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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

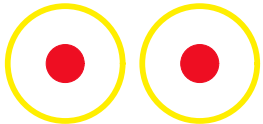
U\_Connectors  
Connectors.SchDoc

U\_POWER  
POWER.SchDoc

LOGO1

TE Logo PRINT Layer

LOGO PRINT



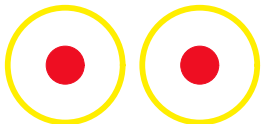
PM1

PM2

Serial

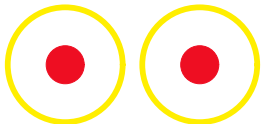
Serial

Serialnumber 6,3 x 6.3mm



PM3

PM4



PM5

PM6



Title: TE0782 - Overview		
A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page1 of 31
Filename: TE0782.SchDoc		

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A

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



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



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



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		Title: TE0782 - Connectors	
		A4	Number: TE0782 TE0782-02-045-2IC
Date: 2015-05-27		Copyright: Trenz Electronic GmbH	
Filename: Connectors.SchDoc		Page2 of 31	

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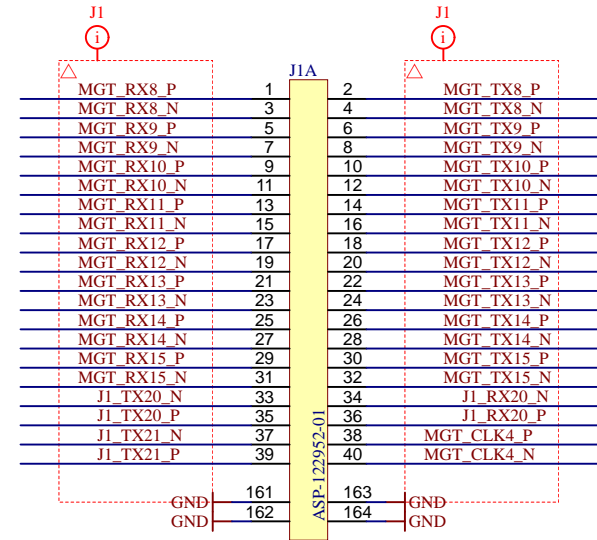
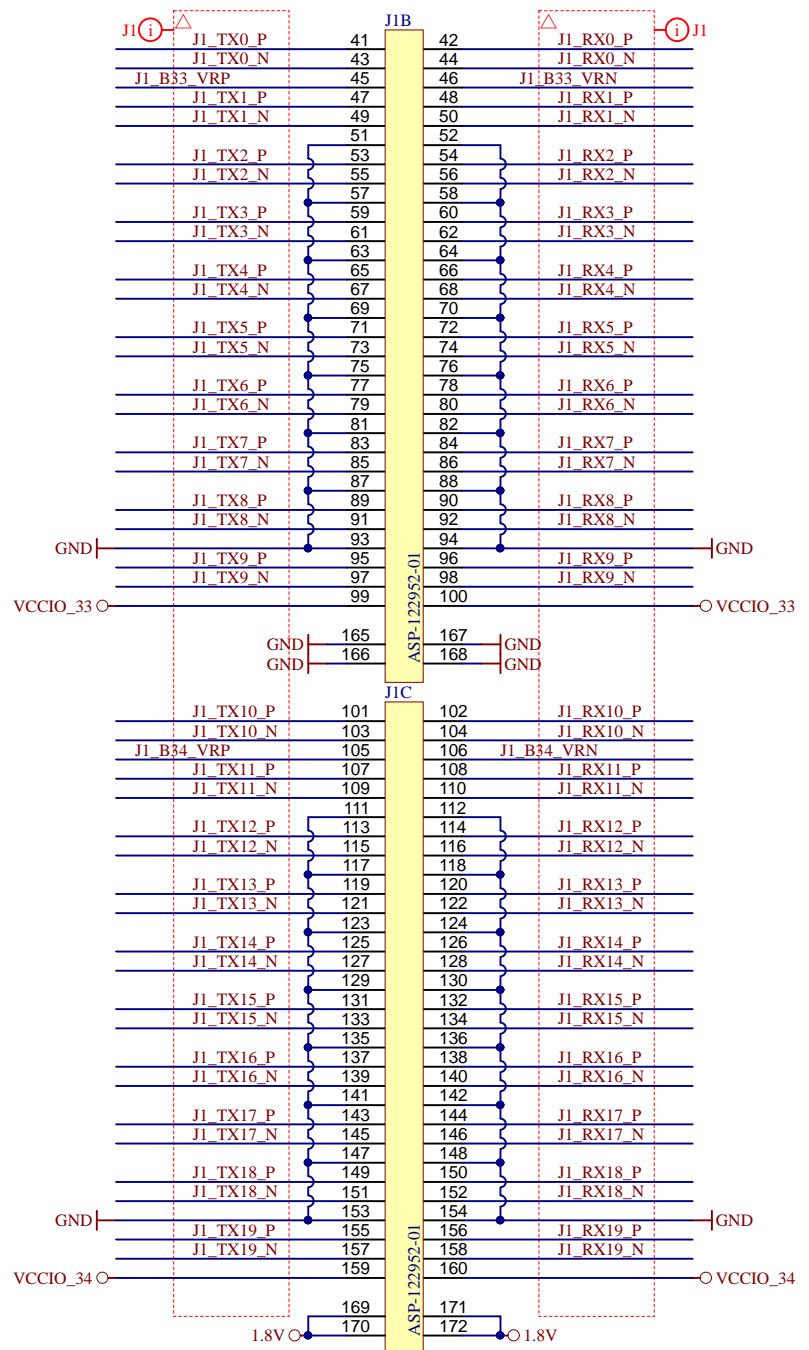
B

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Title: TE0782 - HSMC_Connector_J1		
A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
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Filename: HSMC_CONN_J1.SchDoc		

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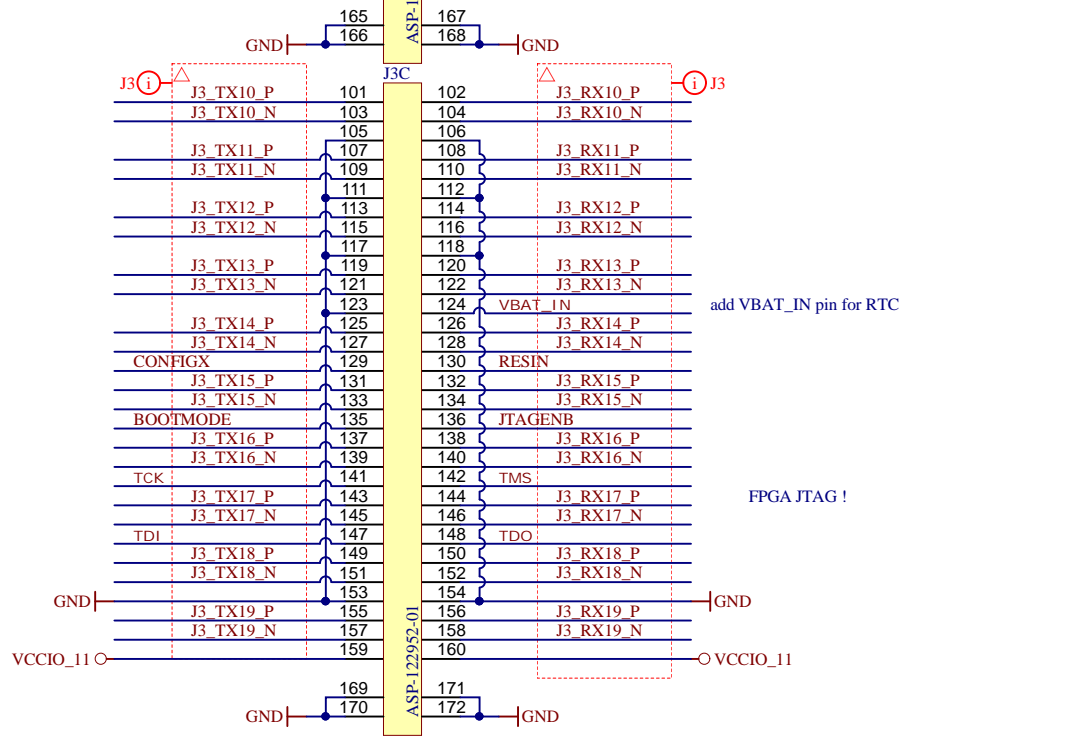
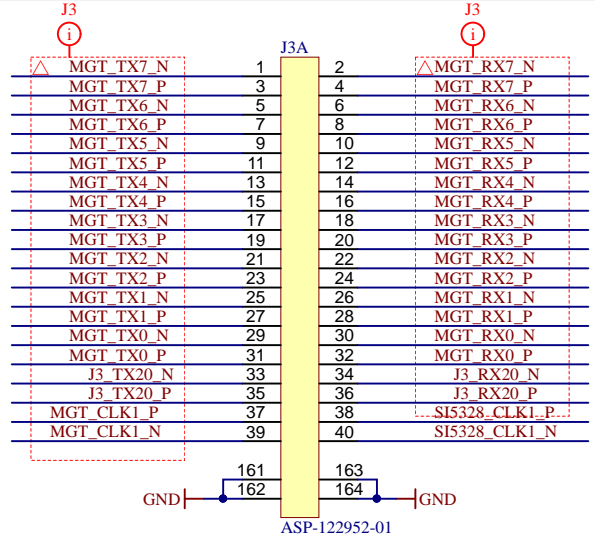
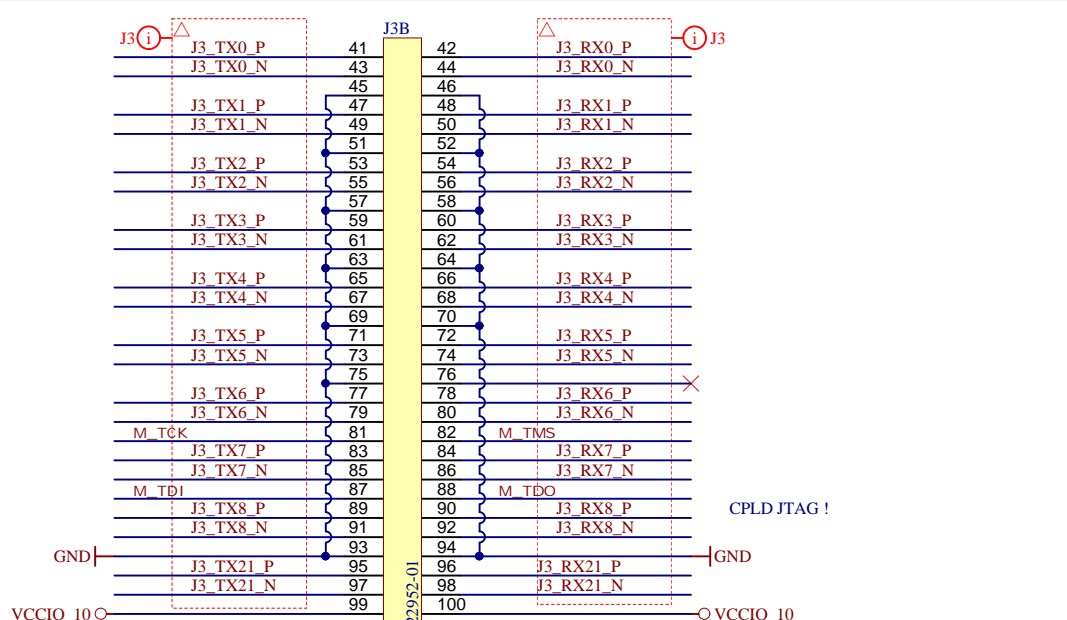
B

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C

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D



Title: TE0782 - HSMC_Connector_J3		
A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 4 of 31
Filename: HSMC_CONN_J3.SchDoc		

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A

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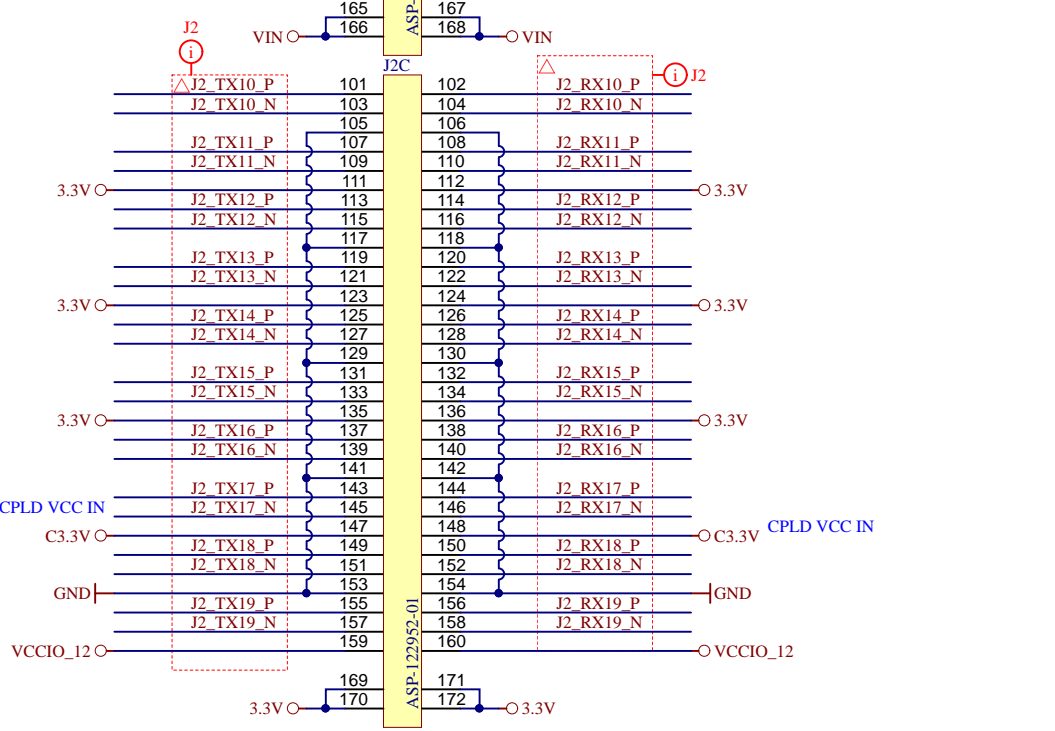
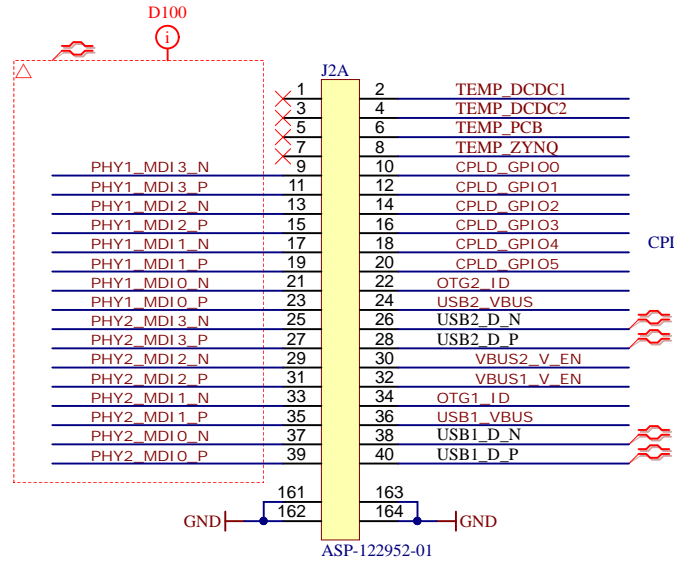
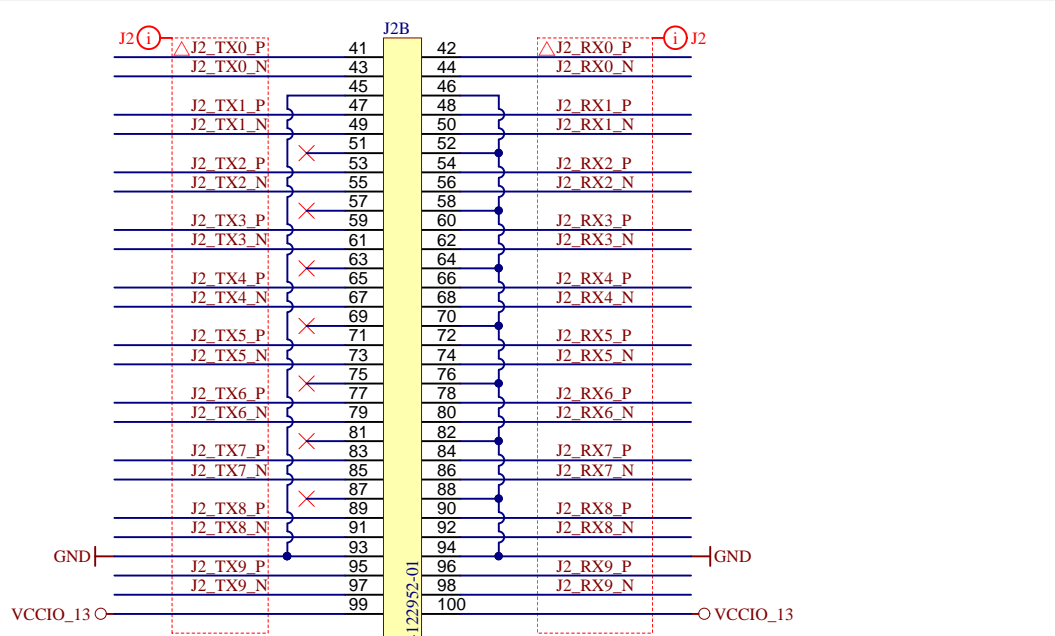
B

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Title: TE0782 - HSMC_Connector_J2		
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Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page5 of 31
Filename: HSMC_CONN_J2.SchDoc		

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A

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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



B

B

U\_FPGA-MGT  
FPGA-MGT.SchDoc



U\_B12  
B12.SchDoc



U\_FPGA-CFG  
FPGA-CFG.SchDoc



U\_B13  
B13.SchDoc



C

C

U\_FPGA-PWR  
FPGA-PWR.SchDoc



D

D



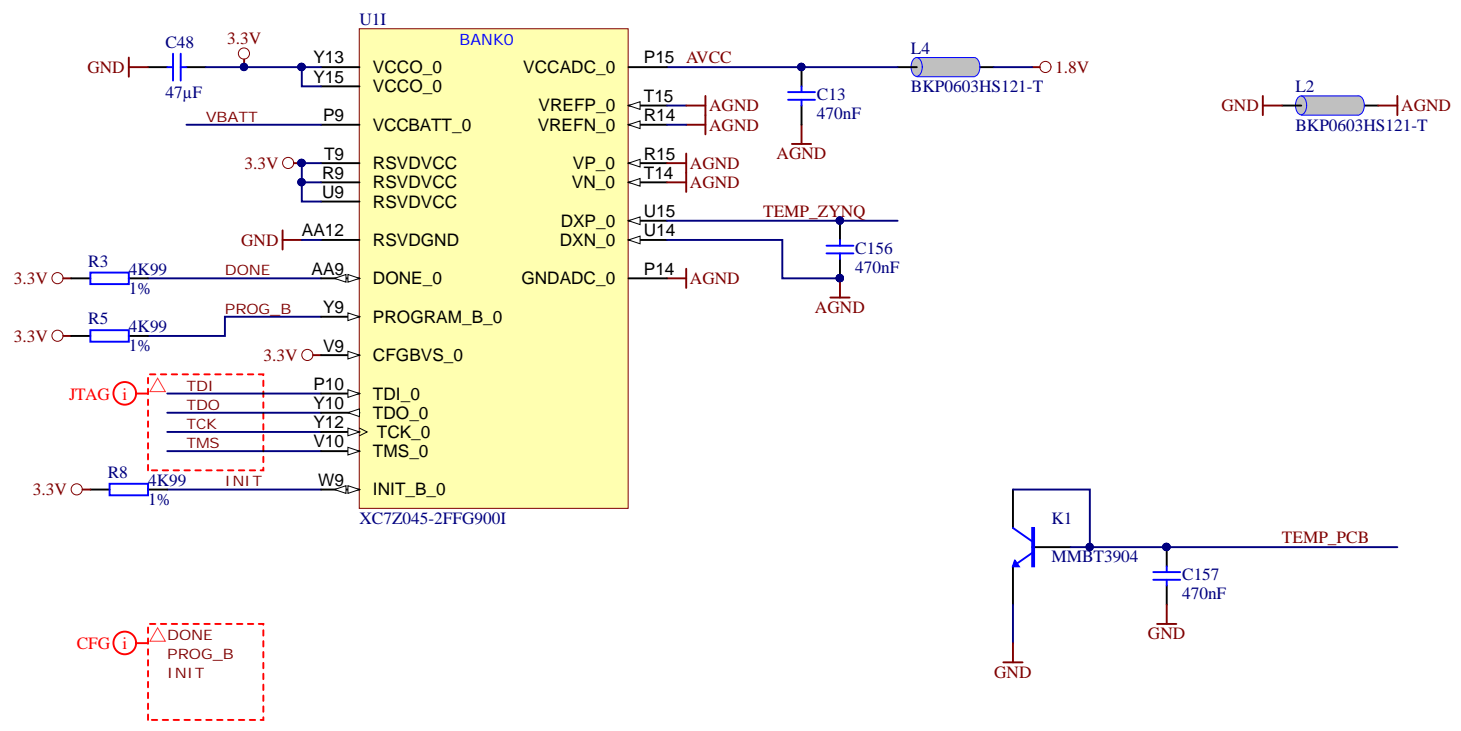
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A4	Number: <b>TE0782 TE0782-02-045-2IC</b>	Rev. <b>02</b>
Date: <b>2015-05-27</b>	Copyright: <b>Trenz Electronic GmbH</b>	Page <b>6</b> of <b>31</b>
Filename: <b>SOC.SchDoc</b>		

1

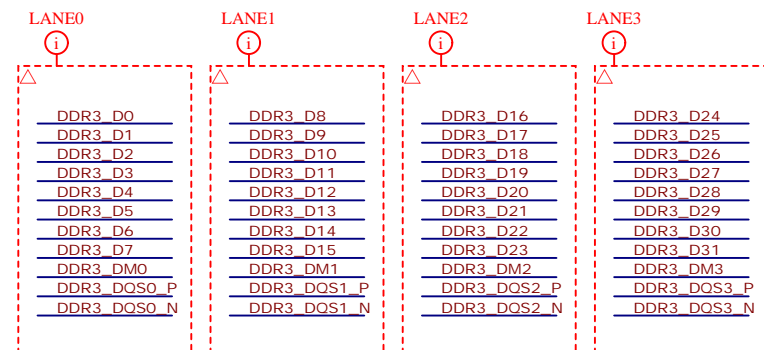
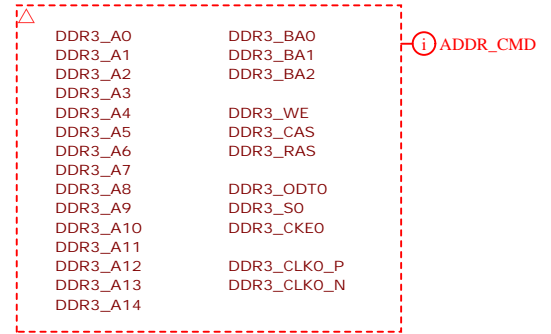
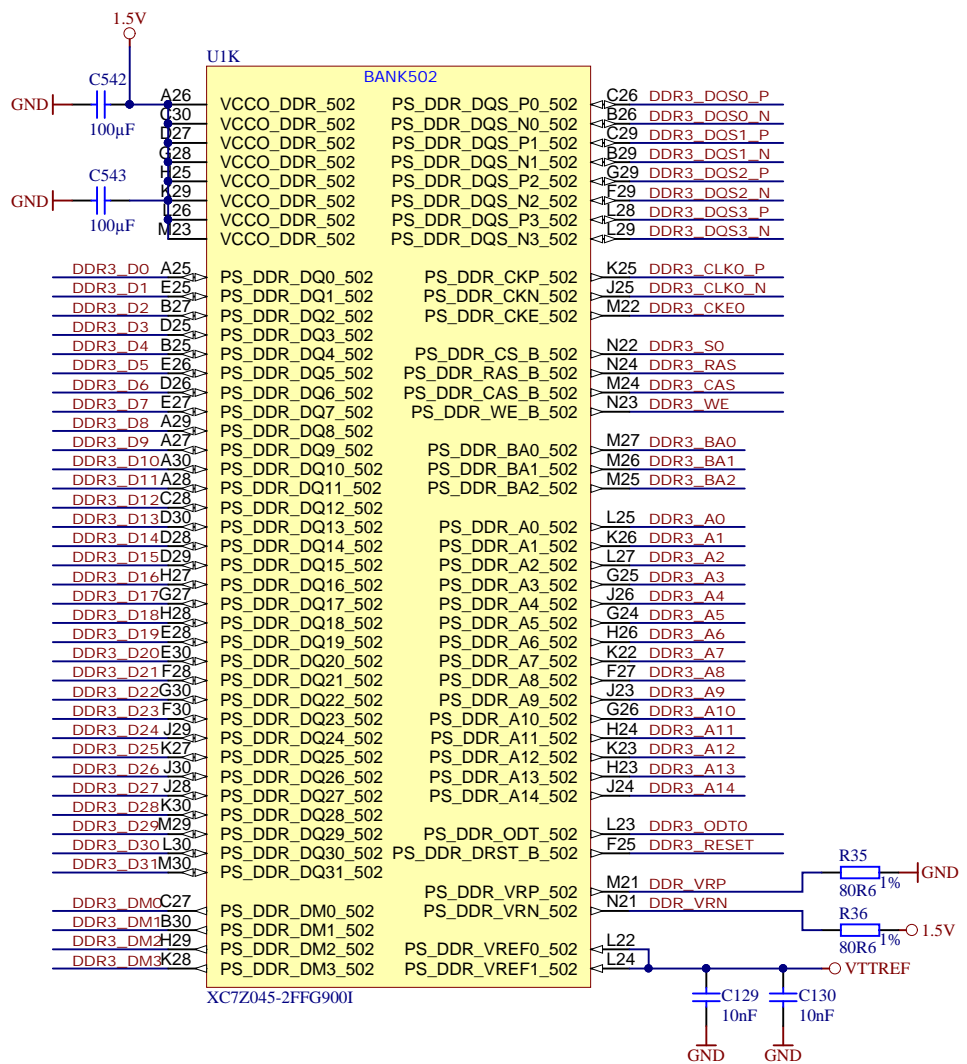
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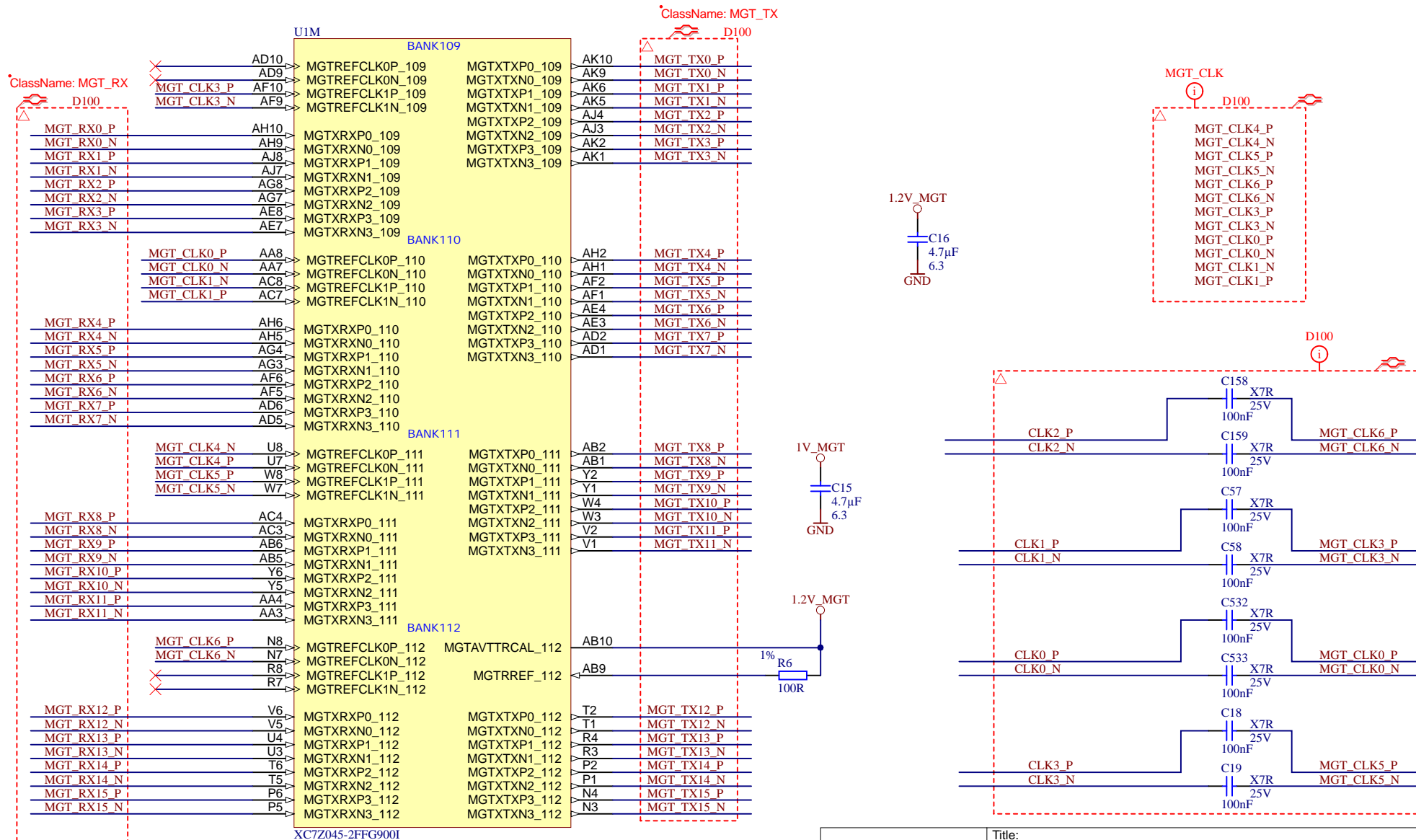


Title: TE0782 - FPGA Configuration		
A4	Nummer: TE0782 TE0782-02-045-2IC	Rev. 02
Datum: 2015-05-27	Zeichner: Trenz Electronic GmbH	Blatt 7 von 31
Filename: FPGA-CFG.SchDoc		

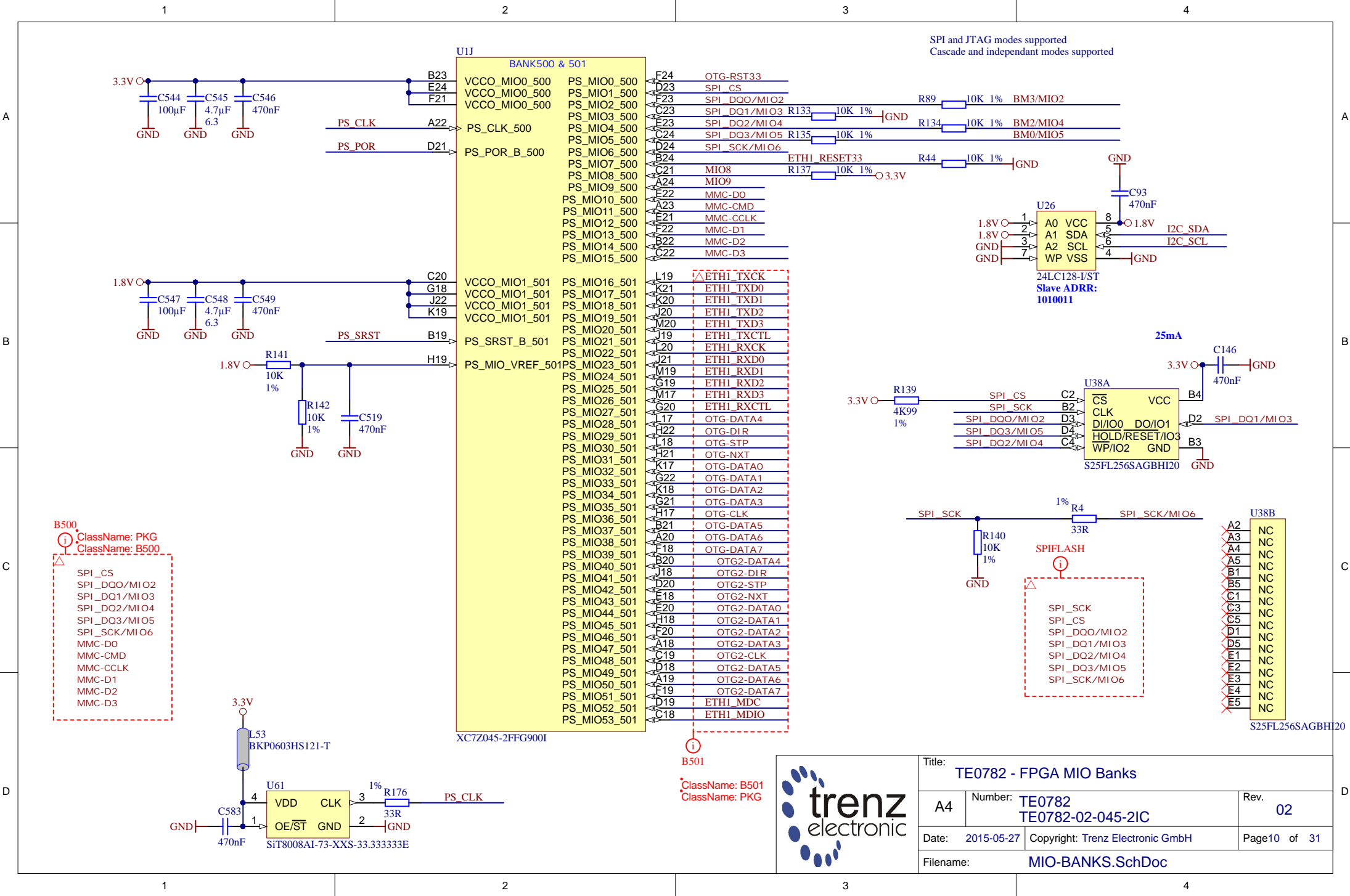


Title: TE0782 - FPGA DDR Banks		
A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 8 of 31
Filename: PS-DDR.SchDoc		

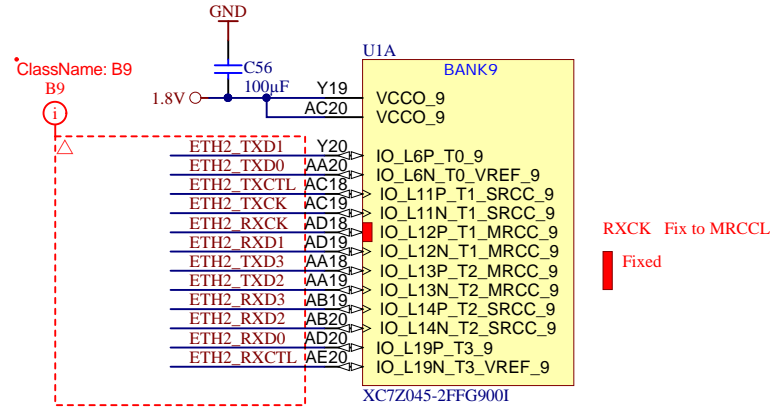





Title: TE0782 - FPGA MGT		
A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page9 of 31
Filename: FPGA-MGT.SchDoc		

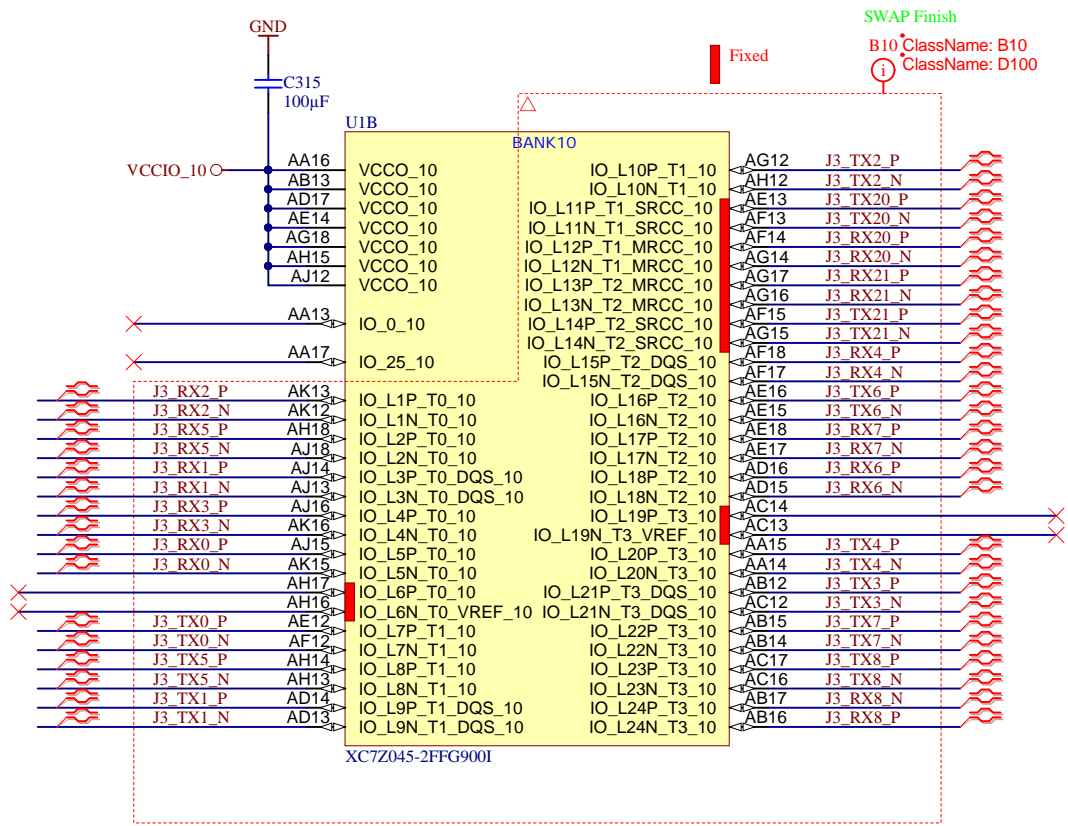


Title: TE0782 - FPGA MIO Banks		
A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 10 of 31
Filename: MIO-BANKS.SchDoc		

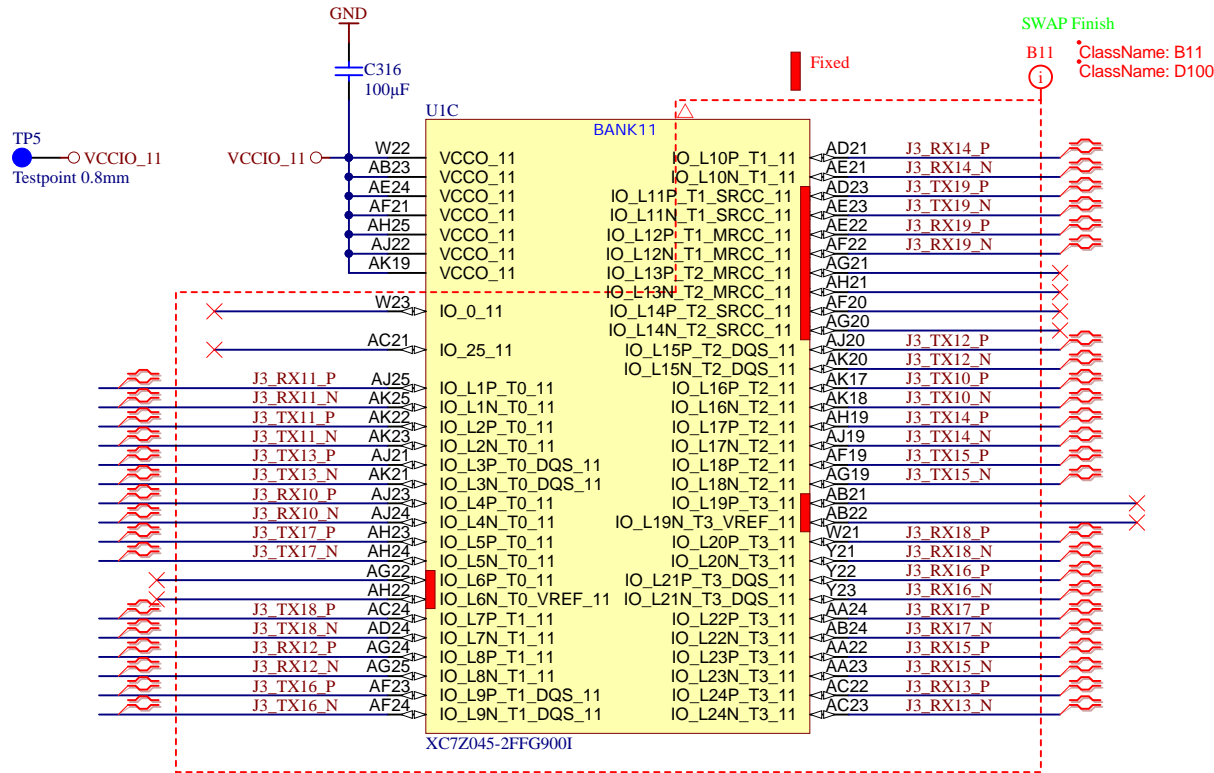



			Title: TE0782 - FPGA B9		
			A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
Date: 2015-05-27		Copyright: Trenz Electronic GmbH		Page 11 of 31	
Filename: B9.SchDoc					

TP4  
 ●—○ VCCIO\_10  
 Testpoint 0.8mm



Title: TE0782 - FPGA B10		
A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
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Filename: B10.SchDoc		



		Title: TE0782 - FPGA B11	
		A4	Number: TE0782 TE0782-02-045-2IC
Date: 2015-05-27		Copyright: Trenz Electronic GmbH	
Page 13 of 31		Filename: B11.SchDoc	

A

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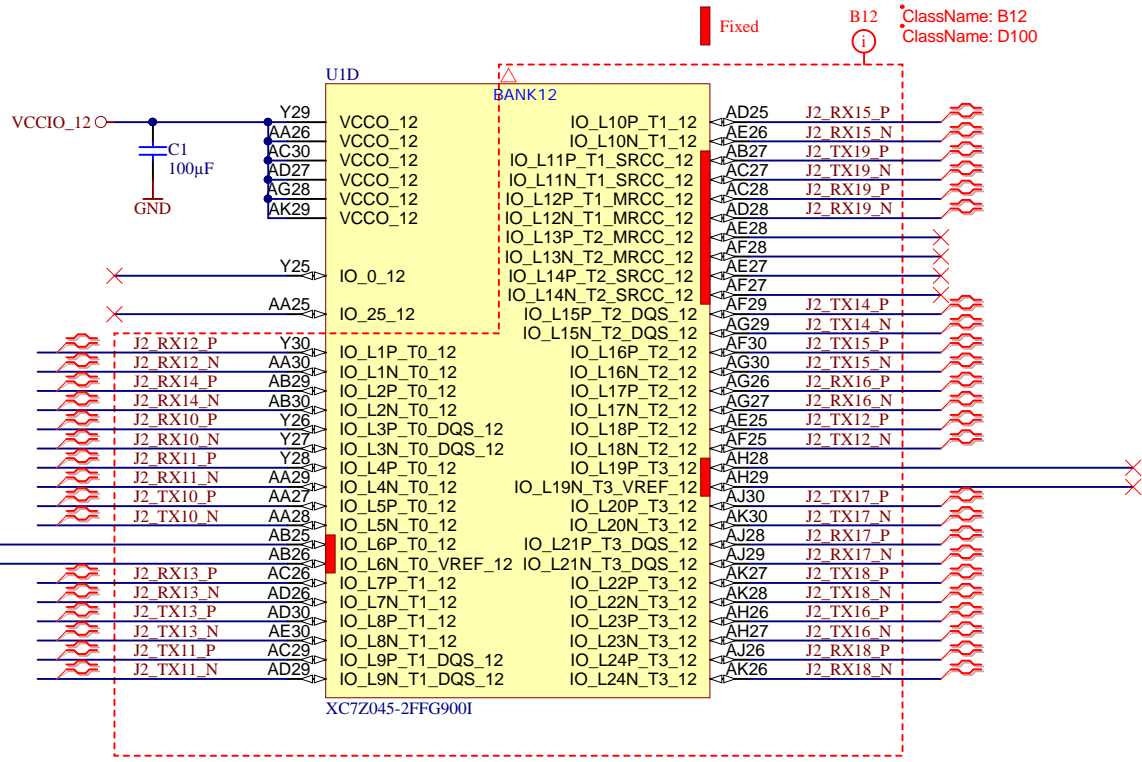
C

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TP1  
 VCCIO\_12  
 Testpoint 0.8mm



Title: TE0782 - FPGA B12		
A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
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Filename: B12.SchDoc		

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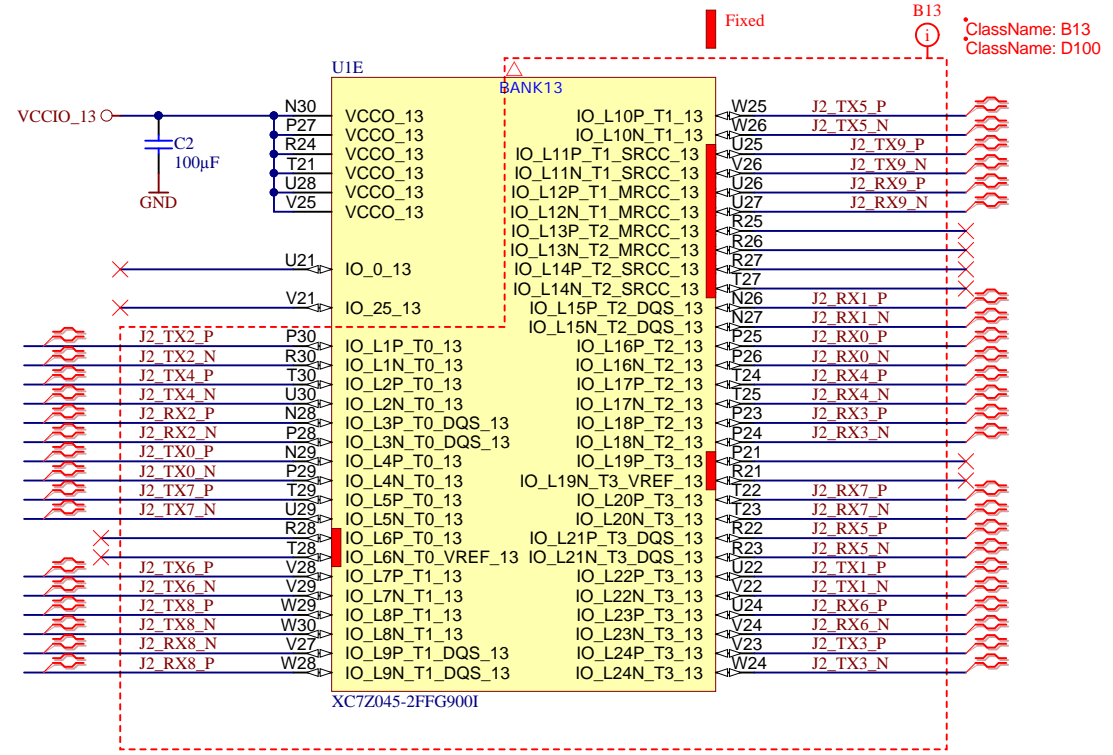
C


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TP2  
 VCCIO\_13  
 Testpoint 0.8mm



	Title: TE0782 - FPGA B13		
	A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
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	Filename: B13.SchDoc		

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U\_B33  
B33.SchDoc



U\_B34  
B34.SchDoc



U\_B35  
B35.SchDoc



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Title: TES0782 - FPGA HP Banks		
A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 16 of 31
Filename: HP-BANKS.SchDoc		


1

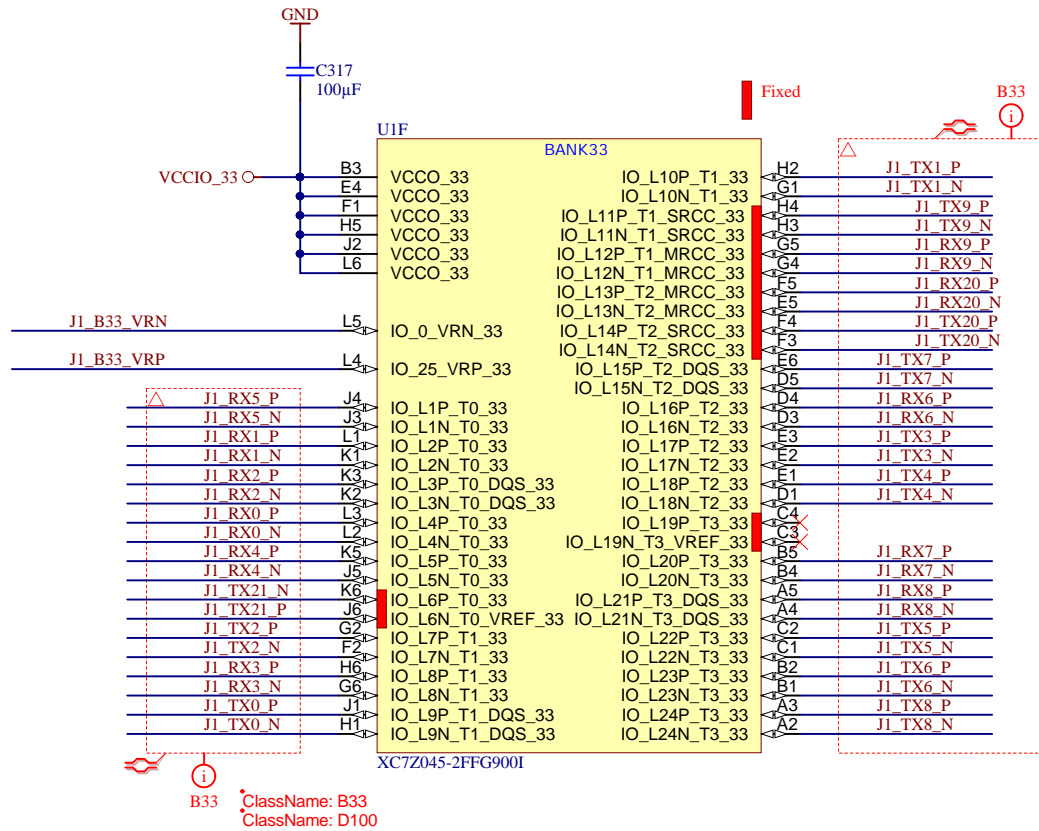
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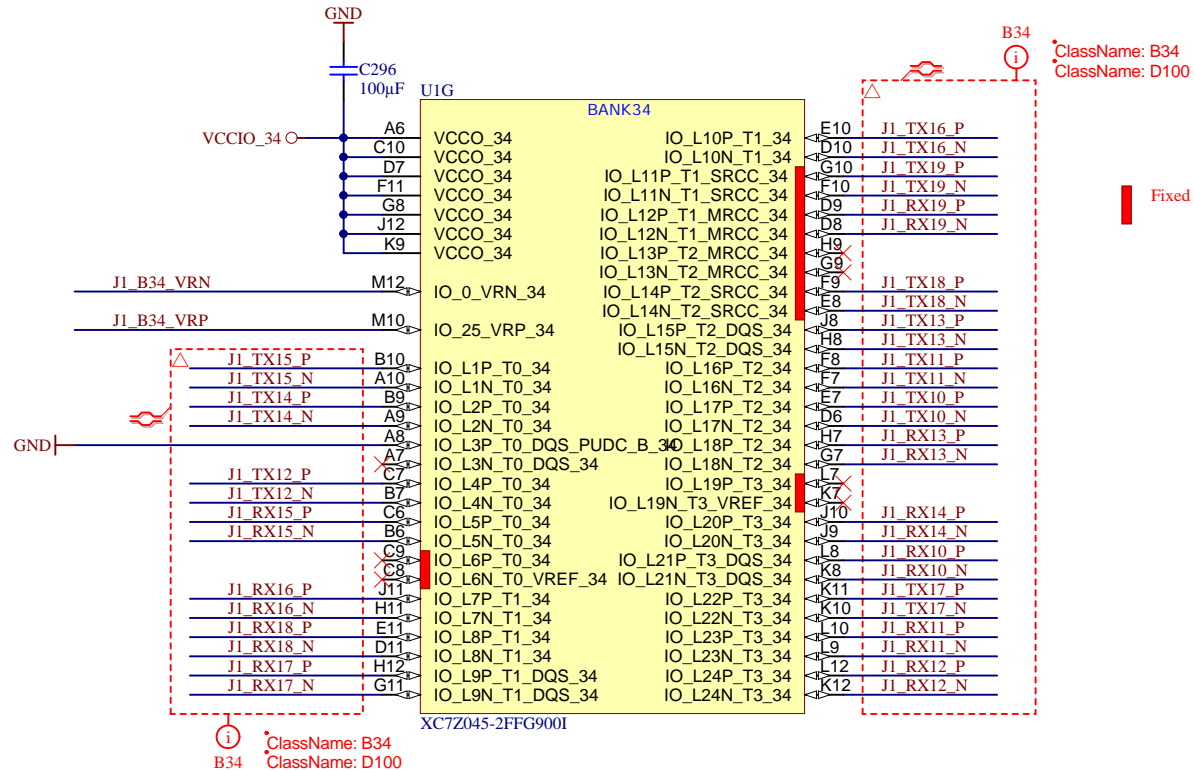


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 VCCIO\_33  
 Testpoint 0.8mm

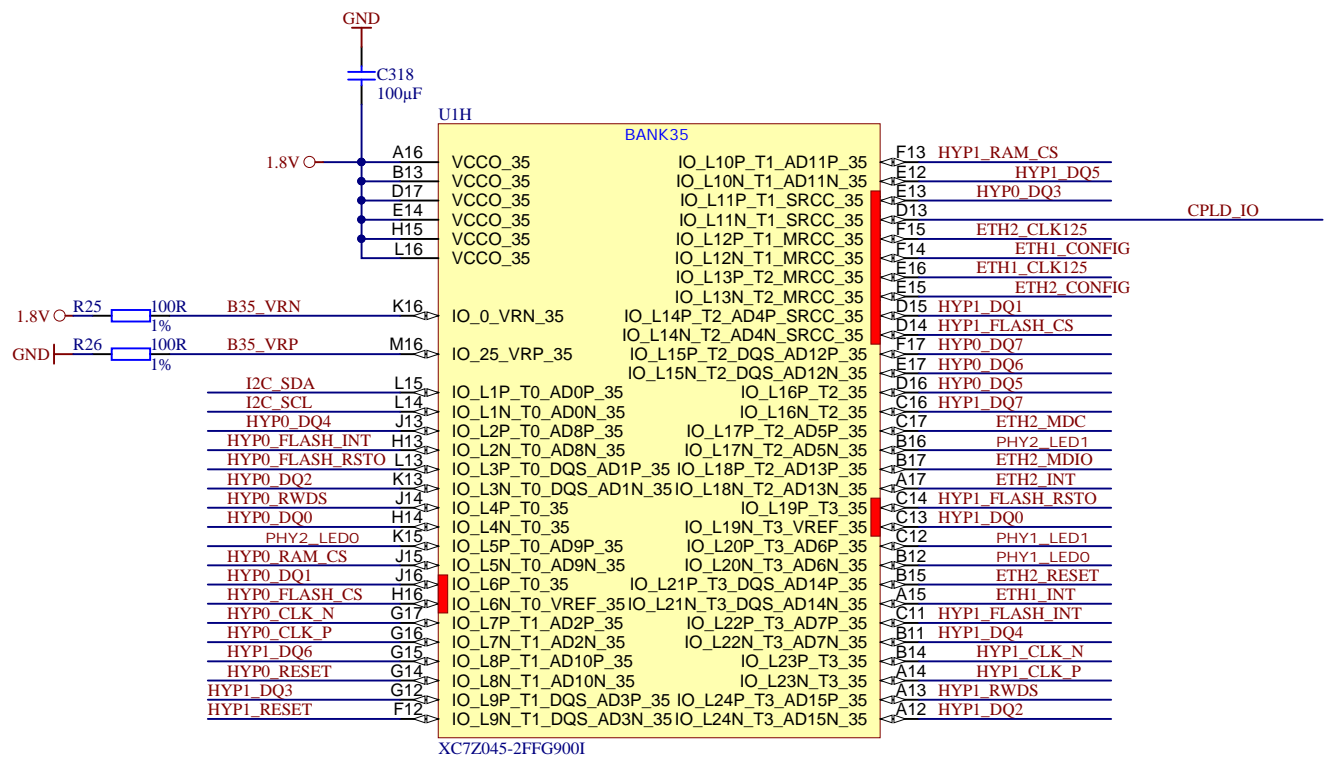


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A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 17 of 31
Filename: B33.SchDoc		

TP3  
 VCCIO\_34  
 Testpoint 0.8mm

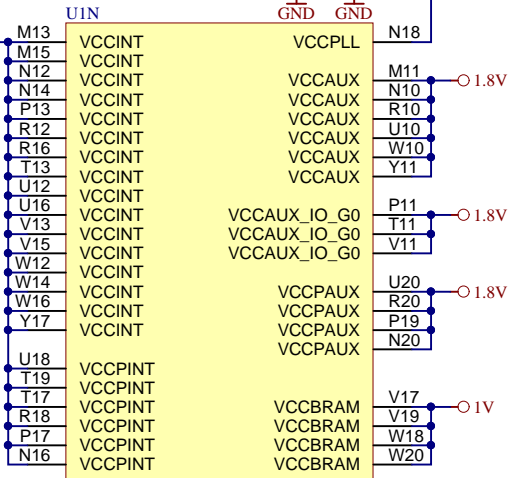
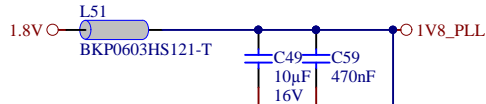
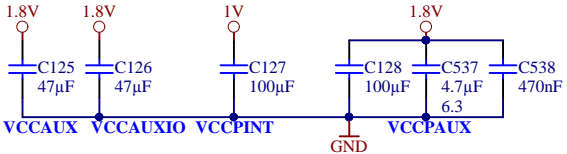
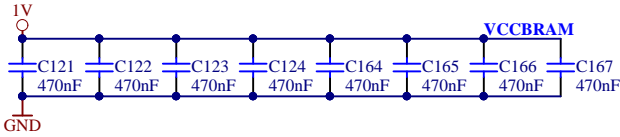
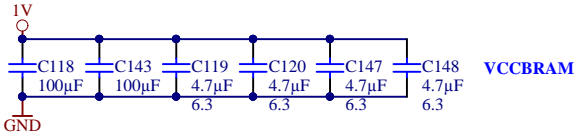
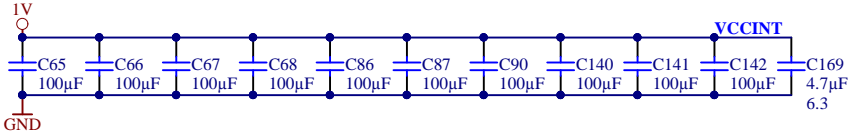
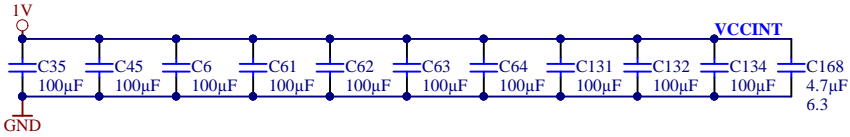


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Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 18 of 31
Filename: B34.SchDoc		

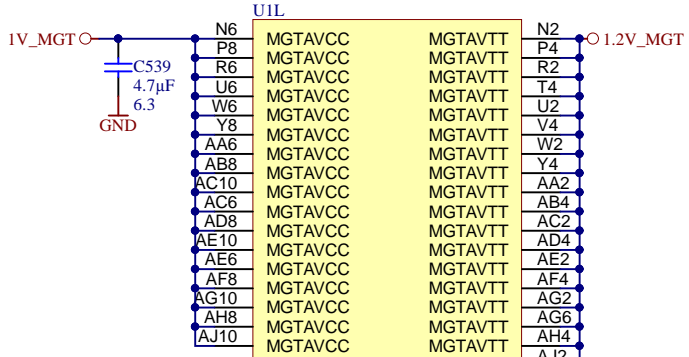


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Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 19 of 31
Filename: B35.SchDoc		

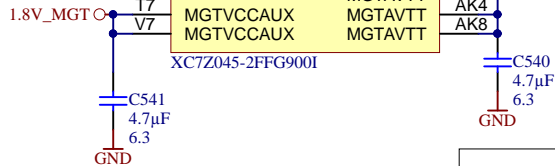
Capacitors suitable for XC7Z100



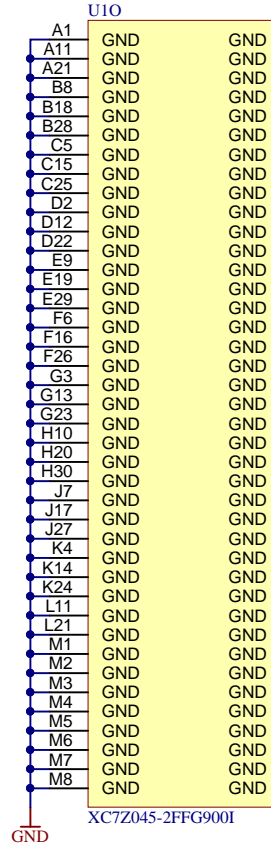
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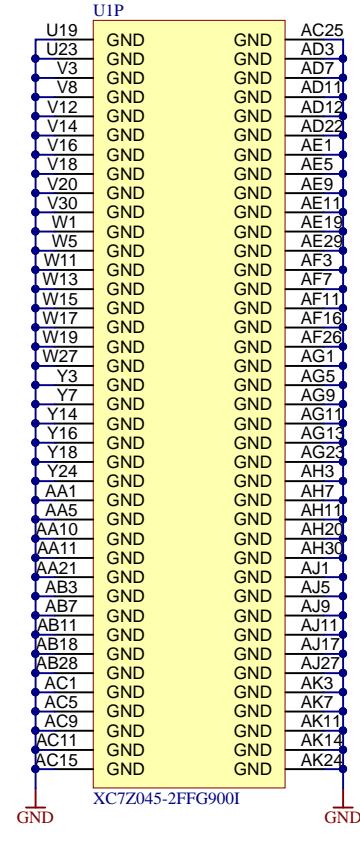
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XC7Z045-2FFG9001



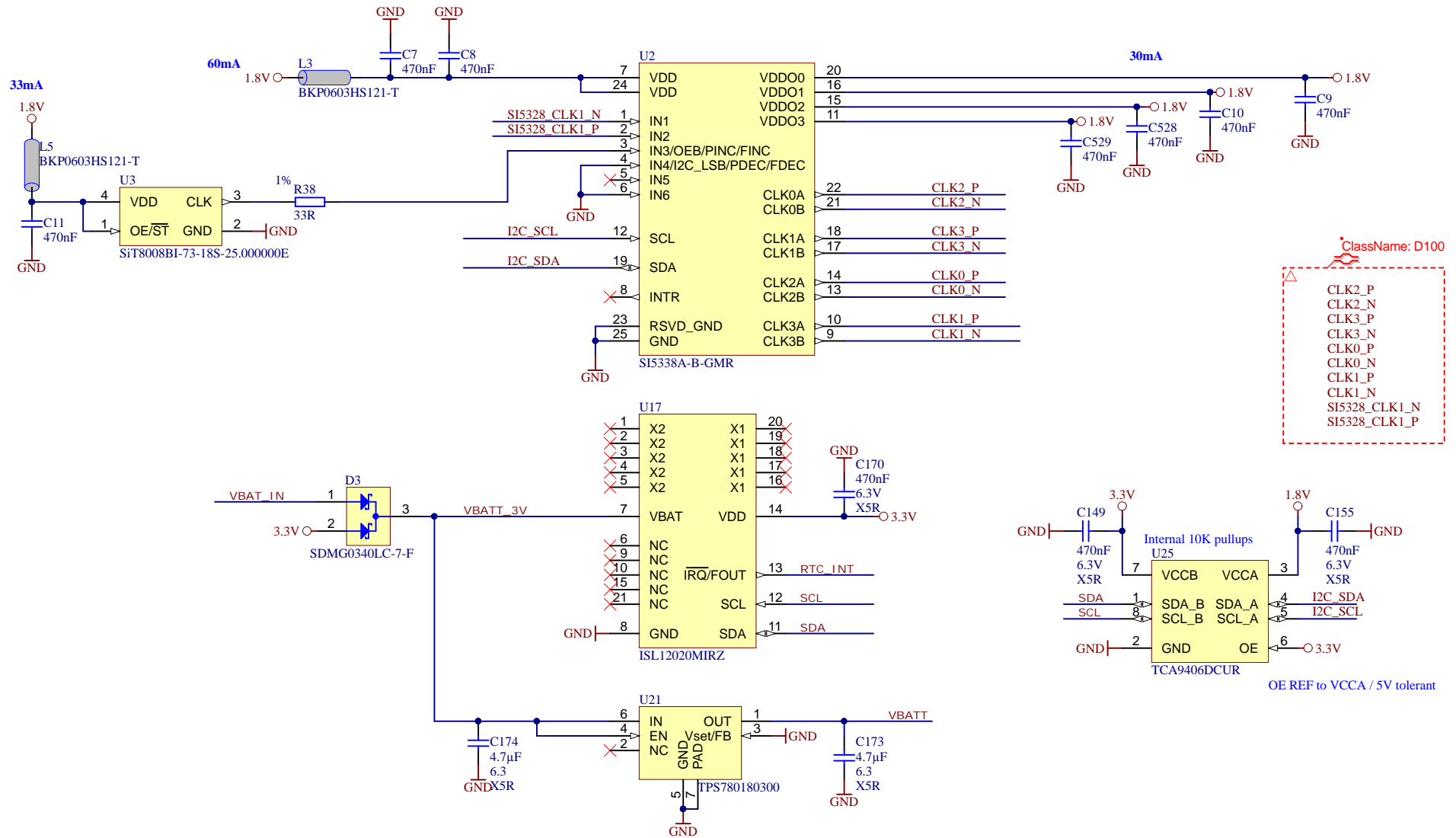
XC7Z045-2FFG9001



XC7Z045-2FFG9001



Title: TE0782 - ZYNQ POWER		
A4	Number: TE0782 TE0782-02-045-2IC	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



Title: TE0782 - Clock		
A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page21 of 31
Filename: Clock.SchDoc		

A

A

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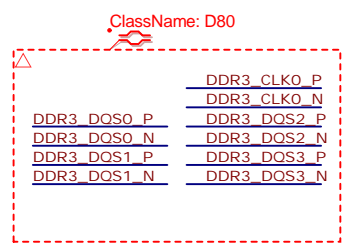
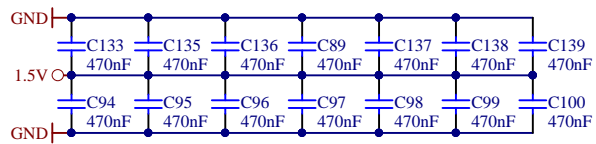
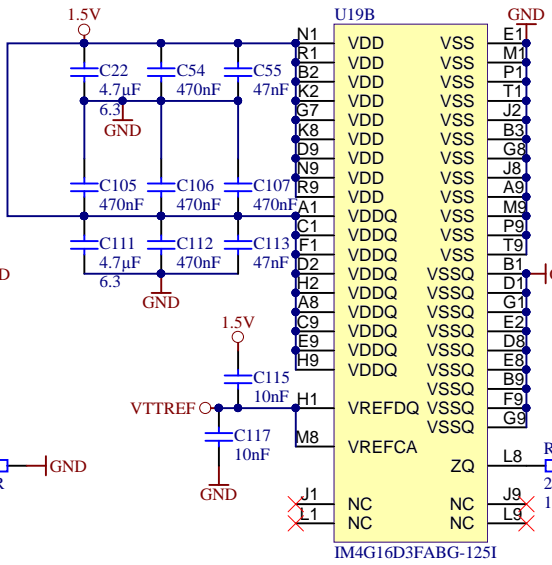
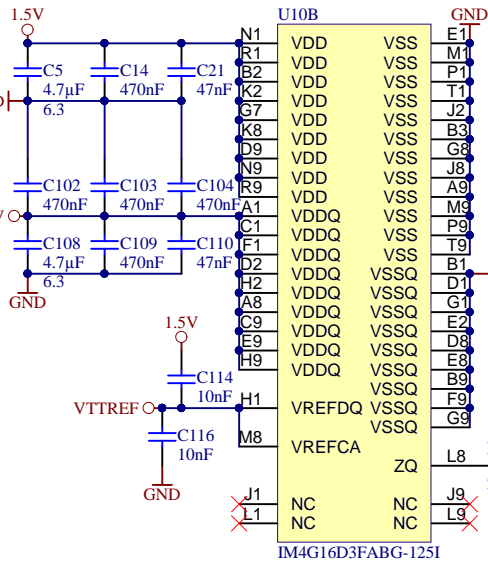
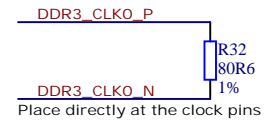
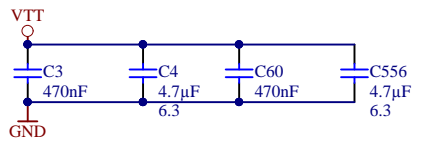
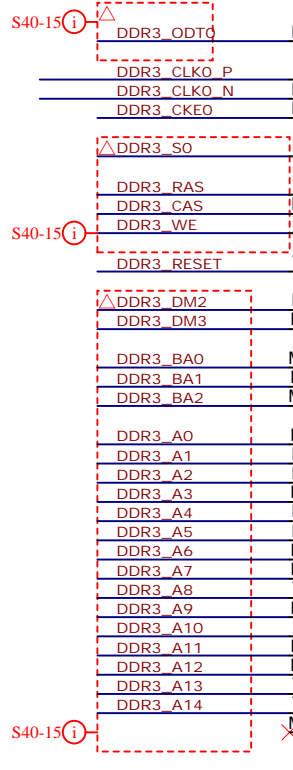
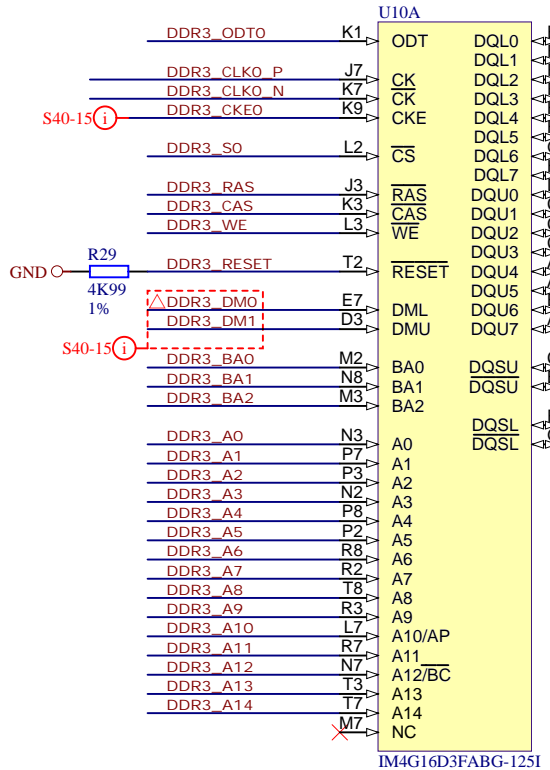
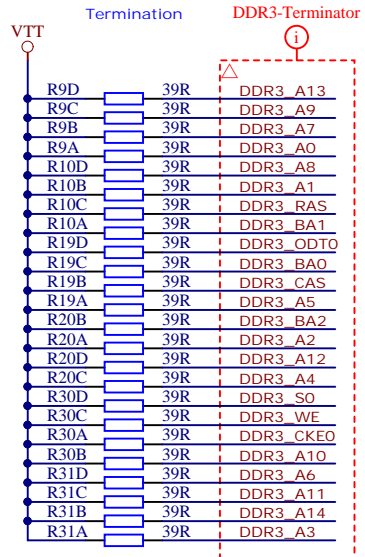
B

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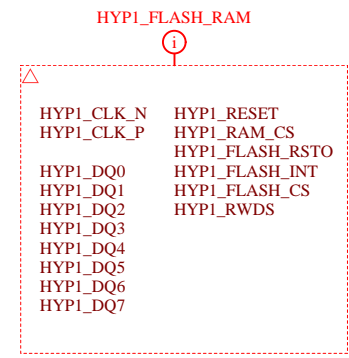
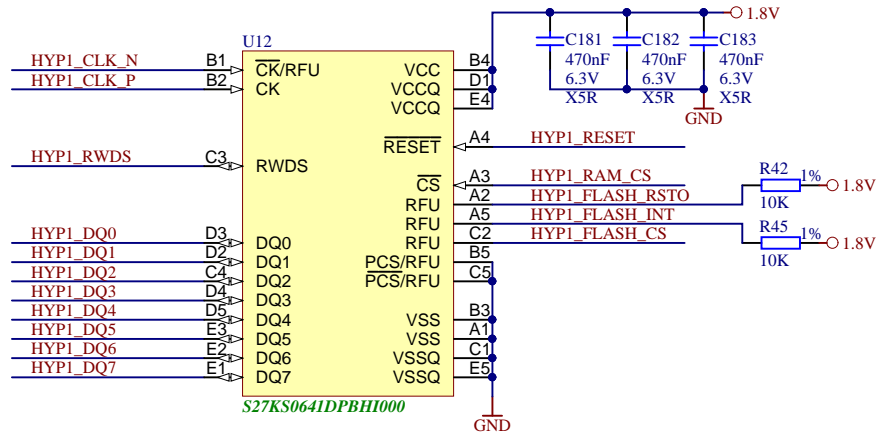
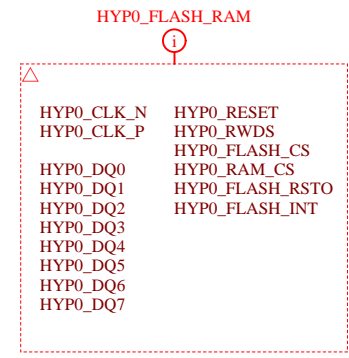
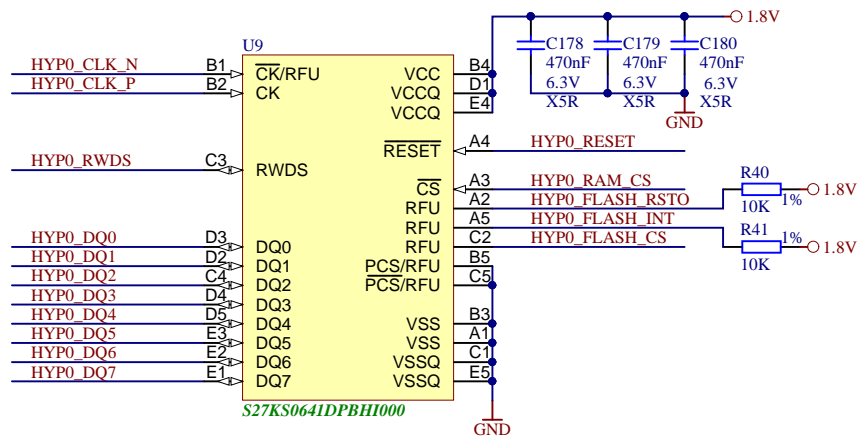
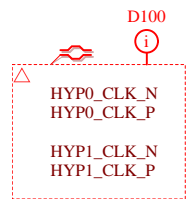
Title: TE0782 - DDR3 RAM		
A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page22 of 31
Filename: DDR3-RAM.SchDoc		

A

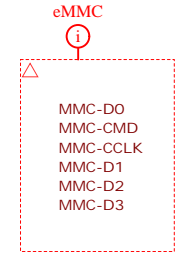
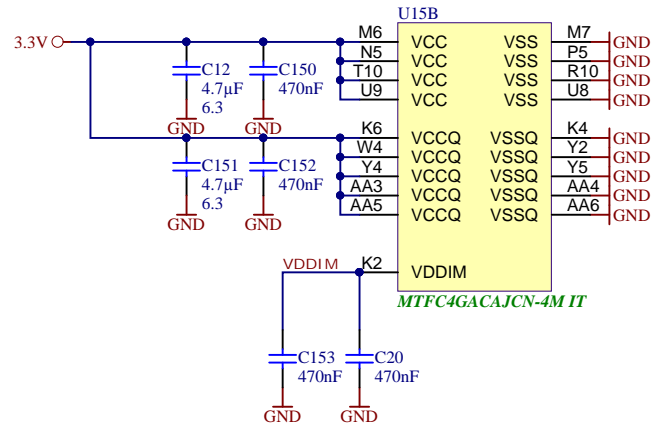
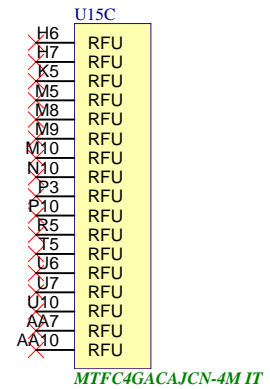
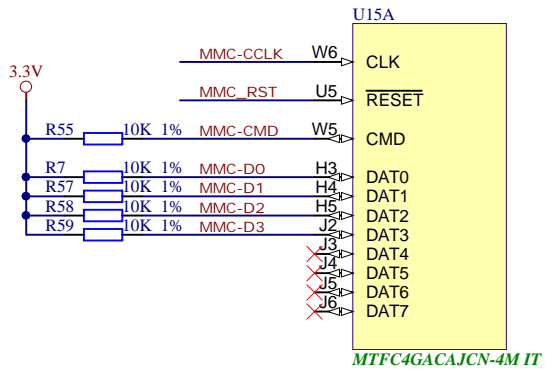
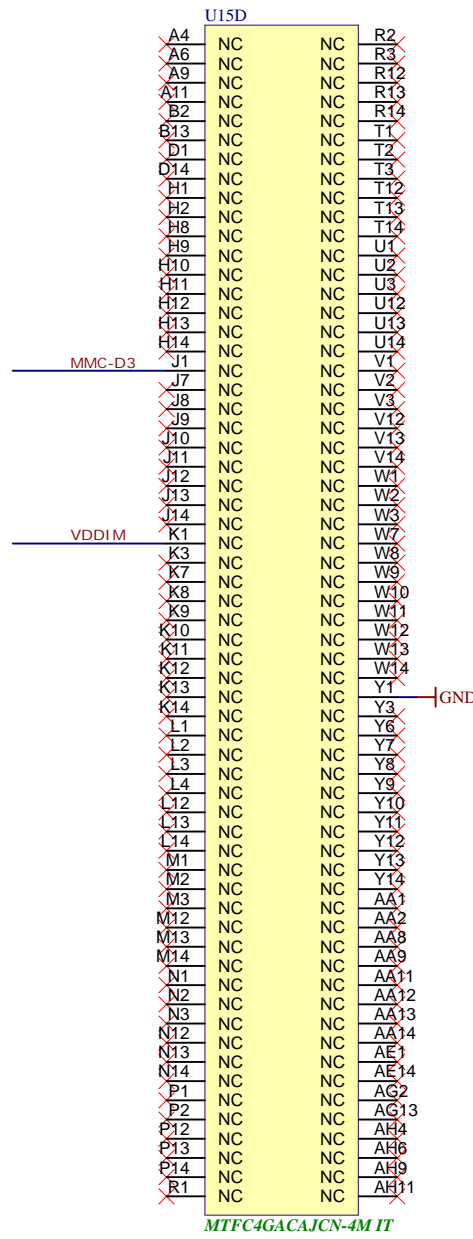
B

C

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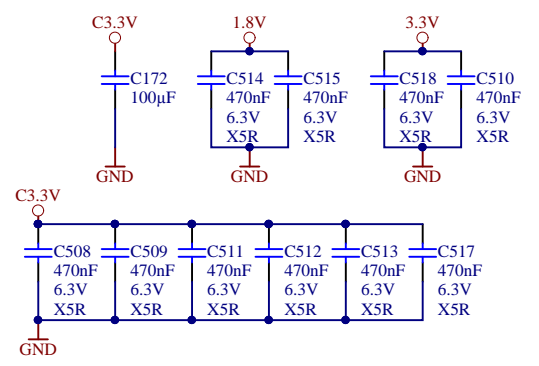
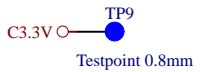
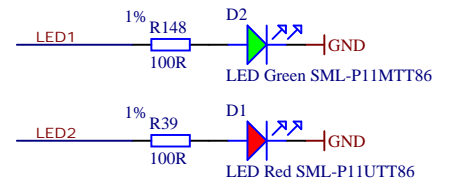
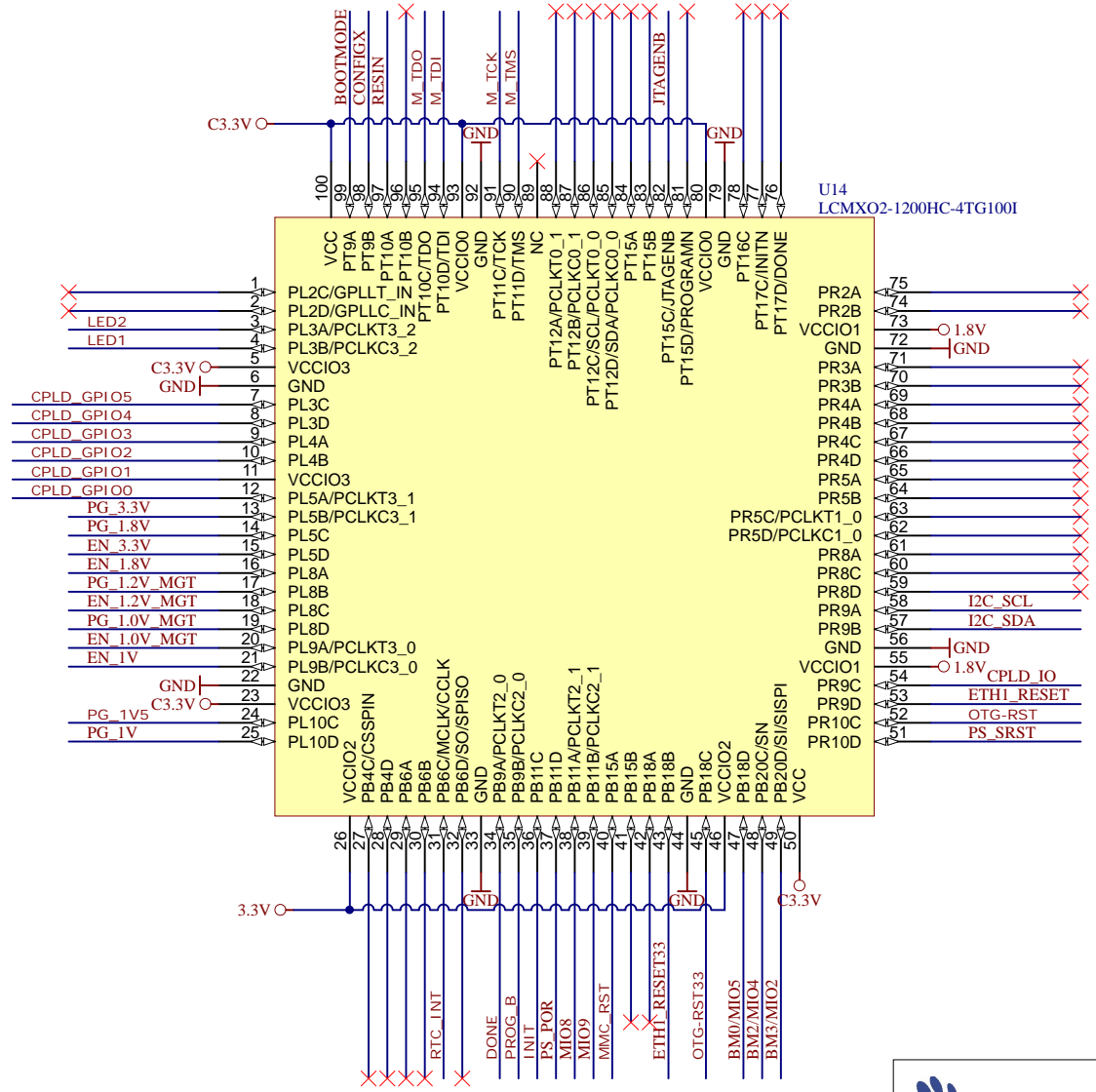


Title: TE0782 - HyperFlash_RAM		
A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page23 of 31
Filename: HyperFlash_RAM.SchDoc		

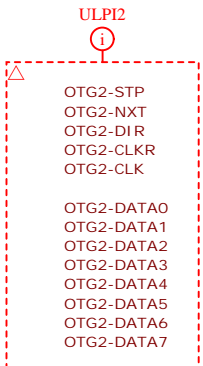
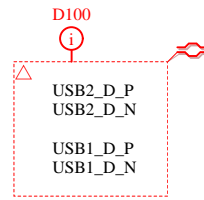
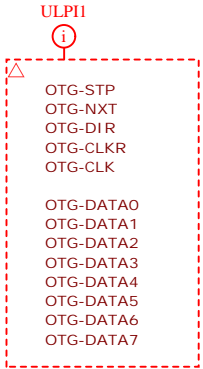
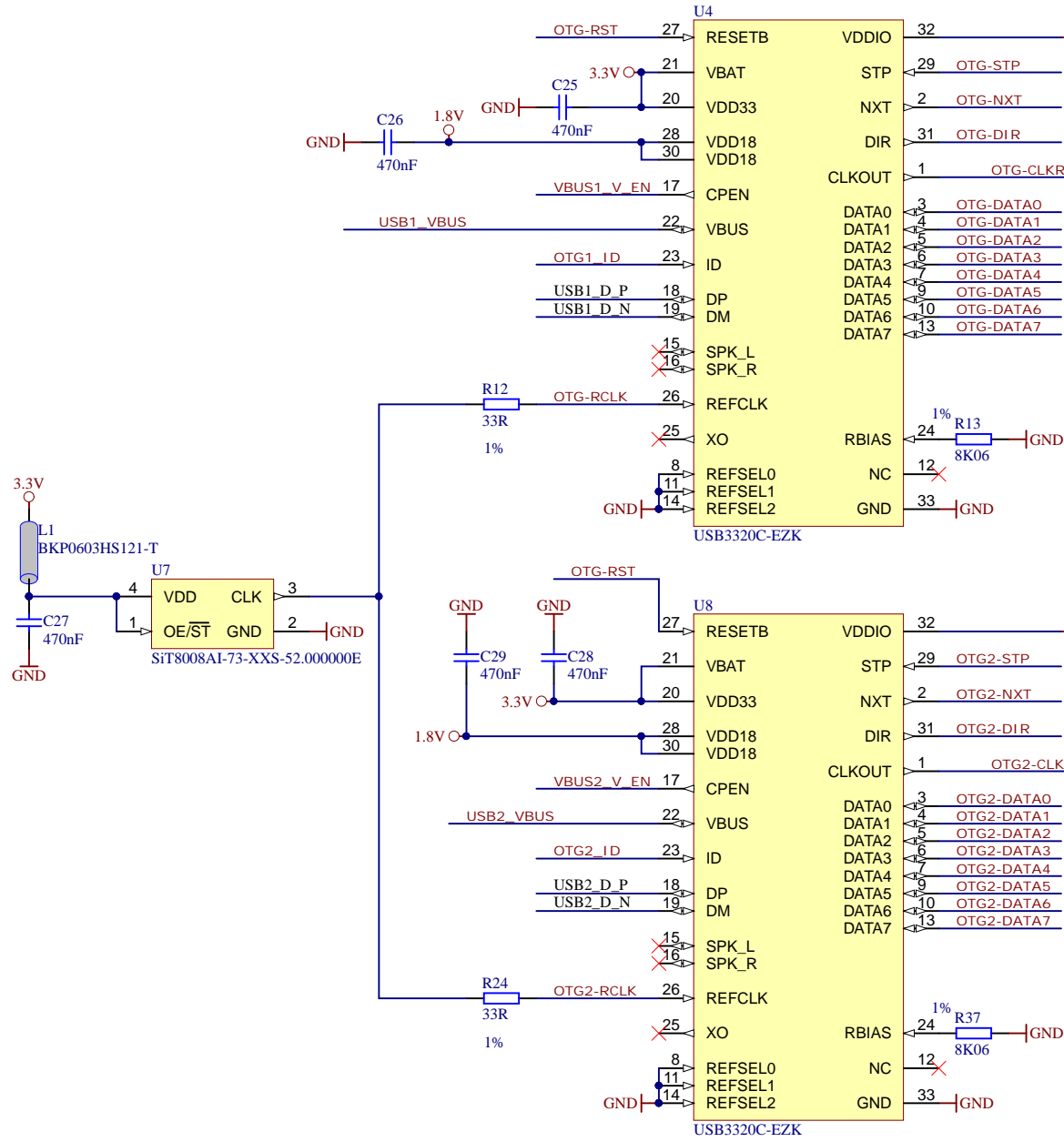


	Title: TE0782 - eMMC		
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	Filename: eMMC.SchDoc		





Title: TE0782 - CPLD		
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Filename: CPLD.SchDoc		



Title: TE0782 - USB-PHY

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Filename: USB-PHY.SchDoc		

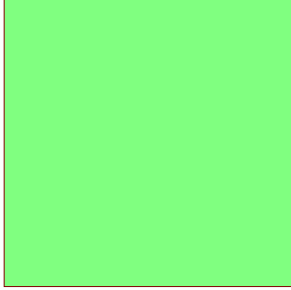
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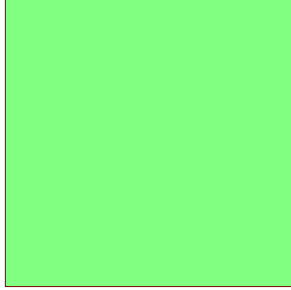
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4

U\_ETH1  
ETH1.SchDoc



U\_ETH2  
ETH2.SchDoc



A

A

B

B

C

C

D

D



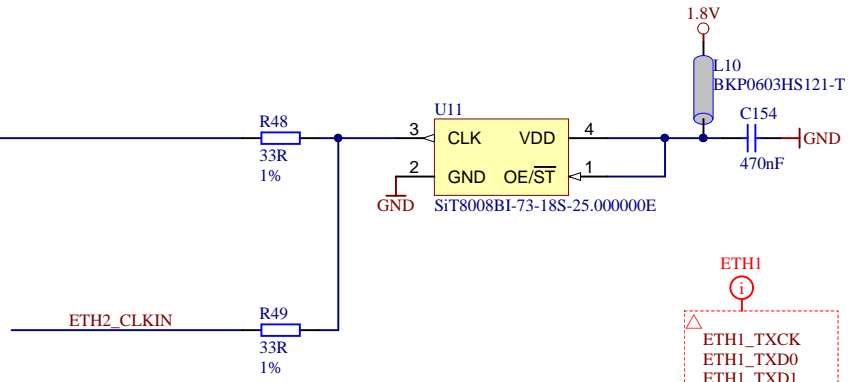
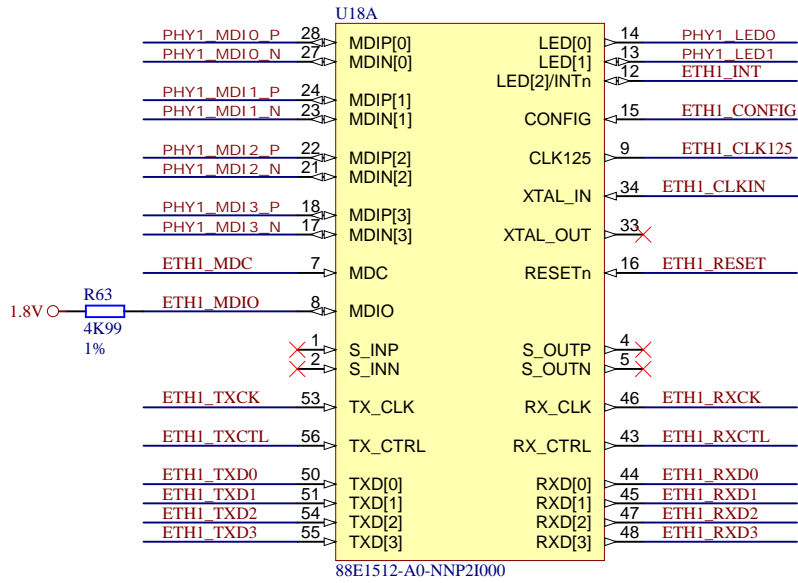
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A4	Number: <b>TE0782 TE0782-02-045-2IC</b>	Rev. <b>02</b>
Date: <b>2015-05-27</b>	Copyright: <b>Trenz Electronic GmbH</b>	Page <b>27</b> of <b>31</b>
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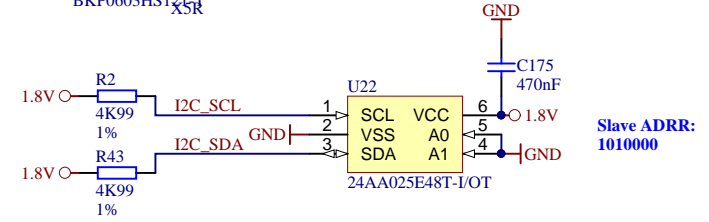
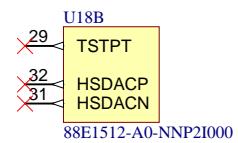
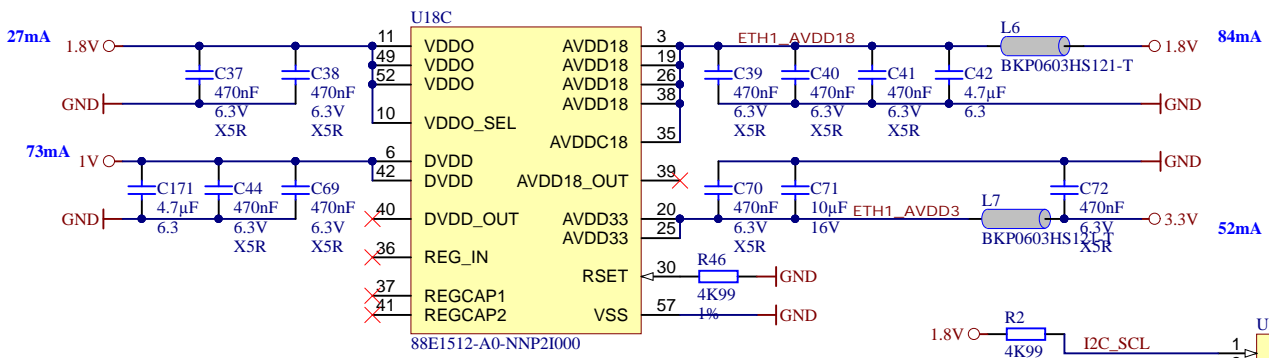
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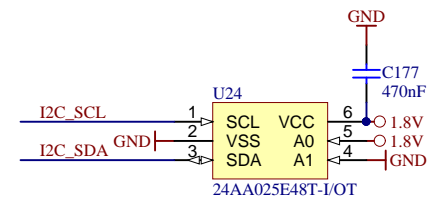
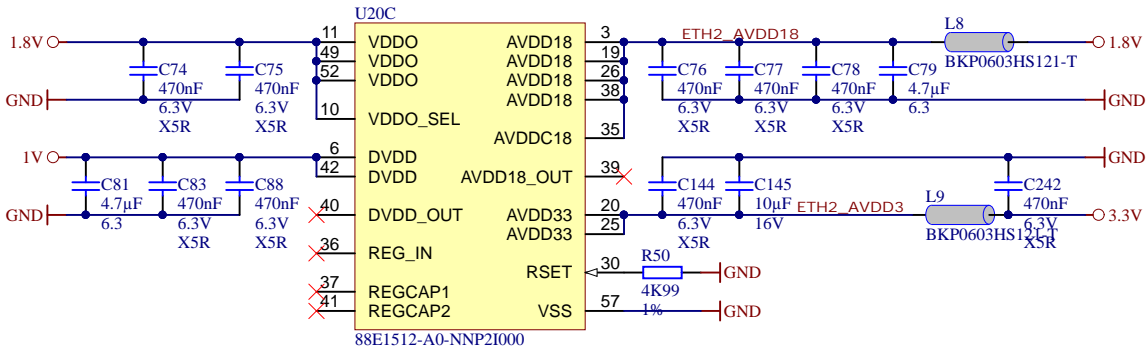
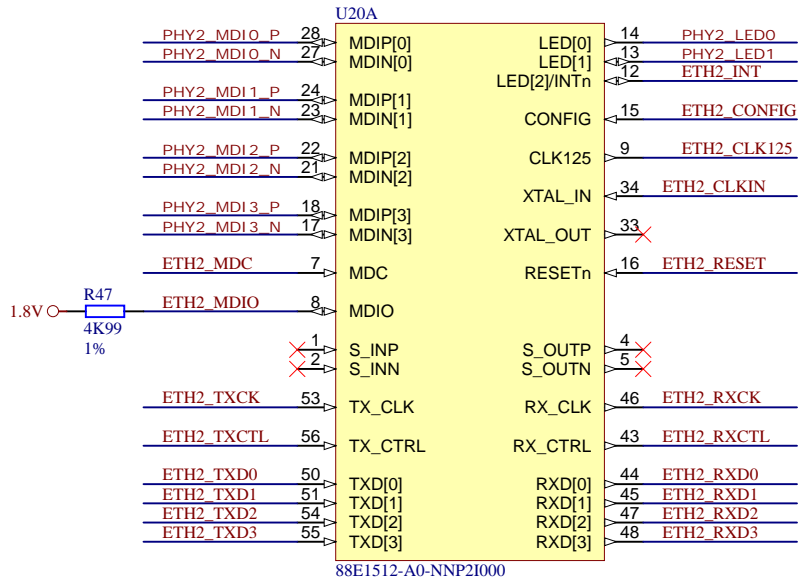
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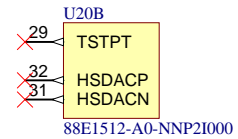
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- ETH1\_TXCK
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  - ETH1\_RXCK
  - ETH1\_RXD0
  - ETH1\_RXD1
  - ETH1\_RXD2
  - ETH1\_RXD3
  - ETH1\_RXCTL
  - ETH1\_MDC
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- PHY1\_LED0  
PHY1\_LED1  
ETH1\_INT  
ETH1\_CONFIG  
ETH1\_CLK125  
ETH1\_RESET



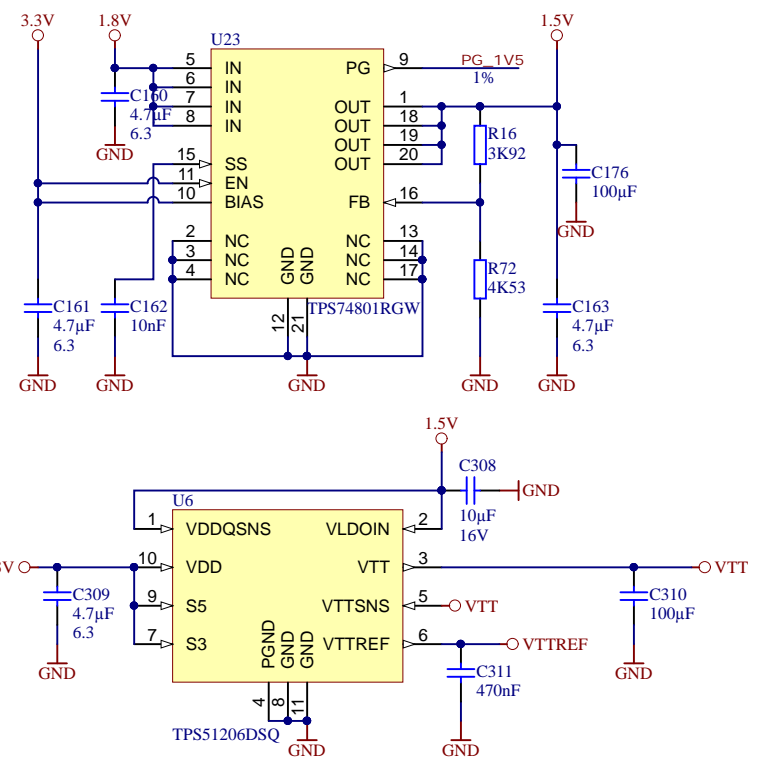
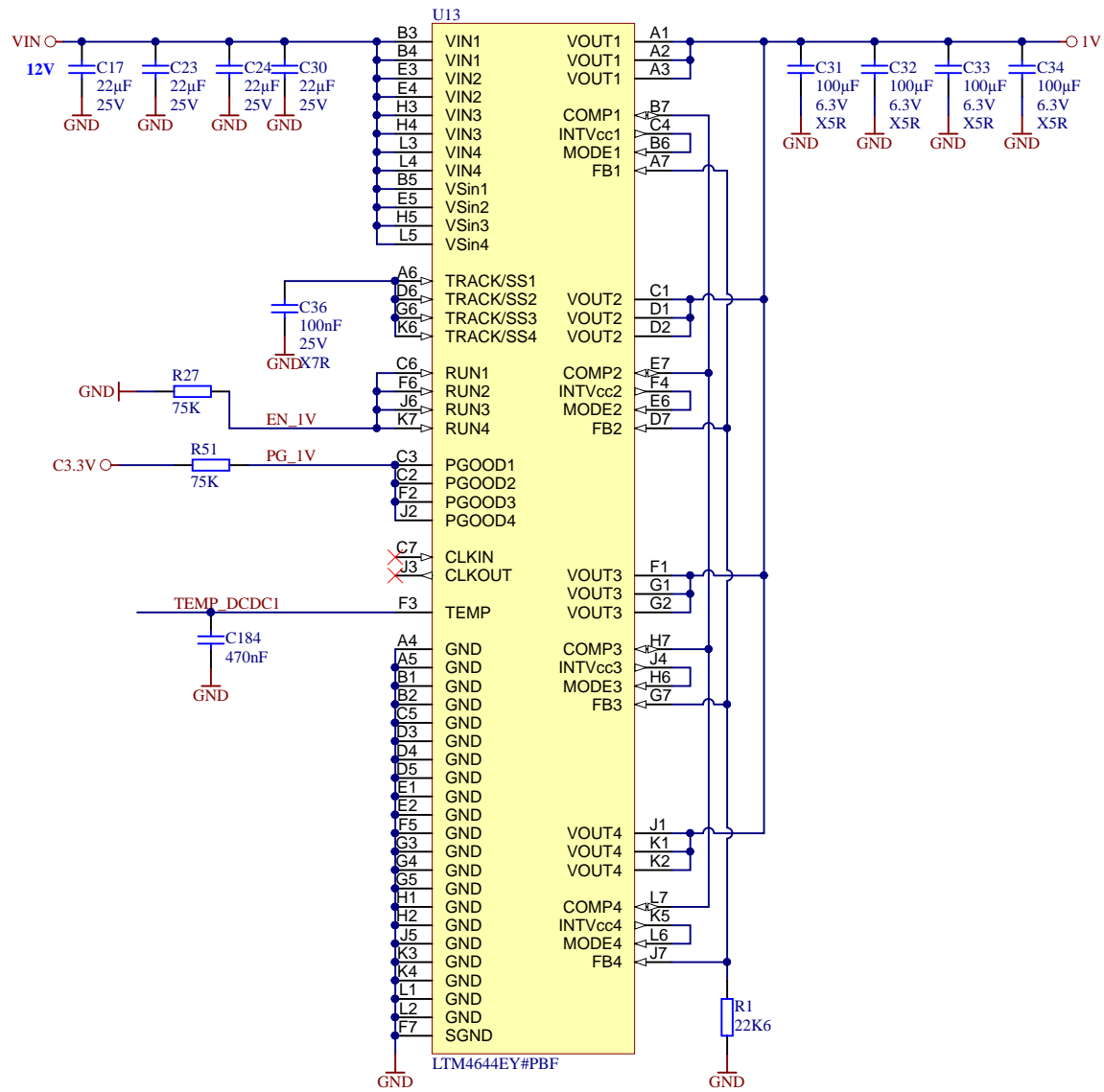
Title: TE0782 - ETH_PHY1		
A4	Number: TE0782 TE0782-02-045-2IC	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 28 of 31
Filename: ETH1.SchDoc		




Slave ADDR:  
1010001

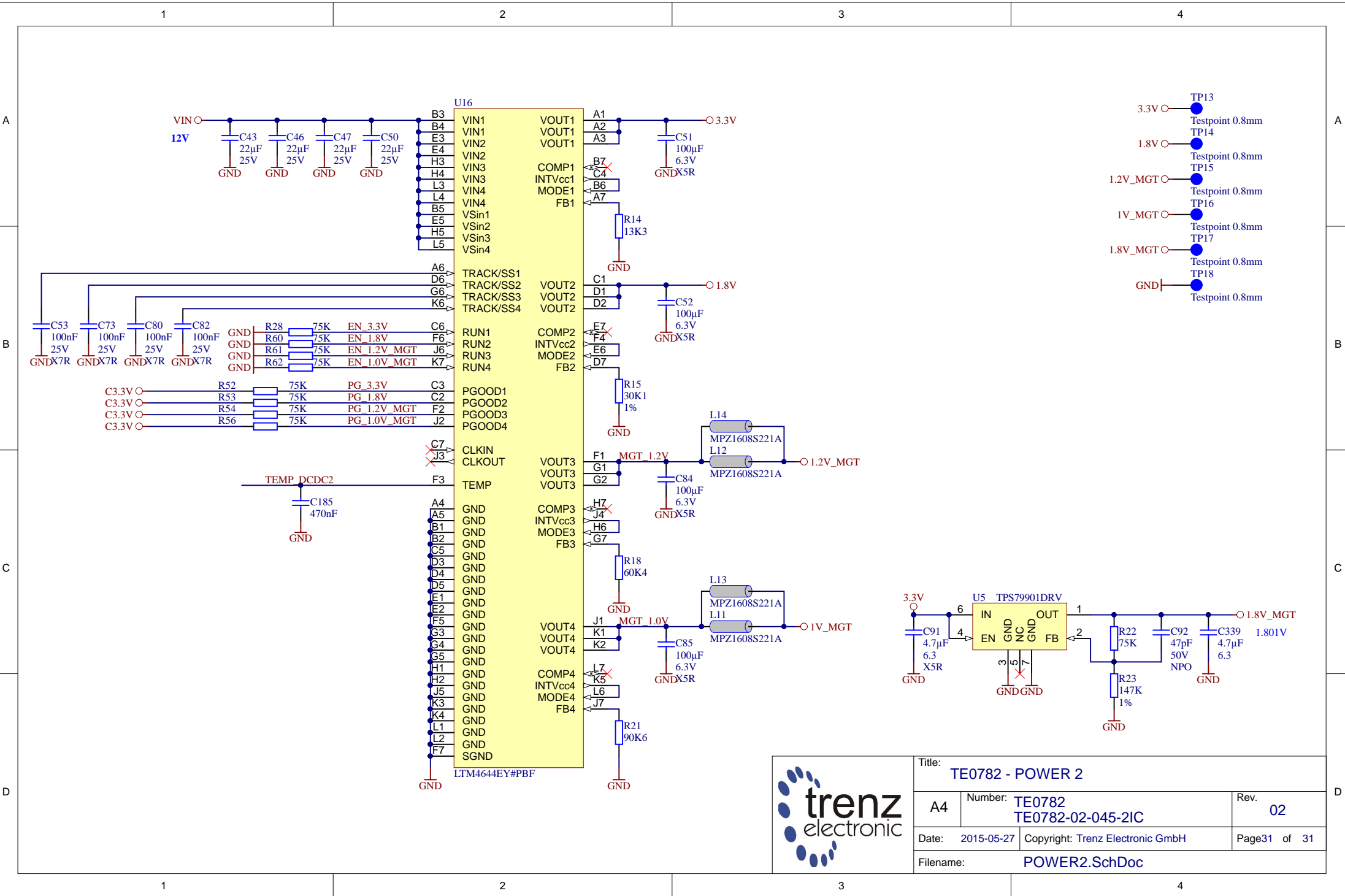


		Title: TE0782 - ETH_PHY2	
		A4	Number: TE0782 TE0782-02-045-2IC
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Filename: ETH2.SchDoc		Page 29 of 31	



- TP7 1V ○ ● Testpoint 0.8mm
- TP8 GND ○ ● Testpoint 0.8mm
- TP10 1.5V ○ ● Testpoint 0.8mm
- TP11 VTT ○ ● Testpoint 0.8mm
- TP12 VTTREF ○ ● Testpoint 0.8mm

			Title: TE0782 - POWER	
			A4	Number: TE0782 TE0782-02-045-2IC
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Filename: POWER.SchDoc				



Title: TE0782 - POWER 2		
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Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page 31 of 31
Filename: POWER2.SchDoc		