U_B12
B12.SchDoc

U_B13
B13.SchDoc

U_B14
B14.SchDoc

U_B15
B15.SchDoc

U_B16
B16.SchDoc

U_B34
B34.SchDoc

U_FPGA-MGT
FPGA-MGT.SchDoc

U_FPGA-CFG
FPGA-CFG.SchDoc

U_FPGA-MISC
FPGA-MISC.SchDoc

U_FPGA-PWR
FPGA-PWR.SchDoc

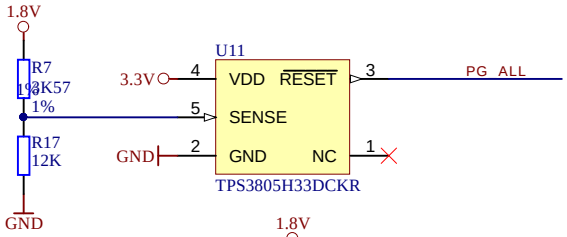
U_PWR1
PWR1.SchDoc

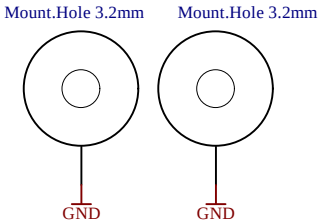
U_PWR2
PWR2.SchDoc

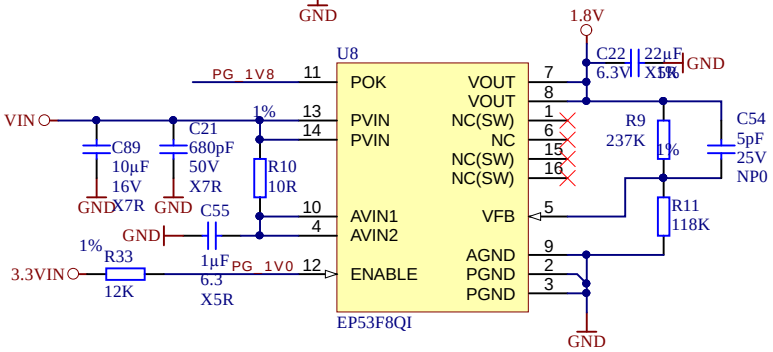
U_Clock
Clock.SchDoc

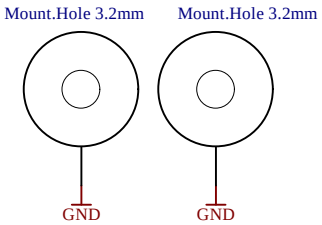
U_B2B-Connectors
B2B-Connectors.SchDoc

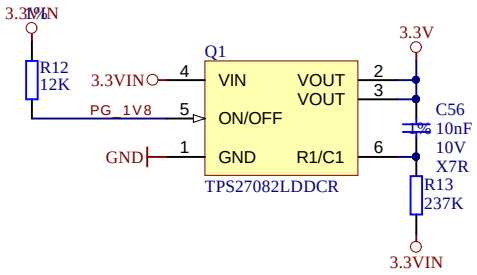
U_B33
B33.SchDoc

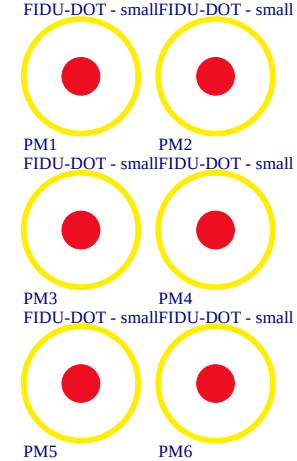


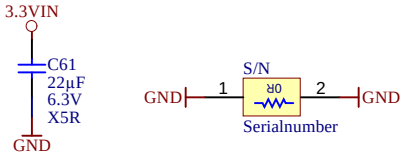



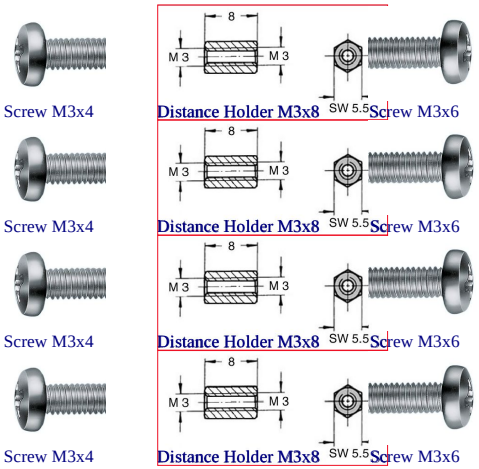




Serial
Serial
Serialnumber 6,3 x 6.3mm

Top of Board




| | |
|---|---|
| Assembly variant | B3E-1-AF |
| Created by | VY |
| Modified by | VY |
| Modified at | 2019-05-12 |
| SVN Revision | 5578 |

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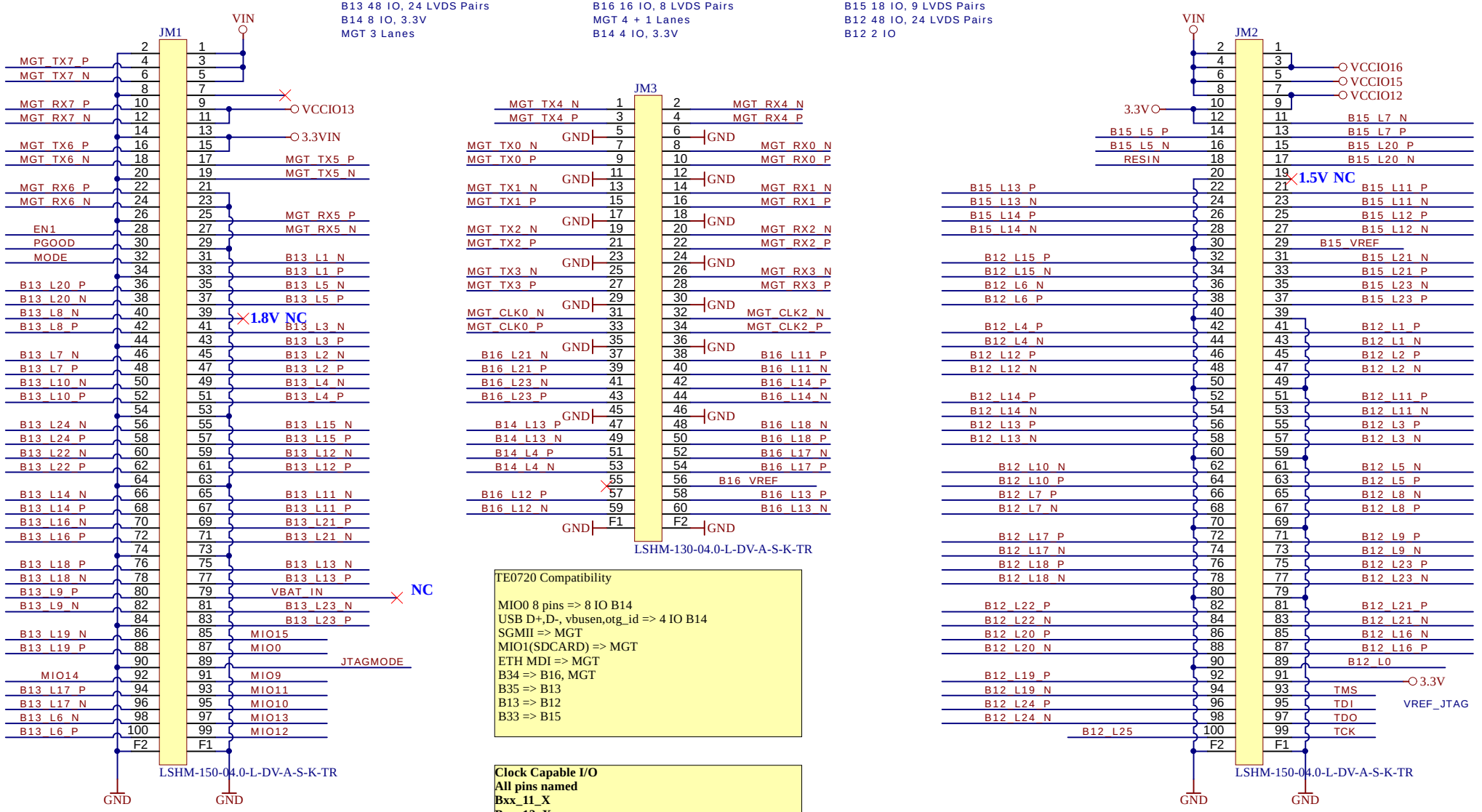
| | | |
|---|---|---|
| Title: TE0741 | | |
| A4 | Number: TE0741 B3E-1-AF | Rev. 03 |
| Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | Page1 of 17 |
| Filename: TE0741.SchDoc | | |

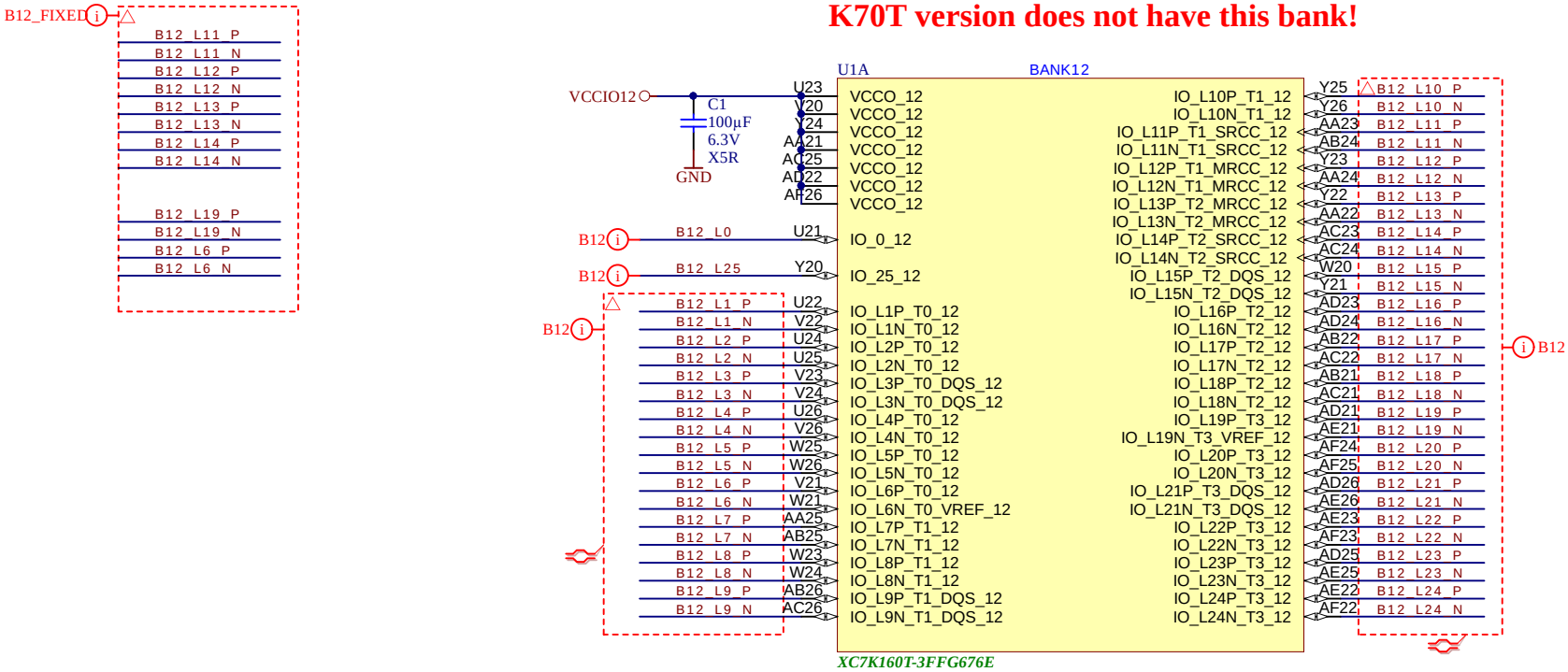



TE0720 Compatibility

MIO0 8 pins => 8 IO B14
USB D+,D-, vbusen,otg_id => 4 IO B14
SGMII => MGT
MIO1(SDCARD) => MGT
ETH MDI => MGT
B34 => B16, MGT
B35 => B13
B13 => B12
B33 => B15

**Clock Capable I/O**
**All pins named**
**Bxx_11_X**
**Bxx_12_X**
**Bxx_13_X**
**Bxx_14_X**
**Are Clock Capable I/O's**

| | | | |
|---|---|---|---|
| trenz electronic | Title: TE0741 | | |
| | A4 | Number: TE0741 B3E-1-AF | Rev. 03 |
| | Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | Page2 of 17 |
| | Filename: B2B-Connectors.SchDoc | | |

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| Title: TE0741 | | | |
| A4 | Number: TE0741 B3E-1-AF | | Rev. 03 |
| Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | | Page3 of 17 |
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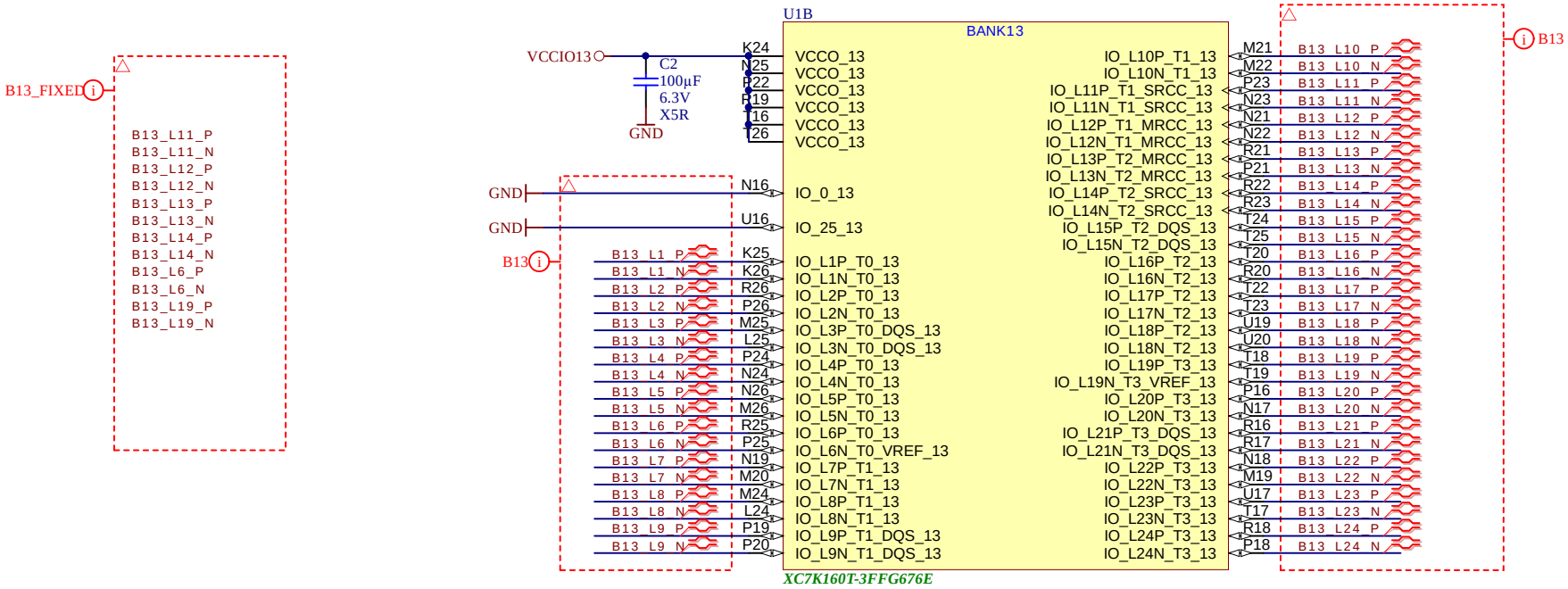


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| A4 | Number: TE0741 B3E-1-AF | | Rev. 03 |
| Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | | Page4 of 17 |
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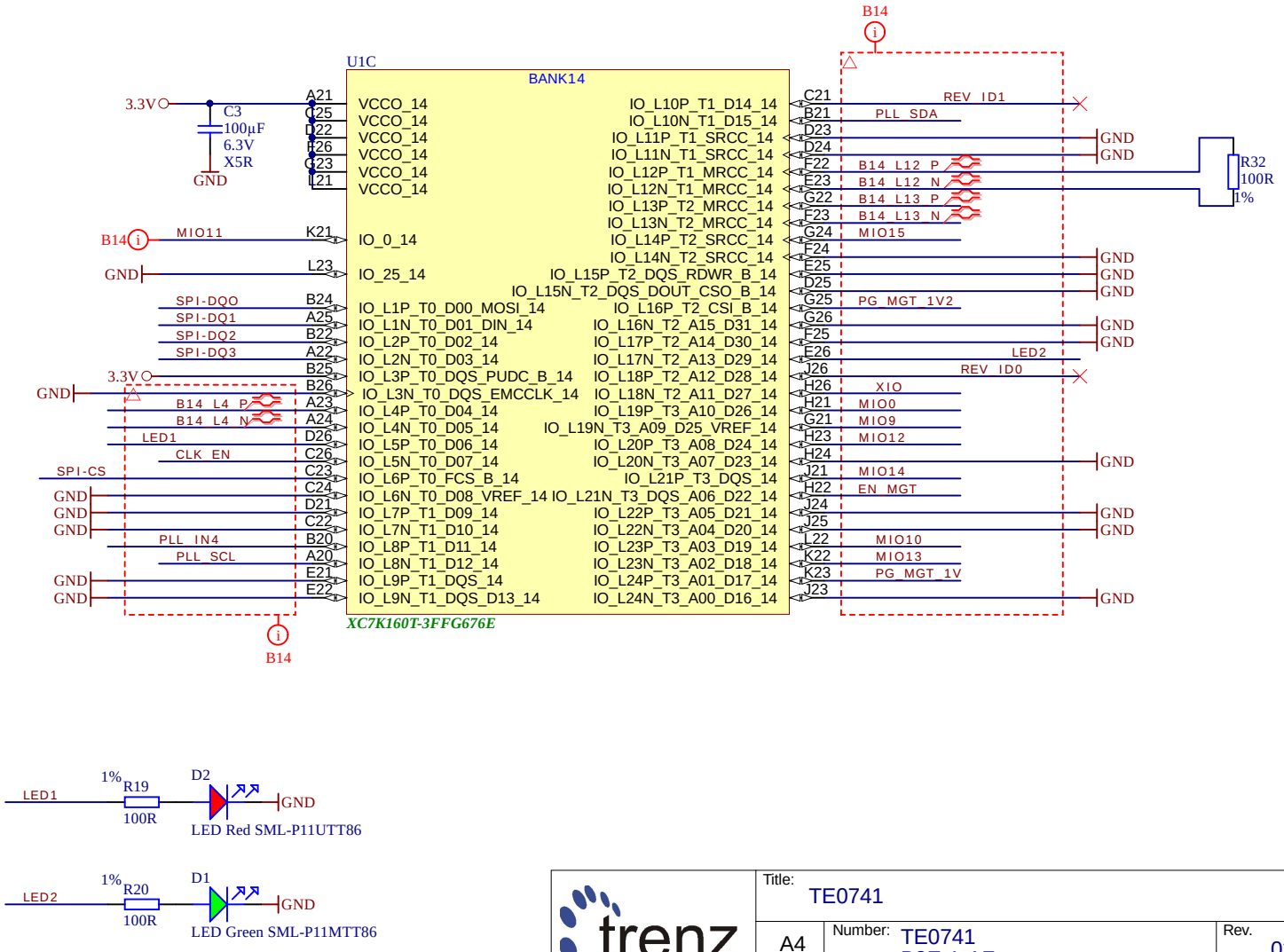


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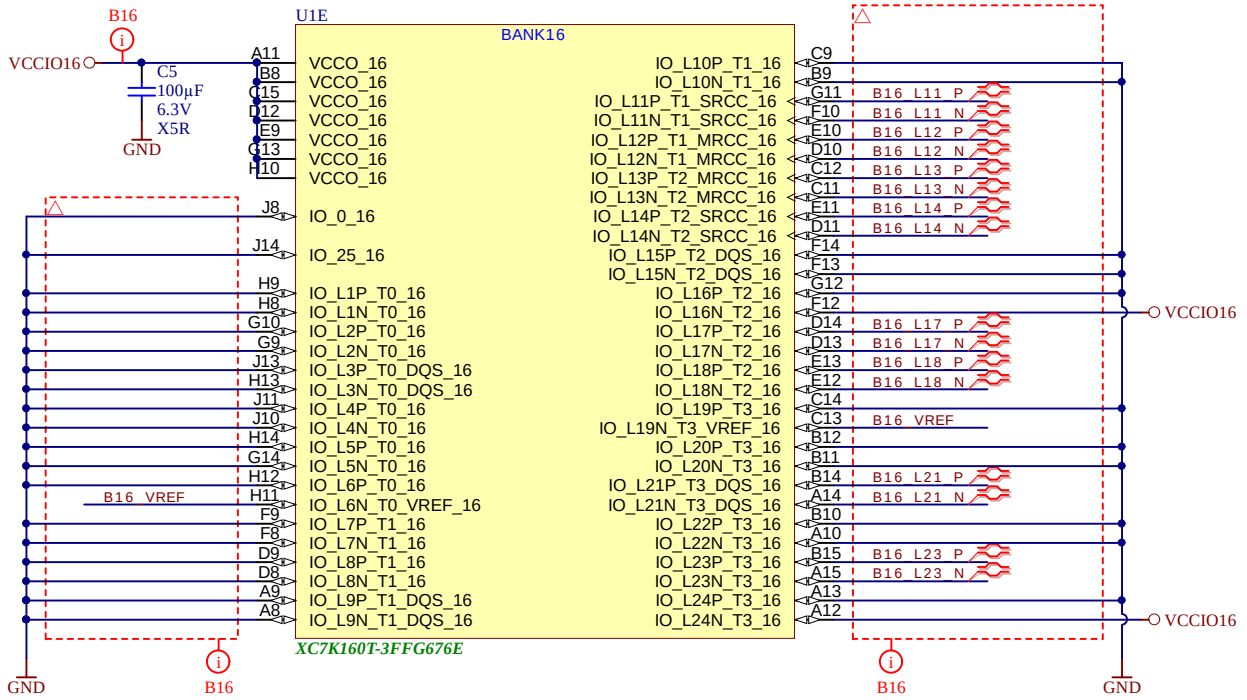
| Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | | Page5 of 17 |
| Filename: B14.SchDoc | | | |

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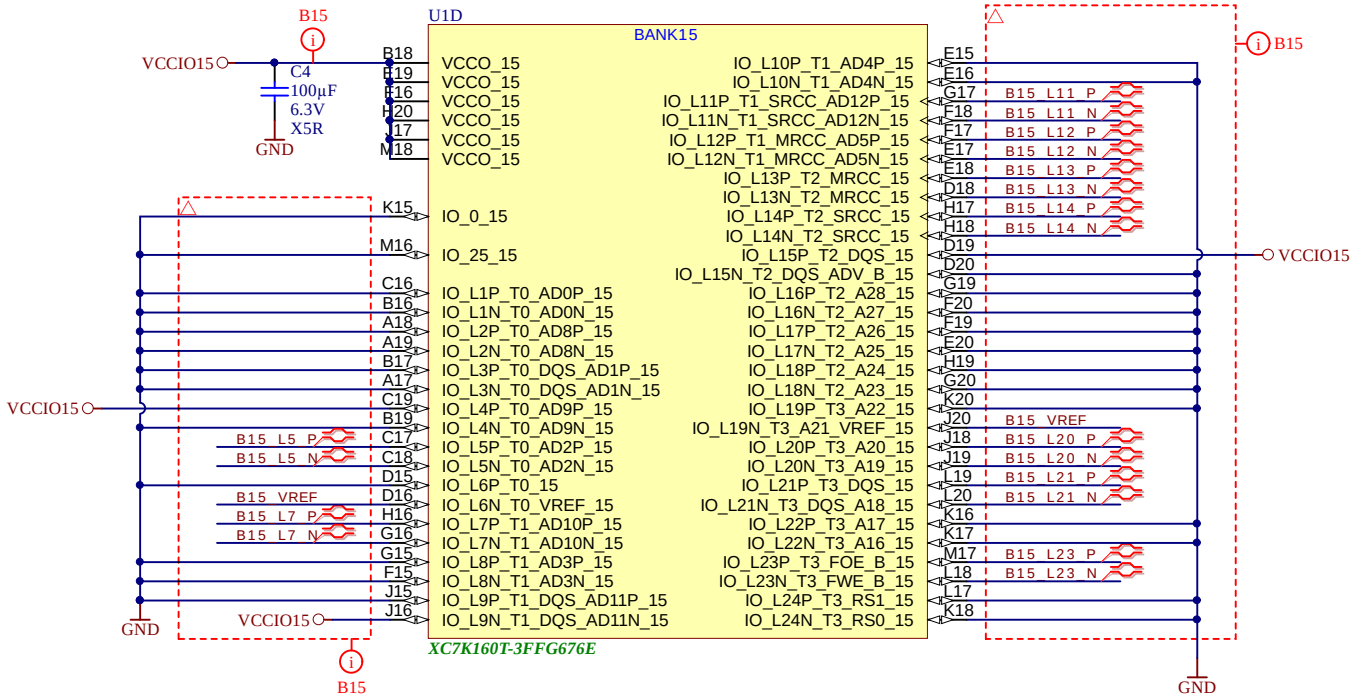
|---|---|---|---|
| trenz electronic | Title: TE0741 | | |
| A4 | Number: TE0741 B3E-1-AF | | Rev. 03 |
| Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | | Page6 of 17 |
| Filename: B16.SchDoc | | | |

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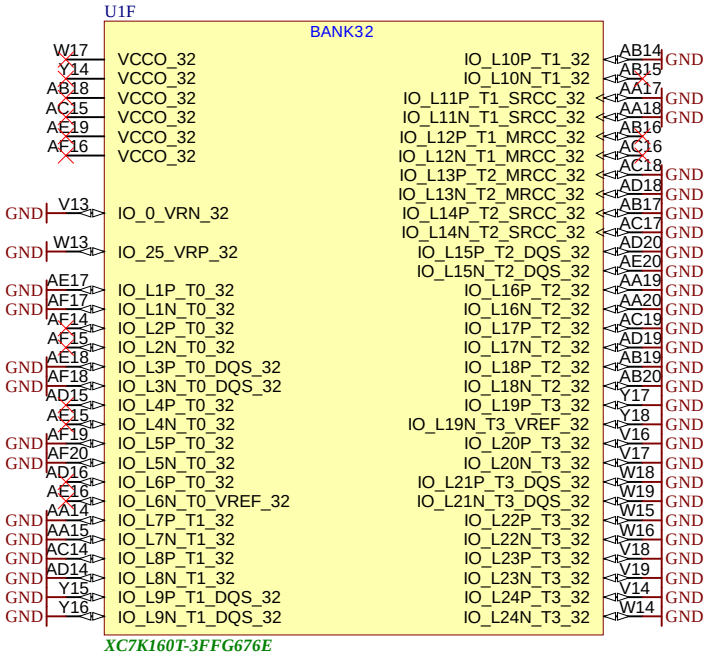
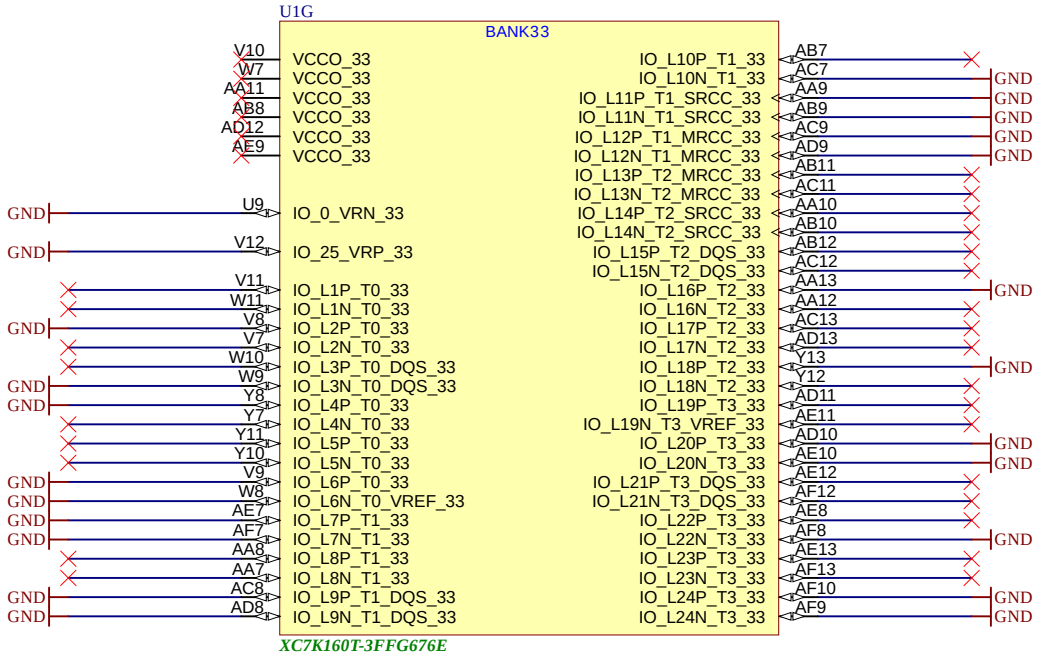
| trenz electronic | Title: TE0741 | | |
| | A4 | Number: TE0741 B3E-1-AF | Rev. 03 |
| | Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | Page7 of 17 |
| | Filename: B15.SchDoc | | |

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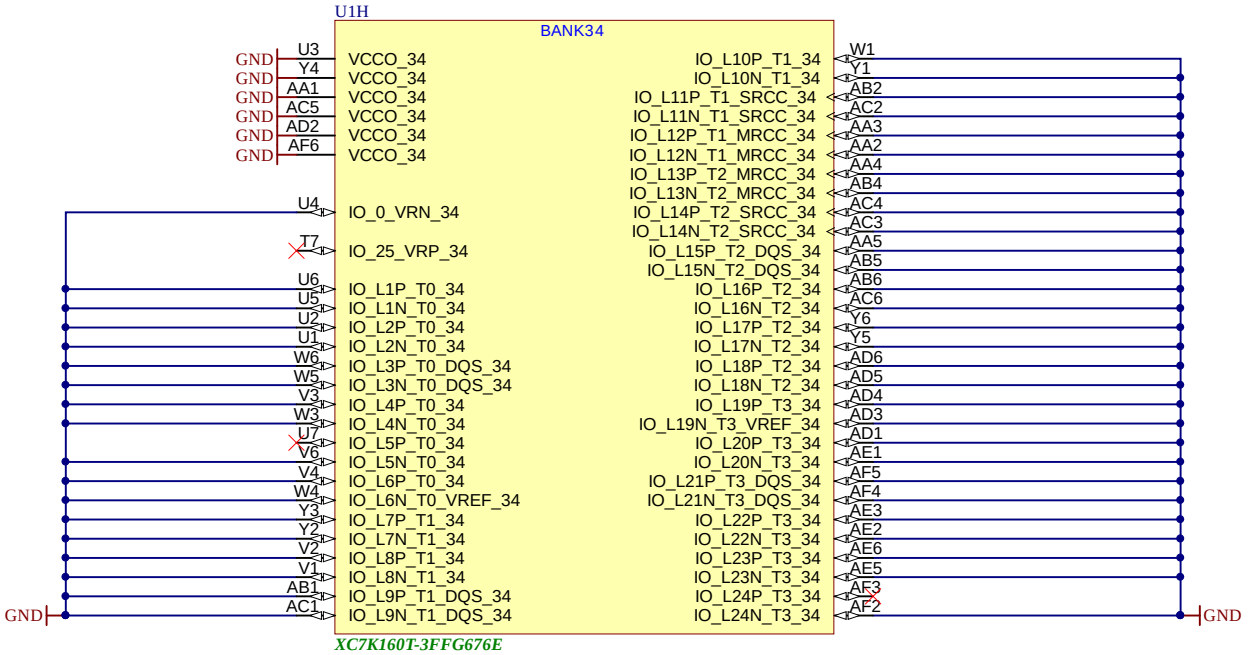
| | | | |
|---|---|---|---|
| Title: TE0741 | | | |
| A4 | Number: TE0741 B3E-1-AF | | Rev. 03 |
| Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | | Page8 of 17 |
| Filename: B33.SchDoc | | | |

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| trenz electronic | Title: TE0741 | | |
| A4 | Number: TE0741 B3E-1-AF | | Rev. 03 |
| Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | | Page9 of 17 |
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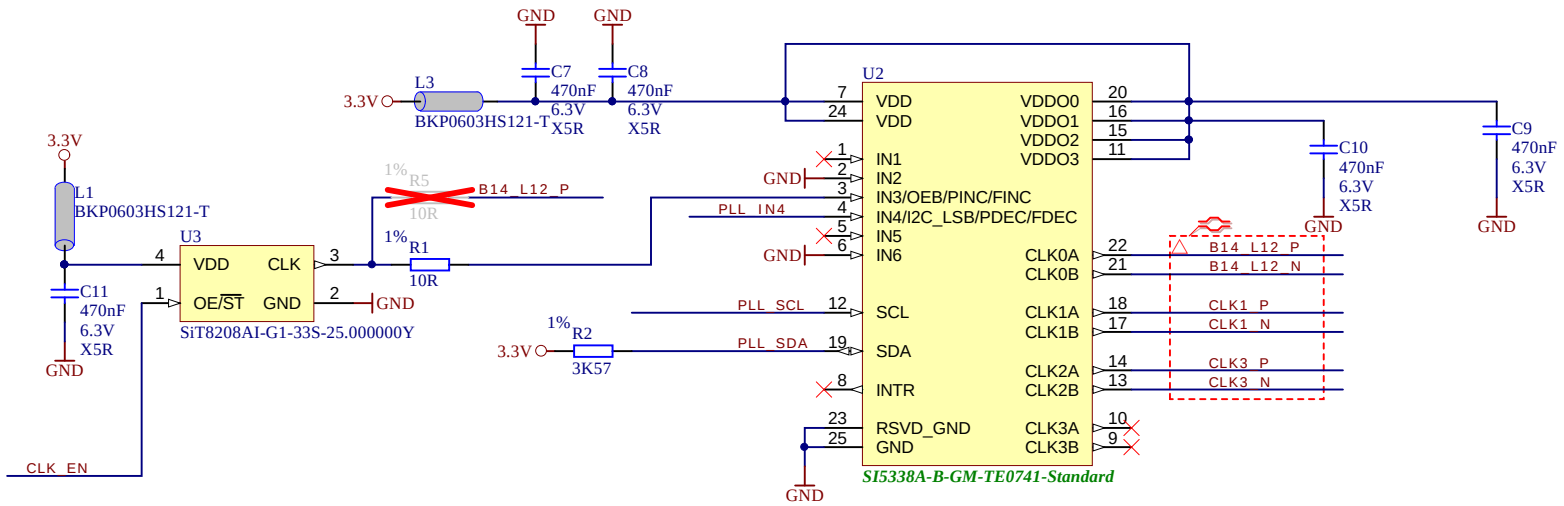


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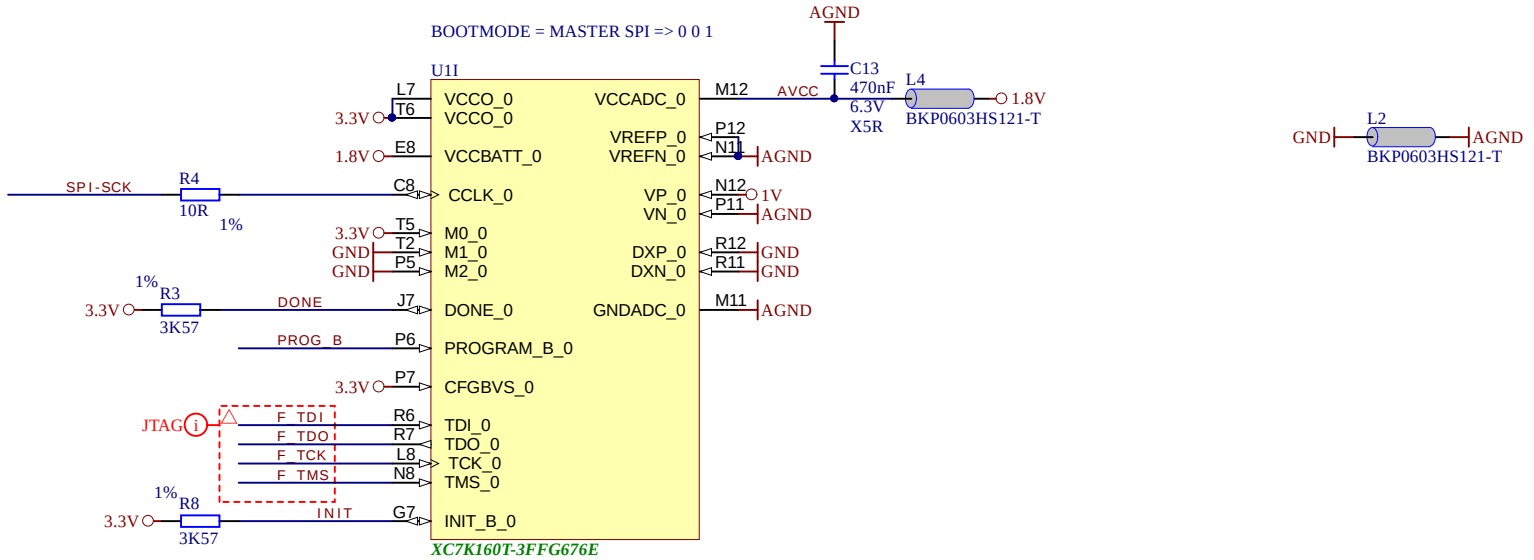
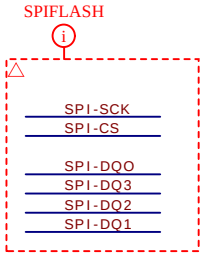
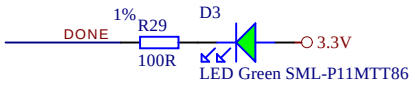
| trenz electronic | Title: TE0741 | | |
| | A4 | Number: TE0741 B3E-1-AF | Rev. 03 |
| | Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | Page10 of 17 |
| | Filename: Clock.SchDoc | | |

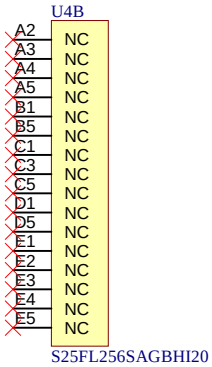


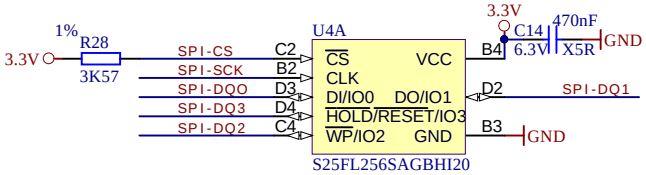




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|---|---|---|---|
| Title: TE0741 | | | |
| A4 | Number: TE0741 B3E-1-AF | | Rev. 03 |
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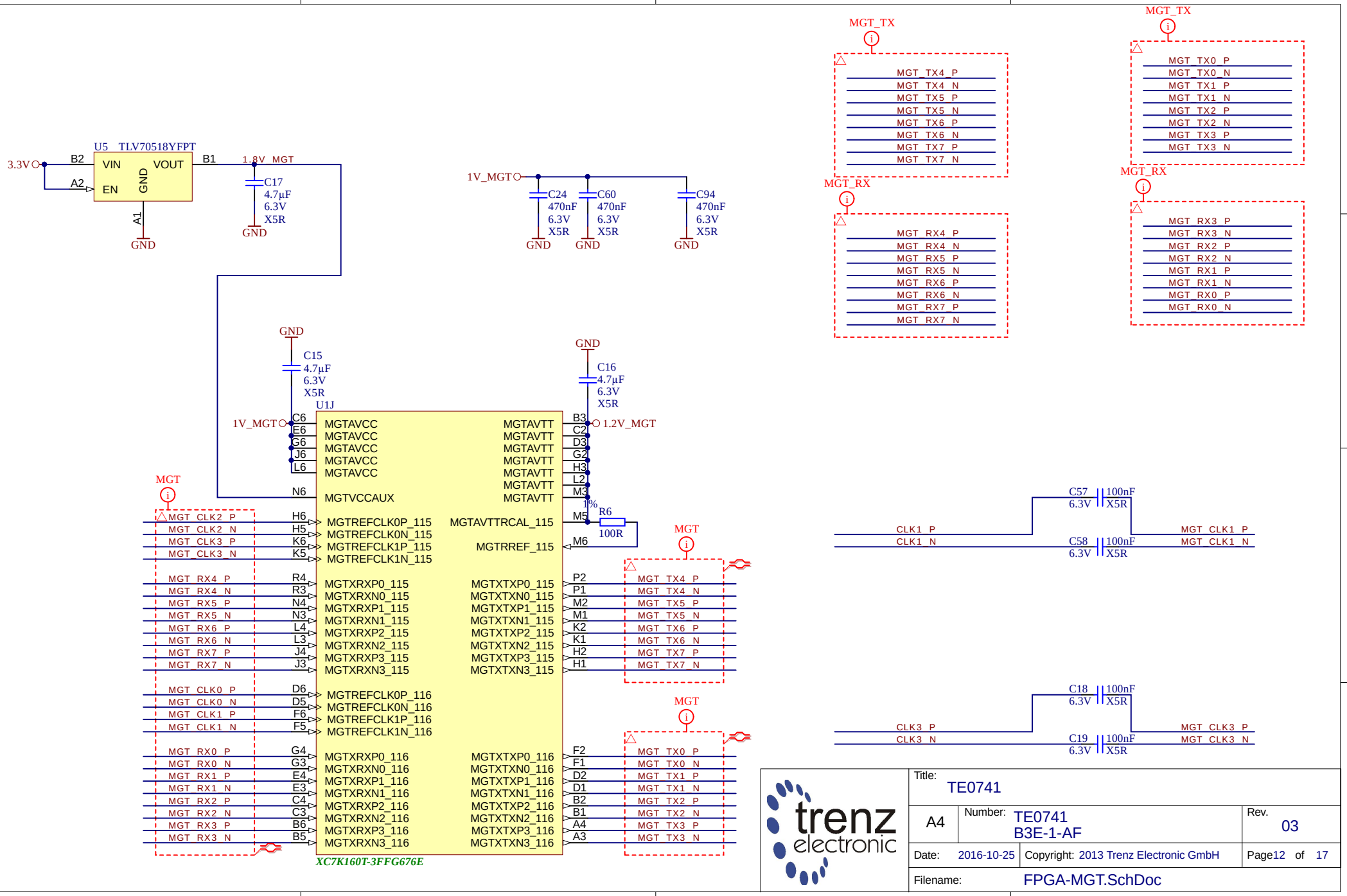
| Filename: FPGA-CFG.SchDoc | | | |

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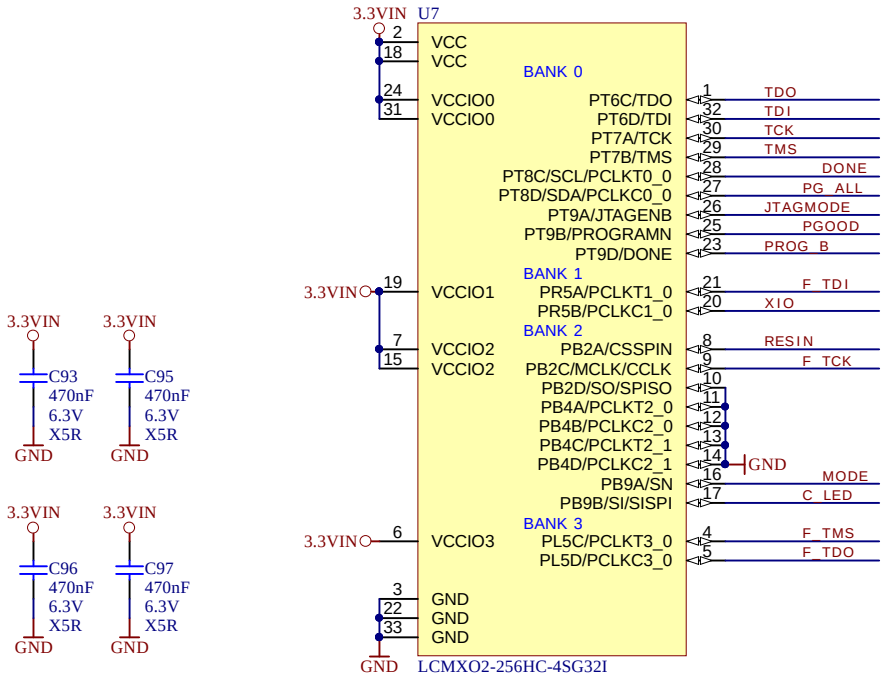
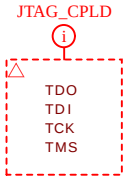
|---|---|---|---|
| Title: TE0741 | | | |
| A4 | Number: TE0741 B3E-1-AF | | Rev. 03 |
| Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | | Page12 of 17 |
| Filename: FPGA-MGT.SchDoc | | | |



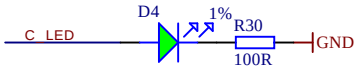






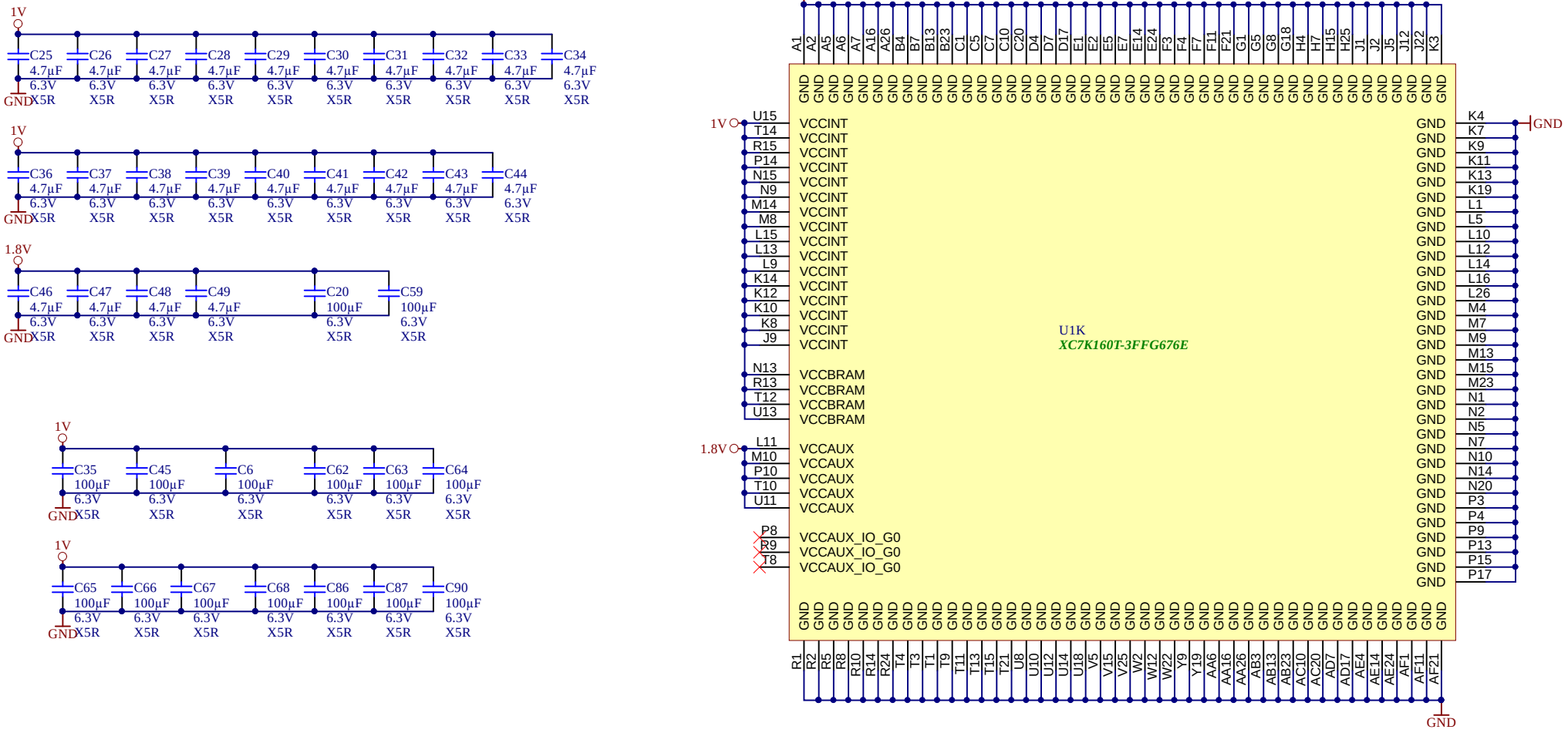








LED Green SML-P11MTT86

| | | | |
|---|---|---|---|
| trenz electronic | Title: TE0741 | | |
| | A4 | Number: TE0741 B3E-1-AF | Rev. 03 |
| | Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | Page13 of 17 |
| | Filename: FPGA-MISC.SchDoc | | |

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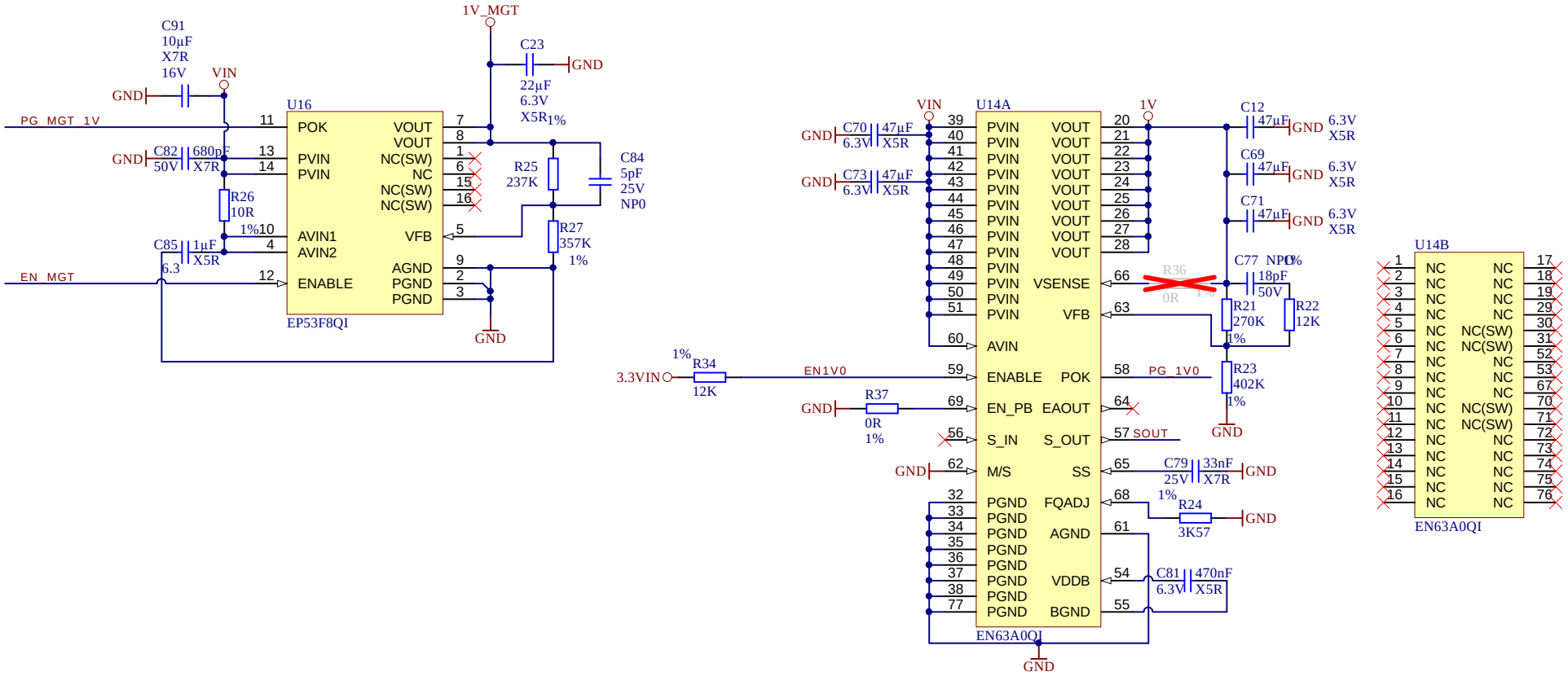
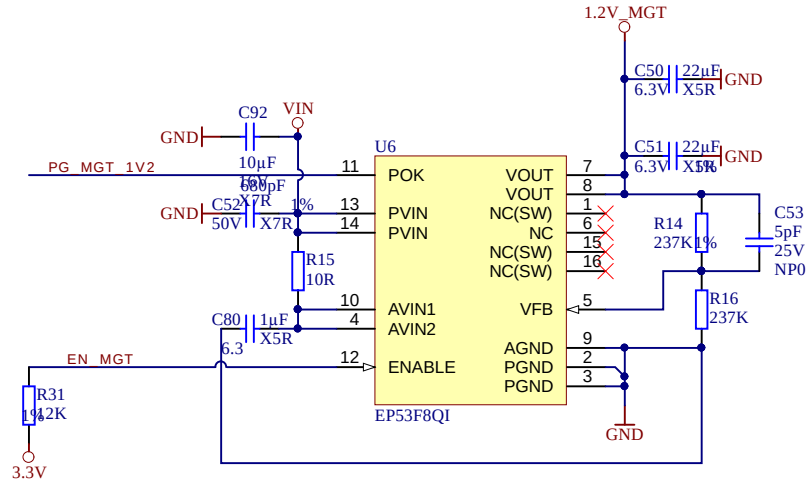
| trenz electronic | Title: TE0741 | | |
| | A4 | Number: TE0741 B3E-1-AF | Rev. 03 |
| | Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | Page14 of 17 |
| | Filename: FPGA-PWR.SchDoc | | |

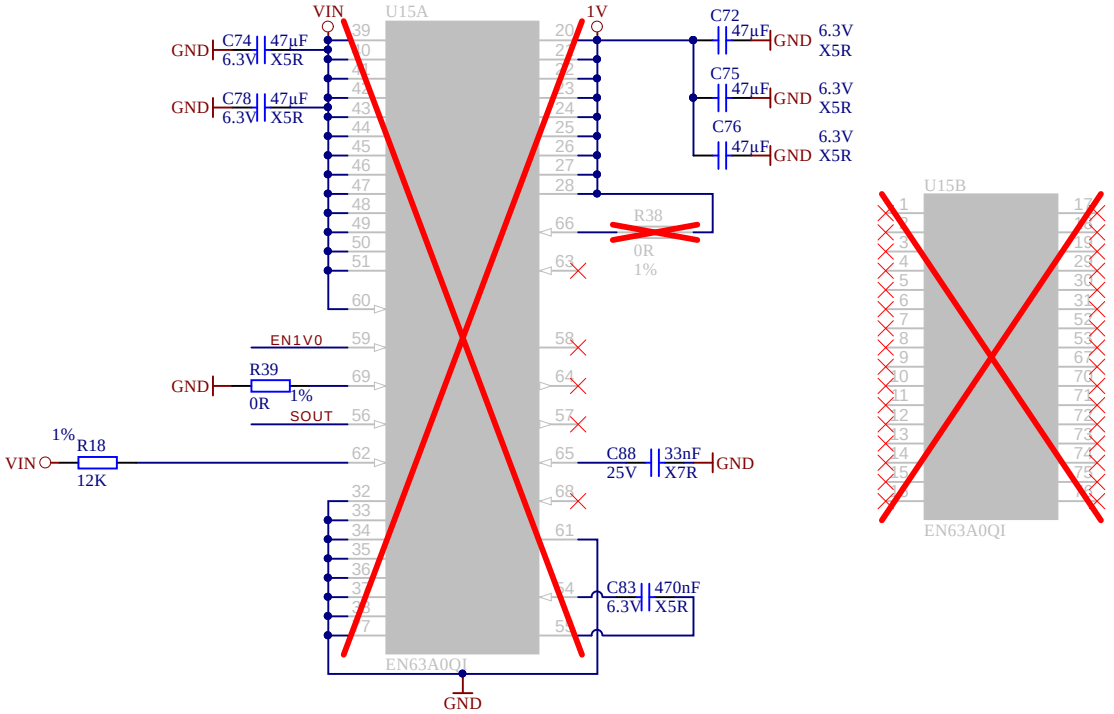



Pre-bias feature is not available for parallel operations

```
R36 R37         MODE EN63A0QI
-------------------------------------
OK   X      |  enable pre-bias start-up (available when U14 or U15 as DNP )
X    OK     |  disable pre-bias start-up
```

| | | | |
|---|---|---|---|
| trenz electronic | Title: TE0741 | | |
| | A4 | Number: TE0741 B3E-1-AF | Rev. 03 |
| | Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | Page15 of 17 |
| | Filename: PWR1.SchDoc | | |




Pre-bias feature is not available for parallel operations

```
R38 R39         MODE EN63A0QI
-------------------------------------
OK   X      |  enable pre-bias start-up (available when U14 or U15 as DNP )
X    OK     |  disable pre-bias start-up
```

| | | | |
|---|---|---|---|
| trenz electronic | Title: TE0741 | | |
| | A4 | Number: TE0741 B3E-1-AF | Rev. 03 |
| | Date: 2016-10-25 | Copyright: 2013 Trenz Electronic GmbH | Page16 of 17 |
| | Filename: PWR2.SchDoc | | |

CHANGES REV02 to REV03

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1) fixed connection DCDC for parallel operations
2) update Razorbeam Connectors, full update lib
3) added serial number (tracebility pad)
4) changed ferrite beads L1..L4 size 0402 on BKP0603HS121-T
5) added thermal vias to mounting holes

| | | | |
|---|---|---|---|
| Title: TE0741 - Changes list | | | |
| A4 | Number: TE0741 B3E-1-AF | | Rev. 03 |
| Date: 2016-10-25 | Copyright: Trenz Electronic GmbH | | Page17 of 17 |
| Filename: Revision_Changes.SchDoc | | | |