

1

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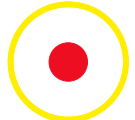





4

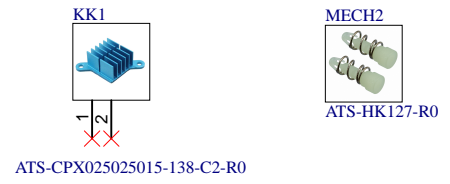
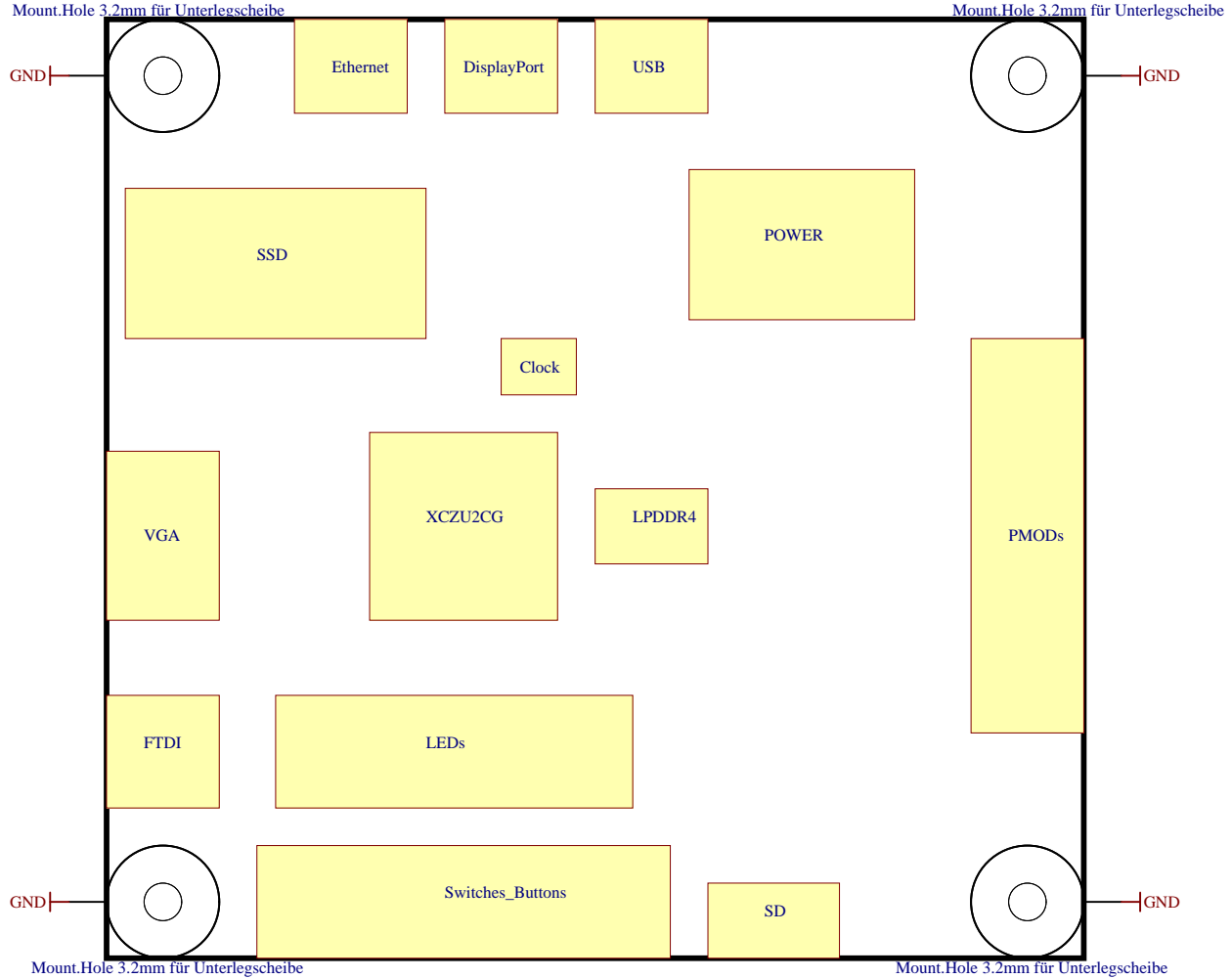
A

B

C

D

- PM1

FIDU-DOT - small
- PM2

FIDU-DOT - small
- PM3

FIDU-DOT - small
- PM4

FIDU-DOT - small
- PM6

FIDU-DOT - small
- PM5

FIDU-DOT - small



| | |
|------------------|------------------|
| Assembly variant | 2AEV2-A |
| Created by | IG |
| Modified by | IG |
| Modified at | 2019-05-13 |
| SVN Revision | Unknown revision |

Serial1
Serial
Serialnumber 6,3 x 6,3mm

LOGO1
TE Logo PRINT Layer
LOGO PRINT

MISC1
Digilent Serialnumber
Digilent_SN



| | | |
|------------------|----------------------------------|--------------|
| Title: TE0802 | | |
| A4 | Number: TE0802-02 2AEV2-A | Rev. 02 |
| Date: 2019-05-20 | Copyright: Trenz Electronic GmbH | Page 1 of 25 |
| Drawn by: IG | Filename: TE0802.schdoc | |

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A

B

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D

1

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A

A

B

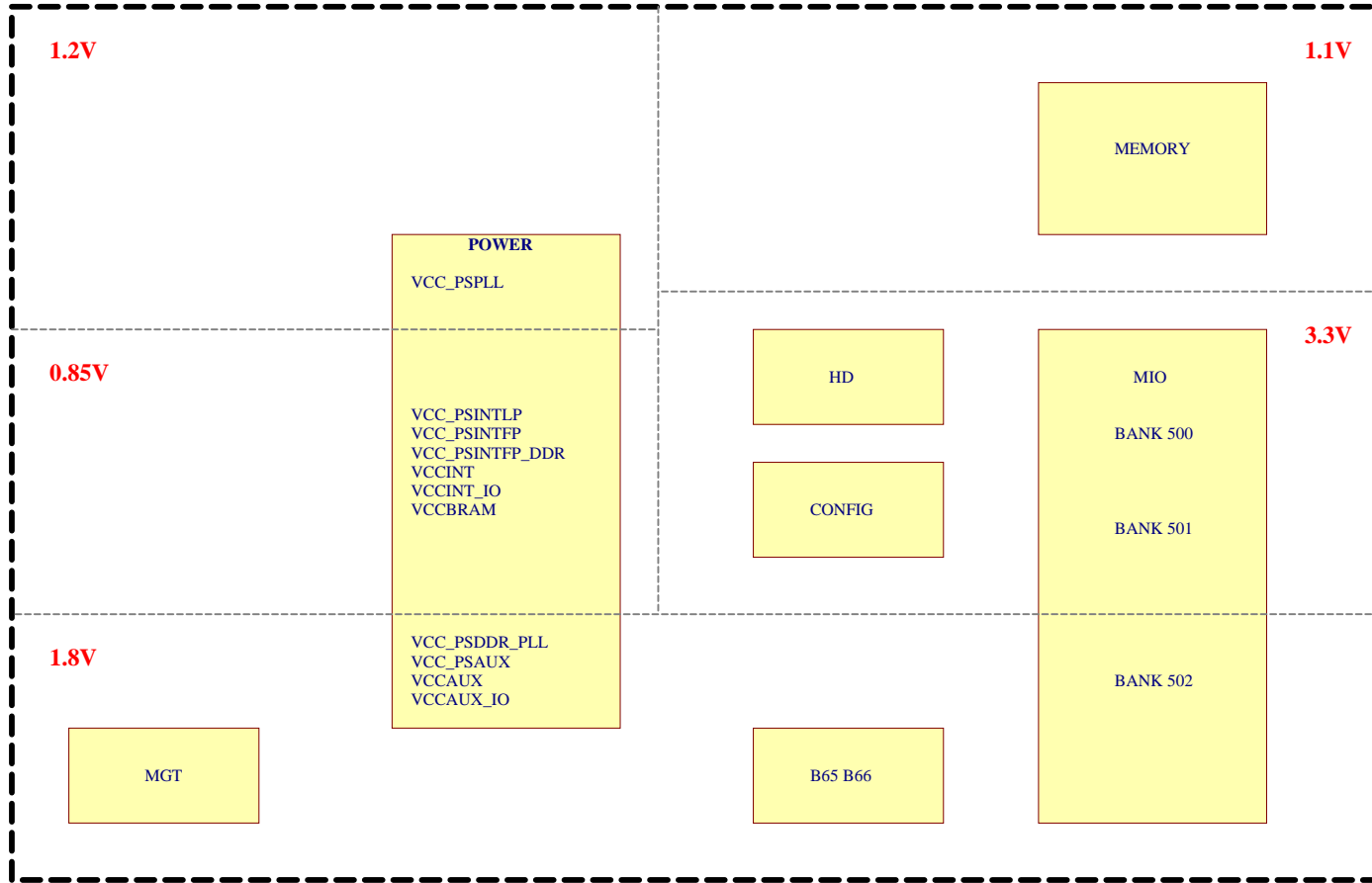
B


C

C

D

D



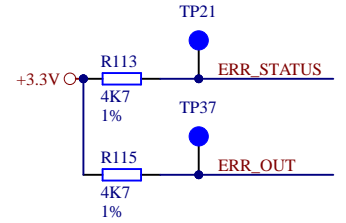
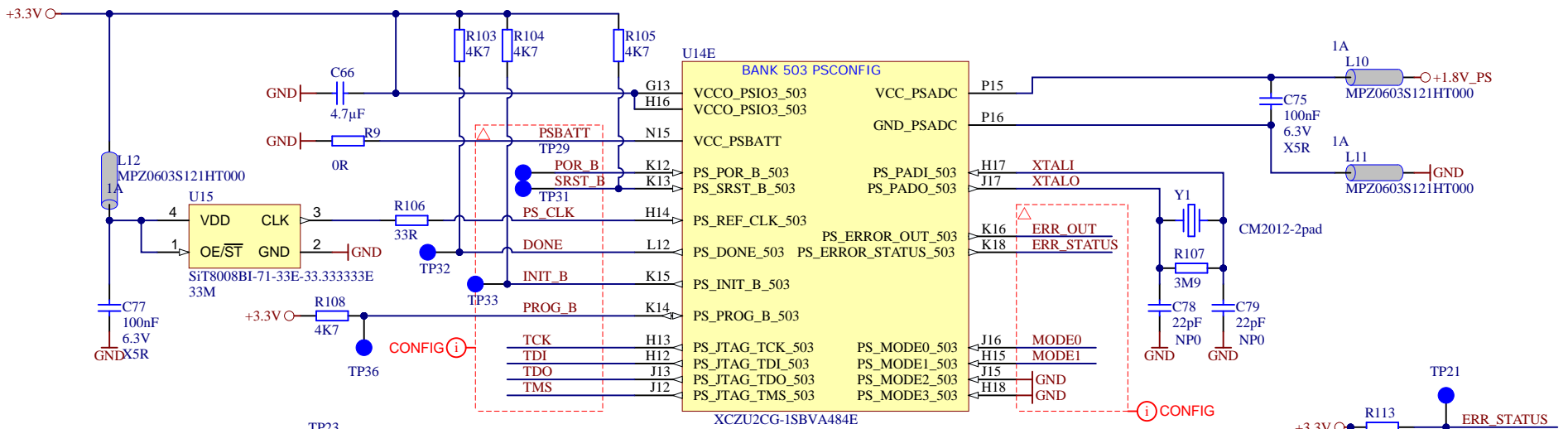
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|  | | Title: XZU2CG | |
| | | A4 | Number: TE0802-02 2AEV2-A |
| Date: 2019-05-20 | | Copyright: Trenz Electronic GmbH | |
| Page 2 of 25 | | Filename: XZU2CG.SchDoc | |
| Drawn by: IG | | | |

1

2

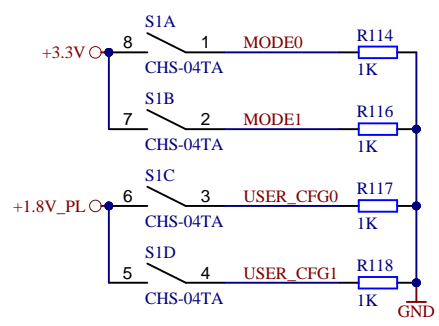
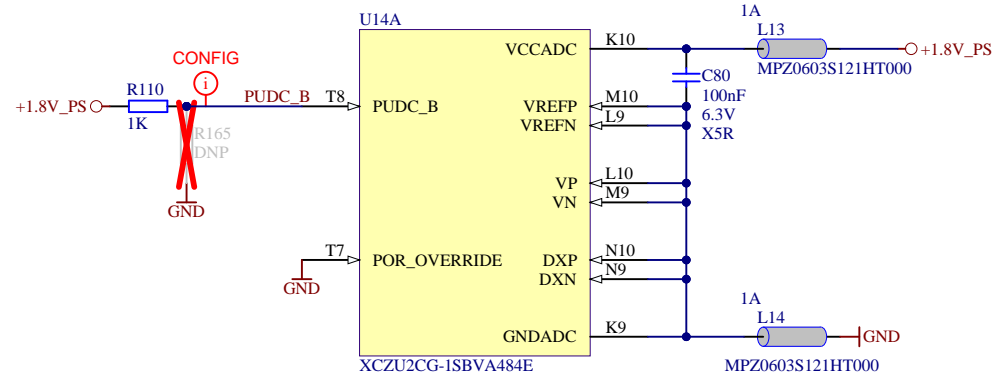

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4



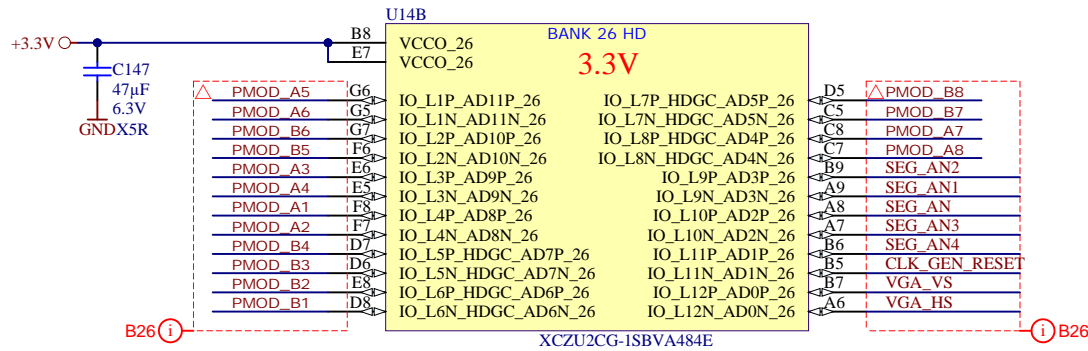
TP23 PSBATT
Testpoint 0.9mm THT
TP24
GND
Testpoint 0.8mm THT


| | MODE [1:0] |
|-----------|------------|
| JTAG | 00 |
| QSPI(24b) | 01 |
| QSPI(32b) | 10 |
| SD0(2.0) | 11 |

Title: **XCZU2CG_Config**

| | | |
|------------------|----------------------------------|--------------|
| A4 | Number: TE0802-02 2AEV2-A | Rev. 02 |
| Date: 2019-05-20 | Copyright: Trenz Electronic GmbH | Page 3 of 25 |
| Drawn by: IG | Filename: XCZU2CG_Config.SchDoc | |



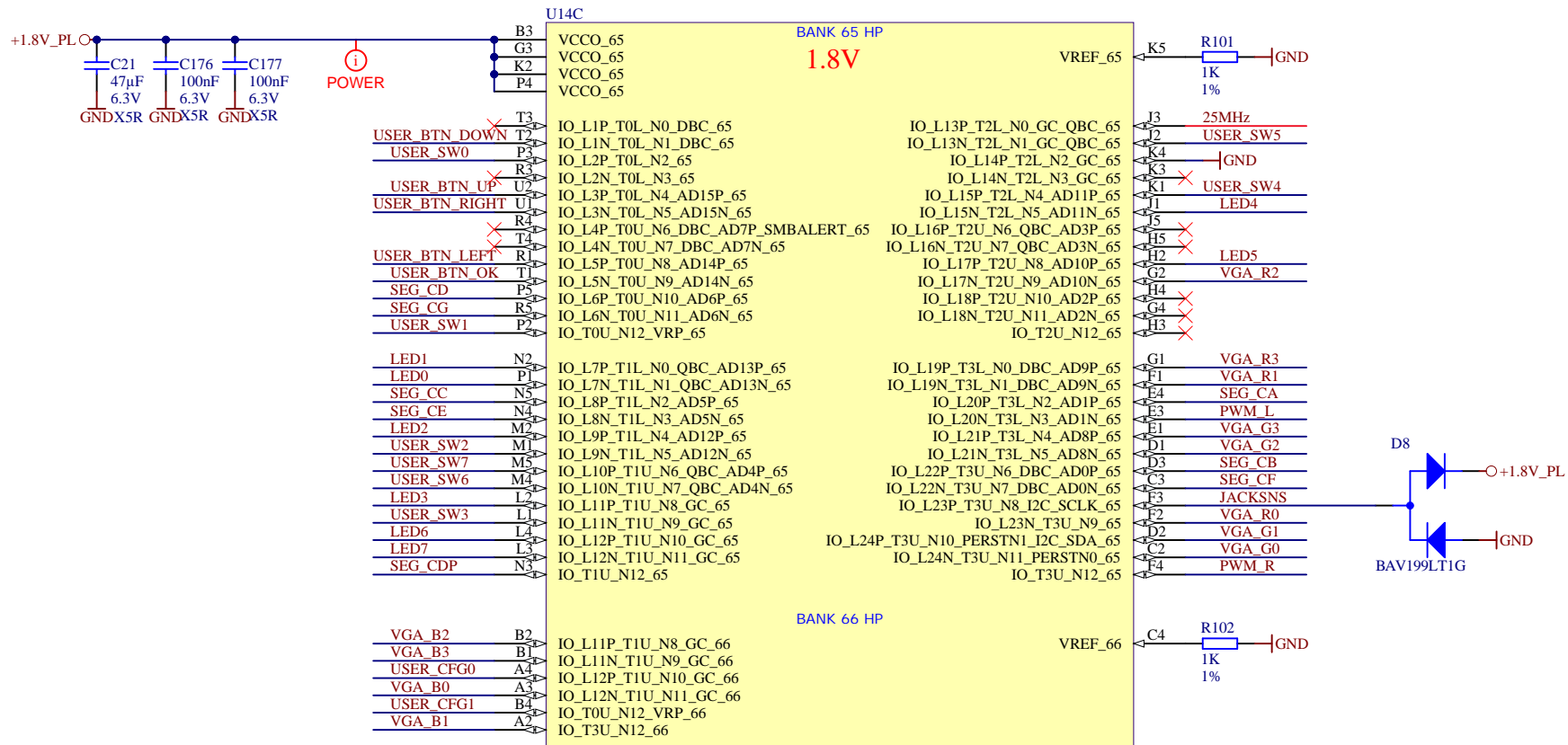
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|  | Title: XCZU2CG_HD | | |
| | A4 | Number: TE0802-02 2AEV2-A | Rev. 02 |
| | Date: 2019-05-20 | Copyright: Trenz Electronic GmbH | Page 4 of 25 |
| | Drawn by: IG | Filename: XCZU2CG_HD.SchDoc | |

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A

A

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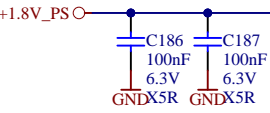
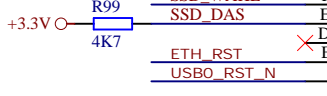
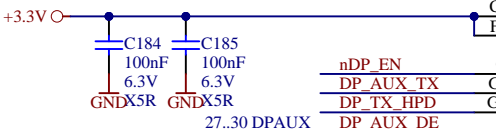
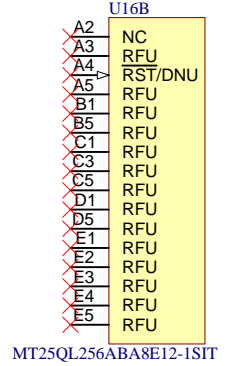
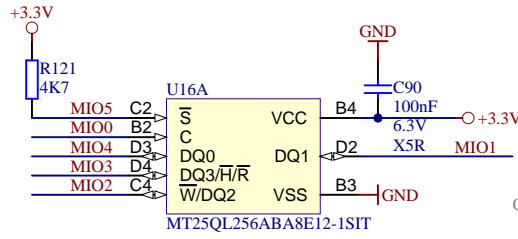
2

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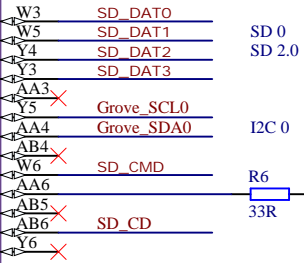
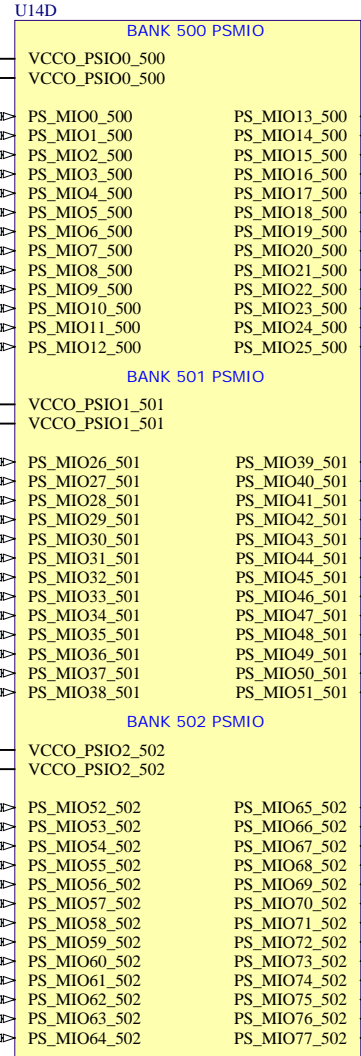
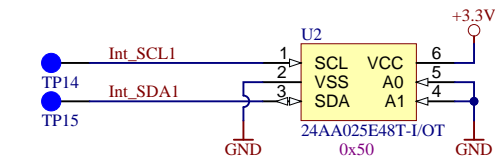


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| Title: XCZU2CG_B65_B66 | | |
| A4 | Number: TE0802-02 2AEV2-A | Rev. 02 |
| Date: 2019-05-20 | Copyright: Trenz Electronic GmbH | Page 5 of 25 |
| Drawn by: IG | Filename: XCZU2CG_B65_B66.SchDoc | |



USB0
USB PHY

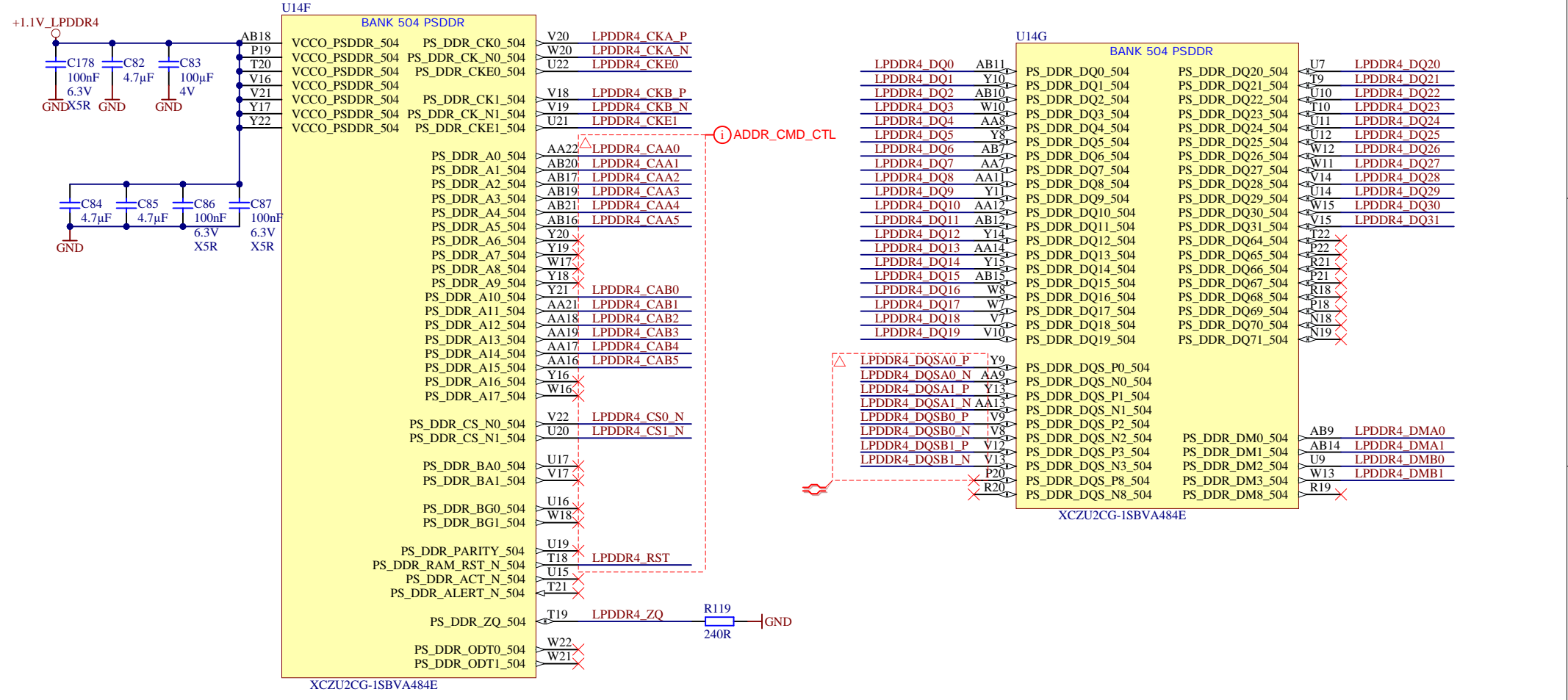
ETH_TXCK



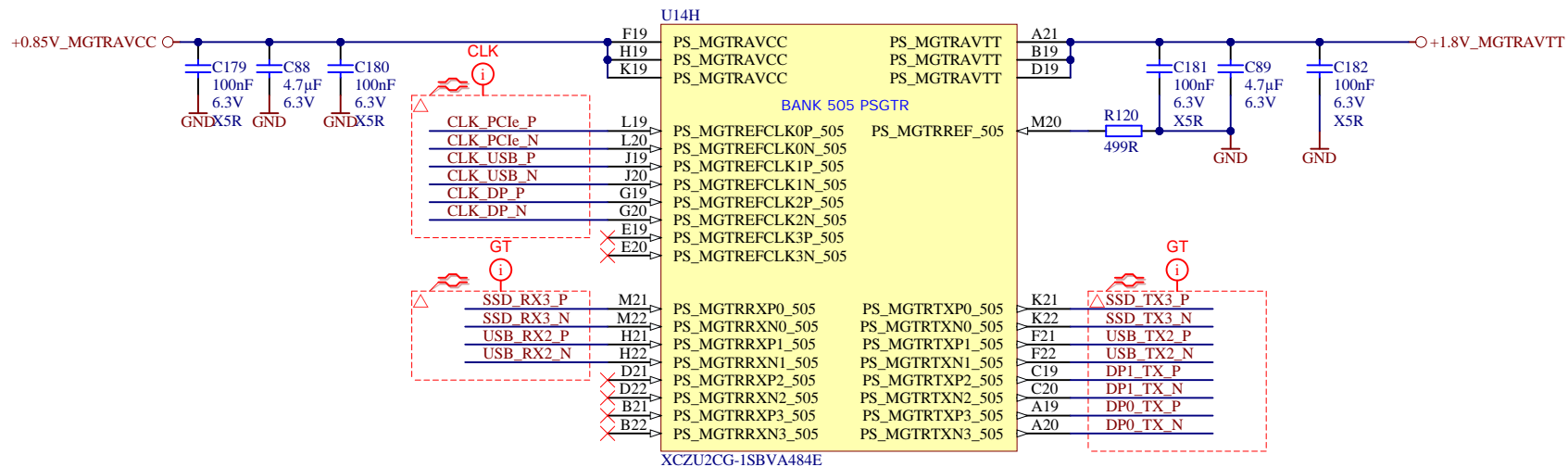
GEM3



| | | |
|--------------------|----------------------------------|--------------|
| Title: XCZU2CG_MIO | | |
| A4 | Number: TE0802-02 2AEV2-A | Rev. 02 |
| Date: 2019-05-20 | Copyright: Trenz Electronic GmbH | Page 6 of 25 |
| Drawn by: IG | Filename: XCZU2CG_MIO.SchDoc | |



| | | | |
|--|------------------------------|---|----------------------------|
| | Title: XCZU2CG_Memory | | |
| | A4 | Number: TE0802-02 2AEV2-A | Rev. 02 |
| | Date: 2019-05-20 | Copyright: Trenz Electronic GmbH | Page 7 of 25 |
| | Drawn by: IG | Filename: XCZU2CG_Memory.SchDoc | |



| | | |
|--|---------------------------|---|
| | Title: XCZU2CG_MGT | |
| | A4 | Number: TE0802-02 2AEV2-A |
| | Date: 2019-05-20 | Copyright: Trenz Electronic GmbH |
| | Drawn by: IG | Filename: XCZU2CG_MGT.SchDoc |

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A

A

B

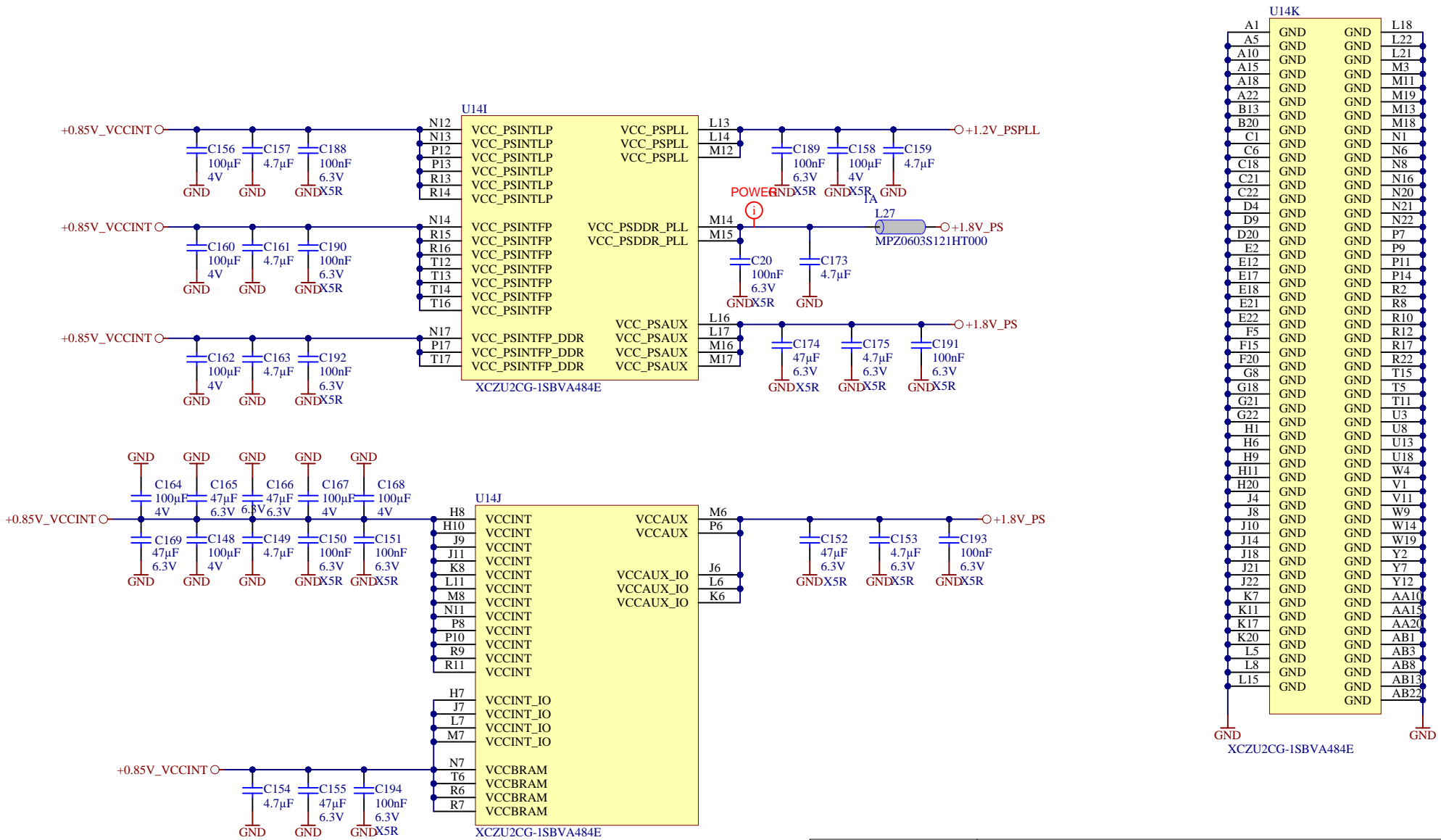
B

C

C

D

D



U14K

| | | | |
|-----|-----|-----|------|
| A1 | GND | GND | L18 |
| A5 | GND | GND | L22 |
| A10 | GND | GND | L21 |
| A15 | GND | GND | M3 |
| A18 | GND | GND | M11 |
| A22 | GND | GND | M19 |
| B13 | GND | GND | M13 |
| B20 | GND | GND | M18 |
| C1 | GND | GND | N1 |
| C6 | GND | GND | N6 |
| C18 | GND | GND | N8 |
| C21 | GND | GND | N16 |
| C22 | GND | GND | N20 |
| D4 | GND | GND | N21 |
| D9 | GND | GND | N22 |
| D20 | GND | GND | P7 |
| E2 | GND | GND | P9 |
| E12 | GND | GND | P11 |
| E17 | GND | GND | P14 |
| E18 | GND | GND | R2 |
| E21 | GND | GND | R8 |
| E22 | GND | GND | R10 |
| F5 | GND | GND | R12 |
| F15 | GND | GND | R17 |
| F20 | GND | GND | R22 |
| G8 | GND | GND | T15 |
| G18 | GND | GND | T5 |
| G21 | GND | GND | T11 |
| G22 | GND | GND | U3 |
| H1 | GND | GND | U8 |
| H6 | GND | GND | U13 |
| H9 | GND | GND | U18 |
| H11 | GND | GND | W4 |
| H20 | GND | GND | V1 |
| J4 | GND | GND | V11 |
| J8 | GND | GND | W9 |
| J10 | GND | GND | W14 |
| J14 | GND | GND | W19 |
| J18 | GND | GND | Y2 |
| J21 | GND | GND | Y7 |
| J22 | GND | GND | Y12 |
| K7 | GND | GND | AA10 |
| K11 | GND | GND | AA15 |
| K17 | GND | GND | AA20 |
| K20 | GND | GND | AB1 |
| L5 | GND | GND | AB3 |
| L8 | GND | GND | AB8 |
| L15 | GND | GND | AB13 |
| | GND | GND | AB22 |

XCZU2CG-1SBVA484E

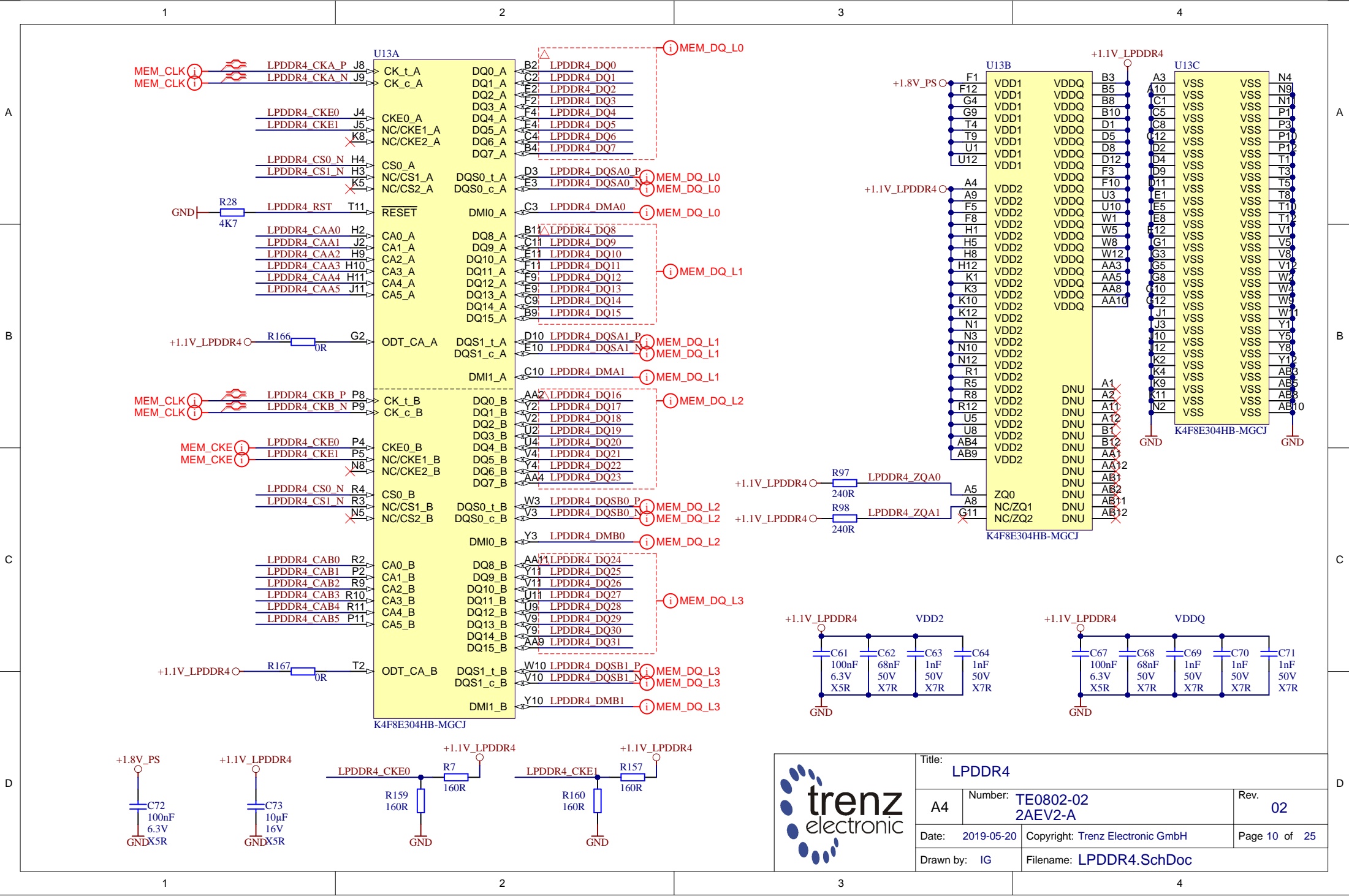
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| | A4 | Number: TE0802-02 2AEV2-A |
| | Date: 2019-05-20 | Copyright: Trenz Electronic GmbH |
| | Drawn by: IG | Filename: XCZU2CG_Power.SchDoc |
| | Rev. 02 | Page 9 of 25 |


1

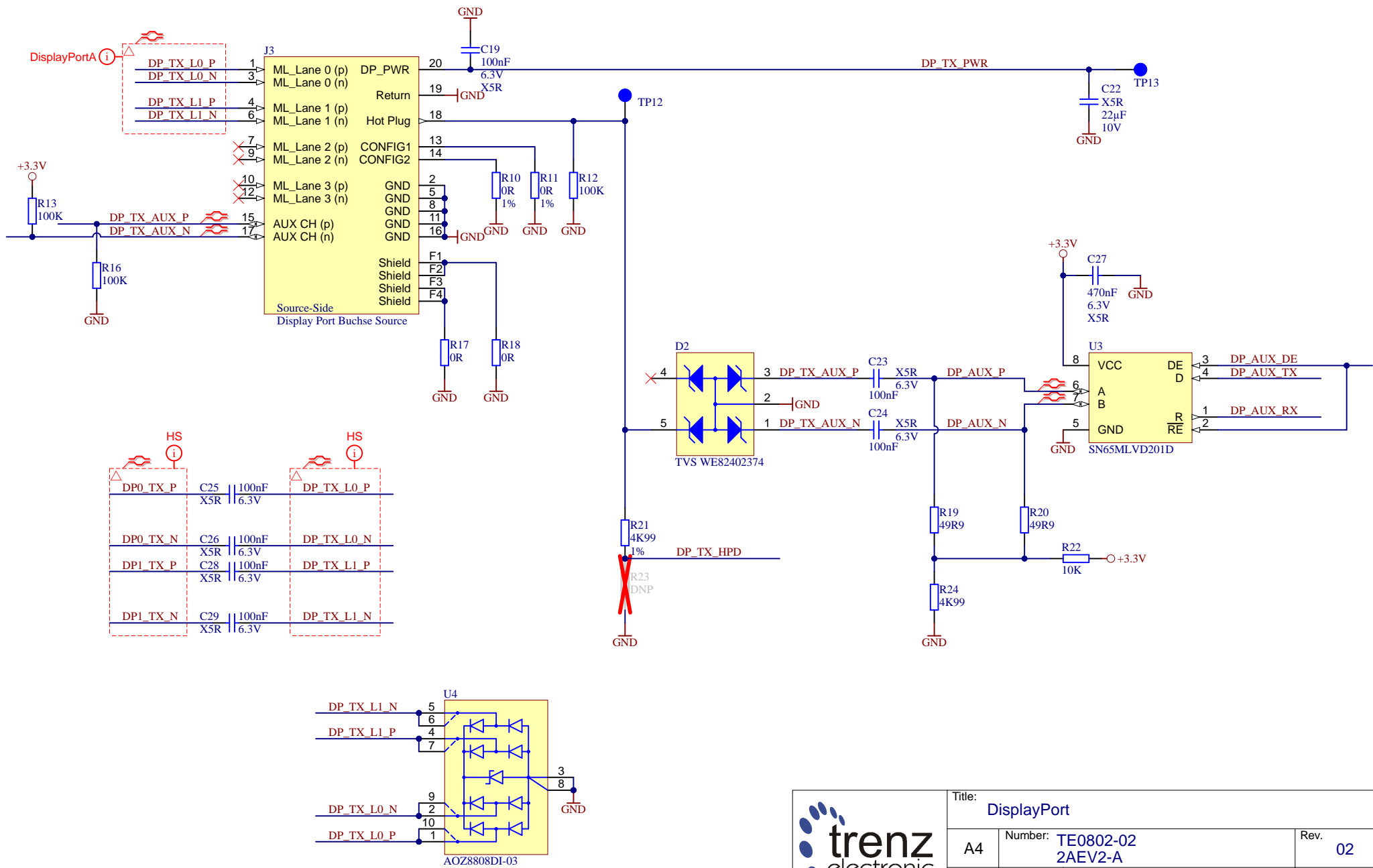
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3

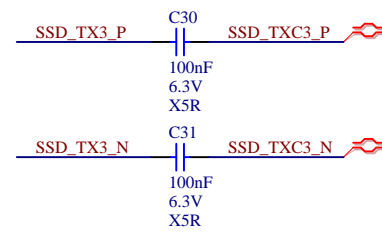
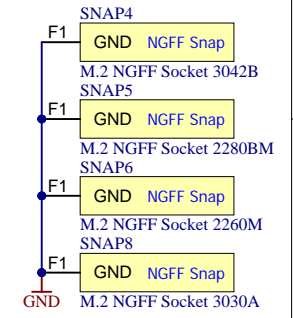
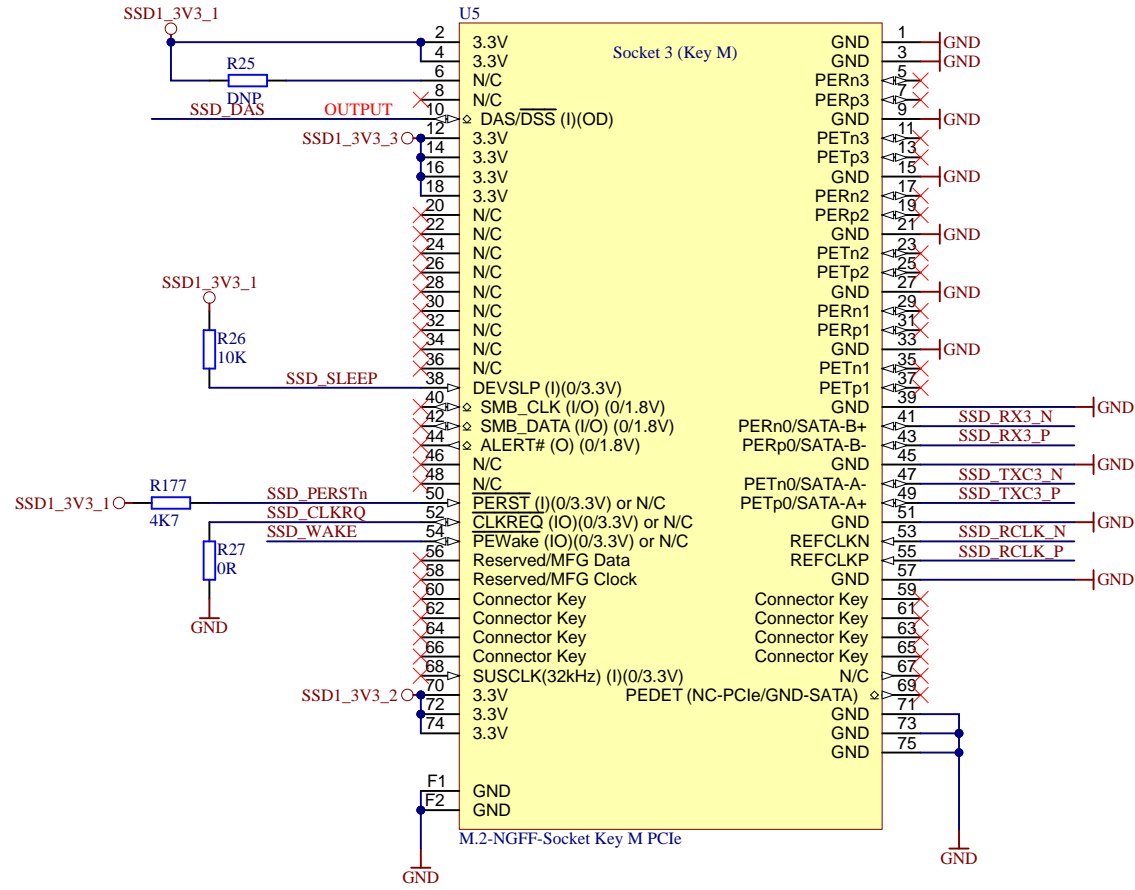
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|  | | | Title: LPDDR4 | |
| A4 | Number: TE0802-02 2AEV2-A | Rev. 02 | | |
| Date: 2019-05-20 | Copyright: Trenz Electronic GmbH | Page 10 of 25 | | |
| Drawn by: IG | Filename: LPDDR4.SchDoc | | | |

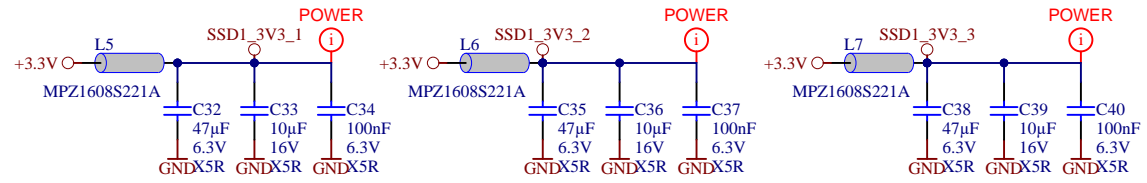



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|  | | | Title: DisplayPort | |
| A4 | Number: TE0802-02 2AEV2-A | Rev. 02 | | |
| Date: | 2019-05-20 | Copyright: | Trenz Electronic GmbH | |
| Page: | 11 | Page: | 11 of 25 | |
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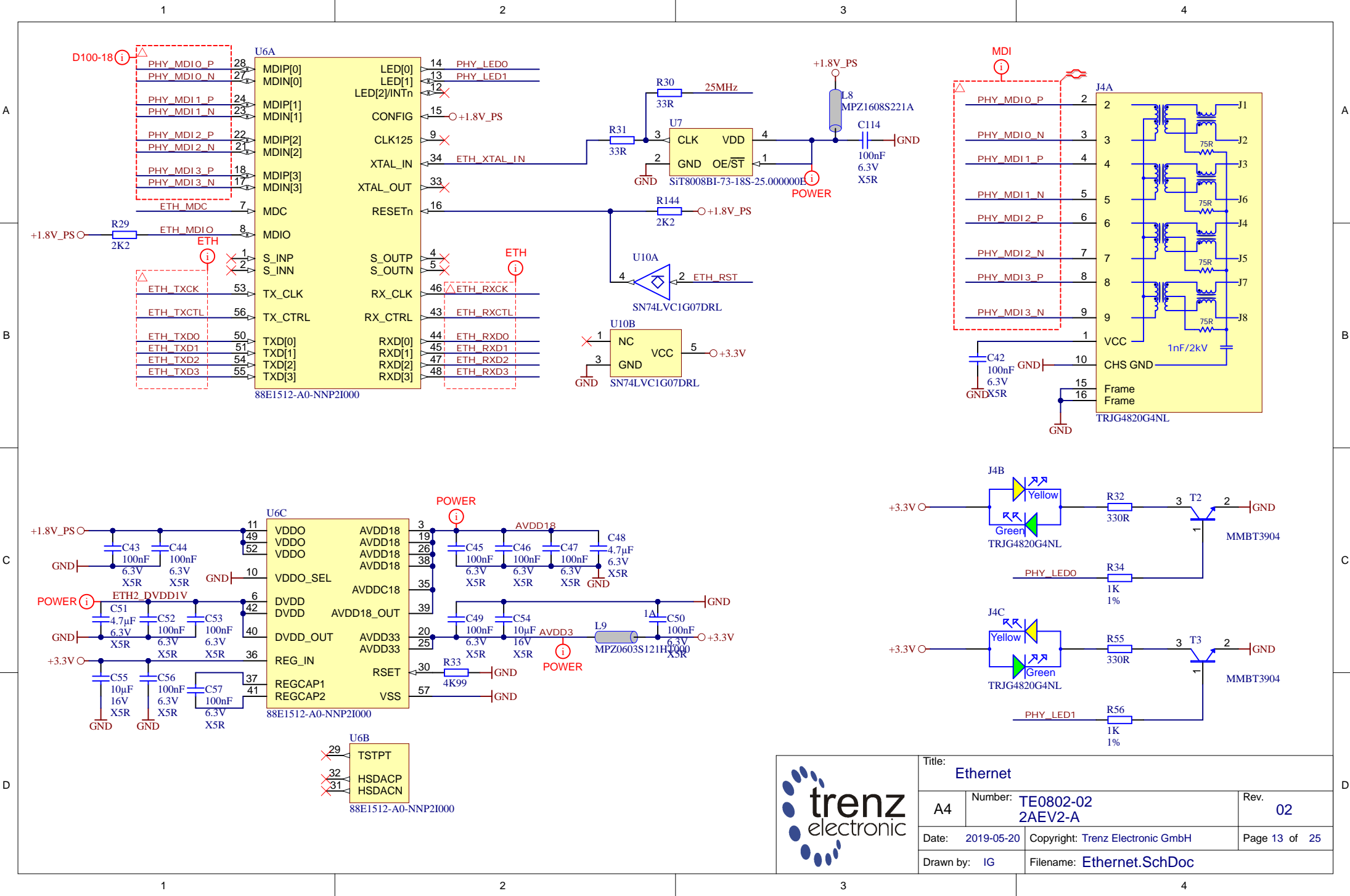


MECH1

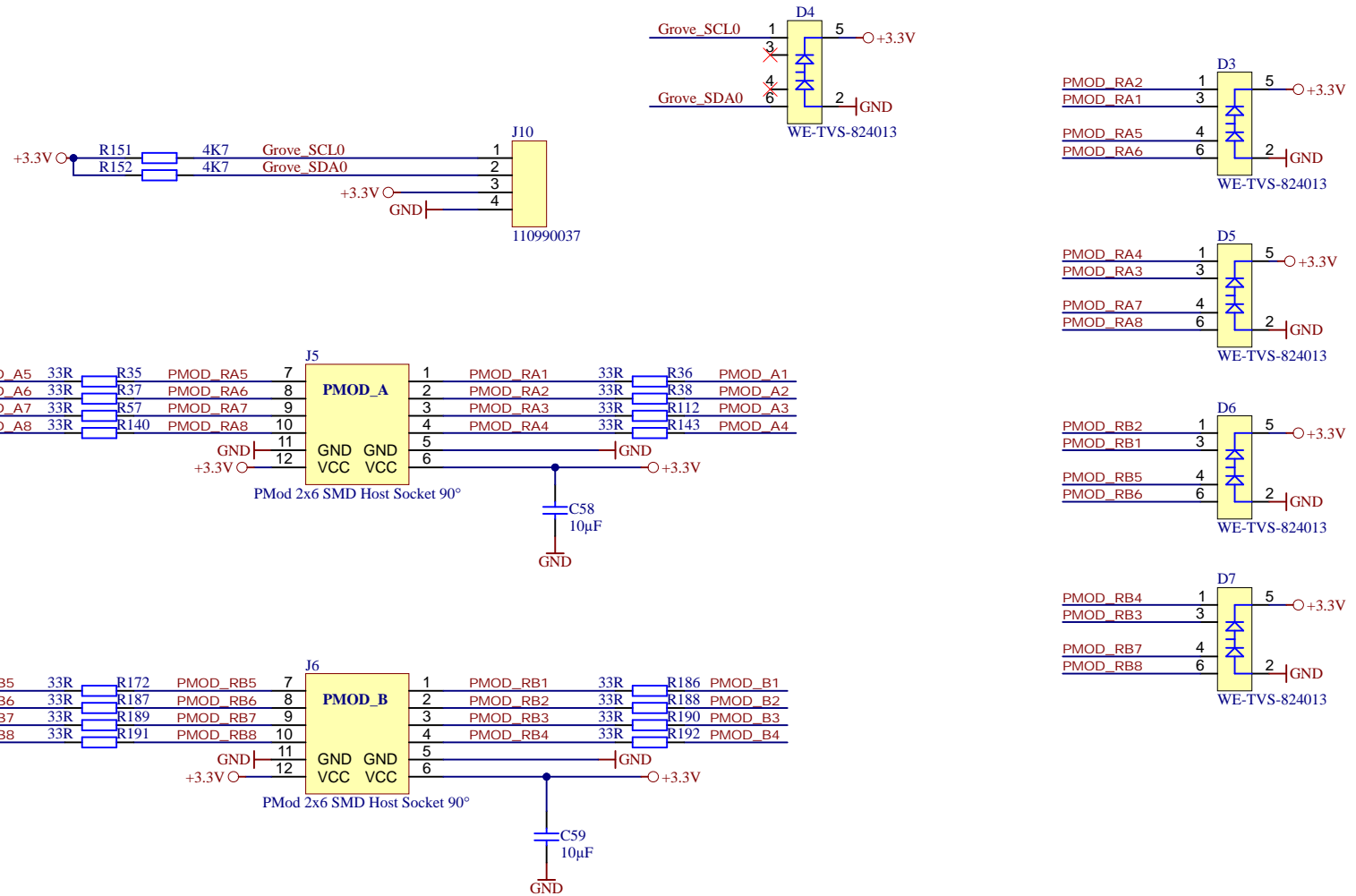
 M.2 NGFF SMD-Abstandsbolzen - M3 - 1.5mm




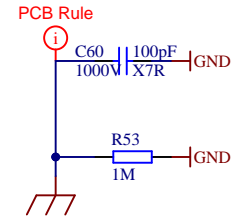
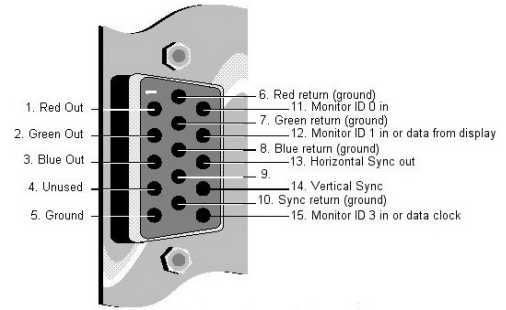
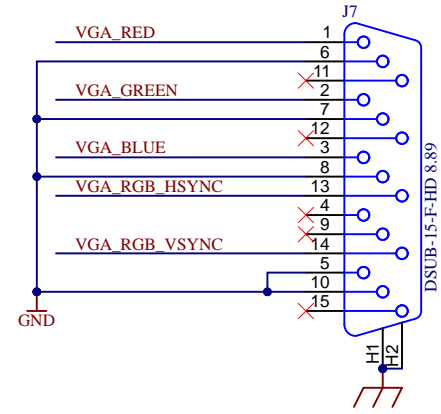
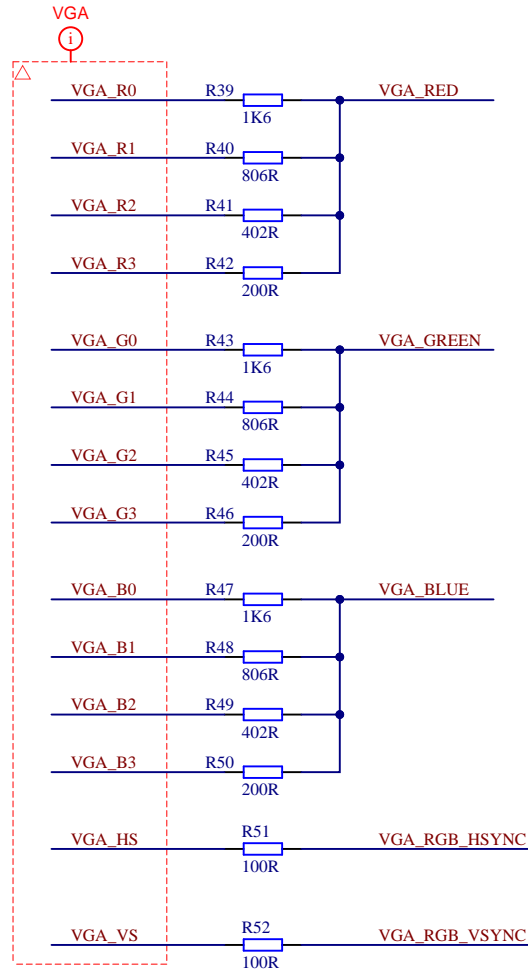
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|  | | | Title: SSD | |
| | | | A4 | Number: TE0802-02 2AEV2-A |
| Date: 2019-05-20 | | Copyright: Trenz Electronic GmbH | | Page 12 of 25 |
| Drawn by: IG | | Filename: SSD.SchDoc | | |



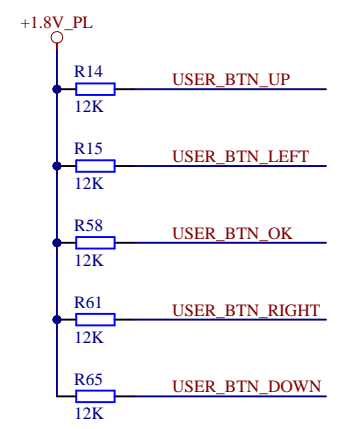
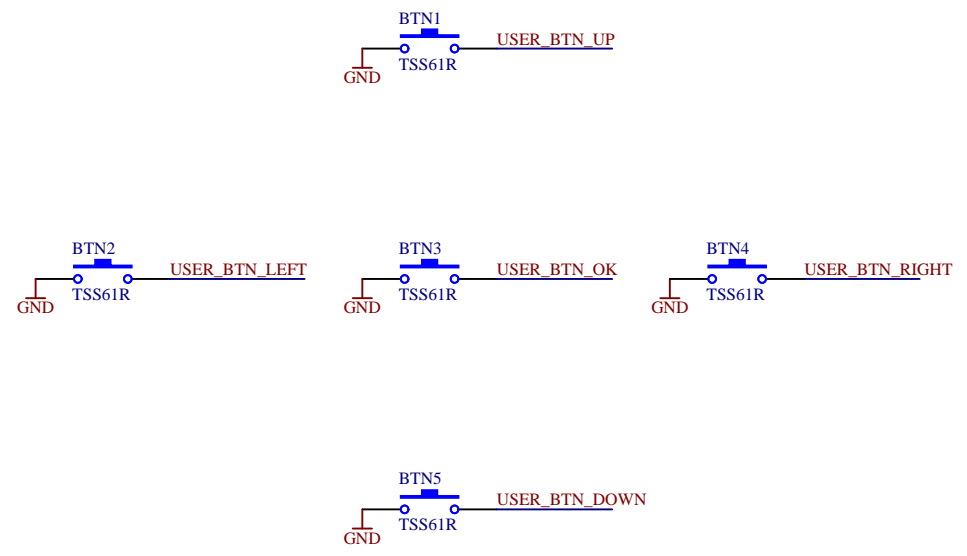
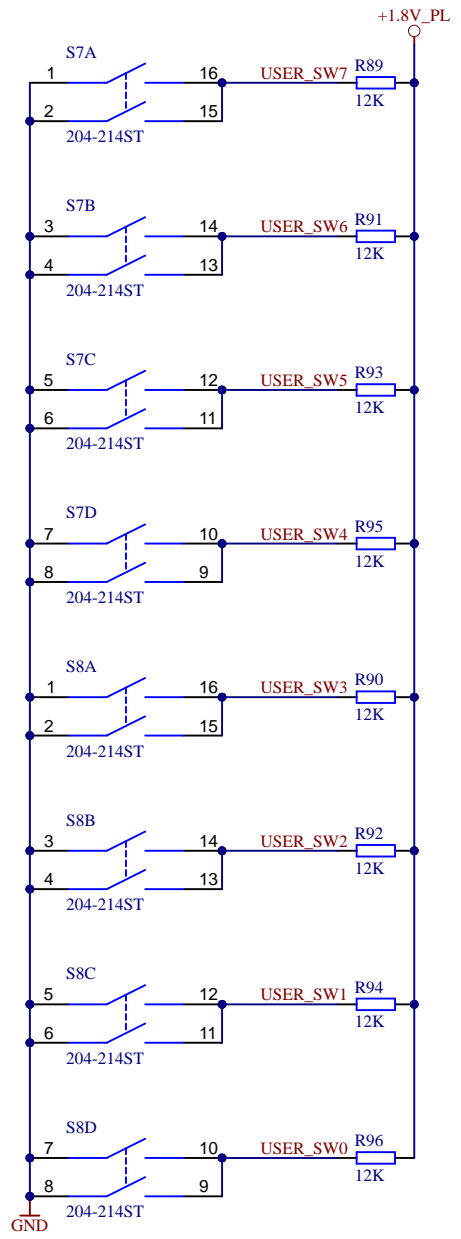
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| A4 | Number: TE0802-02 2AEV2-A | Rev. 02 |
| Date: 2019-05-20 | Copyright: Trenz Electronic GmbH | Page 13 of 25 |
| Drawn by: IG | Filename: Ethernet.SchDoc | |




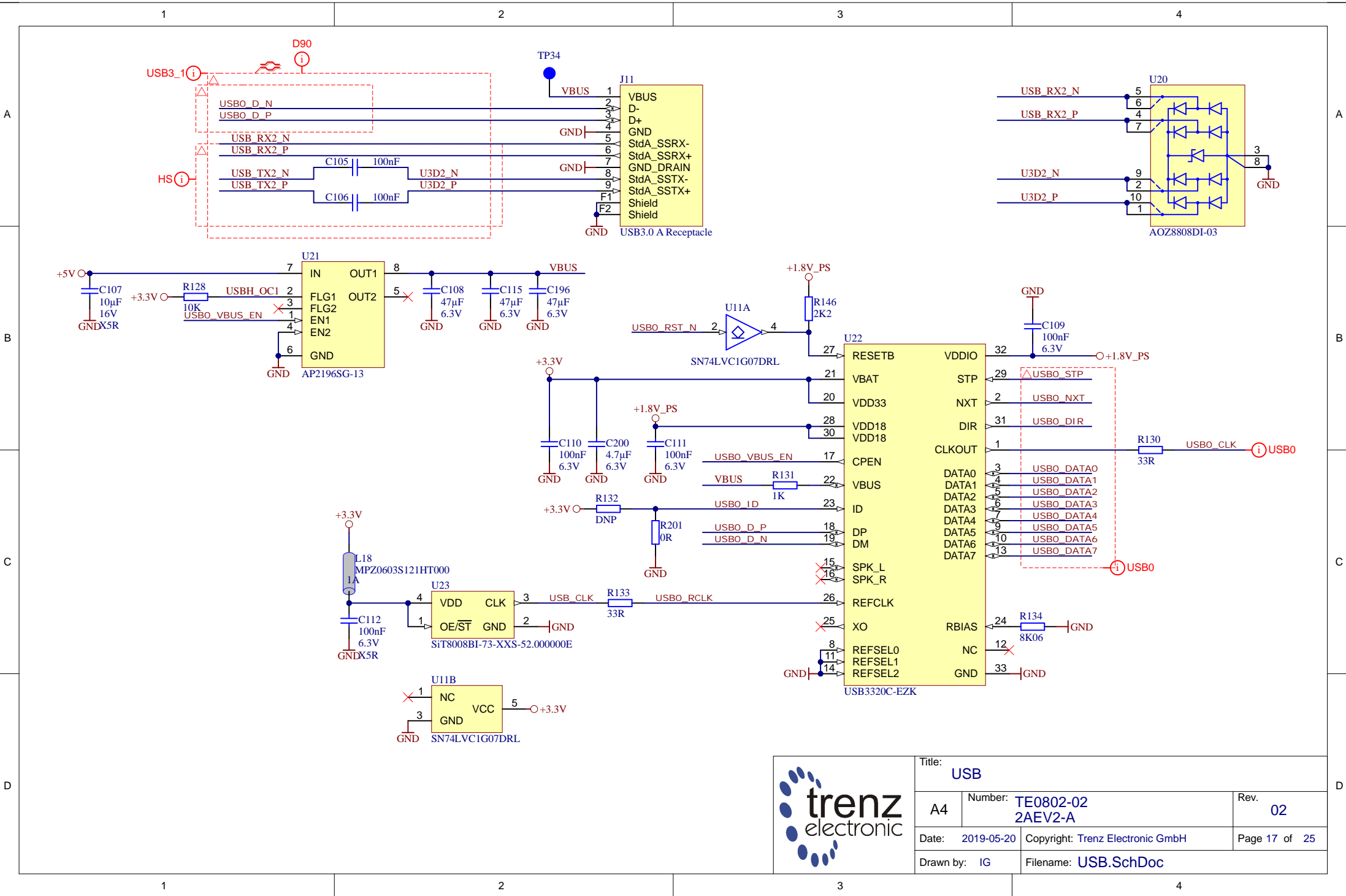
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|  | | | Title: PMODs | |
| | | | A4 | Number: TE0802-02 2AEV2-A |
| Date: 2019-05-20 | | Copyright: Trenz Electronic GmbH | | Page 14 of 25 |
| Drawn by: IG | | Filename: PMODs.SchDoc | | |




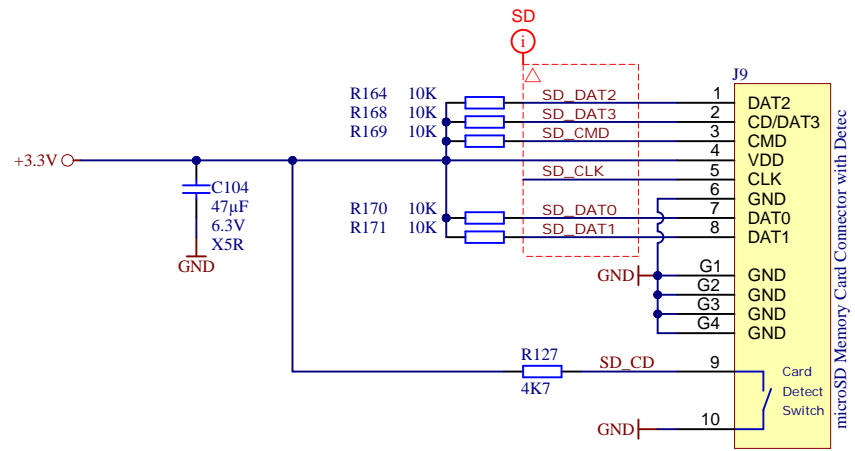
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|--|-------------------------|--|-----------------------------|
| | Title: VGA_OUT | | |
| | A4 | Number: TE0802-02 2AEV2-A | Rev. 02 |
| | Date: 2019-05-20 | Copyright: Trenz Electronic GmbH | Page 15 of 25 |
| | Drawn by: IG | Filename: VGA_OUT.SchDoc | |




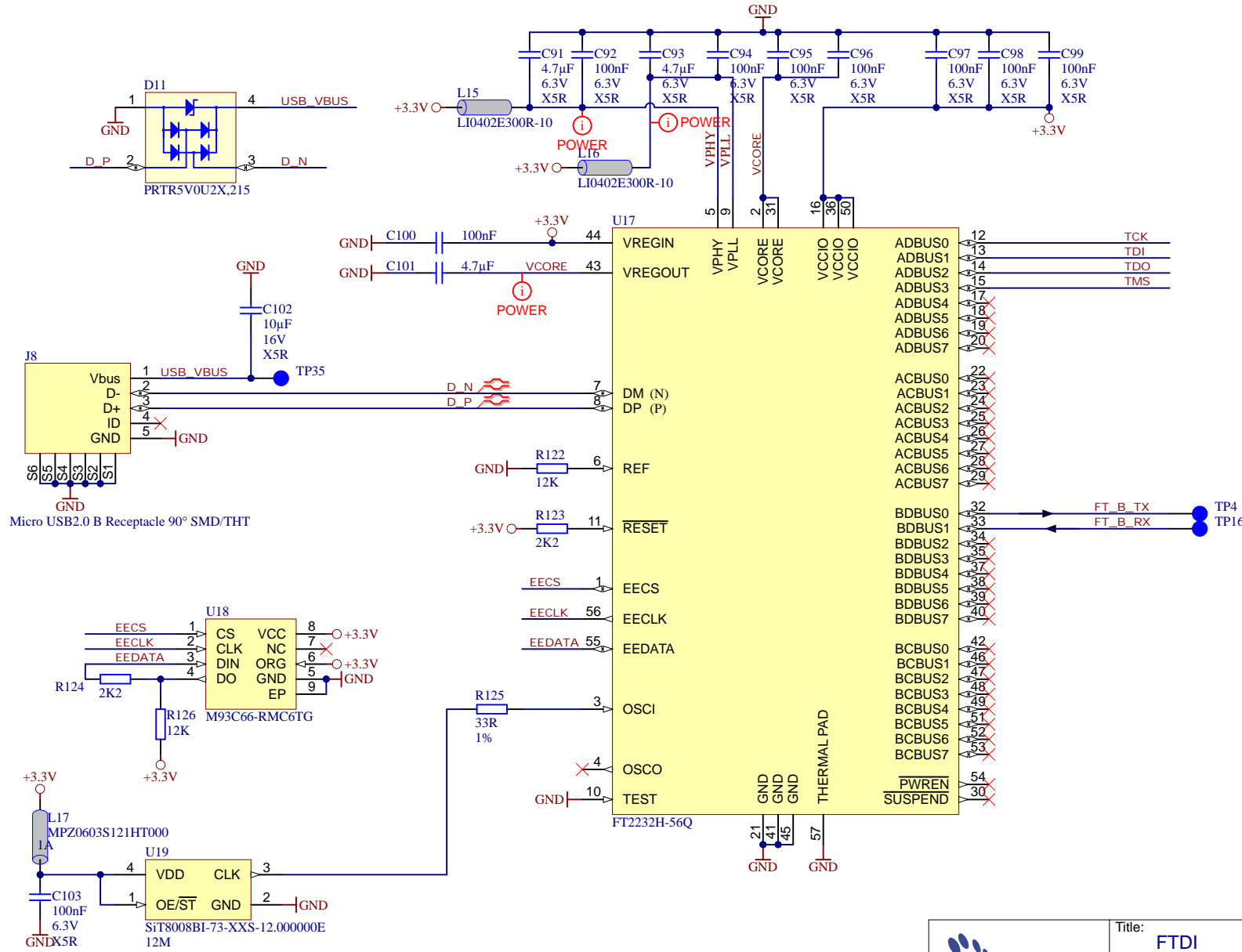
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|  | | | Title: Switches_Buttons | |
| | | | A4 | Number: TE0802-02 2AEV2-A |
| Date: 2019-05-20 | | Copyright: Trenz Electronic GmbH | | Page 16 of 25 |
| Drawn by: IG | | Filename: Switches_Buttons.SchDoc | | |



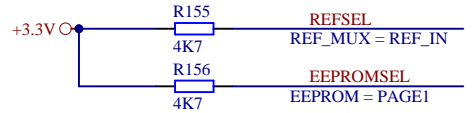
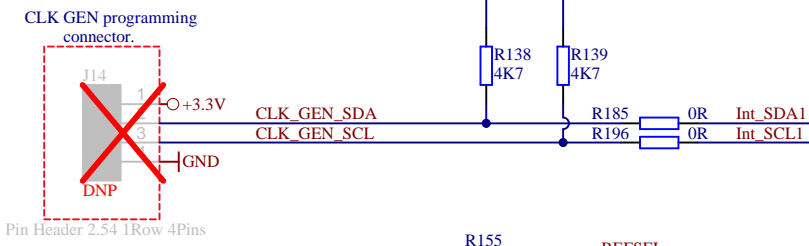
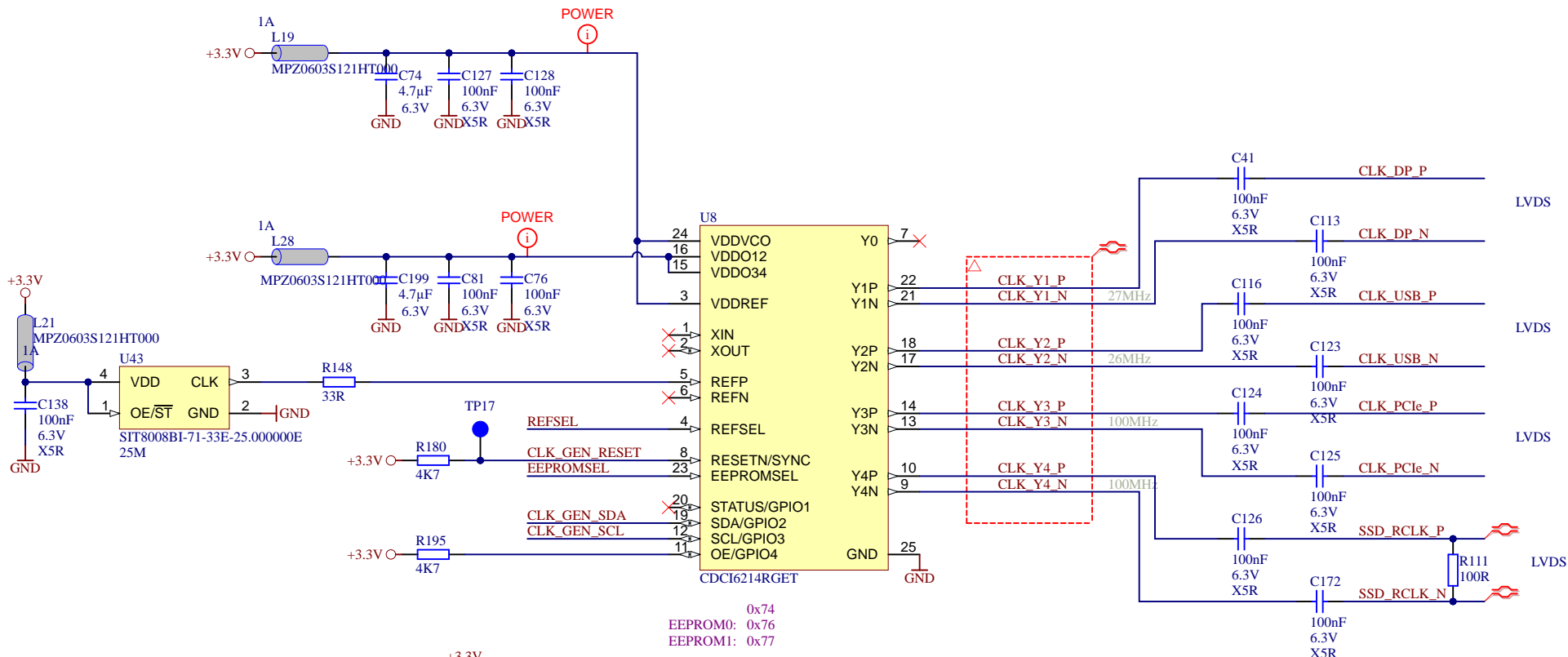
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| | | | A4 | Number: TE0802-02 2AEV2-A |
| Date: 2019-05-20 | | Copyright: Trenz Electronic GmbH | | Page 17 of 25 |
| Drawn by: IG | | Filename: USB.SchDoc | | |



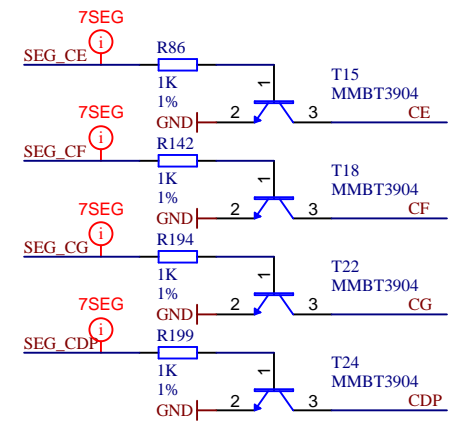
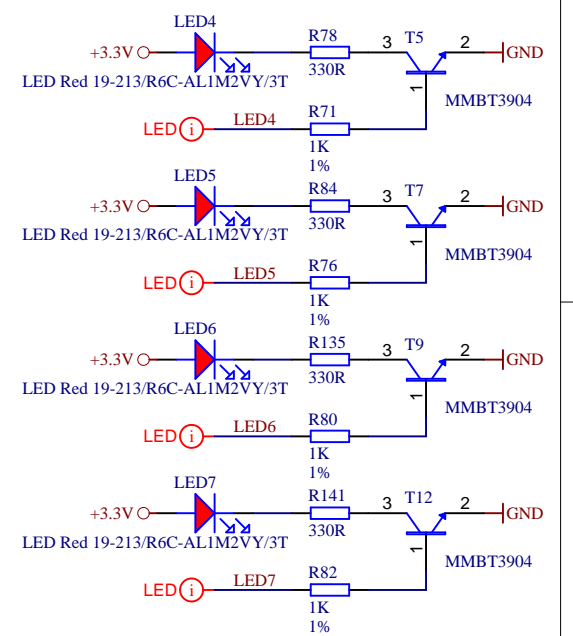
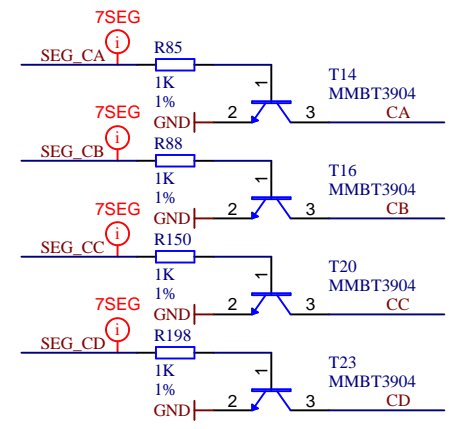
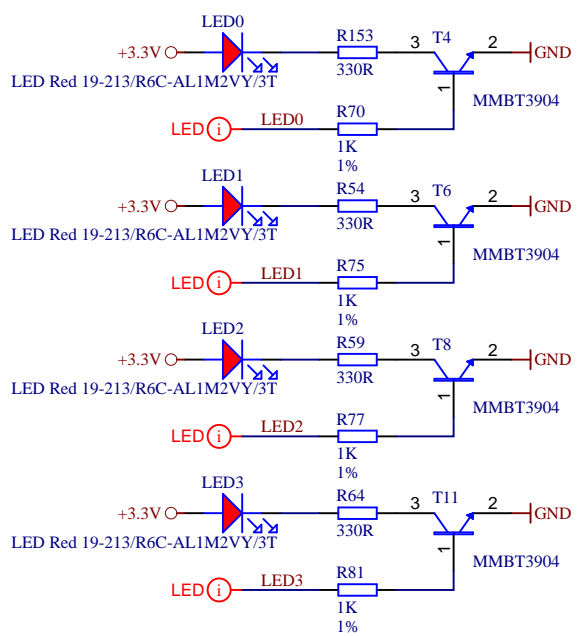
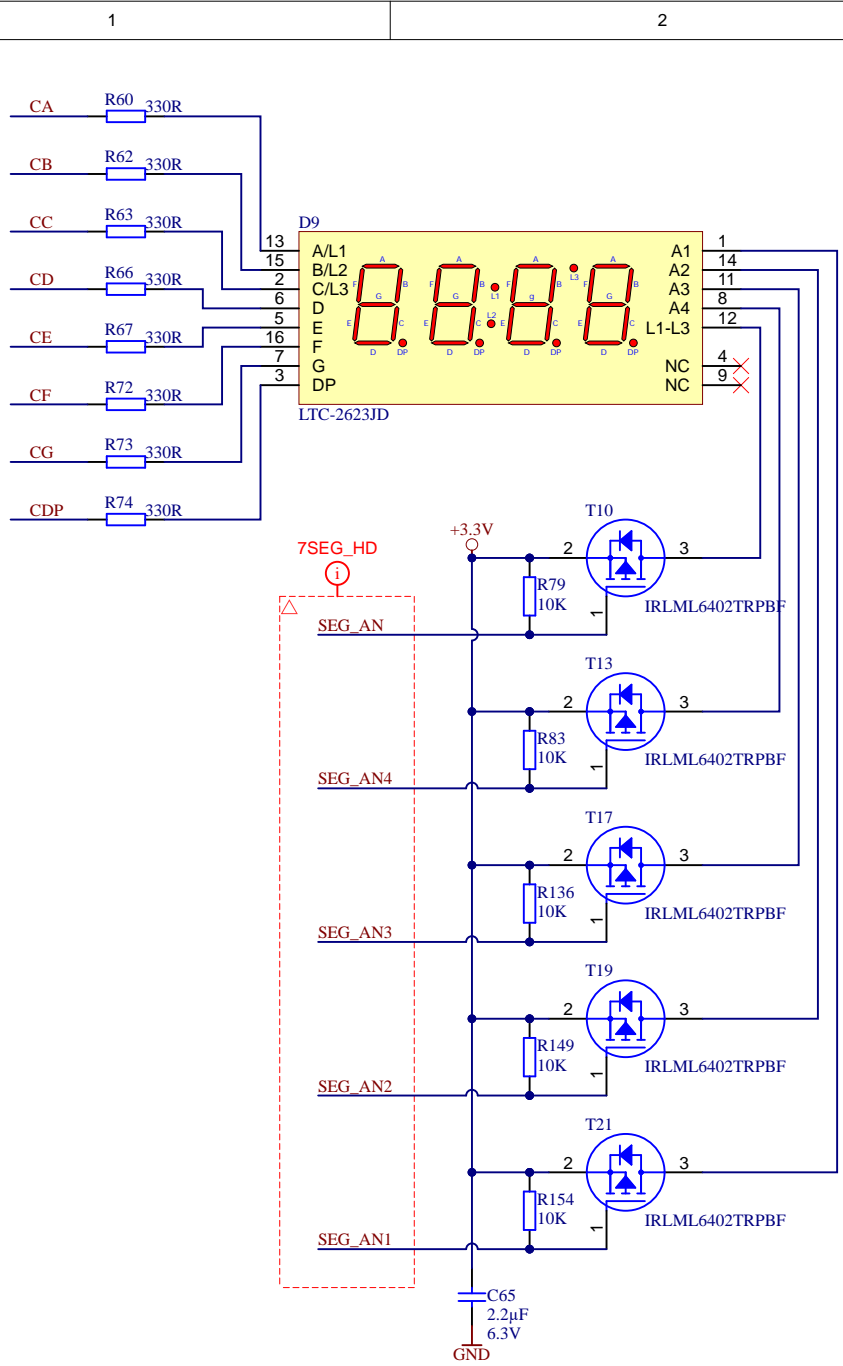
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| | Date: 2019-05-20 | Copyright: Trenz Electronic GmbH | Page 18 of 25 |
| | Drawn by: IG | Filename: SD.SchDoc | |




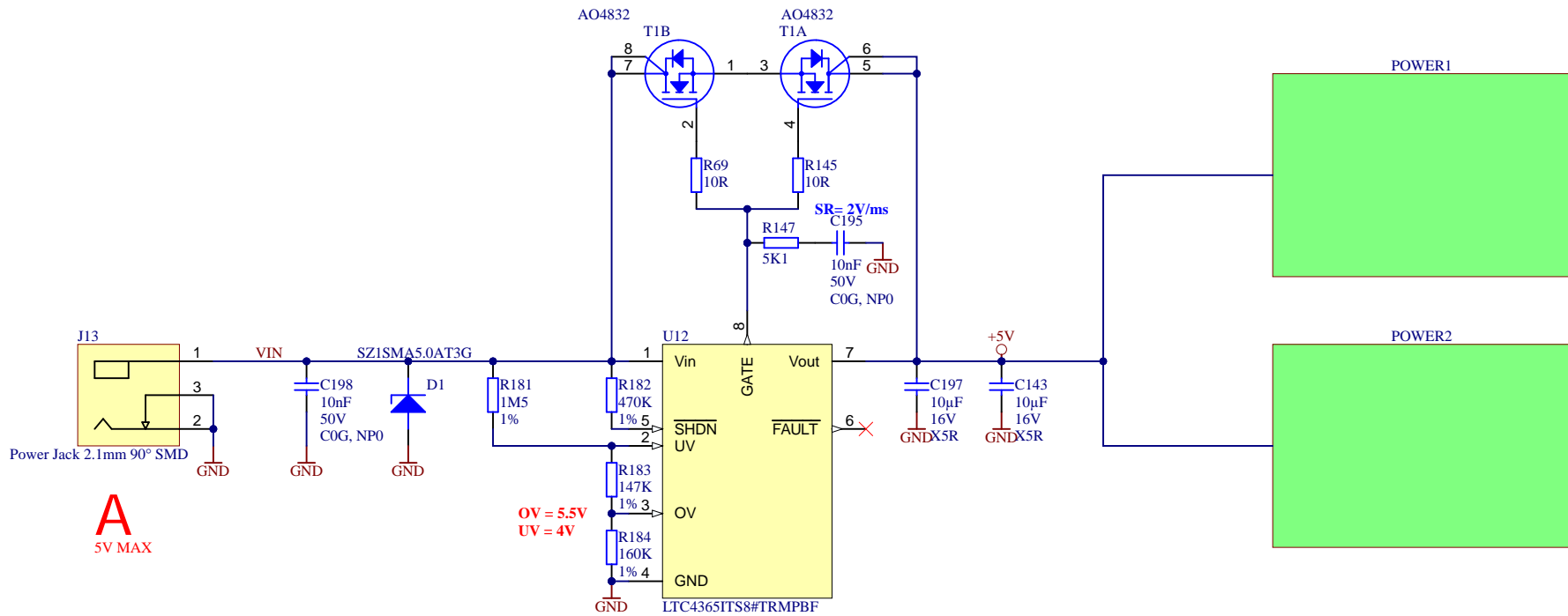
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| Title: FTDI | | |
| A4 | Number: TE0802-02 2AEV2-A | Rev. 02 |
| Date: 2019-05-20 | Copyright: Trenz Electronic GmbH | |
| Page 19 of 25 | Page 19 of 25 | |
| Drawn by: IG | Filename: FTDI.SchDoc | |




| | | |
|---------------------|---------------------------------------|----------------|
| Title: Clock | | |
| A4 | Number: TE0802-02 2AEV2-A | Rev. 02 |
| Date: 2019-05-20 | Copyright: Trenz Electronic GmbH / TT | Page 20 of 25 |
| Drawn by: IG | Filename: Clock.SchDoc | |



| | | | | |
|---|--|----------------------------------|-------------|------------------------------|
|  | | | Title: LEDs | |
| | | | A4 | Number: TE0802-02 2AEV2-A |
| Date: 2019-05-20 | | Copyright: Trenz Electronic GmbH | | Page 21 of 25 |
| Drawn by: IG | | Filename: LEDs.SchDoc | | |



| | | | |
|---|--|--|------------------------------|
|  | | Title: POWER | |
| | | A4 | Number: TE0802-02 2AEV2-A |
| Date: 2019-05-20 | | Copyright: Trenz Electronic GmbH / TT | |
| Page 22 of 25 | | Drawn by: IG Filename: POWER.SchDoc | |

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A

A

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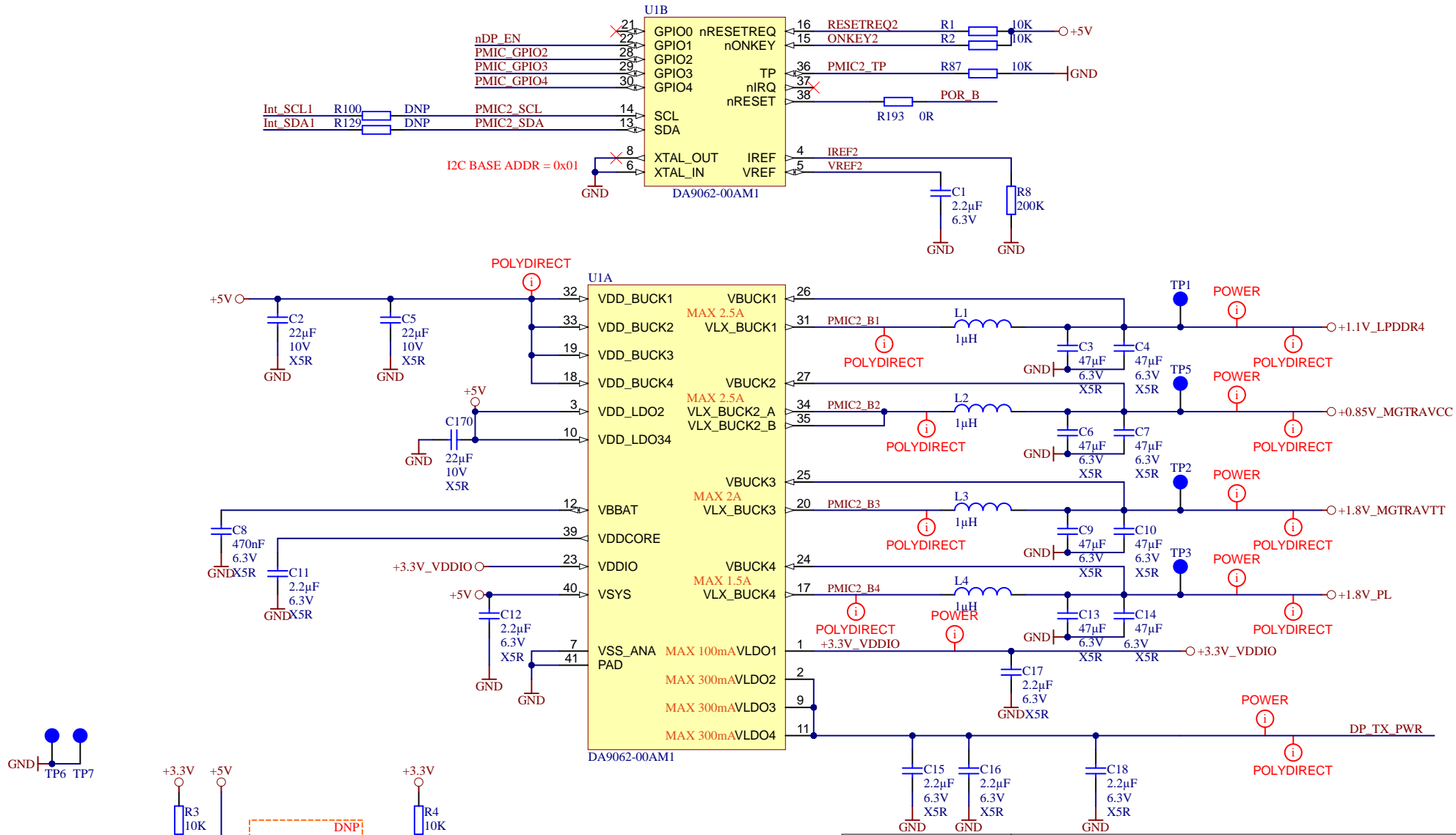
B

C

C

D

D



| | | |
|--|----------------------|---------------------------------------|
| | Title: POWER2 | |
| | A4 | Number: TE0802-02 2AEV2-A |
| | Date: 2019-05-20 | Copyright: Trenz Electronic GmbH / TT |
| | Drawn by: IG | Filename: POWER2.SchDoc |
| | Rev. 02 | Page 24 of 25 |


1

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4

| REV | Description | |
|-----|---|------------|
| -00 | Initial revision | |
| -01 | <ul style="list-style-type: none"> 1. LED display has been moved from BANK 26 on BANK 65. 2. Added overvoltage protection on "Power" sheet; 3. Headphones moved on BANK 65; 4. Added buffers with OD output on USB0_RST and ETH_RST; 5. BOM has been corrected; | |
| -02 | <ul style="list-style-type: none"> 1. Added suppressor 1SMA5.0AT3G on Power input. 2. Changed OV and UV protection range. 3. Changed VGA schematic. 4. USB page: VBUS resistor changed on 1K. 5. The revision has been renamed as TE0802-02-2AEV2-A. 6. Added Digilent SN MISC1. 7. Resistors R185 and R196 changed on 0 Ohms. 8. Resistor R23 changed on DNP. 9. S/N1 is removed. 10. LPDDR4 is changed. | 2021-10-14 |
| | <ul style="list-style-type: none"> 11. Changed microUSB connector. 105017-0001 -> 10118194-0001LF. 12. Changed MEMS Oszillator SiT8008AI-73-XXS-12.000000E -> SiT8008BI-73-XXS-12.000000E. 13. Changed MEMS Oszillator SiT8008AI-73-XXS-52.000000E -> SiT8008BI-73-XXS-52.000000E. 14. Changed Ferrits BKP0603HS121-T to MPZ0603S121HT000. | 2024-04-22 |
| | <ul style="list-style-type: none"> 15. Changed PMOD pinout according to Digilent Pmod Interface Type 1A Specification 15.1. on J5: <ul style="list-style-type: none"> - PMOD_A0 -> PMOD_A1; PMOD_A1 -> PMOD_A5; PMOD_A3 -> PMOD_A6; PMOD_A4 -> PMOD_A3; PMOD_A5 -> PMOD_A7; PMOD_A6 -> PMOD_A4; PMOD_A7 -> PMOD_A8; - PMOD_RA0 -> PMOD_RA1; PMOD_RA1 -> PMOD_RA5; PMOD_RA3 -> PMOD_RA6; PMOD_RA4 -> PMOD_RA3; PMOD_RA5 -> PMOD_RA7; PMOD_RA6 -> PMOD_RA4; PMOD_RA7 -> PMOD_RA8. 15.2. on J6: <ul style="list-style-type: none"> - PMOD_B2 -> PMOD_B5; PMOD_B3 -> PMOD_B2; PMOD_B4 -> PMOD_B6; PMOD_B5 -> PMOD_B3; PMOD_B6 -> PMOD_B7; PMOD_B7 -> PMOD_B4; - PMOD_RB2 -> PMOD_RB5; PMOD_RB3 -> PMOD_RB2; PMOD_RB4 -> PMOD_RB6; PMOD_RB5 -> PMOD_RB3; PMOD_RB6 -> PMOD_RB7; PMOD_RB7 -> PMOD_RB4. | |

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