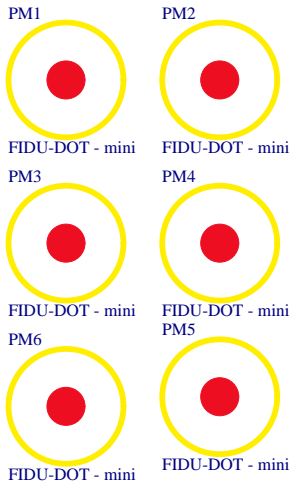
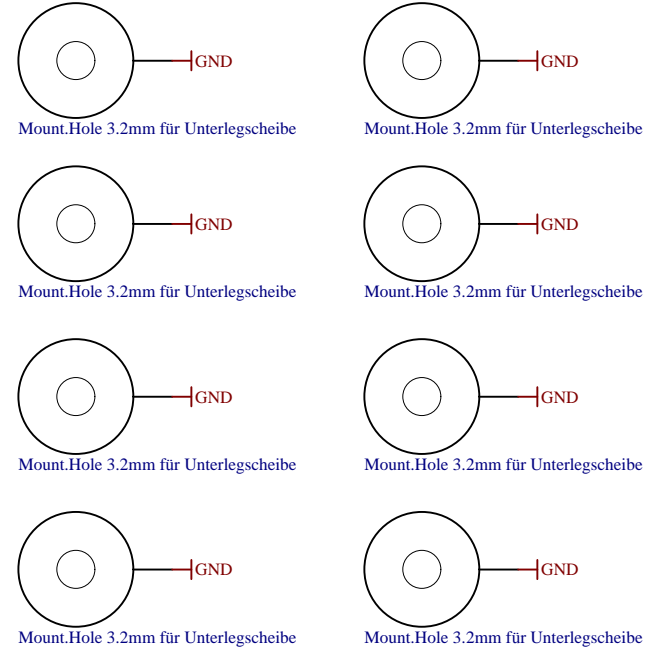


U_J1 J1.SchDoc	U_B_PS_GT B_PS_GT.SchDoc	U_DDR4-TERM DDR4-TERM.SchDoc
U_J2 J2.SchDoc	U_PS_DDR PS_DDR.SchDoc	U_ZU_POWER ZU_POWER.SchDoc
U_J3 J3.SchDoc	U_B_MIO B_MIO.SchDoc	U_ZU_PS_POWER ZU_PS_POWER.SchDoc
U_J4 J4.SchDoc	U_B_HD B_HD.SchDoc	U_POWER POWER.SchDoc
U_DDR4-TERM DDR4-TERM.SchDoc	U_Clock Clock.SchDoc	U_POWER_2 POWER_2.SchDoc
U_B64 B64.SchDoc	U_CONFIG CONFIG.SchDoc	U_POWER_3 POWER_3.SchDoc
U_B65 B65.SchDoc	U_DDR4-RAM DDR4-RAM.SchDoc	U_POWER_4 POWER_4.SchDoc
U_B66 B66.SchDoc	U_DDR4-RAM_2 DDR4-RAM_2.SchDoc	
U_B_GT B_GT.SchDoc	U_DDR4-RAM_3 DDR4-RAM_3.SchDoc	
U_B_GT_2 B_GT_2.SchDoc	U_DDR4-RAM_4 DDR4-RAM_4.SchDoc	



LOGO1  
TE Logo PRINT Layer  
LOGO PRINT

Serial  
Serialnummer 6,3 x 6.3mm

Assembly variant	4BE21-A
Created by	VY
Modified by	VY
Modified at	2019-07-08
SVN Revision	8498

	Title: <b>TE0807</b>	
	A4	Number: <b>TE0807 4BE21-A</b>
	Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT
	Rev. <b>02</b>	Page1 of 28
Filename: <b>TE0807.SchDoc</b>		

A

B

C

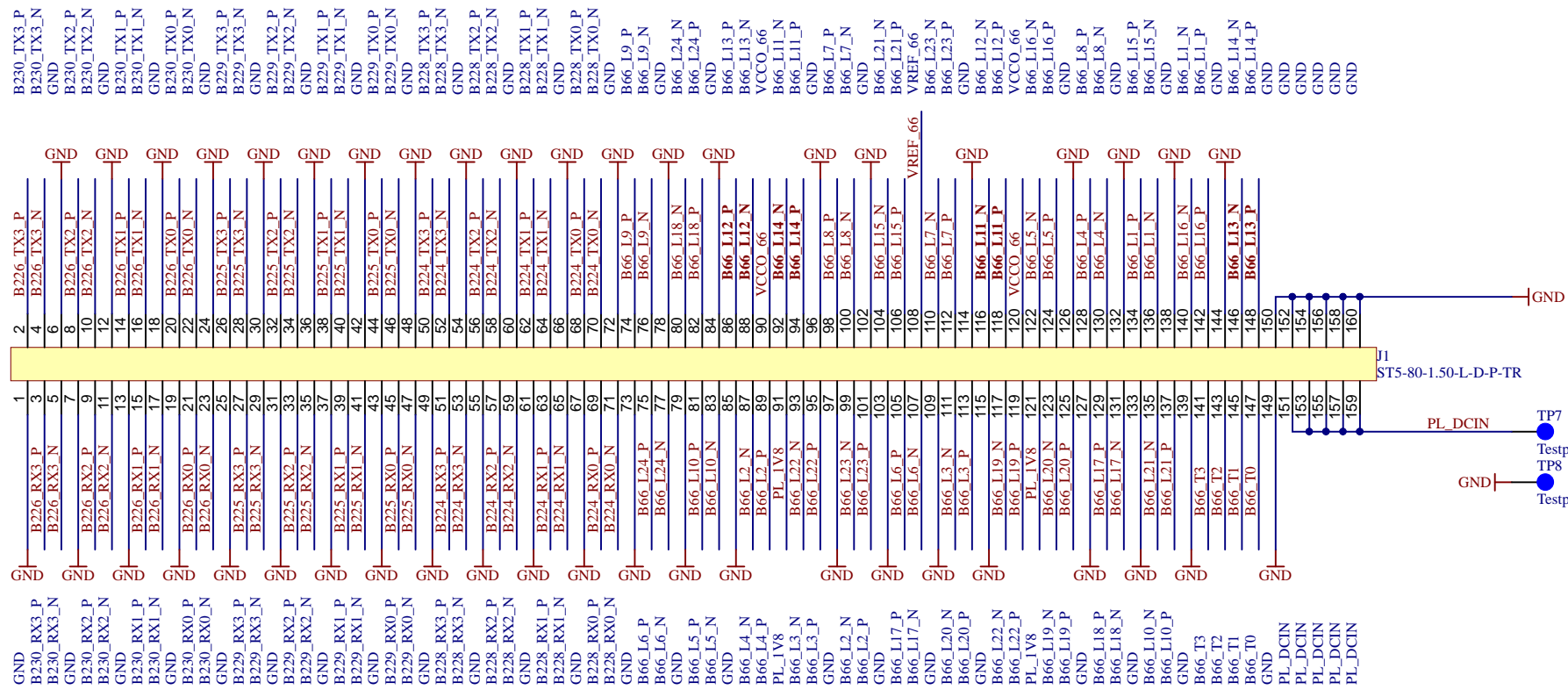
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1

2

3

4



		Title: TE0807 - Connector J1	
		A4	Number: TE0807 4BE21-A
Date: 2018-07-09		Copyright: Trenz Electronic GmbH / TT	
Filename: J1.SchDoc		Page2 of 28	

1

2

3

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A

B

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D



A

B

C

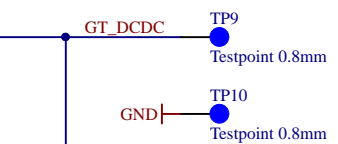
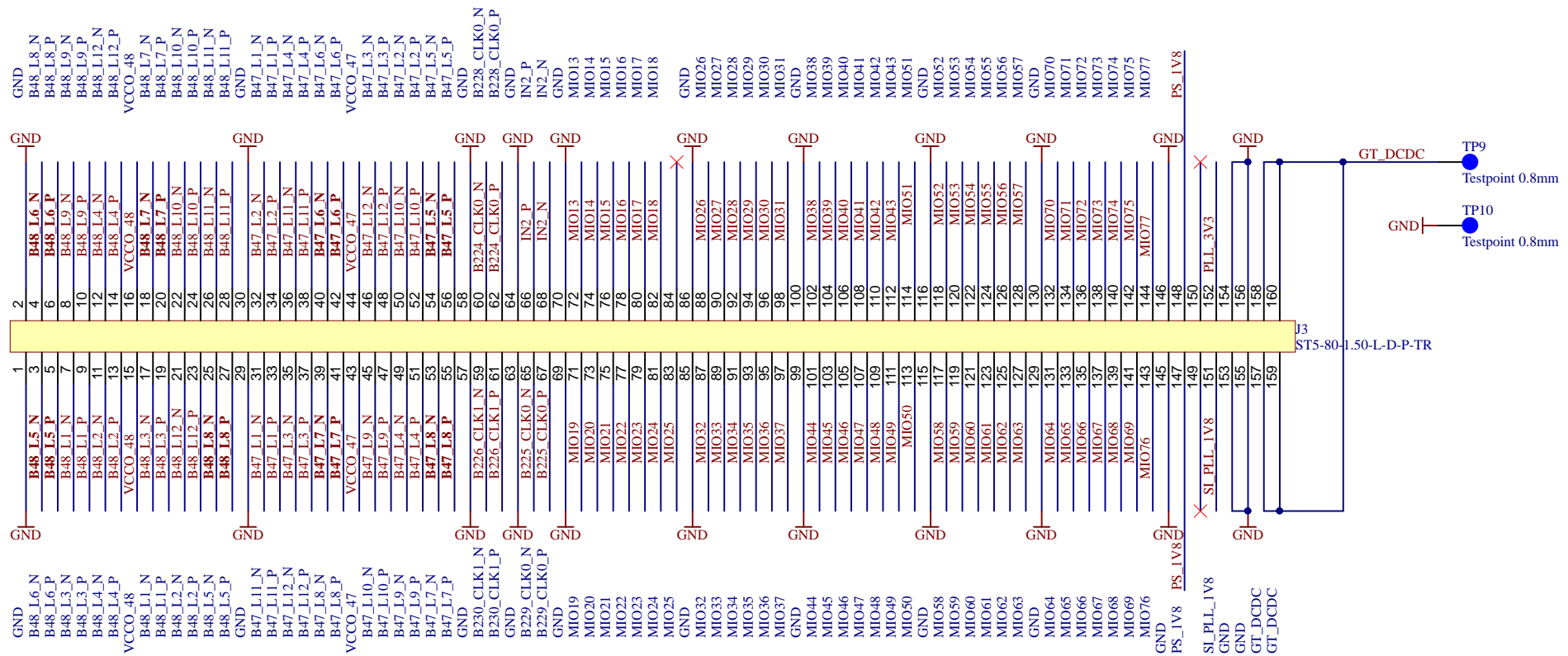
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2

3

4



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			A4	Number: <b>TE0807 4BE21-A</b>
Date: <b>2018-07-09</b>		Copyright: <b>Trenz Electronic GmbH / TT</b>		Page <b>4</b> of <b>28</b>
Filename: <b>J3.SchDoc</b>				

1

2

3

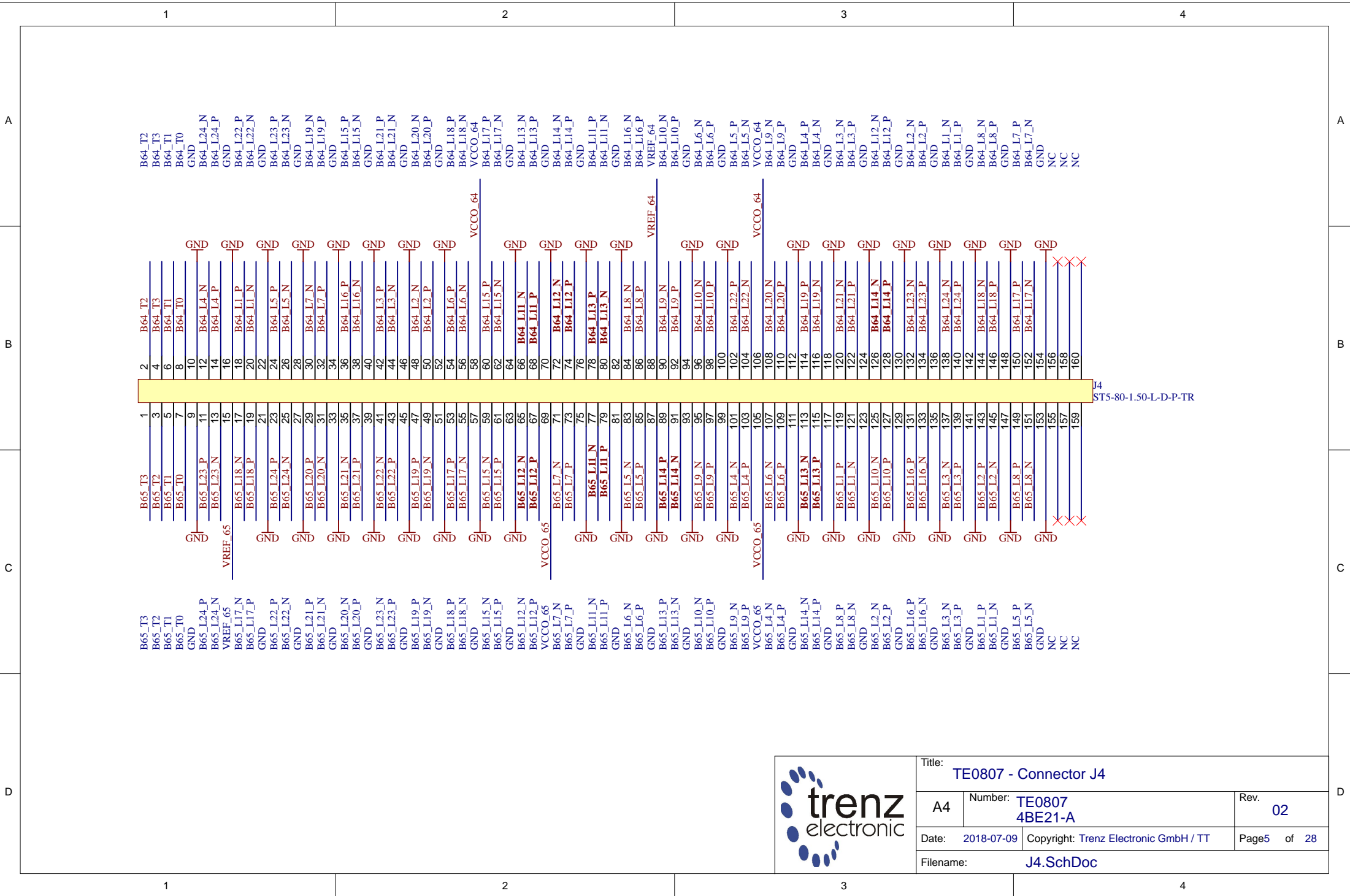
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A

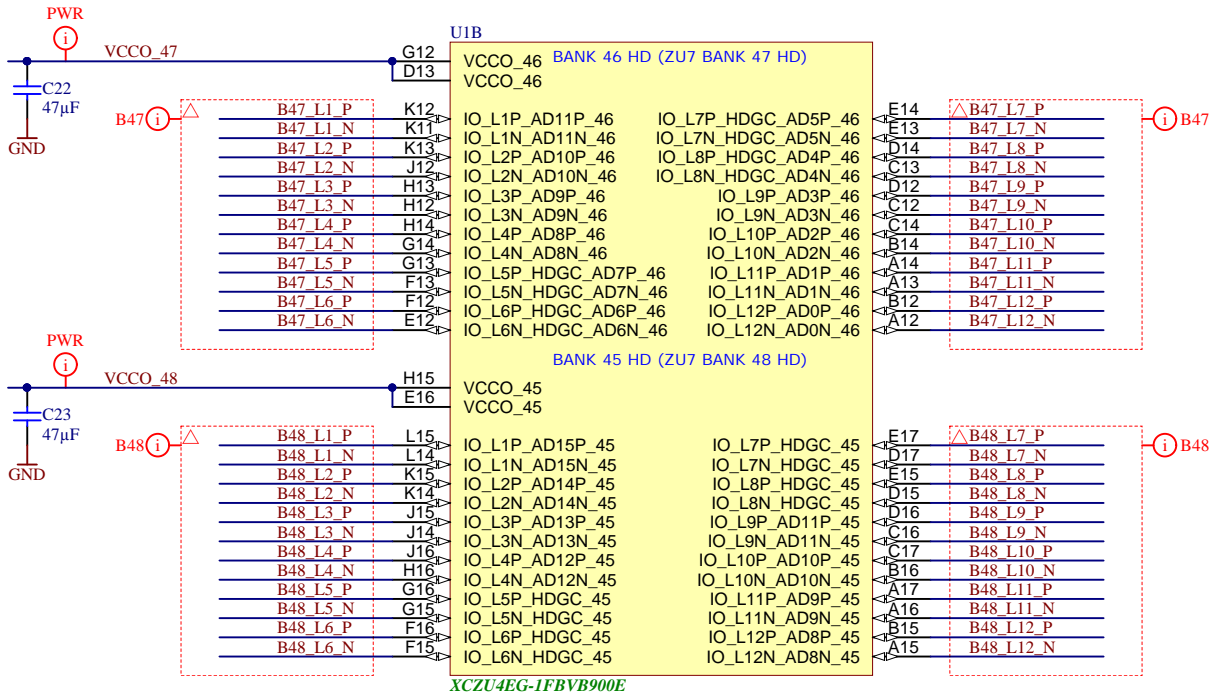
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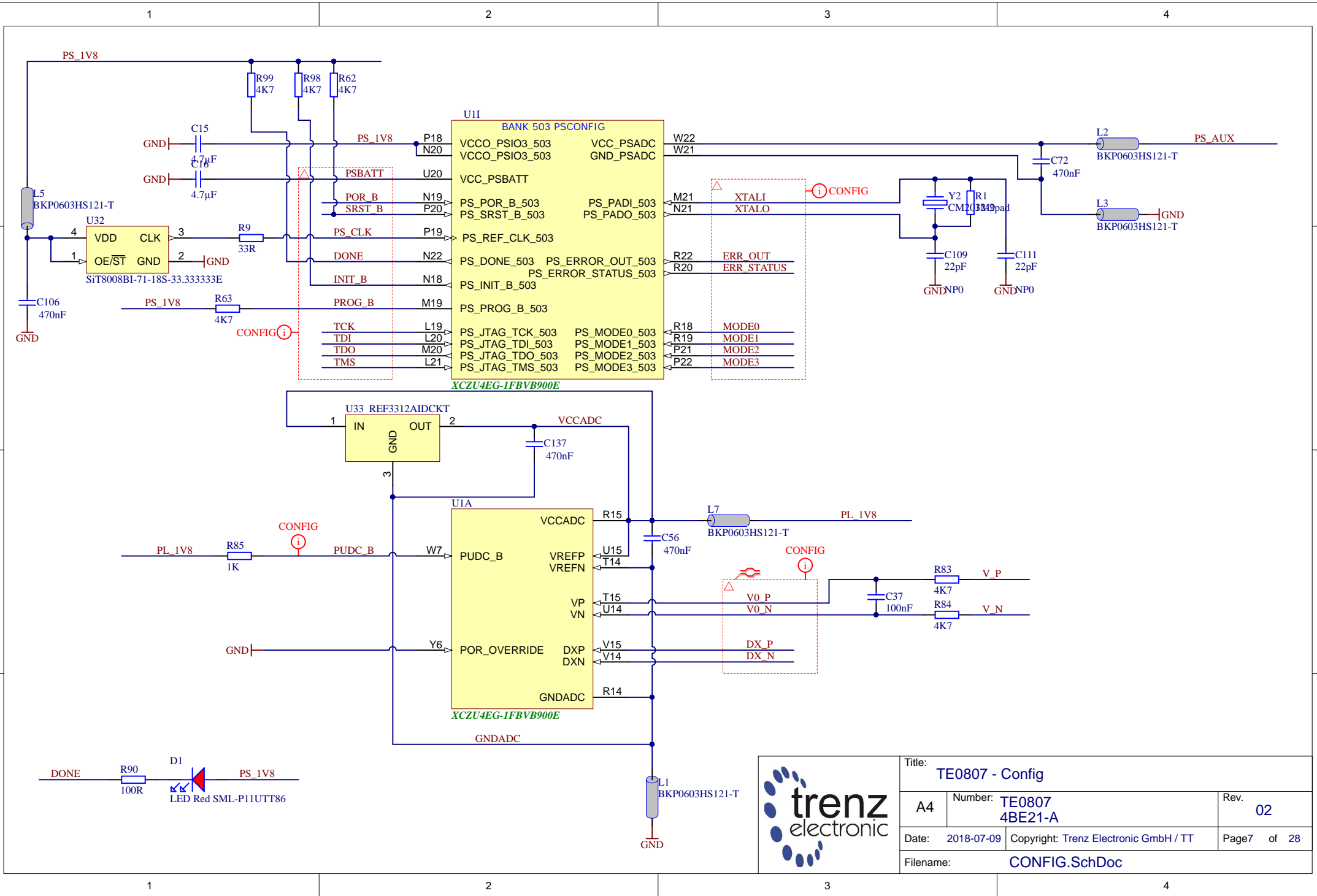
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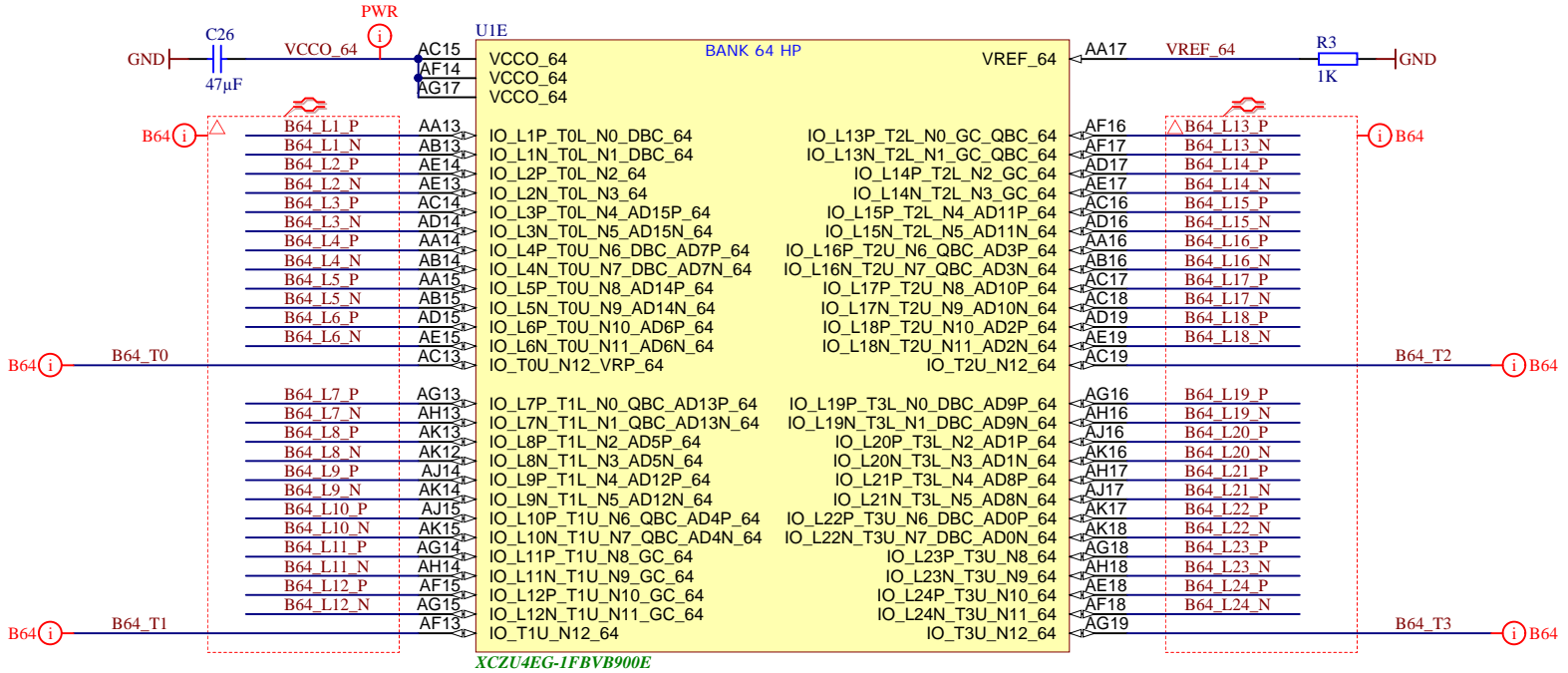
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A4	Number: TE0807 4BE21-A	Rev. 02	
Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page5 of 28	
Filename: J4.SchDoc			



Title: TE0807 - B47HD and B48HD		
A4	Number: TE0807 4BE21-A	Rev. 02
Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page6 of 28
Filename: B_HD.SchDoc		



Title: TE0807 - Config		
A4	Number: TE0807 4BE21-A	Rev. 02
Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page 7 of 28
Filename: CONFIG.SchDoc		

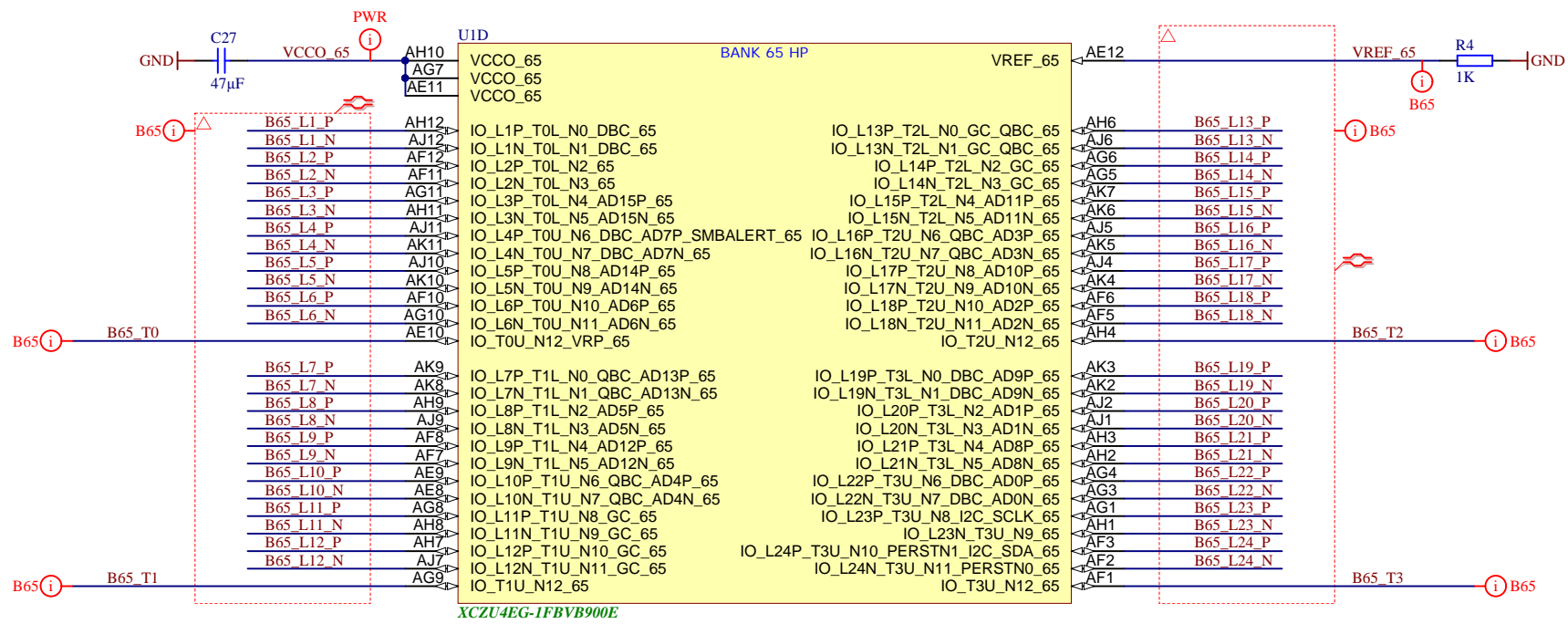


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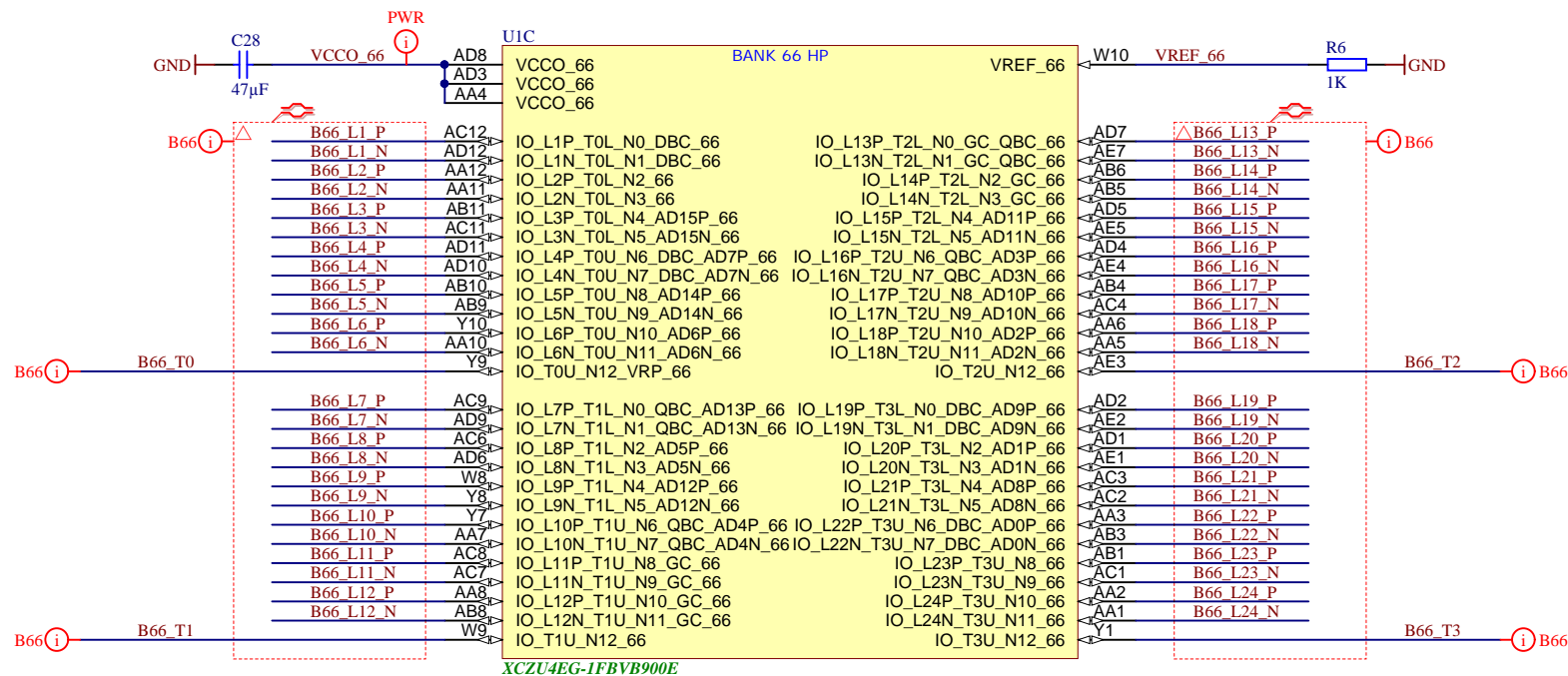


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A4	Number: TE0807 4BE21-A	Rev. 02
Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page8 of 28
Filename: B64.SchDoc		





Title: <b>TE0807 - B65</b>		
A4	Number: <b>TE0807 4BE21-A</b>	Rev. <b>02</b>
Date: <b>2018-07-09</b>	Copyright: <b>Trenz Electronic GmbH / TT</b>	Page <b>9</b> of <b>28</b>
Filename: <b>B65.SchDoc</b>		



Title: <b>TE0807 - B66</b>		
A4	Number: <b>TE0807 4BE21-A</b>	Rev. <b>02</b>
Date: <b>2018-07-09</b>	Copyright: <b>Trenz Electronic GmbH / TT</b>	Page <b>10</b> of <b>28</b>
Filename: <b>B66.SchDoc</b>		

A

B

C

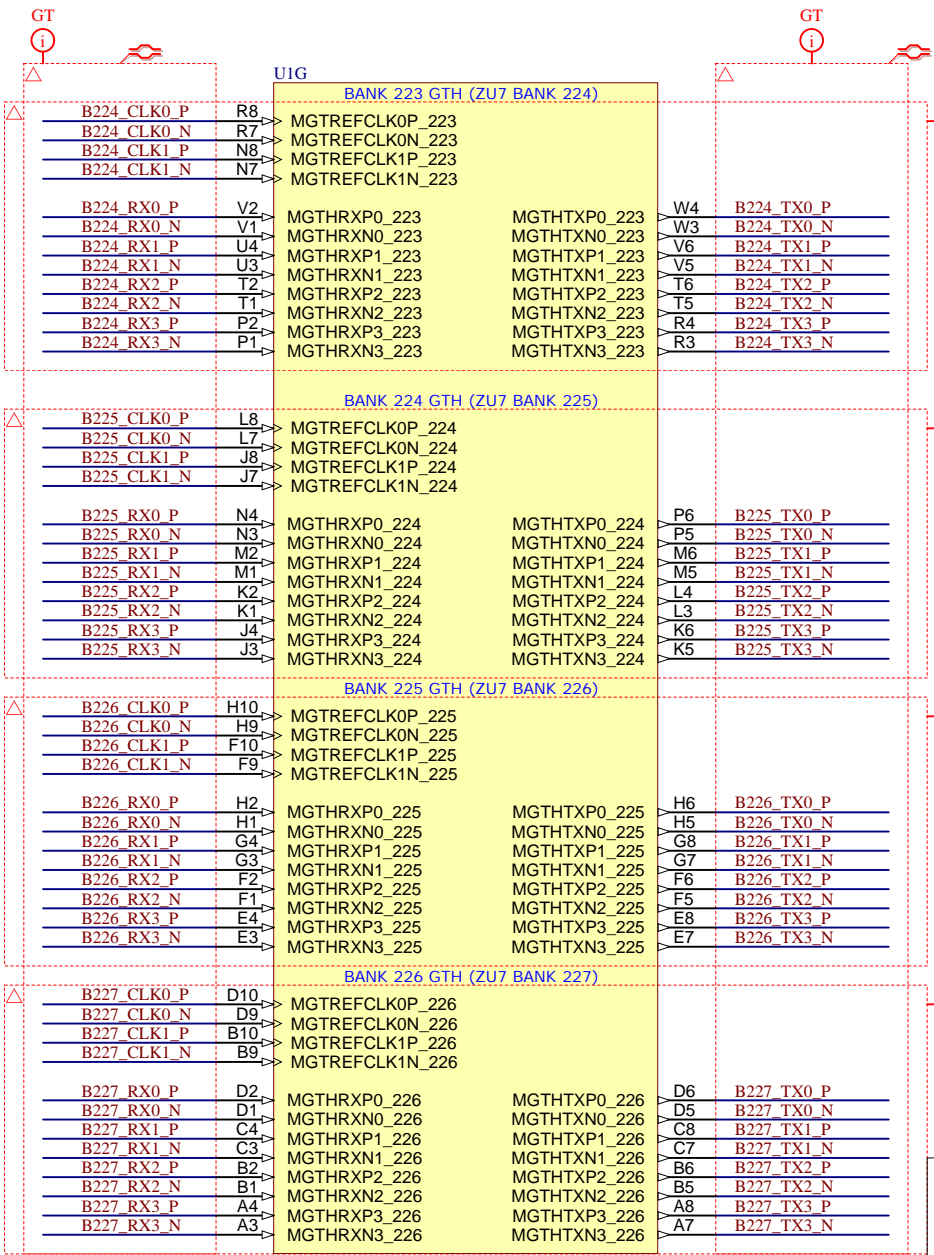
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A

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D



228

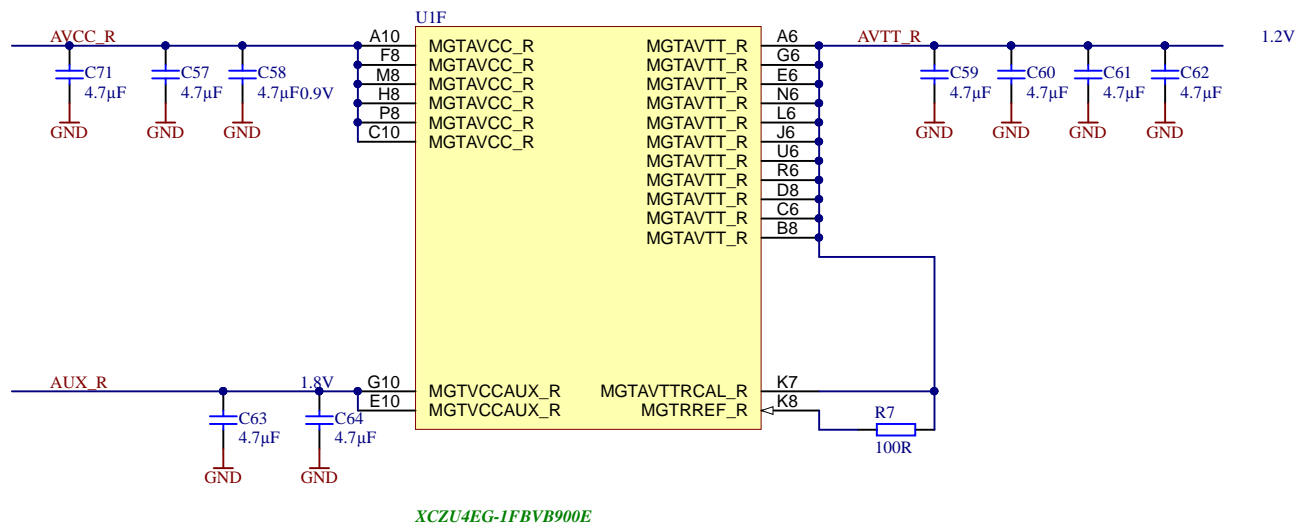
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*XCZU4EG-1FBVB900E*

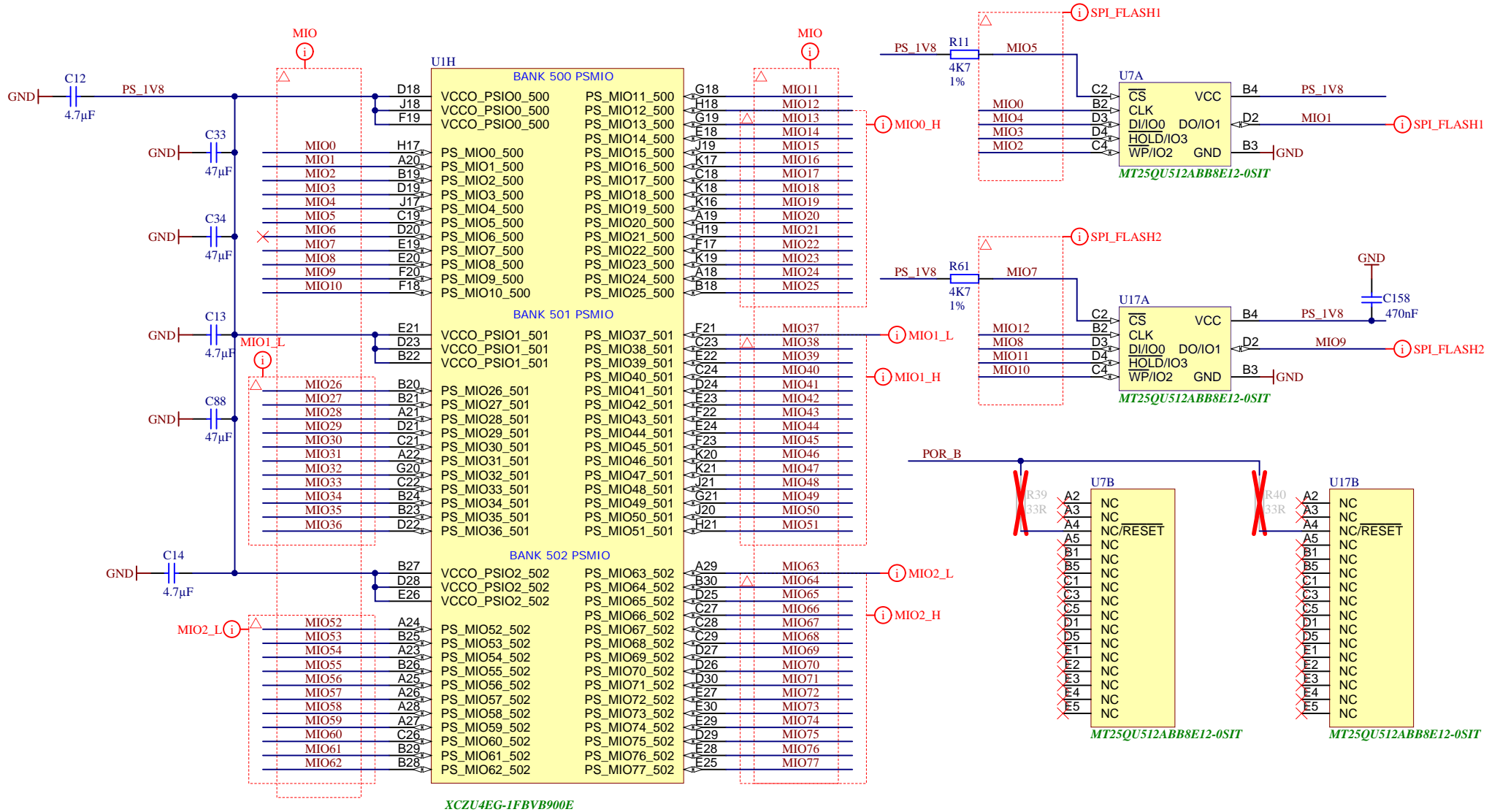


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A4	Number: TE0807 4BE21-A	Rev. 02
Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page 11 of 28
Filename: B_GT.SchDoc		



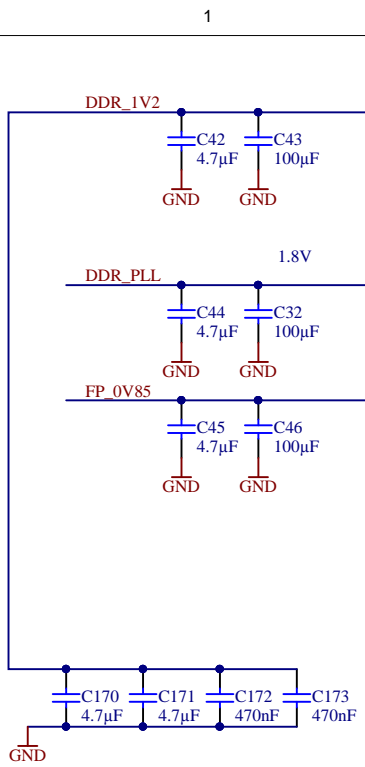
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	Title: TE0807 - GTH_PWR		
	A4	Number: TE0807 4BE21-A	Rev. 02
	Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page12 of 28
	Filename: B_GT_2.SchDoc		



**trenz electronic**

Title: <b>TE0807 - MIO Banks</b>		
A4	Number: <b>TE0807 4BE21-A</b>	Rev. <b>02</b>
Date: <b>2018-07-09</b>	Copyright: <b>Trenz Electronic GmbH / TT</b>	Page <b>13</b> of <b>28</b>
Filename: <b>B_MIO.SchDoc</b>		



**UIJ BANK 504 PSDDR**

AG27	VCCO_PSDDR_504	PS_DDR_CK0_504
AE26	VCCO_PSDDR_504	PS_DDR_CK_NO_504
AD28	VCCO_PSDDR_504	PS_DDR_CKE0_504
AC25	VCCO_PSDDR_504	
AB27	VCCO_PSDDR_504	PS_DDR_CK1_504
AA24	VCCO_PSDDR_504	PS_DDR_CK_N1_504
AK26	VCCO_PSDDR_504	PS_DDR_CKE1_504
U19	VCC_PSDDR_PLL	PS_DDR_A0_504
U18	VCC_PSDDR_PLL	PS_DDR_A1_504
Y22	VCC_PSINTFP_DDR	PS_DDR_A2_504
AA21	VCC_PSINTFP_DDR	PS_DDR_A3_504
AA22	VCC_PSINTFP_DDR	PS_DDR_A4_504
		PS_DDR_A5_504
		PS_DDR_A6_504
		PS_DDR_A7_504
		PS_DDR_A8_504
		PS_DDR_A9_504
		PS_DDR_A10_504
		PS_DDR_A11_504
		PS_DDR_A12_504
		PS_DDR_A13_504
		PS_DDR_A14_504
		PS_DDR_A15_504
		PS_DDR_A16_504
		PS_DDR_A17_504
		PS_DDR_CS_N0_504
		PS_DDR_CS_N1_504
		PS_DDR_BA0_504
		PS_DDR_BA1_504
		PS_DDR_BG0_504
		PS_DDR_BG1_504
		PS_DDR_PARITY_504
		PS_DDR_RAM_RST_N_504
		PS_DDR_ACT_N_504
		PS_DDR_ALERT_N_504
		PS_DDR_ZQ_504
		PS_DDR_ODT0_504
		PS_DDR_ODT1_504

*XCZU4EG-1FBVB900E*

AE30	DDR4-CLK0_P	
AF30	DDR4-CLK0_N	
AC30	DDR4-CKE0	
AF28		✗
AG28		✗
AB28		✗
AH30	DDR4-A0	
AG30	DDR4-A1	
AK29	DDR4-A2	
AJ30	DDR4-A3	
AK28	DDR4-A4	
AK27	DDR4-A5	
AF27	DDR4-A6	
AE27	DDR4-A7	
AF26	DDR4-A8	
AG26	DDR4-A9	
AE29	DDR4-A10	
AE28	DDR4-A11	
AH29	DDR4-A12	
AH28	DDR4-A13	
AG29	DDR4-A14	
AJ29	DDR4-A15	
AH27	DDR4-A16	
AJ27	DDR4-A17	
AD30	DDR4-CS	
AD29		✗
AD27	DDR4-BA0	
AC26	DDR4-BA1	
AC28	DDR4-BG0	
AC27		✗
AB26	DDR4-PAR	
AB25	DDR4-RESET	
AD26	DDR4-ACT	
AB24	DDR4-ALERT	
AB23		→ R2 240R → GND
AB30	DDR4-ODT0	
AC29		✗

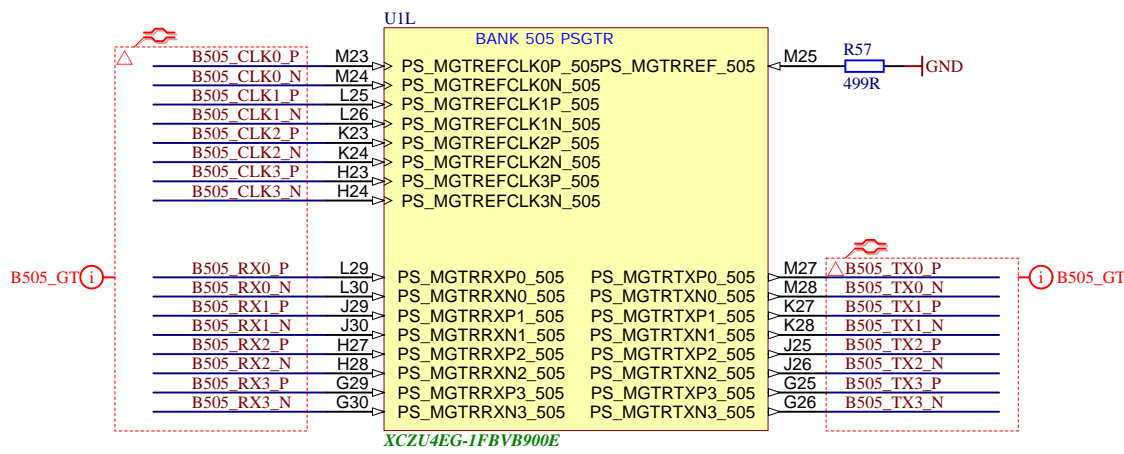
**UIK BANK 504 PSDDR**


DQ0	AH22	PS_DDR_DQ0_504	PS_DDR_DQ32_504	U24	DQ32
DQ1	AH21	PS_DDR_DQ1_504	PS_DDR_DQ33_504	V23	DQ33
DQ2	AJ22	PS_DDR_DQ2_504	PS_DDR_DQ34_504	U25	DQ34
DQ3	AK22	PS_DDR_DQ3_504	PS_DDR_DQ35_504	V24	DQ35
DQ4	AK20	PS_DDR_DQ4_504	PS_DDR_DQ36_504	Y25	DQ36
DQ5	AJ19	PS_DDR_DQ5_504	PS_DDR_DQ37_504	AA23	DQ37
DQ6	AK19	PS_DDR_DQ6_504	PS_DDR_DQ38_504	AA25	DQ38
DQ7	AH19	PS_DDR_DQ7_504	PS_DDR_DQ39_504	Y23	DQ39
DQ8	AH23	PS_DDR_DQ8_504	PS_DDR_DQ40_504	P23	DQ40
DQ9	AK23	PS_DDR_DQ9_504	PS_DDR_DQ41_504	R23	DQ41
DQ10	AG24	PS_DDR_DQ10_504	PS_DDR_DQ42_504	T23	DQ42
DQ11	AK24	PS_DDR_DQ11_504	PS_DDR_DQ43_504	P26	DQ43
DQ12	AJ26	PS_DDR_DQ12_504	PS_DDR_DQ44_504	T25	DQ44
DQ13	AK25	PS_DDR_DQ13_504	PS_DDR_DQ45_504	U23	DQ45
DQ14	AG25	PS_DDR_DQ14_504	PS_DDR_DQ46_504	T26	DQ46
DQ15	AH26	PS_DDR_DQ15_504	PS_DDR_DQ47_504	P24	DQ47
DQ16	AD22	PS_DDR_DQ16_504	PS_DDR_DQ48_504	U26	DQ48
DQ17	AE22	PS_DDR_DQ17_504	PS_DDR_DQ49_504	U26	DQ49
DQ18	AF22	PS_DDR_DQ18_504	PS_DDR_DQ50_504	U28	DQ50
DQ19	AG21	PS_DDR_DQ19_504	PS_DDR_DQ51_504	V27	DQ51
DQ20	AD20	PS_DDR_DQ20_504	PS_DDR_DQ52_504	U30	DQ52
DQ21	AF20	PS_DDR_DQ21_504	PS_DDR_DQ53_504	V30	DQ53
DQ22	AE20	PS_DDR_DQ22_504	PS_DDR_DQ54_504	W30	DQ54
DQ23	AG20	PS_DDR_DQ23_504	PS_DDR_DQ55_504	W29	DQ55
DQ24	AG23	PS_DDR_DQ24_504	PS_DDR_DQ56_504	R30	DQ56
DQ25	AF23	PS_DDR_DQ25_504	PS_DDR_DQ57_504	T30	DQ57
DQ26	AF25	PS_DDR_DQ26_504	PS_DDR_DQ58_504	P30	DQ58
DQ27	AE23	PS_DDR_DQ27_504	PS_DDR_DQ59_504	P29	DQ59
DQ28	AC22	PS_DDR_DQ28_504	PS_DDR_DQ60_504	T28	DQ60
DQ29	AC23	PS_DDR_DQ29_504	PS_DDR_DQ61_504	T27	DQ61
DQ30	AD25	PS_DDR_DQ30_504	PS_DDR_DQ62_504	P27	DQ62
DQ31	AC24	PS_DDR_DQ31_504	PS_DDR_DQ63_504	R27	DQ63
		PS_DDR_DQ64_504	PS_DDR_DQ64_504	AB29	
		PS_DDR_DQ65_504	PS_DDR_DQ65_504	AA30	✗
DDR4-DQS0_P	AJ21	PS_DDR_DQS_P0_504	PS_DDR_DQ66_504	Y30	✗
DDR4-DQS0_N	AK21	PS_DDR_DQS_N0_504	PS_DDR_DQ67_504	Y29	✗
DDR4-DQS1_P	AH24	PS_DDR_DQS_P1_504	PS_DDR_DQ68_504	AA26	✗
DDR4-DQS1_N	AJ24	PS_DDR_DQS_N1_504	PS_DDR_DQ69_504	W27	✗
DDR4-DQS2_P	AC21	PS_DDR_DQS_P2_504	PS_DDR_DQ70_504	Y27	✗
DDR4-DQS2_N	AD21	PS_DDR_DQS_N2_504	PS_DDR_DQ71_504	W26	✗
DDR4-DQS3_P	AD24	PS_DDR_DQS_P3_504			
DDR4-DQS3_N	AE24	PS_DDR_DQS_N3_504			
DDR4-DQS4_P	W24	PS_DDR_DQS_P4_504			
DDR4-DQS4_N	W25	PS_DDR_DQS_N4_504	PS_DDR_DM0_504	AJ20	DDR4-DM0
DDR4-DQS5_P	P25	PS_DDR_DQS_P5_504	PS_DDR_DM1_504	AJ25	DDR4-DM1
DDR4-DQS5_N	R25	PS_DDR_DQS_N5_504	PS_DDR_DM2_504	AF21	DDR4-DM2
DDR4-DQS6_P	U29	PS_DDR_DQS_P6_504	PS_DDR_DM3_504	AE25	DDR4-DM3
DDR4-DQS6_N	V29	PS_DDR_DQS_N6_504	PS_DDR_DM4_504	Y24	DDR4-DM4
DDR4-DQS7_P	R28	PS_DDR_DQS_P7_504	PS_DDR_DM5_504	R24	DDR4-DM5
DDR4-DQS7_N	R29	PS_DDR_DQS_N7_504	PS_DDR_DM6_504	V28	DDR4-DM6
	Y28	PS_DDR_DQS_P8_504	PS_DDR_DM7_504	P28	DDR4-DM7
	AA28	PS_DDR_DQS_N8_504	PS_DDR_DM8_504	AA27	✗

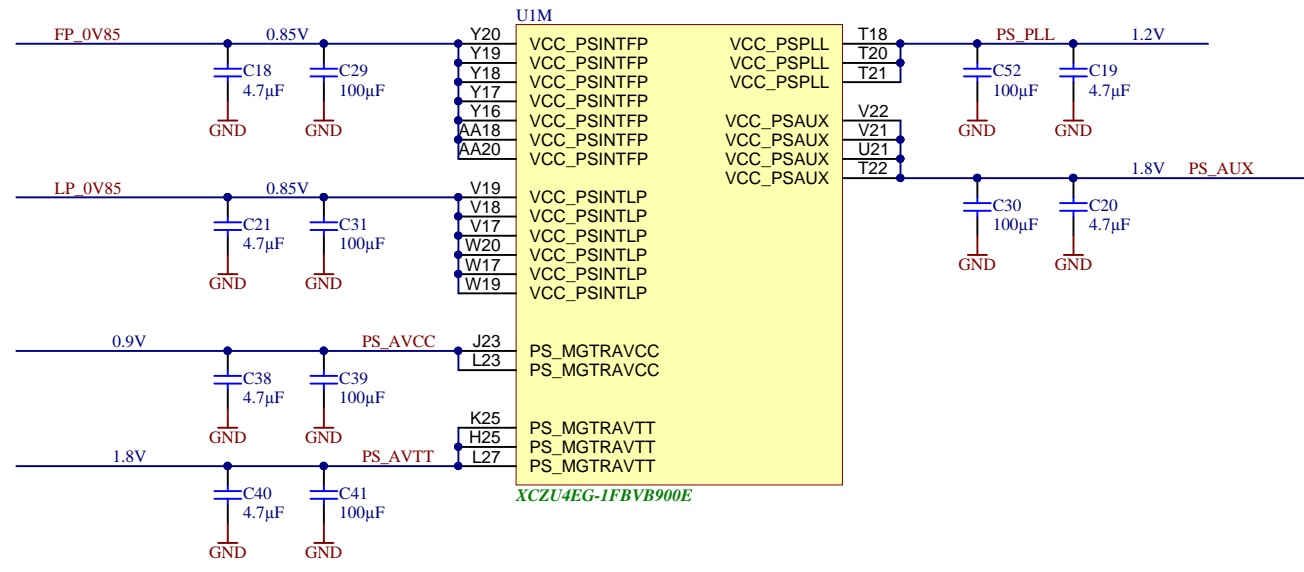
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A4	Number: <b>TE0807 4BE21-A</b>	Rev. <b>02</b>	
Date: <b>2018-07-09</b>	Copyright: <b>Trenz Electronic GmbH / TT</b>	Page 14 of 28	
Filename: <b>PS_DDR.SchDoc</b>			

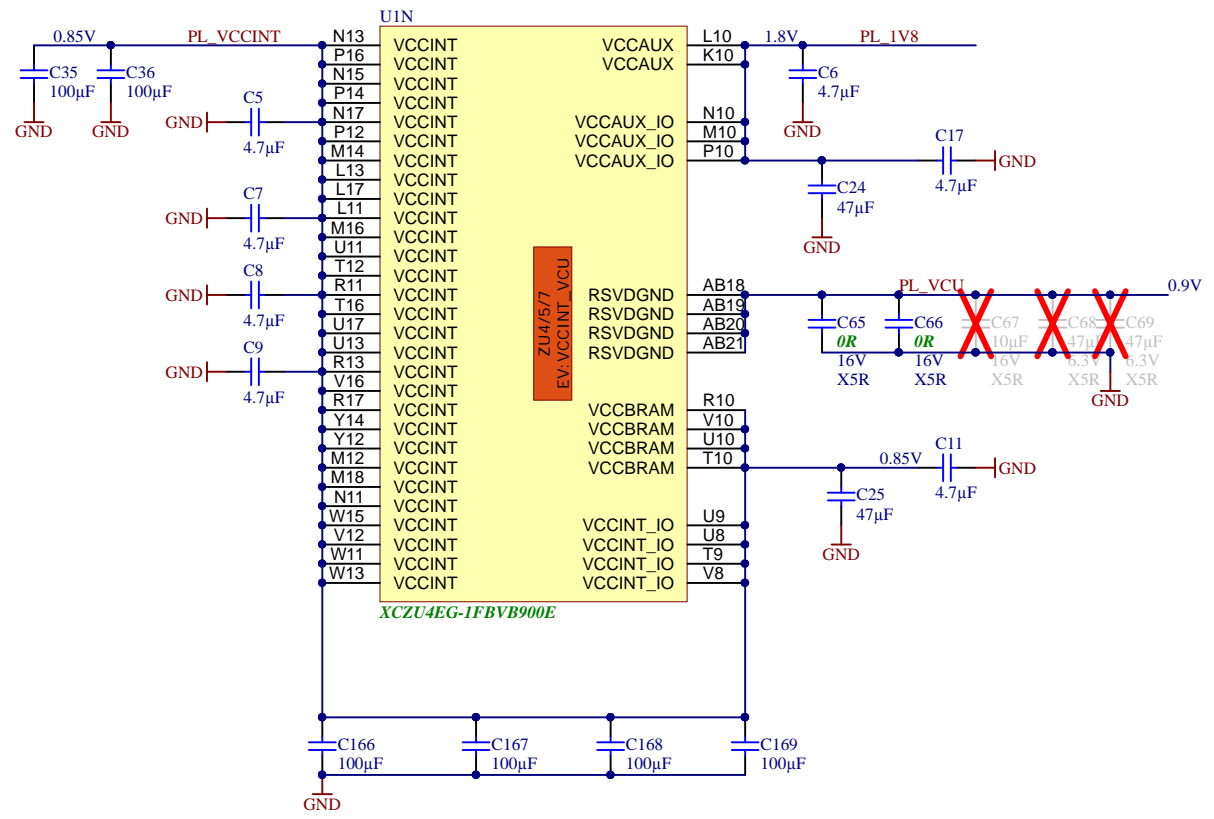
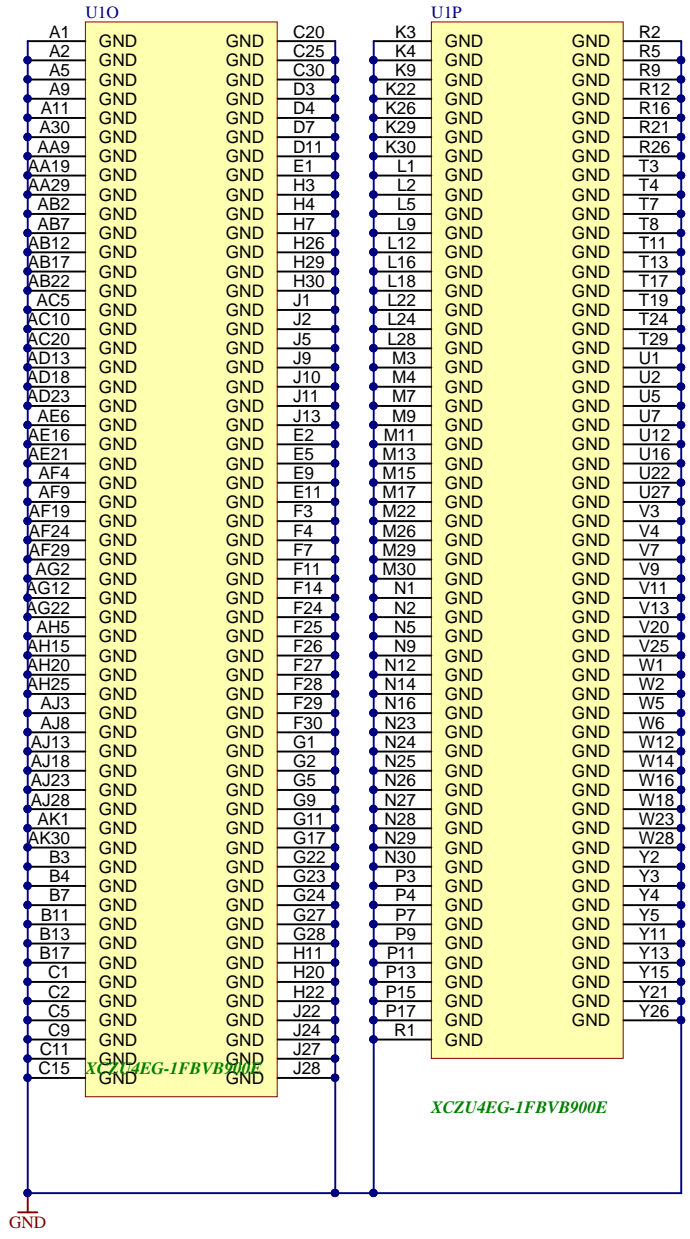



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	A4	Number: TE0807 4BE21-A	Rev. 02
	Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page 15 of 28
	Filename: B_PS_GT.SchDoc		

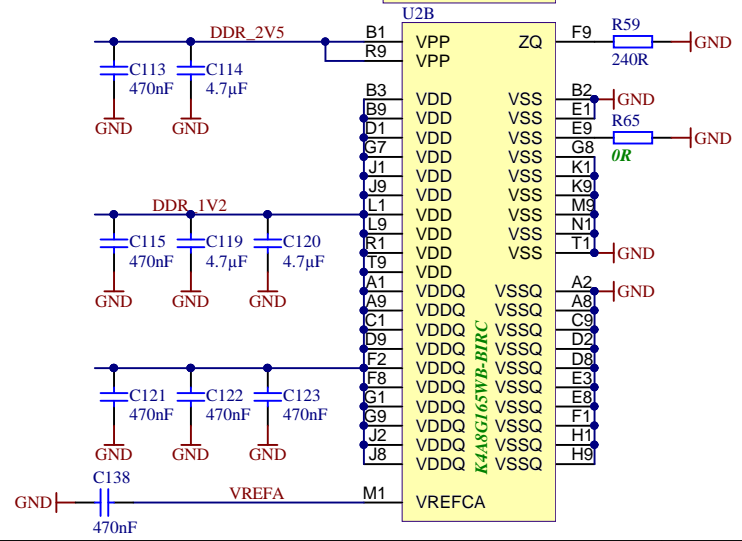
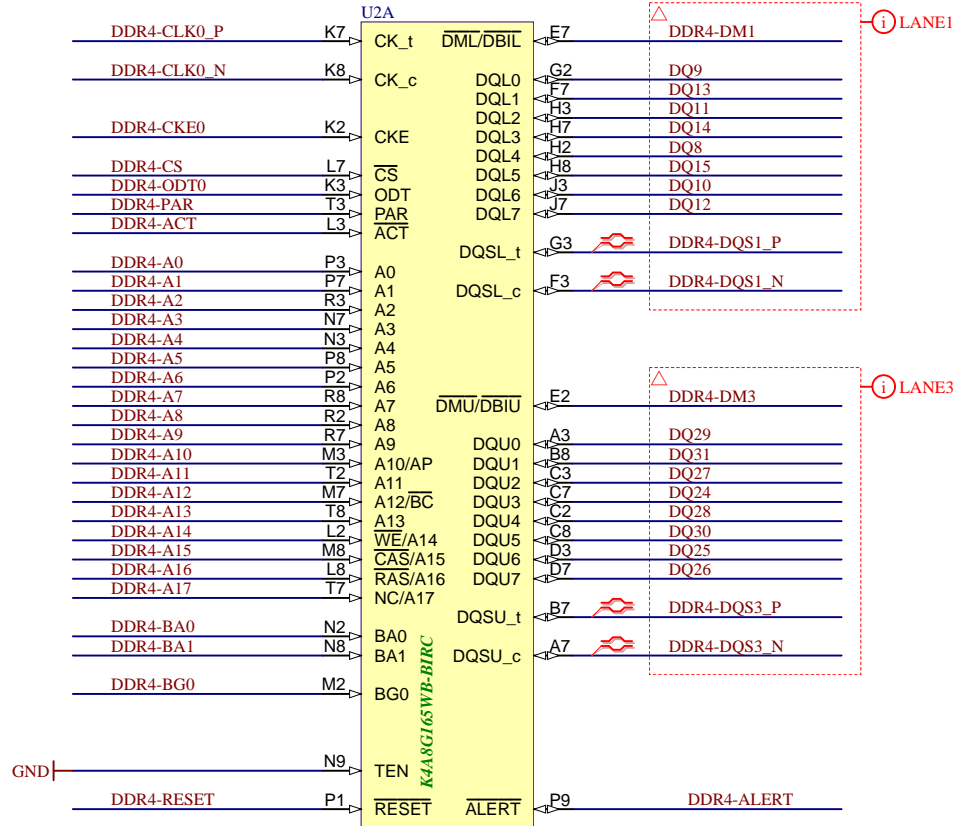



	Title: TE0807 - ZU_PS_POWER		
	A4	Number: TE0807 4BE21-A	Rev. 02
	Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page 16 of 28
	Filename: ZU_PS_POWER.SchDoc		

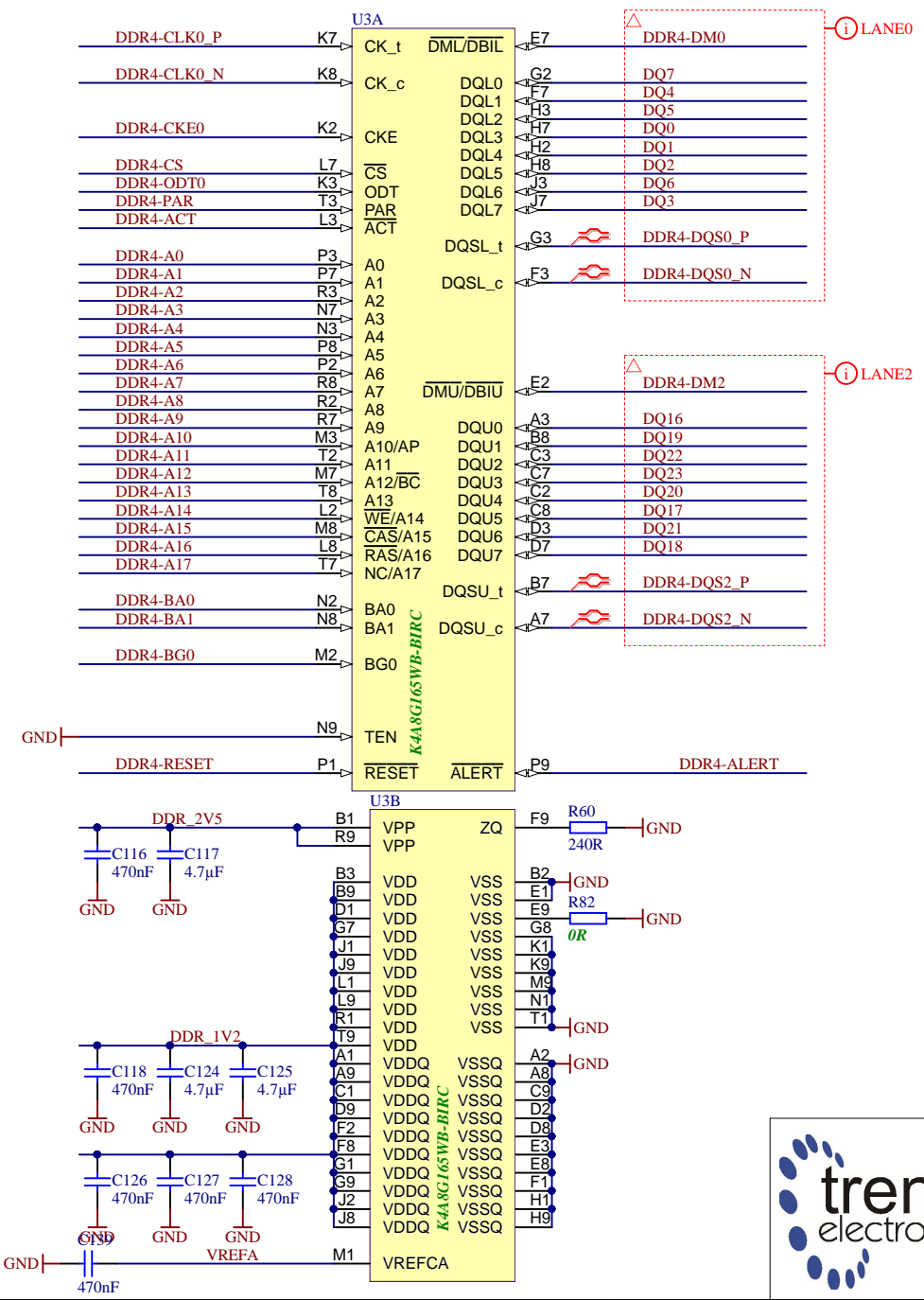


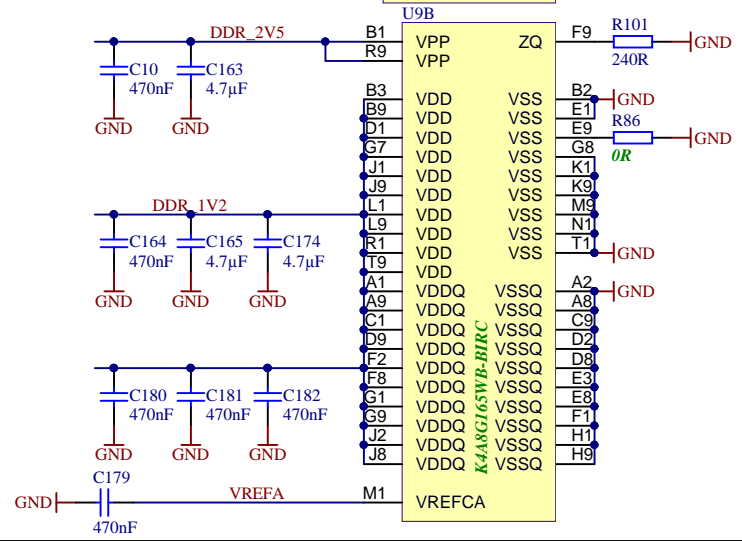
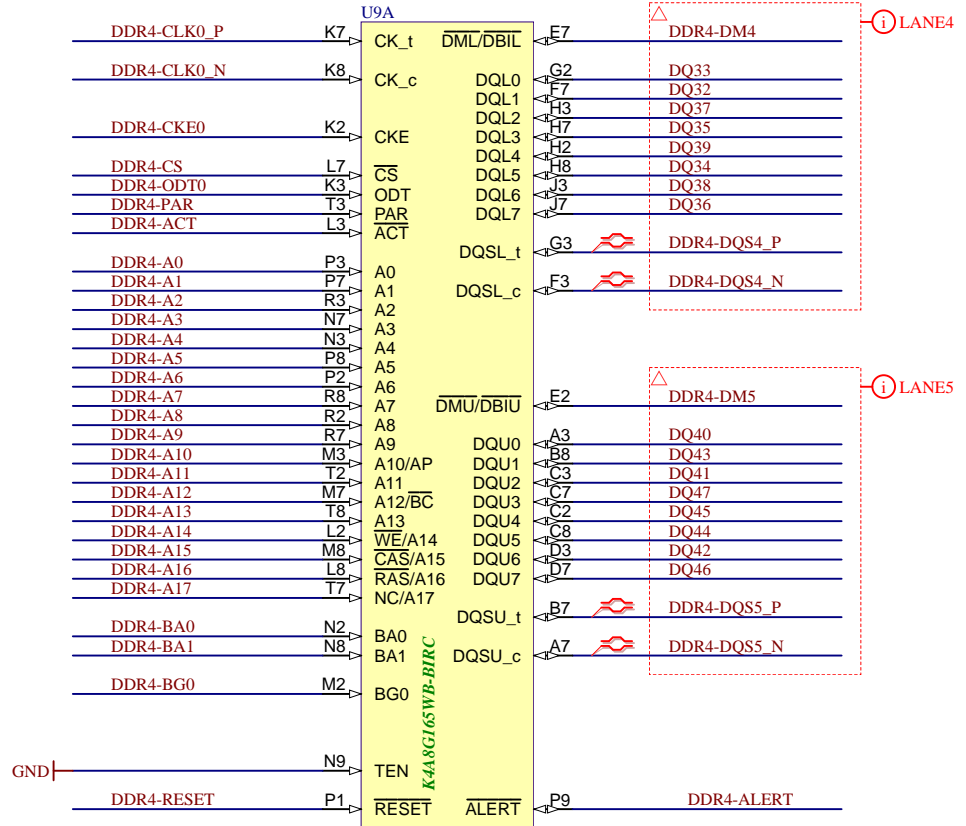

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Date: <b>2018-07-09</b>	Copyright: <b>Trenz Electronic GmbH / TT</b>	Page <b>17</b> of <b>28</b>
Filename: <b>ZU_POWER.SchDoc</b>		

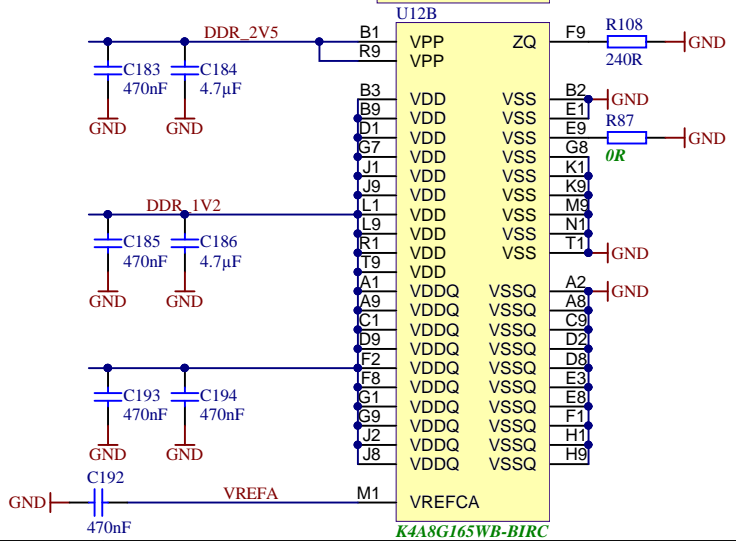
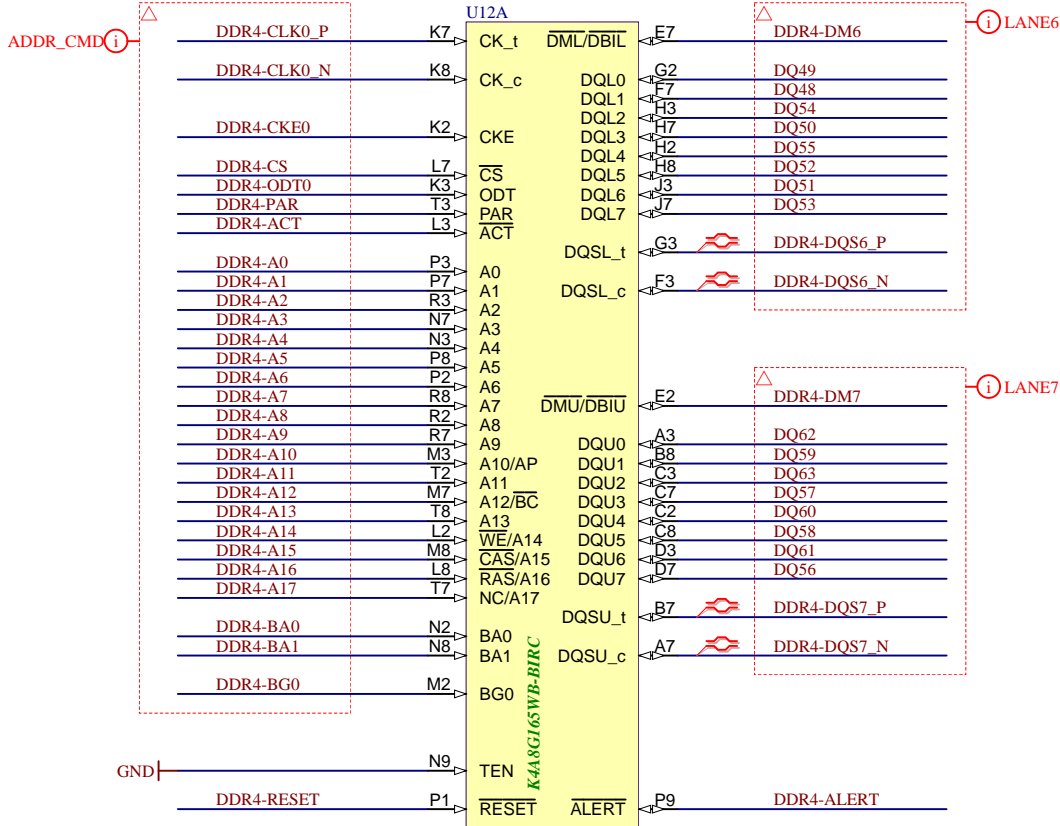
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A4	Number: TE0807 4BE21-A	Rev. 02
Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page 18 of 28
Filename: DDR4-RAM.SchDoc		



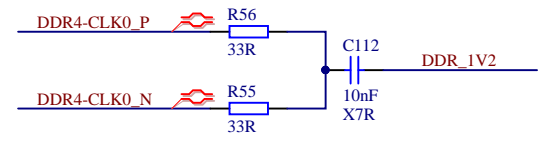
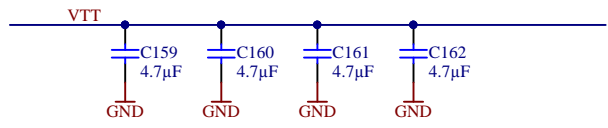
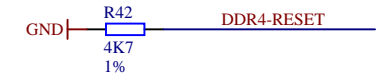
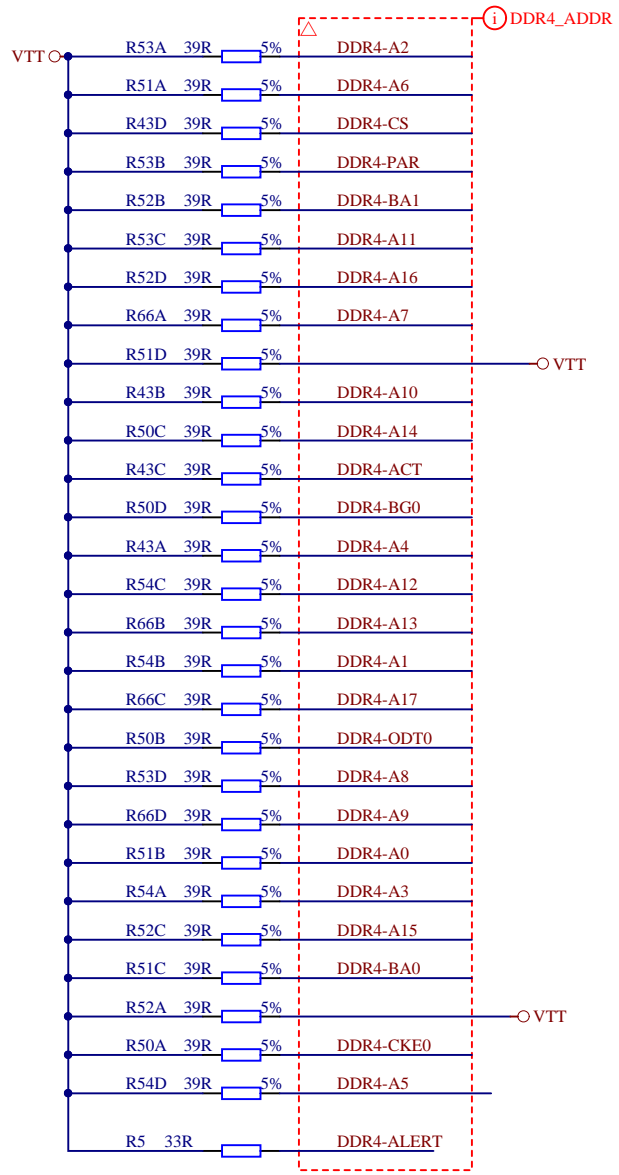
Title: TE0807 - DDR4_2_RAM		
A4	Number: TE0807 4BE21-A	Rev. 02
Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page 19 of 28
Filename: DDR4-RAM_2.SchDoc		

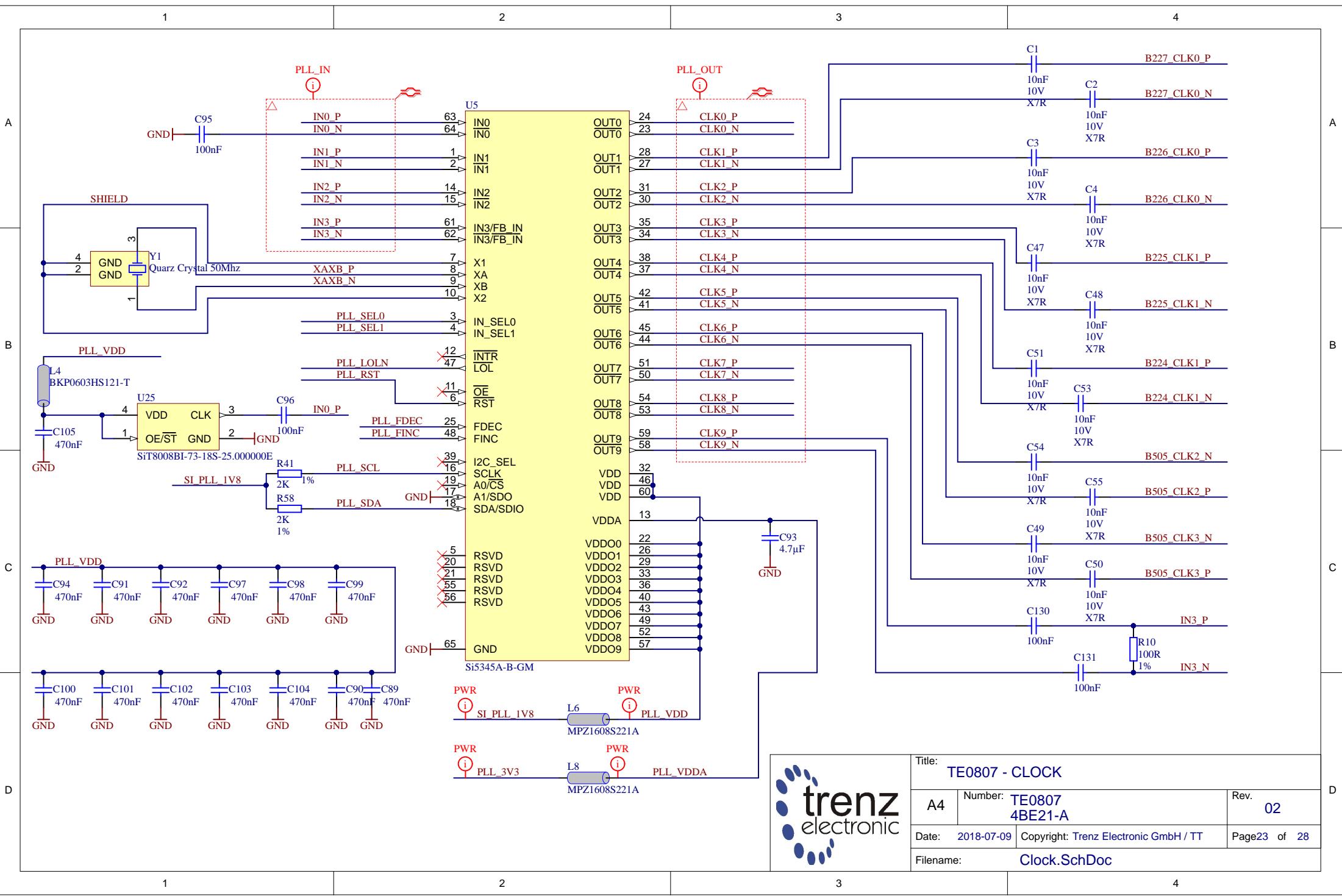
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A4	Number: TE0807 4BE21-A	Rev. 02
Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page20 of 28
Filename: DDR4-RAM_3.SchDoc		



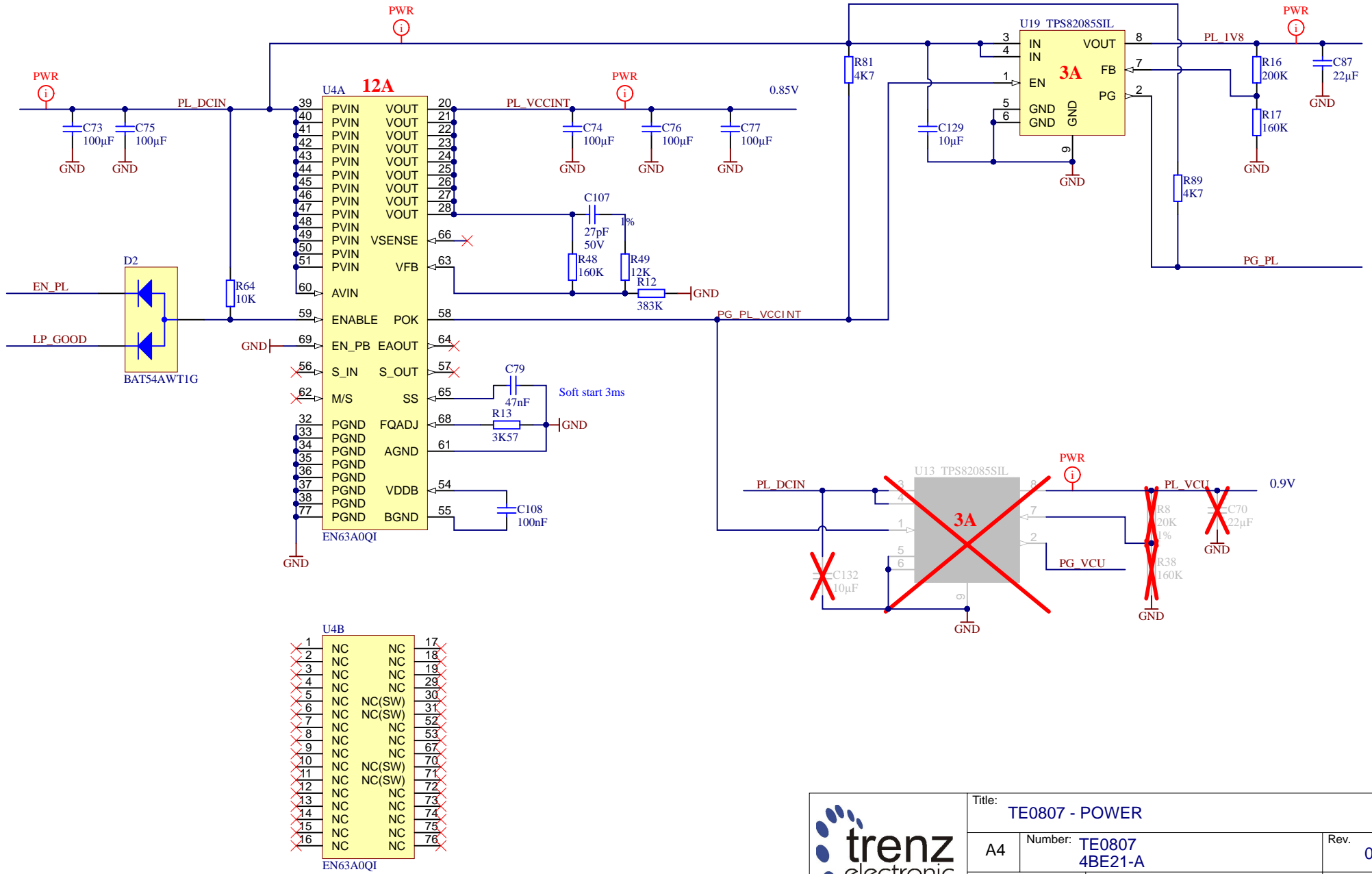
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A4	Number: TE0807 4BE21-A	Rev. 02
Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page21 of 28
Filename: DDR4-RAM_4.SchDoc		



Title: TE0807 - DDR4_TERM		
A4	Number: TE0807 4BE21-A	Rev. 02
Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page22 of 28
Filename: DDR4-TERM.SchDoc		

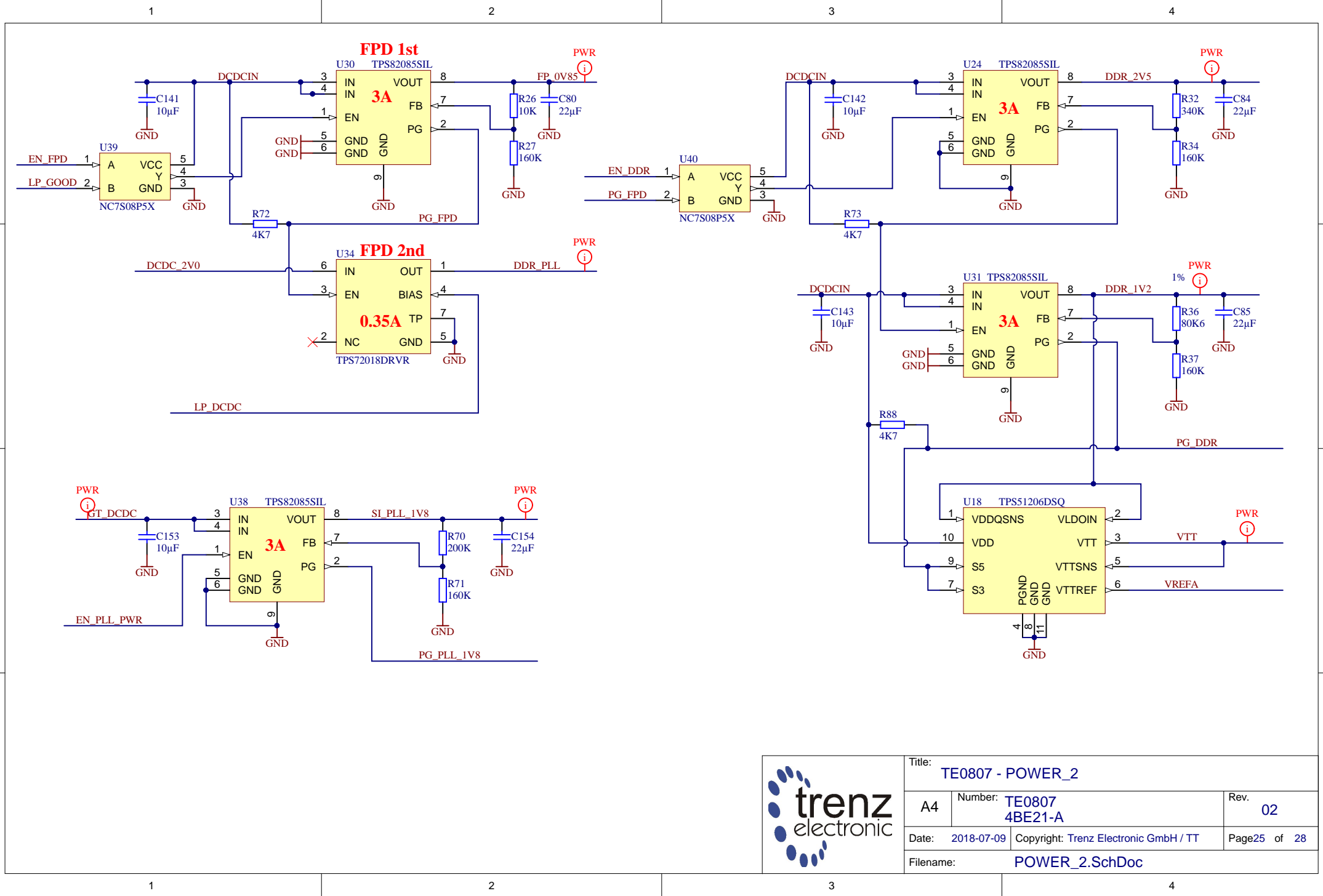



Title: TE0807 - CLOCK		
A4	Number: TE0807 4BE21-A	Rev. 02
Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page 23 of 28
Filename: Clock.SchDoc		

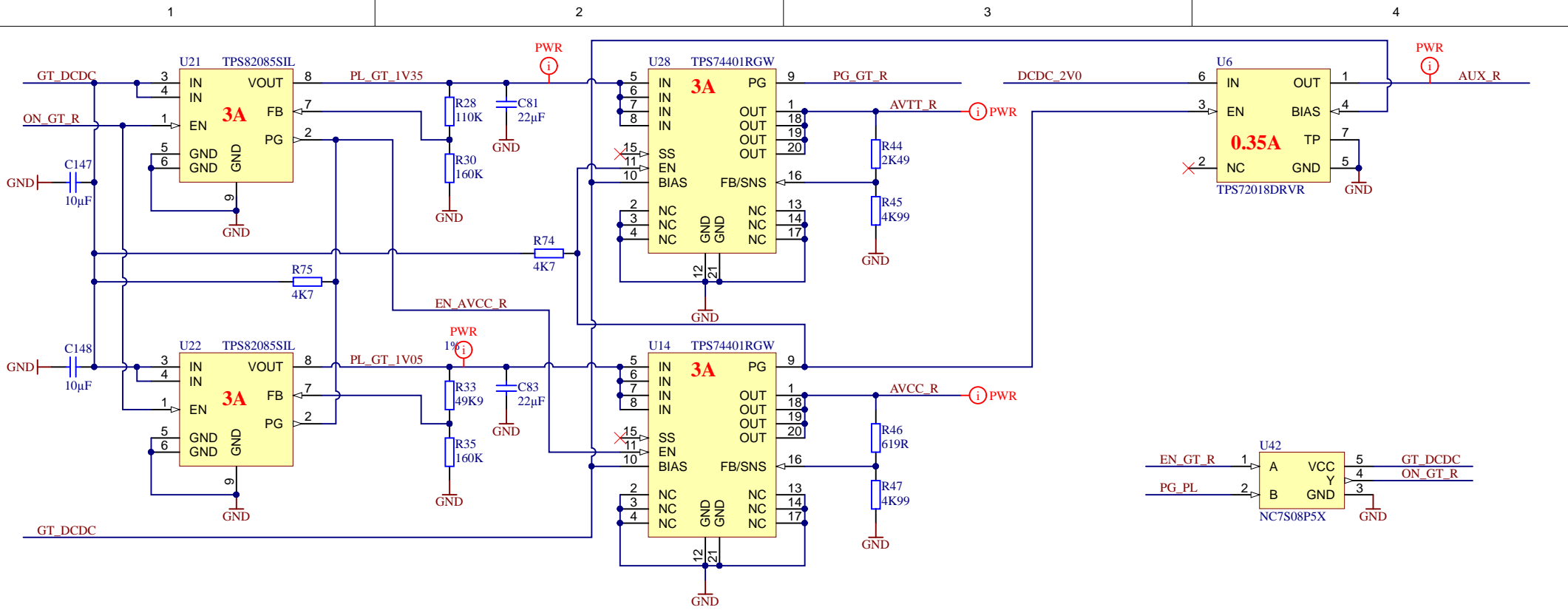


	Title: <b>TE0807 - POWER</b>		
	A4	Number: <b>TE0807 4BE21-A</b>	Rev. <b>02</b>
	Date: <b>2018-07-09</b>	Copyright: <b>Trenz Electronic GmbH / TT</b>	Page <b>24</b> of <b>28</b>
	Filename: <b>POWER.SchDoc</b>		

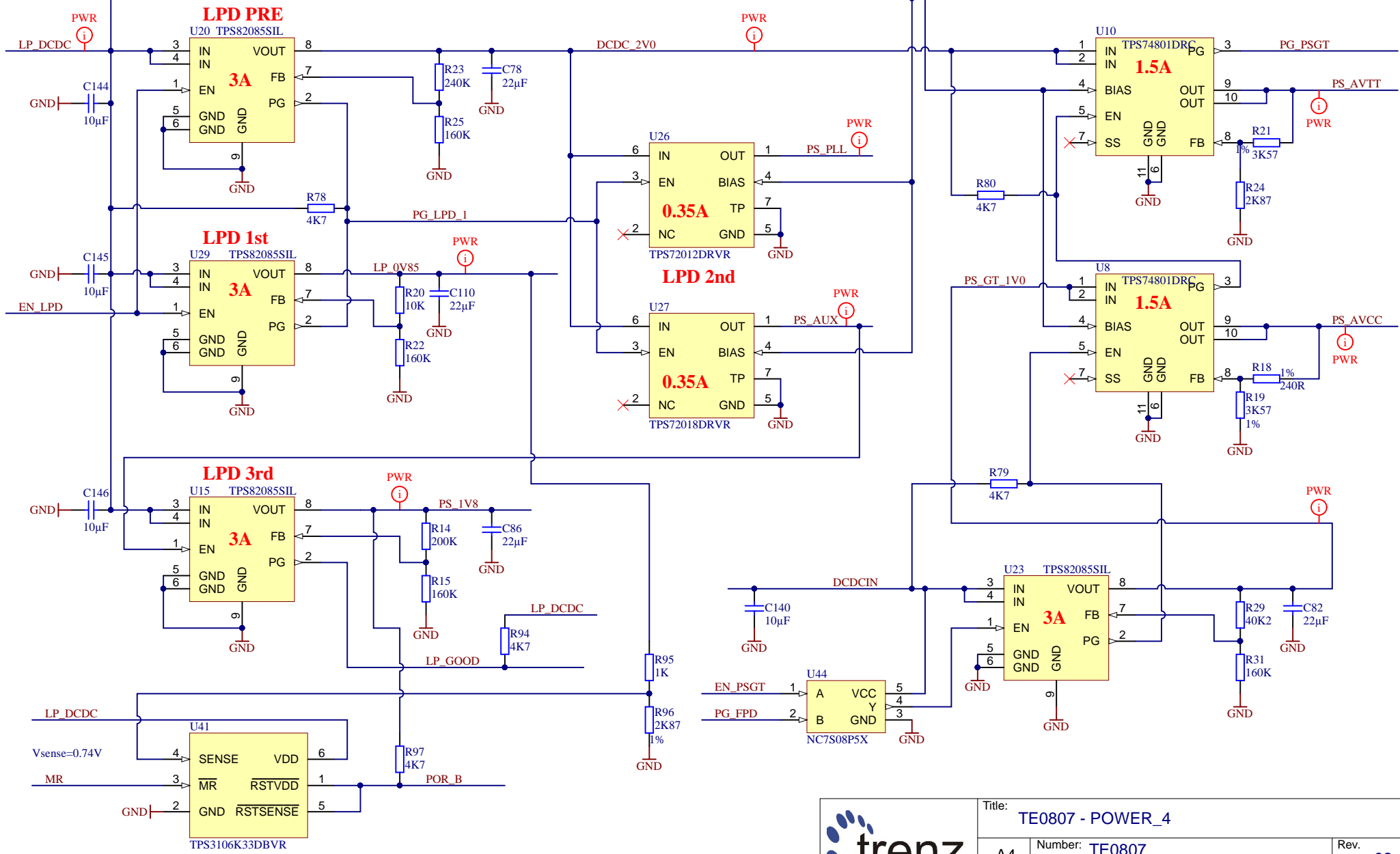




		Title: TE0807 - POWER_2	
		A4	Number: TE0807 4BE21-A
Date: 2018-07-09		Copyright: Trenz Electronic GmbH / TT	
Filename: POWER_2.SchDoc		Page 25 of 28	



Title: TE0807 - POWER_3		
A4	Number: TE0807 4BE21-A	Rev. 02
Date: 2018-07-09	Copyright: Trenz Electronic GmbH / TT	Page26 of 28
Filename: POWER_3.SchDoc		



Title: <b>TE0807 - POWER_4</b>		
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Filename: <b>POWER_4.SchDoc</b>		

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CHANGES REV01 to REV02

- 1) Added EEPROM (U11,24AA025E48T-I/OT)
- 2) Added optional resistors R39/R40 for QSPI flash (do not populated)
- 3) Fixed VCU connection (added additional DCDC and capacitors), recommendation from Xilinx
- 4) Changed obsolete DDR4 chips (NT5AD256M16B2-GN -> K4A8G165WB-BIRC)
- 5) Added net "PG\_VCU" to J2 (pin97)
- 6) full update lib

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B

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C

D

D

	Title: <b>TE0807 - Changes list</b>		
	A4	Number: <b>TE0807 4BE21-A</b>	Rev. <b>02</b>
	Date: <b>2018-07-09</b>	Copyright: <b>Trenz Electronic GmbH</b>	Page <b>28</b> of <b>28</b>
	Filename: <b>Revision_Changes.SchDoc</b>		

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