

1

2

3

4

CHANGES REV01 to REV02

- 1) MAC EEPROM Address patch fixed on PCB
- 2) lib components update

A

A

B

B

C

C

D

D



Title: TE0745		
A4	Number: 1 30-21A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page1 of 25
Filename: Revision Changes.SchDoc		

1

2

3

4

U\_J1  
J1.SchDoc

U\_J2  
J2.SchDoc

U\_J3  
J3.SchDoc

U\_ZYNQ  
ZYNQ.SchDoc

U\_POWER  
POWER.SchDoc

U\_POWER\_2  
POWER\_2.SchDoc

U\_RTC  
SENSOR-RTC.SchDoc

U\_POWER\_3  
POWER\_3.SchDoc

U\_CLK  
CLK.SchDoc

U\_DDR3  
DDR3-RAM.SchDoc

U\_ETH\_PHY  
ETH-PHY.SchDoc

U\_USB\_PHY  
USB-PHY.SchDoc

U\_PowerOverview  
PowerOverview.SchDoc

U\_Revision Changes  
Revision Changes.SchDoc

LOGO1  
TE Logo PRINT Layer  
LOGO PRINT

FIDU-DOT - small



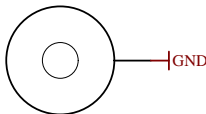
PM1 PM2  
FIDU-DOT - small



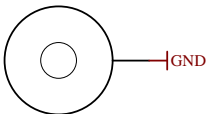
PM3 PM4  
FIDU-DOT - small



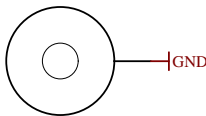
PM5 PM6



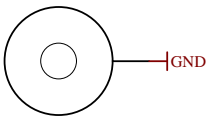
Mount.Hole 3.2mm für Unterlegscheibe



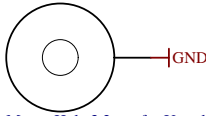
Mount.Hole 3.2mm für Unterlegscheibe



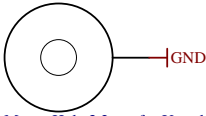
Mount.Hole 3.2mm für Unterlegscheibe



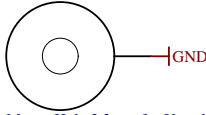
Mount.Hole 3.2mm für Unterlegscheibe



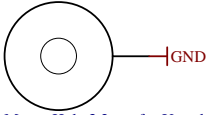
Mount.Hole 3.2mm für Unterlegscheibe



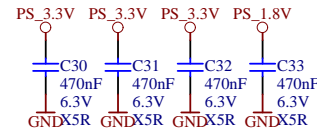
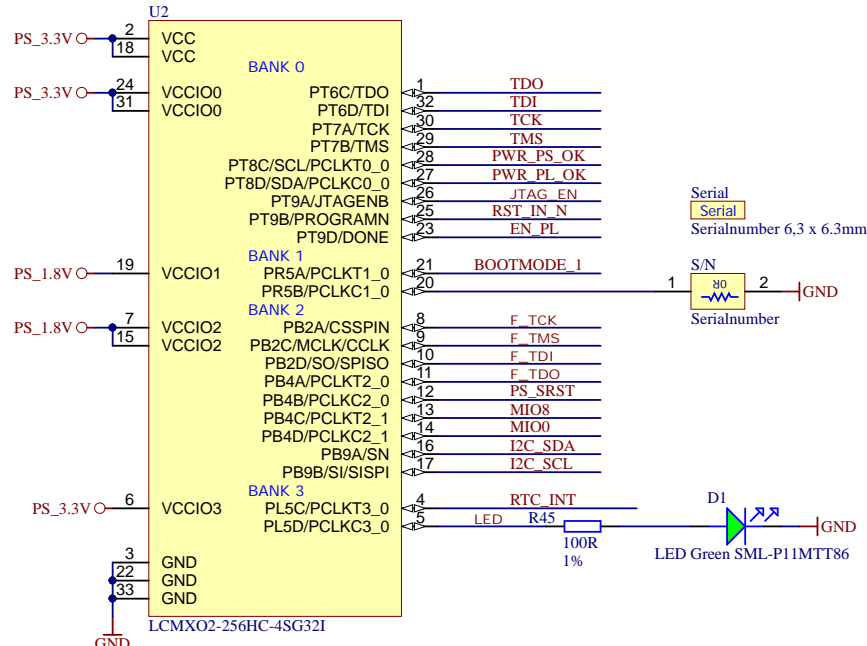
Mount.Hole 3.2mm für Unterlegscheibe



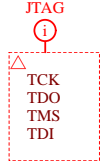
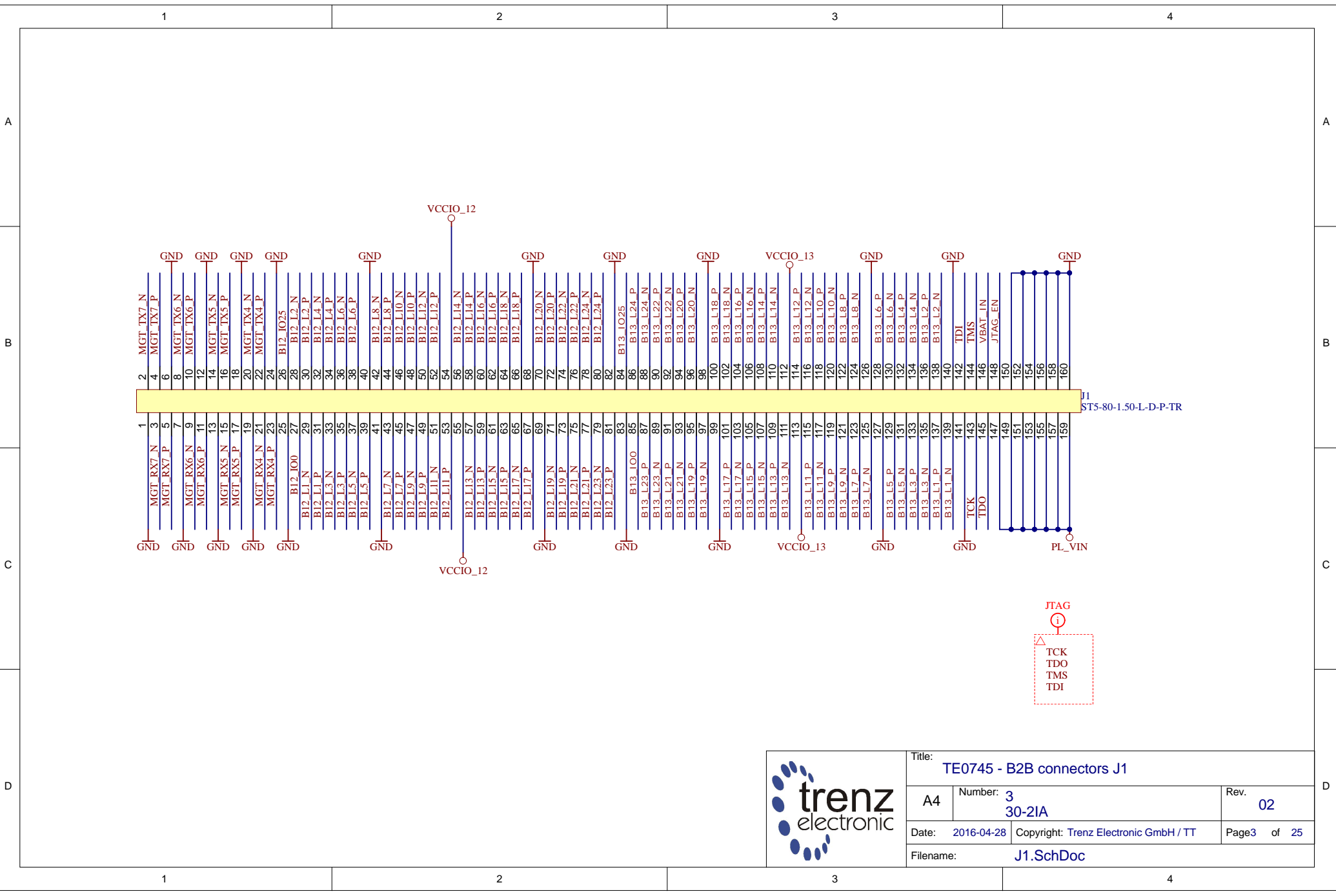
Mount.Hole 3.2mm für Unterlegscheibe



Mount.Hole 3.2mm für Unterlegscheibe



	Title: TE0745	
	A4	Number: 2 30-21A
	Date: 2016-04-28	Rev. 02
	Copyright: Trenz Electronic GmbH / TT	Page2 of 25
Filename: TE0745.SchDoc		

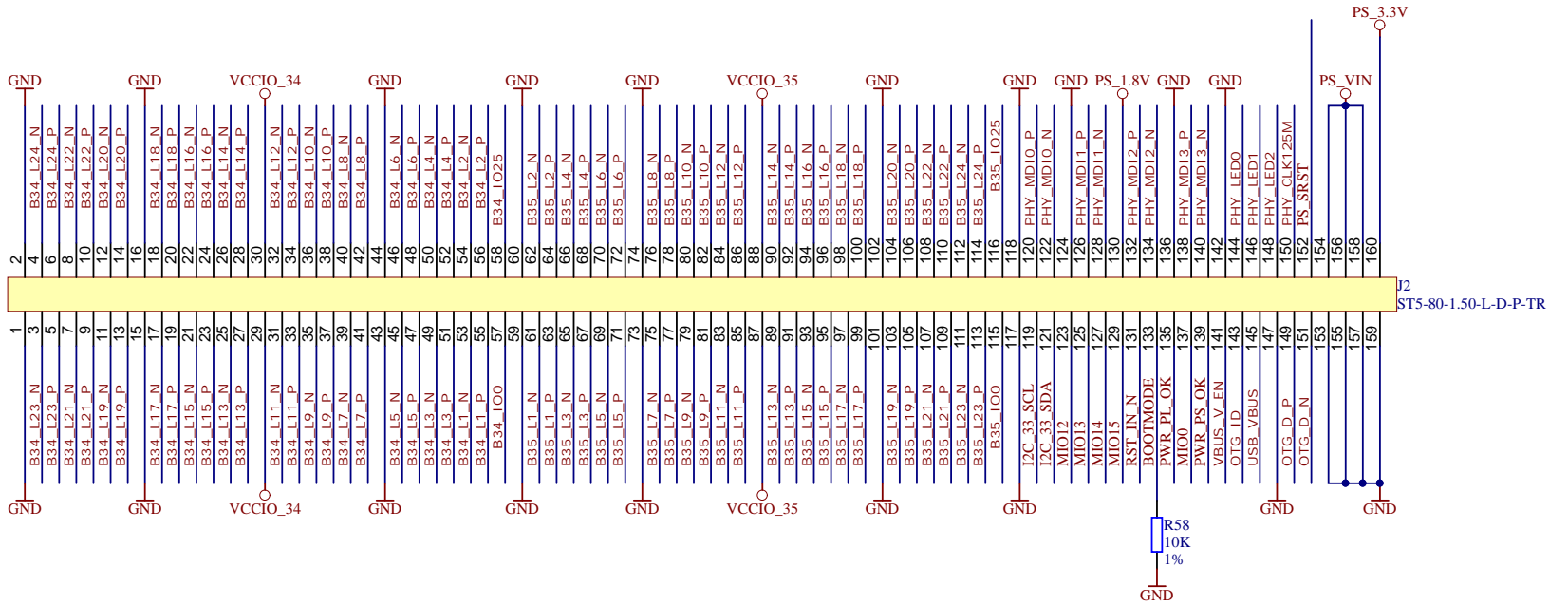


	Title: TE0745 - B2B connectors J1		
	A4	Number: 3 30-21A	Rev. 02
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page3 of 25
	Filename: J1.SchDoc		

ETH\_MDI

i

PHY\_MDI1\_P  
 PHY\_MDI1\_N  
 PHY\_MDI3\_P  
 PHY\_MDI3\_N  
 PHY\_MDI0\_P  
 PHY\_MDI0\_N  
 PHY\_MDI2\_P  
 PHY\_MDI2\_N



J2  
ST5-80-1.50-L-D-P-TR

R58  
10K  
1%



Title: TE0745 - B2B connectors J2		
A4	Number: 4 30-21A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page4 of 25
Filename: J2.SchDoc		

1

2

3

4

A

A

B

B

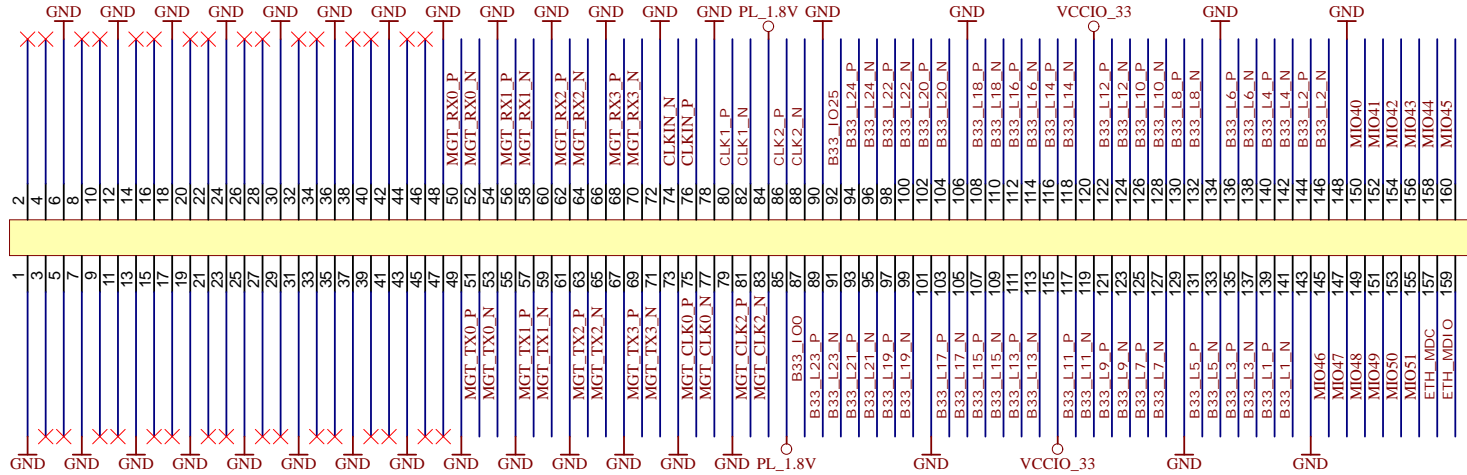
C

C

D

D

RESERVED for additional 8 GTX lanes



J3  
ST5-80-1.50-L-D-P-TR



Title: TE0745 - B2B connectors J3		
A4	Number: 5 30-21A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page5 of 25
Filename: J3.SchDoc		

1

2

3

4

1

2

3

4

U\_B12  
B12.SchDoc



U\_B500  
MIO\_B500.SchDoc



U\_B13  
B13.SchDoc



U\_PS\_DDR  
PS-DDR.SchDoc



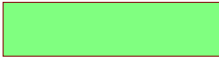
U\_B33  
B33.SchDoc



U\_MISC  
ZYNQ\_MISC.SchDoc



U\_B34  
B34.SchDoc



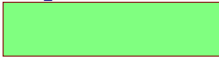
U\_ZYNQ\_POWER  
ZYNQ\_POWER.SchDoc



U\_B35  
B35.SchDoc



U\_FPGA\_MGT  
FPGA\_MGT.SchDoc



1

2

3

4

A

A

B

B

C

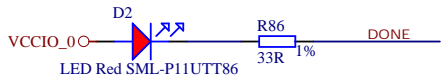
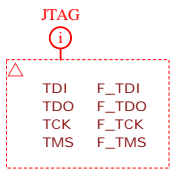
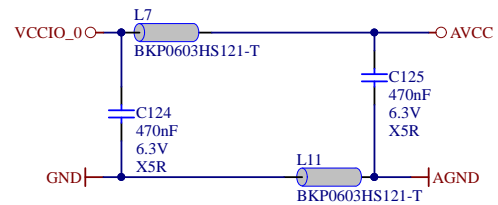
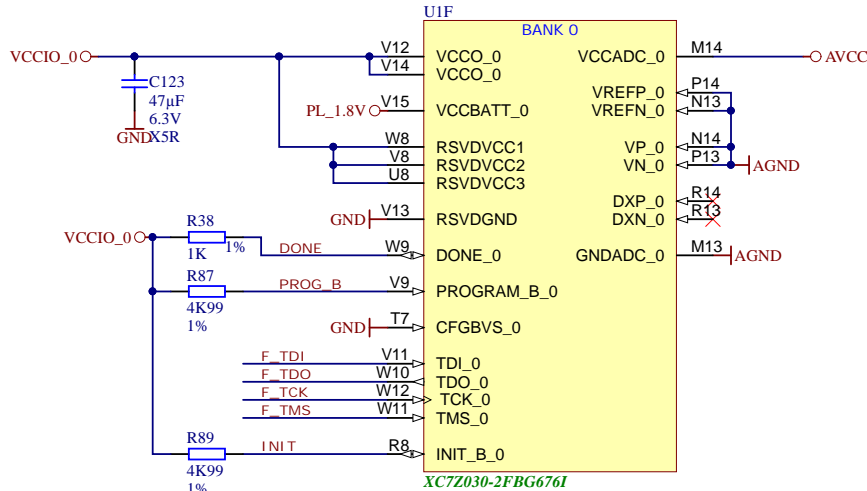
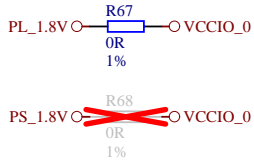
C

D

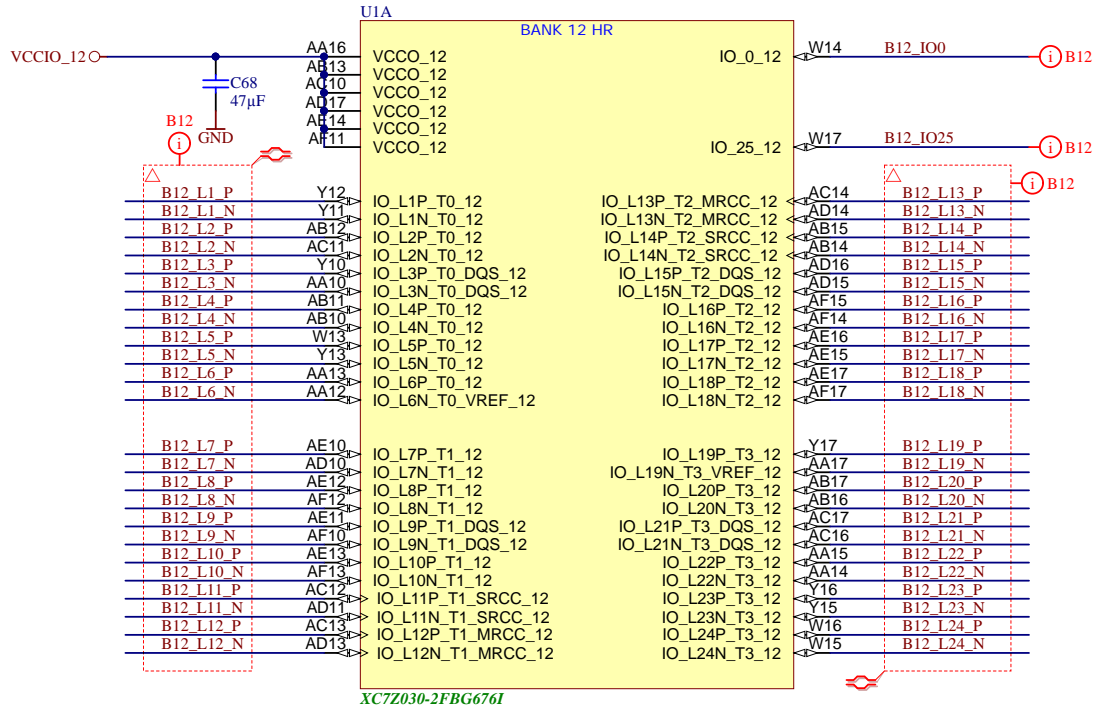
D



Title: TE0745 - Zynq		
A4	Number: 6 30-21A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page6 of 25
Filename: ZYNQ.SchDoc		

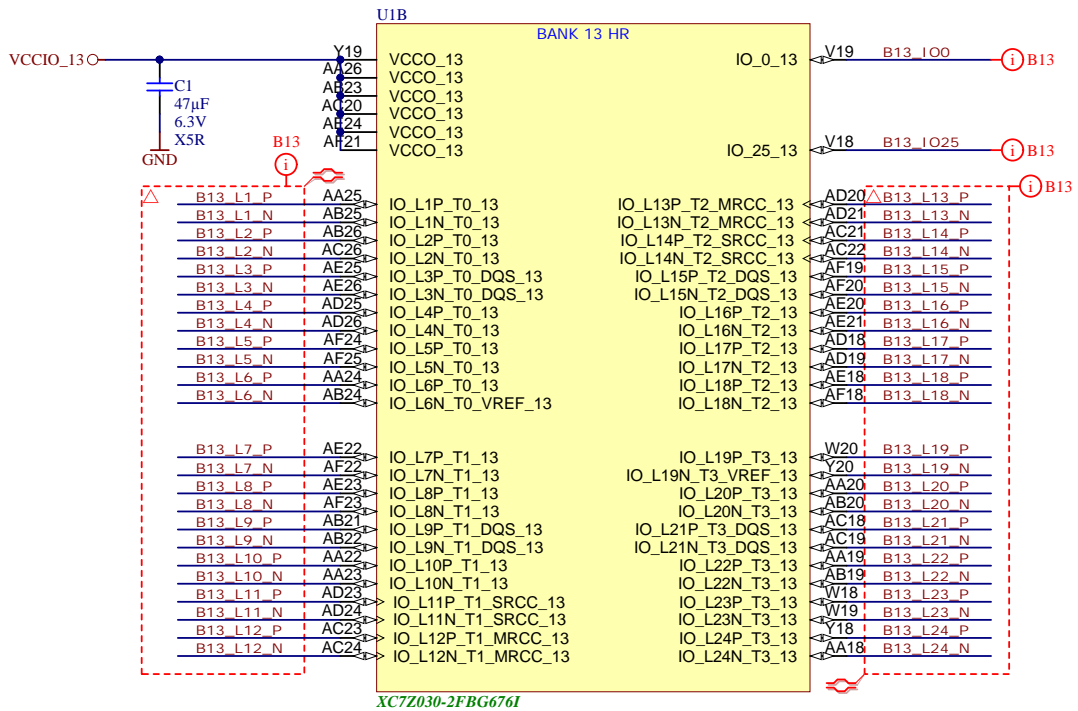


Title: TE0745 - Zynq_MISC		
A4	Number: 7 30-2IA	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 7 of 25
Filename: ZYNQ_MISC.SchDoc		

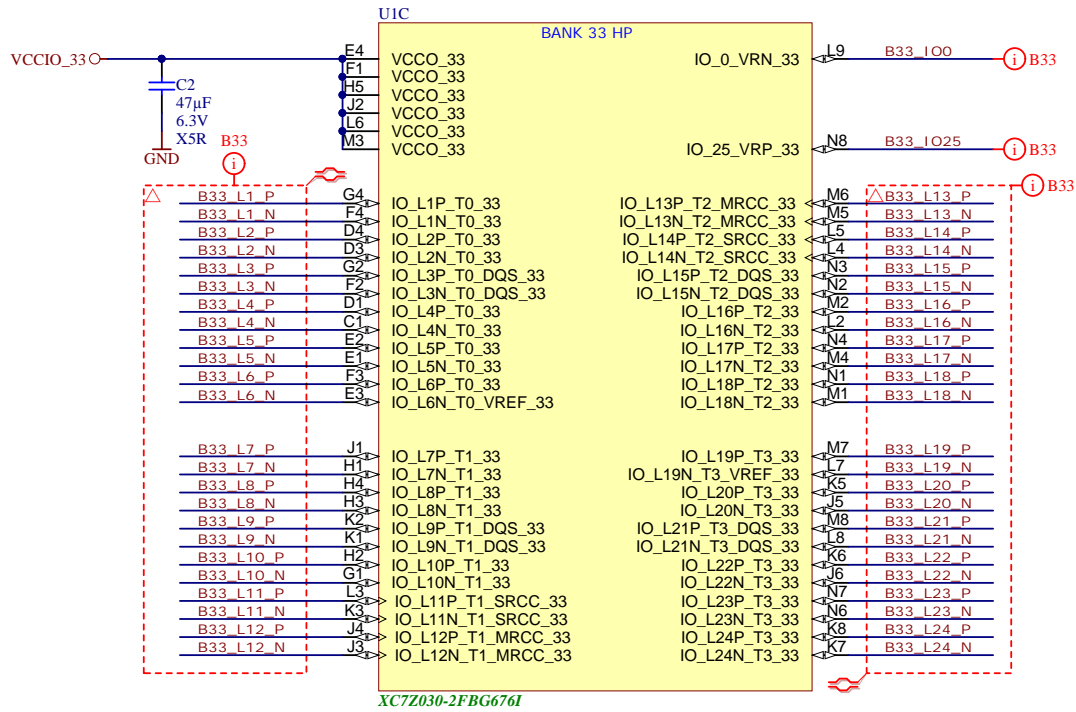


Title: TE0745 - Zynq_B12		
A4	Number: 8 30-2IA	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page8 of 25
Filename: B12.SchDoc		

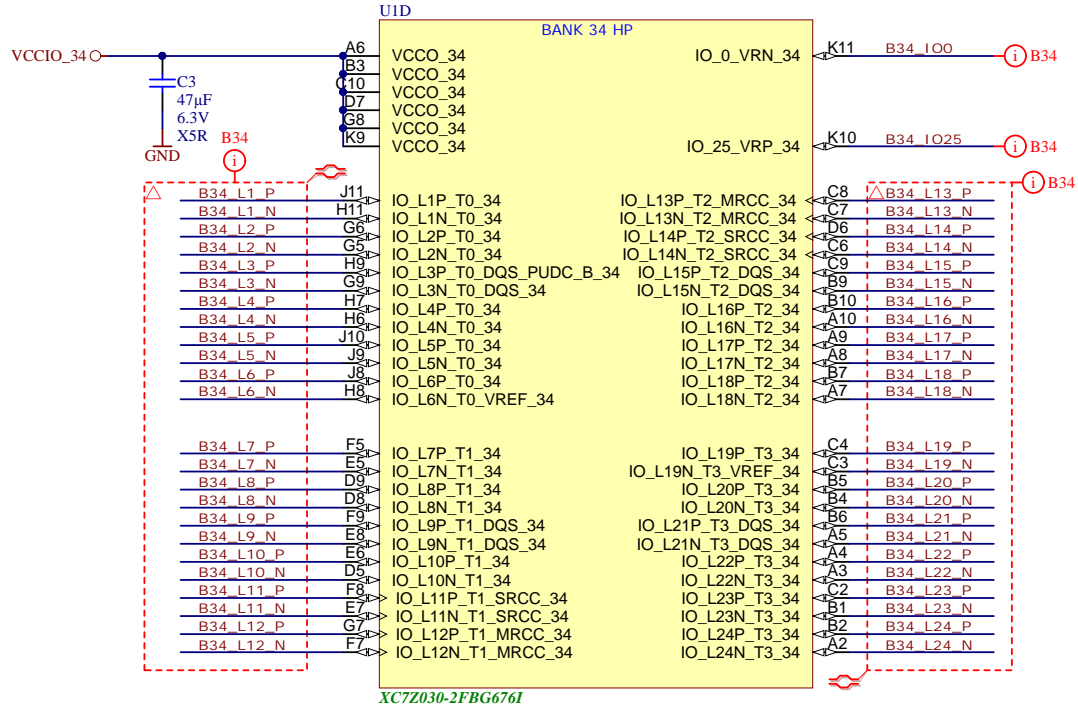




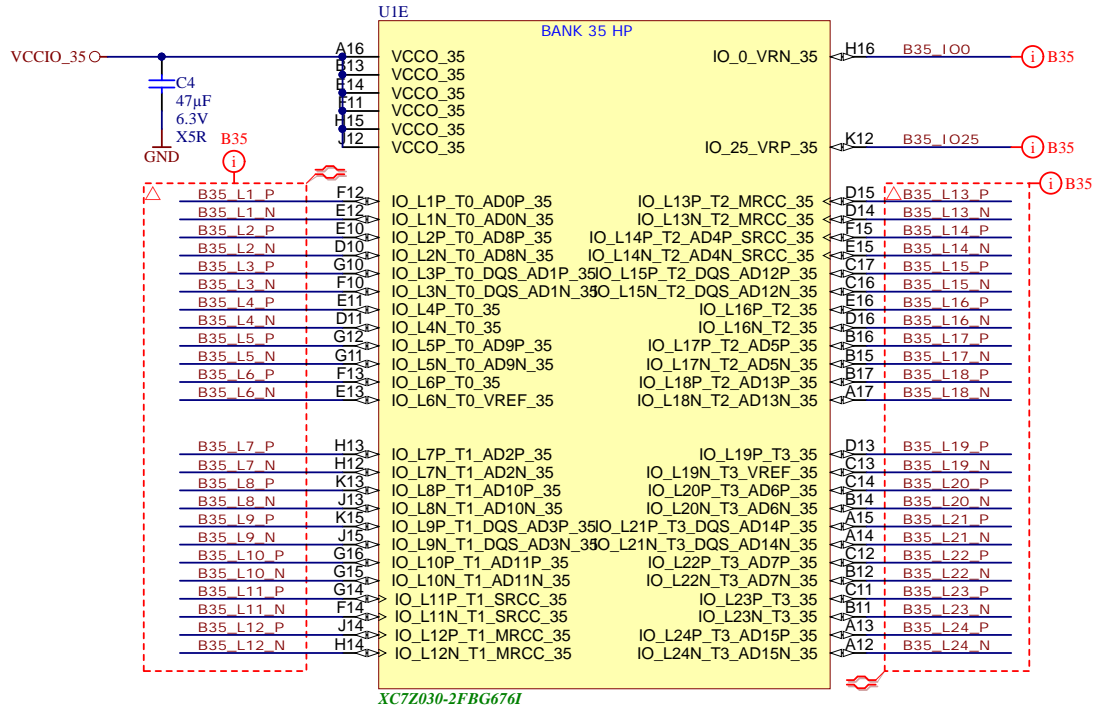
Title: TE0745 - Zynq_B13		
A4	Number: 9 30-2IA	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page9 of 25
Filename: B13.SchDoc		



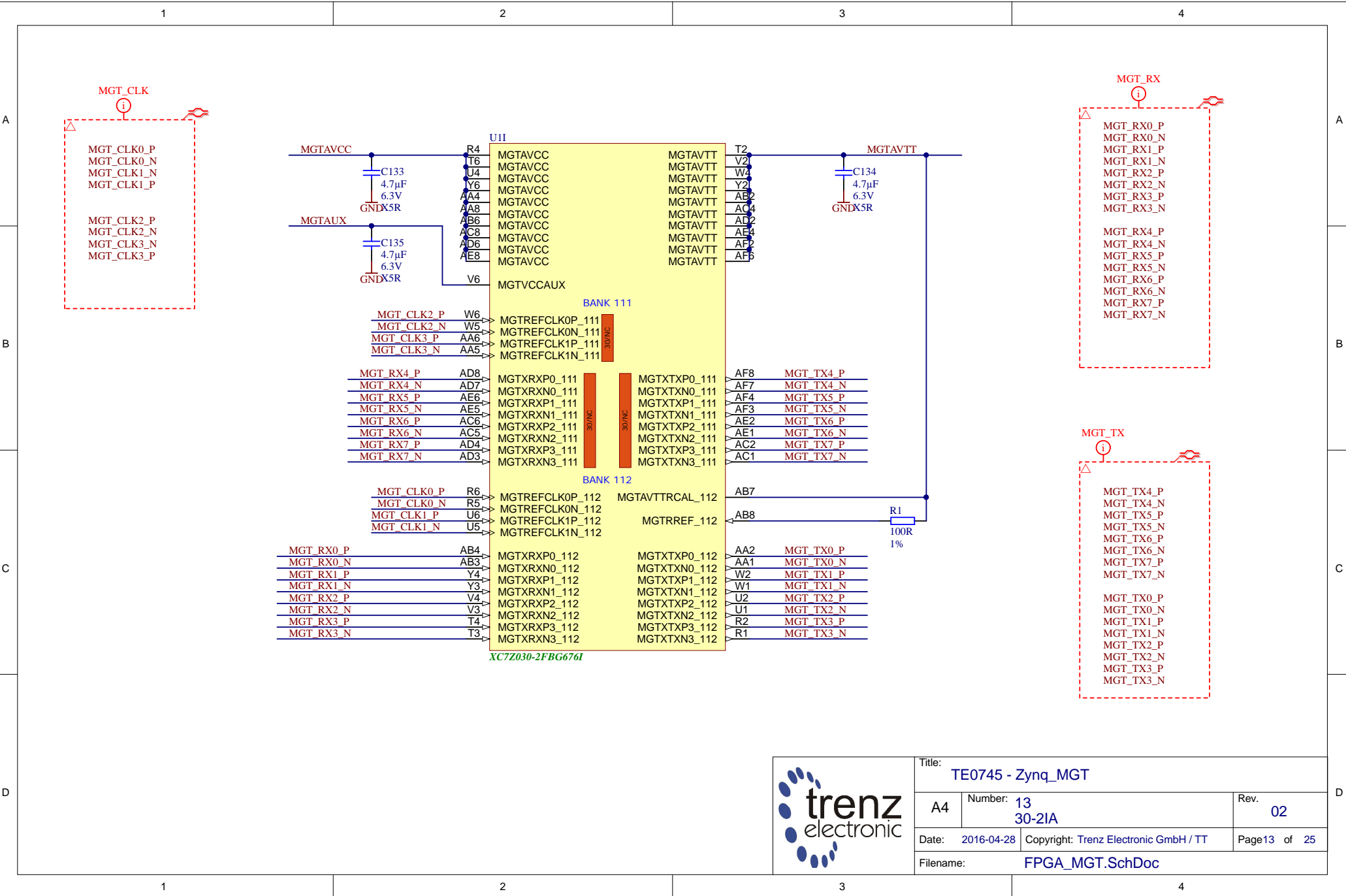
Title: <b>TE0745 - Zynq_B33</b>		
A4	Number: <b>10 30-2IA</b>	Rev. <b>02</b>
Date: <b>2016-04-28</b>	Copyright: <b>Trenz Electronic GmbH / TT</b>	Page <b>10</b> of <b>25</b>
Filename: <b>B33.SchDoc</b>		



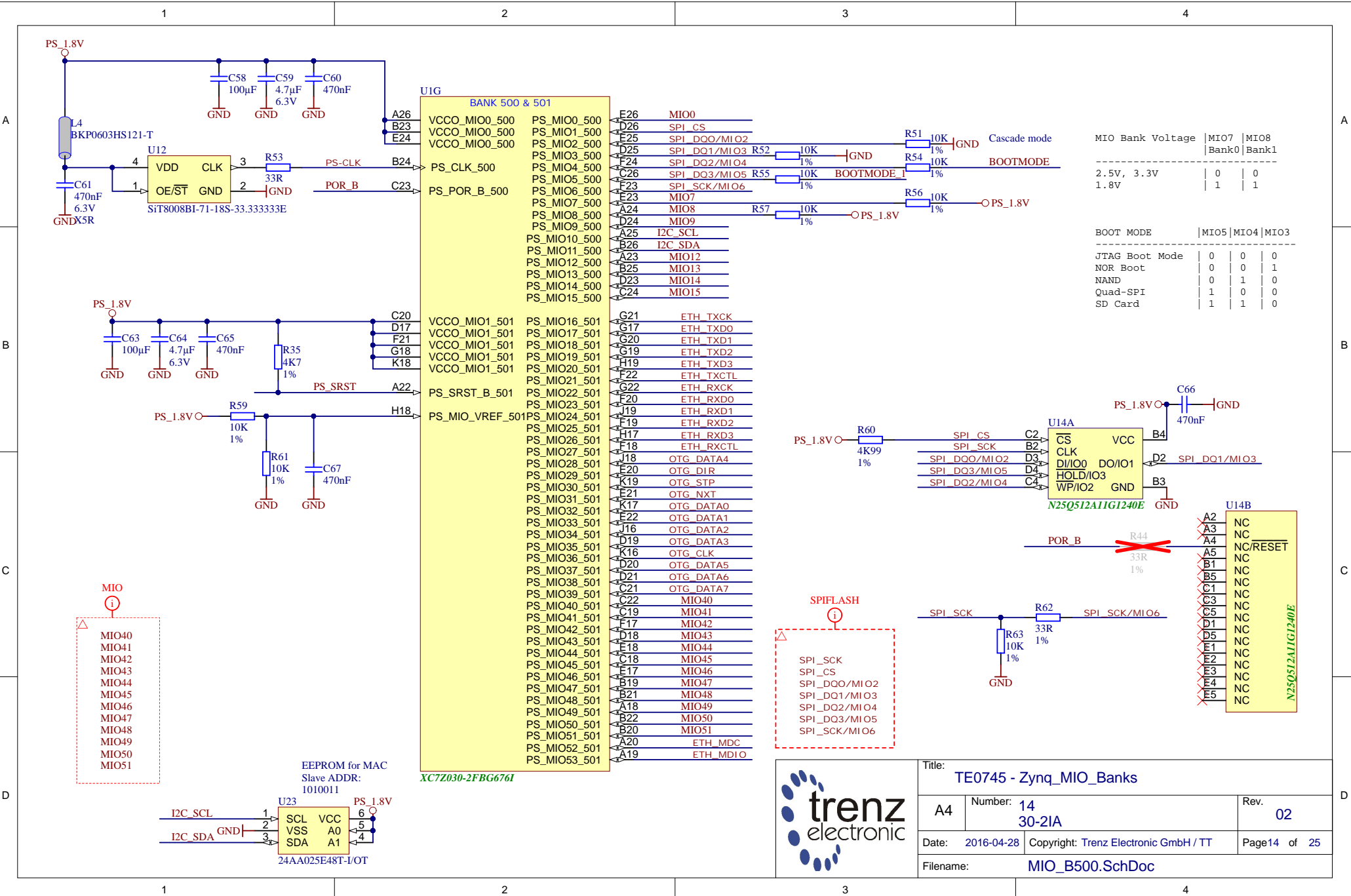
Title: TE0745 - Zynq_B34		
A4	Number: 11 30-2IA	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 11 of 25
Filename: B34.SchDoc		



	Title: TE0745 - Zynq_B35		
	A4	Number: 12 30-2IA	Rev. 02
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 12 of 25
	Filename: B35.SchDoc		



	Title: TE0745 - Zynq_MGT		
	A4	Number: 13 30-2IA	Rev. 02
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page13 of 25
	Filename: FPGA_MGT.SchDoc		



MIO Bank Voltage	MIO7  Bank0	MIO8  Bank1
2.5V, 3.3V	0	0
1.8V	1	1

BOOT MODE	MIO5	MIO4	MIO3
JTAG Boot Mode	0	0	0
NOR Boot	0	0	1
NAND	0	1	0
Quad-SPI	1	0	0
SD Card	1	1	0

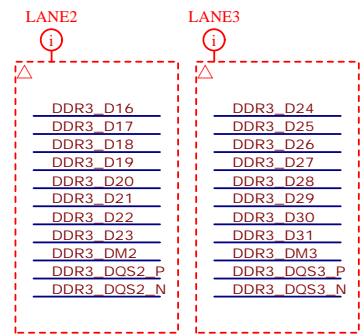
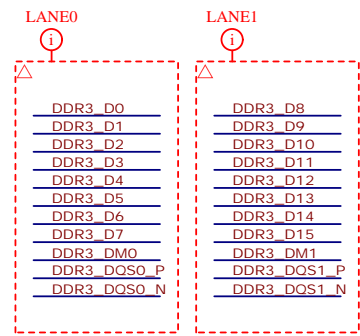
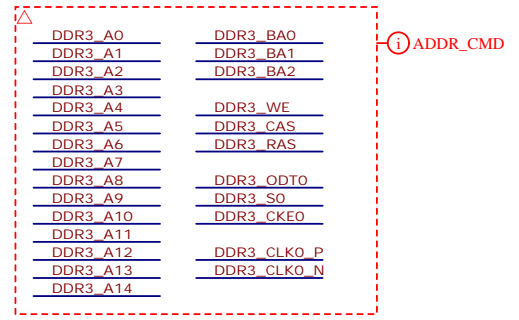
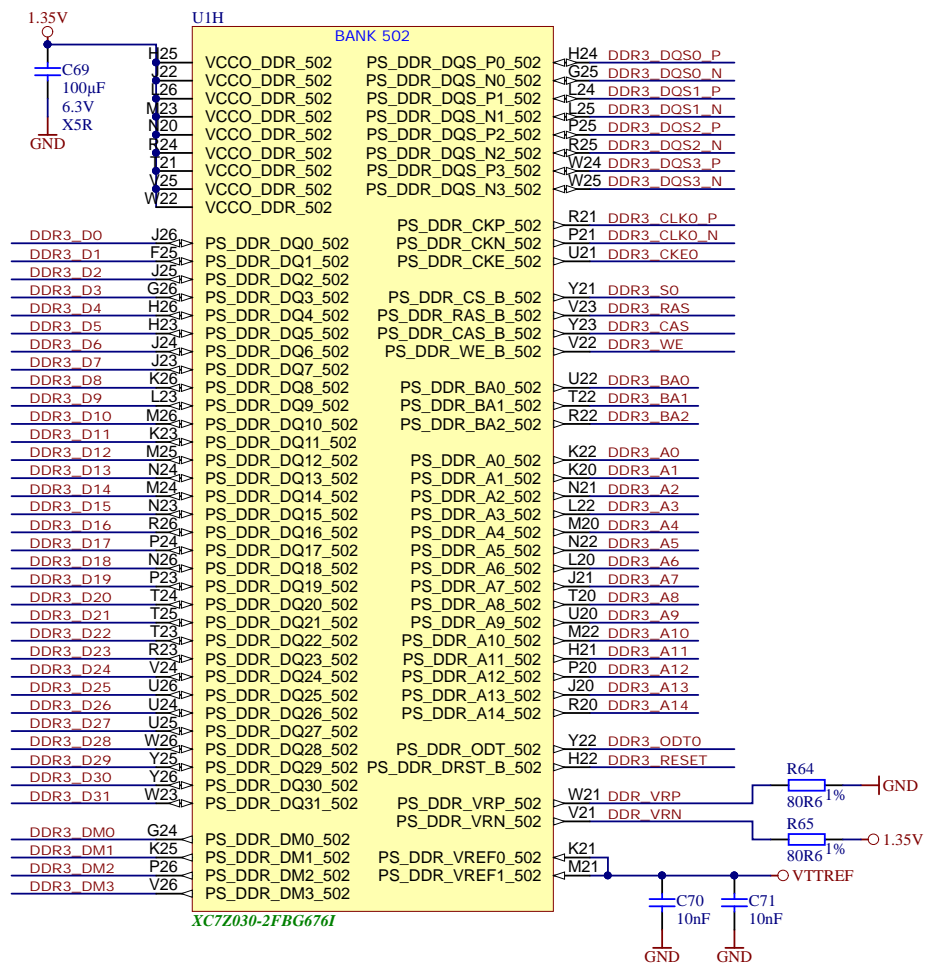
- MIO
- MIO40
  - MIO41
  - MIO42
  - MIO43
  - MIO44
  - MIO45
  - MIO46
  - MIO47
  - MIO48
  - MIO49
  - MIO50
  - MIO51

- SPIFLASH
- SPI\_SCK
  - SPI\_CS
  - SPI\_DQ0/MIO2
  - SPI\_DQ1/MIO3
  - SPI\_DQ2/MIO4
  - SPI\_DQ3/MIO5
  - SPI\_SCK/MIO6

trenz electronic

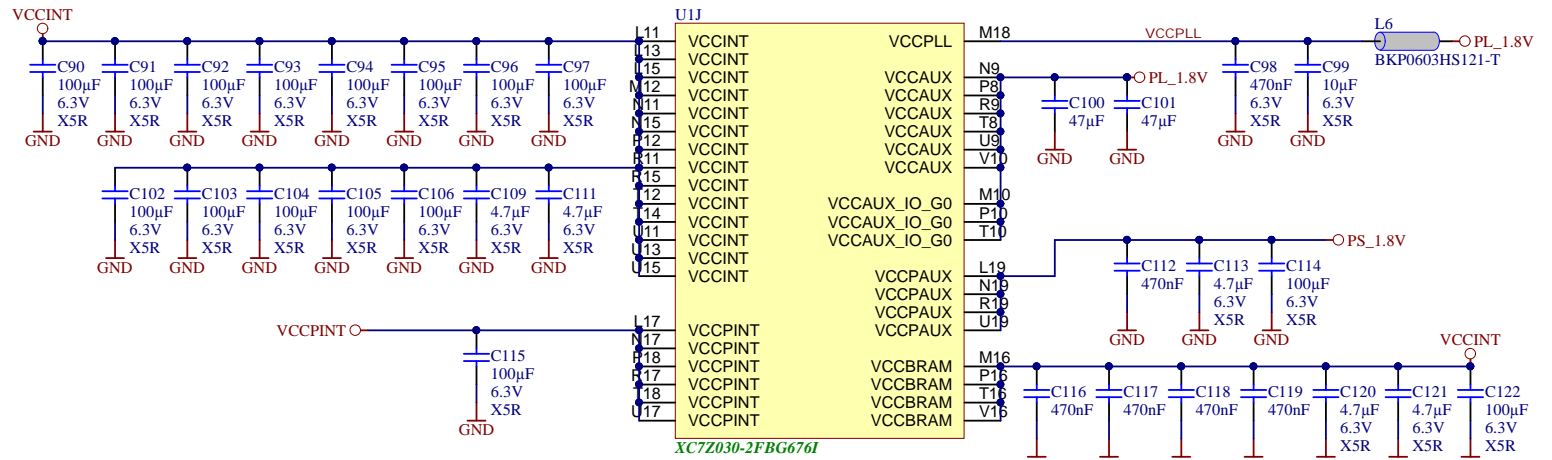
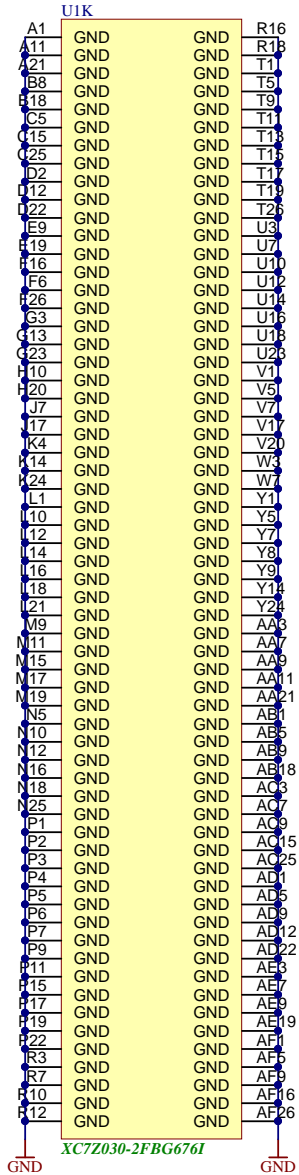
Title: TE0745 - Zynq\_MIO\_Banks

A4	Number: 14 30-21A	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 14 of 25
Filename: MIO_B500.SchDoc		



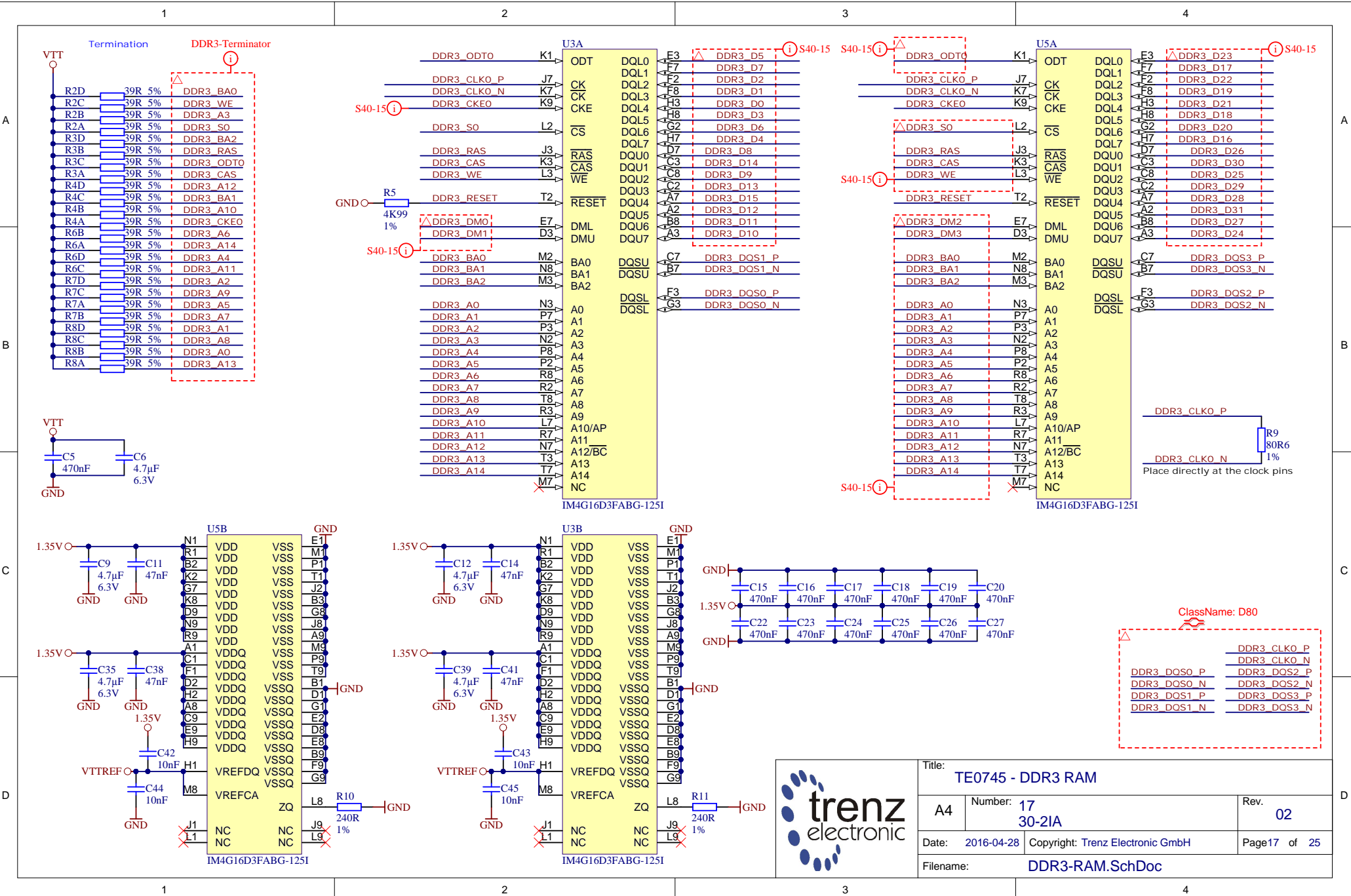
**trenz electronic**

Title: TE0745 - Zynq_PS_DDR		
A4	Number: 15 30-2IA	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 15 of 25
Filename: PS-DDR.SchDoc		



Title: TE0745 - Zynq_Power		
A4	Number: 16 30-2IA	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 16 of 25
Filename: ZYNC_POWER.SchDoc		



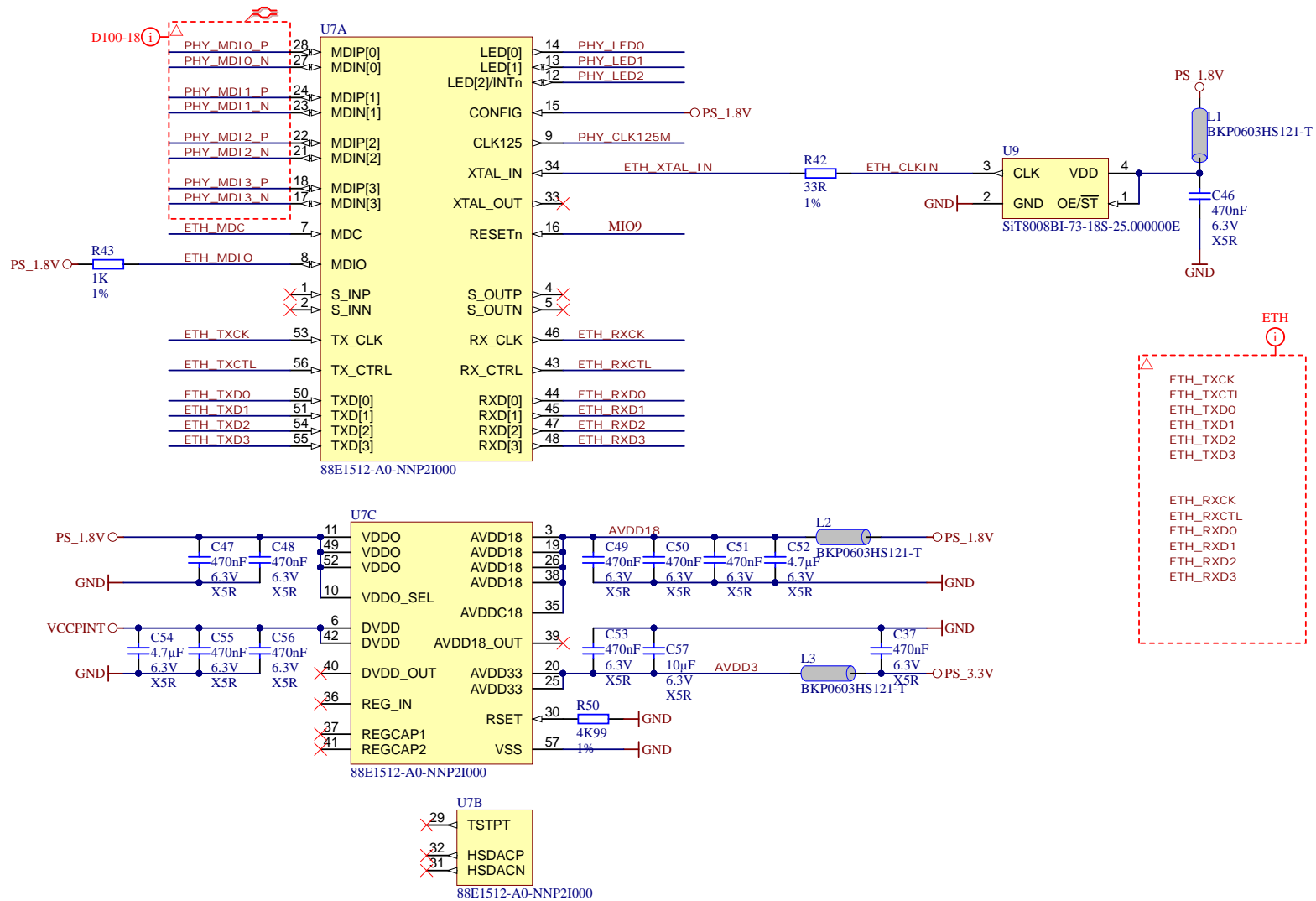


**trenz electronic**

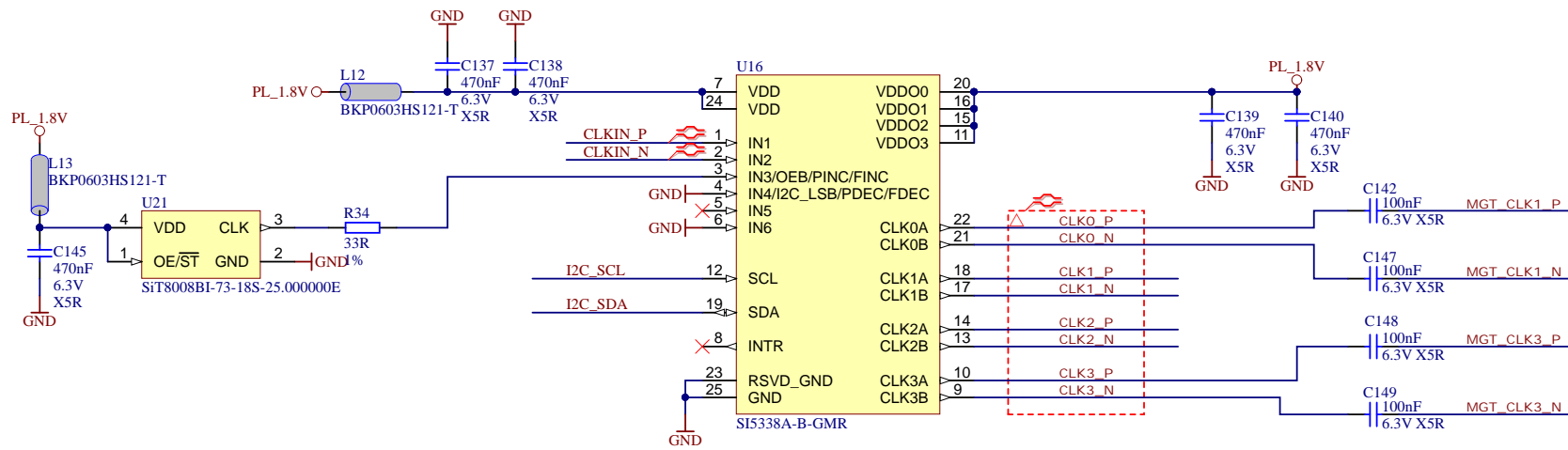
Title: TE0745 - DDR3 RAM		
A4	Number: 17 30-2IA	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH	Page 17 of 25
Filename: DDR3-RAM.SchDoc		




A  
B  
C  
D

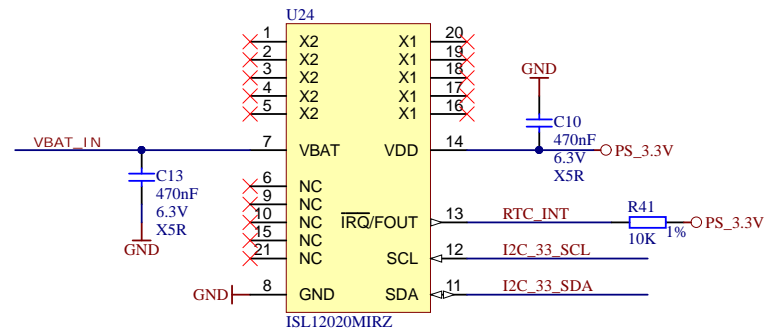


	Title: TE0745 - ETH_PHY	
	A4	Number: 19 30-21A
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT
	Rev. 02	Page 19 of 25
Filename: ETH-PHY.SchDoc		

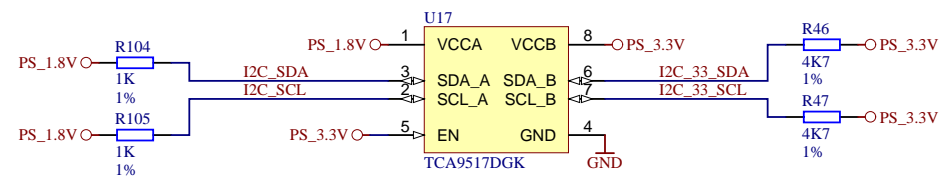



Slave ADDR:  
1110000 OR 1110001

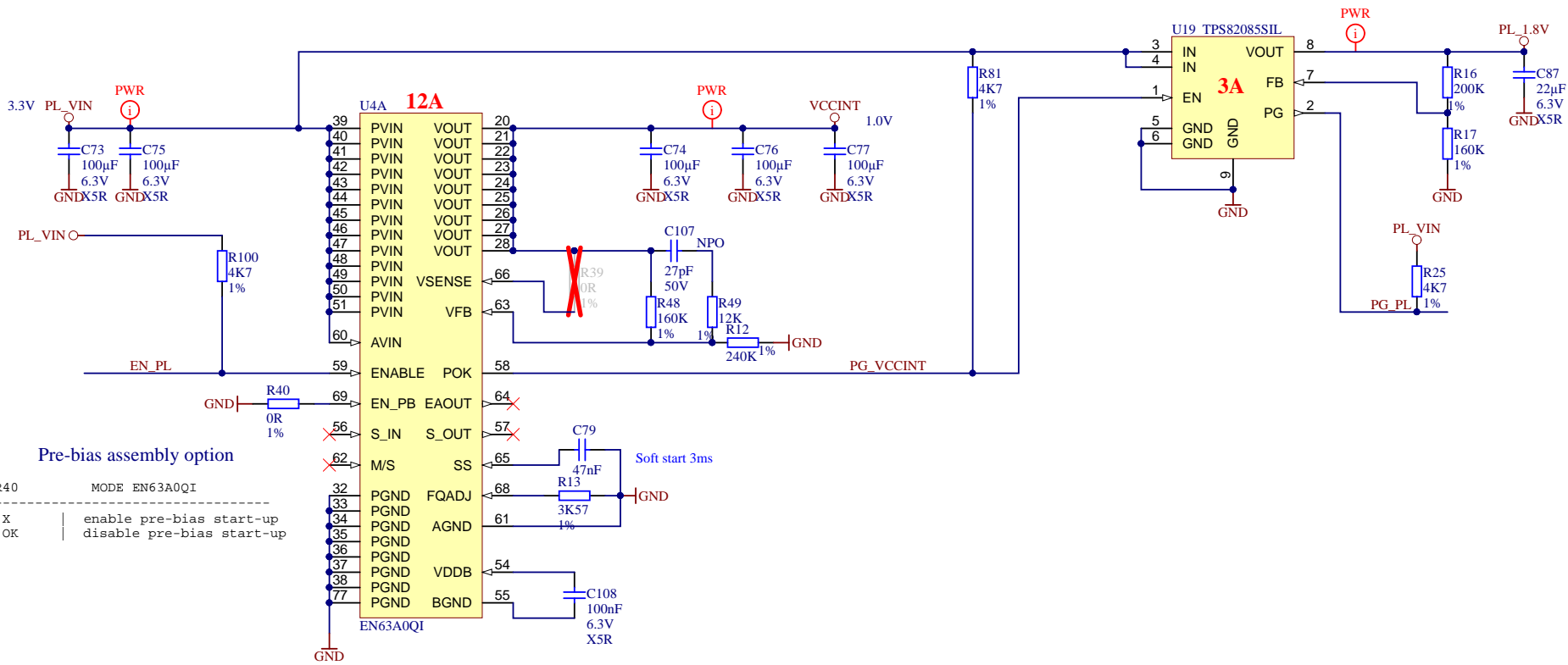
	Title: TE0745 - CLK		
	A4	Number: 20 30-2IA	Rev. 02
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page20 of 25
	Filename: CLK.SchDoc		



Slave ADDR:  
 for RTC registers: 1101111  
 for User SRAM: 1010111



		Title: TE0745 - RTC	
		A4	Number: 21 30-2IA
Date: 2016-04-28		Copyright: Trenz Electronic GmbH / TT	
Filename: SENSOR-RTC.SchDoc		Page21 of 25	



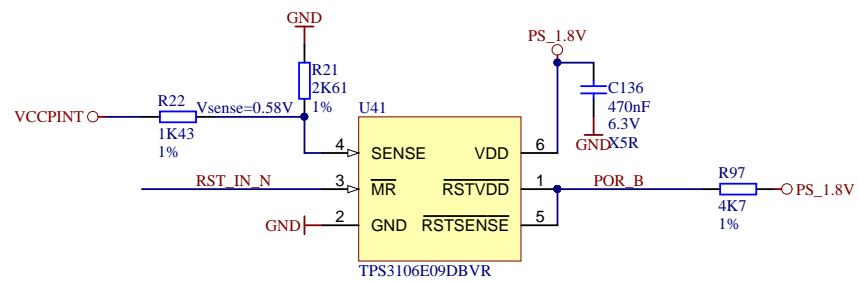
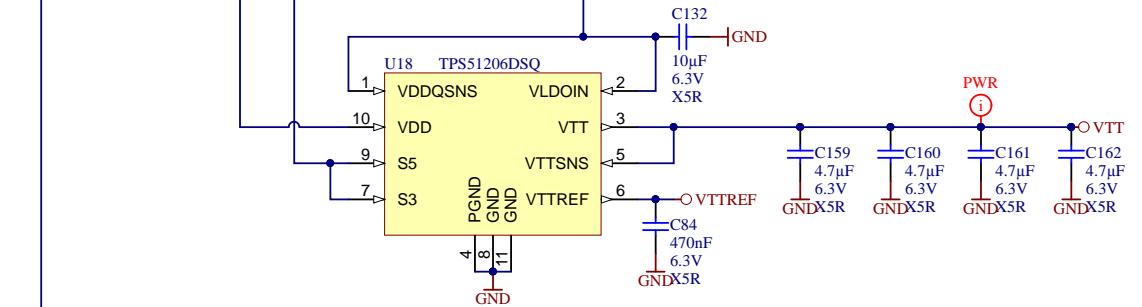
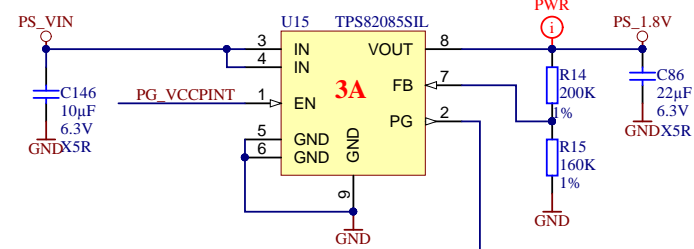
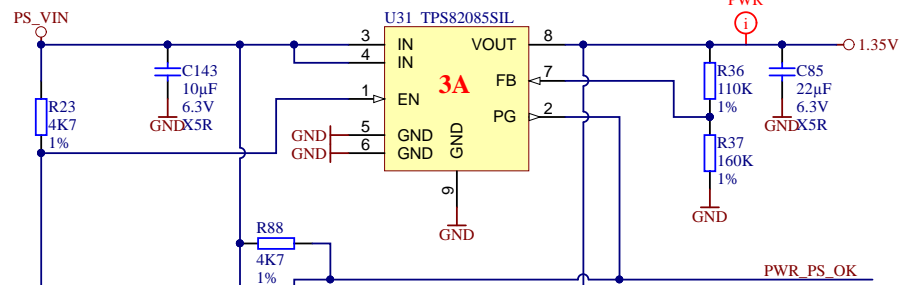
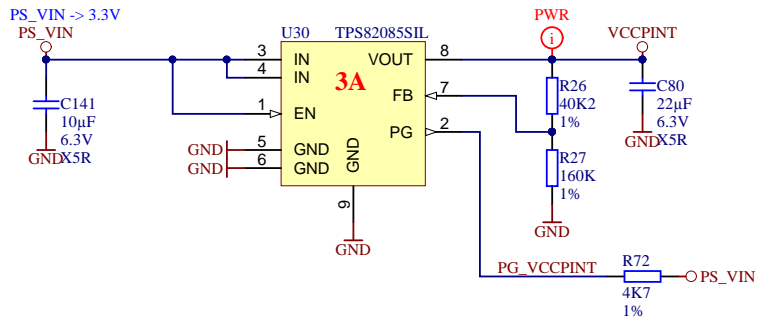
**Pre-bias assembly option**

R39 R40      MODE EN63A0QI  
 -----  
 OK X      enable pre-bias start-up  
 X OK      disable pre-bias start-up

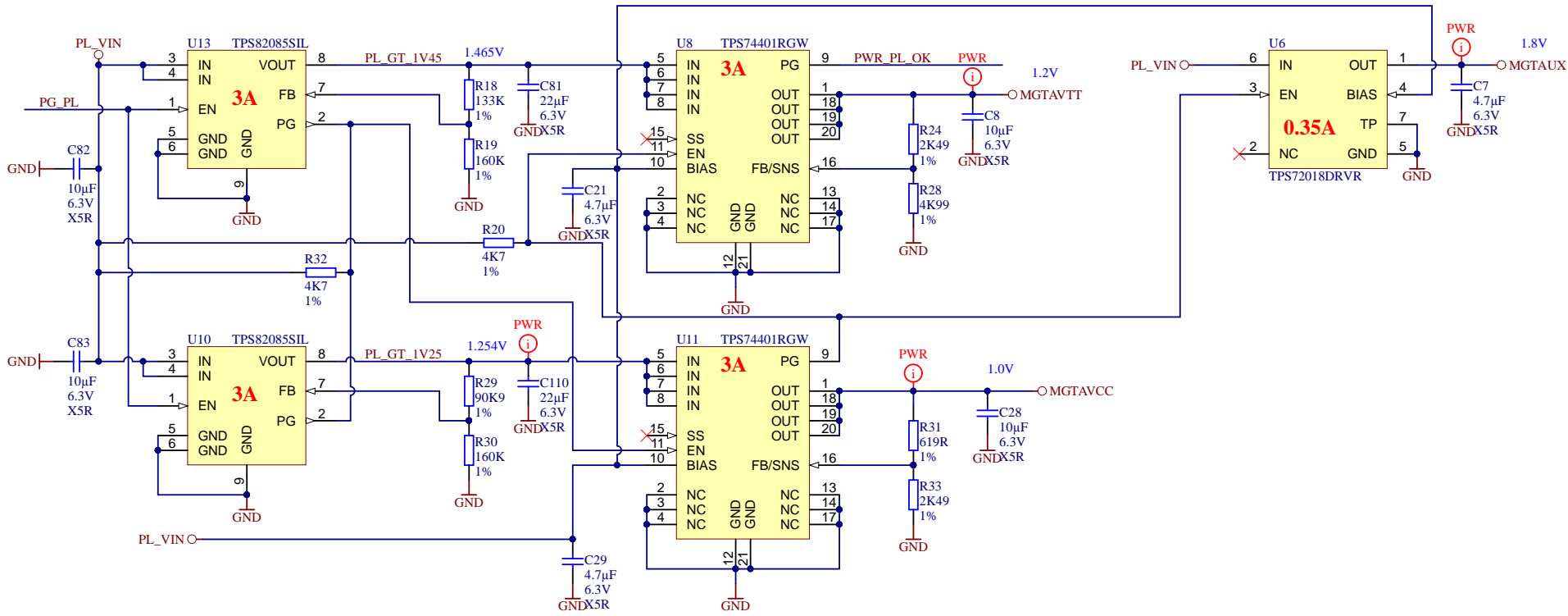
U4B			
1	NC	NC	17
2	NC	NC	18
3	NC	NC	19
4	NC	NC	29
5	NC	NC	30
6	NC	NC(SW)	31
7	NC	NC(SW)	52
8	NC	NC	53
9	NC	NC	67
10	NC	NC(SW)	70
11	NC	NC(SW)	71
12	NC	NC(SW)	72
13	NC	NC	73
14	NC	NC	74
15	NC	NC	75
16	NC	NC	76

EN63A0QI

	Title: <b>TE0745 - Power</b>		
	A4	Number: <b>22</b> 30-21A	Rev. <b>02</b>
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page22 of 25
	Filename: <b>POWER.SchDoc</b>		

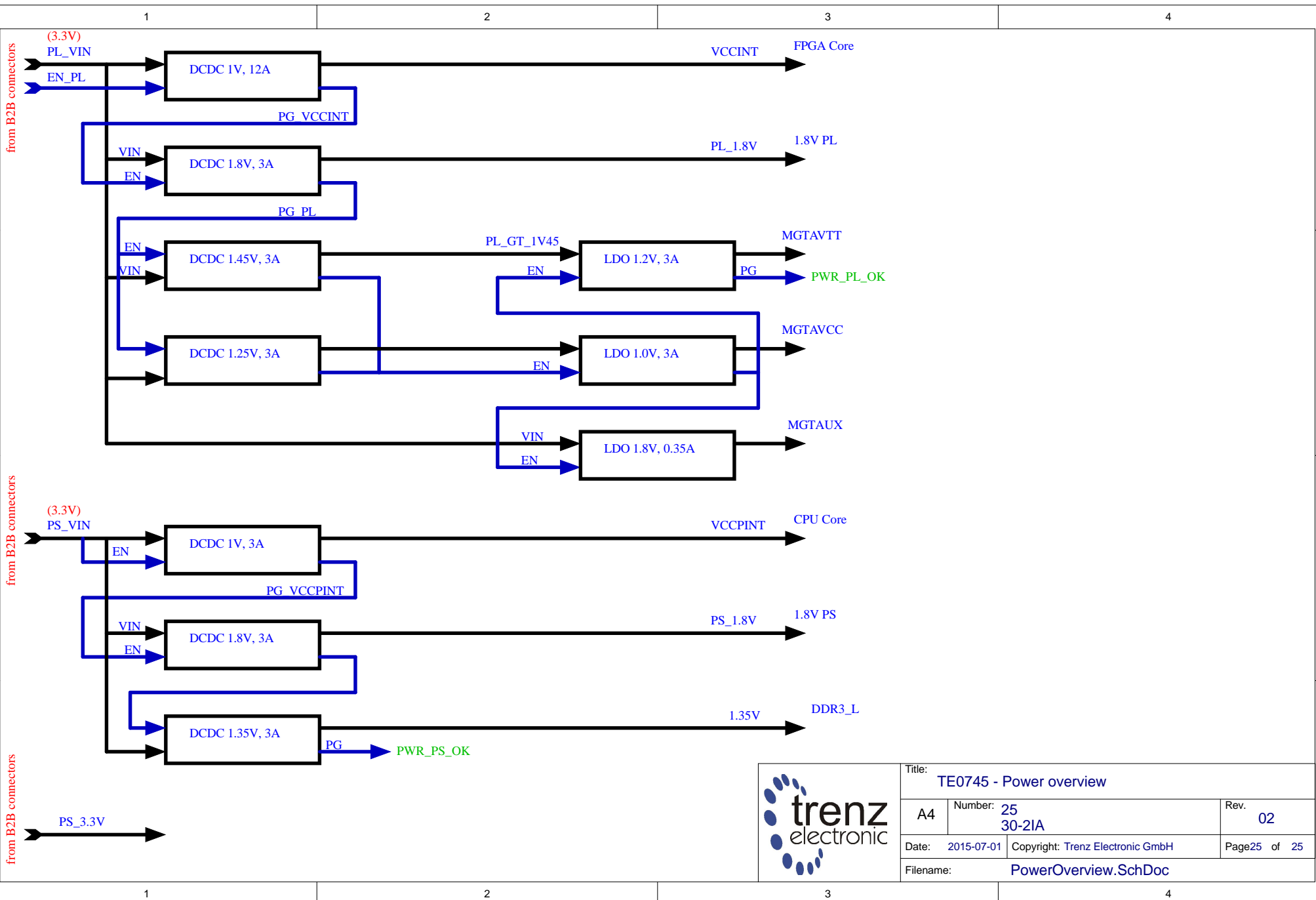


Title: TE0745 - Power2		
A4	Number: 23 30-2IA	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page23 of 25
Filename: POWER_2.SchDoc		



Title: TE0745 - Power3		
A4	Number: 24 30-2IA	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page24 of 25
Filename: POWER_3.SchDoc		





Title: TE0745 - Power overview		
A4	Number: 25 30-21A	Rev. 02
Date: 2015-07-01	Copyright: Trenz Electronic GmbH	Page 25 of 25
Filename: PowerOverview.SchDoc		