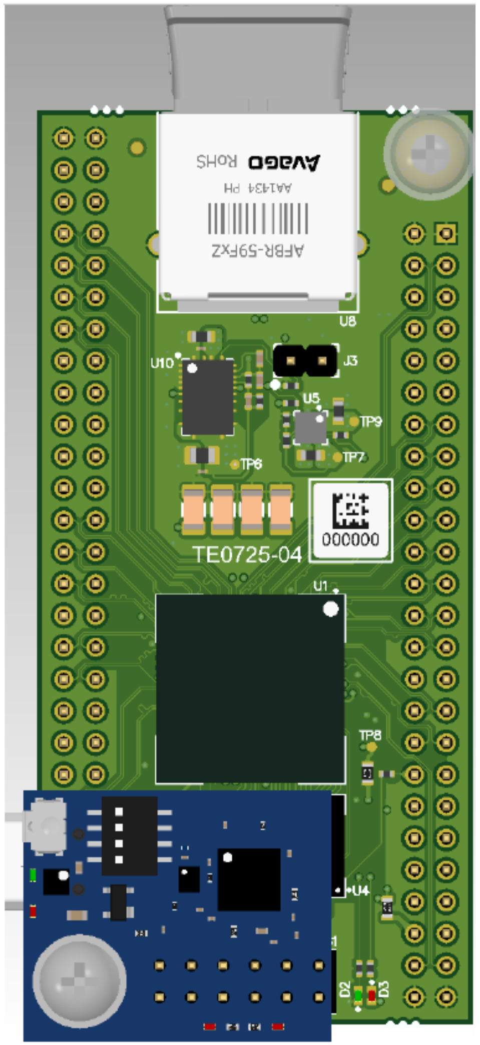

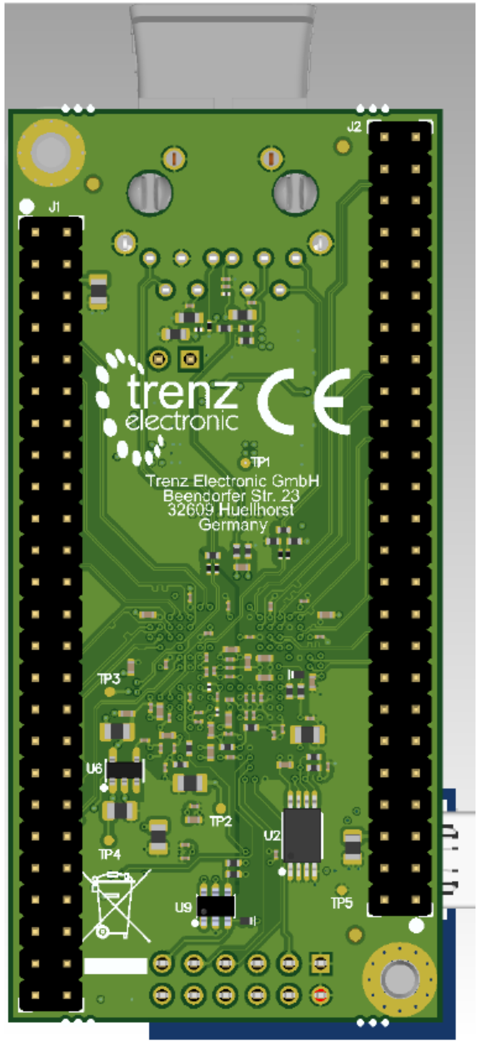

Regarding the usage of our schematics and alike documentation for Trenz module TE0725 .

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Schematics and other handouts serve for informational purposes only!

trenz electronic	Title: Legal Notices Modules		
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	Filename: Legal Notices Modules.SchDoc		

REV	Description	
-01	Initial revision	
-02		
-03	1. Fixed LVPECL termination for 125MBit modules 2. Fixed wrong XADC decoupling capacitors 3. Added serial number (tracebility pad) 4- Added thermal vias to mounting holes	
-04	1. DC-DC EN5311QI is replaced by MPM3834CGPA. Designator of the component is changed U11 --> U5; 2. U10 EN6347QI replaced by MPM3860GQW-Z; 3. Removed "trace pad"; 4. U4 (S27KS0641DPBHI000) is EOL and replaced with IS66WVH8M8FALL-166B1LI; 5. Added pull-up resistor R37 to HyperRAM #CS signal; 6. Added Diode D4; 7. Added Diode D1 for INIT reset; 8. Added J3 (JTAG only Enable); 9. Added testpoints TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10; 10. L1, L2, L3, L4, L6 Ferrit beads BKP0603HS121-T replaced with MPZ0603S121HT000; 11. U3 replaced by SiT8008BI-73-XXS-100.000000E; 12. Components updated from the library;; 13. Added Legal notices and power diagram pages. 14. Power sequence is updated according to DS181: 1V --> 1,8V --> 2,5V.	VG (18.04.2023)

Title:	Revision Changes
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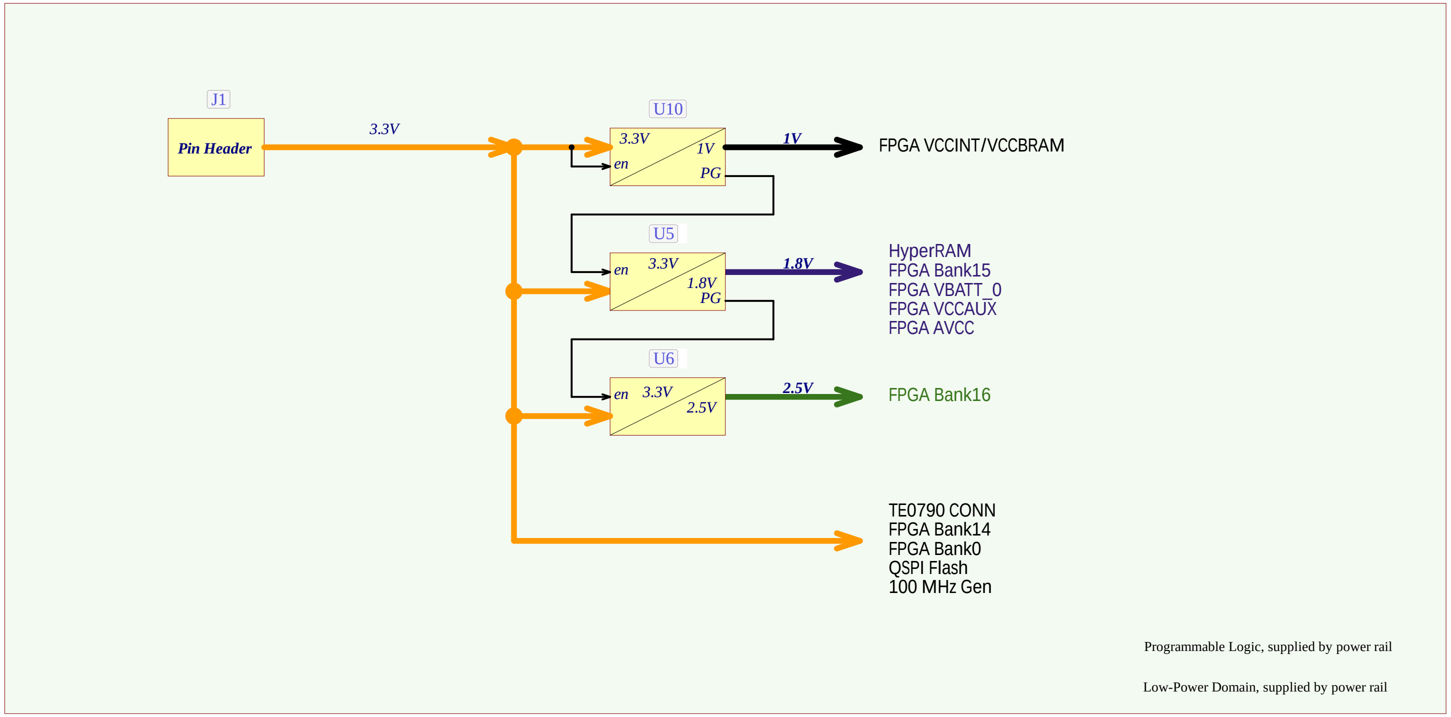
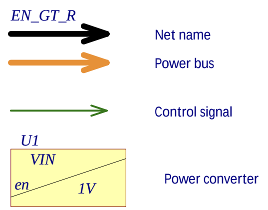
Power-on sequencing:

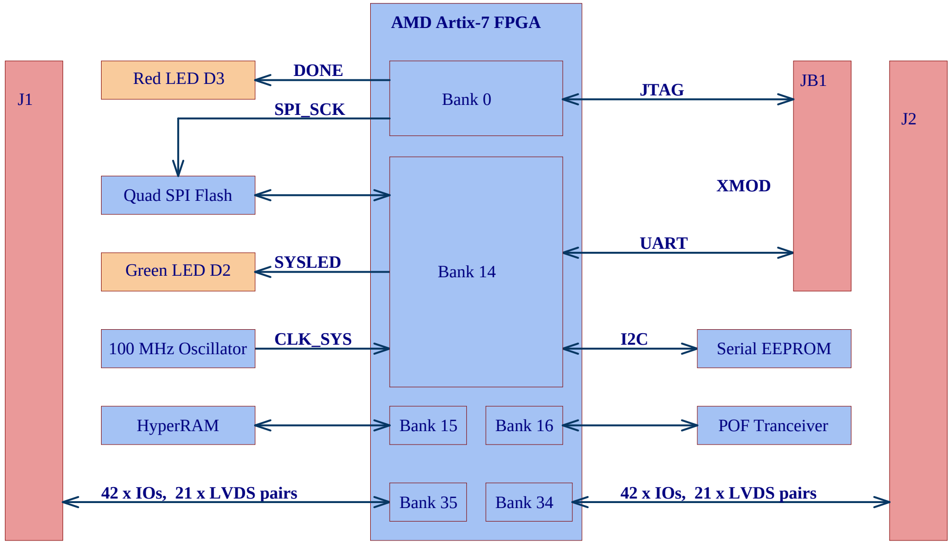


Supported Voltage Ranges:

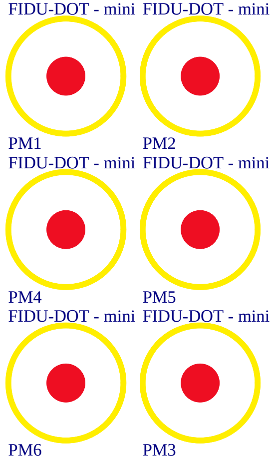
Power Rail	Direction	Range	Tolerance	Description	Note
3.3V from J1, J2	IN	3.3V	+/-3%	Micromodule Power	TE0790 CONN, FPGA Bank14, FPGA Bank0, QSPI Flash, 100 MHz Gen, Optical Transceiver

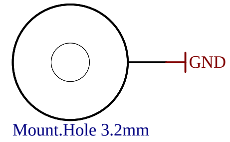


Title: Power Diagram			
A4	Number: TE0725 42C-1-A		Rev. 04
Date: 18.04.2023	Copyright: Trenz Electronic GmbH		Page3 of 13
Filename: Power_Diagram.SchDoc			



LOGO1
TE Logo PRINT Layer
LOGO PRINT
CE
CE Logo on Top Overlay
CE-TOPOVERLAY
MECH1
TE Address Overlay
LOGO ADDRESS
Serial
Serial
Serialnumber 6,3 x 6.3mm





I2C Address:

Device	I2C BUS	I2C ADDR	Note
EEPROM *U2*	I2C	0x50	-

U_FPGA PWR
FPGA_PWR_MISC.SchDoc

U_PowerSupply
POWER.SchDoc

Legend:

B2B Connector | LED Interface | On-board Components

Drawn by	VG
Checked by	IG
Assembly variant	42C-1-A
Created by	AL
Modified by	VG
Modified at	18.04.2023

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Title: Overview

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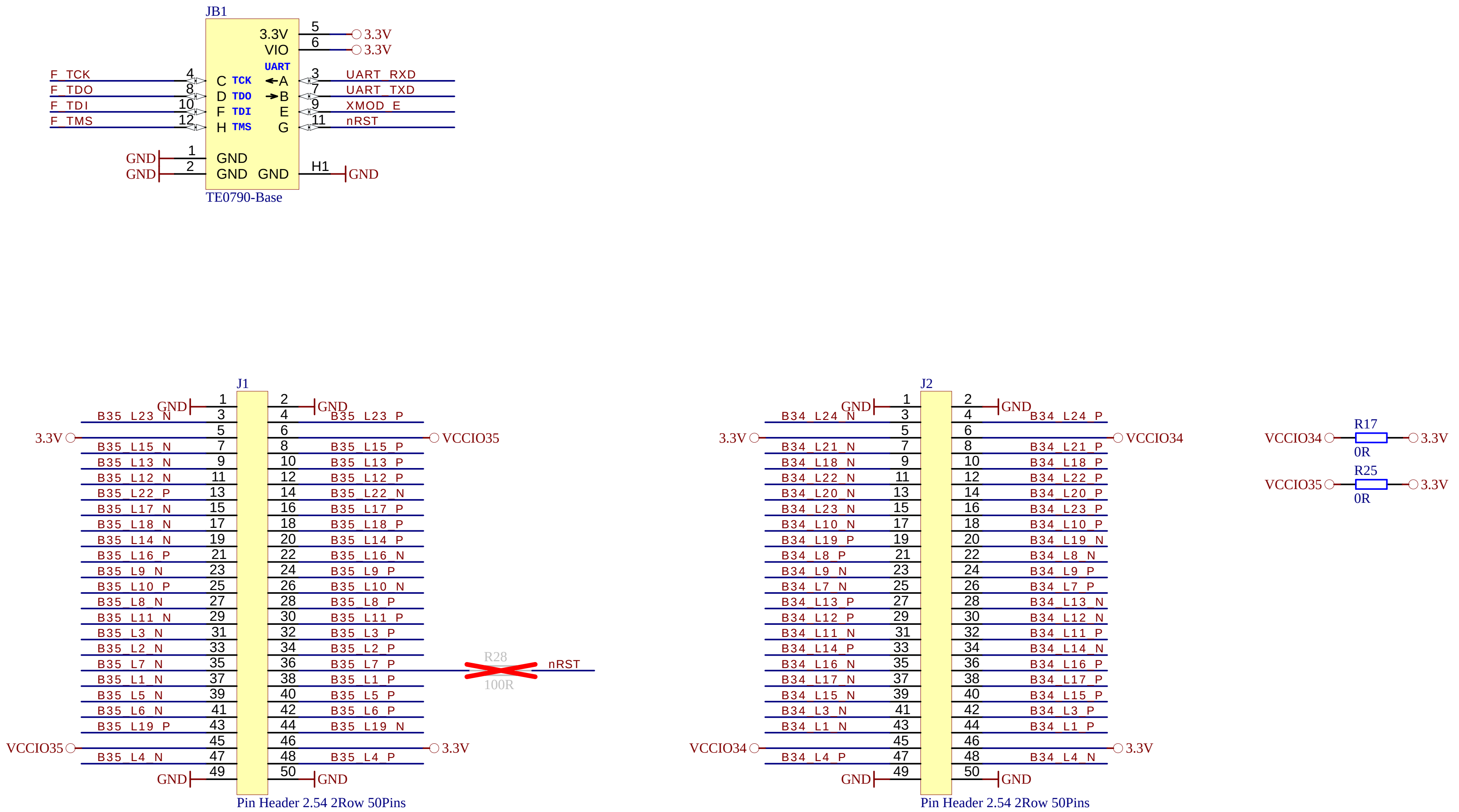

Title: B2B Connectors			
A4	Number: TE0725 42C-1-A		Rev. 04
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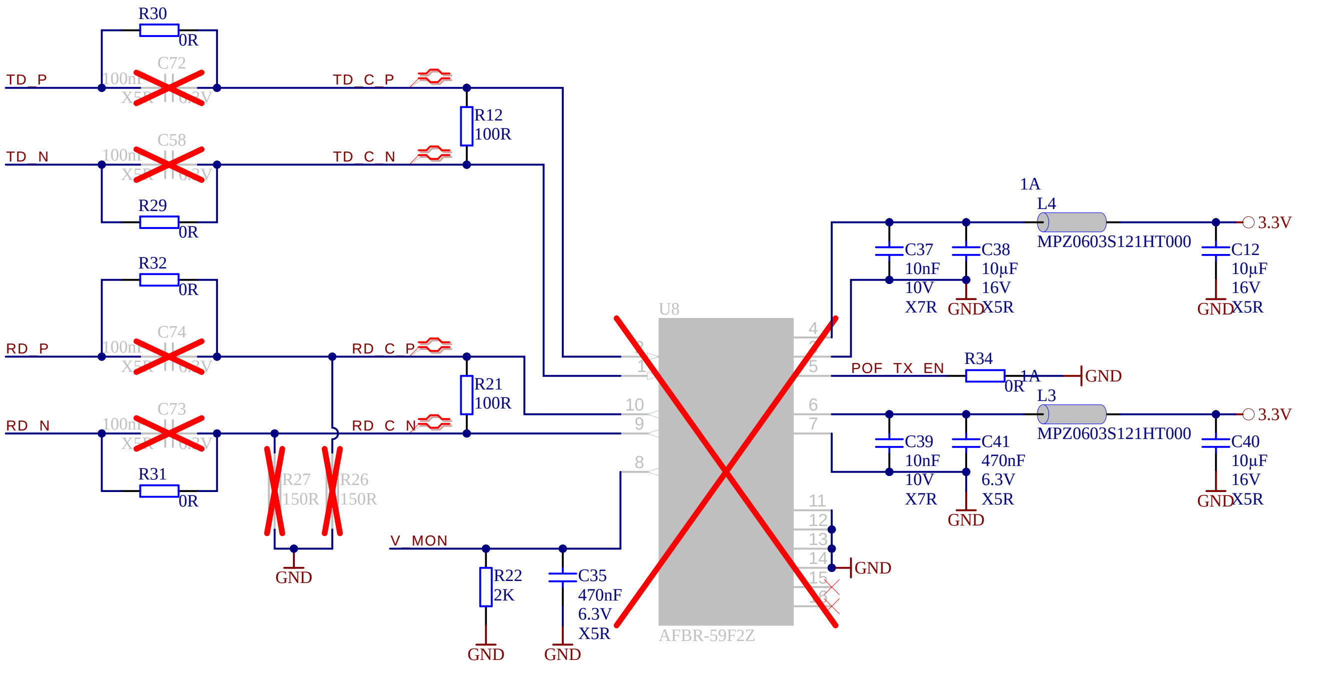
Filename: B2B_Connector.SchDoc			



Title:	Optical transceiver		
A4	Number: TE0725 42C-1-A		Rev. 04
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Filename:	Optical_transceiver.SchDoc		

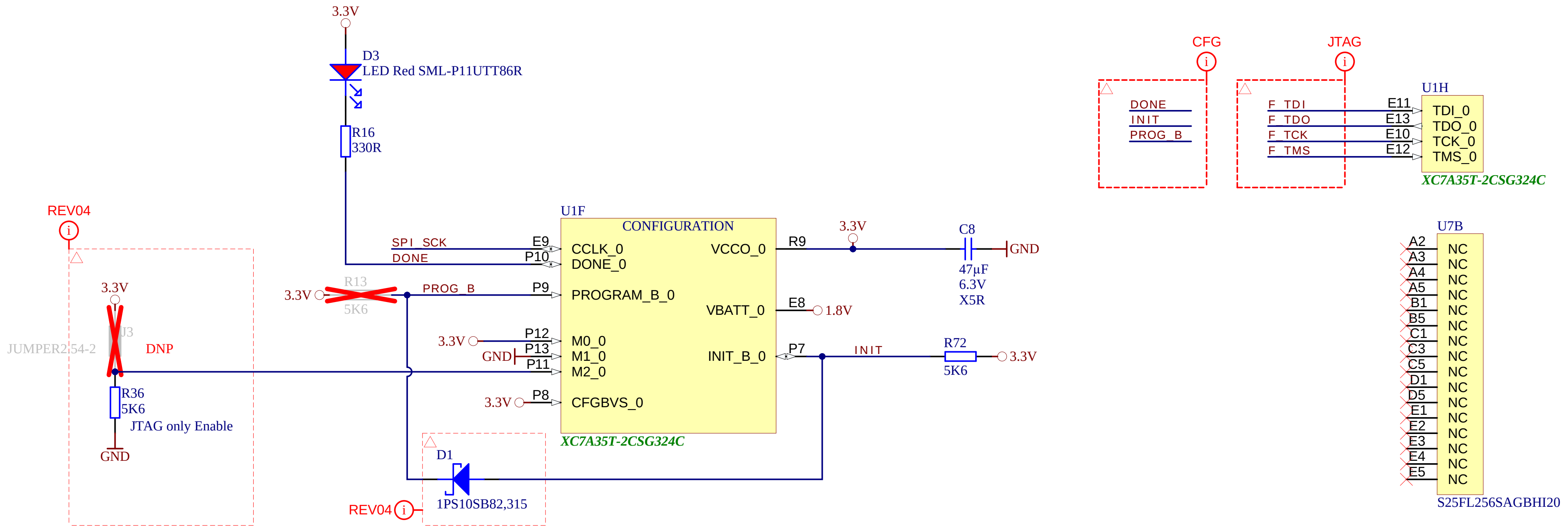
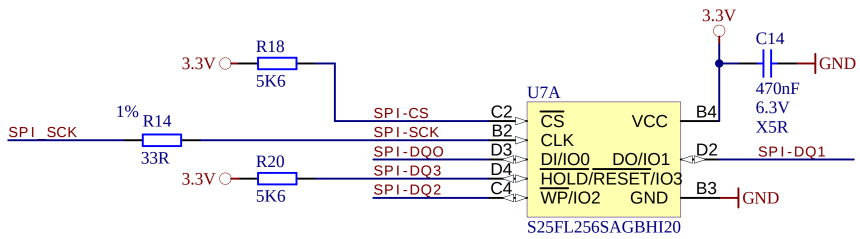


Table 2-1: **7 Series FPGA Configuration Modes** **(UG470)**

Configuration Mode	M[2:0]	Bus Width	CCLK Direction
Master Serial	000	x1	Output
Master SPI	001	x1, x2, x4	Output
Master BPI	010	x8, x16	Output
Master SelectMAP	100	x8, x16	Output
JTAG	101	x1	Not Applicable
Slave SelectMAP	110	x8, x16, x32(1)	Input
Slave Serial(2)	111	x1	Input



Title:	FPGA CFG
A4	Number: TE0725 42C-1-A
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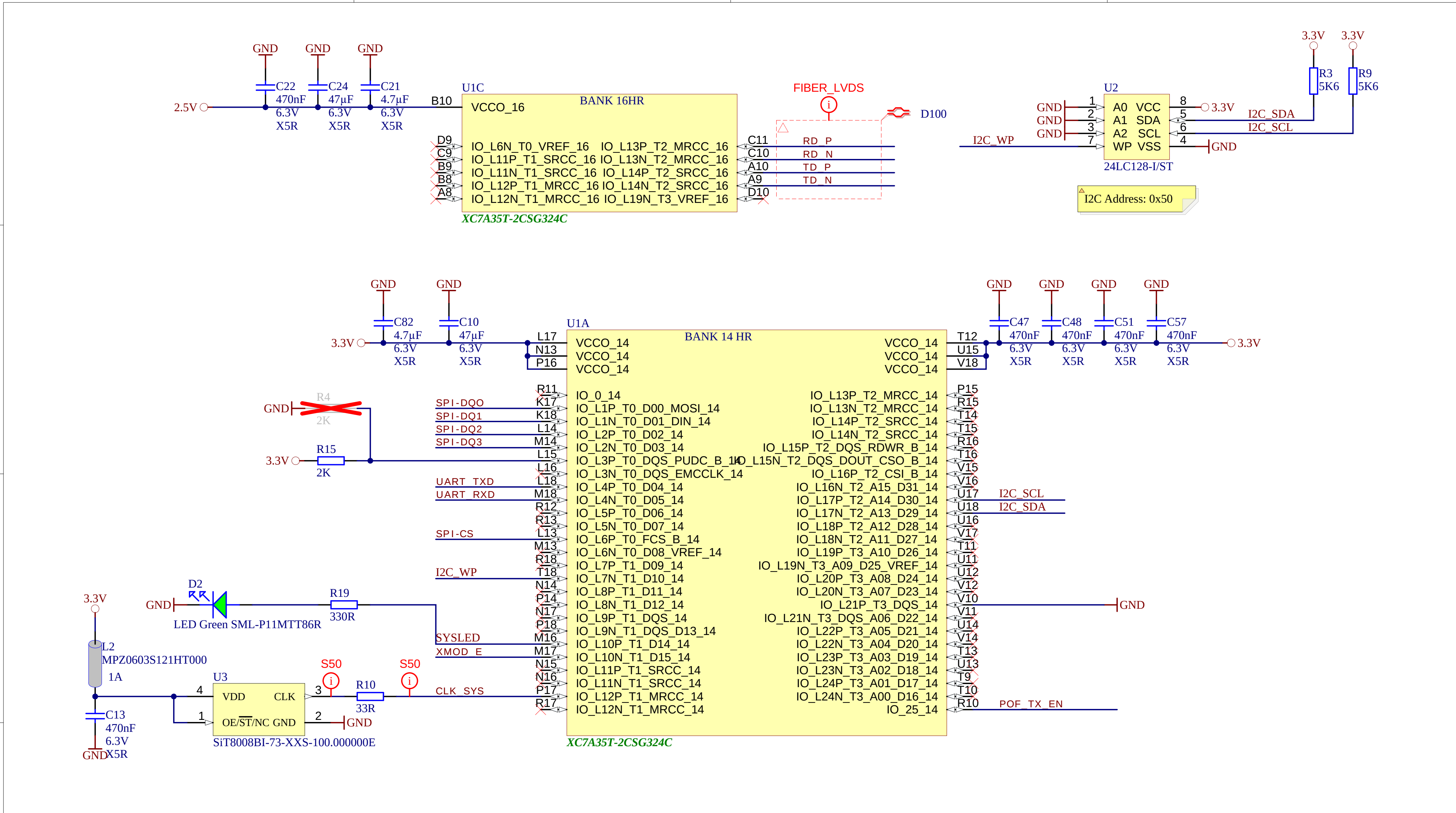
Filename:	FPGA_CFG.SchDoc



Title: B14 & B16

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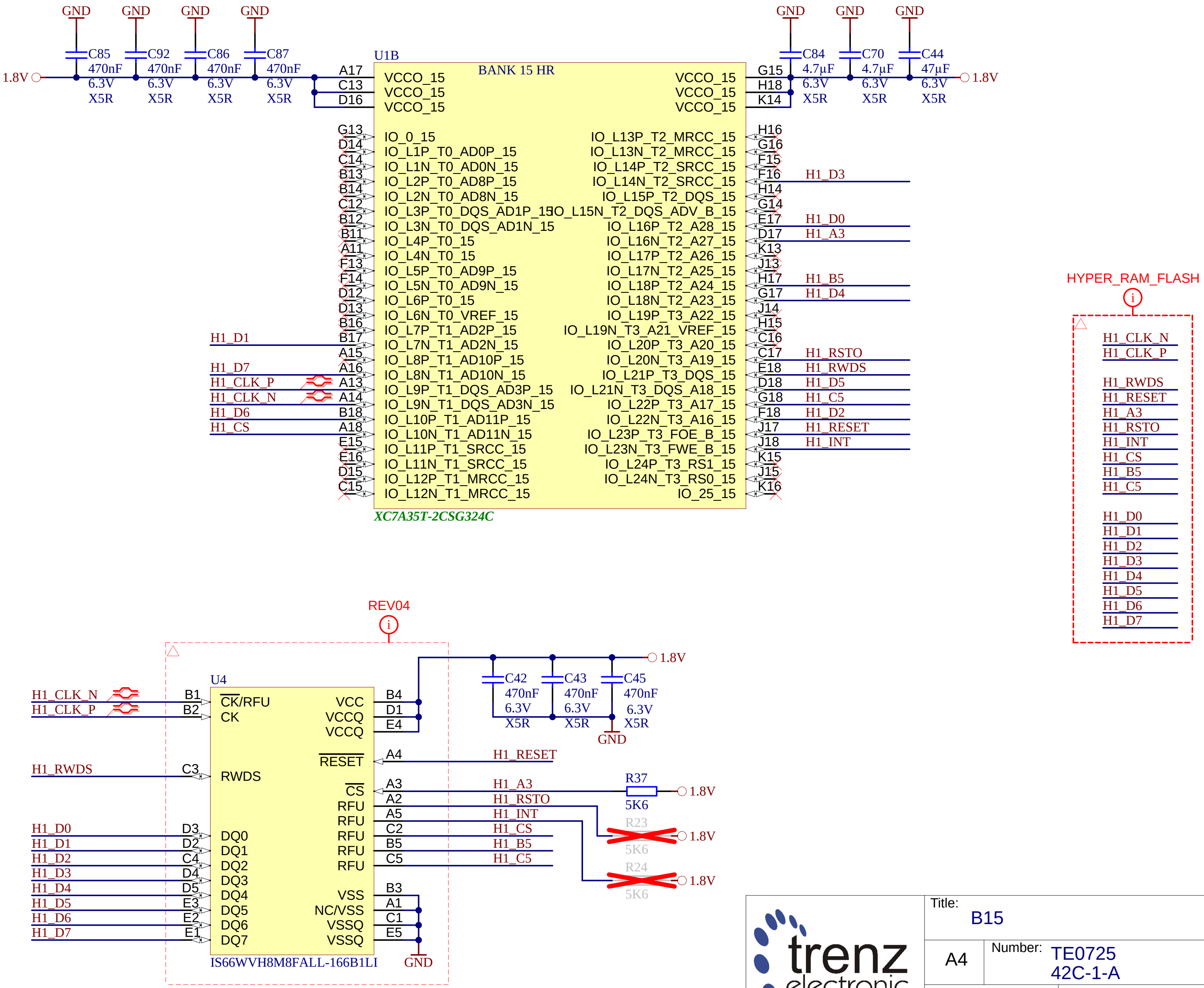
Filename: B14_B16.SchDoc



Title: B15			
A4	Number: TE0725 42C-1-A		Rev. 04
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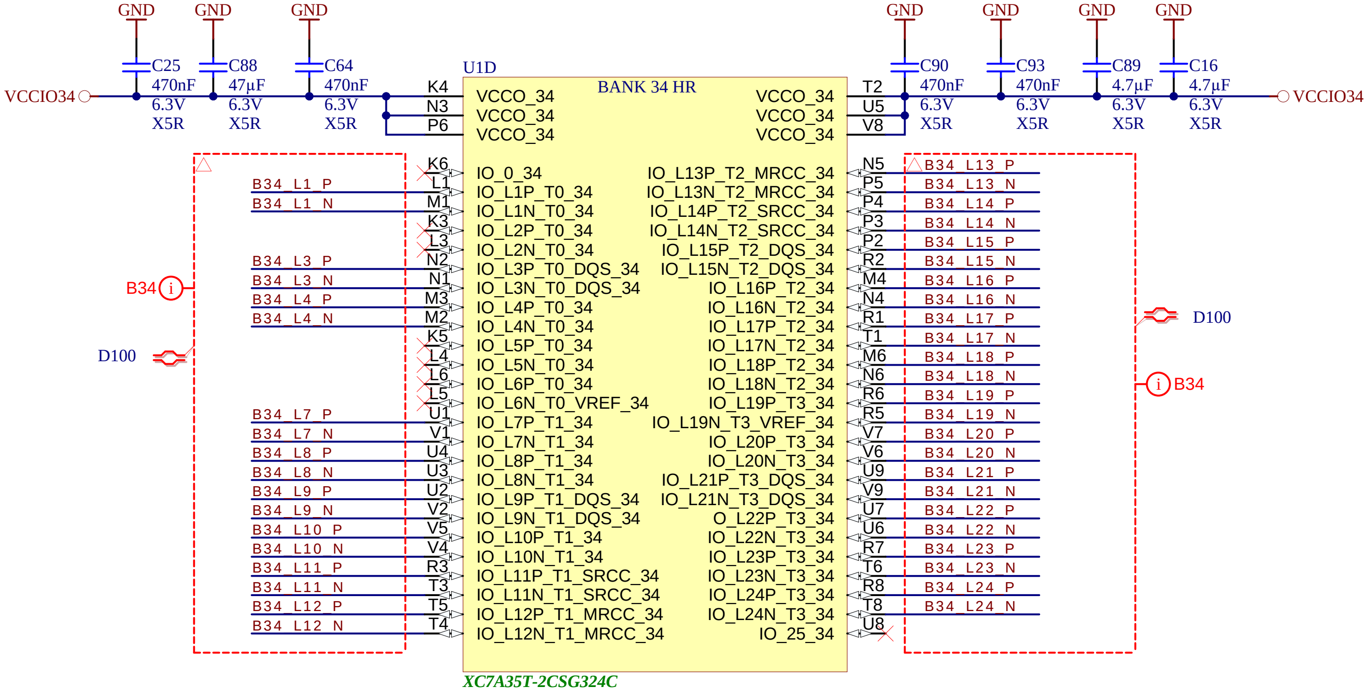
Filename: B15.SchDoc			



Title:	B34		
A4	Number: TE0725 42C-1-A		Rev. 04
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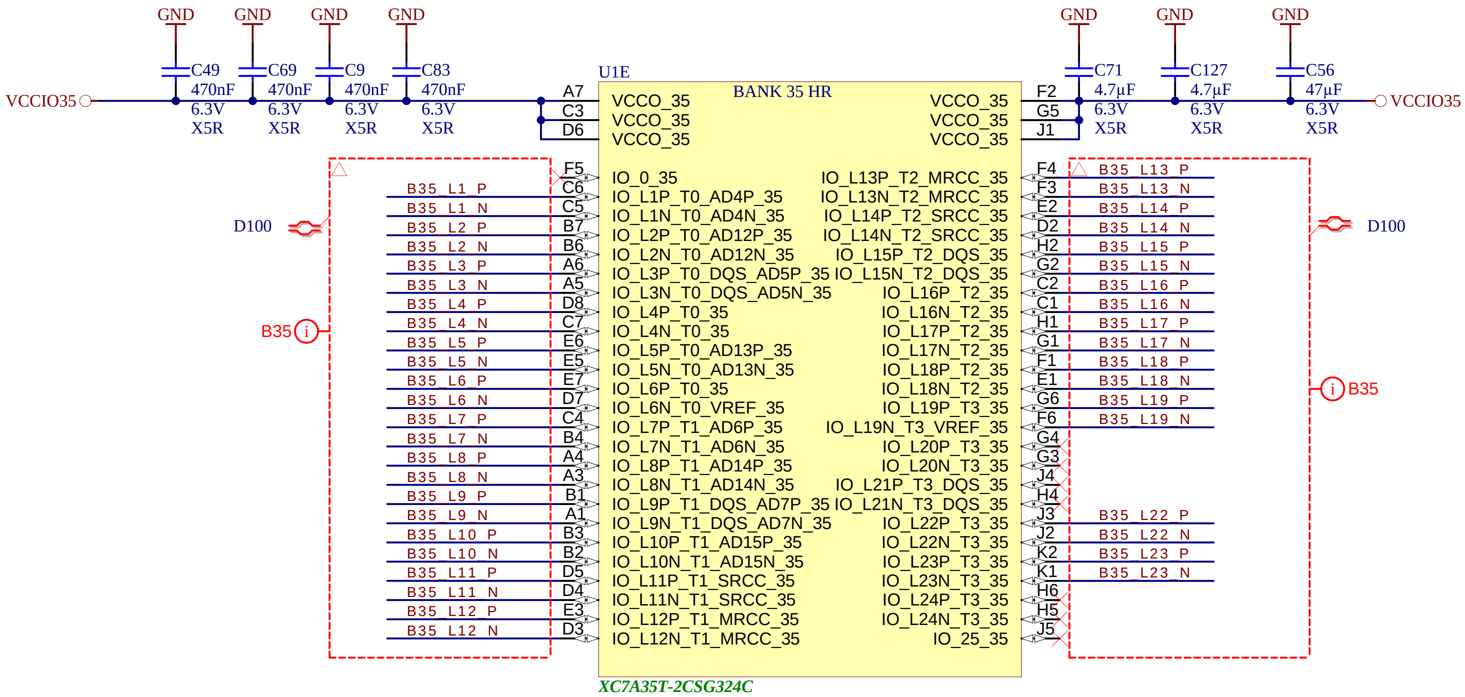
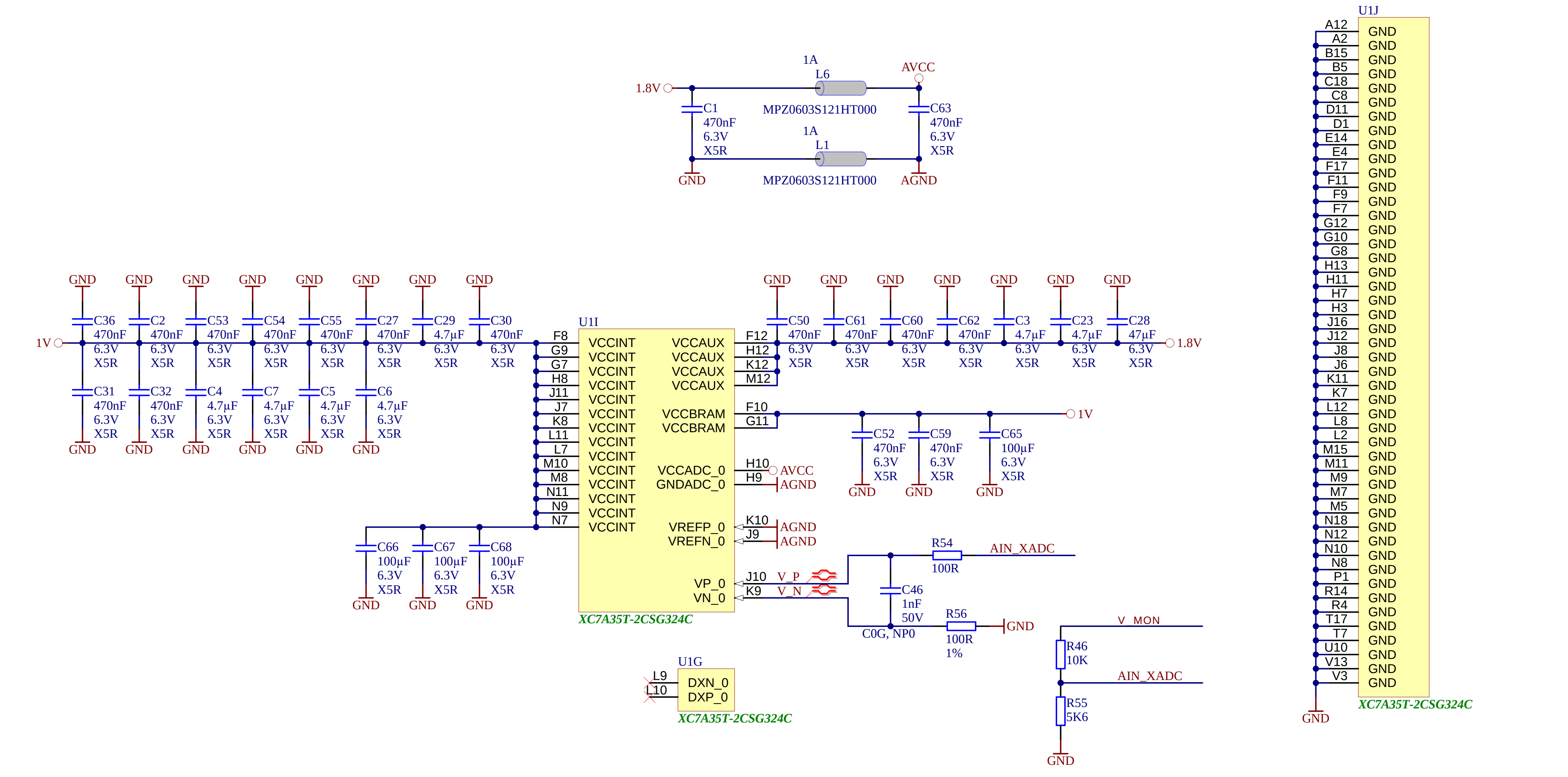
Filename:	B34.SchDoc		



trenz electronic	Title: B35		
	A4	Number: TE0725 42C-1-A	Rev. 04
	Date: 18.04.2023	Copyright: Trenz Electronic GmbH / TT	Page 11 of 13
	Filename: B35.SchDoc		



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Title: FPGA PWR MISC			
A4	Number: TE0725 42C-1-A		Rev. 04
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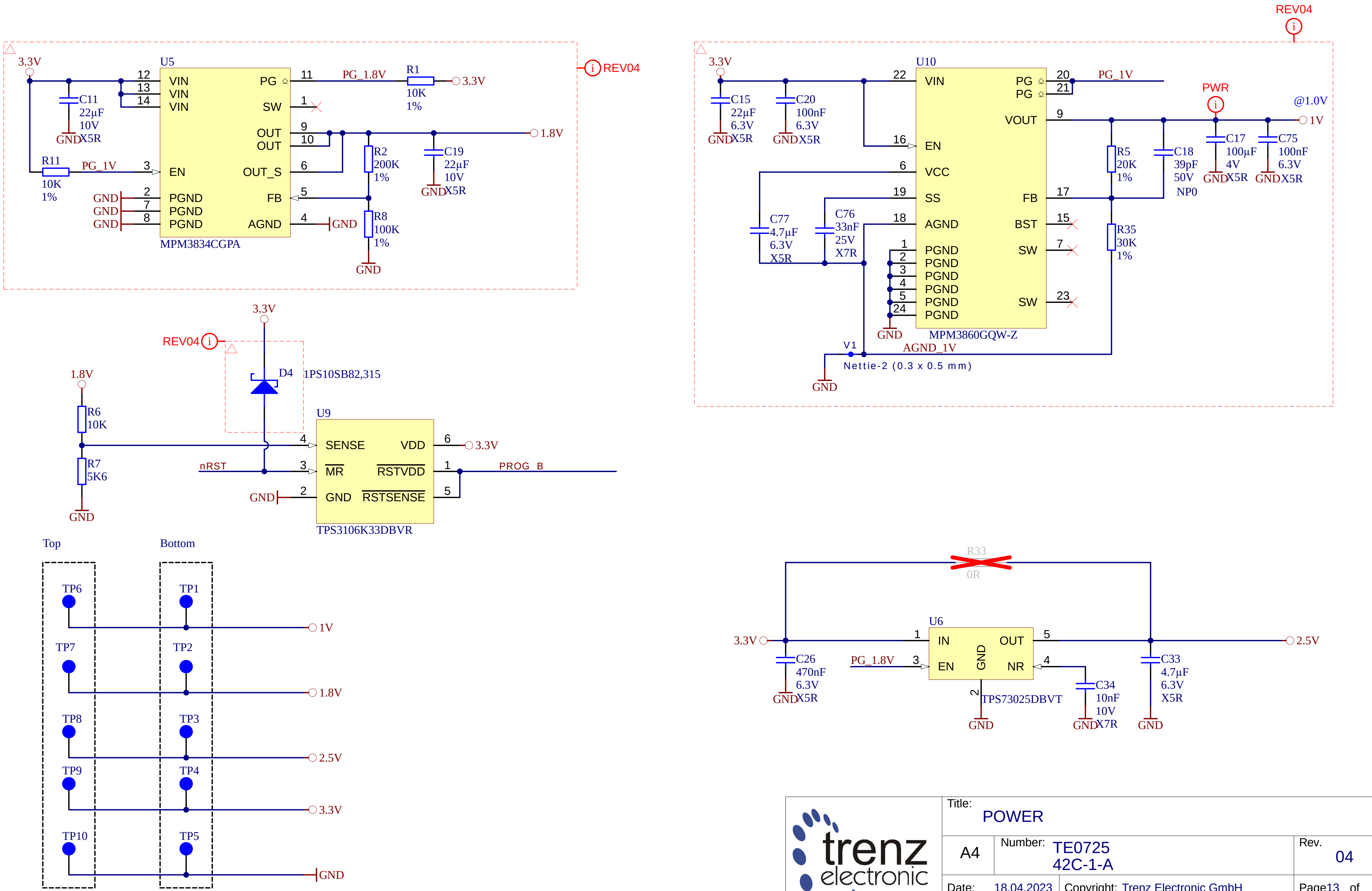
Filename: FPGA_PWR_MISC.SchDoc			



trenz electronic	Title: POWER			
	A4	Number: TE0725 42C-1-A		Rev. 04
	Date: 18.04.2023	Copyright: Trenz Electronic GmbH		Page13 of 13
	Filename: POWER.SchDoc			