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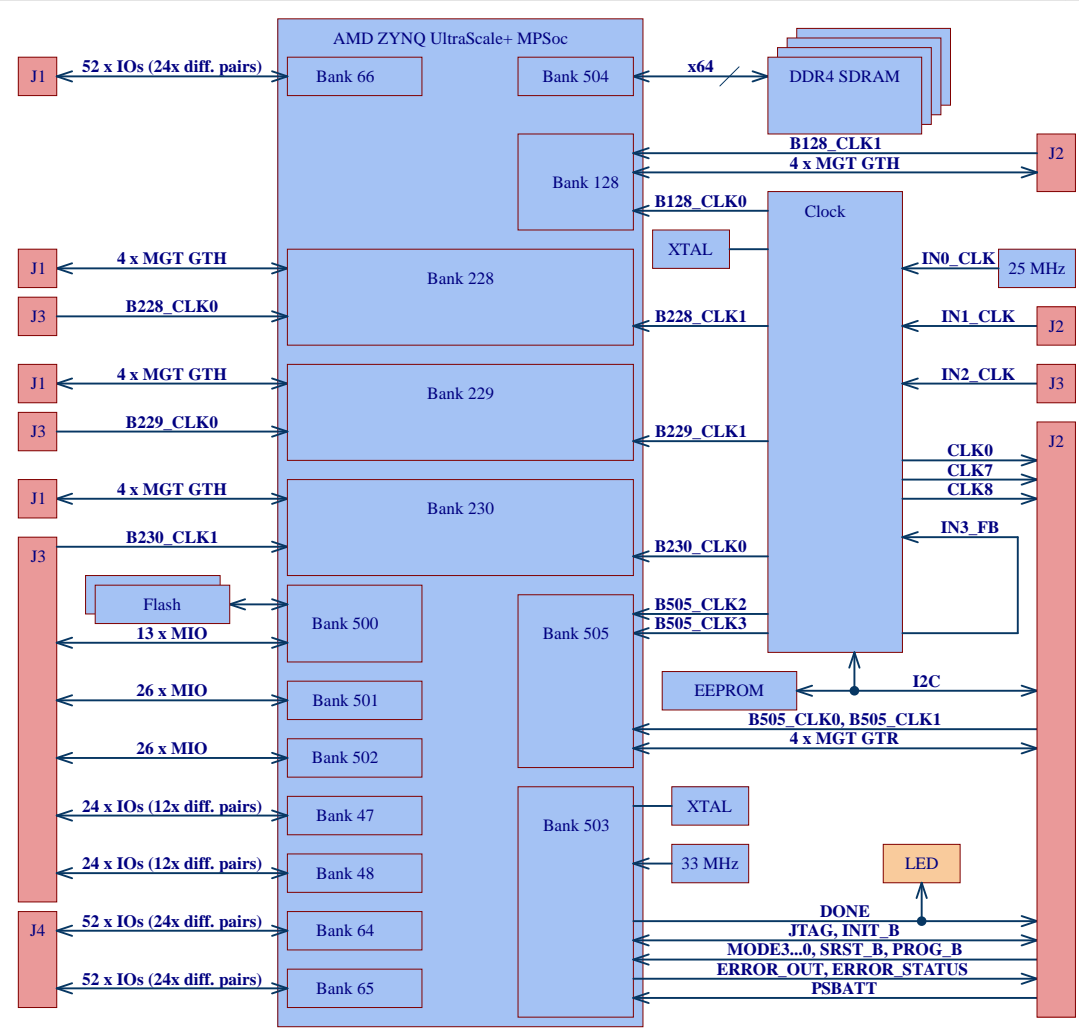
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Schematics and other handouts serve for informational purposes only!

|   |   |   |                            |
|---|---|---|----------------------------|
|  | Title: <b>TE0818 - Legal Notices</b>          |   |                            |
|   | A4  | Number: <b>TE0818<br/>BBI81-A</b>       | Rev. <b>02</b>             |
|   | Date: <b>19.09.2023</b>                       | Copyright: <b>Trenz Electronic GmbH</b> | Page <b>1</b> of <b>31</b> |
|   | Filename: <b>Legal Notices Modules.SchDoc</b> |   |                            |

| REV  | DATE       | Description   |       |
|------|------------|---|-------|
| -01  | 2021-05    | Initial revision  | VT    |
| -02  | 2023-10    | <ol style="list-style-type: none"> <li>Added capacitors <b>C178</b>, <b>C187</b>, <b>C188</b>, <b>C189</b> (470nF) to VTT net.</li> <li>Added <b>U18/U37</b> compensation network: <b>R119</b>, <b>C190</b>, <b>C191</b>. <b>R118</b> is optional jumper and is installed when using the internal compensation network. External compensation network is used by default.</li> <li>Connected all DDR4 TEN pins together and pulled them down with resistor <b>R120</b> and added testpoint <b>TP23</b>.</li> <li>Added testpoints <b>TP25</b>, <b>TP27</b>, <b>TP29</b>, <b>TP35</b>, <b>TP37</b>... <b>TP79</b>.</li> <li>Changed capacitor <b>C112</b> size from 0402 to 0201 and voltage rating from 16 V to 10 V.</li> <li>Changed ferrid beads from MPZ0603S121HT000 to BLM15PX800SZ1D for <b>L1</b>, <b>L2</b>, <b>L3</b>, <b>L4</b>, <b>L5</b>, and <b>L7</b>.</li> <li>Changed ferrid beads from MPZ1608S221A to BLM15PX800SZ1D for <b>L6</b> and <b>L8</b>.</li> <li>Added diode <b>D2</b> between <b>U41</b> pin 3 net <b>MR</b> and voltage rail <b>3.3VIN</b>.</li> <li>Modified trace length.</li> <li>Updated documentation overviews.</li> </ol> | VY/ED |
| -02a | 2023-10-12 | 1. Changed inductors <b>L1</b> ... <b>L8</b> from BLM15PX800SZ1D to BLM15PX800SN1D.   | ED    |
| -02b | 2024-06-05 | 1. Changed the value of resistor <b>R119</b> from 33.2 kOhm to 15 kOhm to improve the stability of <b>U19</b> / <b>U37</b> .  | VY    |

|   |  |   |   |
|---|--|---|---|
|  |  | Title: <b>TE0818 - Revision History</b> |   |
|   |  | A4                                      | Number: <b>TE0818</b><br><b>BBI81-A</b> |
| Date: <b>05.06.2024</b>   |  | Copyright: <b>Trenz Electronic GmbH</b> |   |
| Filename: <b>Revision_Changes.SchDoc</b>  |  | Page <b>2</b> of <b>31</b>              |   |



### Supported Voltage Ranges:

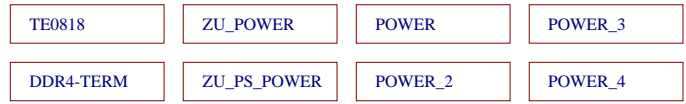
| Power Rail | Direction | Range         | Tolerance | Description       | Note  |
|------------|-----------|---------------|-----------|-------------------|---|
| 3.3VIN     | IN        | 3.3V          | +/- 5 %   | Micromodule Power | Management voltage rail, supplied by power rail   |
| PL_DCIN    | IN        | 3.3V          | +/- 5 %   | Micromodule Power | Programmable Logic, supplied by power rail        |
| LP_DCDC    | IN        | 3.3V          | +/- 3 %   | Micromodule Power | Low-Power Domain, supplied by power rail          |
| GT_DCDC    | IN        | 3.3V          | +/- 3 %   | Micromodule Power | GTH Transceiver, supplied by power rail           |
| DCDCIN     | IN        | 3.3V          | +/- 5 %   | Micromodule Power | Full-Power Domain and GTR, supplied by power rail |
| VCCO_64    | IN        | 1.0 V - 1.8 V | +/- 3 %   | HP IO Bank 64     | Supplied by external power rail via B2B connector |
| VCCO_65    | IN        | 1.0 V - 1.8 V | +/- 3 %   | HP IO Bank 65     | Supplied by external power rail via B2B connector |
| VCCO_66    | IN        | 1.0 V - 1.8 V | +/- 3 %   | HP IO Bank 66     | Supplied by external power rail via B2B connector |
| VCCO_47    | IN        | 1.2 V - 3.3 V | +/- 3 %   | HD IO Bank 47     | Supplied by external power rail via B2B connector |
| VCCO_48    | IN        | 1.2 V - 3.3 V | +/- 3 %   | HD IO Bank 48     | Supplied by external power rail via B2B connector |
| PSBATT     | IN        | 1.2 V - 1.5 V | -         | RTC / BBRAM       | Supplied by external power rail via B2B connector |
| PLL_3V3    | IN        | 3.3 V         | +/- 3 %   | Power for PLL     | Supplied by external power rail via B2B connector |
| PL_1V8     | OUT       | 1.8 V         | +/- 3 %   | Power for Carrier | Micromodule: Programmable Logic                   |
| PS_1V8     | OUT       | 1.8 V         | +/- 3 %   | Power for Carrier | Micromodule: Processing System                    |
| DDR_1V2    | OUT       | 1.2 V         | +/- 3 %   | Power for Carrier | Micromodule: PS DDR I/O Supply                    |

### I2C Address:

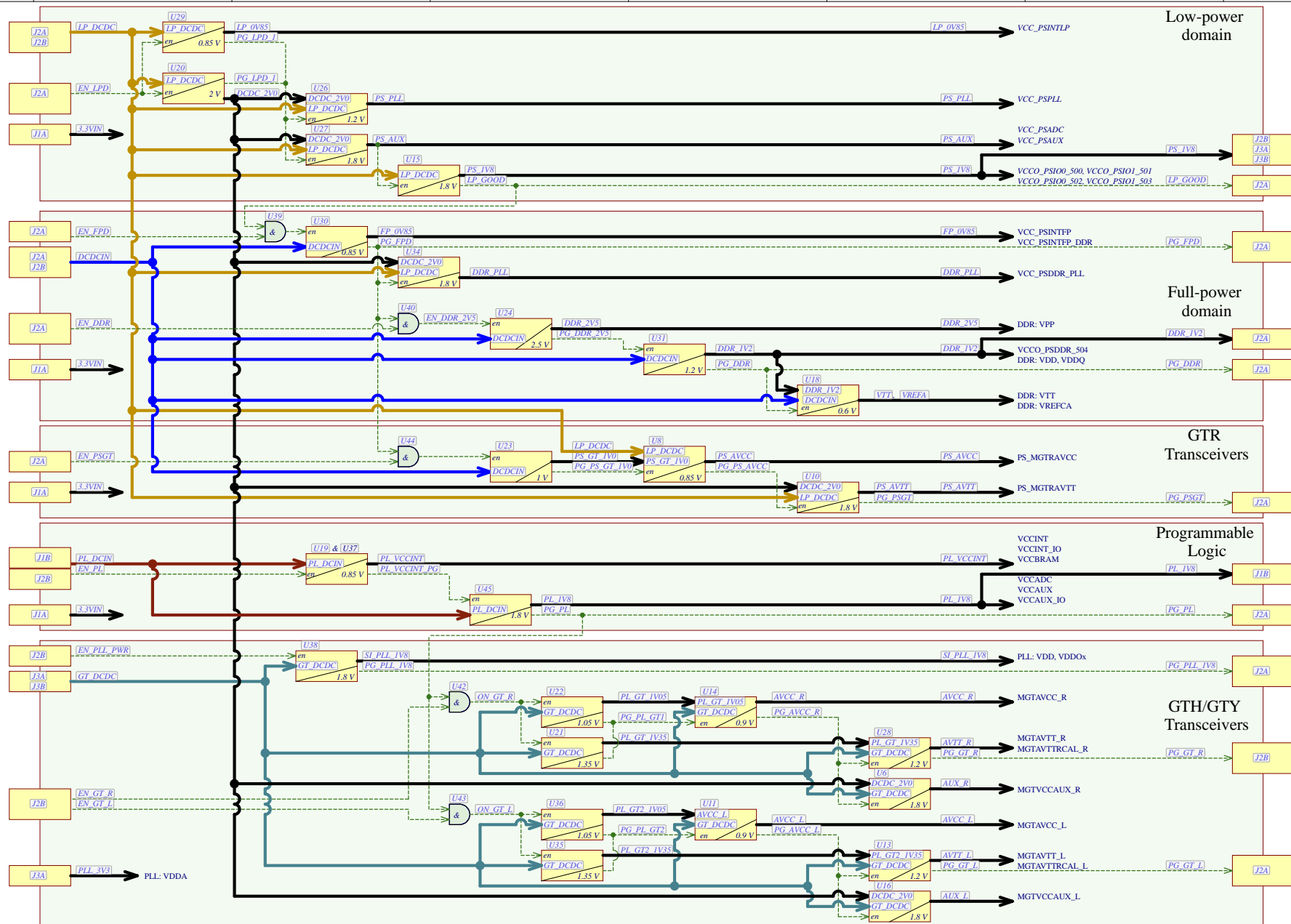
| Device           | I2C ADDR | Note |
|------------------|----------|------|
| PLL <b>U5</b>    | 0x69     | -    |
| EEPROM <b>U4</b> | 0x50     | -    |

### Legend:

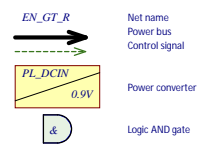
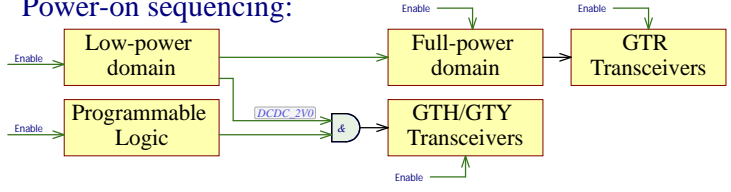
- B2B Connector
- LED Interface
- On-board Components



|   |   |                            |
|---|---|----------------------------|
| Title: <b>TE0818 - System Overview</b>  |   |                            |
| A4                                      | Number: <b>TE0818 BBI81-A</b>           | Rev. <b>02</b>             |
| Date: <b>19.09.2023</b>                 | Copyright: <b>Trenz Electronic GmbH</b> | Page <b>3</b> of <b>31</b> |
| Filename: <b>TE0818-Overview.SchDoc</b> |   |                            |



**Power-on sequencing:**



|                                |                                  |              |
|--------------------------------|----------------------------------|--------------|
| Title: TE0818 - Power Diagram  |                                  |              |
| A3                             | Number: TE0818<br>BB181-A        | Rev. 02      |
| Datum: 19.09.2023              | Copyright: Trenz Electronic GmbH | Page 4 of 31 |
| Filename: Power_Diagram.SchDoc |                                  |              |

Special notes:

Serial  
Serialnummer 6,3 x 6.3mm  
LOGO1

TE Logo PRINT Layer

LOGO PRINT  
MECH1

TE Address Overlay

LOGO ADDRESS  
CE

CE Logo on Top Overlay

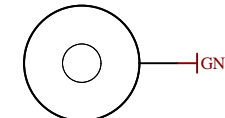
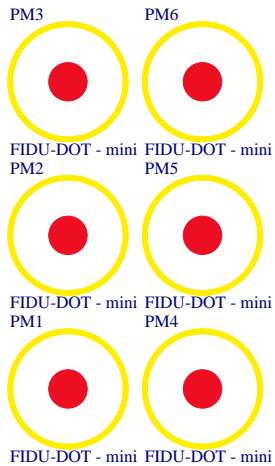
CE-TOPOVERLAY  
RoHS

RoHS Logo on Top Overlay

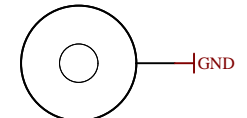
RoHS-TOPOVERLAY  
WEEE

WEEE Logo on Top Overlay

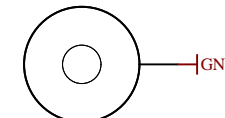
WEEE-TOPOVERLAY



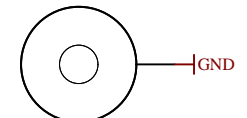
Mount.Hole 3.2mm für Unterlegscheibe



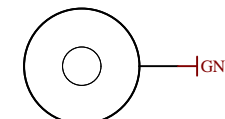
Mount.Hole 3.2mm für Unterlegscheibe



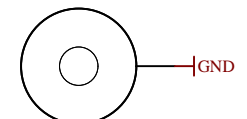
Mount.Hole 3.2mm für Unterlegscheibe



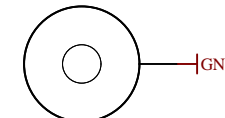
Mount.Hole 3.2mm für Unterlegscheibe



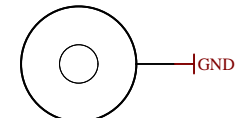
Mount.Hole 3.2mm für Unterlegscheibe



Mount.Hole 3.2mm für Unterlegscheibe



Mount.Hole 3.2mm für Unterlegscheibe



Mount.Hole 3.2mm für Unterlegscheibe

|                   |            |
|-------------------|------------|
| Design drawn by:  | ED         |
| Checked by:       | VY         |
| Assembly variant: | BBI81-A    |
| Created by:       | ED         |
| Modified by:      | ED         |
| Modified at:      | 2023-09-20 |



|                                |   |                            |
|--------------------------------|---|----------------------------|
| Title: <b>TE0818</b>           |   |                            |
| A4                             | Number: <b>TE0818</b><br><b>BBI81-A</b> | Rev. <b>02</b>             |
| Date: <b>09.10.2023</b>        | Copyright: <b>Trenz Electronic GmbH</b> | Page <b>5</b> of <b>31</b> |
| Filename: <b>TE0818.SchDoc</b> |   |                            |

1

2

3

4

A

A

B

B

C

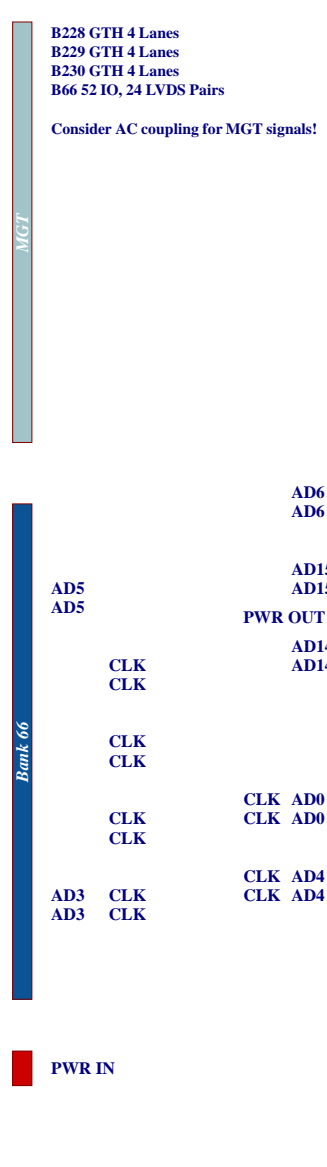
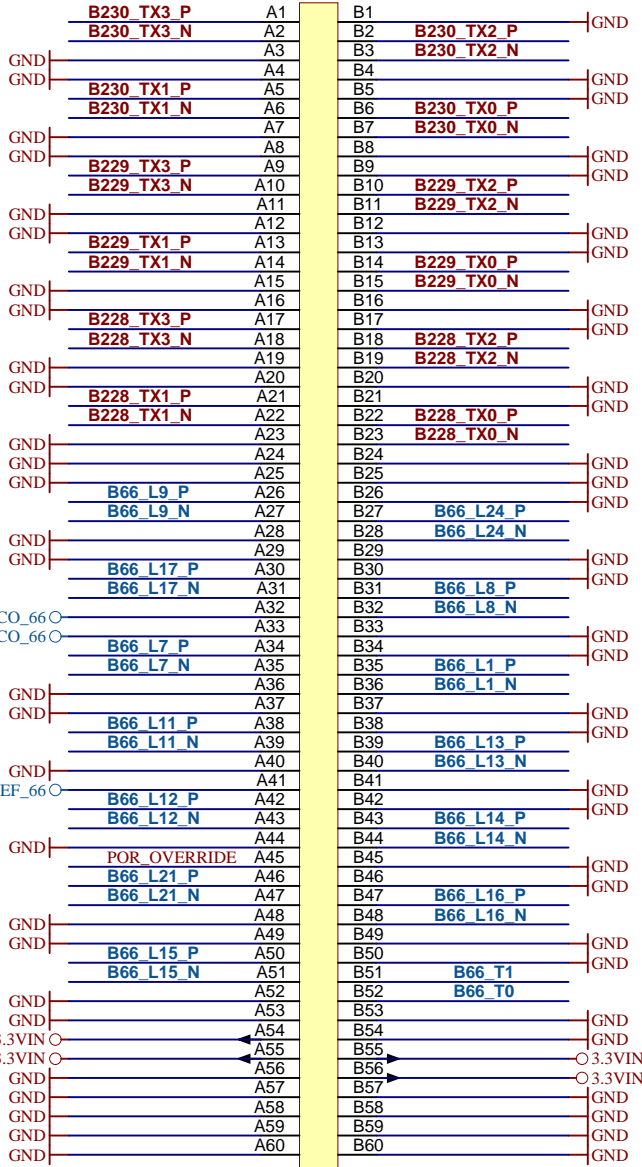
C

D

D

J1A ADM6-60-01.5-L-4-2-FR

J1B ADM6-60-01.5-L-4-2-FR



B228 GTH 4 Lanes  
 B229 GTH 4 Lanes  
 B230 GTH 4 Lanes  
 B66 52 IO, 24 LVDS Pairs

Consider AC coupling for MGT signals!

MGT

MGT

MGT

MGT

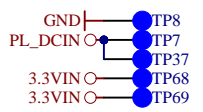
Bank 66

Bank 66

Bank 66

Bank 66

- Bank 47 HD 0..VCC047
- Bank 48 HD 0..VCC048
- Bank 64 HP 0..VCC064
- Bank 65 HP 0..VCC065
- Bank 66 HP 0..VCC066



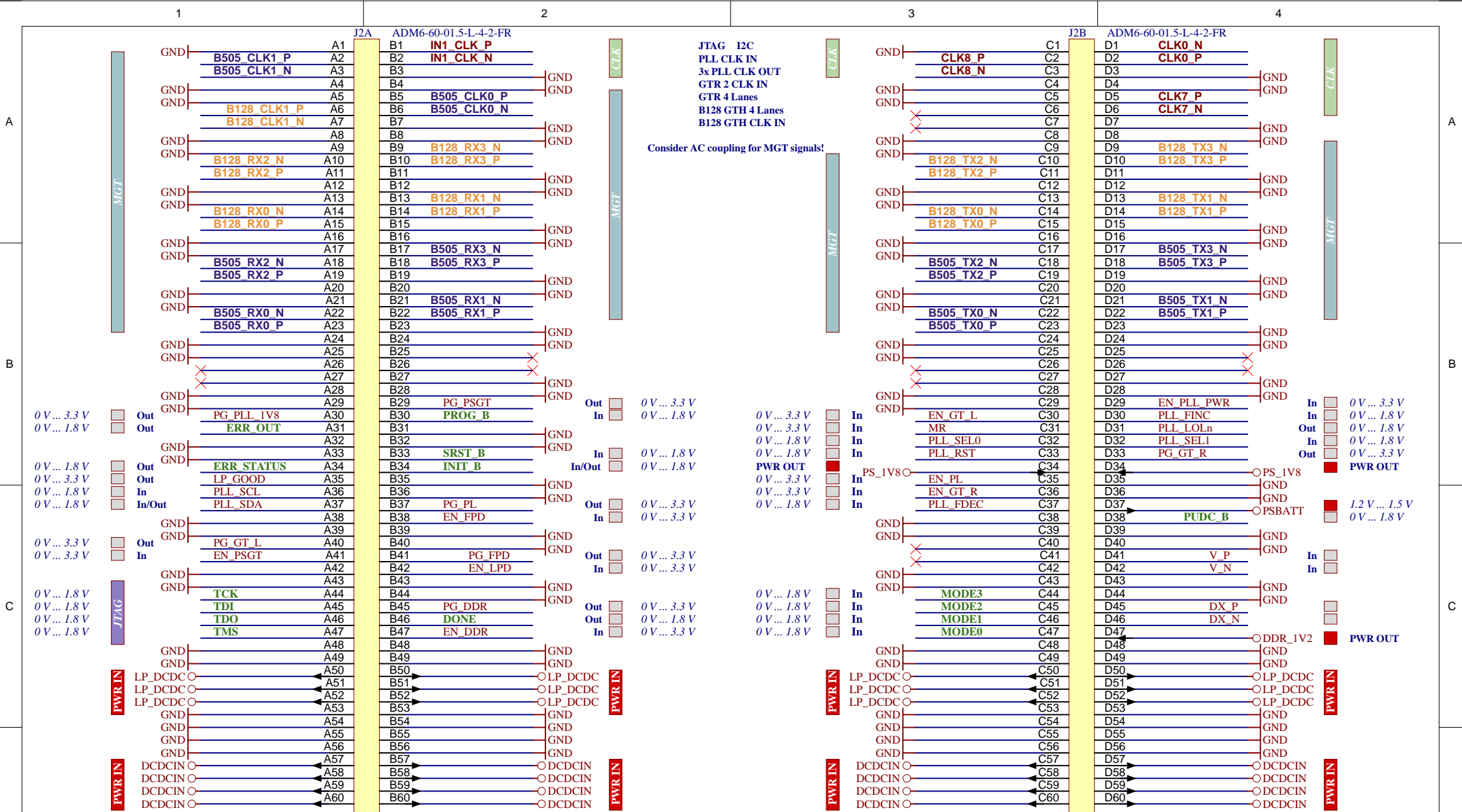
|                              |                                  |              |
|------------------------------|----------------------------------|--------------|
| Title: TE0818 - Connector J1 |                                  |              |
| A4                           | Number: TE0818<br>BBI81-A        | Rev. 02      |
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| Filename: J1.SchDoc          |                                  |              |

1

2

3

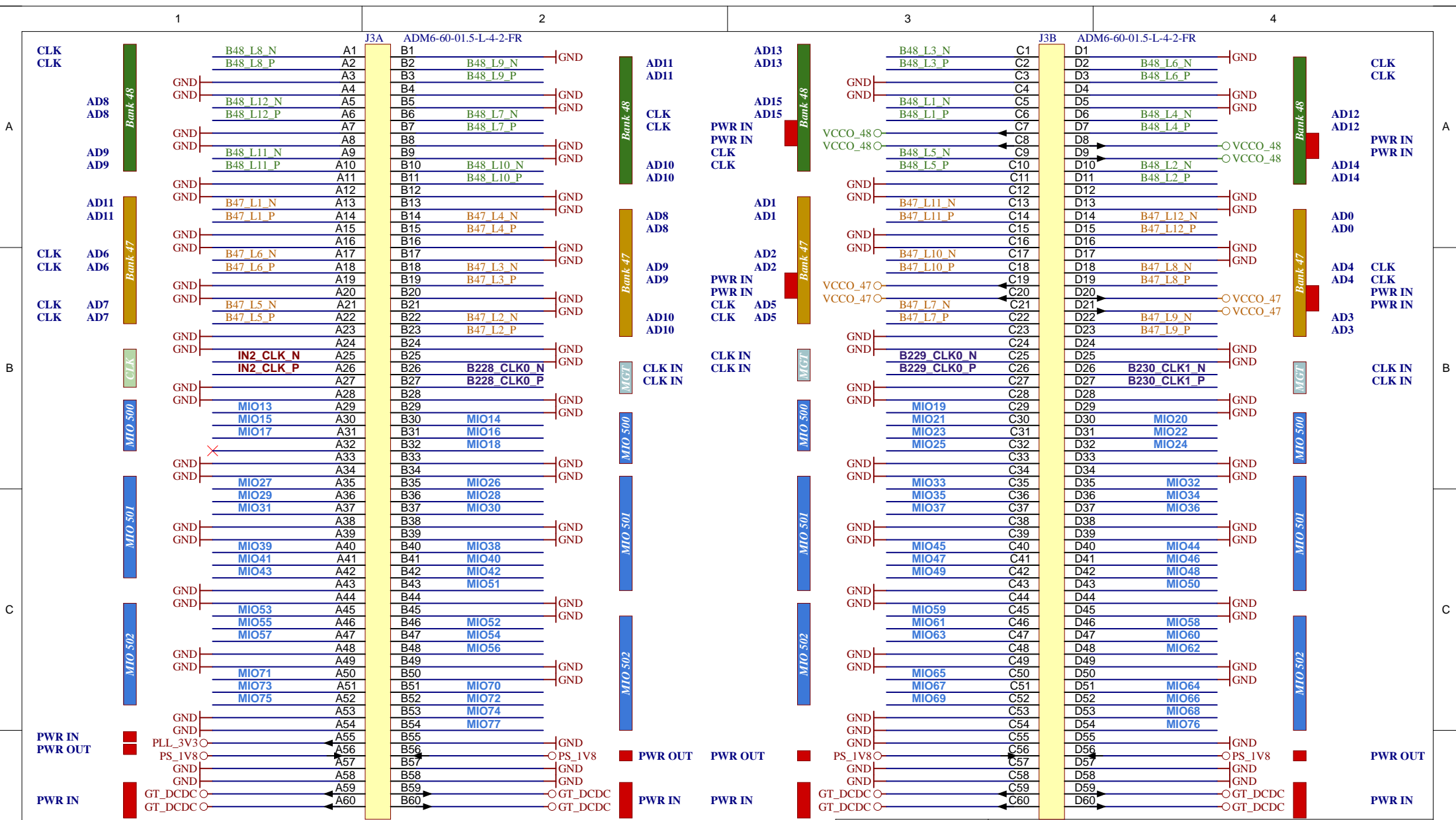
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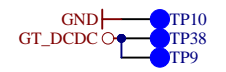
- Bank 47 HD 0..VCC047
- Bank 48 HD 0..VCC048
- Bank 64 HP 0..VCC064
- Bank 65 HP 0..VCC065
- Bank 66 HP 0..VCC066



|                              |                                  |              |
|------------------------------|----------------------------------|--------------|
| Title: TE0818 - Connector J2 |                                  |              |
| A4                           | Number: TE0818<br>BBI81-A        | Rev. 02      |
| Date: 09.10.2023             | Copyright: Trenz Electronic GmbH | Page 7 of 31 |
| Filename: J2.SchDoc          |                                  |              |



- Bank 47 HD ..VCC047
  - Bank 48 HD ..VCC048
  - Bank 64 HP ..VCC064
  - Bank 65 HP ..VCC065
  - Bank 66 HP ..VCC066
- B47 24 IO, 12 LVDS Pairs  
 B48 24 IO, 12 LVDS Pairs  
 B228 GTH CLK IN  
 B229 GTH CLK IN  
 B230 GTH CLK IN  
 65 MIO  
 PLL CLK IN



|                              |                                  |              |
|------------------------------|----------------------------------|--------------|
| Title: TE0818 - Connector J3 |                                  |              |
| A4                           | Number: TE0818<br>BBI81-A        | Rev. 02      |
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| Filename: J3.SchDoc          |                                  |              |



1

2

3

4

A

B

C

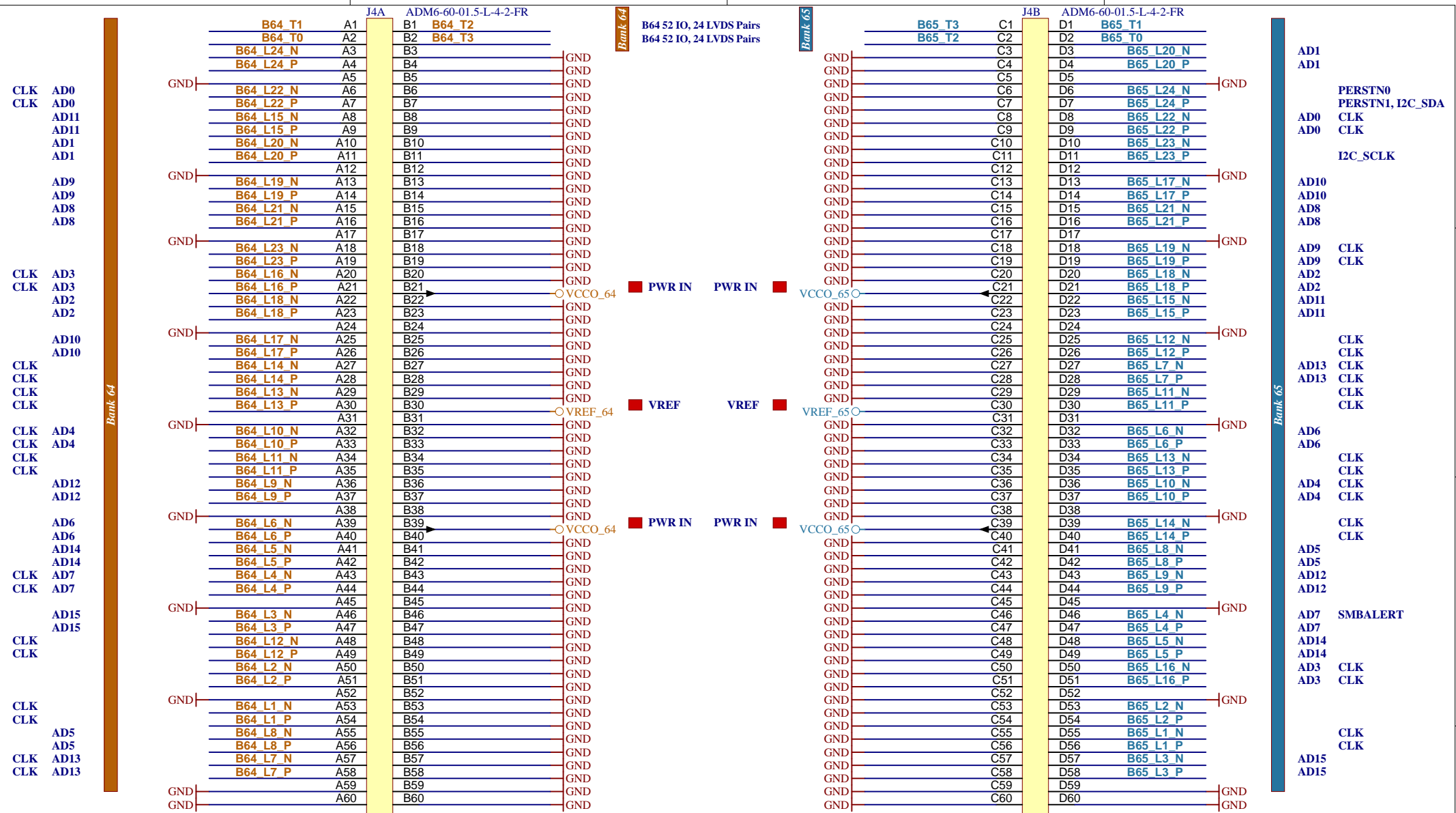
D

A

B

C

D



- Bank 47 HD 0..VCCO47
- Bank 48 HD 0..VCCO48
- Bank 64 HP 0..VCCO64
- Bank 65 HP 0..VCCO65
- Bank 66 HP 0..VCCO66



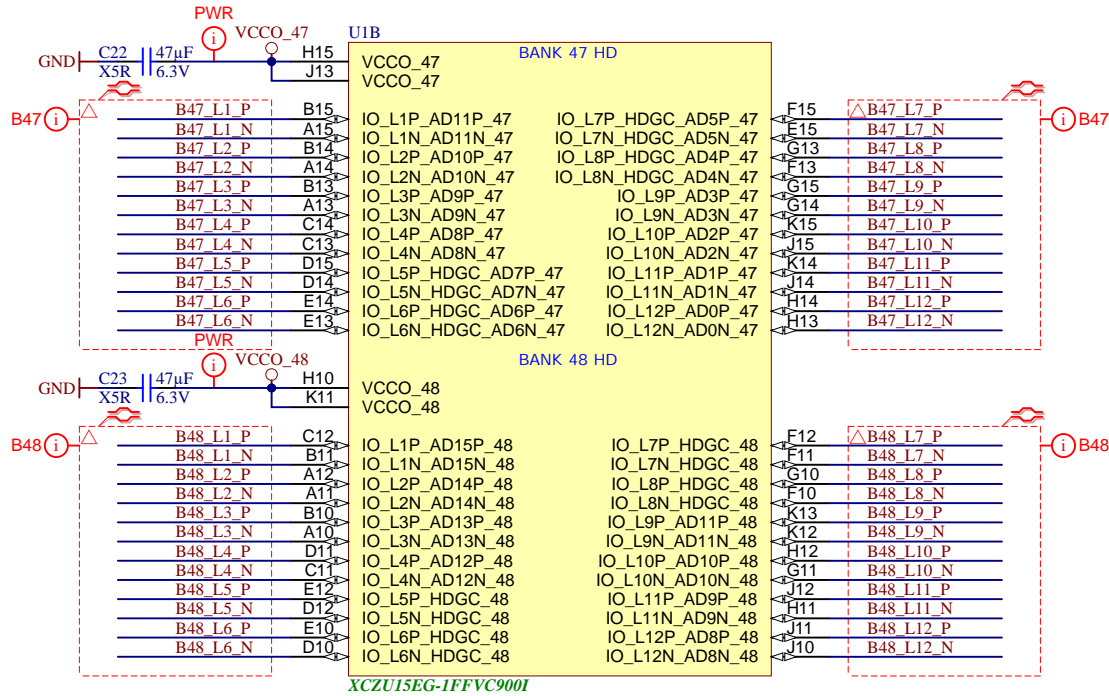
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| Title: TE0818 - Connector J4 |                                  |              |
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| Filename: J4.SchDoc          |                                  |              |

1

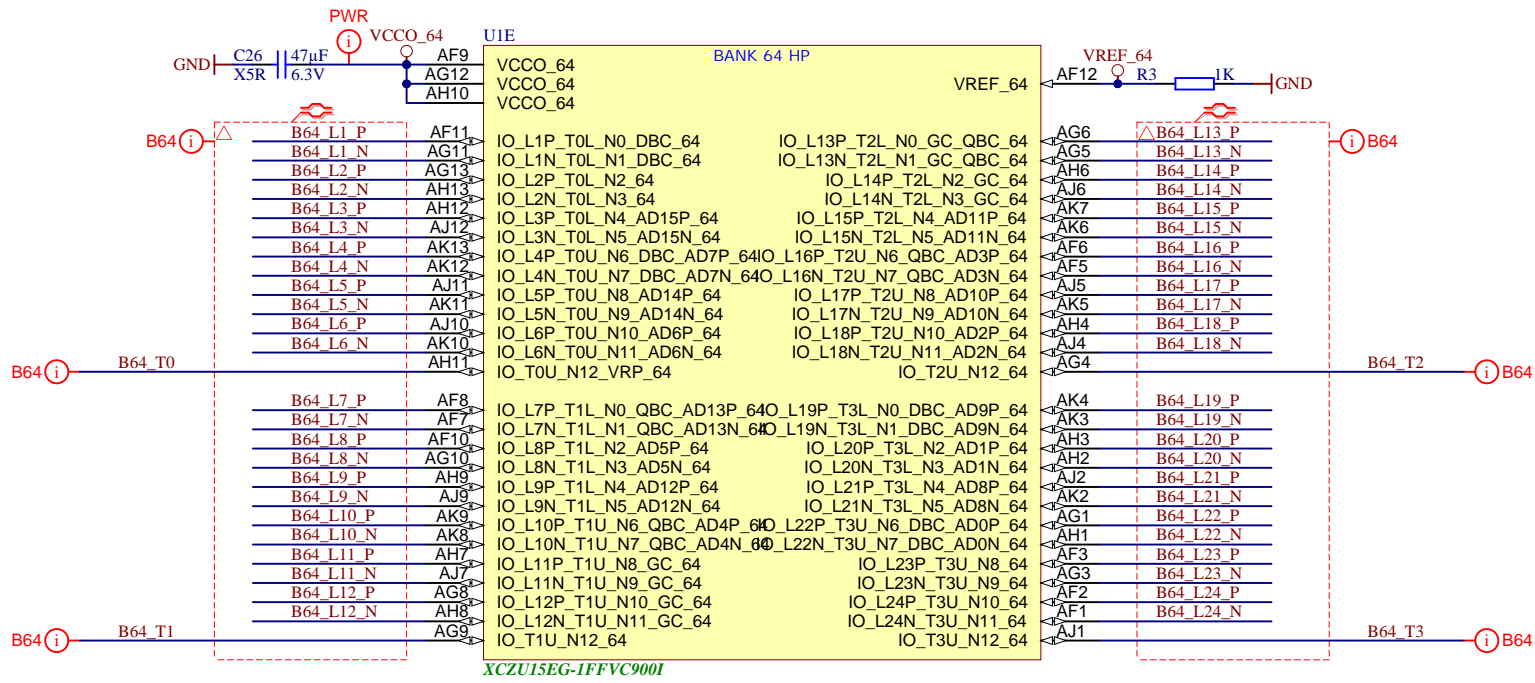
2

3

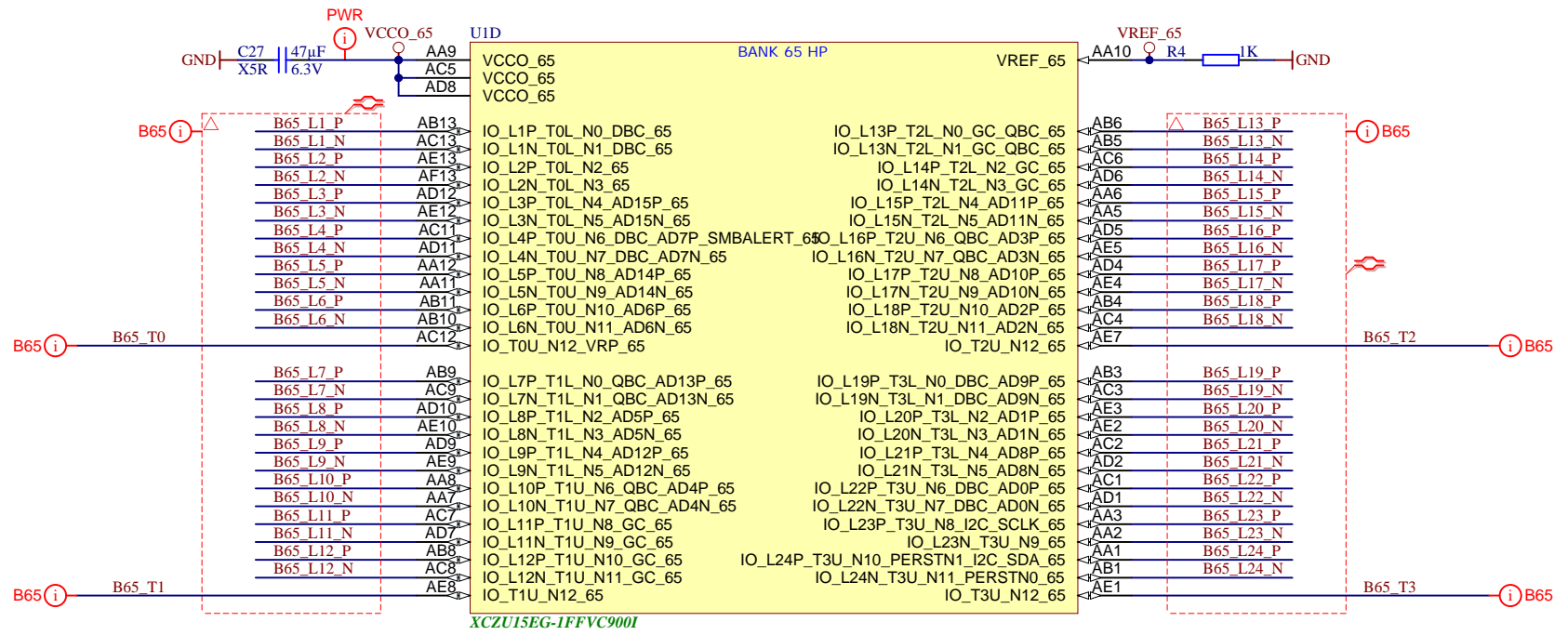
4



|  |                         |                                  |               |
|--|-------------------------|----------------------------------|---------------|
|  | Title: TE0818 - HD Bank |                                  |               |
|  | A4                      | Number: TE0818<br>BBI81-A        | Rev. 02       |
|  | Date: 09.10.2023        | Copyright: Trenz Electronic GmbH | Page 10 of 31 |
|  | Filename: B_HD.SchDoc   |                                  |               |



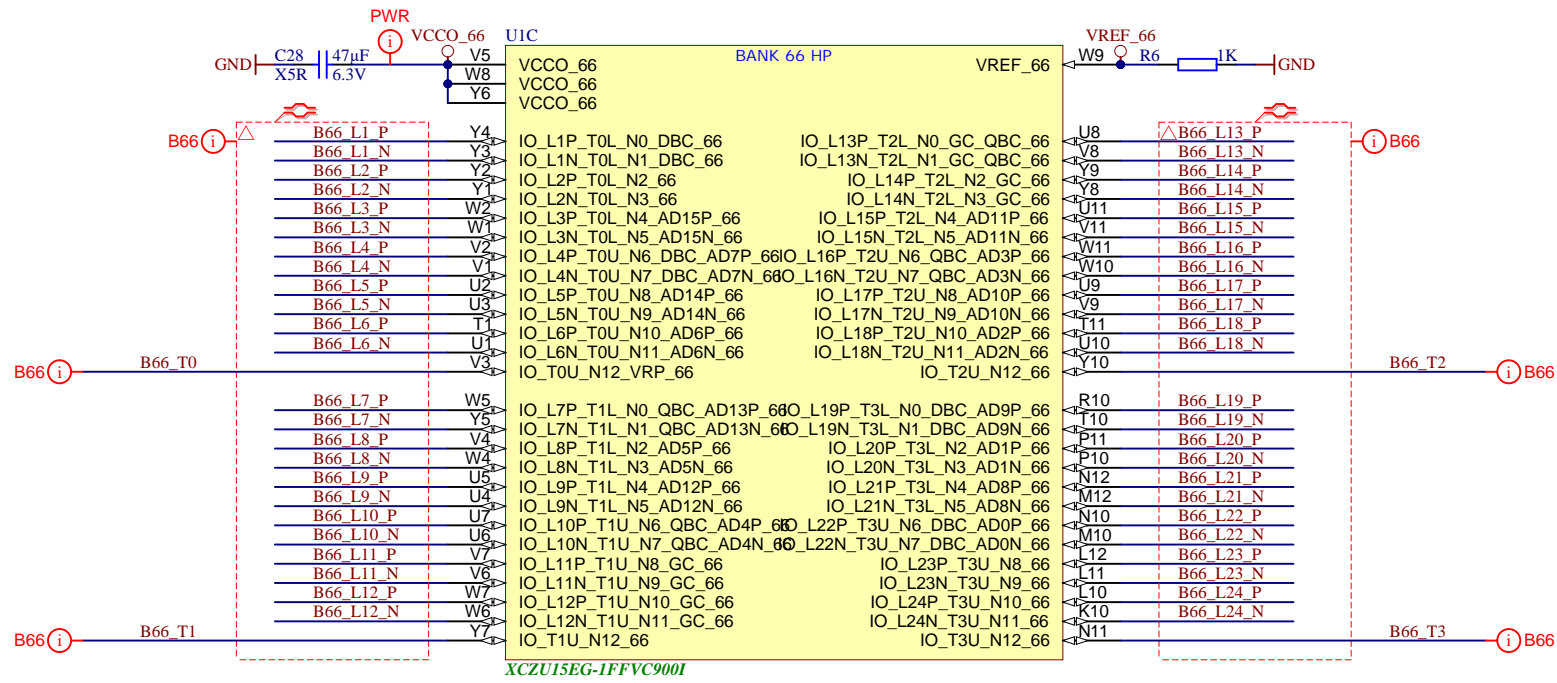
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| Title: <b>TE0818 - HP Bank 1</b> |   |                             |
| A4                               | Number: <b>TE0818 BBI81-A</b>           | Rev. <b>02</b>              |
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| Filename: <b>B64.SchDoc</b>      |   |                             |



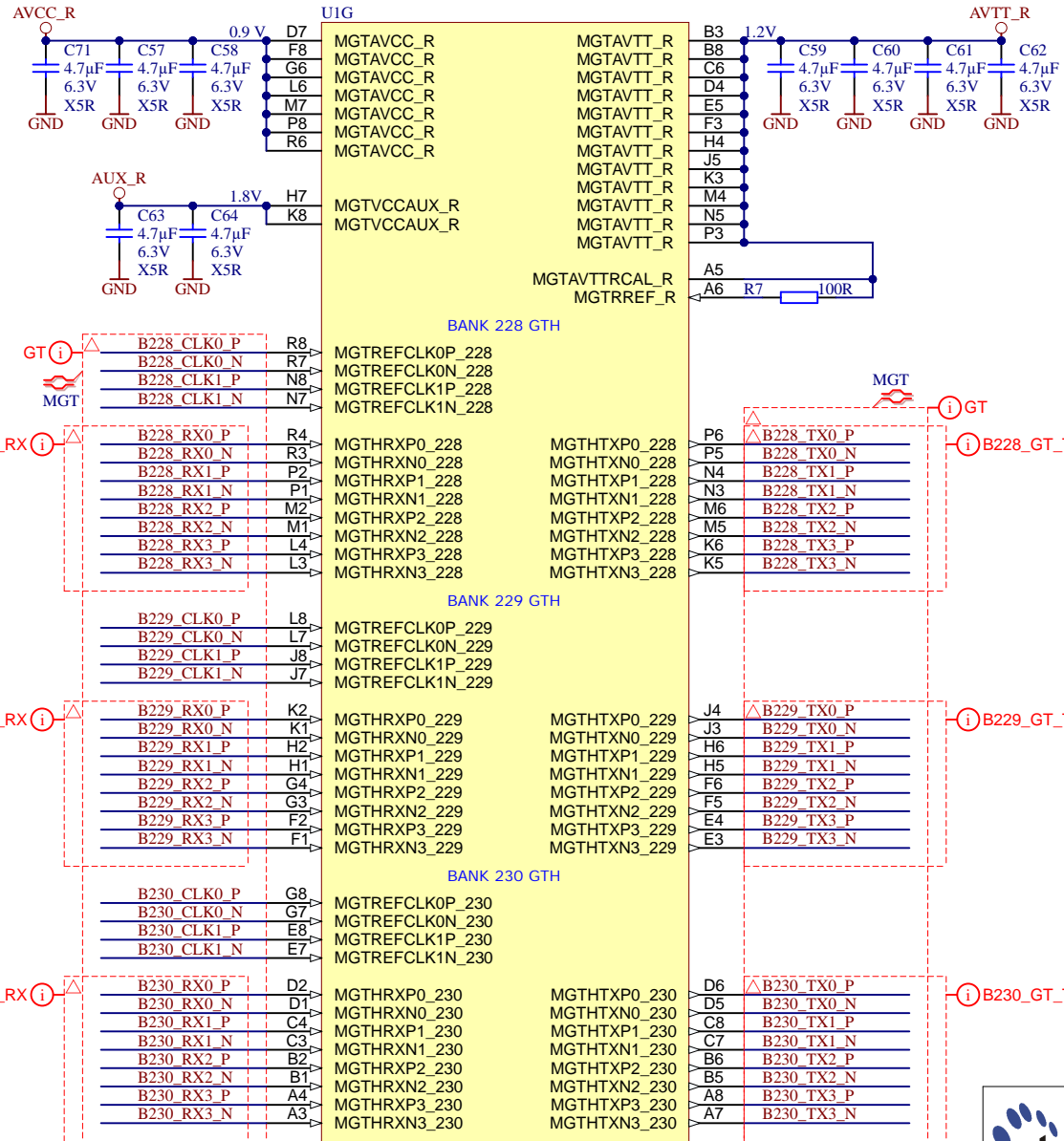
*XCZU15EG-1FFVC9001*



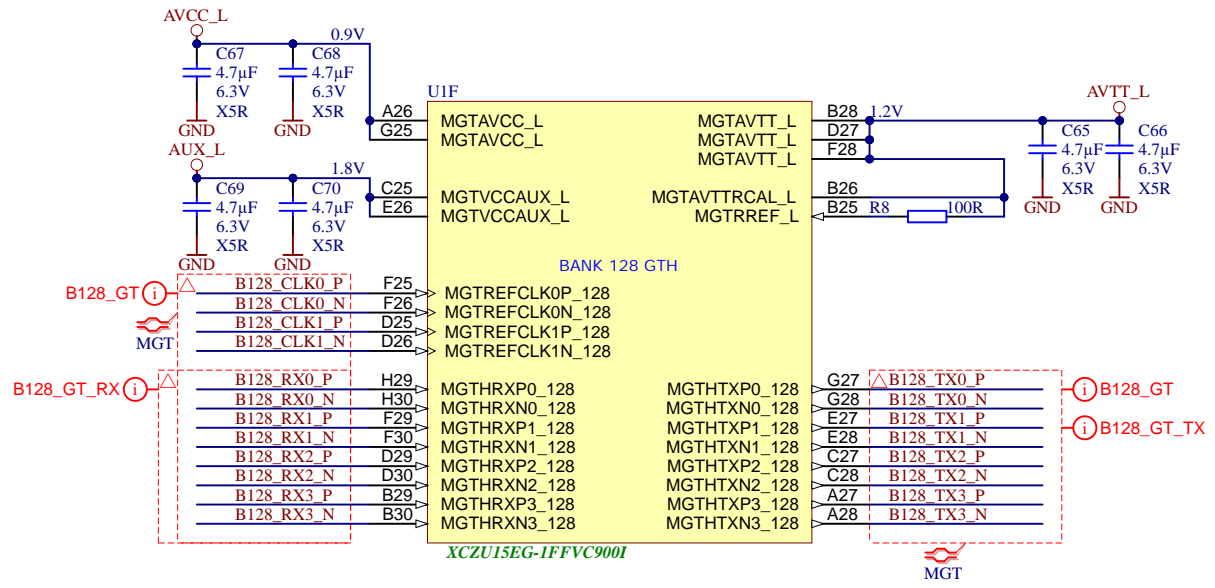
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|---------------------------|----------------------------------|---------------|
| Title: TE0818 - HP Bank 2 |                                  |               |
| A4                        | Number: TE0818<br>BBI81-A        | Rev. 02       |
| Date: 09.10.2023          | Copyright: Trenz Electronic GmbH | Page 12 of 31 |
| Filename: B65.SchDoc      |                                  |               |



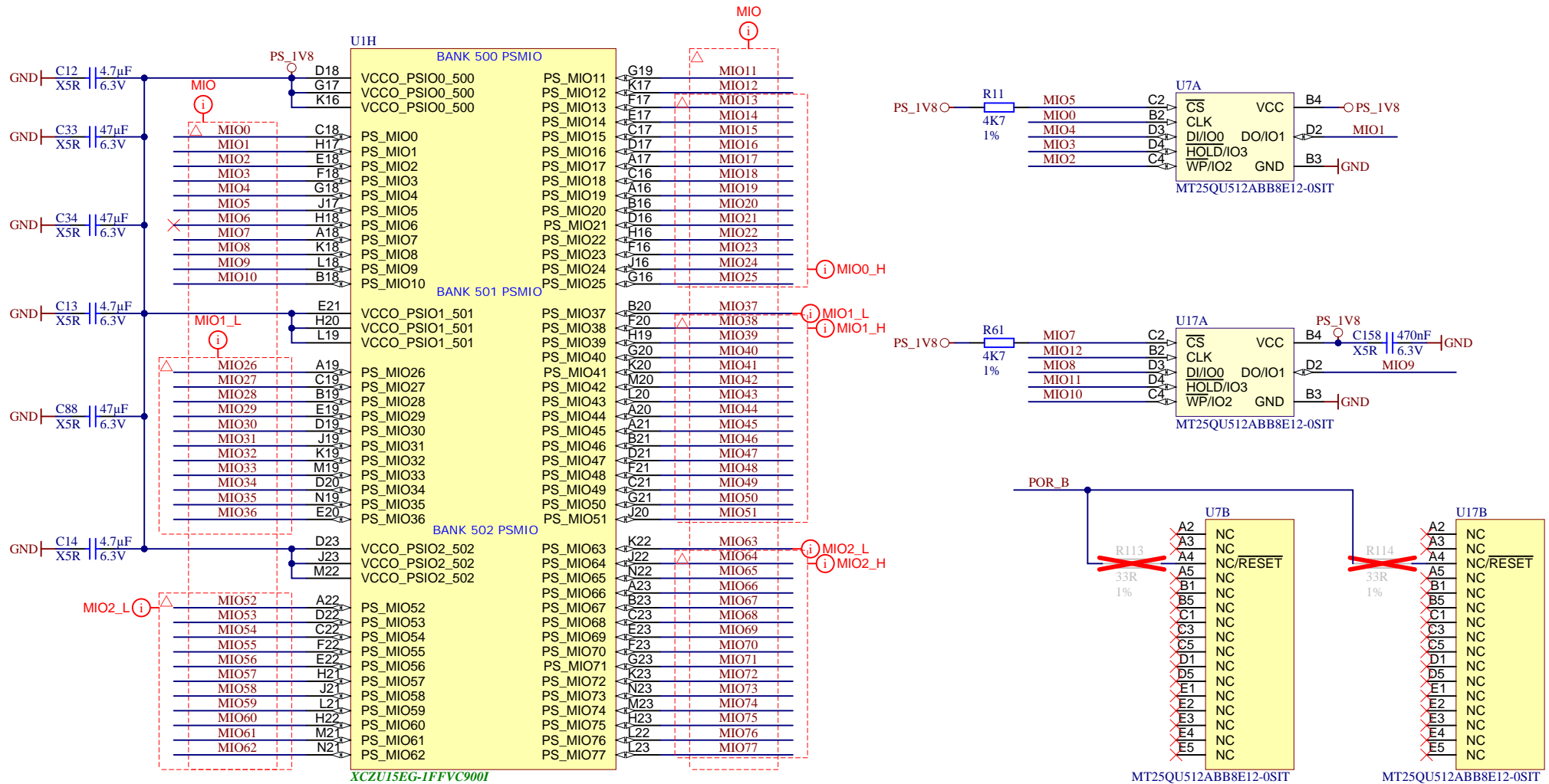
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|---------------------------|----------------------------------|---------------|
| Title: TE0818 - HP Bank 3 |                                  |               |
| A4                        | Number: TE0818 BBI81-A           | Rev. 02       |
| Date: 09.10.2023          | Copyright: Trenz Electronic GmbH | Page 13 of 31 |
| Filename: B66.SchDoc      |                                  |               |



|                            |                                  |               |
|----------------------------|----------------------------------|---------------|
| Title: TE0818 - GTH Bank 1 |                                  |               |
| A4                         | Number: TE0818<br>BBI81-A        | Rev. 02       |
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| Filename: B_GT.SchDoc      |                                  |               |



|                            |                                  |               |
|----------------------------|----------------------------------|---------------|
| Title: TE0818 - GTH Bank 2 |                                  |               |
| A4                         | Number: TE0818<br>BBI81-A        | Rev. 02       |
| Date: 09.10.2023           | Copyright: Trenz Electronic GmbH | Page 15 of 31 |
| Filename: B_GT_2.SchDoc    |                                  |               |

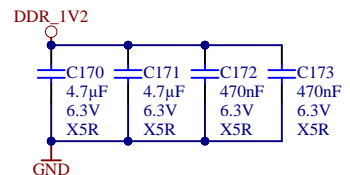
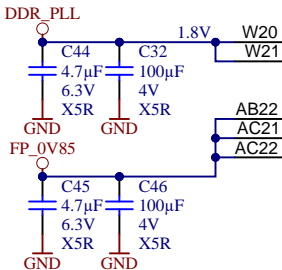
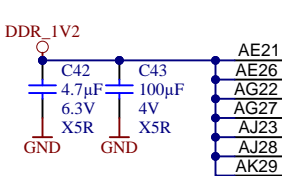


XCZU15EG-1FFVC9001



|                           |                                  |               |
|---------------------------|----------------------------------|---------------|
| Title: TE0818 - MIO Banks |                                  |               |
| A4                        | Number: TE0818<br>BBI81-A        | Rev. 02       |
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| Filename: B_MIO.SchDoc    |                                  |               |





| UIJ              |              | BANK 504 PSDDR |             |
|------------------|--------------|----------------|-------------|
| VCCO_PSDDR_504   | PS_DDR_CK0   | AJ26           | DDR4-CLK0_P |
| VCCO_PSDDR_504   | PS_DDR_CK_N0 | AJ27           | DDR4-CLK0_N |
| VCCO_PSDDR_504   | PS_DDR_CKE0  | AJ25           | DDR4-CKE0   |
| VCCO_PSDDR_504   |              | AG23           |             |
| VCCO_PSDDR_504   | PS_DDR_CK1   | AG24           |             |
| VCCO_PSDDR_504   | PS_DDR_CK_N1 | AH27           |             |
| VCCO_PSDDR_504   | PS_DDR_CKE1  | AH27           |             |
| VCC_PSDDR_PLL    | PS_DDR_A0    | AK25           | DDR4-A0     |
| VCC_PSDDR_PLL    | PS_DDR_A1    | AK28           | DDR4-A1     |
| VCC_PSDDR_PLL    | PS_DDR_A2    | AK27           | DDR4-A2     |
| VCC_PSDDR_PLL    | PS_DDR_A3    | AH24           | DDR4-A3     |
| VCC_PSDDR_PLL    | PS_DDR_A4    | AK24           | DDR4-A4     |
| VCC_PSINTFP_DDR  | PS_DDR_A5    | AJ30           | DDR4-A5     |
| VCC_PSINTFP_DDR  | PS_DDR_A6    | AE22           | DDR4-A6     |
| VCC_PSINTFP_DDR  | PS_DDR_A7    | AE25           | DDR4-A7     |
| VCC_PSINTFP_DDR  | PS_DDR_A8    | AE23           | DDR4-A8     |
| VCC_PSINTFP_DDR  | PS_DDR_A9    | AE24           | DDR4-A9     |
| VCC_PSINTFP_DDR  | PS_DDR_A10   | AD22           | DDR4-A10    |
| VCC_PSINTFP_DDR  | PS_DDR_A11   | AH23           | DDR4-A11    |
| VCC_PSINTFP_DDR  | PS_DDR_A12   | AF21           | DDR4-A12    |
| VCC_PSINTFP_DDR  | PS_DDR_A13   | AG21           | DDR4-A13    |
| VCC_PSINTFP_DDR  | PS_DDR_A14   | AF22           | DDR4-A14    |
| VCC_PSINTFP_DDR  | PS_DDR_A15   | AF23           | DDR4-A15    |
| VCC_PSINTFP_DDR  | PS_DDR_A16   | AD21           | DDR4-A16    |
| VCC_PSINTFP_DDR  | PS_DDR_A17   | AD20           | DDR4-A17    |
| PS_DDR_CS_N0     |              | AJ24           | DDR4-CS     |
| PS_DDR_CS_N1     |              | AG25           |             |
| PS_DDR_BA0       |              | AG26           | DDR4-BA0    |
| PS_DDR_BA1       |              | AF25           | DDR4-BA1    |
| PS_DDR_BG0       |              | AF26           | DDR4-BG0    |
| PS_DDR_BG1       |              | AD26           | DDR4-BG1    |
| PS_DDR_PARITY    |              | AC14           | DDR4-PAR    |
| PS_DDR_RAM_RST_N |              | AC16           | DDR4-RESET  |
| PS_DDR_ACT_N     |              | AC17           | DDR4-ACT    |
| PS_DDR_ALERT_N   |              | AD19           | DDR4-ALERT  |
| PS_DDR_ZQ        |              | AC23           | R2 240R     |
| PS_DDR_ODT0      |              | AJ29           | DDR4-ODT0   |
| PS_DDR_ODT1      |              | AH26           |             |

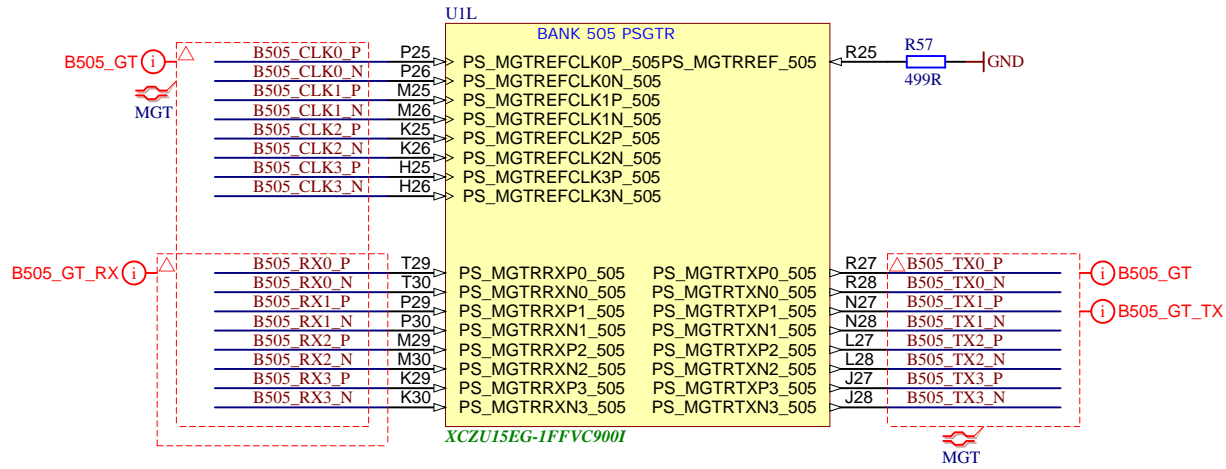
XCZU15EG-1FFVC900I


| UIK         |      | BANK 504 PSDDR |             |
|-------------|------|----------------|-------------|
| DQ0         | AK17 | PS_DDR_DQ0     | PS_DDR_DQ32 |
| DQ1         | AH17 | PS_DDR_DQ1     | PS_DDR_DQ33 |
| DQ2         | AJ17 | PS_DDR_DQ2     | PS_DDR_DQ34 |
| DQ3         | AH16 | PS_DDR_DQ3     | PS_DDR_DQ35 |
| DQ4         | AK15 | PS_DDR_DQ4     | PS_DDR_DQ36 |
| DQ5         | AK14 | PS_DDR_DQ5     | PS_DDR_DQ37 |
| DQ6         | AJ14 | PS_DDR_DQ6     | PS_DDR_DQ38 |
| DQ7         | AH14 | PS_DDR_DQ7     | PS_DDR_DQ39 |
| DQ8         | AK19 | PS_DDR_DQ8     | PS_DDR_DQ40 |
| DQ9         | AK18 | PS_DDR_DQ9     | PS_DDR_DQ41 |
| DQ10        | AJ19 | PS_DDR_DQ10    | PS_DDR_DQ42 |
| DQ11        | AH19 | PS_DDR_DQ11    | PS_DDR_DQ43 |
| DQ12        | AK21 | PS_DDR_DQ12    | PS_DDR_DQ44 |
| DQ13        | AK22 | PS_DDR_DQ13    | PS_DDR_DQ45 |
| DQ14        | AH21 | PS_DDR_DQ14    | PS_DDR_DQ46 |
| DQ15        | AJ22 | PS_DDR_DQ15    | PS_DDR_DQ47 |
| DQ16        | AG14 | PS_DDR_DQ16    | PS_DDR_DQ48 |
| DQ17        | AG15 | PS_DDR_DQ17    | PS_DDR_DQ49 |
| DQ18        | AG16 | PS_DDR_DQ18    | PS_DDR_DQ50 |
| DQ19        | AF16 | PS_DDR_DQ19    | PS_DDR_DQ51 |
| DQ20        | AD14 | PS_DDR_DQ20    | PS_DDR_DQ52 |
| DQ21        | AD16 | PS_DDR_DQ21    | PS_DDR_DQ53 |
| DQ22        | AD15 | PS_DDR_DQ22    | PS_DDR_DQ54 |
| DQ23        | AD17 | PS_DDR_DQ23    | PS_DDR_DQ55 |
| DQ24        | AE17 | PS_DDR_DQ24    | PS_DDR_DQ56 |
| DQ25        | AE18 | PS_DDR_DQ25    | PS_DDR_DQ57 |
| DQ26        | AE20 | PS_DDR_DQ26    | PS_DDR_DQ58 |
| DQ27        | AE19 | PS_DDR_DQ27    | PS_DDR_DQ59 |
| DQ28        | AG18 | PS_DDR_DQ28    | PS_DDR_DQ60 |
| DQ29        | AH18 | PS_DDR_DQ29    | PS_DDR_DQ61 |
| DQ30        | AG19 | PS_DDR_DQ30    | PS_DDR_DQ62 |
| DQ31        | AG20 | PS_DDR_DQ31    | PS_DDR_DQ63 |
| DDR4-DQS0_P | AJ15 | PS_DDR_DQS_P0  | PS_DDR_DQ64 |
| DDR4-DQS0_N | AJ16 | PS_DDR_DQS_N0  | PS_DDR_DQ65 |
| DDR4-DQS1_P | AJ20 | PS_DDR_DQS_P1  | PS_DDR_DQ66 |
| DDR4-DQS1_N | AJ21 | PS_DDR_DQS_N1  | PS_DDR_DQ67 |
| DDR4-DQS2_P | AE15 | PS_DDR_DQS_P2  | PS_DDR_DQ68 |
| DDR4-DQS2_N | AF15 | PS_DDR_DQS_N2  | PS_DDR_DQ69 |
| DDR4-DQS3_P | AF17 | PS_DDR_DQS_P3  | PS_DDR_DQ70 |
| DDR4-DQS3_N | AF18 | PS_DDR_DQS_N3  | PS_DDR_DQ71 |
| DDR4-DQS4_P | AB24 | PS_DDR_DQS_P4  | PS_DDR_DM0  |
| DDR4-DQS4_N | AB25 | PS_DDR_DQS_N4  | PS_DDR_DM1  |
| DDR4-DQS5_P | V26  | PS_DDR_DQS_P5  | PS_DDR_DM2  |
| DDR4-DQS5_N | V27  | PS_DDR_DQS_N5  | PS_DDR_DM3  |
| DDR4-DQS6_P | AC28 | PS_DDR_DQS_P6  | PS_DDR_DM4  |
| DDR4-DQS6_N | AC29 | PS_DDR_DQS_N6  | PS_DDR_DM5  |
| DDR4-DQS7_P | W29  | PS_DDR_DQS_P7  | PS_DDR_DM6  |
| DDR4-DQS7_N | Y29  | PS_DDR_DQS_N7  | PS_DDR_DM7  |
|             | AG29 | PS_DDR_DQS_P8  | PS_DDR_DM8  |
|             | AH29 | PS_DDR_DQS_N8  |             |

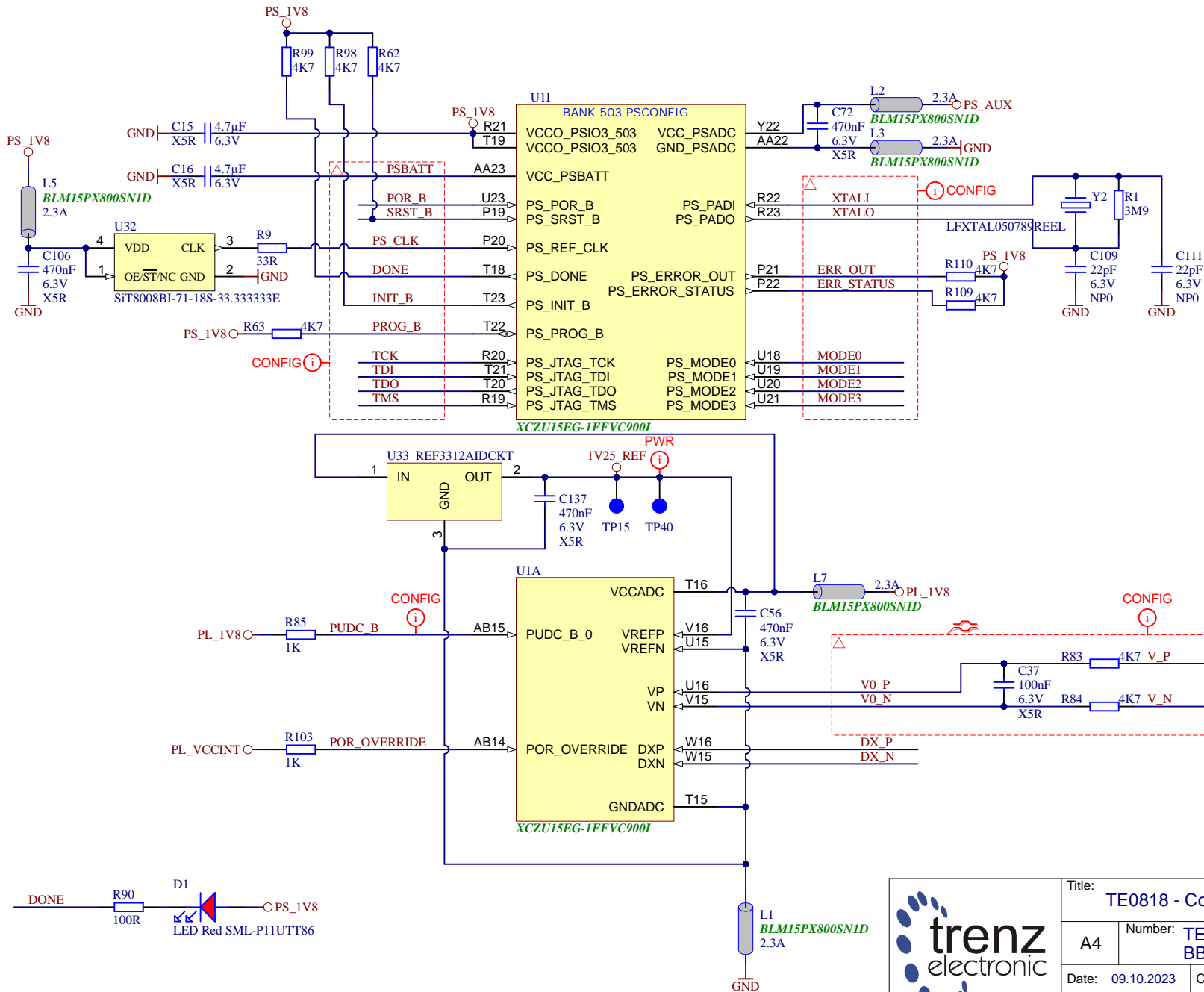
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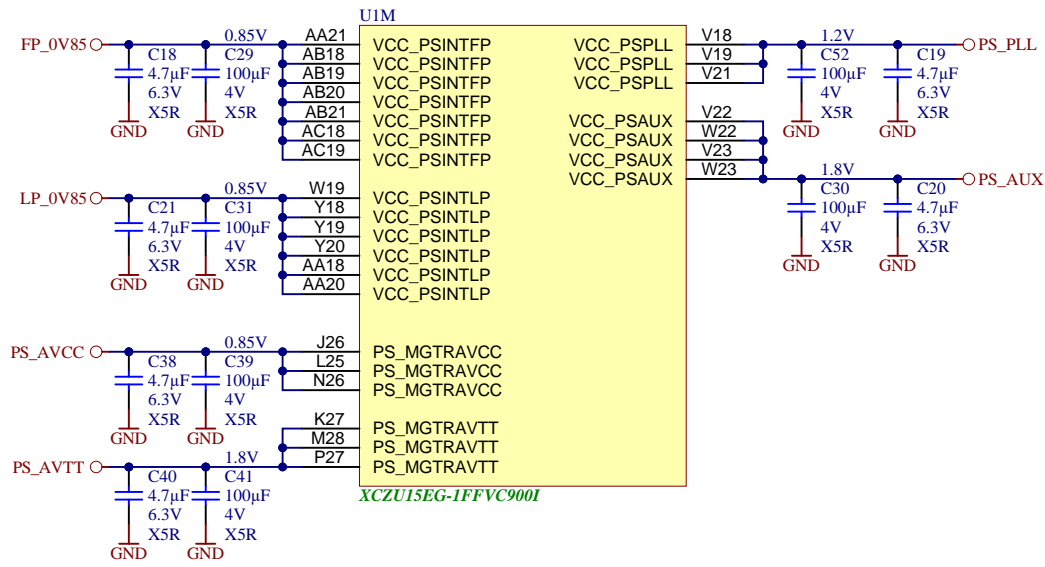
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| A4                      | Number: TE0818 BBI81-A           | Rev. 02       |
| Date: 09.10.2023        | Copyright: Trenz Electronic GmbH | Page 17 of 31 |
| Filename: PS_DDR.SchDoc |                                  |               |



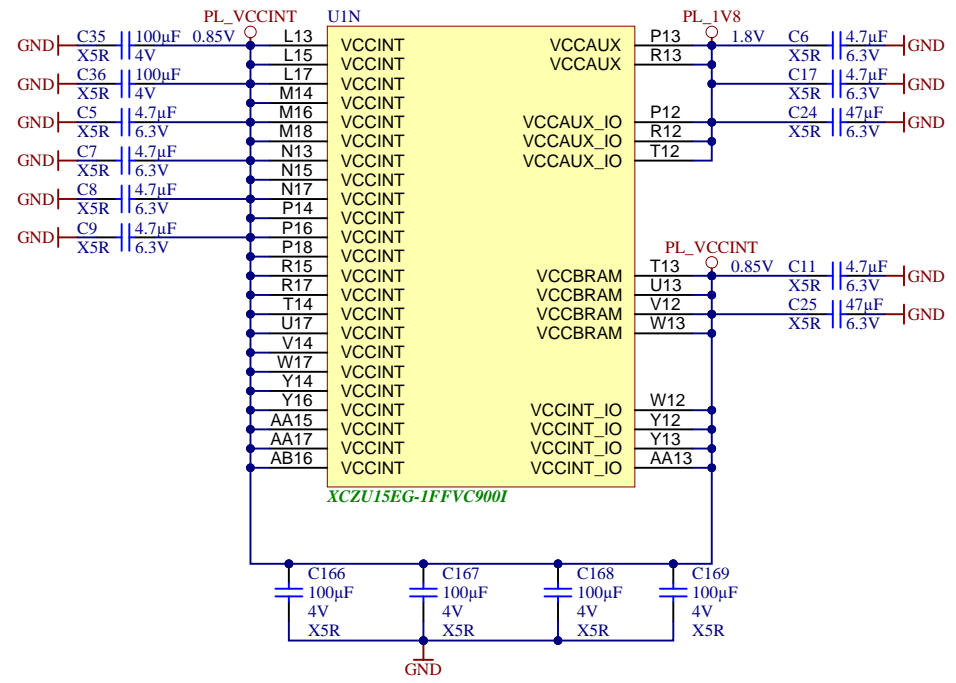
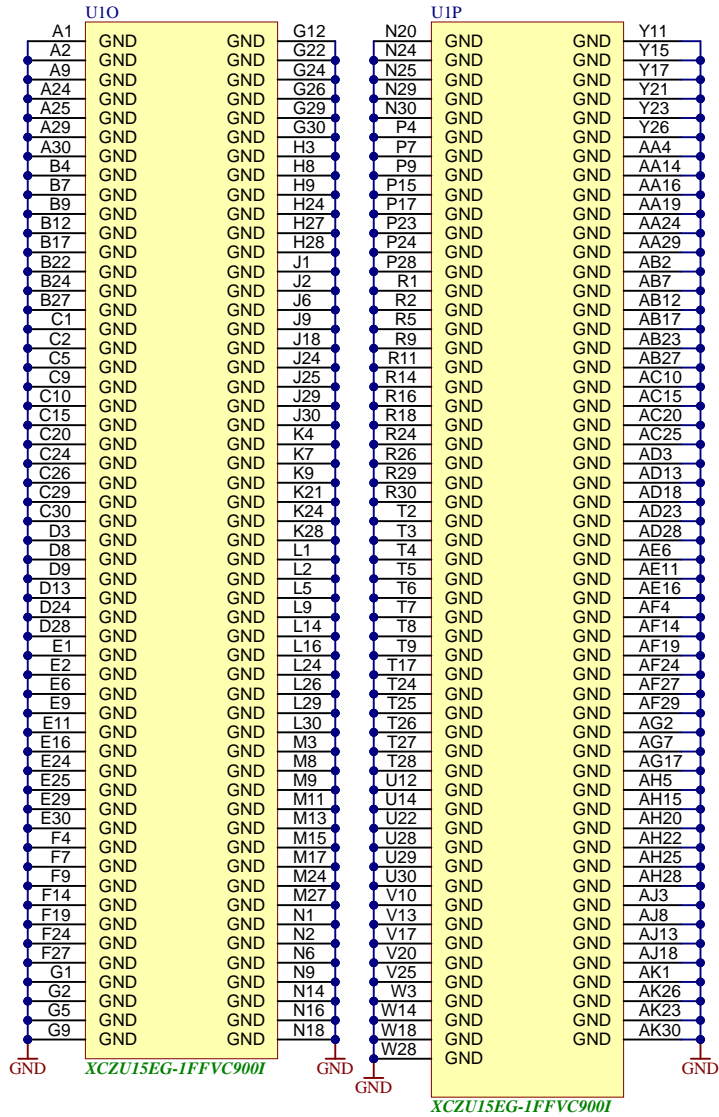
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|   | A4                              | Number: <b>TE0818 BBI81-A</b>           | Rev. <b>02</b>              |
|   | Date: <b>09.10.2023</b>         | Copyright: <b>Trenz Electronic GmbH</b> | Page <b>18</b> of <b>31</b> |
|   | Filename: <b>B_PS_GT.SchDoc</b> |   |                             |



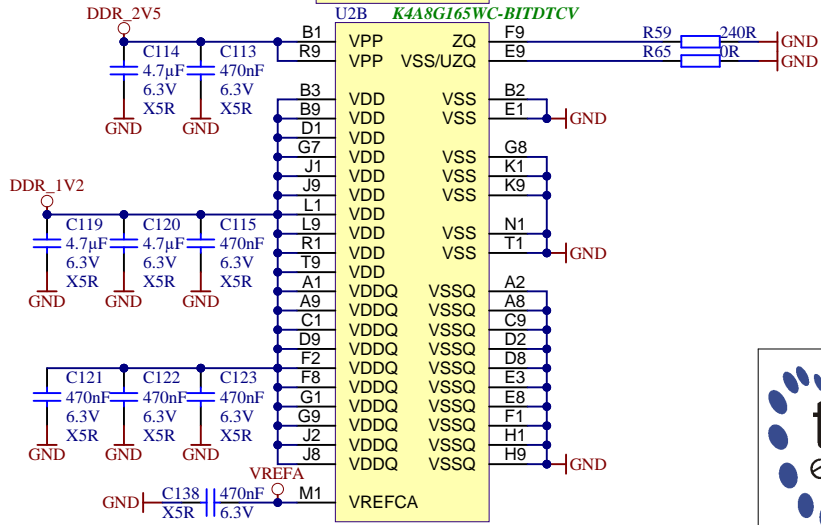
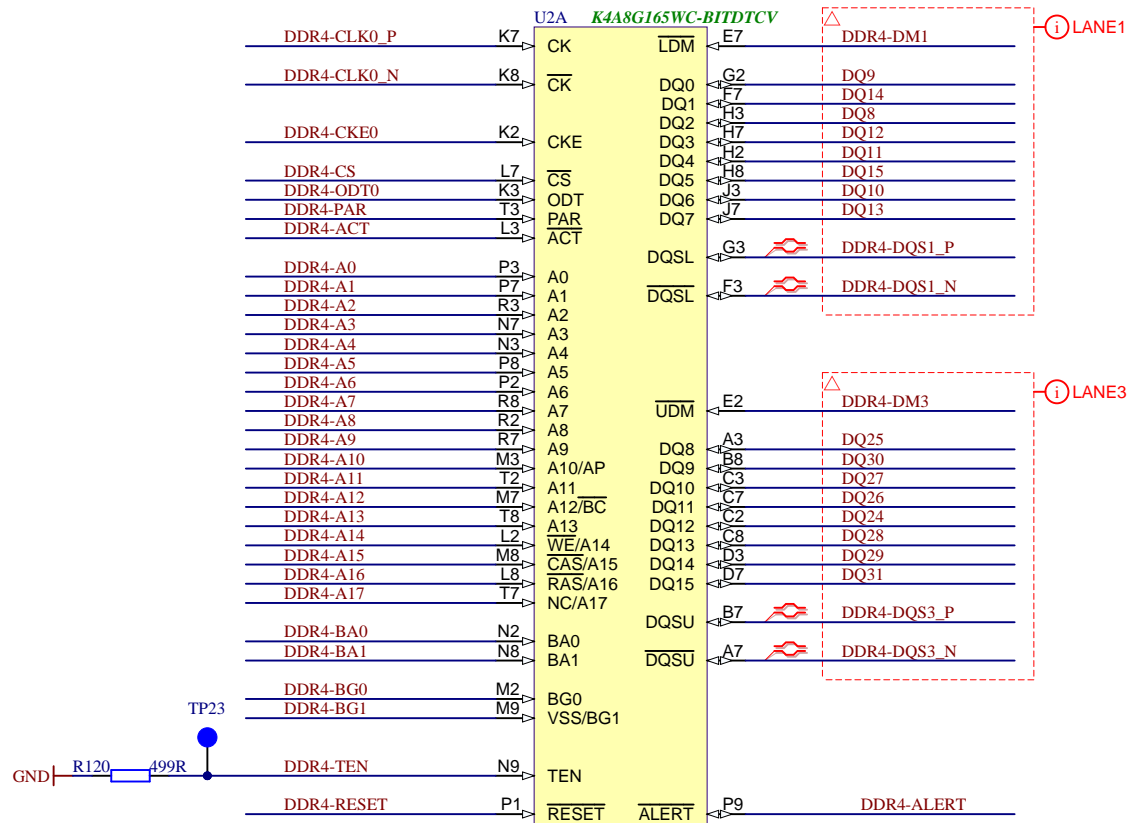
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| Date: 09.10.2023        | Copyright: Trenz Electronic GmbH | Page 19 of 31 |
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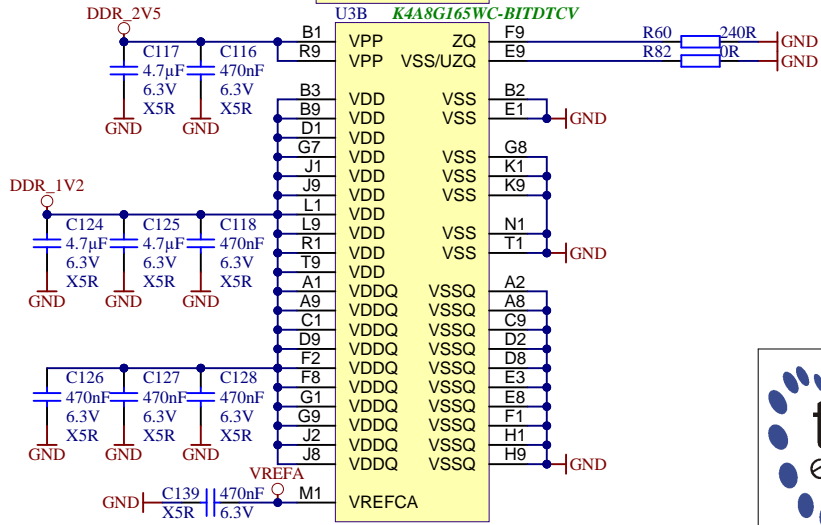
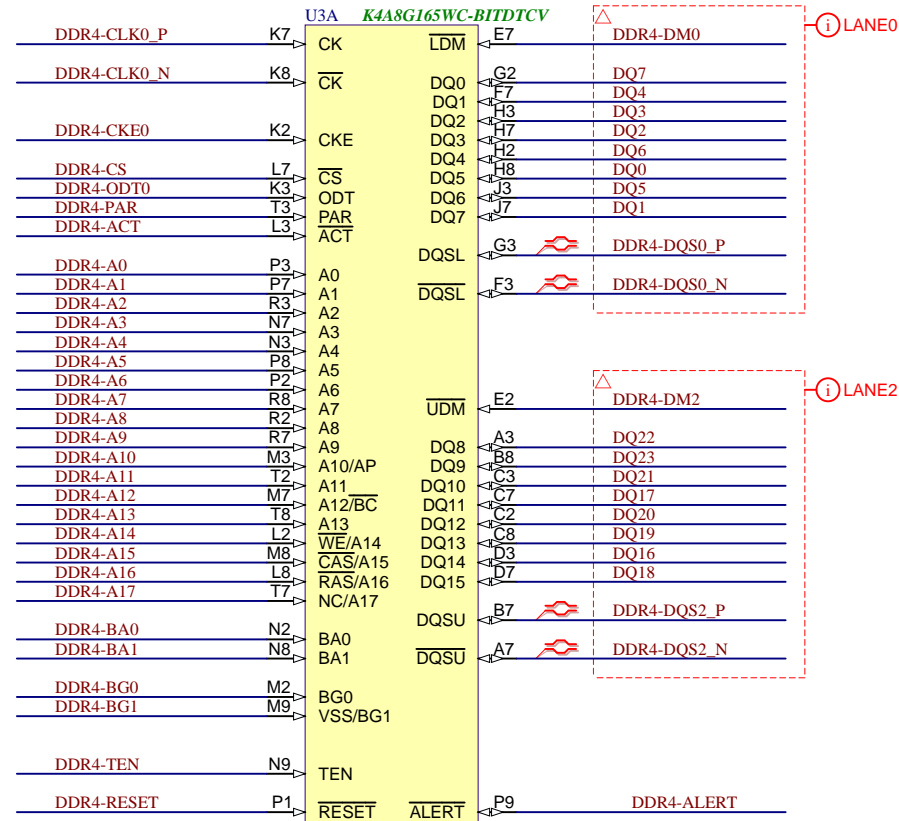
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| A4                           | Number: TE0818<br>BBI81-A        | Rev. 02       |
| Date: 09.10.2023             | Copyright: Trenz Electronic GmbH | Page 20 of 31 |
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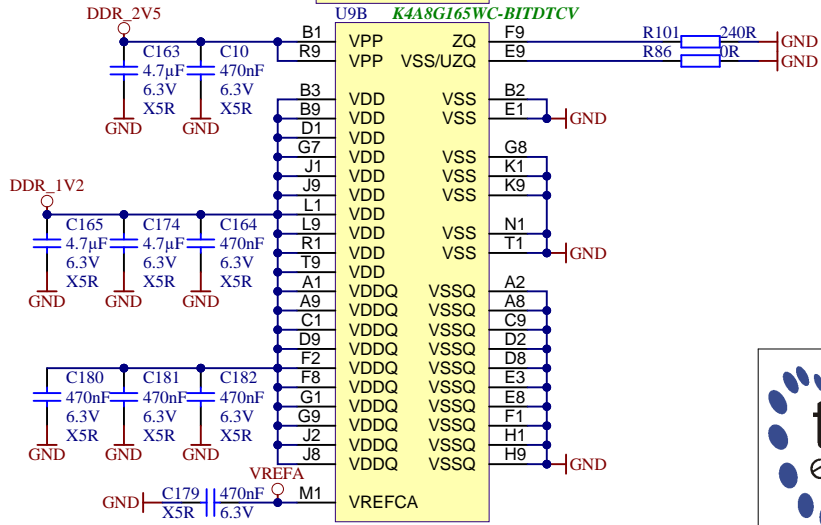
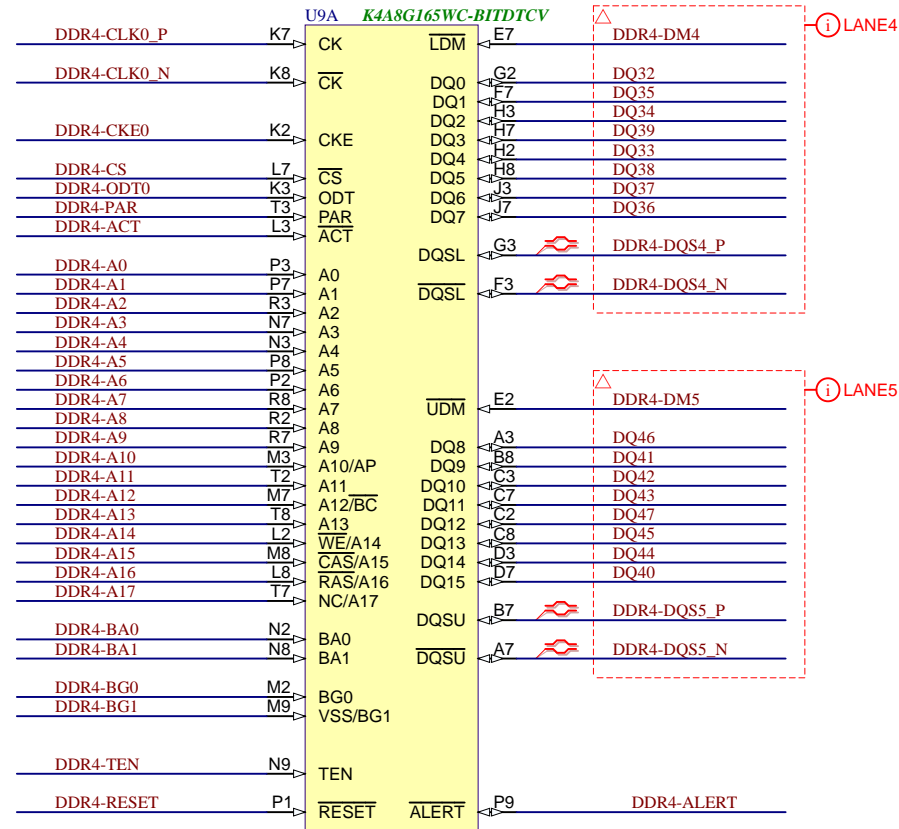
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| Date: 09.10.2023          | Copyright: Trenz Electronic GmbH | Page 21 of 31 |
| Filename: ZU_POWER.SchDoc |                                  |               |



|                            |                                  |               |
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| Title: TE0818 - DDR4 RAM 1 |                                  |               |
| A4                         | Number: TE0818<br>BBI81-A        | Rev. 02       |
| Date: 09.10.2023           | Copyright: Trenz Electronic GmbH | Page 22 of 31 |
| Filename: DDR4-RAM.SchDoc  |                                  |               |

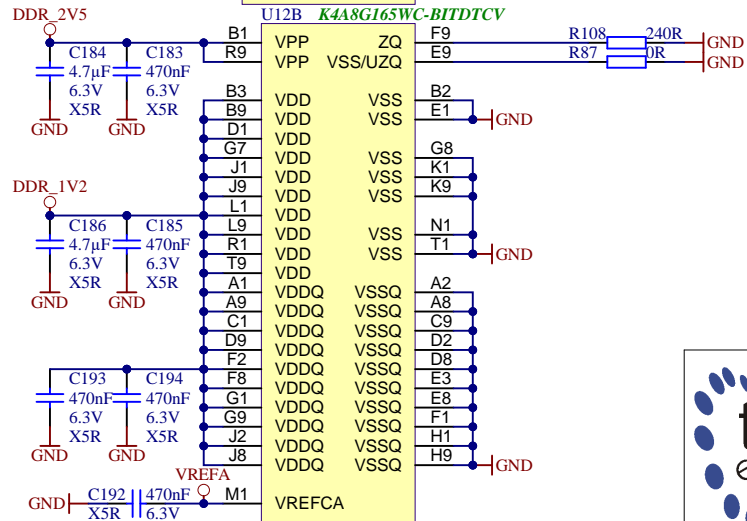
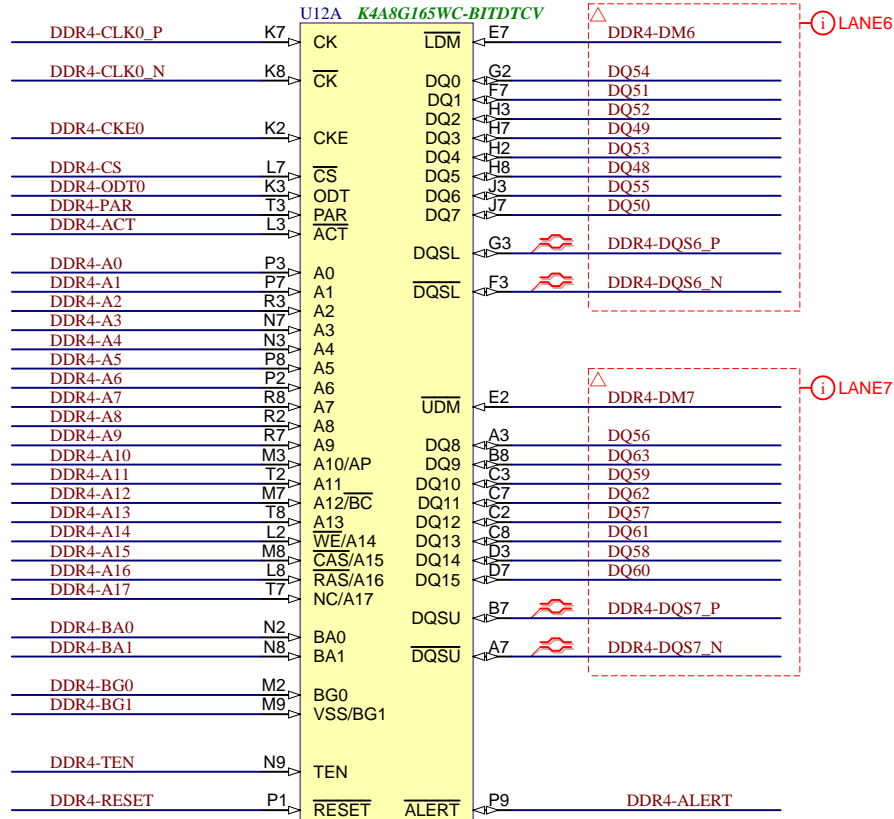


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| Date: 09.10.2023            | Copyright: Trenz Electronic GmbH | Page 23 of 31 |
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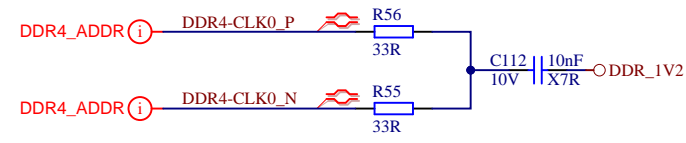
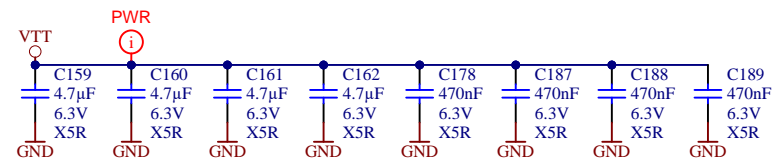
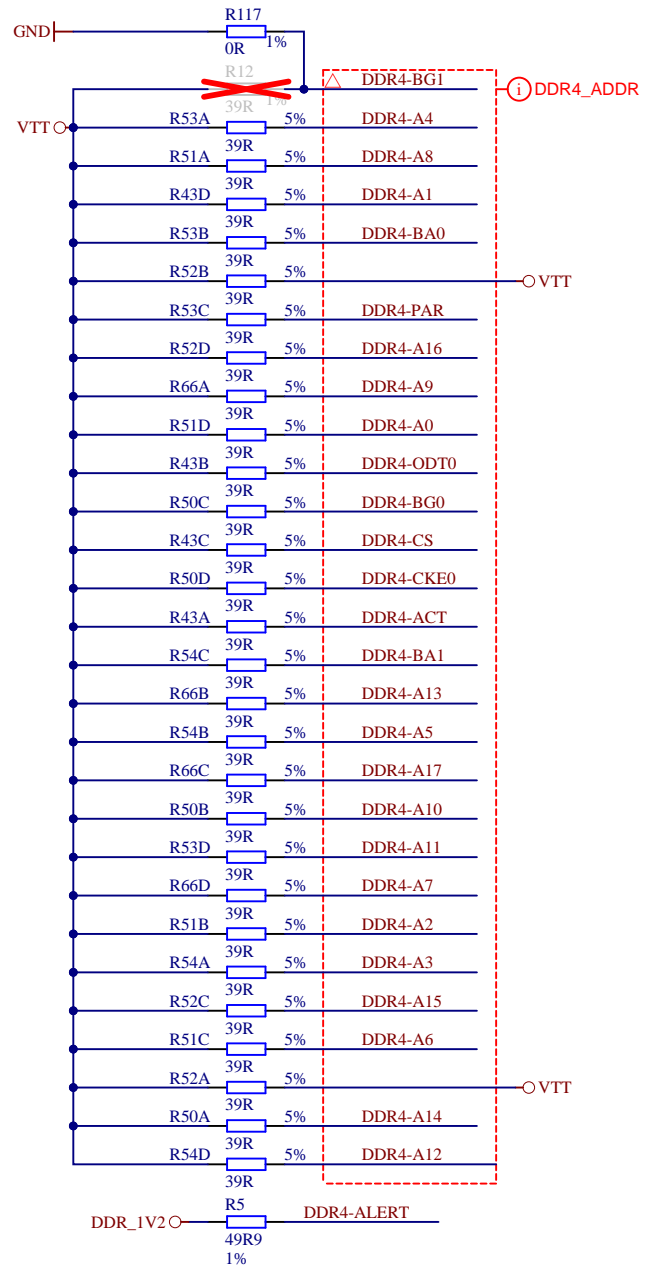


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| Title: TE0818 - DDR4 RAM 3  |                                  |               |
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| Date: 09.10.2023            | Copyright: Trenz Electronic GmbH | Page 24 of 31 |
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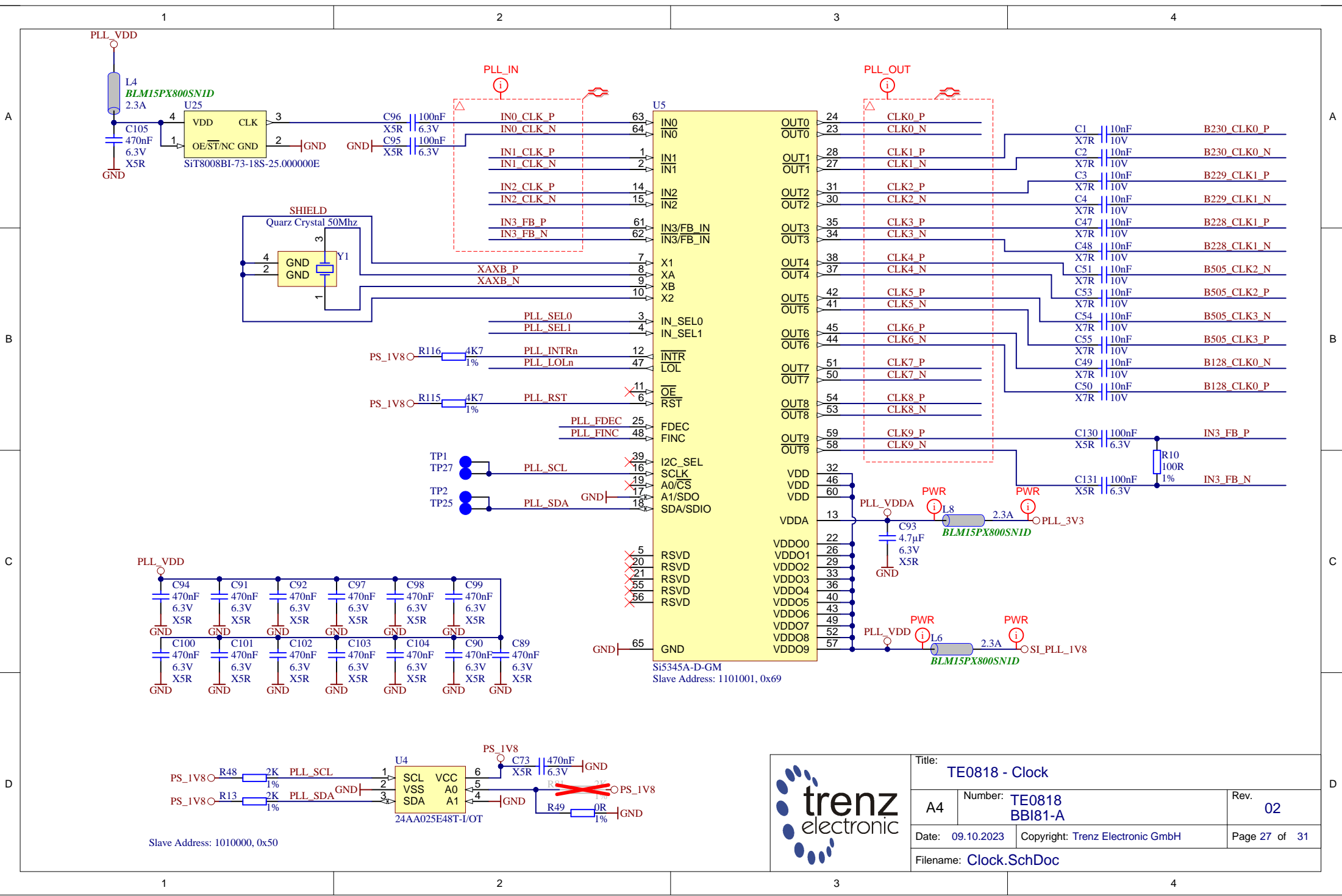




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| A4                          | Number: TE0818 BBI81-A           | Rev. 02       |
| Date: 09.10.2023            | Copyright: Trenz Electronic GmbH | Page 25 of 31 |
| Filename: DDR4-RAM_4.SchDoc |                                  |               |

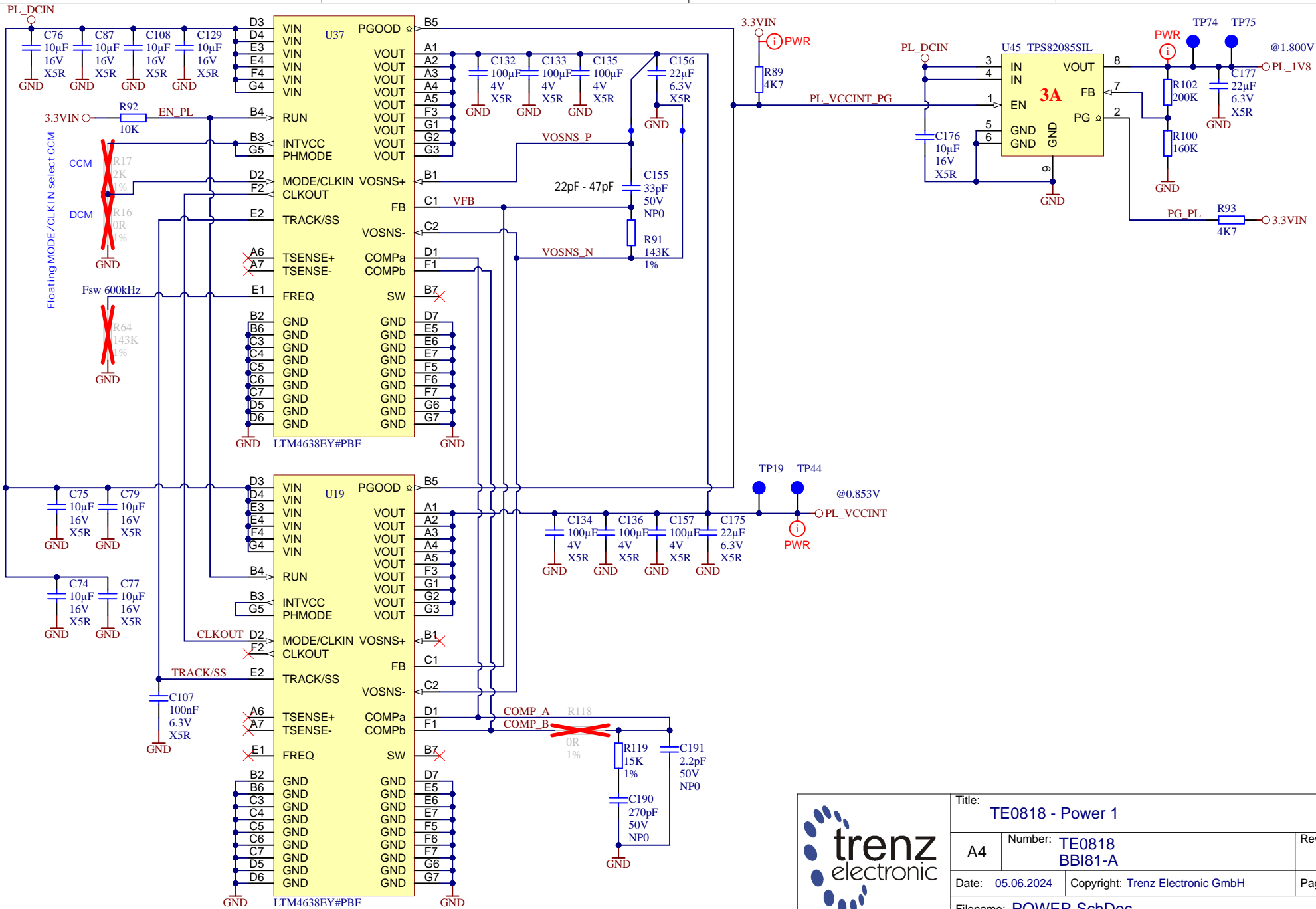


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| Date: 09.10.2023                 | Copyright: Trenz Electronic GmbH | Page 26 of 31 |
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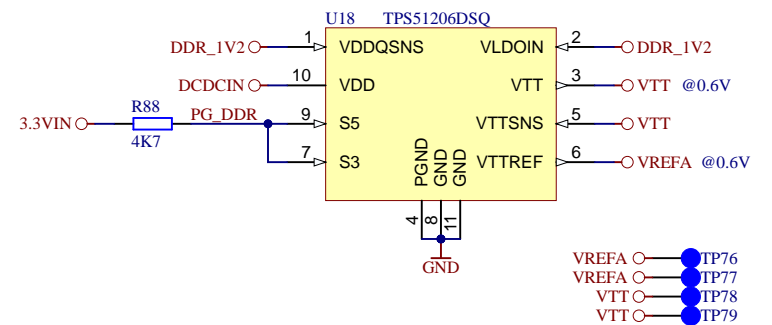
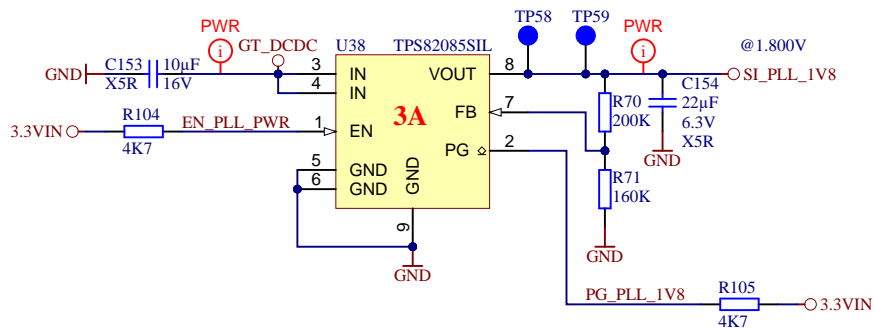
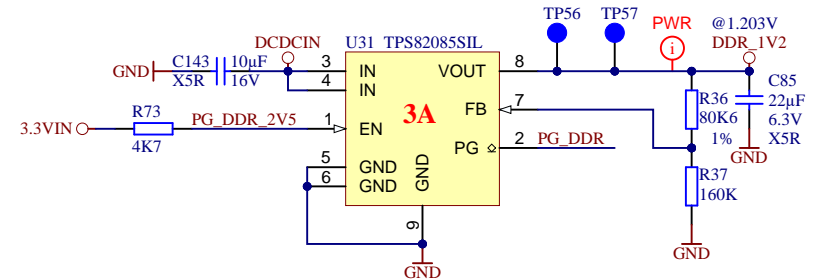
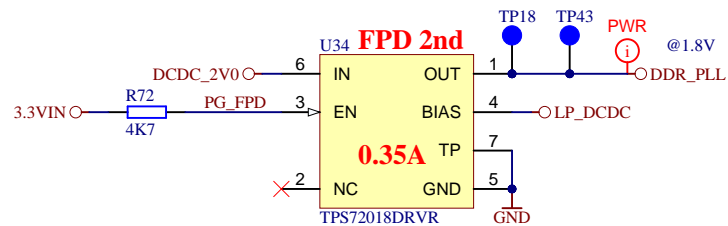
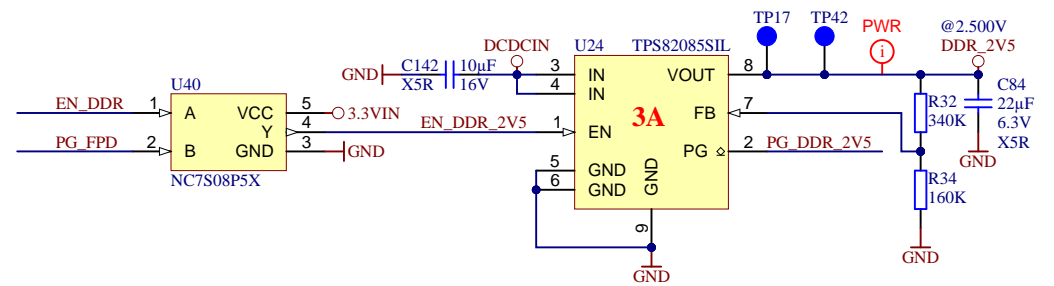
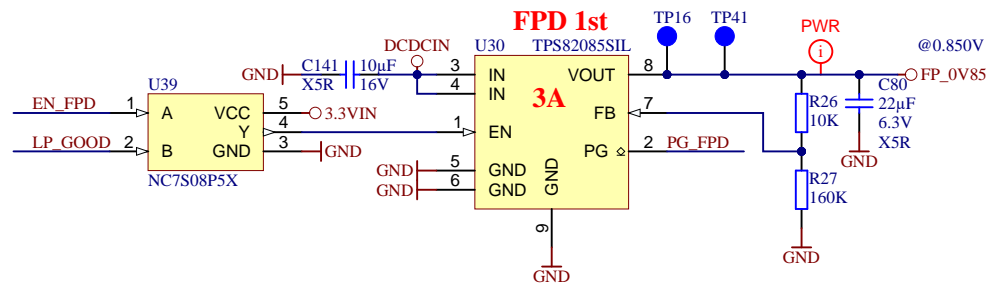


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| Date: <b>09.10.2023</b>       | Copyright: <b>Trenz Electronic GmbH</b> | Page <b>27</b> of <b>31</b> |
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Slave Address: 1010000, 0x50



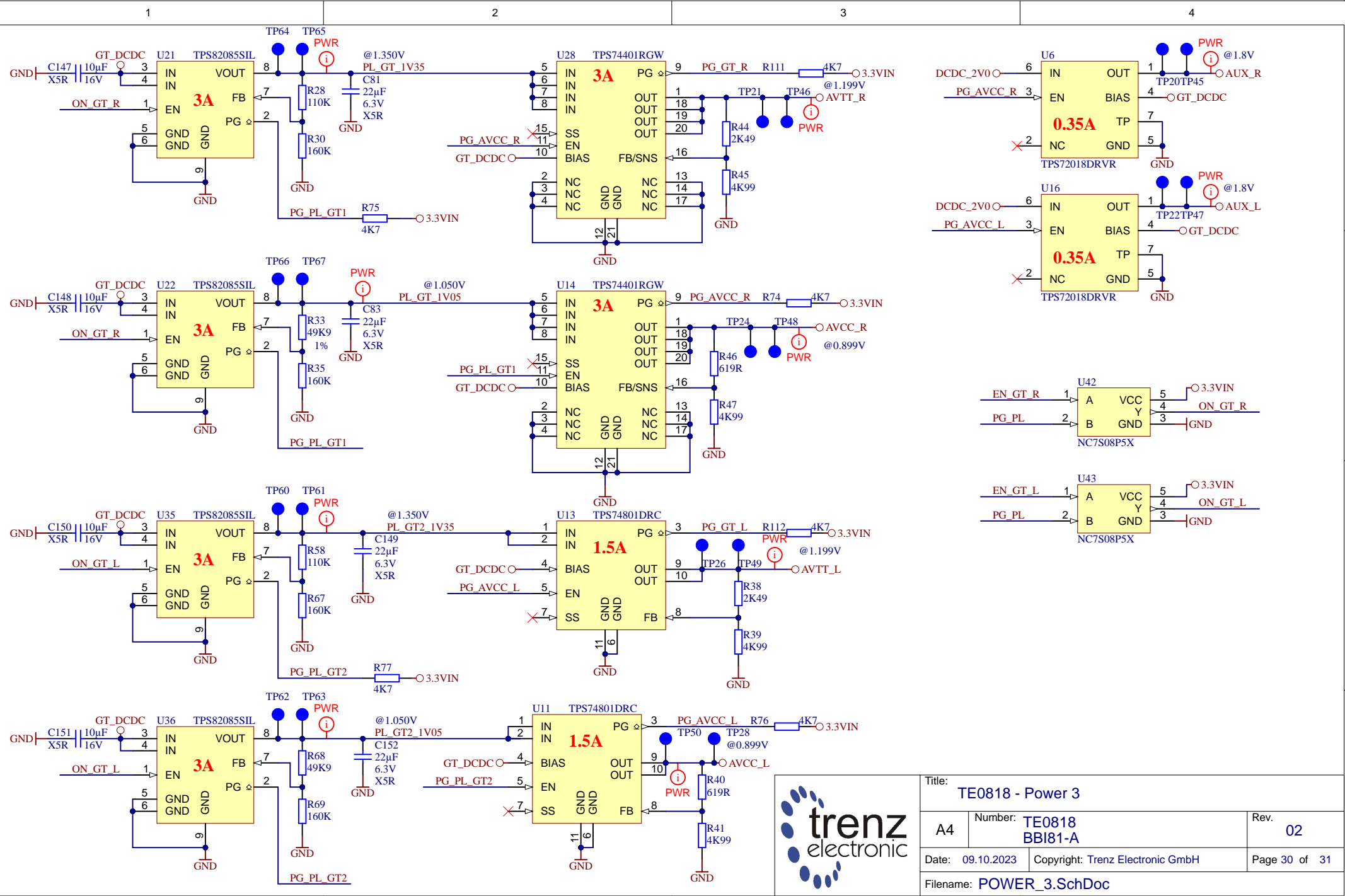
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| A4                      | Number: TE0818<br>BBI81-A        | Rev. 02       |
| Date: 05.06.2024        | Copyright: Trenz Electronic GmbH | Page 28 of 31 |
| Filename: POWER.SchDoc  |                                  |               |



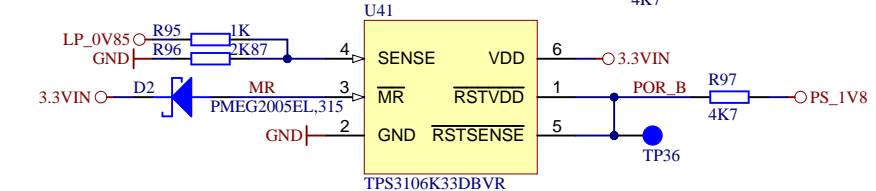
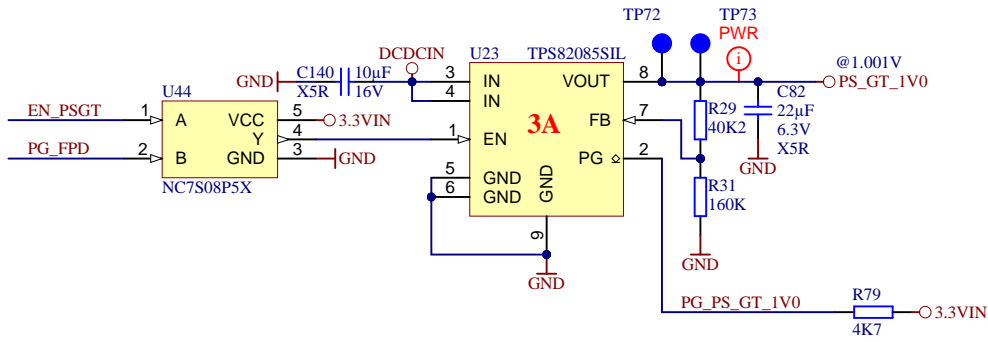
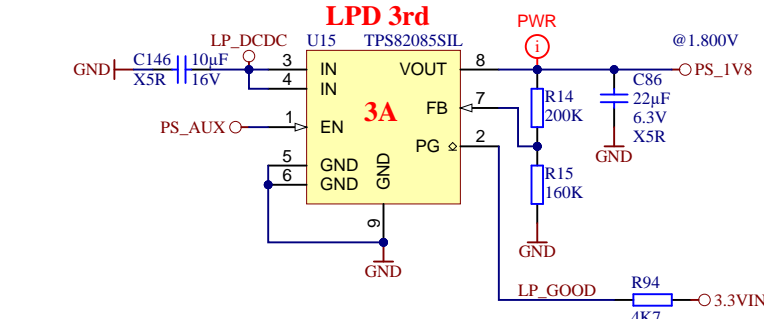
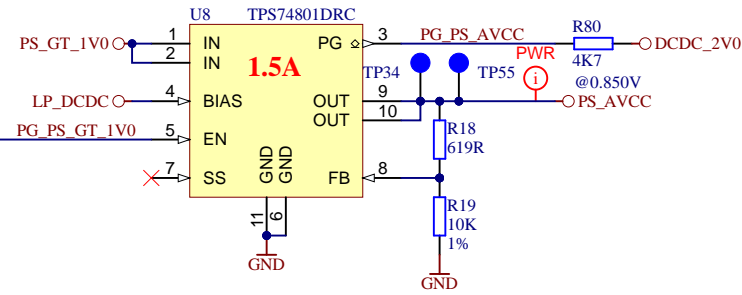
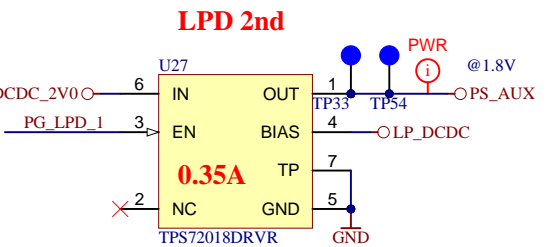
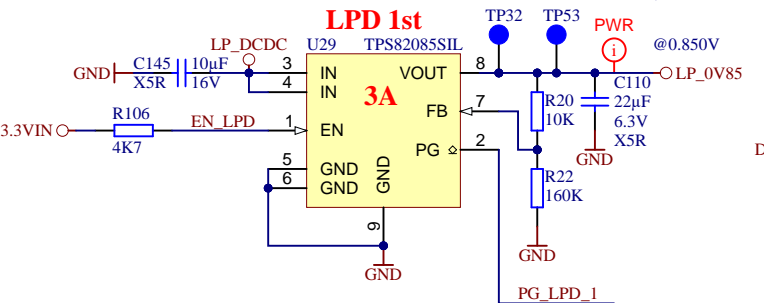
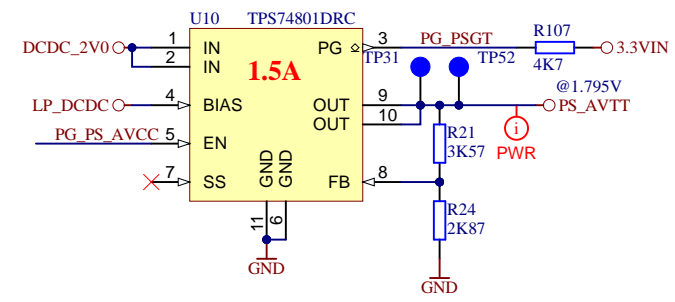
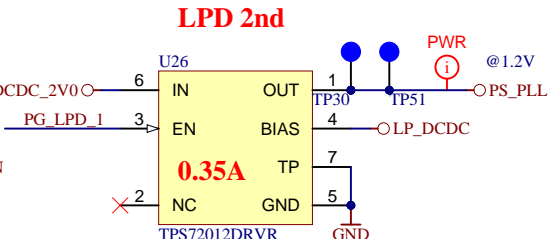
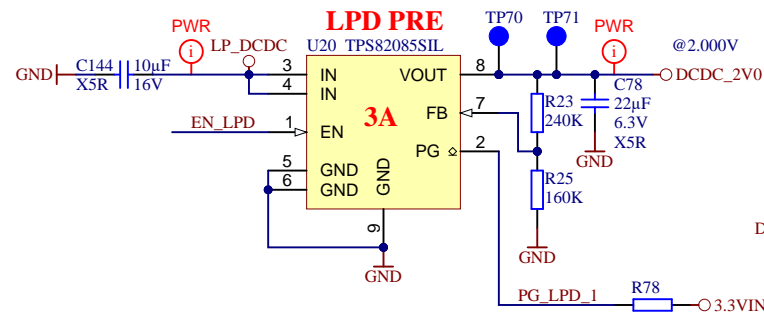
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Title: TE0818 - Power 2

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| A4                       | Number: TE0818<br>BBI81-A        | Rev. 02       |
| Date: 09.10.2023         | Copyright: Trenz Electronic GmbH | Page 29 of 31 |
| Filename: POWER_2.SchDoc |                                  |               |



|                          |                                  |               |
|--------------------------|----------------------------------|---------------|
| Title: TE0818 - Power 3  |                                  |               |
| A4                       | Number: TE0818<br>BBI81-A        | Rev. 02       |
| Date: 09.10.2023         | Copyright: Trenz Electronic GmbH | Page 30 of 31 |
| Filename: POWER_3.SchDoc |                                  |               |



| Net Name | Voltage Rail | Low Detect |
|----------|--------------|------------|
| LP_OV85  | 0.85 V       | 0.743 V    |
| 3.3VIN   | 3.3 V        | 2.941 V    |



|                          |                                  |               |
|--------------------------|----------------------------------|---------------|
| Title: TE0818 - Power 4  |                                  |               |
| A4                       | Number: TE0818 BBI81-A           | Rev. 02       |
| Date: 09.10.2023         | Copyright: Trenz Electronic GmbH | Page 31 of 31 |
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