

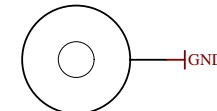
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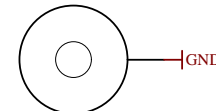
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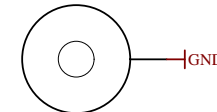
U_J1 J1.SchDoc	U_B_PS_GT B_PS_GT.SchDoc	U_DDR4-TERM DDR4-TERM.SchDoc
U_J2 J2.SchDoc	U_PS_DDR PS_DDR.SchDoc	U_ZU_POWER ZU_POWER.SchDoc
U_J3 J3.SchDoc	U_B_MIO B_MIO.SchDoc	U_ZU_PS_POWER ZU_PS_POWER.SchDoc
U_J4 J4.SchDoc	U_B_HD B_HD.SchDoc	U_POWER POWER.SchDoc
U_DDR4-TERM DDR4-TERM.SchDoc	U_Clock Clock.SchDoc	U_POWER_2 POWER_2.SchDoc
U_B64 B64.SchDoc	U_CONFIG CONFIG.SchDoc	
U_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_REV_CH Revision_Changes.SchDoc
U_B_GT B_GT.SchDoc	U_DDR4-RAM_3 DDR4-RAM_3.SchDoc	
	U_DDR4-RAM_4 DDR4-RAM_4.SchDoc	



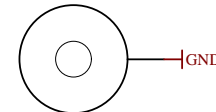
Mount.Hole 3.2mm für Unterlegscheibe



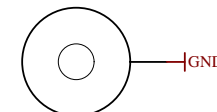
Mount.Hole 3.2mm für Unterlegscheibe



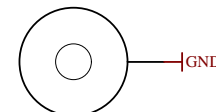
Mount.Hole 3.2mm für Unterlegscheibe



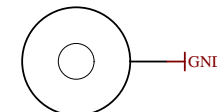
Mount.Hole 3.2mm für Unterlegscheibe



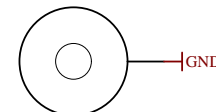
Mount.Hole 3.2mm für Unterlegscheibe



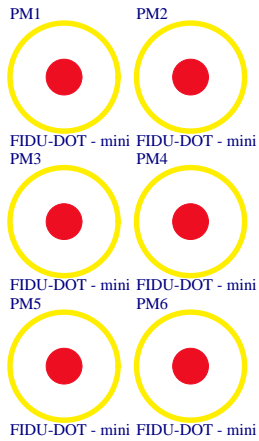
Mount.Hole 3.2mm für Unterlegscheibe



Mount.Hole 3.2mm für Unterlegscheibe

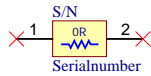


Mount.Hole 3.2mm für Unterlegscheibe



LOGO1
TE Logo PRINT Layer
LOGO PRINT

Serial
Serialnumber 6,3 x 6,3mm



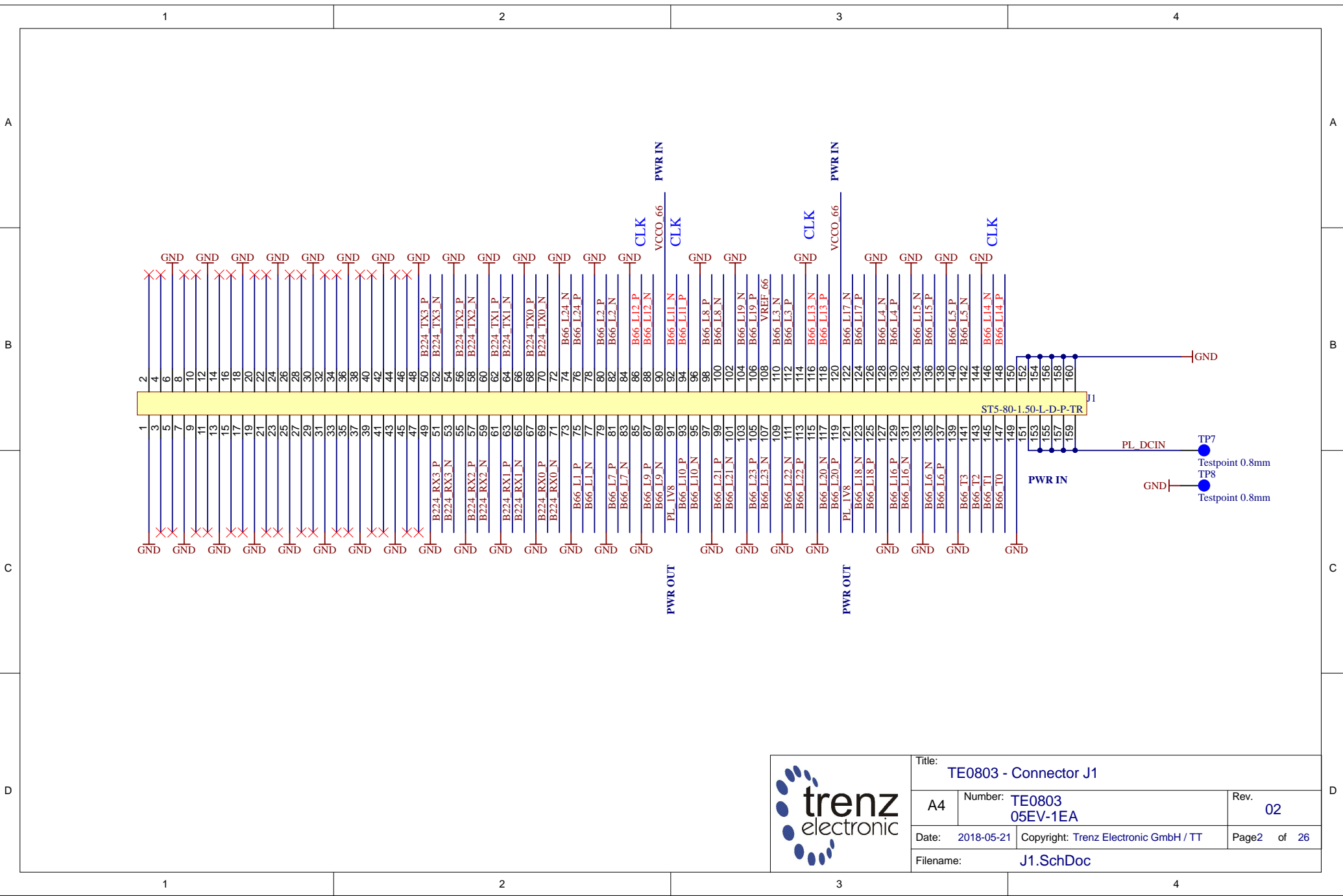
Title: TE0803		
A4	Number: TE0803 05EV-1EA	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page1 of 26
Filename: TE0803.SchDoc		

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

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A

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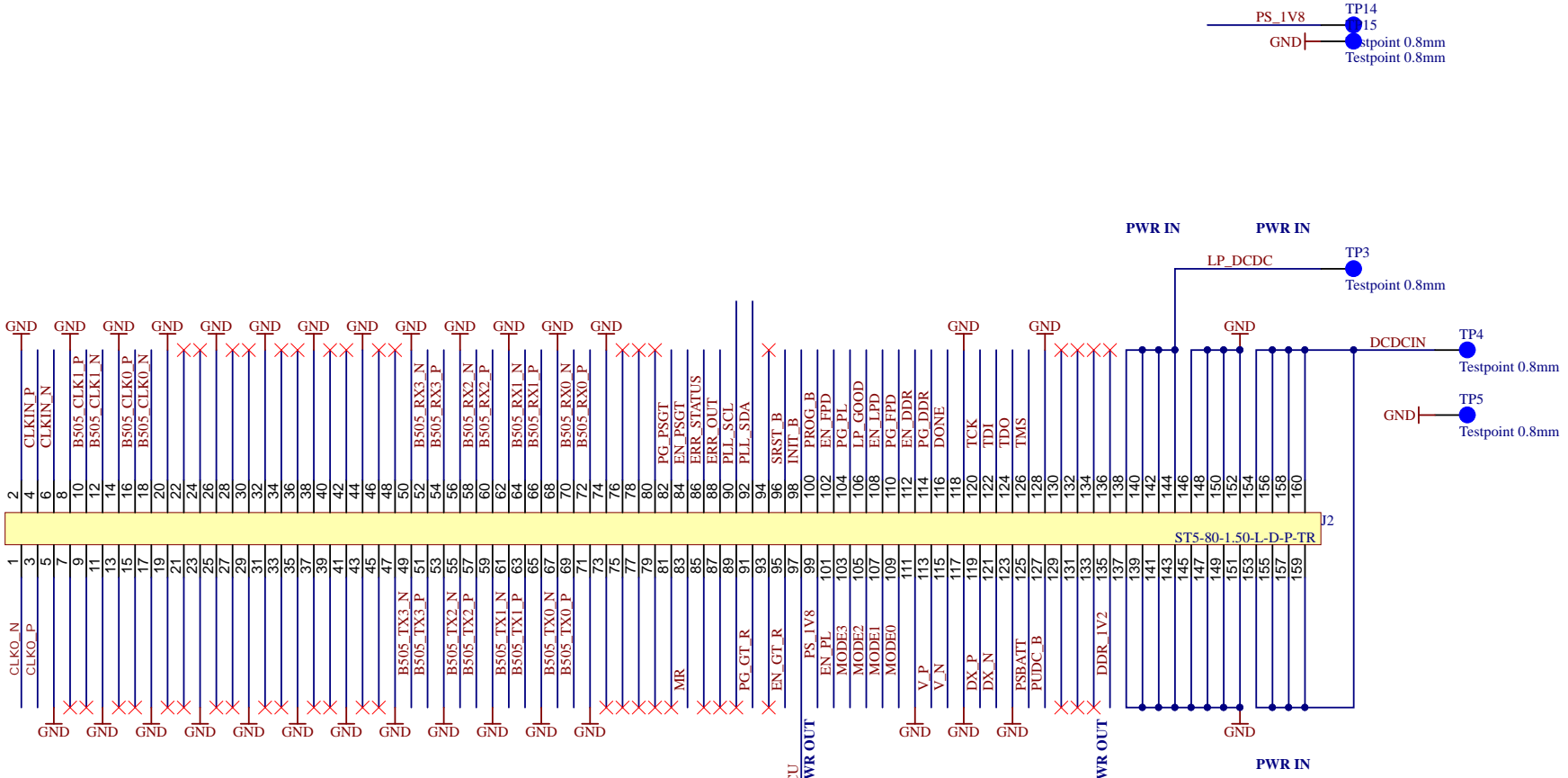

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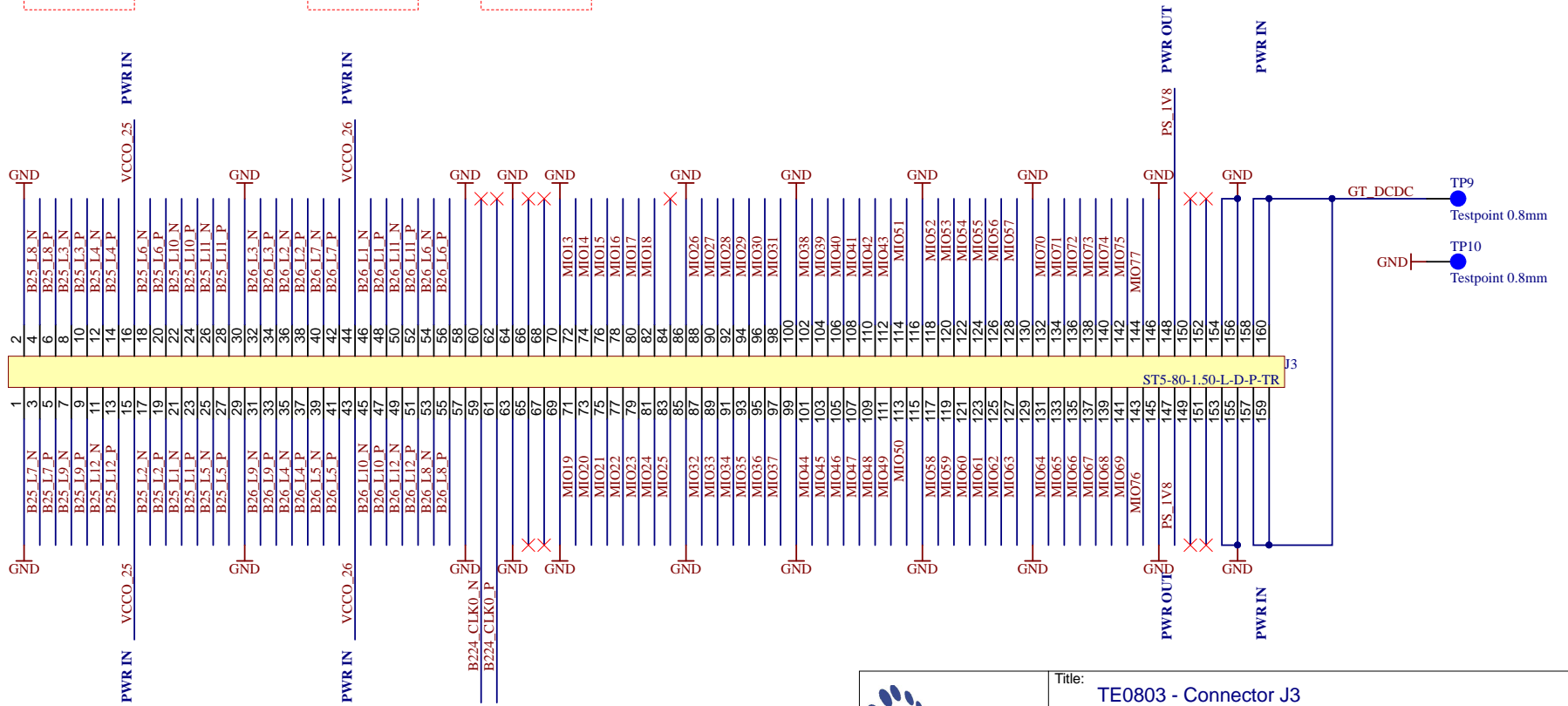
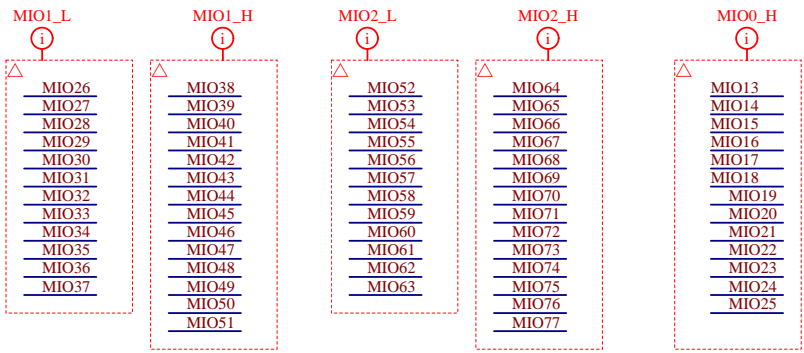
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A4	Number: TE0803 05EV-1EA	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page3 of 26
Filename: J2.SchDoc		

1

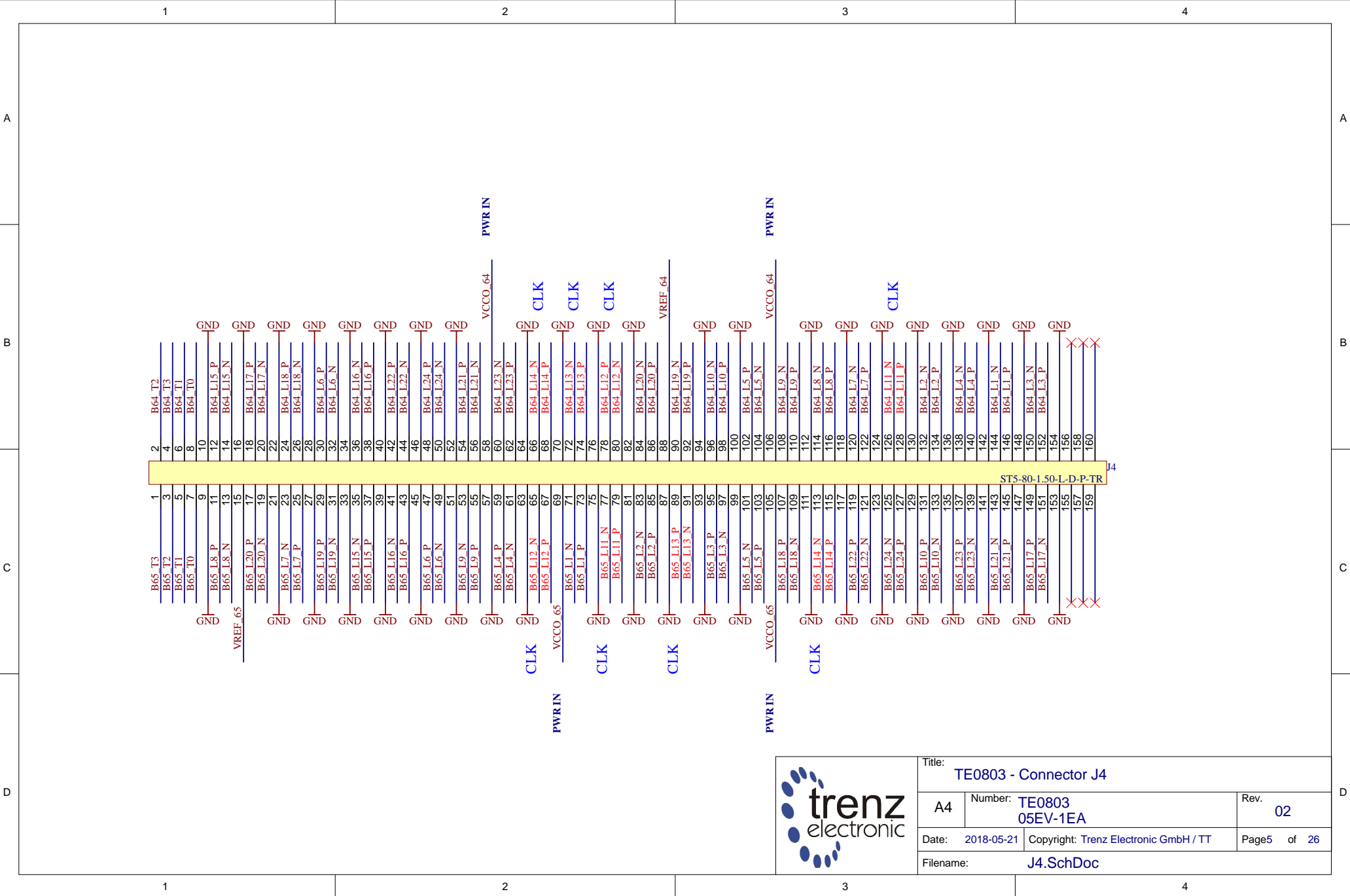
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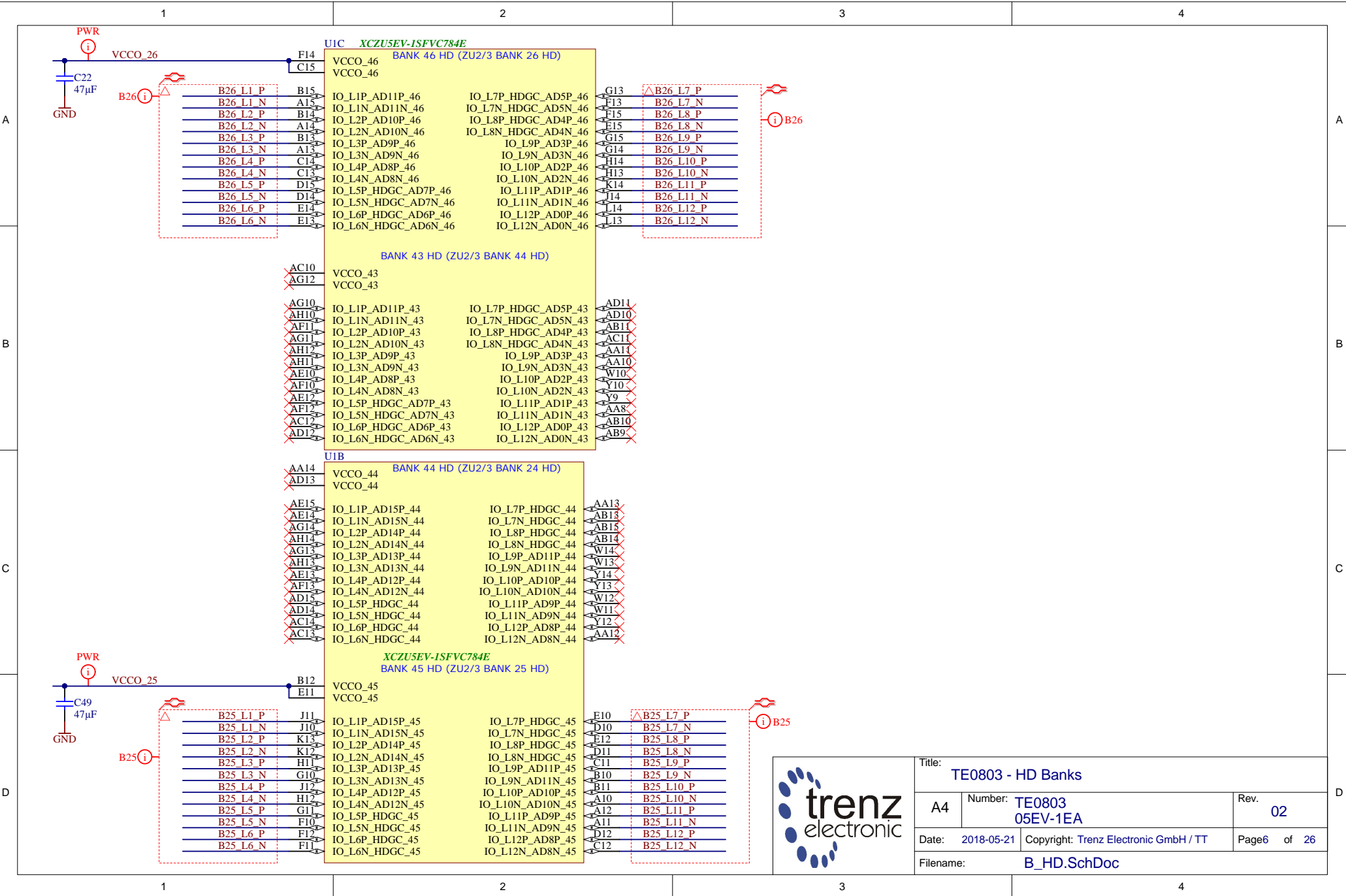
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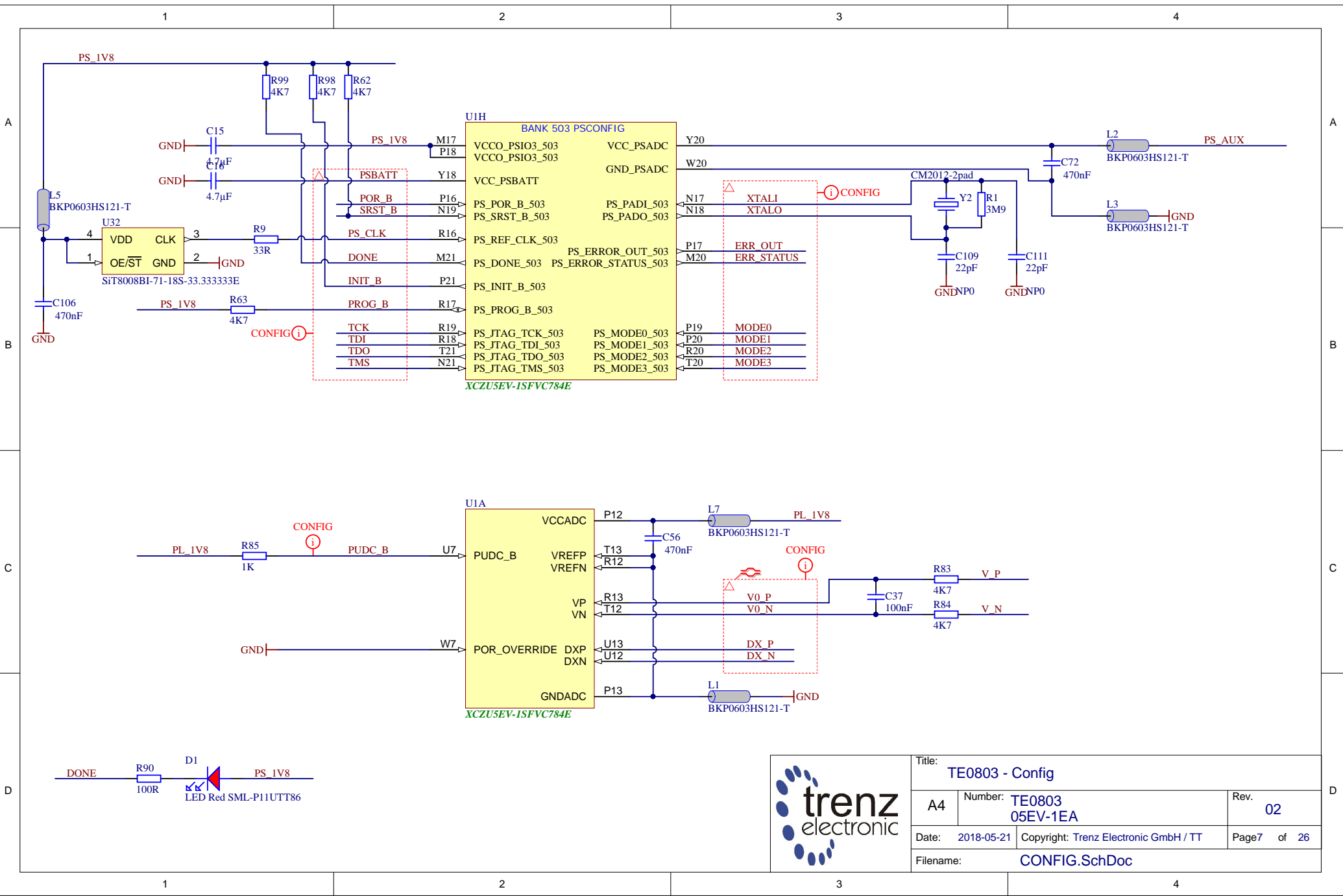
	Title: TE0803 - Connector J3	
	A4	Number: TE0803 05EV-1EA
	Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT
	Rev. 02	Page4 of 26
Filename: J3.SchDoc		



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



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



Title: TE0803 - Config		
A4	Number: TE0803 05EV-1EA	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page7 of 26
Filename: CONFIG.SchDoc		

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A

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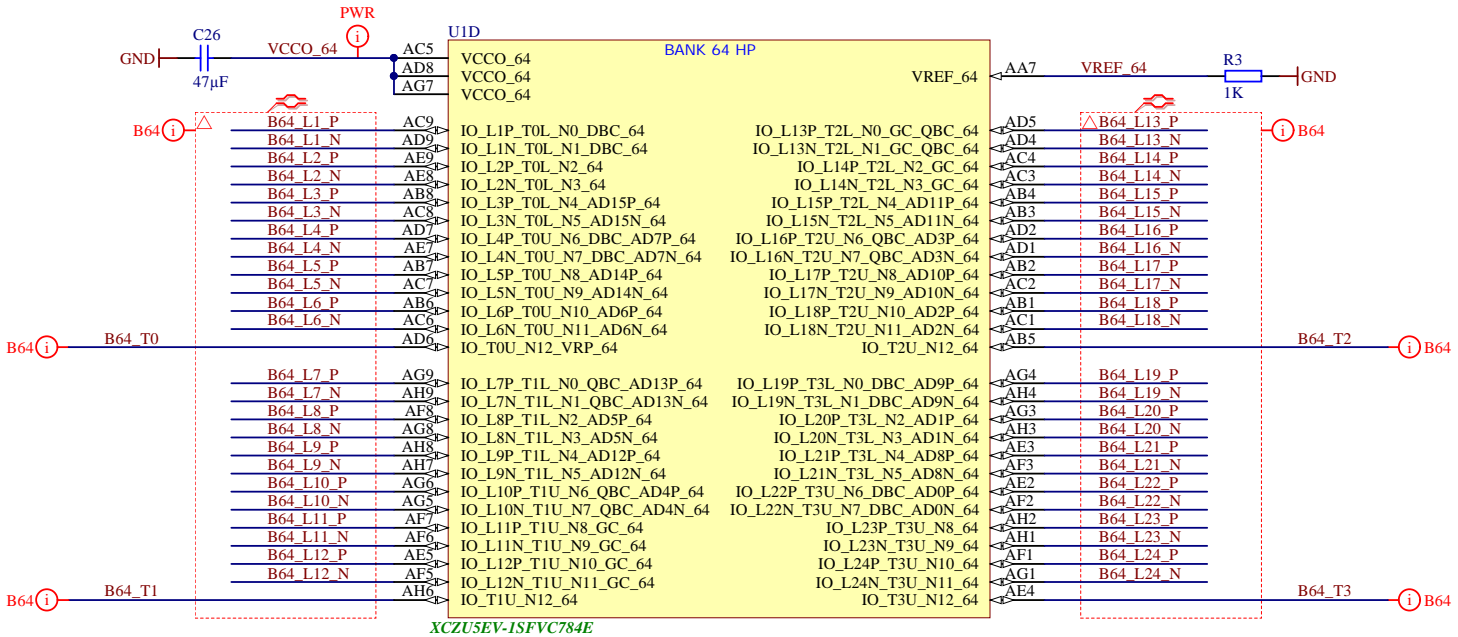

B

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D

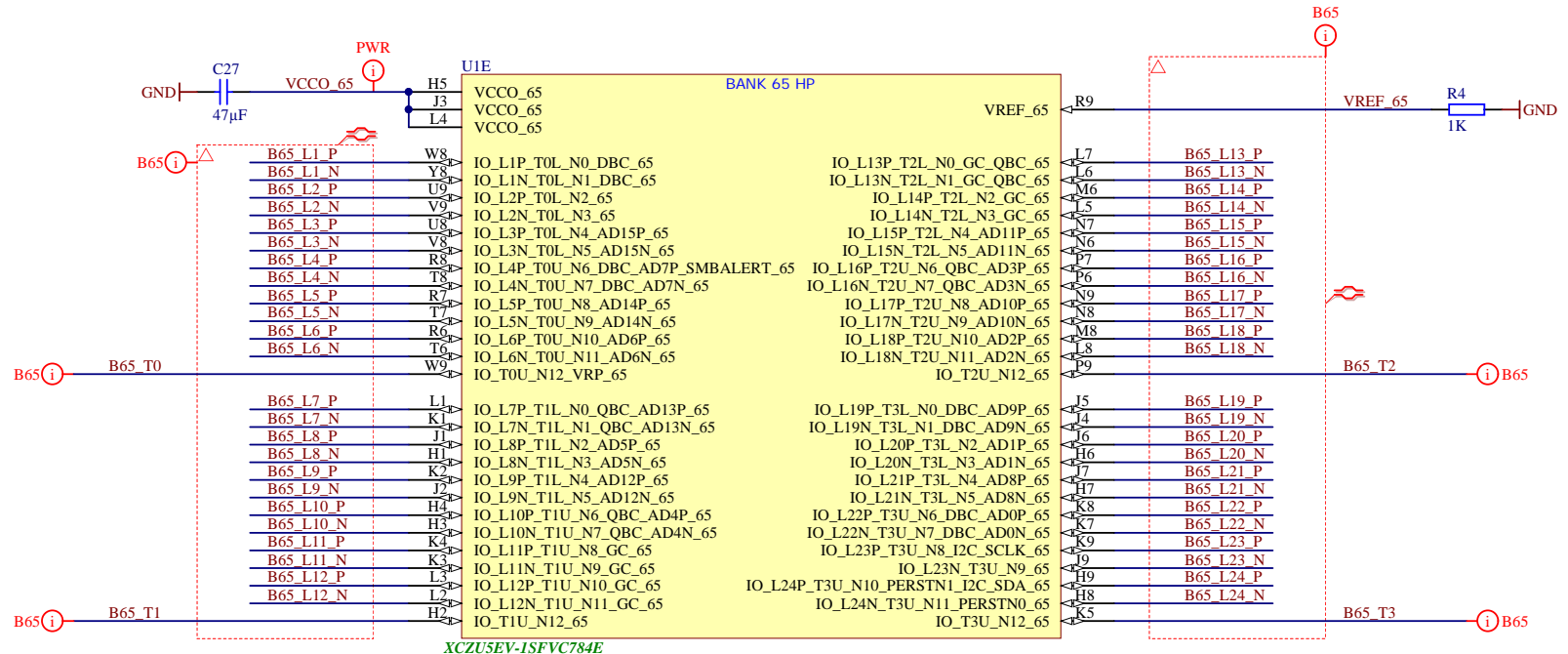
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A4	Number: TE0803 05EV-1EA	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page8 of 26
Filename: B64.SchDoc		

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Title: TE0803 - B65		
A4	Number: TE0803 05EV-1EA	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page 9 of 26
Filename: B65.SchDoc		

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A

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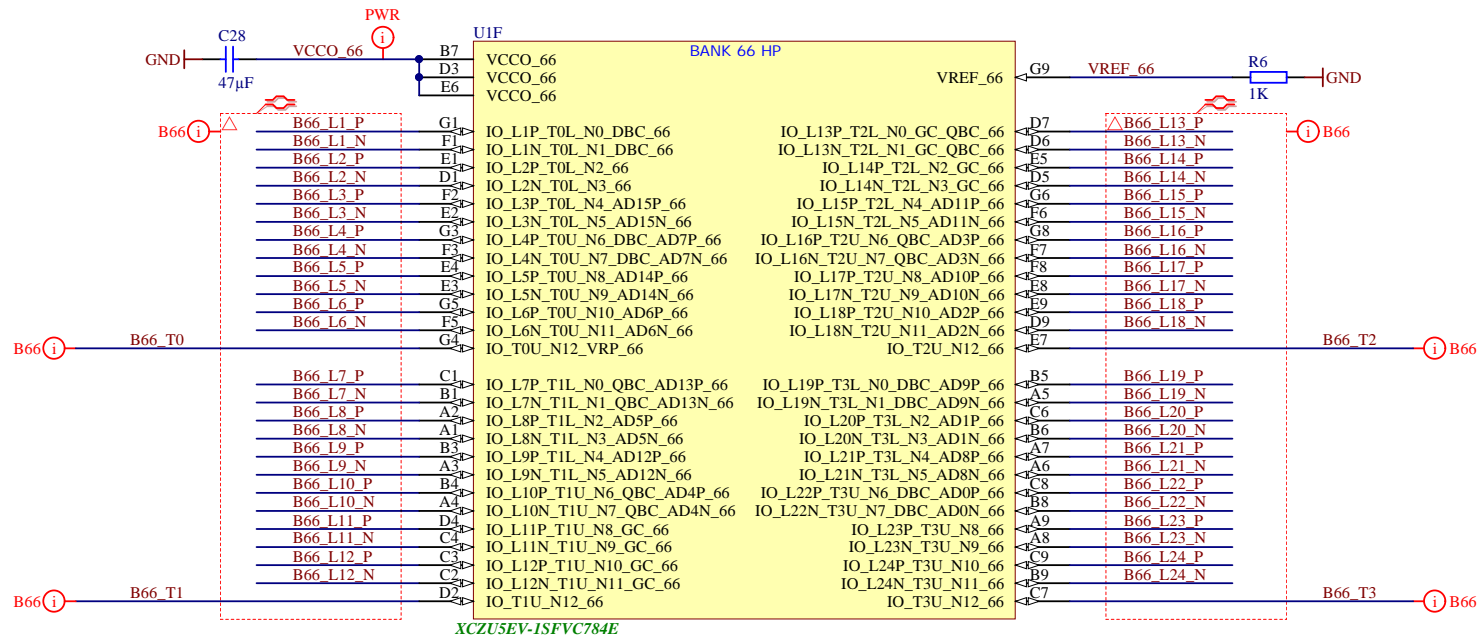
B

C

C

D

D



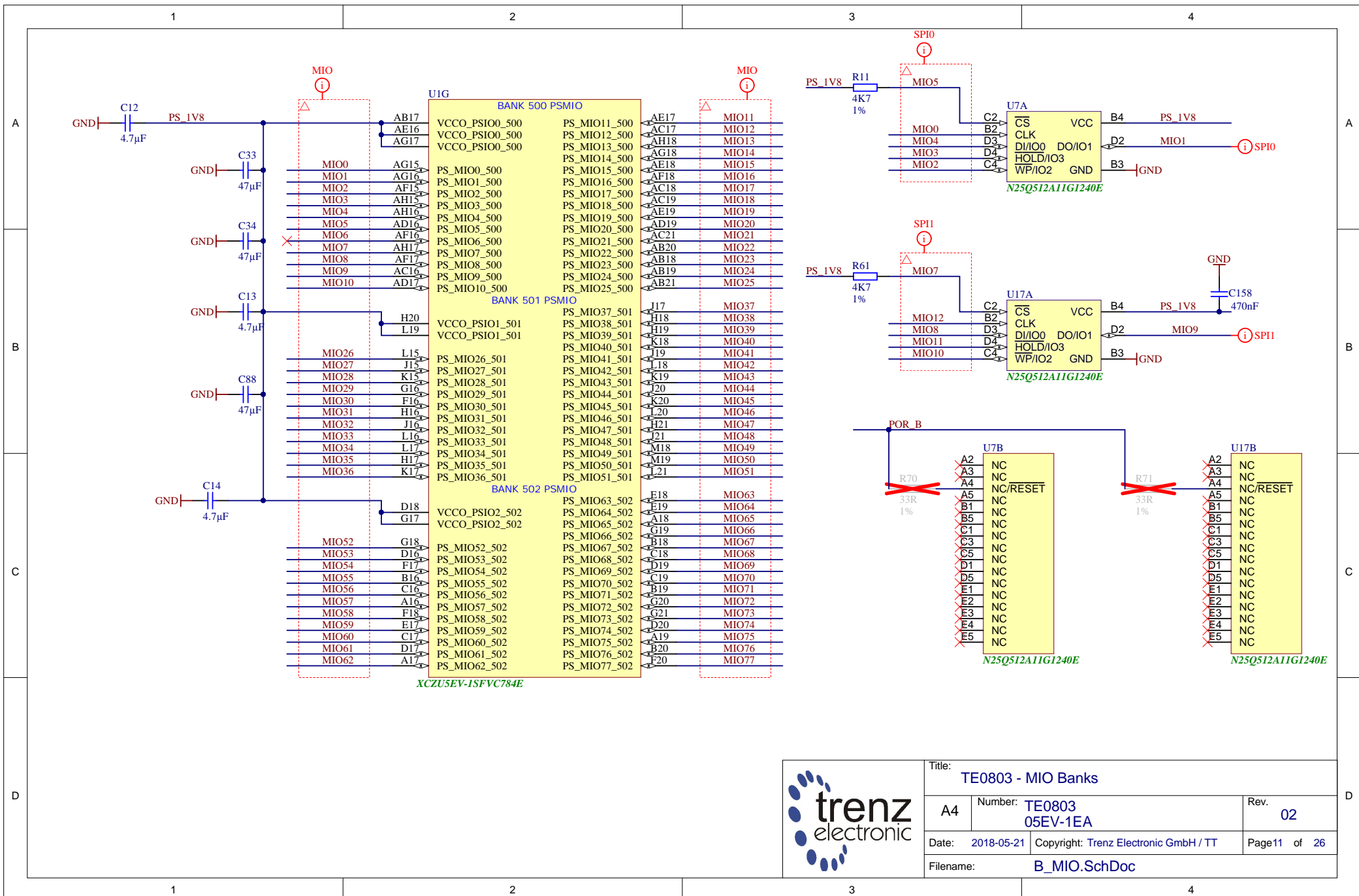
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A4	Number: TE0803 05EV-1EA	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page10 of 26
Filename: B66.SchDoc		

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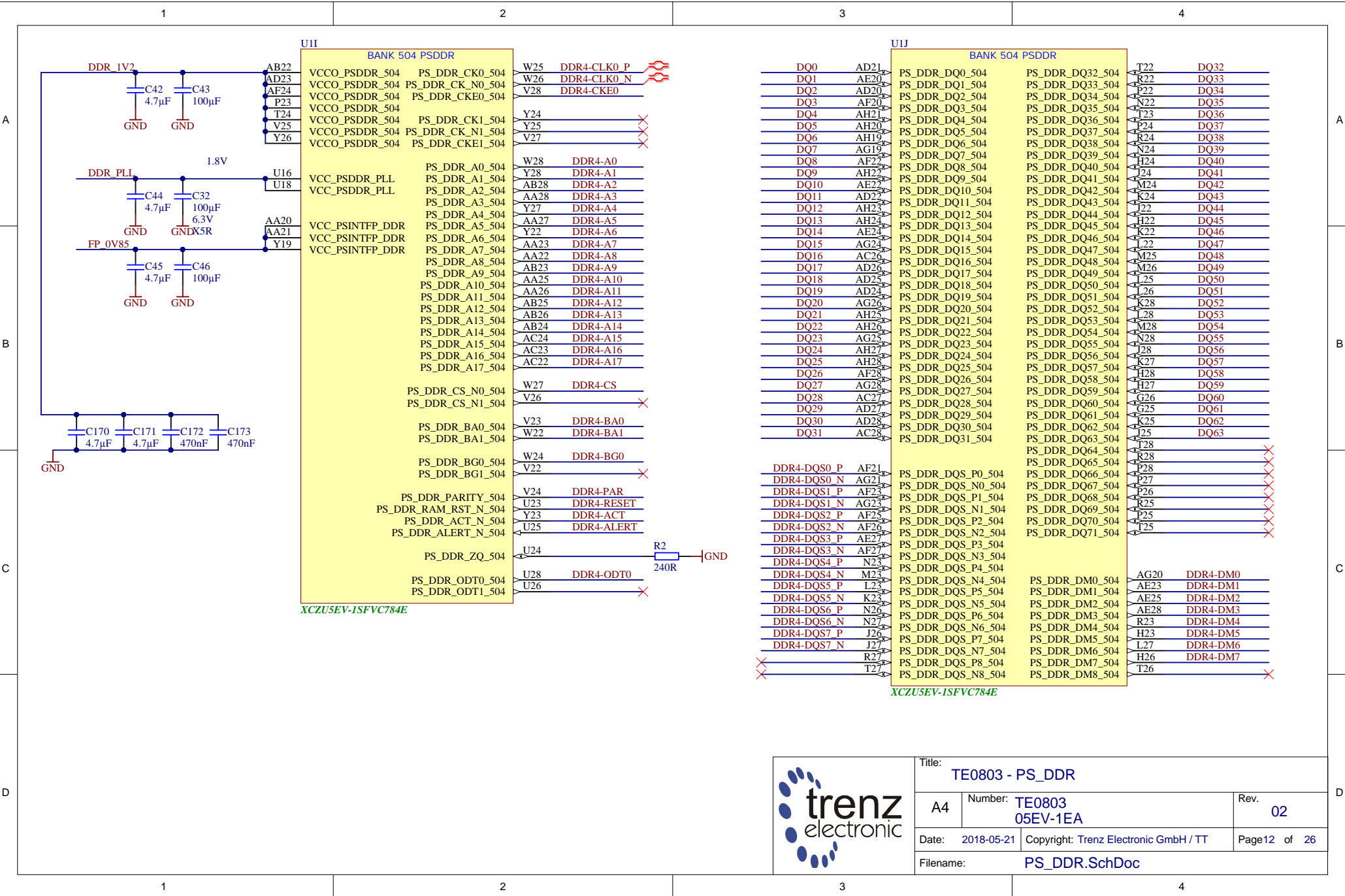
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	Title: TE0803 - MIO Banks	
	A4	Number: TE0803 05EV-1EA
	Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT
	Filename: B_MIO.SchDoc	Page 11 of 26
		Rev. 02



U11

BANK 504 PSDDR

VCCO_PSDDR_504	PS_DDR_CK0_504
VCCO_PSDDR_504	PS_DDR_CK_N0_504
VCCO_PSDDR_504	PS_DDR_CKE0_504
VCCO_PSDDR_504	
VCCO_PSDDR_504	PS_DDR_CK1_504
VCCO_PSDDR_504	PS_DDR_CK_N1_504
VCCO_PSDDR_504	PS_DDR_CKE1_504
PS_DDR_A0_504	
PS_DDR_A1_504	
PS_DDR_A2_504	
PS_DDR_A3_504	
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	

XCZU5EV-1SFVC784E

W25	DDR4-CLK0_P
W26	DDR4-CLK0_N
V28	DDR4-CKE0
Y24	
Y25	
V27	
W28	DDR4-A0
Y28	DDR4-A1
AB28	DDR4-A2
AA28	DDR4-A3
Y27	DDR4-A4
AA27	DDR4-A5
Y22	DDR4-A6
AA23	DDR4-A7
AA22	DDR4-A8
AB23	DDR4-A9
AA25	DDR4-A10
AA26	DDR4-A11
AB25	DDR4-A12
AB26	DDR4-A13
AB24	DDR4-A14
AC24	DDR4-A15
AC23	DDR4-A16
AC22	DDR4-A17
W27	DDR4-CS
V26	
V23	DDR4-BA0
W22	DDR4-BA1
W24	DDR4-BG0
V22	
V24	DDR4-PAR
U23	DDR4-RESET
Y23	DDR4-ACT
U25	DDR4-ALERT
U24	
U28	DDR4-ODT0
U26	

U1J

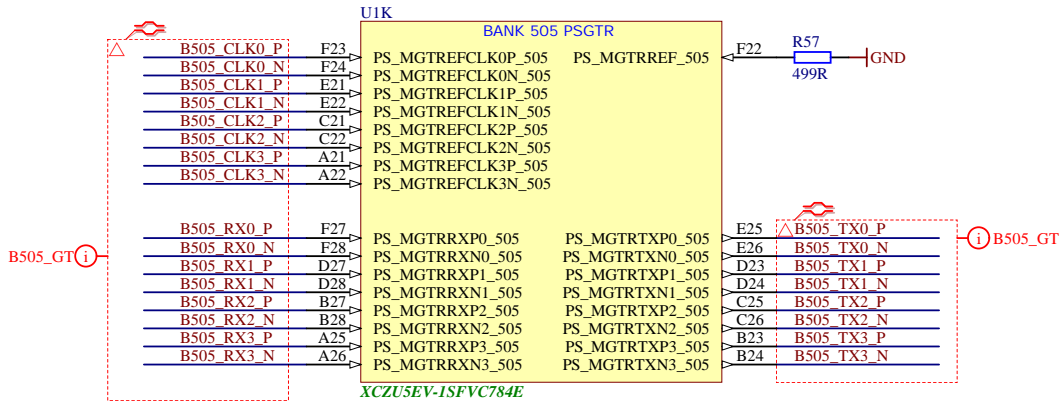
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PS_DDR_DQ2_504	
PS_DDR_DQ3_504	
PS_DDR_DQ4_504	
PS_DDR_DQ5_504	
PS_DDR_DQ6_504	
PS_DDR_DQ7_504	
PS_DDR_DQ8_504	
PS_DDR_DQ9_504	
PS_DDR_DQ10_504	
PS_DDR_DQ11_504	
PS_DDR_DQ12_504	
PS_DDR_DQ13_504	
PS_DDR_DQ14_504	
PS_DDR_DQ15_504	
PS_DDR_DQ16_504	
PS_DDR_DQ17_504	
PS_DDR_DQ18_504	
PS_DDR_DQ19_504	
PS_DDR_DQ20_504	
PS_DDR_DQ21_504	
PS_DDR_DQ22_504	
PS_DDR_DQ23_504	
PS_DDR_DQ24_504	
PS_DDR_DQ25_504	
PS_DDR_DQ26_504	
PS_DDR_DQ27_504	
PS_DDR_DQ28_504	
PS_DDR_DQ29_504	
PS_DDR_DQ30_504	
PS_DDR_DQ31_504	
PS_DDR_DQS_P0_504	
PS_DDR_DQS_N0_504	
PS_DDR_DQS_P1_504	
PS_DDR_DQS_N1_504	
PS_DDR_DQS_P2_504	
PS_DDR_DQS_N2_504	
PS_DDR_DQS_P3_504	
PS_DDR_DQS_N3_504	
PS_DDR_DQS_P4_504	
PS_DDR_DQS_N4_504	
PS_DDR_DQS_P5_504	
PS_DDR_DQS_N5_504	
PS_DDR_DQS_P6_504	
PS_DDR_DQS_N6_504	
PS_DDR_DQS_P7_504	
PS_DDR_DQS_N7_504	
PS_DDR_DQS_P8_504	
PS_DDR_DQS_N8_504	

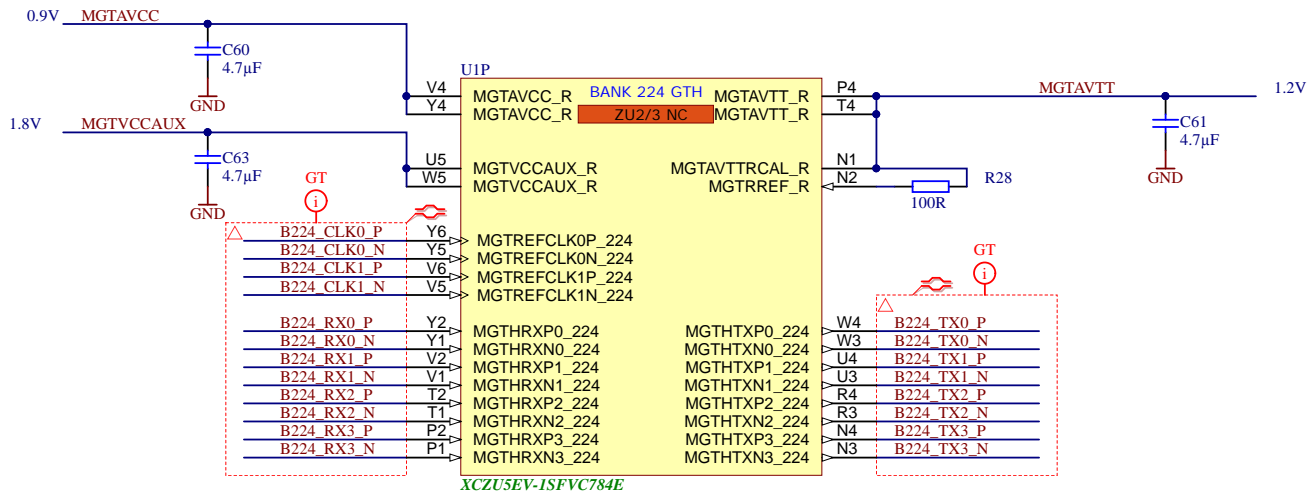
PS_DDR_DQ32_504	
PS_DDR_DQ33_504	
PS_DDR_DQ34_504	
PS_DDR_DQ35_504	
PS_DDR_DQ36_504	
PS_DDR_DQ37_504	
PS_DDR_DQ38_504	
PS_DDR_DQ39_504	
PS_DDR_DQ40_504	
PS_DDR_DQ41_504	
PS_DDR_DQ42_504	
PS_DDR_DQ43_504	
PS_DDR_DQ44_504	
PS_DDR_DQ45_504	
PS_DDR_DQ46_504	
PS_DDR_DQ47_504	
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PS_DDR_DQ64_504	
PS_DDR_DQ65_504	
PS_DDR_DQ66_504	
PS_DDR_DQ67_504	
PS_DDR_DQ68_504	
PS_DDR_DQ69_504	
PS_DDR_DQ70_504	
PS_DDR_DQ71_504	
PS_DDR_DM0_504	
PS_DDR_DM1_504	
PS_DDR_DM2_504	
PS_DDR_DM3_504	
PS_DDR_DM4_504	
PS_DDR_DM5_504	
PS_DDR_DM6_504	
PS_DDR_DM7_504	
PS_DDR_DM8_504	

XCZU5EV-1SFVC784E

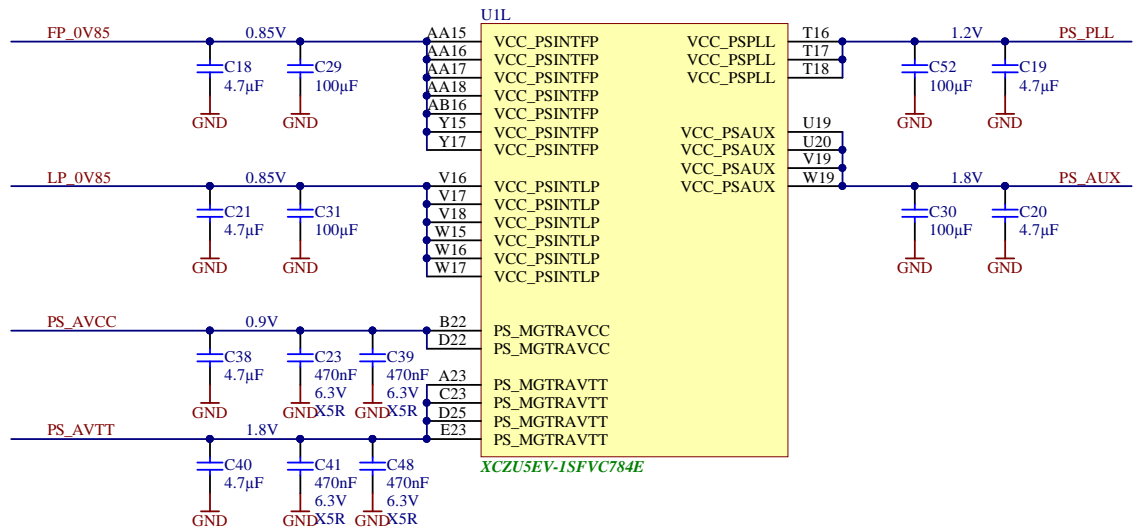
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	A4	Number: TE0803 05EV-1EA
	Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT
	Filename: PS_DDR.SchDoc	Rev. 02
		Page 12 of 26



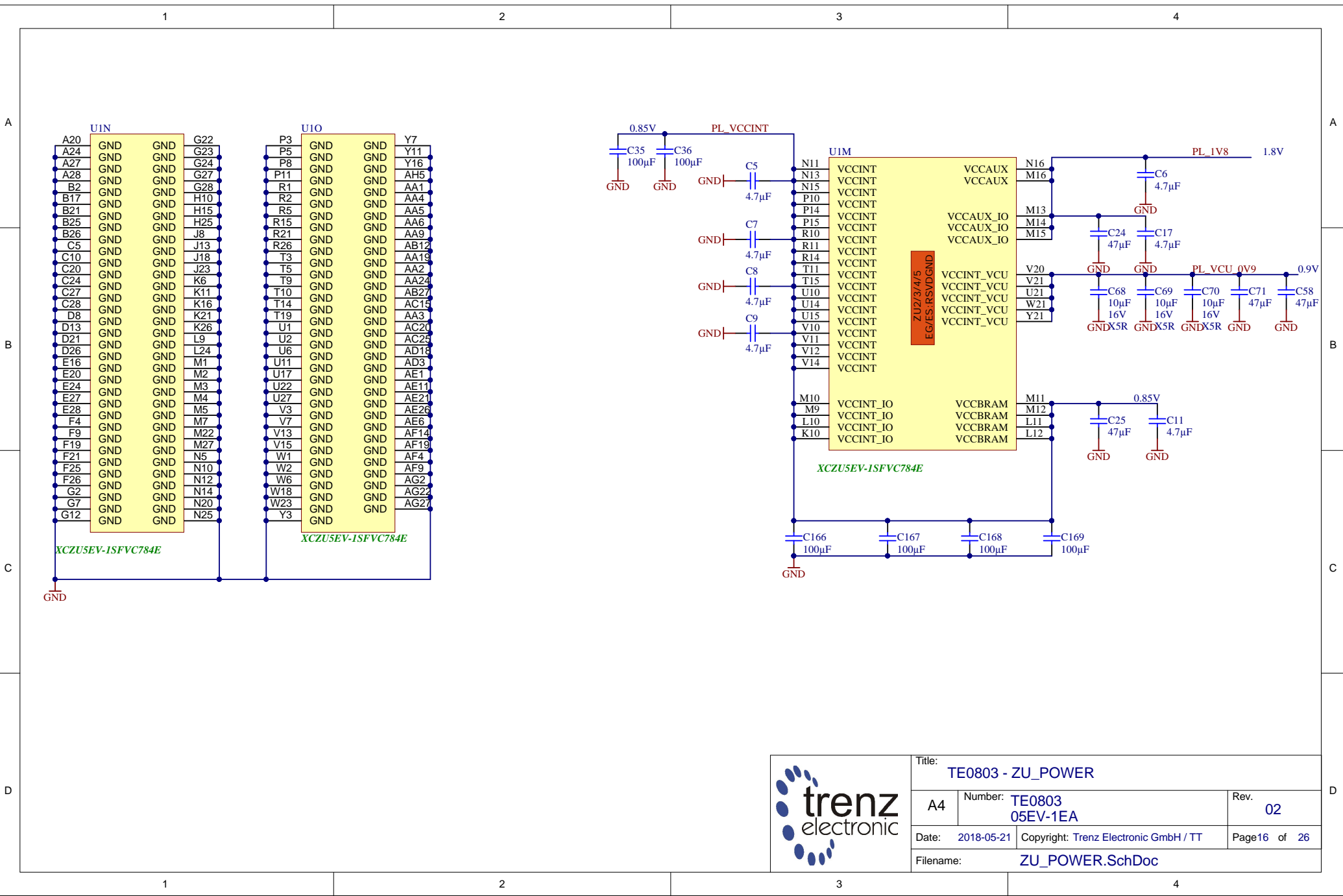
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	A4	Number: TE0803 05EV-1EA	Rev. 02
	Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page13 of 26
	Filename: B_PS_GT.SchDoc		




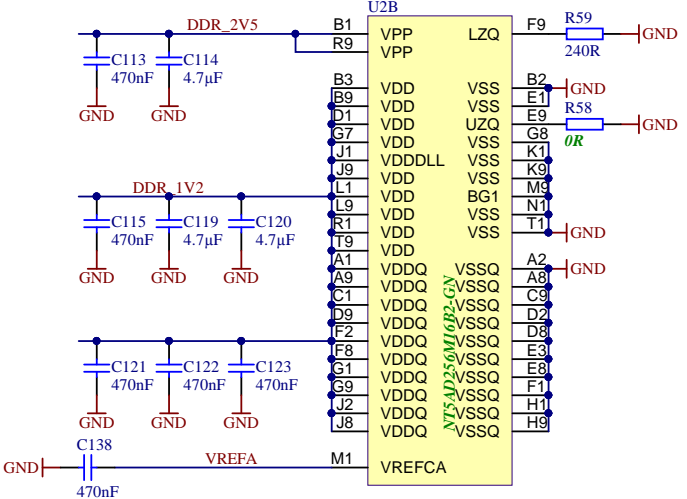
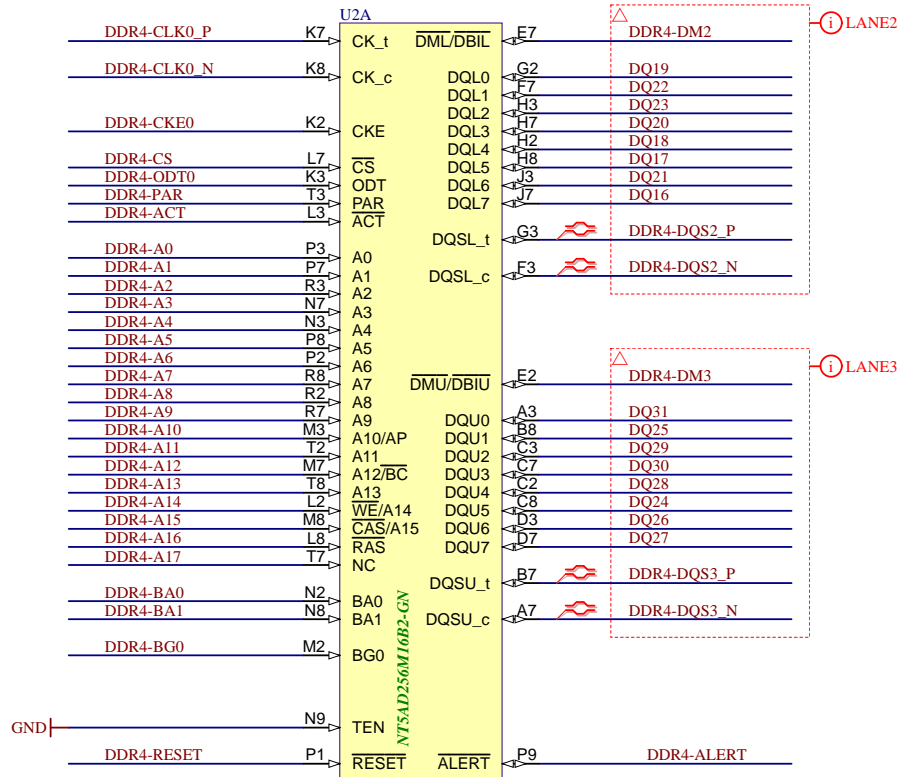
Title: TE0803 - B224GTH		
A4	Number: TE0803 05EV-1EA	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page 14 of 26
Filename: B_GT.SchDoc		



Title: TE0803 - ZU_PS_POWER		
A4	Number: TE0803 05EV-1EA	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 05EV-1EA
Date: 2018-05-21		Copyright: Trenz Electronic GmbH / TT		Page16 of 26
Filename: ZU_POWER.SchDoc				



Title: TE0803 - DDR4_1_RAM		
A4	Number: TE0803 05EV-1EA	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page 17 of 26
Filename: DDR4-RAM.SchDoc		

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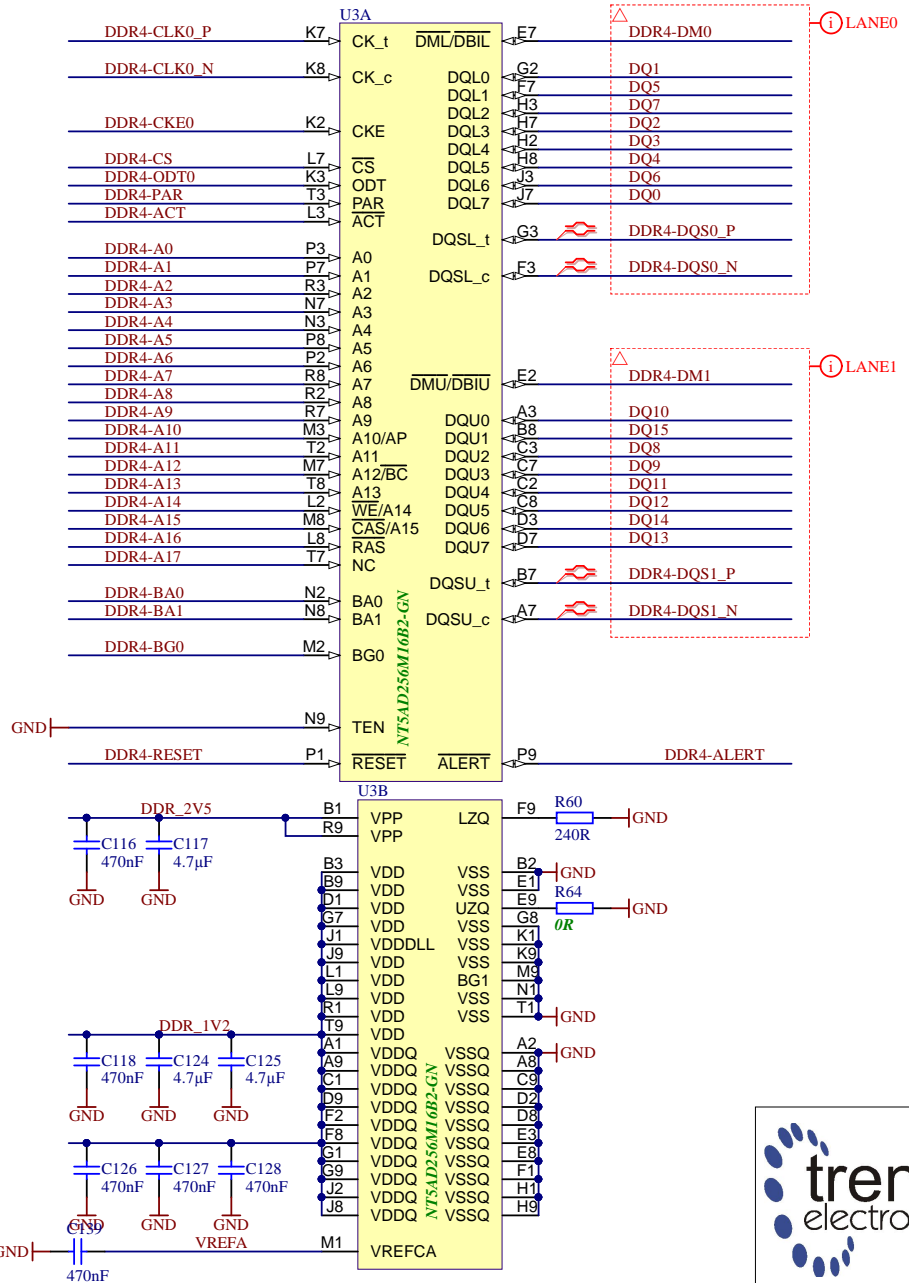
B

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D



trenz electronic

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

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A

A

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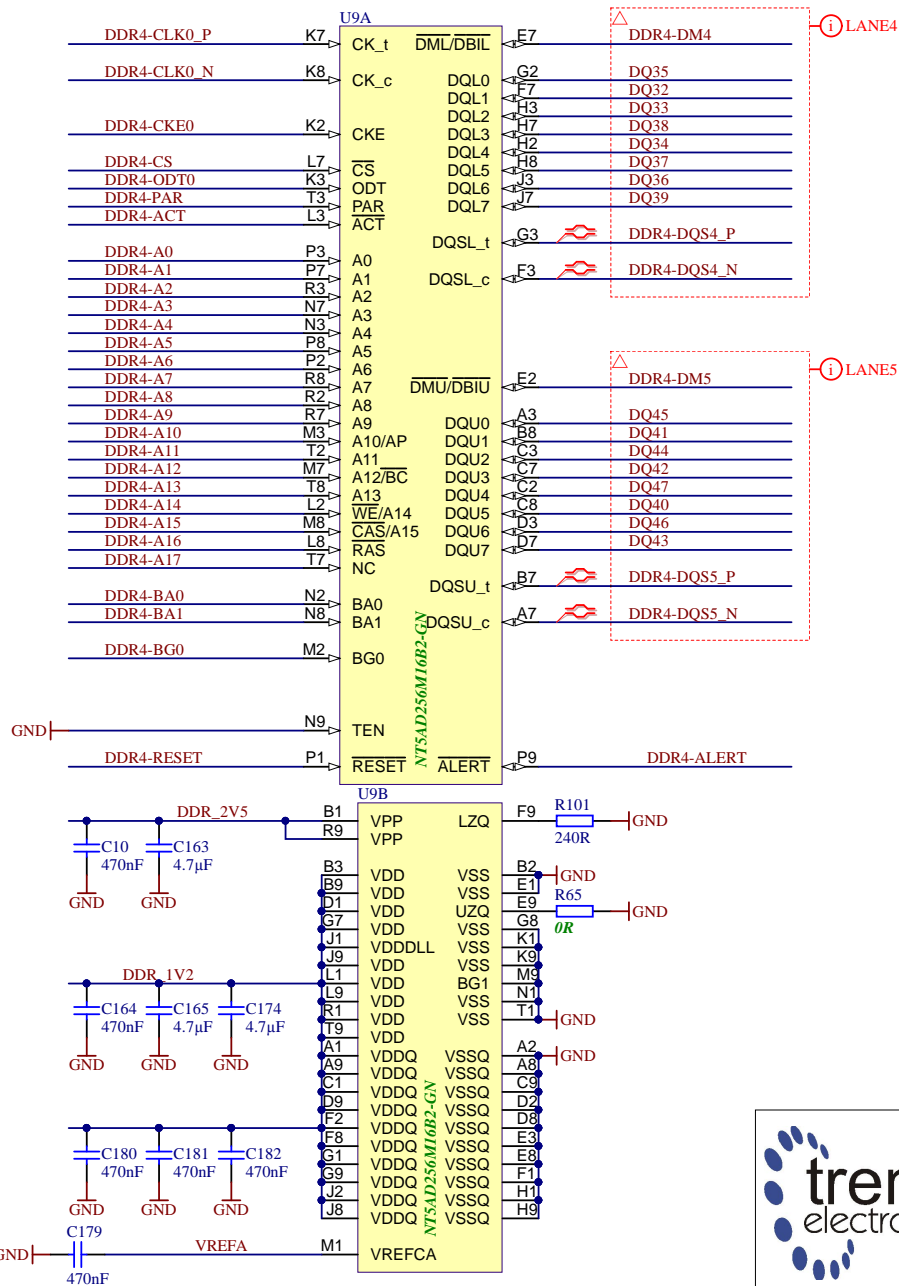
B

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C

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D



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

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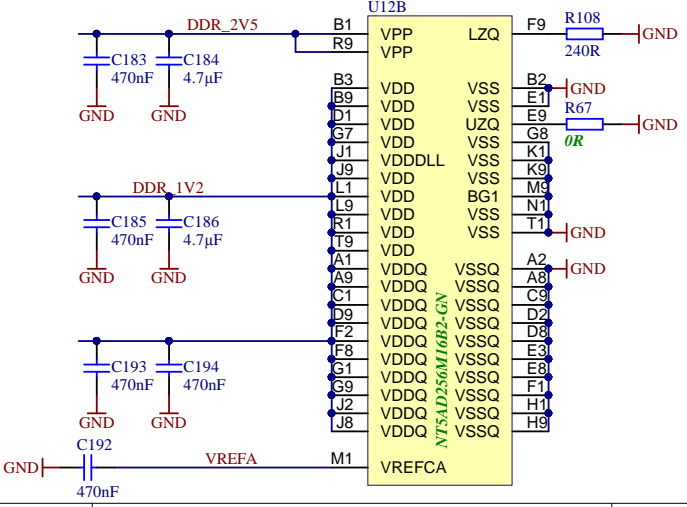
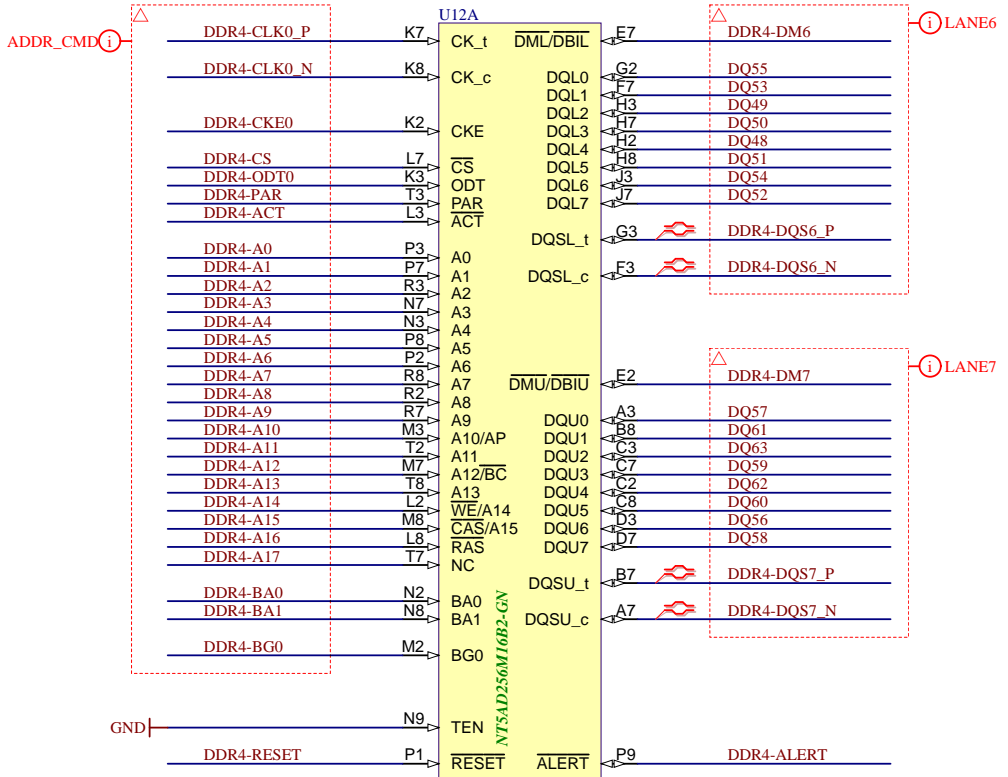
4

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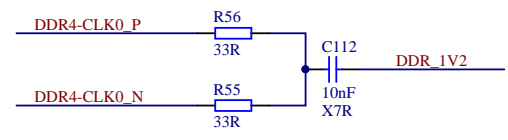
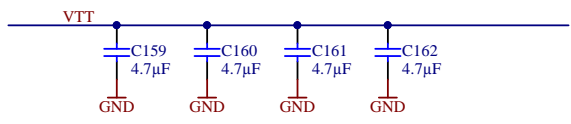
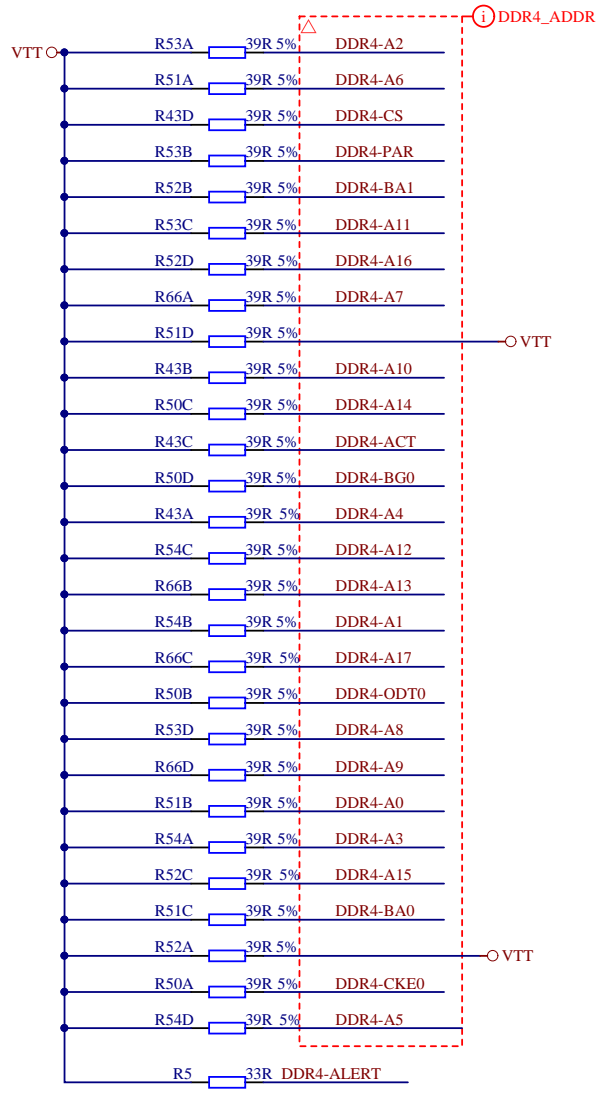

Title: TE0803 - DDR4_4_RAM		
A4	Number: TE0803 05EV-1EA	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page20 of 26
Filename: DDR4-RAM_4.SchDoc		

1

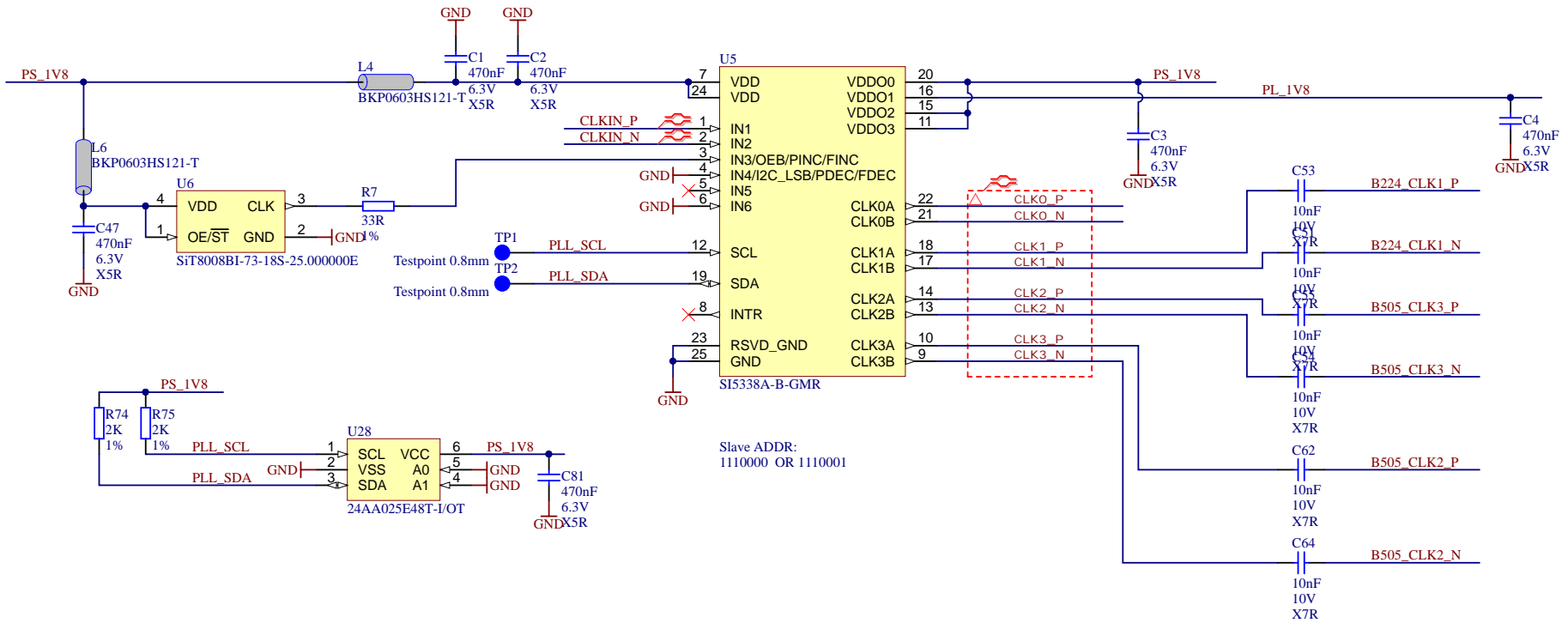
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3

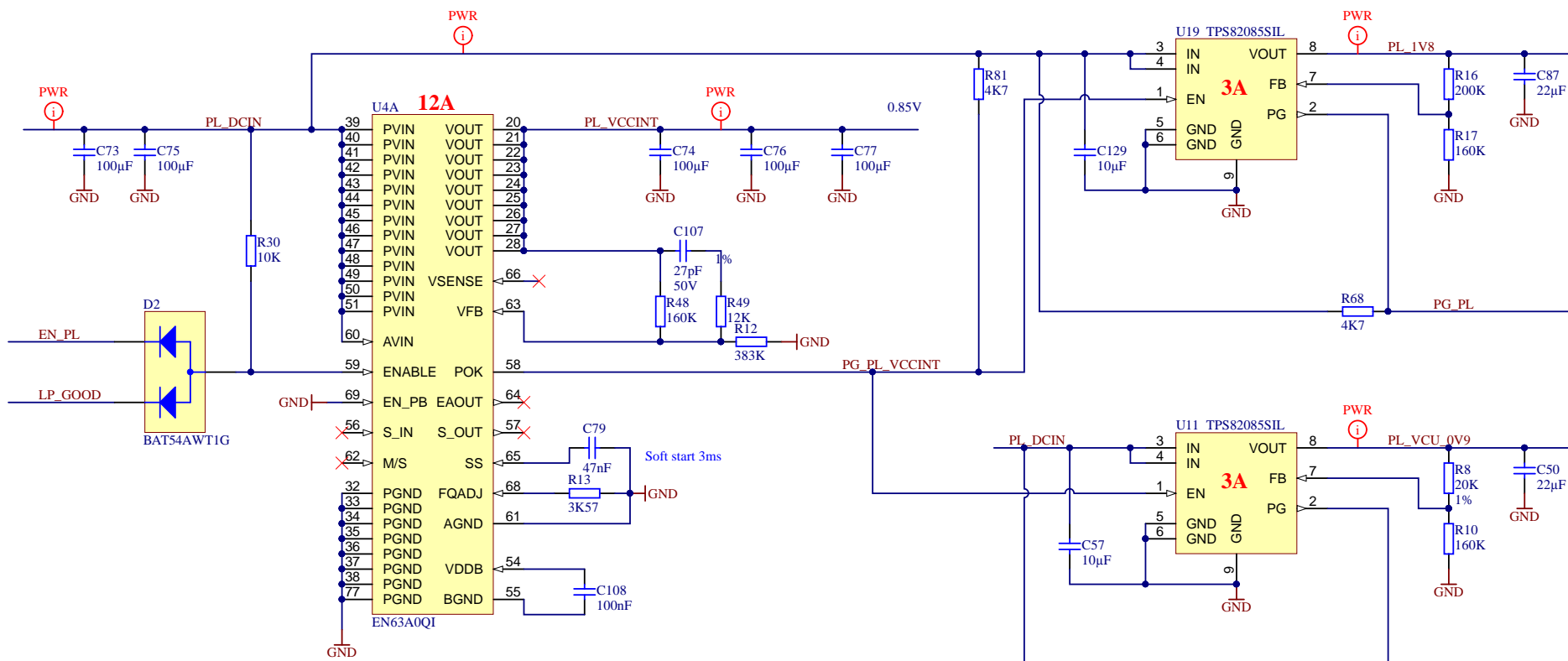
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Title: TE0803 - DDR4_TERM		
A4	Number: TE0803 05EV-1EA	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page21 of 26
Filename: DDR4-TERM.SchDoc		




Title: TE0803 - CLOCK		
A4	Number: TE0803 05EV-1EA	Rev. 02
Date: 2018-05-21	Copyright: Trenz Electronic GmbH / TT	Page22 of 26
Filename: Clock.SchDoc		

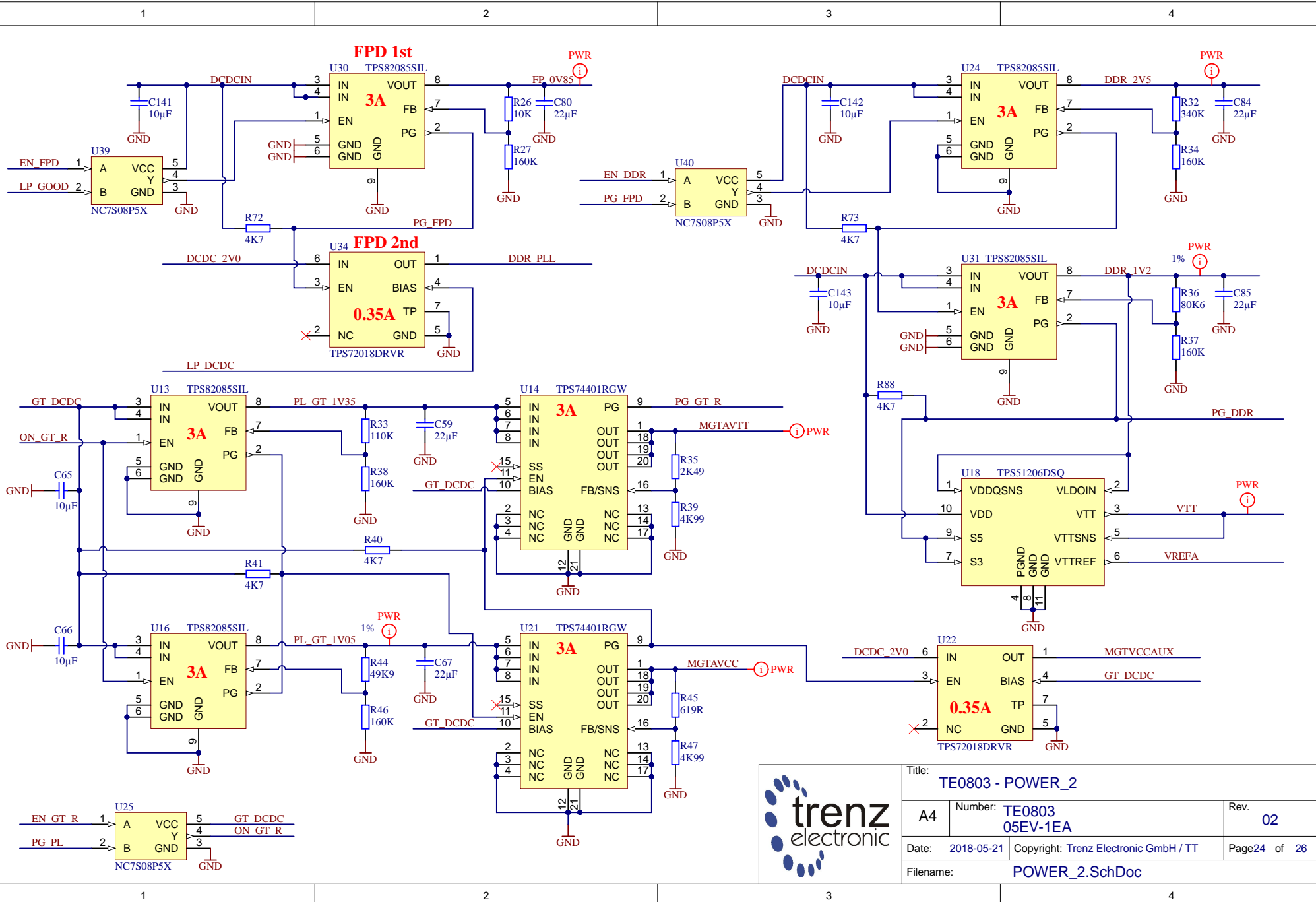


U4B
EN63A0QI

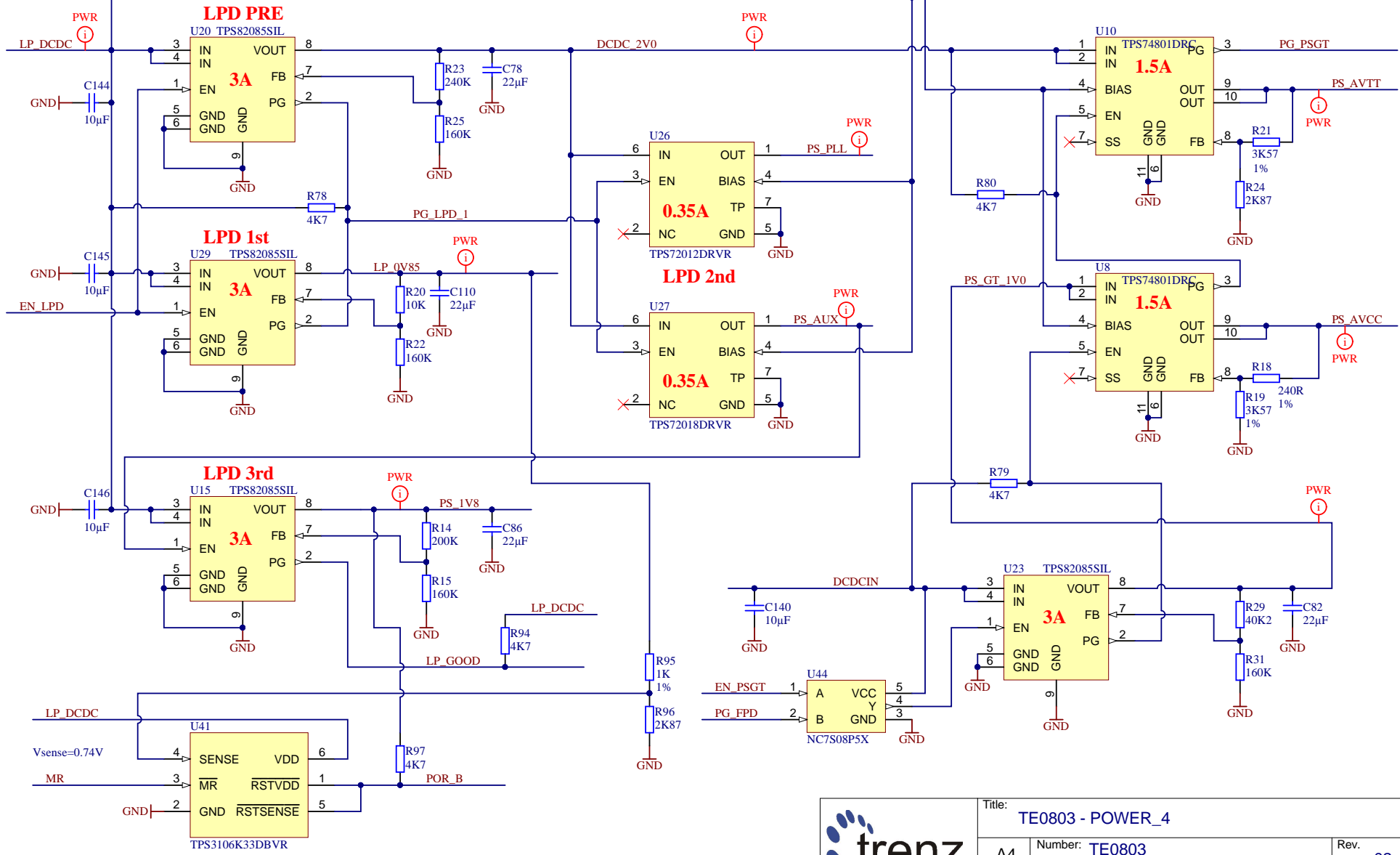
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2	NC	NC	18
3	NC	NC	19
4	NC	NC	29
5	NC	NC	30
6	NC	NC(SW)	31
7	NC	NC(SW)	52
8	NC	NC	53
9	NC	NC	67
10	NC	NC(SW)	70
11	NC	NC(SW)	71
12	NC	NC(SW)	72
13	NC	NC	73
14	NC	NC	74
15	NC	NC	75
16	NC	NC	76




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



Title: TE0803 - POWER_2		
A4	Number: TE0803 05EV-1EA	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 05EV-1EA
Date: 2018-05-21		Copyright: Trenz Electronic GmbH / TT		Page25 of 26
Filename: POWER_4.SchDoc				

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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

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