

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

Assembly variant	92111-F
Created by	VY
Modified by	VY
Modified at	2019-09-25
SVN Version	8496



Title: TE0745		
A4	Number: 1 92111-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 1 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

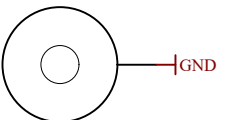
U_ETH_PHY
ETH-PHY.SchDoc

U_USB_PHY
USB-PHY.SchDoc

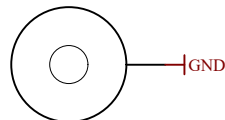
U_PowerOverview
PowerOverview.SchDoc

U_Revision Changes
Revision Changes.SchDoc

LOGO1
TE Logo PRINT Layer
LOGO PRINT

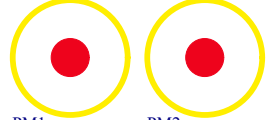


Mount.Hole 3.2mm für Unterlegscheibe

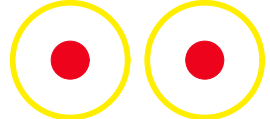


Mount.Hole 3.2mm für Unterlegscheibe

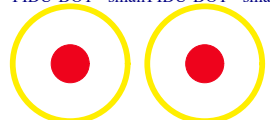
FIDU-DOT - small FIDU-DOT - small



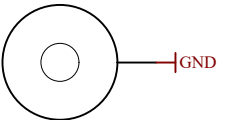
PM1 PM2
FIDU-DOT - small FIDU-DOT - small



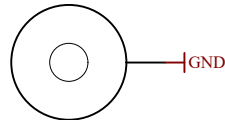
PM3 PM4
FIDU-DOT - small FIDU-DOT - small



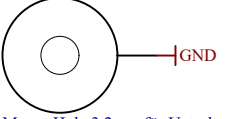
PM5 PM6



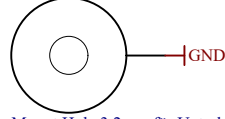
Mount.Hole 3.2mm für Unterlegscheibe



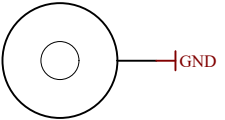
Mount.Hole 3.2mm für Unterlegscheibe



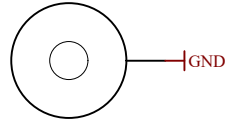
Mount.Hole 3.2mm für Unterlegscheibe



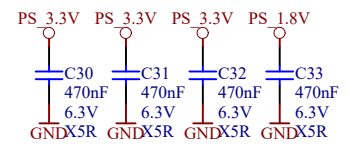
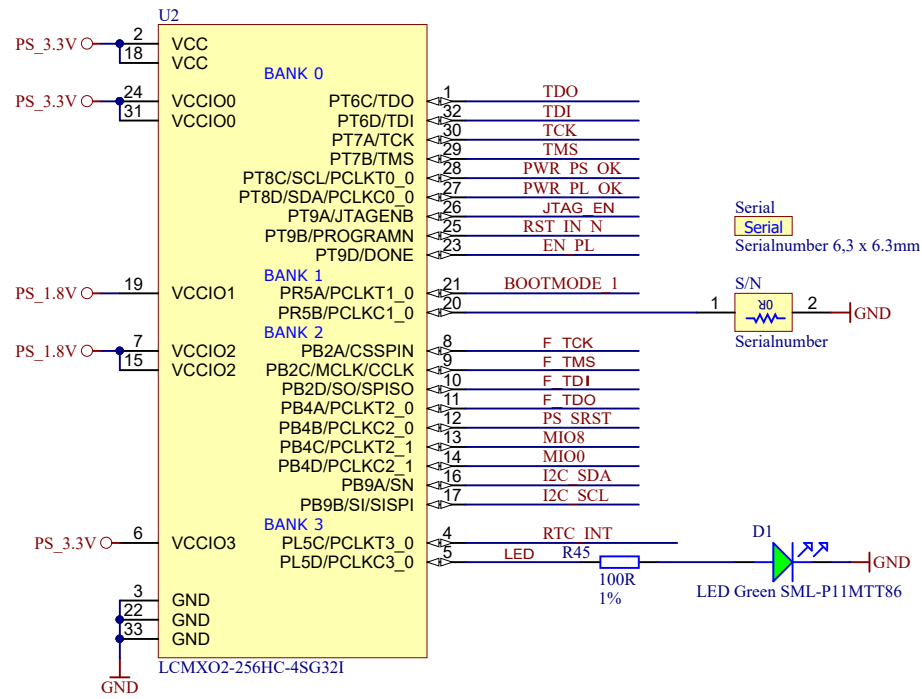
Mount.Hole 3.2mm für Unterlegscheibe



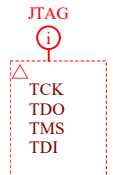
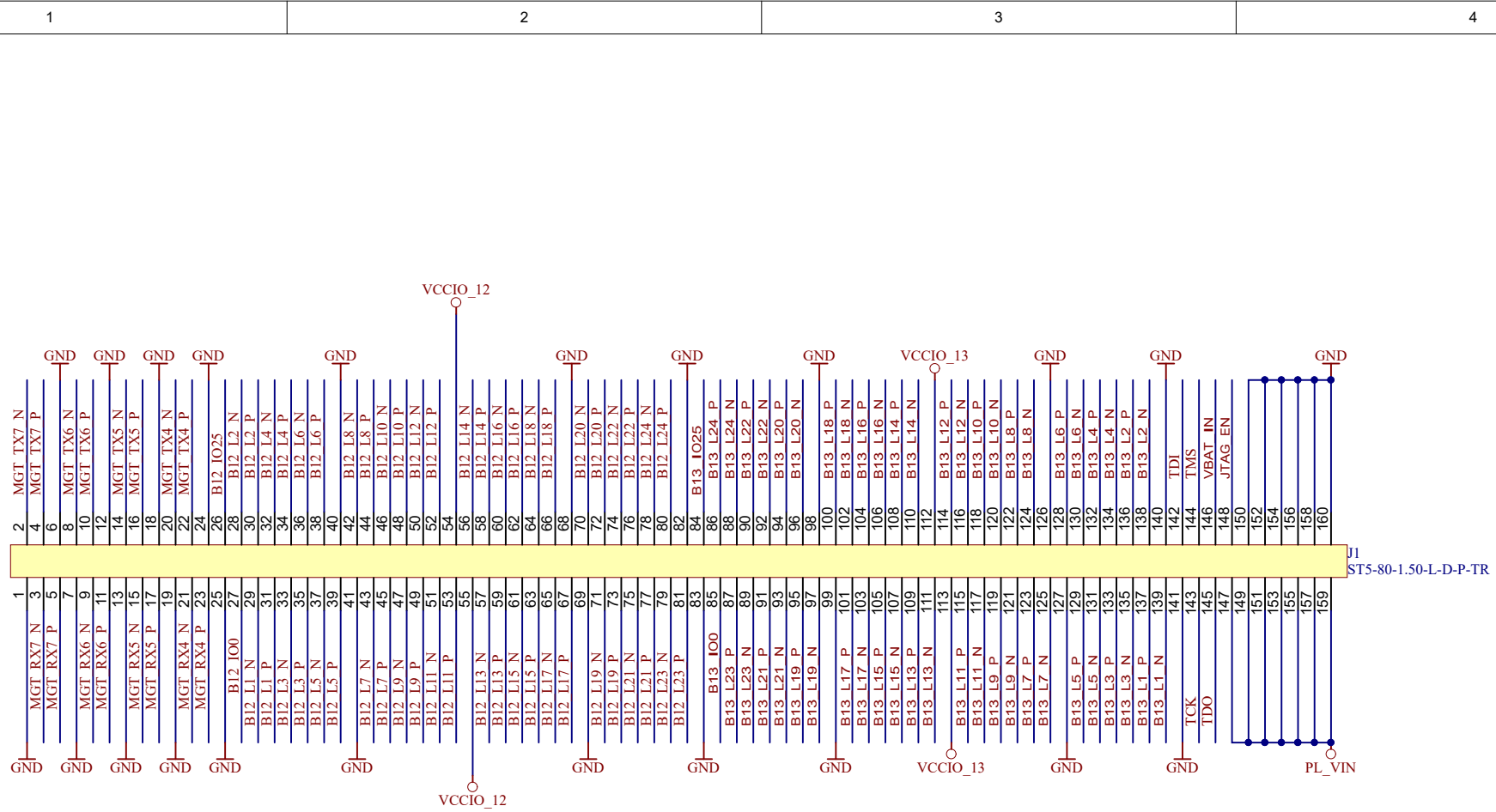
Mount.Hole 3.2mm für Unterlegscheibe




Mount.Hole 3.2mm für Unterlegscheibe



	Title: TE0745		
	A4	Number: 2 92111-F	Rev. 02
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page2 of 25
	Filename: TE0745.SchDoc		

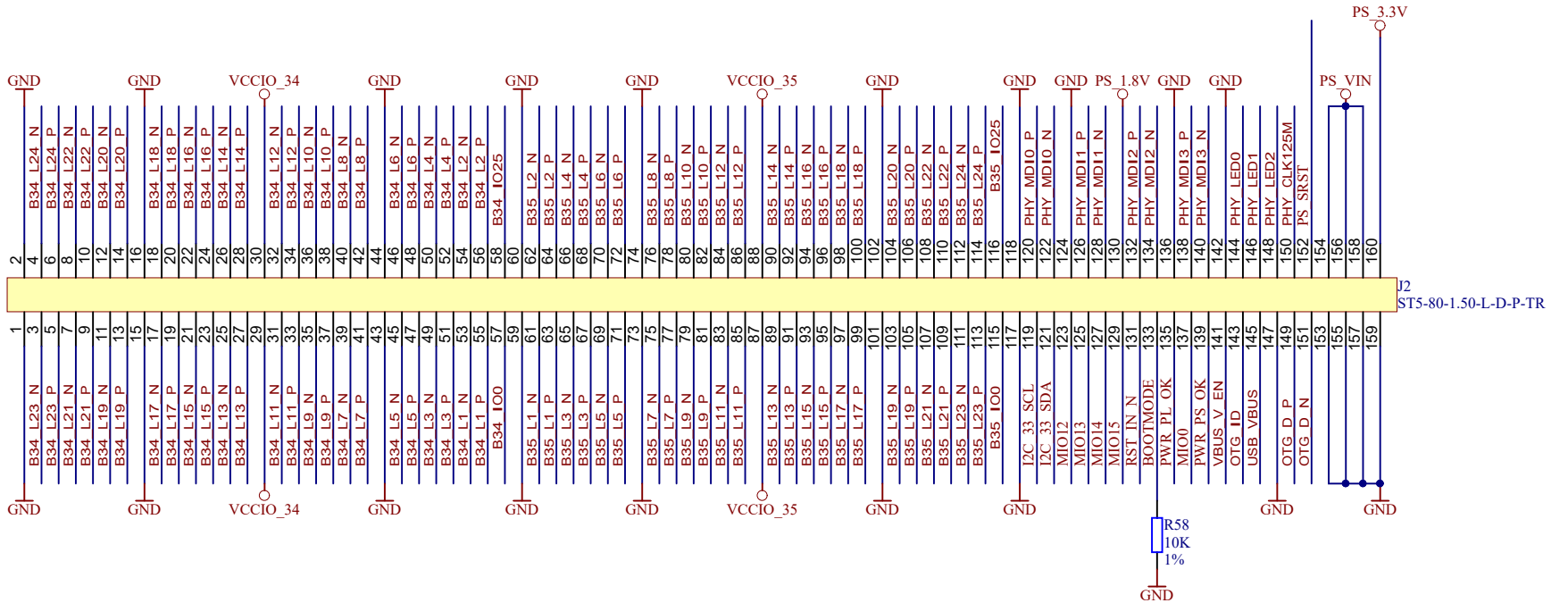


			Title: TE0745 - B2B connectors J1	
			A4	Number: 3 92I11-F
Date: 2016-04-28		Copyright: Trenz Electronic GmbH / TT		Page3 of 25
Filename: J1.SchDoc				

ETH_MDI

1

- PHY_MDI1_P
- PHY_MDI1_N
- PHY_MDI3_P
- PHY_MDI3_N
- PHY_MDI0_P
- PHY_MDI0_N
- PHY_MDI2_P
- PHY_MDI2_N

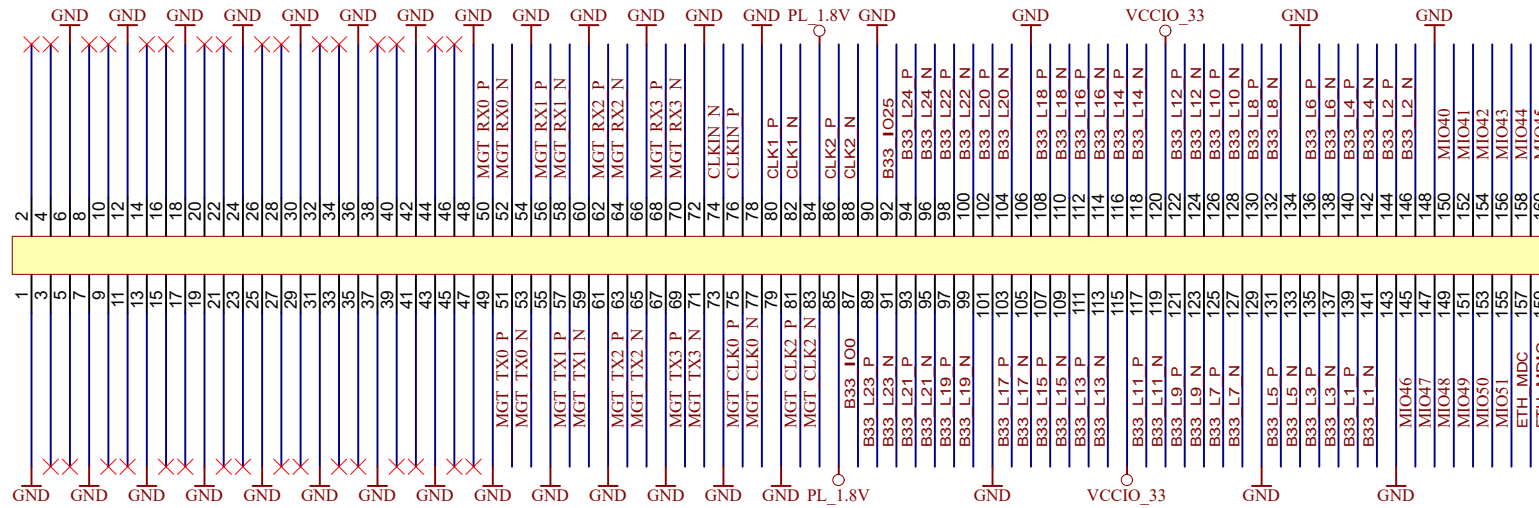


J2 ST5-80-1.50-L-D-P-TR



Title: TE0745 - B2B connectors J2		
A4	Number: 4 92I11-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page4 of 25
Filename: J2.SchDoc		

RESERVED for additional 8 GTX lanes



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



Title: TE0745 - B2B connectors J3		
A4	Number: 5 92111-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page5 of 25
Filename: J3.SchDoc		

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



A

A

B

B

C

C

D


D

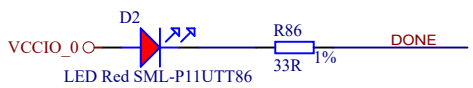
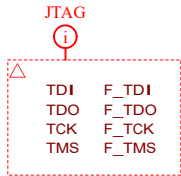
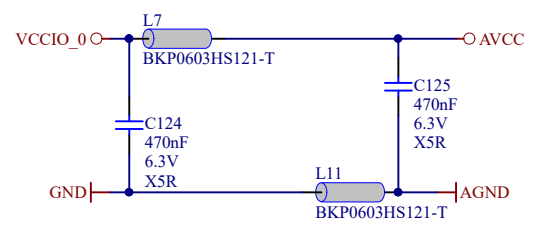
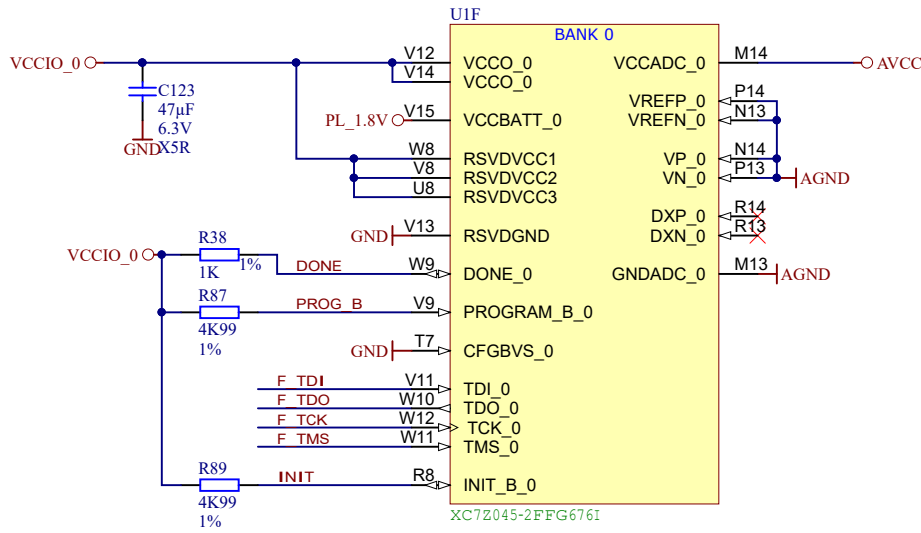
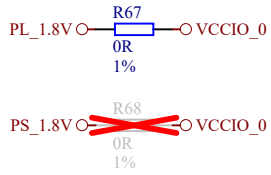

1

2

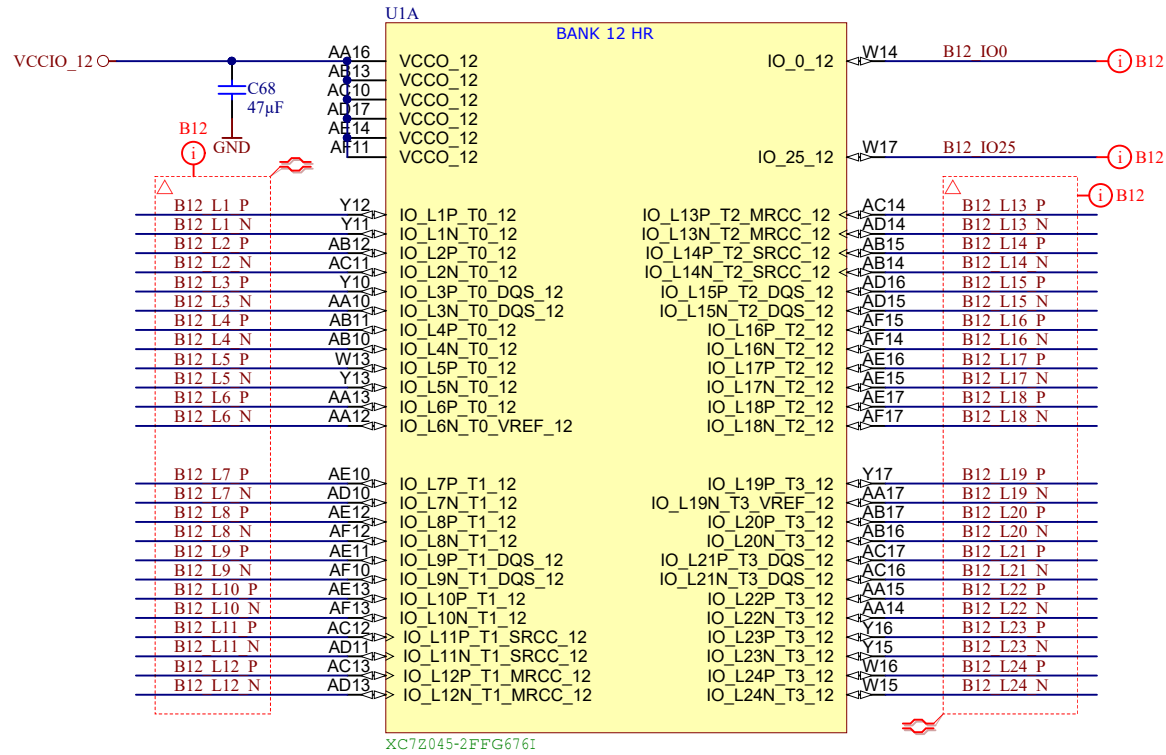
3

4

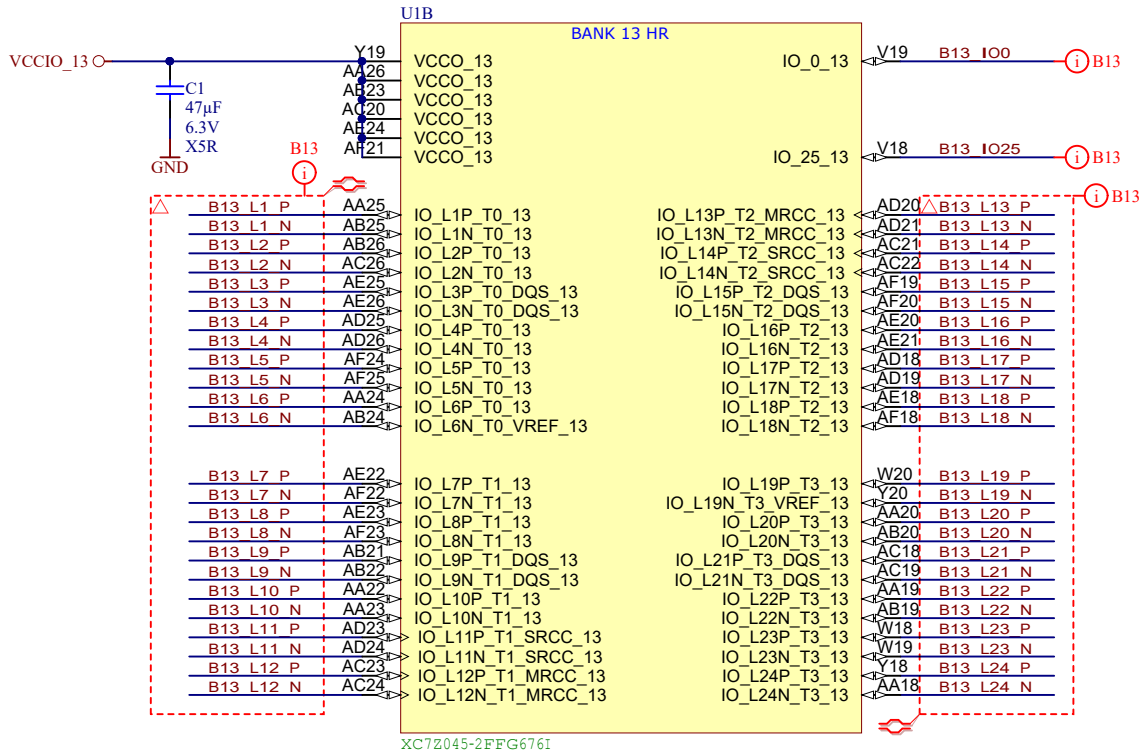
			Title: TE0745 - Zynq		
			A4	Number: 6 92I11-F	Rev. 02
Date: 2016-04-28		Copyright: Trenz Electronic GmbH / TT		Page6 of 25	
Filename: ZYNQ.SchDoc					

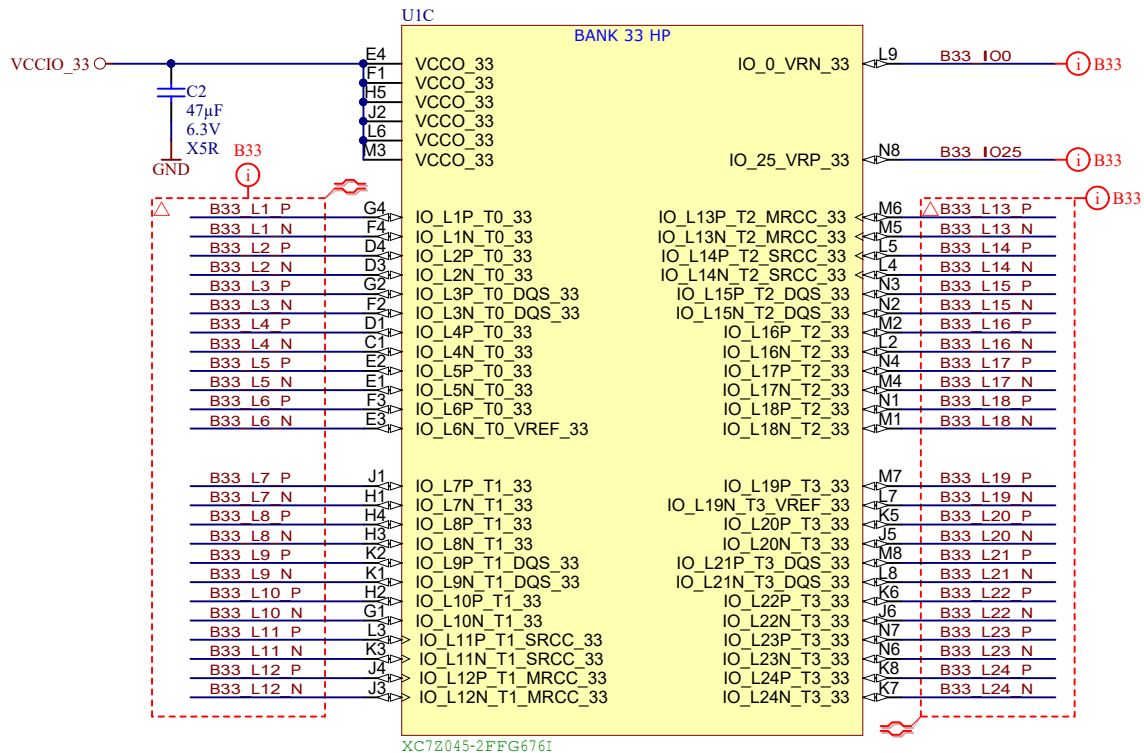
Title: TE0745 - Zynq_MISC		
A4	Number: 7 92I11-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 7 of 25
Filename: ZYNQ_MISC.SchDoc		



Title: TE0745 - Zynq_B12		
A4	Number: 8 92I11-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 8 of 25
Filename: B12.SchDoc		



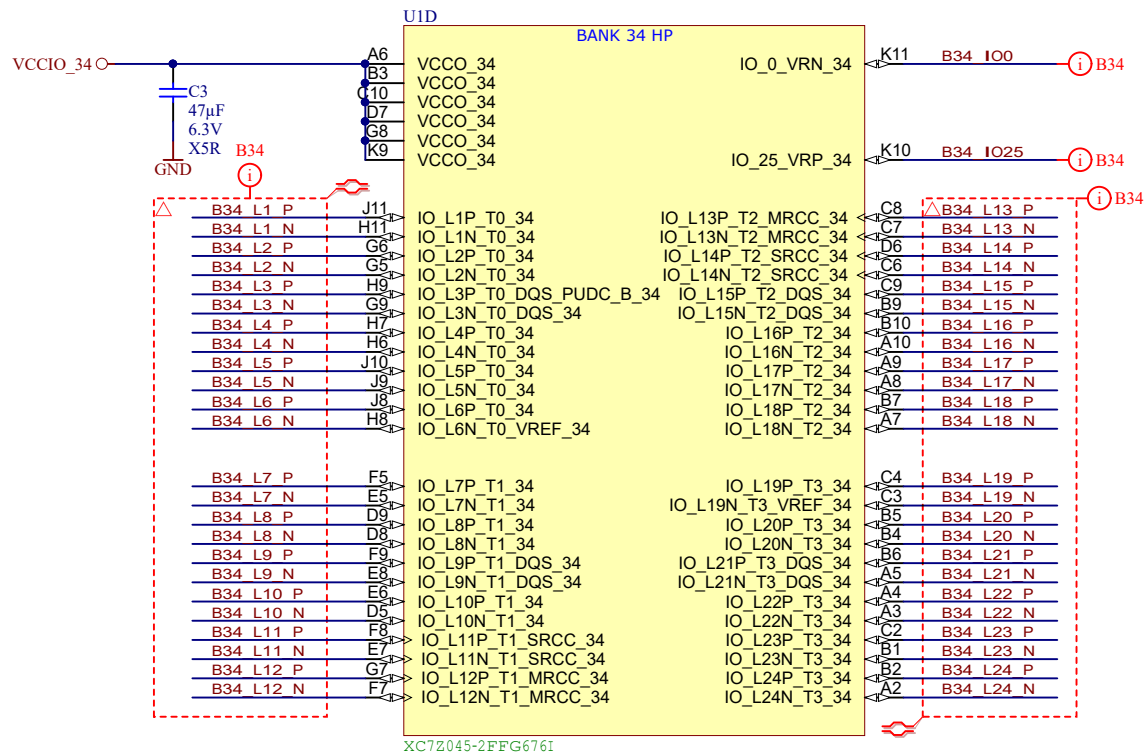
Title: TE0745 - Zynq_B13		
A4	Number: 9 92111-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page9 of 25
Filename: B13.SchDoc		



XC7Z045-2FFG6761



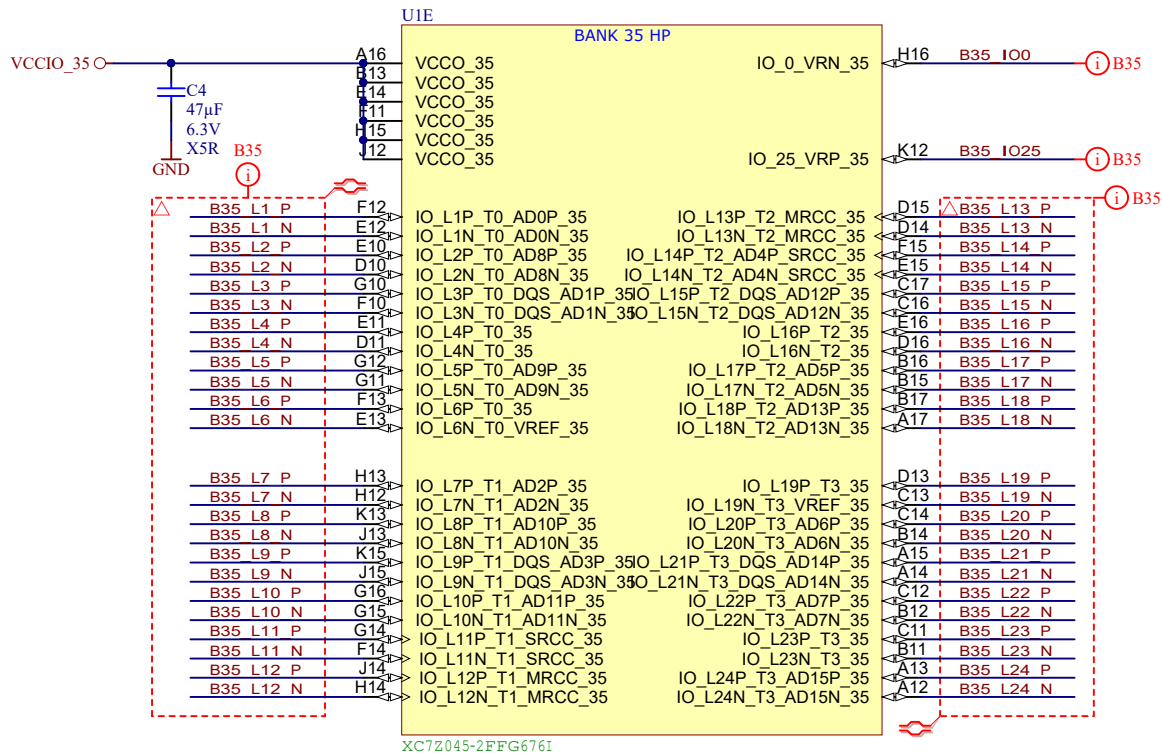
Title: TE0745 - Zynq_B33		
A4	Number: 10 92111-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 10 of 25
Filename: B33.SchDoc		



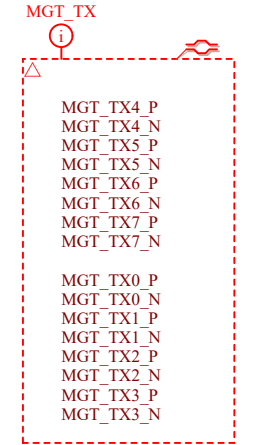
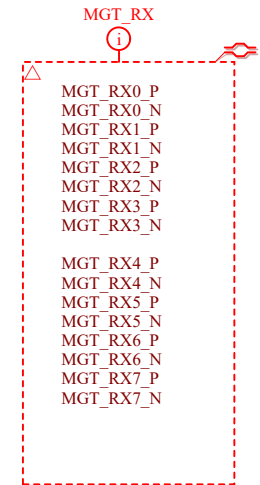
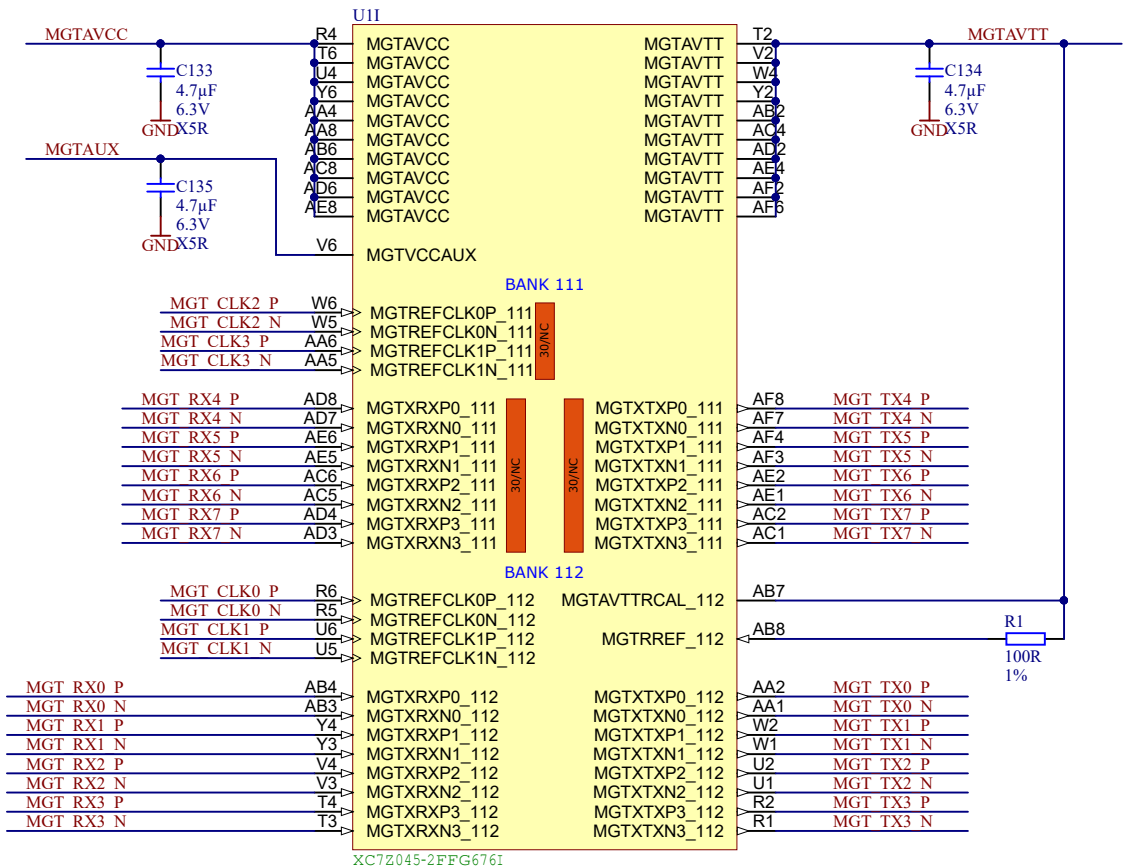
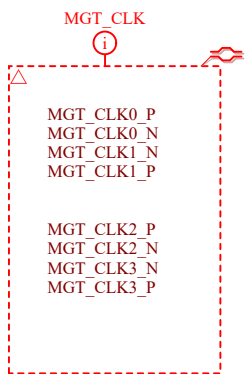
XC7Z045-2FFG6761



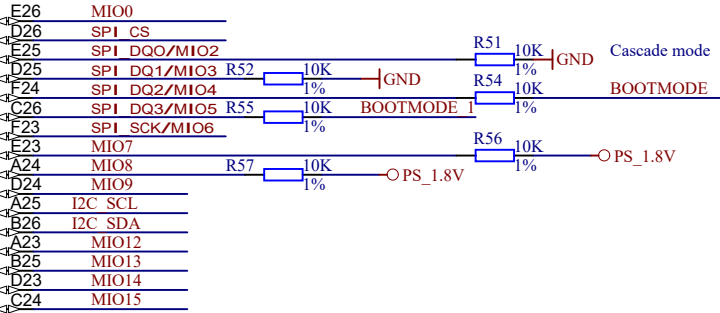
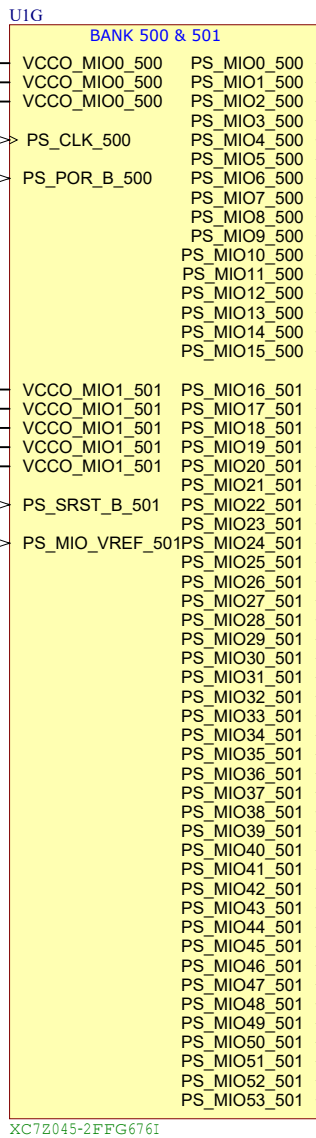
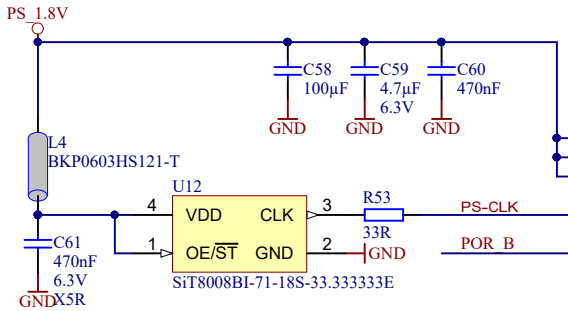
Title: TE0745 - Zynq_B34		
A4	Number: 11 92111-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 11 of 25
Filename: B34.SchDoc		



	Title: TE0745 - Zynq_B35		
	A4	Number: 12 92111-F	Rev. 02
	Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 12 of 25
	Filename: B35.SchDoc		

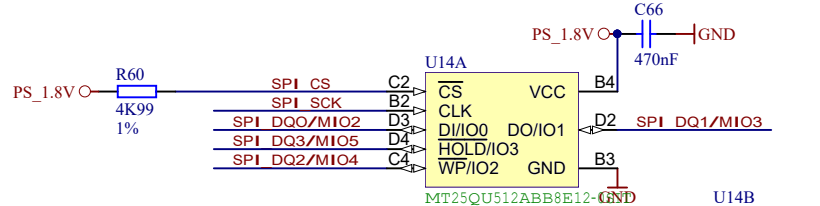
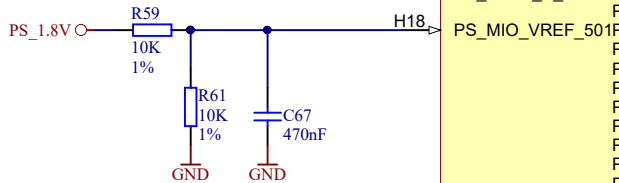
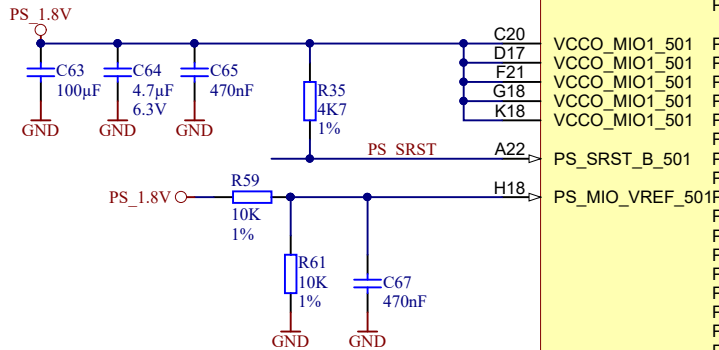


Title: TE0745 - Zynq_MGT		
A4	Number: 13 92I11-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 13 of 25
Filename: FPGA_MGT.SchDoc		



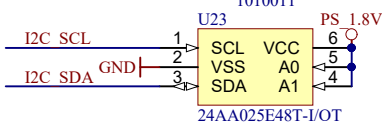
MIO Bank Voltage	MIO7 Bank0	MIO8 Bank1
2.5V, 3.3V	0 0	
1.8V	1 1	

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



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

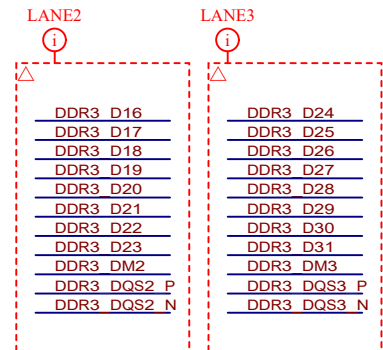
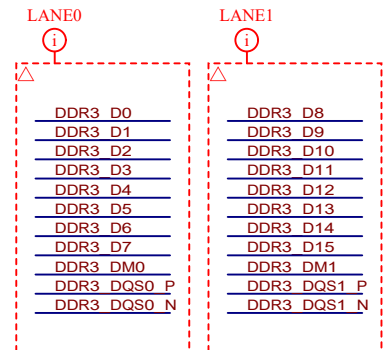
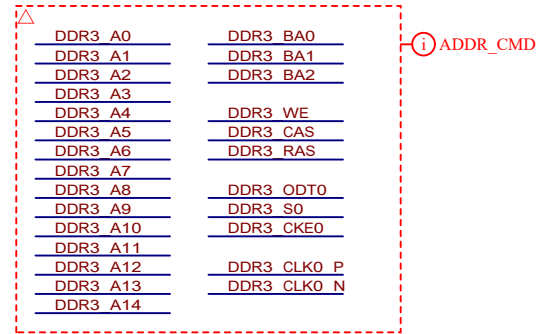
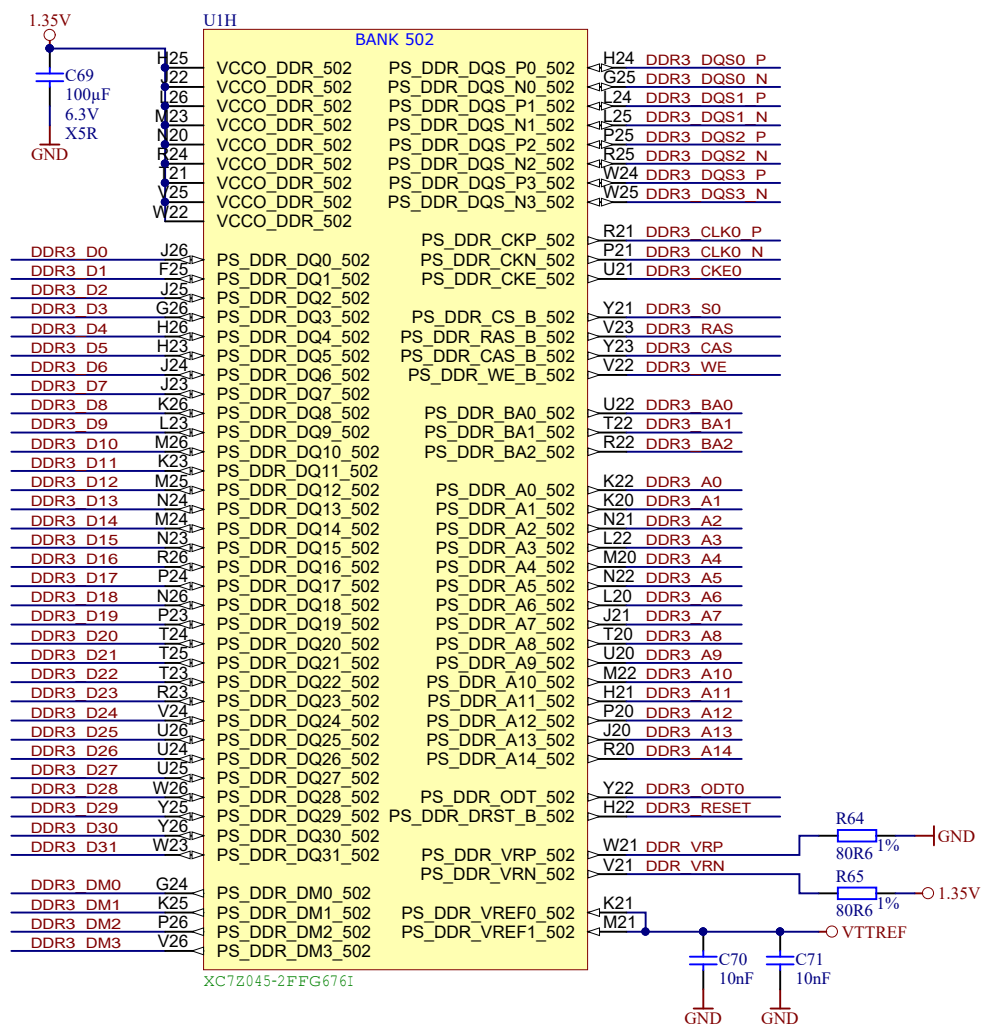
EEPROM for MAC
Slave ADDR:
1010011



- SPIFLASH
- SPI_SCK
- SPI_CS
- SPI_DQ0/MIO2
- SPI_DQ1/MIO3
- SPI_DQ2/MIO4
- SPI_DQ3/MIO5
- SPI_SCK/MIO6



Title: TE0745 - Zynq_MIO_Banks		
A4	Number: 14 92111-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 14 of 25
Filename: MIO_B500.SchDoc		



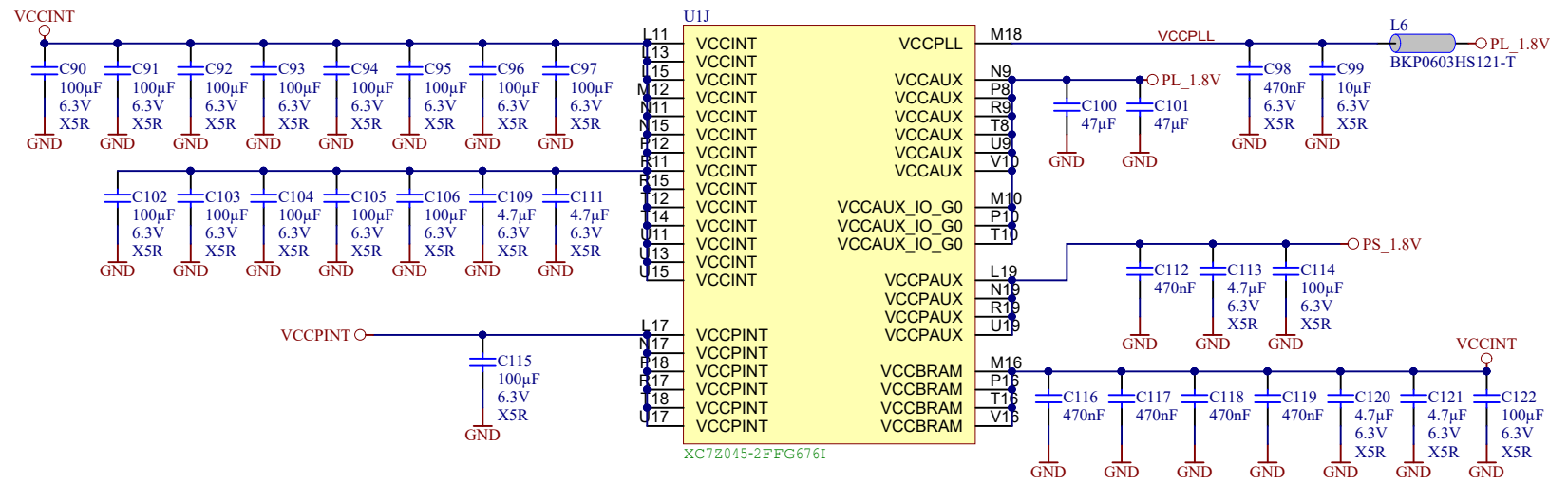
Title: TE0745 - Zynq_PS_DDR

A4	Number: 15 92111-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 15 of 25
Filename: PS-DDR.SchDoc		

UIK

A1	GND	GND	R16
A11	GND	GND	R18
A21	GND	GND	T11
B8	GND	GND	T5
B18	GND	GND	T9
C5	GND	GND	T1
C15	GND	GND	T13
C25	GND	GND	T15
D2	GND	GND	T17
D12	GND	GND	T19
D22	GND	GND	T26
E9	GND	GND	U3
E19	GND	GND	U7
F6	GND	GND	U10
F26	GND	GND	U14
G3	GND	GND	U16
G13	GND	GND	U18
G23	GND	GND	U28
H10	GND	GND	V1
H20	GND	GND	V5
J7	GND	GND	V7
J17	GND	GND	V17
K4	GND	GND	V20
K14	GND	GND	W3
L24	GND	GND	W7
L10	GND	GND	Y1
L20	GND	GND	Y5
L32	GND	GND	Y7
L14	GND	GND	Y8
L16	GND	GND	Y9
L18	GND	GND	Y14
L21	GND	GND	Y24
M9	GND	GND	AA3
M11	GND	GND	AA7
M15	GND	GND	AA9
M17	GND	GND	AA11
M19	GND	GND	AA21
N5	GND	GND	AB1
N10	GND	GND	AB5
N12	GND	GND	AB9
N16	GND	GND	AB18
N18	GND	GND	AC3
N25	GND	GND	AC7
P1	GND	GND	AC9
P2	GND	GND	AC15
P3	GND	GND	AC25
P4	GND	GND	AD1
P5	GND	GND	AD5
P6	GND	GND	AD9
P7	GND	GND	AD12
P9	GND	GND	AD22
P11	GND	GND	AE3
P15	GND	GND	AE7
P17	GND	GND	AE9
P19	GND	GND	AE19
P22	GND	GND	AF1
R3	GND	GND	AF5
R7	GND	GND	AF9
R10	GND	GND	AF16
R12	GND	GND	AF26

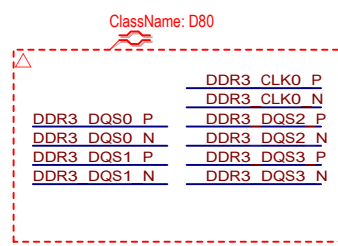
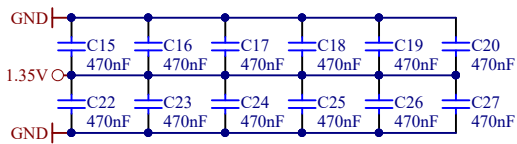
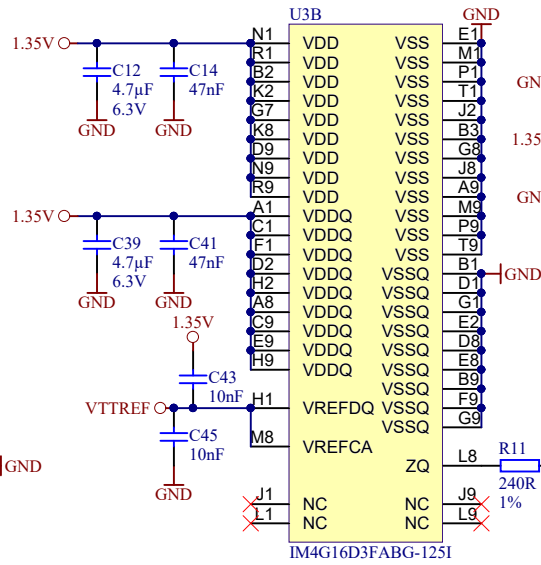
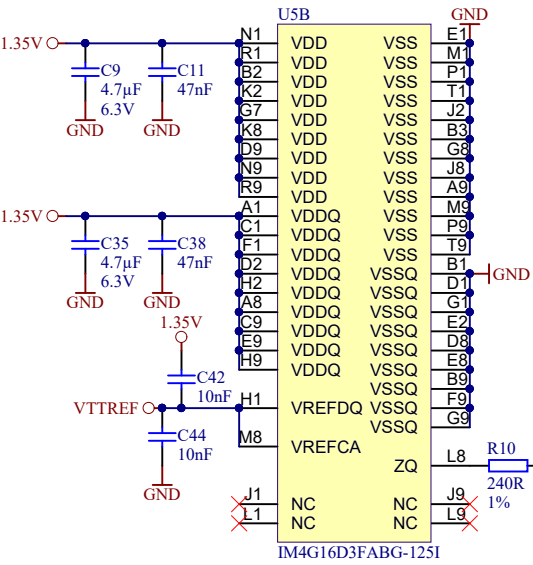
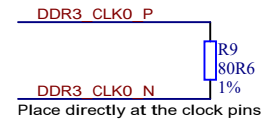
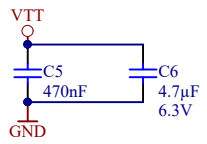
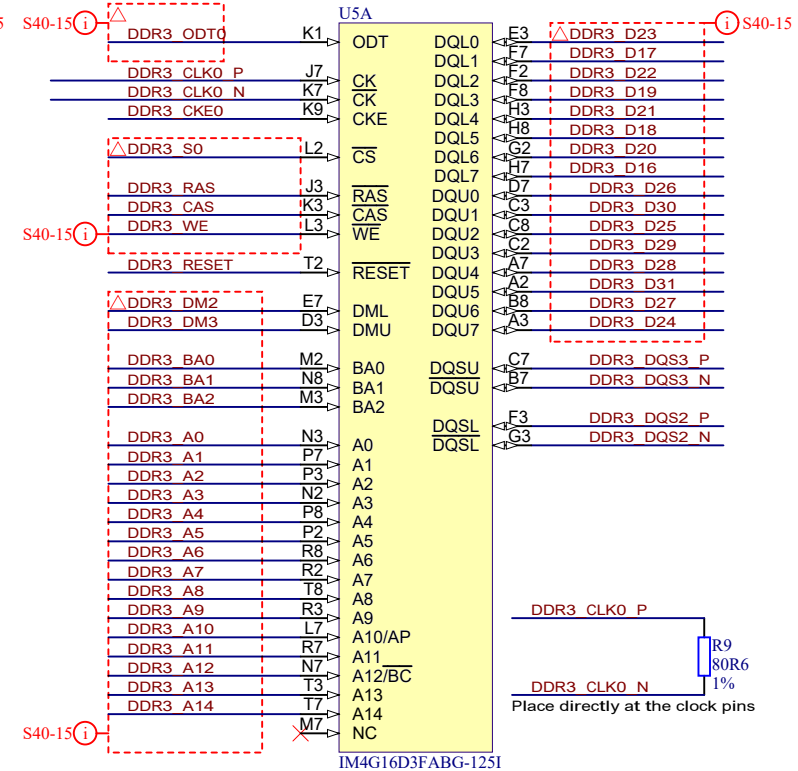
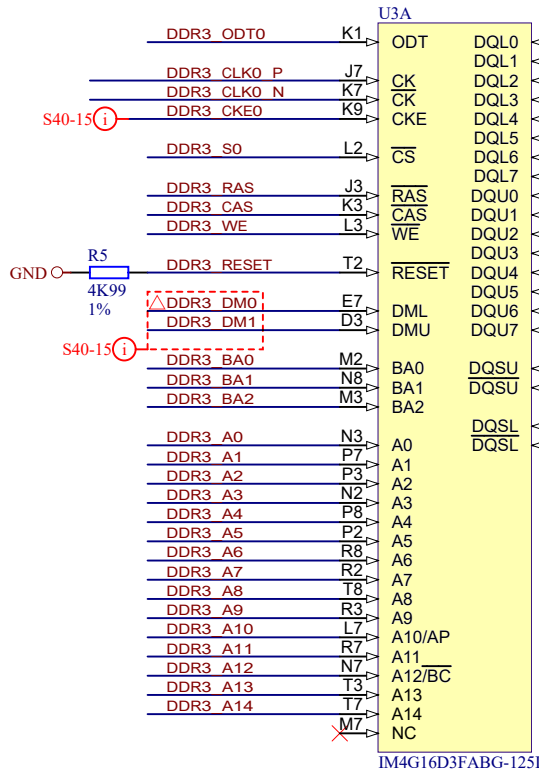
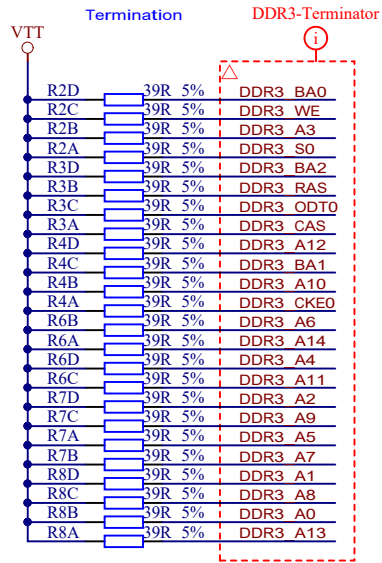
XC7Z045-2FFG6761



XC7Z045-2FFG6761



Title: TE0745 - Zynq_Power		
A4	Number: 16 9211-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 16 of 25
Filename: ZYNC_POWER.SchDoc		



Title: TE0745 - DDR3 RAM		
A4	Number: 17 92111-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH	Page 17 of 25
Filename: DDR3-RAM.SchDoc		

1

2

3

4

A

A

B

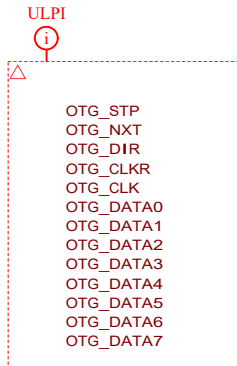
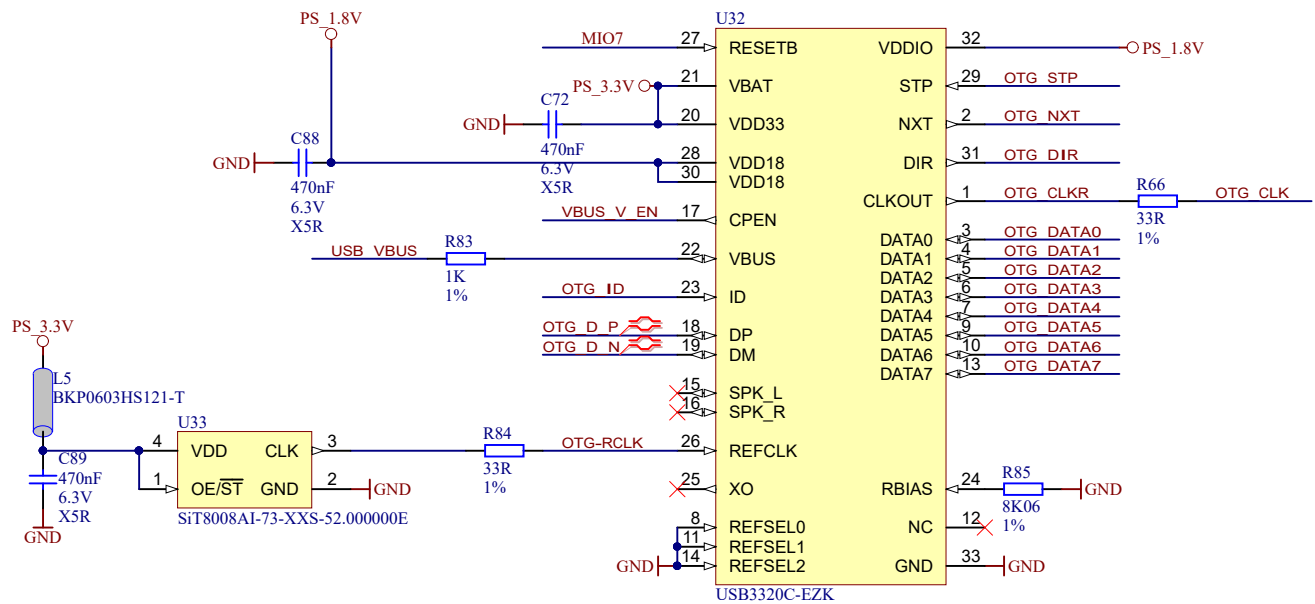
B

C

C

D

D



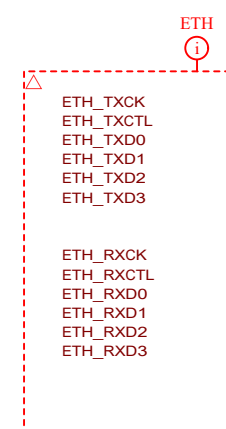
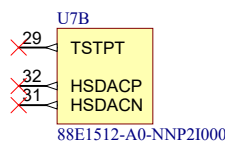
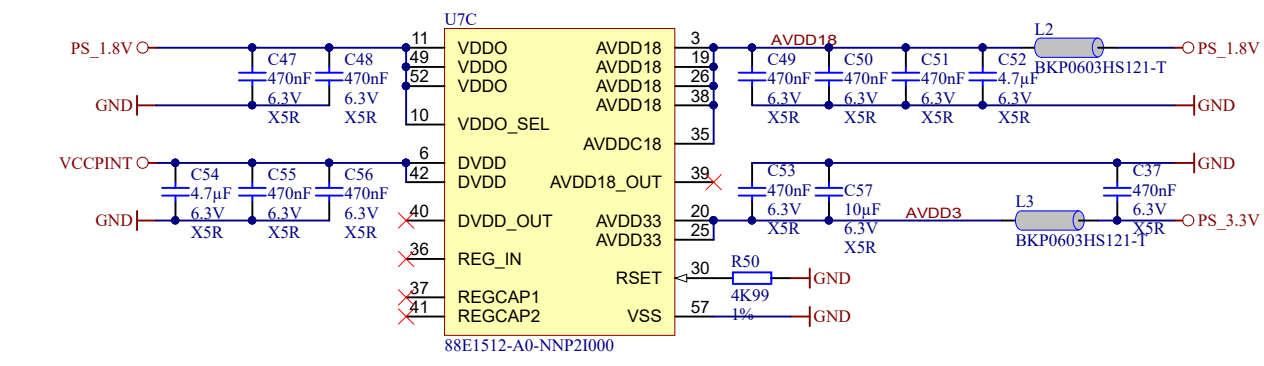
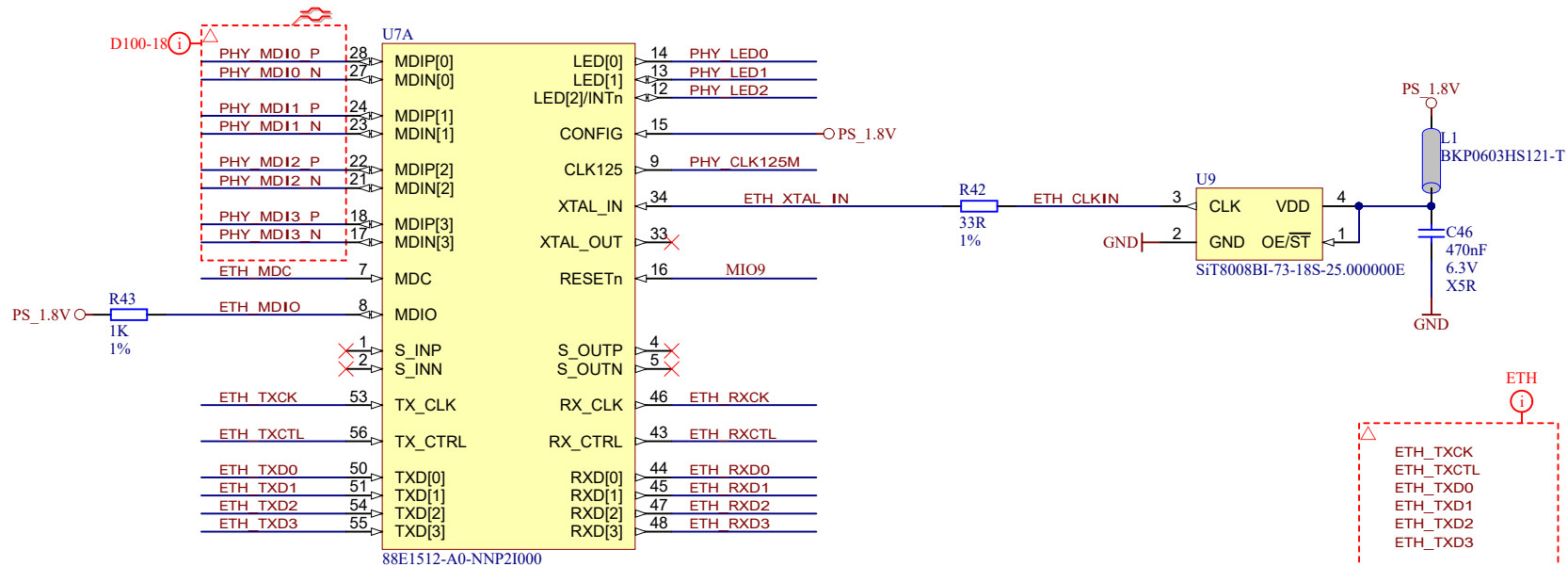
Title: TE0745 - USB_PHY		
A4	Number: 18 92111-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 18 of 25
Filename: USB-PHY.SchDoc		


1

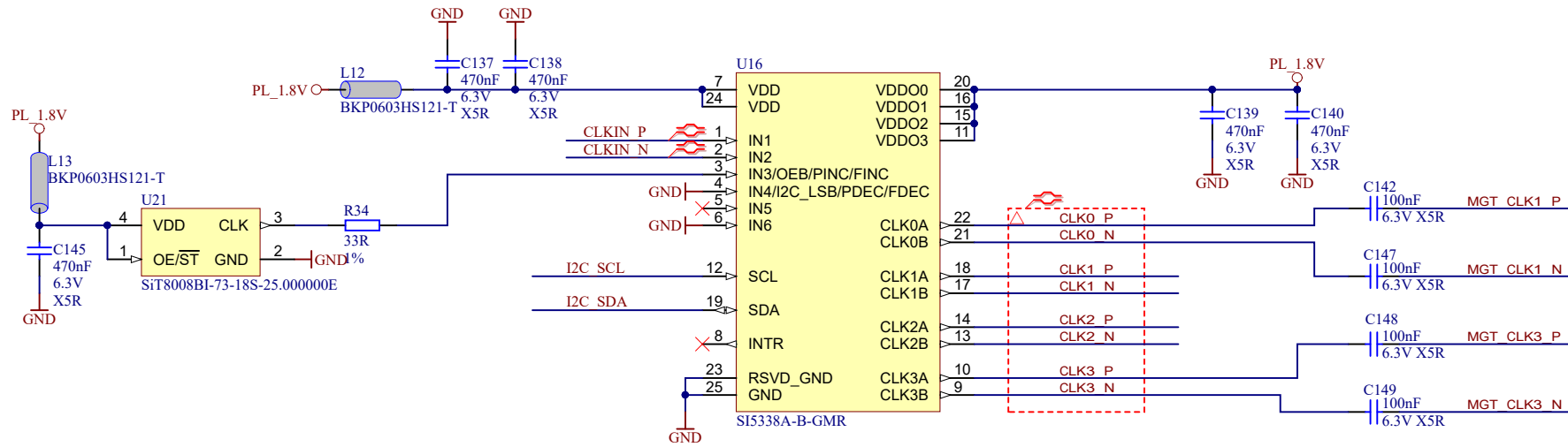
2

3


4

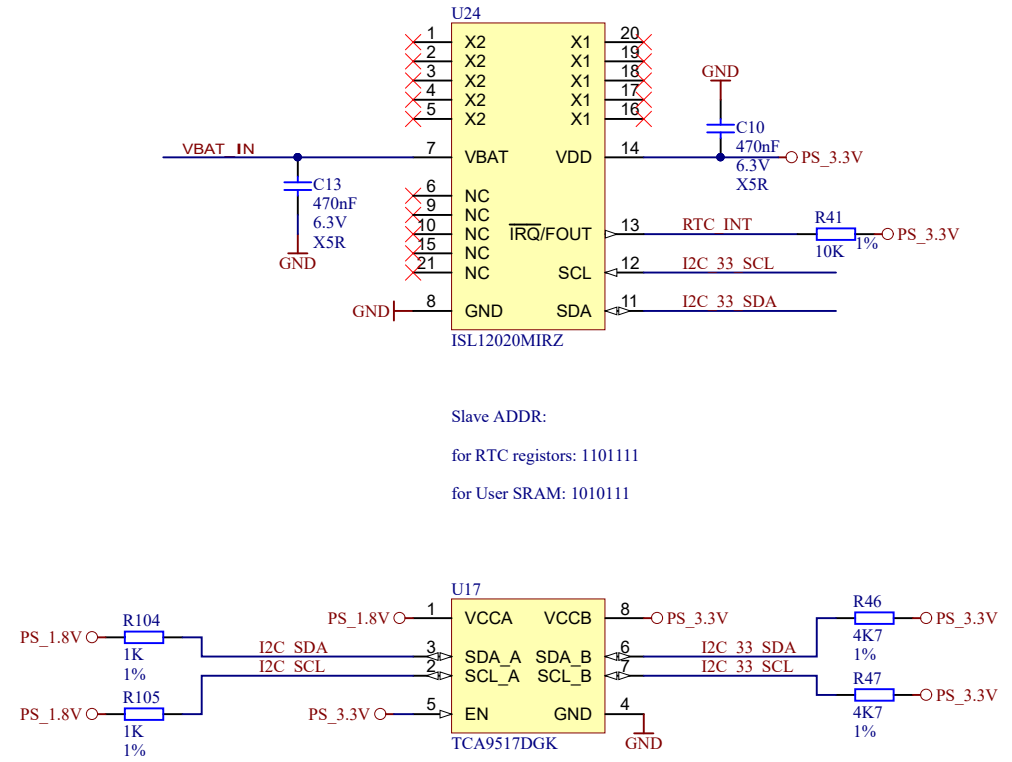


			Title: TE0745 - ETH_PHY	
			A4	Number: 19 92111-F
Date: 2016-04-28		Copyright: Trenz Electronic GmbH / TT		Page 19 of 25
Filename: ETH-PHY.SchDoc				



Slave ADDR:
1110000 OR 1110001

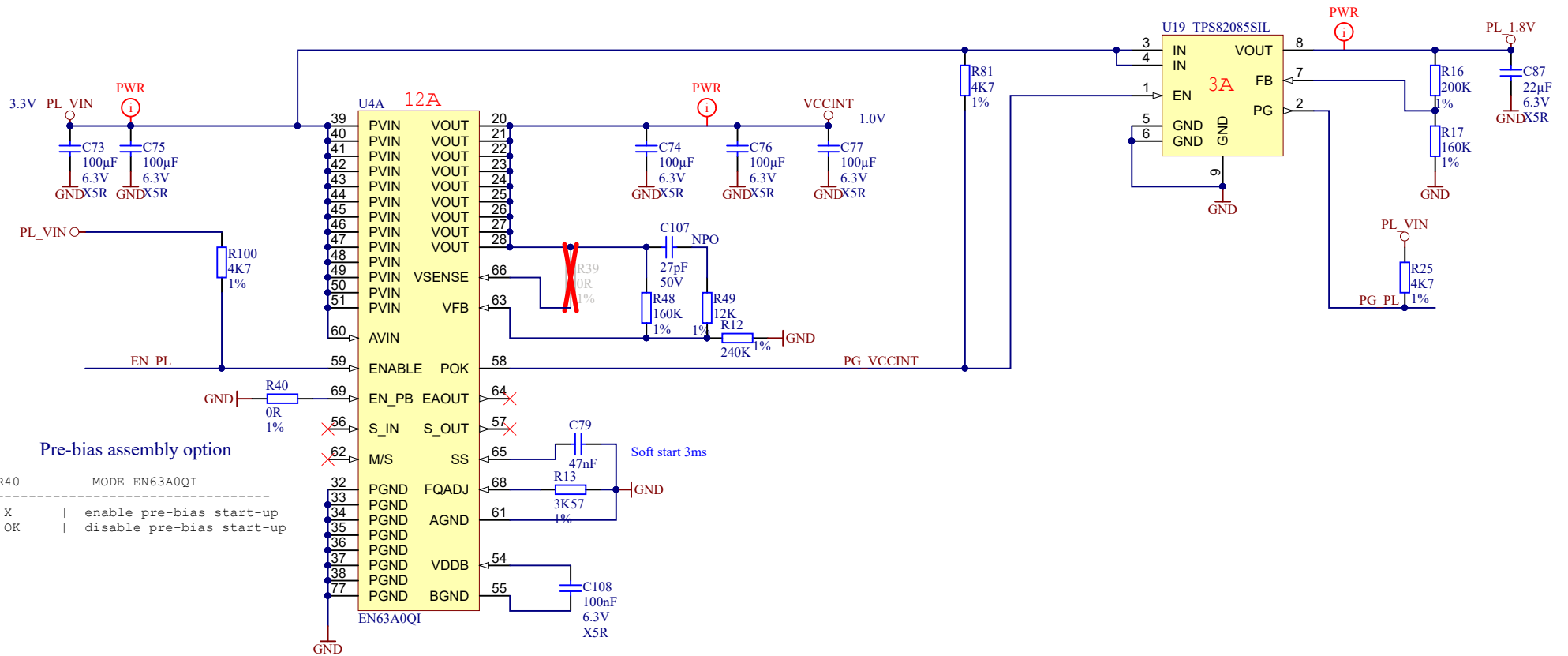
		Title: TE0745 - CLK	
		A4	Number: 20 92111-F
Date: 2016-04-28		Copyright: Trenz Electronic GmbH / TT	
Filename: CLK.SchDoc		Page 20 of 25	



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



Title: TE0745 - RTC		
A4	Number: 21 92111-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page21 of 25
Filename: SENSOR-RTC.SchDoc		



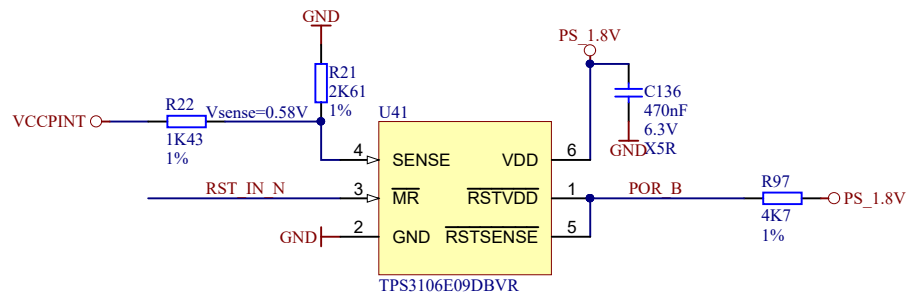
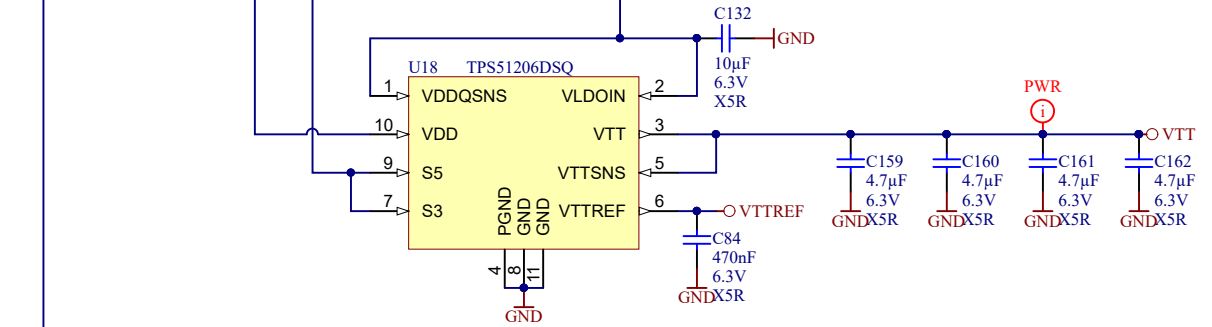
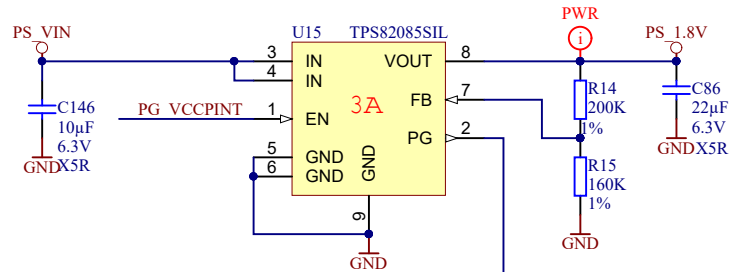
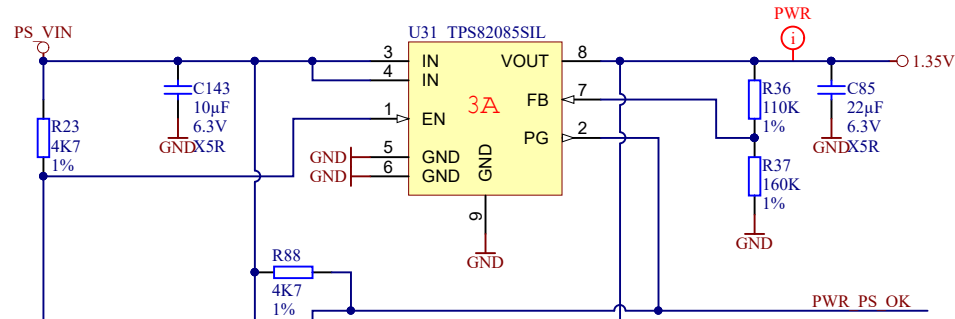
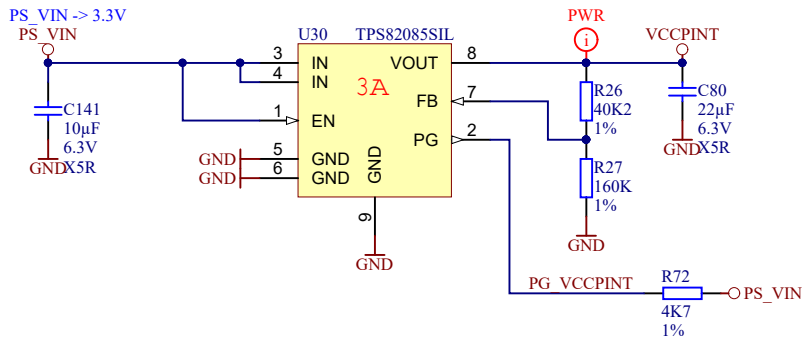
U4B

1	NC	NC	17
2	NC	NC	18
3	NC	NC	19
4	NC	NC	29
5	NC	NC(SW)	30
6	NC	NC(SW)	31
7	NC	NC	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

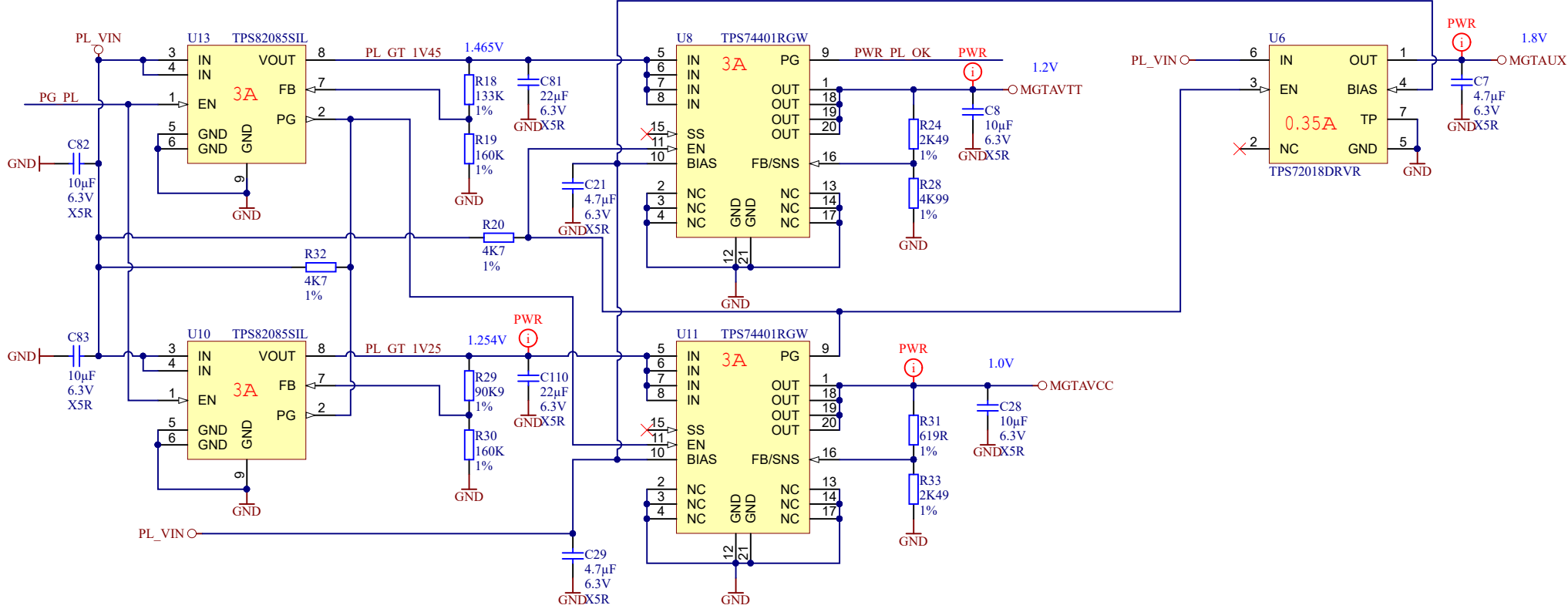
EN63A0QI



Title: TE0745 - Power		
A4	Number: 22 92111-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page 22 of 25
Filename: POWER.SchDoc		



Title: TE0745 - Power2		
A4	Number: 23 92111-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page23 of 25
Filename: POWER_2.SchDoc		



Title: TE0745 - Power3		
A4	Number: 24 92111-F	Rev. 02
Date: 2016-04-28	Copyright: Trenz Electronic GmbH / TT	Page24 of 25
Filename: POWER_3.SchDoc		

