

	Title: TE0803 - Connector J1	
	A4	Number: TE0803 03EG-1E3
	Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT
	Filename: J1.SchDoc	Rev. 02 Page2 of 26

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A

A

B

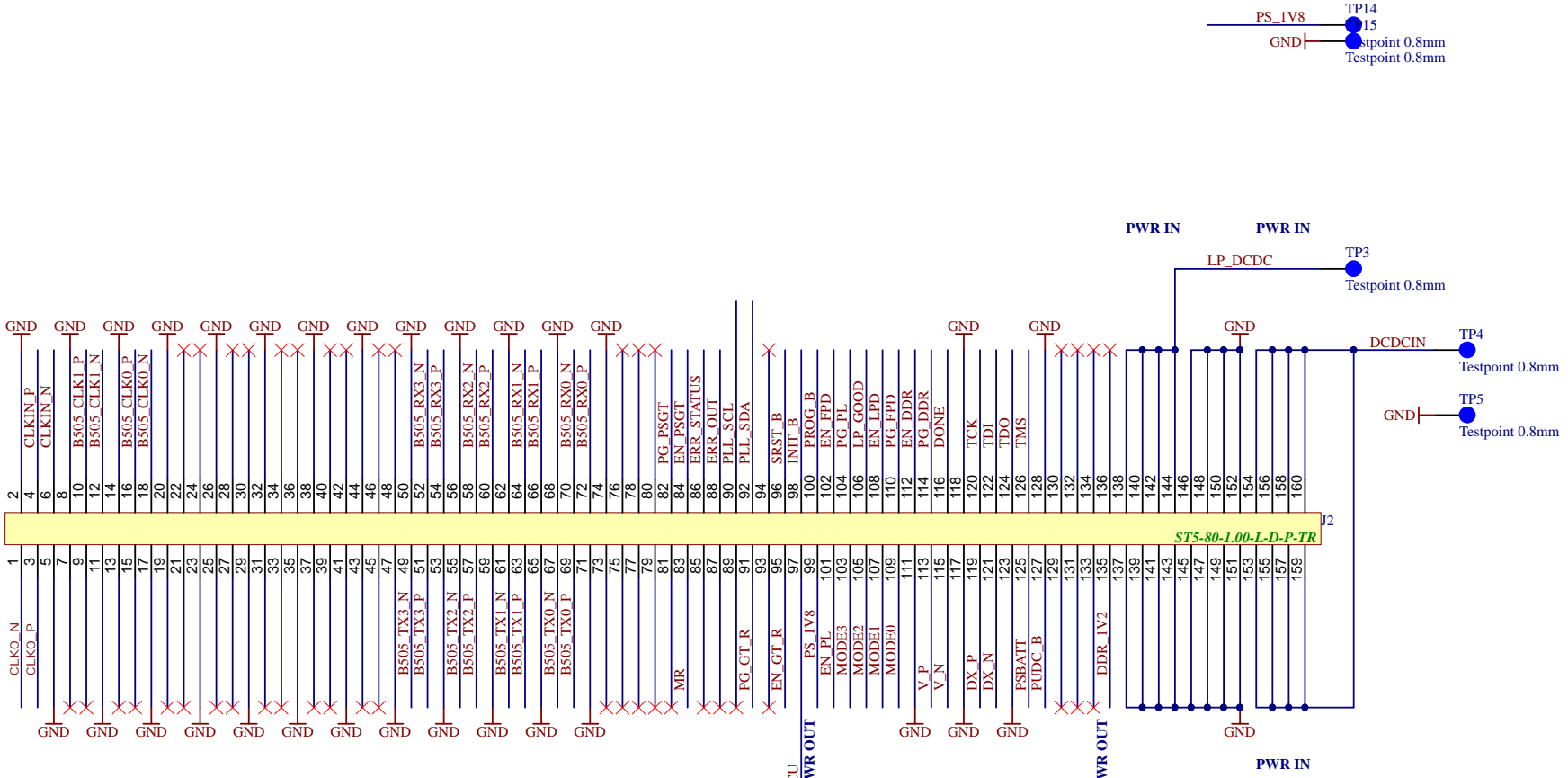
B

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1

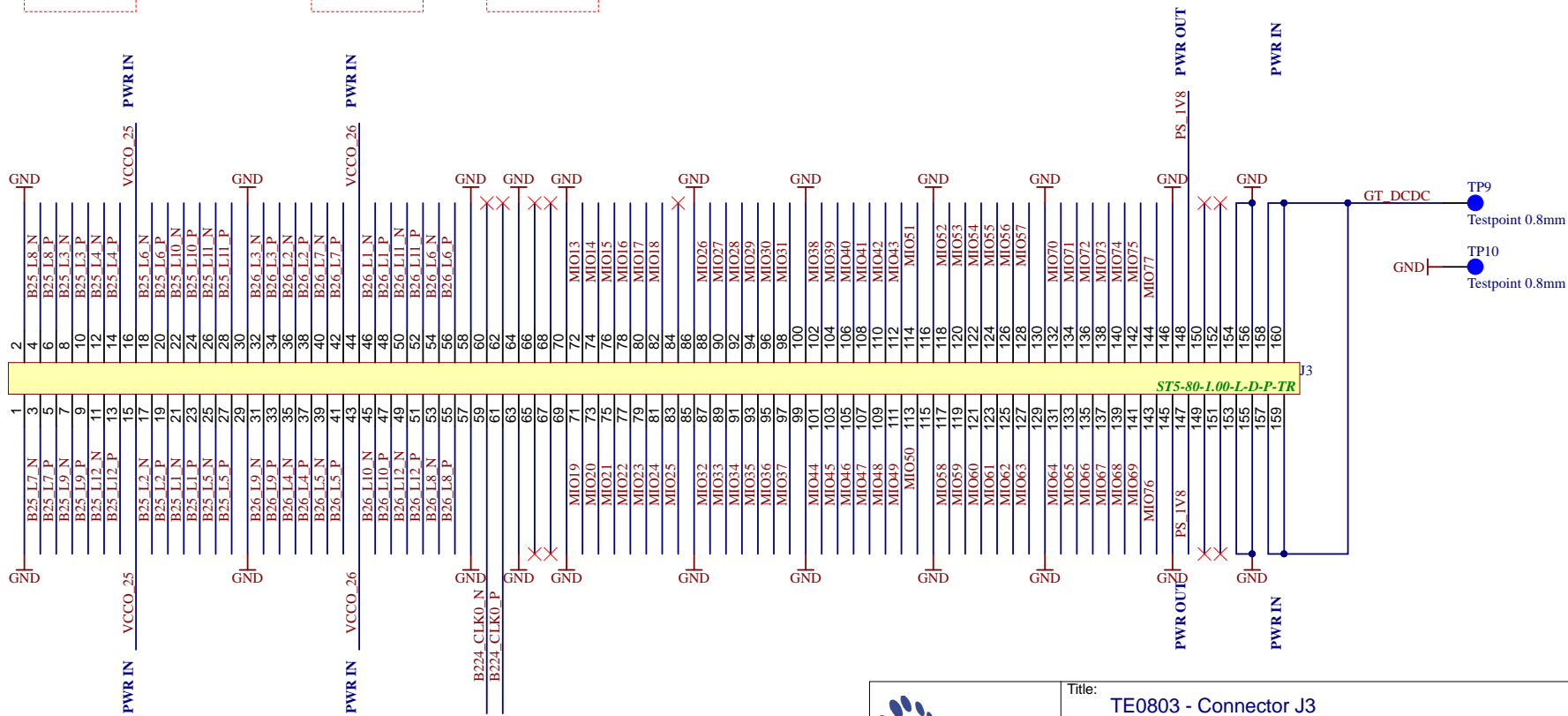
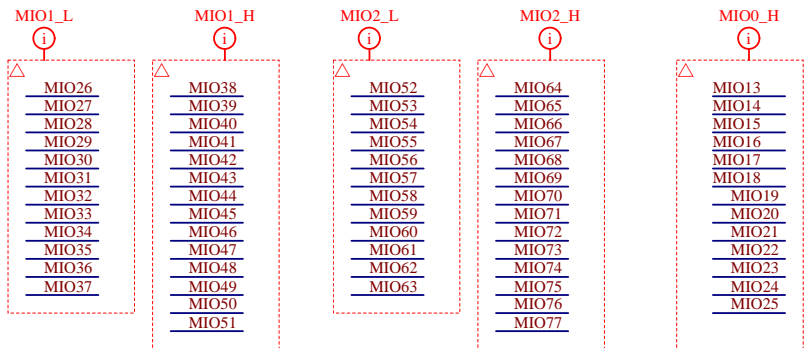
2

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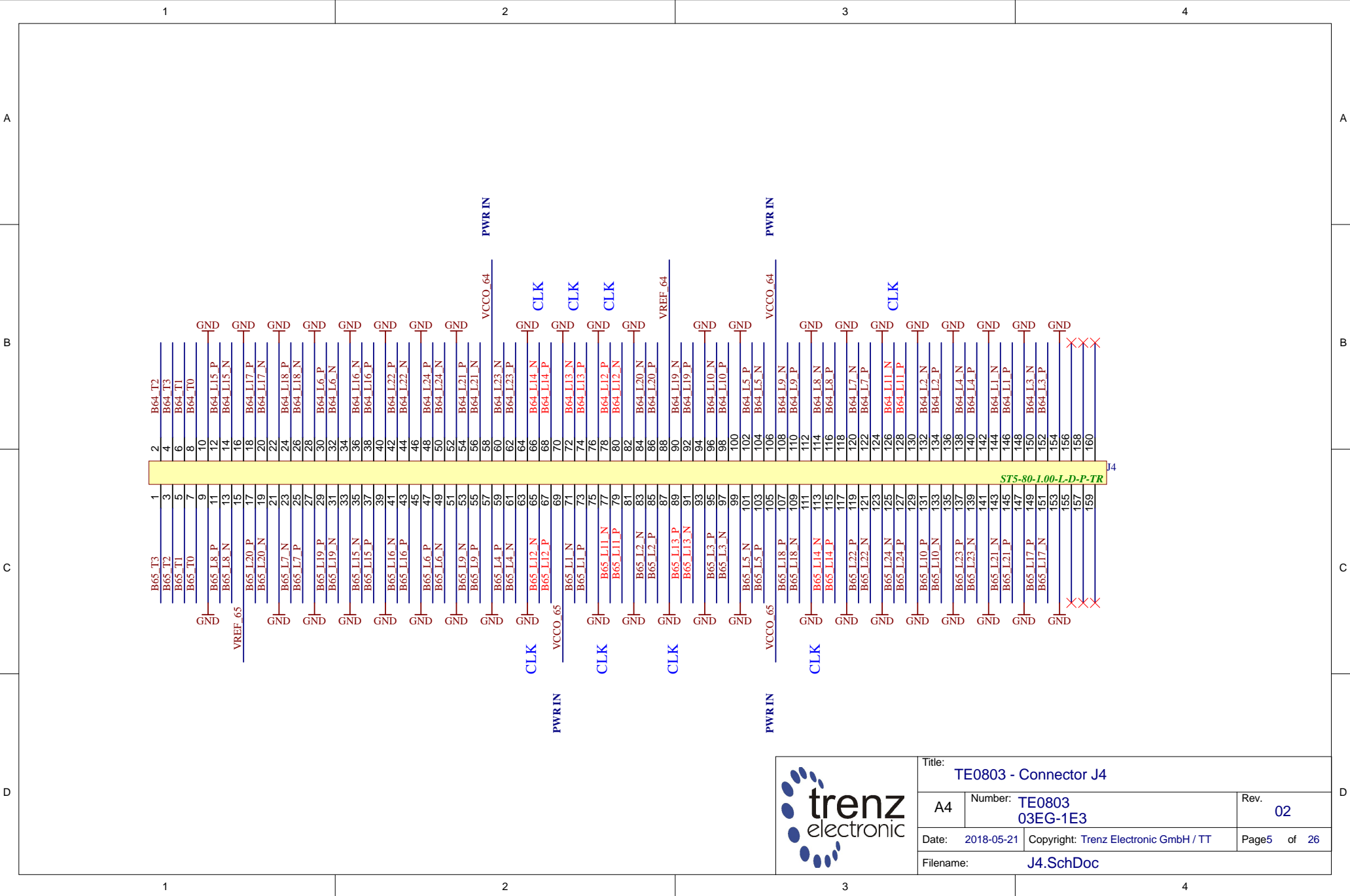


Title: TE0803 - Connector J2		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page3 of 26
Filename: J2.SchDoc		

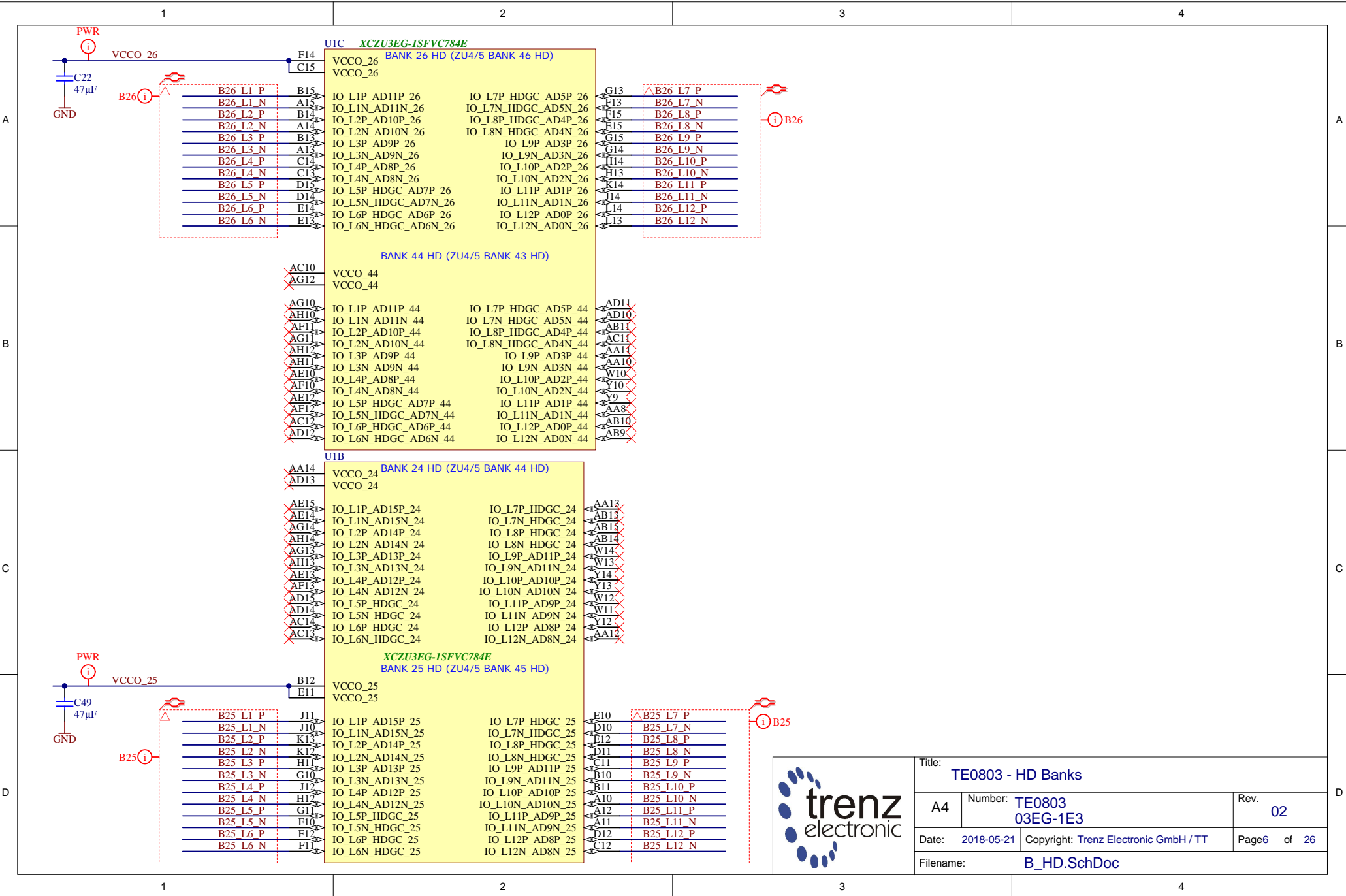


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Title: TE0803 - Connector J3		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page4 of 26
Filename: J3.SchDoc		



	Title: TE0803 - Connector J4		
	A4	Number: TE0803 03EG-1E3	Rev. 02
	Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page5 of 26
	Filename: J4.SchDoc		



UIC XCZU3EG-1SFVC784E
BANK 26 HD (ZU4/5 BANK 46 HD)

VCCO_26	F14	VCCO_26	IO_L1P_AD11P_26	IO_L7P_HDGC_AD5P_26	G13	B26 L7 P
VCCO_26	C15	VCCO_26	IO_L1N_AD11N_26	IO_L7N_HDGC_AD5N_26	F13	B26 L7 N
			IO_L2P_AD10P_26	IO_L8P_HDGC_AD4P_26	F15	B26 L8 P
			IO_L2N_AD10N_26	IO_L8N_HDGC_AD4N_26	F15	B26 L8 N
			IO_L3P_AD9P_26	IO_L9P_AD3P_26	G15	B26 L9 P
			IO_L3N_AD9N_26	IO_L9N_AD3N_26	G14	B26 L9 N
			IO_L4P_AD8P_26	IO_L10P_AD2P_26	H14	B26 L10 P
			IO_L4N_AD8N_26	IO_L10N_AD2N_26	H13	B26 L10 N
			IO_L5P_HDGC_AD7P_26	IO_L11P_AD1P_26	K14	B26 L11 P
			IO_L5N_HDGC_AD7N_26	IO_L11N_AD1N_26	J14	B26 L11 N
			IO_L6P_HDGC_AD6P_26	IO_L12P_AD0P_26	L14	B26 L12 P
			IO_L6N_HDGC_AD6N_26	IO_L12N_AD0N_26	L13	B26 L12 N

BANK 44 HD (ZU4/5 BANK 43 HD)

VCCO_44	AC10	VCCO_44	IO_L1P_AD11P_44	IO_L7P_HDGC_AD5P_44	AD11	
VCCO_44	AG12	VCCO_44	IO_L1N_AD11N_44	IO_L7N_HDGC_AD5N_44	AD10	
			IO_L2P_AD10P_44	IO_L8P_HDGC_AD4P_44	AB11	
			IO_L2N_AD10N_44	IO_L8N_HDGC_AD4N_44	AC11	
			IO_L3P_AD9P_44	IO_L9P_AD3P_44	AA11	
			IO_L3N_AD9N_44	IO_L9N_AD3N_44	AA10	
			IO_L4P_AD8P_44	IO_L10P_AD2P_44	W10	
			IO_L4N_AD8N_44	IO_L10N_AD2N_44	Y10	
			IO_L5P_HDGC_AD7P_44	IO_L11P_AD1P_44	Y9	
			IO_L5N_HDGC_AD7N_44	IO_L11N_AD1N_44	AA8	
			IO_L6P_HDGC_AD6P_44	IO_L12P_AD0P_44	AB10	
			IO_L6N_HDGC_AD6N_44	IO_L12N_AD0N_44	AB9	

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

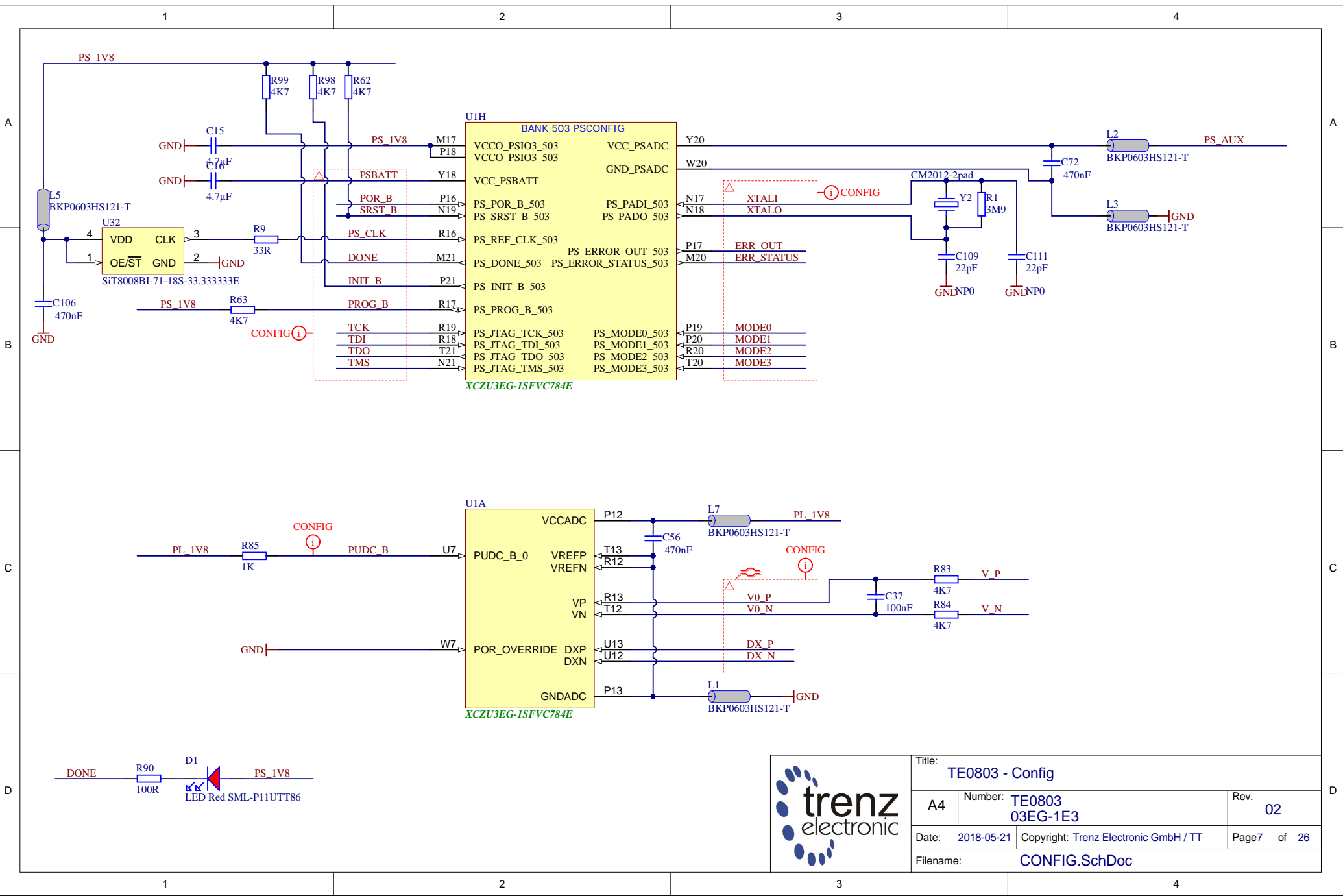
VCCO_24	AA14	VCCO_24	IO_L1P_AD15P_24	IO_L7P_HDGC_24	AA13	
VCCO_24	AD13	VCCO_24	IO_L1N_AD15N_24	IO_L7N_HDGC_24	AB13	
			IO_L2P_AD14P_24	IO_L8P_HDGC_24	AB15	
			IO_L2N_AD14N_24	IO_L8N_HDGC_24	AB14	
			IO_L3P_AD13P_24	IO_L9P_AD11P_24	W14	
			IO_L3N_AD13N_24	IO_L9N_AD11N_24	W13	
			IO_L4P_AD12P_24	IO_L10P_AD10P_24	Y14	
			IO_L4N_AD12N_24	IO_L10N_AD10N_24	Y13	
			IO_L5P_HDGC_24	IO_L11P_AD9P_24	W12	
			IO_L5N_HDGC_24	IO_L11N_AD9N_24	W11	
			IO_L6P_HDGC_24	IO_L12P_AD8P_24	Y12	
			IO_L6N_HDGC_24	IO_L12N_AD8N_24	AA12	

XCZU3EG-1SFVC784E
BANK 25 HD (ZU4/5 BANK 45 HD)

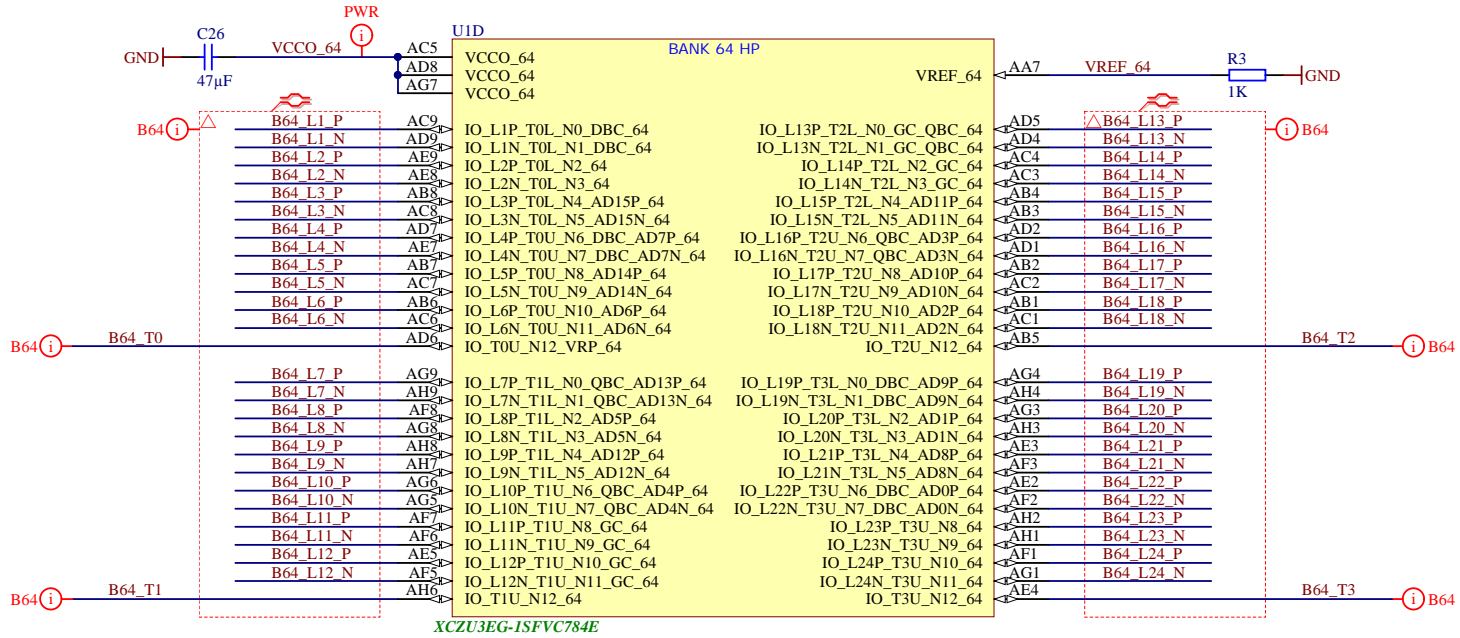
VCCO_25	B12	VCCO_25	IO_L1P_AD15P_25	IO_L7P_HDGC_25	E10	B25 L7 P
VCCO_25	E11	VCCO_25	IO_L1N_AD15N_25	IO_L7N_HDGC_25	D10	B25 L7 N
			IO_L2P_AD14P_25	IO_L8P_HDGC_25	E12	B25 L8 P
			IO_L2N_AD14N_25	IO_L8N_HDGC_25	D11	B25 L8 N
			IO_L3P_AD13P_25	IO_L9P_AD11P_25	C11	B25 L9 P
			IO_L3N_AD13N_25	IO_L9N_AD11N_25	B10	B25 L9 N
			IO_L4P_AD12P_25	IO_L10P_AD10P_25	B11	B25 L10 P
			IO_L4N_AD12N_25	IO_L10N_AD10N_25	A10	B25 L10 N
			IO_L5P_HDGC_25	IO_L11P_AD9P_25	A12	B25 L11 P
			IO_L5N_HDGC_25	IO_L11N_AD9N_25	A11	B25 L11 N
			IO_L6P_HDGC_25	IO_L12P_AD8P_25	D12	B25 L12 P
			IO_L6N_HDGC_25	IO_L12N_AD8N_25	C12	B25 L12 N



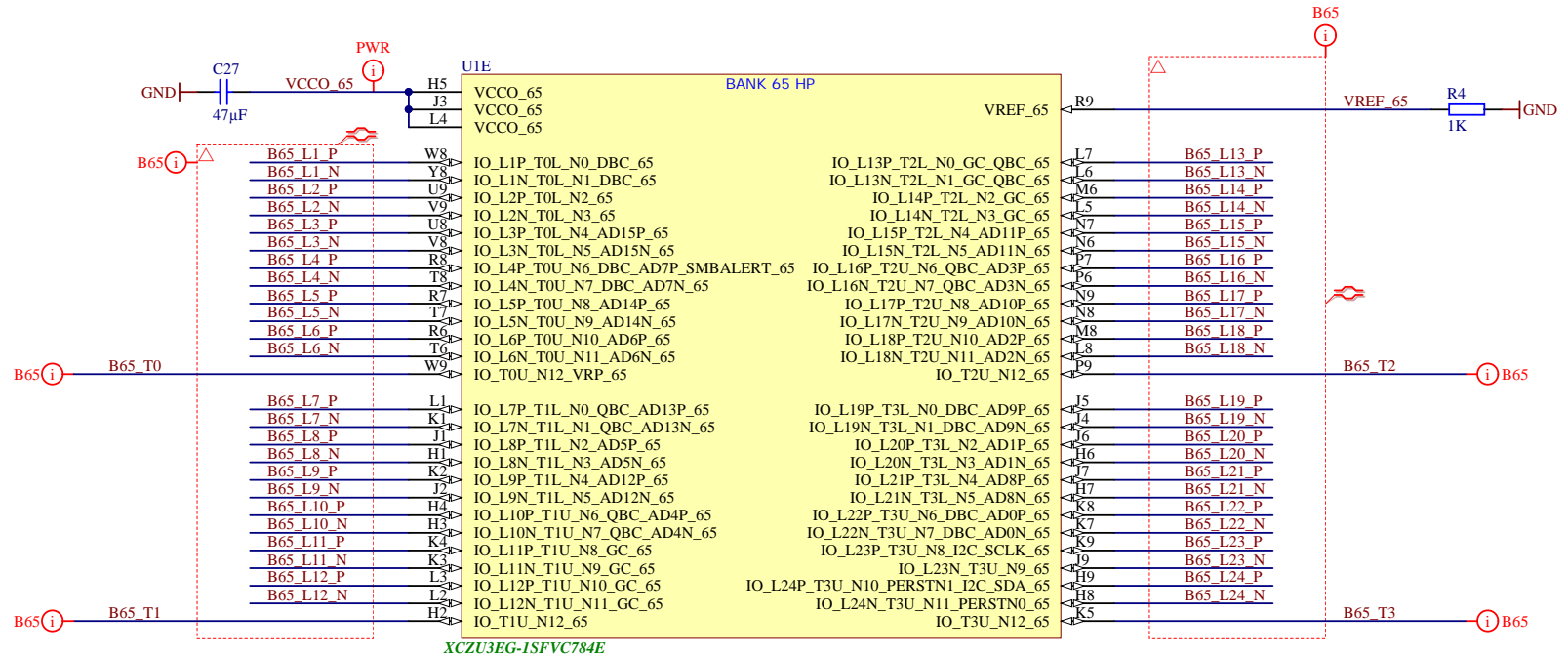
Title: TE0803 - HD Banks		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page6 of 26
Filename: B_HD.SchDoc		



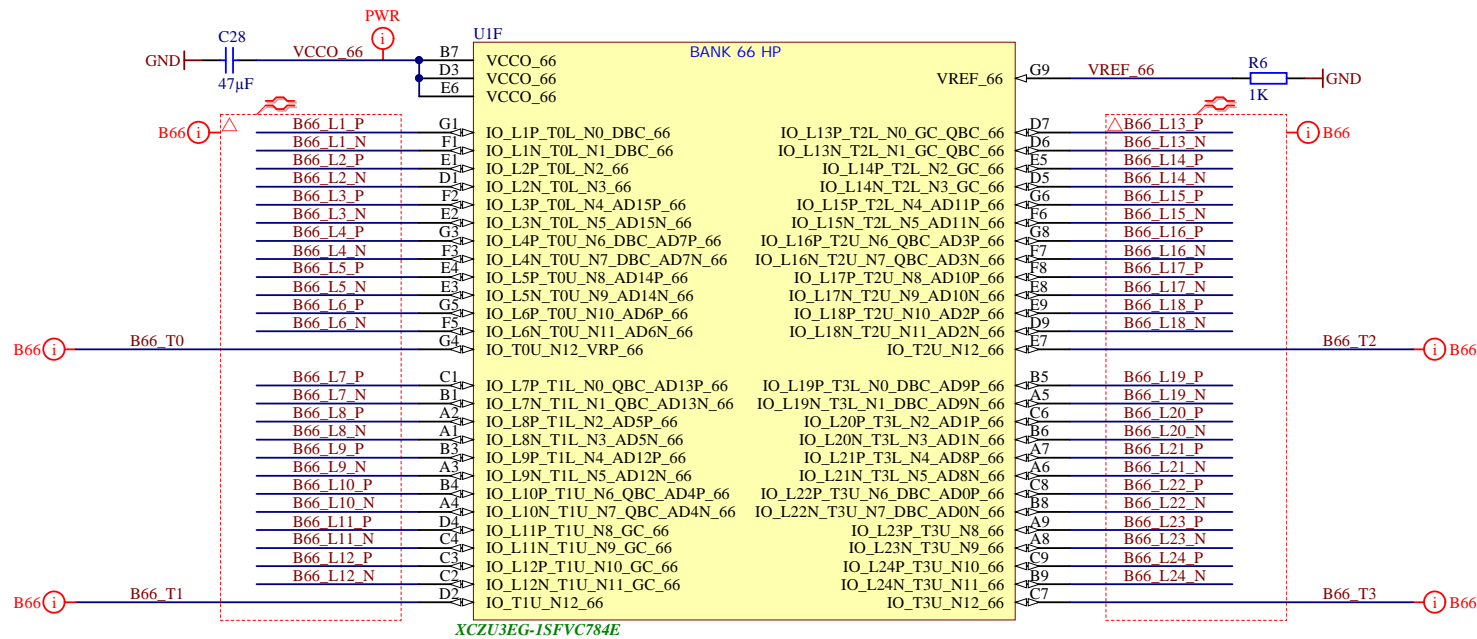
Title: TE0803 - Config		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page 7 of 26
Filename: CONFIG.SchDoc		



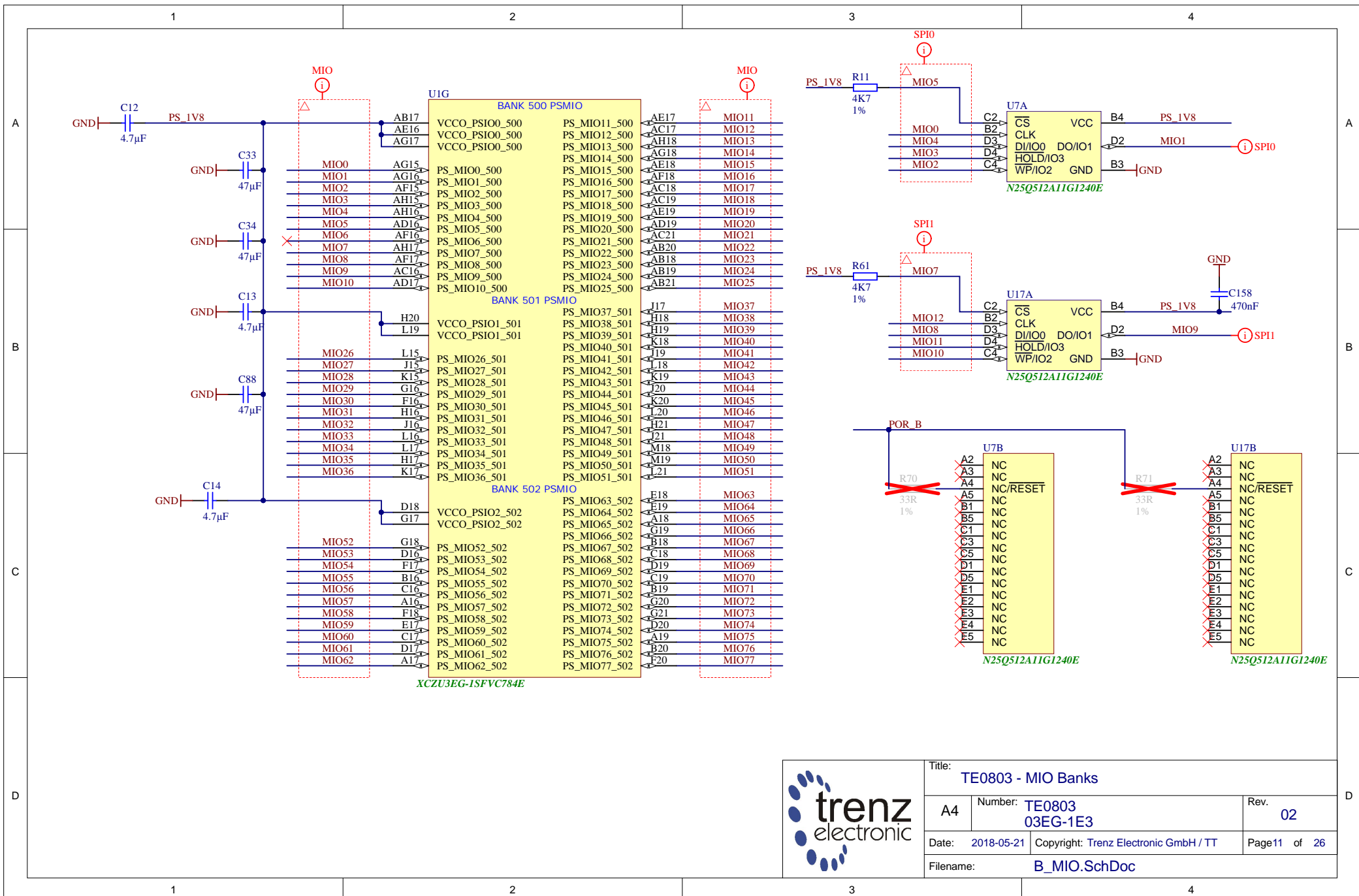
Title: TE0803 - B64		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page8 of 26
Filename: B64.SchDoc		



	Title: TE0803 - B65		
	A4	Number: TE0803 03EG-1E3	Rev. 02
	Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page9 of 26
	Filename: B65.SchDoc		



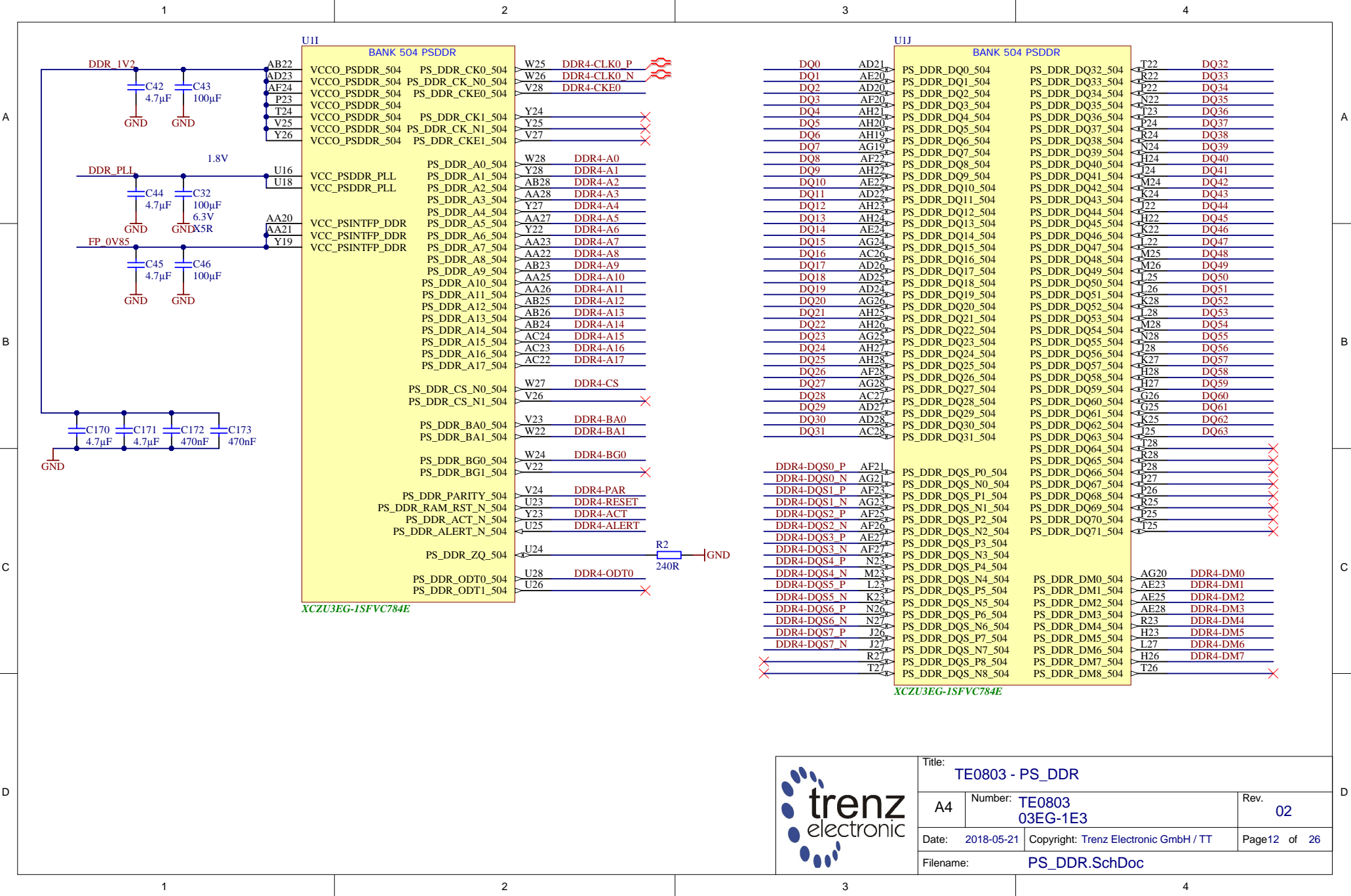
Title: TE0803 - B66		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page10 of 26
Filename: B66.SchDoc		



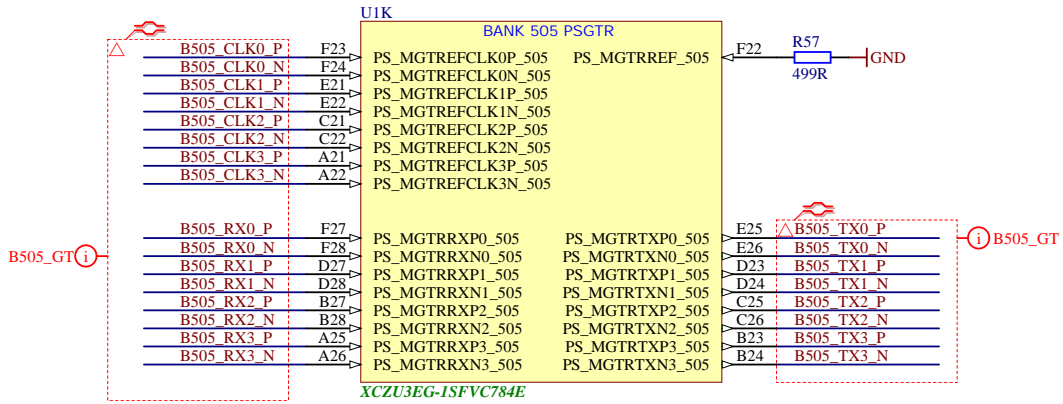
trenz electronic


Title: **TE0803 - MIO Banks**

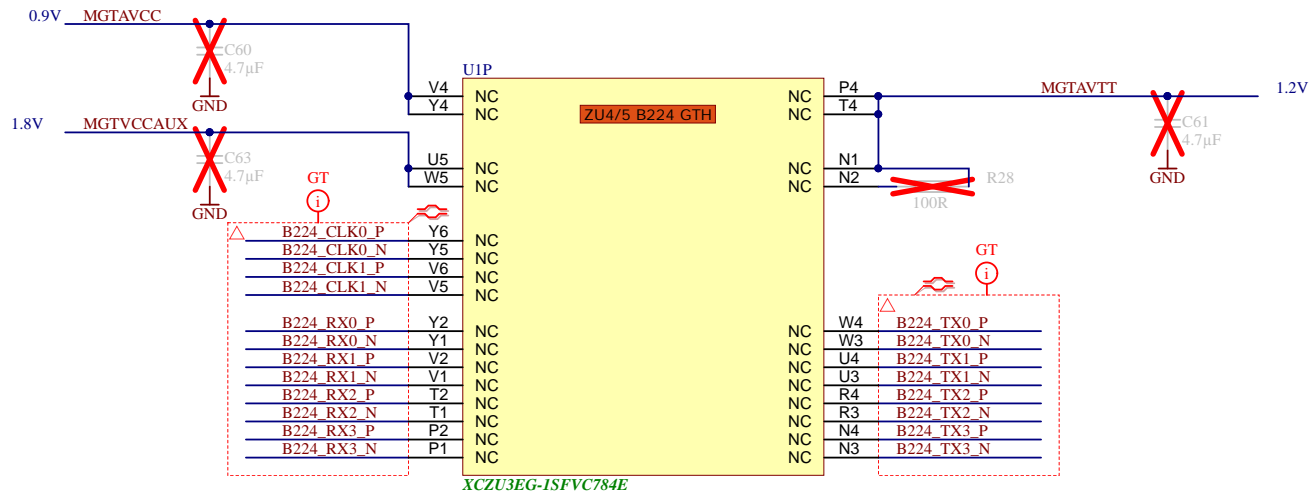
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page 11 of 26
Filename: B_MIO.SchDoc		



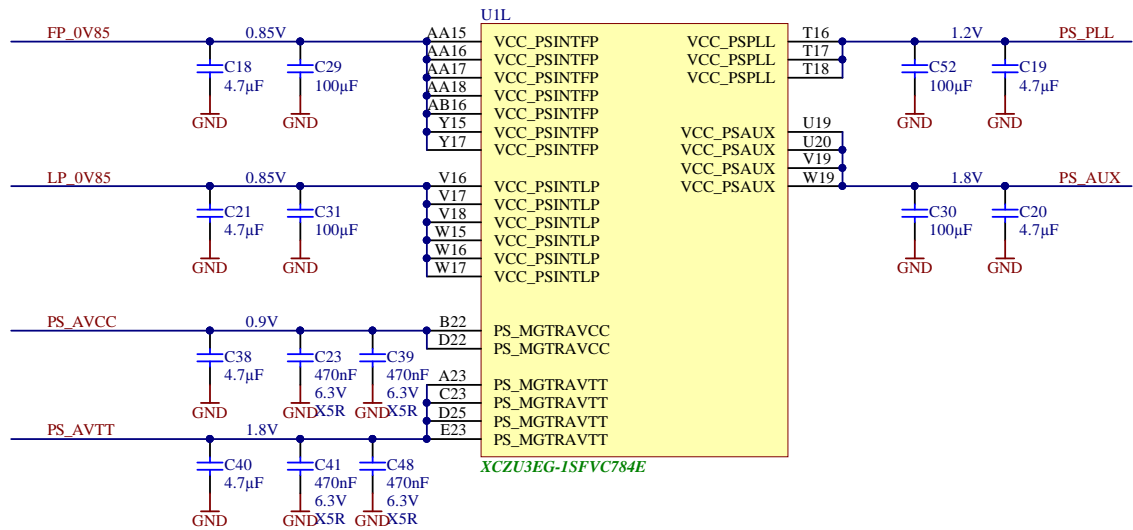
Title: TE0803 - PS_DDR		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page 12 of 26
Filename: PS_DDR.SchDoc		



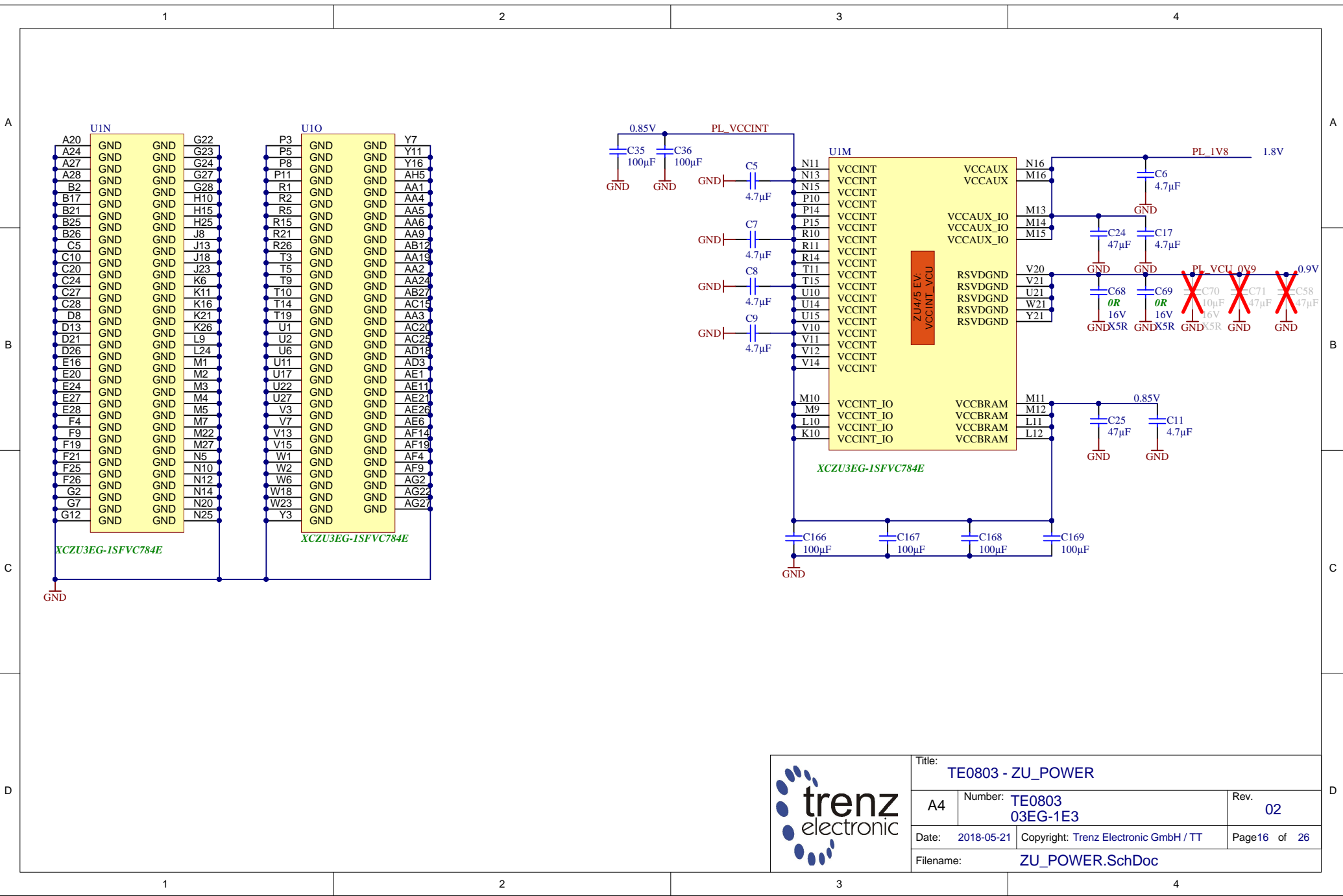
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		A4	Number: TE0803 03EG-1E3
Date: 2018-05-21		Copyright: Trenz Electronic GmbH / TT	
Filename: B_PS_GT.SchDoc		Page13 of 26	




Title: TE0803 - B224GTH		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page14 of 26
Filename: B_GT.SchDoc		



Title: TE0803 - ZU_PS_POWER		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page15 of 26
Filename: ZU_PS_POWER.SchDoc		



			Title: TE0803 - ZU_POWER	
			A4	Number: TE0803 03EG-1E3
Date: 2018-05-21		Copyright: Trenz Electronic GmbH / TT		Page 16 of 26
Filename: ZU_POWER.SchDoc				

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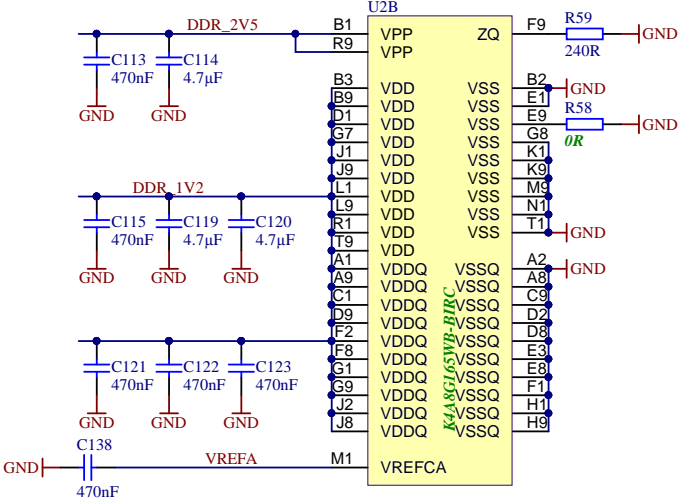
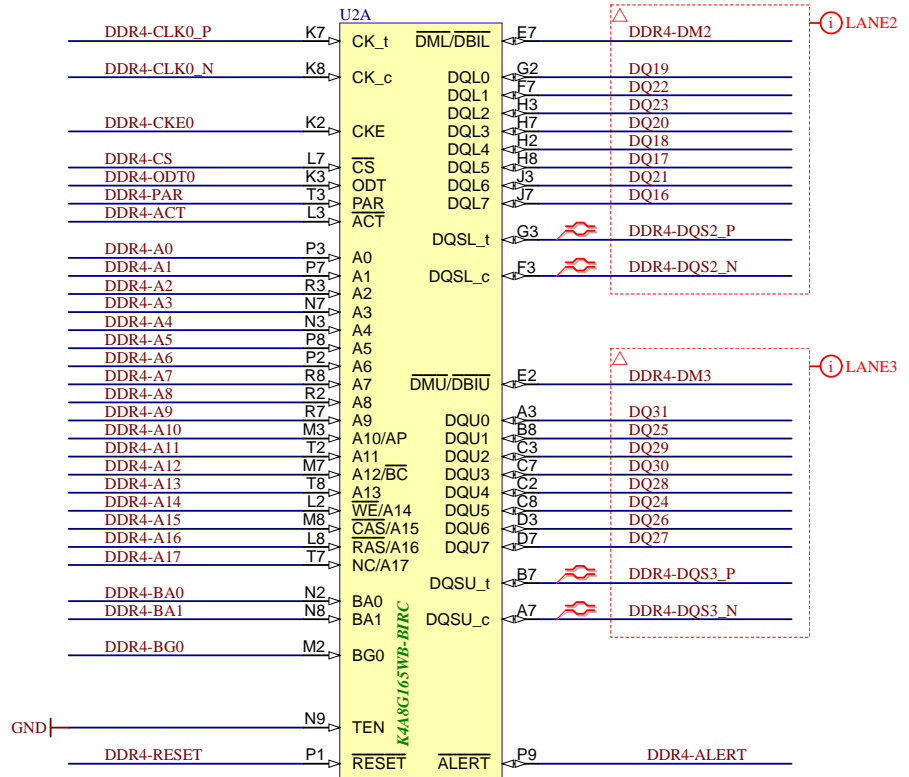
B

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Title: TE0803 - DDR4_1_RAM		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page17 of 26
Filename: DDR4-RAM.SchDoc		

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A

A

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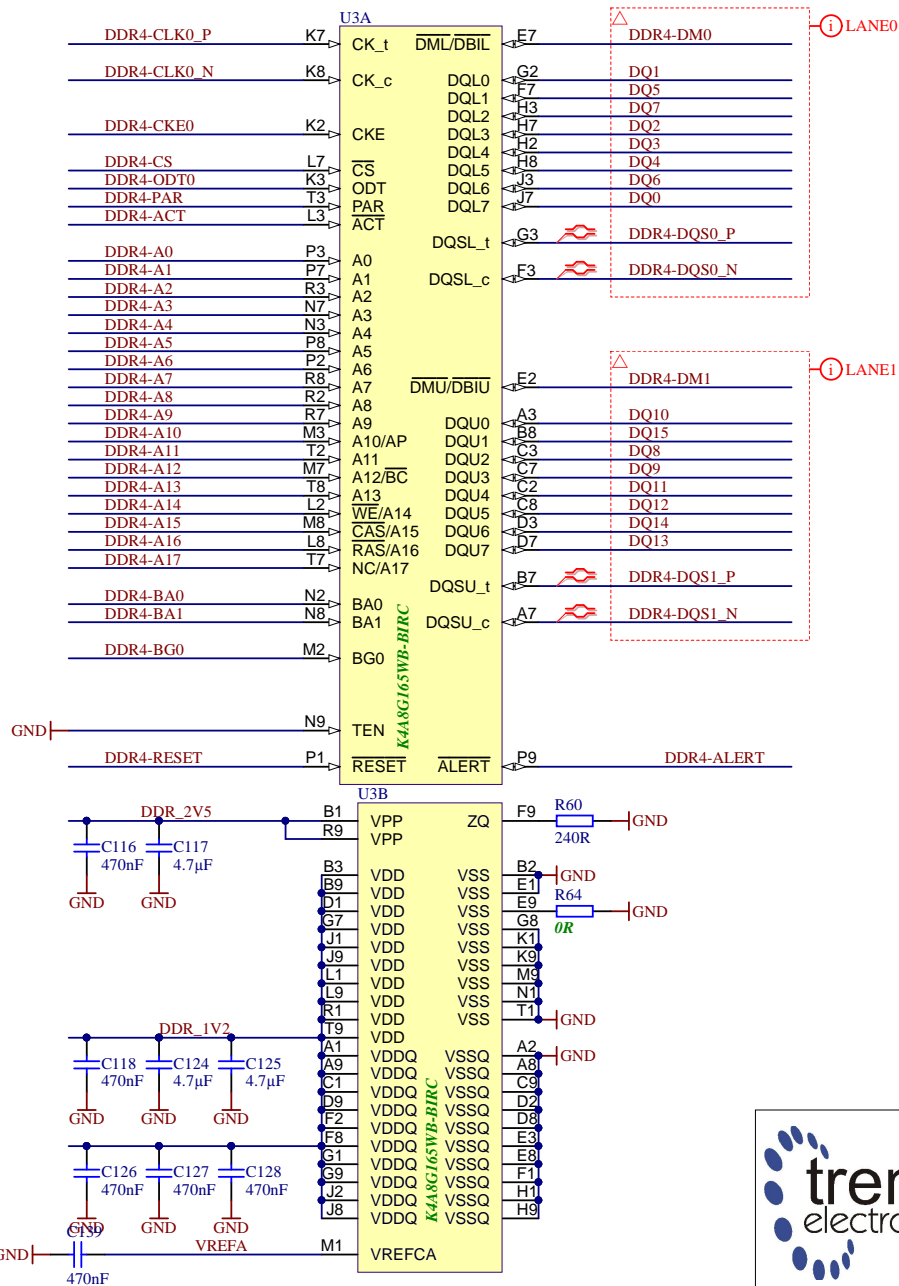

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Title: TE0803 - DDR4_2_RAM		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page18 of 26
Filename: DDR4-RAM_2.SchDoc		

1

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A

A

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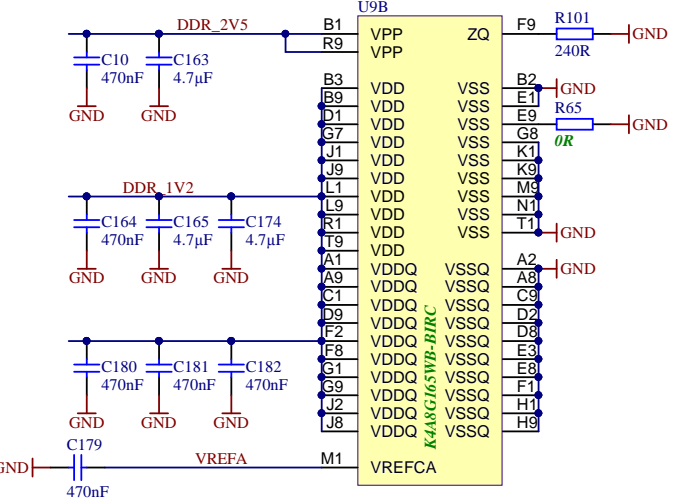
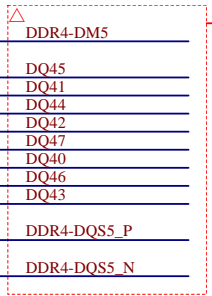
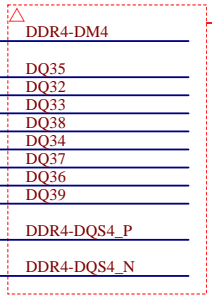
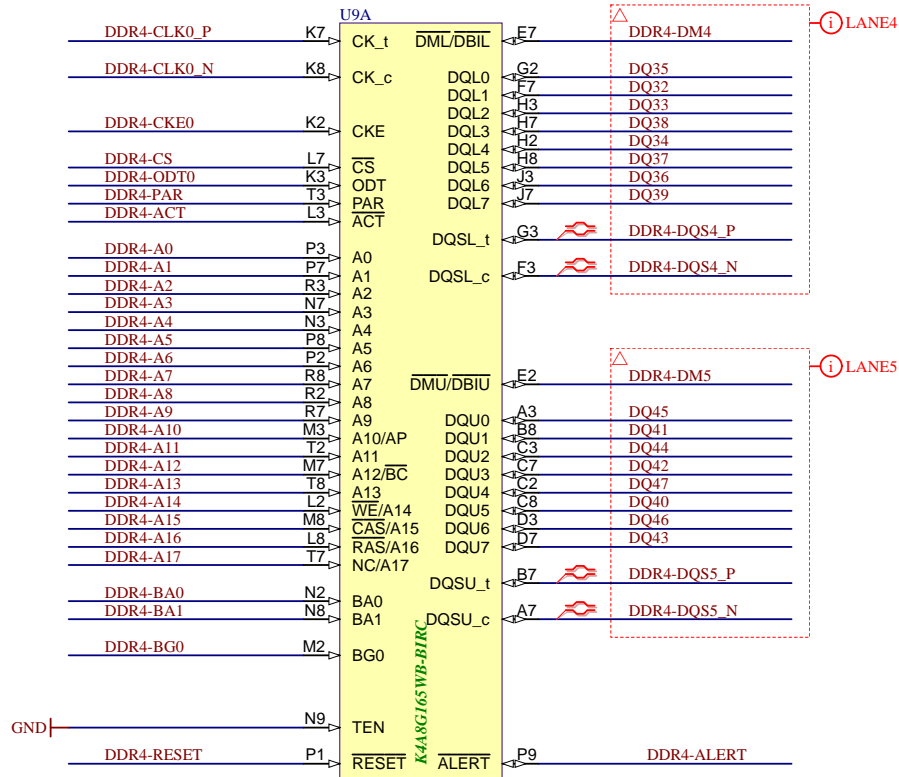
B

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C

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D



Title: TE0803 - DDR4_3_RAM		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page 19 of 26
Filename: DDR4-RAM_3.SchDoc		

1

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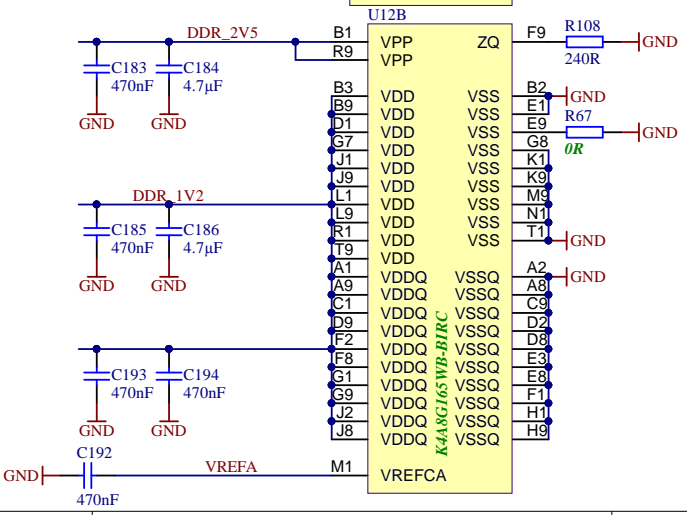
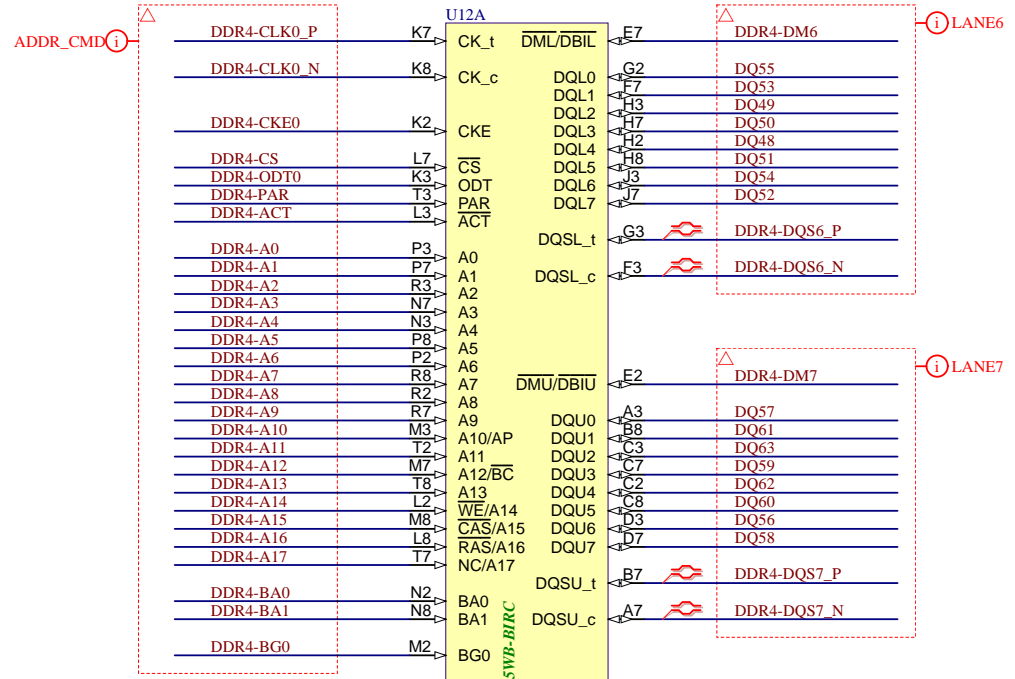
4

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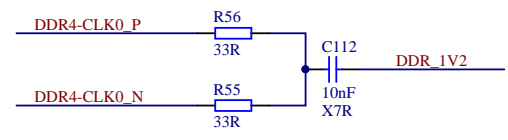
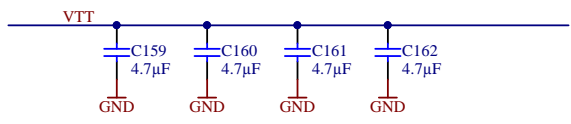
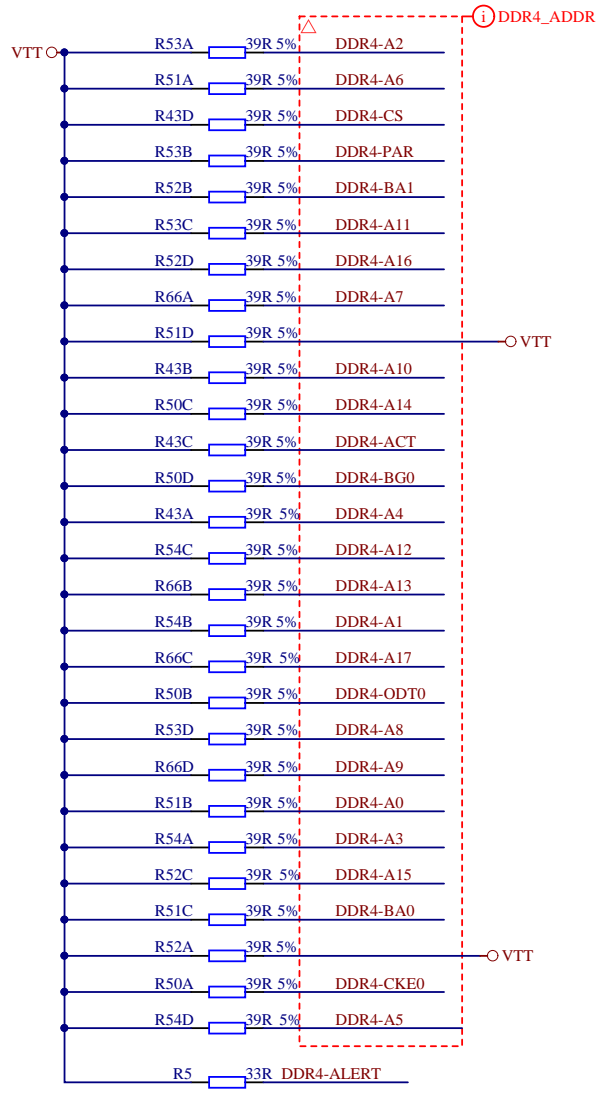
Title: TE0803 - DDR4_4_RAM		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page20 of 26
Filename: DDR4-RAM_4.SchDoc		

1

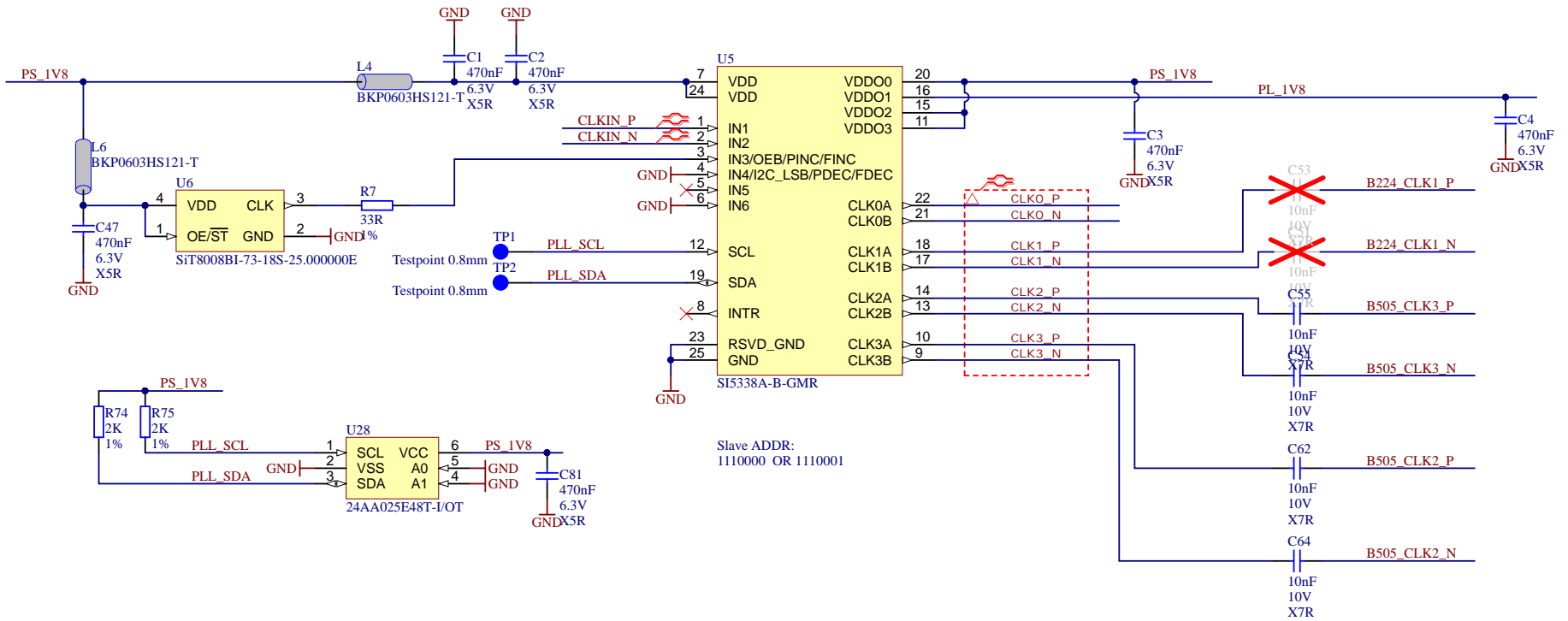
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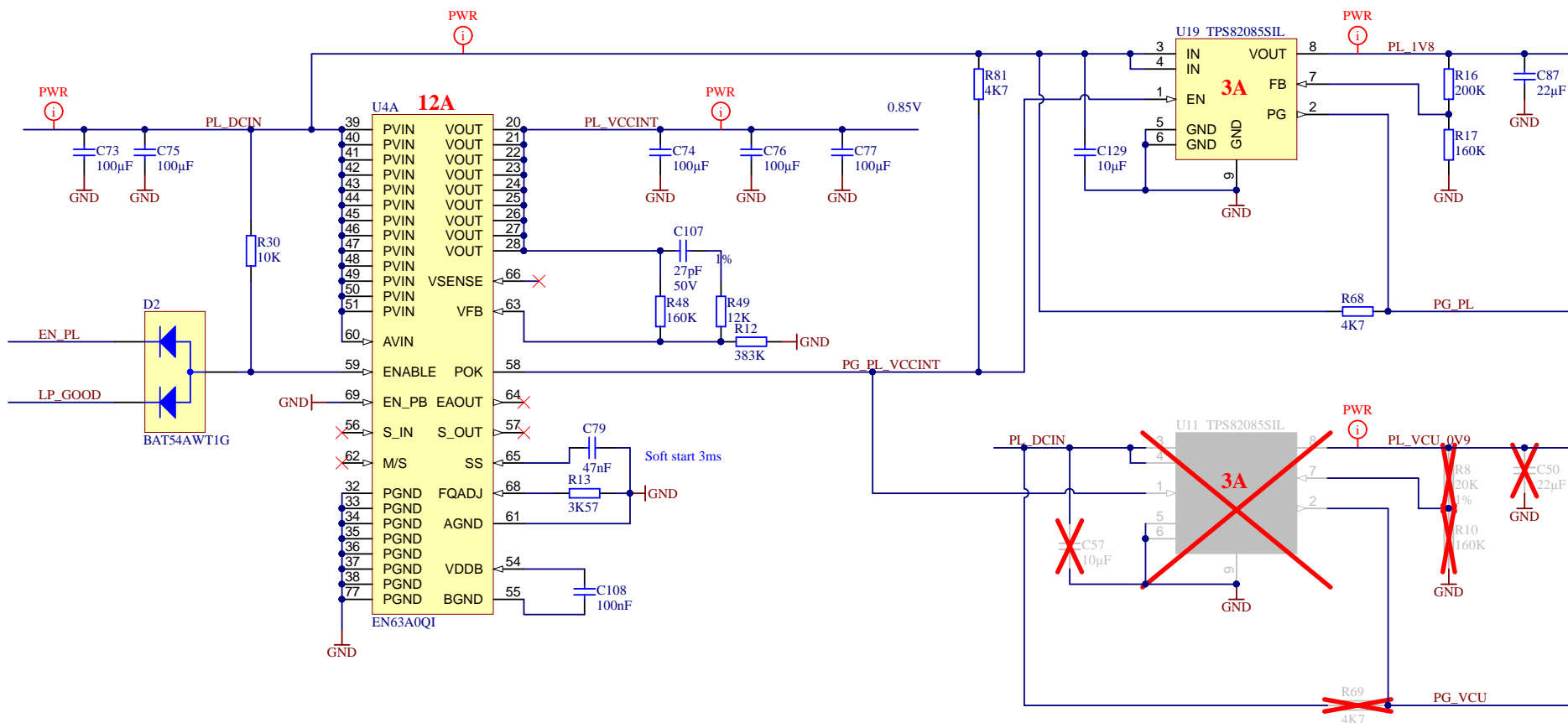


Title: TE0803 - DDR4_TERM		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page21 of 26
Filename: DDR4-TERM.SchDoc		



	Title: TE0803 - CLOCK	
	A4	Number: TE0803 03EG-1E3
	Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT
	Filename: Clock.SchDoc	Page22 of 26

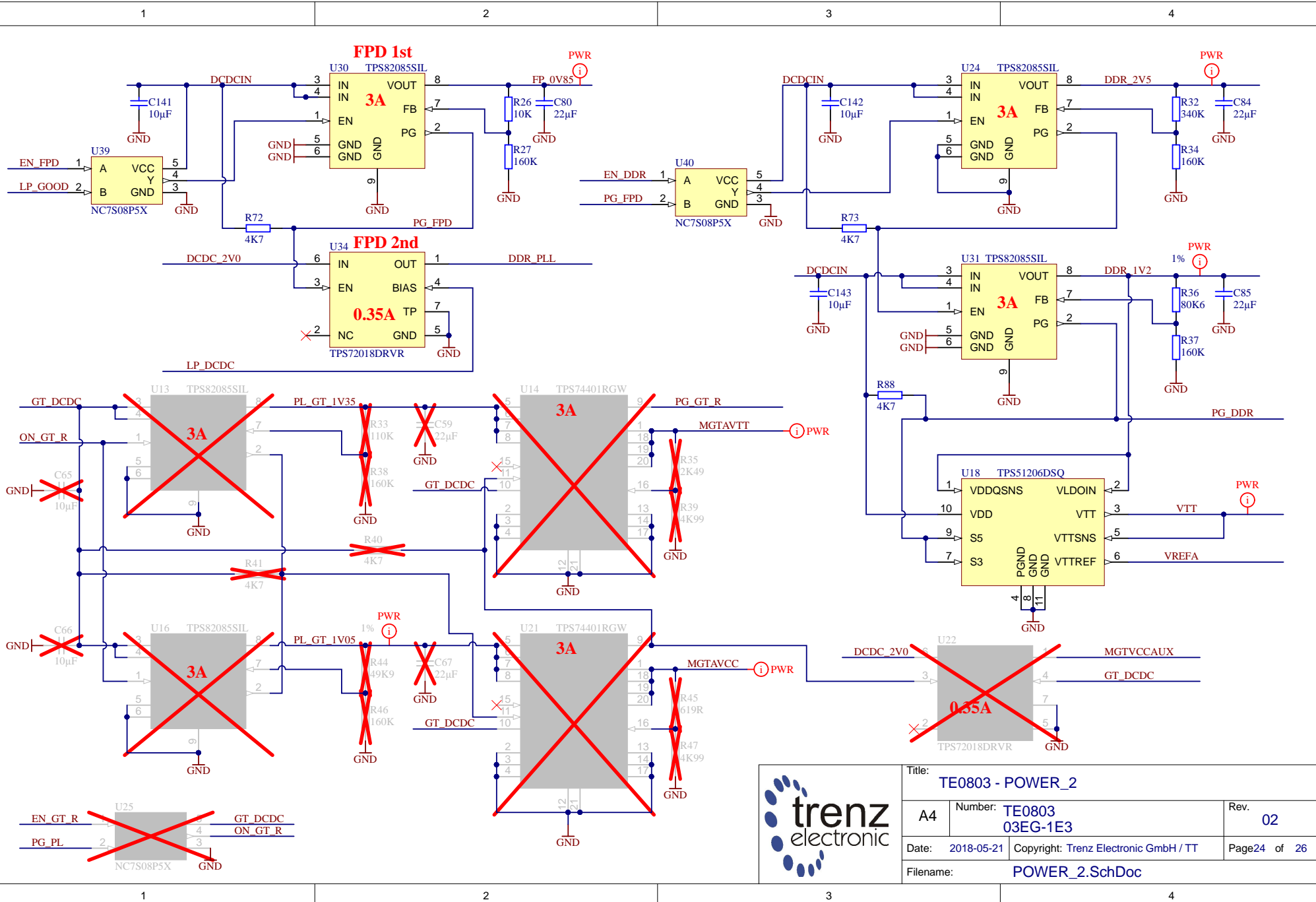
Rev. 02



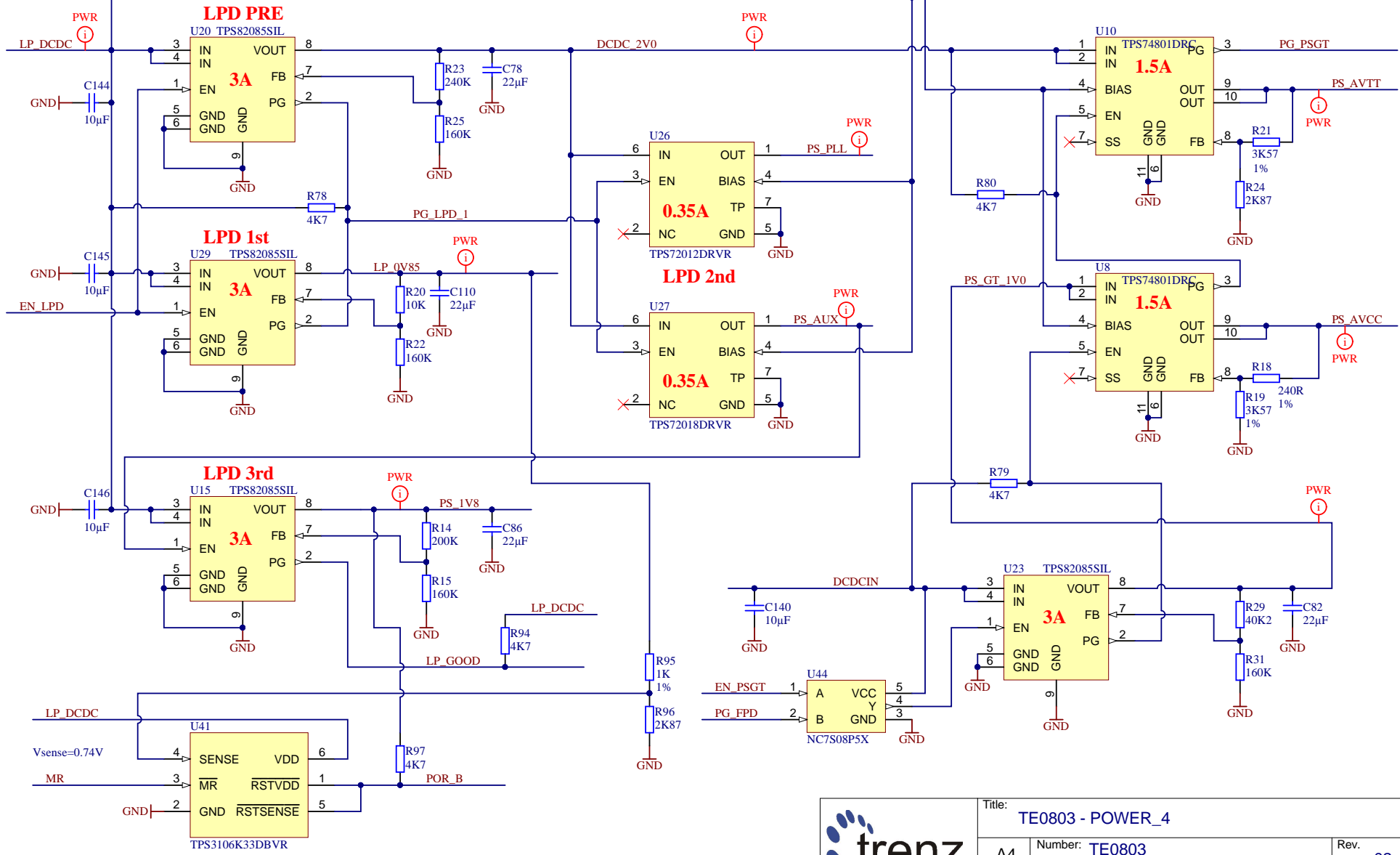
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2	NC	NC	18
3	NC	NC	19
4	NC	NC	29
5	NC	NC	30
6	NC	NC(SW)	31
7	NC	NC(SW)	52
8	NC	NC	53
9	NC	NC	67
10	NC	NC(SW)	70
11	NC	NC(SW)	71
12	NC	NC(SW)	72
13	NC	NC	73
14	NC	NC	74
15	NC	NC	75
16	NC	NC	76


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	Title: TE0803 - POWER		
	A4	Number: TE0803 03EG-1E3	Rev. 02
	Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page23 of 26
	Filename: POWER.SchDoc		



Title: TE0803 - POWER_2		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page24 of 26
Filename: POWER_2.SchDoc		



		Title: TE0803 - POWER_4	
		A4	Number: TE0803 03EG-1E3
Date: 2018-05-21		Copyright: Trenz Electronic GmbH / TT	
Filename: POWER_4.SchDoc		Page 25 of 26	

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A

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D

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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

A

A

B

B

C

C

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Title: TE0803 - Changes list		
A4	Number: TE0803 03EG-1E3	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH	Page26 of 26
Filename: Revision_Changes.SchDoc		

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