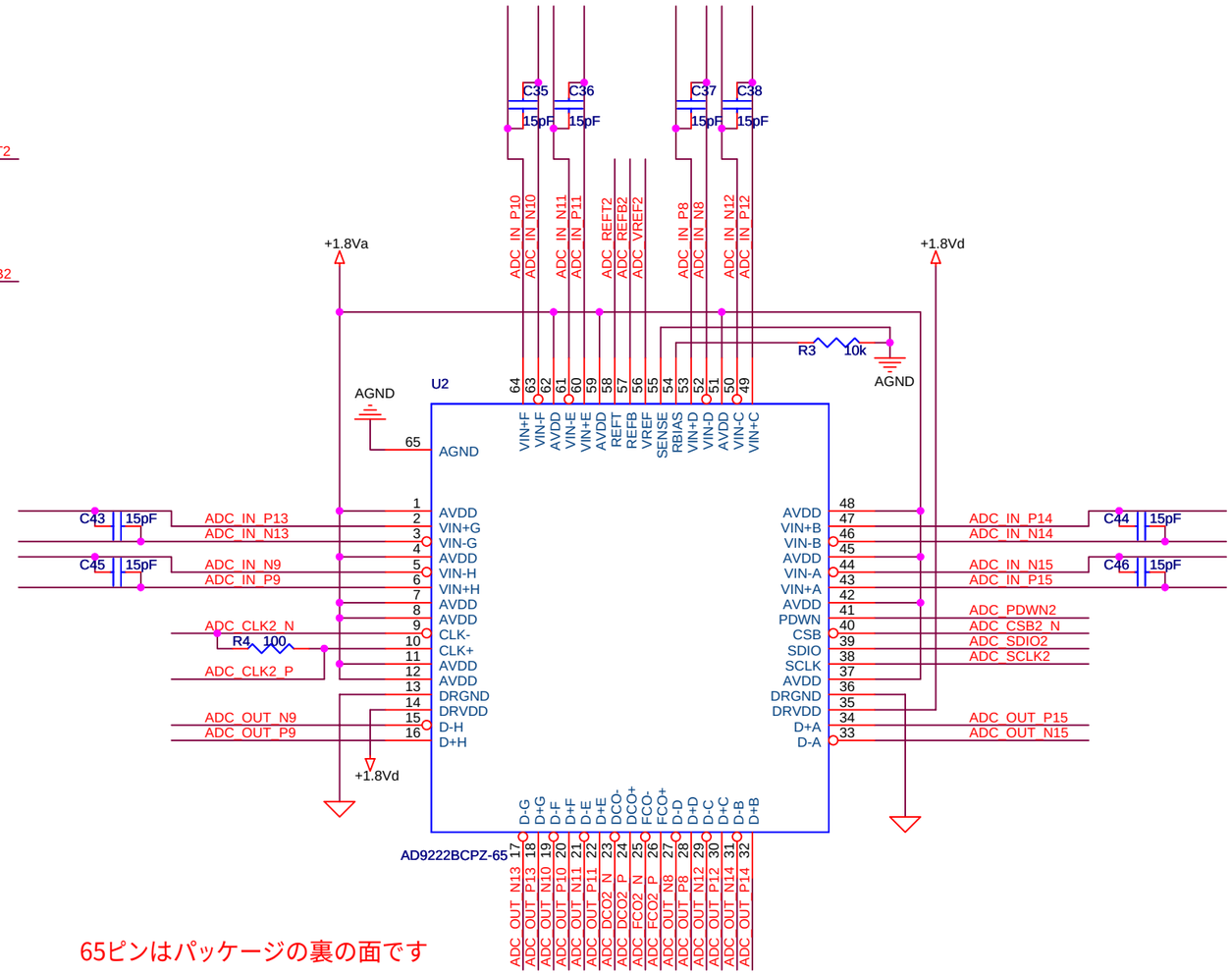
LVDS

LVDS









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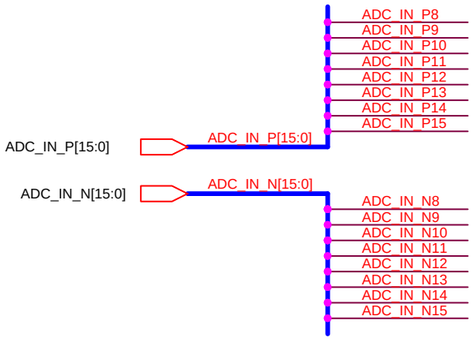
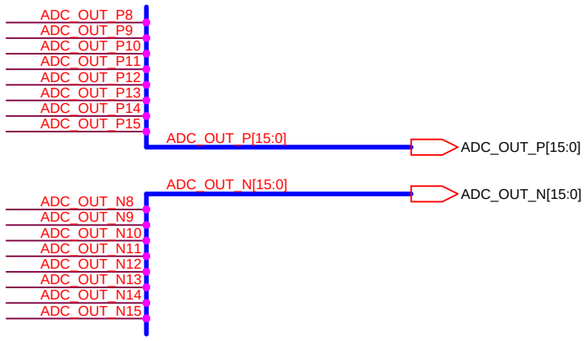
DIFFERENCIAL





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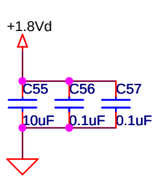

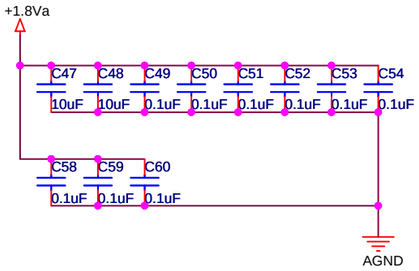

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ANALOG
DIFFERENCIAL

ASIC_ADC_P[15:0]
ASIC_ADC_N[15:0]

ASIC_ADC_P[15:0]
ASIC_ADC_N[15:0]

ASIC_ADC_N0
ASIC_ADC_N1
ASIC_ADC_N2
ASIC_ADC_N3
ASIC_ADC_N4
ASIC_ADC_N5
ASIC_ADC_N6
ASIC_ADC_N7
ASIC_ADC_N8
ASIC_ADC_N9
ASIC_ADC_N10
ASIC_ADC_N11
ASIC_ADC_N12
ASIC_ADC_N13
ASIC_ADC_N14
ASIC_ADC_N15

ASIC_AMP1

ASIC_ADC_P[15:0]
ADC_N[15:0]
ADC1_VCOM

ASIC_ADC_P[15:0]
ADC_N[15:0]
ADC1_VCOM

ADC_IN_P[15:0]
ADC_IN_N[15:0]

ADC_IN_P[15:0]
ADC_IN_N[15:0]

ASIC_AMP1

ASIC_AMP2

ASIC_ADC_P[15:0]
ADC_N[15:0]
ADC2_VCOM

ASIC_ADC_P[15:0]
ADC_N[15:0]
ADC2_VCOM

ADC_IN_P[15:0]
ADC_IN_N[15:0]

ADC_IN_P[15:0]
ADC_IN_N[15:0]

ASIC_AMP2

+3.3Va
R293
2K
R294
750
C71 10uF
C72 0.1uF
C66 0.1uF
AGND
U3A
AD8044R-14
ADC1_VCOM
U3B
AD8044R-14
U3C
AD8044R-14
ADC2_VCOM
C68 0.1uF
U3D
AD8044R-14
R43
PV37W_10K
2COM_REF
C69 10uF

Pedestal SELECT
1:2=ASiC ADC
2:3=INT VR

JP1 JUMPER3P
1 ASIC_ADC_N0
2 ADC_N0
3 REF0

JP2 JUMPER3P
1 ASIC_ADC_N1
2 ADC_N1
3 REF1

JP3 JUMPER3P
1 ASIC_ADC_N2
2 ADC_N2
3 REF2

JP4 JUMPER3P
1 ASIC_ADC_N3
2 ADC_N3
3 REF3

JP5 JUMPER3P
1 ASIC_ADC_N4
2 ADC_N4
3 REF4

JP6 JUMPER3P
1 ASIC_ADC_N5
2 ADC_N5
3 REF5

JP7 JUMPER3P
1 ASIC_ADC_N6
2 ADC_N6
3 REF6

JP8 JUMPER3P
1 ASIC_ADC_N7
2 ADC_N7
3 REF7

JP9 JUMPER3P
1 ASIC_ADC_N8
2 ADC_N8
3 REF8

JP10 JUMPER3P
1 ASIC_ADC_N9
2 ADC_N9
3 REF9

JP11 JUMPER3P
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2 ADC_N10
3 REF10

JP12 JUMPER3P
1 ASIC_ADC_N11
2 ADC_N11
3 REF11

JP13 JUMPER3P
1 ASIC_ADC_N12
2 ADC_N12
3 REF12

JP14 JUMPER3P
1 ASIC_ADC_N13
2 ADC_N13
3 REF13

JP15 JUMPER3P
1 ASIC_ADC_N14
2 ADC_N14
3 REF14

JP16 JUMPER3P
1 ASIC_ADC_N15
2 ADC_N15
3 REF15

U45A AD8044R-14
U45B AD8044R-14
U45C AD8044R-14
U45D AD8044R-14
U46A AD8044R-14
U46B AD8044R-14
U46C AD8044R-14
U46D AD8044R-14
U47A AD8044R-14
U47B AD8044R-14
U47C AD8044R-14
U47D AD8044R-14
U48A AD8044R-14
U48B AD8044R-14
U48C AD8044R-14
U48D AD8044R-14

C453 10uF C454 0.1uF
C455 10uF C456 0.1uF
C461 10uF C462 0.1uF
C467 10uF C468 0.1uF
C449 0.1uF
C457 0.1uF
C463 0.1uF
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C472 0.1uF

REF9 REF13 REF10 REF0
REF1 REF2 REF3 REF4
REF5 REF6 REF7 REF11
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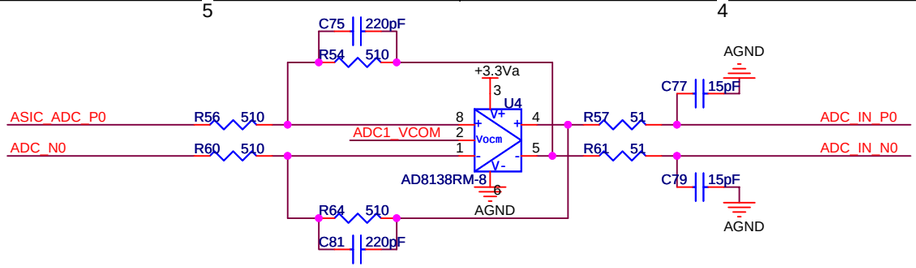

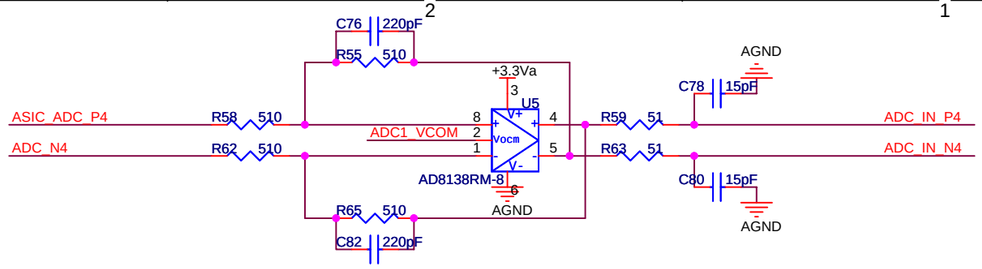

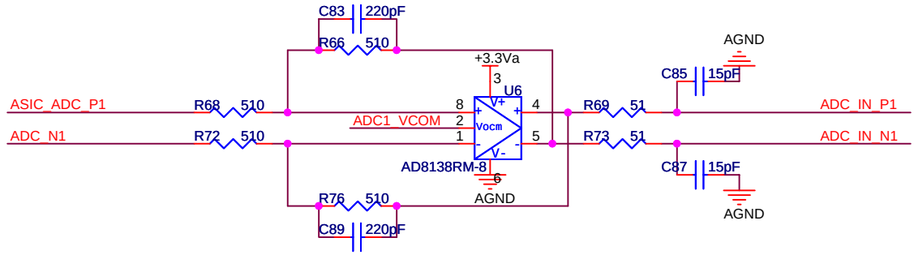

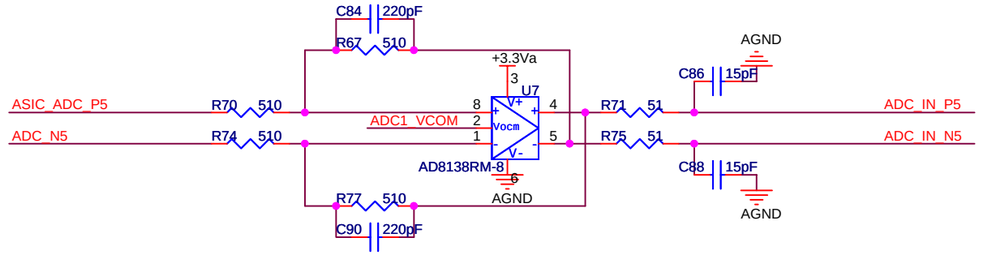

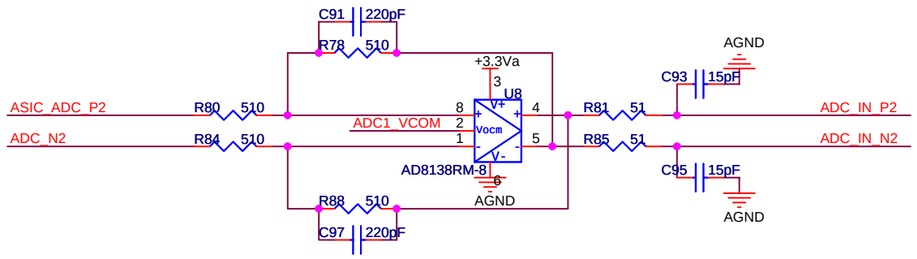

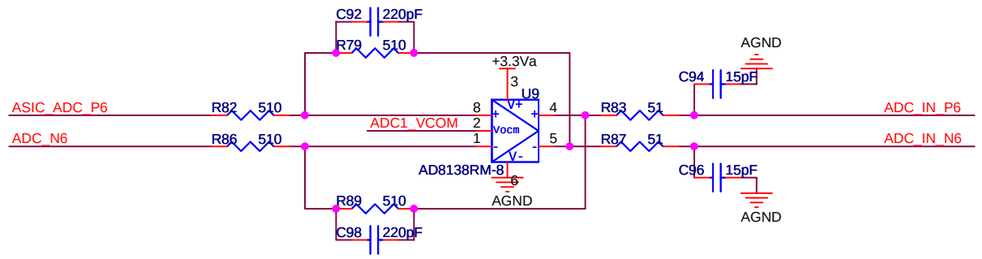

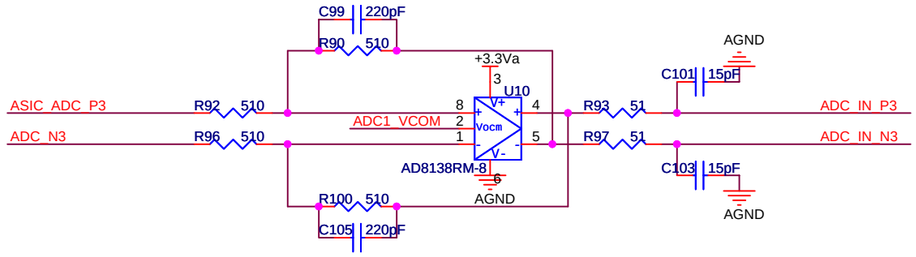

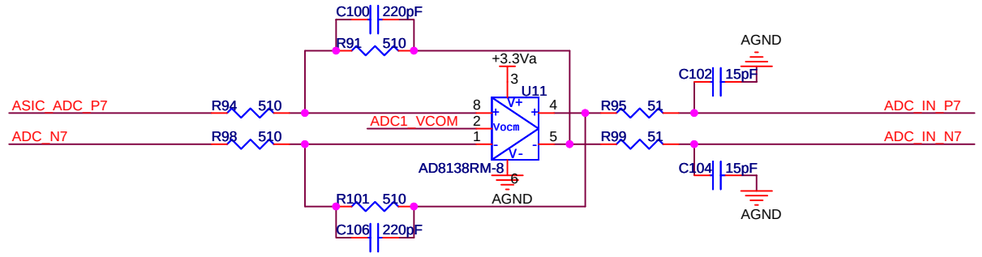

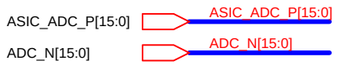

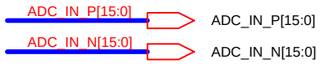

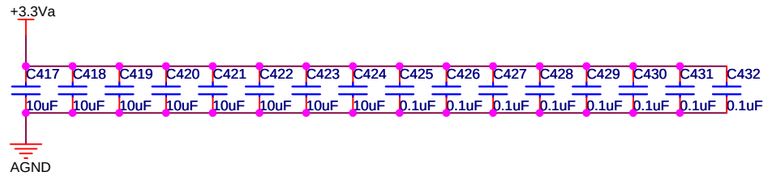

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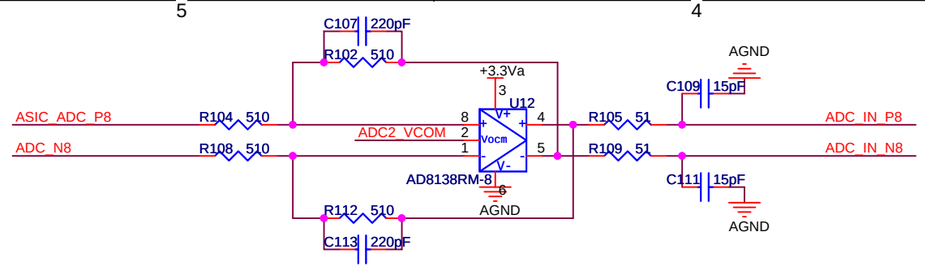

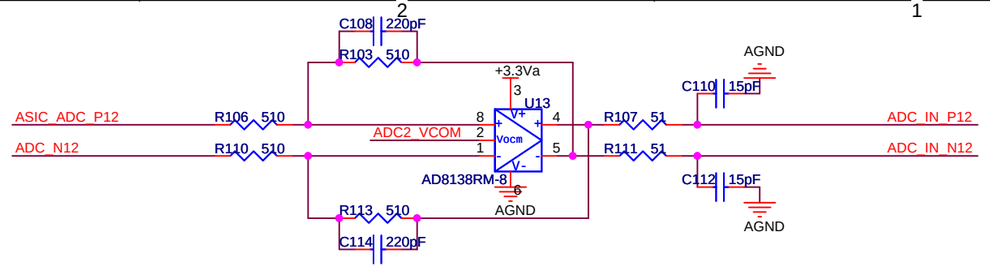

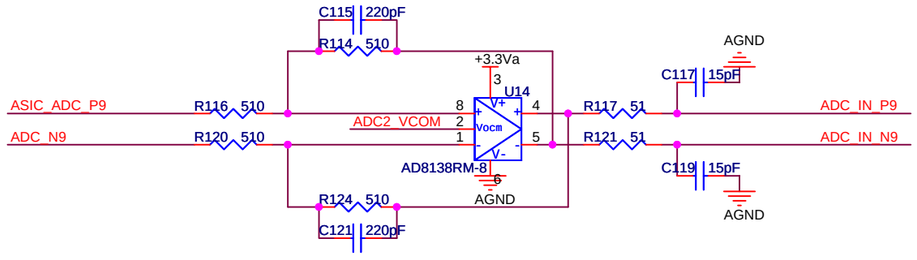

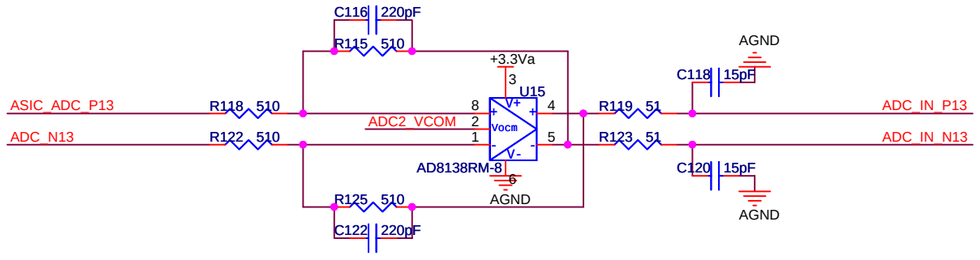

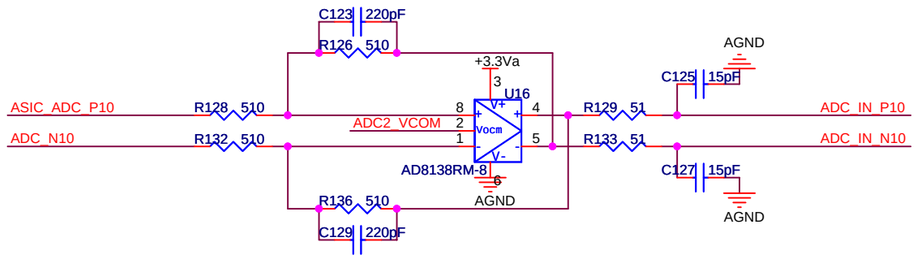

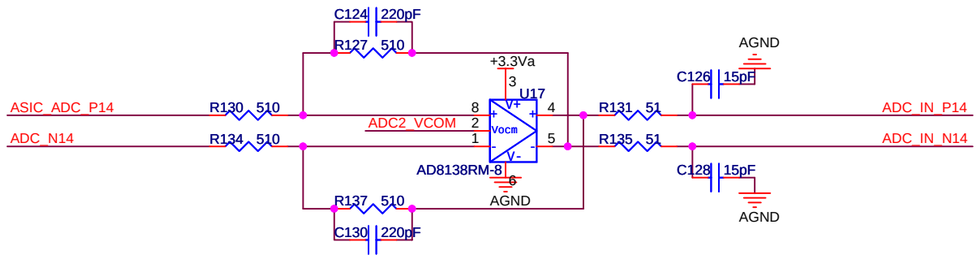

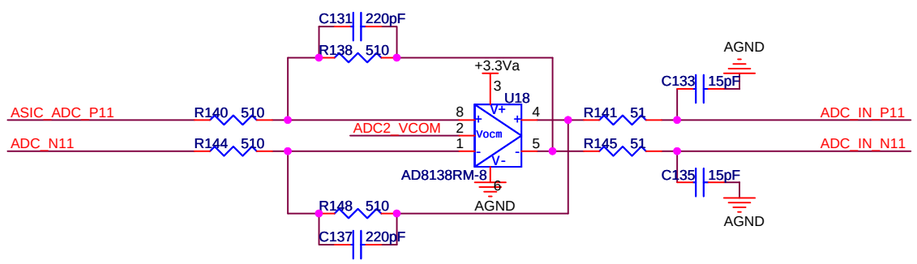

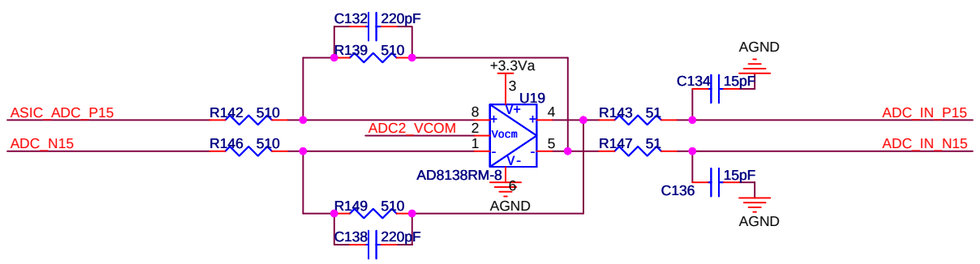

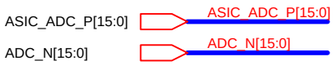

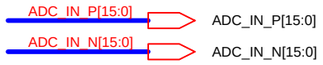

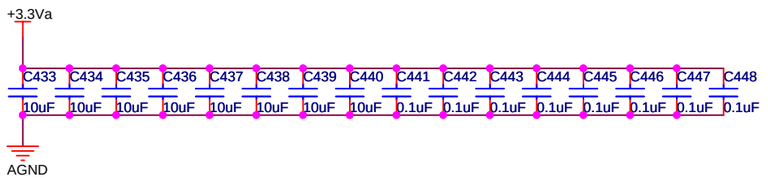

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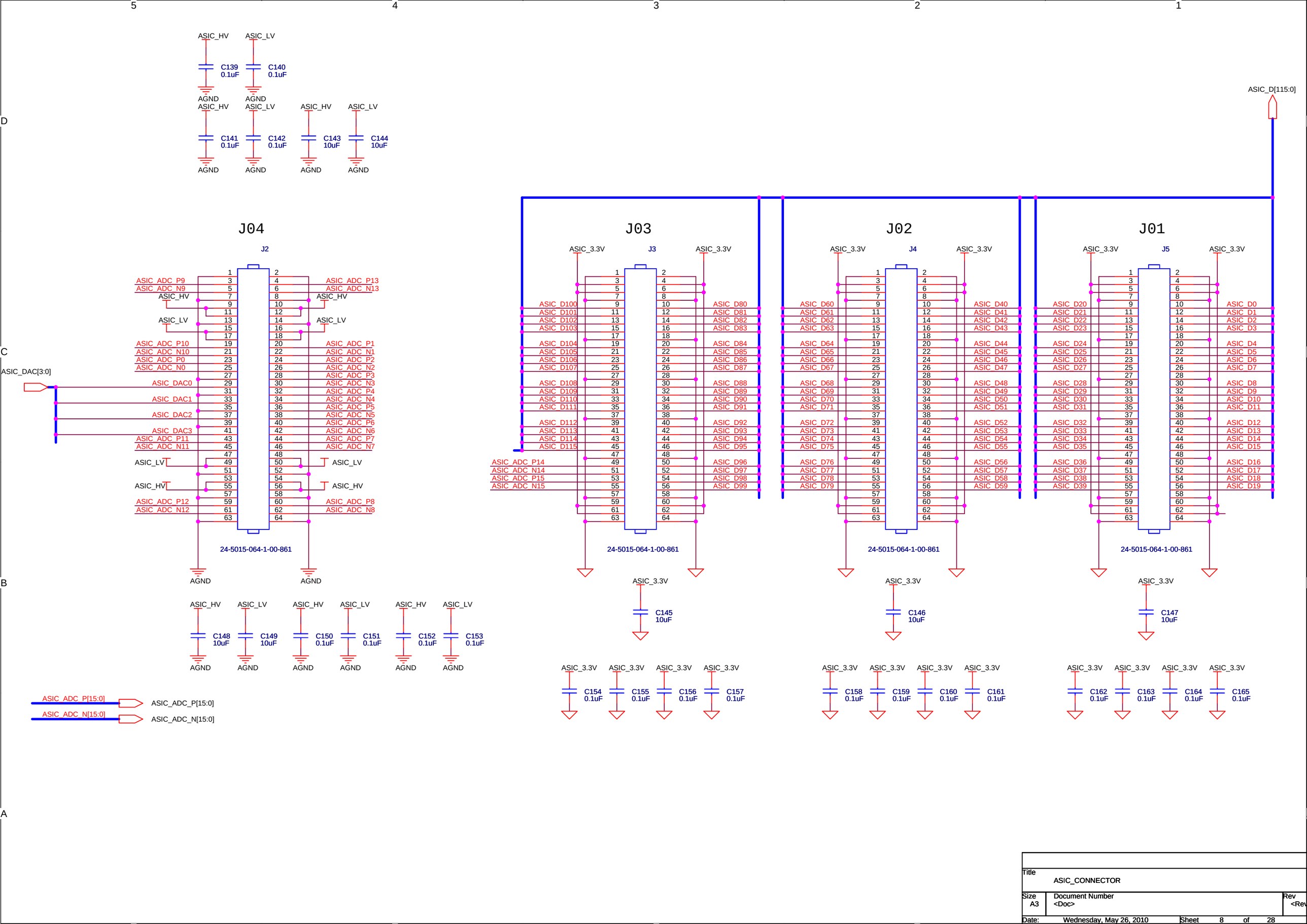
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4
3
2
1
D
C
B
A
ASIC_HV
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C140 0.1uF
AGND
C141 0.1uF
C142 0.1uF
C143 10uF
C144 10uF
ASIC_D[115:0]
J04
J2
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ASIC_DAC3
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ASIC_D103
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ASIC_D111
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ASIC_D114
ASIC_D115
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J4
ASIC_D60
ASIC_D61
ASIC_D62
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ASIC_D19
C145 10uF
C146 10uF
C147 10uF
C148 10uF
C149 10uF
C150 0.1uF
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Size
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Document Number
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Rev
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Date:
Wednesday, May 26, 2010
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8
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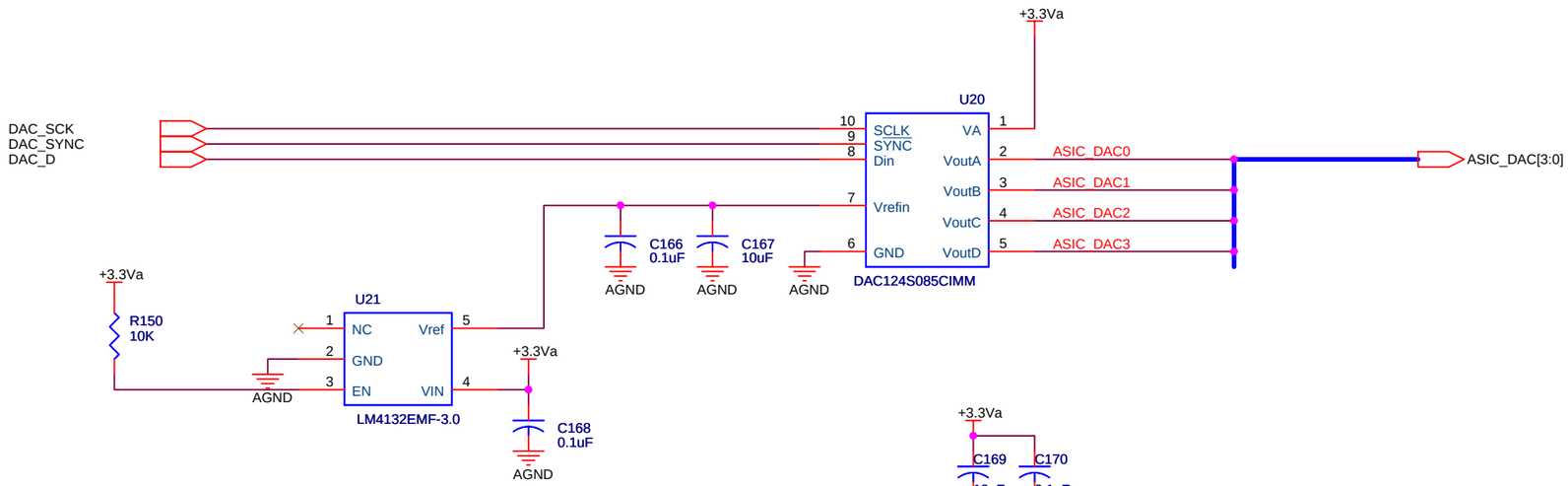
28



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Size A3	Document Number <Doc>	Rev <Rev
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For Low Voltage

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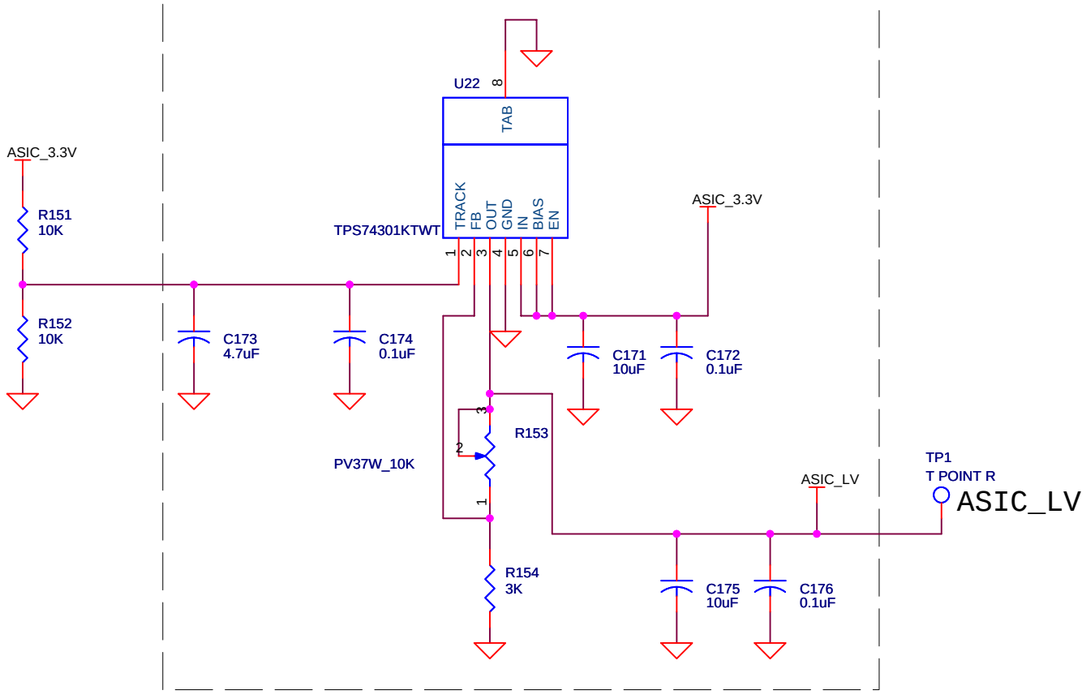

ICの近くに配置
ＶＲは多回転型を使用してください

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Size A3	Document Number <Doc>	Rev <Rev
Date: Wednesday, May 26, 2010	Sheet 10 of 28	

TDI_U
TMS_U
TCK_U
TDO_U

R155 0
R156 0
R157 0

Jtag
コネクタの近くに置く
+3.3Vd
J6
VCC TMS TCK TDO TDI
87831-1420(MOLEX)

R161 0
R163 0
R164 0

Top View

U25A
Bank 0
option
+3.3Vd
R158 (4.7k)
R159 4.7k
R160 4.7k
R162 0
R165 0
R166 0
R167 0

Y12 TDI_0
Y11 TMS_0
W12 TCK_0
Y13 TDO_0
G16 HSWAPEN_0
H12 RDWR_B_0
W13 PWRDWN_B_0
Y16 VBATT_0
W15 M0_0
Y15 M1_0
W14 M2_0
AE17 AVSS_SM(GND)
AF16 VP_SM(GND)
AF15 VN_SM(GND)
AF17 AVDD_SM(2.5V)
AE16 VREFP_SM(GND)
AE15 VREFN_SM(GND)

CCLK_0 G14
DONE_0 H14
INIT_0 G15
PROGRAM_B_0 H15
DOUT_BUSY_0 Y14
D_IN_0 G12
CS_B_0 G11
TDN_0 G13
TDP_0 H13
VCCO_0 V12
VCCO_0 J15
VCCAUX M9
VCCAUX N9
VCCAUX P9
VCCAUX W10
VCCAUX H11
VCCAUX W11
VCCAUX J12
VCCAUX V15
VCCAUX H16
VCCAUX W16
VCCAUX H17
VCCAUX N18
VCCAUX P18
VCCAUX R18

XC4VLX15-10FF668

+3.3Vd
+2.5Vd
C177 0.1uF/1005
C178 0.1uF/1005
C179 0.1uF/1005
C180 0.1uF/1005

+3.3Vd
R168 4.7k
R169 100
R170 100
R172 330
Conf.Done
LED1 1 2 R173 470
SML-310MTT86
+3.3Vd
R171 4.7k

U24
TDI OE/RESET
TMS TDO
TCK
D0
/CF CLK
BUSY /CE
REV_SEL0 /CEO
REV_SEL1 CLKOUT
/EN_EXT_SEL
VCCO
D1 VCCO
D2 VCCO
D3 VCCO
D4 VCCJ
D5
D6 VCCINT
D7 VCCINT
VCCINT
DNC
DNC GND
DNC GND
DNC GND
DNC GND
DNC GND
DNC GND
DNC GND
DNC
DNC
DNC
A3
E6 R174 0
H6
B3
B4
D2
C2
B2
C6
D6
G5
H2
B1
E1
G6
A1
A2
B6
F1
F5
F6
H1

XCF08PFSG48C

+3.3Vd
+3.3Vd
+1.8Vd
C181 0.1uF
C182 0.1uF
C183 0.1uF
C184 0.1uF
C185 0.1uF

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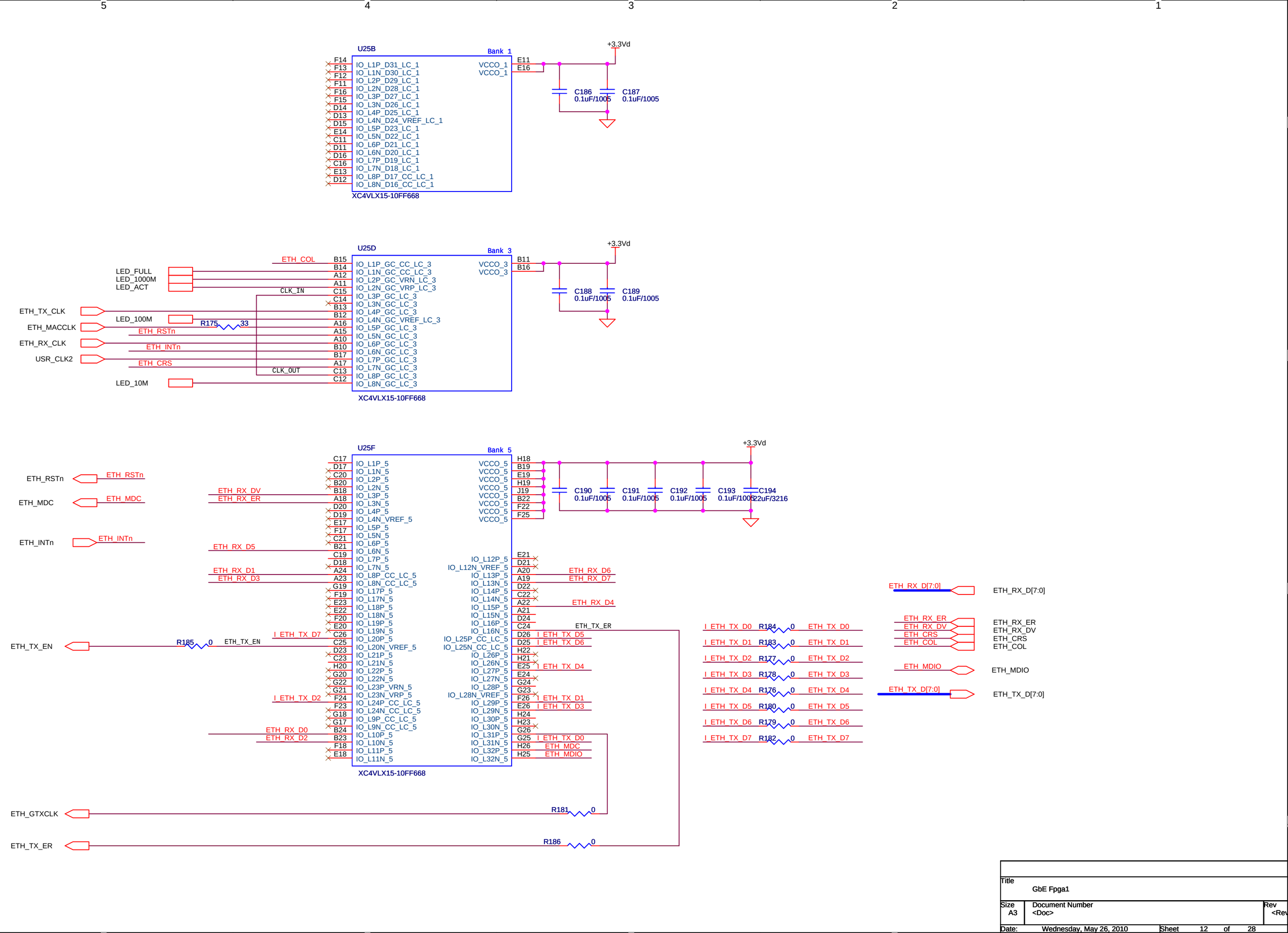
Size A3	Document Number <Doc>	Rev <Rev
Date: Wednesday, May 26, 2010	Sheet 11 of 28	



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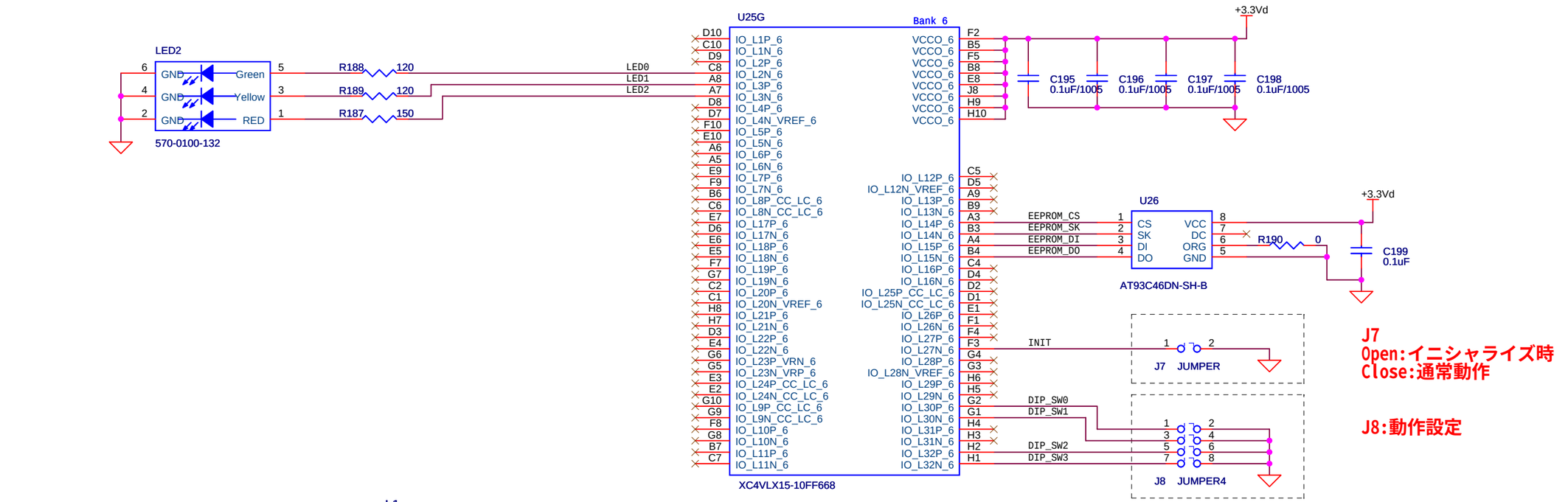

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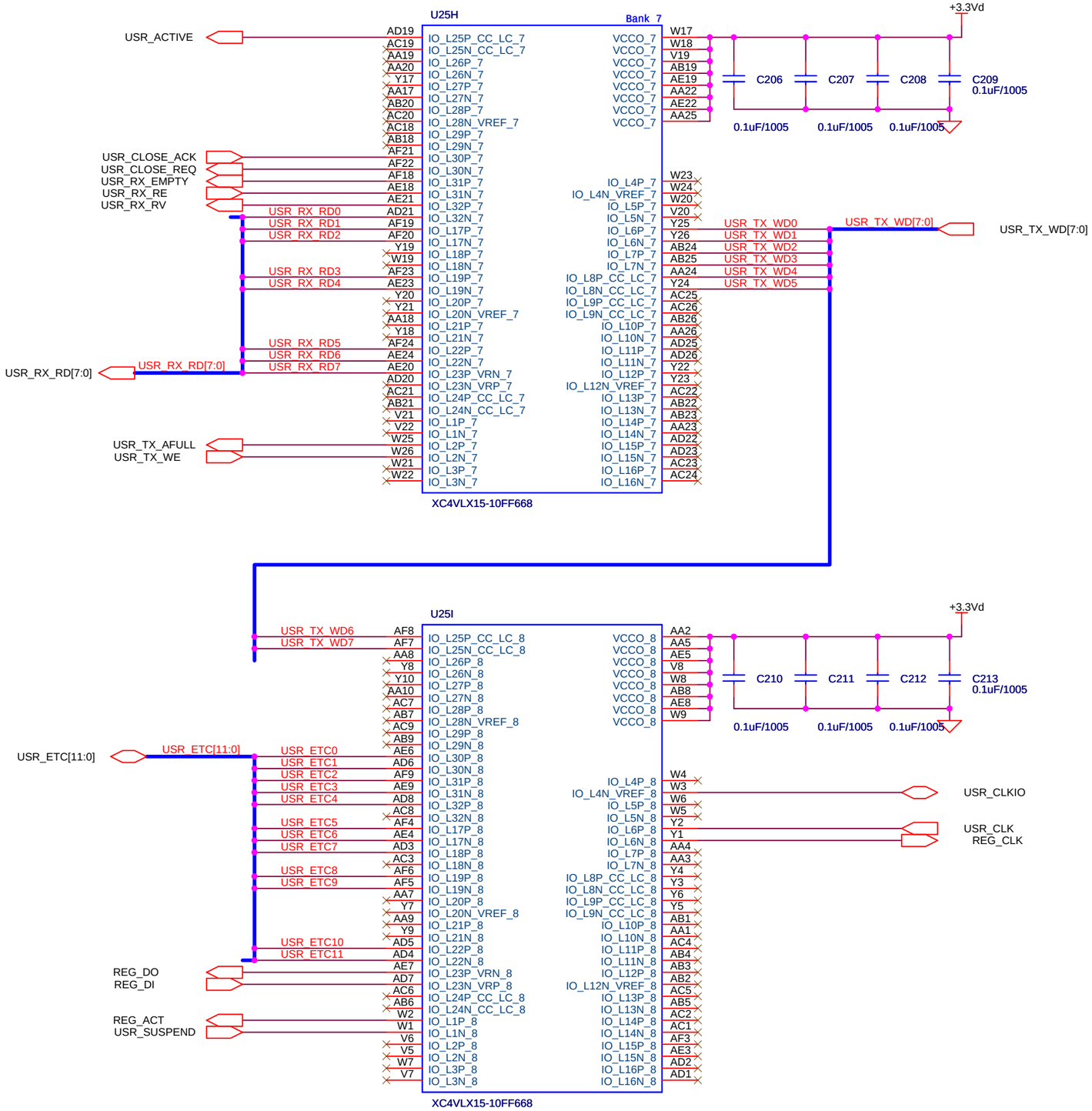

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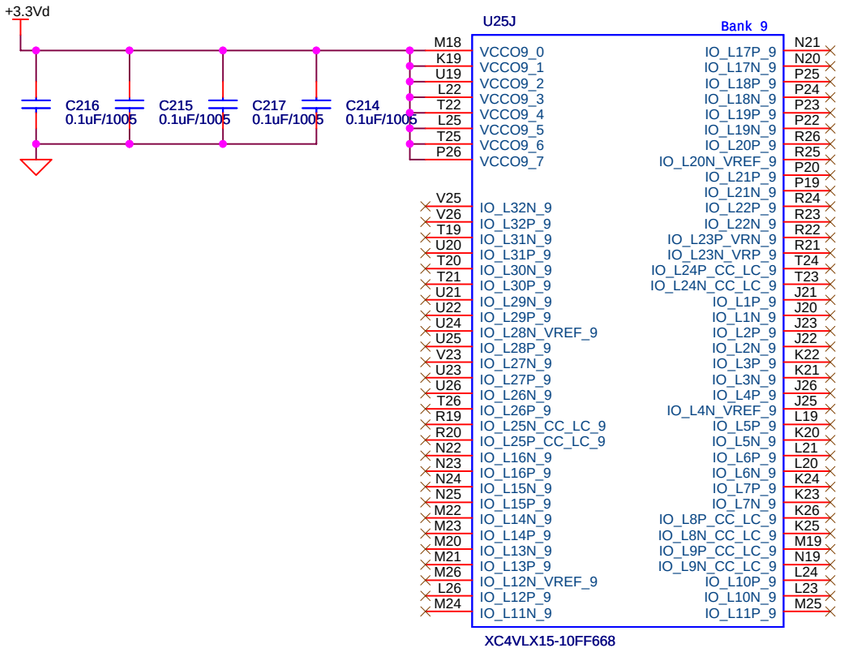

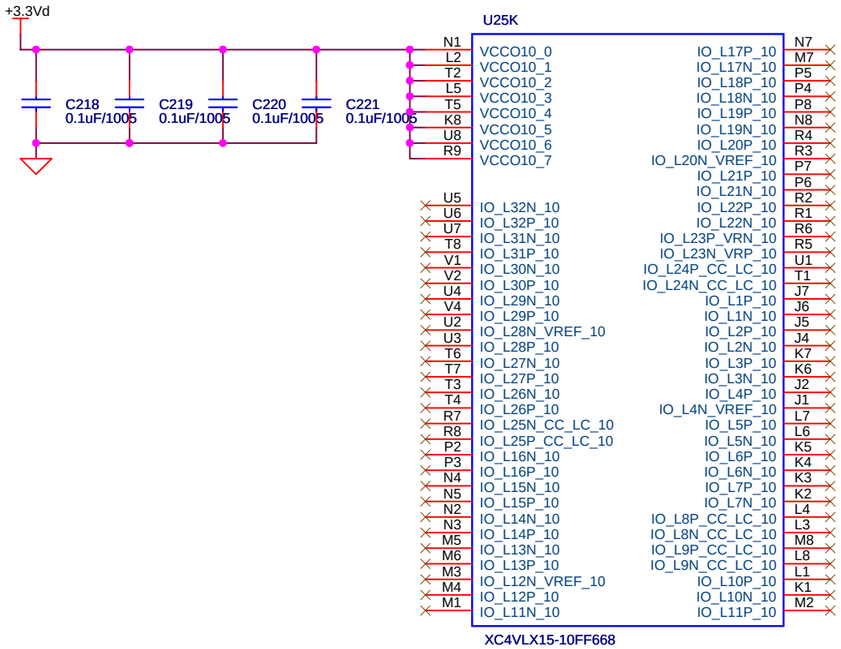

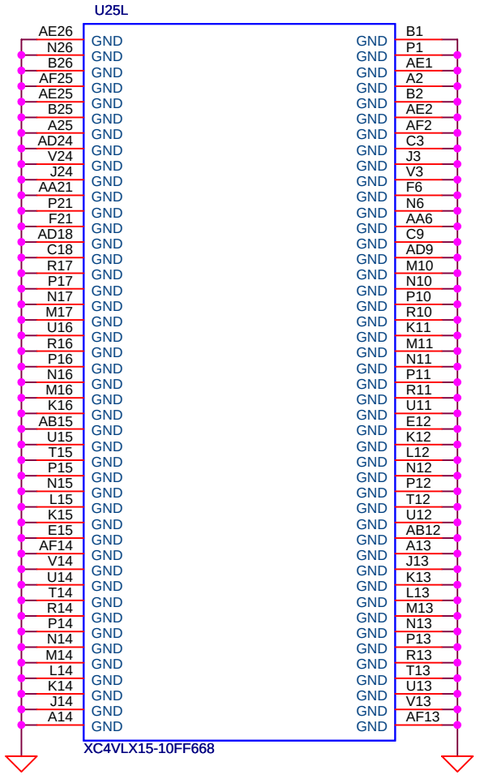

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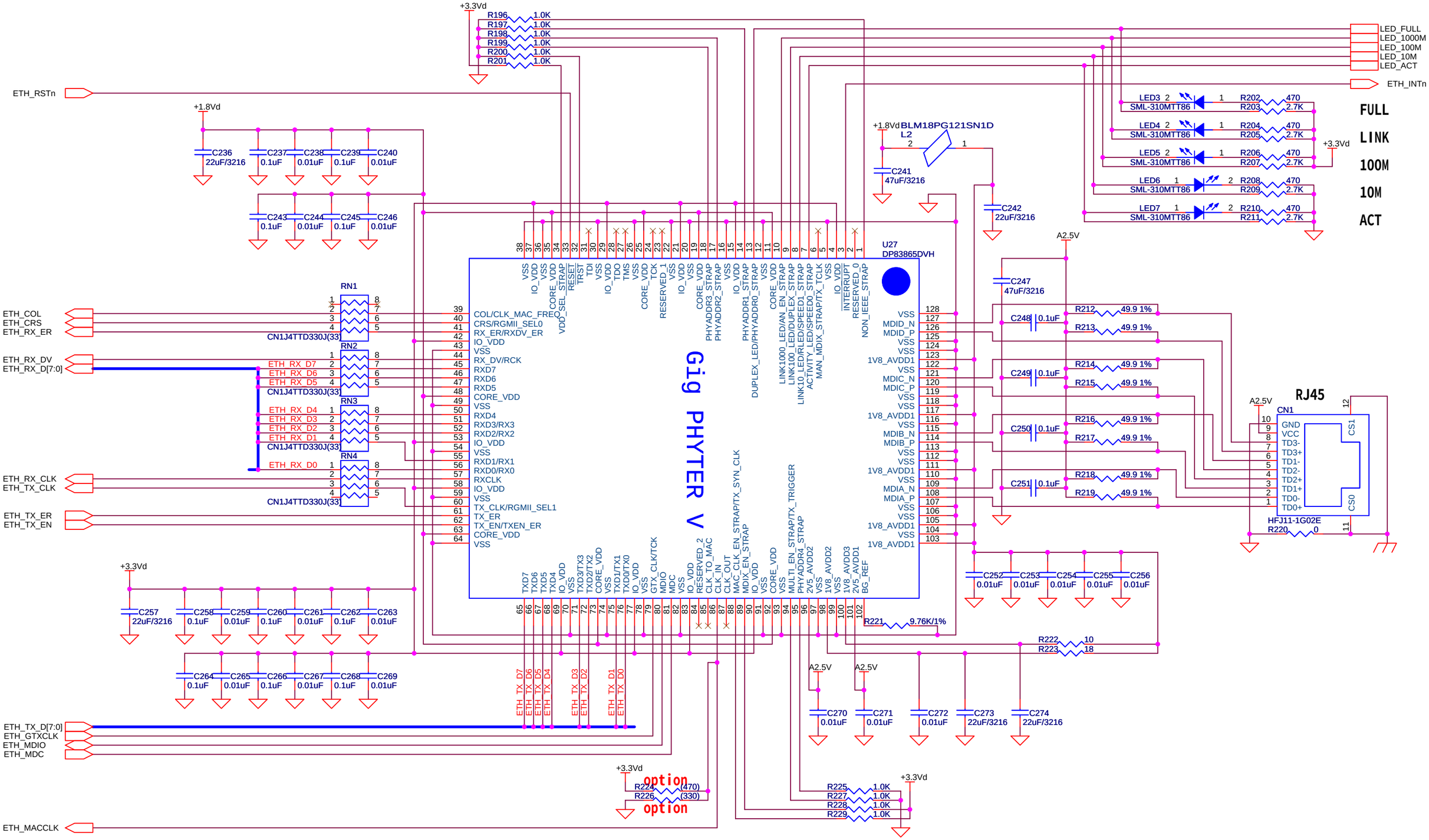

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Size A3	Document Number <Doc>		Rev <Rev
Date: Wednesday, May 26, 2010	Sheet 16 of 28		

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IN 2
IN 3
OUT 0
OUT 1
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NIM_OUT[1:0]
NIM_IN0
NIM_IN1
NIM_IN2
NIM_IN3
NIM_OUT0
NIM_OUT1
SN65LVDS9637B_0
SN65CML100D
MC100EPT24D
-3.3Vd
+3.3Vd

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Size A3	Document Number <Doc>		Rev <Rev
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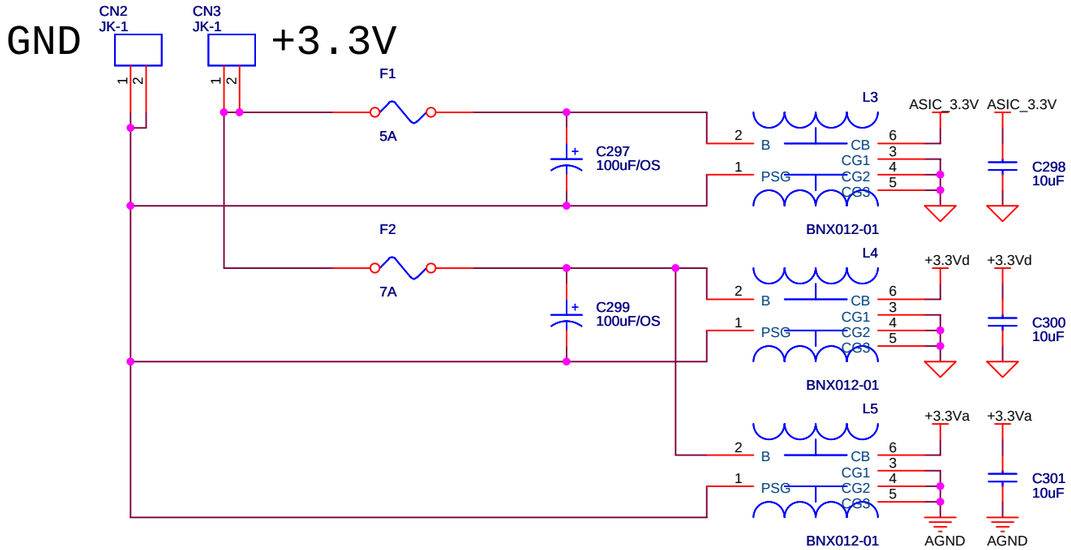

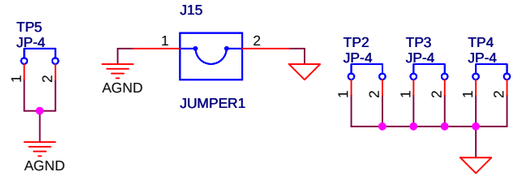

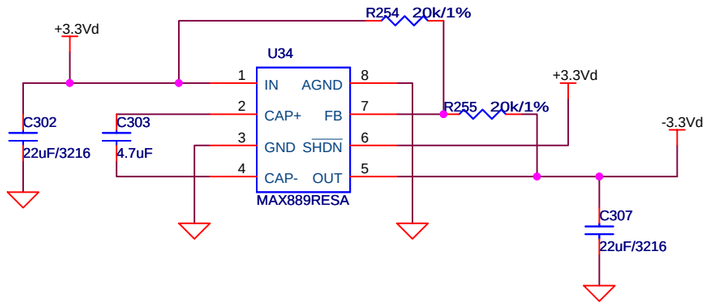

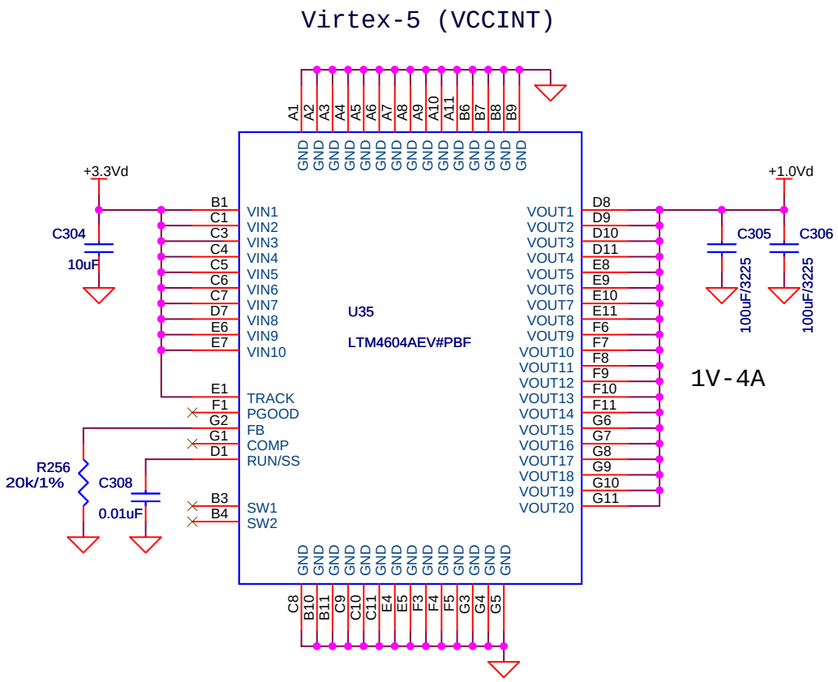

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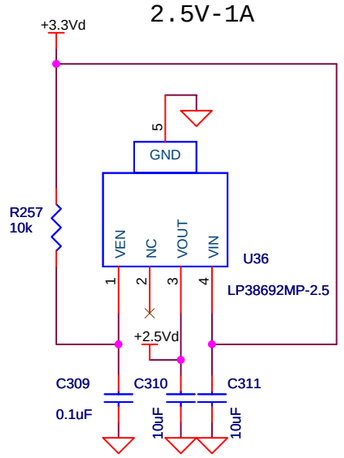
Virtex5
Virtex4
2.5V-1A



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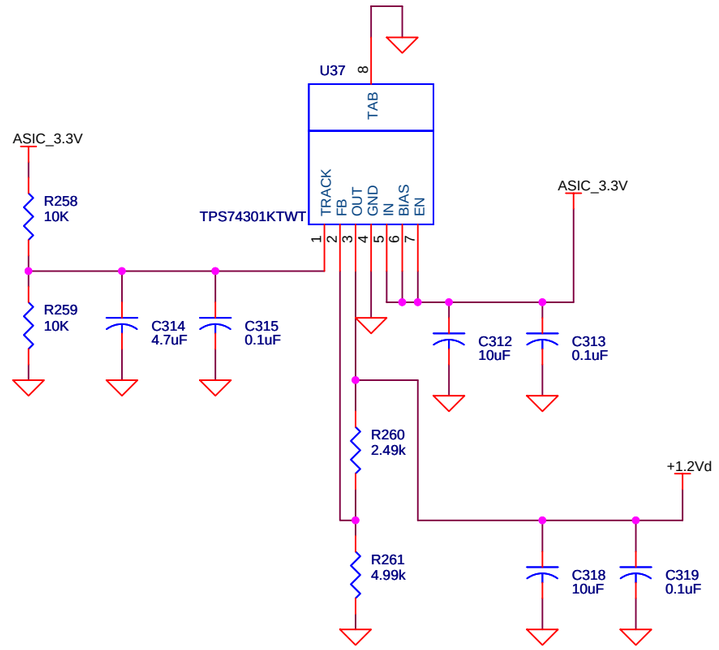

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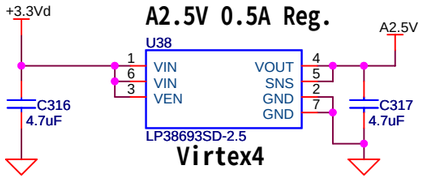
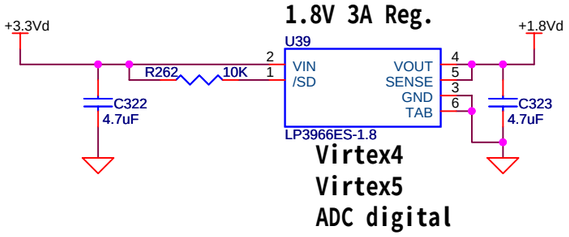
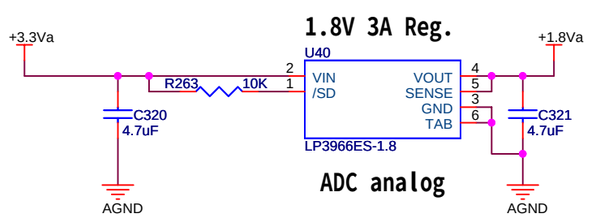
Virtex4







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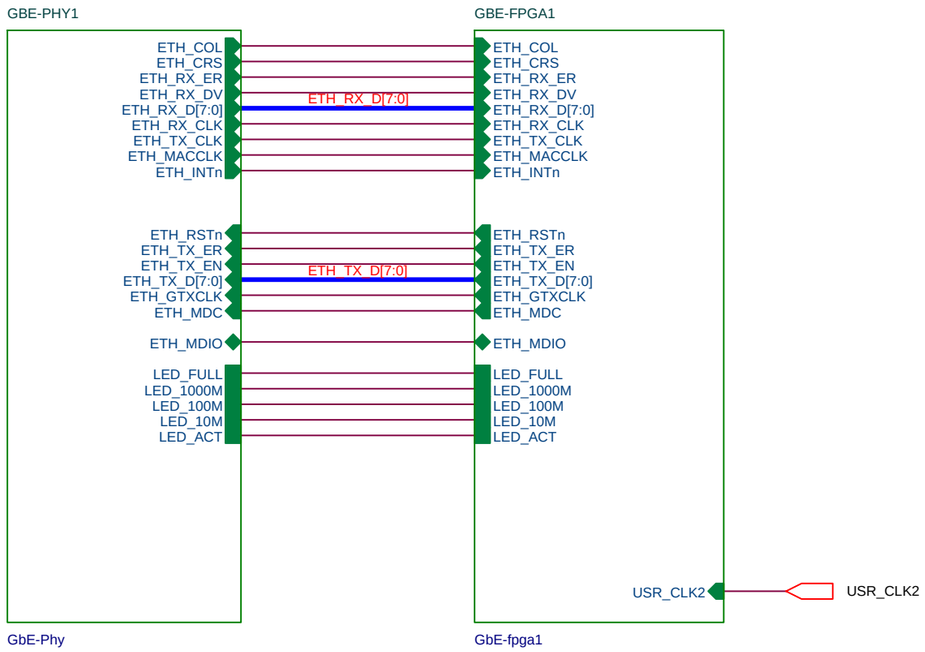

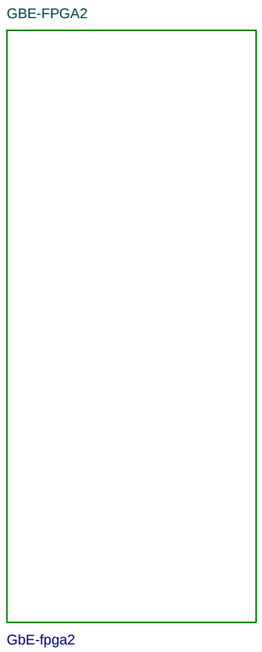

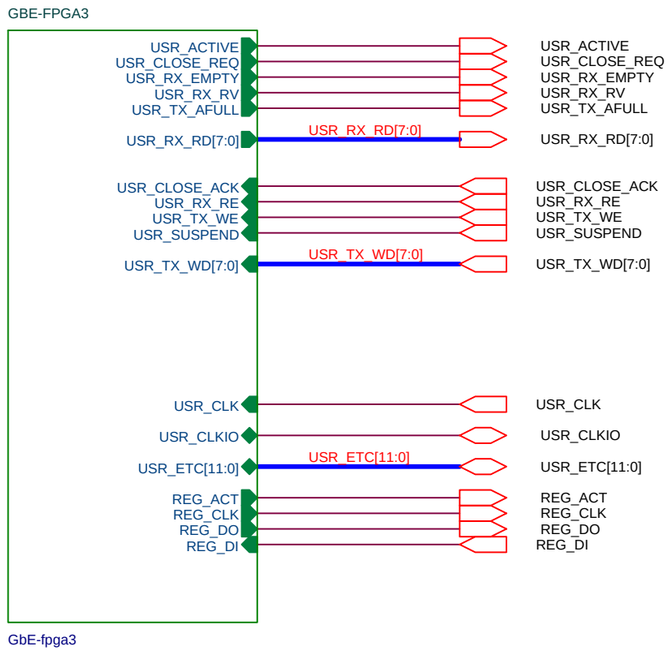

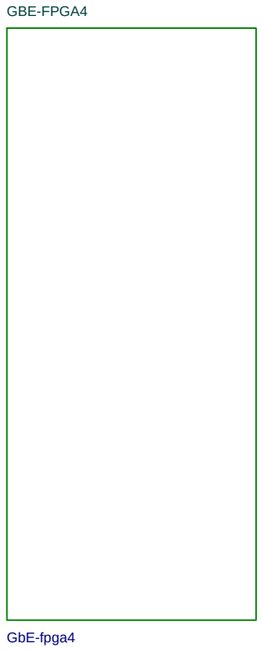

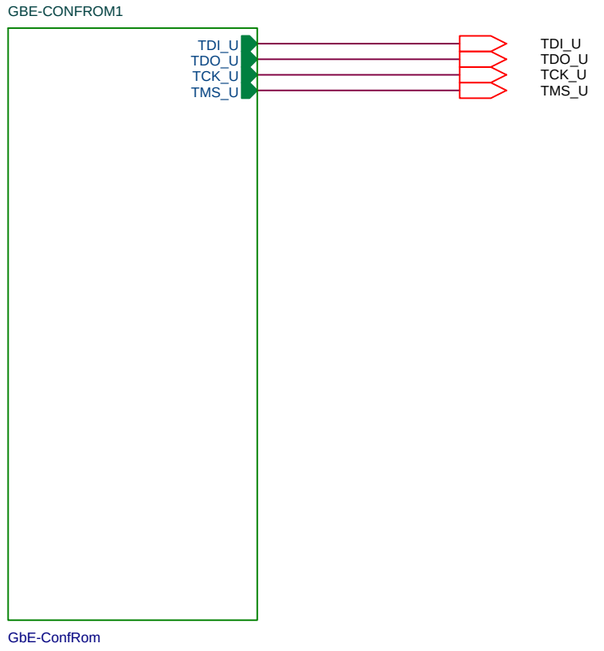

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Size A3	Document Number <Doc>	Rev <Rev
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B

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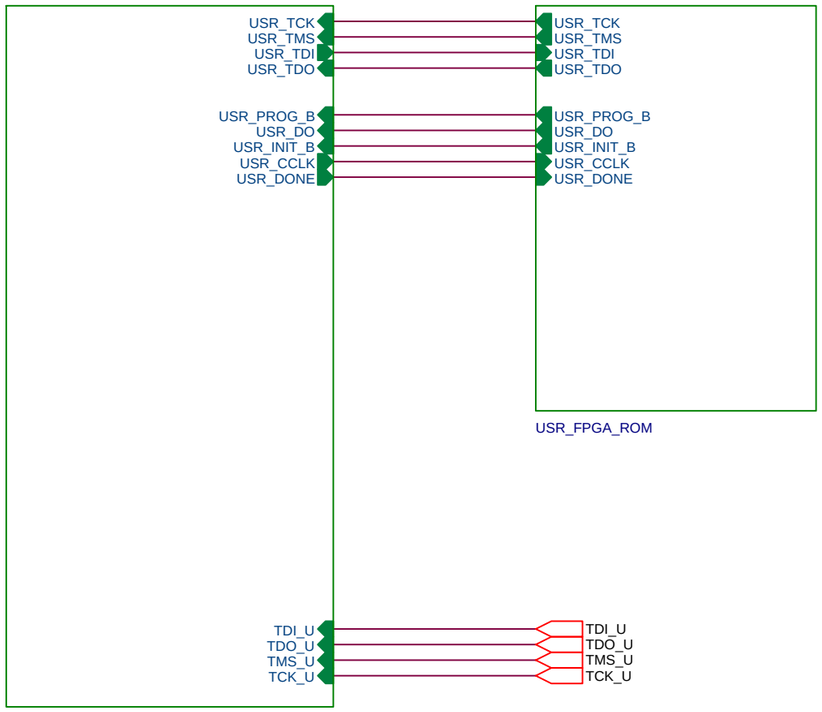
USR_FPGA_POWER

USR_FPGA_CONFIG1



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USR_FPGA_ROM1

USR_FPGA_ROM

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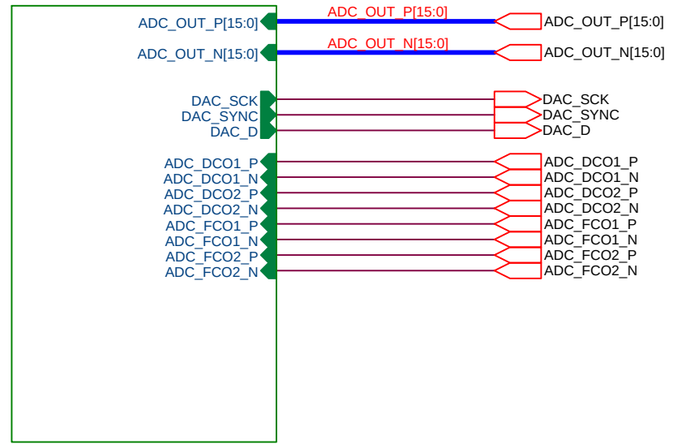

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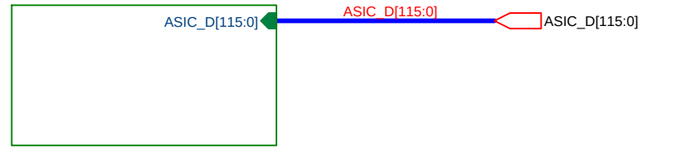
USR_FPGA_CONNECT1



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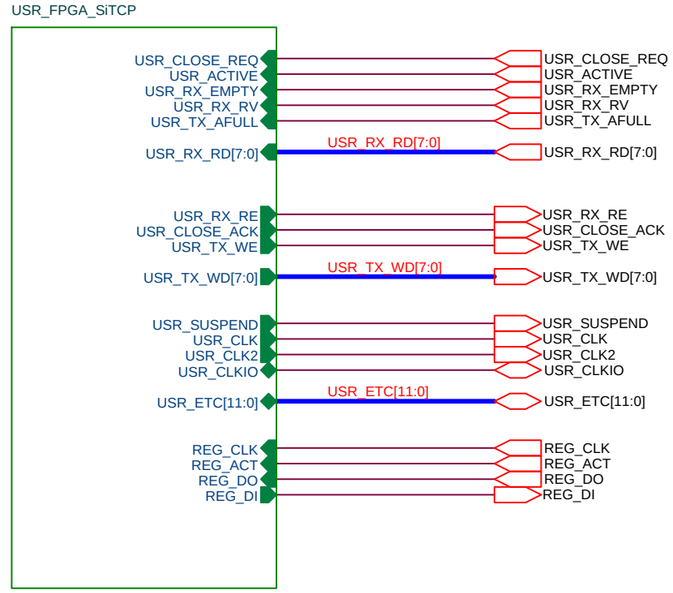
USR_FPGA_SiTCP



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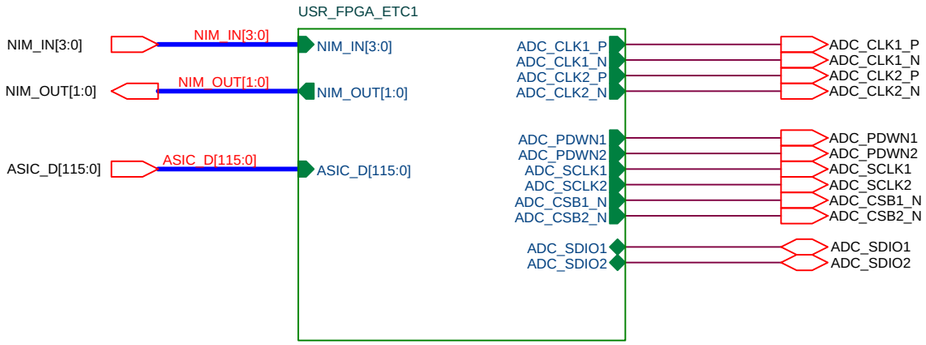

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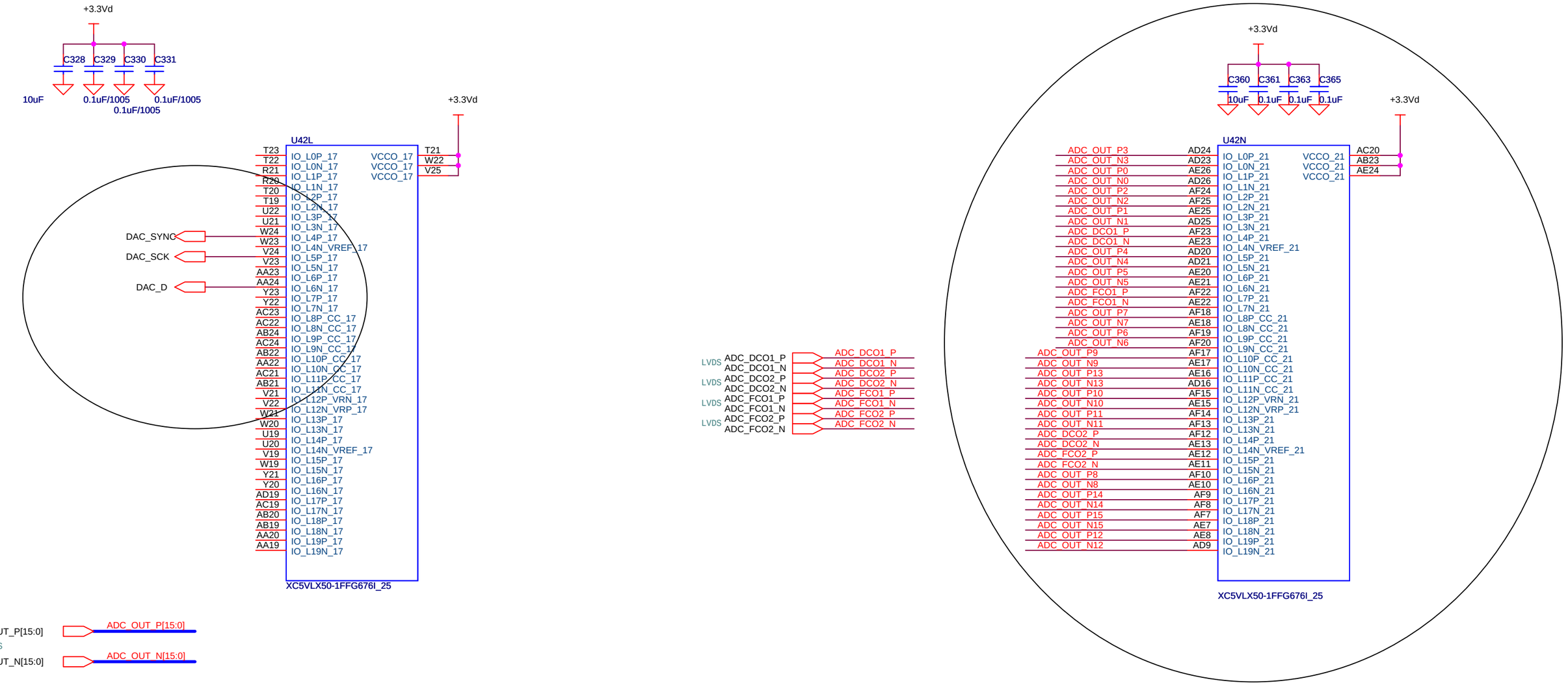

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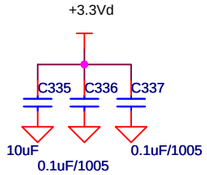

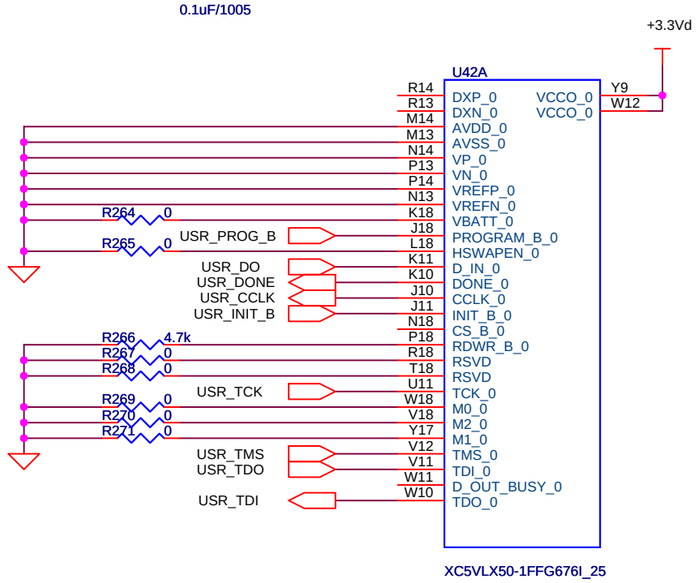

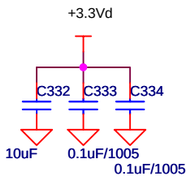

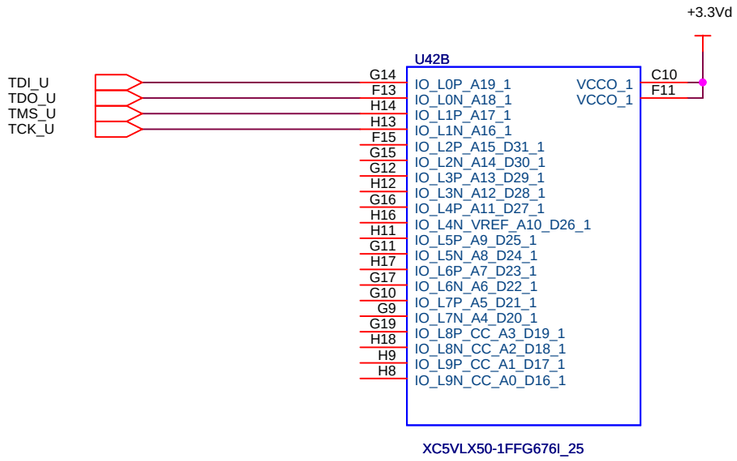

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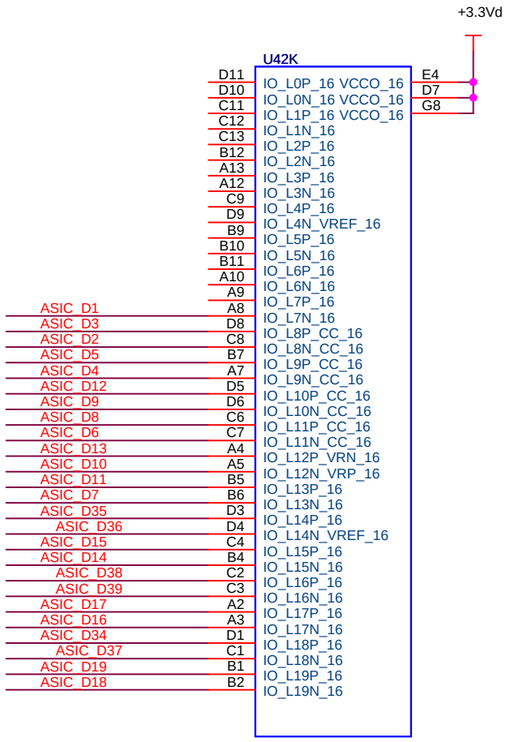
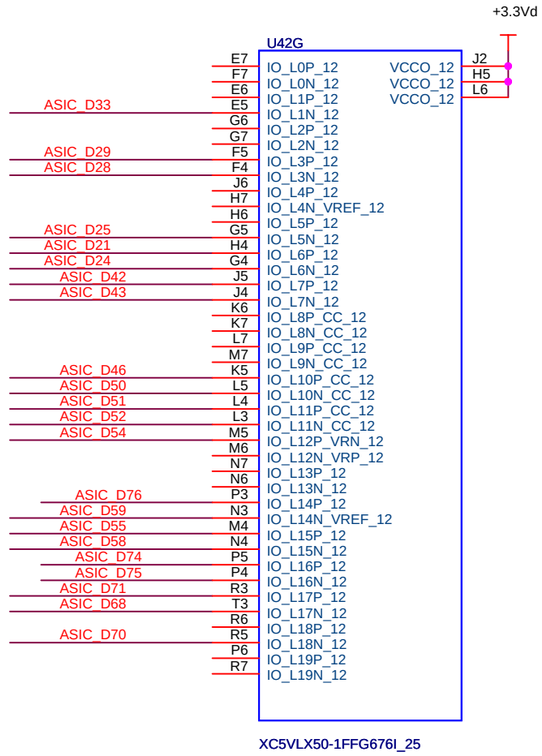
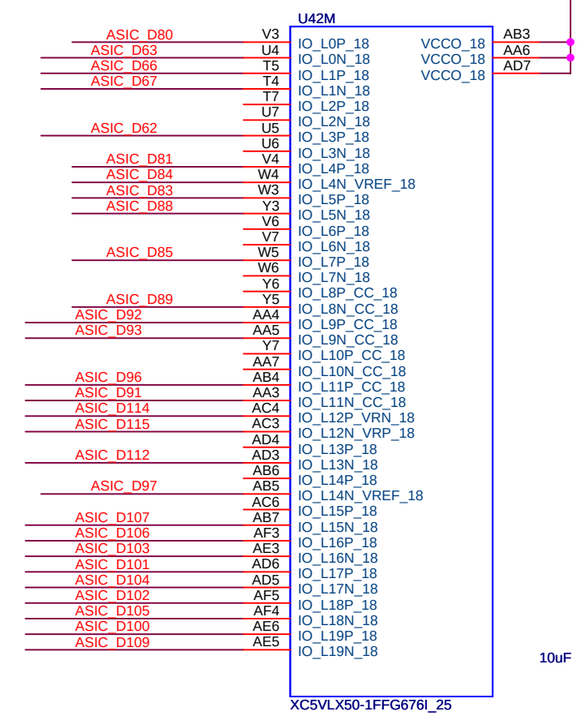
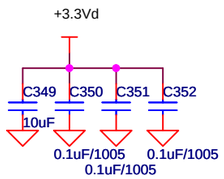
Date: Wednesday, May 26, 2010	Sheet 23 of 28	









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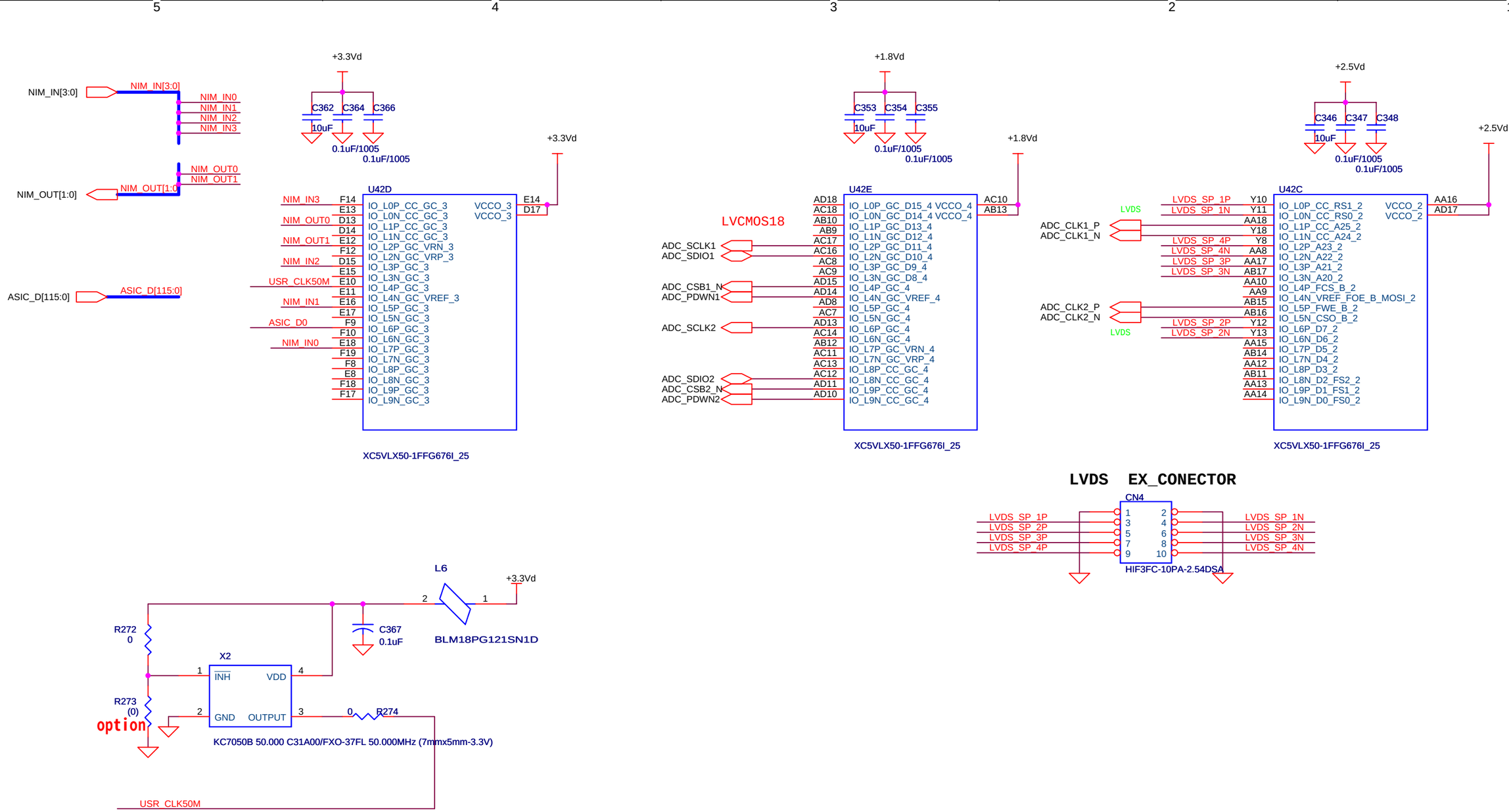

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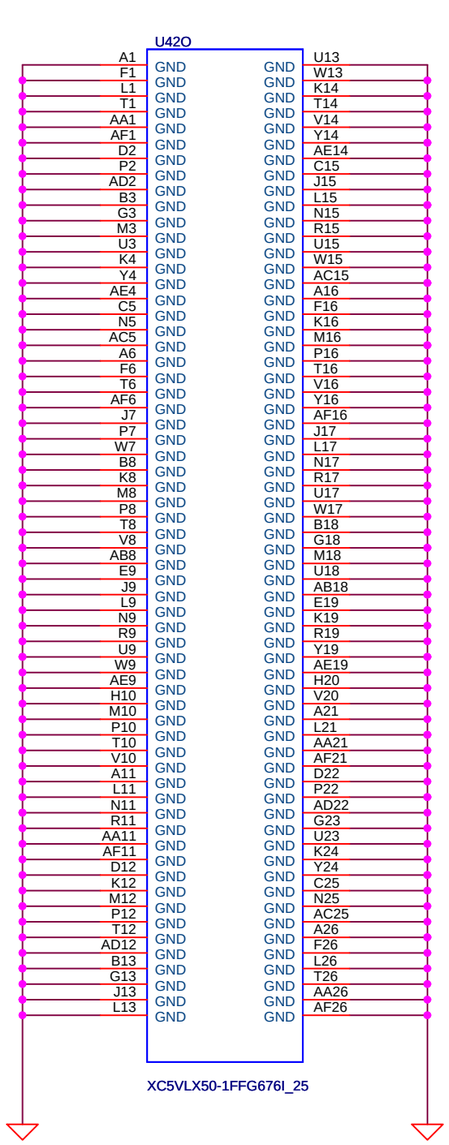

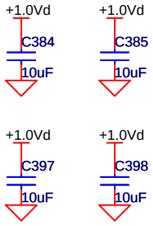

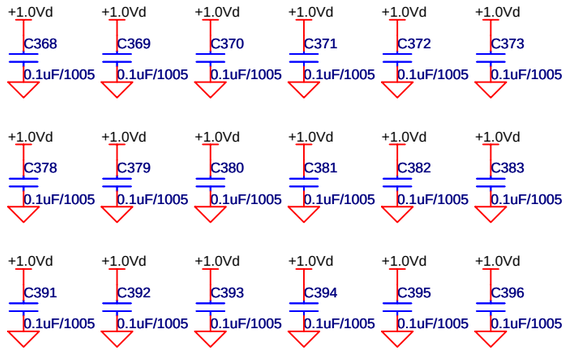

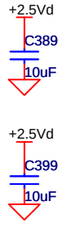

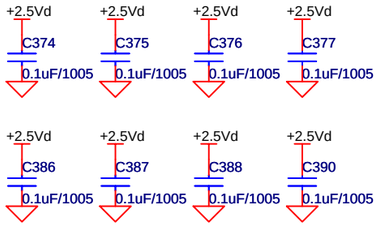

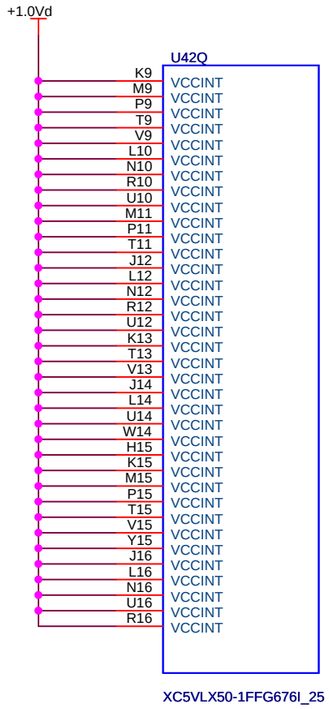

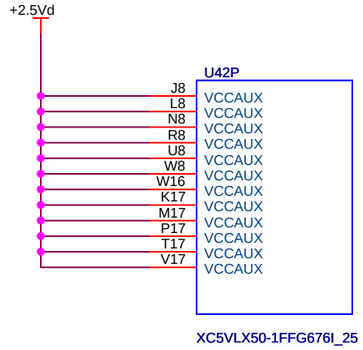

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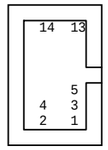

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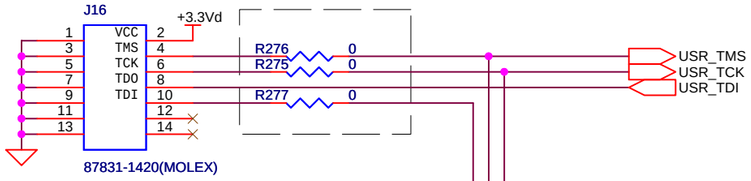

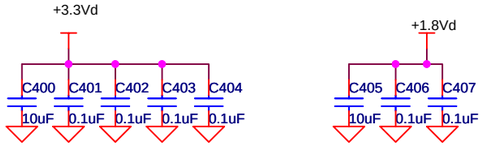

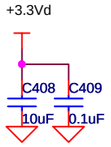

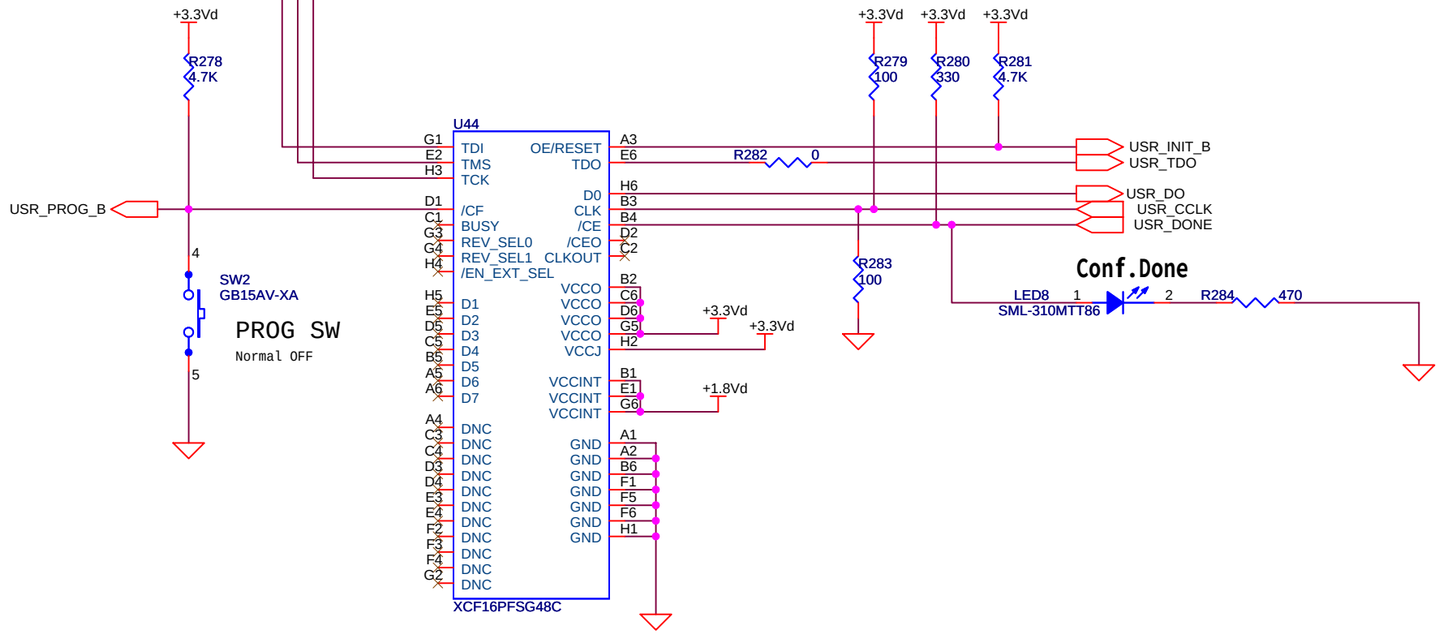

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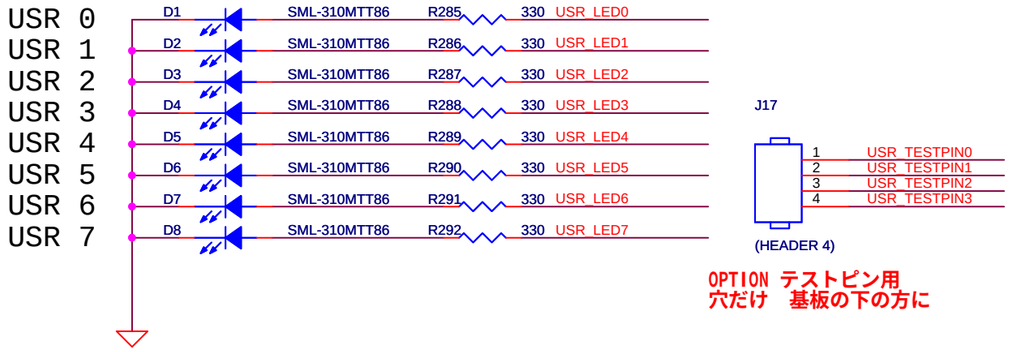

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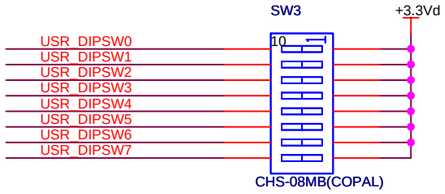

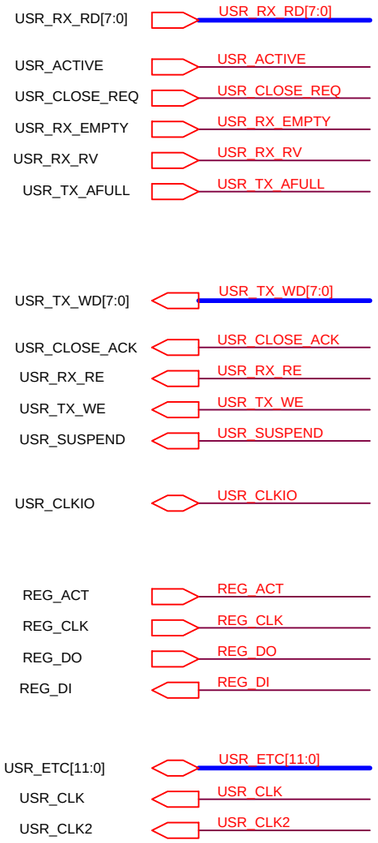

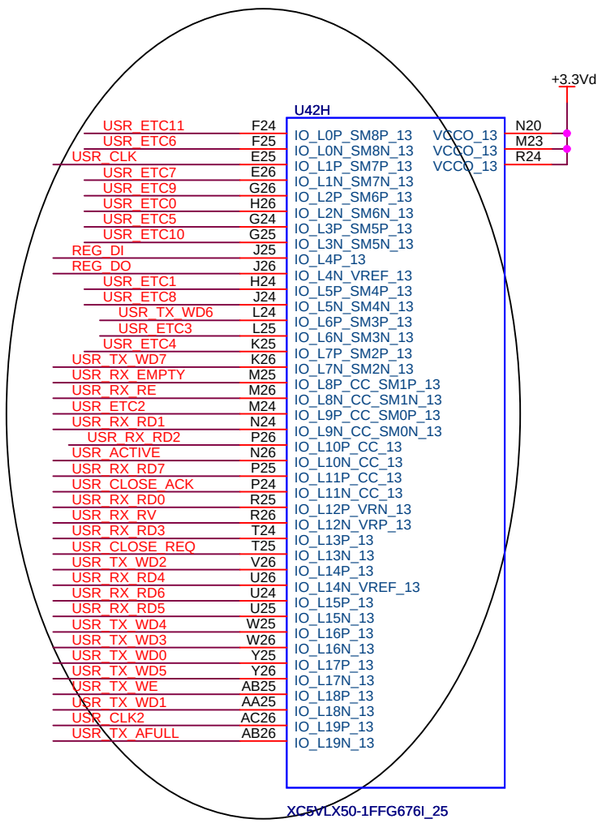

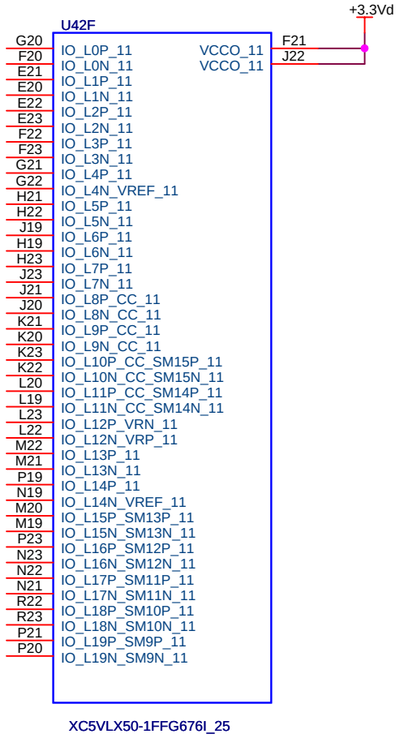

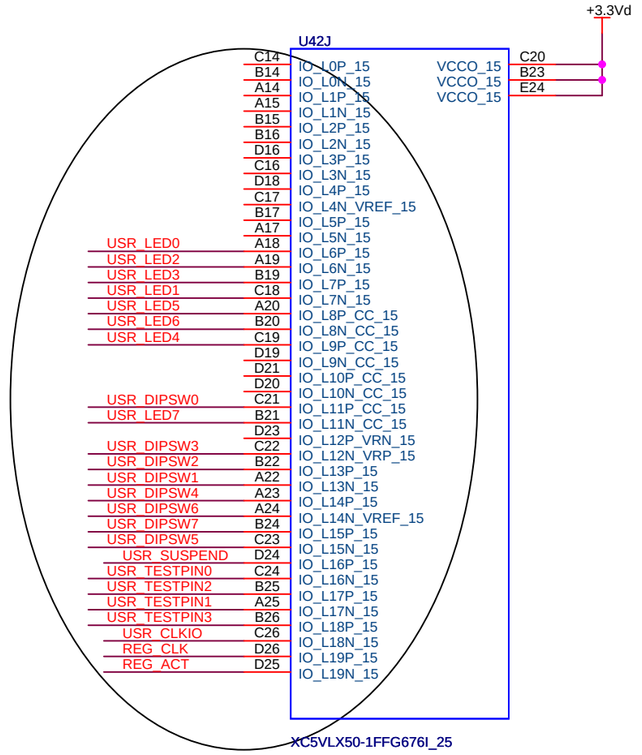

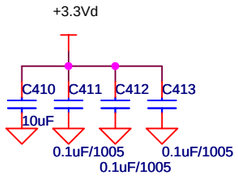

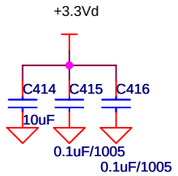

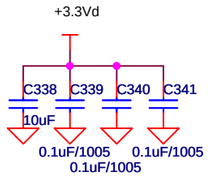

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