

1

2

3

4

A

A

B

B

C

C

D

D

U\_DDR3-RAM  
DDR3-RAM.SchDoc

U\_Ethernet  
Ethernet.SchDoc

U\_USB-PHY  
USB-PHY.SchDoc

U\_SOC  
SOC.SchDoc

U\_CPLD  
CPLD.SchDoc

U\_POWER2  
POWER2.SchDoc

U\_HyperFlash\_RAM  
HyperFlash\_RAM.SchDoc

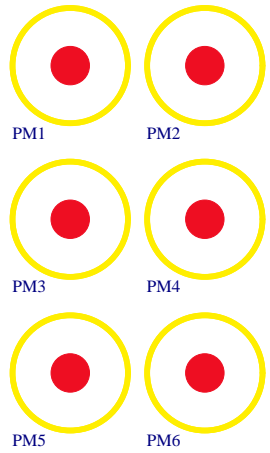
U\_Clock  
Clock.SchDoc

U\_eMMC  
eMMC.SchDoc

U\_Connectors  
Connectors.SchDoc

U\_POWER  
POWER.SchDoc

LOGO1  
TE Logo PRINT Layer  
LOGO PRINT



Serial  
Serialnumber 6,3 x 6.3mm

Special notes:



Title: TE0782 - Overview		
A4	Number: TE0782 92133MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page1 of 31
Filename: TE0782.SchDoc		

1

2

3

4

1

2

3

4

U\_HSMC\_CONN\_J1  
HSMC\_CONN\_J1.SchDoc



U\_HSMC\_CONN\_J2  
HSMC\_CONN\_J2.SchDoc



U\_HSMC\_CONN\_J3  
HSMC\_CONN\_J3.SchDoc



A

A

B

B

C

C

D


D

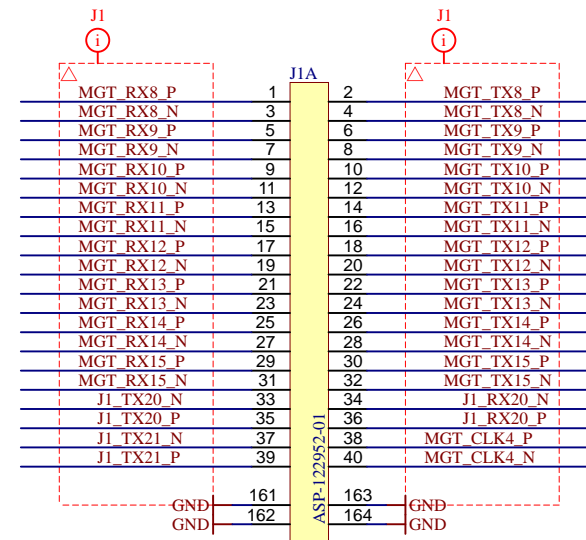
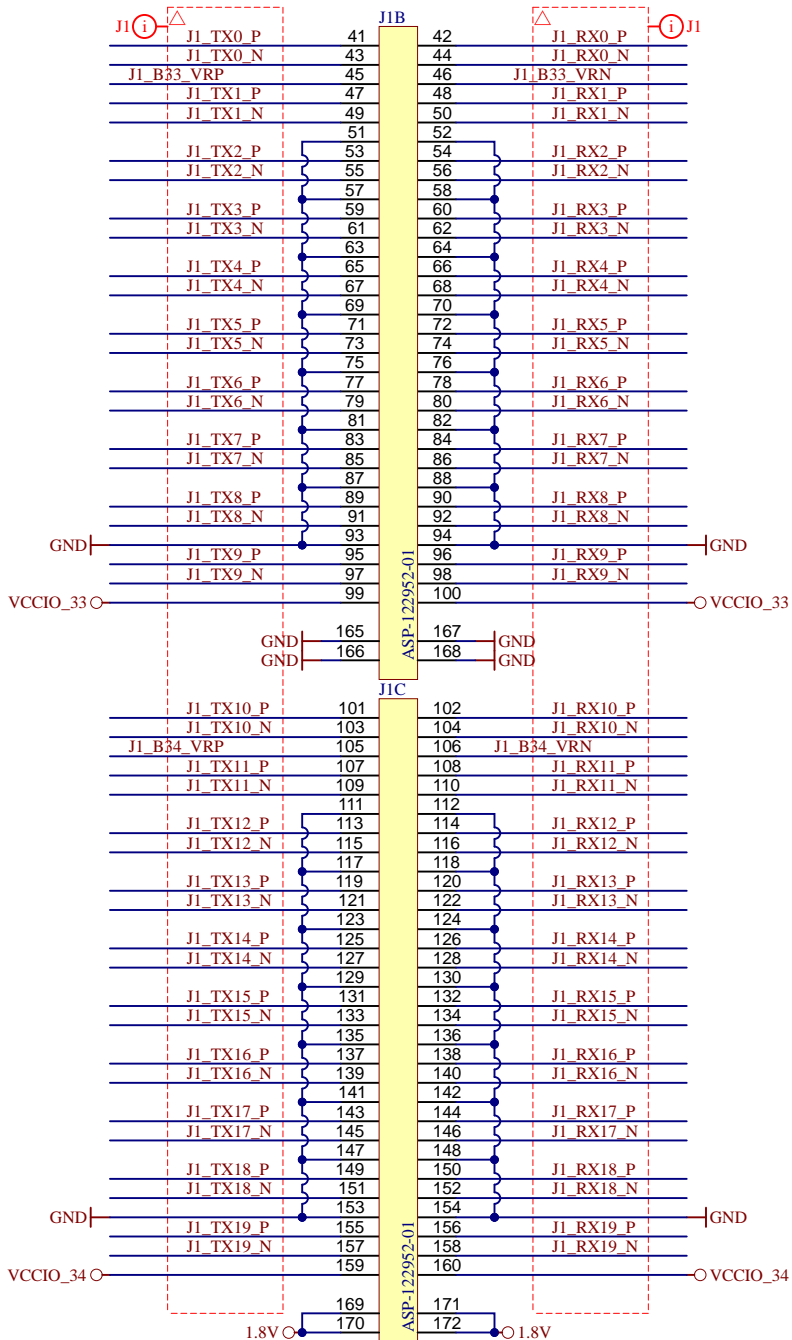
1

2

3

4

		Title: <b>TE0782 - Connectors</b>	
		A4	Number: <b>TE0782 92I33MA</b>
Date: <b>2015-05-27</b>		Copyright: <b>Trenz Electronic GmbH</b>	
Filename: <b>Connectors.SchDoc</b>		Page <b>2</b> of <b>31</b>	



Title: TE0782 - HSMC_Connector_J1		
A4	Number: TE0782 92I33MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page3 of 31
Filename: HSMC_CONN_J1.SchDoc		

A

A

B

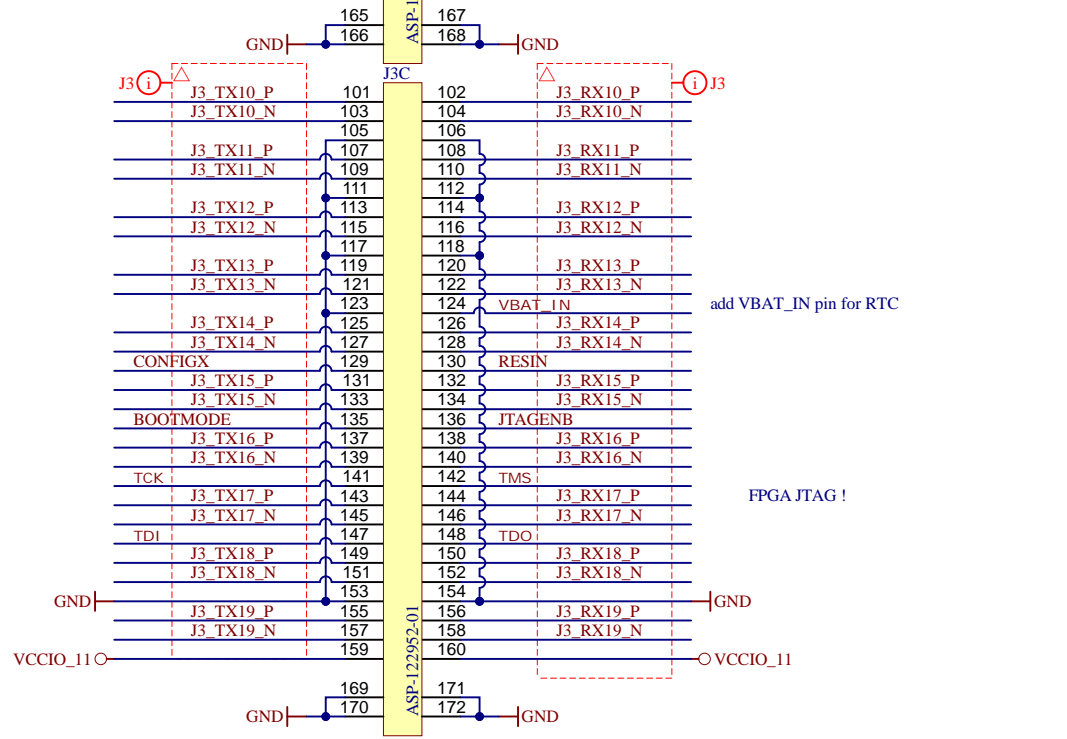
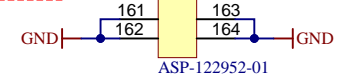
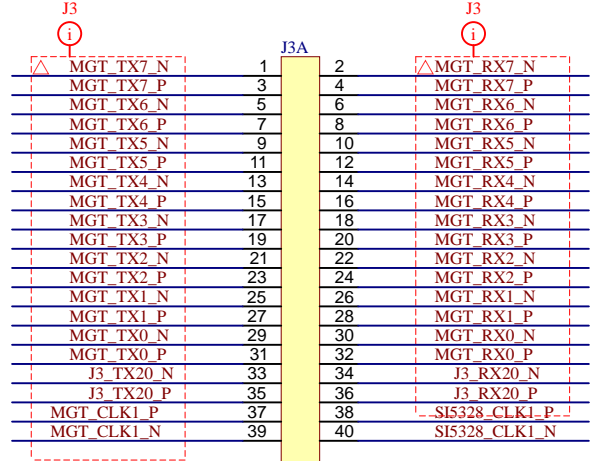
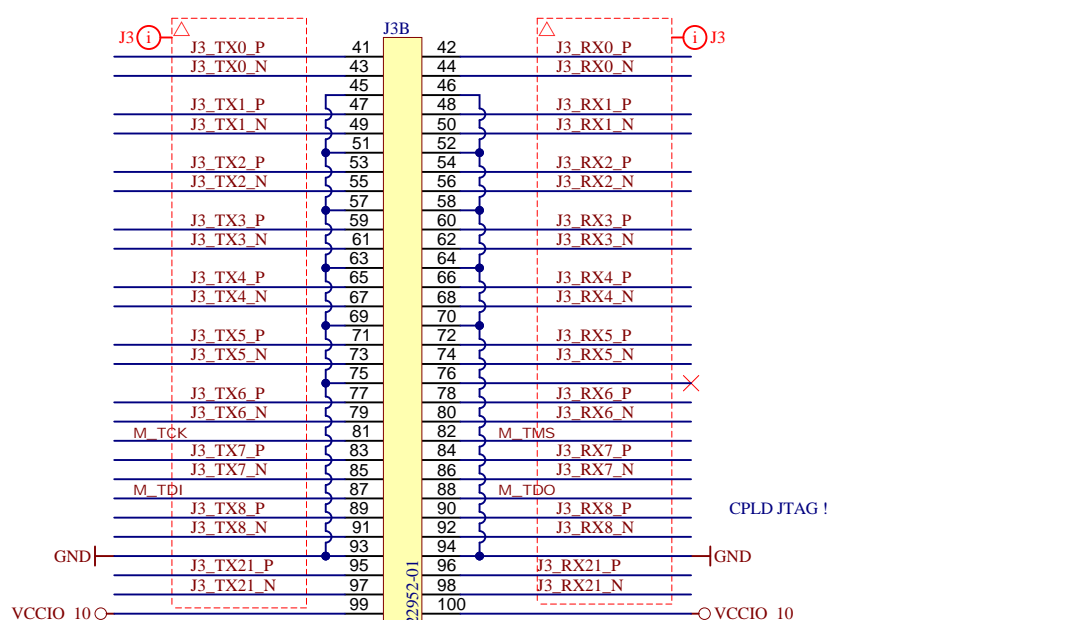
B

C

C

D

D



Title: TE0782 - HSMC_Connector_J3		
A4	Number: TE0782 92I33MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page4 of 31
Filename: HSMC_CONN_J3.SchDoc		

1

2

3

4

A

A

B

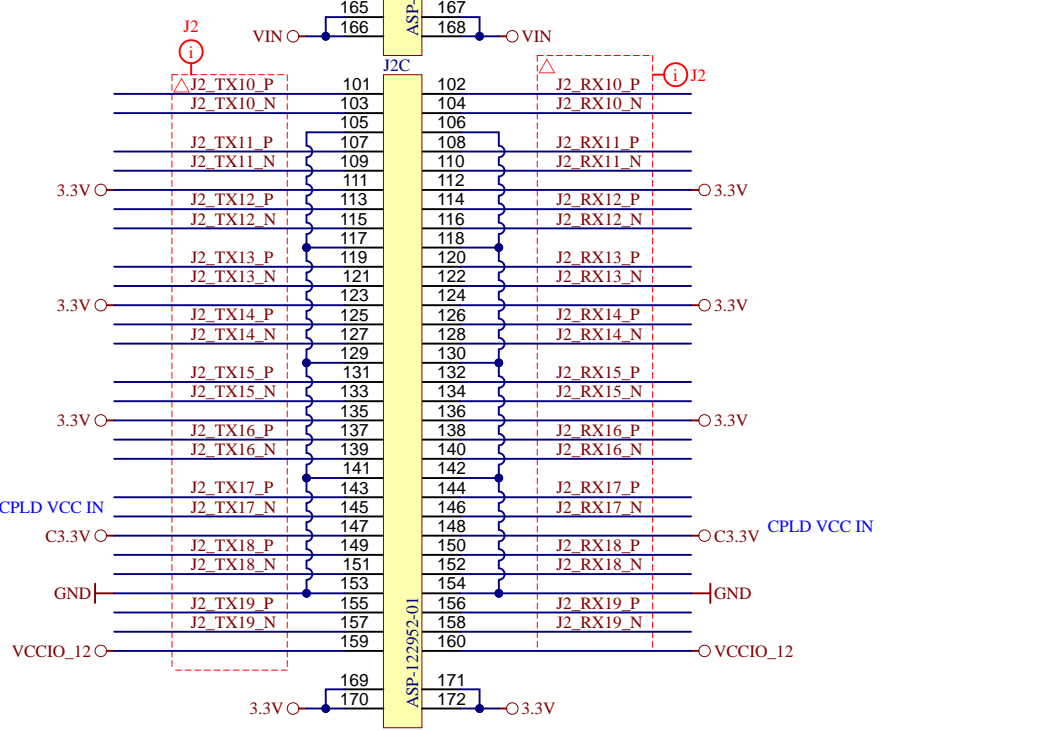
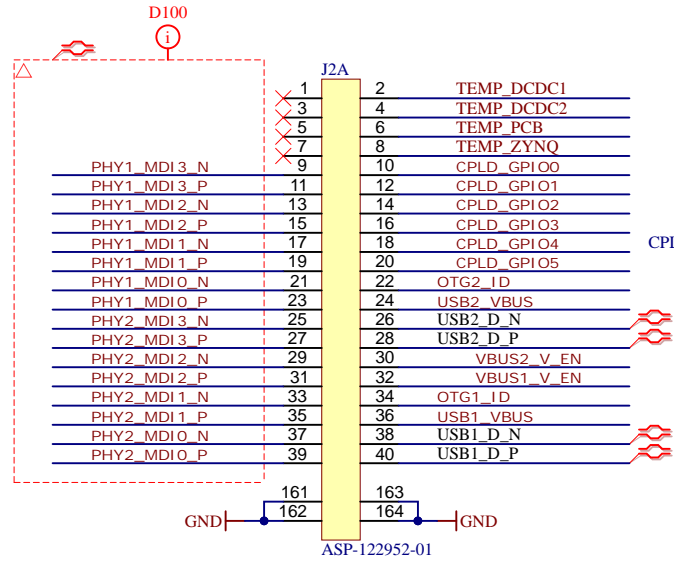
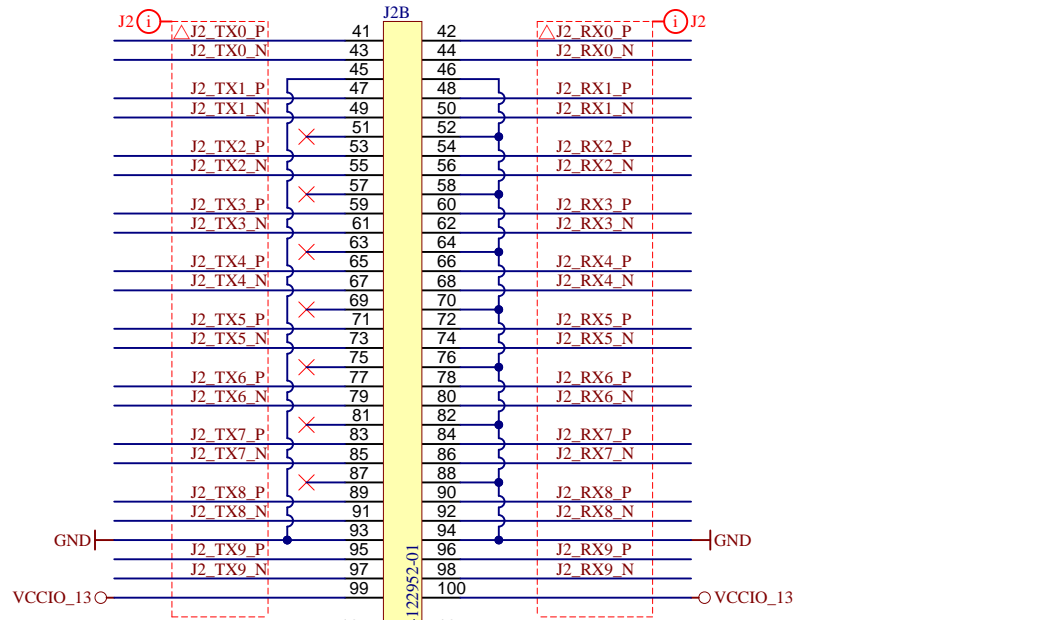
B

C

C

D

D



Title: TE0782 - HSMC_Connector_J2		
A4	Number: TE0782 92I33MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page5 of 31
Filename: HSMC_CONN_J2.SchDoc		

1

2

3

4

1

2

3

4

U\_PS-DDR  
PS-DDR.SchDoc



U\_B9  
B9.SchDoc



U\_MIO-BANKS  
MIO-BANKS.SchDoc



U\_B10  
B10.SchDoc



U\_HP-BANKS  
HP-BANKS.SchDoc



U\_B11  
B11.SchDoc



U\_FPGA-MGT  
FPGA-MGT.SchDoc



U\_B12  
B12.SchDoc



U\_FPGA-CFG  
FPGA-CFG.SchDoc



U\_B13  
B13.SchDoc



U\_FPGA-PWR  
FPGA-PWR.SchDoc



A

A

B


B

C

C

D

D

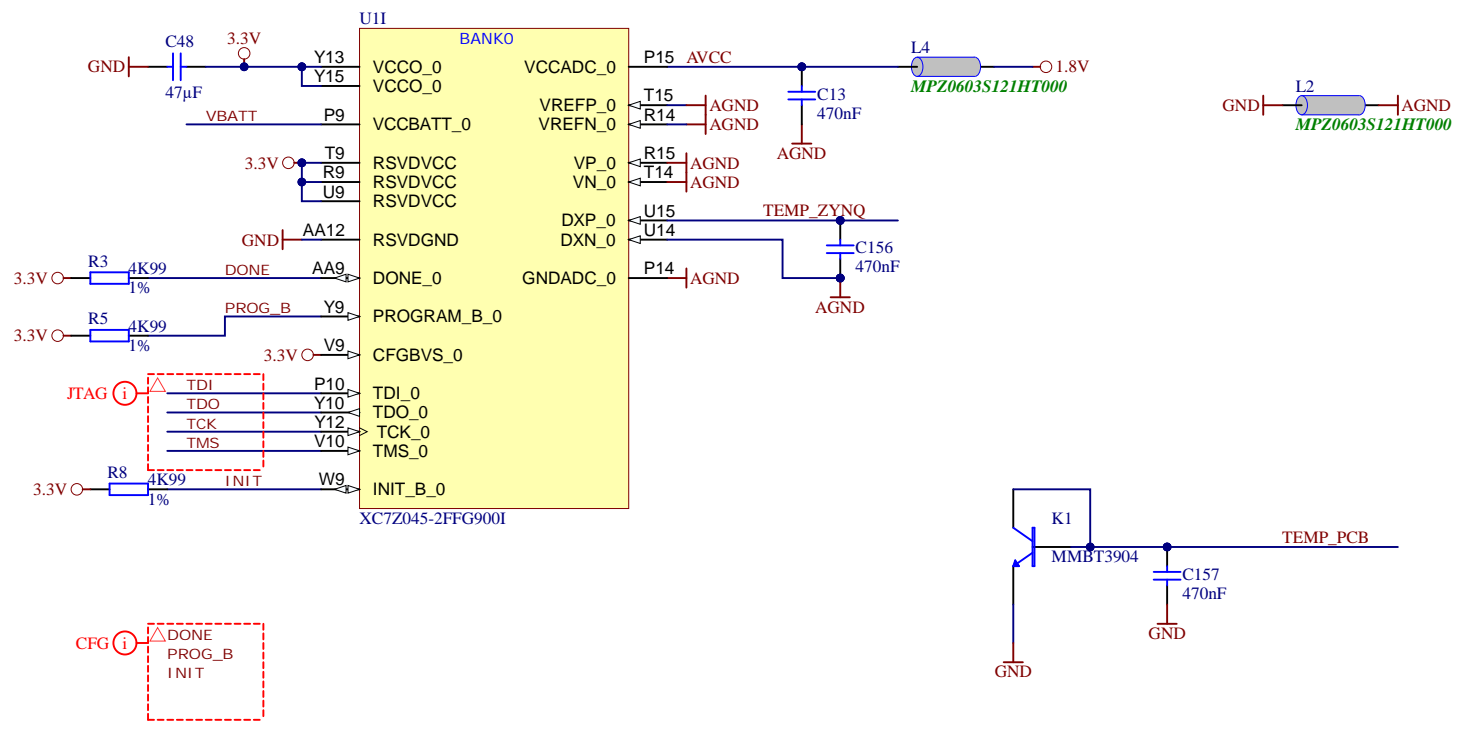
			Title: TE0782 - SOC		
			A4	Number: TE0782 92I33MA	Rev. 02
Date: 2015-05-27		Copyright: Trenz Electronic GmbH		Page6 of 31	
Filename: SOC.SchDoc					


1

2

3

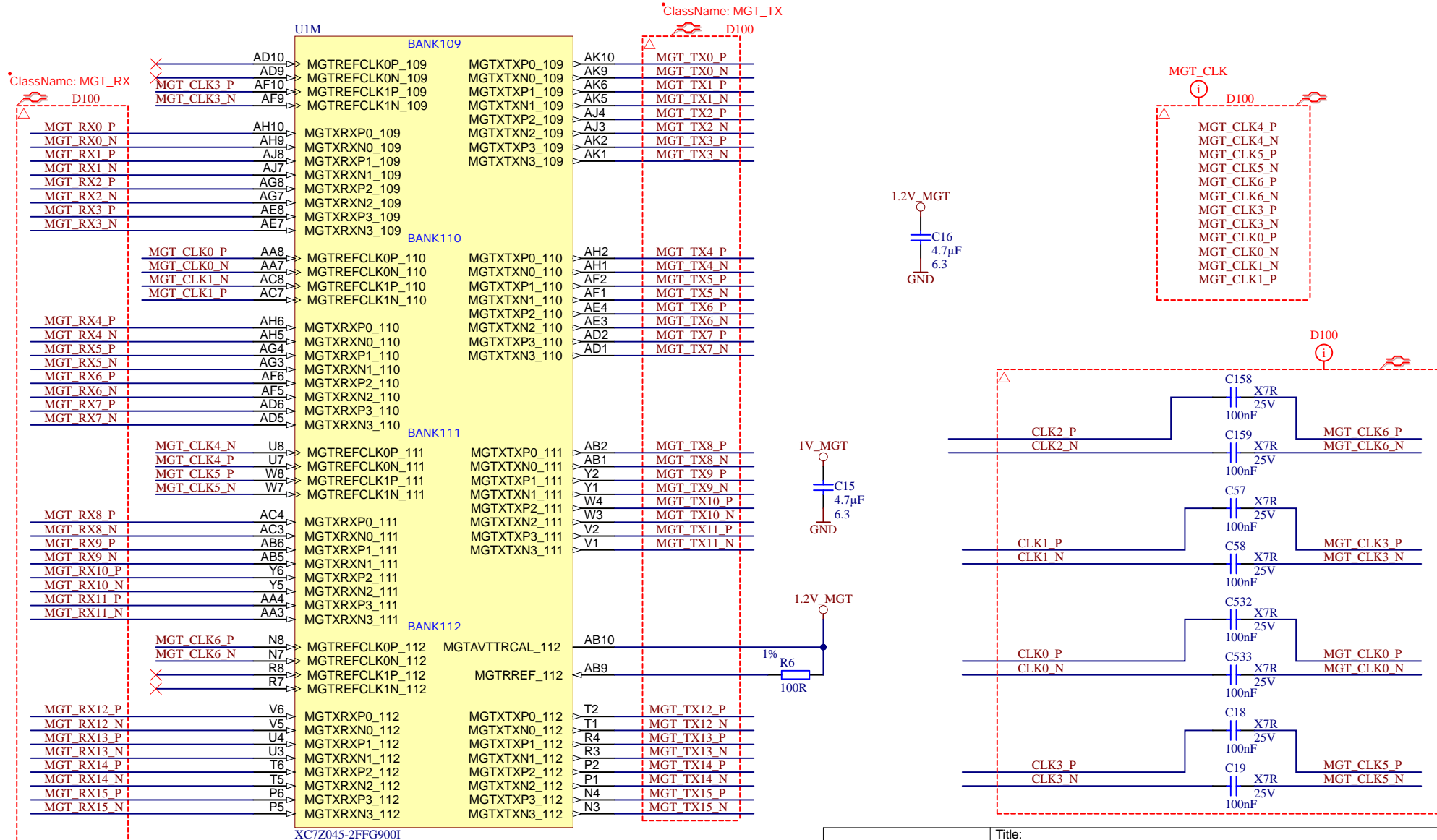
4



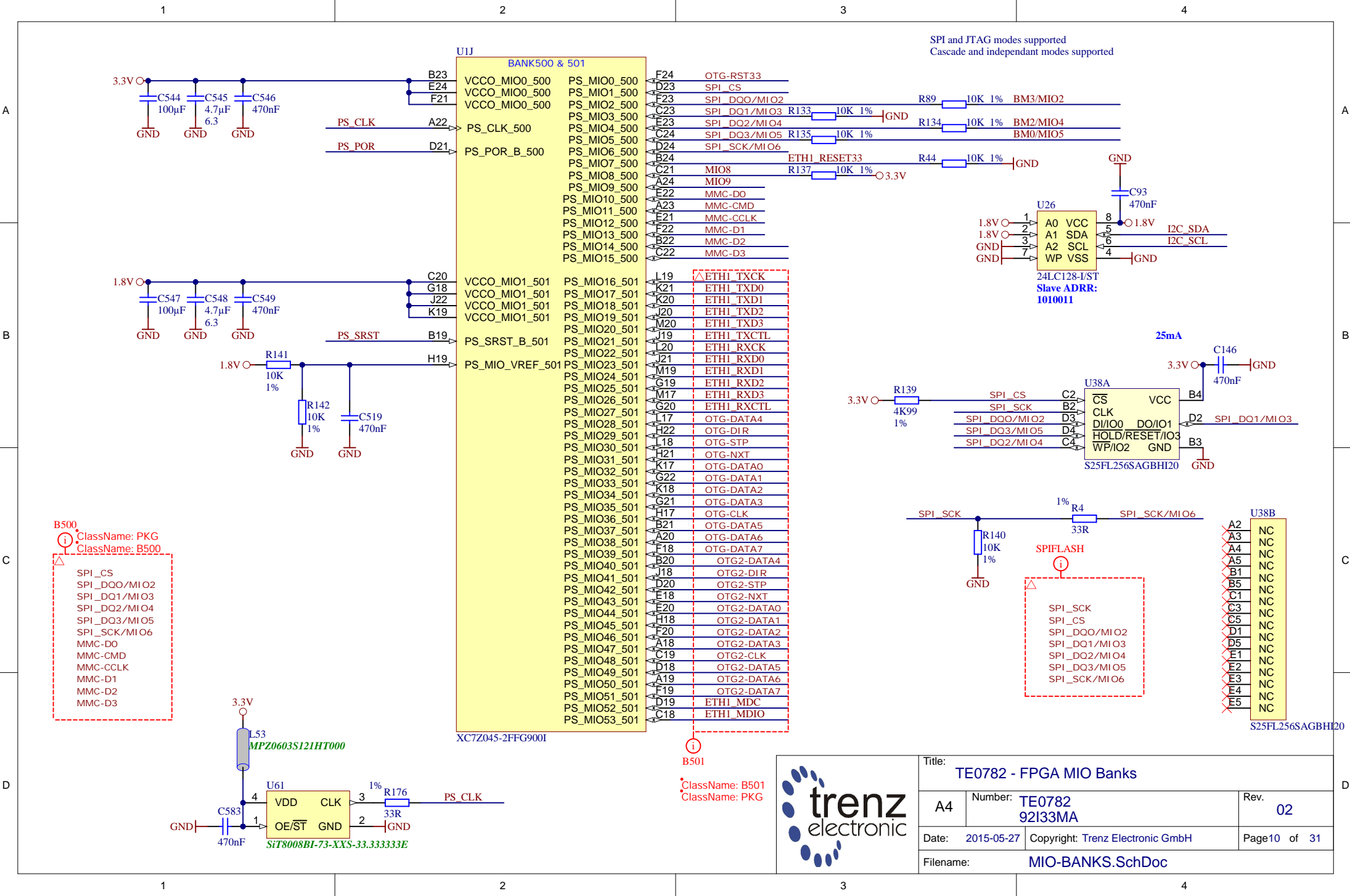
	Title: TE782 - FPGA Configuration		
	A4	Nummer: TE0782 92I33MA	Rev. 02
	Datum: 2015-05-27	Zeichner: Trenz Electronic GmbH	Blatt 7 von 31
	Filename: FPGA-CFG.SchDoc		



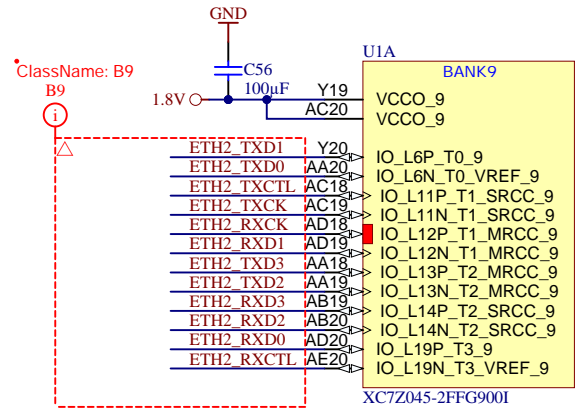





Title: TE0782 - FPGA MGT		
A4	Number: TE0782 92I33MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page9 of 31
Filename: FPGA-MGT.SchDoc		



Title: <b>TE0782 - FPGA MIO Banks</b>		
A4	Number: <b>TE0782 92I33MA</b>	Rev. <b>02</b>
Date: <b>2015-05-27</b>	Copyright: <b>Trenz Electronic GmbH</b>	Page <b>10</b> of <b>31</b>
Filename: <b>MIO-BANKS.SchDoc</b>		

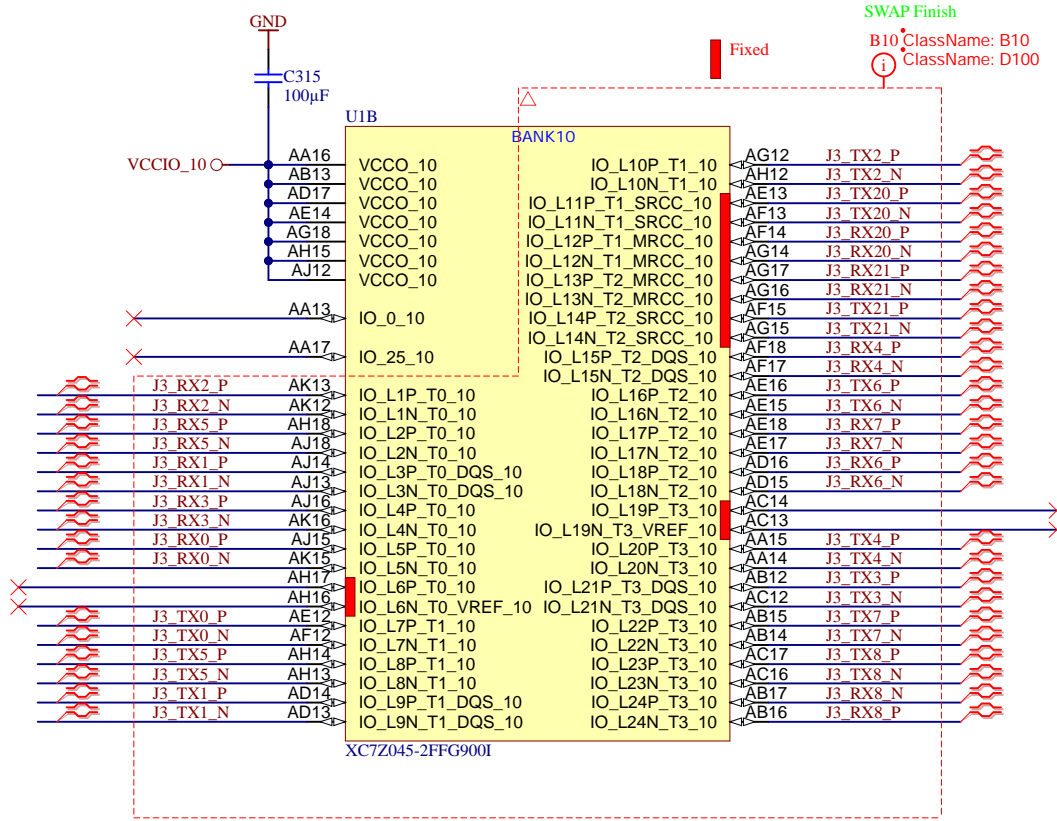


RXCK Fix to MRCCL  
Fixed



Title: TE0782 - FPGA B9		
A4	Number: TE0782 92I33MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 11 of 31
Filename: B9.SchDoc		

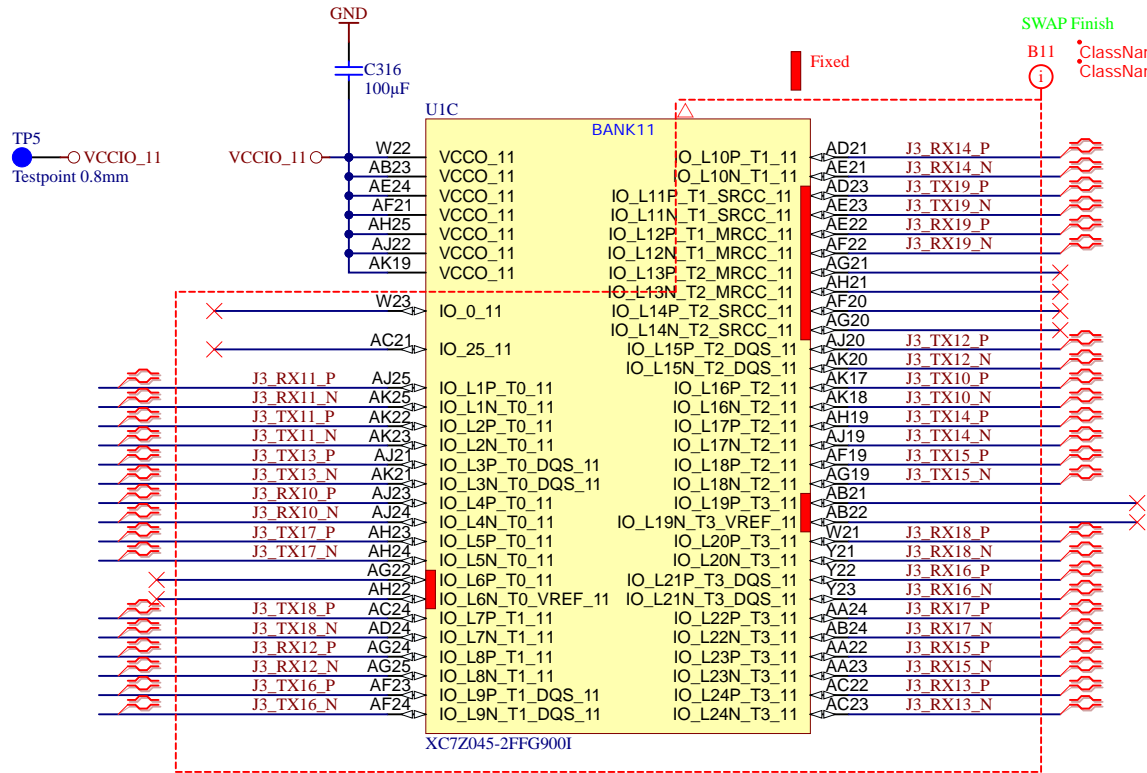
TP4  
 ● ○ VCCIO\_10  
 Testpoint 0.8mm





SWAP Finish  
 Fixed  
 B10:ClassName: B10  
 D100:ClassName: D100

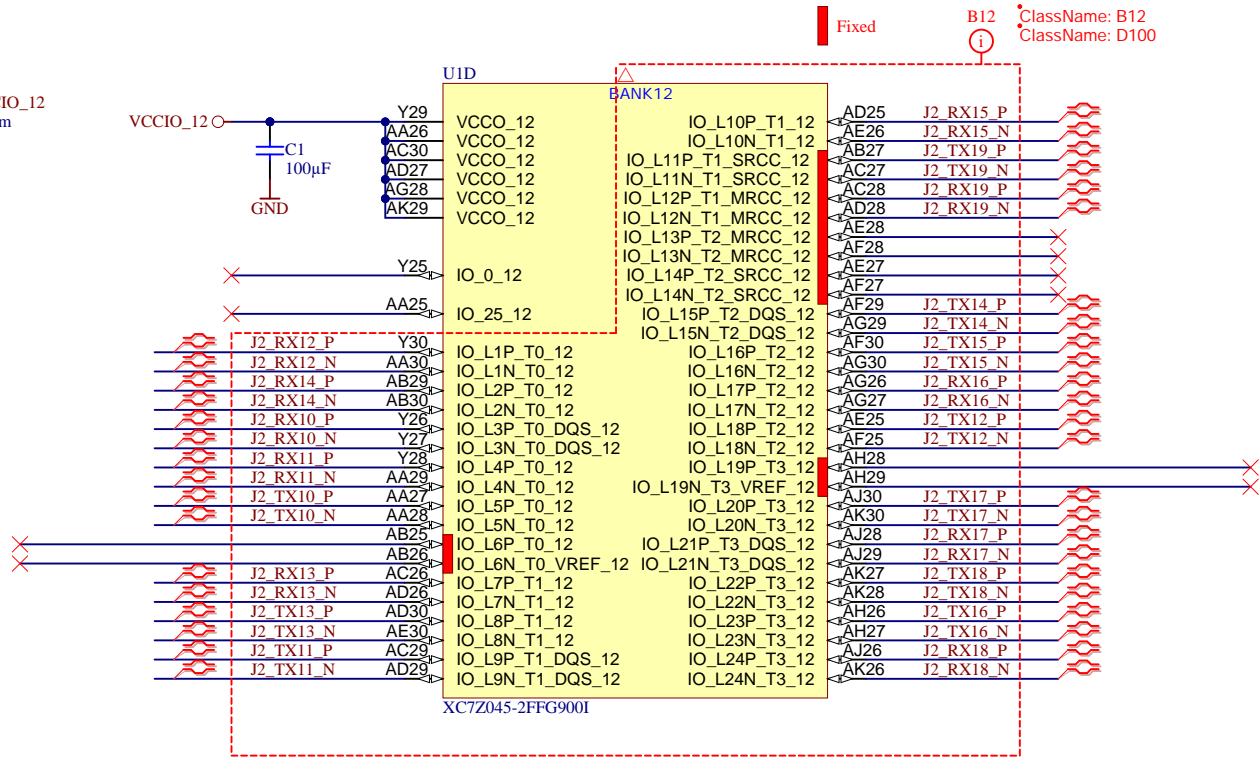


Title: TE0782 - FPGA B10		
A4	Number: TE0782 92I33MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 12 of 31
Filename: B10.SchDoc		

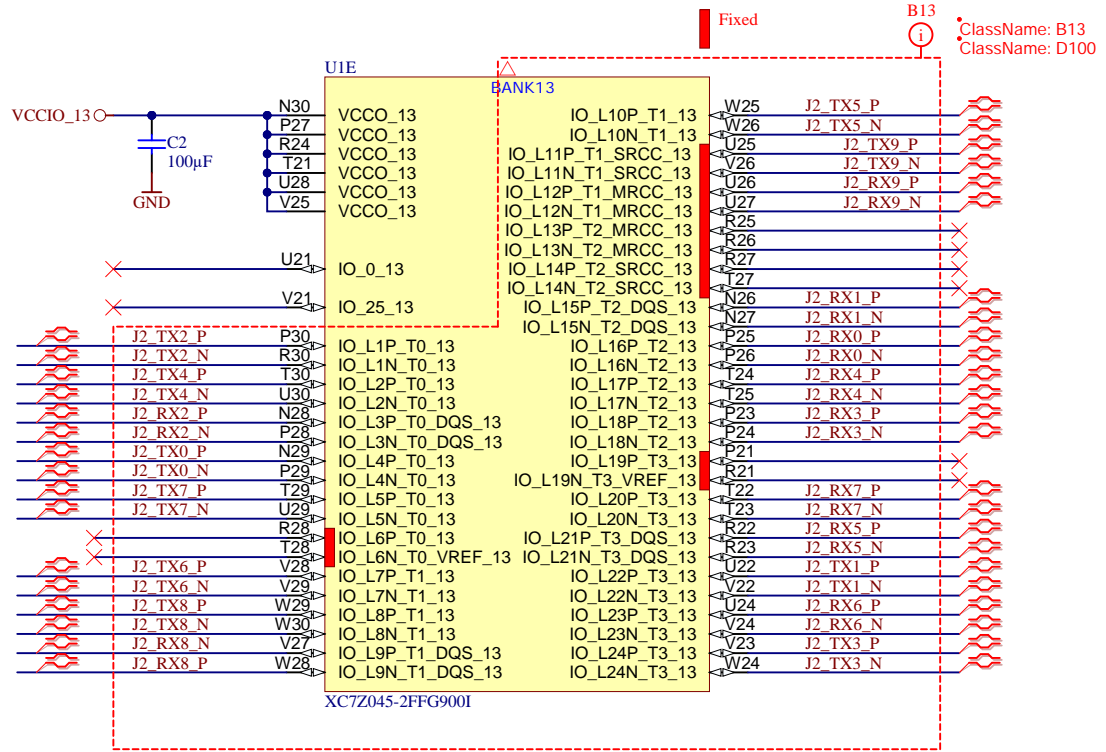
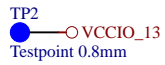


			Title: TE0782 - FPGA B11	
			A4	Number: TE0782 92I33MA
Date: 2015-05-27		Copyright: Trenz Electronic GmbH		Page13 of 31
Filename: B11.SchDoc				

TP1  
 VCCIO\_12  
 Testpoint 0.8mm



Title: TE0782 - FPGA B12		
A4	Number: TE0782 92I33MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 14 of 31
Filename: B12.SchDoc		



	Title: TE0782 - FPGA B13		
	A4	Number: TE0782 92I33MA	Rev. 02
	Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page15 of 31
	Filename: B13.SchDoc		

1

2

3

4

U\_B33  
B33.SchDoc



U\_B34  
B34.SchDoc



U\_B35  
B35.SchDoc



A

A

B

B

C

C

D


D

1

2

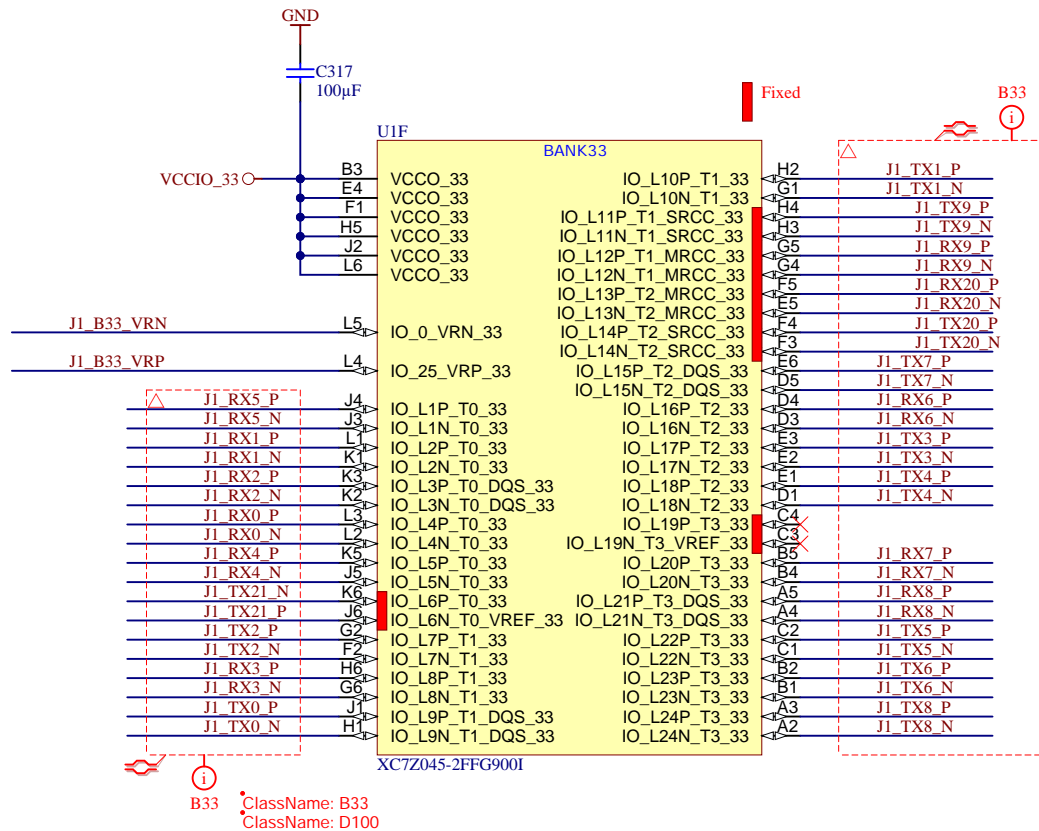
3

4


	Title: TES0782 - FPGA HP Banks		
	A4	Number: TE0782 92I33MA	Rev. 02
	Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 16 of 31
	Filename: HP-BANKS.SchDoc		

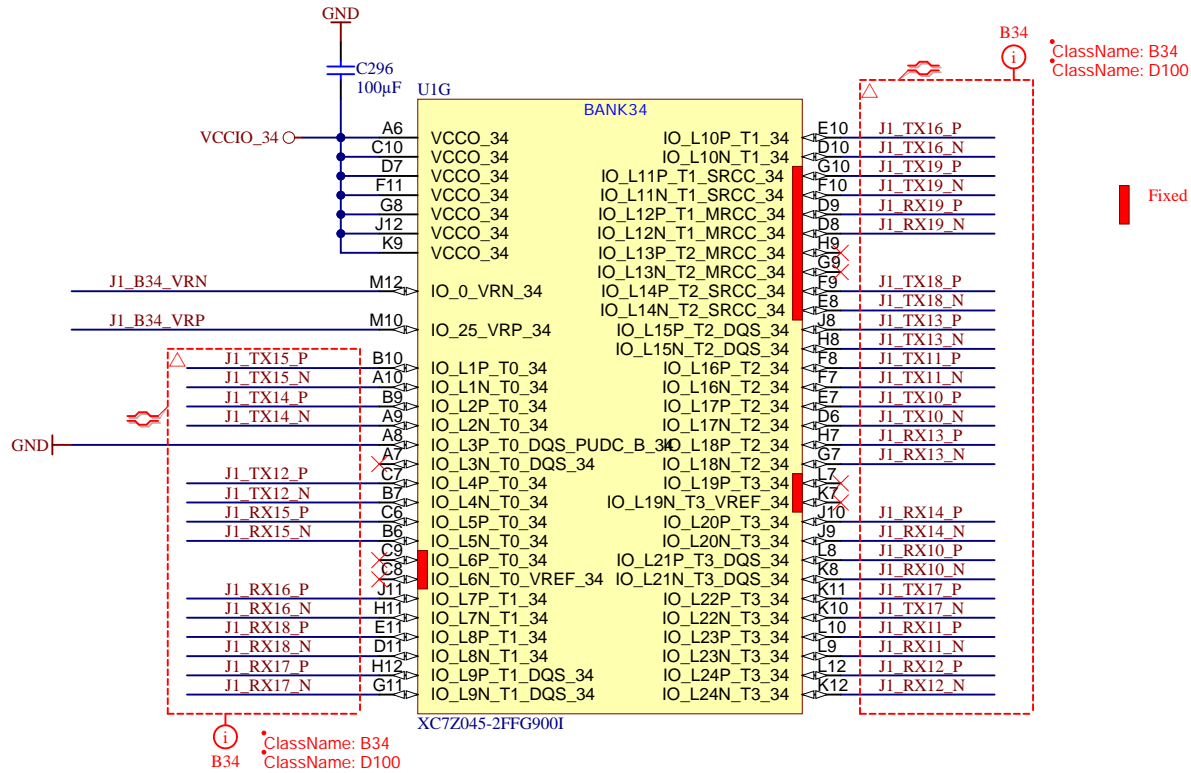


TP6  
 ● ○ VCCIO\_33  
 Testpoint 0.8mm

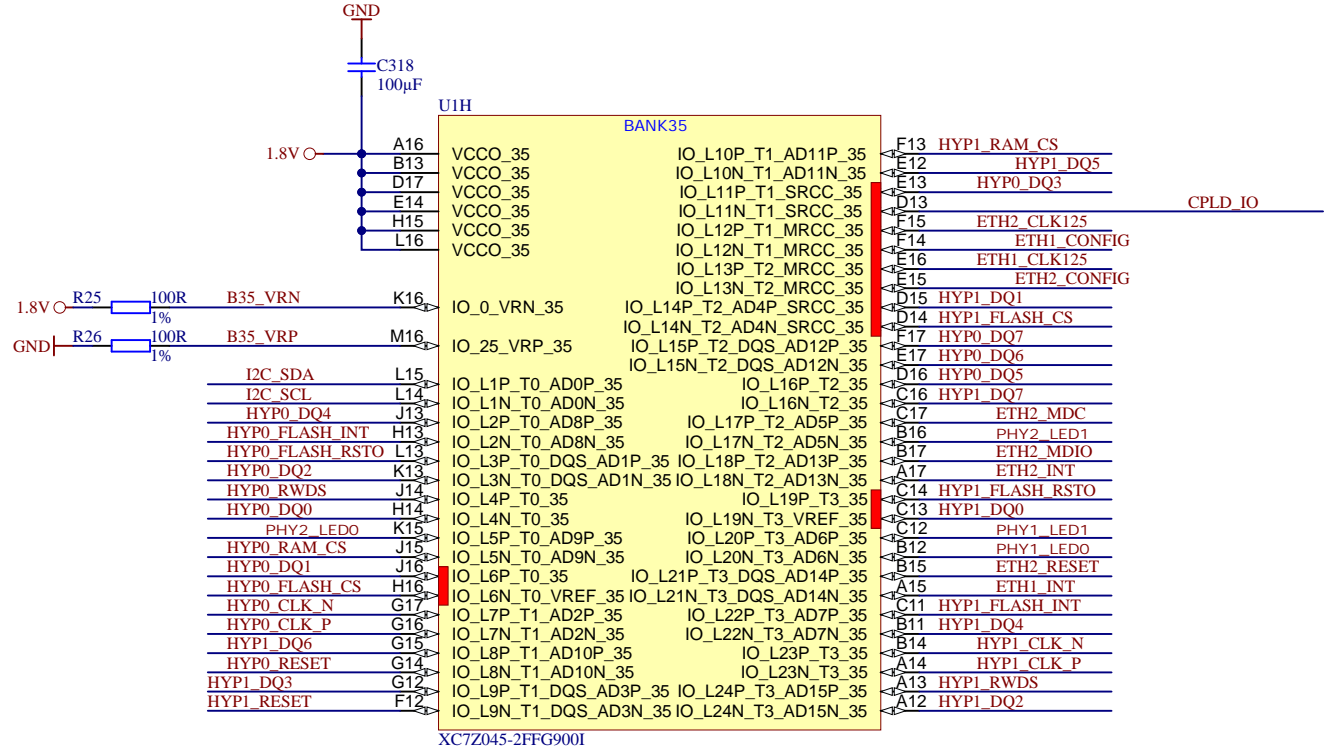


	Title: TE0782 - FPGA B33	
	A4	Number: TE0782 92I33MA
	Date: 2015-05-27	Copyright: Trenz Electronic GmbH
	Filename: B33.SchDoc	
	Rev. 02	Page 17 of 31

TP3  
 VCCIO\_34  
 Testpoint 0.8mm

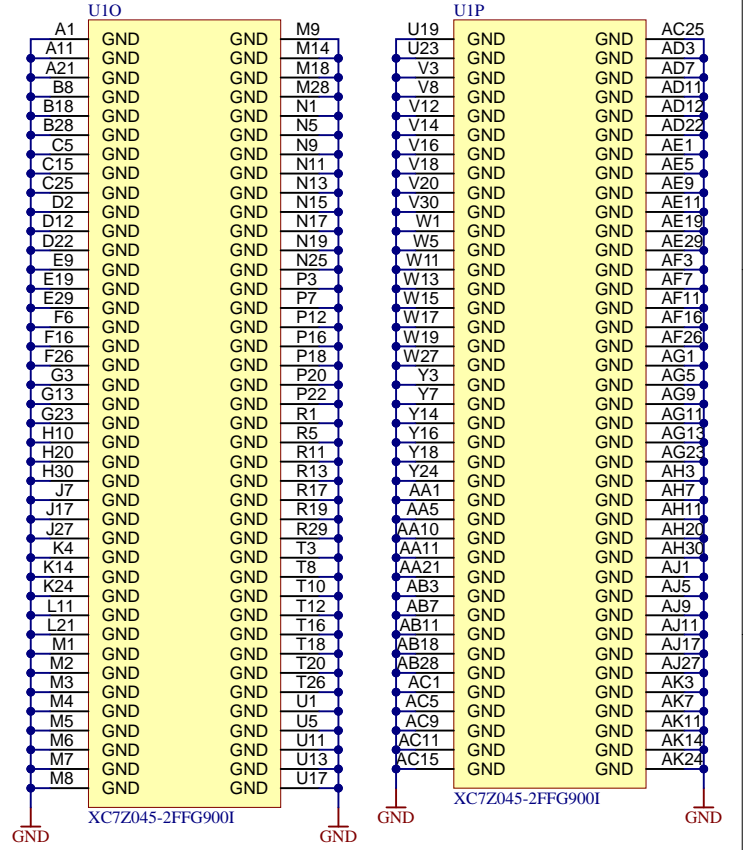
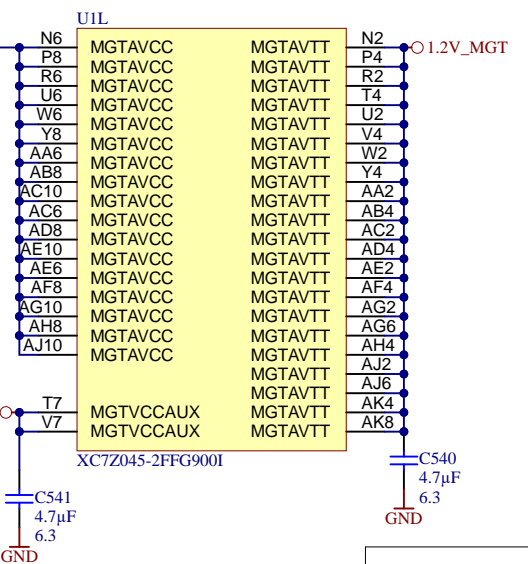
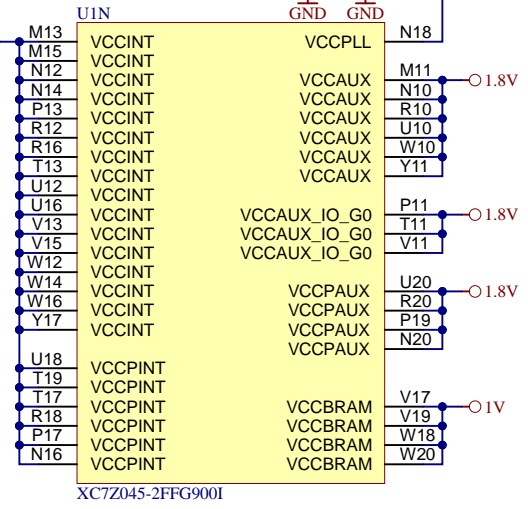
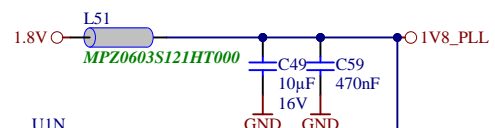
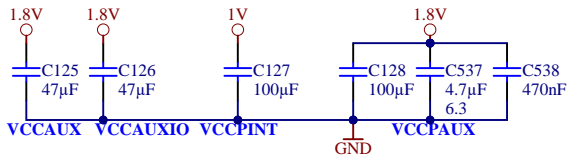
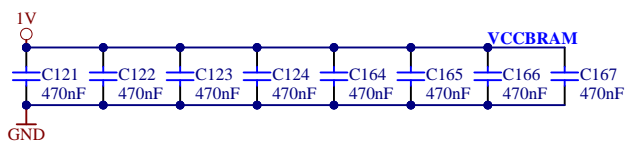
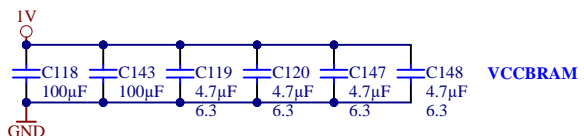
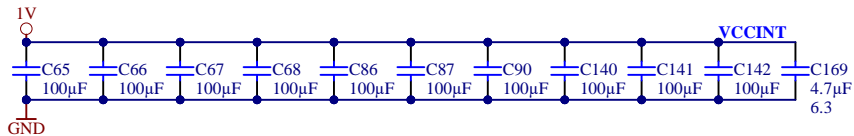
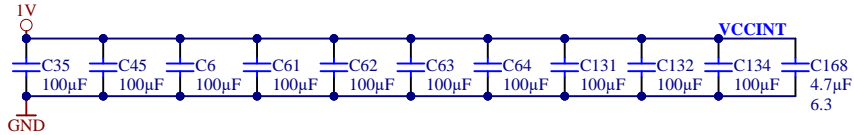


Title: TE0782 - FPGA B34		
A4	Number: TE0782 92I33MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 18 of 31
Filename: B34.SchDoc		

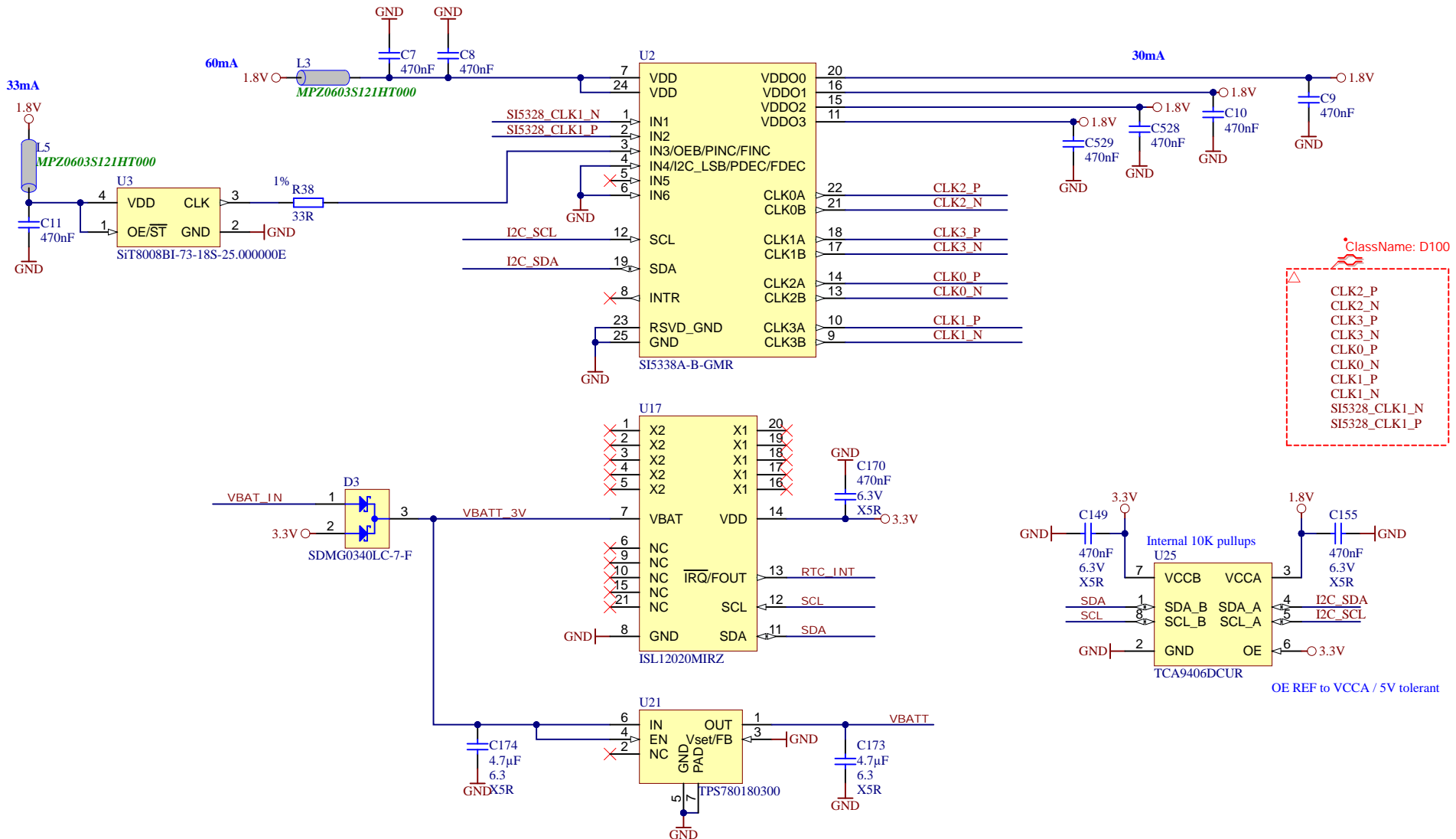


	Title: TE0782 - FPGA B35	
	A4	Number: TE0782 92I33MA
	Date: 2015-05-27	Rev. 02
	Copyright: Trenz Electronic GmbH	
Date: 2015-05-27		Page 19 of 31
Filename: B35.SchDoc		

Capacitors suitable for XC7Z100



Title: TE0782 - ZYNQ POWER		
A4	Number: TE0782 92I33MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page20 of 31
Filename: FPGA-PWR.SchDoc		



ClassName: D100

CLK2\_P  
 CLK2\_N  
 CLK3\_P  
 CLK3\_N  
 CLK0\_P  
 CLK0\_N  
 CLK1\_P  
 CLK1\_N  
 SI5328\_CLK1\_N  
 SI5328\_CLK1\_P

OE REF to VCCA / 5V tolerant



Title: TE0782 - Clock		
A4	Number: TE0782 92133MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 21 of 31
Filename: Clock.SchDoc		

A

A

B

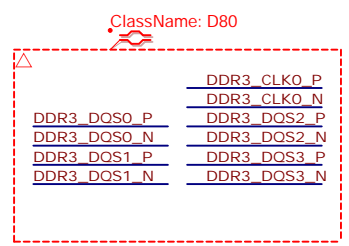
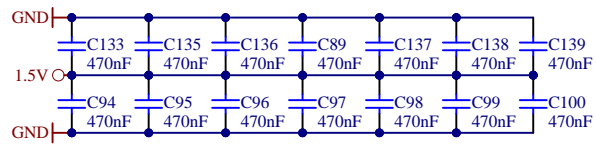
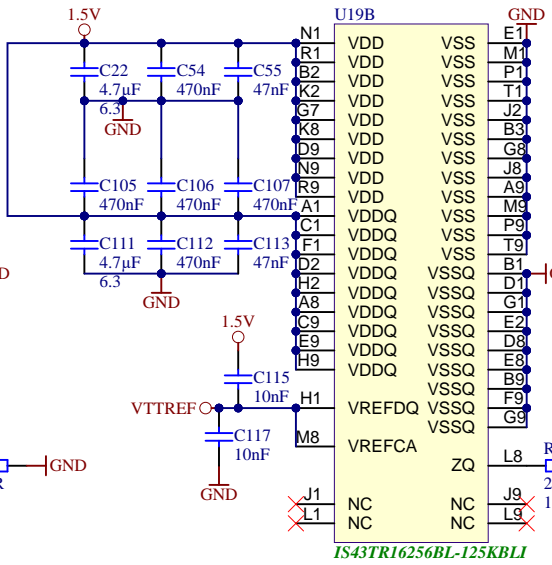
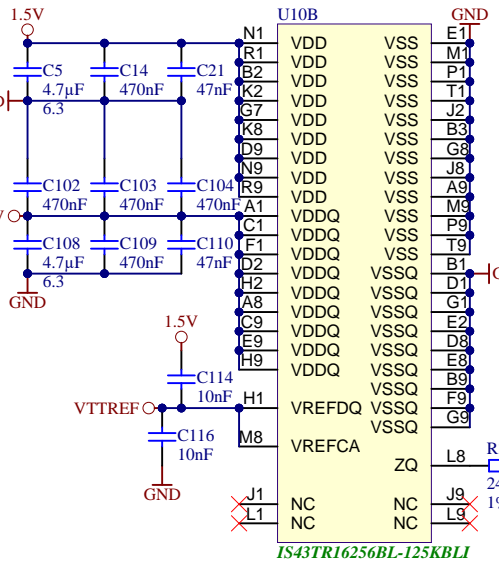
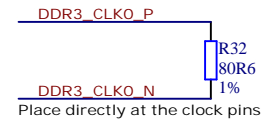
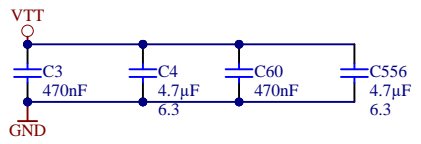
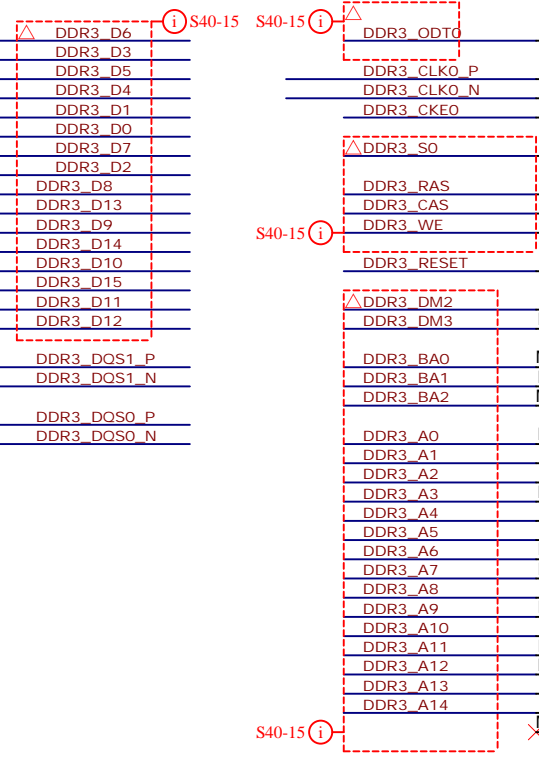
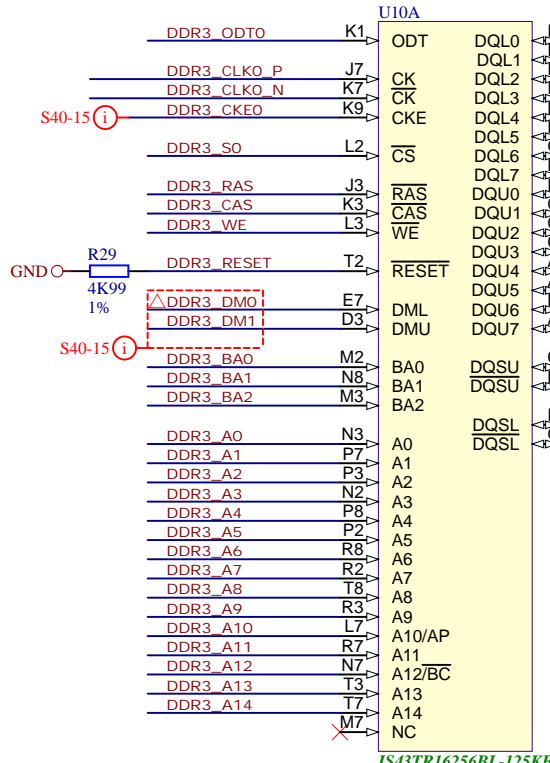
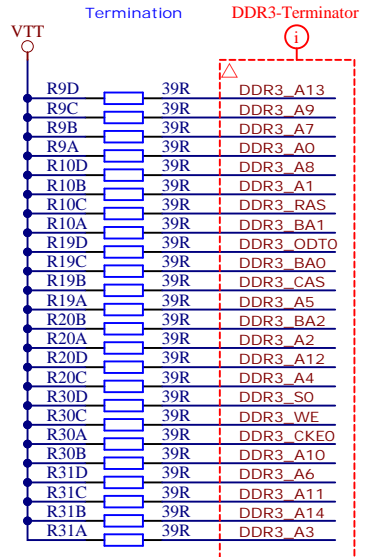
B

C

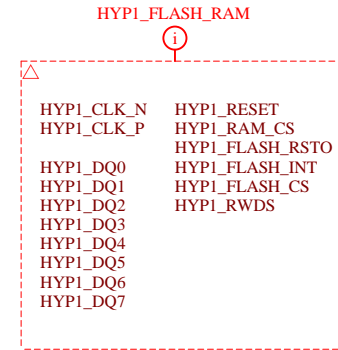
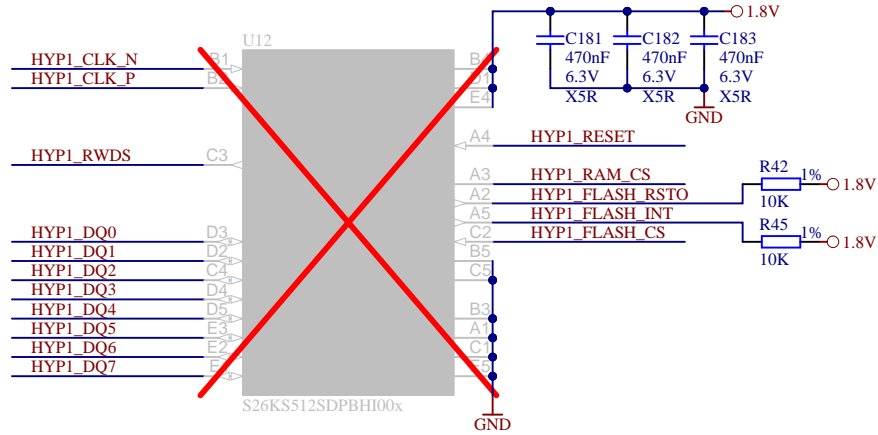
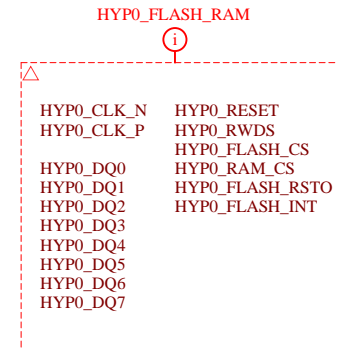
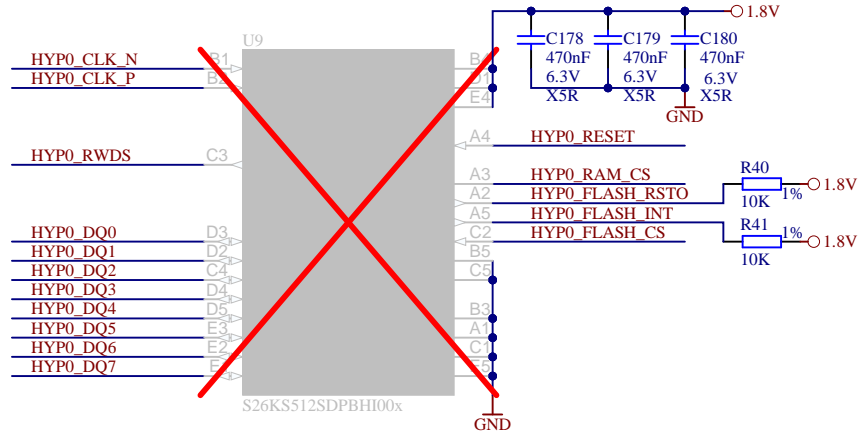
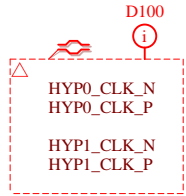

C

D

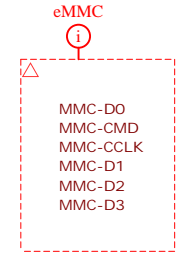
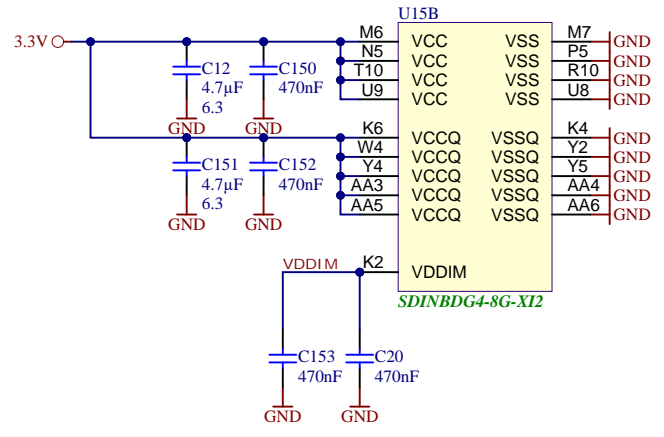
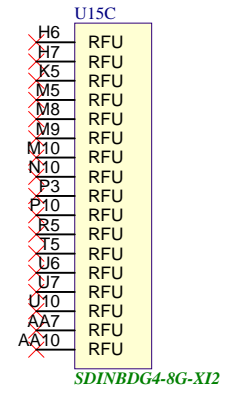
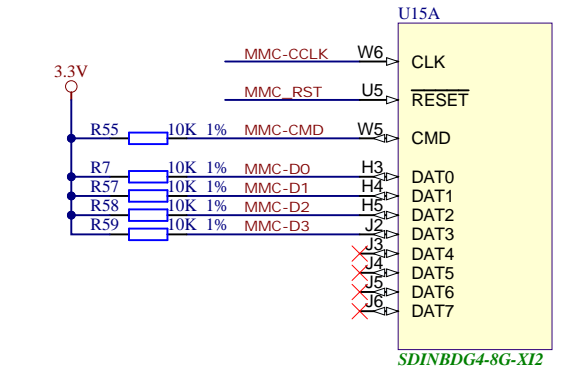
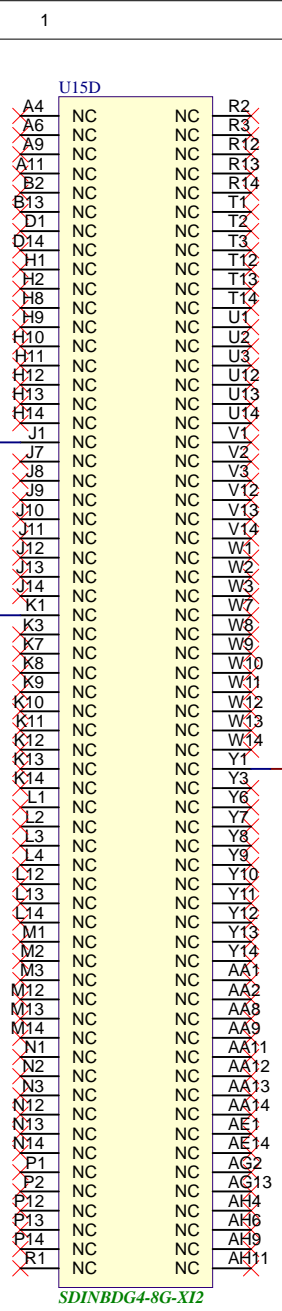
D



Title: TE0782 - DDR3 RAM		
A4	Number: TE0782 92I33MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page22 of 31
Filename: DDR3-RAM.SchDoc		

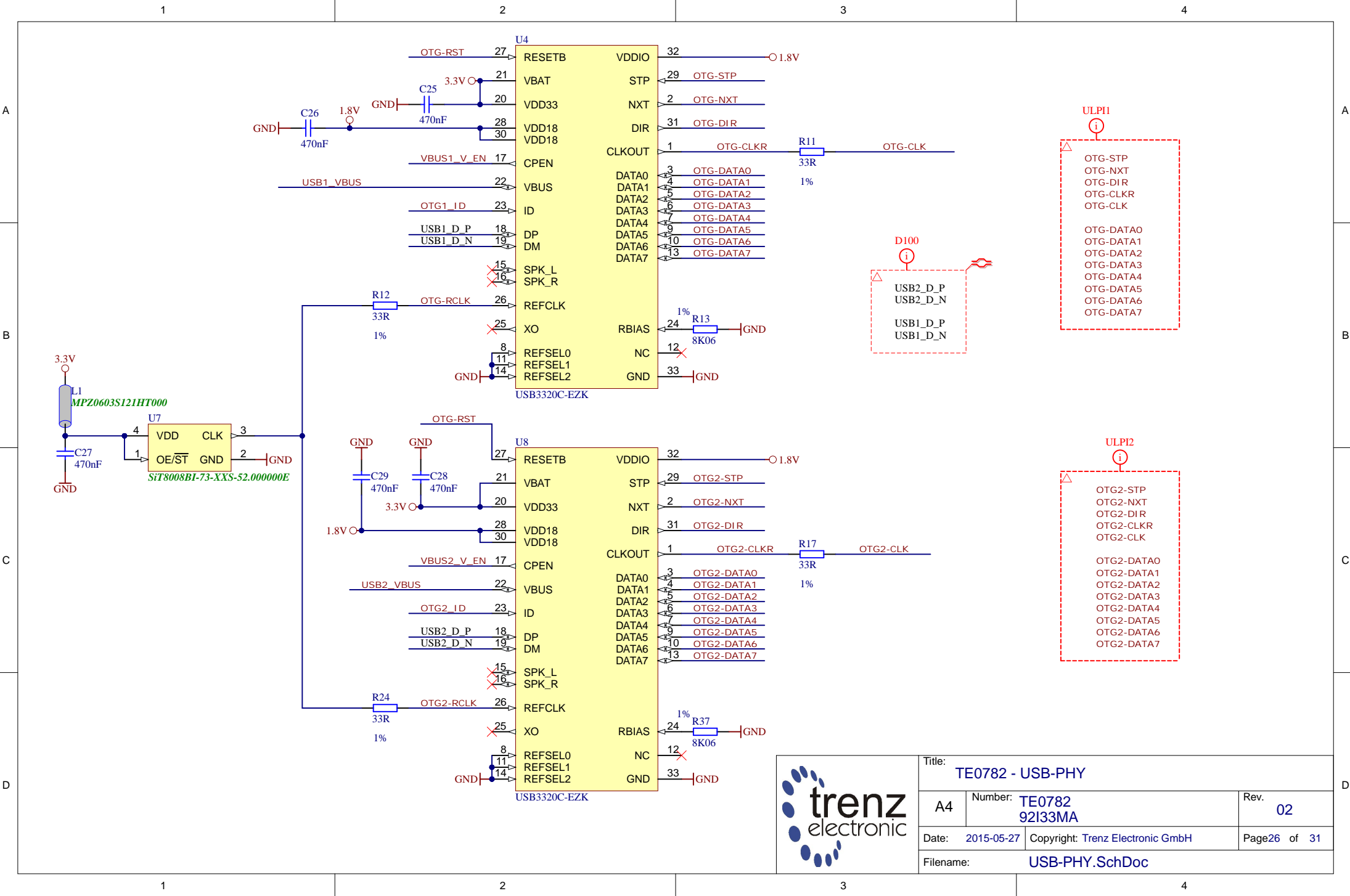
Title: TE0782 - HyperFlash_RAM		
A4	Number: TE0782 92I33MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page23 of 31
Filename: HyperFlash_RAM.SchDoc		




Title: TE0782 - eMMC		
A4	Number: TE0782 92I33MA	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page24 of 31
Filename: eMMC.SchDoc		







			Title: TE0782 - USB-PHY	
			A4	Number: TE0782 92I33MA
Date: 2015-05-27		Copyright: Trenz Electronic GmbH		Page 26 of 31
Filename: USB-PHY.SchDoc				

1

2

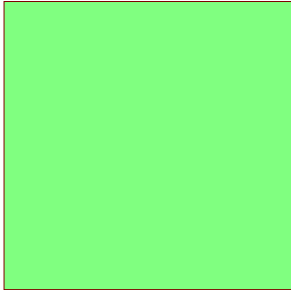
3

4

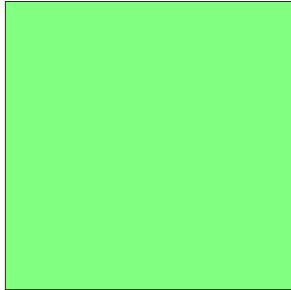
A

A

U\_ETH1  
ETH1.SchDoc



U\_ETH2  
ETH2.SchDoc



B

B

C

C

D

D



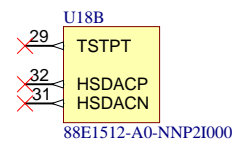
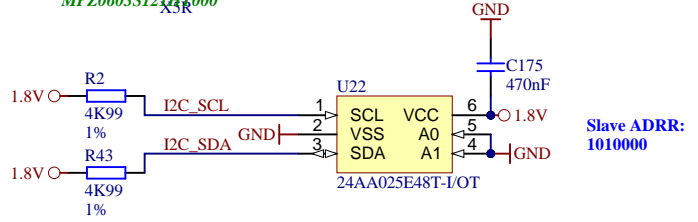
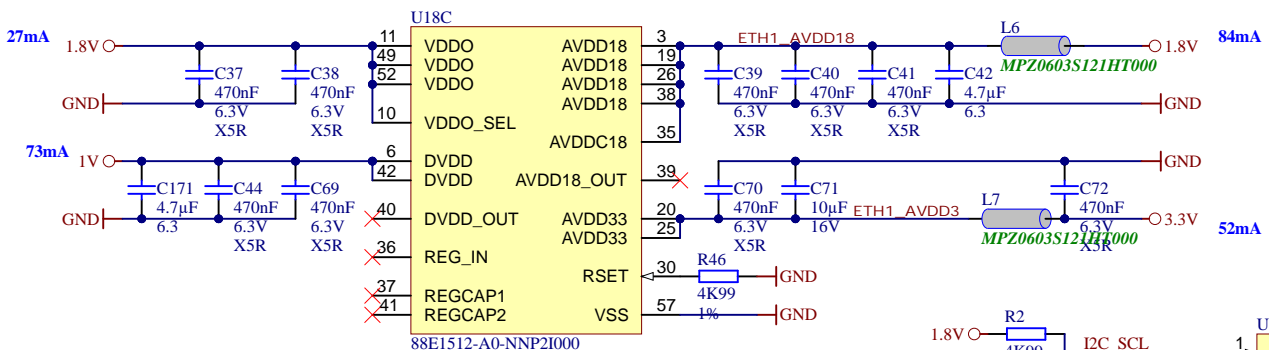
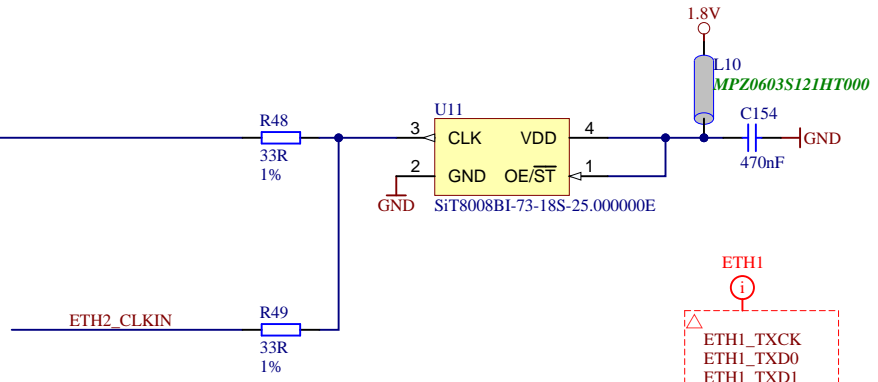
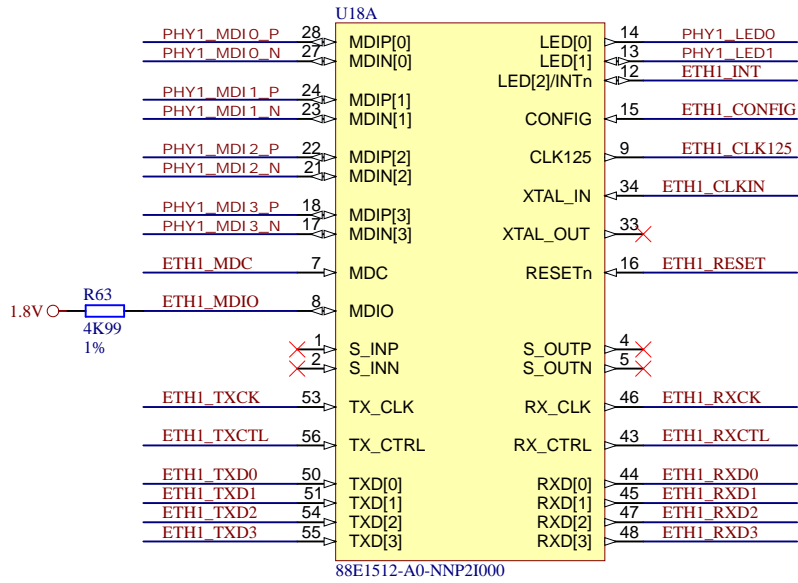
Title: <b>TE0782 - Ethernet</b>		
A4	Number: <b>TE0782 92I33MA</b>	Rev. <b>02</b>
Date: <b>2015-05-27</b>	Copyright: <b>Trenz Electronic GmbH</b>	Page <b>27</b> of <b>31</b>
Filename: <b>Ethernet.SchDoc</b>		

1

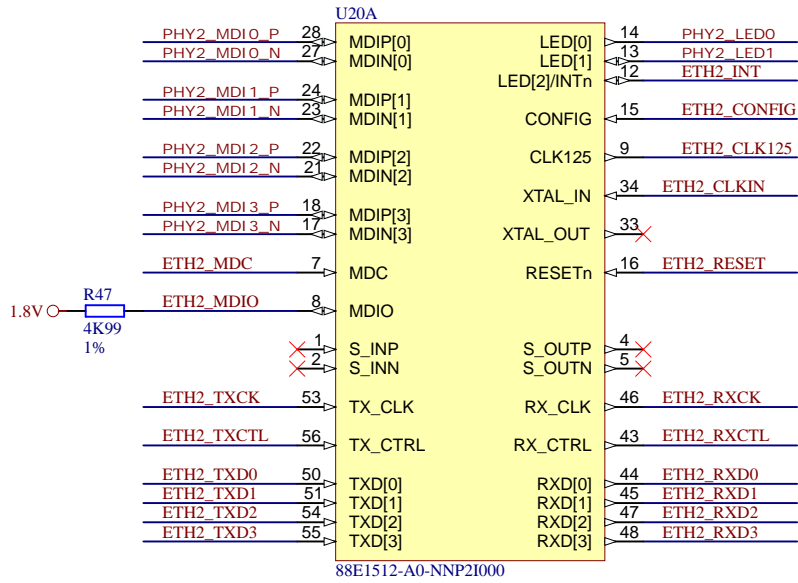
2

3

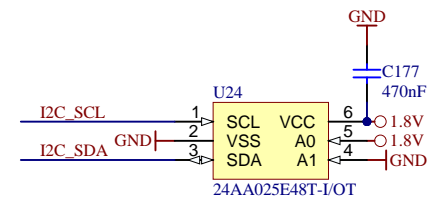
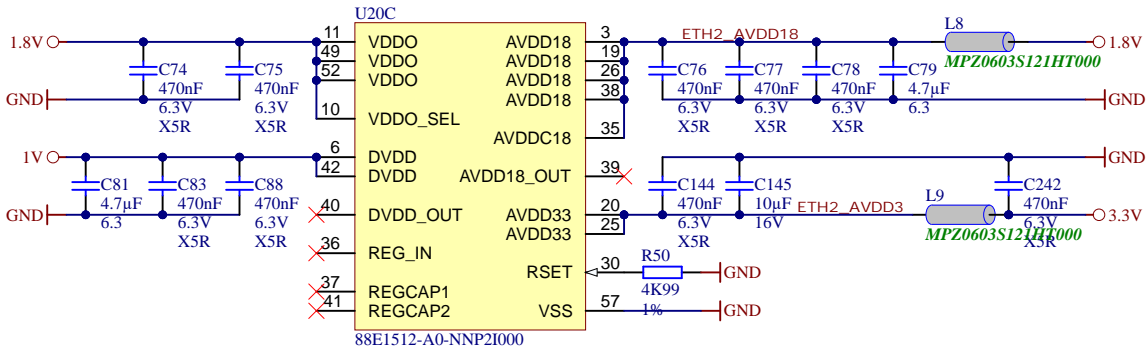
4



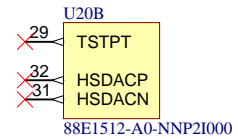
	Title: TE0782 - ETH_PHY1	
	A4	Number: TE0782 92I33MA
	Date: 2015-05-27	Rev. 02
	Copyright: Trenz Electronic GmbH	Page 28 of 31
Filename: ETH1.SchDoc		



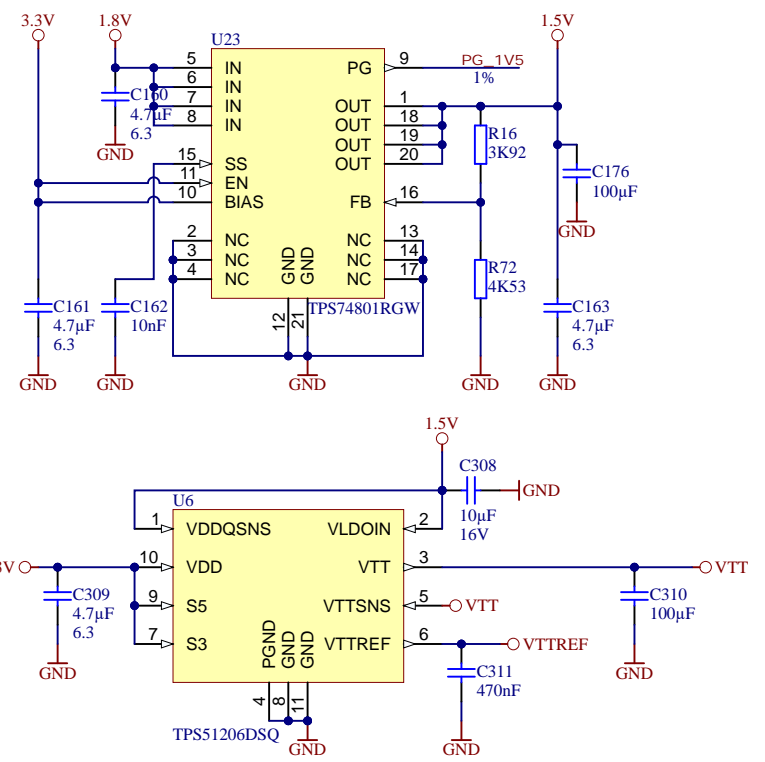
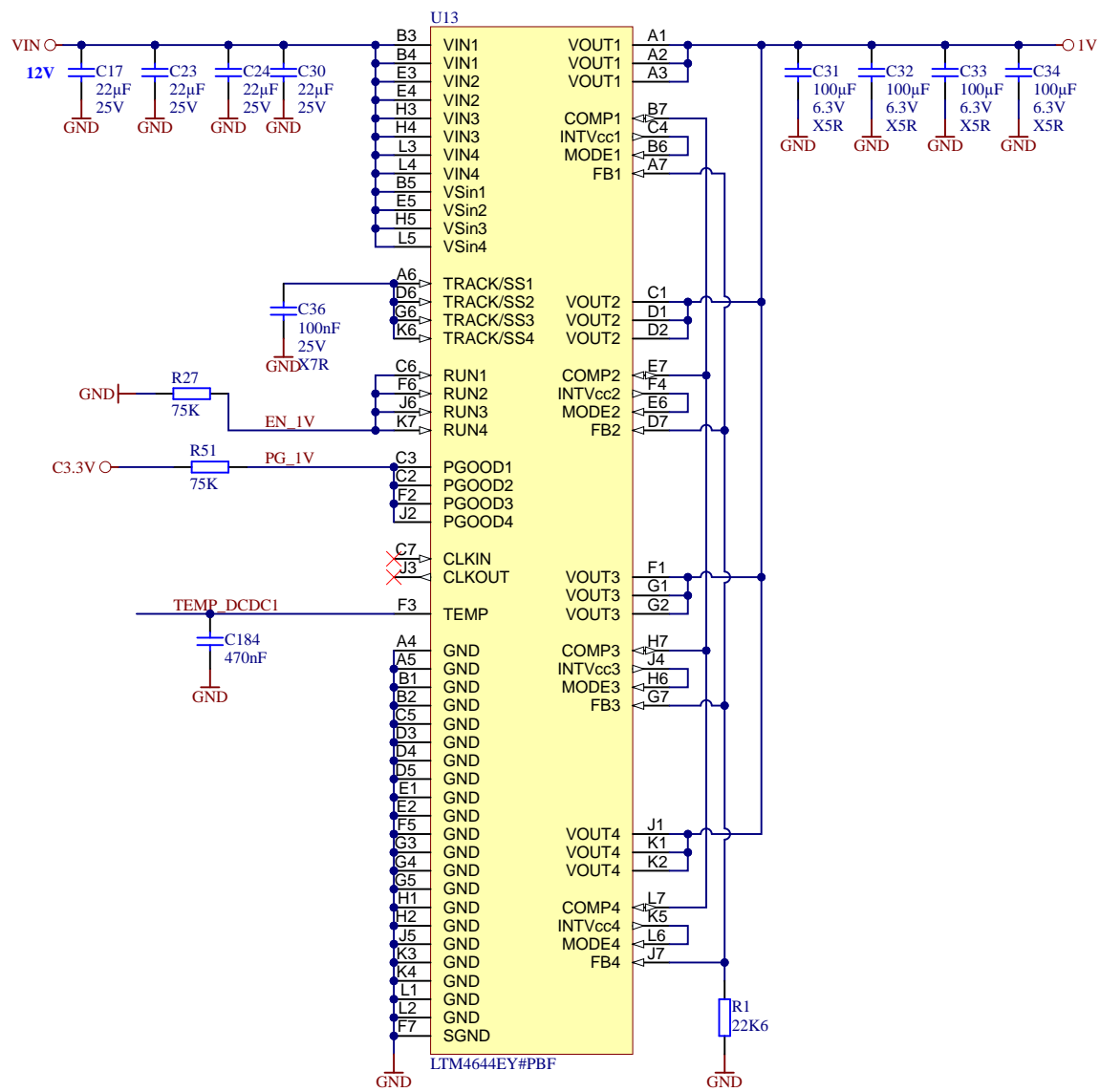
- ETH2
- ETH2\_TXD1
  - ETH2\_TXD0
  - ETH2\_TXCTL
  - ETH2\_TXCK
  - ETH2\_RXCK
  - ETH2\_RXD1
  - ETH2\_RXD3
  - ETH2\_RXD2
  - ETH2\_RXD0
  - ETH2\_RXCTL
  - ETH2\_MDC
  - ETH2\_MDIO
- PHY2\_LED0
- PHY2\_LED1
- ETH2\_INT
- ETH2\_CONFIG
- ETH2\_CLK125
- ETH2\_RESET




Slave ADDR:  
1010001

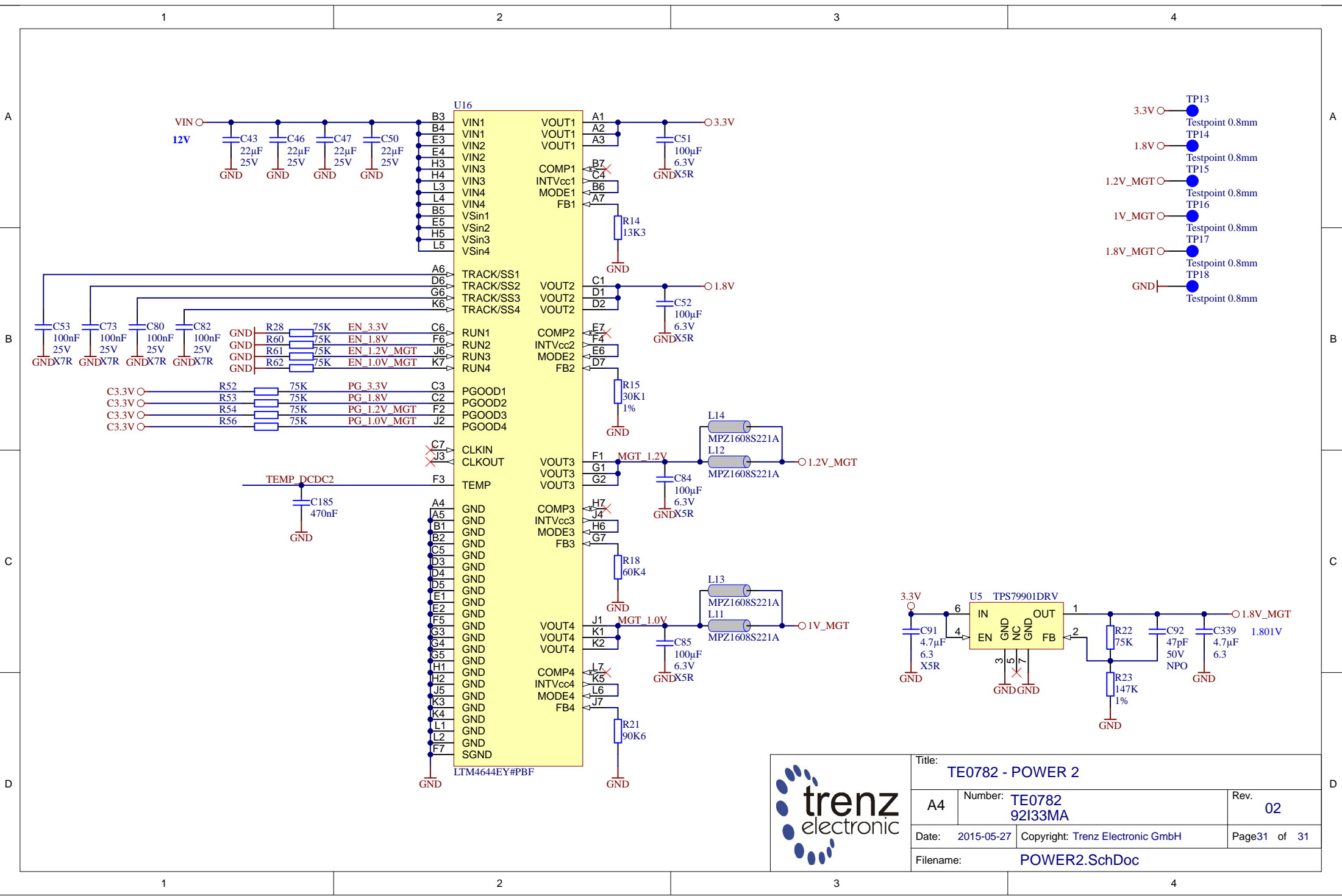



	Title: TE0782 - ETH_PHY2		
	A4	Number: TE0782 92133MA	Rev. 02
	Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 29 of 31
	Filename: ETH2.SchDoc		



- TP7 1V Testpoint 0.8mm
- TP8 GND Testpoint 0.8mm
- TP10 1.5V Testpoint 0.8mm
- TP11 VTT Testpoint 0.8mm
- TP12 VTTREF0 Testpoint 0.8mm

			Title: TE0782 - POWER	
			A4	Number: TE0782 92I33MA
Date: 2015-05-27		Copyright: Trenz Electronic GmbH		Page30 of 31
Filename: POWER.SchDoc				



			Title: <b>TE0782 - POWER 2</b>	
			A4	Number: <b>TE0782 92133MA</b>
Date: 2015-05-27		Copyright: Trenz Electronic GmbH		Page 31 of 31
Filename: <b>POWER2.SchDoc</b>				