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

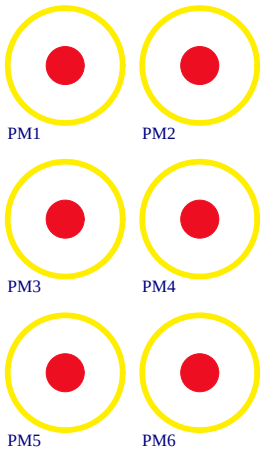
U_Clock
Clock.SchDoc

U_eMMC
eMMC.SchDoc

U_Connectors
Connectors.SchDoc

U_POWER
POWER.SchDoc

LOGO1
TE Logo PRINT Layer
LOGO PRINT



Serial
Serial
Serialnumber 6,3 x 6.3mm

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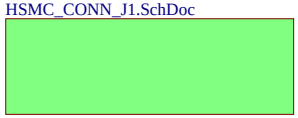
Title: TE0782 - Overview			
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page1 of 31
Filename: TE0782.SchDoc			

U_HSMC_CONN_J1
HSMC_CONN_J1.SchDoc



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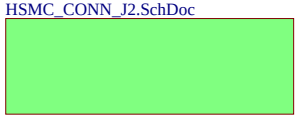

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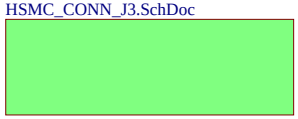

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Title: TE0782 - Connectors			
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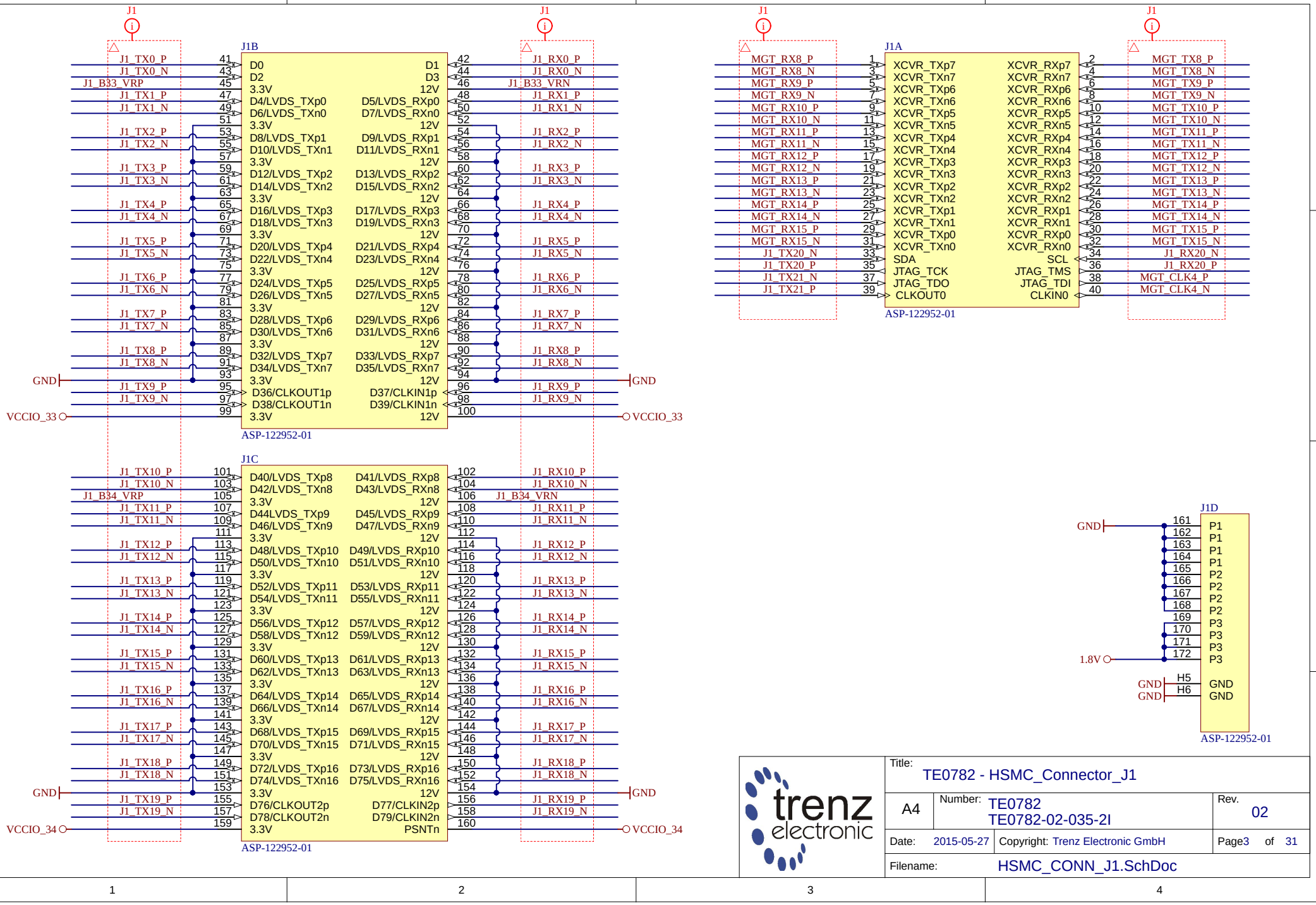
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page2 of 31
Filename: Connectors.SchDoc			


J1
J1B
J1_TX0_P
J1_TX0_N
J1_B33_VRP
J1_TX1_P
J1_TX1_N
J1_TX2_P
J1_TX2_N
J1_TX3_P
J1_TX3_N
J1_TX4_P
J1_TX4_N
J1_TX5_P
J1_TX5_N
J1_TX6_P
J1_TX6_N
J1_TX7_P
J1_TX7_N
J1_TX8_P
J1_TX8_N
GND
J1_TX9_P
J1_TX9_N
VCCIO_33
D0
D1
D2
D3
3.3V
12V
D4/LVDS_TXp0
D5/LVDS_RXp0
D6/LVDS_TXn0
D7/LVDS_RXn0
D8/LVDS_TXp1
D9/LVDS_RXp1
D10/LVDS_TXn1
D11/LVDS_RXn1
D12/LVDS_TXp2
D13/LVDS_RXp2
D14/LVDS_TXn2
D15/LVDS_RXn2
D16/LVDS_TXp3
D17/LVDS_RXp3
D18/LVDS_TXn3
D19/LVDS_RXn3
D20/LVDS_TXp4
D21/LVDS_RXp4
D22/LVDS_TXn4
D23/LVDS_RXn4
D24/LVDS_TXp5
D25/LVDS_RXp5
D26/LVDS_TXn5
D27/LVDS_RXn5
D28/LVDS_TXp6
D29/LVDS_RXp6
D30/LVDS_TXn6
D31/LVDS_RXn6
D32/LVDS_TXp7
D33/LVDS_RXp7
D34/LVDS_TXn7
D35/LVDS_RXn7
D36/CLKOUT1p
D37/CLKIN1p
D38/CLKOUT1n
D39/CLKIN1n
ASP-122952-01
J1_RX0_P
J1_RX0_N
J1_B33_VRN
J1_RX1_P
J1_RX1_N
J1_RX2_P
J1_RX2_N
J1_RX3_P
J1_RX3_N
J1_RX4_P
J1_RX4_N
J1_RX5_P
J1_RX5_N
J1_RX6_P
J1_RX6_N
J1_RX7_P
J1_RX7_N
J1_RX8_P
J1_RX8_N
GND
J1_RX9_P
J1_RX9_N
VCCIO_33
J1C
J1_TX10_P
J1_TX10_N
J1_B34_VRP
J1_TX11_P
J1_TX11_N
J1_TX12_P
J1_TX12_N
J1_TX13_P
J1_TX13_N
J1_TX14_P
J1_TX14_N
J1_TX15_P
J1_TX15_N
J1_TX16_P
J1_TX16_N
J1_TX17_P
J1_TX17_N
J1_TX18_P
J1_TX18_N
GND
J1_TX19_P
J1_TX19_N
VCCIO_34
D40/LVDS_TXp8
D41/LVDS_RXp8
D42/LVDS_TXn8
D43/LVDS_RXn8
D44LVDS_TXp9
D45/LVDS_RXp9
D46/LVDS_TXn9
D47/LVDS_RXn9
D48/LVDS_TXp10
D49/LVDS_RXp10
D50/LVDS_TXn10
D51/LVDS_RXn10
D52/LVDS_TXp11
D53/LVDS_RXp11
D54/LVDS_TXn11
D55/LVDS_RXn11
D56/LVDS_TXp12
D57/LVDS_RXp12
D58/LVDS_TXn12
D59/LVDS_RXn12
D60/LVDS_TXp13
D61/LVDS_RXp13
D62/LVDS_TXn13
D63/LVDS_RXn13
D64/LVDS_TXp14
D65/LVDS_RXp14
D66/LVDS_TXn14
D67/LVDS_RXn14
D68/LVDS_TXp15
D69/LVDS_RXp15
D70/LVDS_TXn15
D71/LVDS_RXn15
D72/LVDS_TXp16
D73/LVDS_RXp16
D74/LVDS_TXn16
D75/LVDS_RXn16
D76/CLKOUT2p
D77/CLKIN2p
D78/CLKOUT2n
D79/CLKIN2n
PSNTn
ASP-122952-01
J1_RX10_P
J1_RX10_N
J1_B34_VRN
J1_RX11_P
J1_RX11_N
J1_RX12_P
J1_RX12_N
J1_RX13_P
J1_RX13_N
J1_RX14_P
J1_RX14_N
J1_RX15_P
J1_RX15_N
J1_RX16_P
J1_RX16_N
J1_RX17_P
J1_RX17_N
J1_RX18_P
J1_RX18_N
GND
J1_RX19_P
J1_RX19_N
VCCIO_34
J1
J1A
MGT_RX8_P
MGT_RX8_N
MGT_RX9_P
MGT_RX9_N
MGT_RX10_P
MGT_RX10_N
MGT_RX11_P
MGT_RX11_N
MGT_RX12_P
MGT_RX12_N
MGT_RX13_P
MGT_RX13_N
MGT_RX14_P
MGT_RX14_N
MGT_RX15_P
MGT_RX15_N
J1_TX20_N
J1_TX20_P
J1_TX21_N
J1_TX21_P
XCVR_TXp7
XCVR_TXn7
XCVR_TXp6
XCVR_TXn6
XCVR_TXp5
XCVR_TXn5
XCVR_TXp4
XCVR_TXn4
XCVR_TXp3
XCVR_TXn3
XCVR_TXp2
XCVR_TXn2
XCVR_TXp1
XCVR_TXn1
XCVR_TXp0
XCVR_TXn0
SDA
JTAG_TCK
JTAG_TDO
CLKOUT0
XCVR_RXp7
XCVR_RXn7
XCVR_RXp6
XCVR_RXn6
XCVR_RXp5
XCVR_RXn5
XCVR_RXp4
XCVR_RXn4
XCVR_RXp3
XCVR_RXn3
XCVR_RXp2
XCVR_RXn2
XCVR_RXp1
XCVR_RXn1
XCVR_RXp0
XCVR_RXn0
SCL
JTAG_TMS
JTAG_TDI
CLKIN0
ASP-122952-01
J1
MGT_TX8_P
MGT_TX8_N
MGT_TX9_P
MGT_TX9_N
MGT_TX10_P
MGT_TX10_N
MGT_TX11_P
MGT_TX11_N
MGT_TX12_P
MGT_TX12_N
MGT_TX13_P
MGT_TX13_N
MGT_TX14_P
MGT_TX14_N
MGT_TX15_P
MGT_TX15_N
J1_RX20_N
J1_RX20_P
MGT_CLK4_P
MGT_CLK4_N
J1D
GND
1.8V
P1
P2
P3
H5
H6
GND
GND
GND
ASP-122952-01
trenz electronic
Title: TE0782 - HSMC_Connector_J1
A4
Number: TE0782
TE0782-02-035-2I
Rev. 02
Date: 2015-05-27
Copyright: Trenz Electronic GmbH
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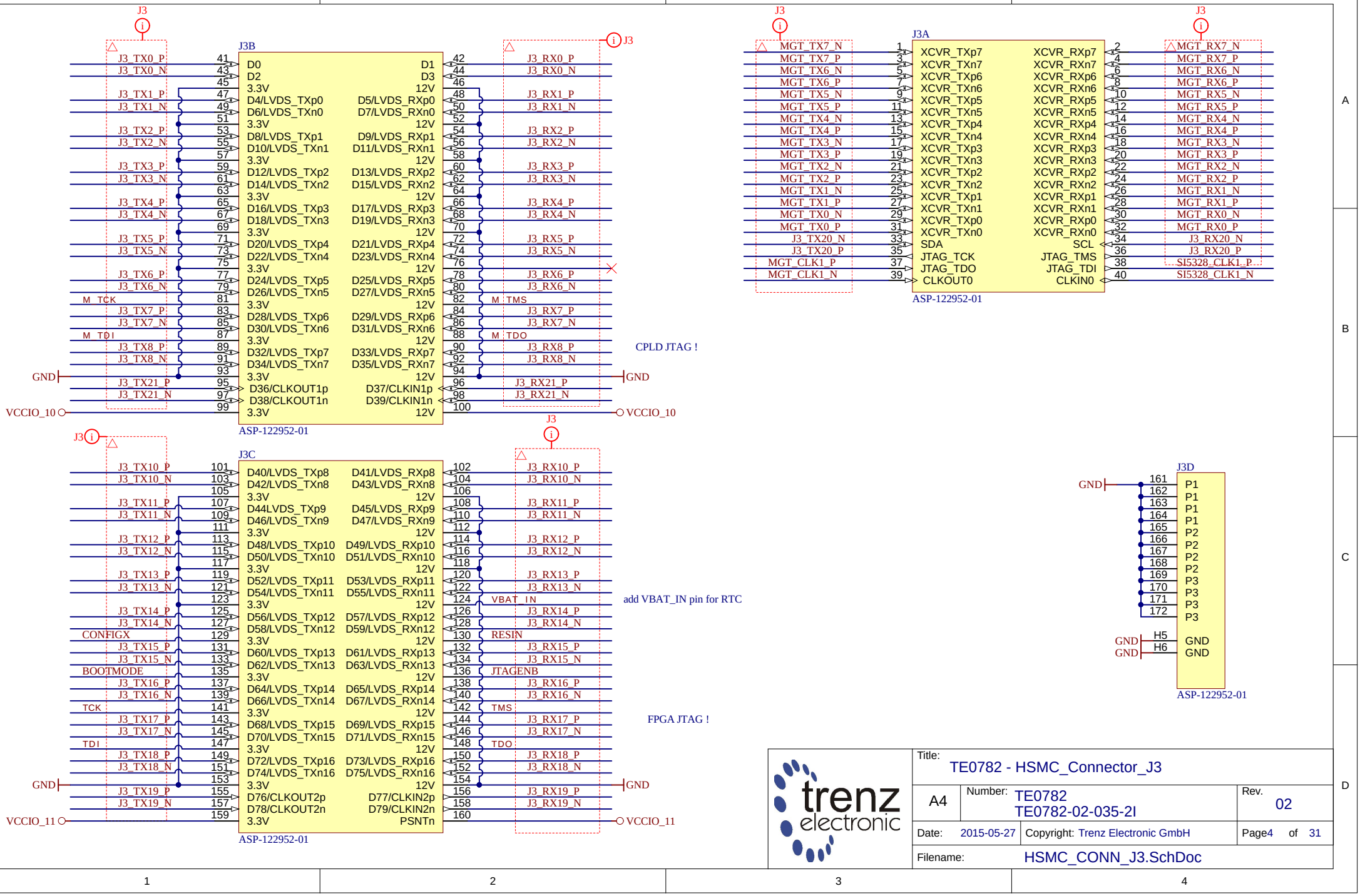
Filename: HSMC_CONN_J1.SchDoc


J3
J3B
D0
D1
D2
D3
3.3V
12V
D4/LVDS_TXp0
D5/LVDS_RXp0
D6/LVDS_TXn0
D7/LVDS_RXn0
D8/LVDS_TXp1
D9/LVDS_RXp1
D10/LVDS_TXn1
D11/LVDS_RXn1
D12/LVDS_TXp2
D13/LVDS_RXp2
D14/LVDS_TXn2
D15/LVDS_RXn2
D16/LVDS_TXp3
D17/LVDS_RXp3
D18/LVDS_TXn3
D19/LVDS_RXn3
D20/LVDS_TXp4
D21/LVDS_RXp4
D22/LVDS_TXn4
D23/LVDS_RXn4
D24/LVDS_TXp5
D25/LVDS_RXp5
D26/LVDS_TXn5
D27/LVDS_RXn5
D28/LVDS_TXp6
D29/LVDS_RXp6
D30/LVDS_TXn6
D31/LVDS_RXn6
D32/LVDS_TXp7
D33/LVDS_RXp7
D34/LVDS_TXn7
D35/LVDS_RXn7
D36/CLKOUT1p
D37/CLKIN1p
D38/CLKOUT1n
D39/CLKIN1n
ASP-122952-01
J3_TX0_P
J3_TX0_N
J3_TX1_P
J3_TX1_N
J3_TX2_P
J3_TX2_N
J3_TX3_P
J3_TX3_N
J3_TX4_P
J3_TX4_N
J3_TX5_P
J3_TX5_N
J3_TX6_P
J3_TX6_N
M_TCK
J3_TX7_P
J3_TX7_N
M_TDI
J3_TX8_P
J3_TX8_N
J3_TX21_P
J3_TX21_N
J3_RX0_P
J3_RX0_N
J3_RX1_P
J3_RX1_N
J3_RX2_P
J3_RX2_N
J3_RX3_P
J3_RX3_N
J3_RX4_P
J3_RX4_N
J3_RX5_P
J3_RX5_N
J3_RX6_P
J3_RX6_N
M_TMS
J3_RX7_P
J3_RX7_N
M_TDO
J3_RX8_P
J3_RX8_N
J3_RX21_P
J3_RX21_N
GND
VCCIO_10
CPLD JTAG !
J3C
D40/LVDS_TXp8
D41/LVDS_RXp8
D42/LVDS_TXn8
D43/LVDS_RXn8
D44LVDS_TXp9
D45/LVDS_RXp9
D46/LVDS_TXn9
D47/LVDS_RXn9
D48/LVDS_TXp10
D49/LVDS_RXp10
D50/LVDS_TXn10
D51/LVDS_RXn10
D52/LVDS_TXp11
D53/LVDS_RXp11
D54/LVDS_TXn11
D55/LVDS_RXn11
D56/LVDS_TXp12
D57/LVDS_RXp12
D58/LVDS_TXn12
D59/LVDS_RXn12
D60/LVDS_TXp13
D61/LVDS_RXp13
D62/LVDS_TXn13
D63/LVDS_RXn13
D64/LVDS_TXp14
D65/LVDS_RXp14
D66/LVDS_TXn14
D67/LVDS_RXn14
D68/LVDS_TXp15
D69/LVDS_RXp15
D70/LVDS_TXn15
D71/LVDS_RXn15
D72/LVDS_TXp16
D73/LVDS_RXp16
D74/LVDS_TXn16
D75/LVDS_RXn16
D76/CLKOUT2p
D77/CLKIN2p
D78/CLKOUT2n
D79/CLKIN2n
PSNTn
ASP-122952-01
J3_TX10_P
J3_TX10_N
J3_TX11_P
J3_TX11_N
J3_TX12_P
J3_TX12_N
J3_TX13_P
J3_TX13_N
J3_TX14_P
J3_TX14_N
CONFIGX
J3_TX15_P
J3_TX15_N
BOOTMODE
J3_TX16_P
J3_TX16_N
TCK
J3_TX17_P
J3_TX17_N
TDI
J3_TX18_P
J3_TX18_N
J3_TX19_P
J3_TX19_N
J3_RX10_P
J3_RX10_N
J3_RX11_P
J3_RX11_N
J3_RX12_P
J3_RX12_N
J3_RX13_P
J3_RX13_N
VBAT_IN
J3_RX14_P
J3_RX14_N
RESIN
J3_RX15_P
J3_RX15_N
JTAGENB
J3_RX16_P
J3_RX16_N
TMS
J3_RX17_P
J3_RX17_N
TDO
J3_RX18_P
J3_RX18_N
J3_RX19_P
J3_RX19_N
GND
VCCIO_11
add VBAT_IN pin for RTC
FPGA JTAG !
J3A
XCVR_TXp7
XCVR_RXp7
XCVR_TXn7
XCVR_RXn7
XCVR_TXp6
XCVR_RXp6
XCVR_TXn6
XCVR_RXn6
XCVR_TXp5
XCVR_RXp5
XCVR_TXn5
XCVR_RXn5
XCVR_TXp4
XCVR_RXp4
XCVR_TXn4
XCVR_RXn4
XCVR_TXp3
XCVR_RXp3
XCVR_TXn3
XCVR_RXn3
XCVR_TXp2
XCVR_RXp2
XCVR_TXn2
XCVR_RXn2
XCVR_TXp1
XCVR_RXp1
XCVR_TXn1
XCVR_RXn1
XCVR_TXp0
XCVR_RXp0
XCVR_TXn0
XCVR_RXn0
SDA
SCL
JTAG_TCK
JTAG_TMS
JTAG_TDO
JTAG_TDI
CLKOUT0
CLKIN0
ASP-122952-01
MGT_TX7_N
MGT_TX7_P
MGT_TX6_N
MGT_TX6_P
MGT_TX5_N
MGT_TX5_P
MGT_TX4_N
MGT_TX4_P
MGT_TX3_N
MGT_TX3_P
MGT_TX2_N
MGT_TX2_P
MGT_TX1_N
MGT_TX1_P
MGT_TX0_N
MGT_TX0_P
J3_TX20_N
J3_TX20_P
MGT_CLK1_P
MGT_CLK1_N
MGT_RX7_N
MGT_RX7_P
MGT_RX6_N
MGT_RX6_P
MGT_RX5_N
MGT_RX5_P
MGT_RX4_N
MGT_RX4_P
MGT_RX3_N
MGT_RX3_P
MGT_RX2_N
MGT_RX2_P
MGT_RX1_N
MGT_RX1_P
MGT_RX0_N
MGT_RX0_P
J3_RX20_N
J3_RX20_P
SI5328_CLK1_P
SI5328_CLK1_N
J3D
P1
P2
P3
H5
H6
GND
ASP-122952-01
trenz electronic
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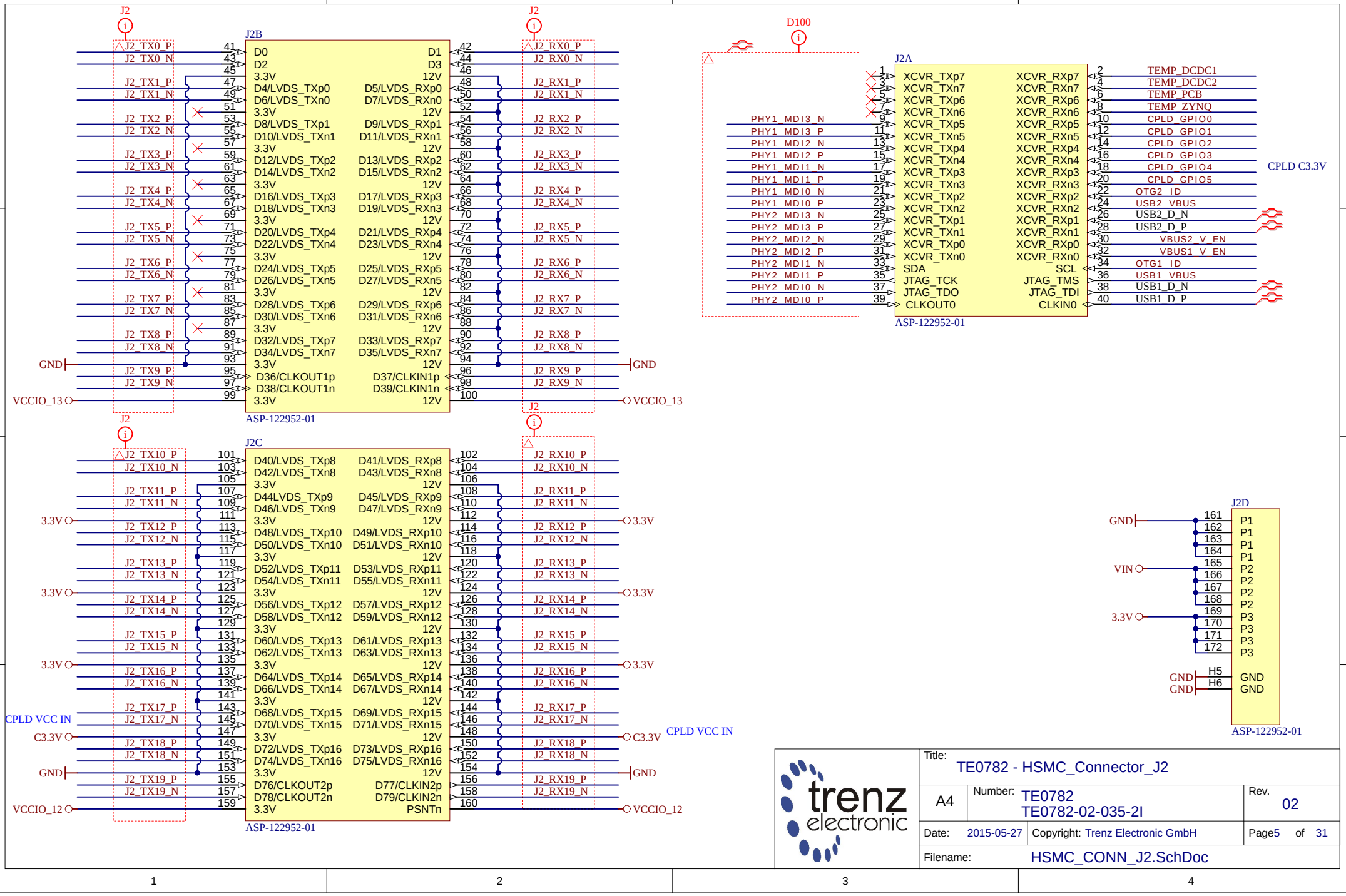
A4
Number: TE0782
TE0782-02-035-2I
Rev. 02
Date: 2015-05-27
Copyright: Trenz Electronic GmbH
Page4 of 31
Filename: HSMC_CONN_J3.SchDoc


J2B
J2A
J2C
J2D
D100
ASP-122952-01
CPLD C3.3V
CPLD VCC IN
GND
VCCIO_13
VCCIO_12
3.3V
C3.3V
VIN
TE0782 - HSMC_Connector_J2
A4
Number: TE0782
TE0782-02-035-2I
Rev. 02
Date: 2015-05-27
Copyright: Trenz Electronic GmbH
Page5 of 31
Filename: HSMC_CONN_J2.SchDoc

U_PS-DDR
PS-DDR.SchDoc

U_MIO-BANKS
MIO-BANKS.SchDoc

U_HP-BANKS
HP-BANKS.SchDoc

U_FPGA-MGT
FPGA-MGT.SchDoc

U_FPGA-CFG
FPGA-CFG.SchDoc

U_FPGA-PWR
FPGA-PWR.SchDoc

U_B9
B9.SchDoc

U_B10
B10.SchDoc

U_B11
B11.SchDoc

U_B12
B12.SchDoc

U_B13
B13.SchDoc

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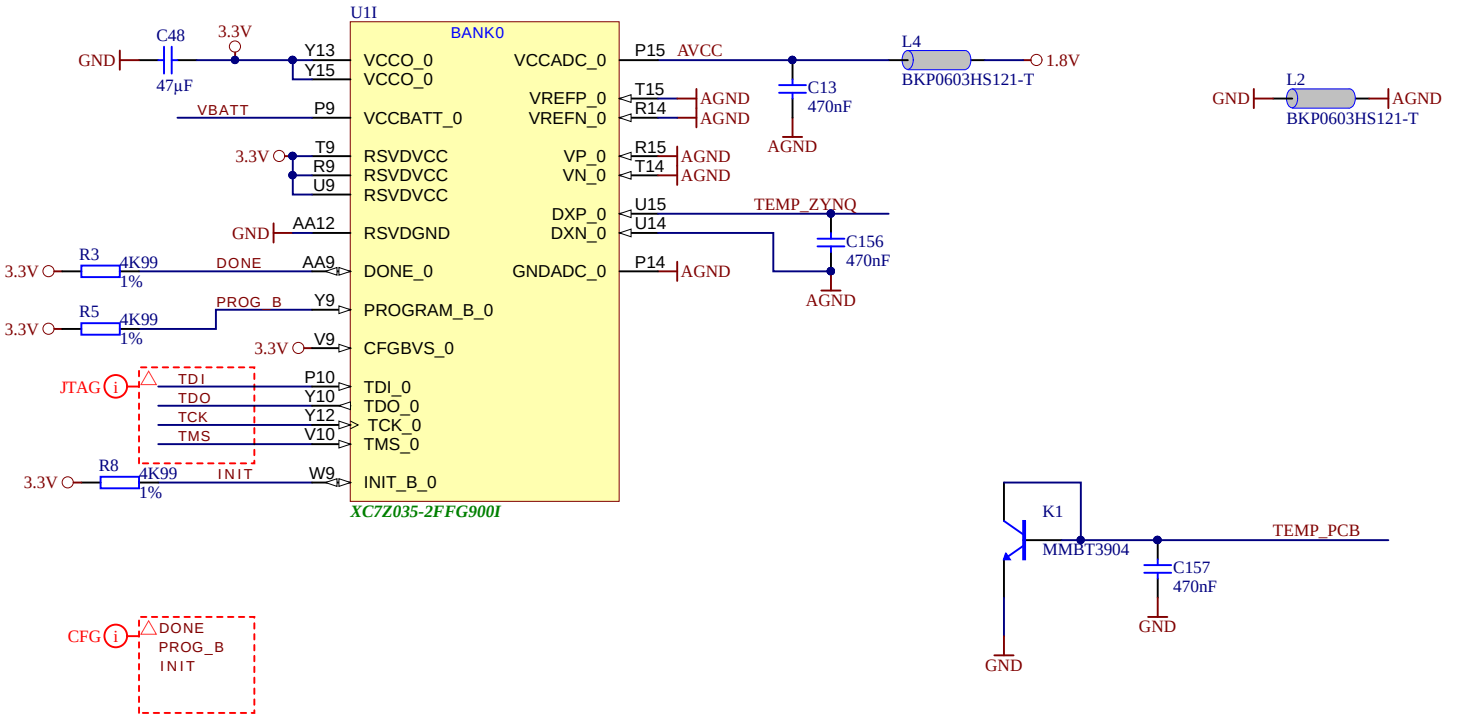
Title: TE0782 - SOC		
A4	Number: TE0782 TE0782-02-035-2I	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page6 of 31
Filename: SOC.SchDoc		



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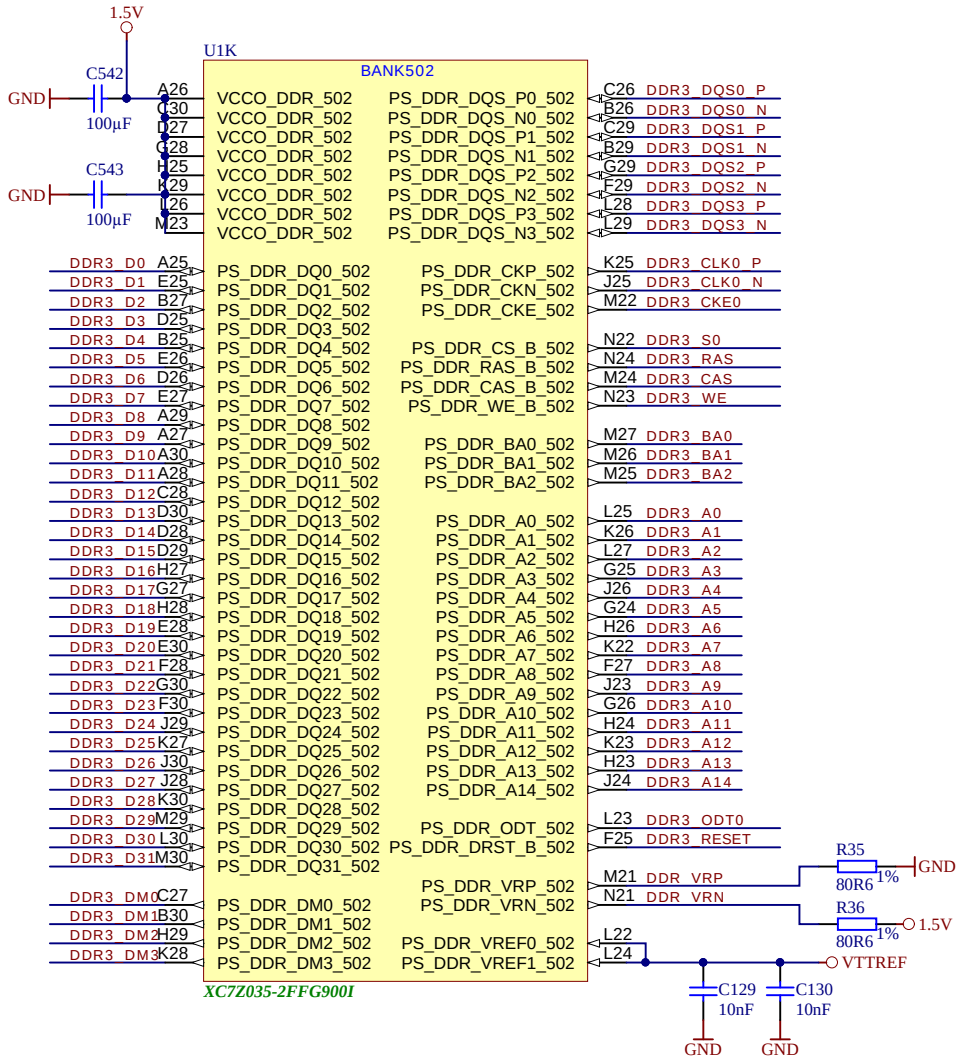
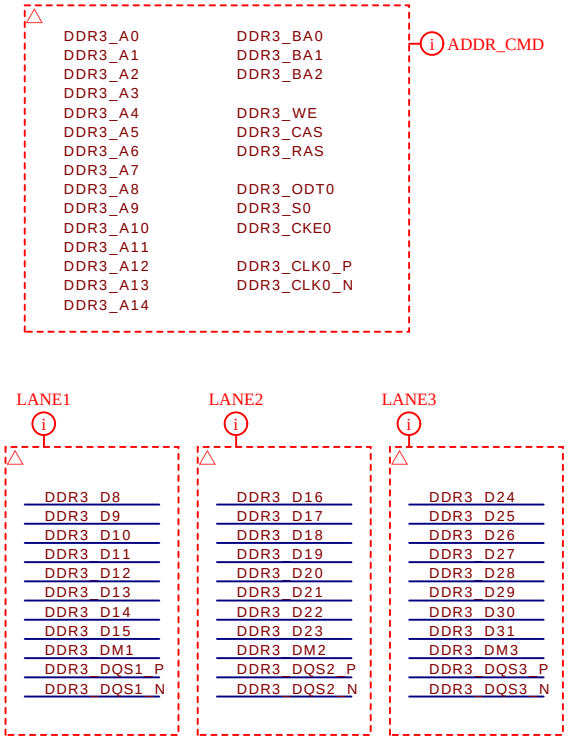
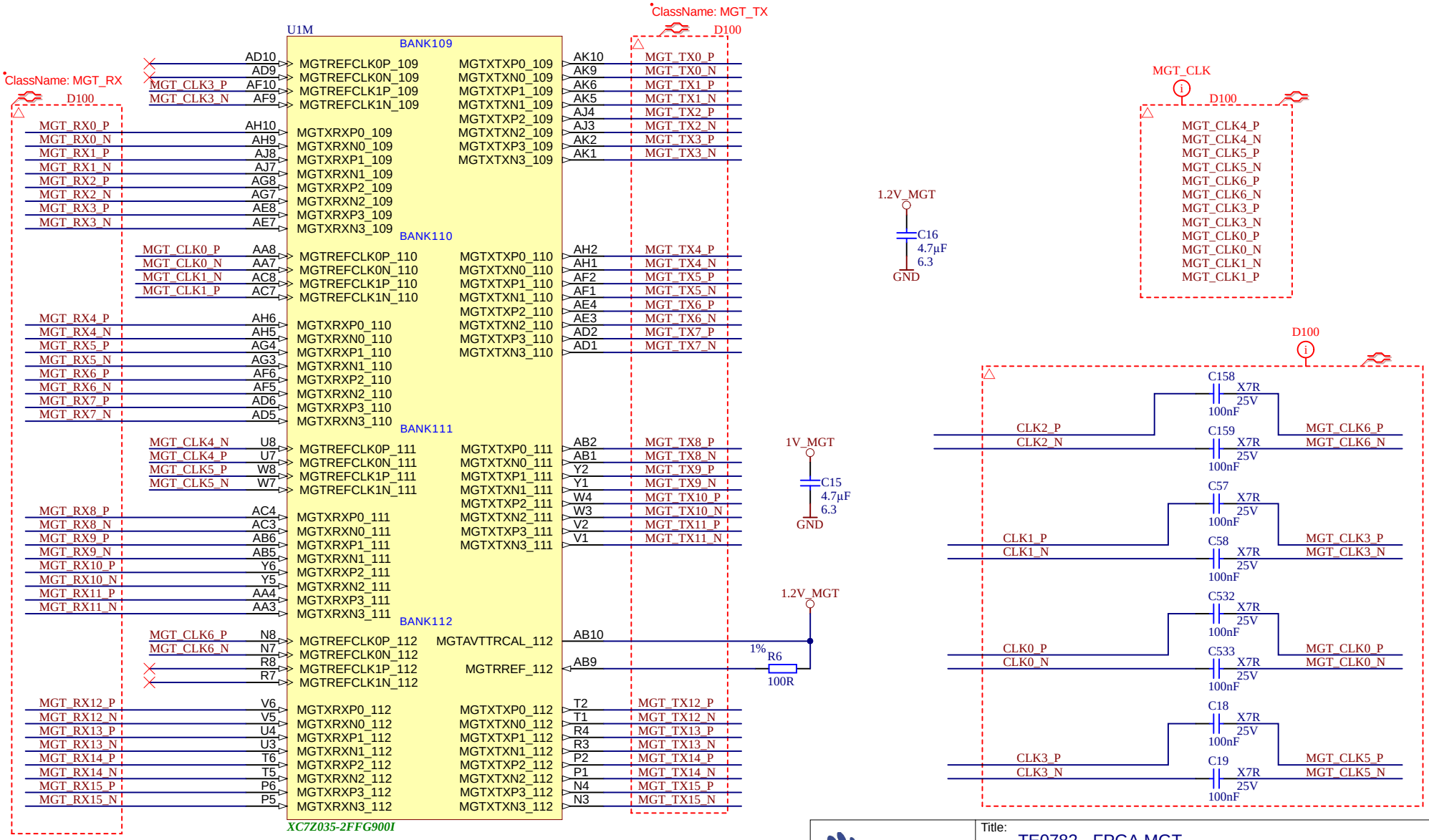
Datum: 2015-05-27	Zeichner: Trenz Electronic GmbH		Blatt 7 von 31
Filename: FPGA-CFG.SchDoc			

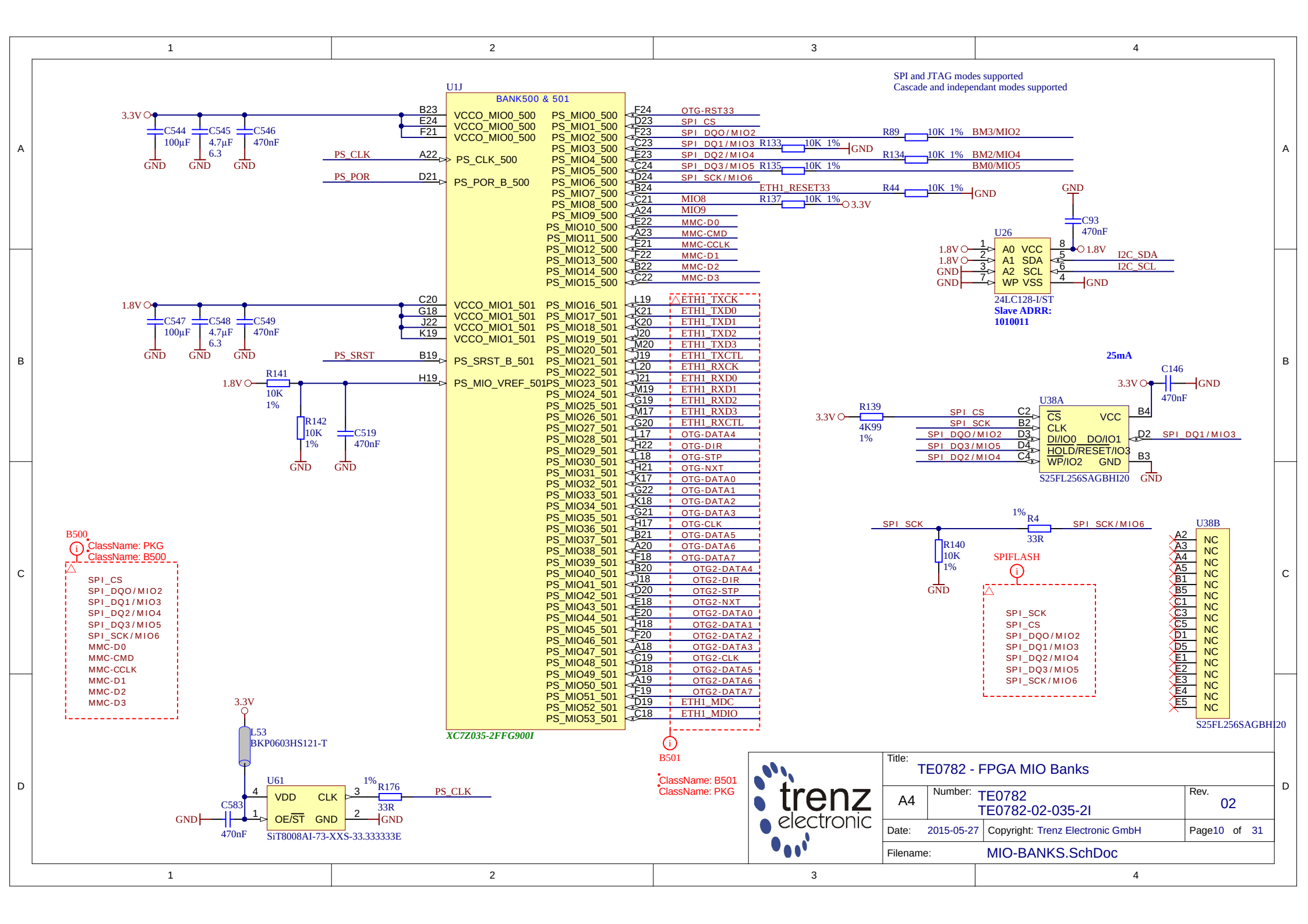


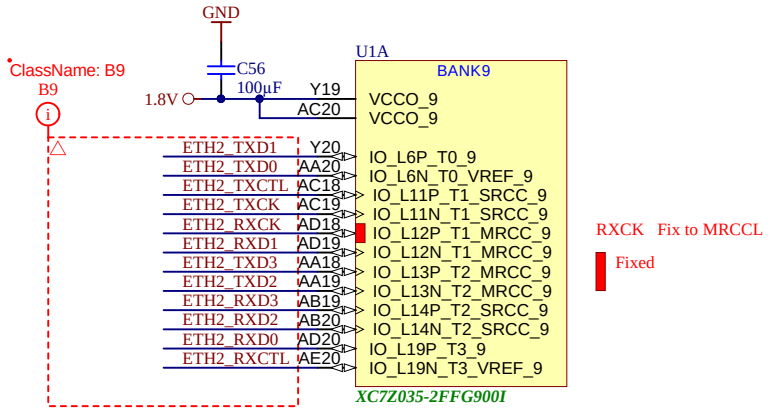


trenz electronic	Title: TE0782 - FPGA DDR Banks		
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page8 of 31
Filename: PS-DDR.SchDoc			

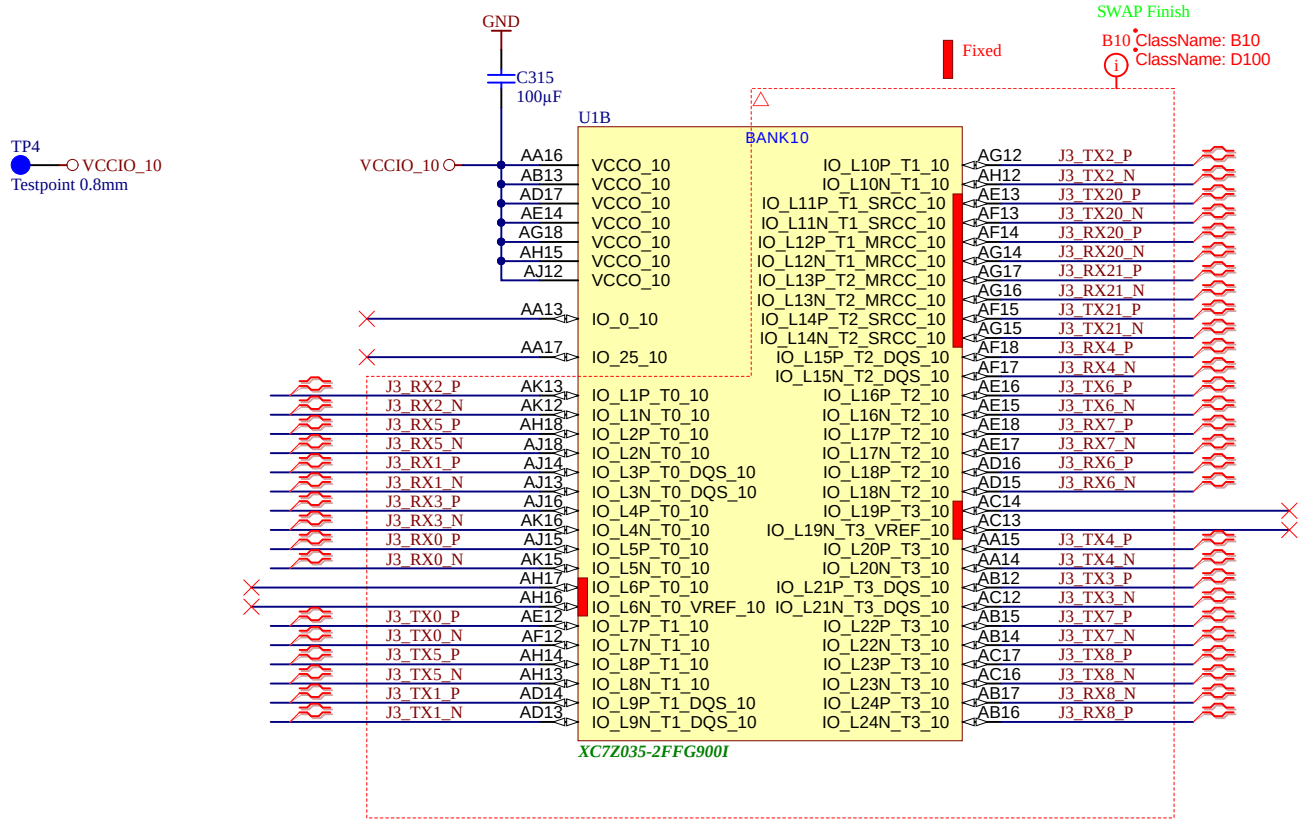


Title: TE0782 - FPGA MGT			
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page9 of 31
Filename: FPGA-MGT.SchDoc			

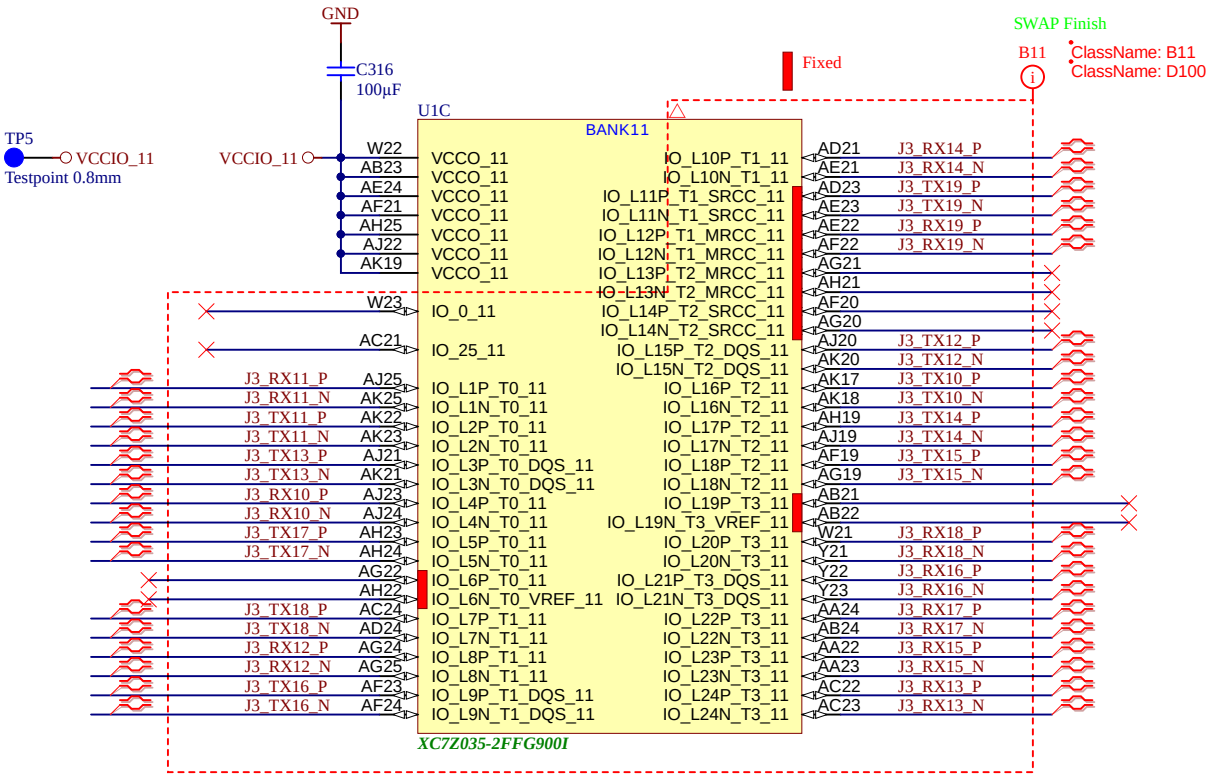

SPI and JTAG modes supported
Cascade and independant modes supported
U1J
BANK500 & 501
XC7Z035-2FFG900I
U26
24LC128-I/ST
Slave ADRR:
1010011
25mA
U38A
S25FL256SAGBHI20
U38B
S25FL256SAGBHI20
SPIFLASH
B500
ClassName: PKG
ClassName: B500
B501
ClassName: B501
ClassName: PKG
U61
SiT8008AI-73-XXS-33.333333E
L53
BKP0603HS121-T
Title: TE0782 - FPGA MIO Banks
A4
Number: TE0782
TE0782-02-035-2I
Rev. 02
Date: 2015-05-27
Copyright: Trenz Electronic GmbH
Page10 of 31
Filename: MIO-BANKS.SchDoc



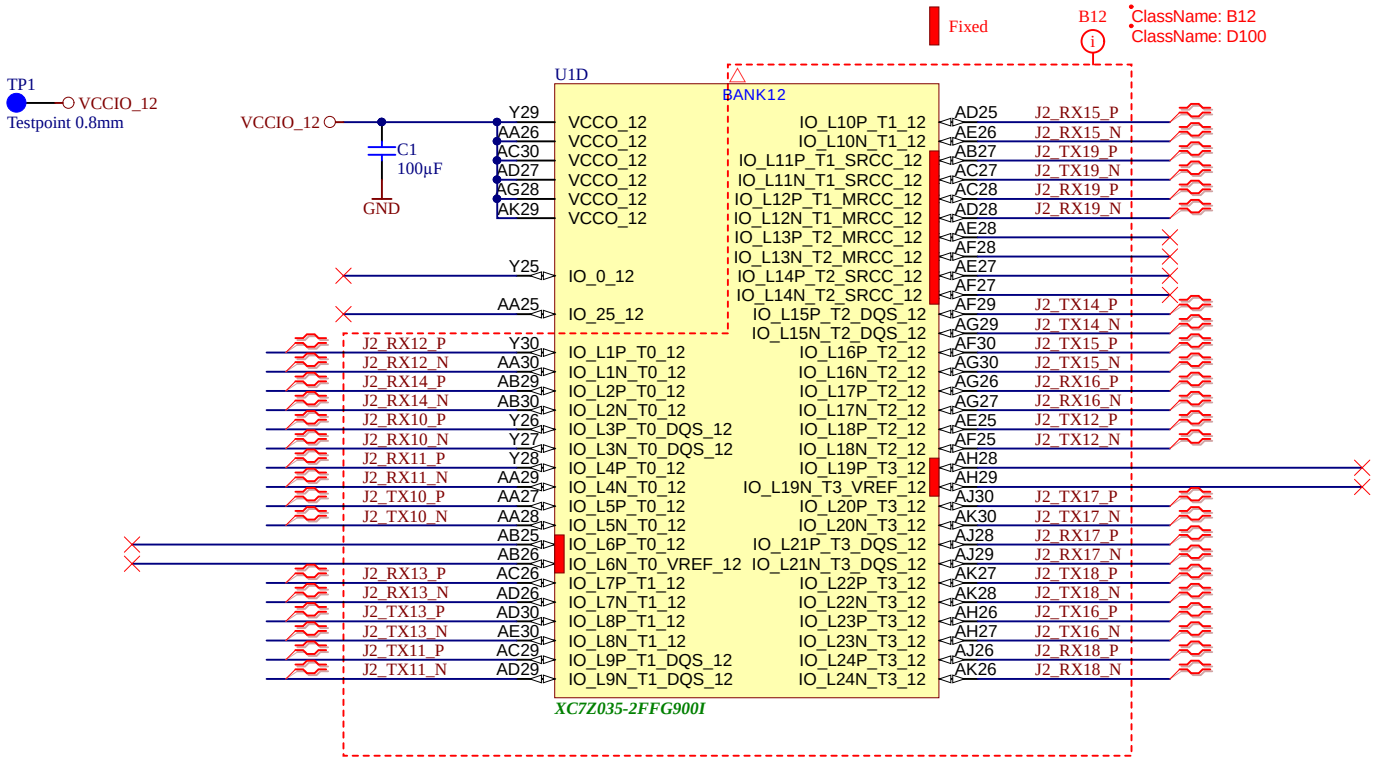
trenz electronic	Title: TE0782 - FPGA B9		
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page 11 of 31
Filename: B9.SchDoc			



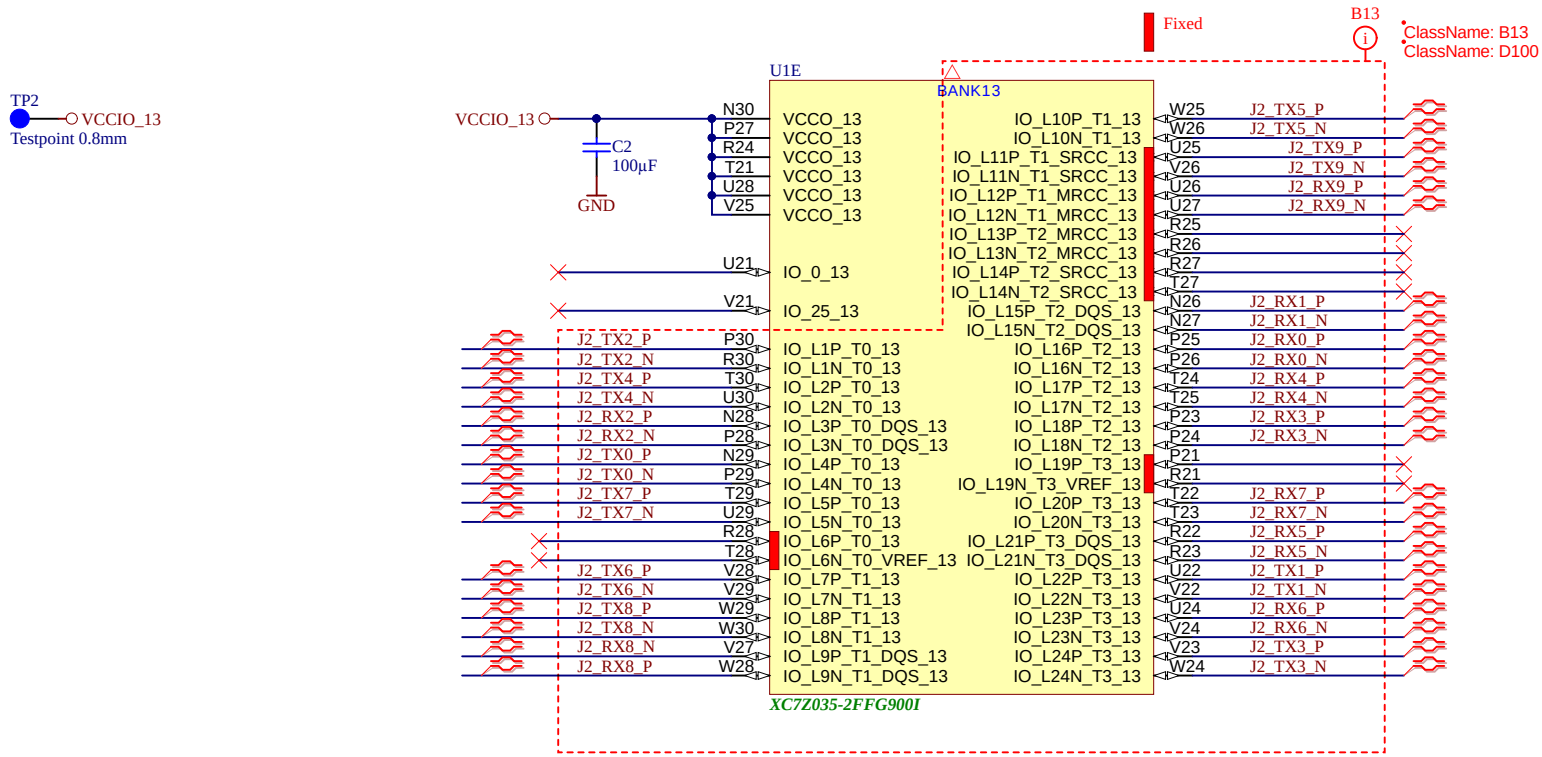
trenz electronic	Title: TE0782 - FPGA B10		
	A4	Number: TE0782 TE0782-02-035-2I	Rev. 02
	Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page12 of 31
	Filename: B10.SchDoc		



trenz electronic	Title: TE0782 - FPGA B11		
	A4	Number: TE0782 TE0782-02-035-2I	Rev. 02
	Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page13 of 31
	Filename: B11.SchDoc		



trenz electronic	Title: TE0782 - FPGA B12		
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page14 of 31
Filename: B12.SchDoc			



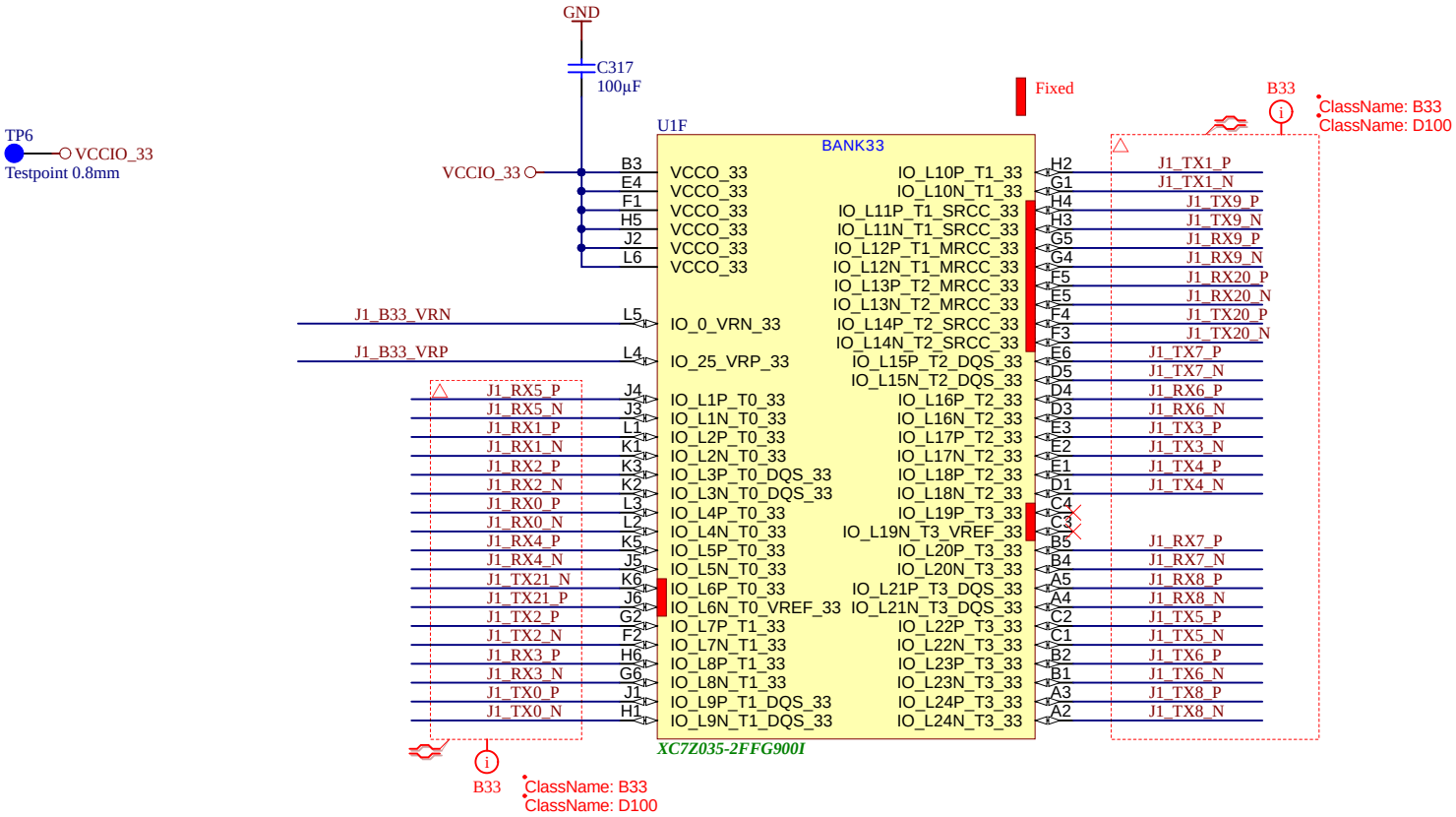
Title: TE0782 - FPGA B13		
A4	Number: TE0782 TE0782-02-035-2I	Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH	Page15 of 31
Filename: B13.SchDoc		

U_B33
B33.SchDoc

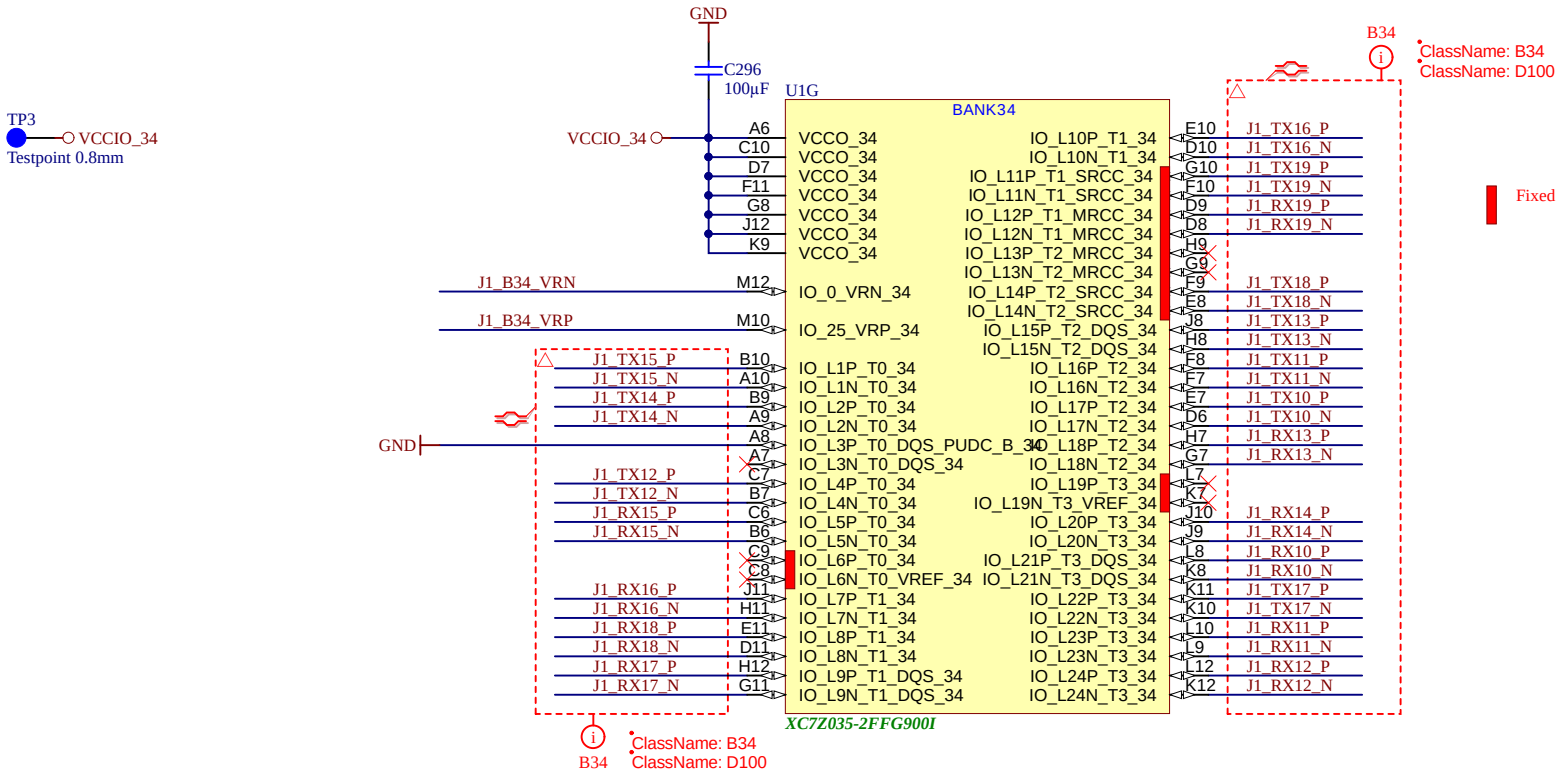
U_B34
B34.SchDoc

U_B35
B35.SchDoc

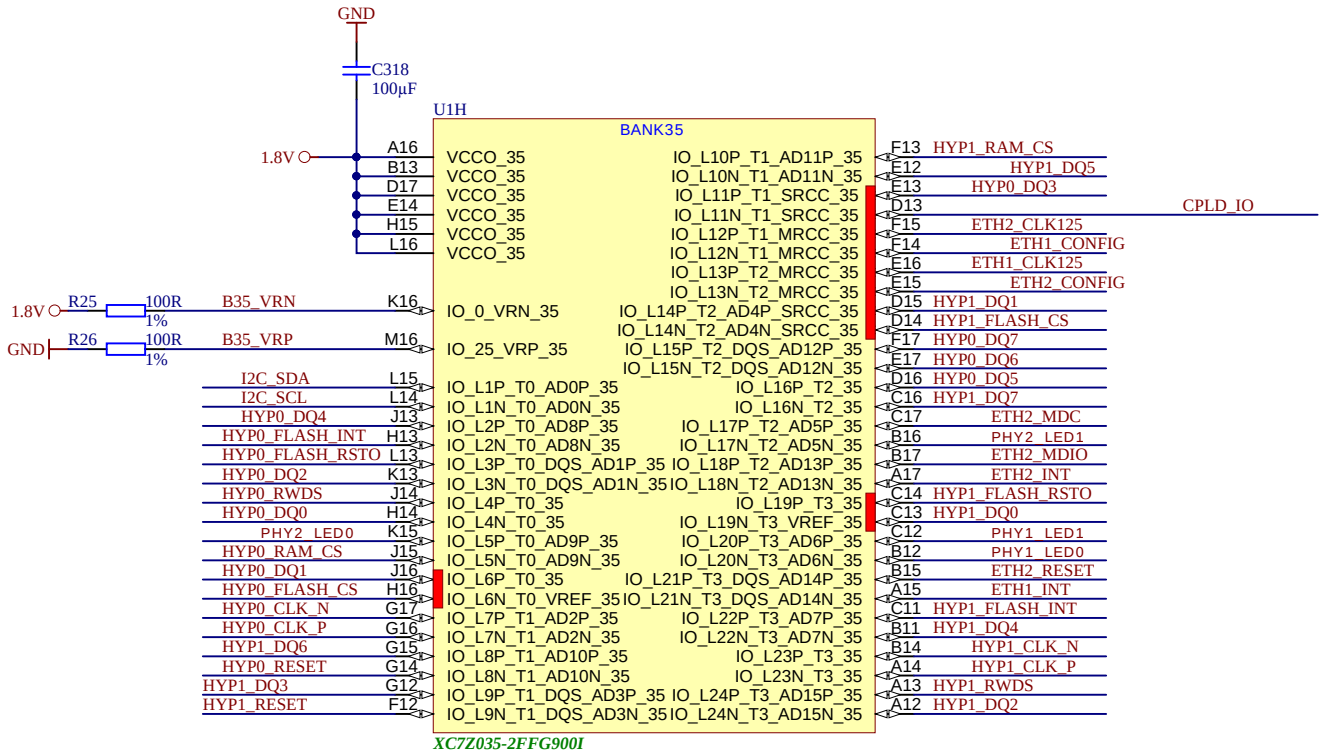
Title: TES0782 - FPGA HP Banks			
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page16 of 31
Filename: HP-BANKS.SchDoc			



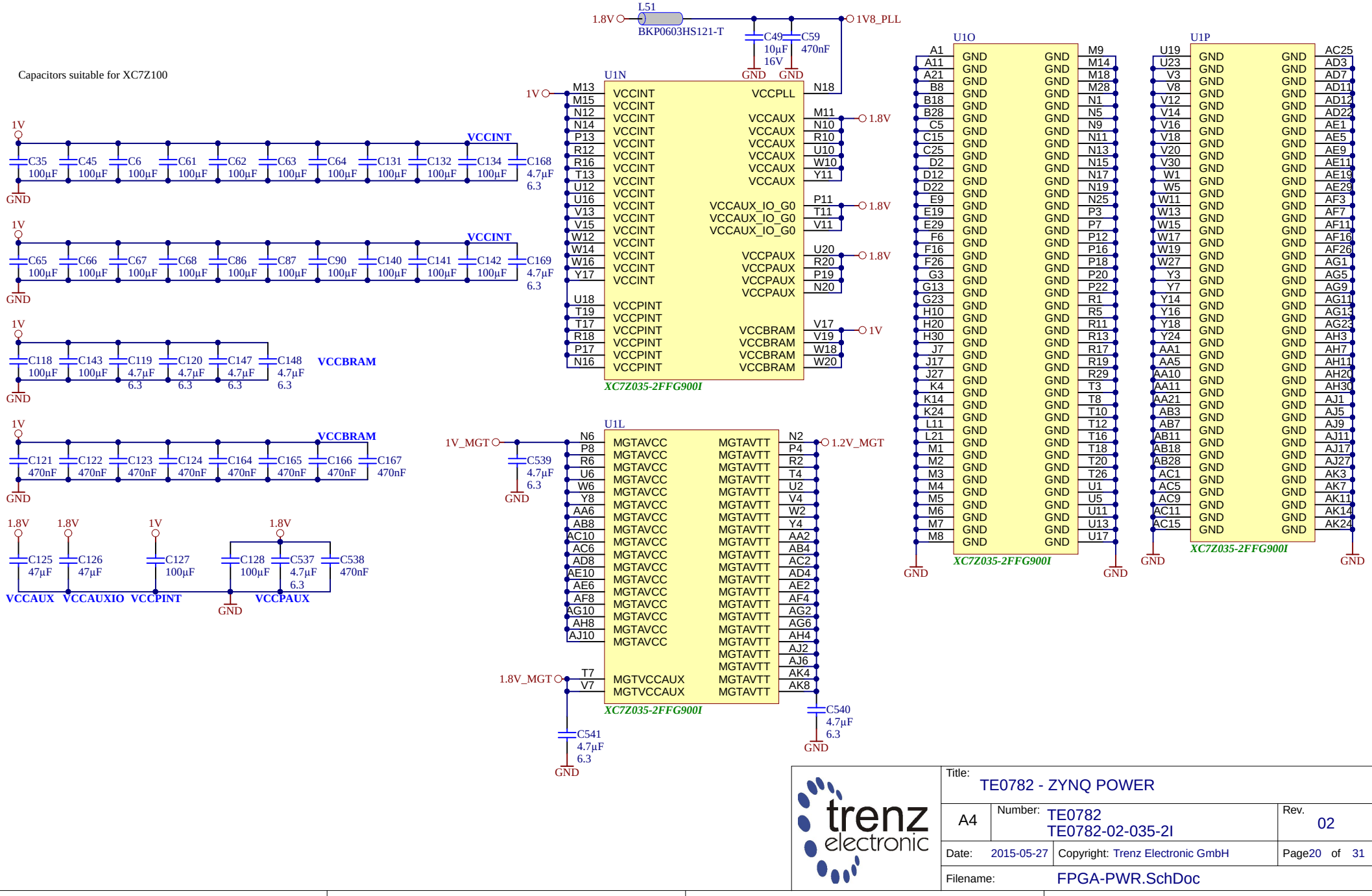
trenz electronic	Title: TE0782 - FPGA B33		
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page17 of 31
Filename: B33.SchDoc			



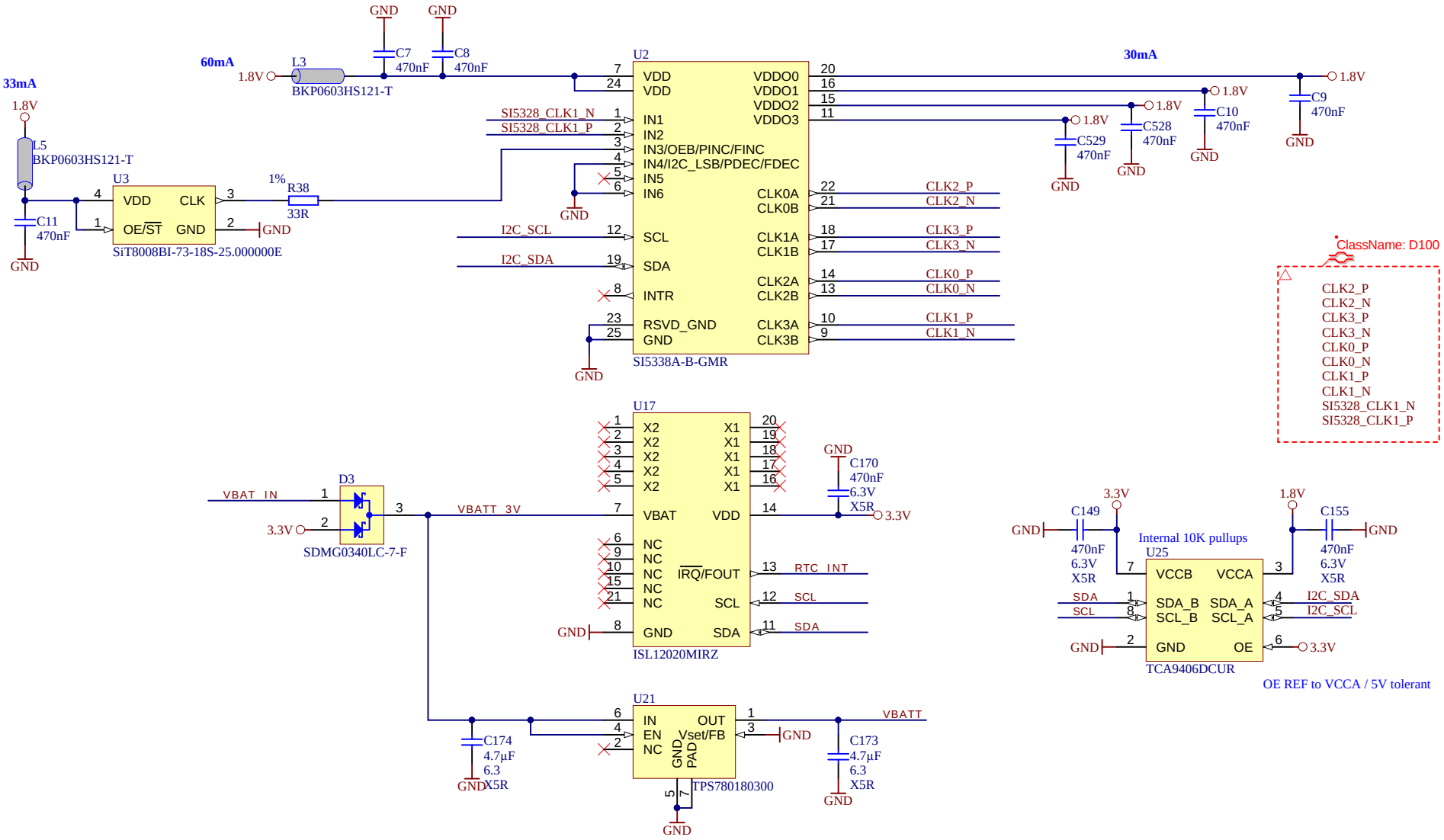
trenz electronic	Title: TE0782 - FPGA B34		
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page 18 of 31
Filename: B34.SchDoc			



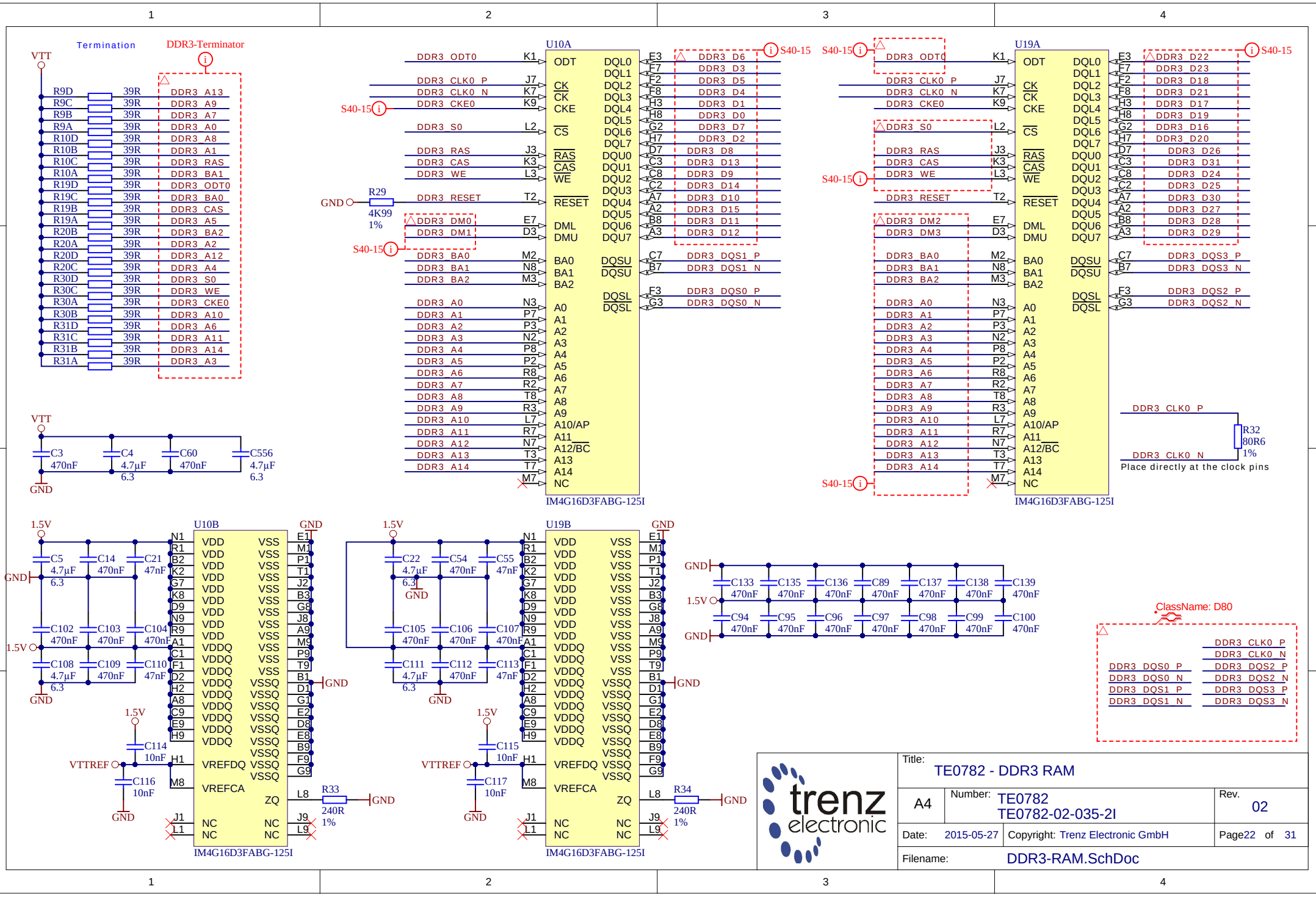
trenz electronic	Title: TE0782 - FPGA B35		
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page19 of 31
Filename: B35.SchDoc			

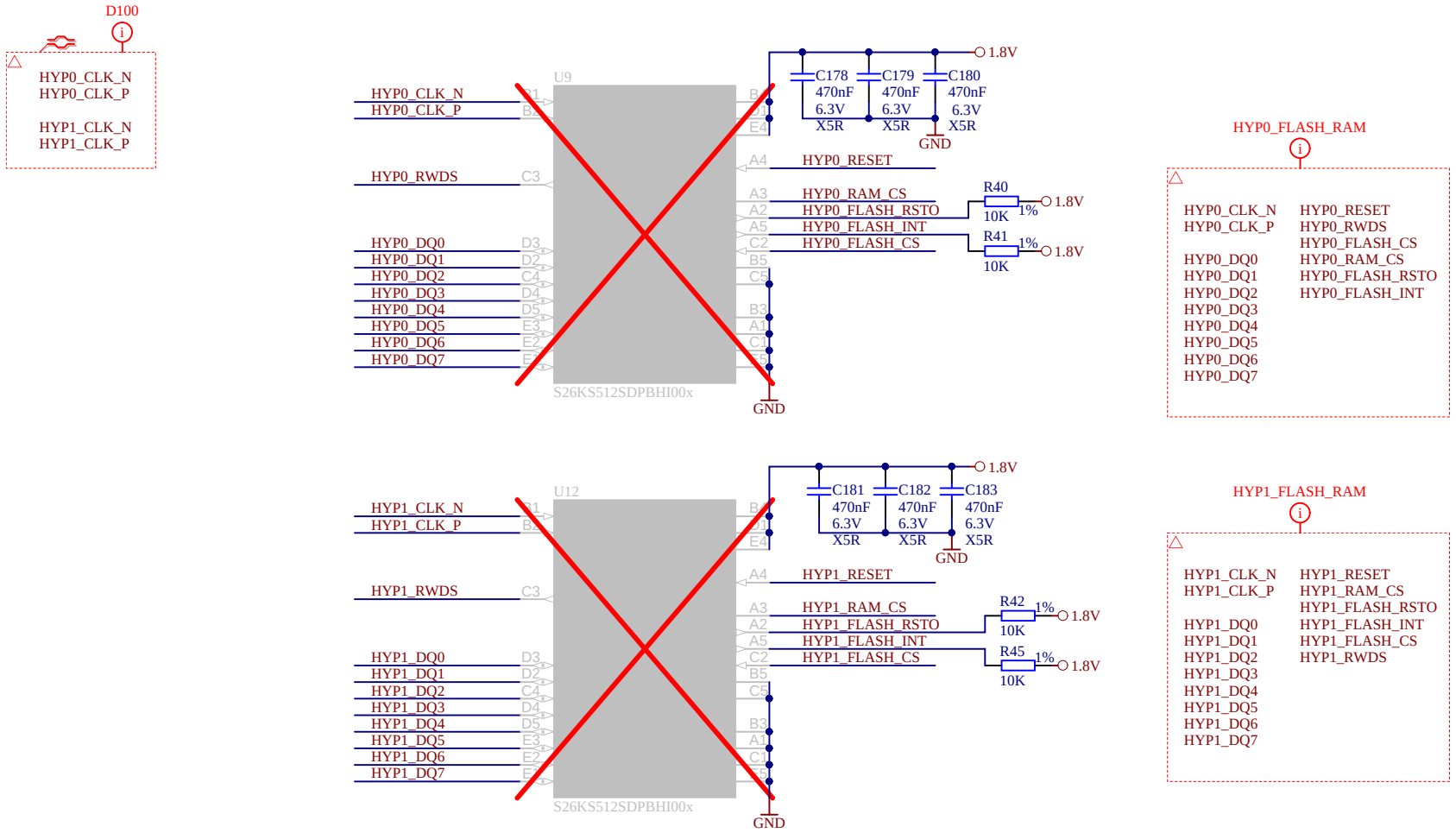


Title: TE0782 - ZYNQ POWER			
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page 20 of 31
Filename: FPGA-PWR.SchDoc			

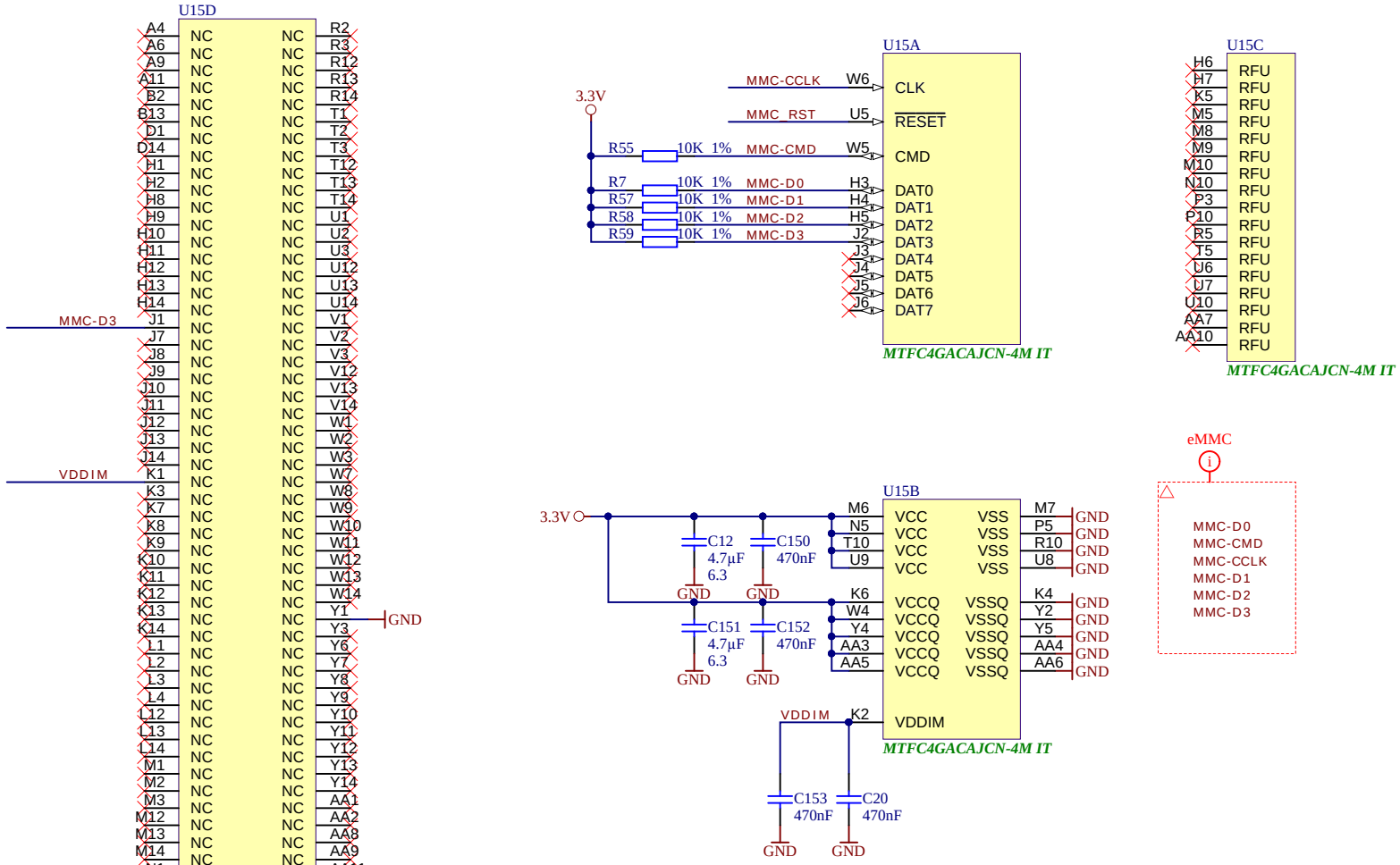


Title: TE0782 - Clock			
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page21 of 31
Filename: Clock.SchDoc			

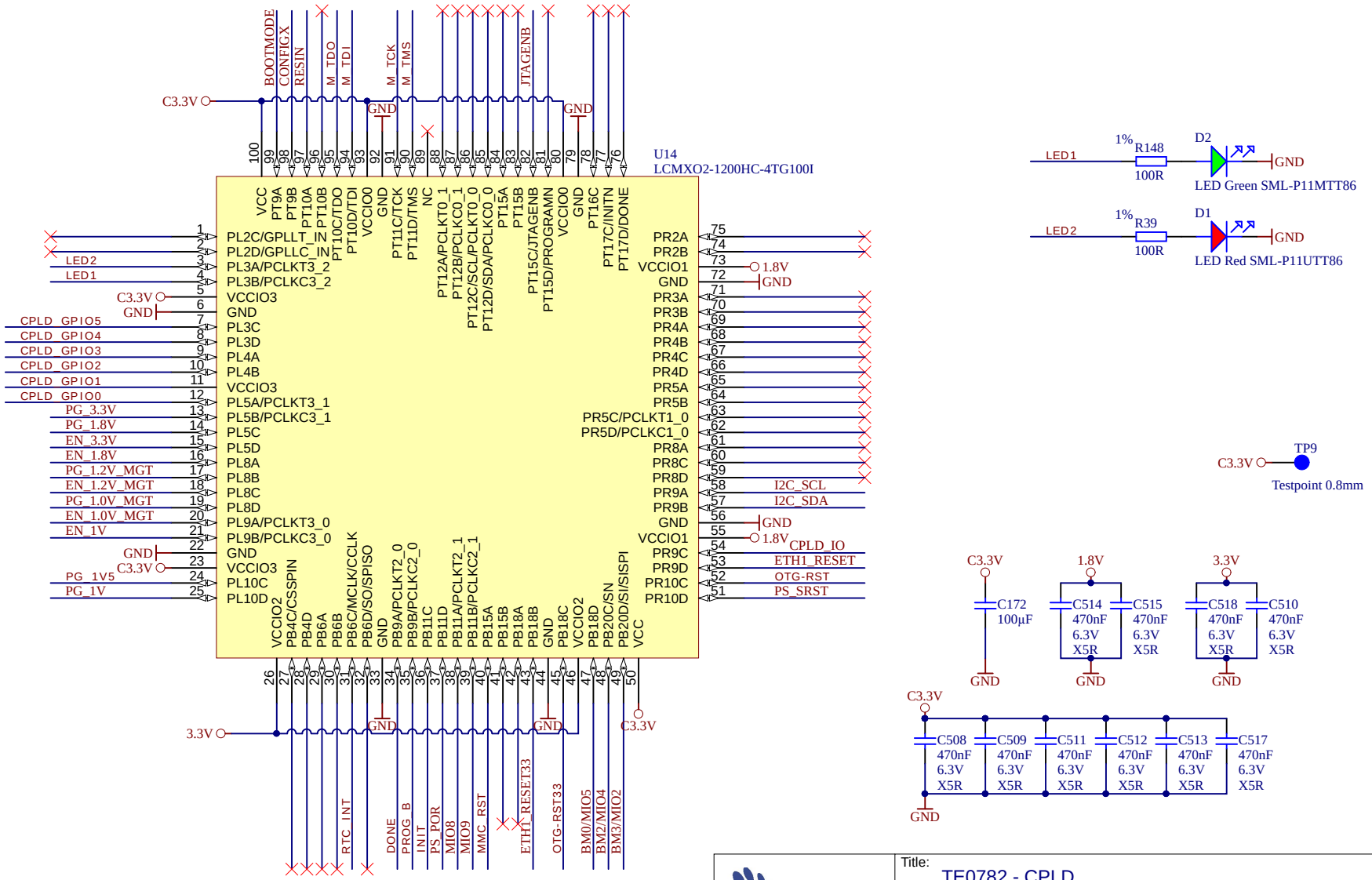

Termination
DDR3-Terminator
VTT
R9D 39R DDR3_A13
R9C 39R DDR3_A9
R9B 39R DDR3_A7
R9A 39R DDR3_A0
R10D 39R DDR3_A8
R10B 39R DDR3_A1
R10C 39R DDR3_RAS
R10A 39R DDR3_BA1
R19D 39R DDR3_ODT0
R19C 39R DDR3_BA0
R19B 39R DDR3_CAS
R19A 39R DDR3_A5
R20B 39R DDR3_BA2
R20A 39R DDR3_A2
R20D 39R DDR3_A12
R20C 39R DDR3_A4
R30D 39R DDR3_S0
R30C 39R DDR3_WE
R30A 39R DDR3_CKE0
R30B 39R DDR3_A10
R31D 39R DDR3_A6
R31C 39R DDR3_A11
R31B 39R DDR3_A14
R31A 39R DDR3_A3
VTT
C3 470nF
C4 4.7µF 6.3
C60 470nF
C556 4.7µF 6.3
GND
U10A
DDR3_ODT0 K1 ODT
DDR3_CLK0_P J7 CK
DDR3_CLK0_N K7 CK
DDR3_CKE0 K9 CKE
S40-15
DDR3_S0 L2 CS
DDR3_RAS J3 RAS
DDR3_CAS K3 CAS
DDR3_WE L3 WE
R29 4K99 1%
DDR3_RESET T2 RESET
DDR3_DM0 E7 DML
DDR3_DM1 D3 DMU
DDR3_BA0 M2 BA0
DDR3_BA1 N8 BA1
DDR3_BA2 M3 BA2
DDR3_A0 N3 A0
DDR3_A1 P7 A1
DDR3_A2 P3 A2
DDR3_A3 N2 A3
DDR3_A4 P8 A4
DDR3_A5 P2 A5
DDR3_A6 R8 A6
DDR3_A7 R2 A7
DDR3_A8 T8 A8
DDR3_A9 R3 A9
DDR3_A10 L7 A10/AP
DDR3_A11 R7 A11
DDR3_A12 N7 A12/BC
DDR3_A13 T3 A13
DDR3_A14 T7 A14
NC M7
DQL0 E3 DDR3_D6
DQL1 F7 DDR3_D3
DQL2 F2 DDR3_D5
DQL3 F8 DDR3_D4
DQL4 H3 DDR3_D1
DQL5 H8 DDR3_D0
DQL6 G2 DDR3_D7
DQL7 H7 DDR3_D2
DQU0 D7 DDR3_D8
DQU1 C3 DDR3_D13
DQU2 C8 DDR3_D9
DQU3 C2 DDR3_D14
DQU4 A7 DDR3_D10
DQU5 A2 DDR3_D15
DQU6 B8 DDR3_D11
DQU7 A3 DDR3_D12
DQSU C7 DDR3_DQS1_P
DQSU B7 DDR3_DQS1_N
DQSL E3 DDR3_DQS0_P
DQSL G3 DDR3_DQS0_N
IM4G16D3FABG-125I
U19A
DDR3_ODT0 K1 ODT
DDR3_CLK0_P J7 CK
DDR3_CLK0_N K7 CK
DDR3_CKE0 K9 CKE
DDR3_S0 L2 CS
DDR3_RAS J3 RAS
DDR3_CAS K3 CAS
DDR3_WE L3 WE
DDR3_RESET T2 RESET
DDR3_DM2 E7 DML
DDR3_DM3 D3 DMU
DDR3_BA0 M2 BA0
DDR3_BA1 N8 BA1
DDR3_BA2 M3 BA2
DDR3_A0 N3 A0
DDR3_A1 P7 A1
DDR3_A2 P3 A2
DDR3_A3 N2 A3
DDR3_A4 P8 A4
DDR3_A5 P2 A5
DDR3_A6 R8 A6
DDR3_A7 R2 A7
DDR3_A8 T8 A8
DDR3_A9 R3 A9
DDR3_A10 L7 A10/AP
DDR3_A11 R7 A11
DDR3_A12 N7 A12/BC
DDR3_A13 T3 A13
DDR3_A14 T7 A14
NC M7
DQL0 E3 DDR3_D22
DQL1 F7 DDR3_D23
DQL2 F2 DDR3_D18
DQL3 F8 DDR3_D21
DQL4 H3 DDR3_D17
DQL5 H8 DDR3_D19
DQL6 G2 DDR3_D16
DQL7 H7 DDR3_D20
DQU0 D7 DDR3_D26
DQU1 C3 DDR3_D31
DQU2 C8 DDR3_D24
DQU3 C2 DDR3_D25
DQU4 A7 DDR3_D30
DQU5 A2 DDR3_D27
DQU6 B8 DDR3_D28
DQU7 A3 DDR3_D29
DQSU C7 DDR3_DQS3_P
DQSU B7 DDR3_DQS3_N
DQSL E3 DDR3_DQS2_P
DQSL G3 DDR3_DQS2_N
IM4G16D3FABG-125I
DDR3_CLK0_P
R32 80R6 1%
DDR3_CLK0_N
Place directly at the clock pins
1.5V
U10B
VDD N1 R1 B2 K2 G7 K8 D9 N9 R9 A1 C1 F1 D2 H2 A8 C9 E9 H9
VDDQ C1 F1 D2 H2 A8 C9 E9 H9
VSS E1 M1 P1 T1 J2 B3 G8 J8 A9 M9 P9 T9 B1 D1 G1 E2 D8 E8 B9 F9 G9
VSSQ D1 G1 E2 D8 E8 B9 F9 G9
VREFDQ H1
VREFCA M8
ZQ L8
NC J1 L1
NC J9 L9
C5 4.7µF 6.3
C14 470nF
C21 47nF
C102 470nF
C103 470nF
C104 470nF
C108 4.7µF 6.3
C109 470nF
C110 47nF
C114 10nF
C116 10nF
VTTREF
R33 240R 1%
IM4G16D3FABG-125I
U19B
C22 4.7µF 6.3
C54 470nF
C55 47nF
C105 470nF
C106 470nF
C107 470nF
C111 4.7µF 6.3
C112 470nF
C113 47nF
C115 10nF
C117 10nF
R34 240R 1%
IM4G16D3FABG-125I
C133 470nF
C135 470nF
C136 470nF
C89 470nF
C137 470nF
C138 470nF
C139 470nF
C94 470nF
C95 470nF
C96 470nF
C97 470nF
C98 470nF
C99 470nF
C100 470nF
ClassName: D80
DDR3_DQS0_P
DDR3_DQS0_N
DDR3_DQS1_P
DDR3_DQS1_N
DDR3_CLK0_P
DDR3_CLK0_N
DDR3_DQS2_P
DDR3_DQS2_N
DDR3_DQS3_P
DDR3_DQS3_N
trenz electronic
Title: TE0782 - DDR3 RAM
A4
Number: TE0782
TE0782-02-035-2I
Rev. 02
Date: 2015-05-27
Copyright: Trenz Electronic GmbH
Page22 of 31
Filename: DDR3-RAM.SchDoc



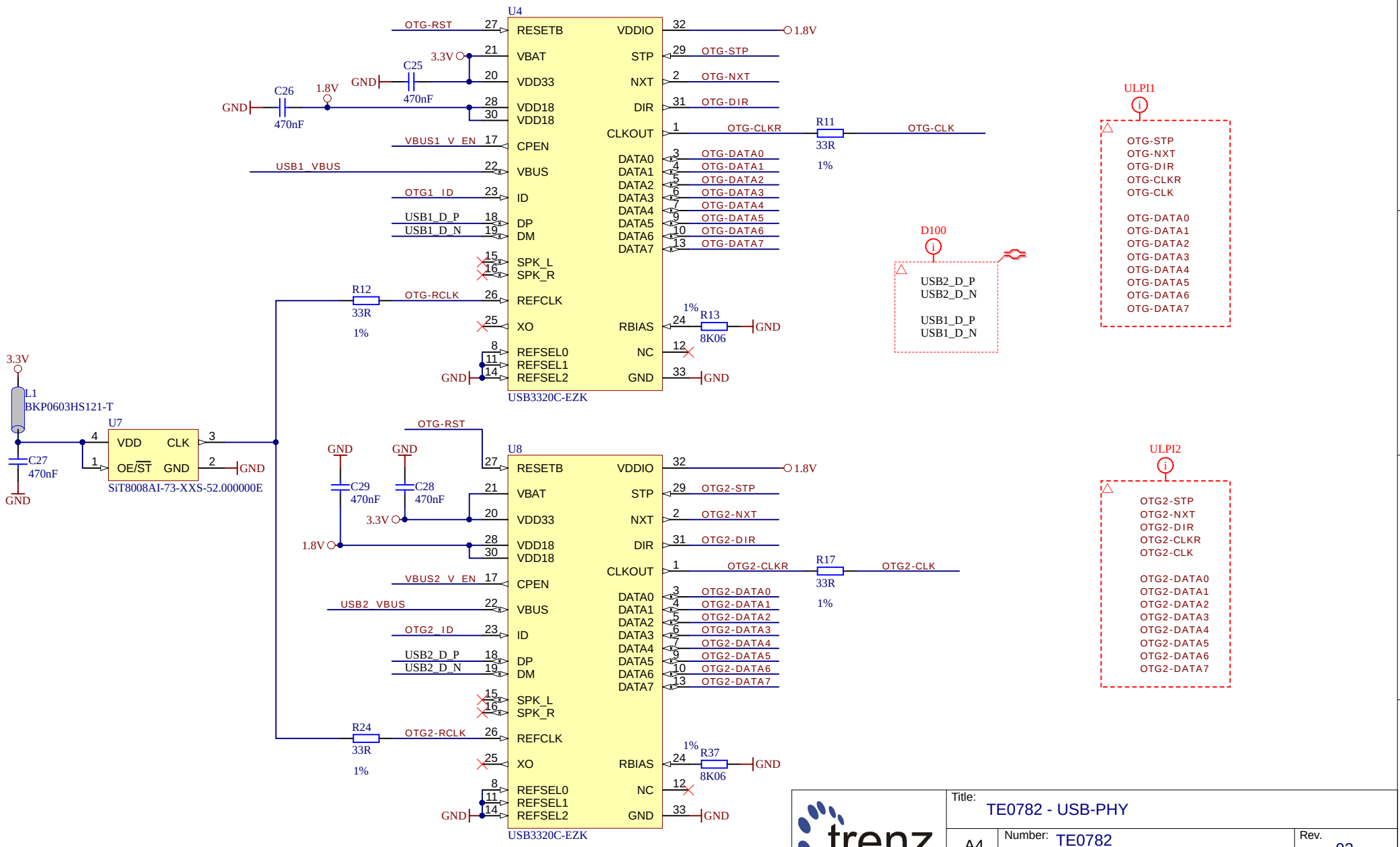
trenz electronic	Title: TE0782 - HyperFlash_RAM		
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page23 of 31
Filename: HyperFlash_RAM.SchDoc			



Title: TE0782 - eMMC			
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page24 of 31
Filename: eMMC.SchDoc			

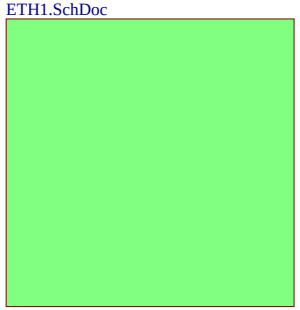


Title: TE0782 - CPLD			
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page25 of 31
Filename: CPLD.SchDoc			

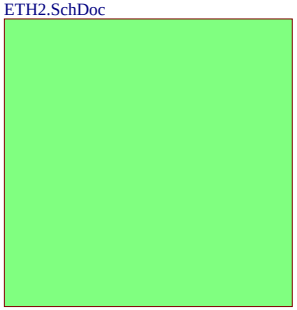


Title: TE0782 - USB-PHY			
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page 26 of 31
Filename: USB-PHY.SchDoc			

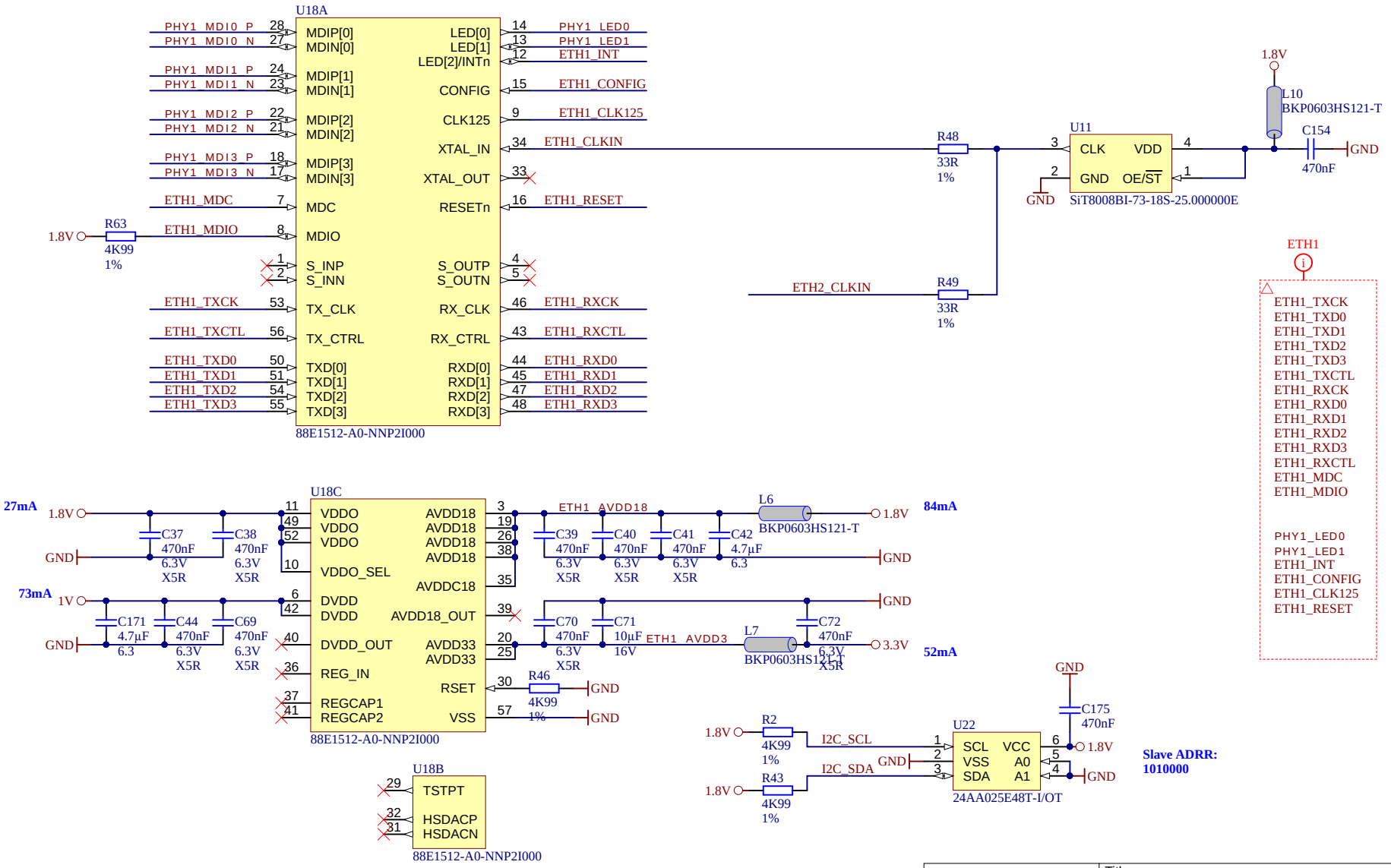
U_ETH1
ETH1.SchDoc



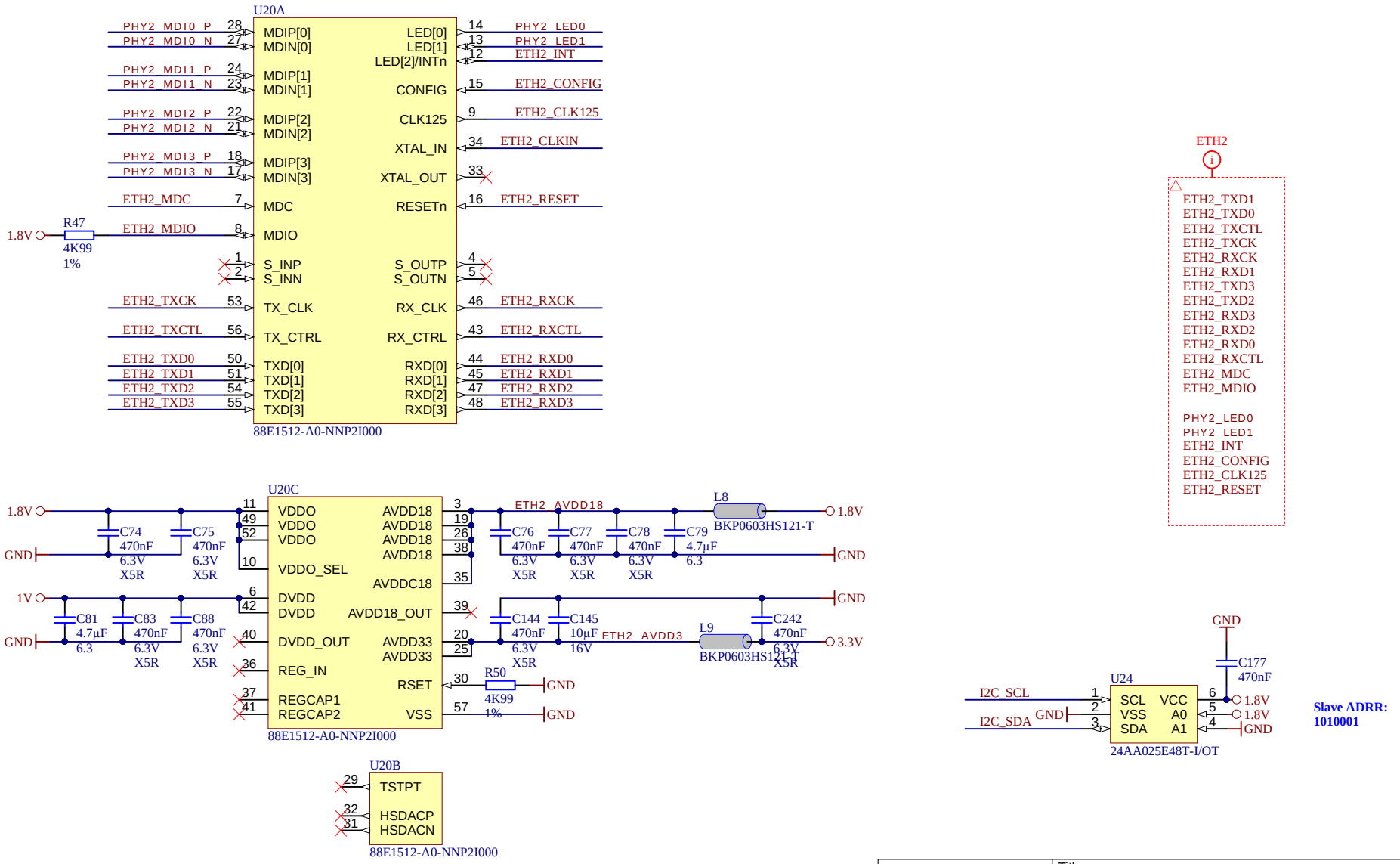
U_ETH2
ETH2.SchDoc



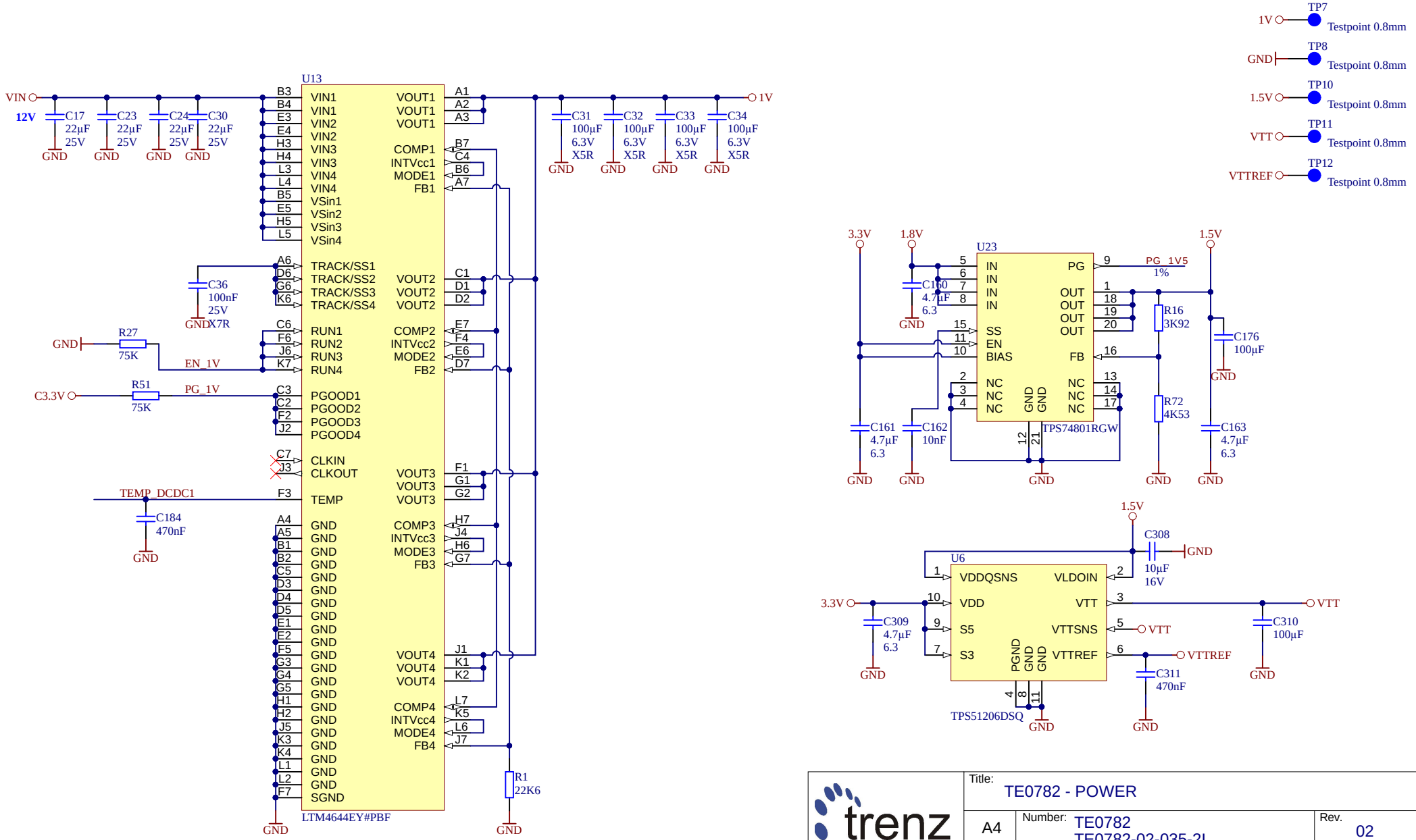
Title: TE0782 - Ethernet			
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page 27 of 31
Filename: Ethernet.SchDoc			



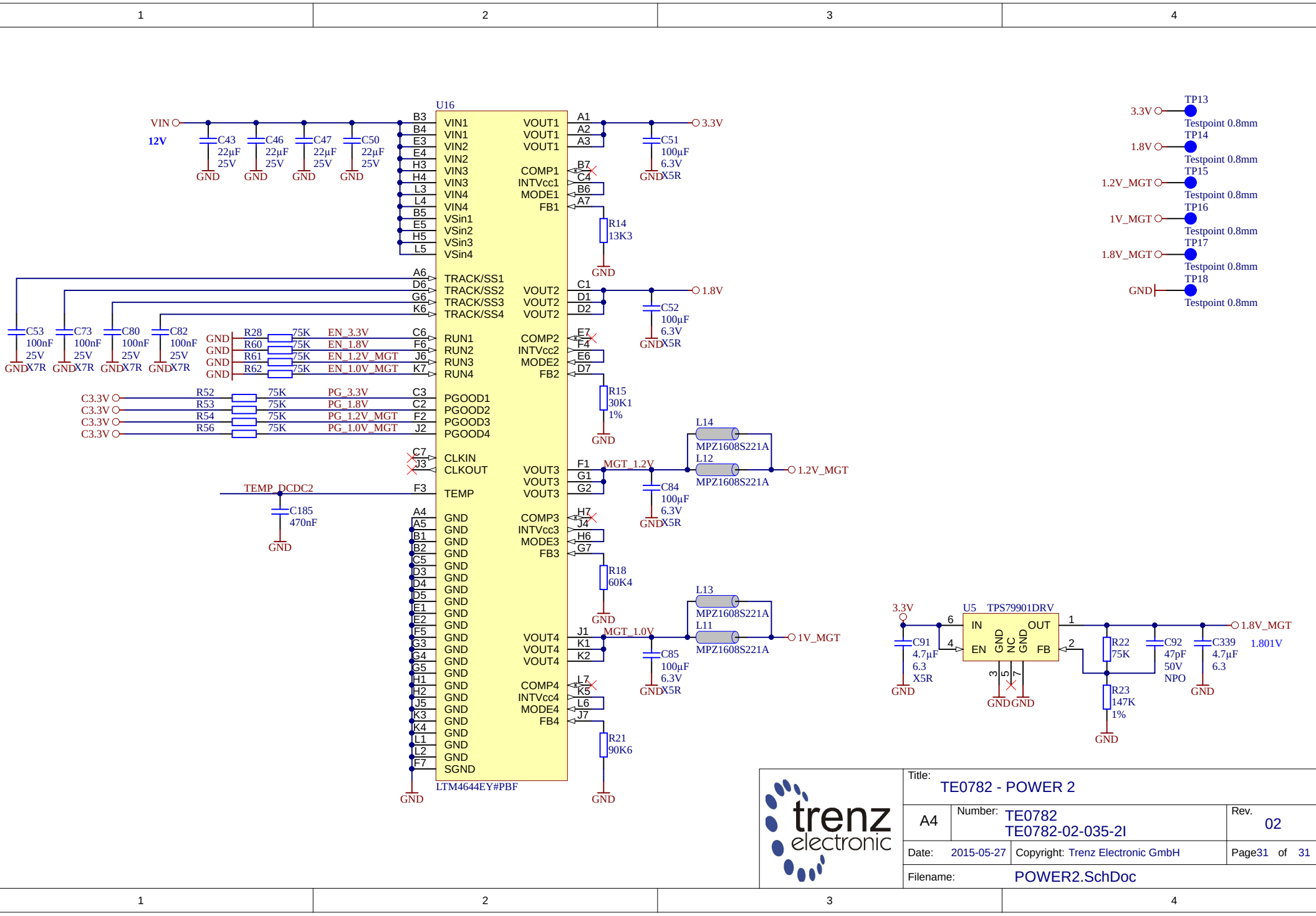
trenz electronic	Title: TE0782 - ETH_PHY1		
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page28 of 31
Filename: ETH1.SchDoc			



Title: TE0782 - ETH_PHY2			
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page29 of 31
Filename: ETH2.SchDoc			



Title: TE0782 - POWER			
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page30 of 31
Filename: POWER.SchDoc			



Title: TE0782 - POWER 2			
A4	Number: TE0782 TE0782-02-035-2I		Rev. 02
Date: 2015-05-27	Copyright: Trenz Electronic GmbH		Page31 of 31
Filename: POWER2.SchDoc			