

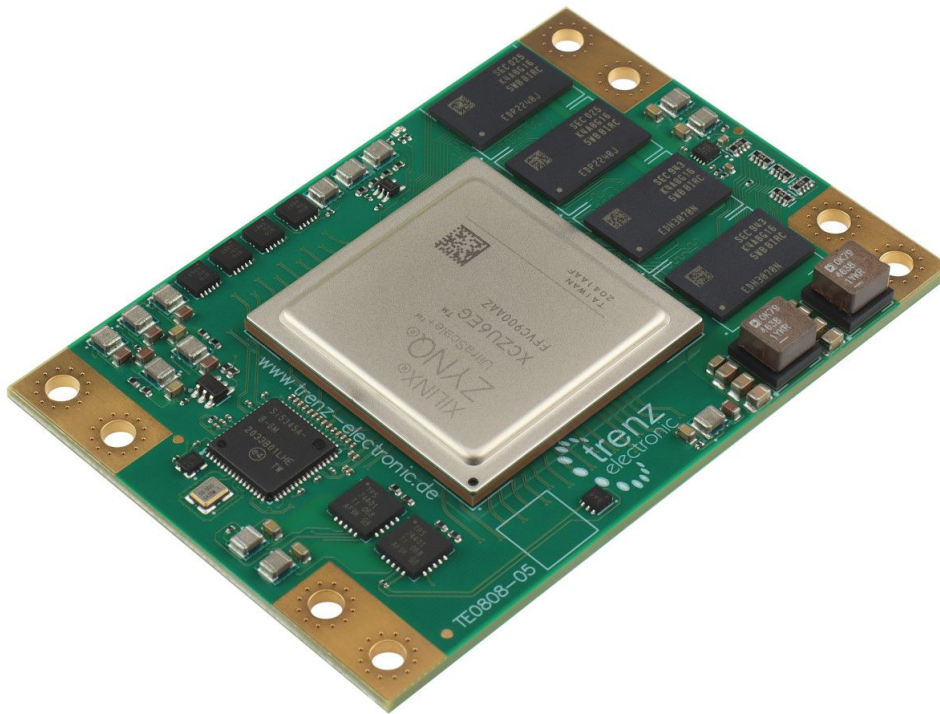


Photo Shows Similar Product

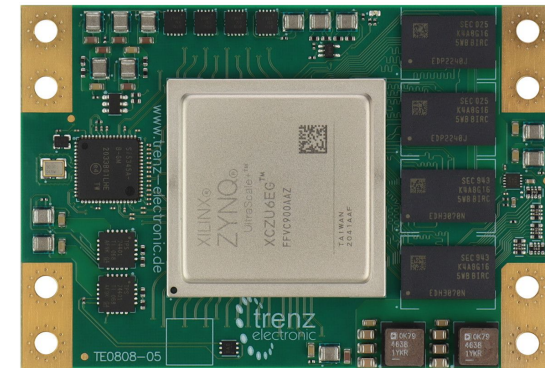


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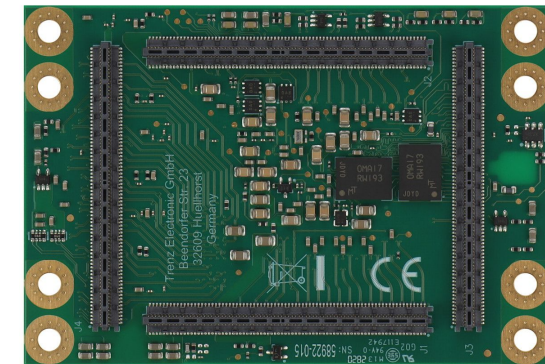


Photo Shows Similar Product

Regarding the usage of our schematics and alike documentation for Trenz module TE0808.

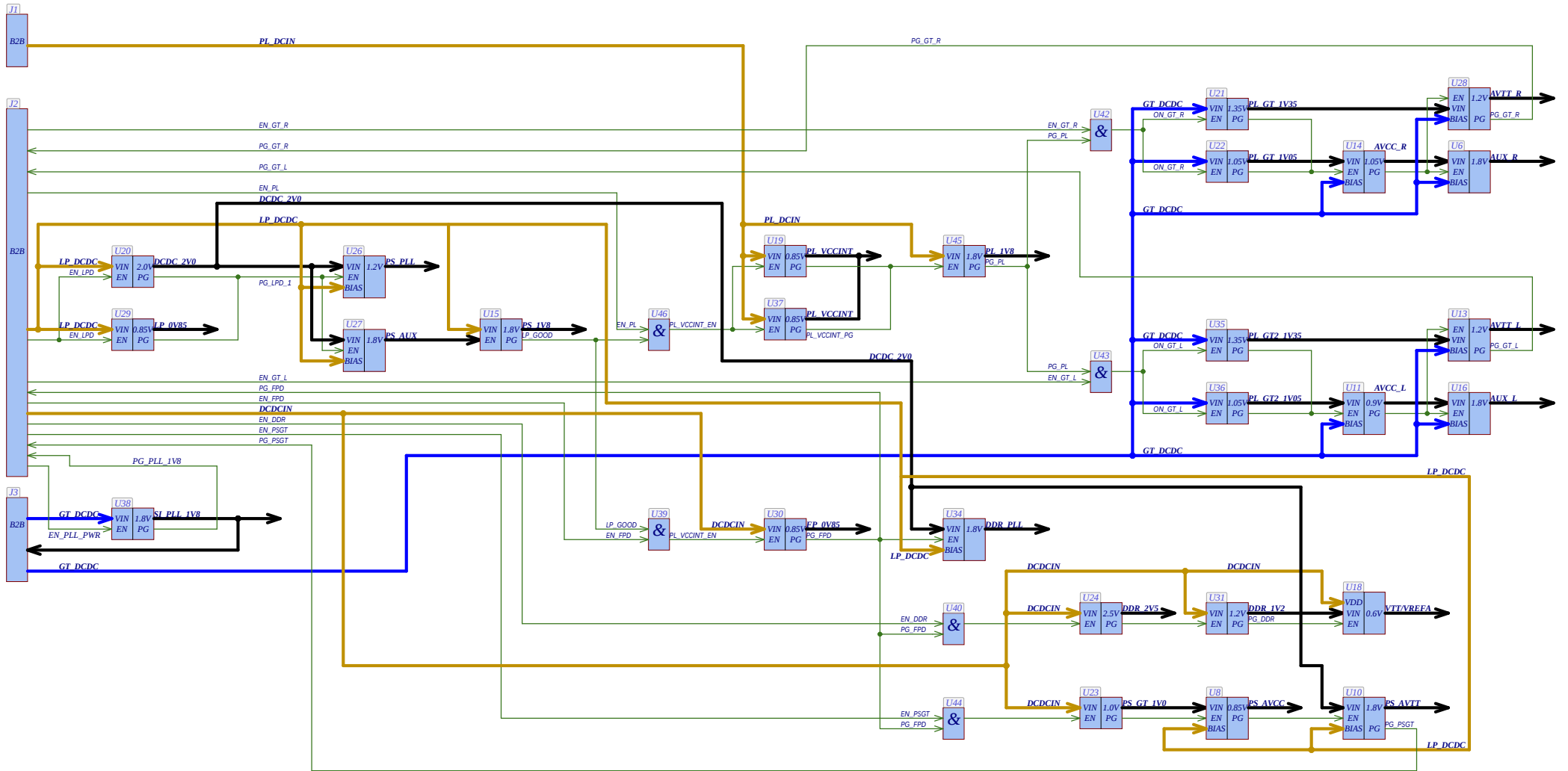
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Schematics and other handouts serve for informational purposes only!

	Title: TE0808 - Legal Notices		
	A4	Number: TE0808 9BE51-E	Rev. 06
	Date: 12/4/2025	Copyright: Trenz Electronic GmbH	Page 1 of 32
	Filename: Legal Notices.SchDoc		

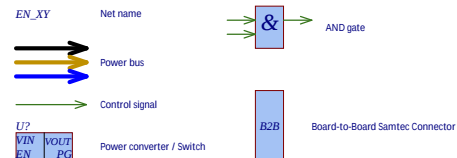
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A	<table><tr><td>REV</td><td>Description</td><td></td></tr><tr><td>-01</td><td>Initial revision</td><td></td></tr><tr><td>-04</td><td>1) Added resistors R65,R82,R86,R87 (240R) for each DDR4-chip for supporting DDP DDR4 chips 2) Full library update</td><td></td></tr><tr><td>-04a</td><td>1) R19 value was changed to 10K (was: 4K99) to set PS_MGTRAVCC 0.85V</td><td>VY</td></tr></table>		REV	Description		-01	Initial revision		-04	1) Added resistors R65,R82,R86,R87 (240R) for each DDR4-chip for supporting DDP DDR4 chips 2) Full library update		-04a	1) R19 value was changed to 10K (was: 4K99) to set PS_MGTRAVCC 0.85V	VY																
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	Date: 2/26/2026	Copyright: Trenz Electronic GmbH		Page 2 of 32																										
Filename: Revision_Changes.SchDoc																														
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Power-on sequencing:

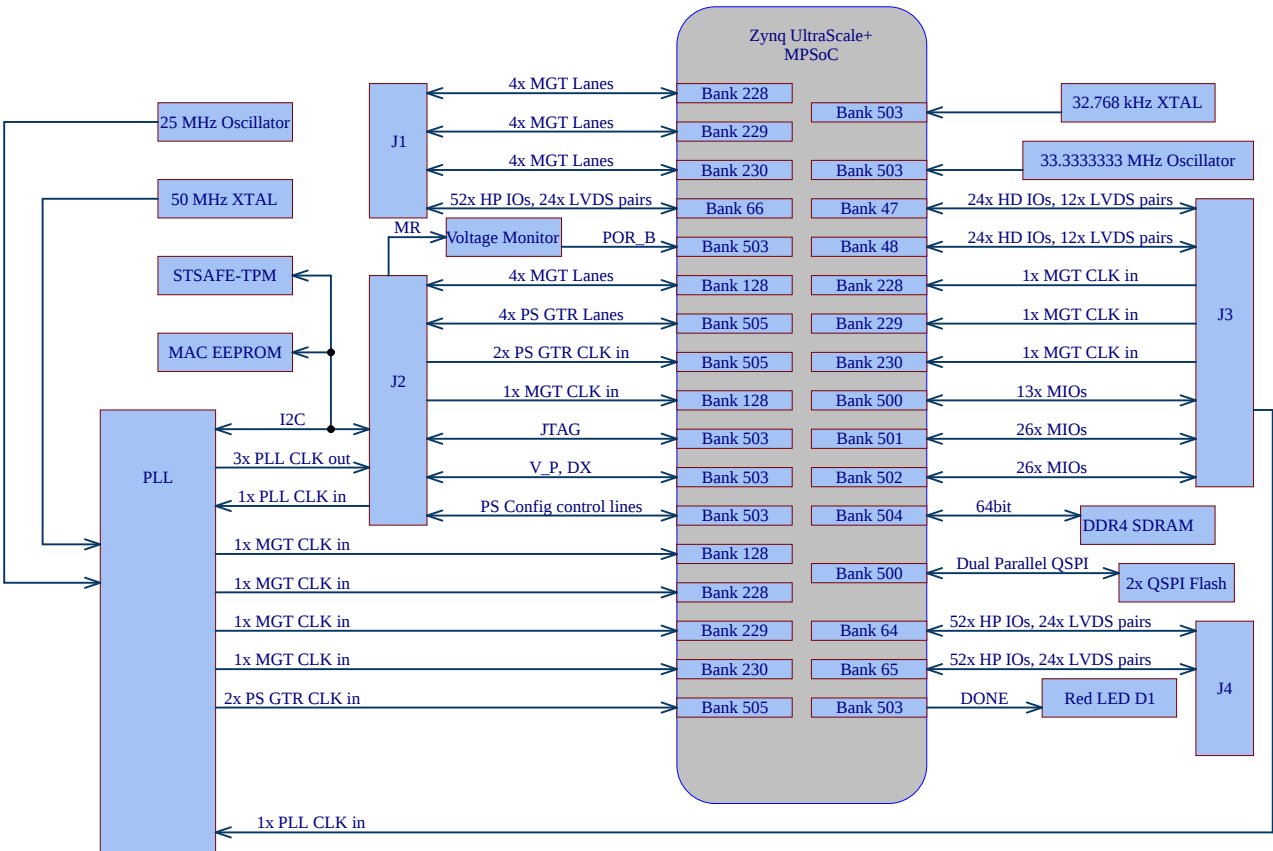


Supported Voltage Ranges:

Power Rail	Direction	Range	Description	Note
PL_DCIN	IN	2.5V-5.5V	Micromodule Power	-
DCDCIN	IN	3.1V-5.5V	Micromodule Power	-
LP_DCDC	IN	3.1V-3.6V	Micromodule Power	-
GT_DCDC	IN	3.1V-5.5V	Micromodule Power	-
PLL_3V3	IN	3.14V-3.47V	PLL Power	-
PSBATT	IN	1.2 - 1.5V	SoC Vbatt	-
VCCO_65	IN	0.95 - 1.9V	IO HP Bank65 Power	-
VCCO_64	IN	0.95 - 1.9V	IO HP Bank64 Power	-
VCCO_66	IN	0.95 - 1.9V	IO HP Bank66 Power	-
VCCO_47	IN	1.14 - 3.4V	IO HP Bank47 Power	-
VCCO_48	IN	1.14 - 3.4V	IO HP Bank48 Power	-



Title: TE0808 - Power Diagram		
A3	Number: TE0808 9BE51-E	Rev. 06
Datum: 12/30/2025	Copyright: Trenz Electronic GmbH	Page 3 of 32
Filename: Power_Diagramm.SchDoc		



I2C Address Table

U4	EEPROM	0x50
U5	PLL	0x69
U47	TPM	0x2E

- ZU_PS_POWER

DDR4-RAM_2

DDR4-RAM_4

POWER_2

TE0808
- ZU_POWER

DDR4-RAM_3

POWER

POWER_3

DDR4-TERM



Title:TE0808 - System Overview

A4

Number:TE08089BE51-E

Rev.06

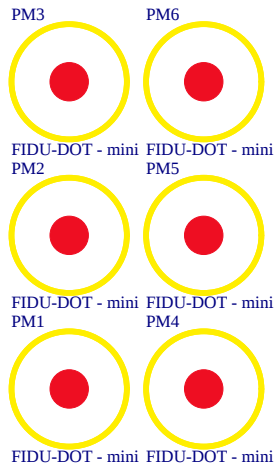
Date:1/6/2026

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Page 4 of 32

Filename: System_Overview.SchDoc

Special notes:



~~Serial1~~
Serialnumber 6,3 x 6.3mm

Serial2
Serial
Serialnumber 6,3 x 6.3mm
AD only

UKCA1

UKCA Logo on Top Overlay

UKCA-TOPOVERLAY

Design drawn by: MT
Checked by: VY
Assembly variant: 9BE51-E
Created by: MT
Modified by: MT
Modified at: 2025-12-18



Title:
TE0808

A4

Number: TE0808
9BE51-E

Rev. 06

Date: 2/2/2026

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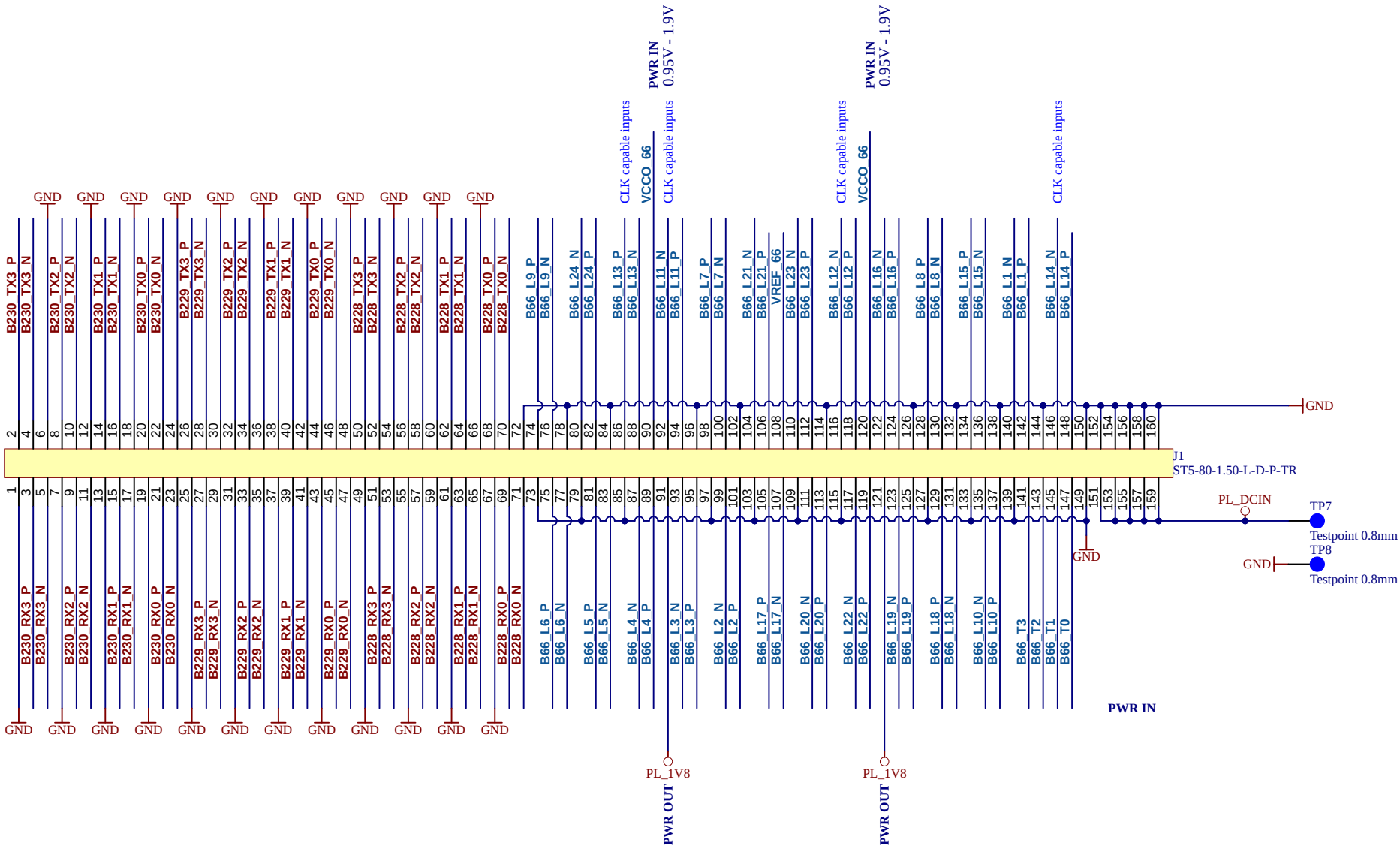
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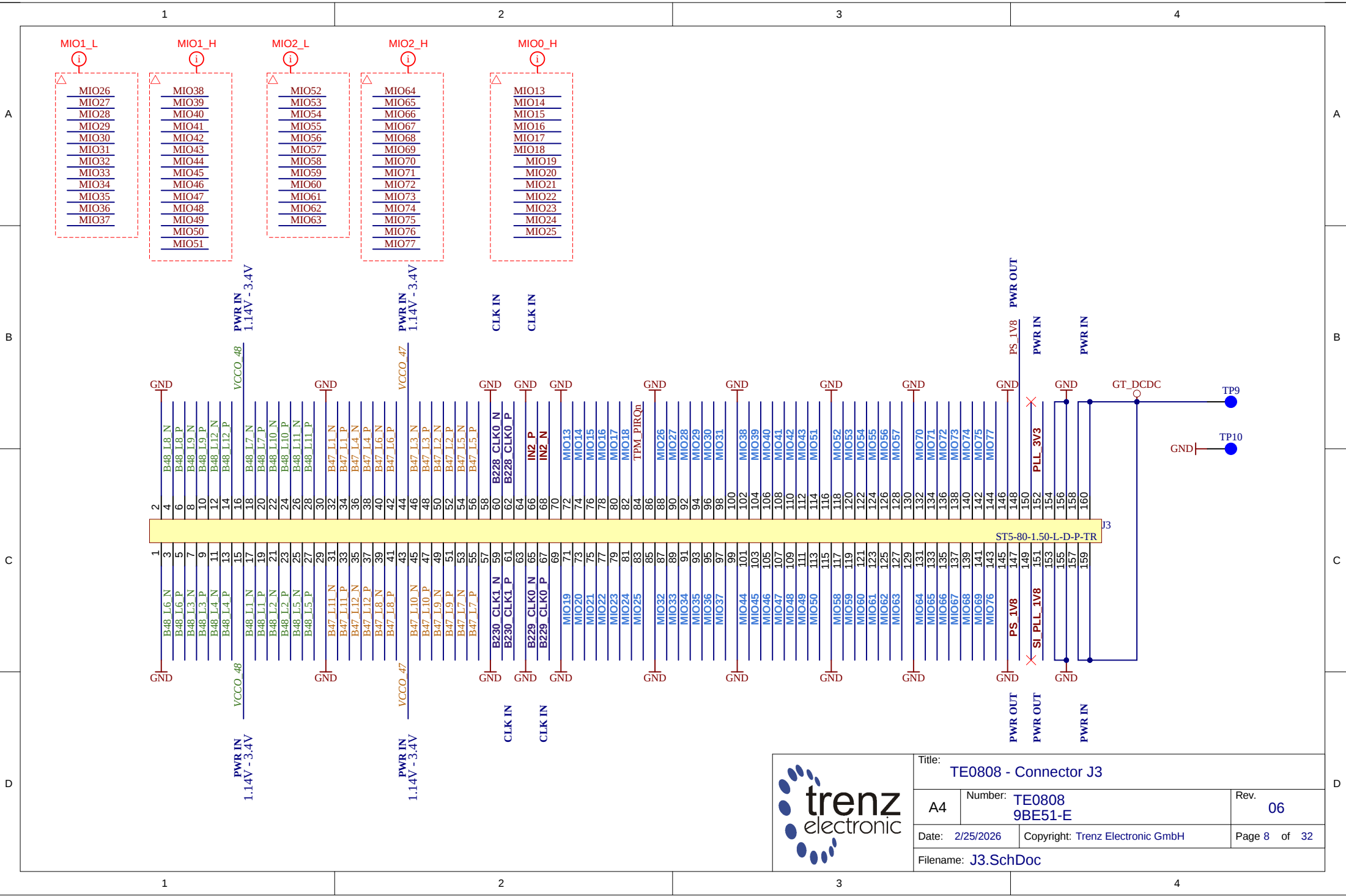
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	Date: 2/25/2026	Copyright: Trenz Electronic GmbH	Page 6 of 32
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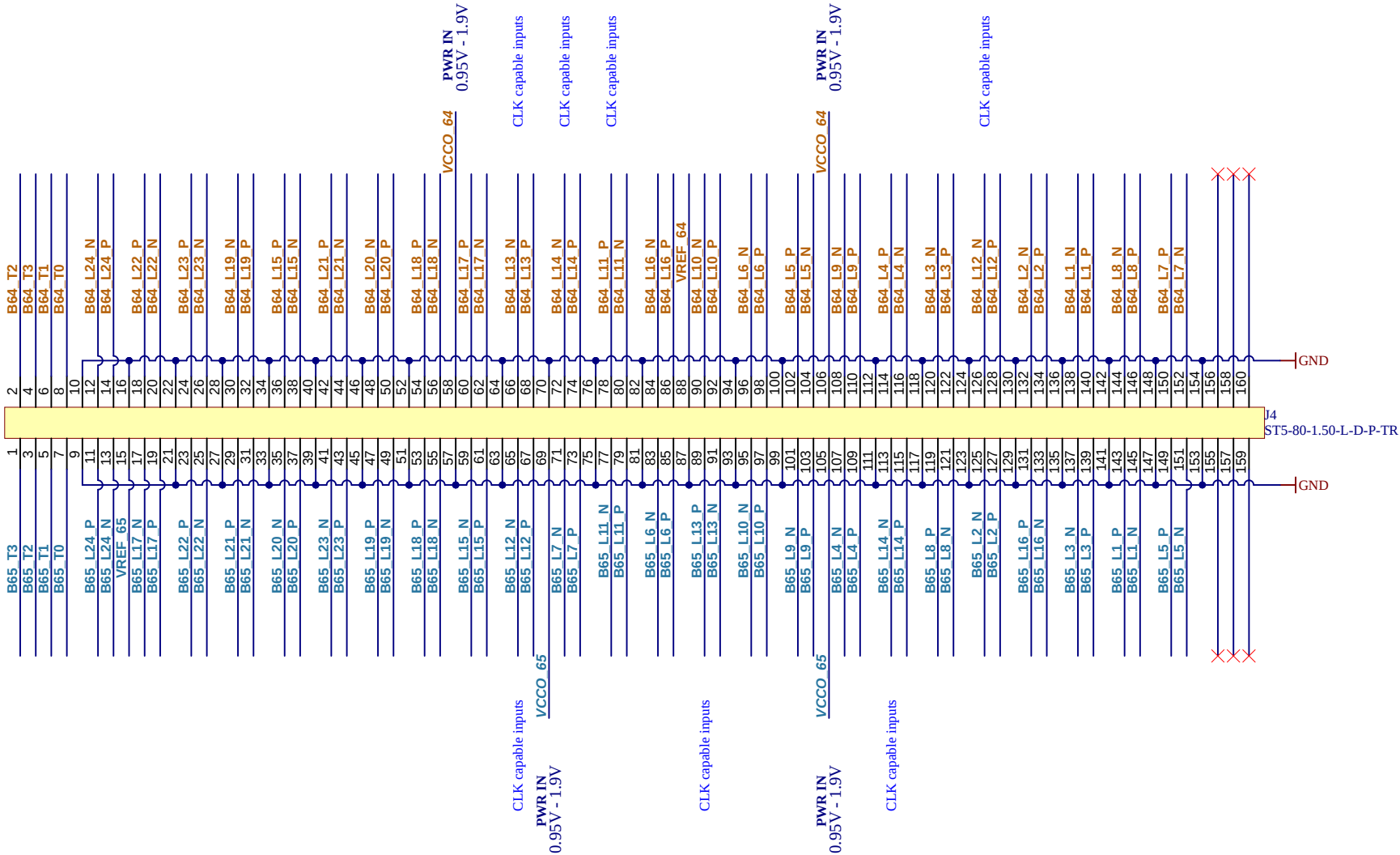
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Filename: J3.SchDoc		

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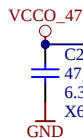
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1.14V - 3.4V



PWR

B47

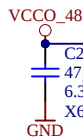
U1B

BANK 47 HD			
VCCO_47			
VCCO_47			
IO_L1P_AD11P_47	IO_L7P_HDGC_AD5P_47		
IO_L1N_AD11N_47	IO_L7N_HDGC_AD5N_47		
IO_L2P_AD10P_47	IO_L8P_HDGC_AD4P_47		
IO_L2N_AD10N_47	IO_L8N_HDGC_AD4N_47		
IO_L3P_AD9P_47	IO_L9P_AD3P_47		
IO_L3N_AD9N_47	IO_L9N_AD3N_47		
IO_L4P_AD8P_47	IO_L10P_AD2P_47		
IO_L4N_AD8N_47	IO_L10N_AD2N_47		
IO_L5P_HDGC_AD7P_47	IO_L11P_AD1P_47		
IO_L5N_HDGC_AD7N_47	IO_L11N_AD1N_47		
IO_L6P_HDGC_AD6P_47	IO_L12P_AD0P_47		
IO_L6N_HDGC_AD6N_47	IO_L12N_AD0N_47		

F15	B47_L7_P
F15	B47_L7_N
G13	B47_L8_P
F13	B47_L8_N
G15	B47_L9_P
G14	B47_L9_N
K15	B47_L10_P
J15	B47_L10_N
K14	B47_L11_P
J14	B47_L11_N
H14	B47_L12_P
H13	B47_L12_N

B47

1.14V - 3.4V



PWR

B48

H10

BANK 48 HD			
VCCO_48			
VCCO_48			
IO_L1P_AD15P_48	IO_L7P_HDGC_48		
IO_L1N_AD15N_48	IO_L7N_HDGC_48		
IO_L2P_AD14P_48	IO_L8P_HDGC_48		
IO_L2N_AD14N_48	IO_L8N_HDGC_48		
IO_L3P_AD13P_48	IO_L9P_AD11P_48		
IO_L3N_AD13N_48	IO_L9N_AD11N_48		
IO_L4P_AD12P_48	IO_L10P_AD10P_48		
IO_L4N_AD12N_48	IO_L10N_AD10N_48		
IO_L5P_HDGC_48	IO_L11P_AD9P_48		
IO_L5N_HDGC_48	IO_L11N_AD9N_48		
IO_L6P_HDGC_48	IO_L12P_AD8P_48		
IO_L6N_HDGC_48	IO_L12N_AD8N_48		

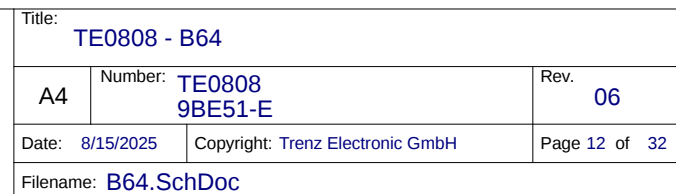
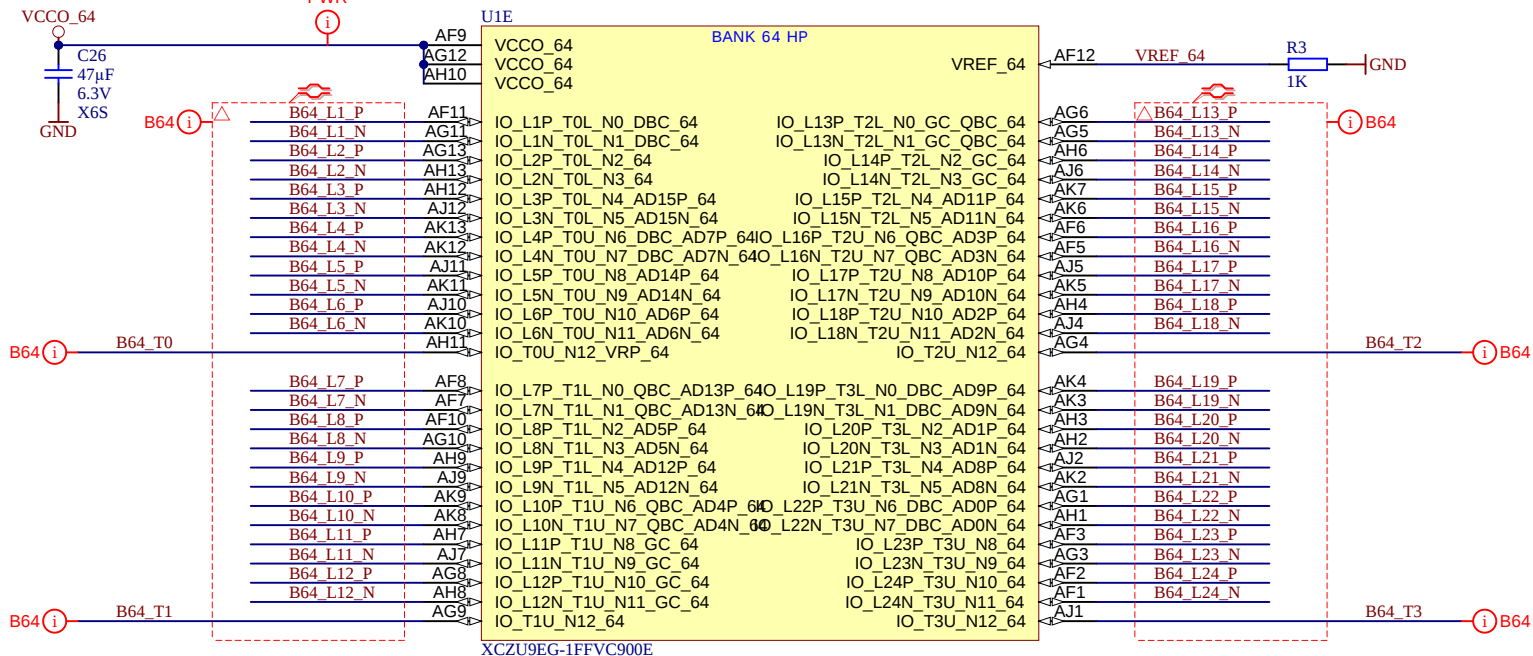
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F11	B48_L7_N
G10	B48_L8_P
F10	B48_L8_N
K13	B48_L9_P
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H12	B48_L10_P
G11	B48_L10_N
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J11	B48_L12_P
J10	B48_L12_N

B48

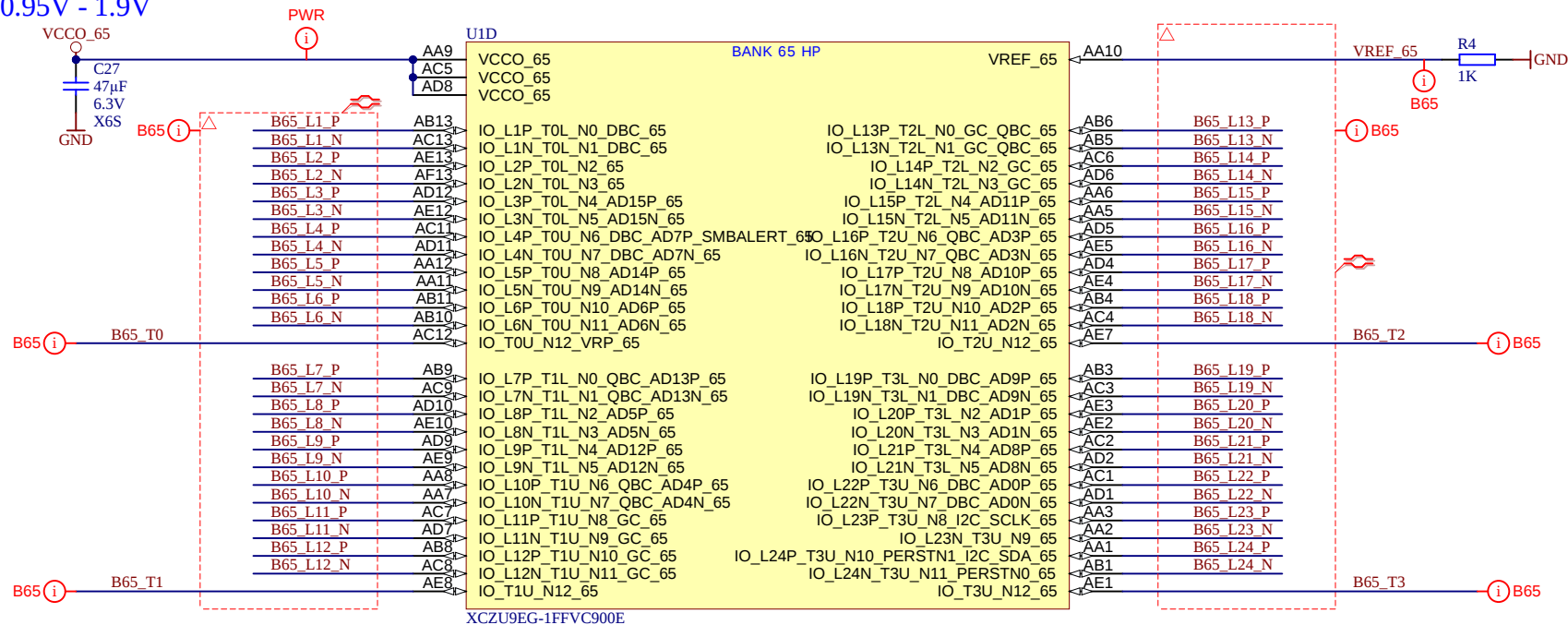
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Date: 8/15/2025	Copyright: Trenz Electronic GmbH	Page 10 of 32
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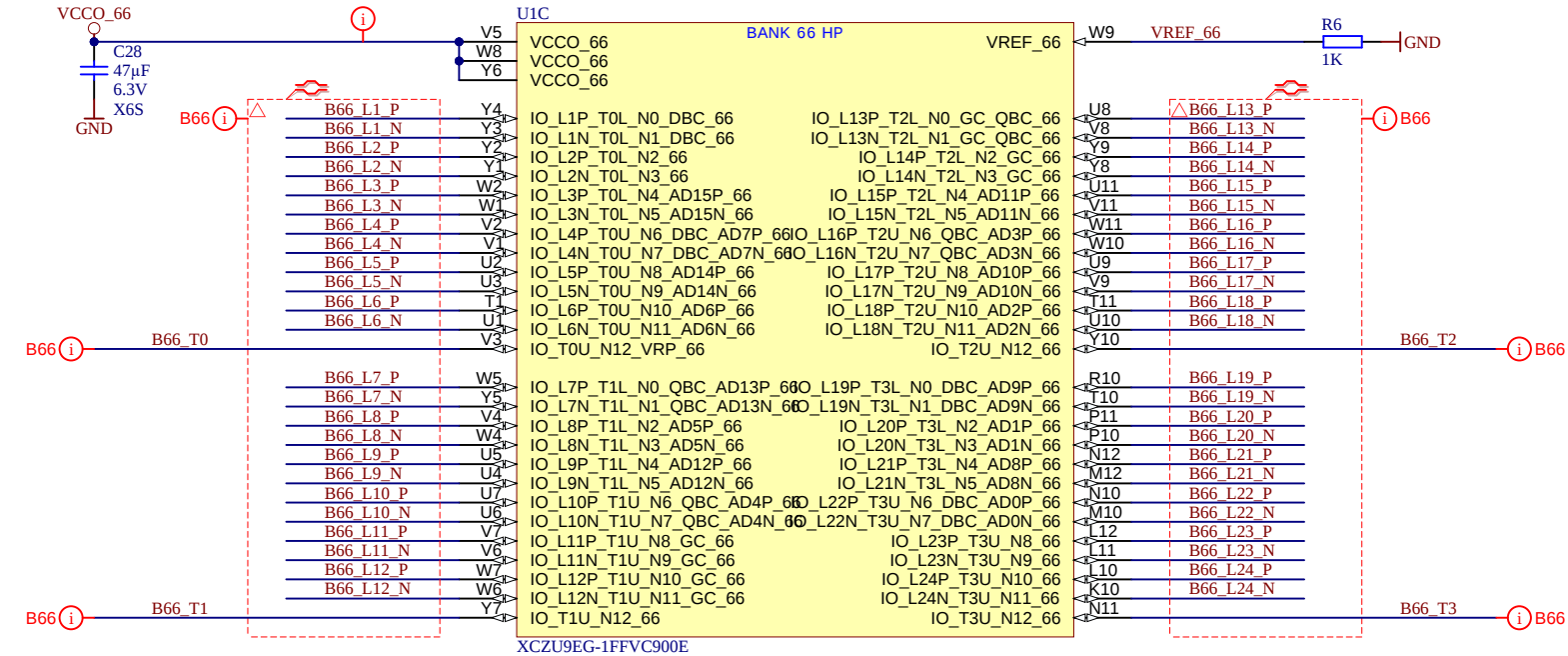
0.95V - 1.9V



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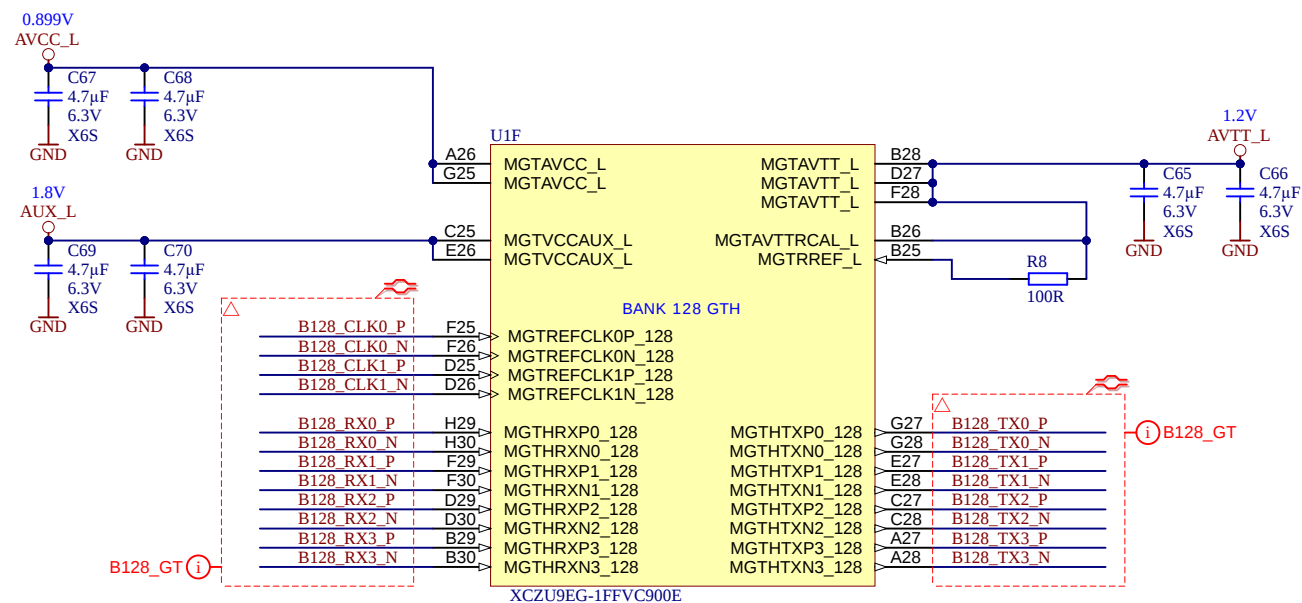
0.95V - 1.9V



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Filename: B66.SchDoc			



Filename: B GT.SchDoc



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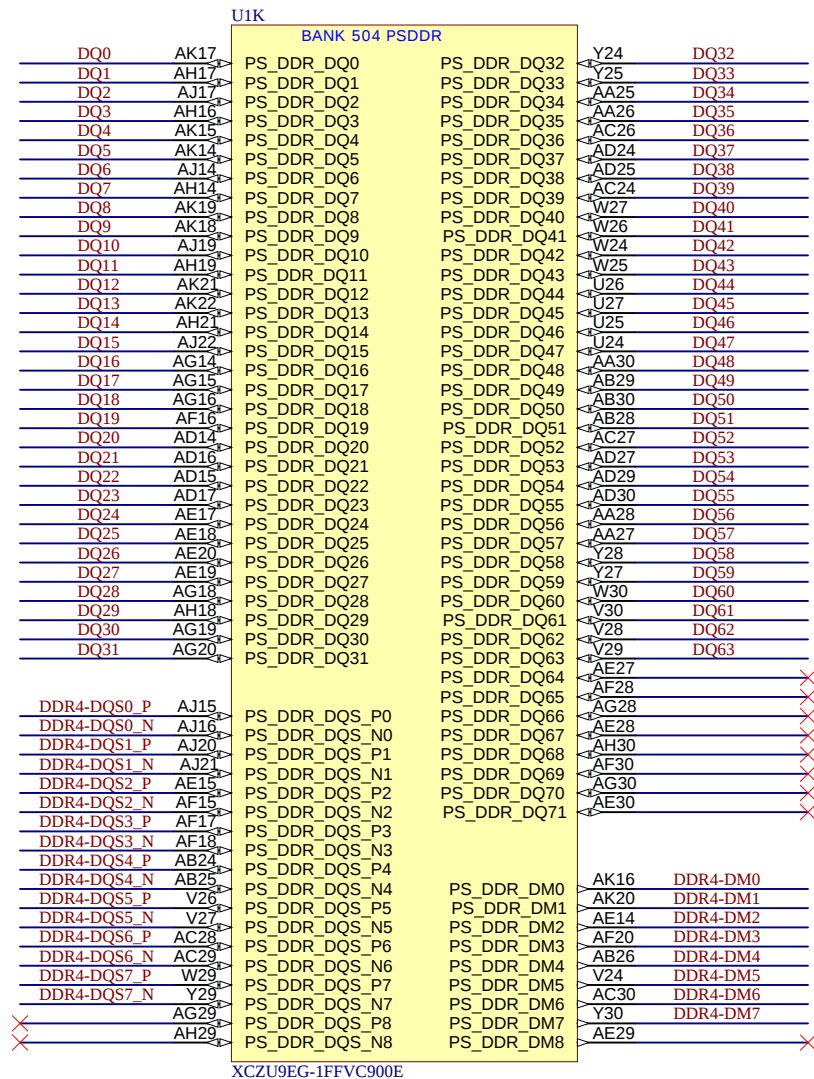
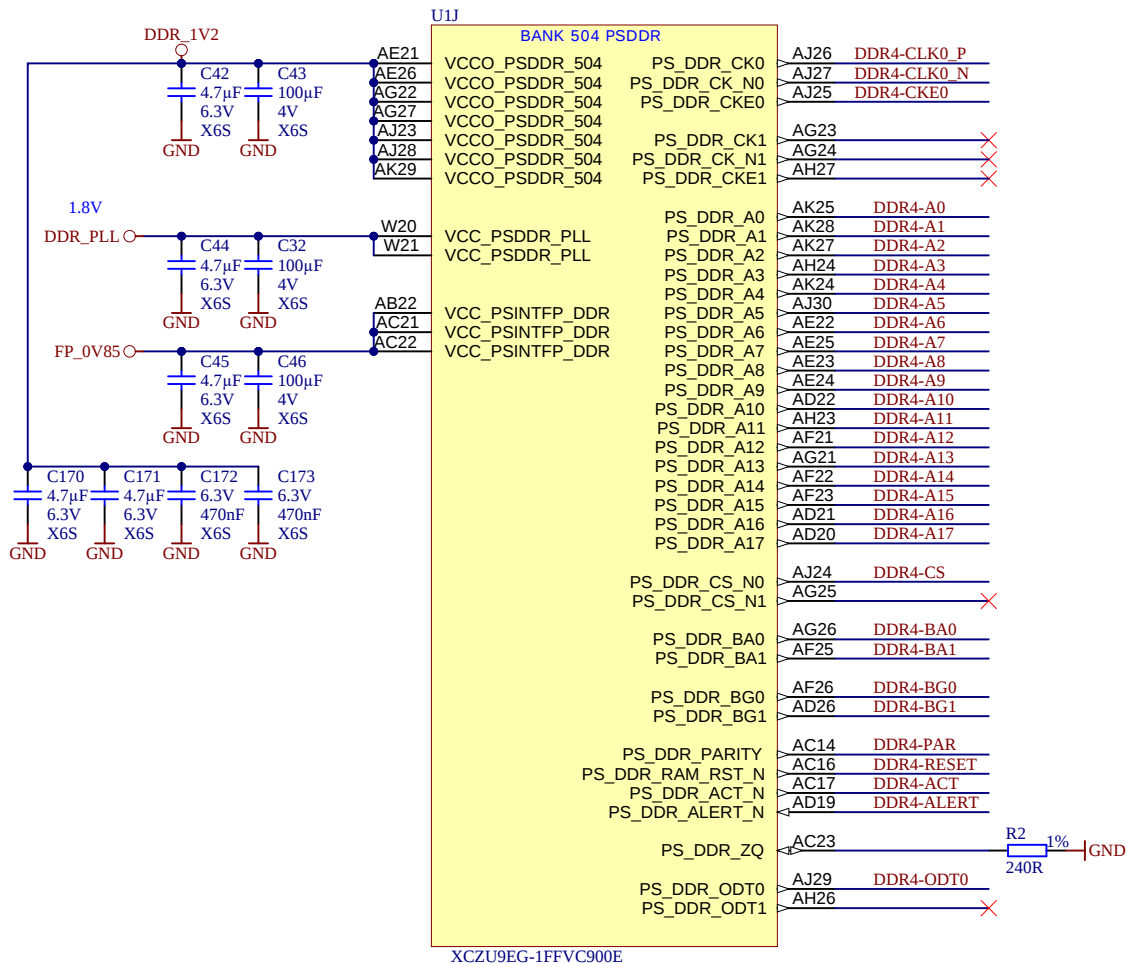
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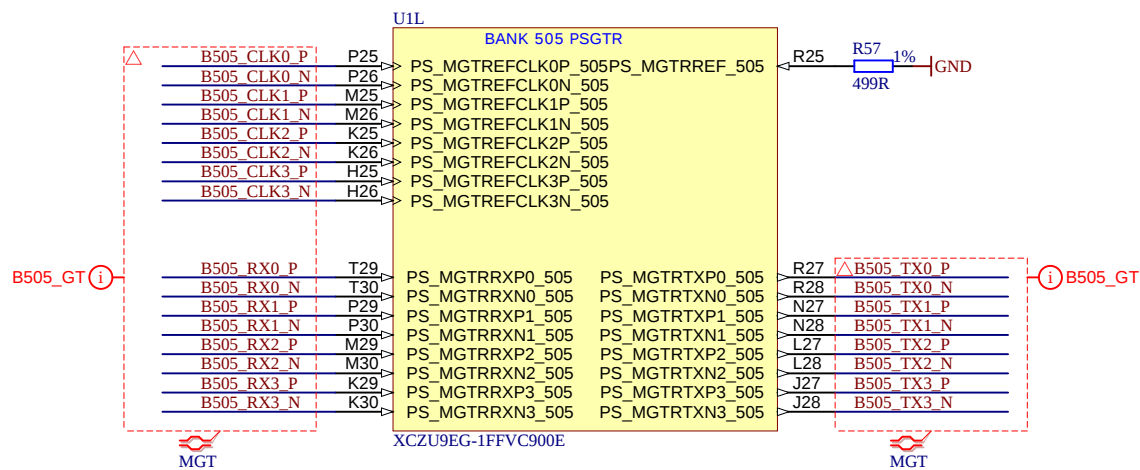
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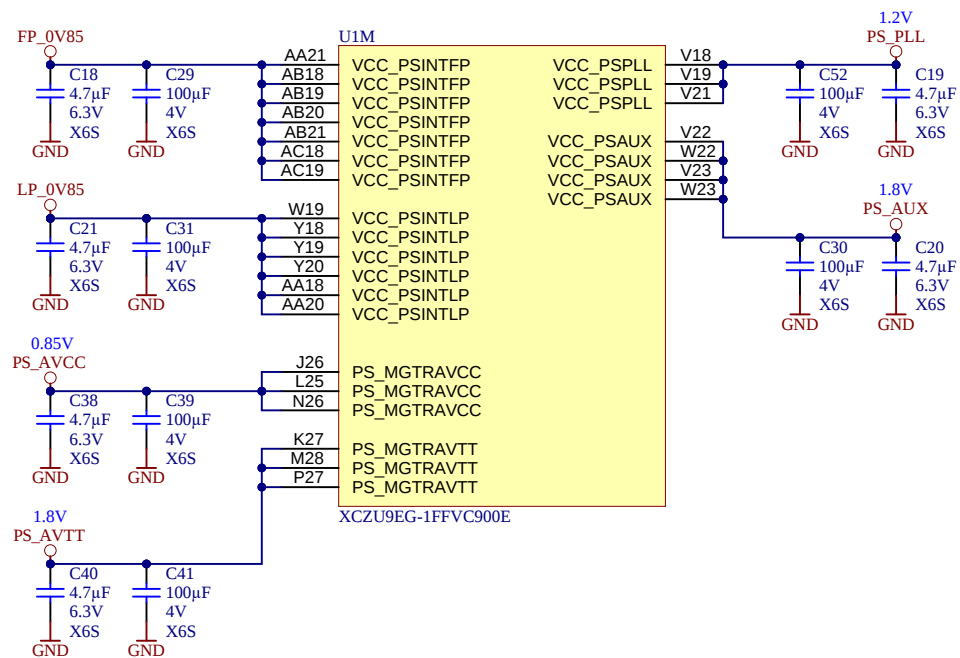
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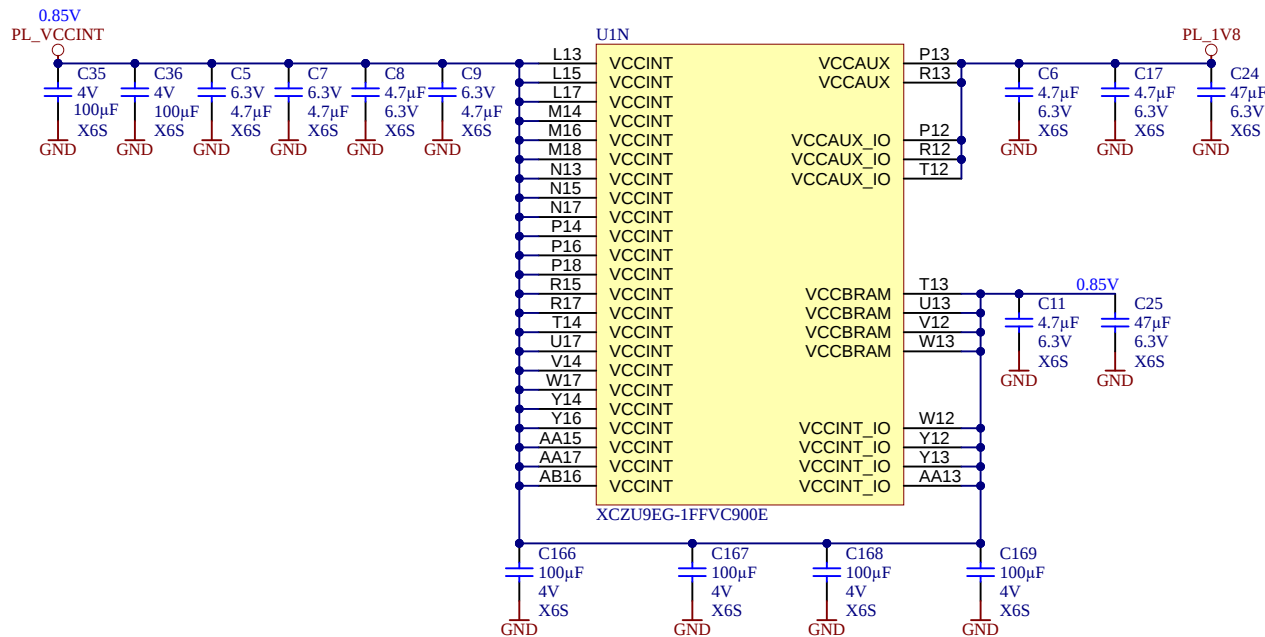
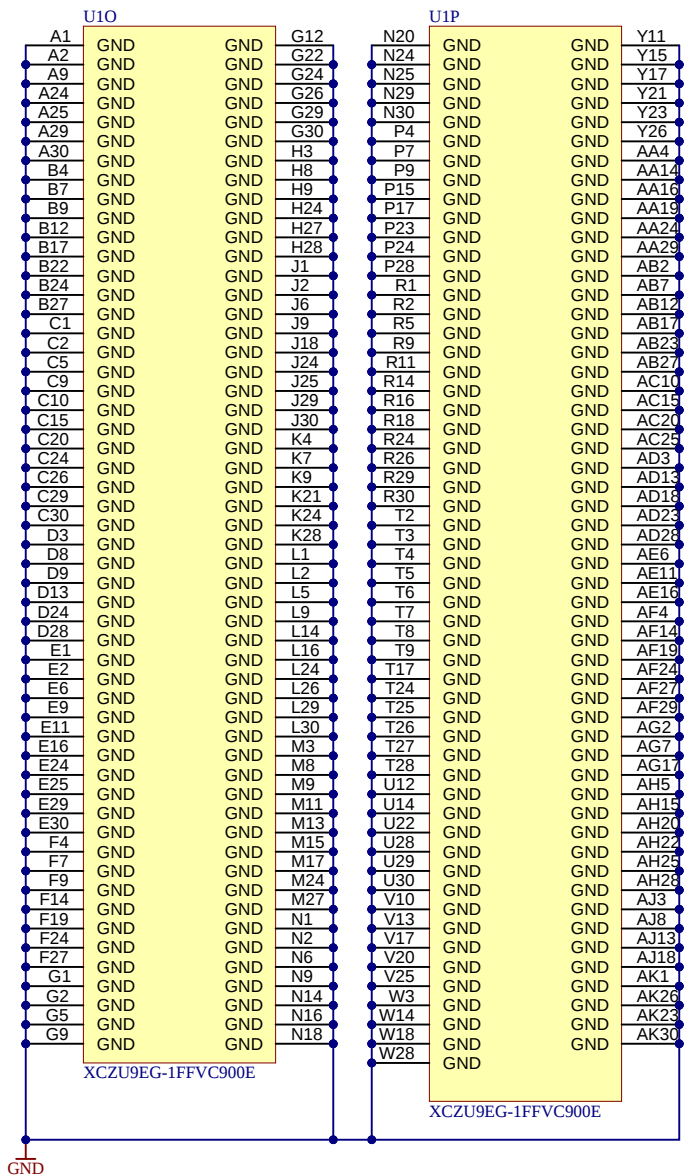
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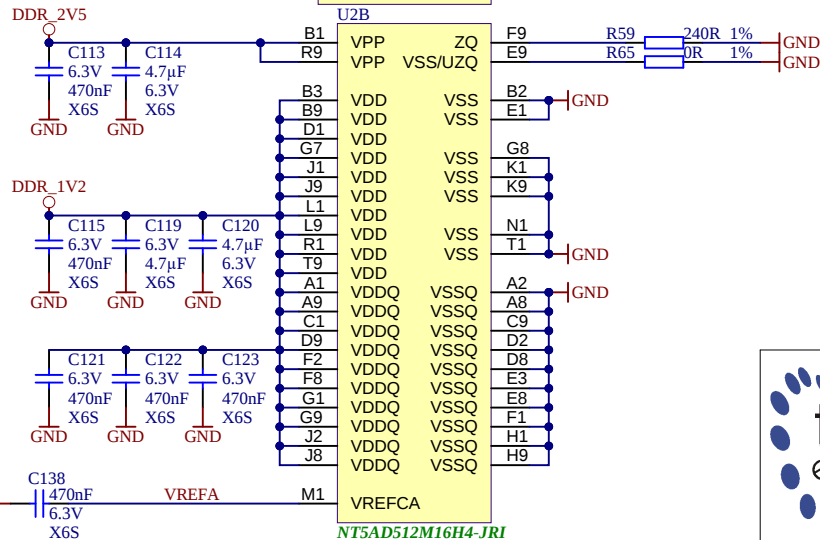
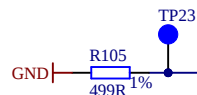
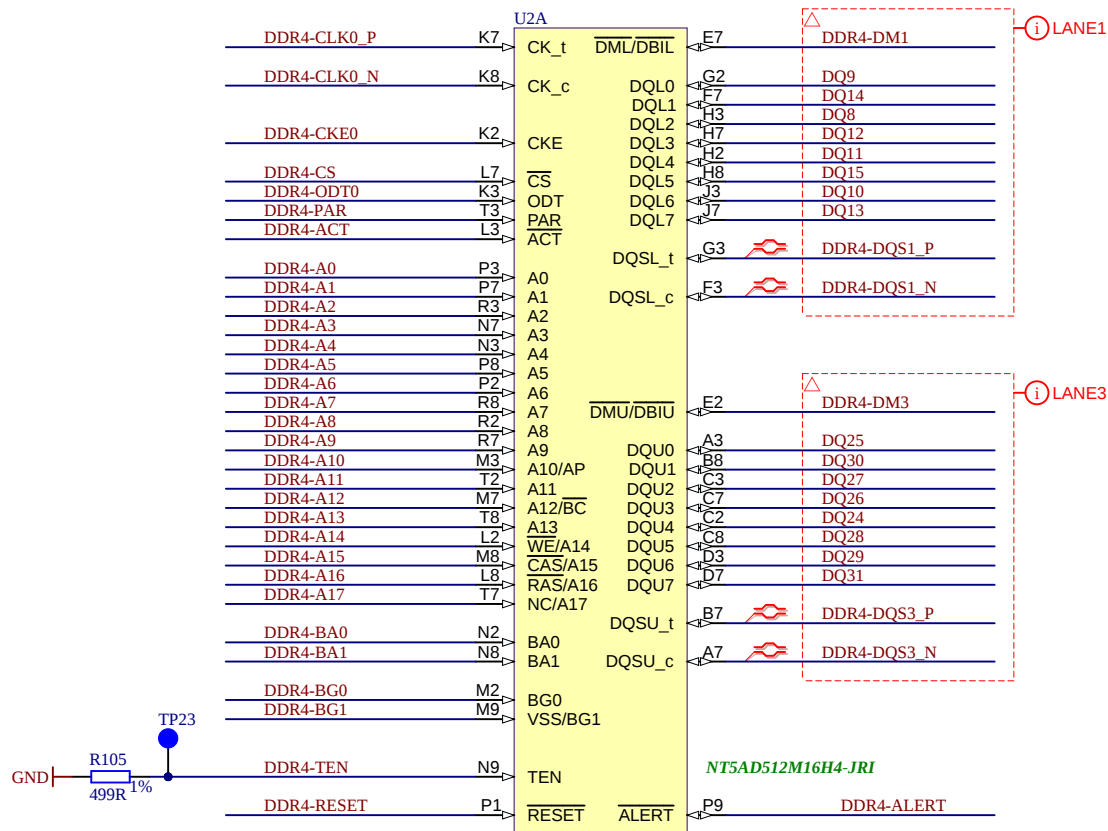
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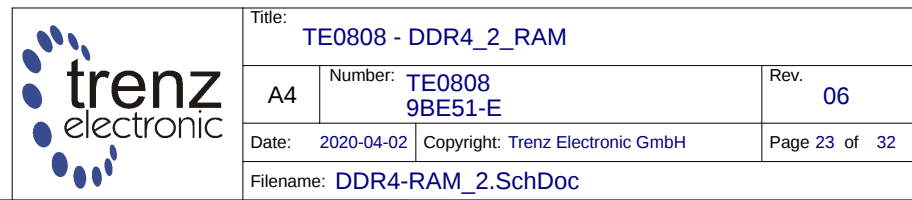
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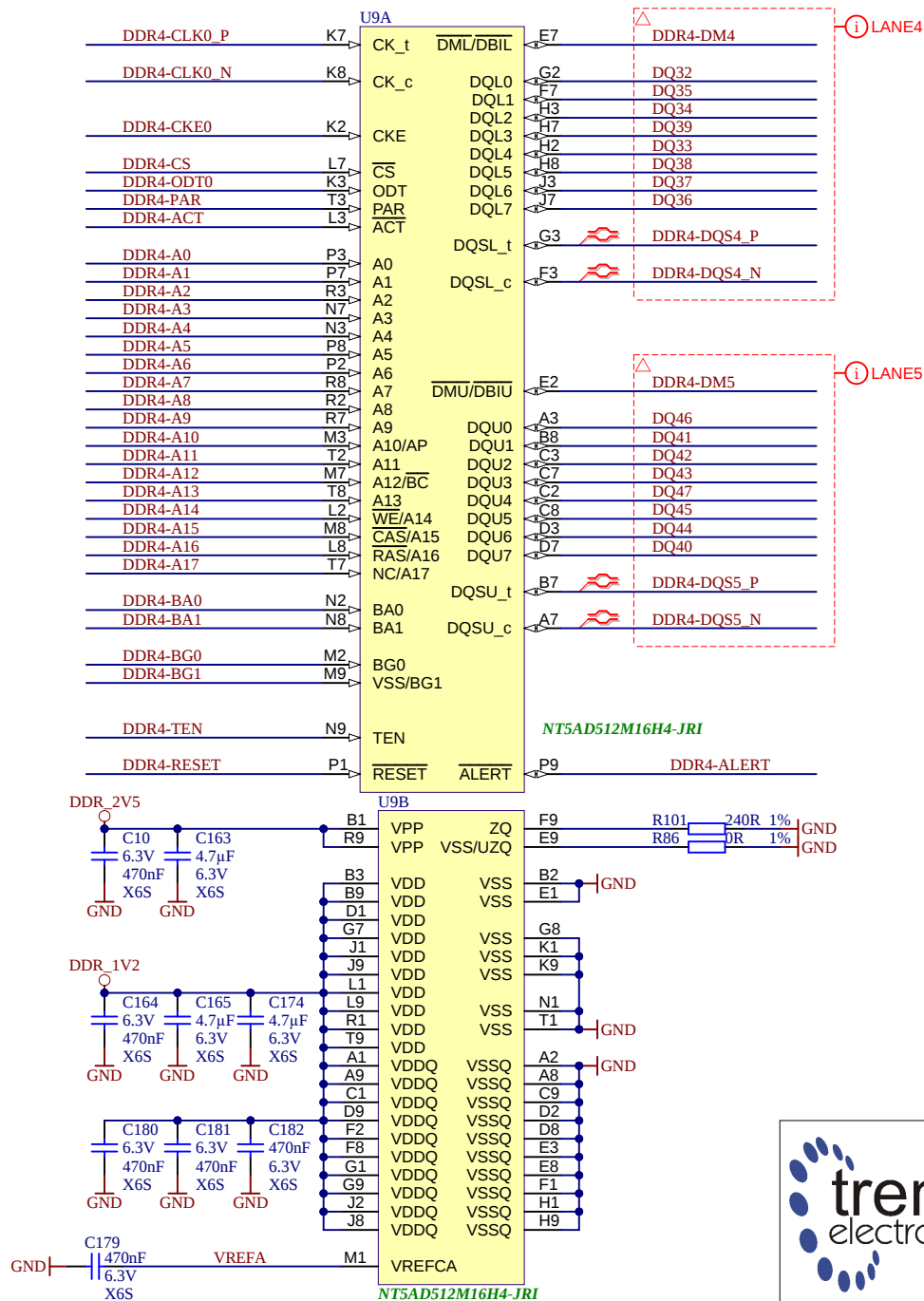
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C

C

D

D



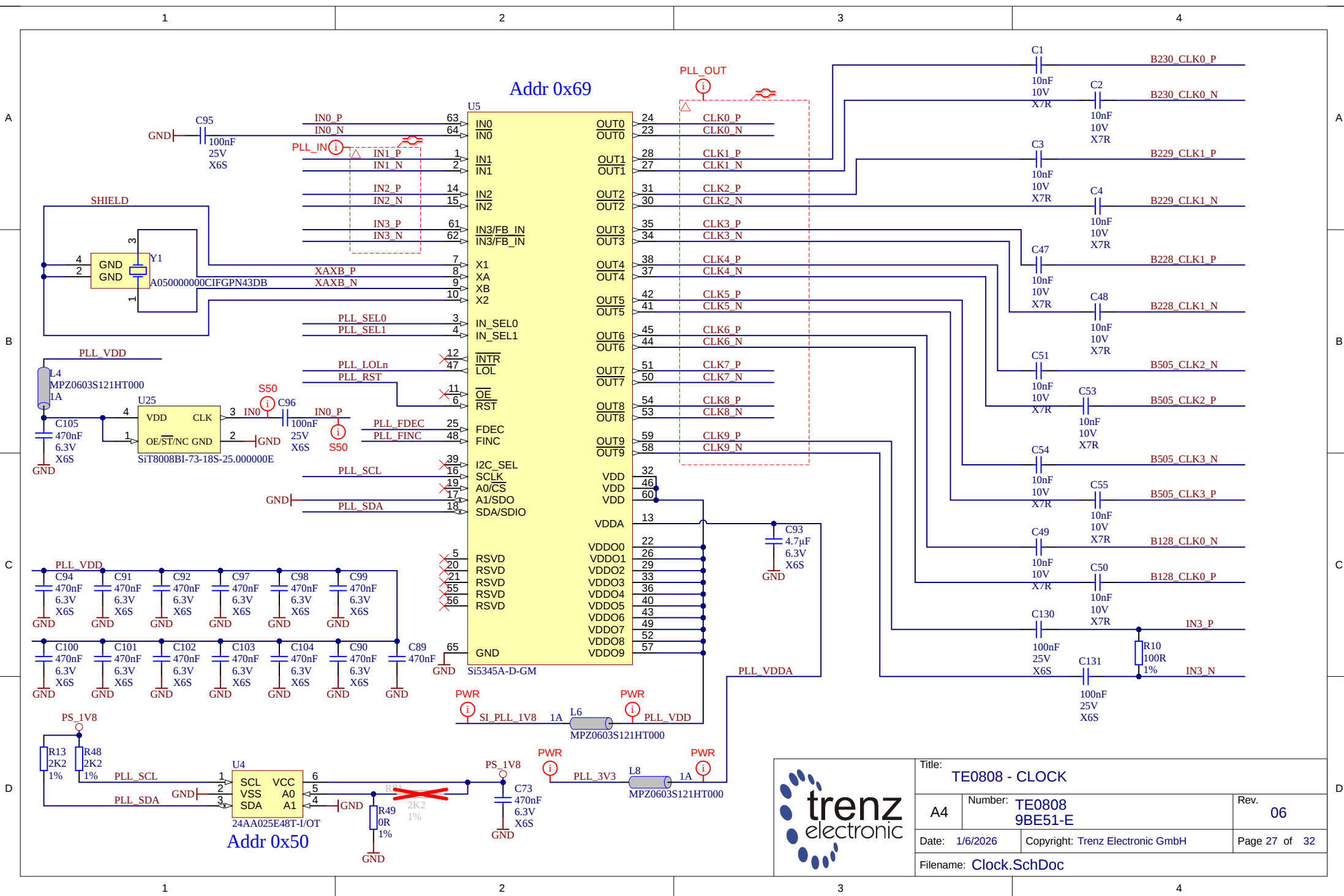
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A4	Number: TE0808 9BE51-E	Rev. 06
Date: 12/3/2025	Copyright: Trenz Electronic GmbH	Page 24 of 32
Filename: DDR4-RAM_3.SchDoc		

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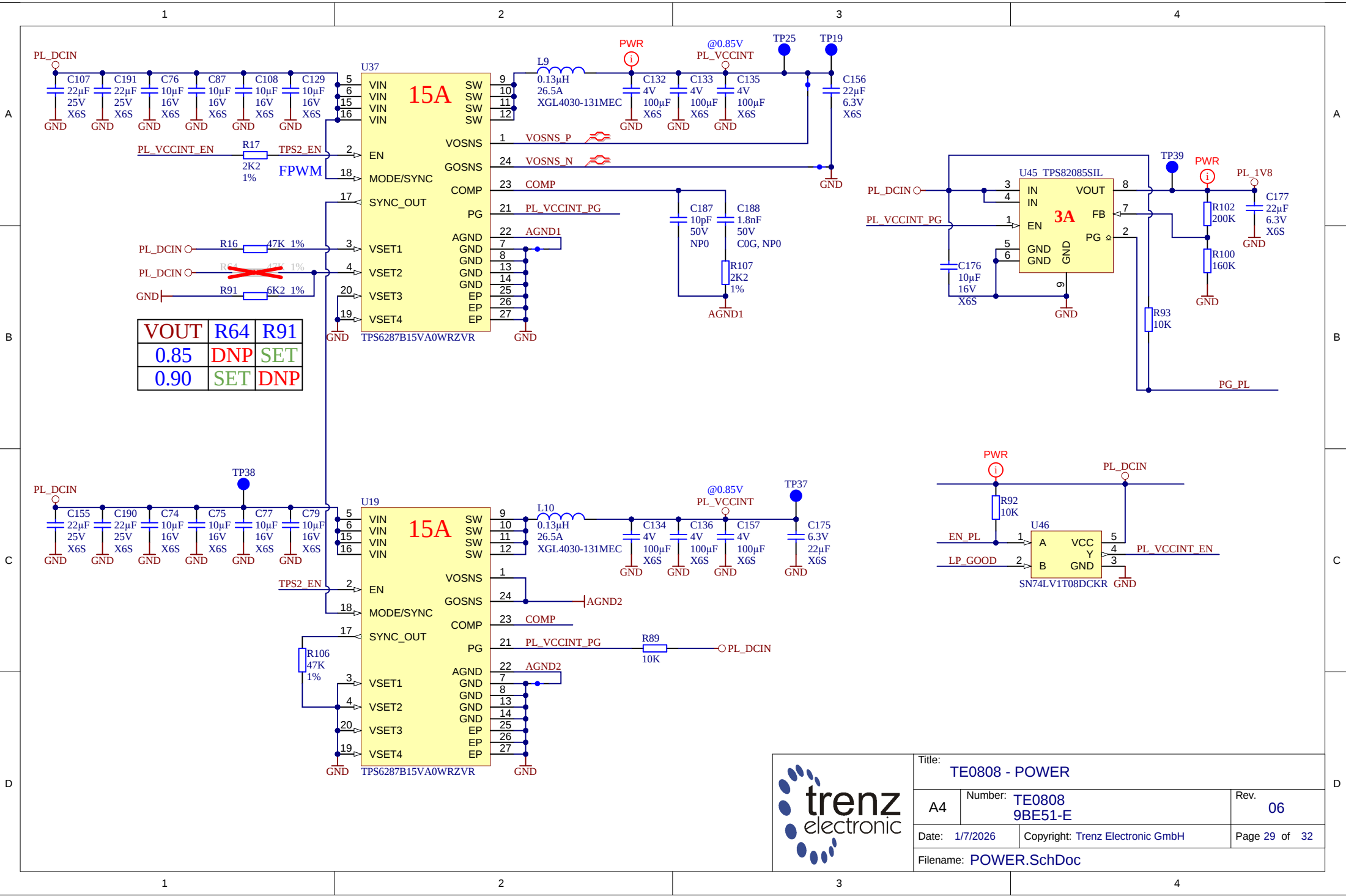
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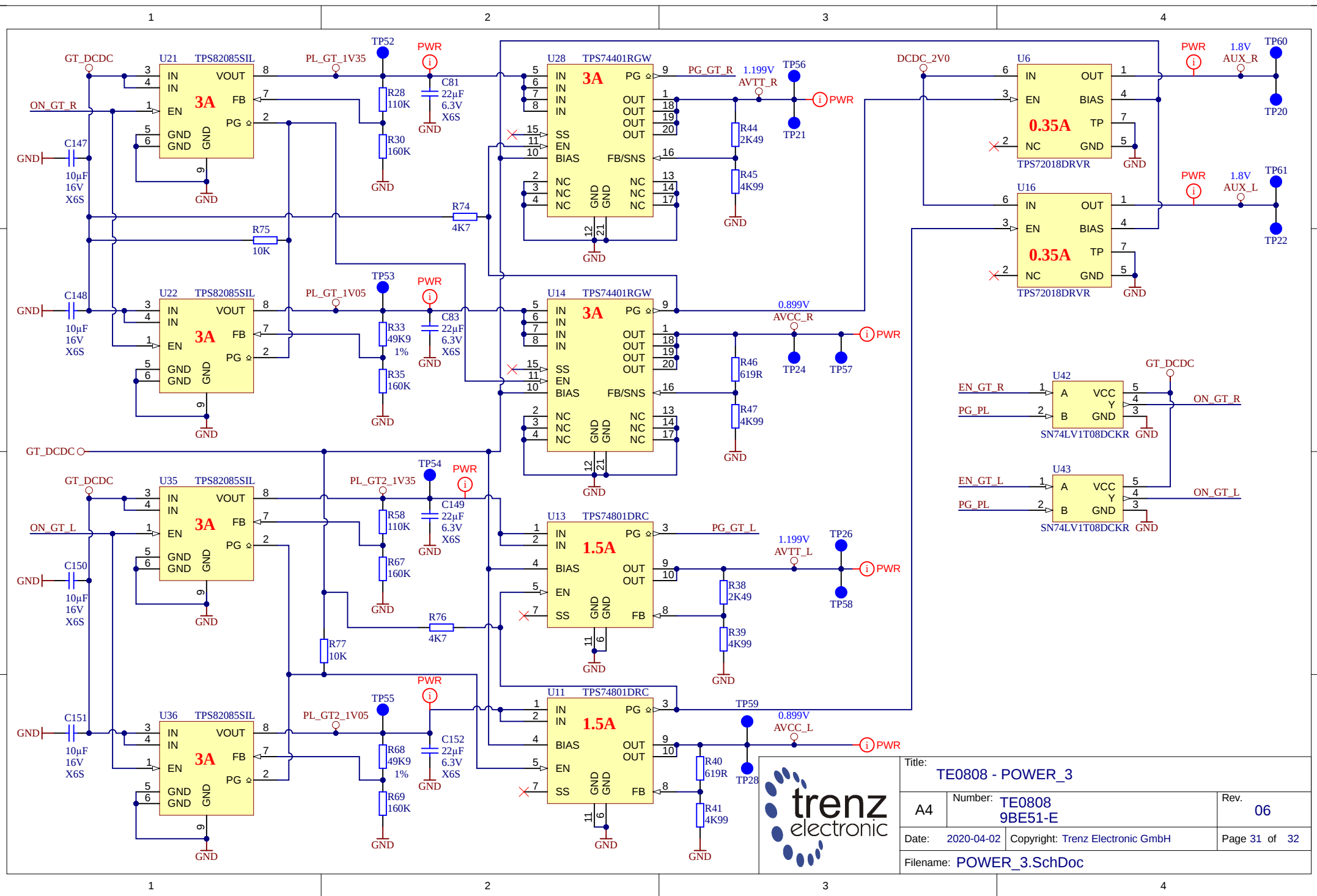
Rev.06

Date:1/7/2026

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Filename:POWER.SchDoc



Title: TE0808 - POWER_3		
A4	Number: TE0808 9BE51-E	Rev. 06
Date: 2020-04-02	Copyright: Trenz Electronic GmbH	
Filename: POWER_3.SchDoc		Page 31 of 32

