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- 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

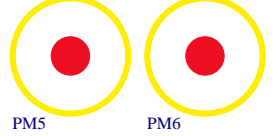
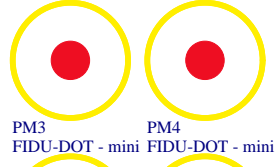
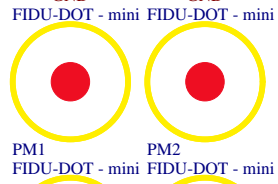
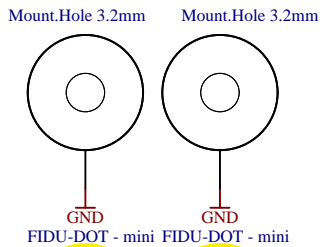
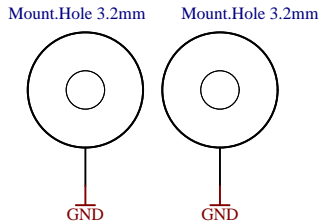
- U_PWR1
PWR1.SchDoc
- U_PWR2
PWR2.SchDoc

- U_Clock
Clock.SchDoc

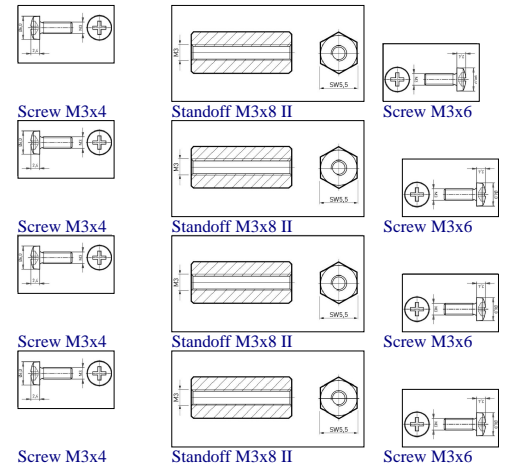
- U_B2B-Connectors
B2B-Connectors.SchDoc

- U_B33
B33.SchDoc

Serial
Serialnumber 6,3 x 6.3mm



Top of Board



Assembly variant	B21-1-A
Created by	VT
Modified by	VT
Modified at	2017-01-23
SVN Revision	12616



Title: TE0741		
A4	Number: TE0741 B21-1-A	Rev. 04
Date: 2016-10-25	Copyright: 2013 Trenz Electronic GmbH	Page1 of 17
Filename: TE0741.SchDoc		

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B13 48 IO, 24 LVDS Pairs
 B14 8 IO, 3.3V
 MGT 3 Lanes

B16 16 IO, 8 LVDS Pairs
 MGT 4 + 1 Lanes
 B14 4 IO, 3.3V

B15 18 IO, 9 LVDS Pairs
 B12 48 IO, 24 LVDS Pairs
 B12 2 IO

A

A

B

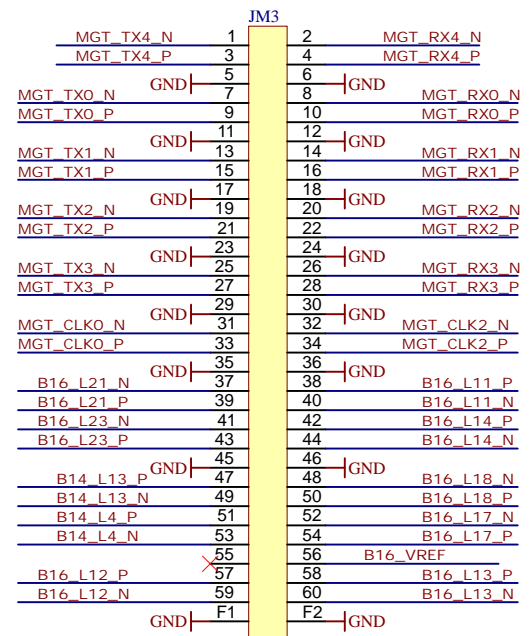
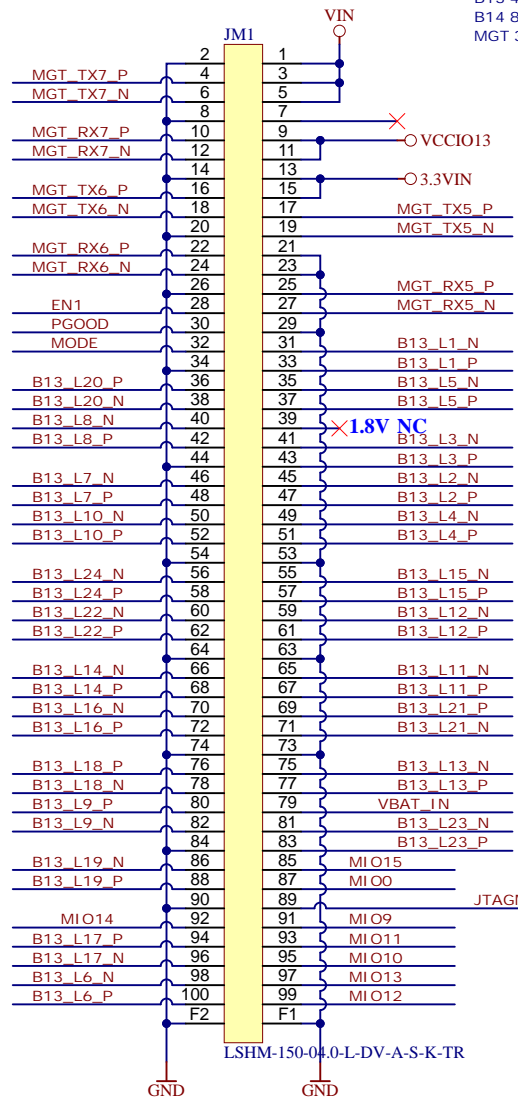
B

C

C

D

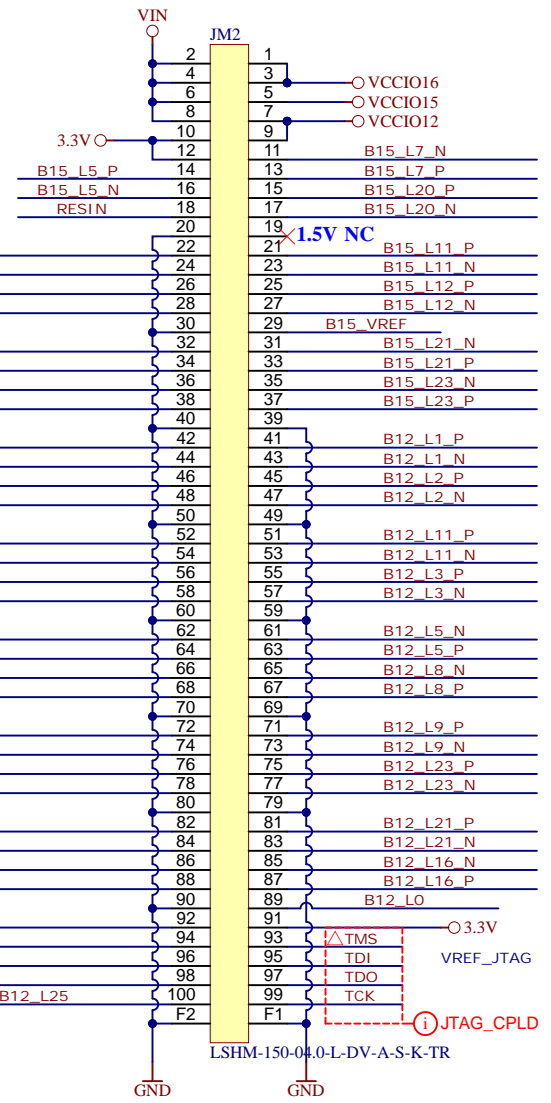
D



LSHM-130-04.0-L-DV-A-S-K-TR

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

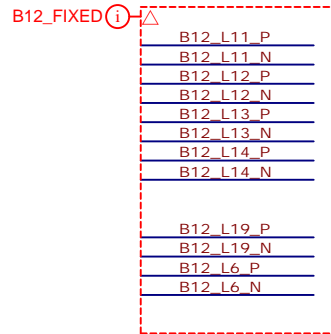
Clock Capable I/O
 All pins named
 Bxx_11_X
 Bxx_12_X
 Bxx_13_X
 Bxx_14_X
 Are Clock Capable I/O's



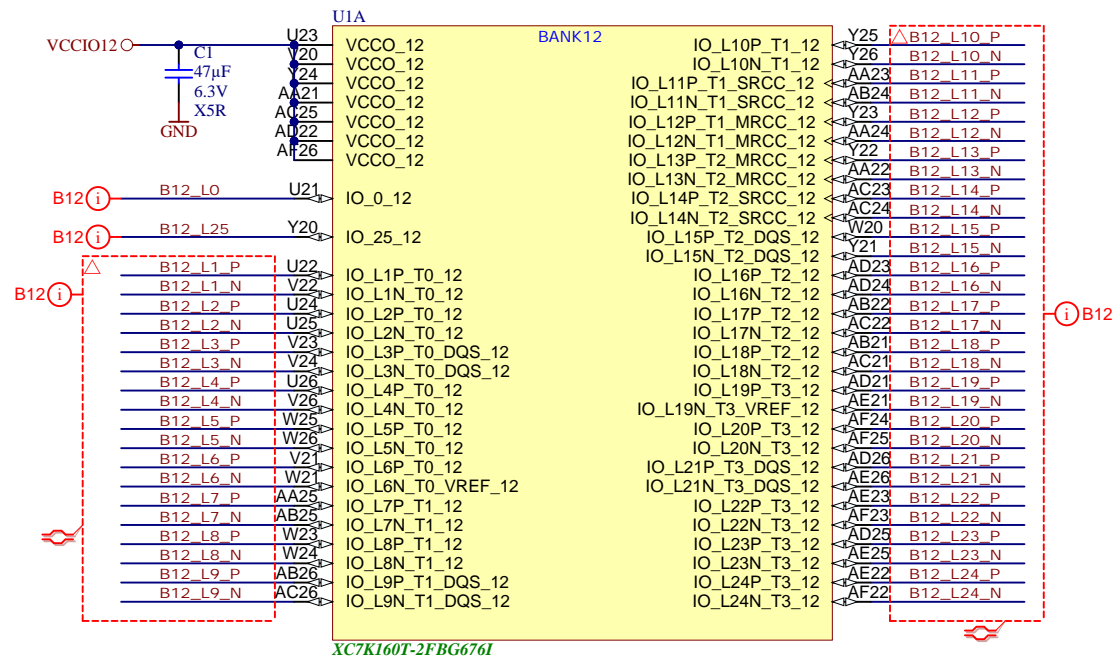
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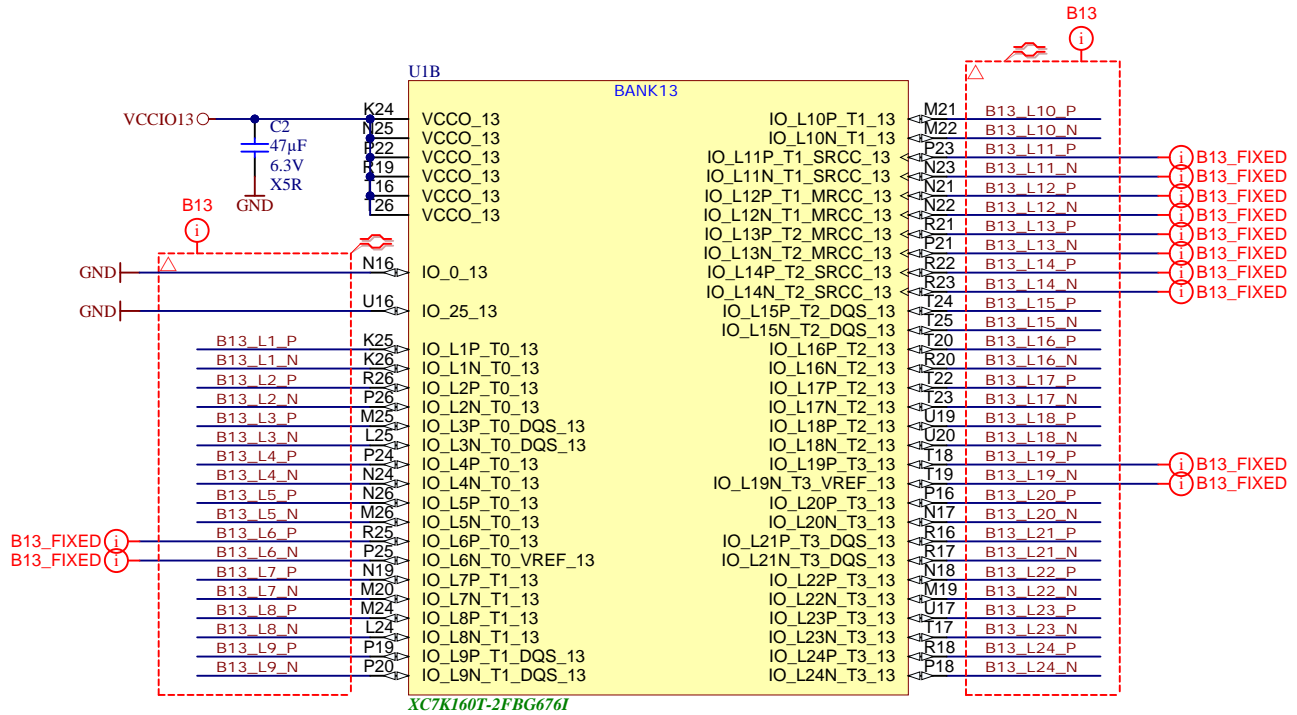
Title: TE0741		Rev. 04	
A4	Number: TE0741 B2I-1-A	Page2 of 17	
Date: 2016-10-25	Copyright: 2013 Trenz Electronic GmbH	Page2 of 17	
Filename: B2B-Connectors.SchDoc			




K70T version does not have this bank!



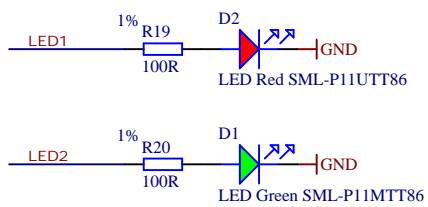
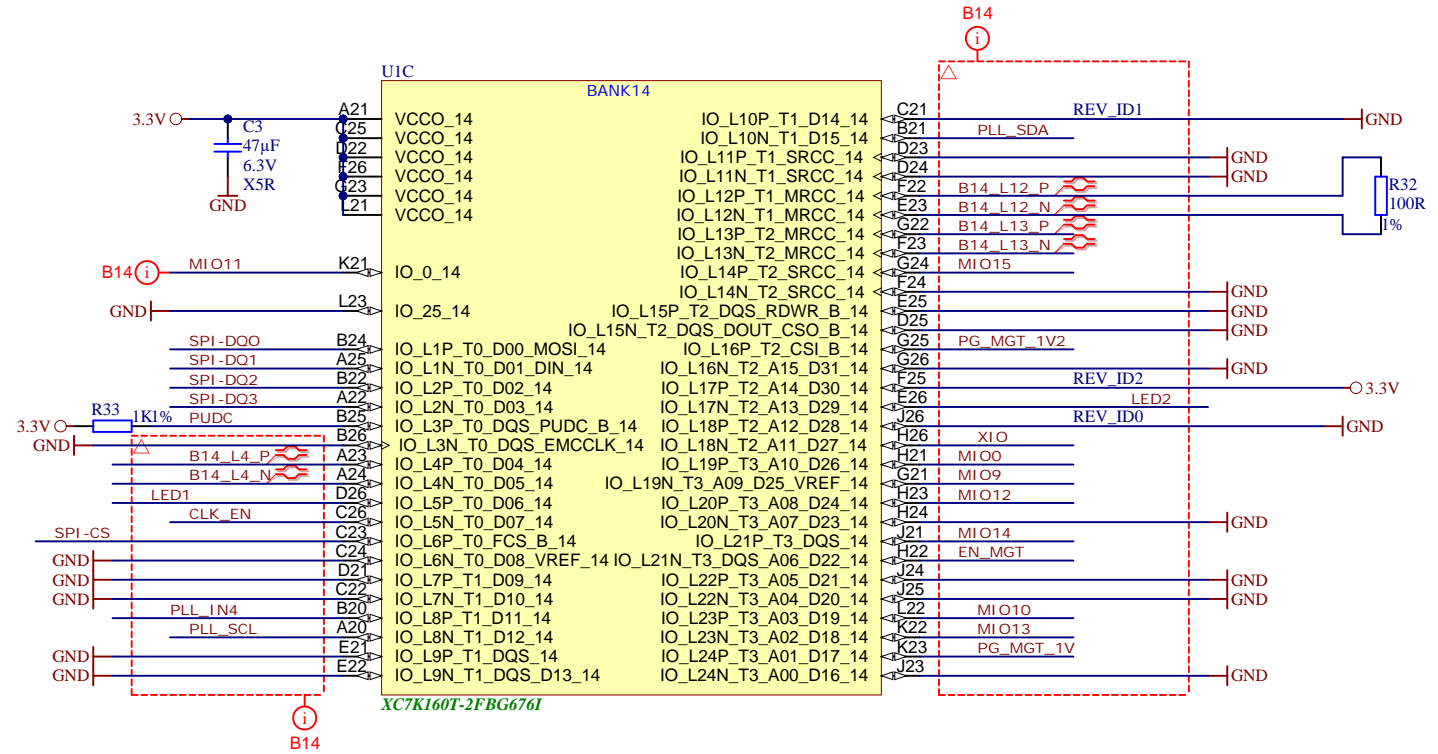
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	Date: 2016-10-25	Rev. 04
	Page3 of 17	
Filename: B12.SchDoc		



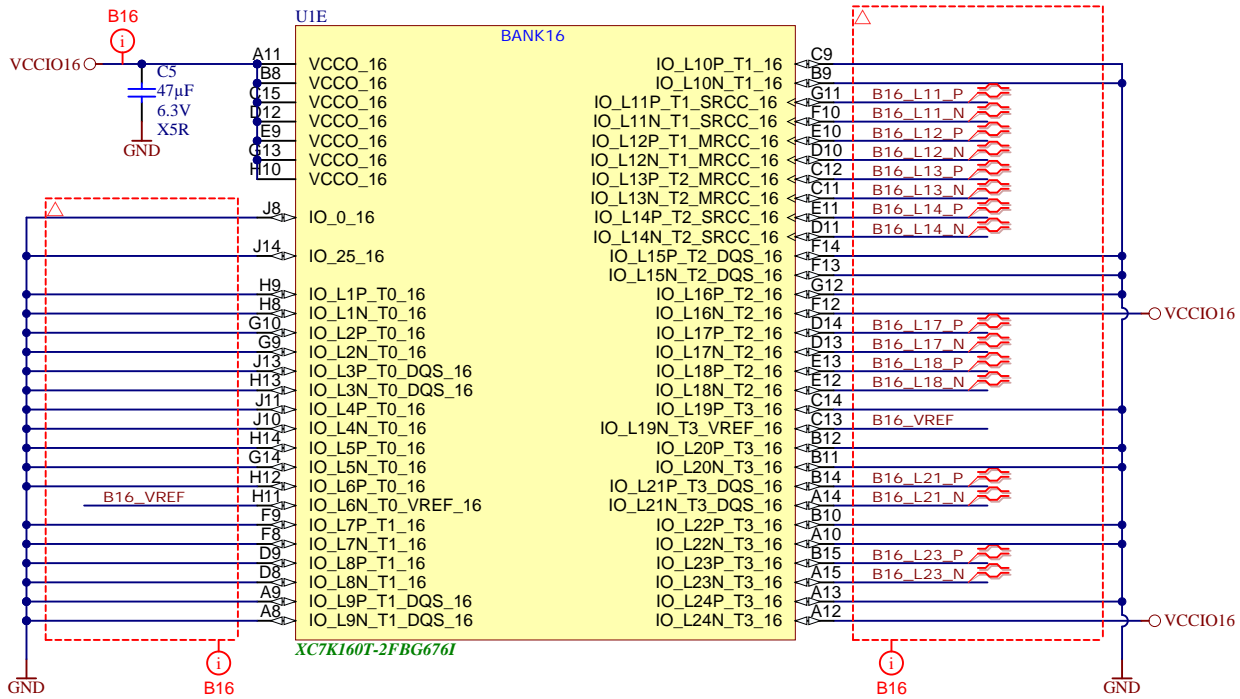
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	Date: 2016-10-25	Copyright: 2013 Trenz Electronic GmbH	Page 4 of 17
	Filename: B13.SchDoc		


Revision PCB Board:

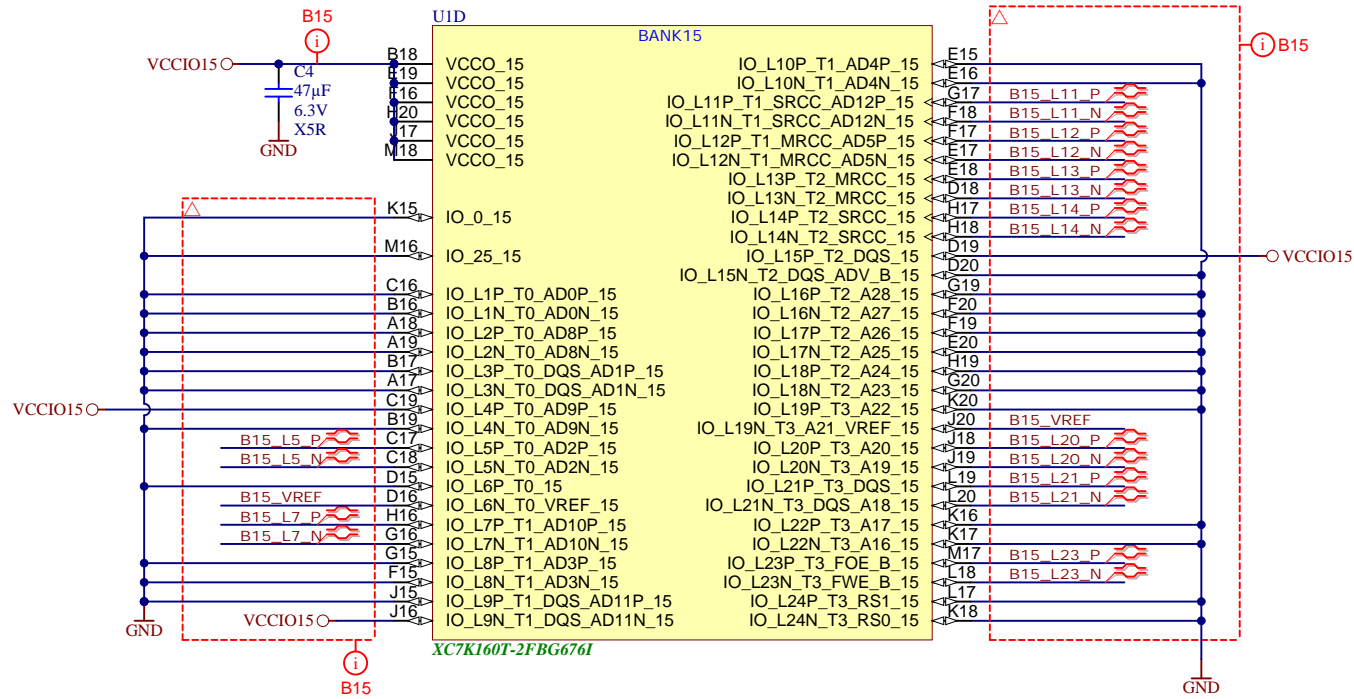

	"0"	"1"	"2"	"3"	"4"
REV_ID0	0	1	0	1	0
REV_ID1	0	0	1	1	0
REV_ID2	0	0	0	0	1



Title: TE0741		
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Filename: B14.SchDoc		



	Title: TE0741		
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	Date: 2016-10-25	Copyright: 2013 Trenz Electronic GmbH	Page 6 of 17
	Filename: B16.SchDoc		

Title: TE0741		
A4	Number: TE0741 B2I-1-A	Rev. 04
Date: 2016-10-25	Copyright: 2013 Trenz Electronic GmbH	Page 7 of 17
Filename: B15.SchDoc		

1

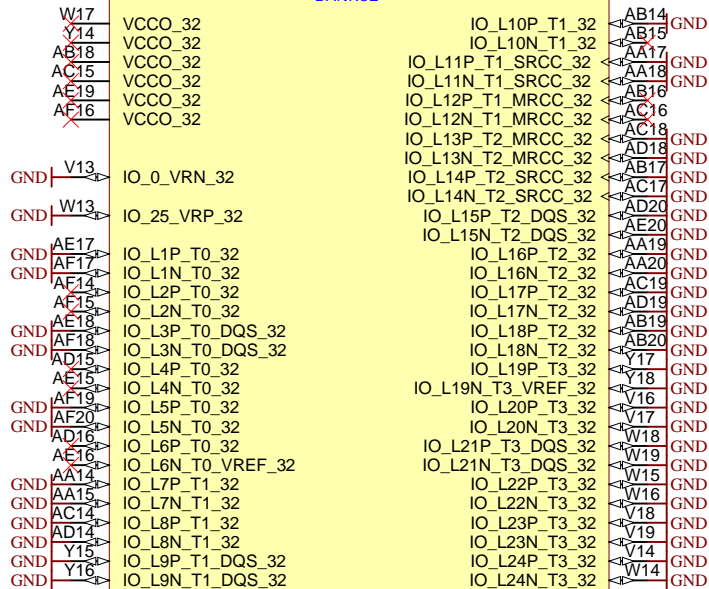
2

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UIF

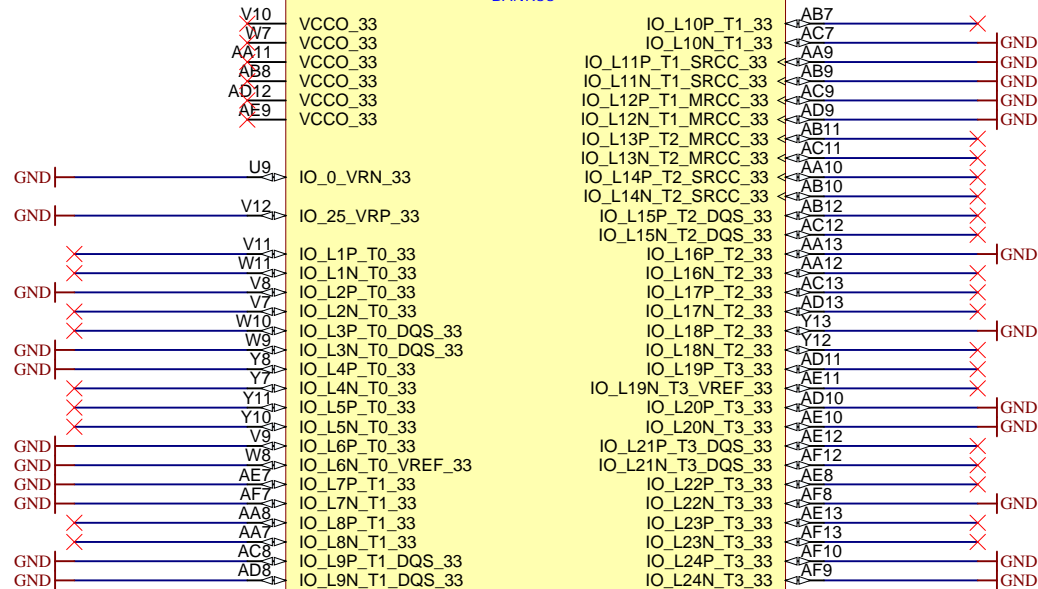
BANK32



XC7K160T-2FBG676I

UIG

BANK33



XC7K160T-2FBG676I



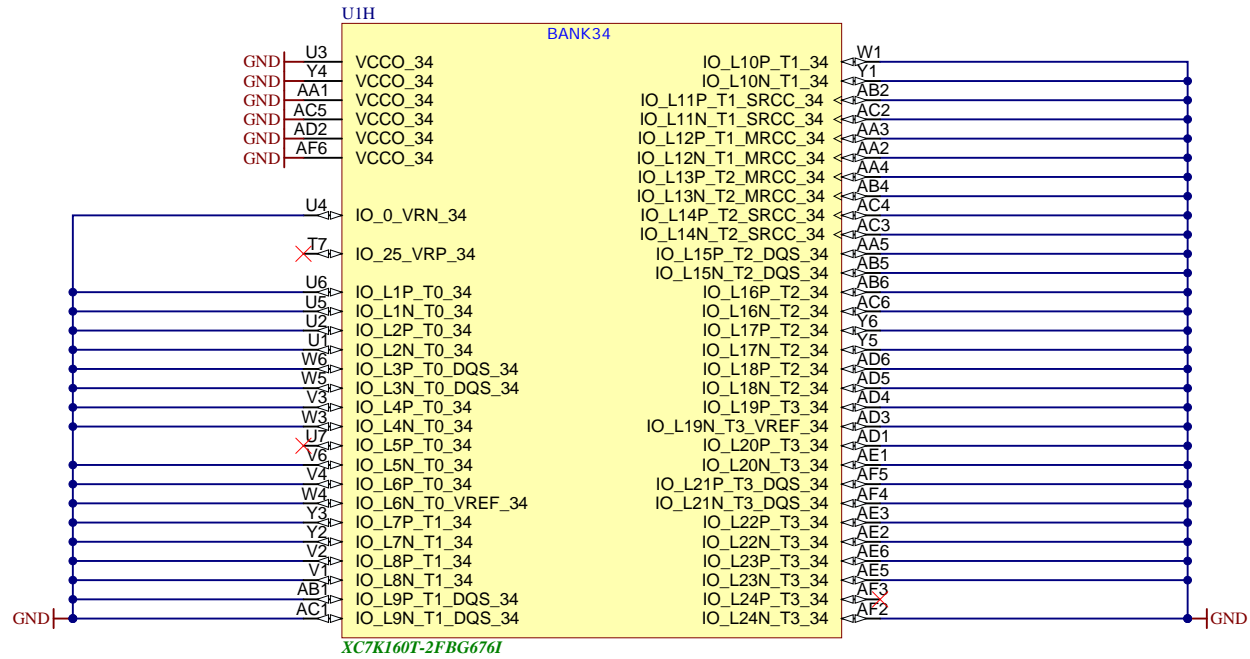
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Date: 2016-10-25	Copyright: 2013 Trenz Electronic GmbH	Page8 of 17
Filename: B33.SchDoc		


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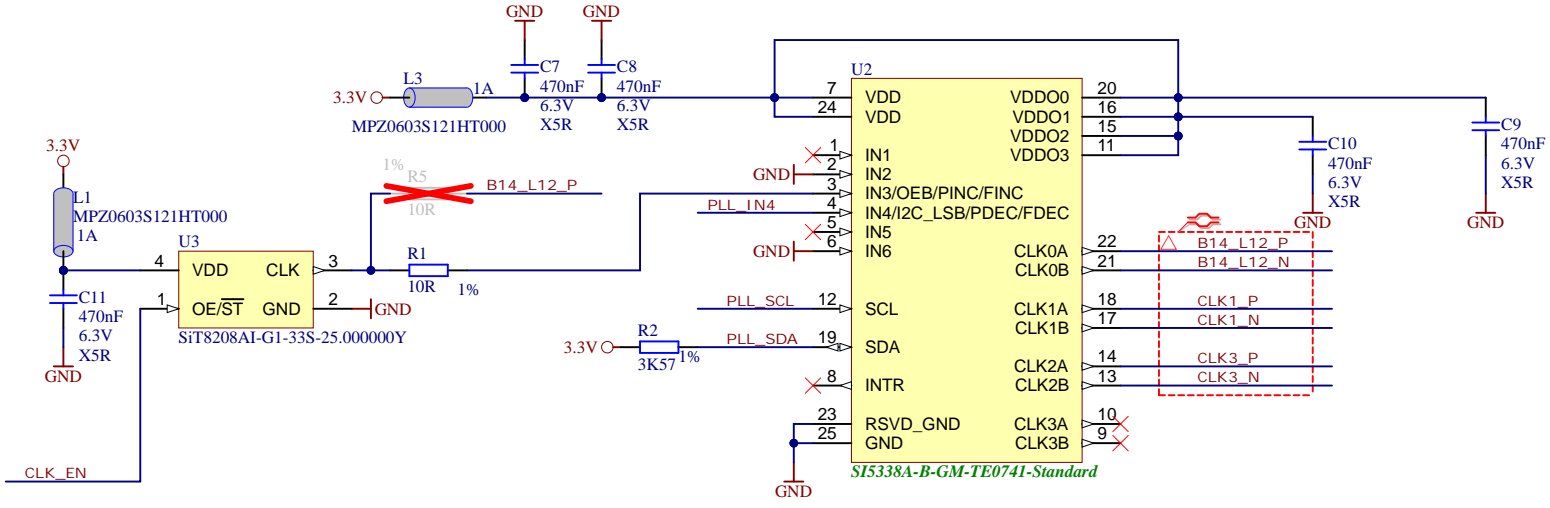
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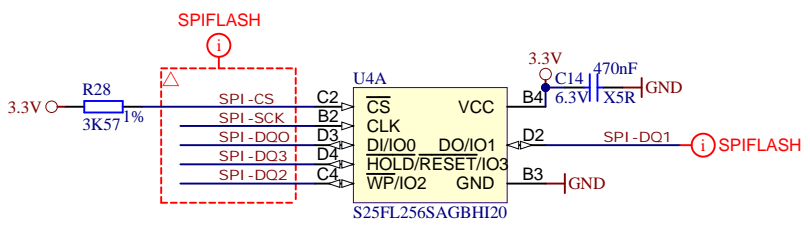
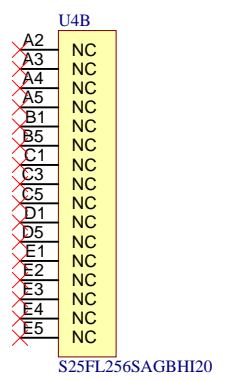
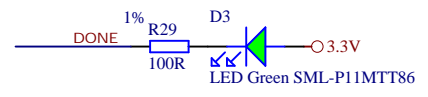
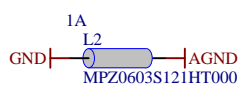
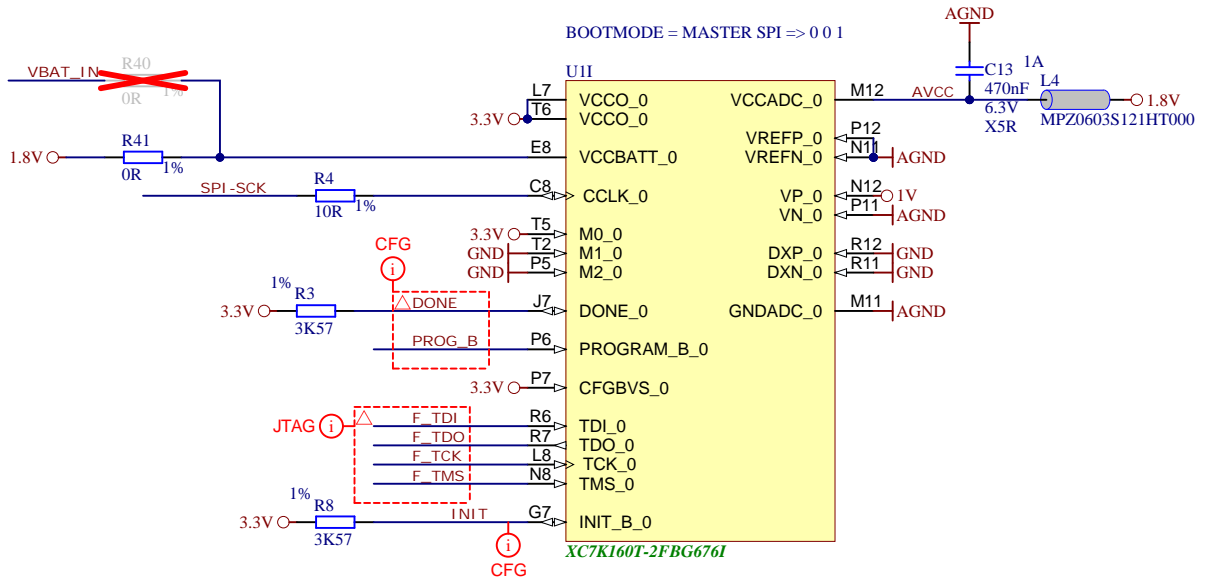
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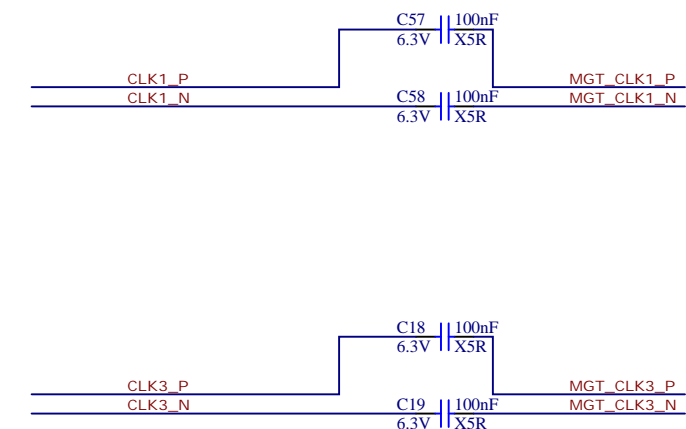
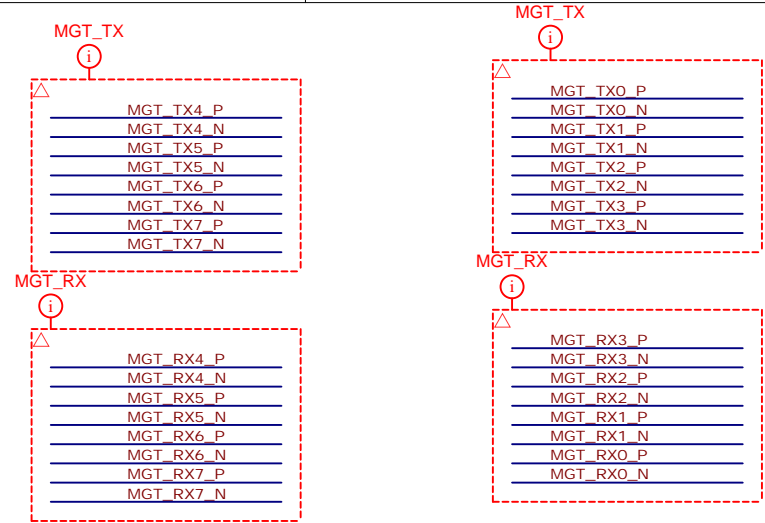
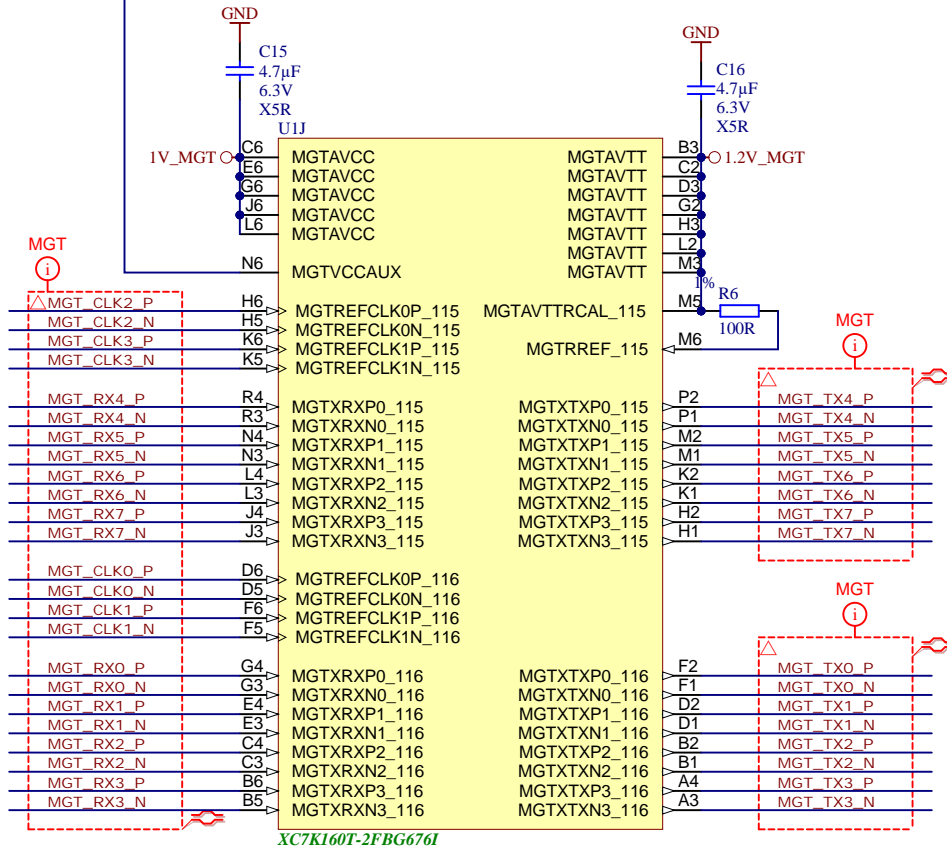
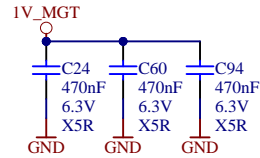
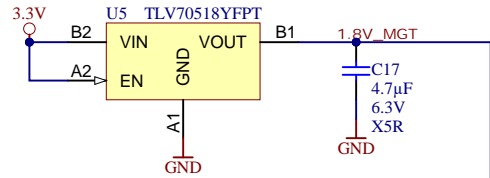

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Date: 2016-10-25		Copyright: 2013 Trenz Electronic GmbH	
Page 9 of 17		Filename: B34.SchDoc	



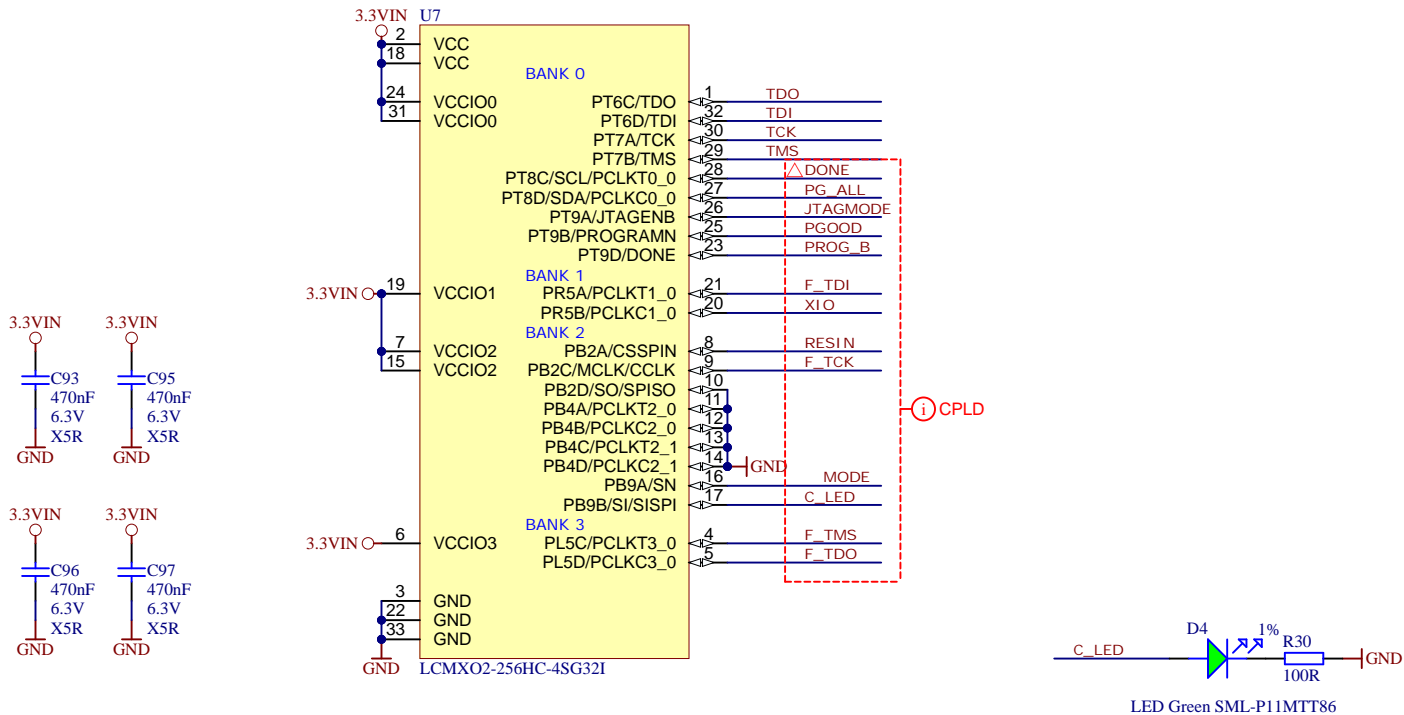
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Filename: Clock.SchDoc		Page10 of 17	



Title: TE0741		
A4	Number: TE0741 B2I-1-A	Rev. 04
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Filename: FPGA-CFG.SchDoc		

Title: TE0741		
A4	Number: TE0741 B2I-1-A	Rev. 04
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Filename: FPGA-MGT.SchDoc		



	Title: TE0741	
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	Date: 2016-10-25	Copyright: 2013 Trenz Electronic GmbH
	Rev. 04	Page 13 of 17
Filename: FPGA-MISC.SchDoc		

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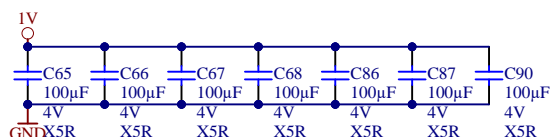
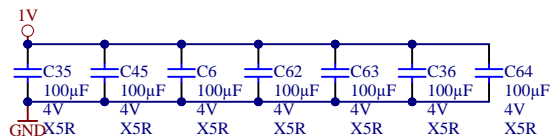
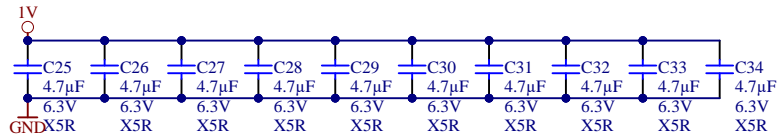
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A

A



B

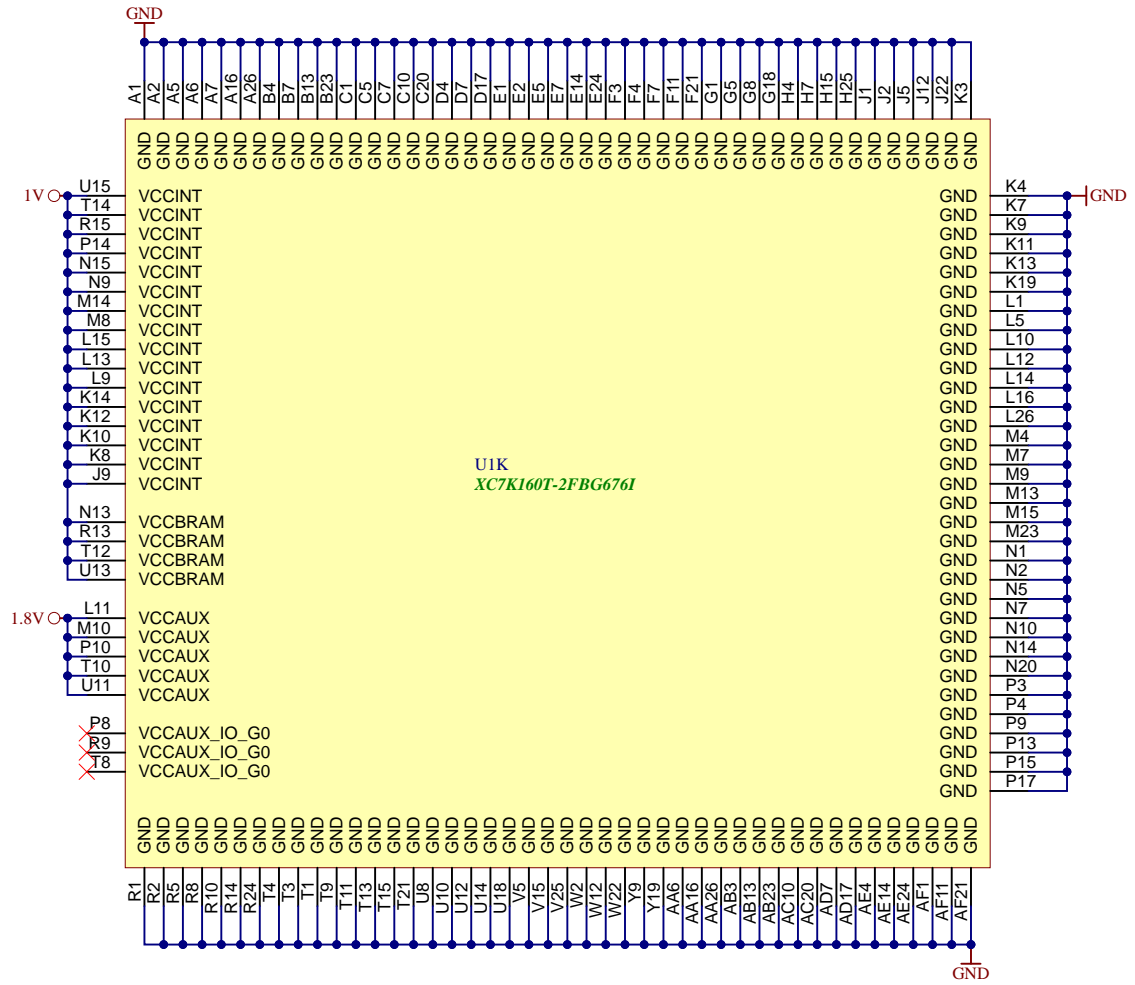
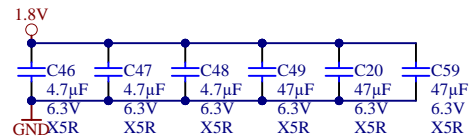
B

C

C

D

D



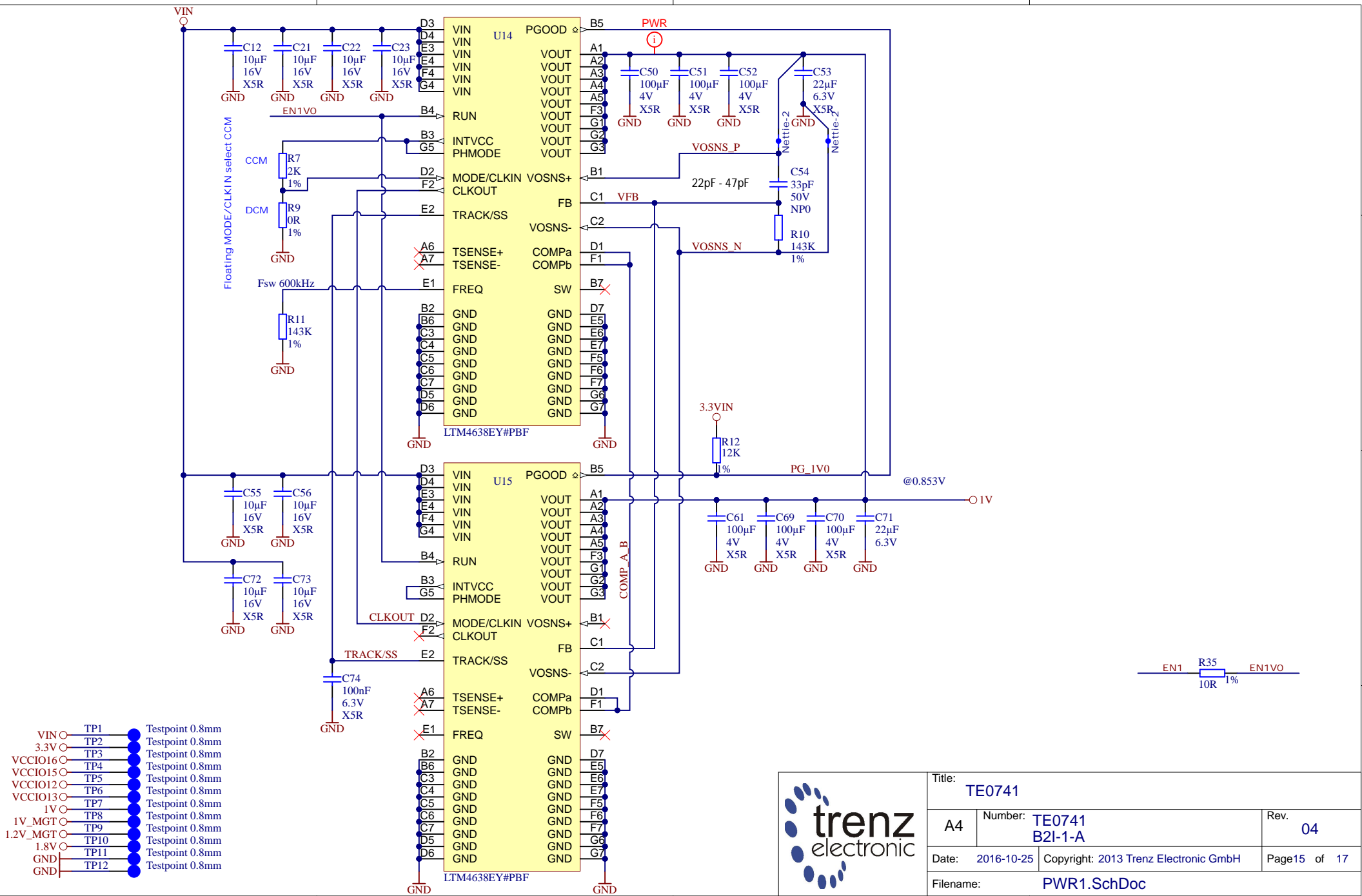
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Date: 2016-10-25	Copyright: 2013 Trenz Electronic GmbH	Page 14 of 17
Filename: FPGA-PWR.SchDoc		

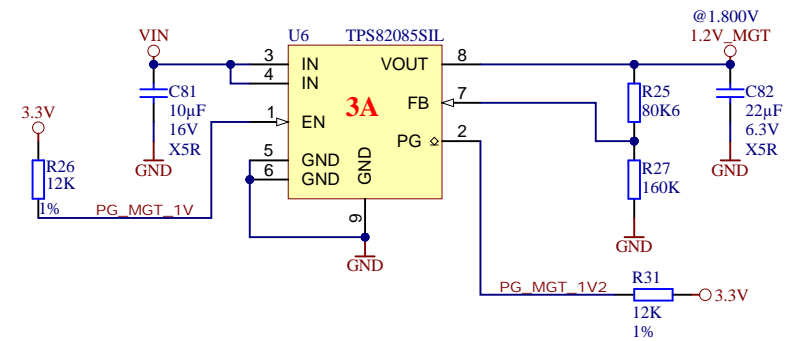
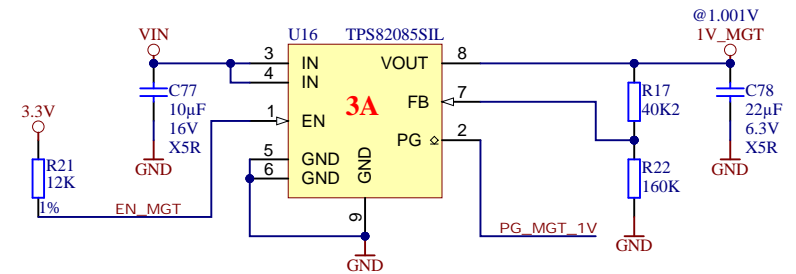
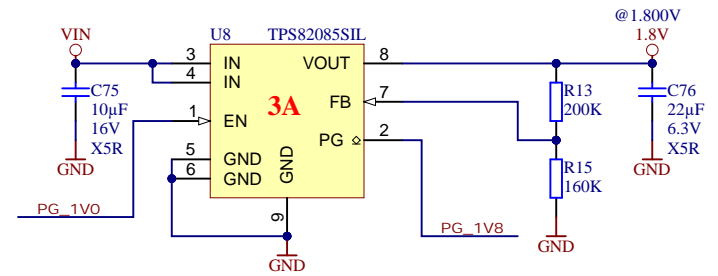
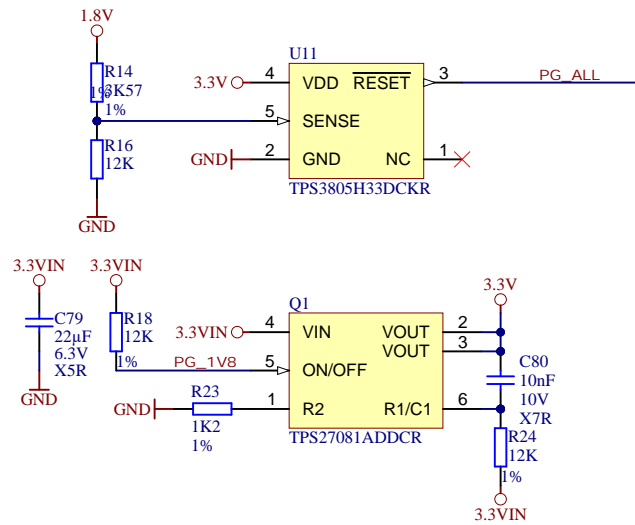
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			Title: TE0741	
			A4	Number: TE0741 B2I-1-A
Date: 2016-10-25		Copyright: 2013 Trenz Electronic GmbH		Page16 of 17
Filename: PWR2.SchDoc				

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CHANGES REV02 to REV03

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

Changes REV03 to REV04 (VT:10.2021):

- 1) replaced all DCDC (reason: not recommended use Enpirion DCDC)
- 2) remove Traceability Pad (reason: EOL)
- 3) added additional resistor for VBAT (reason: possibility using external VBAT from Carrier Board)
- 4) full upd LIB components
- 5) optimization PCB routing

A

A

B


B

C

C

D

D

		Title: TE0741 - Changes list	
		A4	Number: TE0741 B2I-1-A
Date: 2016-10-25		Copyright: Trenz Electronic GmbH	
Filename: Revision_Changes.SchDoc		Page 17 of 17	

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