

U_FPGA-MGT
FPGA-MGT.SchDoc

U_FPGA-MISC
FPGA-MISC.SchDoc

U_FPGA-PWR
FPGA-PWR.SchDoc

U_FPGA-B44
FPGA-B44.SchDoc

U_FPGA-B45
FPGA-B45.SchDoc

U_FPGA-B46
FPGA-B46.SchDoc

U_FPGA-B47
FPGA-B47.SchDoc

U_FPGA-B64
FPGA-B64.SchDoc

U_FPGA-B65
FPGA-B65.SchDoc

U_FPGA-B66
FPGA-B66.SchDoc

U_FPGA-B67
FPGA-B67.SchDoc

U_FPGA-B68
FPGA-B68.SchDoc

U_DDR4-RAM
DDR4-RAM.SchDoc

U_DDR4-RAM_2
DDR4-RAM_2.SchDoc

U_B2B-Connectors
B2B-Connectors.SchDoc

U_CPLD
CPLD.SchDoc

U_Clock
Clock.SchDoc

U_PWR1
PWR1.SchDoc

U_PWR2
PWR2.SchDoc

U_POWER_2
POWER_2.SchDoc

Mount.Hole 3.2mm

Mount.Hole 3.2mm

Mount.Hole 3.2mm

Mount.Hole 3.2mm

PM1

PM2

FIDU-DOT - mini PM3

FIDU-DOT - mini PM4

FIDU-DOT - mini PM5

FIDU-DOT - mini PM6

FIDU-DOT - mini

FIDU-DOT - mini

3.3VIN

R12
12K

1%

PG

1V8

GND

Q1

VIN

VOUT

ON/OFF

GND

R1/C1

TPS27082LDDCR

3.3V

C56
10nF

10V

X7R

R13
237K

3.3VIN

S/N

OR

Serial

Serialnumber

Serial

Serialnumber 6,3 x 6.3mm

Top of Board

Screw M3x4

Distance Holder M3x8

Screw M3x6

Screw M3x4

Distance Holder M3x8

Screw M3x6

Screw M3x4

Distance Holder M3x8

Screw M3x6

Screw M3x4

Distance Holder M3x8

Screw M3x6

trenz
electronic

Title: TE0841

A4

Number: TE0841
035-1I

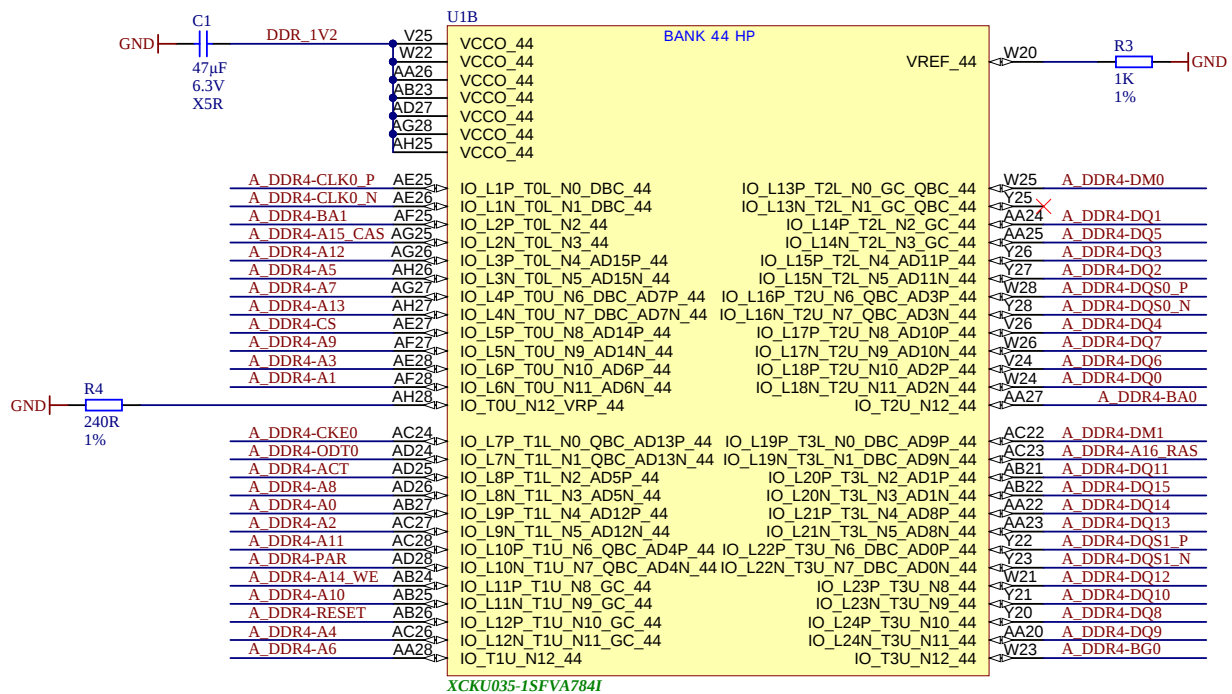
Rev. 02

Date: 2018-03-14

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Page1 of 21

Filename: TE0841.SchDoc



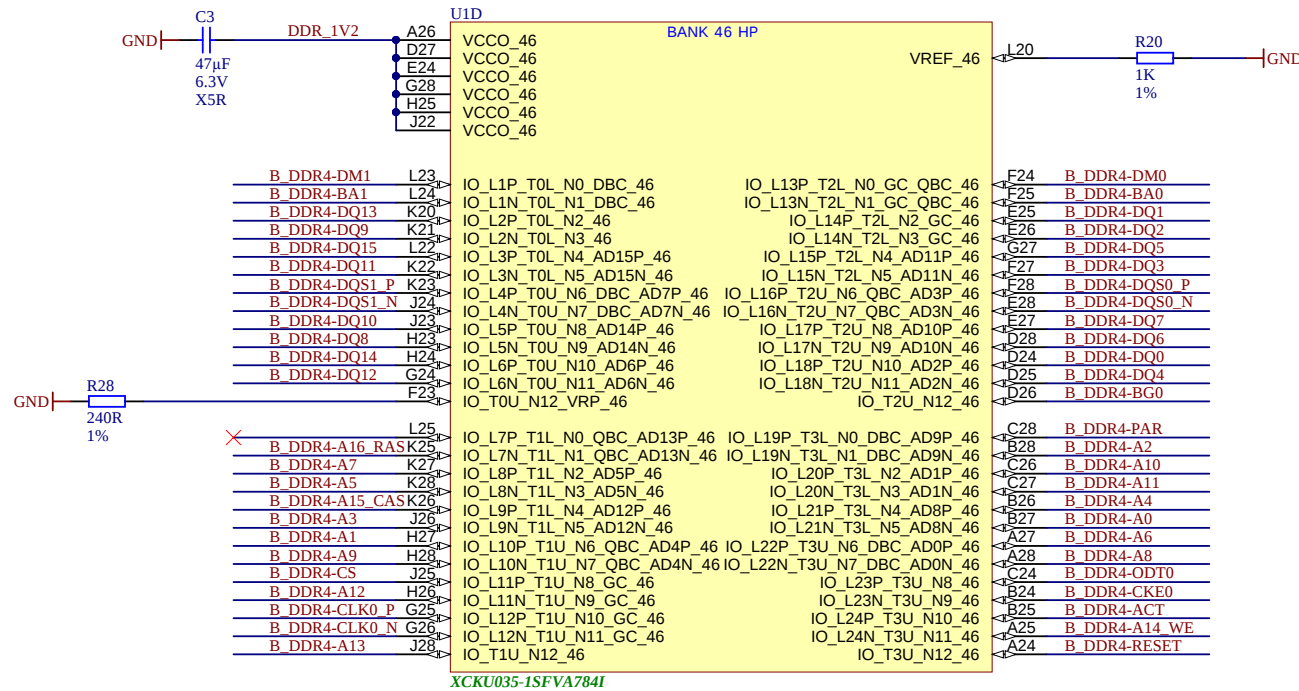
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A4	Number: TE0841 035-1I	Rev. 02
Date: 2018-03-14	Copyright: Trenz Electronic GmbH / TT	
Filename: FPGA-B44.SchDoc		Page4 of 21

1

2

3

4



Title: TE0841		
A4	Number: TE0841 035-1I	Rev. 02
Date: 2018-03-14	Copyright: Trenz Electronic GmbH / TT	Page6 of 21
Filename: FPGA-B46.SchDoc		

1

2

3

4

1

2

3

4

A

A

B

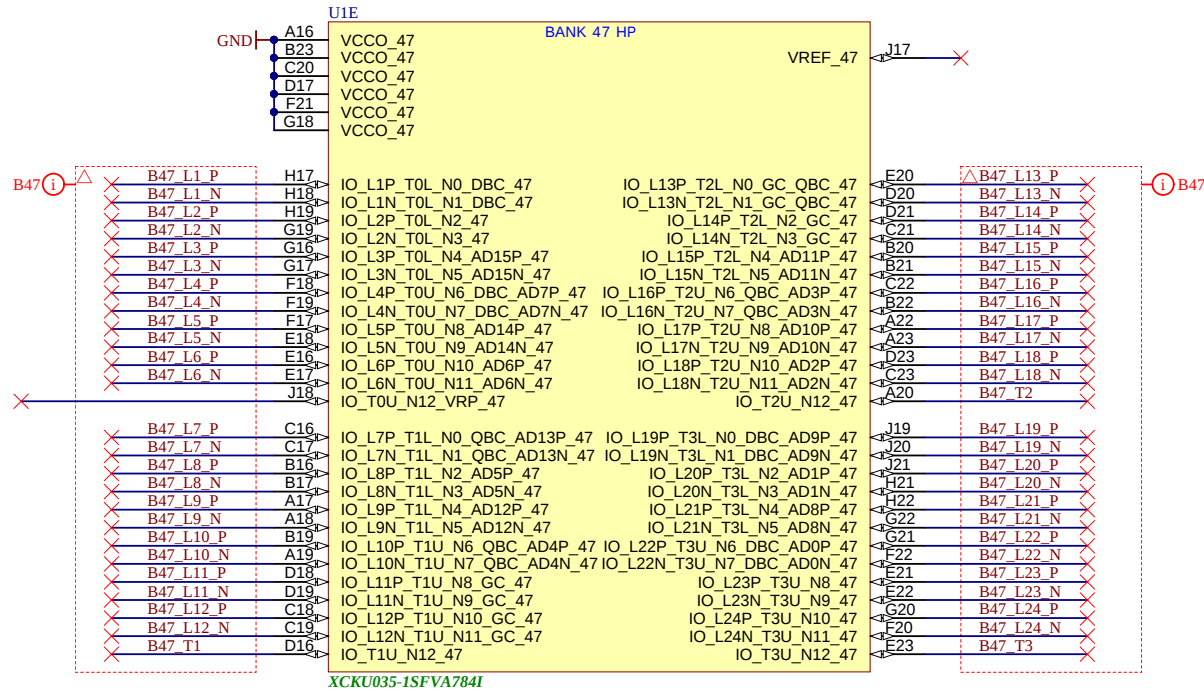
B

C

C

D

D



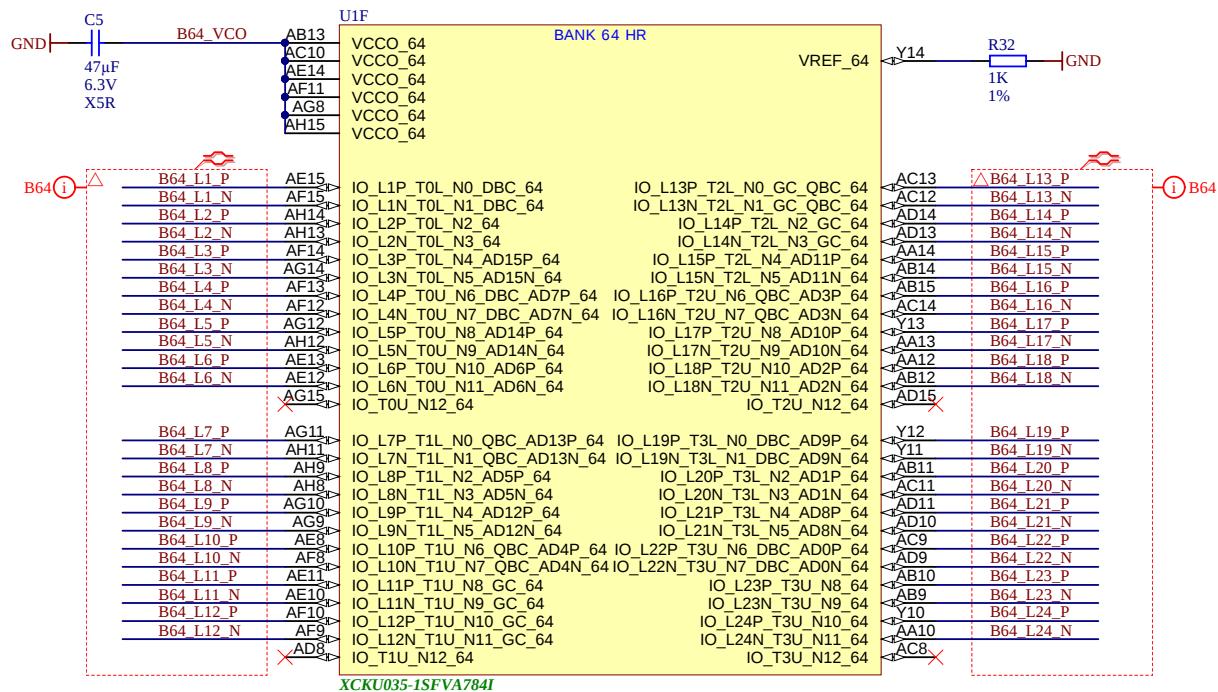
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Date: 2018-03-14	Copyright: Trenz Electronic GmbH / TT	Page7 of 21
Filename: FPGA-B47.SchDoc		

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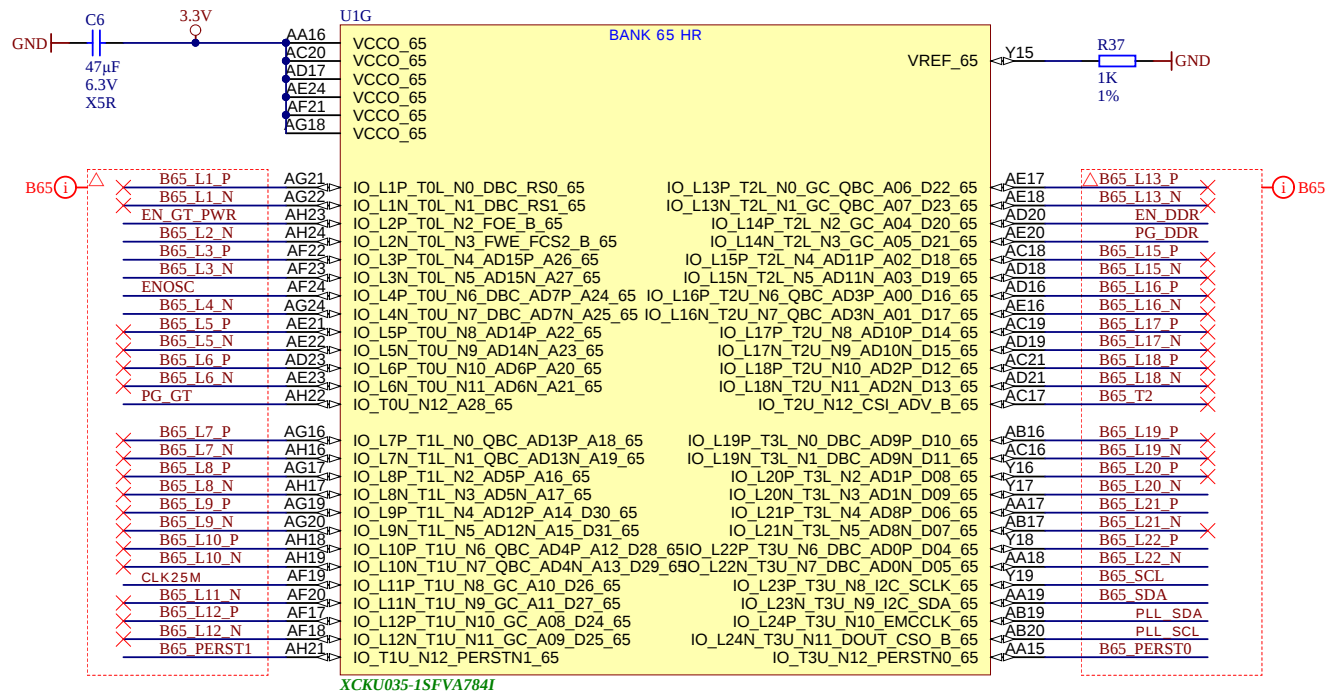
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3

4



Title: TE0841		
A4	Number: TE0841 035-1I	Rev. 02
Date: 2018-03-14	Copyright: Trenz Electronic GmbH / TT	
Filename: FPGA-B64.SchDoc		Page8 of 21



XCKU035-1SFVA7841

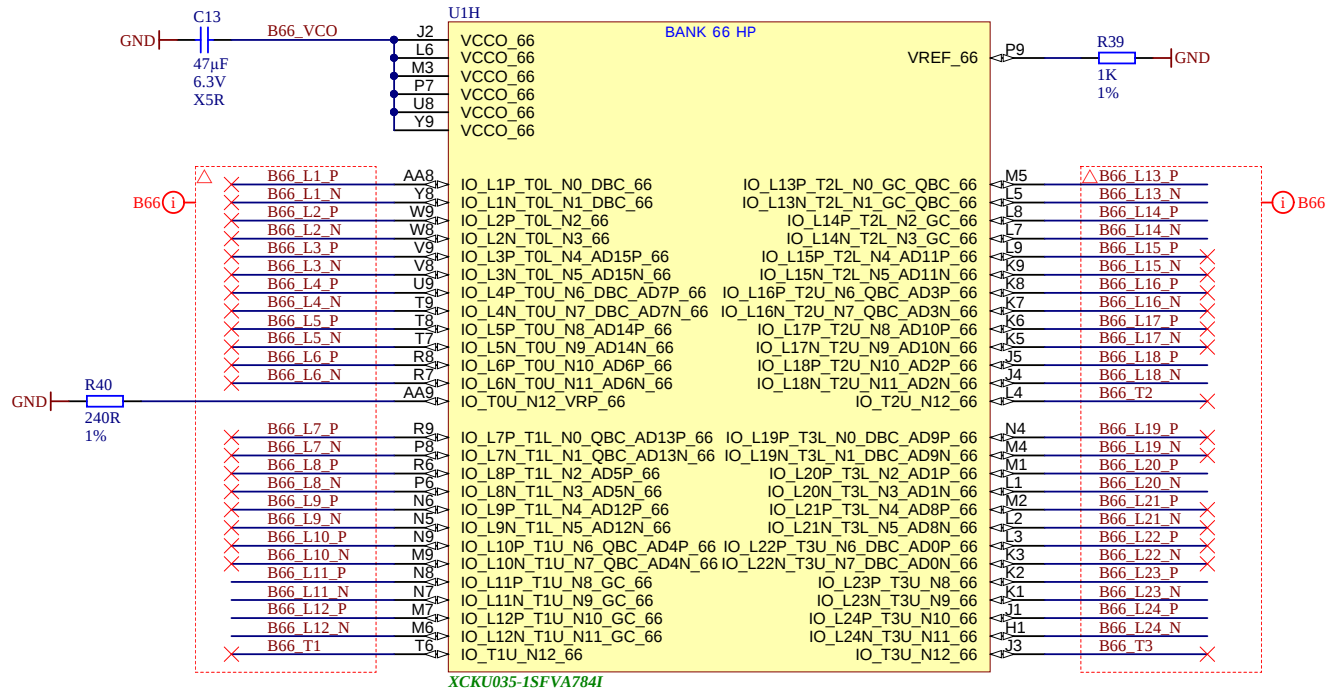
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		Number: TE0841 035-1I	Rev. 02
Date: 2018-03-14	Copyright: Trenz Electronic GmbH / TT		Page9 of 21
Filename: FPGA-B65.SchDoc			

1

2

3

4



Title: TE0841		
A4	Number: TE0841 035-1I	Rev. 02
Date: 2018-03-14	Copyright: Trenz Electronic GmbH / TT	
Filename: FPGA-B66.SchDoc		Page10 of 21

1

2

3

4

1

2

3

4

A

A

B

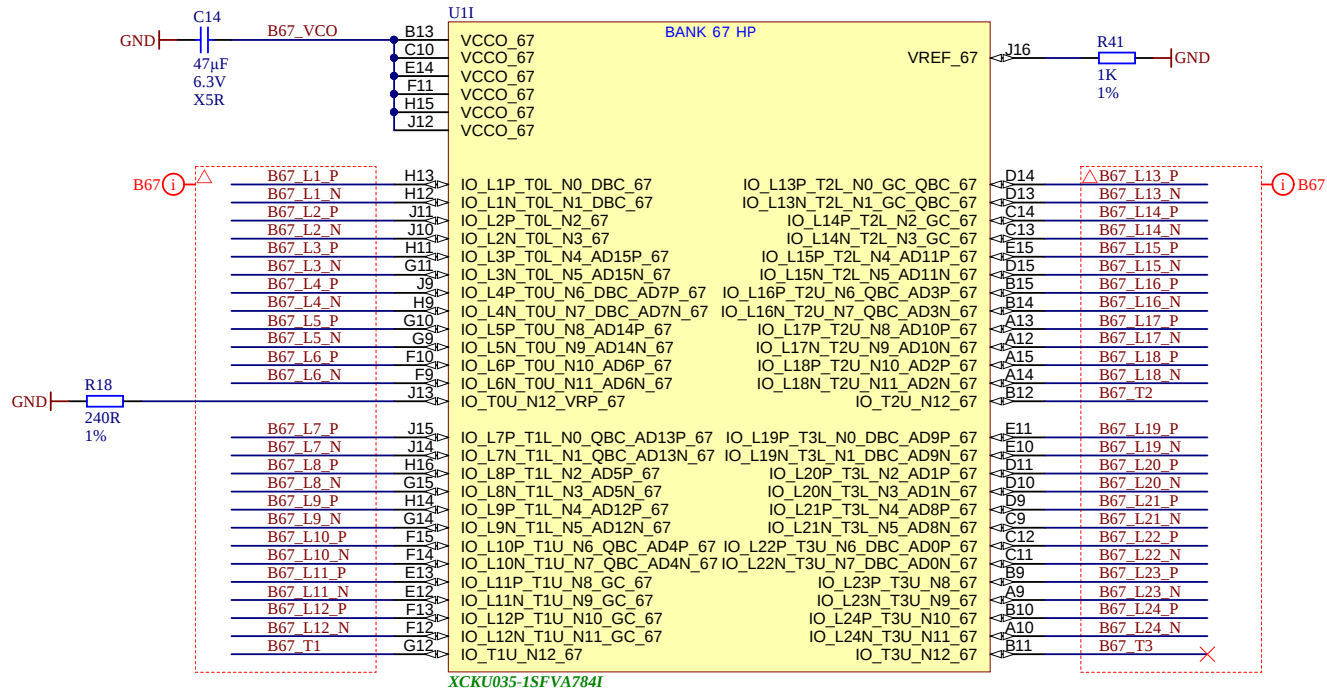
B

C

C

D

D



Title: TE0841		
A4	Number: TE0841 035-1I	Rev. 02
Date: 2018-03-14	Copyright: Trenz Electronic GmbH / TT	Page11 of 21
Filename: FPGA-B67.SchDoc		

1

2

3

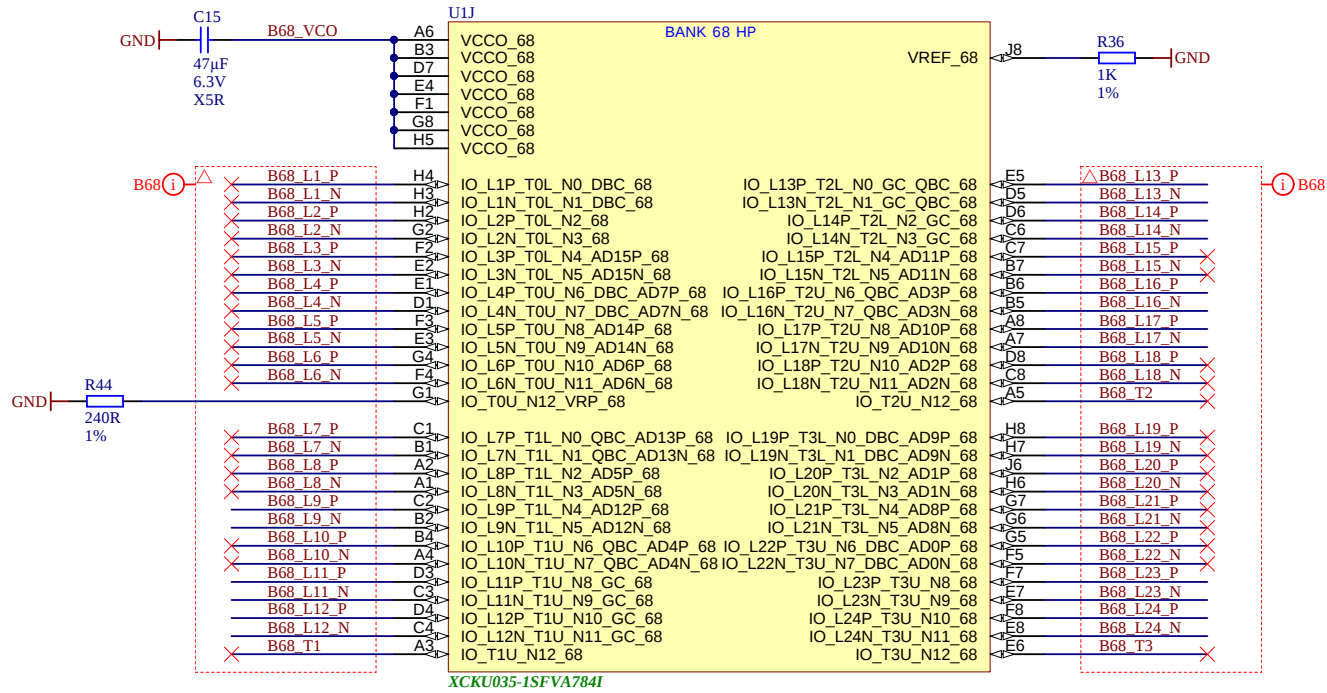
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1

2

3

4



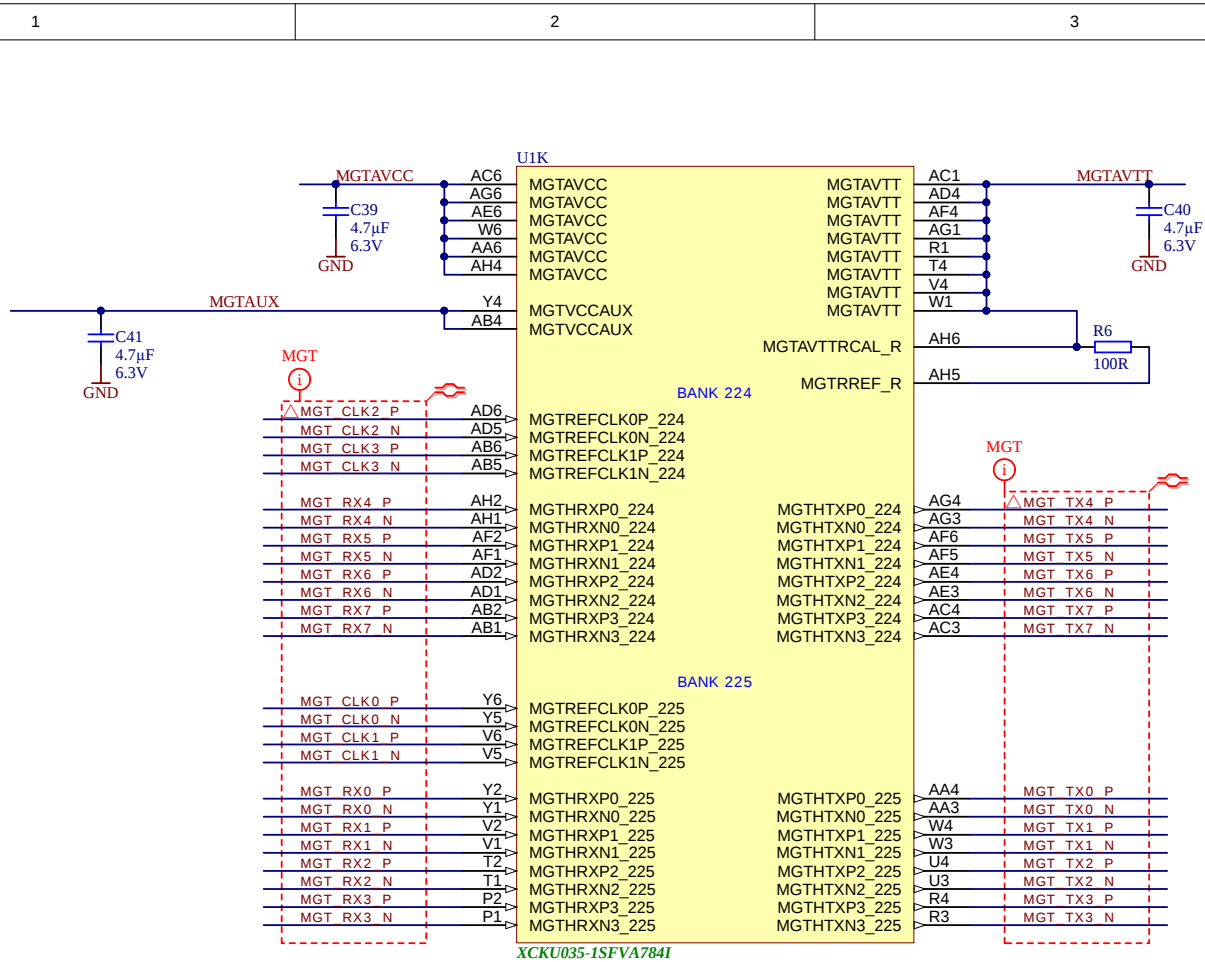
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A4	Number: TE0841 035-1I	Rev. 02
Date: 2018-03-14	Copyright: Trenz Electronic GmbH / TT	Page12 of 21
Filename: FPGA-B68.SchDoc		

1

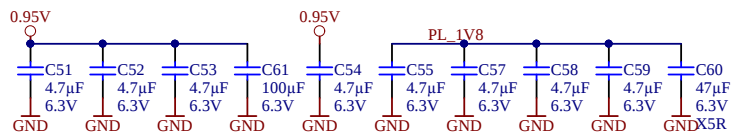
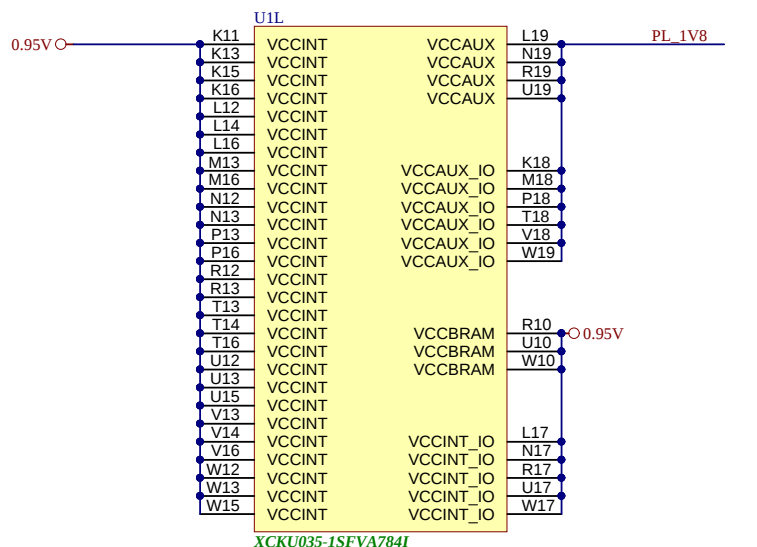
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3

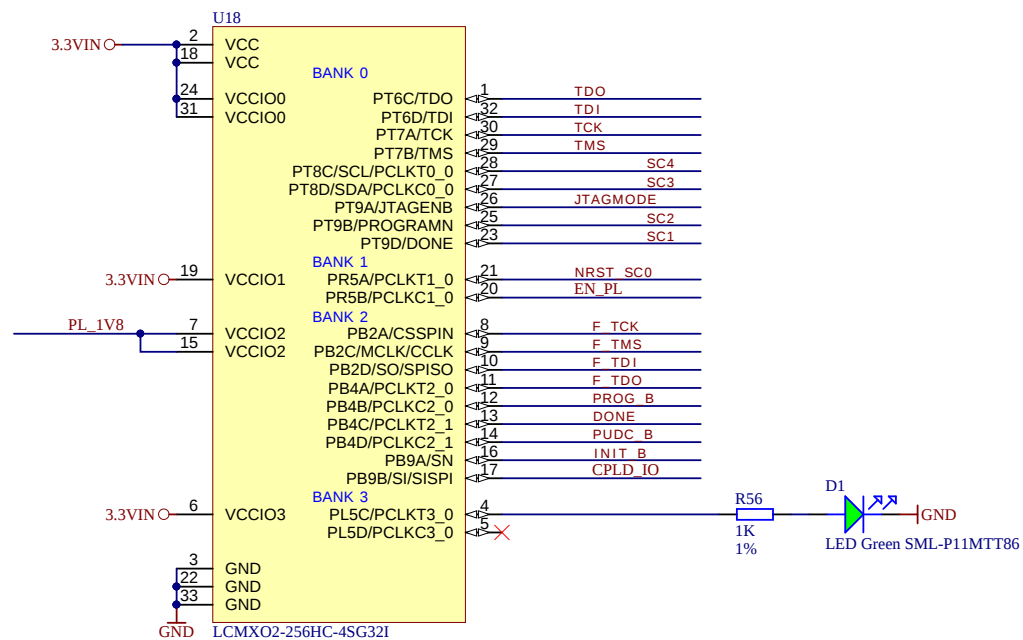
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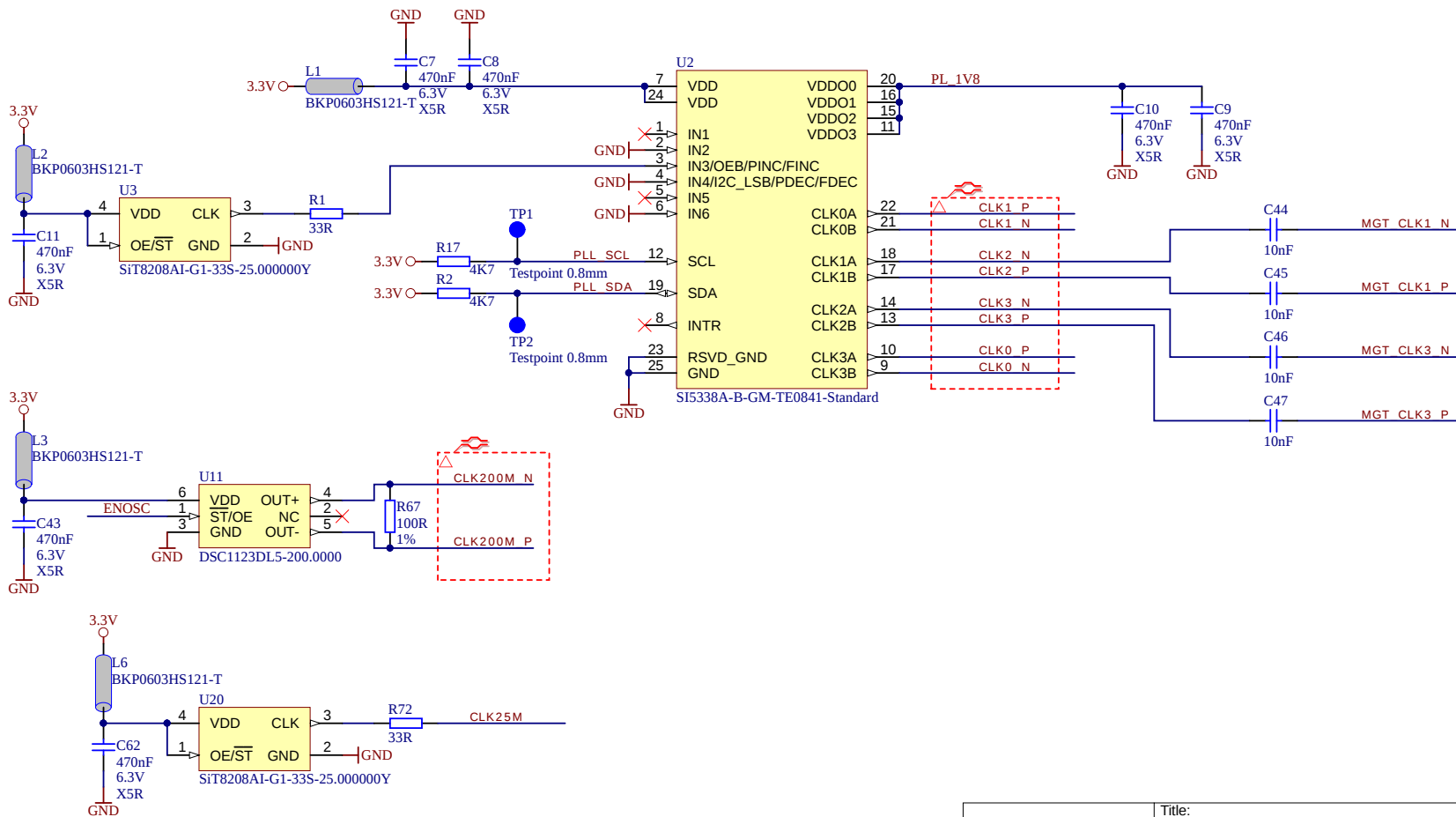
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A4	Number: TE0841 035-1I	Rev. 02	
Date: 2018-03-14	Copyright: Trenz Electronic GmbH / TT		Page13 of 21
Filename: FPGA-MGT.SchDoc			



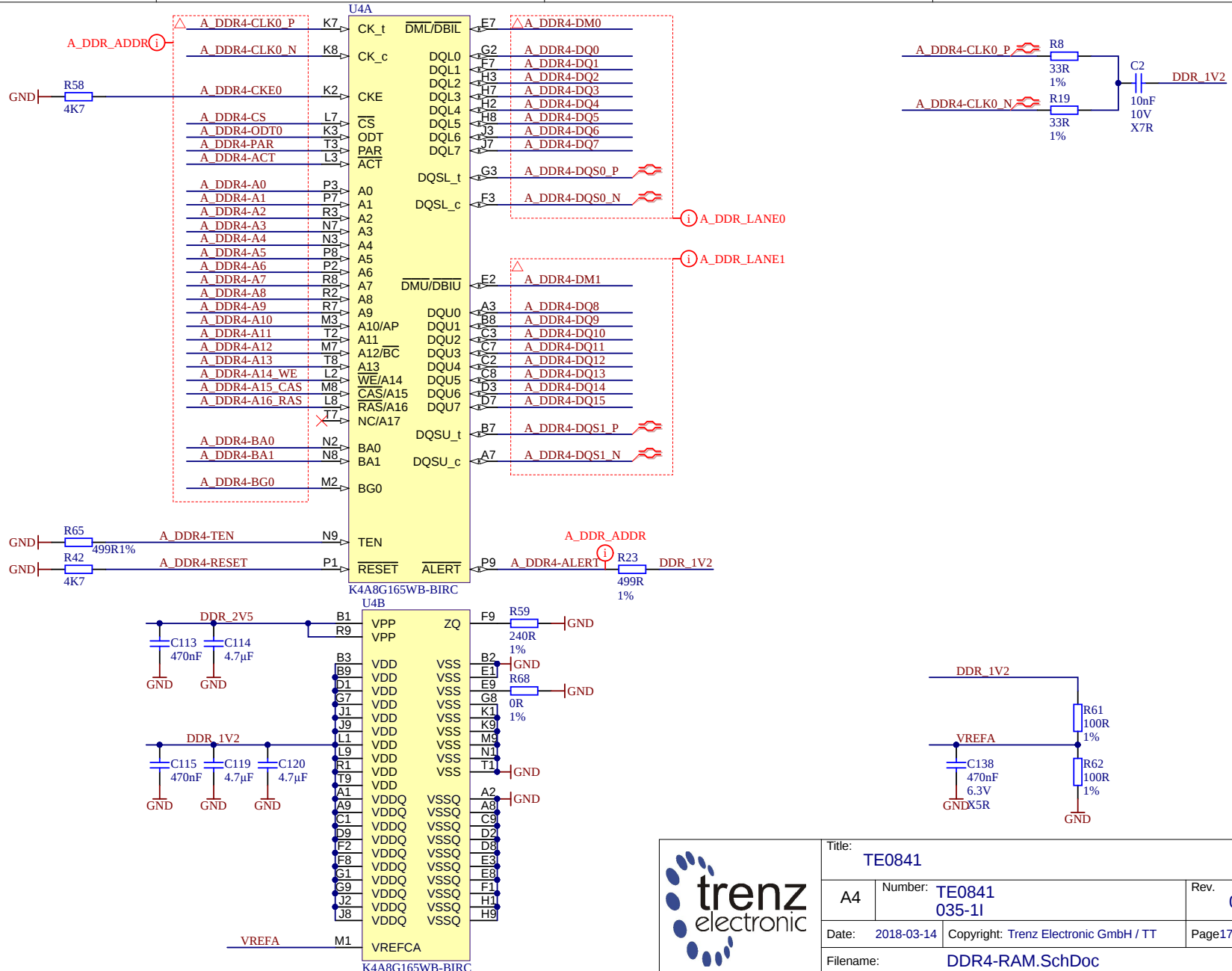
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A4	Number: TE0841 035-1I	Rev. 02
Date: 2018-03-14	Copyright: Trenz Electronic GmbH / TT	Page14 of 21
Filename: FPGA-PWR.SchDoc		



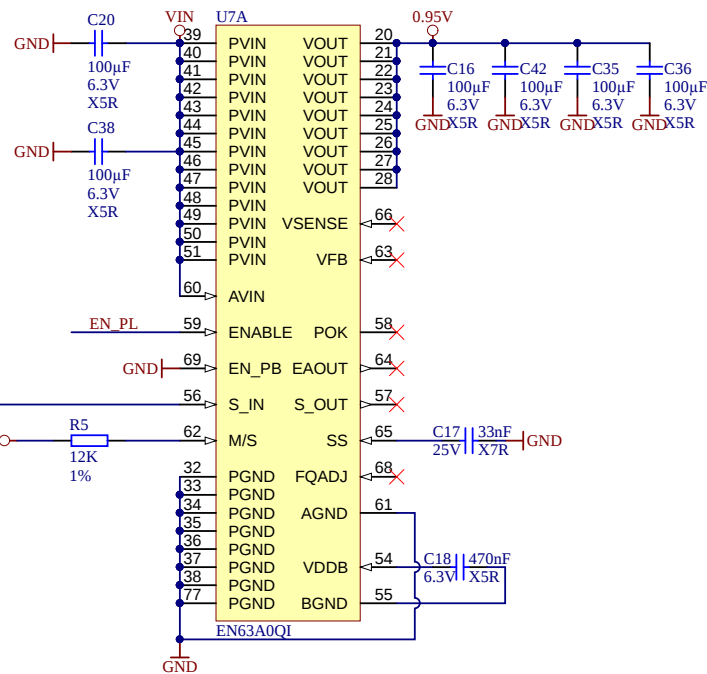
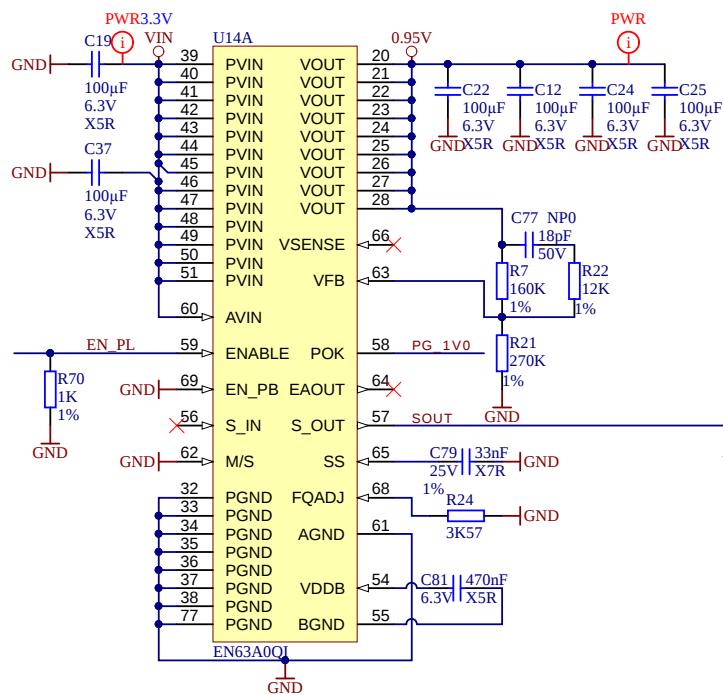
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		Number: TE0841 035-1I	Rev. 02
Date: 2018-03-14	Copyright: Trenz Electronic GmbH / TT		Page15 of 21
Filename: CPLD.SchDoc			



		Title: TE0841	
		A4	Number: TE0841 035-1I
Date: 2018-03-14		Copyright: Trenz Electronic GmbH / TT	
Filename: Clock.SchDoc		Page16 of 21	
		Rev.	02



Title: TE0841		
A4	Number: TE0841 035-1I	Rev. 02
Date: 2018-03-14	Copyright: Trenz Electronic GmbH / TT	
Filename: DDR4-RAM.SchDoc		Page17 of 21

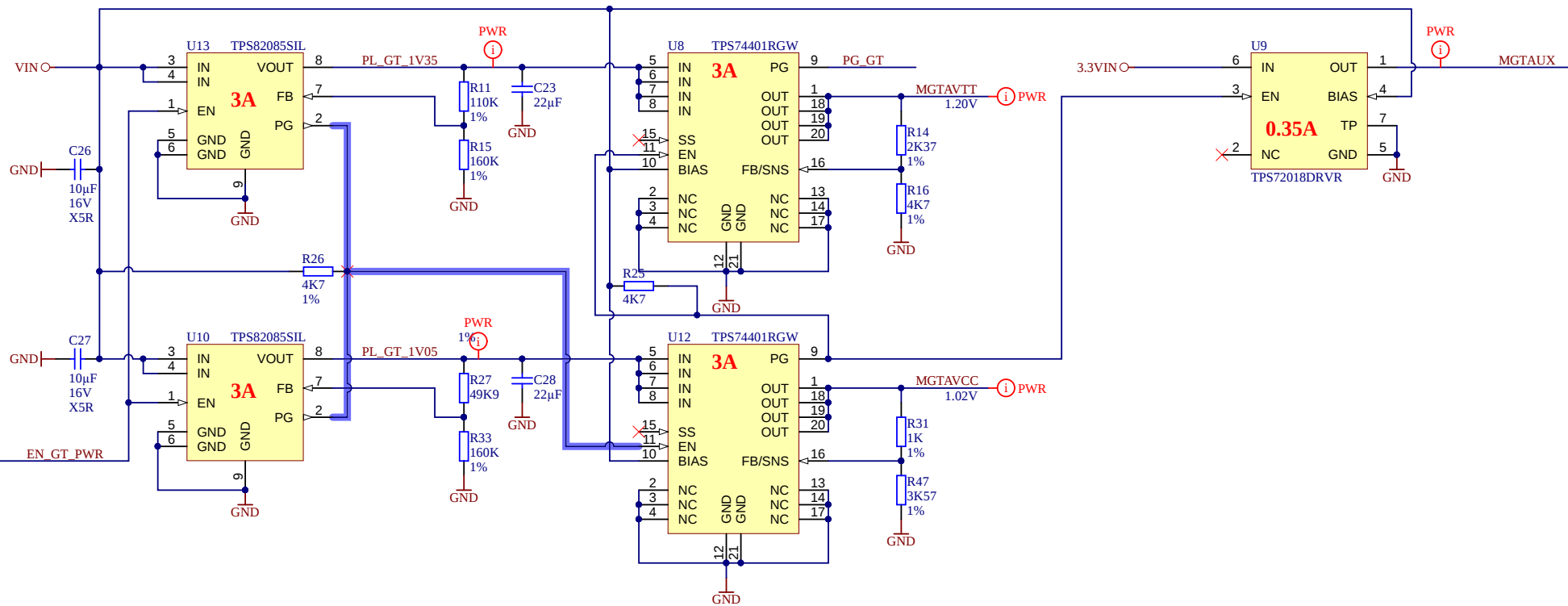


U14B		
1	NC	17
2	NC	18
3	NC	19
4	NC	29
5	NC	30
6	NC	31
7	NC	52
8	NC	53
9	NC	67
10	NC	70
11	NC	71
12	NC	72
13	NC	73
14	NC	74
15	NC	75
16	NC	76

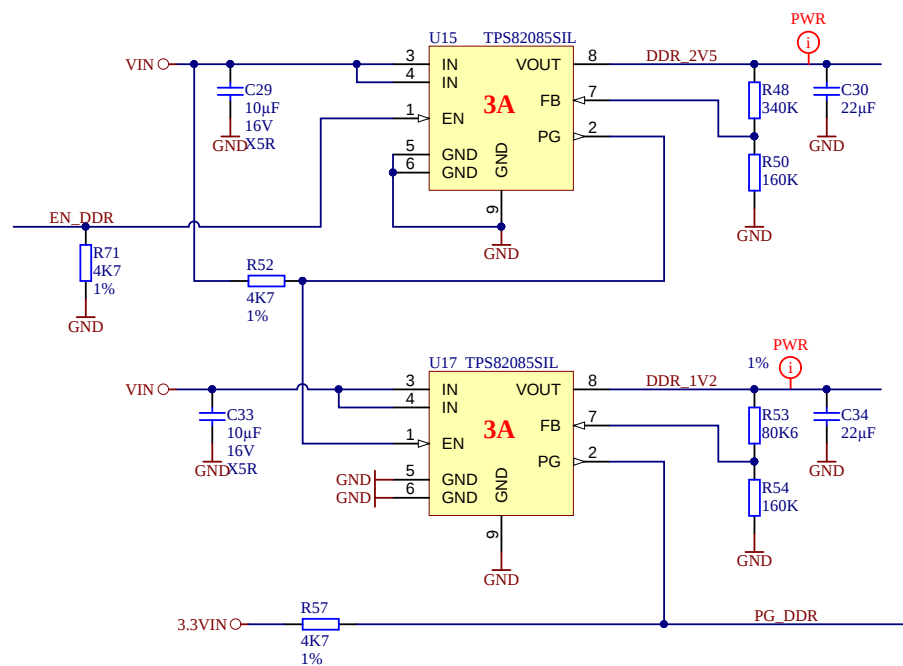
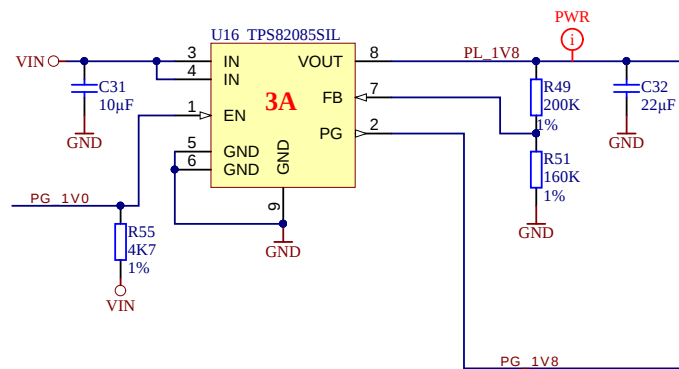
U7B		
1	NC	17
2	NC	18
3	NC	19
4	NC	29
5	NC	30
6	NC	31
7	NC	52
8	NC	53
9	NC	67
10	NC	70
11	NC	71
12	NC	72
13	NC	73
14	NC	74
15	NC	75
16	NC	76



Title: TE0841		
A4	Number: TE0841 035-1I	Rev. 02
Date: 2018-03-14	Copyright: Trenz Electronic GmbH / TT	
Filename: PWR1.SchDoc		Page19 of 21



		Title: TE0841	
		A4	Number: TE0841 035-1I
Date: 2018-03-14		Copyright: Trenz Electronic GmbH / TT	
Filename: PWR2.SchDoc		Page20 of 21	
Rev. 02			



		Title: TE0841	
		A4	Number: TE0841 035-1I
Date: 2018-03-14		Copyright: Trenz Electronic GmbH / TT	
Filename: POWER_2.SchDoc		Page 21 of 21	
Rev. 02			

	1	2	3	4													
A	CHANGES REV01 TO REV01A (08.16.2017): 1) U1: changed schematic symbol. Next pins swapped to mach same polarity order: -- AE13 (IO_L6P_T0U_N10_AD6P_64)/AE12 (IO_L6N_T0U_N11_AD6N_64) -- J5 (IO_L18P_T2U_N10_AD2P_66)/J4 (IO_L18N_T2U_N11_AD2N_66) 2) Net names changed (no electrical changes): JM1: swapped signals B64_L6: -- B64_L6_N - pin 40 (was pin 42) -- B64_L6_P - pin 42 (was pin 40) JM3: swapped signals B64_L6: -- B66_L18_N - pin 52 (was pin 54) -- B66_L18_P - pin 54 (was pin 52) CHANGES REV01A TO REV02 (03.2018): 1) U4 / U5: changed DDR4 chip: NT5AD256M16B2-GN -> K4A4G165WE-BCRC (K4A8G165WB-BIRC) 2) Fixed sense connection on DCDC 3) U6: changed SPI flash chip: N25Q256A11E1240E-> N25Q512A11G1240E 4) Full update LIB 5) Added additional resistors for support 16GBit DDR chips 6) Added strong pull-down to EN_PL 7) Added additional testpoints for I2C bus 8) Added additional MEMS oscillator (25MHz) 9) Changed pull-up power supply VIN -> 3.3VIN on the PG_DDR net 10) Added pull-down on the EN_DDR				A												
B					B												
C					C												
D	 <table><tr><td colspan="3">Title: TE0841 - Changes list</td></tr><tr><td>A4</td><td>Number: TE0841 035-1I</td><td>Rev. 02</td></tr><tr><td>Date: 2018-03-14</td><td>Copyright: Trenz Electronic GmbH</td><td>Page22 of 22</td></tr><tr><td colspan="3">Filename: Revision_Changes.SchDoc</td></tr></table>				Title: TE0841 - Changes list			A4	Number: TE0841 035-1I	Rev. 02	Date: 2018-03-14	Copyright: Trenz Electronic GmbH	Page22 of 22	Filename: Revision_Changes.SchDoc			D
Title: TE0841 - Changes list																	
A4	Number: TE0841 035-1I	Rev. 02															
Date: 2018-03-14	Copyright: Trenz Electronic GmbH	Page22 of 22															
Filename: Revision_Changes.SchDoc																	
	1	2	3	4													