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J3.SchDoc

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J4.SchDoc

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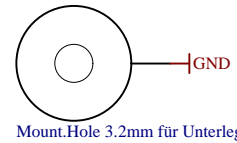
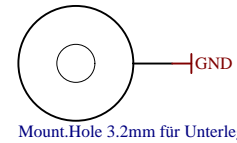
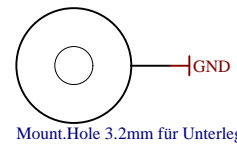
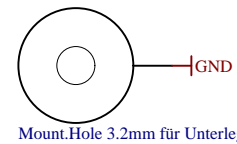
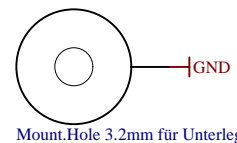
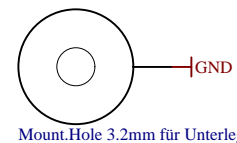
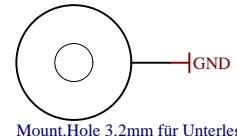
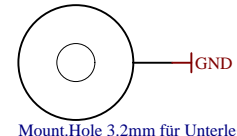
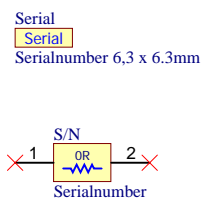
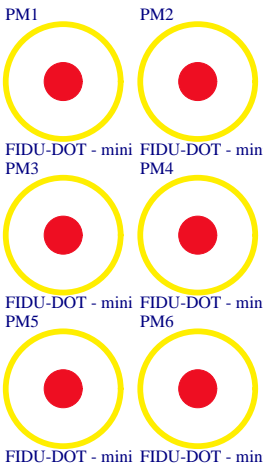
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POWER_2.SchDoc

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U_REV_CH
Revision_Changes.SchDoc



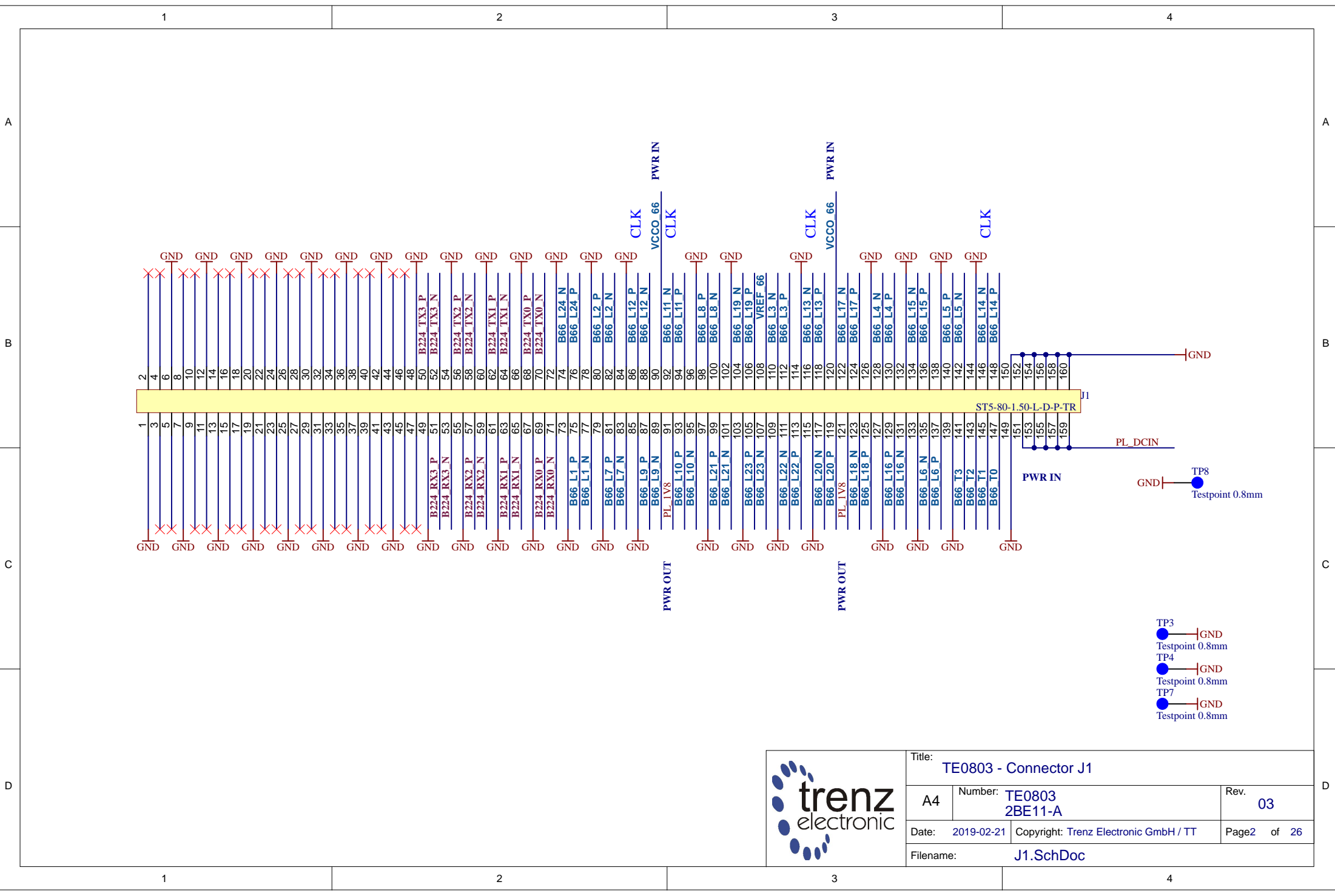
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A4	Number: TE0803 2BE11-A	Rev. 03
Date: 2019-02-21	Copyright: Trenz Electronic GmbH / TT	Page1 of 26
Filename: TE0803.SchDoc		

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Title: TE0803 - Connector J1		
A4	Number: TE0803 2BE11-A	Rev. 03
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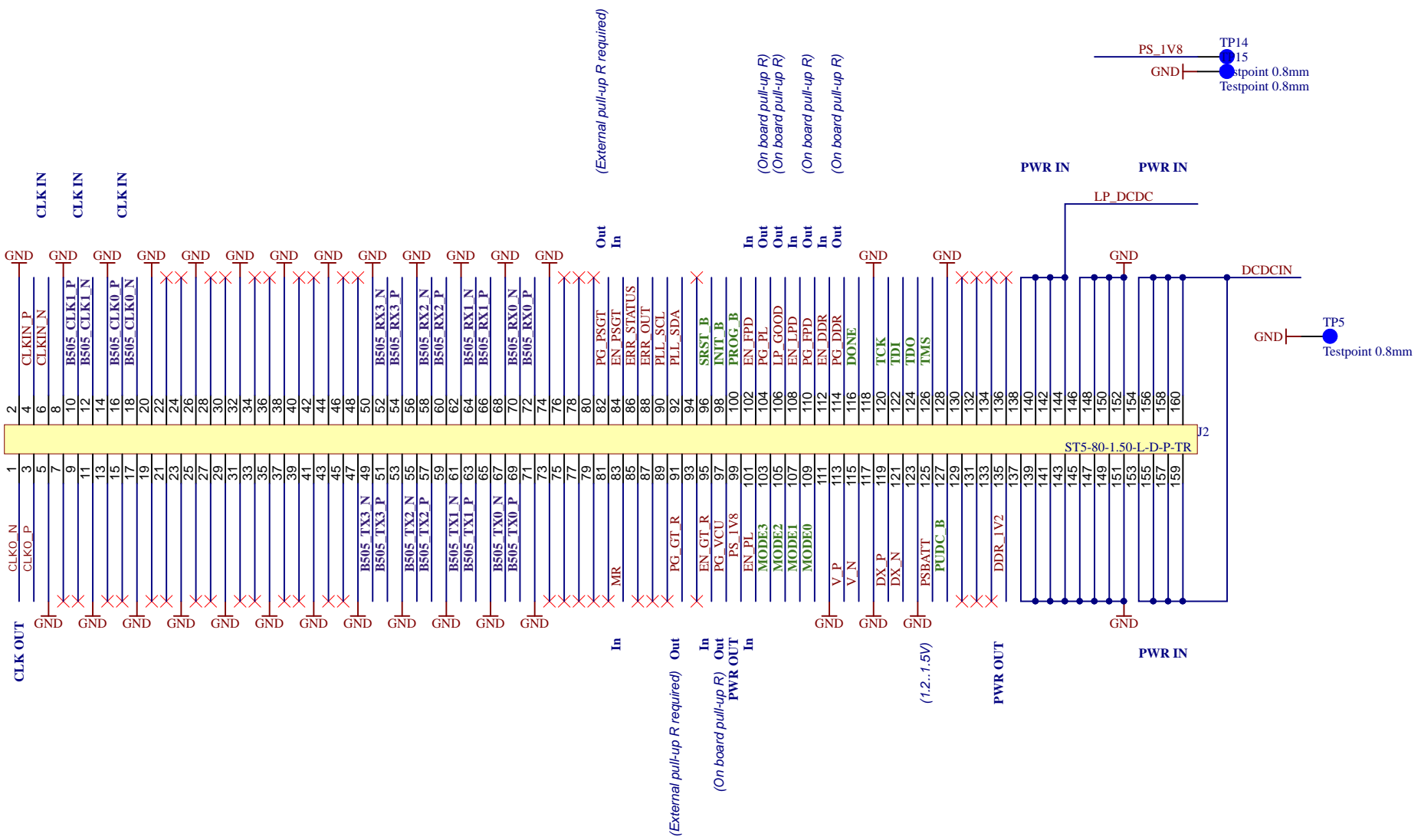

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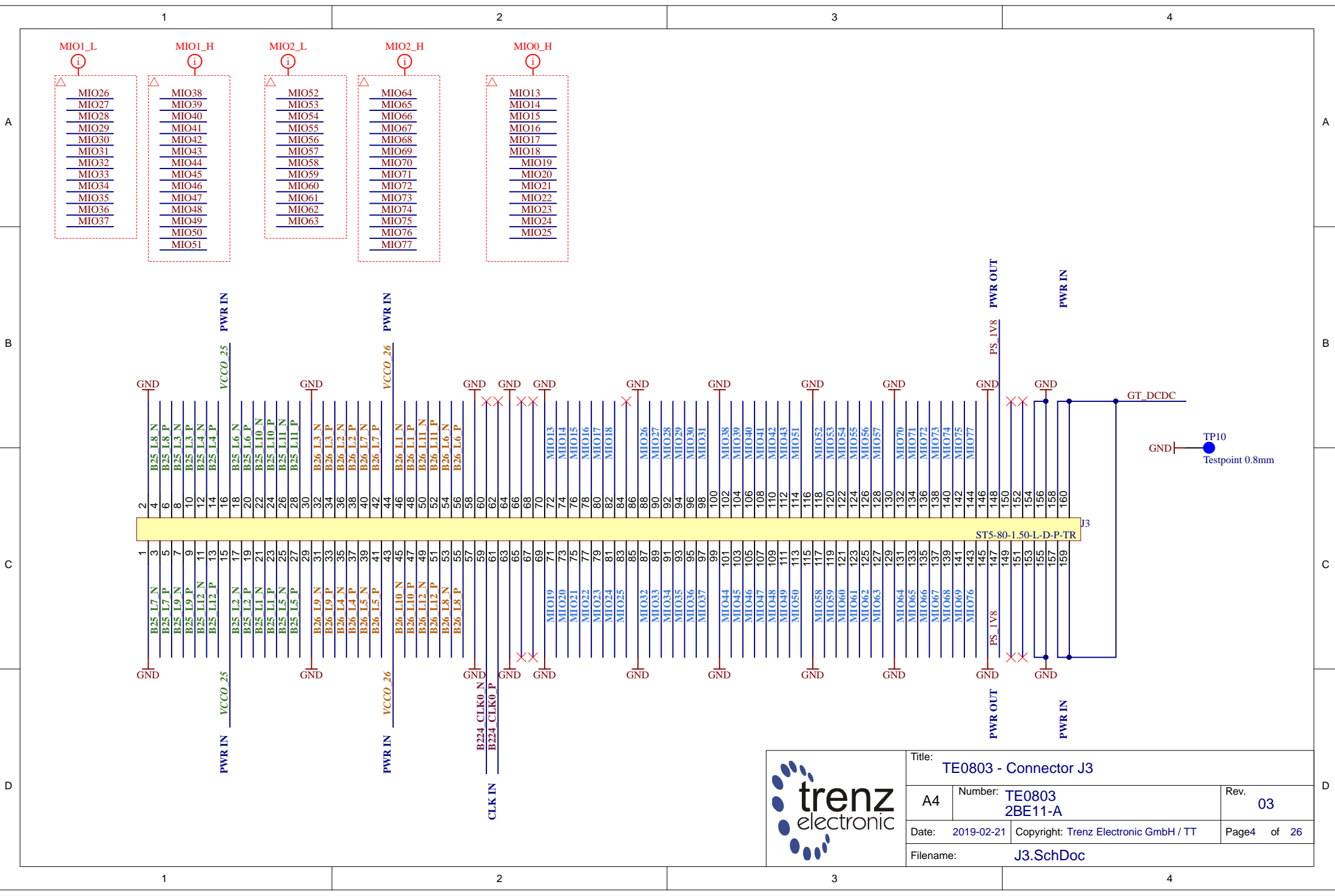
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Date: 2019-02-21	Copyright: Trenz Electronic GmbH / TT	Page3 of 26
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A4	Number: TE0803 2BE11-A	Rev. 03		
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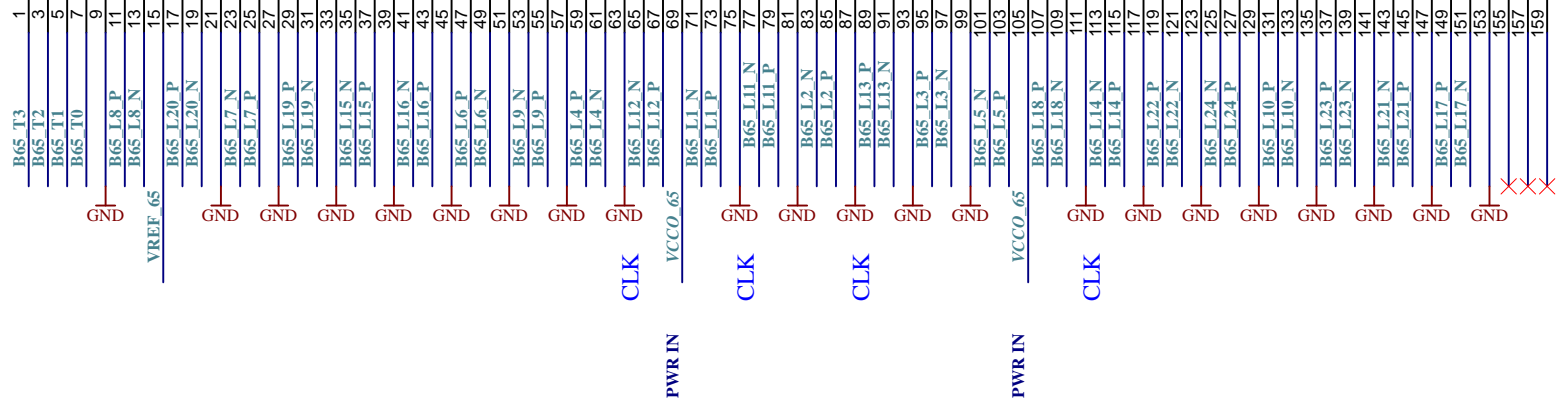
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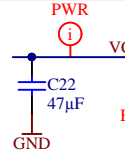
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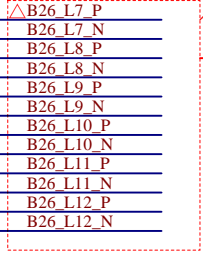


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Date: 2019-02-21	Copyright: Trenz Electronic GmbH / TT	Page5 of 26
Filename: J4.SchDoc		



U1C XCZU2EG-1SFVC784E
BANK 26 HD (ZU4/5 BANK 46 HD)

F14	VCCO_26	B15	IO_L1P_AD11P_26	IO_L7P_HDGC_AD5P_26	G13	B26 L7 P
C15	VCCO_26	A15	IO_L1N_AD11N_26	IO_L7N_HDGC_AD5N_26	F13	B26 L7 N
		B14	IO_L2P_AD10P_26	IO_L8P_HDGC_AD4P_26	F15	B26 L8 P
		A14	IO_L2N_AD10N_26	IO_L8N_HDGC_AD4N_26	E15	B26 L8 N
		B13	IO_L3P_AD9P_26	IO_L9P_AD3P_26	G15	B26 L9 P
		A13	IO_L3N_AD9N_26	IO_L9N_AD3N_26	G14	B26 L9 N
		C14	IO_L4P_AD8P_26	IO_L10P_AD2P_26	H14	B26 L10 P
		C13	IO_L4N_AD8N_26	IO_L10N_AD2N_26	H13	B26 L10 N
		D15	IO_L5P_HDGC_AD7P_26	IO_L11P_AD1P_26	K14	B26 L11 P
		D14	IO_L5N_HDGC_AD7N_26	IO_L11N_AD1N_26	J14	B26 L11 N
		E14	IO_L6P_HDGC_AD6P_26	IO_L12P_AD0P_26	L14	B26 L12 P
		E13	IO_L6N_HDGC_AD6N_26	IO_L12N_AD0N_26	L13	B26 L12 N

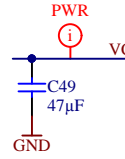


BANK 44 HD (ZU4/5 BANK 43 HD)

AC10	VCCO_44	AG10	IO_L1P_AD11P_44	IO_L7P_HDGC_AD5P_44	AD11	
AG12	VCCO_44	AH10	IO_L1N_AD11N_44	IO_L7N_HDGC_AD5N_44	AD10	
		AF11	IO_L2P_AD10P_44	IO_L8P_HDGC_AD4P_44	AB11	
		AG11	IO_L2N_AD10N_44	IO_L8N_HDGC_AD4N_44	AC11	
		AH12	IO_L3P_AD9P_44	IO_L9P_AD3P_44	AA11	
		AH11	IO_L3N_AD9N_44	IO_L9N_AD3N_44	AA10	
		AE10	IO_L4P_AD8P_44	IO_L10P_AD2P_44	W10	
		AF10	IO_L4N_AD8N_44	IO_L10N_AD2N_44	Y10	
		AE12	IO_L5P_HDGC_AD7P_44	IO_L11P_AD1P_44	Y9	
		AF12	IO_L5N_HDGC_AD7N_44	IO_L11N_AD1N_44	AA8	
		AC13	IO_L6P_HDGC_AD6P_44	IO_L12P_AD0P_44	AB10	
		AD13	IO_L6N_HDGC_AD6N_44	IO_L12N_AD0N_44	AB9	

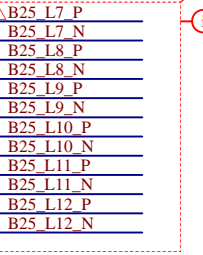
U1B
BANK 24 HD (ZU4/5 BANK 44 HD)

AA14	VCCO_24	AD13	IO_L1P_AD15P_24	IO_L7P_HDGC_24	AA13	
	VCCO_24	AE15	IO_L1N_AD15N_24	IO_L7N_HDGC_24	AB13	
		AG14	IO_L2P_AD14P_24	IO_L8P_HDGC_24	AB15	
		AH11	IO_L2N_AD14N_24	IO_L8N_HDGC_24	AB14	
		AG13	IO_L3P_AD13P_24	IO_L9P_AD11P_24	W14	
		AH13	IO_L3N_AD13N_24	IO_L9N_AD11N_24	W13	
		AE13	IO_L4P_AD12P_24	IO_L10P_AD10P_24	Y14	
		AF13	IO_L4N_AD12N_24	IO_L10N_AD10N_24	Y13	
		AD15	IO_L5P_HDGC_24	IO_L11P_AD9P_24	W12	
		AD14	IO_L5N_HDGC_24	IO_L11N_AD9N_24	W11	
		AC14	IO_L6P_HDGC_24	IO_L12P_AD8P_24	Y12	
		AC13	IO_L6N_HDGC_24	IO_L12N_AD8N_24	AA12	

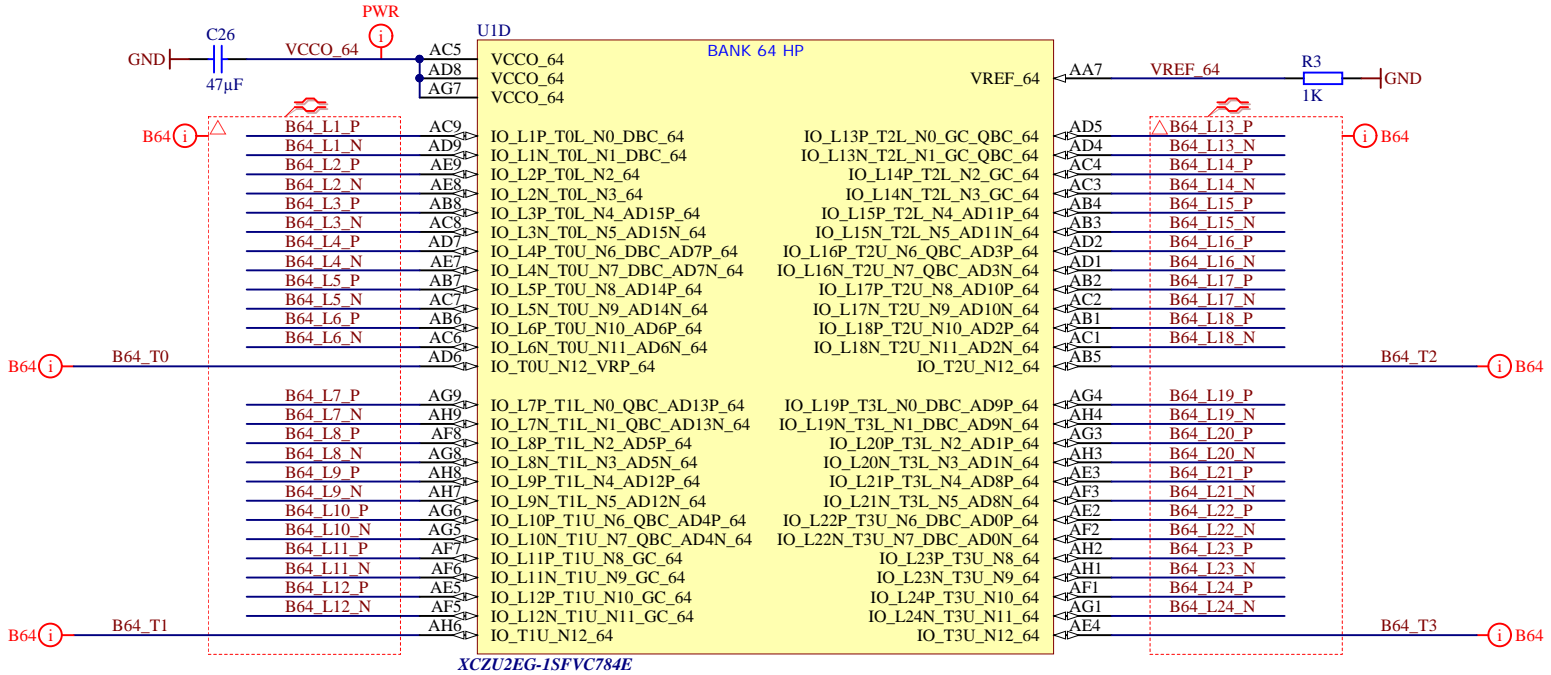


XCZU2EG-1SFVC784E
BANK 25 HD (ZU4/5 BANK 45 HD)

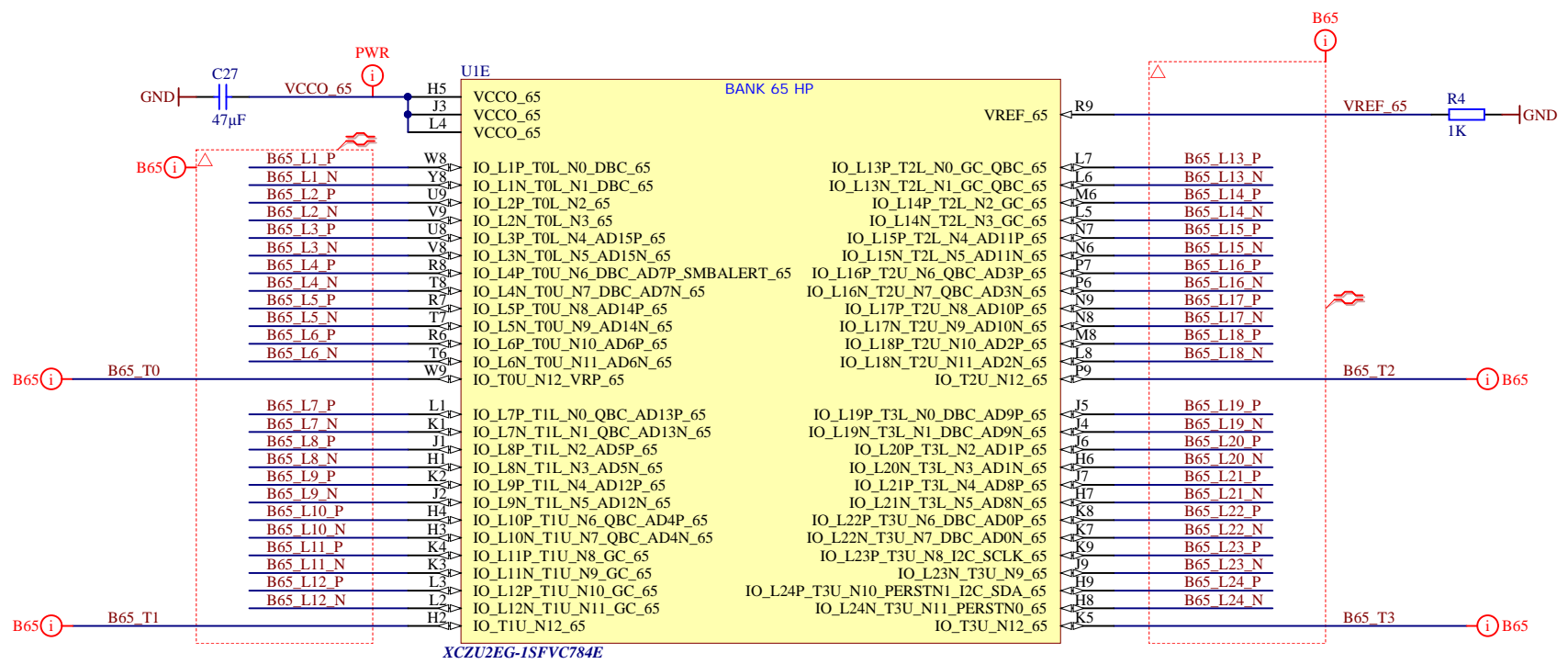
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E11	VCCO_25	J10	IO_L1N_AD15N_25	IO_L7N_HDGC_25	D10	B25 L7 N
		K13	IO_L2P_AD14P_25	IO_L8P_HDGC_25	E12	B25 L8 P
		K12	IO_L2N_AD14N_25	IO_L8N_HDGC_25	D11	B25 L8 N
		H11	IO_L3P_AD13P_25	IO_L9P_AD11P_25	C11	B25 L9 P
		G10	IO_L3N_AD13N_25	IO_L9N_AD11N_25	B10	B25 L9 N
		J12	IO_L4P_AD12P_25	IO_L10P_AD10P_25	B11	B25 L10 P
		H12	IO_L4N_AD12N_25	IO_L10N_AD10N_25	A10	B25 L10 N
		G11	IO_L5P_HDGC_25	IO_L11P_AD9P_25	A12	B25 L11 P
		F11	IO_L5N_HDGC_25	IO_L11N_AD9N_25	A11	B25 L11 N
		F12	IO_L6P_HDGC_25	IO_L12P_AD8P_25	D12	B25 L12 P
		F11	IO_L6N_HDGC_25	IO_L12N_AD8N_25	C12	B25 L12 N



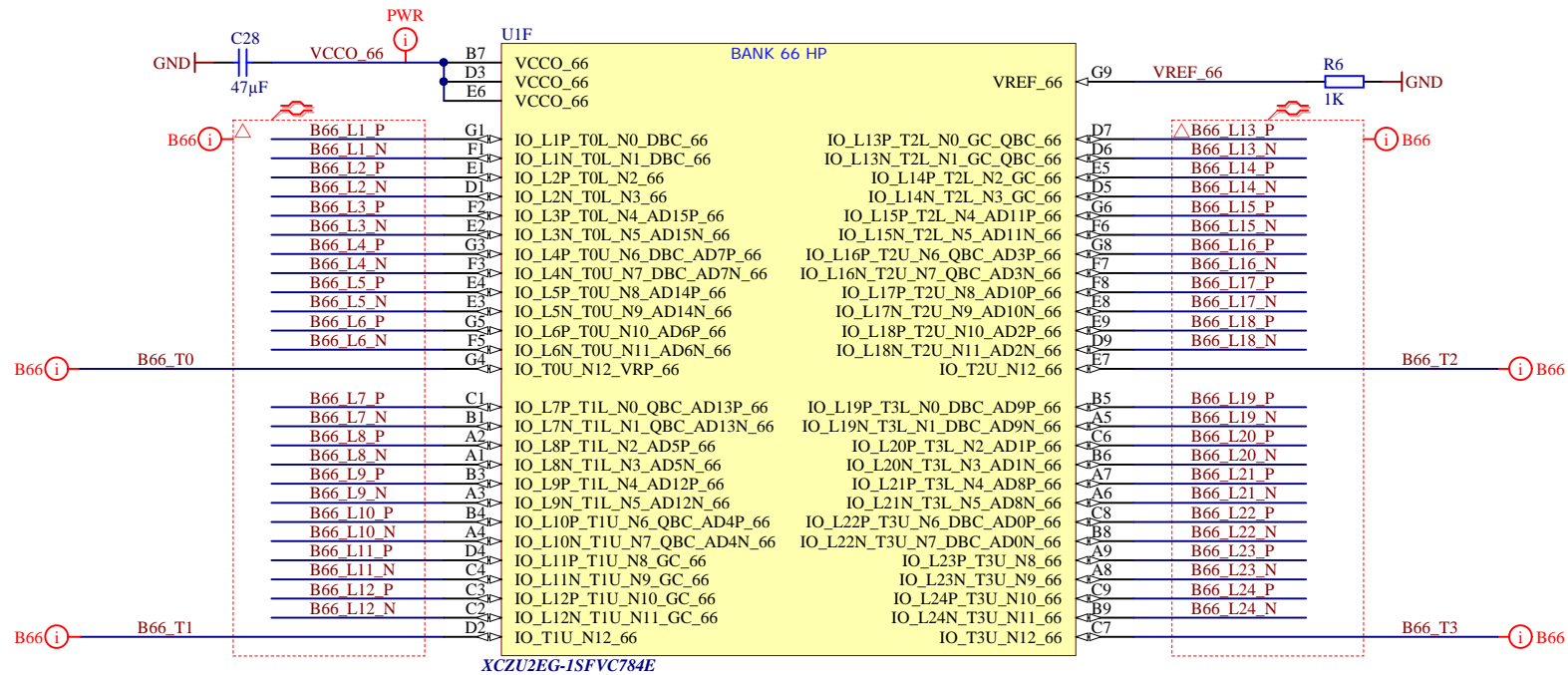
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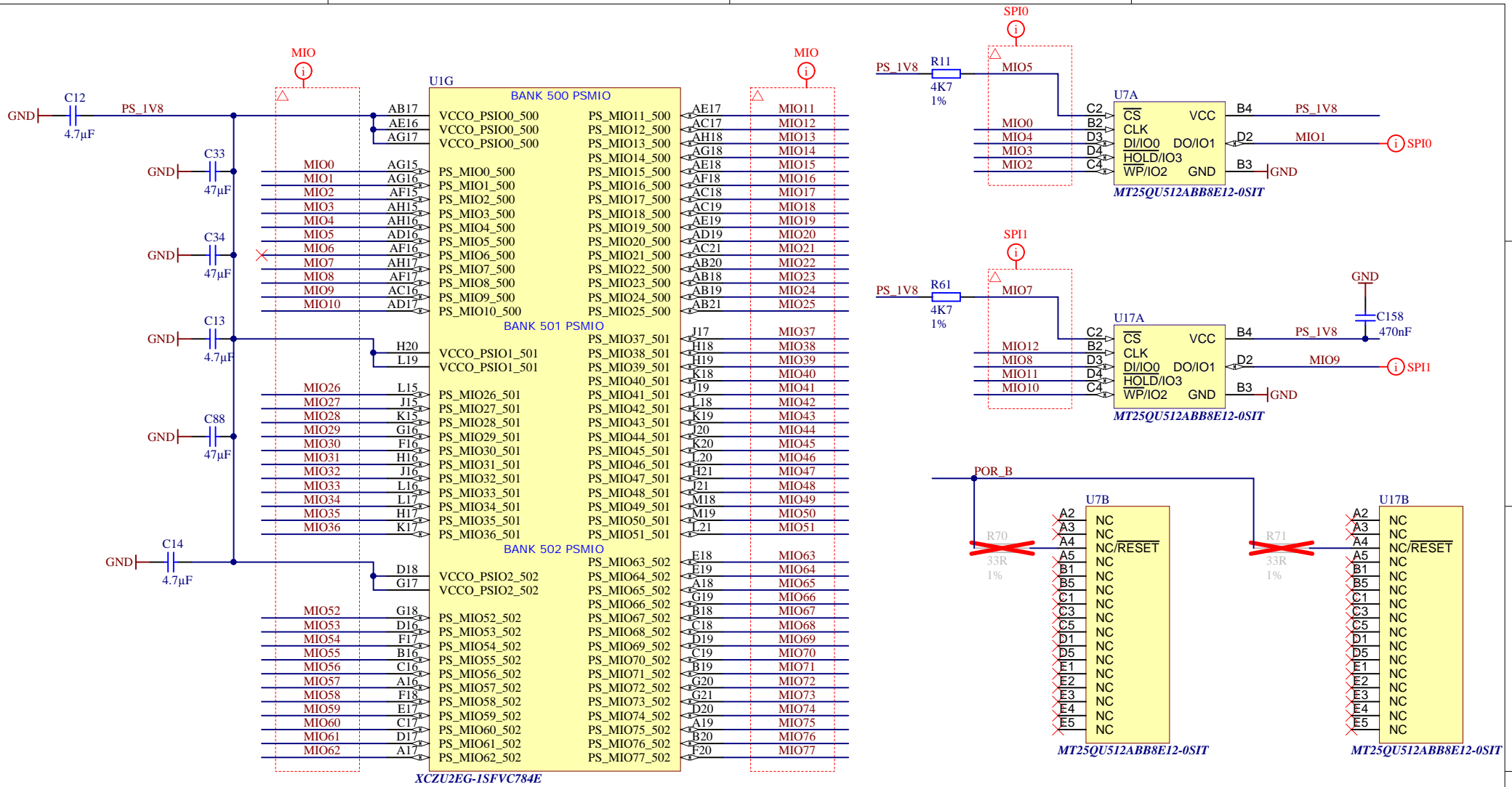
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Title: TE0803 - B65		
A4	Number: TE0803 2BE11-A	Rev. 03
Date: 2019-02-21	Copyright: Trenz Electronic GmbH / TT	Page 9 of 26
Filename: B65.SchDoc		



Title: TE0803 - B66		
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Date: 2019-02-21	Copyright: Trenz Electronic GmbH / TT	Page 10 of 26
Filename: B66.SchDoc		



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Date: 2019-02-21		Copyright: Trenz Electronic GmbH / TT		Page 11 of 26
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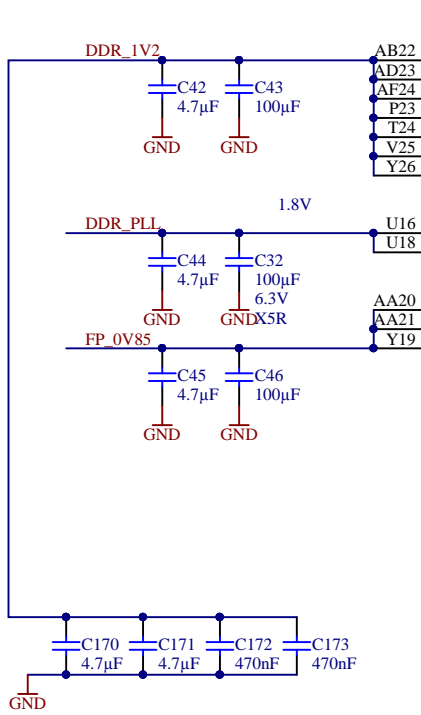
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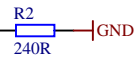
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U11		BANK 504 PSDDR	
VCCO_PSDDR_504	PS_DDR_CK0_504	W25	DDR4-CLK0 P
VCCO_PSDDR_504	PS_DDR_CK_N0_504	W26	DDR4-CLK0 N
VCCO_PSDDR_504	PS_DDR_CKE0_504	V28	DDR4-CKE0
VCCO_PSDDR_504	PS_DDR_CK1_504	Y24	
VCCO_PSDDR_504	PS_DDR_CK_N1_504	Y25	
VCCO_PSDDR_504	PS_DDR_CKE1_504	V27	
VCC_PSDDR_PLL	PS_DDR_A0_504	W28	DDR4-A0
VCC_PSDDR_PLL	PS_DDR_A1_504	Y28	DDR4-A1
VCC_PSDDR_PLL	PS_DDR_A2_504	AB28	DDR4-A2
VCC_PSDDR_PLL	PS_DDR_A3_504	AA28	DDR4-A3
VCC_PSDDR_PLL	PS_DDR_A4_504	Y27	DDR4-A4
VCC_PSDDR_PLL	PS_DDR_A5_504	AA27	DDR4-A5
VCC_PSINTFP_DDR	PS_DDR_A6_504	Y22	DDR4-A6
VCC_PSINTFP_DDR	PS_DDR_A7_504	AA23	DDR4-A7
VCC_PSINTFP_DDR	PS_DDR_A8_504	AA22	DDR4-A8
VCC_PSINTFP_DDR	PS_DDR_A9_504	AB23	DDR4-A9
VCC_PSINTFP_DDR	PS_DDR_A10_504	AA25	DDR4-A10
VCC_PSINTFP_DDR	PS_DDR_A11_504	AA26	DDR4-A11
VCC_PSINTFP_DDR	PS_DDR_A12_504	AB25	DDR4-A12
VCC_PSINTFP_DDR	PS_DDR_A13_504	AB26	DDR4-A13
VCC_PSINTFP_DDR	PS_DDR_A14_504	AB24	DDR4-A14
VCC_PSINTFP_DDR	PS_DDR_A15_504	AC24	DDR4-A15
VCC_PSINTFP_DDR	PS_DDR_A16_504	AC23	DDR4-A16
VCC_PSINTFP_DDR	PS_DDR_A17_504	AC22	DDR4-A17
PS_DDR_CS_N0_504		W27	DDR4-CS
PS_DDR_CS_N1_504		V26	
PS_DDR_BA0_504		V23	DDR4-BA0
PS_DDR_BA1_504		W22	DDR4-BA1
PS_DDR_BG0_504		W24	DDR4-BG0
PS_DDR_BG1_504		V22	DDR4-BG1
PS_DDR_PARITY_504		V24	DDR4-PAR
PS_DDR_RAM_RST_N_504		U23	DDR4-RESET
PS_DDR_ACT_N_504		Y23	DDR4-ACT
PS_DDR_ALERT_N_504		U25	DDR4-ALERT
PS_DDR_ZQ_504		U24	
PS_DDR_ODT0_504		U28	DDR4-ODT0
PS_DDR_ODT1_504		U26	

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U1J		BANK 504 PSDDR	
DQ0	AD21	PS_DDR_DQ0_504	PS_DDR_DQ32_504
DQ1	AE20	PS_DDR_DQ1_504	PS_DDR_DQ33_504
DQ2	AD20	PS_DDR_DQ2_504	PS_DDR_DQ34_504
DQ3	AF20	PS_DDR_DQ3_504	PS_DDR_DQ35_504
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DQ5	AH20	PS_DDR_DQ5_504	PS_DDR_DQ37_504
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DQ10	AE22	PS_DDR_DQ10_504	PS_DDR_DQ42_504
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DQ13	AH24	PS_DDR_DQ13_504	PS_DDR_DQ45_504
DQ14	AE24	PS_DDR_DQ14_504	PS_DDR_DQ46_504
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DQ16	AC26	PS_DDR_DQ16_504	PS_DDR_DQ48_504
DQ17	AD26	PS_DDR_DQ17_504	PS_DDR_DQ49_504
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DDR4-DQS0 N	AG21	PS_DDR_DQS_N0_504	PS_DDR_DQ65_504
DDR4-DQS1 P	AF23	PS_DDR_DQS_P1_504	PS_DDR_DQ66_504
DDR4-DQS1 N	AG23	PS_DDR_DQS_N1_504	PS_DDR_DQ67_504
DDR4-DQS2 P	AF25	PS_DDR_DQS_P2_504	PS_DDR_DQ68_504
DDR4-DQS2 N	AF26	PS_DDR_DQS_N2_504	PS_DDR_DQ69_504
DDR4-DQS3 P	AE27	PS_DDR_DQS_P3_504	PS_DDR_DQ70_504
DDR4-DQS3 N	AF27	PS_DDR_DQS_N3_504	PS_DDR_DQ71_504
DDR4-DQS4 P	N23	PS_DDR_DQS_P4_504	PS_DDR_DM0_504
DDR4-DQS4 N	M23	PS_DDR_DQS_N4_504	PS_DDR_DM1_504
DDR4-DQS5 P	L23	PS_DDR_DQS_P5_504	PS_DDR_DM2_504
DDR4-DQS5 N	K23	PS_DDR_DQS_N5_504	PS_DDR_DM3_504
DDR4-DQS6 P	N26	PS_DDR_DQS_P6_504	PS_DDR_DM4_504
DDR4-DQS6 N	N27	PS_DDR_DQS_N6_504	PS_DDR_DM5_504
DDR4-DQS7 P	J26	PS_DDR_DQS_P7_504	PS_DDR_DM6_504
DDR4-DQS7 N	J27	PS_DDR_DQS_N7_504	PS_DDR_DM7_504
	R27	PS_DDR_DQS_P8_504	PS_DDR_DM8_504
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Filename: PS_DDR.SchDoc		

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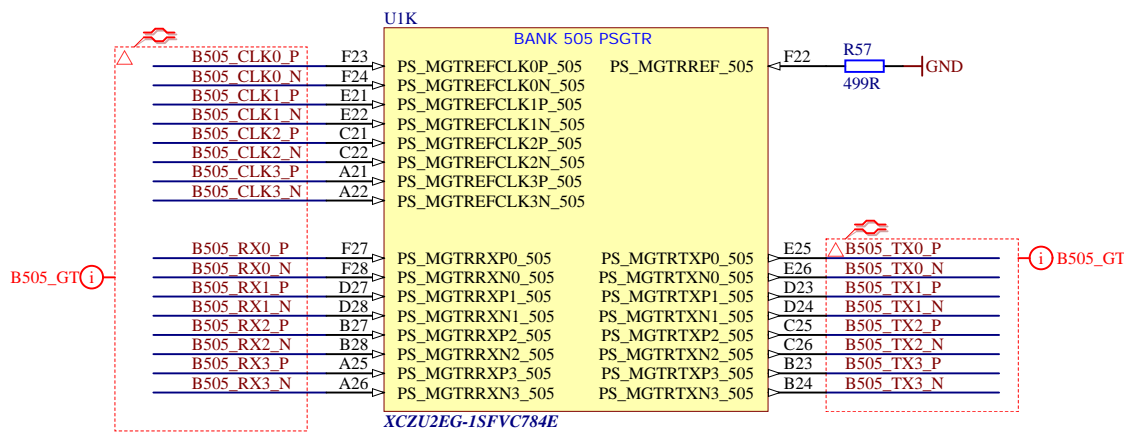
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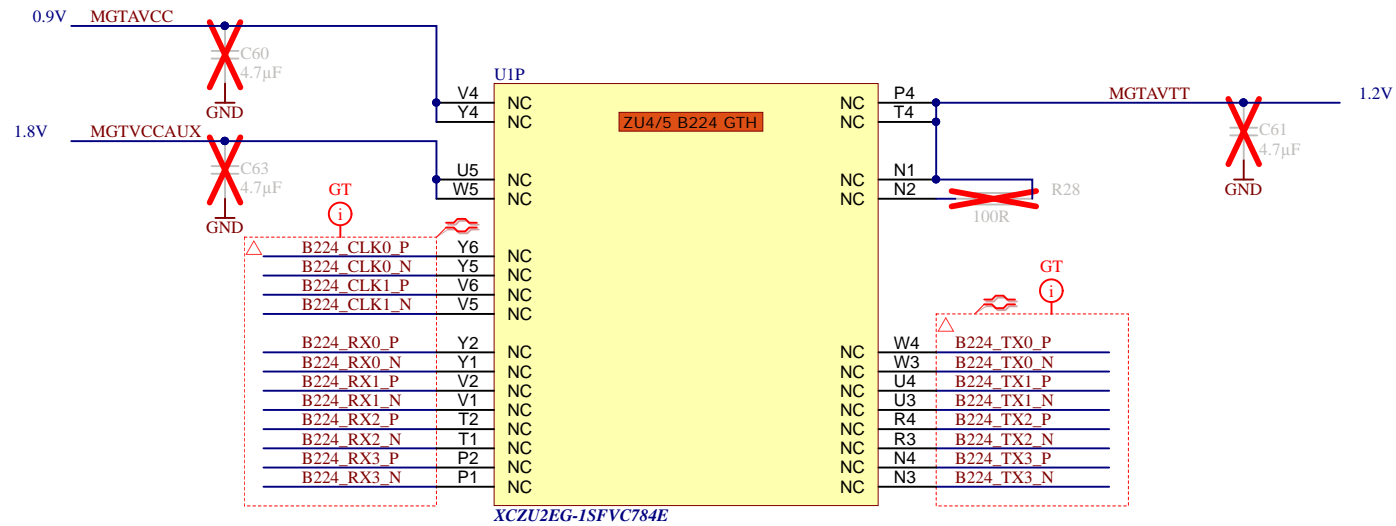
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	Filename: B_PS_GT.SchDoc		


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		Title: TE0803 - B224GTH	
		A4	Number: TE0803 2BE11-A
Date: 2019-02-21		Copyright: Trenz Electronic GmbH / TT	
Filename: B_GT.SchDoc		Page 14 of 26	

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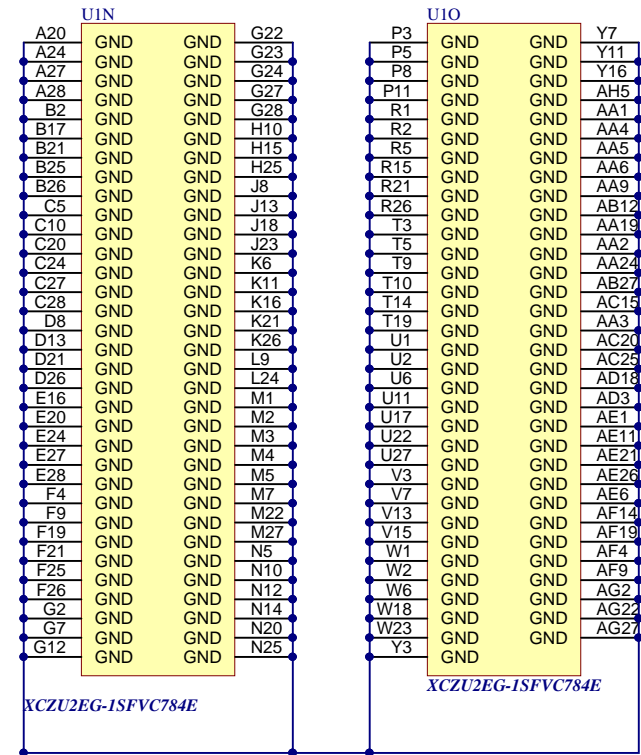
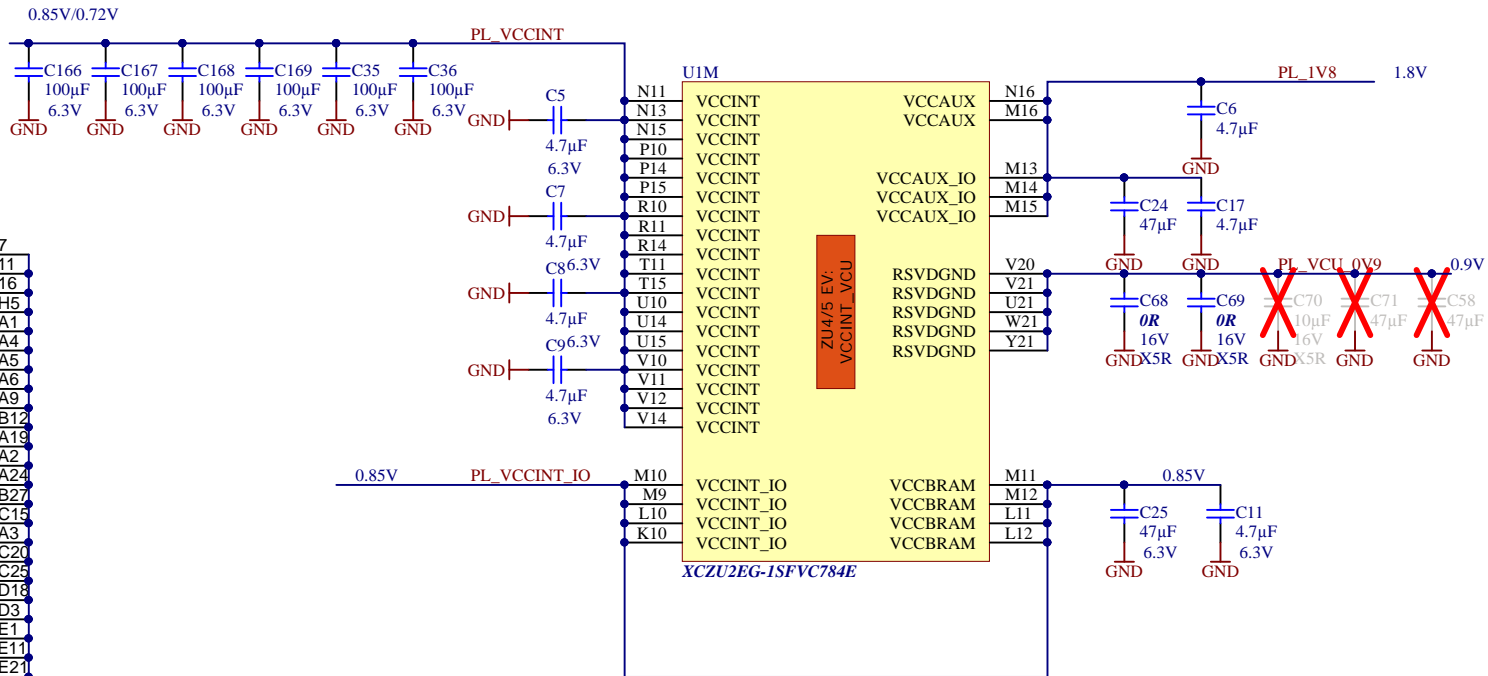
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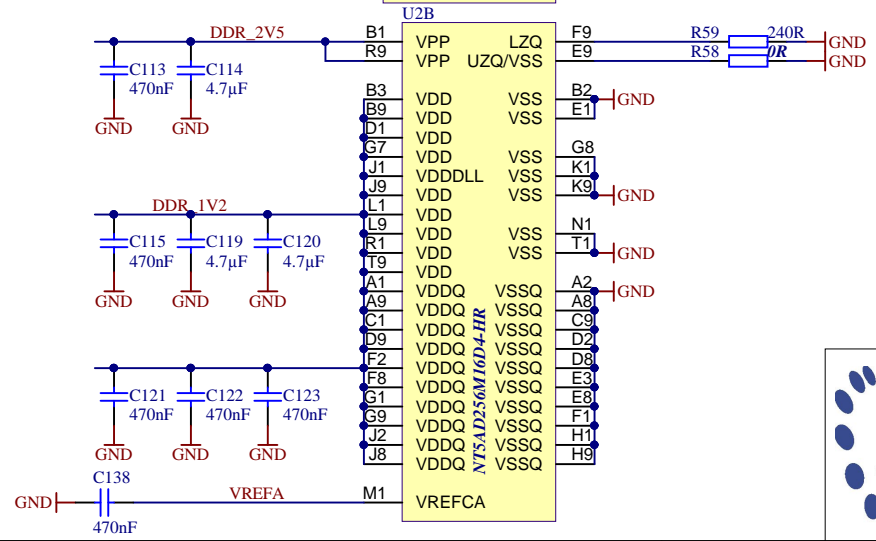
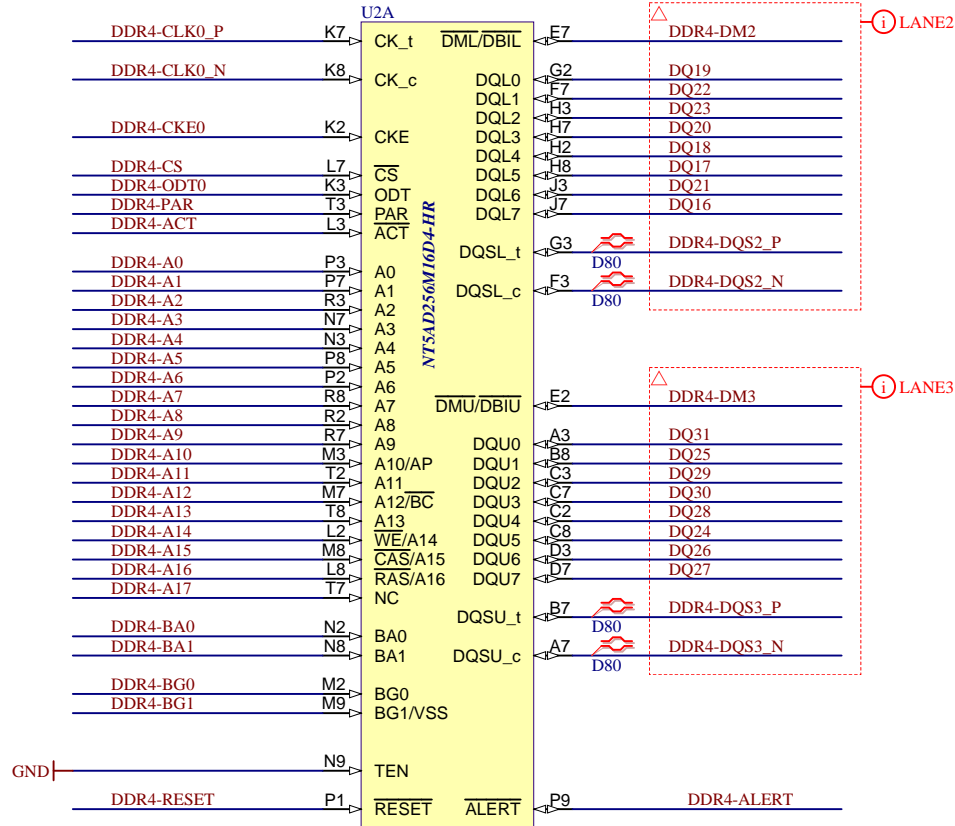
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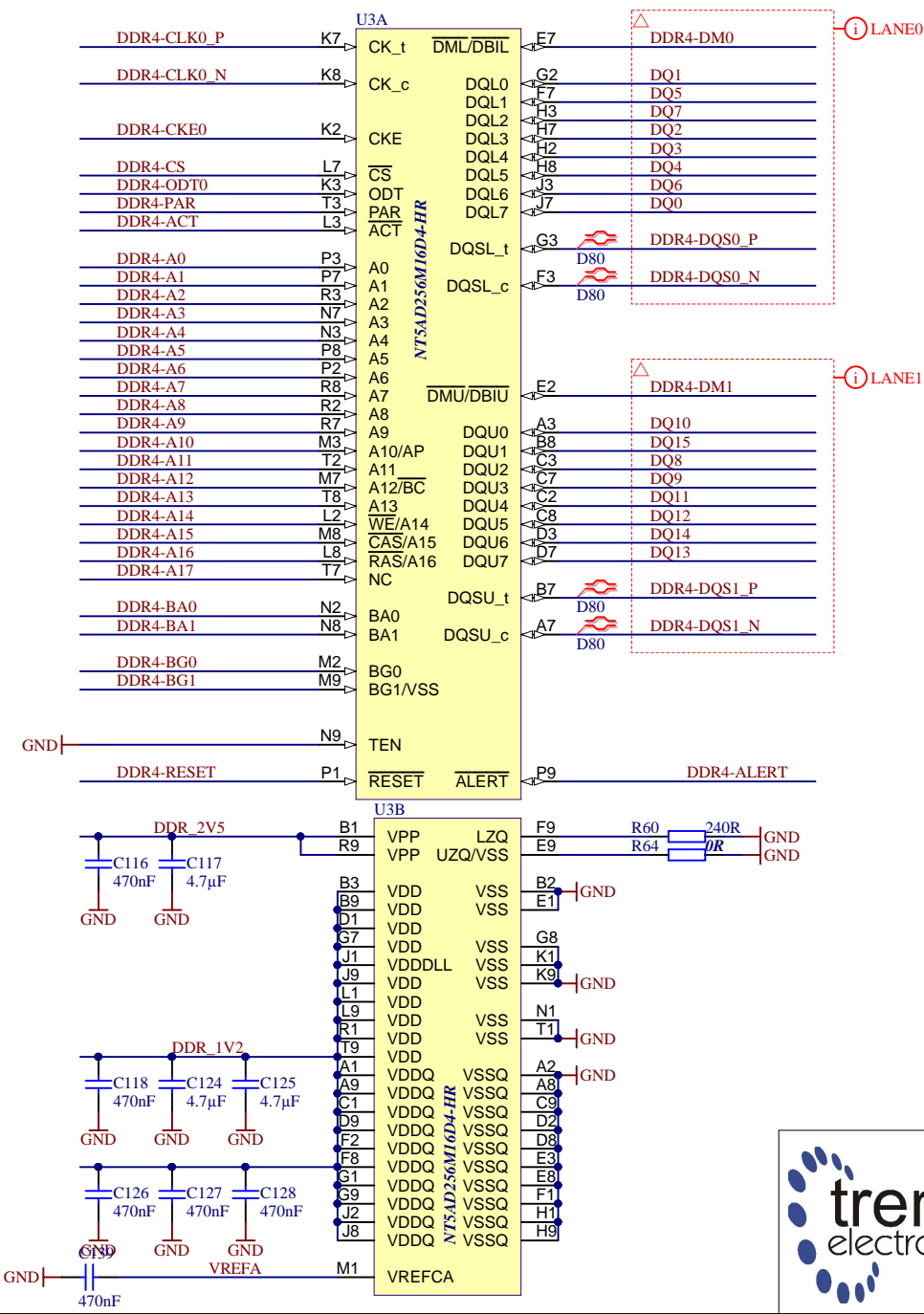
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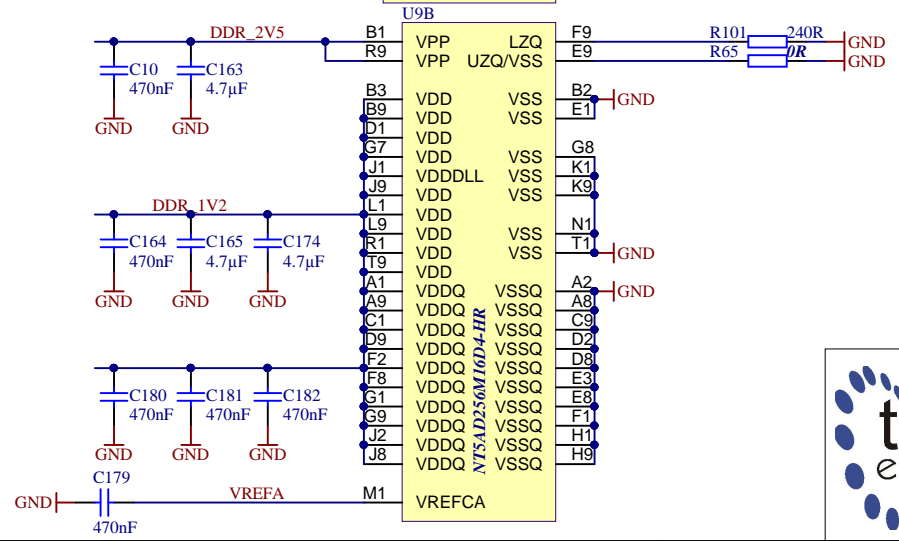
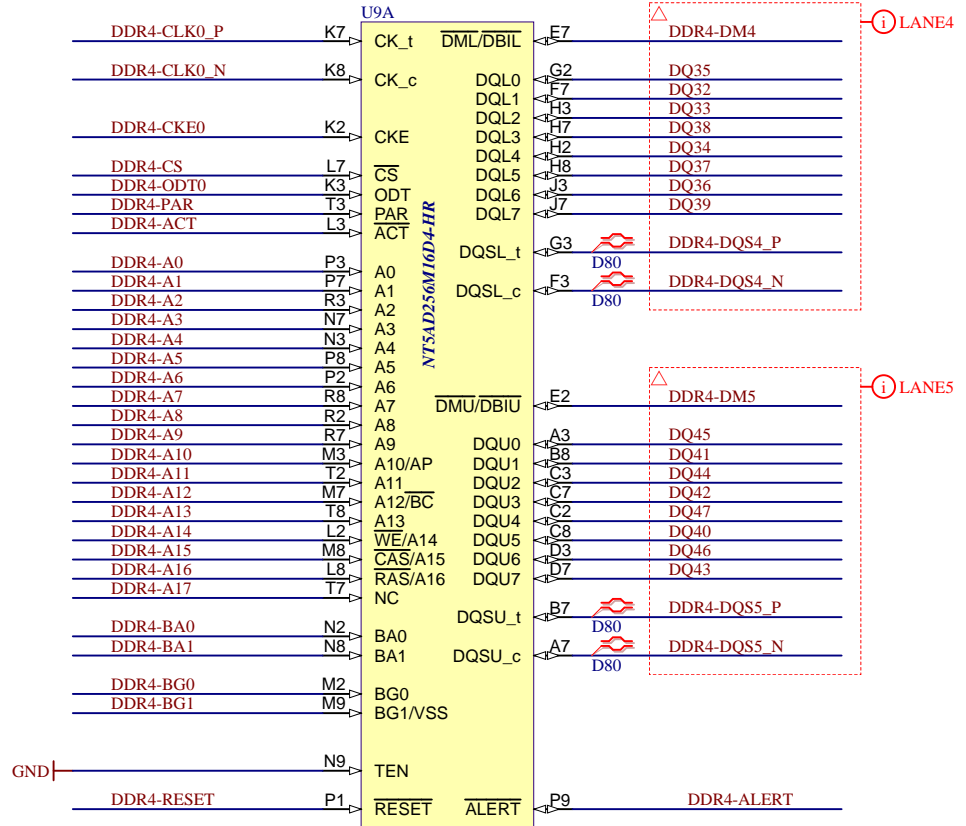
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	A4	Number: TE0803 2BE11-A	Rev. 03
	Date: 2019-02-21	Copyright: Trenz Electronic GmbH / TT	Page 16 of 26
	Filename: ZU_POWER.SchDoc		



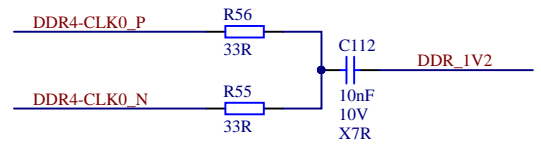
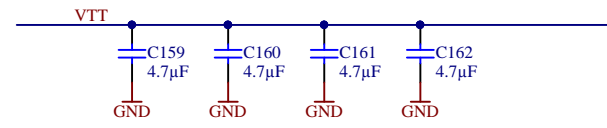
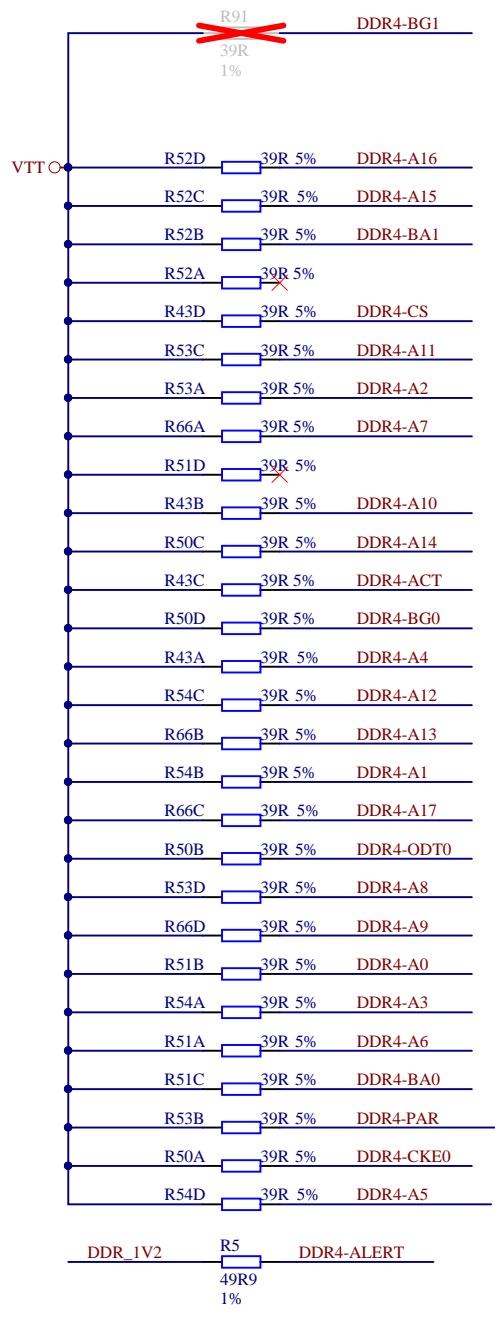
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Date: 2019-02-21	Copyright: Trenz Electronic GmbH / TT	Page 17 of 26
Filename: DDR4-RAM.SchDoc		



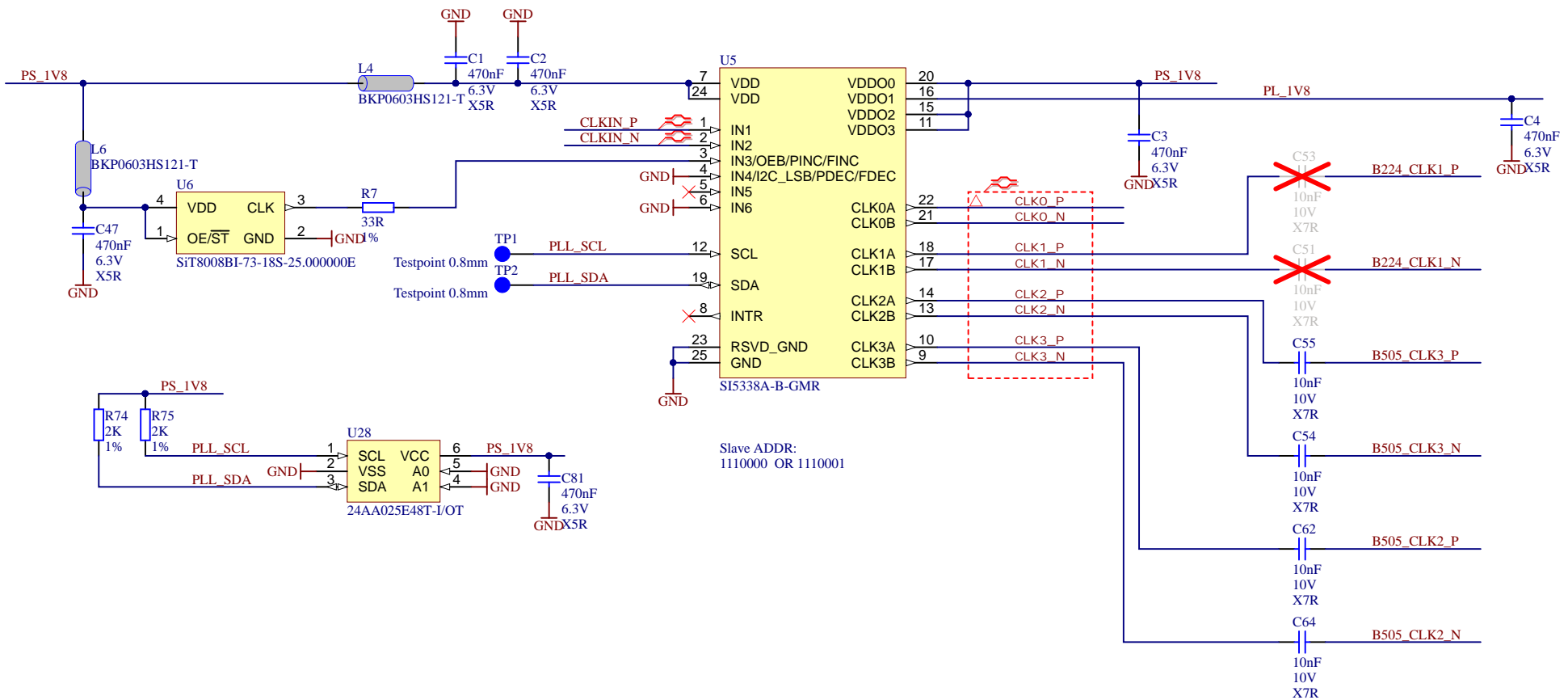
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Date: 2019-02-21	Copyright: Trenz Electronic GmbH / TT	Page18 of 26
Filename: DDR4-RAM_2.SchDoc		




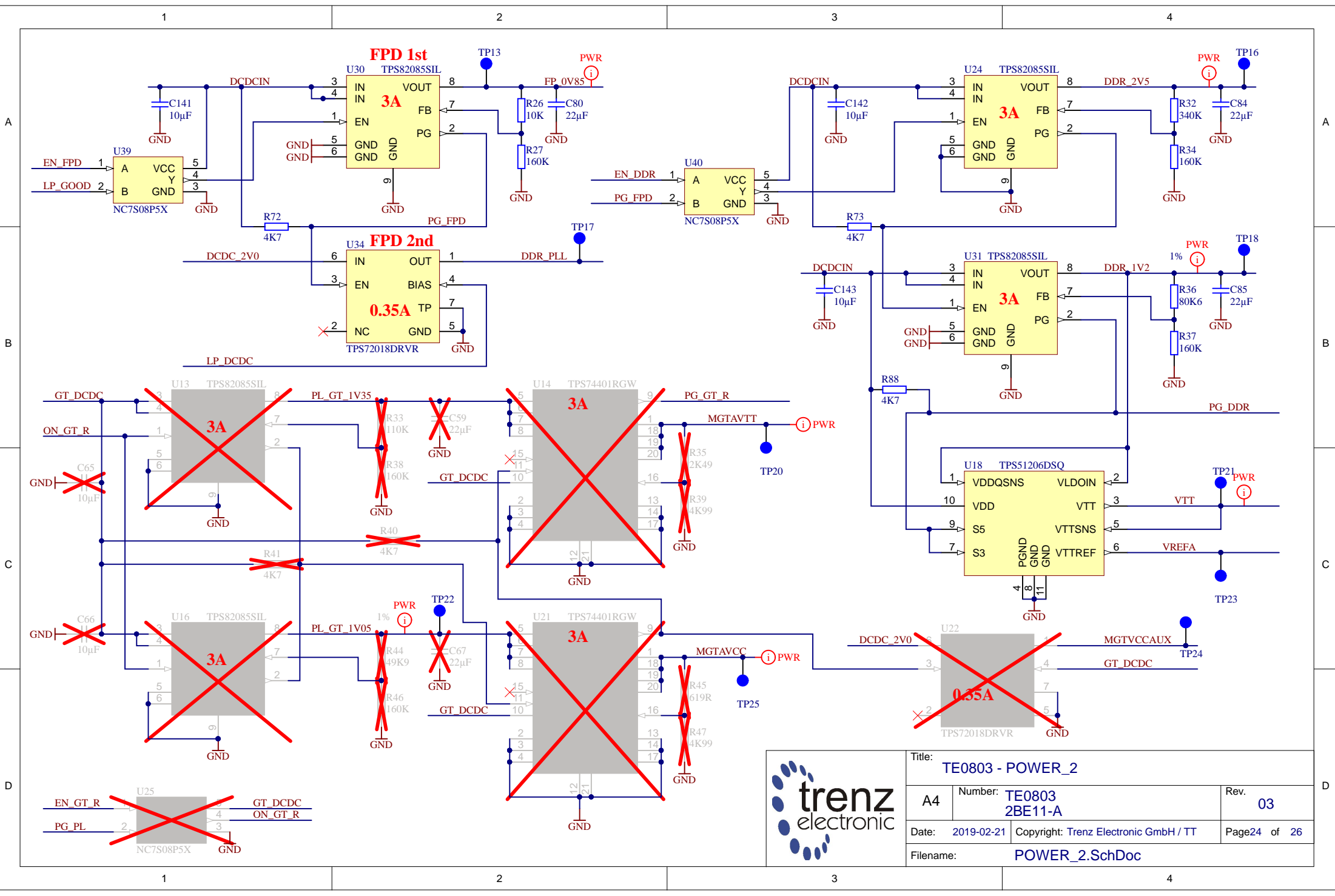
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Date: 2019-02-21	Copyright: Trenz Electronic GmbH / TT	Page 19 of 26
Filename: DDR4-RAM_3.SchDoc		



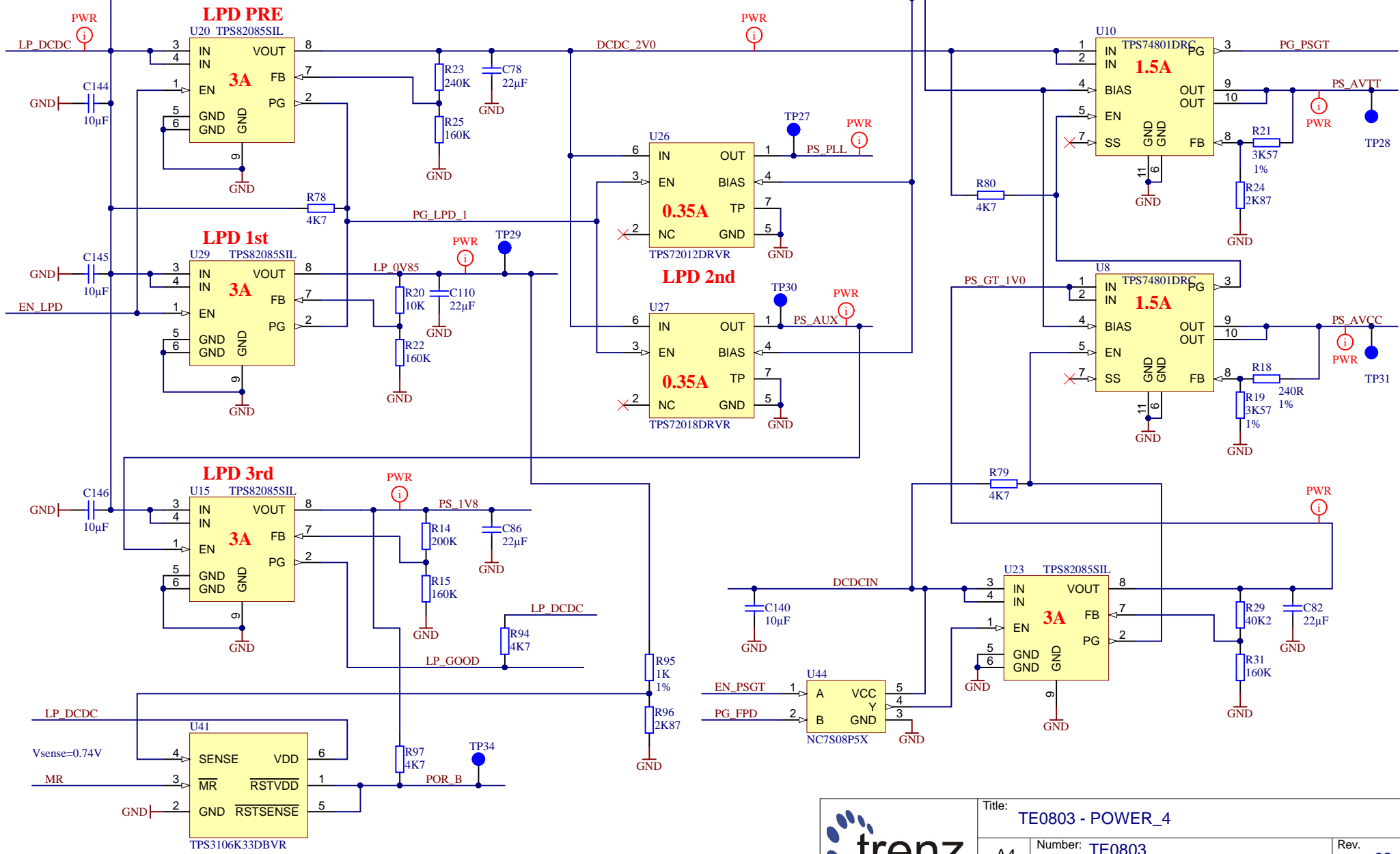
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Date: 2019-02-21	Copyright: Trenz Electronic GmbH / TT	Page 21 of 26
Filename: DDR4-TERM.SchDoc		



		Title: TE0803 - CLOCK	
		A4	Number: TE0803 2BE11-A
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Title: TE0803 - POWER_2		
A4	Number: TE0803 2BE11-A	Rev. 03
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Title: TE0803 - POWER_4		
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CHANGES REV01a (20.11.2017):

- 1) VCU voltage set to 0.9V, R20 changed to 40K , PL_VCU_1V0 renamed to PL_VCU_0V9.

CHANGES REV02 (20.06.2018):

- 1) Added LDO to DDR_PLL
- 2) All differential pairs wath length matched with tollerance 0.1mm (excluding package delays)
- 3) Added MAC EEPROM U28
- 4) VPS_MGTRAVCC set to 0.85V
- 5) Added pull-up resistors R68,R69

CHANGES REV03 (21.02.2019):

- 1) Added support of DDP DDR4
- 2) Added support of Low power FPGA (-L1/L2).
- 3) Revised testpoints
- 4) Revised J1-J4 connectors net label style

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		Title: TE0803 - Changes list		
		A4	Number: TE0803 2BE11-A	Rev. 03
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		Filename: Revision_Changes.SchDoc		

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