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CHANGES REV01 to REV02

- 1) MAC EEPROM Address patch fixed on PCB
- 2) lib components update

A

A

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Assembly variant	81C31-A
Created by	MR
Modified by	MR
Modified at	2021-02-19
SVN Version	8496

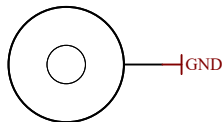
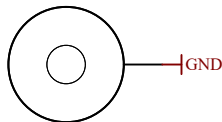
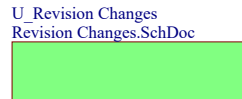
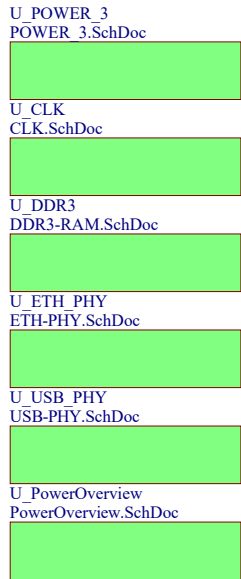
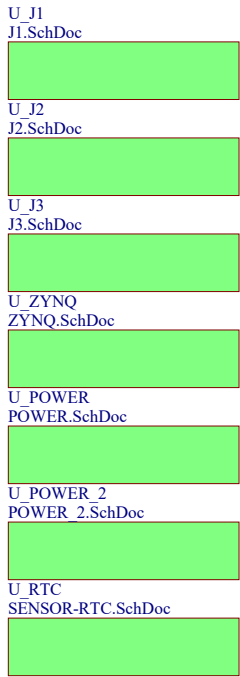
	Title: TE0745		
	A4	Number: 1 81C31-A	Rev. 02
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page1 of 25
	Filename: Revision Changes.SchDoc		

1

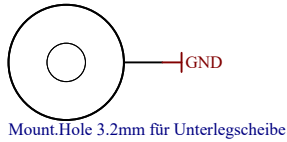
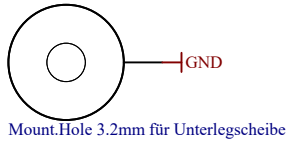
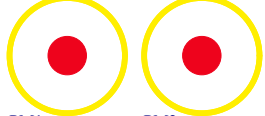
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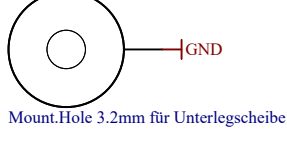
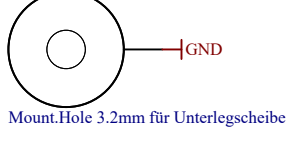
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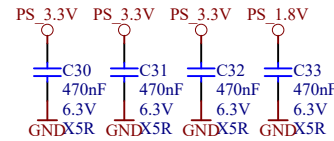
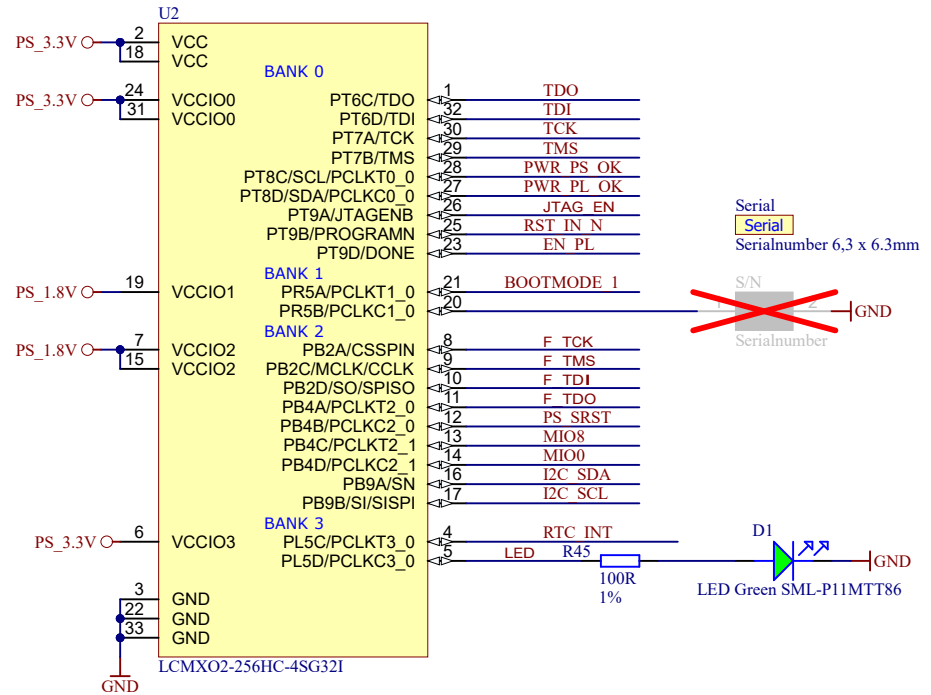
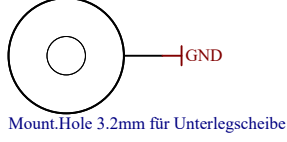
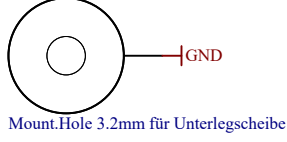
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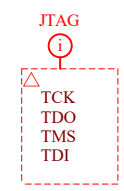
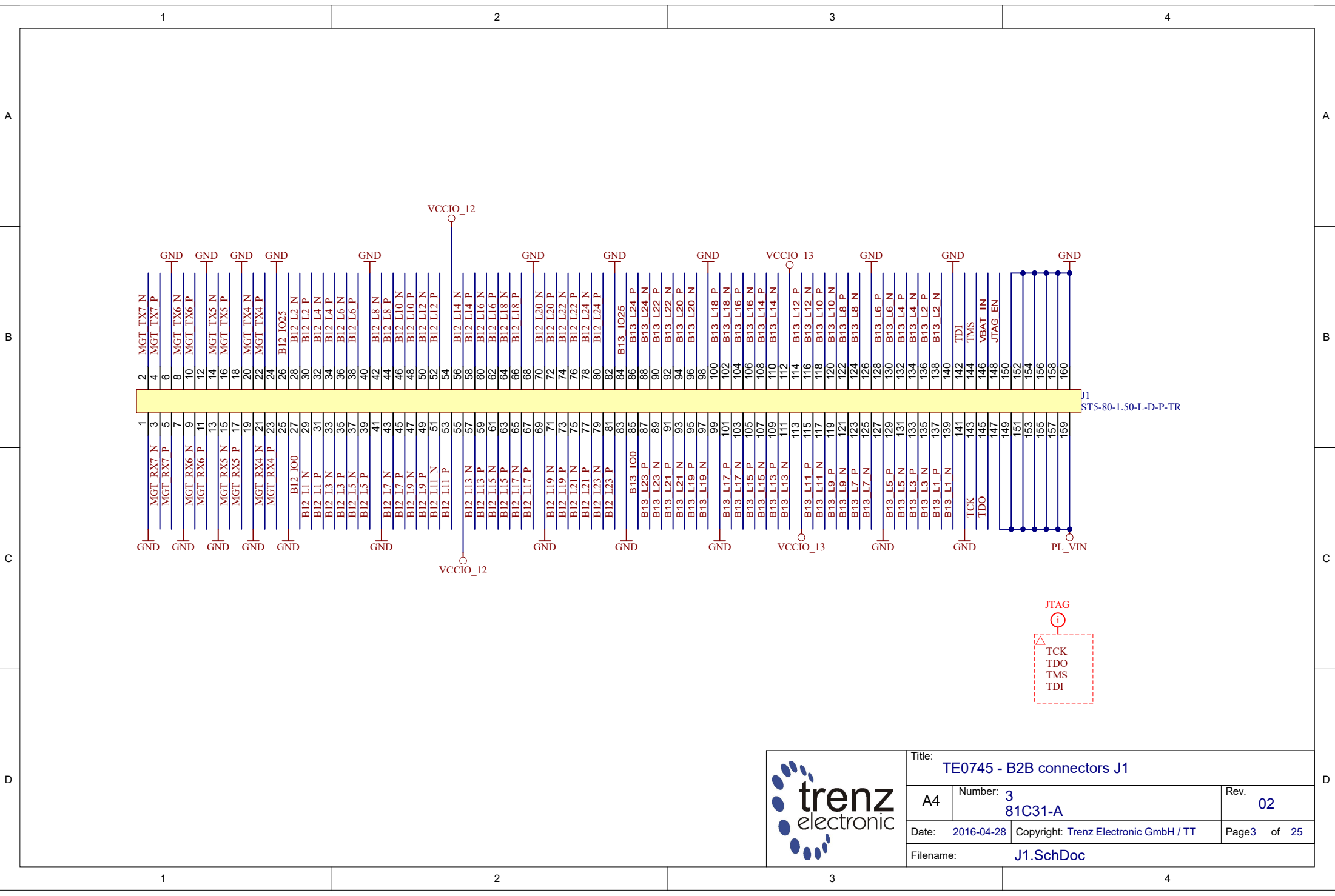
FIDU-DOT - small FIDU-DOT - small




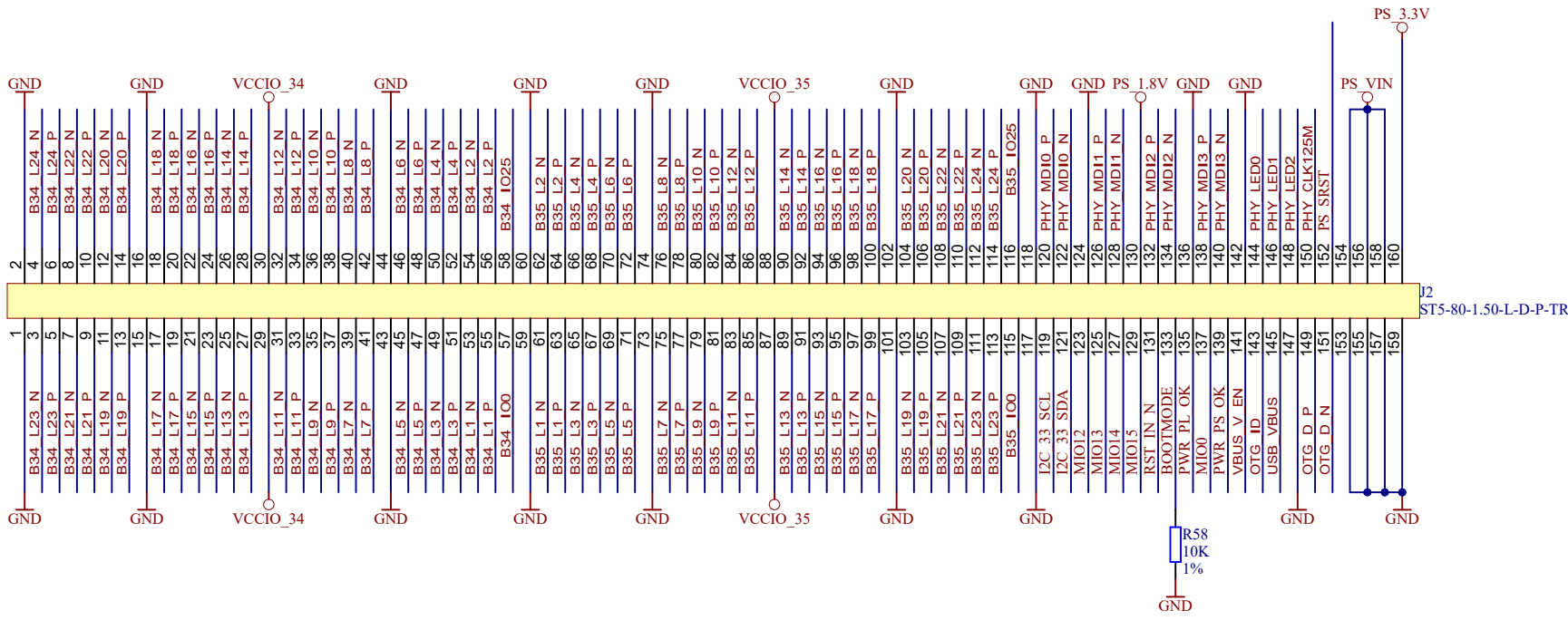
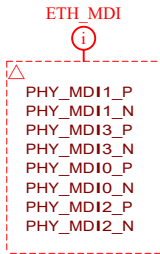
FIDU-DOT - small FIDU-DOT - small



	Title: TE0745	
	A4	Number: 2 81C31-A
	Date: 2016-04-28	Rev. 02
	Copyright: Trenz Electronic GmbH / TT	Page2 of 25
Filename: TE0745.SchDoc		

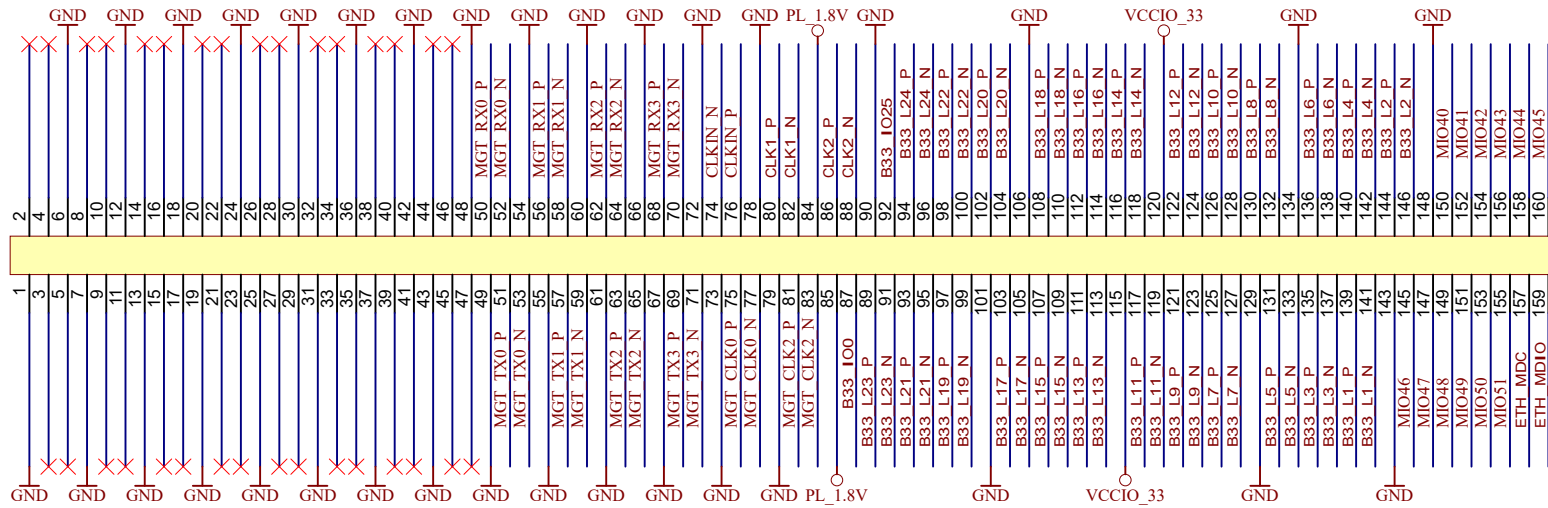


			Title: TE0745 - B2B connectors J1	
			A4	Number: 3 81C31-A
Date: 2016-04-28		Copyright: Trenz Electronic GmbH / TT		Page3 of 25
Filename: J1.SchDoc				




Title: TE0745 - B2B connectors J2		
A4	Number: 4 81C31-A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page4 of 25
Filename: J2.SchDoc		

RESERVED for additional 8 GTX lanes



J3  
ST5-80-1.50-L-D-P-TR



Title: TE0745 - B2B connectors J3		
A4	Number: 5 81C31-A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page5 of 25
Filename: J3.SchDoc		

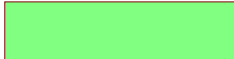
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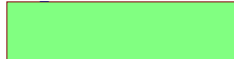
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4

U\_B12  
B12.SchDoc



U\_B500  
MIO\_B500.SchDoc



U\_B13  
B13.SchDoc



U\_PS\_DDR  
PS-DDR.SchDoc



U\_B33  
B33.SchDoc



U\_MISC  
ZYNQ\_MISC.SchDoc



U\_B34  
B34.SchDoc



U\_ZYNQ\_POWER  
ZYNQ\_POWER.SchDoc



U\_B35  
B35.SchDoc



U\_FPGA\_MGT  
FPGA\_MGT.SchDoc



A

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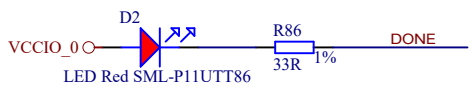
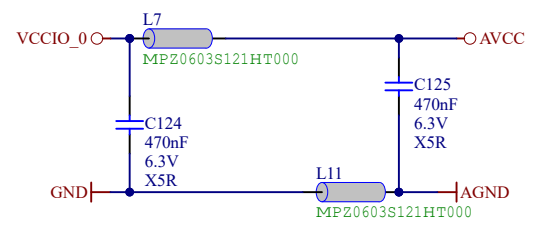
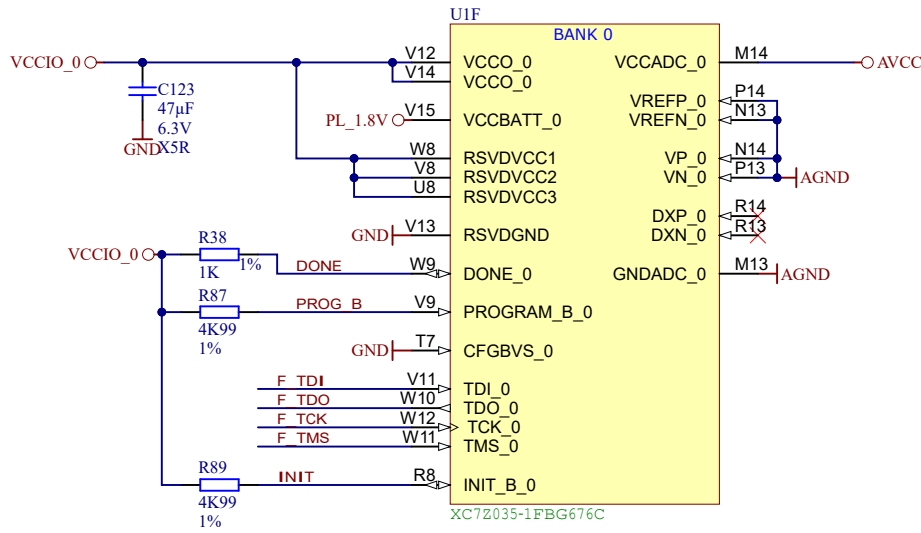
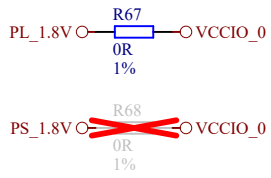
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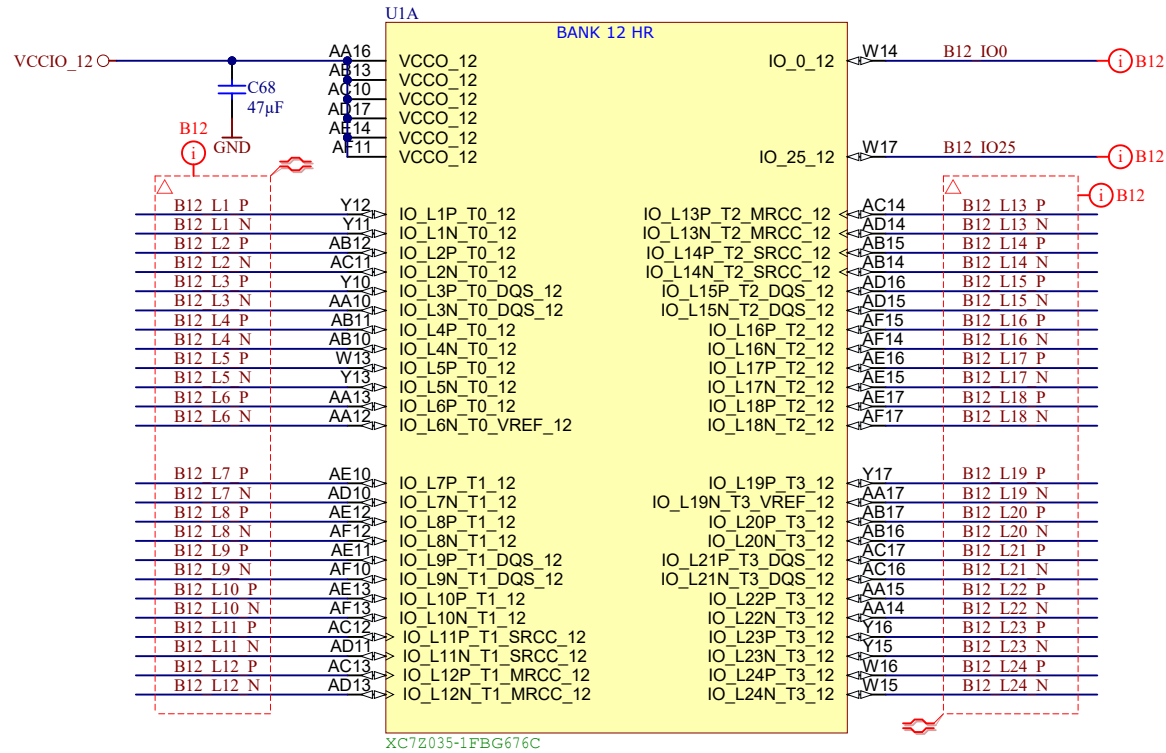
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4

	Title: TE0745 - Zynq		
	A4	Number: 6 81C31-A	Rev. 02
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page6 of 25
	Filename: ZYNQ.SchDoc		

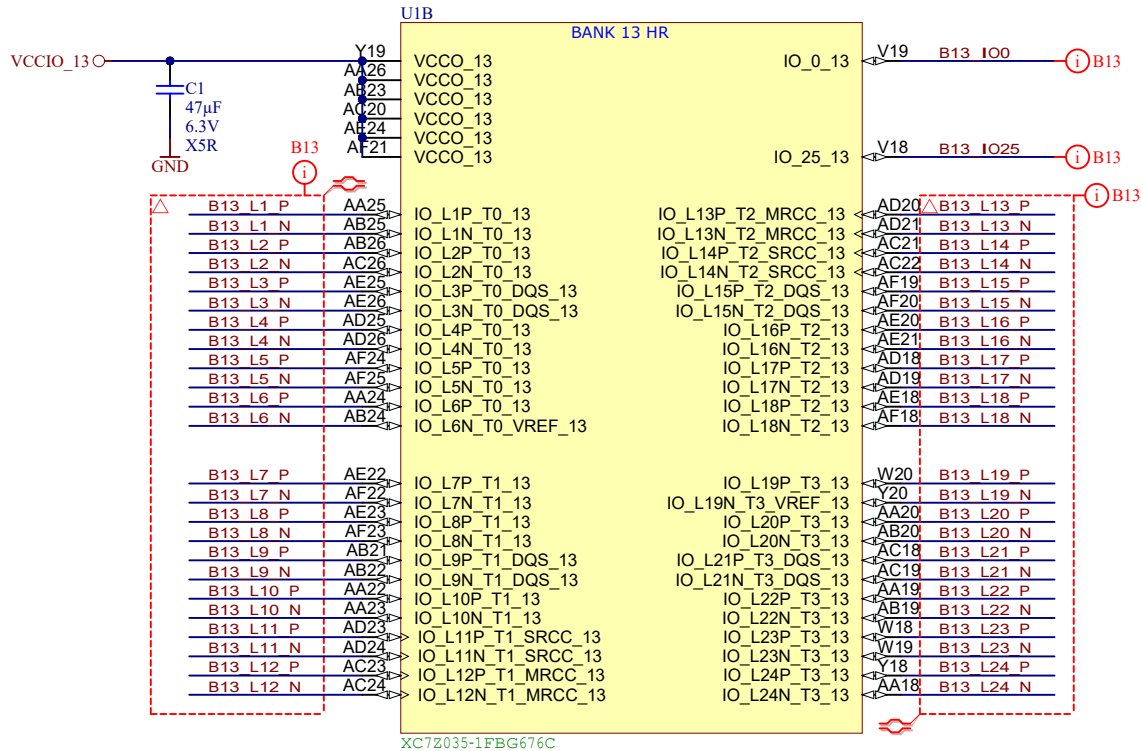


Title: TE0745 - Zynq_MISC		
A4	Number: 7 81C31-A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 7 of 25
Filename: ZYNQ_MISC.SchDoc		

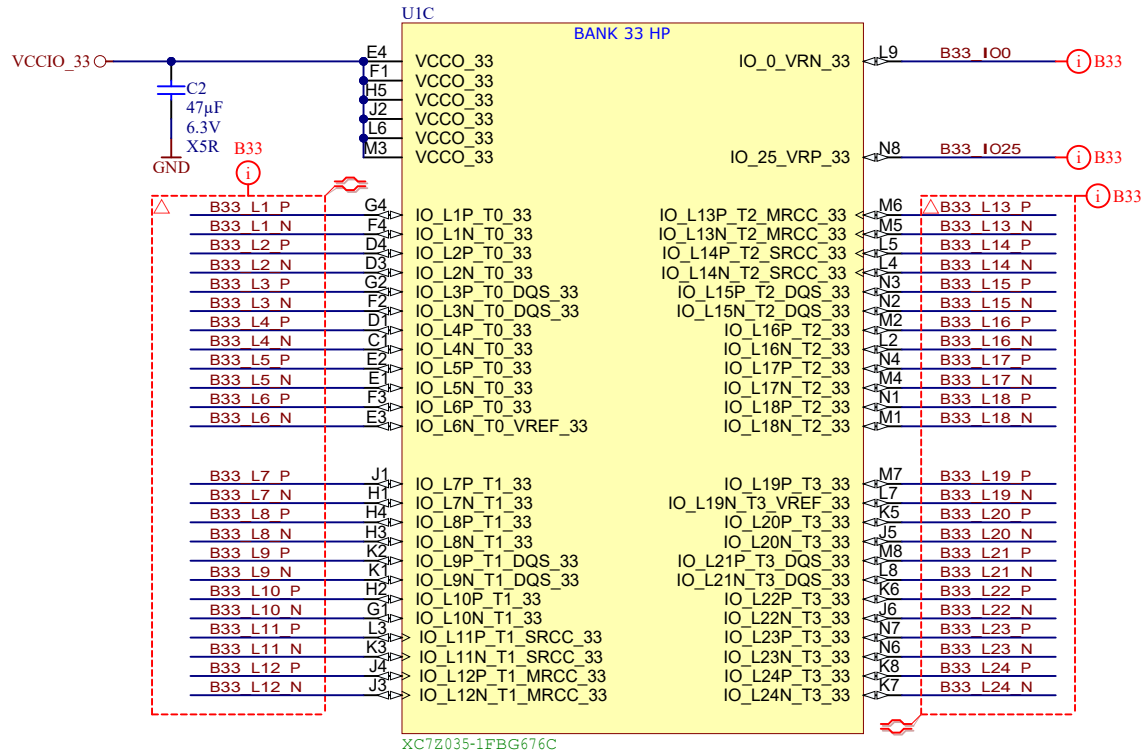


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Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 8 of 25
Filename: B12.SchDoc		



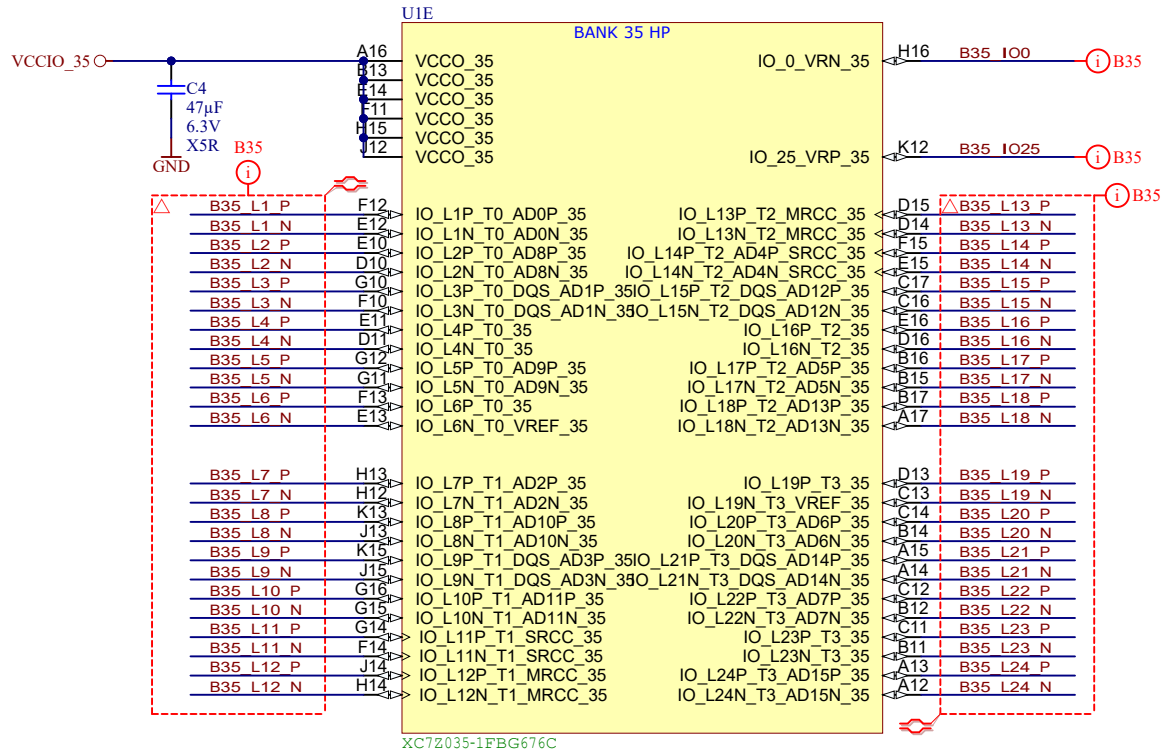


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A4	Number: 9 81C31-A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page9 of 25
Filename: B13.SchDoc		

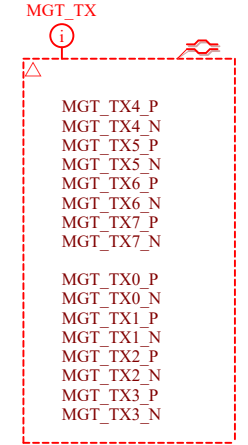
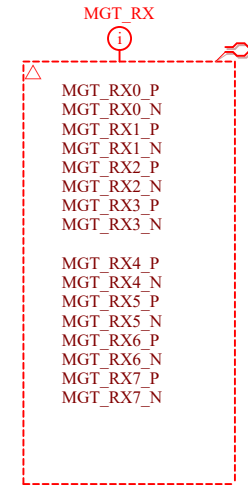
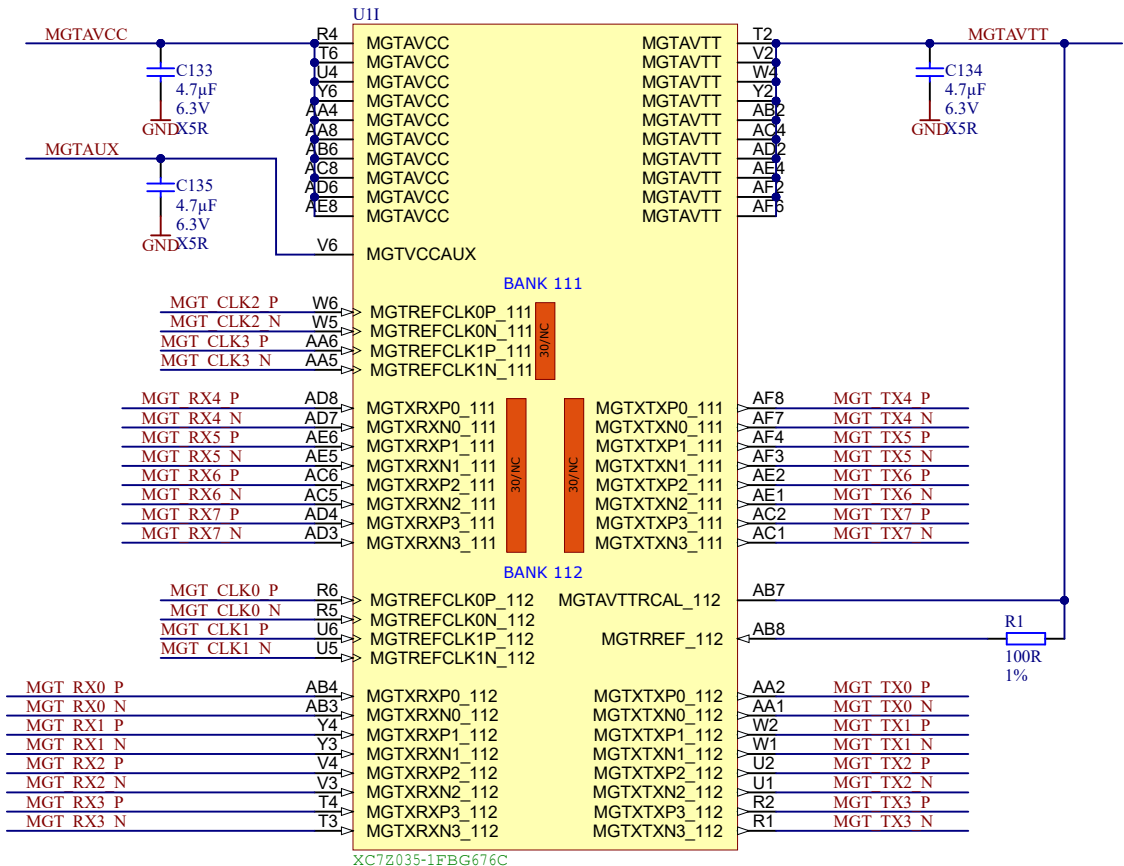
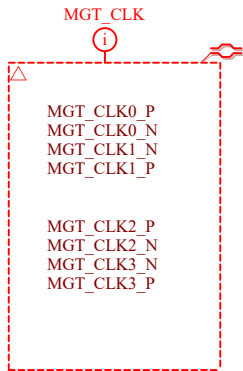


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Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 10 of 25
Filename: B33.SchDoc		



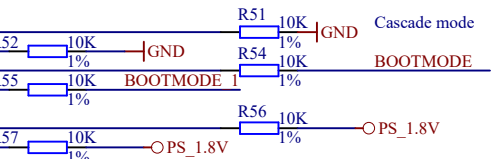
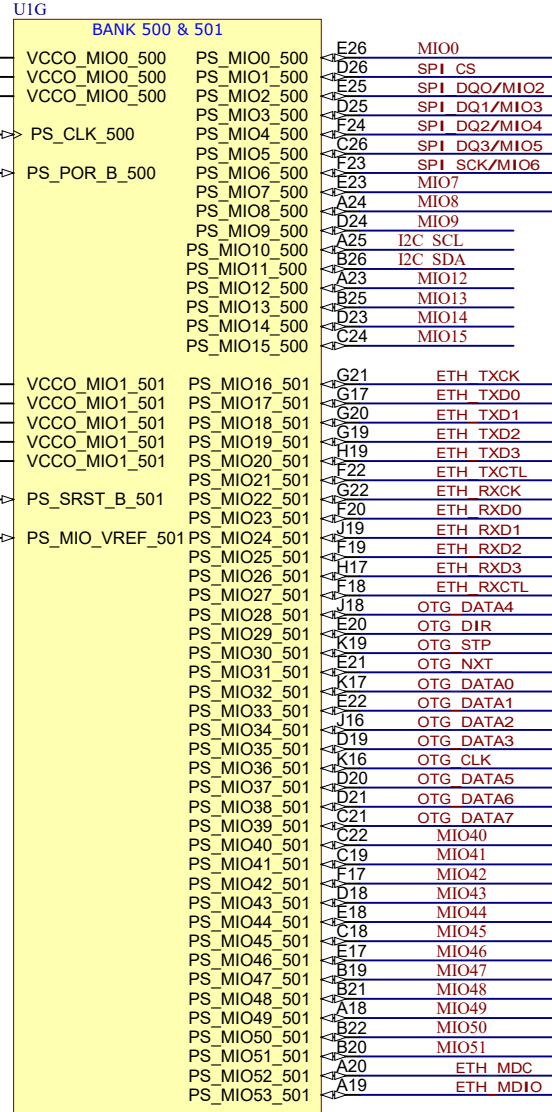
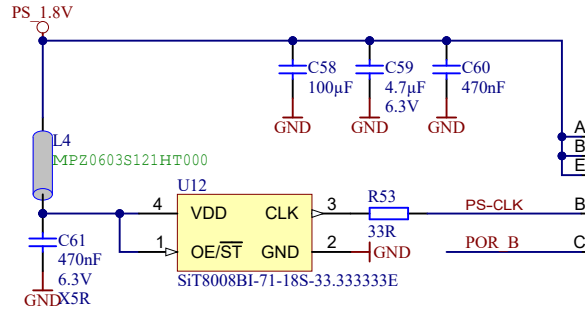


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Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 12 of 25
Filename: B35.SchDoc		



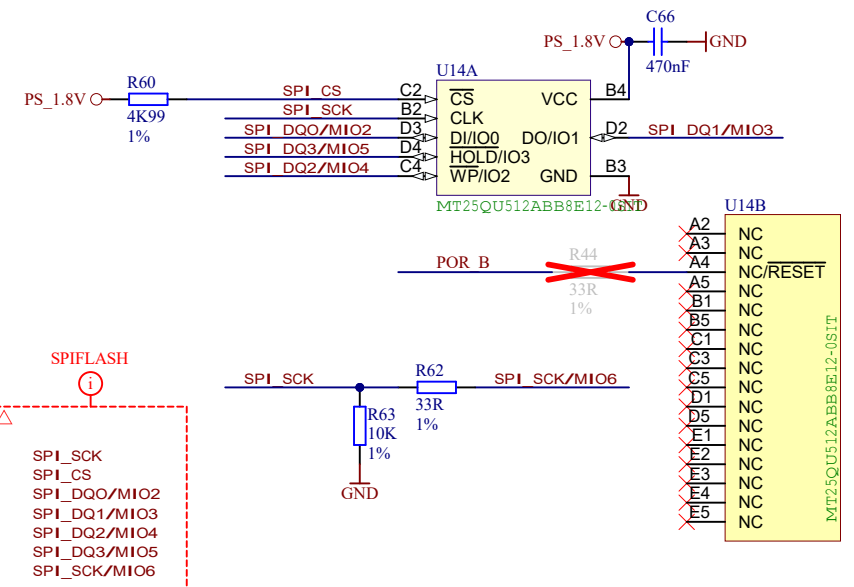
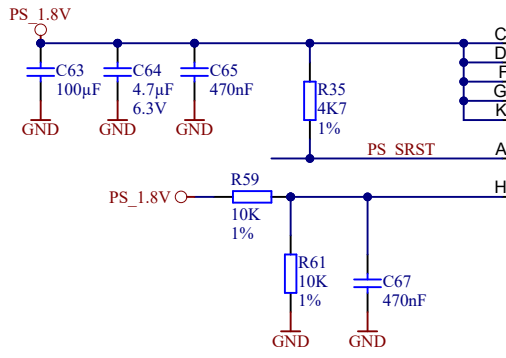
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A4	Number: 13 81C31-A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page13 of 25
Filename: FPGA_MGT.SchDoc		

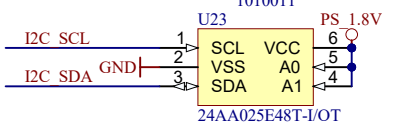


MIO Bank Voltage	MIO7	MIO8
2.5V, 3.3V	0	0
1.8V	1	1

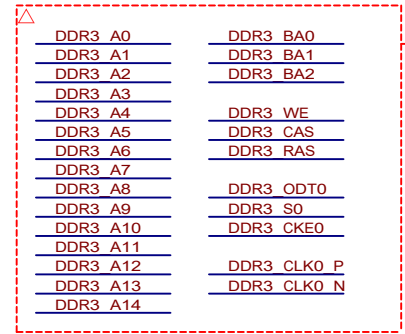
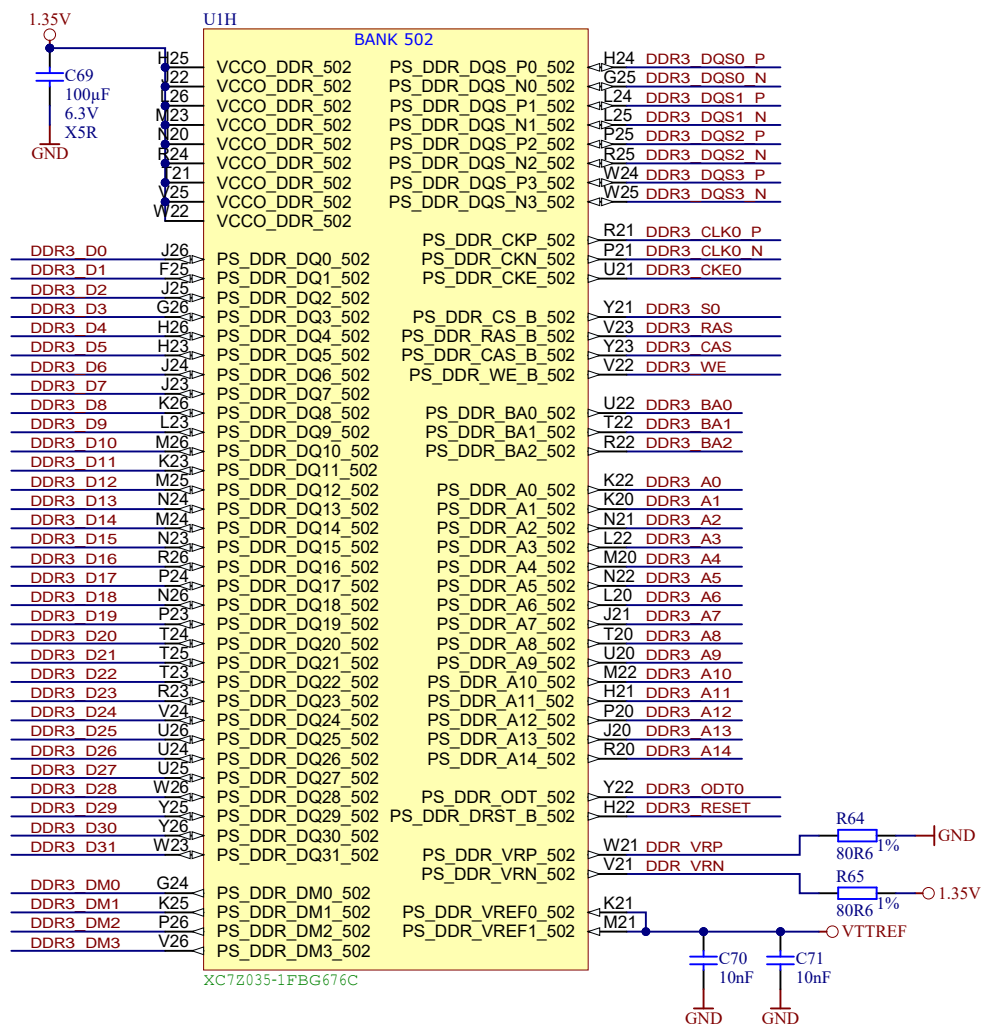
BOOT MODE	MIO5	MIO4	MIO3
JTAG Boot Mode	0	0	0
NOR Boot	0	0	1
NAND	0	1	0
Quad-SPI	1	0	0
SD Card	1	1	0



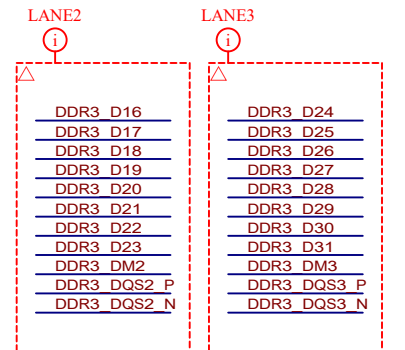
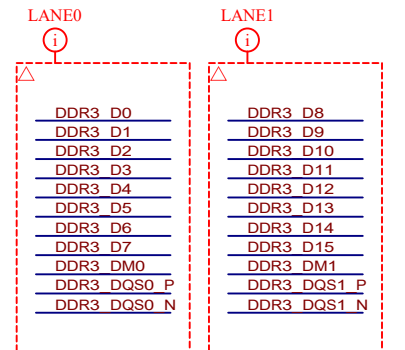
EEPROM for MAC  
Slave ADDR:  
1010011



Title: TE0745 - Zynq_MIO_Banks		
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Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 14 of 25
Filename: MIO_B500.SchDoc		

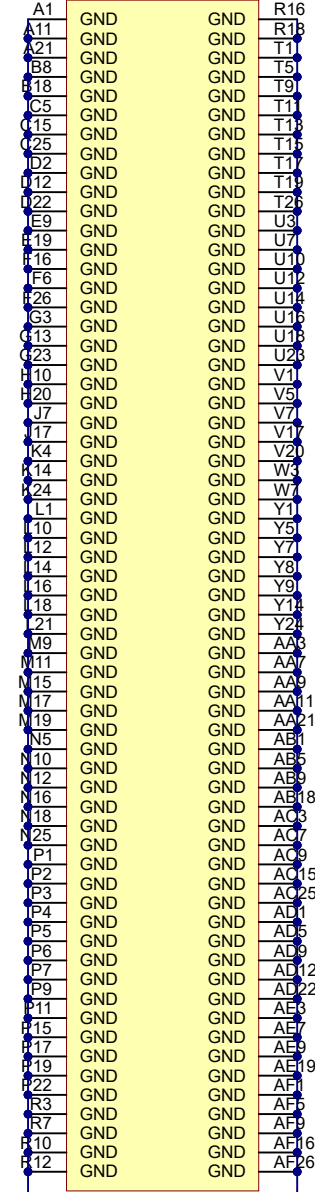


ADDR\_CMD

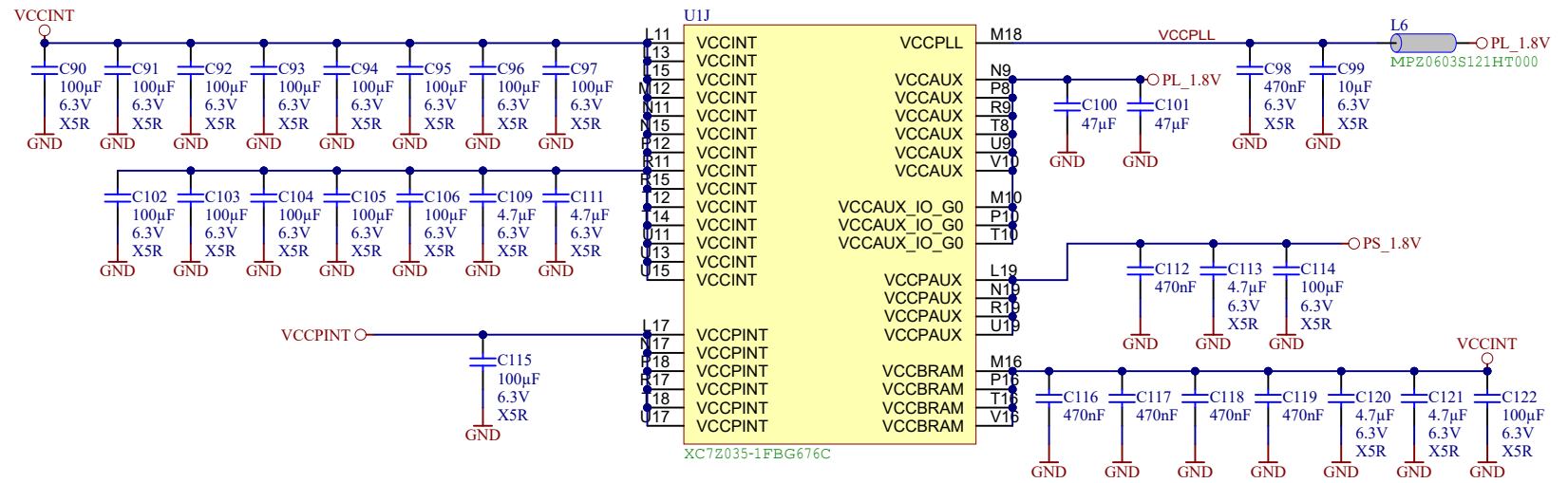


Title: TE0745 - Zynq_PS_DDR		
A4	Number: 15 81C31-A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 15 of 25
Filename: PS-DDR.SchDoc		

UIK



XC72035-1FBG676C



XC72035-1FBG676C



Title: TE0745 - Zynq_Power		
A4	Number: 16 81C31-A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 16 of 25
Filename: ZYNC_POWER.SchDoc		



A

A

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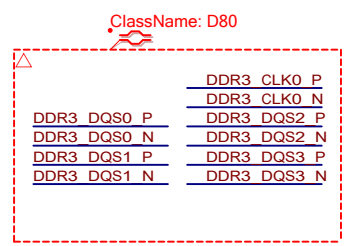
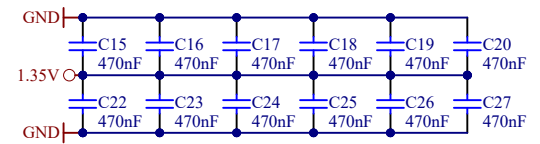
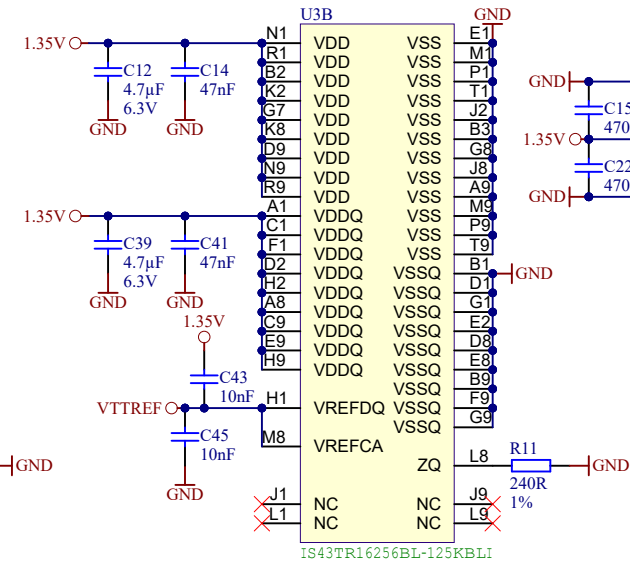
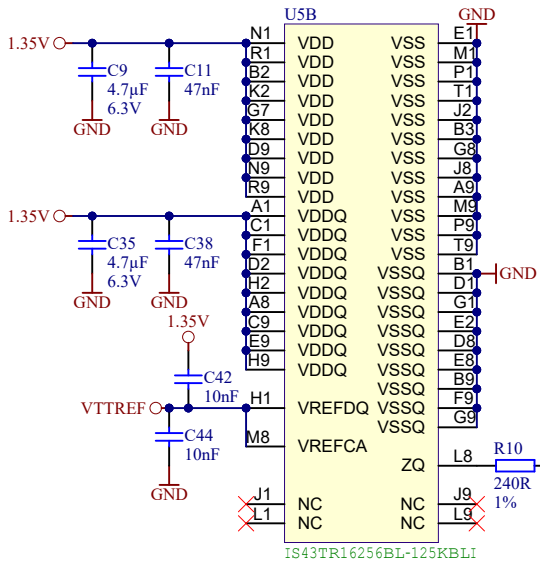
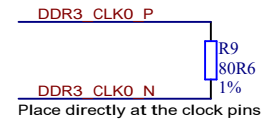
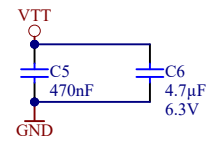
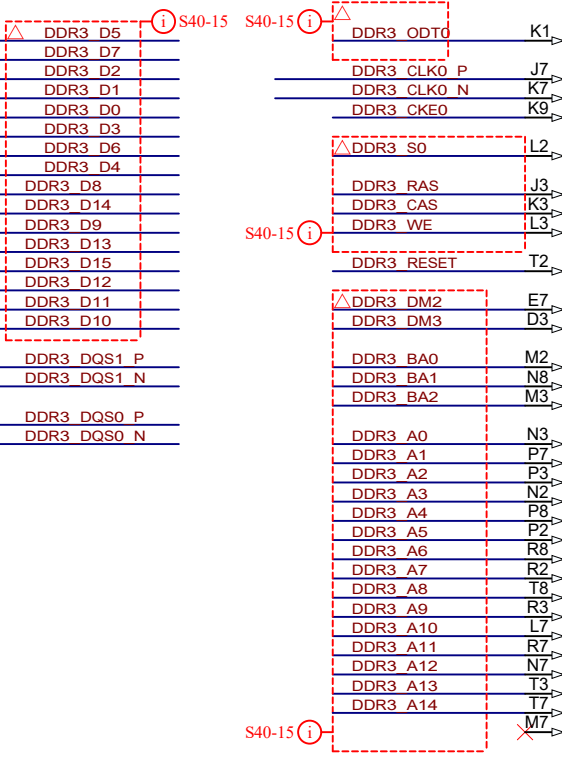
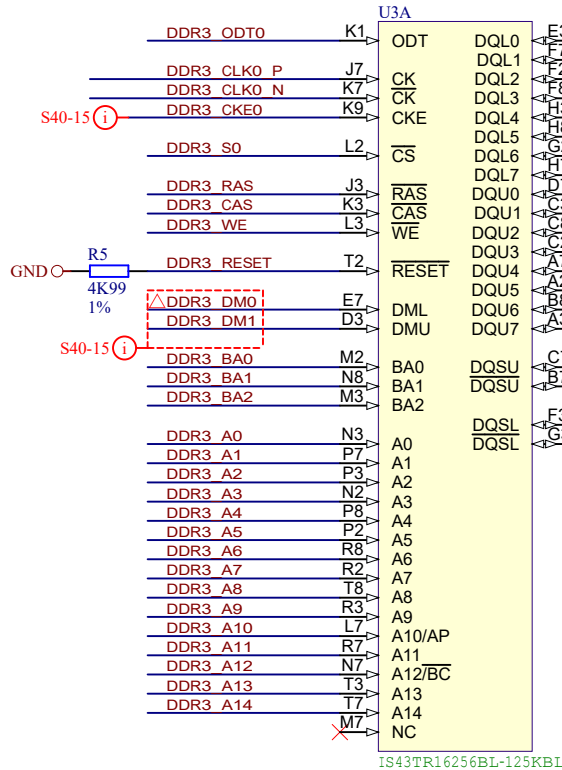
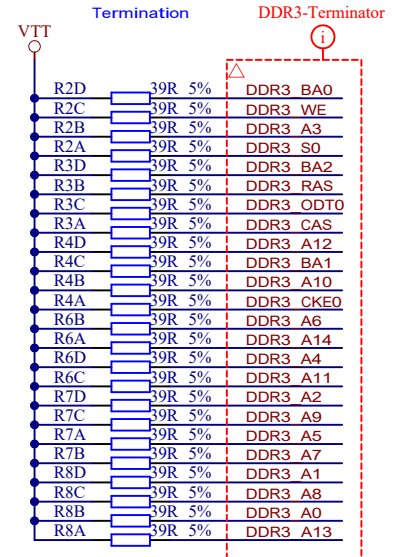
B

C

C

D

D



Title: TE0745 - DDR3 RAM		
A4	Number: 17 81C31-A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH	Page 17 of 25
Filename: DDR3-RAM.SchDoc		

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A

A

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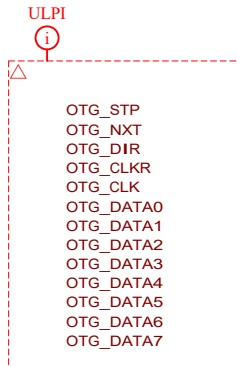
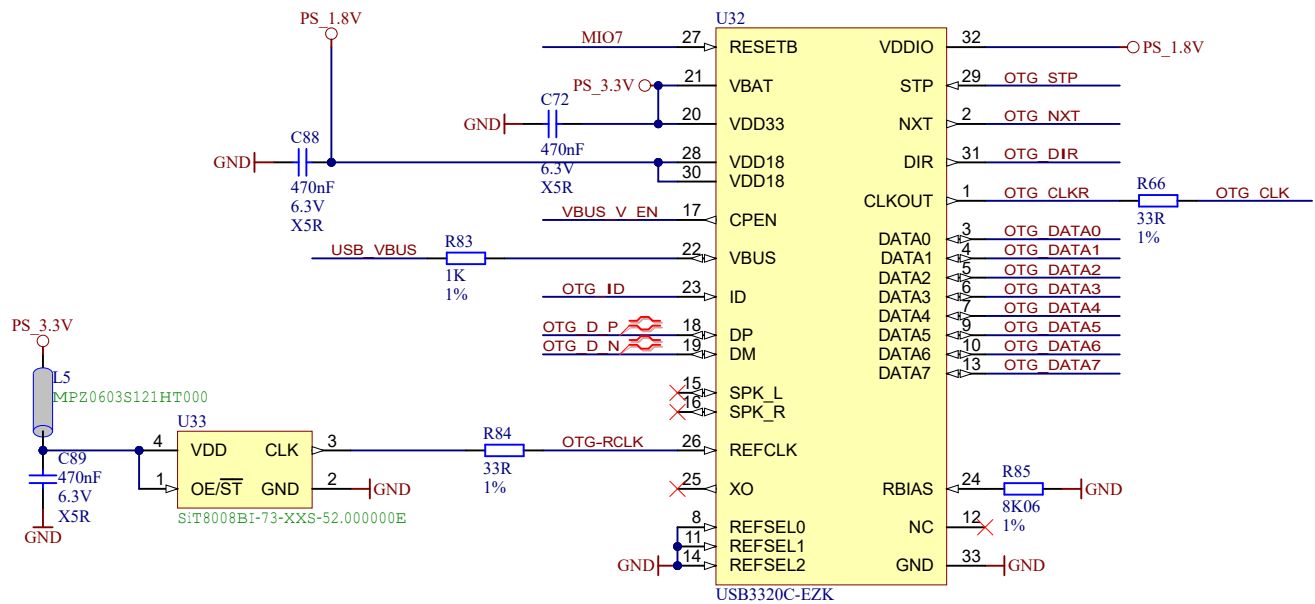
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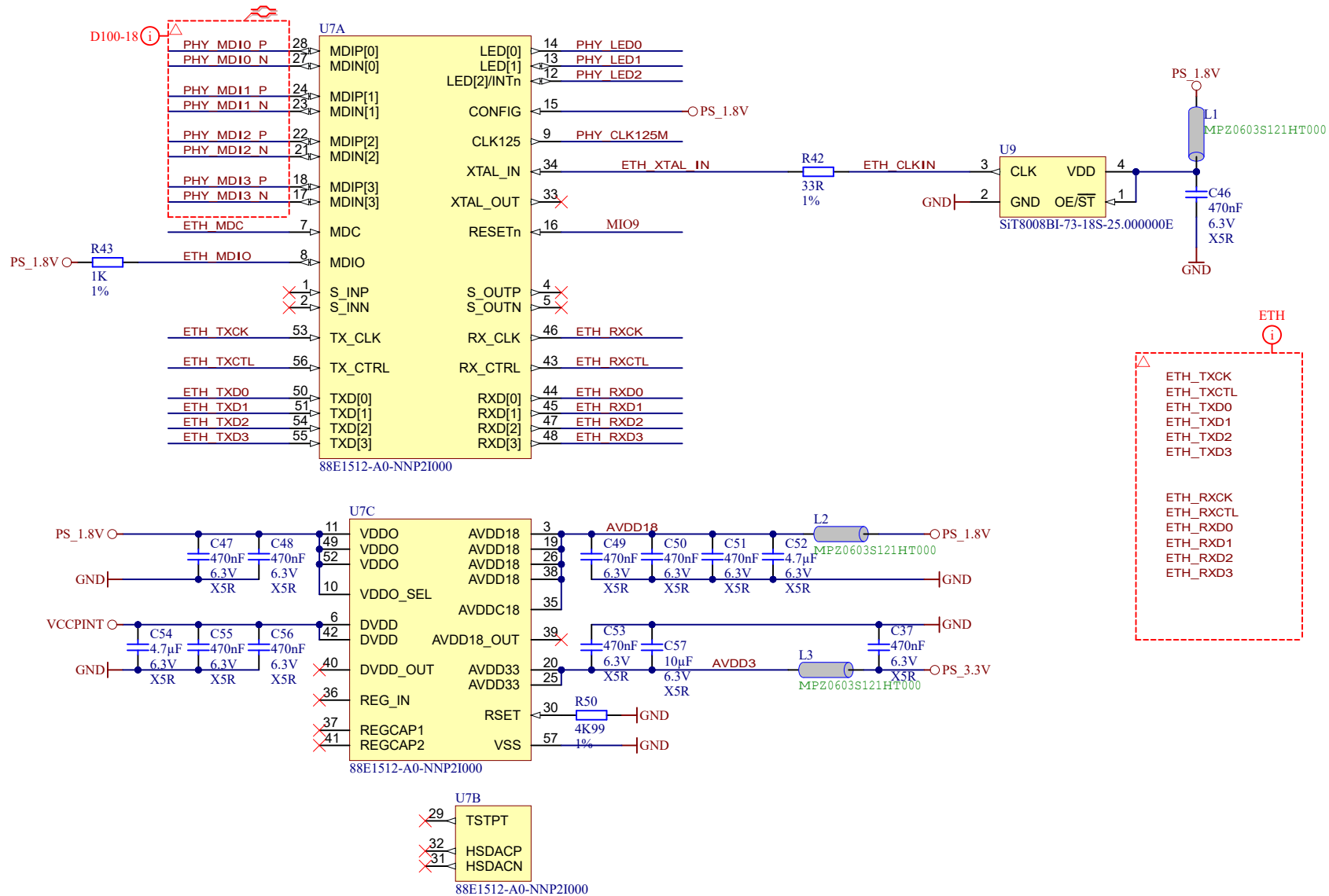
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A4	Number: 18 81C31-A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 18 of 25
Filename: USB-PHY.SchDoc		


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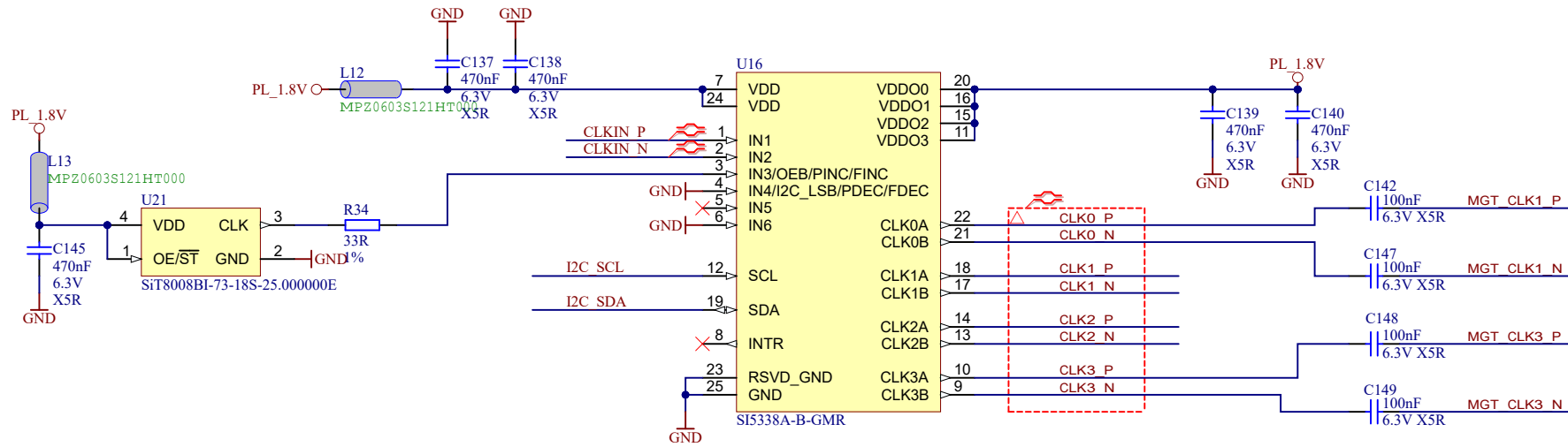
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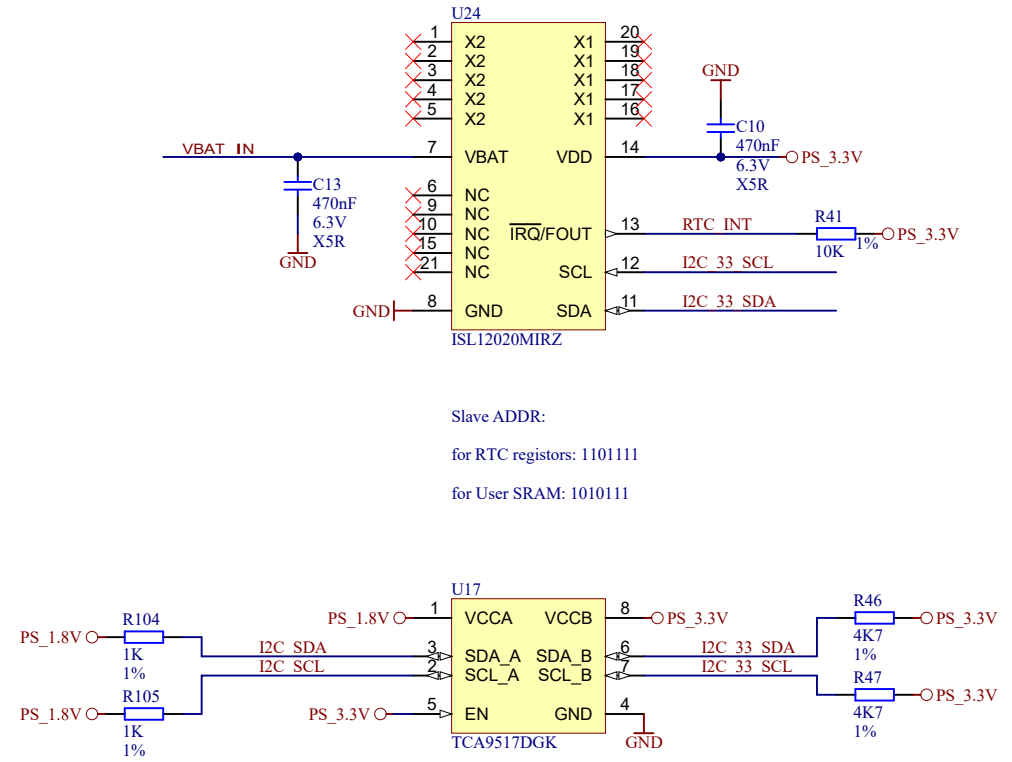


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			A4	Number: 19 81C31-A
Date: 2016-04-28		Copyright: Trenz Electronic GmbH / TT		Page 19 of 25
Filename: ETH-PHY.SchDoc				



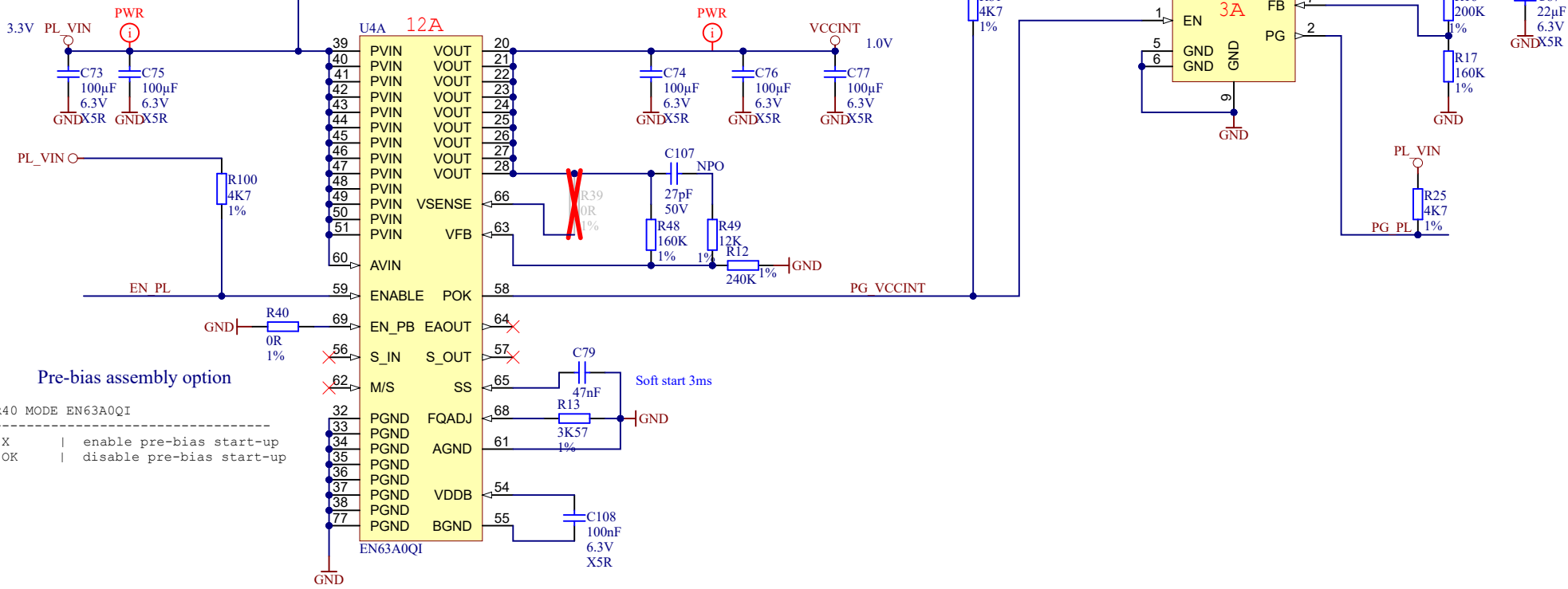
Slave ADDR:  
1110000 OR 1110001

		Title: TE0745 - CLK	
		A4	Number: 20 81C31-A
Date: 2016-04-28		Copyright: Trenz Electronic GmbH / TT	
Filename: CLK.SchDoc		Page 20 of 25	



Slave ADDR:  
 for RTC registers: 1101111  
 for User SRAM: 1010111

	Title: TE0745 - RTC		
	A4	Number: 21 81C31-A	Rev. 02
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page21 of 25
	Filename: SENSOR-RTC.SchDoc		




**Pre-bias assembly option**

R39 R40 MODE EN63A0QI  
 -----  
 OK X | enable pre-bias start-up  
 X OK | disable pre-bias start-up

U4B

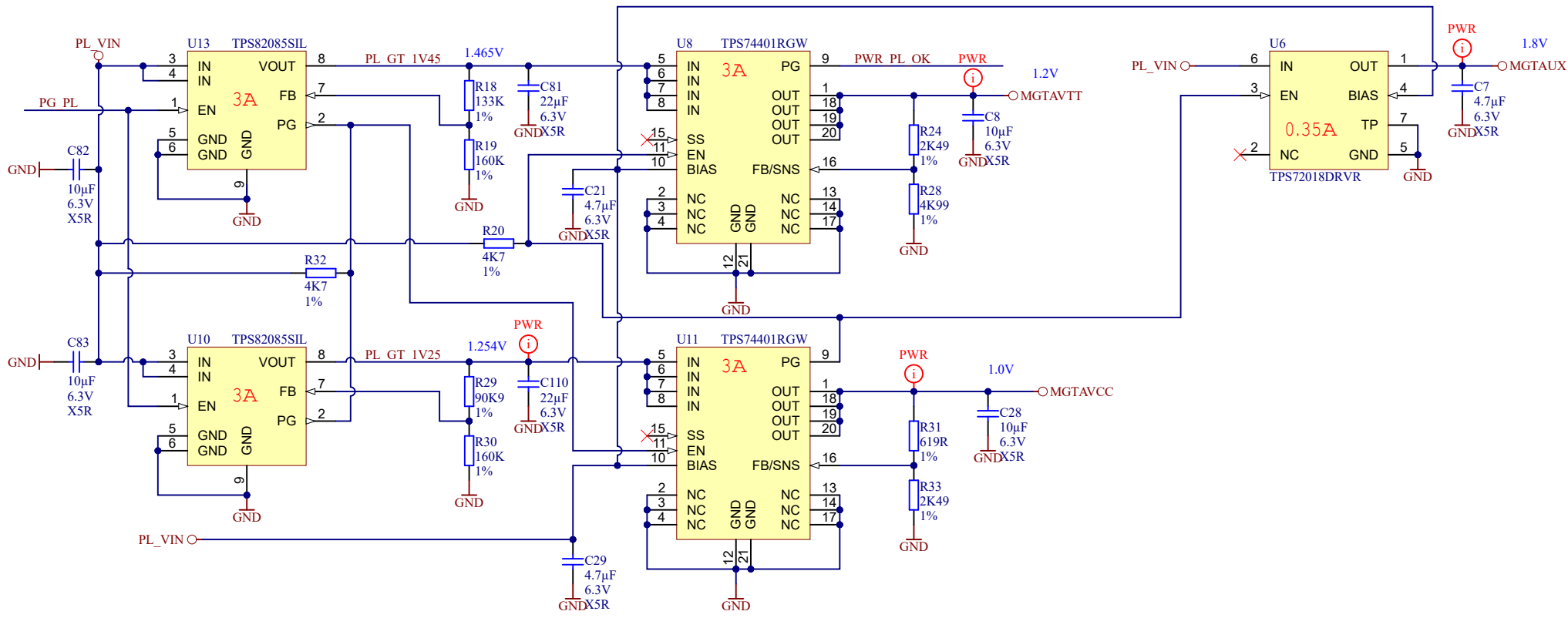
1	NC	NC	17
2	NC	NC	18
3	NC	NC	19
4	NC	NC	29
5	NC	NC(SW)	30
6	NC	NC(SW)	31
7	NC	NC	52
8	NC	NC	53
9	NC	NC	67
10	NC	NC(SW)	70
11	NC	NC(SW)	71
12	NC	NC	72
13	NC	NC	73
14	NC	NC	74
15	NC	NC	75
16	NC	NC	76


EN63A0QI



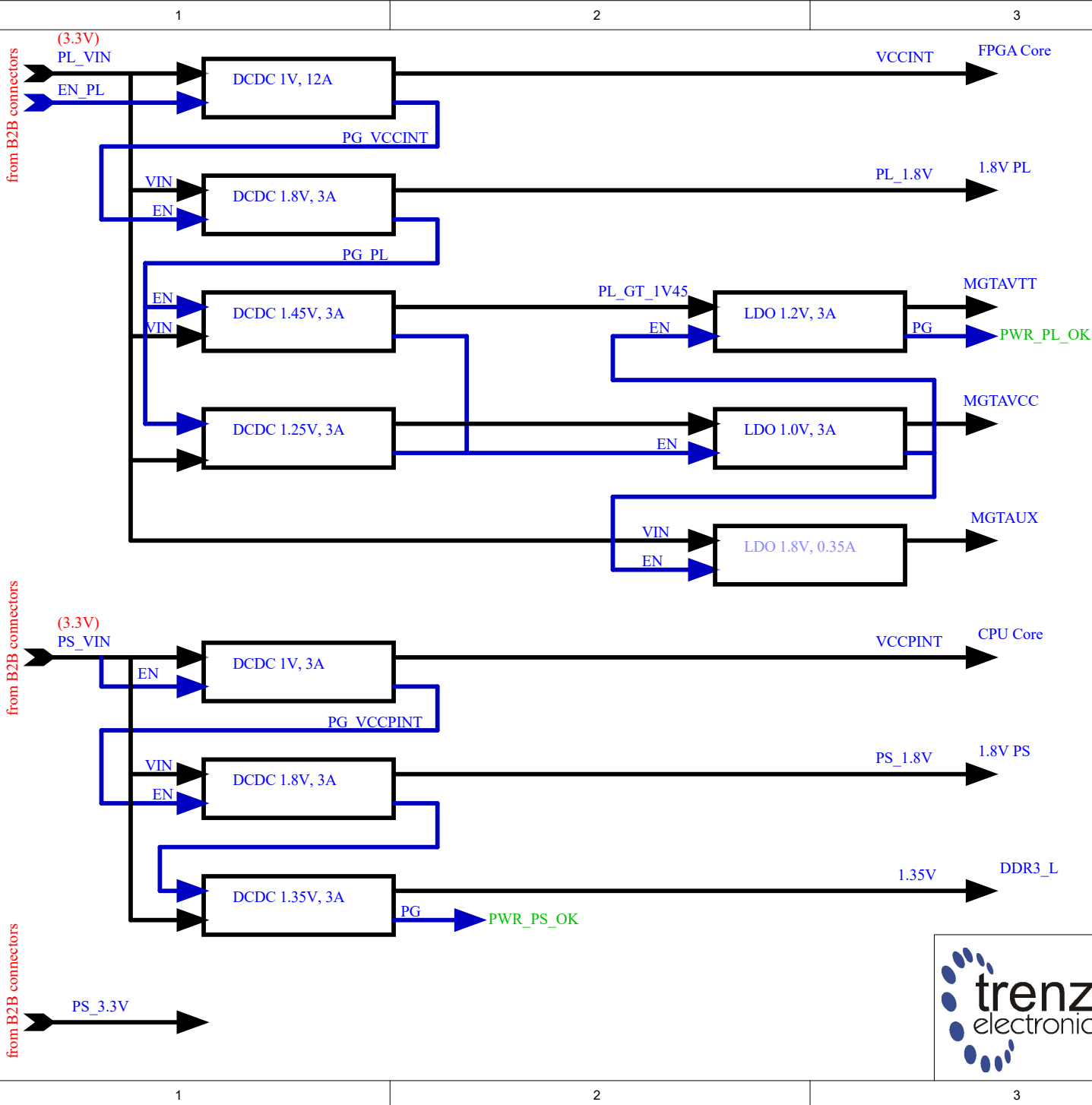
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A4	Number: 22 81C31-A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 22 of 25
Filename: POWER.SchDoc		





	Title: TE0745 - Power3		
	A4	Number: 24 81C31-A	Rev. 02
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page24 of 25
	Filename: POWER_3.SchDoc		





Title: TE0745 - Power overview		
A4	Number: 25 81C31-A	Rev. 02
Date: 2015-07-01	Copyright: Trenz Electronic GmbH	Page 25 of 25
Filename: PowerOverview.SchDoc		