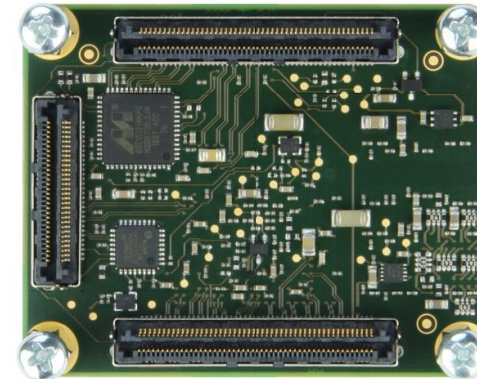
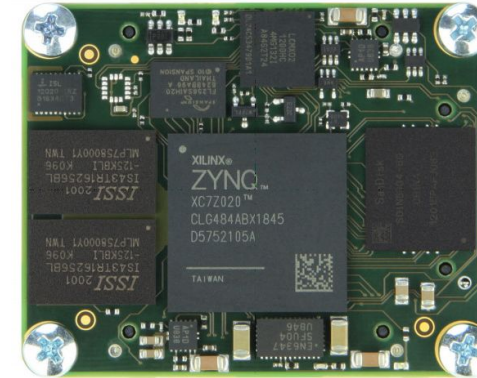




Regarding the usage of our schematics and alike documentation for Trenz module TE0720.

Project is protected under copyright and we strongly and strictly prohibit the reverse engineering or recreation, even if the design is just adapted or modified. TE0720 is protected under such right and in case of plagiarism we will have to do anything necessary in order to protect our assets.

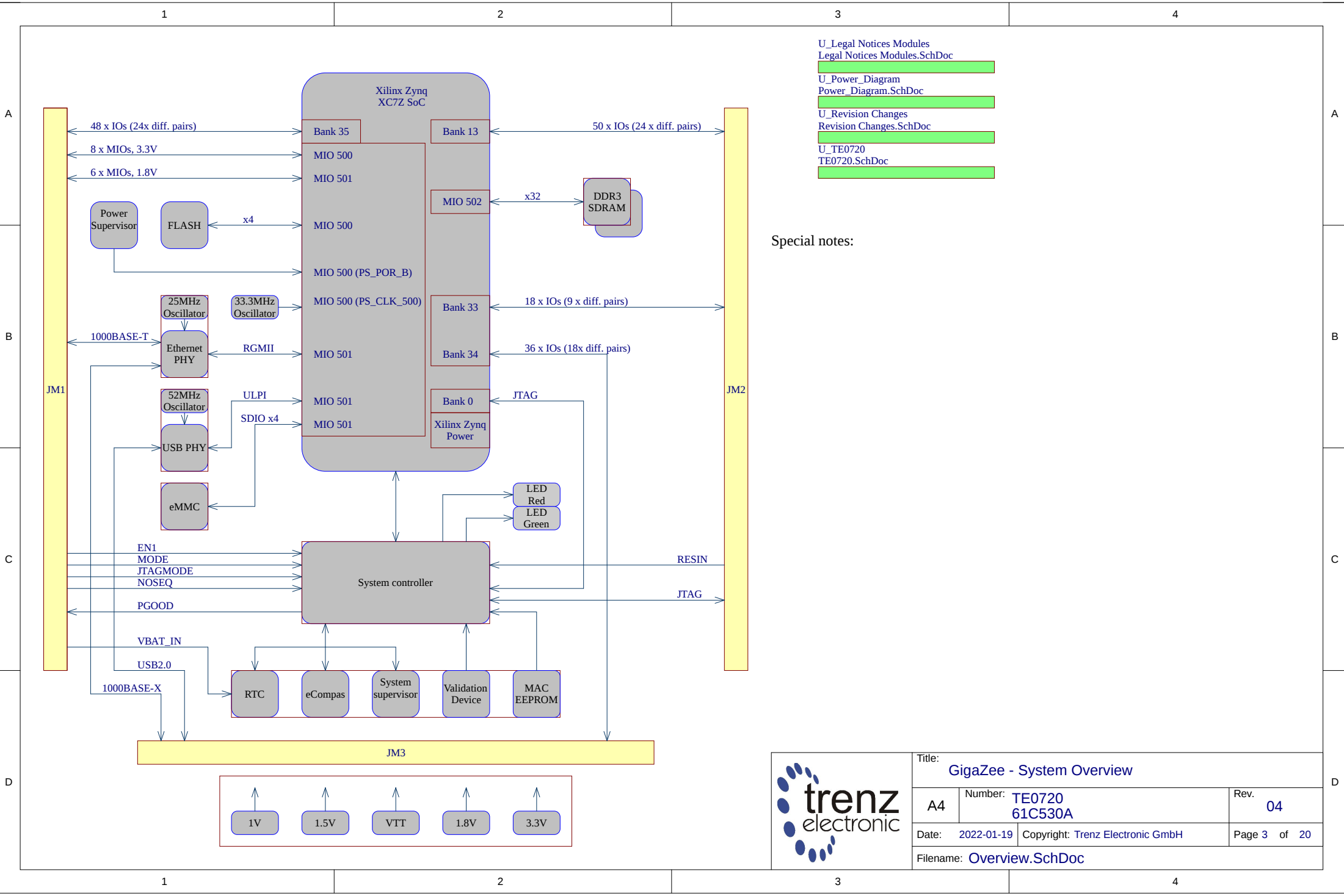
Schematics and other handouts serve for informational purposes only!

	Title: GigaZee		
	A4	Number: TE0720 61C530A	Rev. 04
	Date: 2022-01-19	Copyright: Trenz Electronic GmbH / TT	Page 1 of 20
	Filename: Legal Notices Modules.SchDoc		

1		2		3		4																	
A	<table><tr><td>REV</td><td>Description</td><td></td></tr><tr><td>-01</td><td>Initial revision</td><td></td></tr><tr><td>-02</td><td></td><td></td></tr><tr><td>-03</td><td></td><td></td></tr><tr><td>-04</td><td>1. Revised power supply circuit, replaced next components: - EN6347QI (U1) by MPM3840GQV-Z, - EP53F8QI (U2, U3) by MPM3834CGPA, - TPS27082LDDCR (Q1) by MP5077GG-Z. 2. Added power supervisor BD39040MUF (U27). Next signal connected to system controller: - PG_All (U27 - U19.C12) with pull-up resistor R67; - WDEN (U27.13 - U19.C6) with pull-down resistor R80; - WDIN (U27.14 - U19.N8); - WDOUT (U27.16 - U19.M3). 3. Signal MIO8 (U5.E5) connected to system controller (U19.N7) 4. Added pull-down resistors R64 (net ON_1V0) and R65 (net ON_1V8) 5. Revised voltage supervisor U26 circuit: U26.6 (VDD) connected to 3.3VIN, Added protection diode D3 to U26.3 (#MR input) 6. Replaced BKP0603HS (L1, L2, L3, L4, L5, L7, L8) by MPZ0603S121HT000 7. Auxiliary information has been added on Samtec B2B connectors page 8. PCB: Revised layout of power supplies 9. PCB: Revised layout of Samtec B2B signals. The length of the tracks has been changed. Pinout of Samtec B2B connectors not affected 10: PCB: Added option to install Heatsink SuperGrip (c) 11. Added capacitors C7, C8 (100uF, 1V) 12. Changed voltage divider resistors (R21, R61) to set the threshold for U26.</td><td>VY</td></tr><tr><td>-04A</td><td>1. Added note regarding VCCIO34, page B2B-Connectors</td><td>VY</td></tr></table>		REV	Description		-01	Initial revision		-02			-03			-04	1. Revised power supply circuit, replaced next components: - EN6347QI (U1) by MPM3840GQV-Z, - EP53F8QI (U2, U3) by MPM3834CGPA, - TPS27082LDDCR (Q1) by MP5077GG-Z. 2. Added power supervisor BD39040MUF (U27). Next signal connected to system controller: - PG_All (U27 - U19.C12) with pull-up resistor R67; - WDEN (U27.13 - U19.C6) with pull-down resistor R80; - WDIN (U27.14 - U19.N8); - WDOUT (U27.16 - U19.M3). 3. Signal MIO8 (U5.E5) connected to system controller (U19.N7) 4. Added pull-down resistors R64 (net ON_1V0) and R65 (net ON_1V8) 5. Revised voltage supervisor U26 circuit: U26.6 (VDD) connected to 3.3VIN, Added protection diode D3 to U26.3 (#MR input) 6. Replaced BKP0603HS (L1, L2, L3, L4, L5, L7, L8) by MPZ0603S121HT000 7. Auxiliary information has been added on Samtec B2B connectors page 8. PCB: Revised layout of power supplies 9. PCB: Revised layout of Samtec B2B signals. The length of the tracks has been changed. Pinout of Samtec B2B connectors not affected 10: PCB: Added option to install Heatsink SuperGrip (c) 11. Added capacitors C7, C8 (100uF, 1V) 12. Changed voltage divider resistors (R21, R61) to set the threshold for U26.	VY	-04A	1. Added note regarding VCCIO34, page B2B-Connectors	VY			
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-04A	1. Added note regarding VCCIO34, page B2B-Connectors	VY																					
B						B																	
C						C																	
D			 <table><tr><td colspan="3">Title: GigaZee - Revision History</td></tr><tr><td>A4</td><td>Number: TE0720 61C530A</td><td>Rev. 04</td></tr><tr><td>Date: 2022-01-19</td><td>Copyright: Trenz Electronic GmbH</td><td>Page 2 of 20</td></tr><tr><td>Drawn by: VY</td><td colspan="2">Filename: Revision Changes.SchDoc</td></tr></table>		Title: GigaZee - Revision History			A4	Number: TE0720 61C530A	Rev. 04	Date: 2022-01-19	Copyright: Trenz Electronic GmbH	Page 2 of 20	Drawn by: VY	Filename: Revision Changes.SchDoc		D						
Title: GigaZee - Revision History																							
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Title: GigaZee - Revision History		
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U_Legal Notices Modules
Legal Notices Modules.SchDoc
U_Power_Diagram
Power_Diagram.SchDoc
U_Revision Changes
Revision Changes.SchDoc
U_TE0720
TE0720.SchDoc

Special notes:

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Date: 2022-01-19	Copyright: Trenz Electronic GmbH	Page 3 of 20
Filename: Overview.SchDoc		

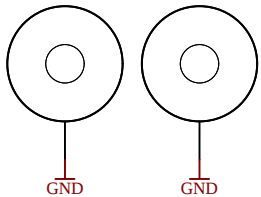
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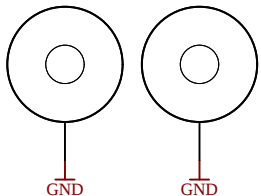
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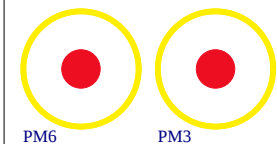
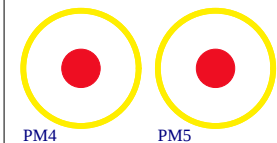
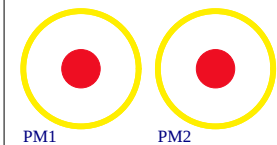
Mount.Hole 3.2mmMount.Hole 3.2mm



Mount.Hole 3.2mmMount.Hole 3.2mm



1V	TP1	Testpoint 0.8mm
VIN	TP2	Testpoint 0.8mm
1.5V	TP3	Testpoint 0.8mm
1.8V	TP4	Testpoint 0.8mm
VTT	TP5	Testpoint 0.8mm
VTTREF	TP6	Testpoint 0.8mm
3.3VIN	TP7	Testpoint 0.8mm
3.3V	TP8	Testpoint 0.8mm
VCCIO13	TP9	Testpoint 0.8mm
VCCIO33	TP10	Testpoint 0.8mm
VCCIO34	TP11	Testpoint 0.8mm
VCCIO35	TP12	Testpoint 0.8mm
AVCC	TP13	Testpoint 0.8mm
AVREF	TP14	Testpoint 0.8mm
AGND	TP15	Testpoint 0.8mm
GND	TP16	Testpoint 0.8mm
GND	TP17	Testpoint 0.8mm
GND	TP18	Testpoint 0.8mm
GND	TP19	Testpoint 0.8mm
GND	TP20	Testpoint 0.8mm



Serial
Serial
Serialnumber 6,3 x 6.3mm

Assembly variant 61C530A
Created by MR
Modified by MR
Modified at 2021-01-25

SVN Revision Unknown revision



Title: GigaZee - TE0720

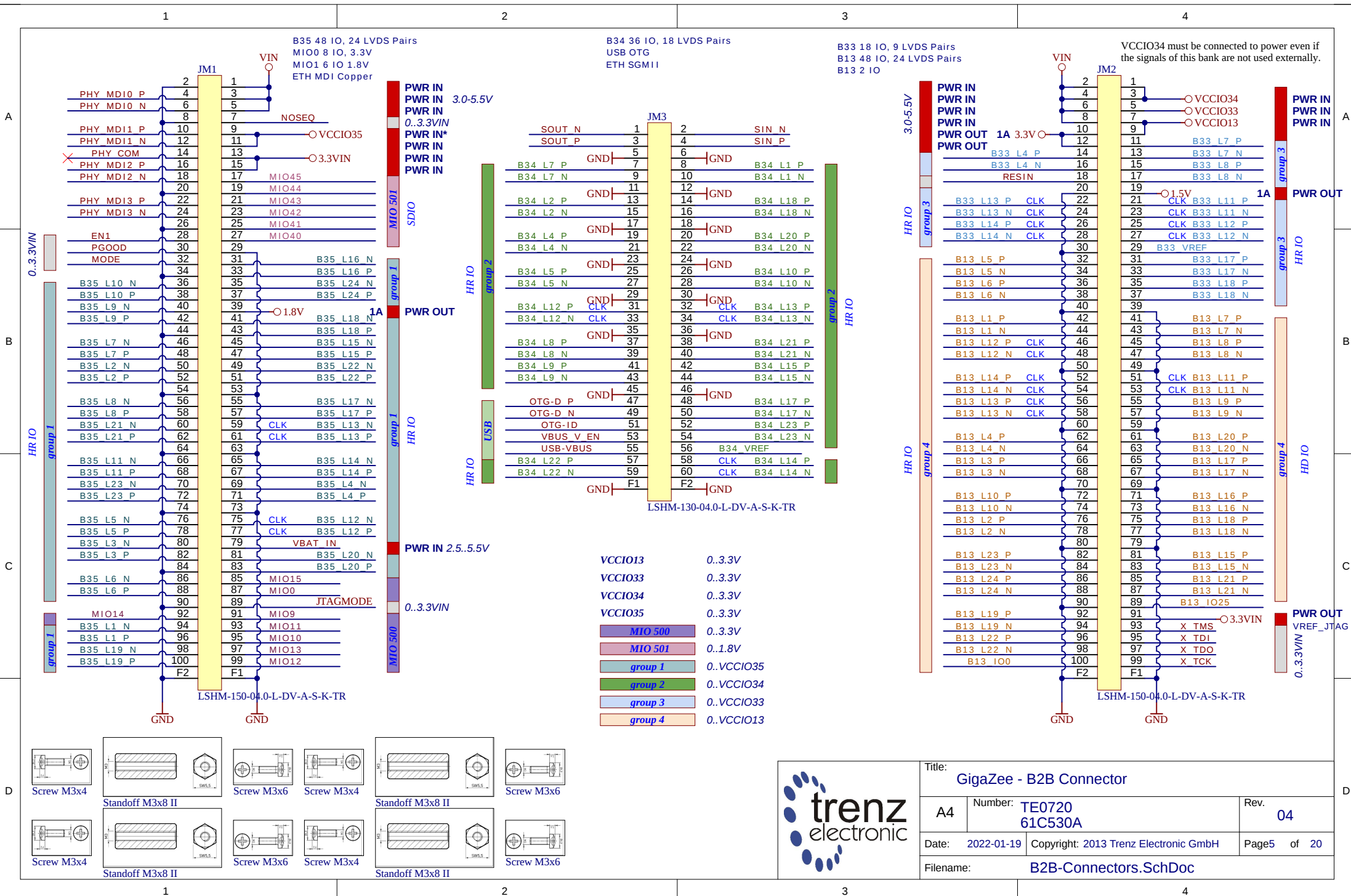
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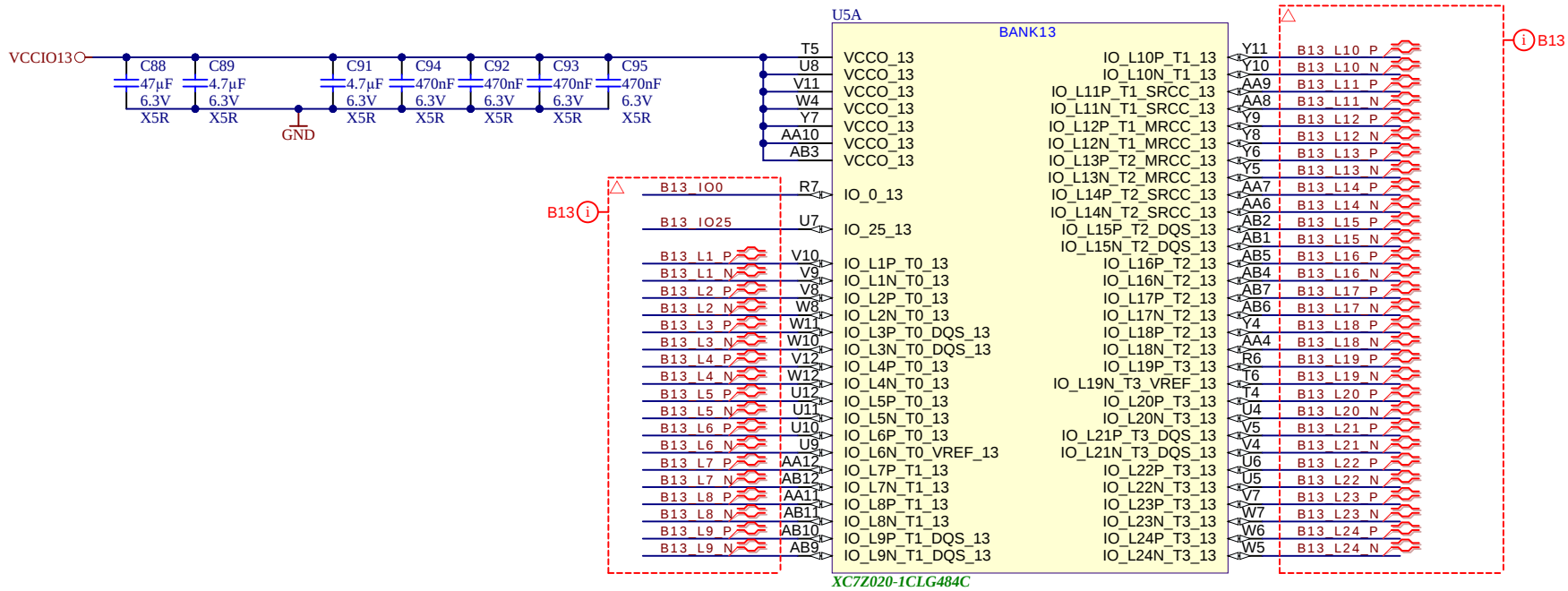
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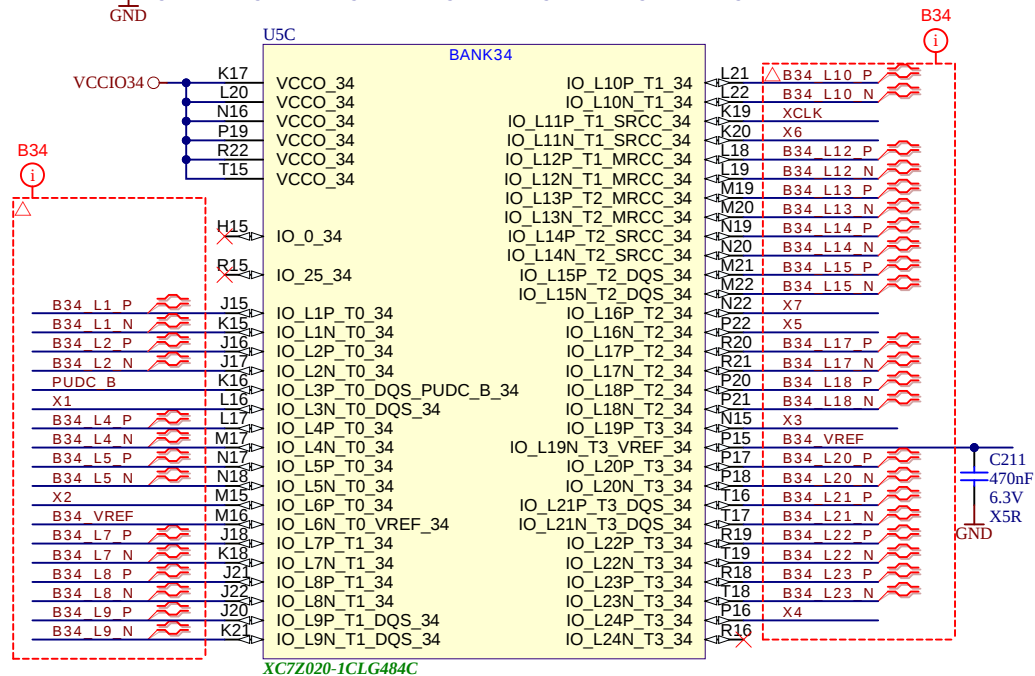
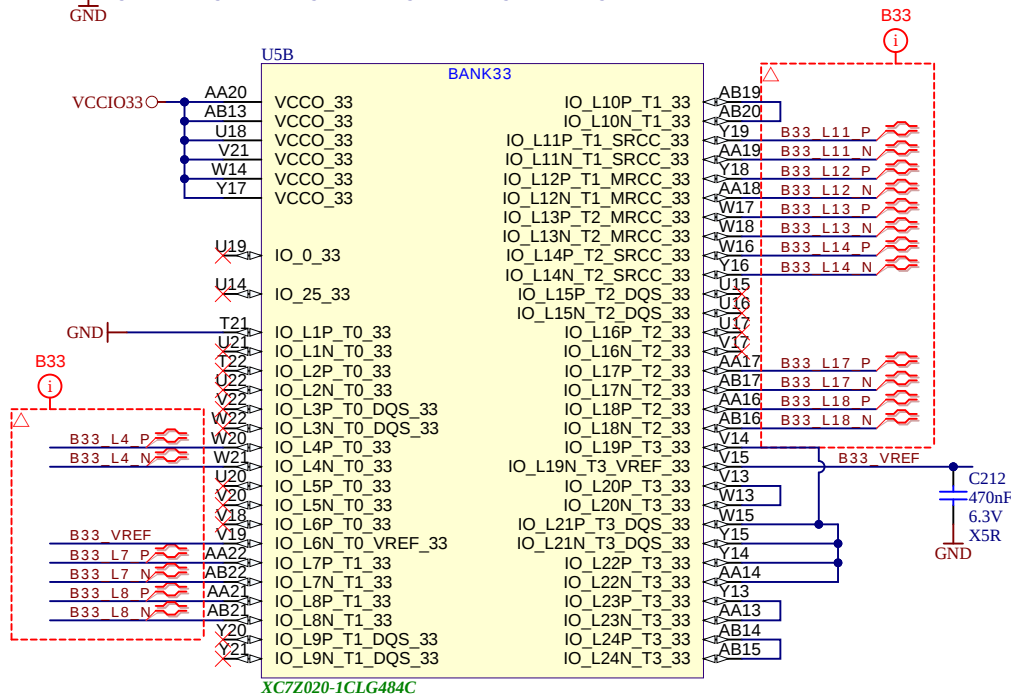
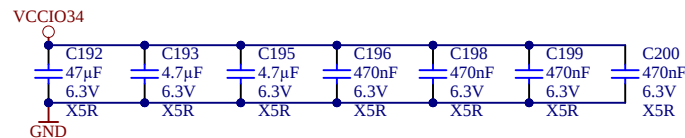
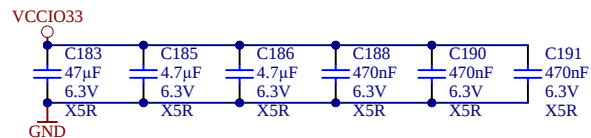
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Date:	2022-01-19	Copyright: 2013 Trenz Electronic GmbH	Page6 of 20
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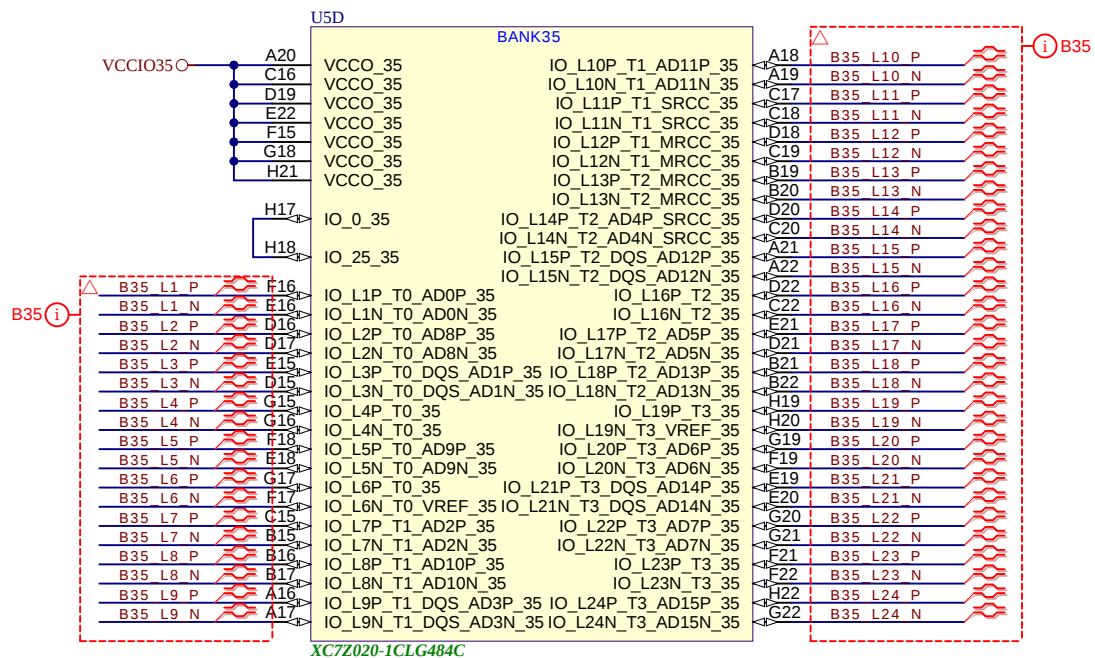
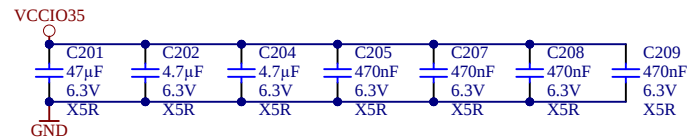
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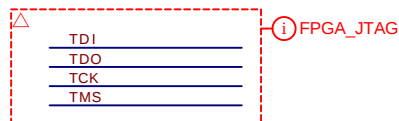
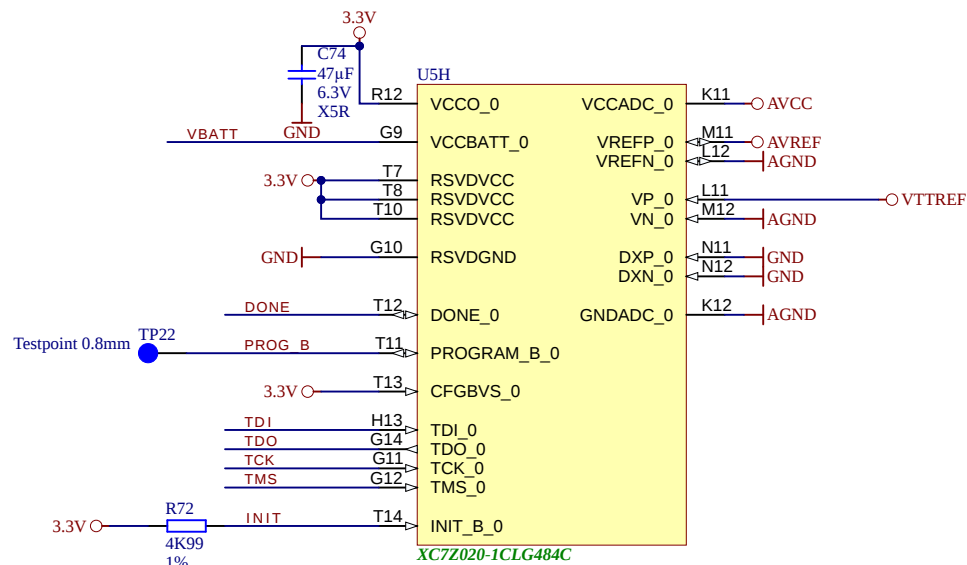
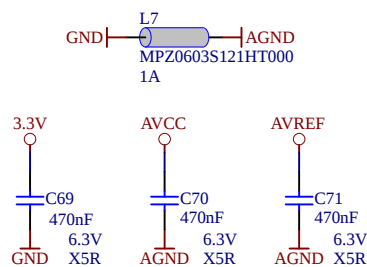
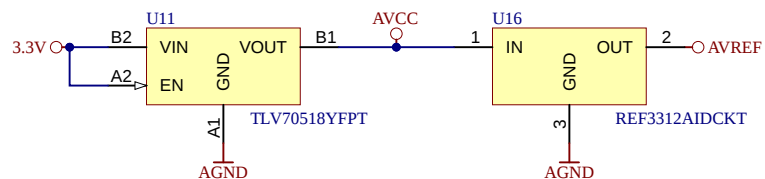
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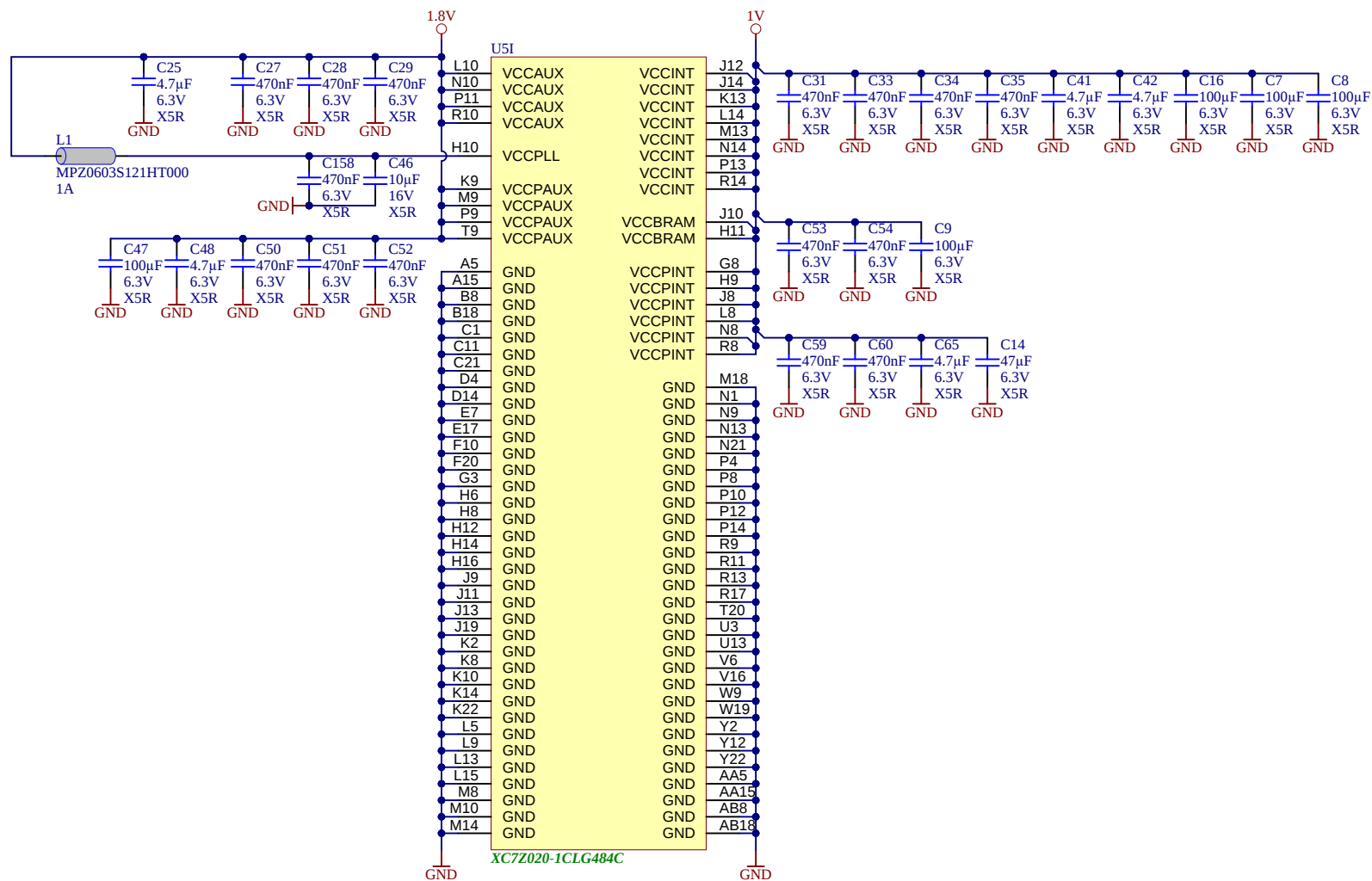
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Date: 2022-01-19	Copyright: 2013 Trenz Electronic GmbH		Page 8 of 20
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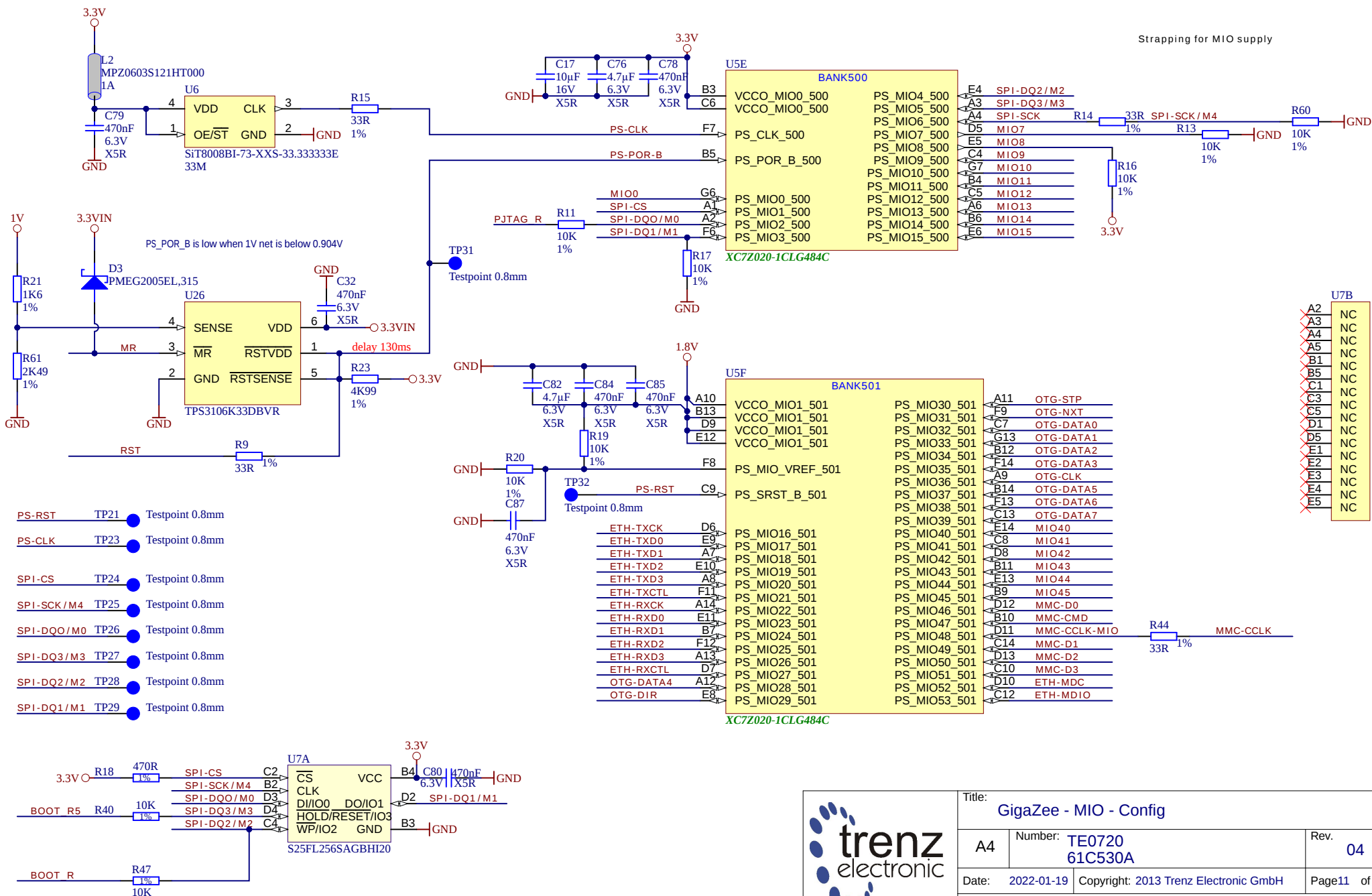
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Title: GigaZee - MIO - Config		
A4	Number: TE0720 61C530A	Rev. 04
Date: 2022-01-19	Copyright: 2013 Trenz Electronic GmbH	Page11 of 20
Filename: MIO-BANKS.SchDoc		

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4

U5G

BANK502

E2
F5
H1
J4
K7
M3
N6
R2
V1

VCCO_DDR_502
VCCO_DDR_502
VCCO_DDR_502
VCCO_DDR_502
VCCO_DDR_502
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VCCO_DDR_502
VCCO_DDR_502
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PS_DDR_A1_502
PS_DDR_A2_502
PS_DDR_A3_502
PS_DDR_A4_502
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PS_DDR_A6_502
PS_DDR_A7_502
PS_DDR_A8_502
PS_DDR_A9_502

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M5 DDR3-A1
K4 DDR3-A2
L4 DDR3-A3
K6 DDR3-A4
K5 DDR3-A5
J7 DDR3-A6
J6 DDR3-A7
J5 DDR3-A8
H5 DDR3-A9
J3 DDR3-A10
G5 DDR3-A11
H4 DDR3-A12
F4 DDR3-A13
G4 DDR3-A14

H7
P7

PS_DDR_VREF0_502
PS_DDR_VREF1_502

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PS_DDR_A11_502
PS_DDR_A12_502
PS_DDR_A13_502
PS_DDR_A14_502

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L6 DDR3-BA1
M6 DDR3-BA2

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DDR3-D2
DDR3-D3
DDR3-D4
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U1
AA1
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Y3
W3
Y1

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H3 DDR3-DM1
P1 DDR3-DM2
AA2 DDR3-DM3

N4 DDR3-CLK0_P
N5 DDR3-CLK0_N

N7 DDR3-VRP
M7 DDR3-VRN

P5 DDR3-ODT0

P6 DDR3-S0

V3 DDR3-CKE0

R4 DDR3-WE

P3 DDR3-CAS

R5 DDR3-RAS

F3 DDR3-RESET

C2
D2

PS_DDR_DQS_P0_502
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J2

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PS_DDR_DQS_N1_502

N2
P2

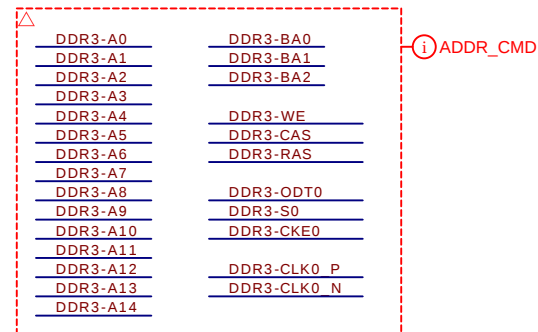
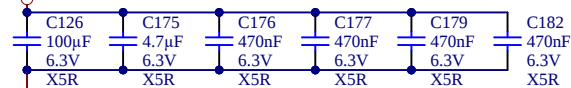
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W2

PS_DDR_DQS_P3_502
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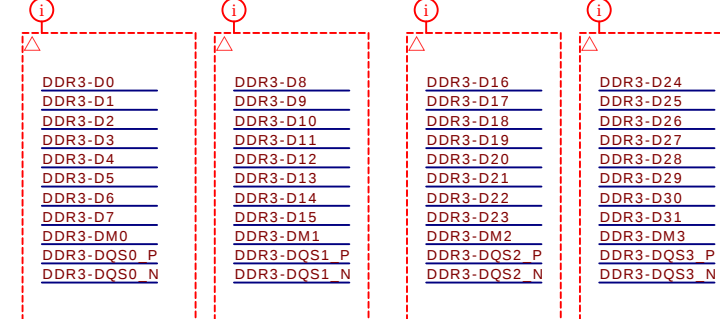


LANE0

LANE1

LANE2

LANE3



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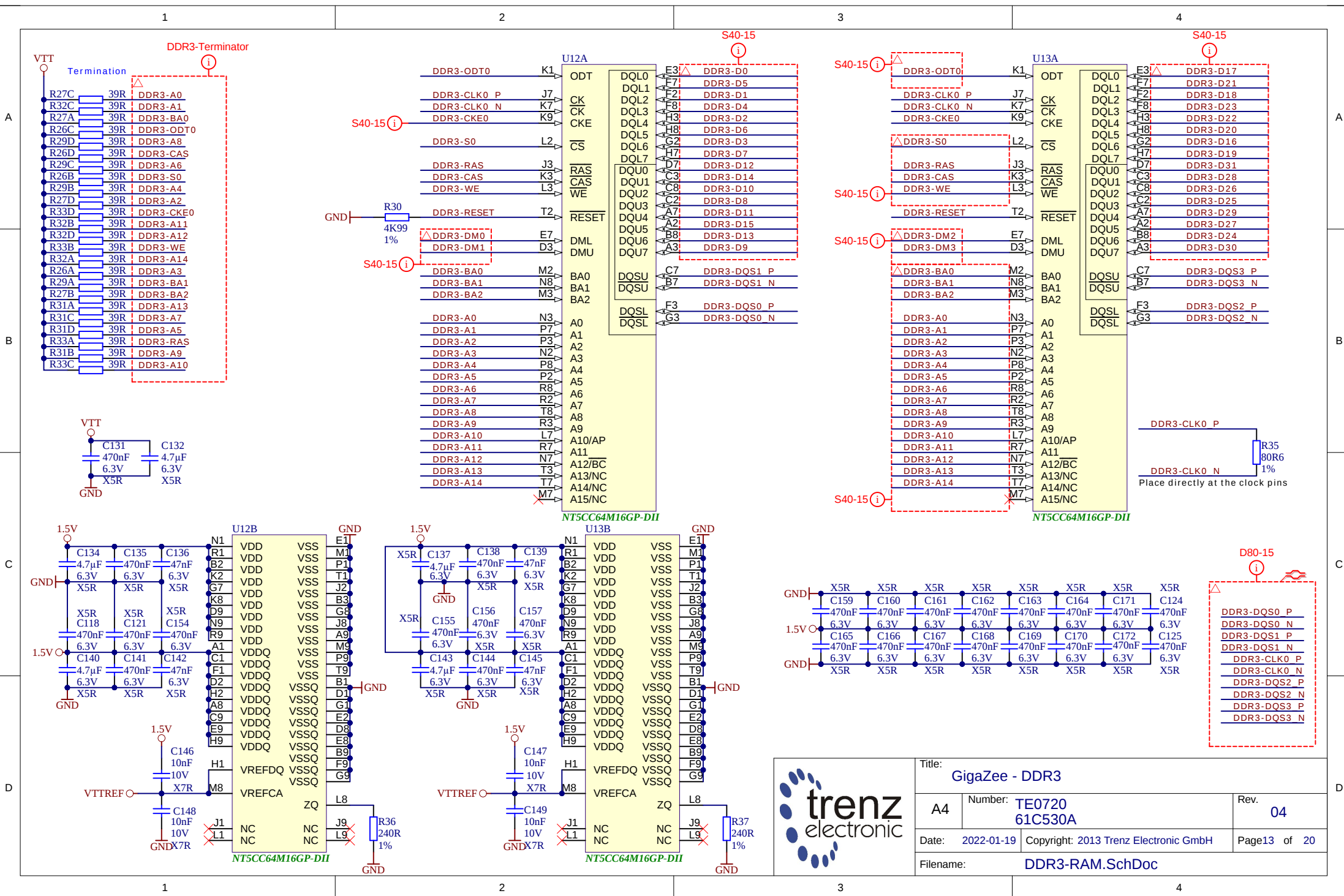
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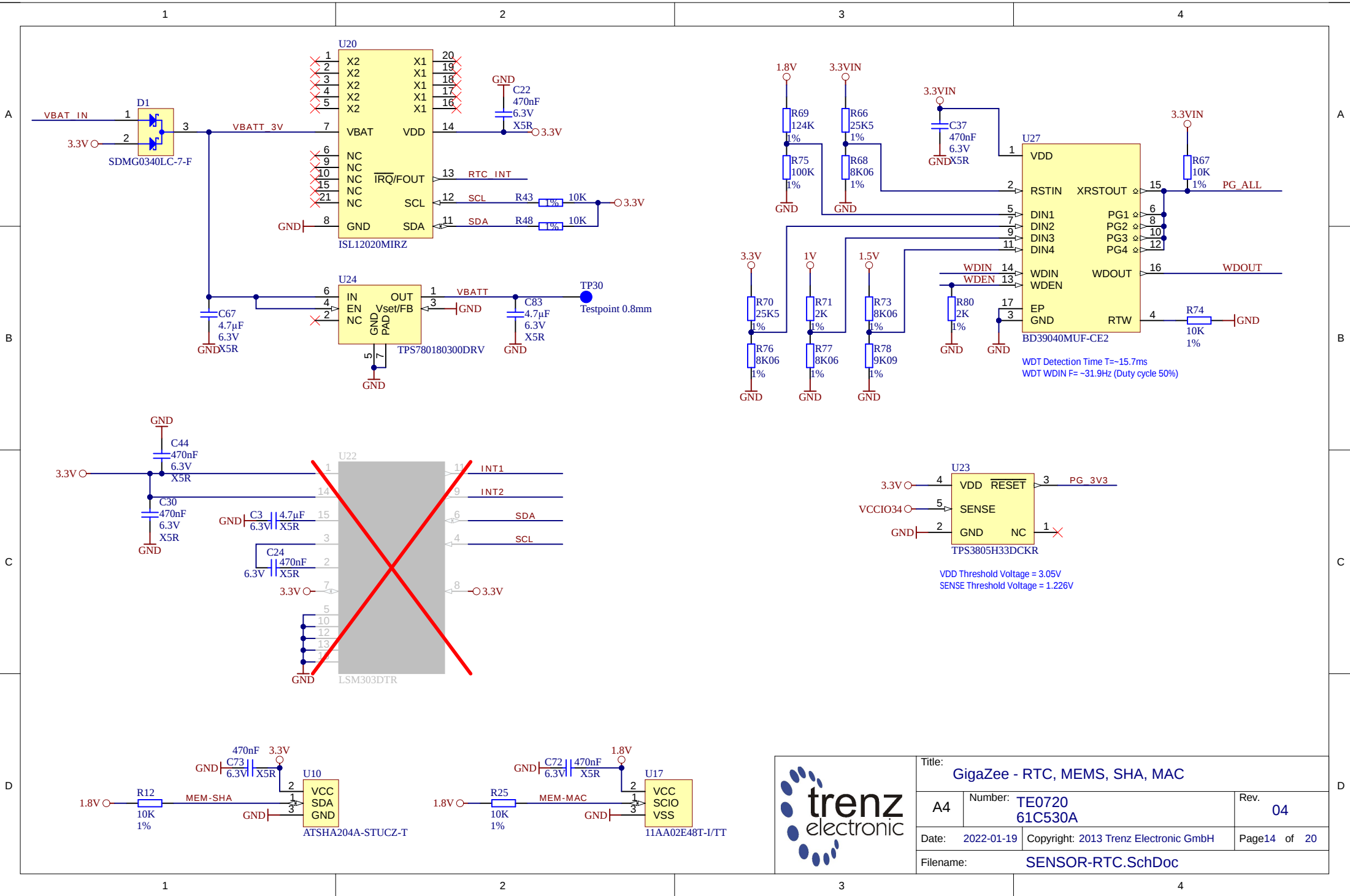
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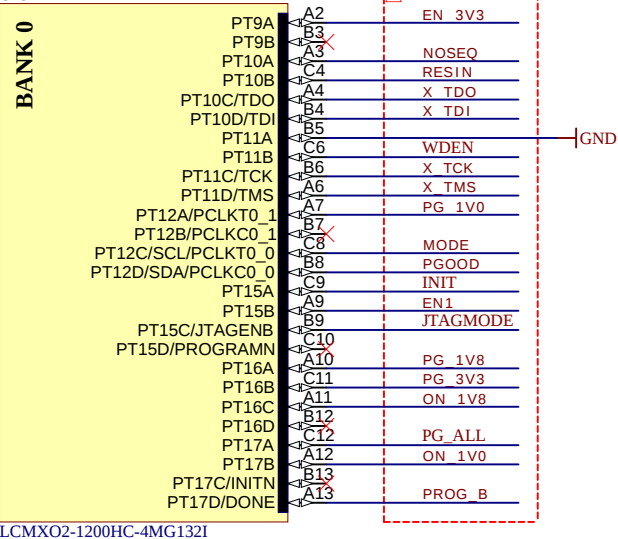
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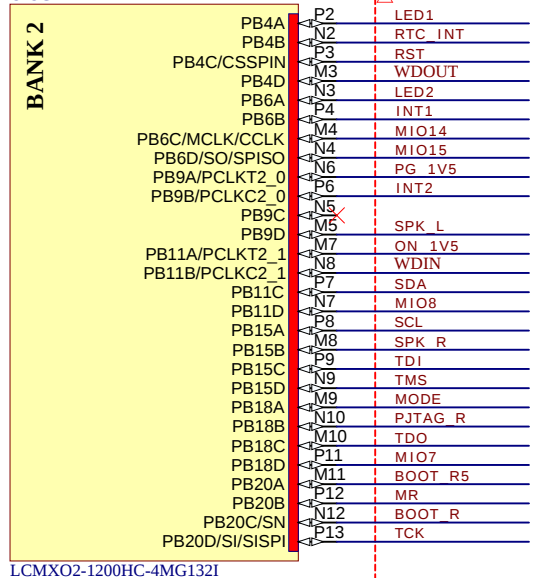
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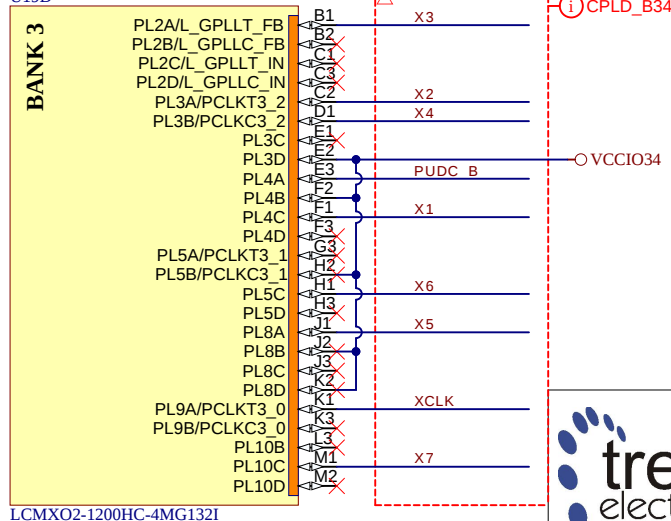
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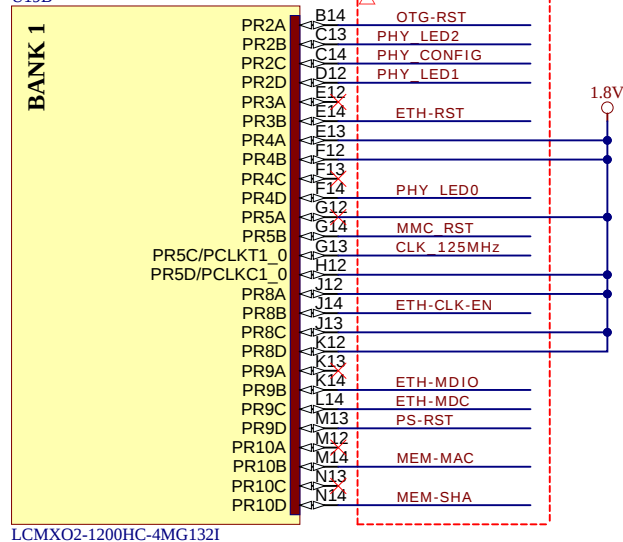
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U19D



U19B



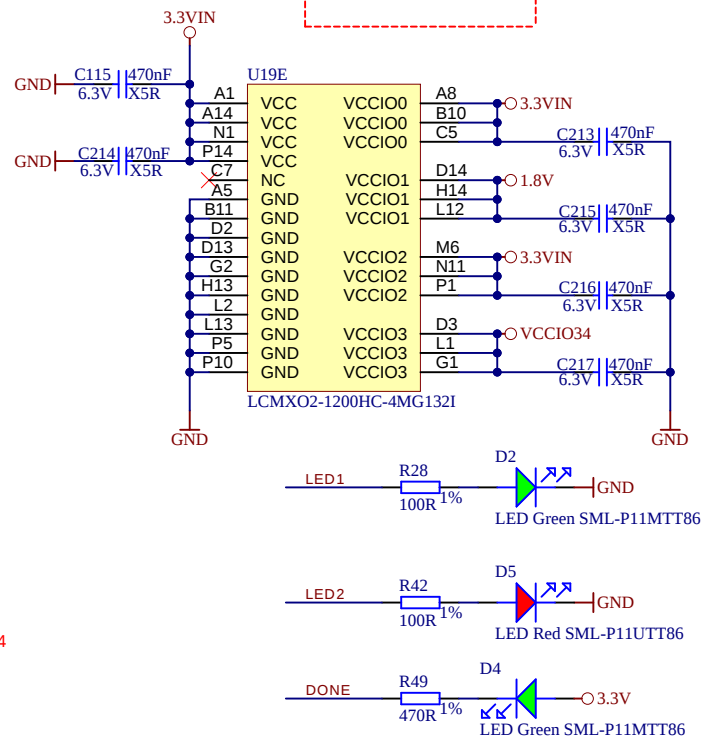
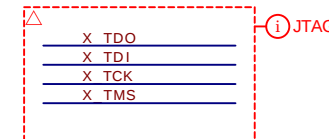
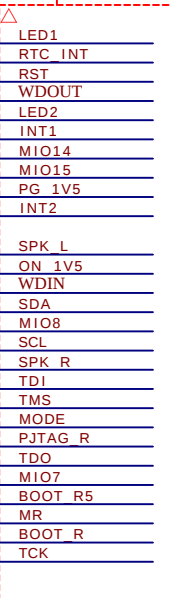
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CPLD_3V3



Title: GigaZee - System Controller		
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Date: 2022-01-19	Copyright: 2013 Trenz Electronic GmbH	
Filename: SystemController.SchDoc	Page15 of 20	

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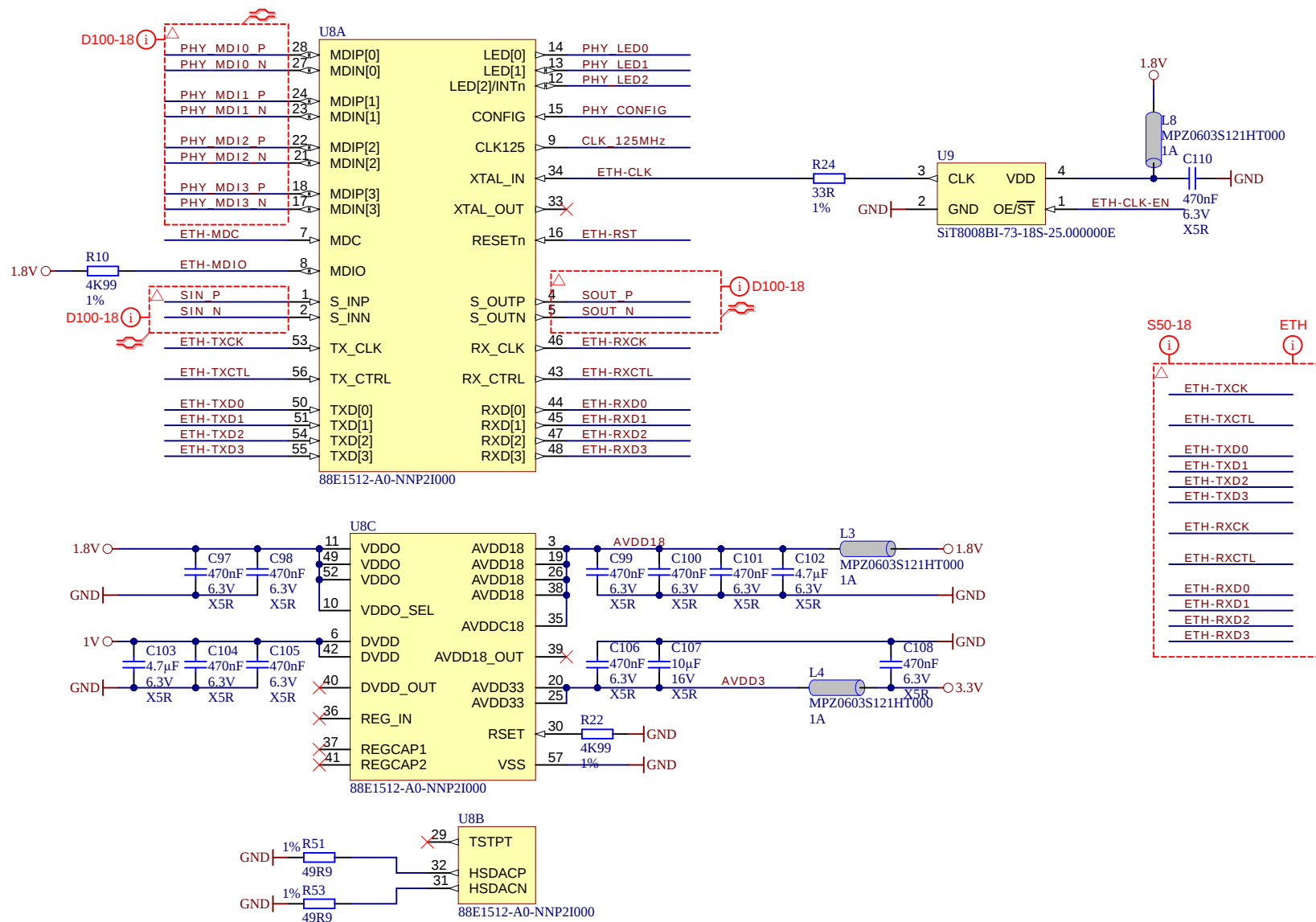
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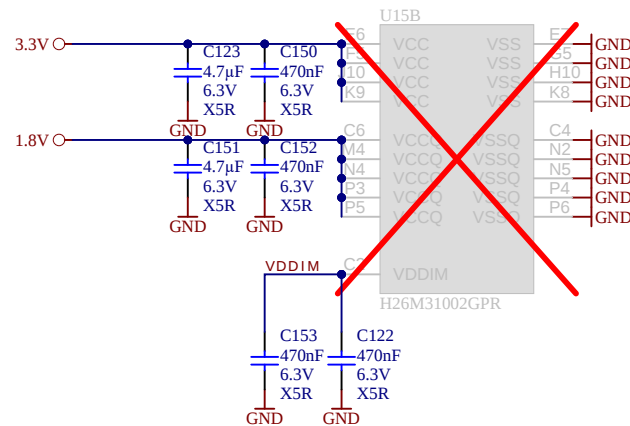
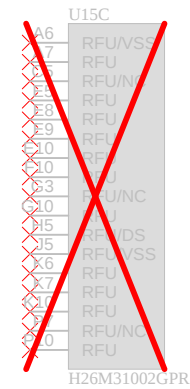
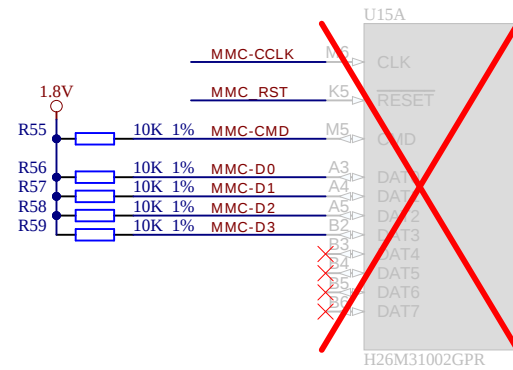
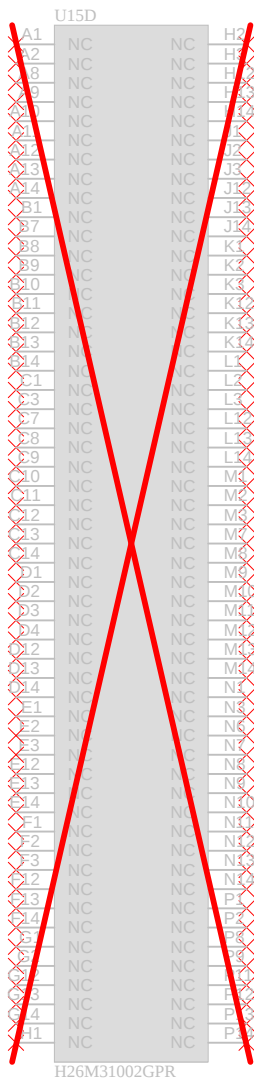
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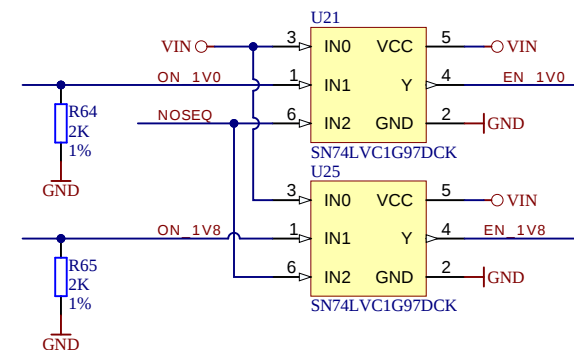
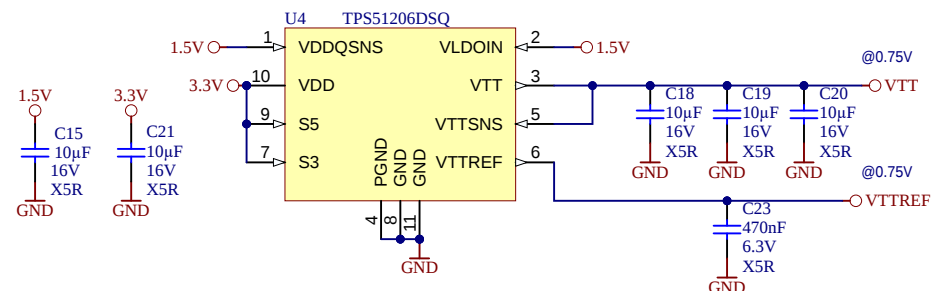
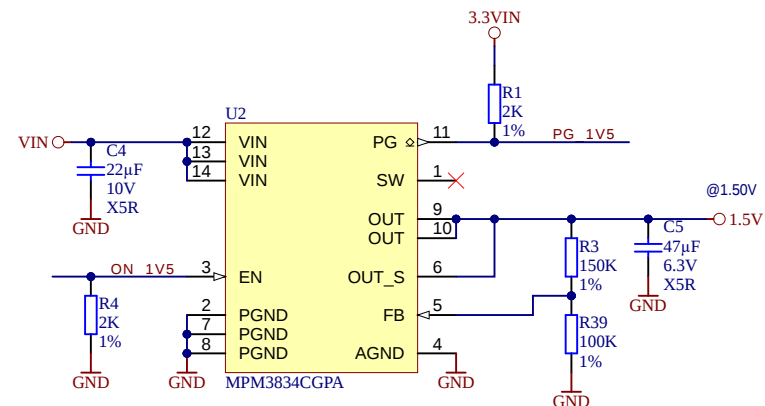
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