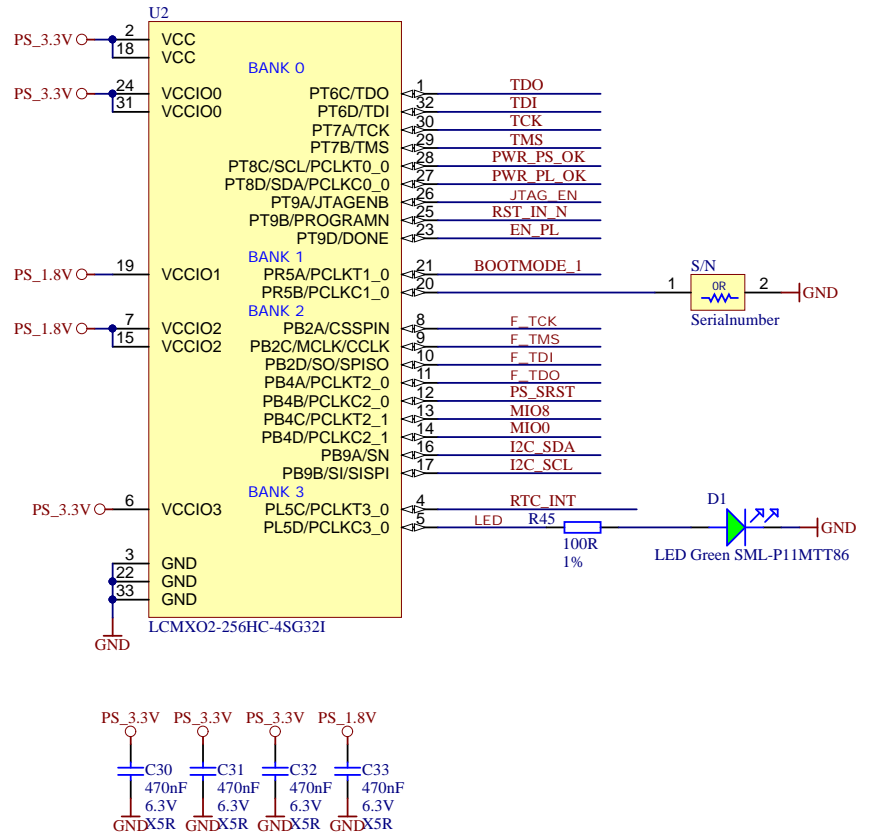
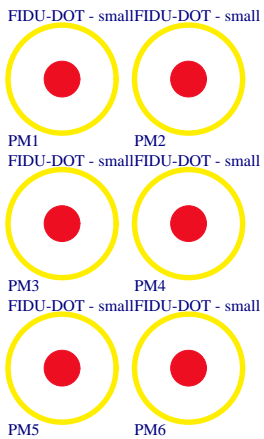
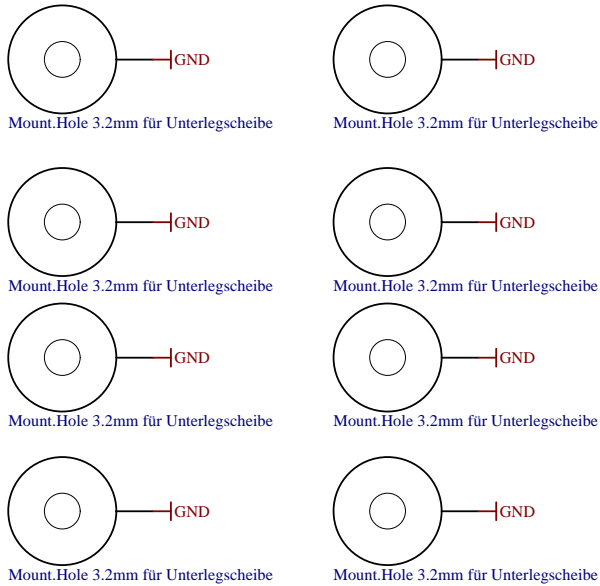
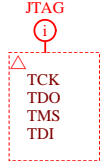
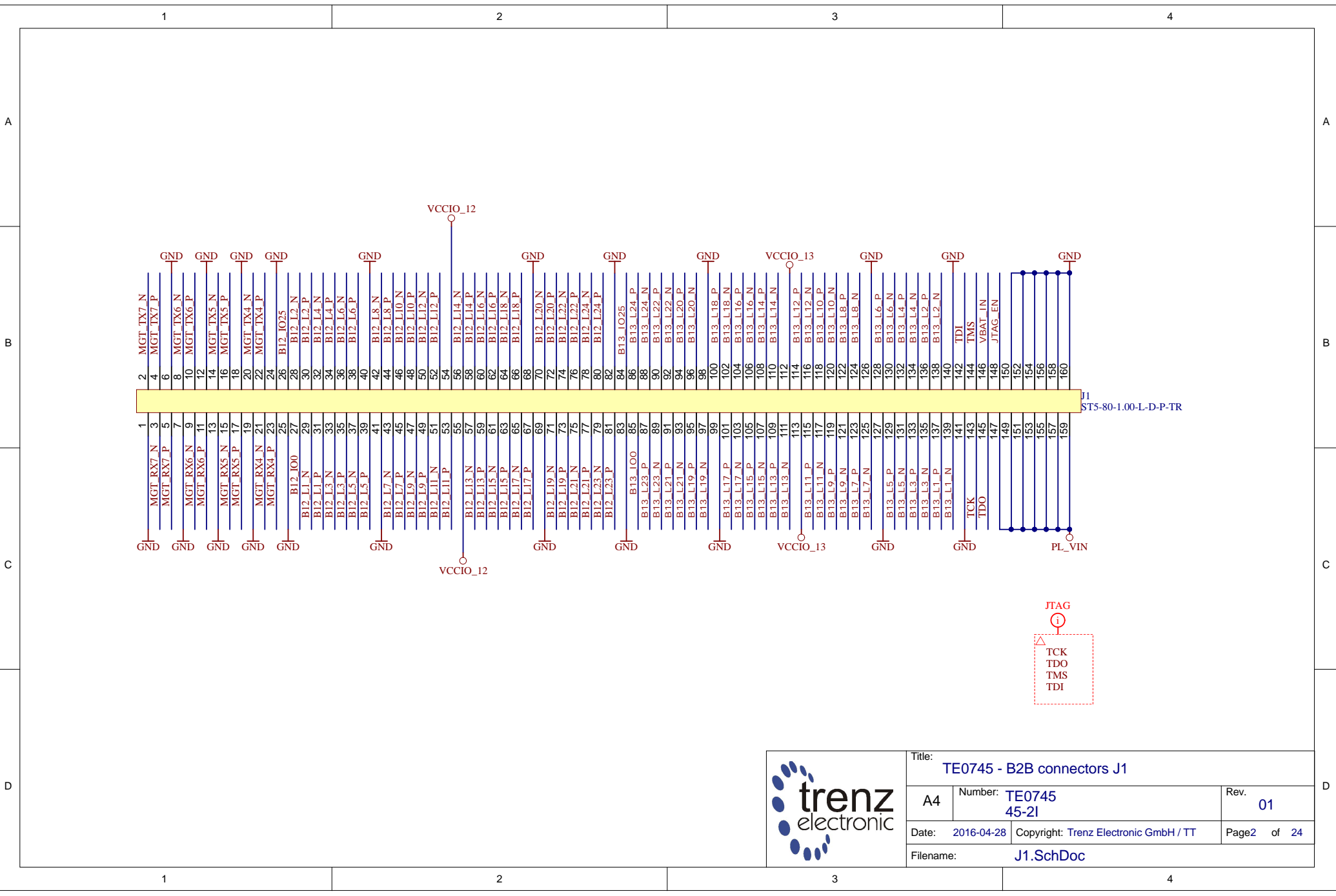



Serial
Serialnummer 6,3 x 6.3mm

LOGO1
TE Logo PRINT Layer
LOGO PRINT



	Title: TE0745	
	A4	Number: TE0745 45-21
	Date: 2016-04-28	Rev. 01
	Copyright: Trenz Electronic GmbH / TT	Page1 of 24
Filename: TE0745.SchDoc		

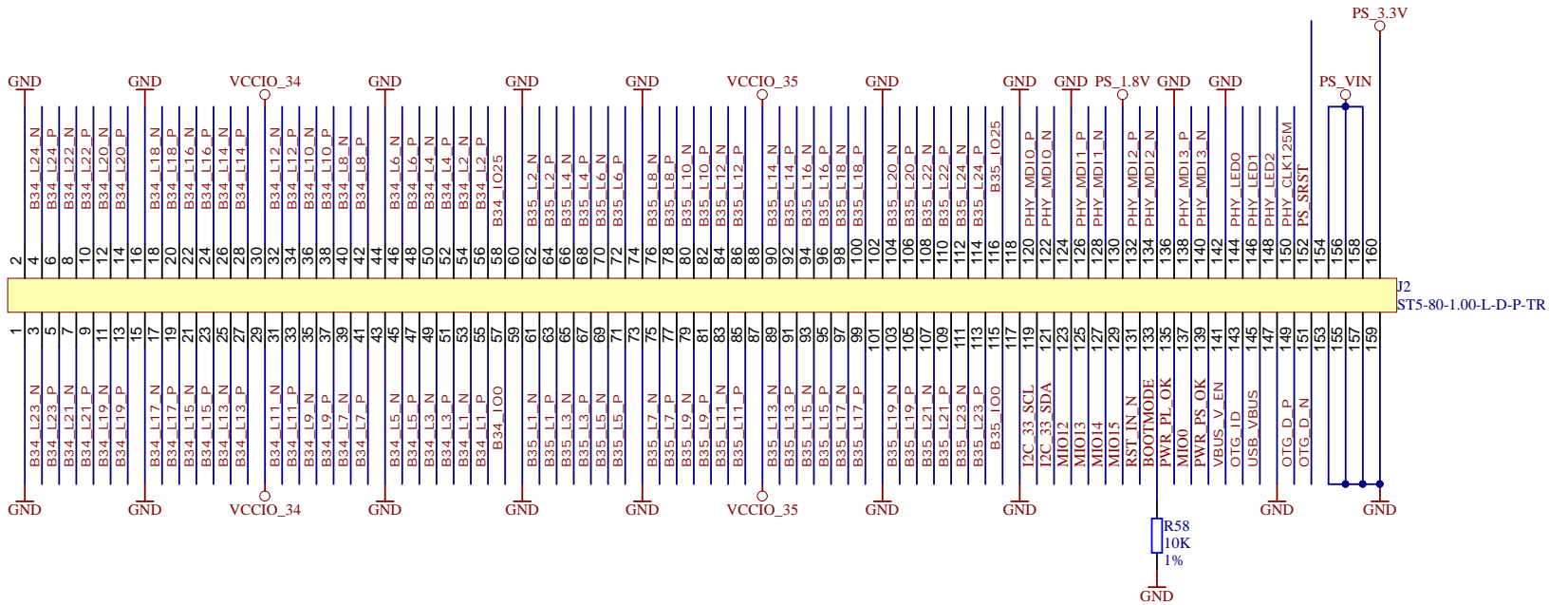


		Title: TE0745 - B2B connectors J1	
		A4	Number: TE0745 45-21
Date: 2016-04-28		Copyright: Trenz Electronic GmbH / TT	
Filename: J1.SchDoc		Page2 of 24	

ETH_MDI

i

PHY_MDI1_P
 PHY_MDI1_N
 PHY_MDI3_P
 PHY_MDI3_N
 PHY_MDI0_P
 PHY_MDI0_N
 PHY_MDI2_P
 PHY_MDI2_N



J2 ST5-80-1.00-L-D-P-TR

R58 10K 1%



Title: TE0745 - B2B connectors J2		
A4	Number: TE0745 45-21	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page3 of 24
Filename: J2.SchDoc		

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A

B

B

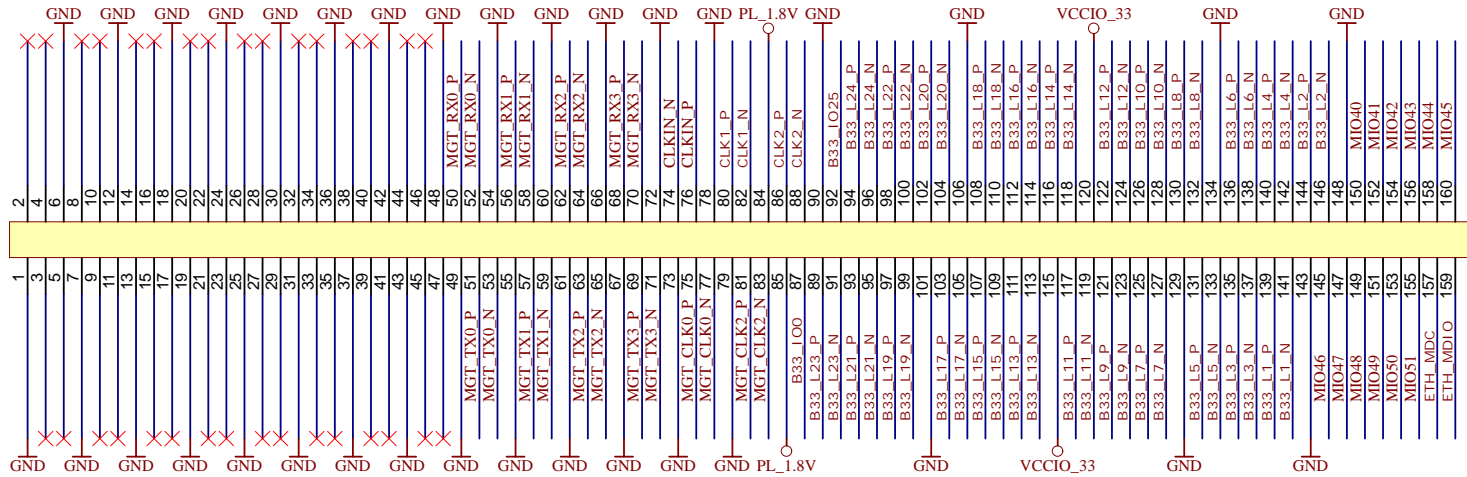
C

C

D

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RESERVED for additional 8 GTX lanes



J3
ST5-80-1.00-L-D-P-TR



Title: TE0745 - B2B connectors J3		
A4	Number: TE0745 45-21	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page4 of 24
Filename: J3.SchDoc		

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U_B12
B12.SchDoc



U_B500
MIO_B500.SchDoc



U_B13
B13.SchDoc



U_PS_DDR
PS-DDR.SchDoc



U_B33
B33.SchDoc



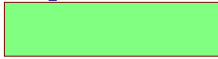
U_MISC
ZYNQ_MISC.SchDoc



U_B34
B34.SchDoc



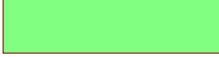
U_ZYNQ_POWER
ZYNQ_POWER.SchDoc



U_B35
B35.SchDoc



U_FPGA_MGT
FPGA_MGT.SchDoc



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Title: TE0745 - Zynq		
A4	Number: TE0745 45-2I	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page5 of 24
Filename: ZYNQ.SchDoc		

A

A

B

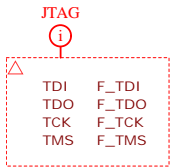
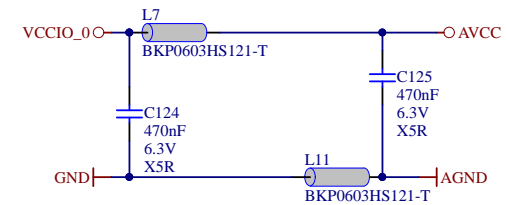
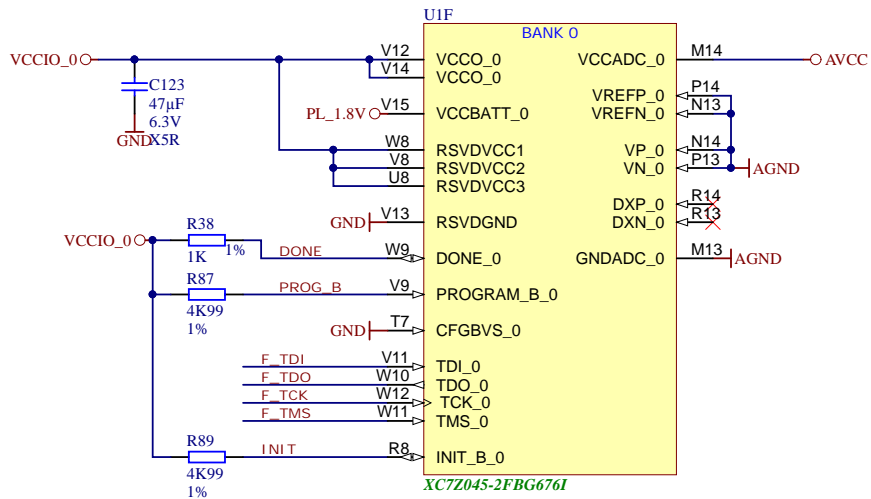
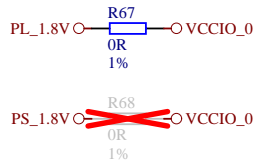
B

C

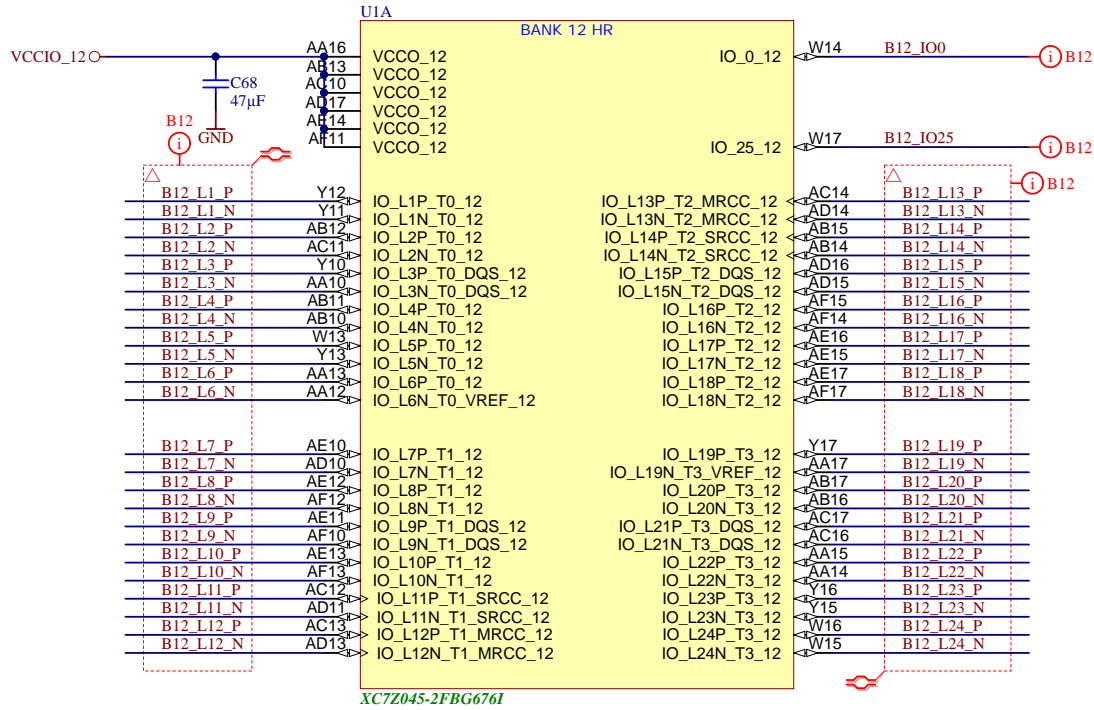
C

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D



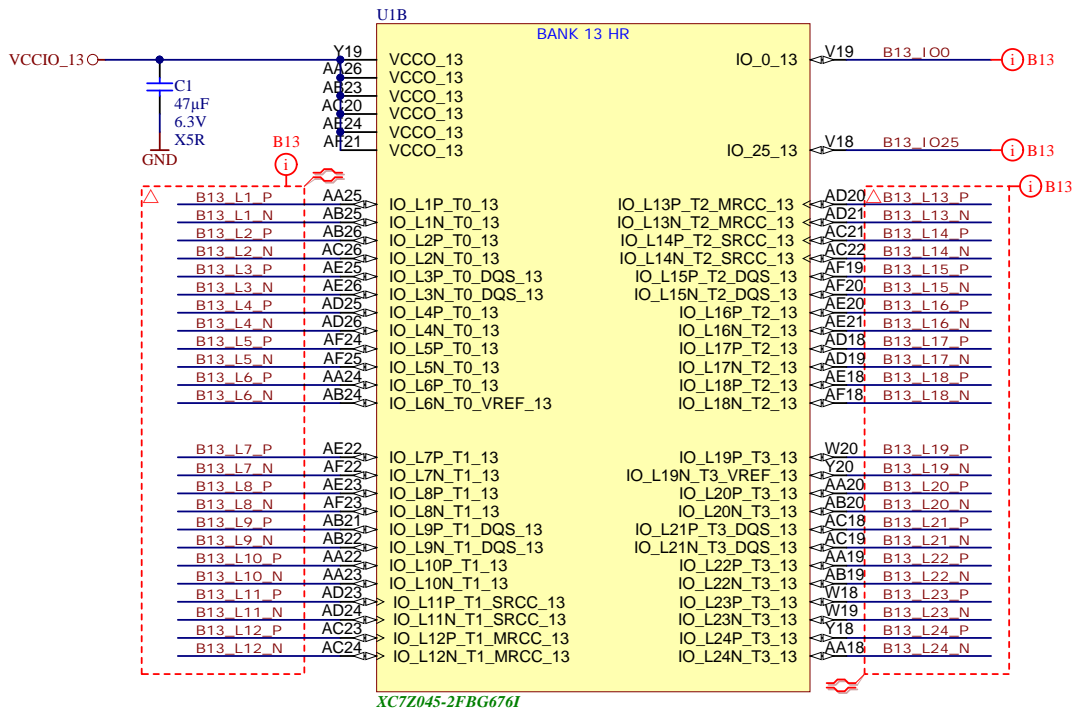
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		A4	Number: TE0745 45-21
Date: 2016-04-28		Copyright: Trenz Electronic GmbH / TT	
Filename: ZYNQ_MISC.SchDoc		Page6 of 24	



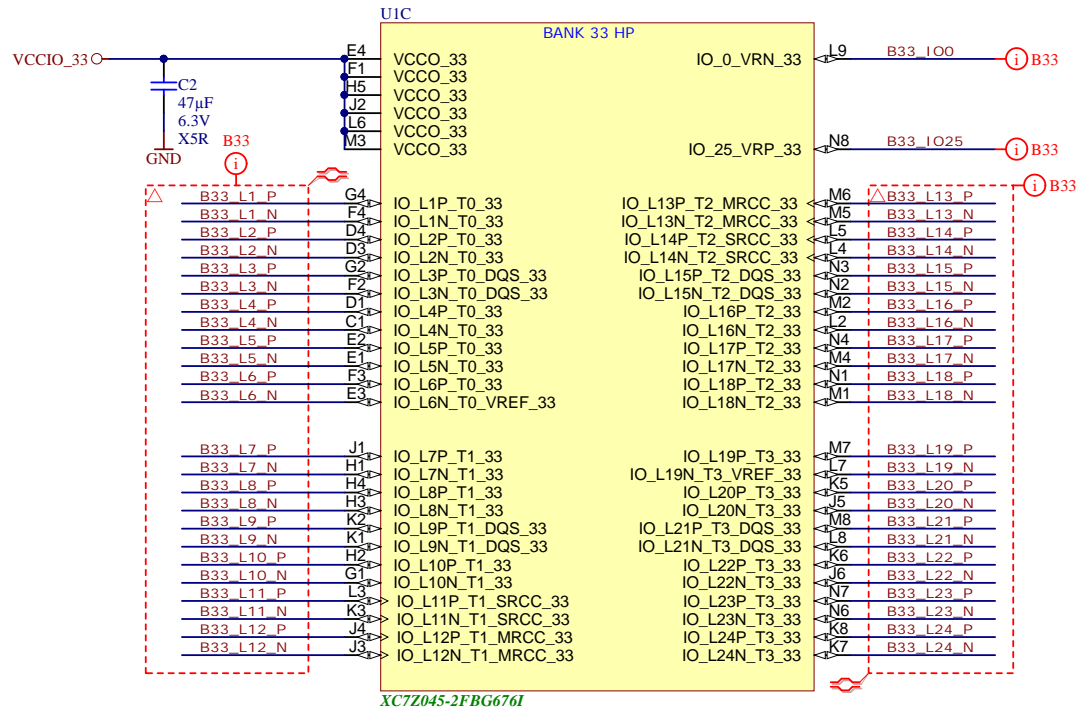
XC7Z045-2FBG6761



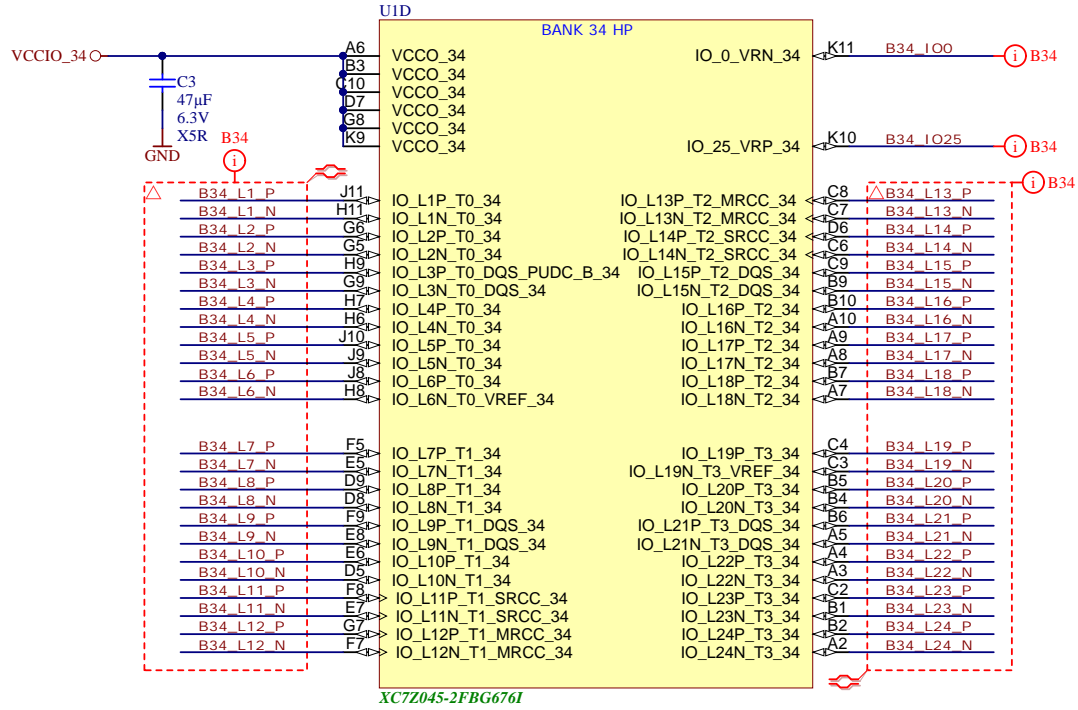
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A4	Number: TE0745 45-21	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page7 of 24
Filename: B12.SchDoc		




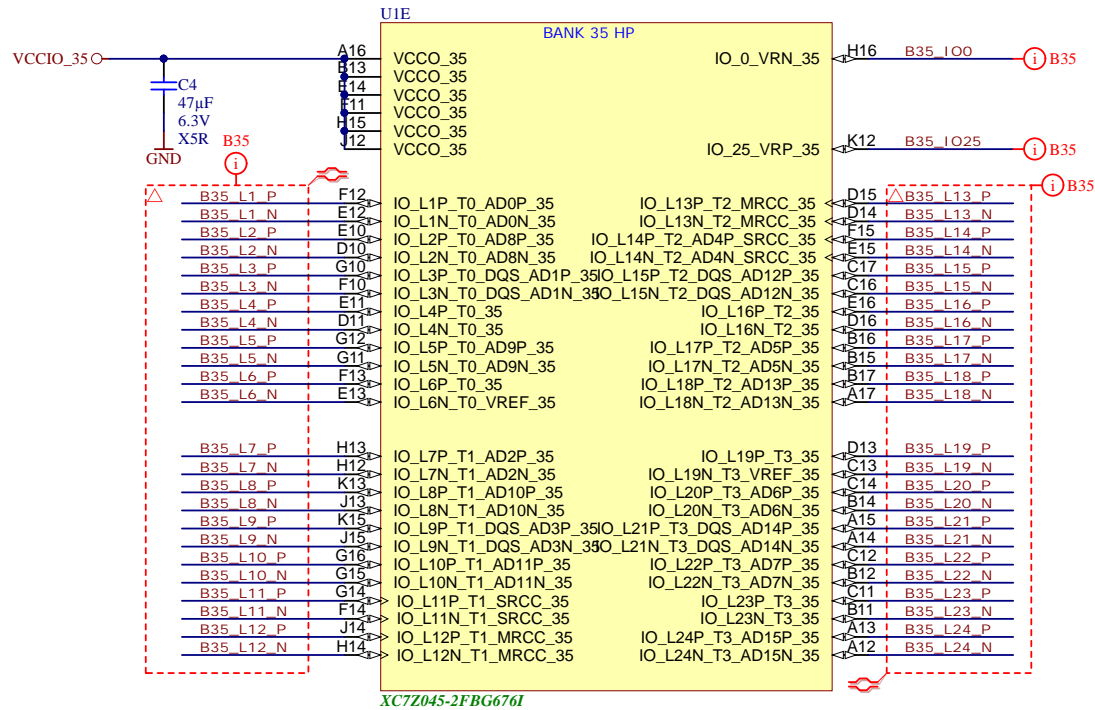
Title: TE0745 - Zynq_B13		
A4	Number: TE0745 45-2I	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page8 of 24
Filename: B13.SchDoc		



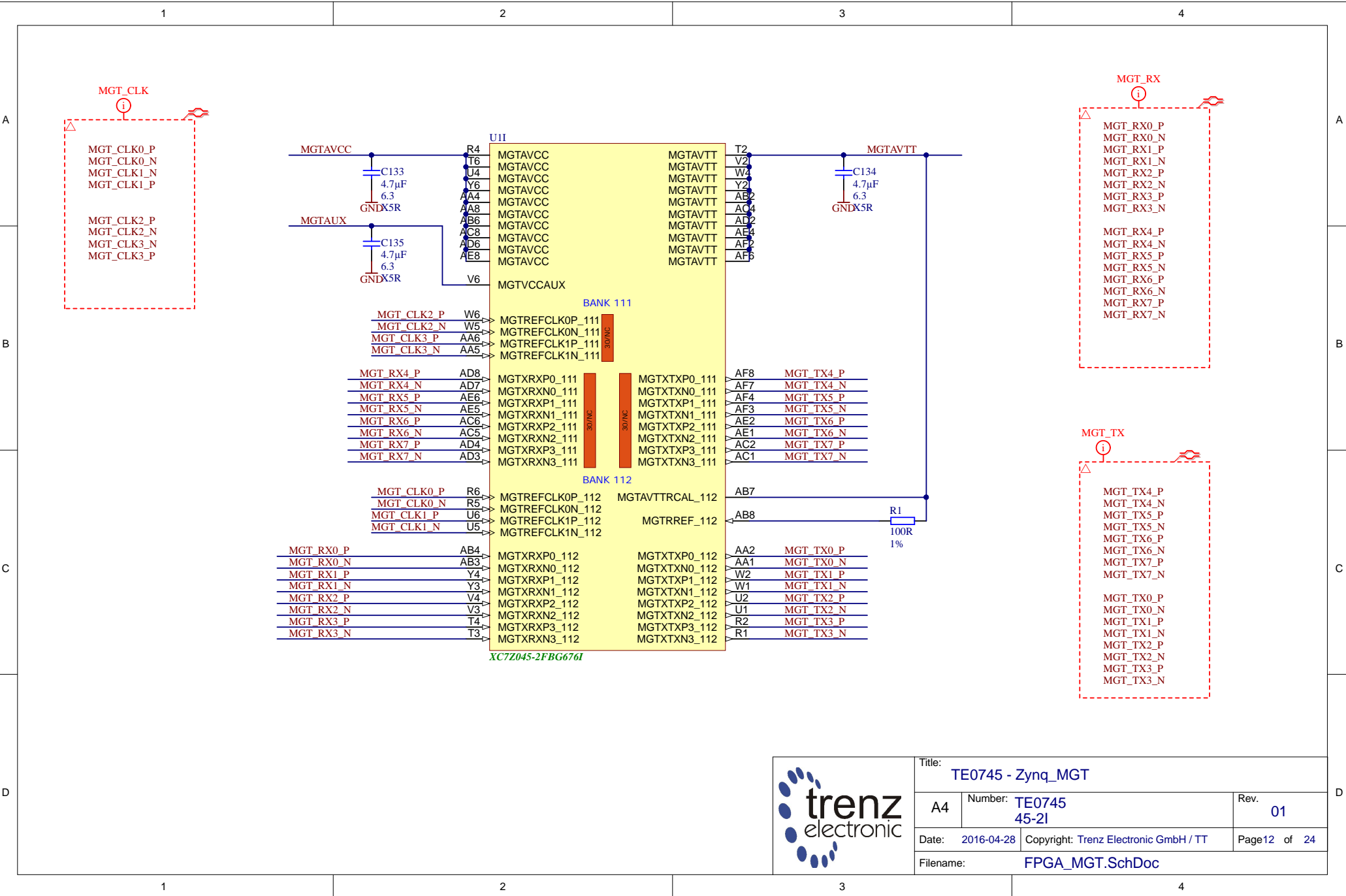
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A4	Number: TE0745 45-2I	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page9 of 24
Filename: B33.SchDoc		



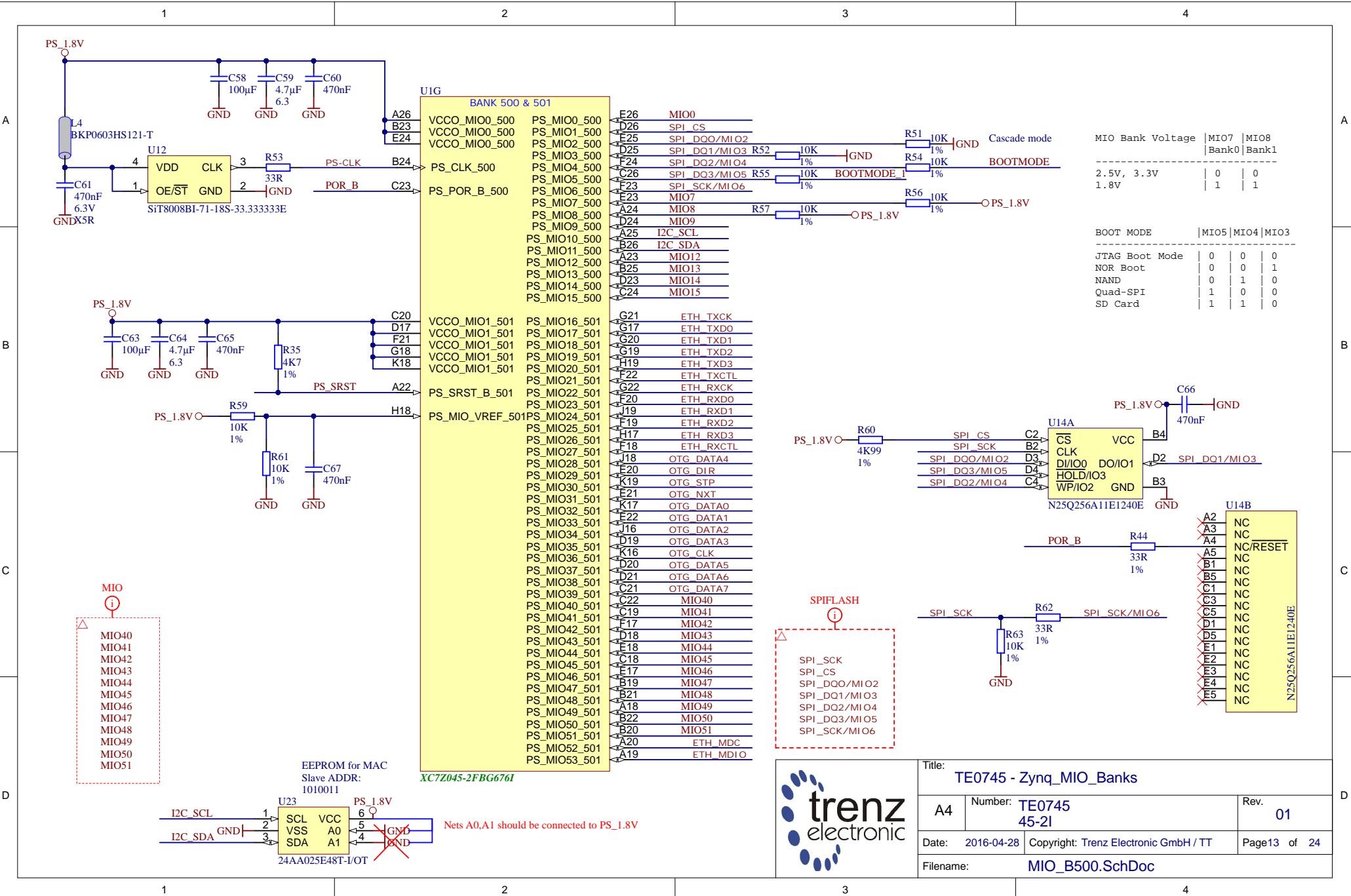
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		A4	Number: TE0745 45-2I
Date: 2016-04-28		Copyright: Trenz Electronic GmbH / TT	
Filename: B34.SchDoc		Page 10 of 24	



Title: TE0745 - Zynq_B35		
A4	Number: TE0745 45-2I	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 11 of 24
Filename: B35.SchDoc		



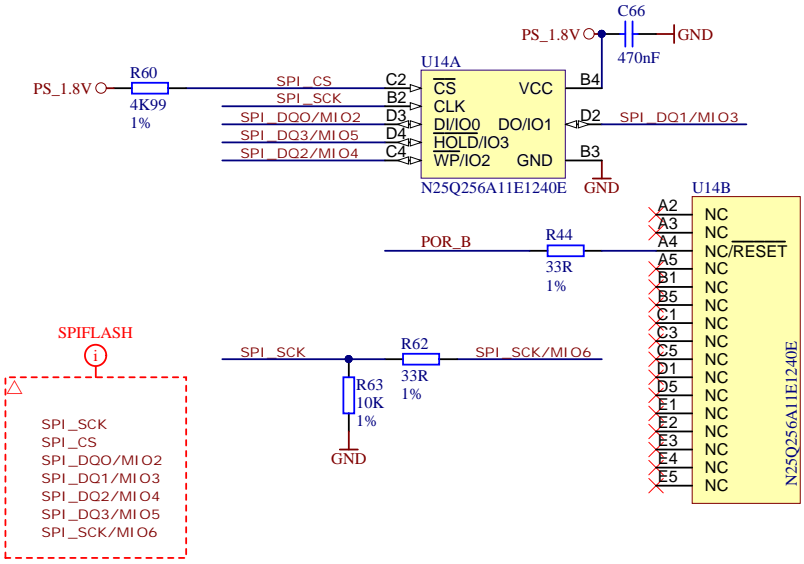
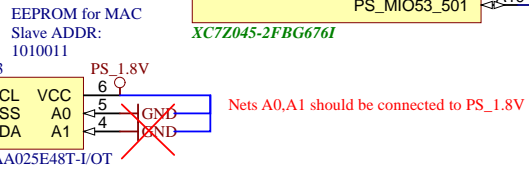
	Title: TE0745 - Zynq_MGT		
	A4	Number: TE0745 45-2I	Rev. 01
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 12 of 24
	Filename: FPGA_MGT.SchDoc		



Title: TE0745 - Zynq_MIO_Banks		
A4	Number: TE0745 45-21	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page13 of 24
Filename: MIO_B500.SchDoc		

BANK 500 & 501		
VCCO_MIO0_500	PS_MIO0_500	E26 MIO0
VCCO_MIO0_500	PS_MIO1_500	D26 SPI_CS
VCCO_MIO0_500	PS_MIO2_500	E25 SPI_DQ0/MIO2
PS_MIO3_500	PS_MIO3_500	D25 SPI_DO1/MIO3
PS_MIO4_500	PS_MIO4_500	F24 SPI_DO2/MIO4
PS_MIO5_500	PS_MIO5_500	C26 SPI_DO3/MIO5
PS_MIO6_500	PS_MIO6_500	F23 SPI_SCK/MIO6
PS_MIO7_500	PS_MIO7_500	E23 MIO7
PS_MIO8_500	PS_MIO8_500	A24 MIO8
PS_MIO9_500	PS_MIO9_500	D24 MIO9
PS_MIO10_500	PS_MIO10_500	A25 I2C_SCL
PS_MIO11_500	PS_MIO11_500	B26 I2C_SDA
PS_MIO12_500	PS_MIO12_500	A23 MIO12
PS_MIO13_500	PS_MIO13_500	B25 MIO13
PS_MIO14_500	PS_MIO14_500	D23 MIO14
PS_MIO15_500	PS_MIO15_500	C24 MIO15
VCCO_MIO16_501	PS_MIO16_501	G21 ETH_TXCK
VCCO_MIO17_501	PS_MIO17_501	G17 ETH_TXD0
VCCO_MIO18_501	PS_MIO18_501	G20 ETH_TXD1
VCCO_MIO19_501	PS_MIO19_501	G19 ETH_TXD2
VCCO_MIO20_501	PS_MIO20_501	H19 ETH_TXD3
PS_MIO21_501	PS_MIO21_501	F22 ETH_TXCTL
PS_MIO22_501	PS_MIO22_501	G22 ETH_RXCK
PS_MIO23_501	PS_MIO23_501	F20 ETH_RXD0
PS_MIO24_501	PS_MIO24_501	H19 ETH_RXD1
PS_MIO25_501	PS_MIO25_501	F19 ETH_RXD2
PS_MIO26_501	PS_MIO26_501	H17 ETH_RXD3
PS_MIO27_501	PS_MIO27_501	F18 ETH_RXCTL
PS_MIO28_501	PS_MIO28_501	J18 OTG_DATA4
PS_MIO29_501	PS_MIO29_501	E20 OTG_DIR
PS_MIO30_501	PS_MIO30_501	K19 OTG_STP
PS_MIO31_501	PS_MIO31_501	E21 OTG_NXT
PS_MIO32_501	PS_MIO32_501	K17 OTG_DATA0
PS_MIO33_501	PS_MIO33_501	E22 OTG_DATA1
PS_MIO34_501	PS_MIO34_501	J16 OTG_DATA2
PS_MIO35_501	PS_MIO35_501	D19 OTG_DATA3
PS_MIO36_501	PS_MIO36_501	K16 OTG_CLK
PS_MIO37_501	PS_MIO37_501	D20 OTG_DATA5
PS_MIO38_501	PS_MIO38_501	D21 OTG_DATA6
PS_MIO39_501	PS_MIO39_501	C21 OTG_DATA7
PS_MIO40_501	PS_MIO40_501	C22 MIO40
PS_MIO41_501	PS_MIO41_501	C19 MIO41
PS_MIO42_501	PS_MIO42_501	F17 MIO42
PS_MIO43_501	PS_MIO43_501	D18 MIO43
PS_MIO44_501	PS_MIO44_501	E18 MIO44
PS_MIO45_501	PS_MIO45_501	C18 MIO45
PS_MIO46_501	PS_MIO46_501	E17 MIO46
PS_MIO47_501	PS_MIO47_501	B19 MIO47
PS_MIO48_501	PS_MIO48_501	B21 MIO48
PS_MIO49_501	PS_MIO49_501	A18 MIO49
PS_MIO50_501	PS_MIO50_501	B22 MIO50
PS_MIO51_501	PS_MIO51_501	B20 MIO51
PS_MIO52_501	PS_MIO52_501	A20 ETH_MDC
PS_MIO53_501	PS_MIO53_501	A19 ETH_MDIO

- MIO
- MIO40
 - MIO41
 - MIO42
 - MIO43
 - MIO44
 - MIO45
 - MIO46
 - MIO47
 - MIO48
 - MIO49
 - MIO50
 - MIO51



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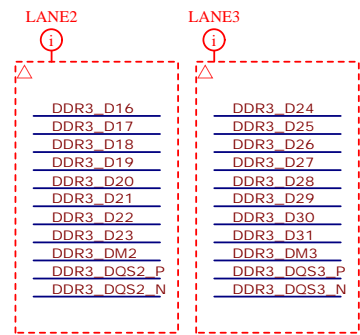
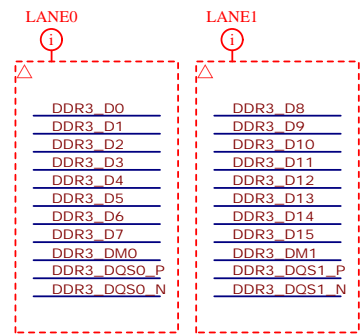
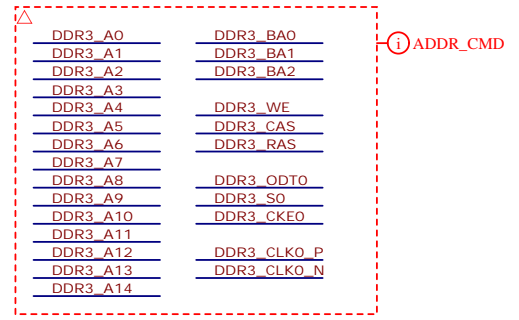
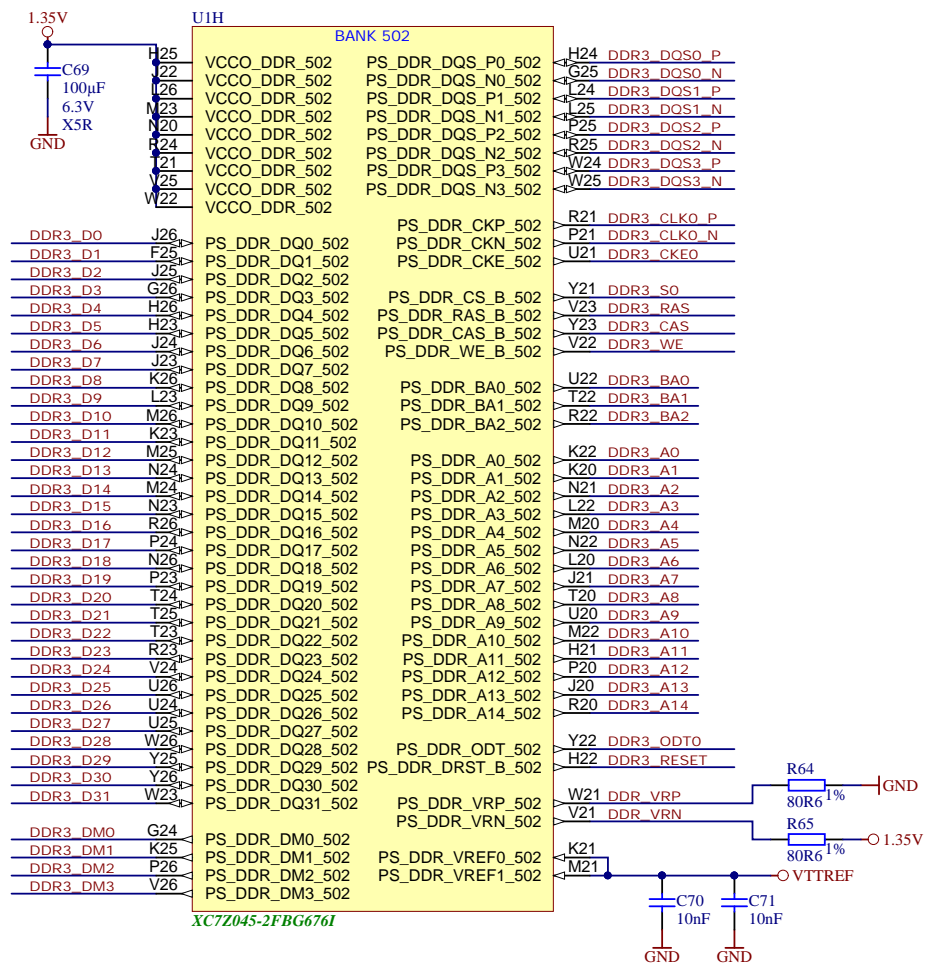
B

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Title: TE0745 - Zynq_PS_DDR		
A4	Number: TE0745 45-2I	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 14 of 24
Filename: PS-DDR.SchDoc		

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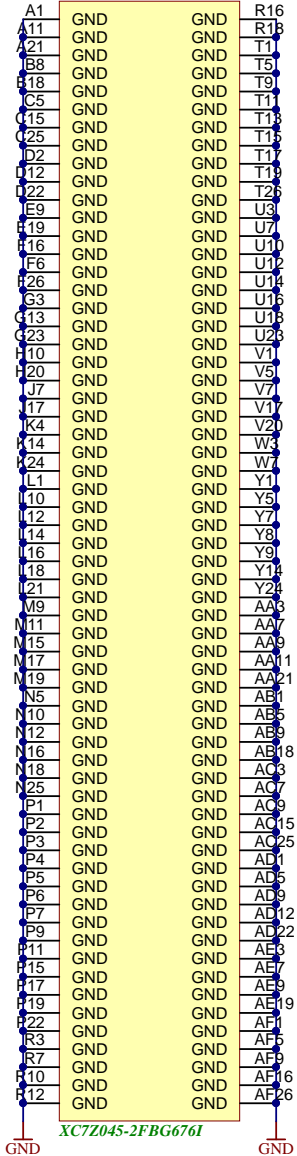
1

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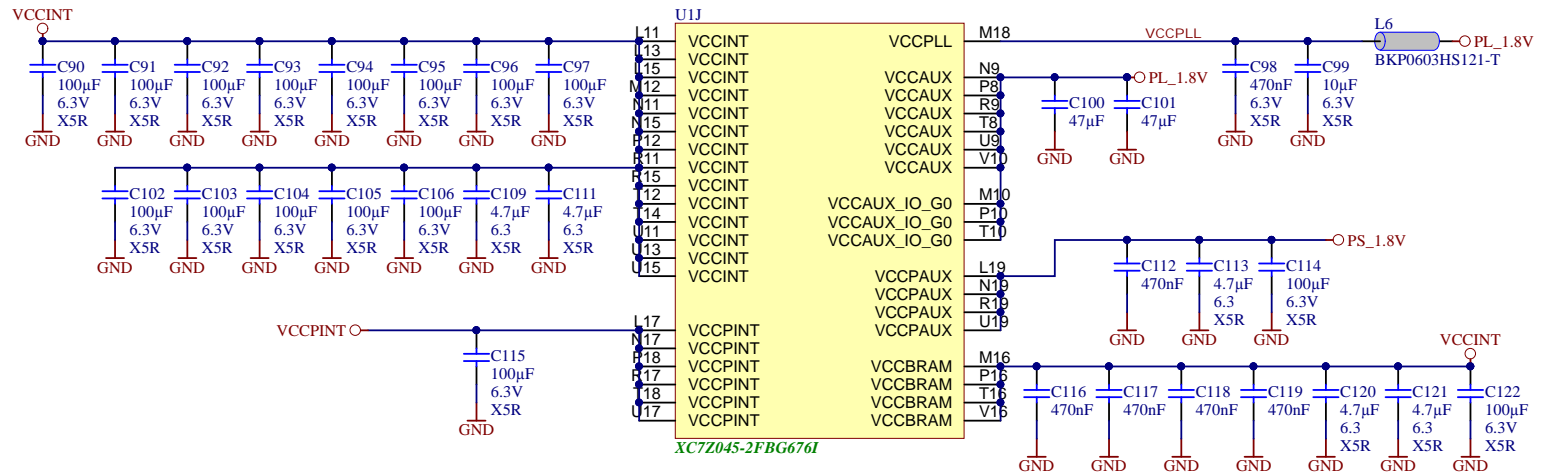
3

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UIK



Capacitors suitable for XC7Z045



XC7Z045-2FBG6761



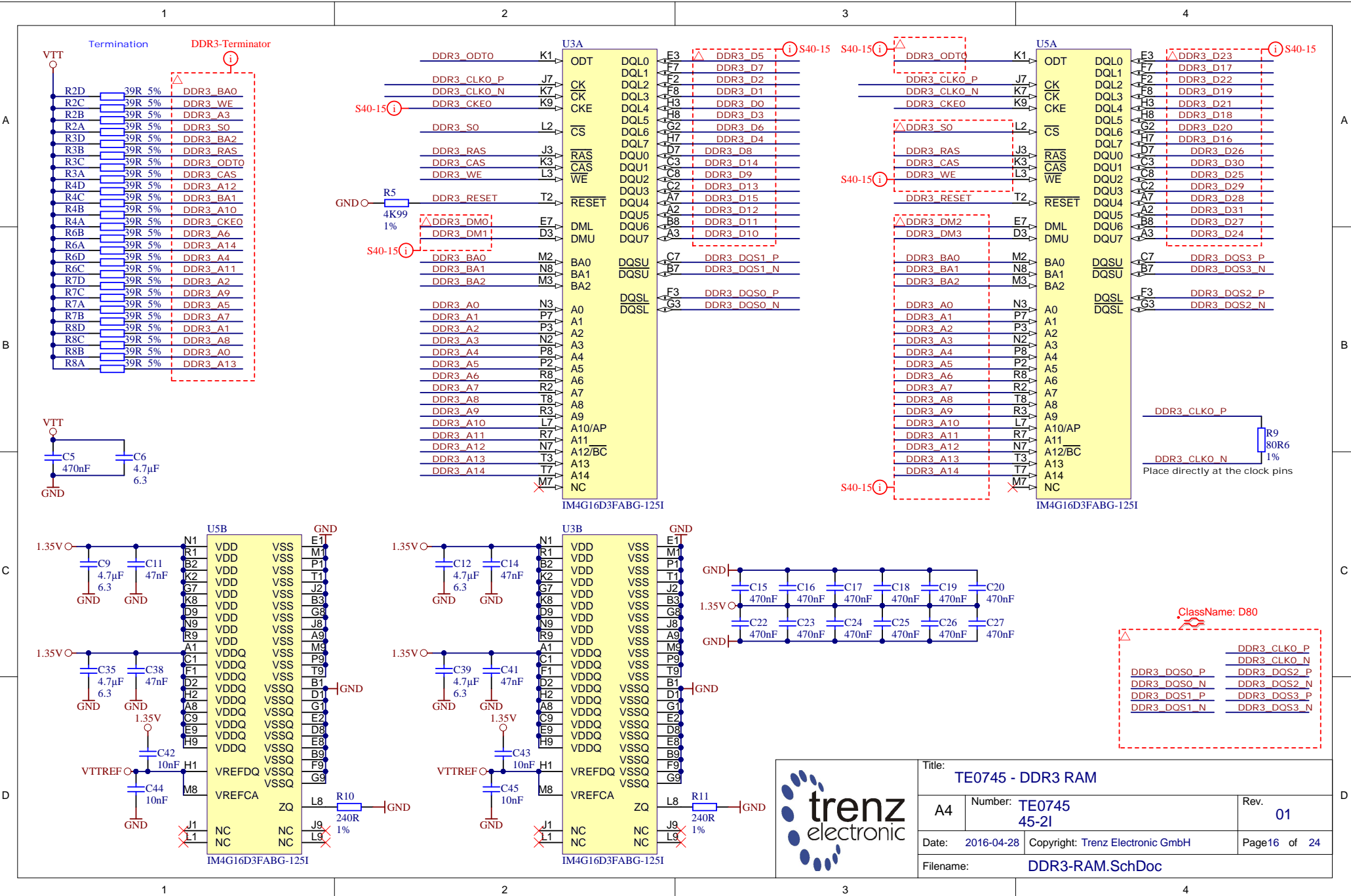
Title: TE0745 - Zynq_Power		
A4	Number: TE0745 45-21	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 15 of 24
Filename: ZYNC_POWER.SchDoc		

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trenz electronic

Title: TE0745 - DDR3 RAM

A4	Number: TE0745 45-21	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH	Page 16 of 24
Filename: DDR3-RAM.SchDoc		

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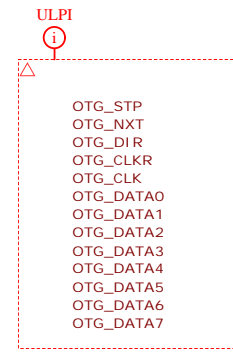
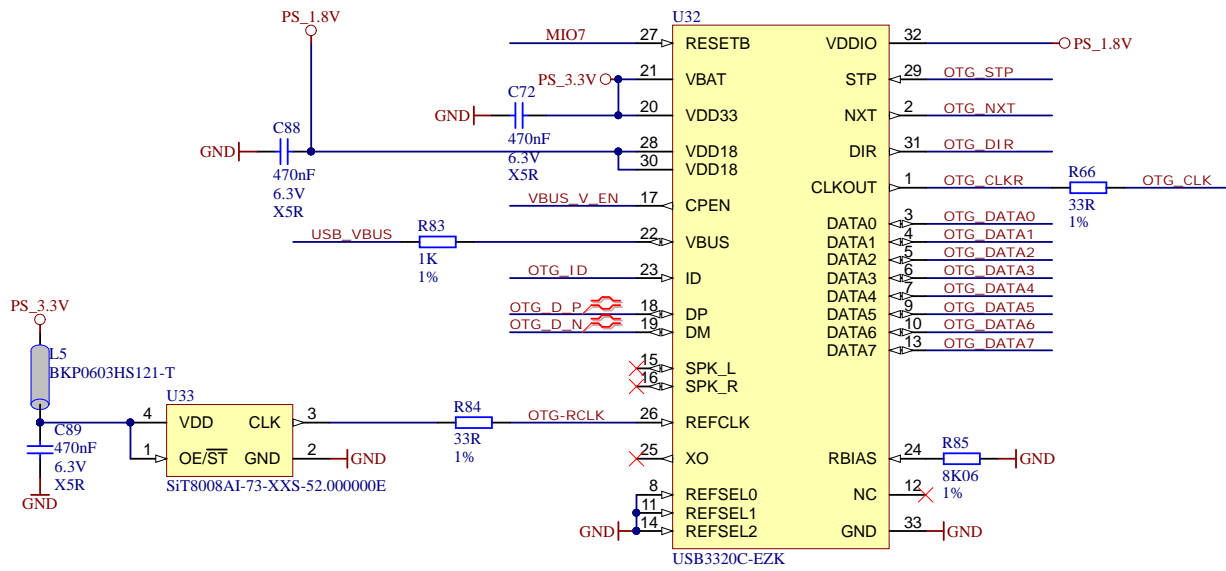
D


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		Title: TE0745 - USB_PHY	
		A4	Number: TE0745 45-2I
Date: 2016-04-28		Copyright: Trenz Electronic GmbH / TT	
Filename: USB-PHY.SchDoc		Page 17 of 24	

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A

A

B

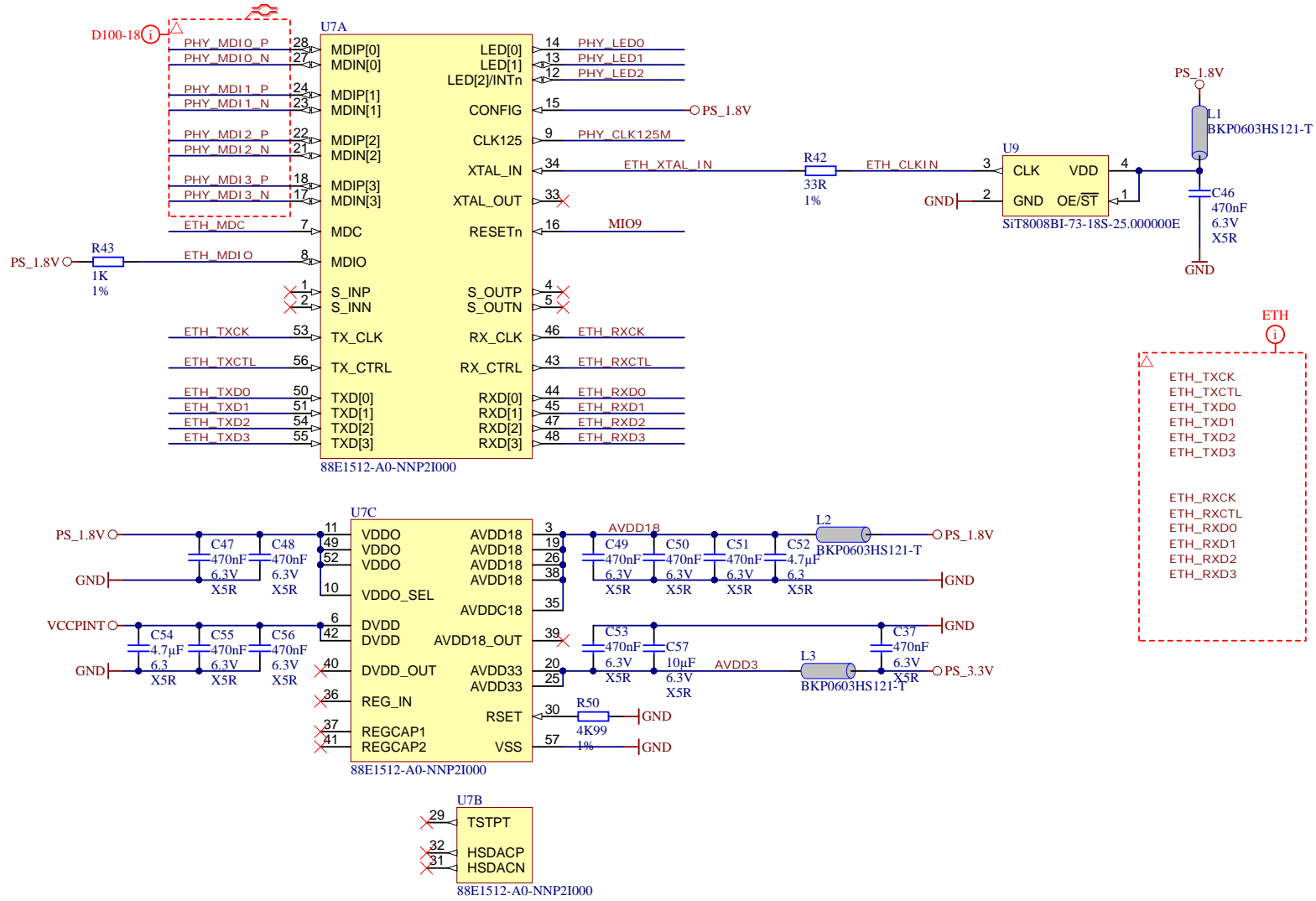
B

C

C

D

D



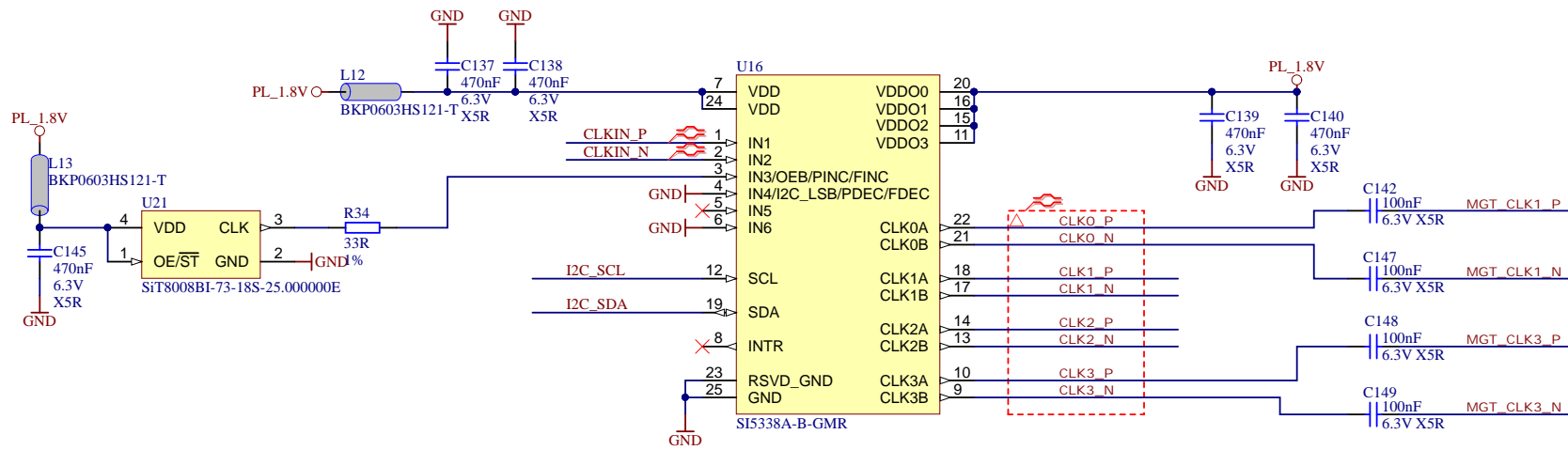
Title: TE0745 - ETH_PHY		
A4	Number: TE0745 45-21	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 18 of 24
Filename: ETH-PHY.SchDoc		

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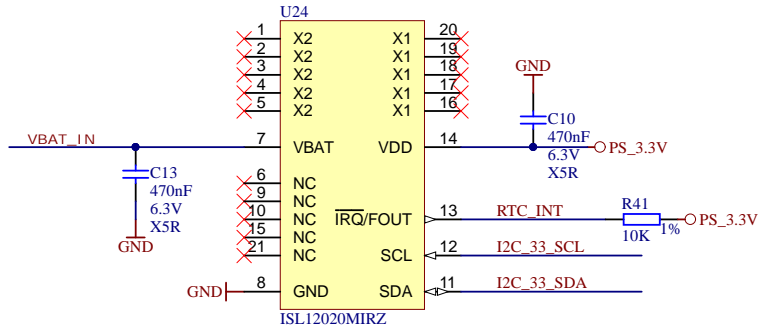
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4

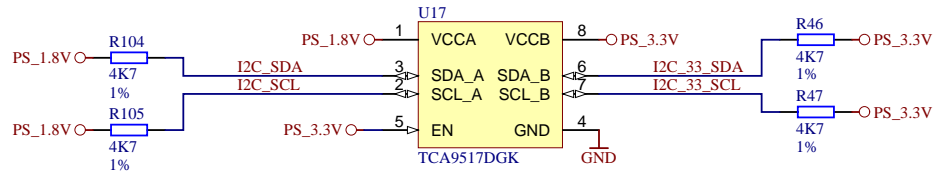


Slave ADDR:
1110000 OR 1110001

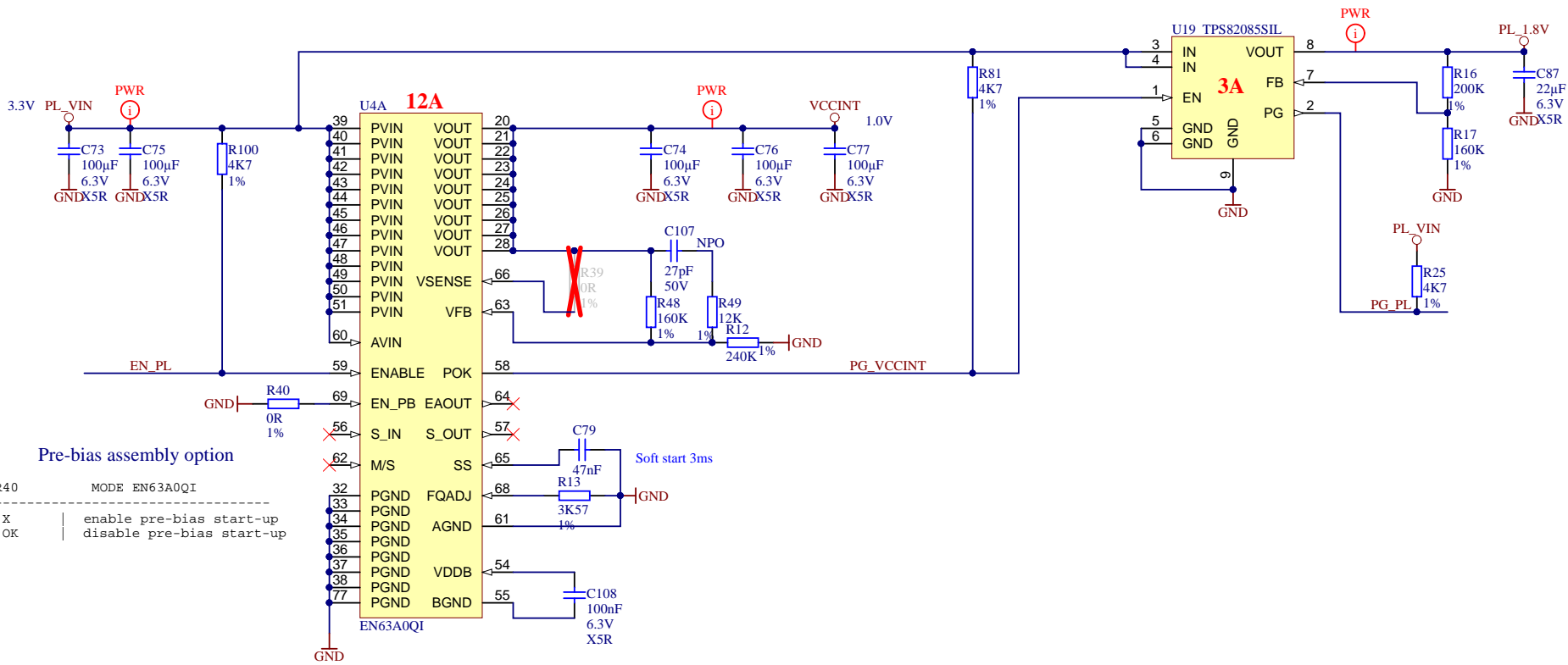
	Title: TE0745 - CLK		
	A4	Number: TE0745 45-21	Rev. 01
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 19 of 24
	Filename: CLK.SchDoc		



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



Title: TE0745 - RTC		
A4	Number: TE0745 45-21	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 20 of 24
Filename: SENSOR-RTC.SchDoc		



Pre-bias assembly option

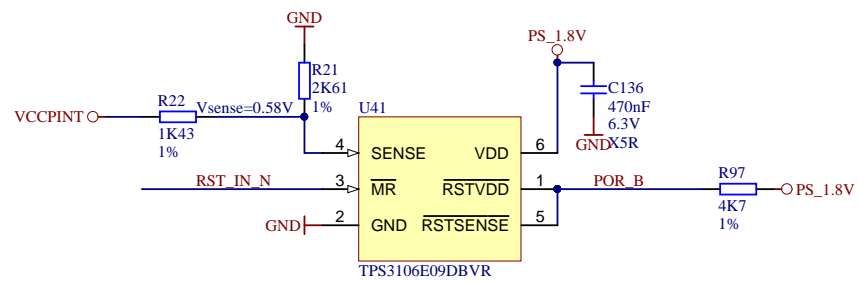
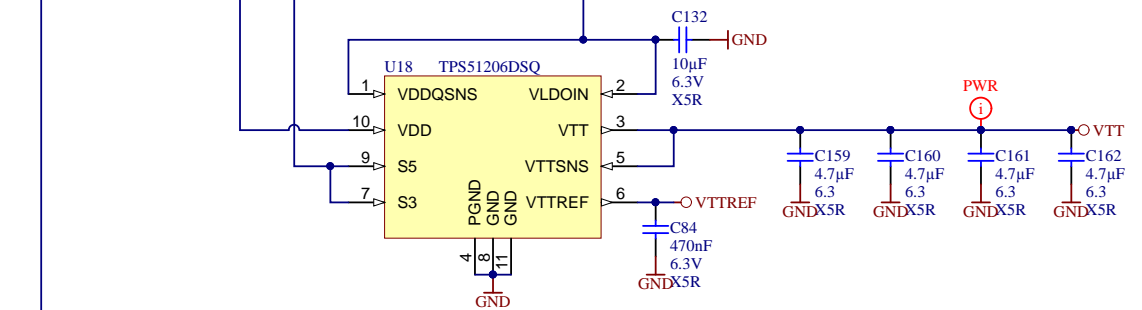
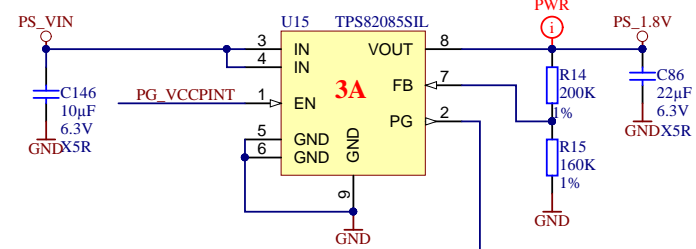
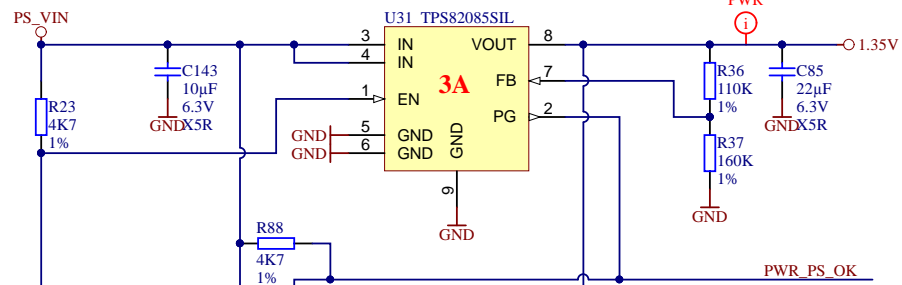
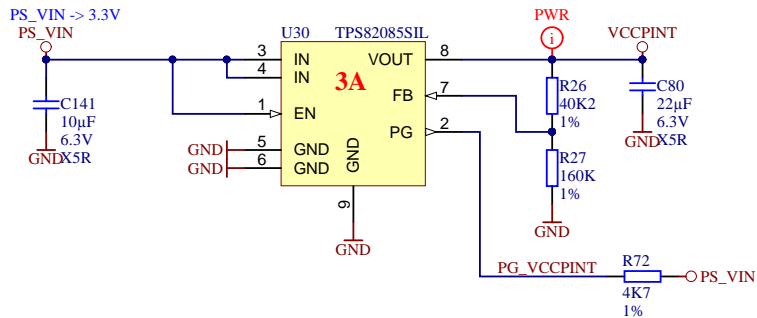
R39 R40 MODE EN63A0QI

 OK X enable pre-bias start-up
 X OK disable pre-bias start-up

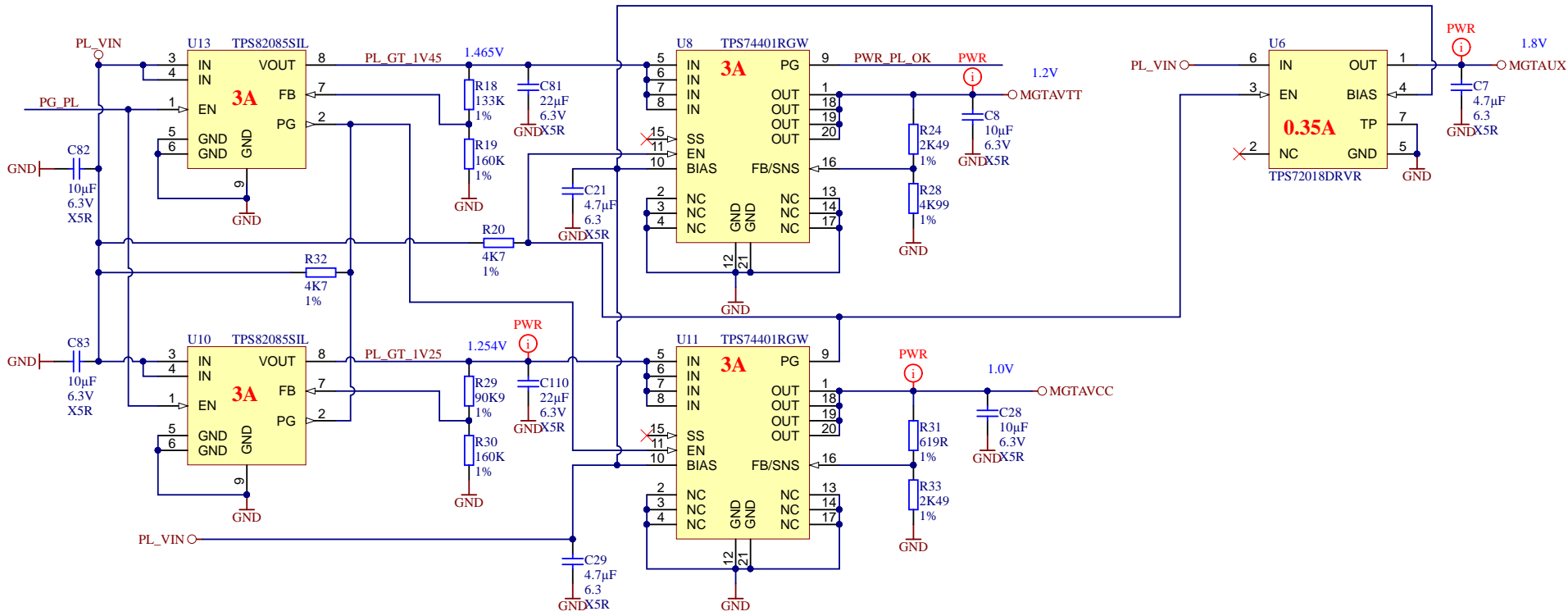
U4B			
1	NC	NC	17
2	NC	NC	18
3	NC	NC	19
4	NC	NC	29
5	NC	NC	30
6	NC	NC(SW)	31
7	NC	NC(SW)	52
8	NC	NC	53
9	NC	NC	67
10	NC	NC(SW)	70
11	NC	NC(SW)	71
12	NC	NC(SW)	72
13	NC	NC	73
14	NC	NC	74
15	NC	NC	75
16	NC	NC	76

EN63A0QI

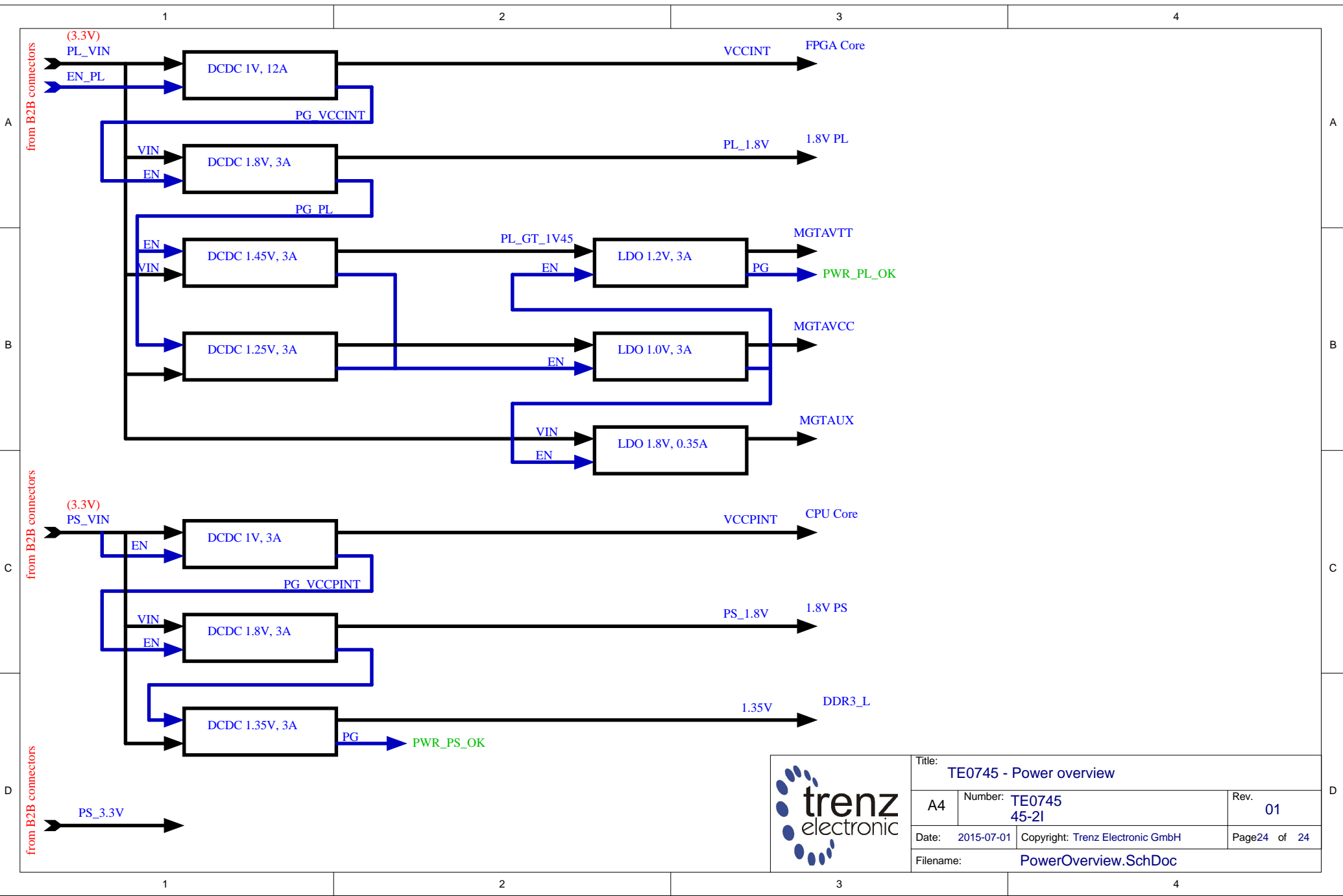
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	A4	Number: TE0745 45-21	Rev. 01
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page21 of 24
	Filename: POWER.SchDoc		



Title: TE0745 - Power2		
A4	Number: TE0745 45-21	Rev. 01
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page22 of 24
Filename: POWER_2.SchDoc		



	Title: TE0745 - Power3	
	A4	Number: TE0745 45-21
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT
	Filename: POWER_3.SchDoc	Rev. 01
Page 23 of 24		



Title: TE0745 - Power overview		
A4	Number: TE0745 45-2I	Rev. 01
Date: 2015-07-01	Copyright: Trenz Electronic GmbH	Page 24 of 24
Filename: PowerOverview.SchDoc		