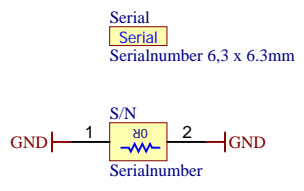
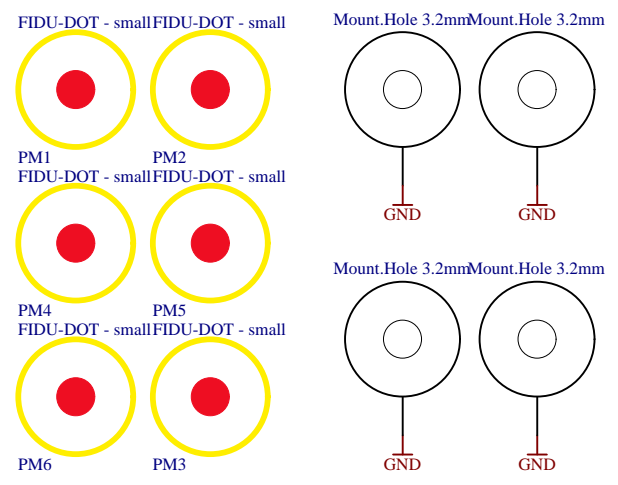
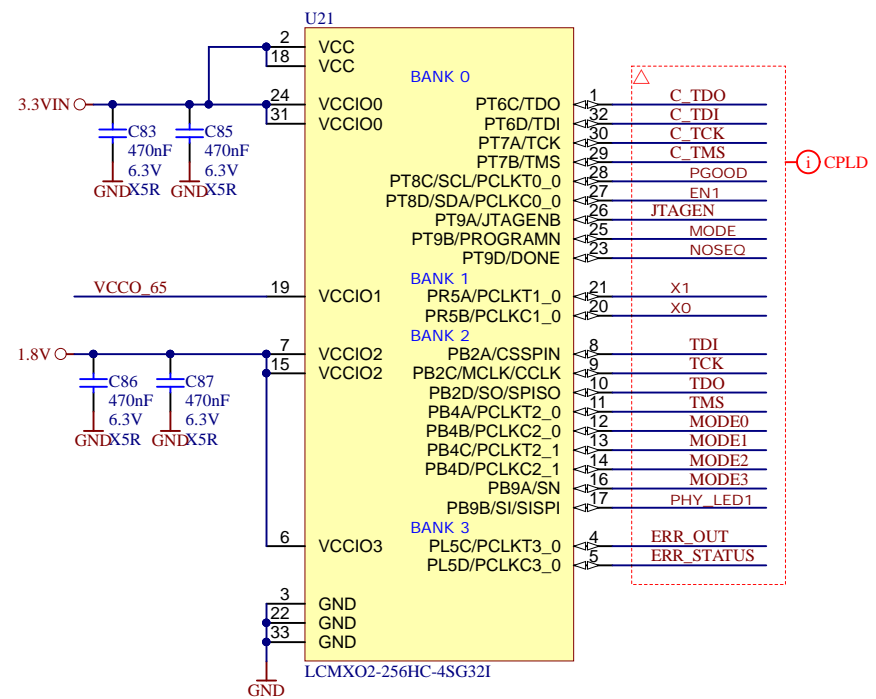


U_USB-PHY	USB-PHY.SchDoc
U_ETH-PHY	ETH-PHY.SchDoc
U_B_HD	B_HD.SchDoc
U_B64	B64.SchDoc
U_B65	B65.SchDoc
U_B66	B66.SchDoc
U_CONFIG	CONFIG.SchDoc
U_B_MIO	B_MIO.SchDoc
U_B_PS_GT	B_PS_GT.SchDoc
U_CLK	CLK.SchDoc

U_B2B-Connectors	B2B-Connectors.SchDoc
U_eMMC	eMMC.SchDoc
U_PS_DDR	PS_DDR.SchDoc
U_ZU_POWER	ZU_POWER.SchDoc
U_ZU_PS_POWER	ZU_PS_POWER.SchDoc
U_DDR4-RAM_2	DDR4-RAM_2.SchDoc
U_DDR4-RAM	DDR4-RAM.SchDoc
U_POWER	POWER.SchDoc
U_POWER_1	POWER_1.SchDoc



Title: TE0820		
A4	Number: TE0820 03EG-1EA	Rev. 02
Date: 2017-05-02	Copyright: 2015 Trenz Electronic GmbH	Page1 of 21
Filename: TE0820.SchDoc		

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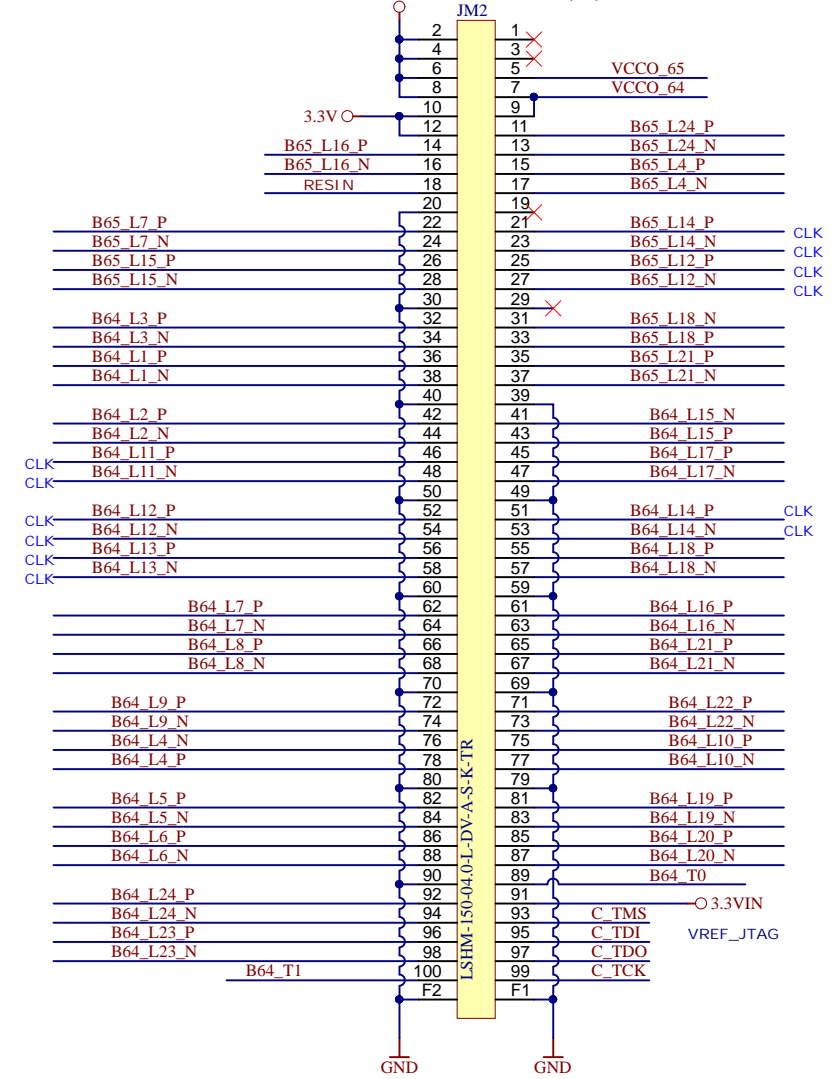
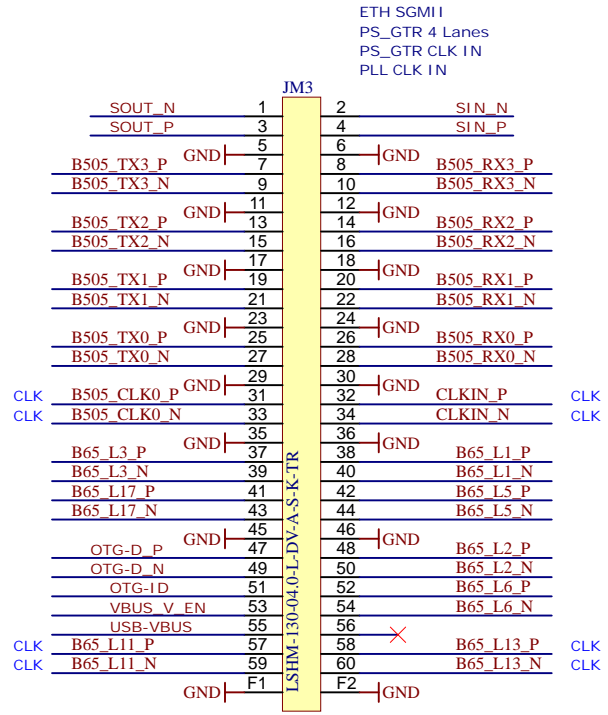
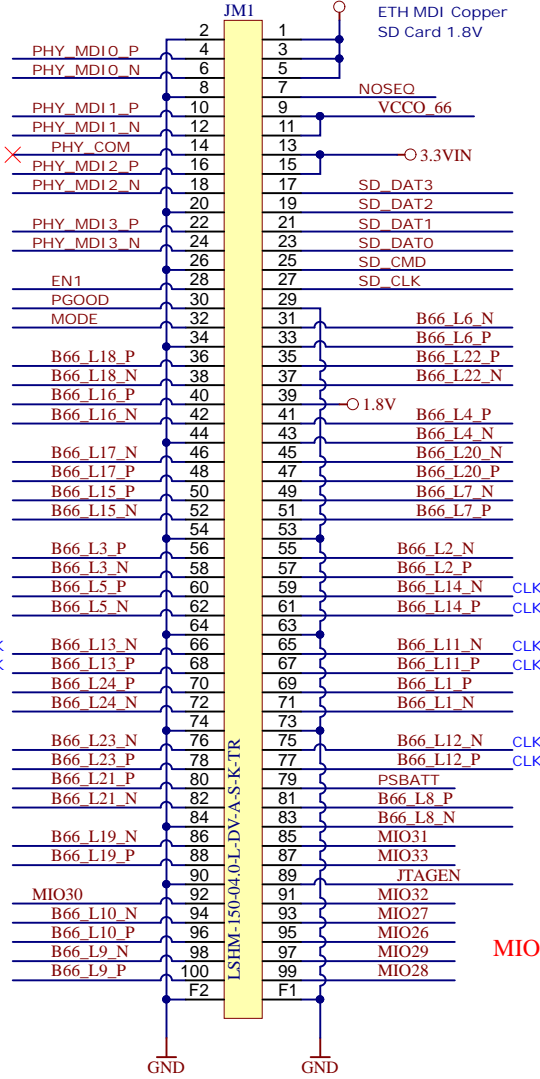
D

D

B66(HP) 48 IO, 24 LVDS Pairs
 MIO501 8 IO, 3.3V
 ETH MDI Copper
 SD Card 1.8V

B65(HP) 16 IO, 8 LVDS Pairs
 USB OTG
 ETH SGMII
 PS_GTR 4 Lanes
 PS_GTR CLK IN
 PLL CLK IN

B65(HP) 18 IO, 9 LVDS Pairs
 B64(HP) 50 IO, 24 LVDS Pairs



VCCO64, VCCO65, VCCO66 ->>> max. 1.8V (HP bank's)

MIO[29..26] ->PJTAG1



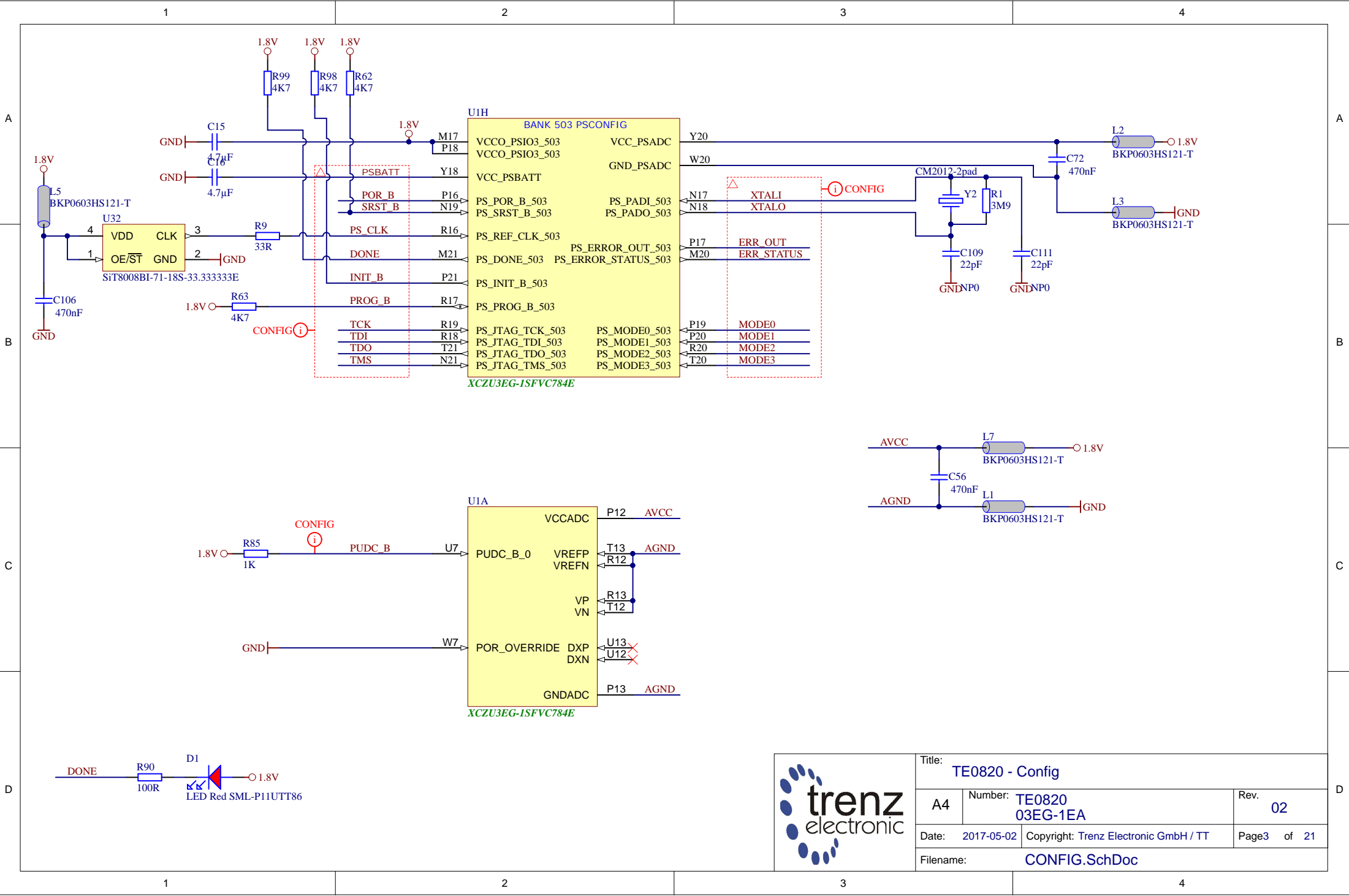

Title: TE0820 - B2B Connectors		
A4	Number: TE0820 03EG-1EA	Rev. 02
Date: 2017-05-02	Copyright: 2015 Trenz Electronic GmbH	Page2 of 21
Filename: B2B-Connectors.SchDoc		

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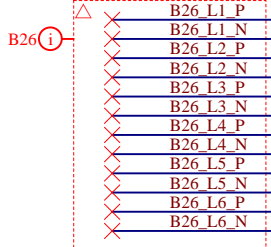



Title: TE0820 - Config		
A4	Number: TE0820 03EG-1EA	Rev. 02
Date: 2017-05-02	Copyright: Trenz Electronic GmbH / TT	Page3 of 21
Filename: CONFIG.SchDoc		

UIC

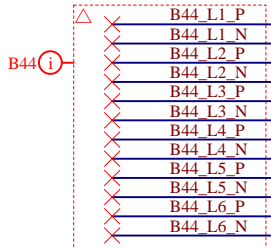
BANK 26 HD (ZU4/5 BANK 46 HD)

F14
C15
VCCO_26
VCCO_26



BANK 44 HD (ZU4/5 BANK 43 HD)

AC10
AG12
VCCO_44
VCCO_44

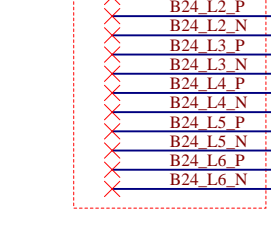


UIB

XCZU3EG-1SFVC784E

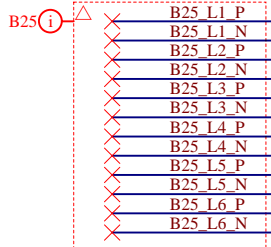
BANK 24 HD (ZU4/5 BANK 44 HD)

AA14
AD13
VCCO_24
VCCO_24



BANK 25 HD (ZU4/5 BANK 45 HD)

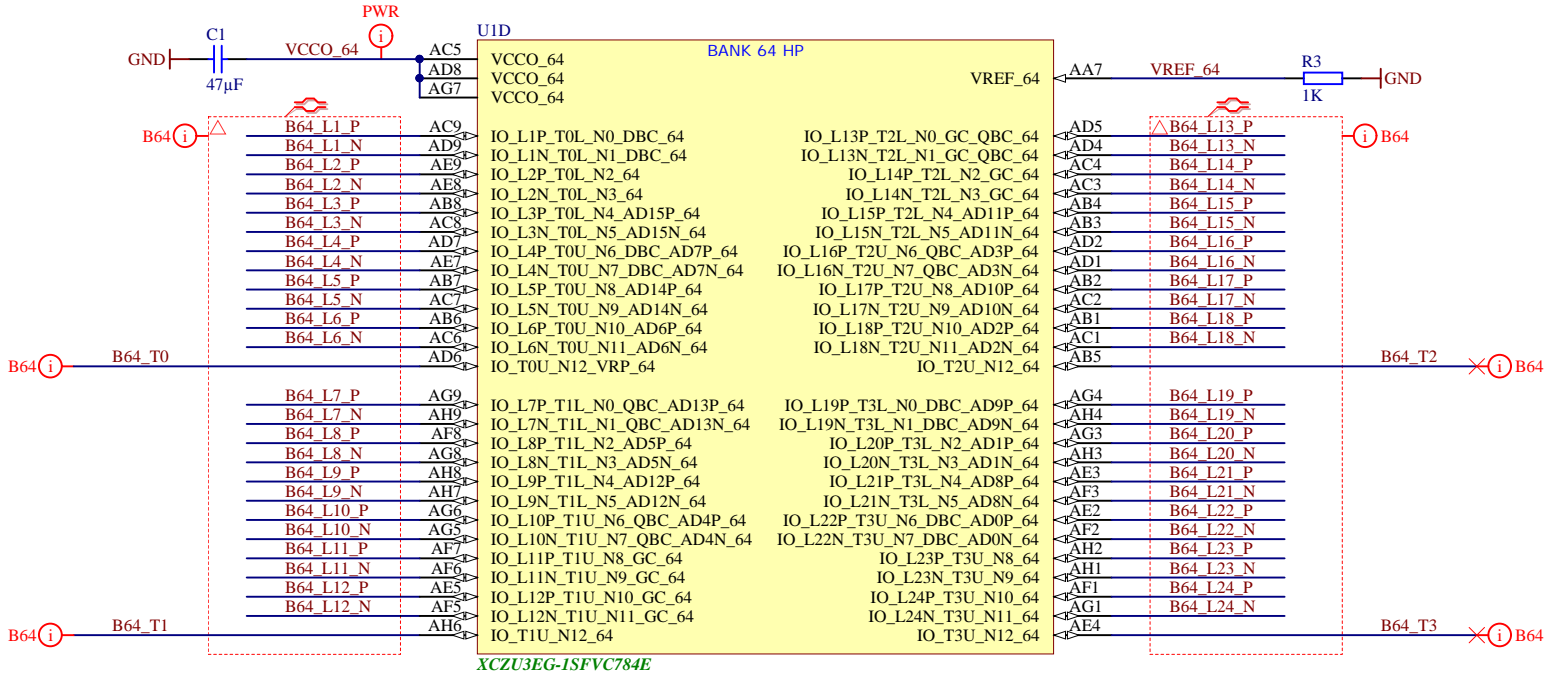
B12
E11
VCCO_25
VCCO_25



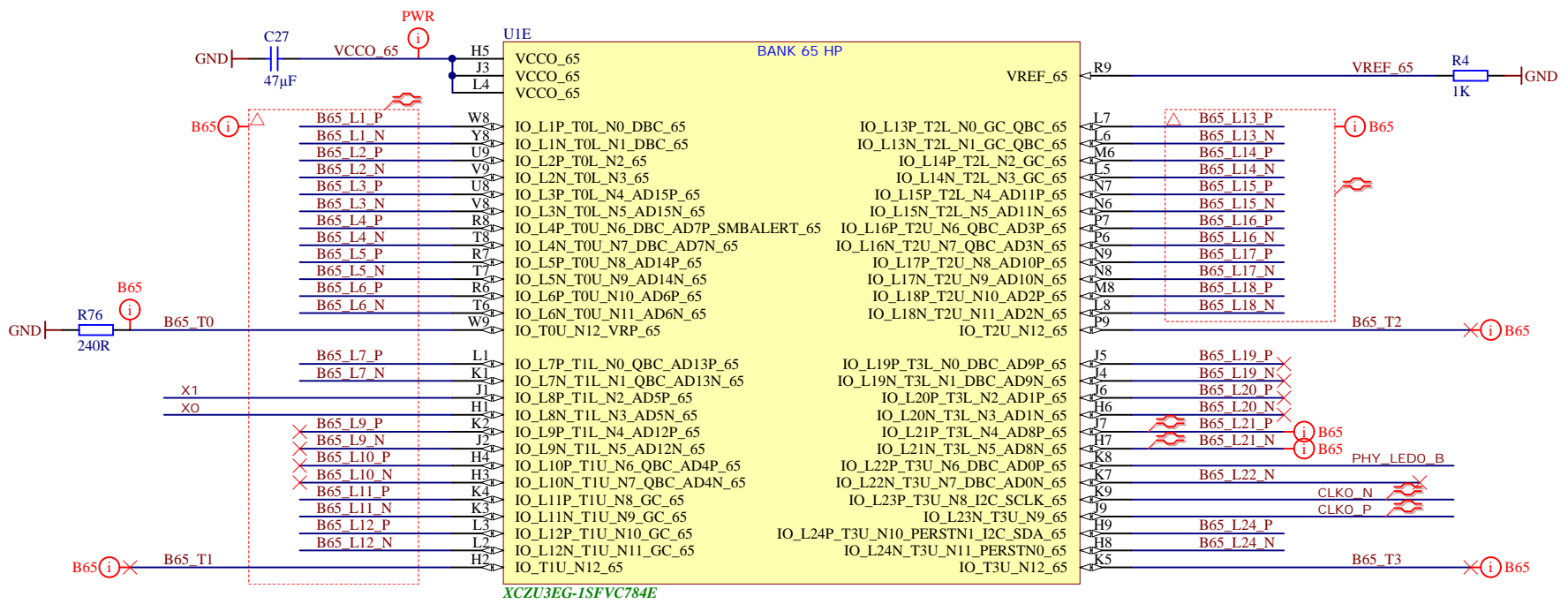
XCZU3EG-1SFVC784E



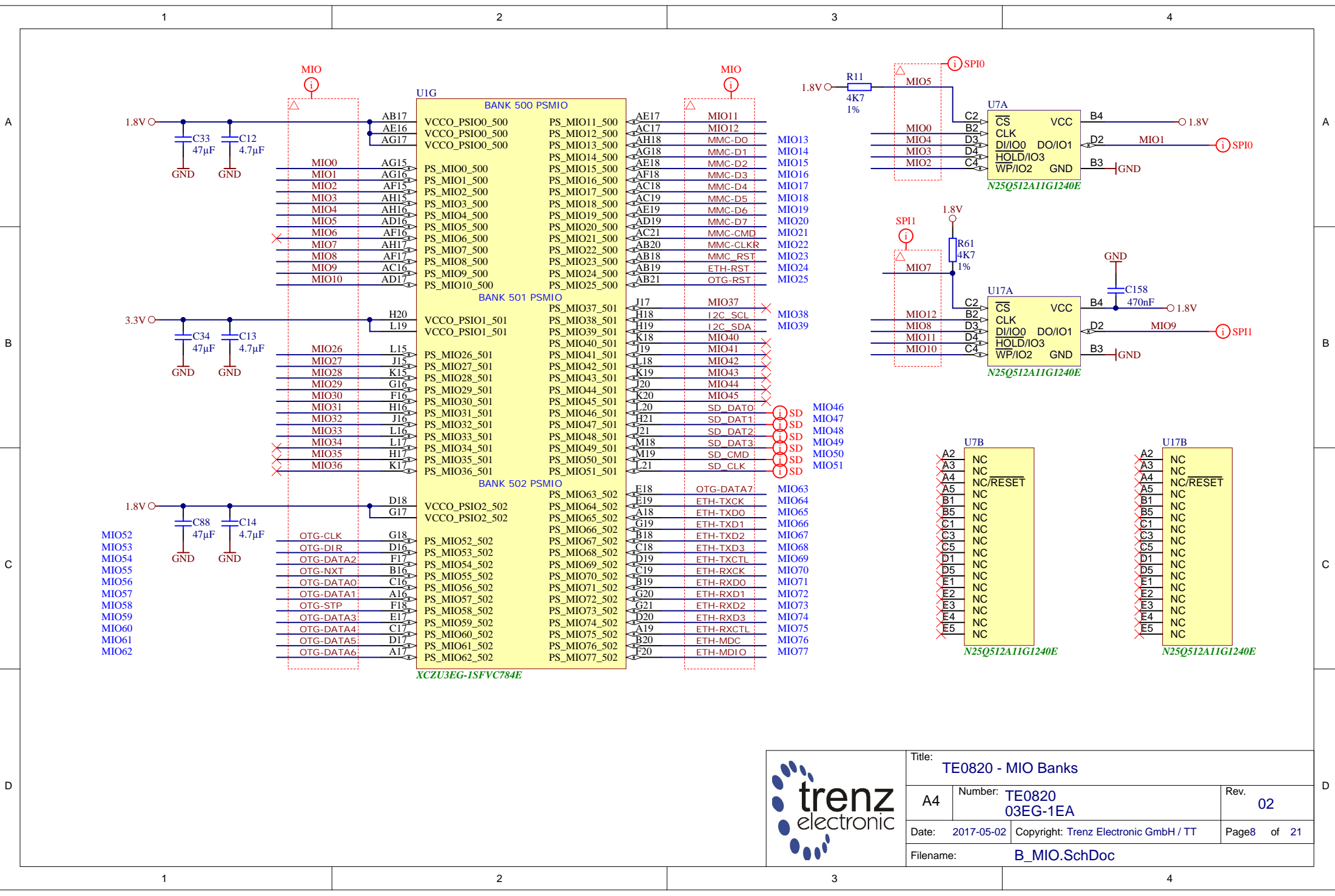
Title: TE0820 - HD Banks		
A4	Number: TE0820 03EG-1EA	Rev. 02
Date: 2017-05-02	Copyright: Trenz Electronic GmbH / TT	Page 4 of 21
Filename: B_HD.SchDoc		



Title: TE0820 - B64		
A4	Number: TE0820 03EG-1EA	Rev. 02
Date: 2017-05-02	Copyright: Trenz Electronic GmbH / TT	Page 5 of 21
Filename: B64.SchDoc		



Title: TE0820 - B65		
A4	Number: TE0820 03EG-1EA	Rev. 02
Date: 2017-05-02	Copyright: Trenz Electronic GmbH / TT	Page6 of 21
Filename: B65.SchDoc		



		Title: TE0820 - MIO Banks	
		A4	Number: TE0820 03EG-1EA
Date: 2017-05-02		Copyright: Trenz Electronic GmbH / TT	
Filename: B_MIO.SchDoc		Page 8 of 21	

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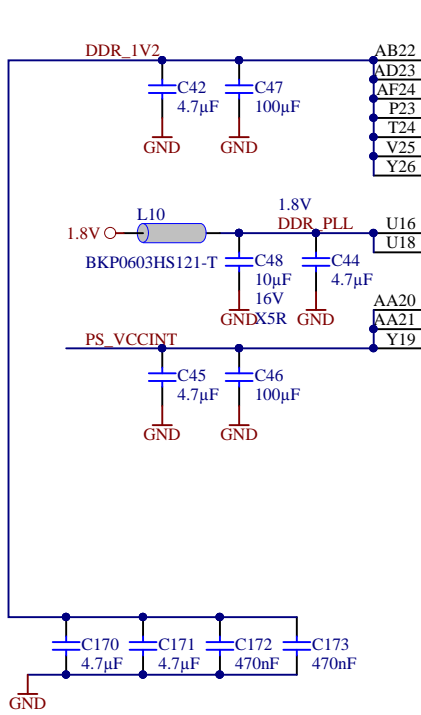
B

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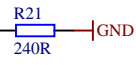
D

D



U11		BANK 504 PSDDR	
VCCO_PSDDR_504	PS_DDR_CK0_504	W25	DDR4-CLK0 P
VCCO_PSDDR_504	PS_DDR_CK_N0_504	W26	DDR4-CLK0 N
VCCO_PSDDR_504	PS_DDR_CKE0_504	V28	DDR4-CKE0
VCCO_PSDDR_504	PS_DDR_CK1_504	Y24	
VCCO_PSDDR_504	PS_DDR_CK_N1_504	Y25	
VCCO_PSDDR_504	PS_DDR_CKE1_504	V27	
VCC_PSDDR_PLL	PS_DDR_A0_504	W28	DDR4-A0
VCC_PSDDR_PLL	PS_DDR_A1_504	Y28	DDR4-A1
VCC_PSDDR_PLL	PS_DDR_A2_504	AB28	DDR4-A2
	PS_DDR_A3_504	AA28	DDR4-A3
	PS_DDR_A4_504	Y27	DDR4-A4
	PS_DDR_A5_504	AA27	DDR4-A5
	PS_DDR_A6_504	Y22	DDR4-A6
	PS_DDR_A7_504	AA23	DDR4-A7
	PS_DDR_A8_504	AA22	DDR4-A8
	PS_DDR_A9_504	AB23	DDR4-A9
	PS_DDR_A10_504	AA25	DDR4-A10
	PS_DDR_A11_504	AA26	DDR4-A11
	PS_DDR_A12_504	AB25	DDR4-A12
	PS_DDR_A13_504	AB26	DDR4-A13
	PS_DDR_A14_504	AB24	DDR4-A14
	PS_DDR_A15_504	AC24	DDR4-A15
	PS_DDR_A16_504	AC23	DDR4-A16
	PS_DDR_A17_504	AC22	DDR4-A17
	PS_DDR_CS_N0_504	W27	DDR4-CS
	PS_DDR_CS_N1_504	V26	
	PS_DDR_BA0_504	V23	DDR4-BA0
	PS_DDR_BA1_504	W22	DDR4-BA1
	PS_DDR_BG0_504	W24	DDR4-BG0
	PS_DDR_BG1_504	V22	
	PS_DDR_PARITY_504	V24	DDR4-PAR
	PS_DDR_RAM_RST_N_504	U23	DDR4-RESET
	PS_DDR_ACT_N_504	Y23	DDR4-ACT
	PS_DDR_ALERT_N_504	U25	DDR4-ALERT
	PS_DDR_ZQ_504	U24	
	PS_DDR_ODT0_504	U28	DDR4-ODT0
	PS_DDR_ODT1_504	U26	

XCZU3EG-1SFVC784E



D80



U1J		BANK 504 PSDDR	
DQ0	AD21	PS_DDR_DQ0_504	PS_DDR_DQ32_504
DQ1	AE20	PS_DDR_DQ1_504	PS_DDR_DQ33_504
DQ2	AD20	PS_DDR_DQ2_504	PS_DDR_DQ34_504
DQ3	AF20	PS_DDR_DQ3_504	PS_DDR_DQ35_504
DQ4	AH21	PS_DDR_DQ4_504	PS_DDR_DQ36_504
DQ5	AH20	PS_DDR_DQ5_504	PS_DDR_DQ37_504
DQ6	AH19	PS_DDR_DQ6_504	PS_DDR_DQ38_504
DQ7	AG19	PS_DDR_DQ7_504	PS_DDR_DQ39_504
DQ8	AF22	PS_DDR_DQ8_504	PS_DDR_DQ40_504
DQ9	AH22	PS_DDR_DQ9_504	PS_DDR_DQ41_504
DQ10	AE22	PS_DDR_DQ10_504	PS_DDR_DQ42_504
DQ11	AD22	PS_DDR_DQ11_504	PS_DDR_DQ43_504
DQ12	AH23	PS_DDR_DQ12_504	PS_DDR_DQ44_504
DQ13	AH24	PS_DDR_DQ13_504	PS_DDR_DQ45_504
DQ14	AE24	PS_DDR_DQ14_504	PS_DDR_DQ46_504
DQ15	AG24	PS_DDR_DQ15_504	PS_DDR_DQ47_504
DQ16	AC26	PS_DDR_DQ16_504	PS_DDR_DQ48_504
DQ17	AD26	PS_DDR_DQ17_504	PS_DDR_DQ49_504
DQ18	AD25	PS_DDR_DQ18_504	PS_DDR_DQ50_504
DQ19	AD24	PS_DDR_DQ19_504	PS_DDR_DQ51_504
DQ20	AG26	PS_DDR_DQ20_504	PS_DDR_DQ52_504
DQ21	AH25	PS_DDR_DQ21_504	PS_DDR_DQ53_504
DQ22	AH26	PS_DDR_DQ22_504	PS_DDR_DQ54_504
DQ23	AG25	PS_DDR_DQ23_504	PS_DDR_DQ55_504
DQ24	AH27	PS_DDR_DQ24_504	PS_DDR_DQ56_504
DQ25	AH28	PS_DDR_DQ25_504	PS_DDR_DQ57_504
DQ26	AF28	PS_DDR_DQ26_504	PS_DDR_DQ58_504
DQ27	AG28	PS_DDR_DQ27_504	PS_DDR_DQ59_504
DQ28	AC27	PS_DDR_DQ28_504	PS_DDR_DQ60_504
DQ29	AD27	PS_DDR_DQ29_504	PS_DDR_DQ61_504
DQ30	AD28	PS_DDR_DQ30_504	PS_DDR_DQ62_504
DQ31	AC28	PS_DDR_DQ31_504	PS_DDR_DQ63_504
		PS_DDR_DQ64_504	PS_DDR_DQ65_504
		PS_DDR_DQ66_504	PS_DDR_DQ67_504
		PS_DDR_DQ68_504	PS_DDR_DQ69_504
		PS_DDR_DQ70_504	PS_DDR_DQ71_504
		PS_DDR_DQ72_504	
		PS_DDR_DQ73_504	
		PS_DDR_DQ74_504	
		PS_DDR_DQ75_504	
		PS_DDR_DQ76_504	
		PS_DDR_DQ77_504	
		PS_DDR_DQ78_504	
		PS_DDR_DQ79_504	
		PS_DDR_DQ80_504	
		PS_DDR_DQ81_504	
		PS_DDR_DQ82_504	
		PS_DDR_DQ83_504	
		PS_DDR_DQ84_504	
		PS_DDR_DQ85_504	
		PS_DDR_DQ86_504	
		PS_DDR_DQ87_504	
		PS_DDR_DQ88_504	
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		PS_DDR_DQ90_504	
		PS_DDR_DQ91_504	
		PS_DDR_DQ92_504	
		PS_DDR_DQ93_504	
		PS_DDR_DQ94_504	
		PS_DDR_DQ95_504	
		PS_DDR_DQ96_504	
		PS_DDR_DQ97_504	
		PS_DDR_DQ98_504	
		PS_DDR_DQ99_504	
		PS_DDR_DQ100_504	

XCZU3EG-1SFVC784E



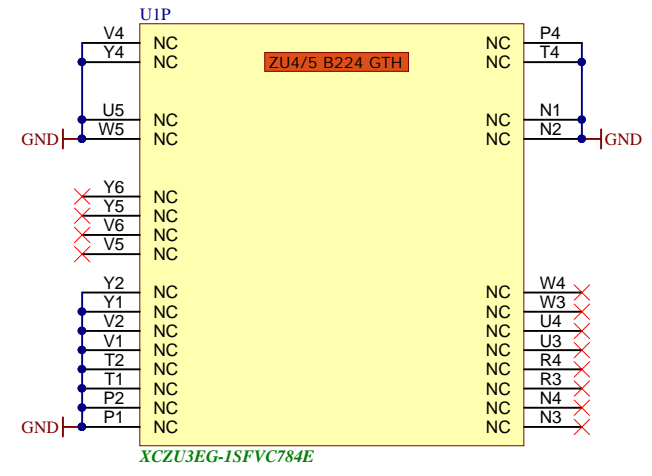
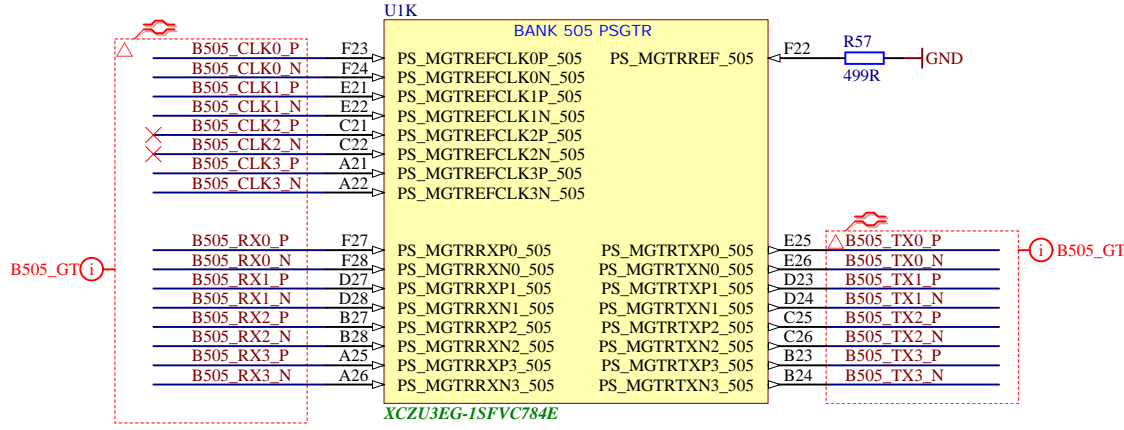
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A4	Number: TE0820 03EG-1EA	Rev. 02
Date: 2017-05-02	Copyright: Trenz Electronic GmbH / TT	Page 9 of 21
Filename: PS_DDR.SchDoc		

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Title: TE0820 - PS_GT		
A4	Number: TE0820 03EG-1EA	Rev. 02
Date: 2017-05-02	Copyright: Trenz Electronic GmbH / TT	Page 10 of 21
Filename: B_PS_GT.SchDoc		

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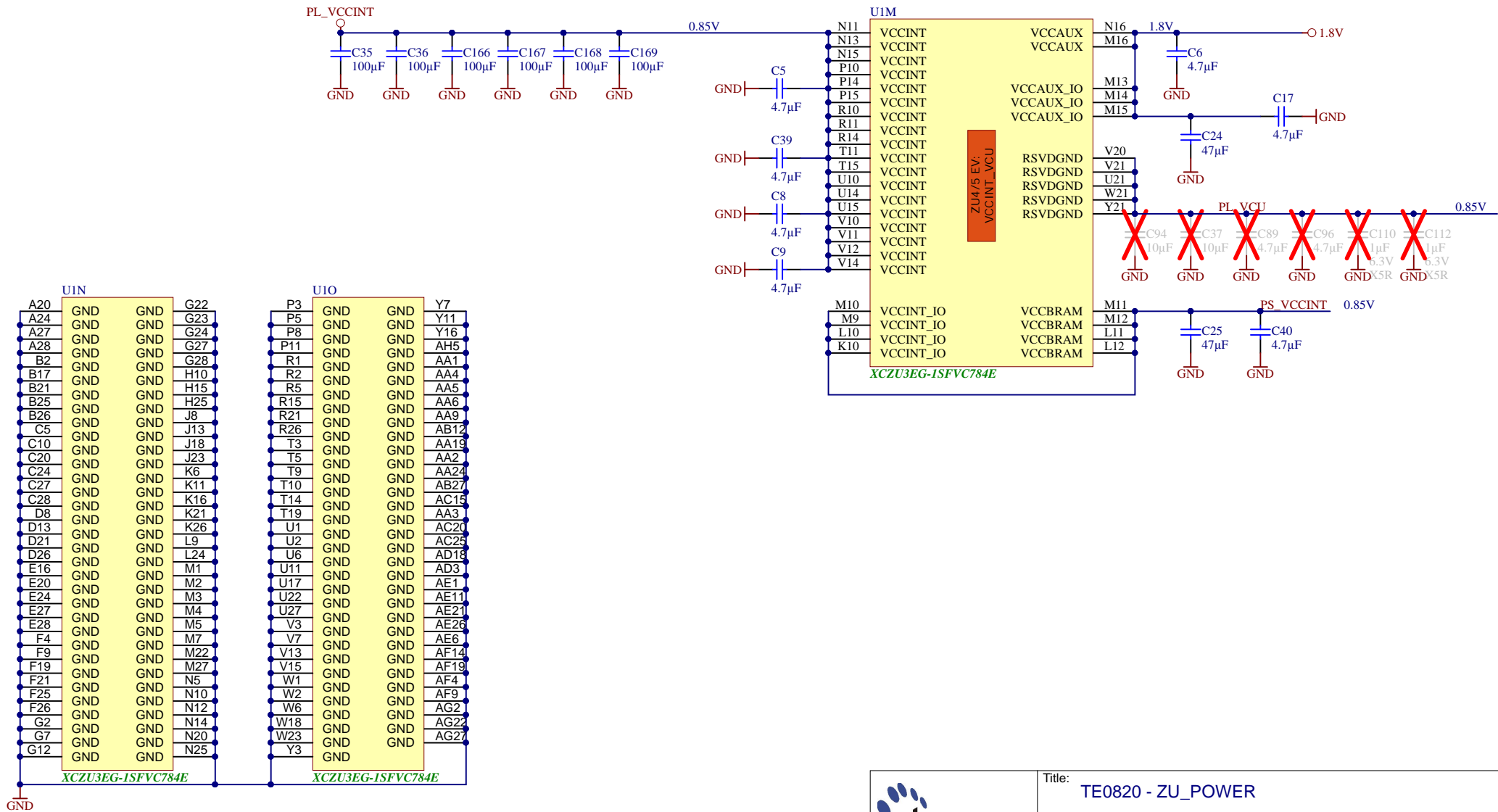
B

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C

D

D



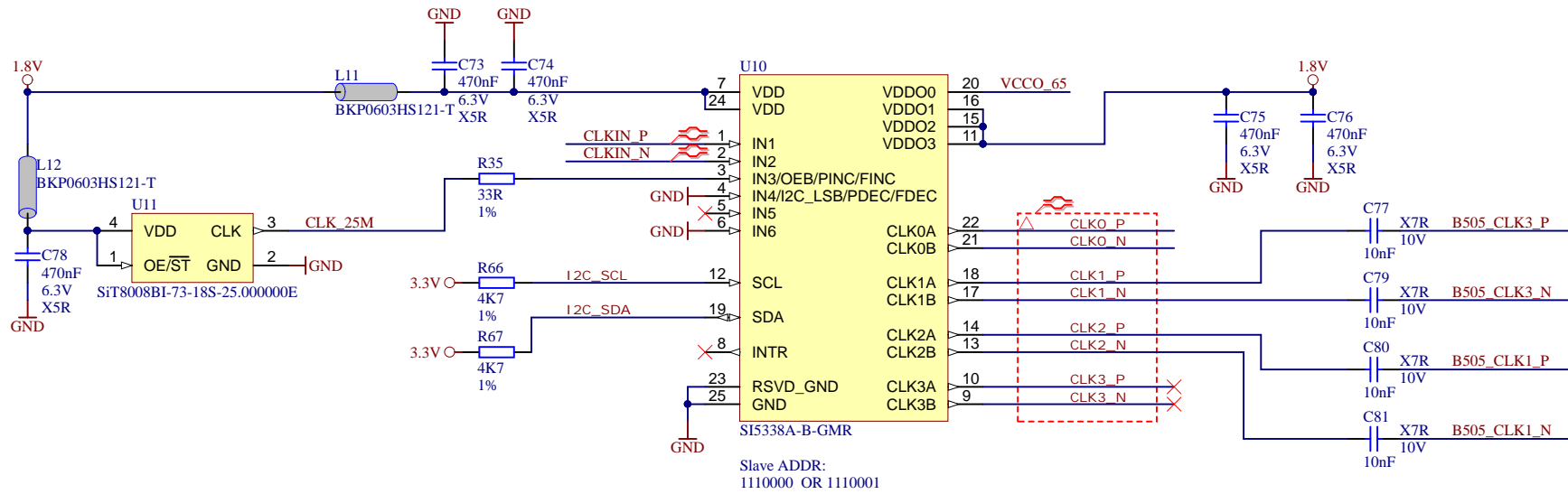
Title: TE0820 - ZU_POWER		
A4	Number: TE0820 03EG-1EA	Rev. 02
Date: 2017-05-02	Copyright: Trenz Electronic GmbH / TT	Page 11 of 21
Filename: ZU_POWER.SchDoc		


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		Title: TE0820 - CLK	
		A4	Number: TE0820 03EG-1EA
Date: 2017-05-02		Copyright: 2015 Trenz Electronic GmbH	
Filename: CLK.SchDoc		Page13 of 21	

A

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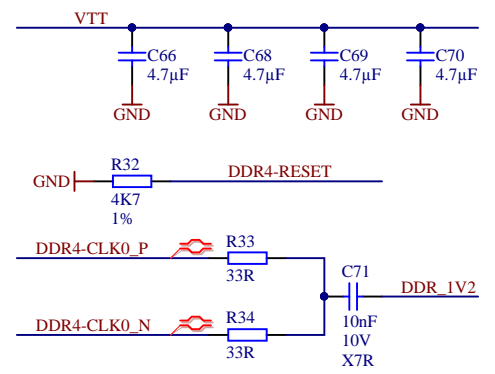
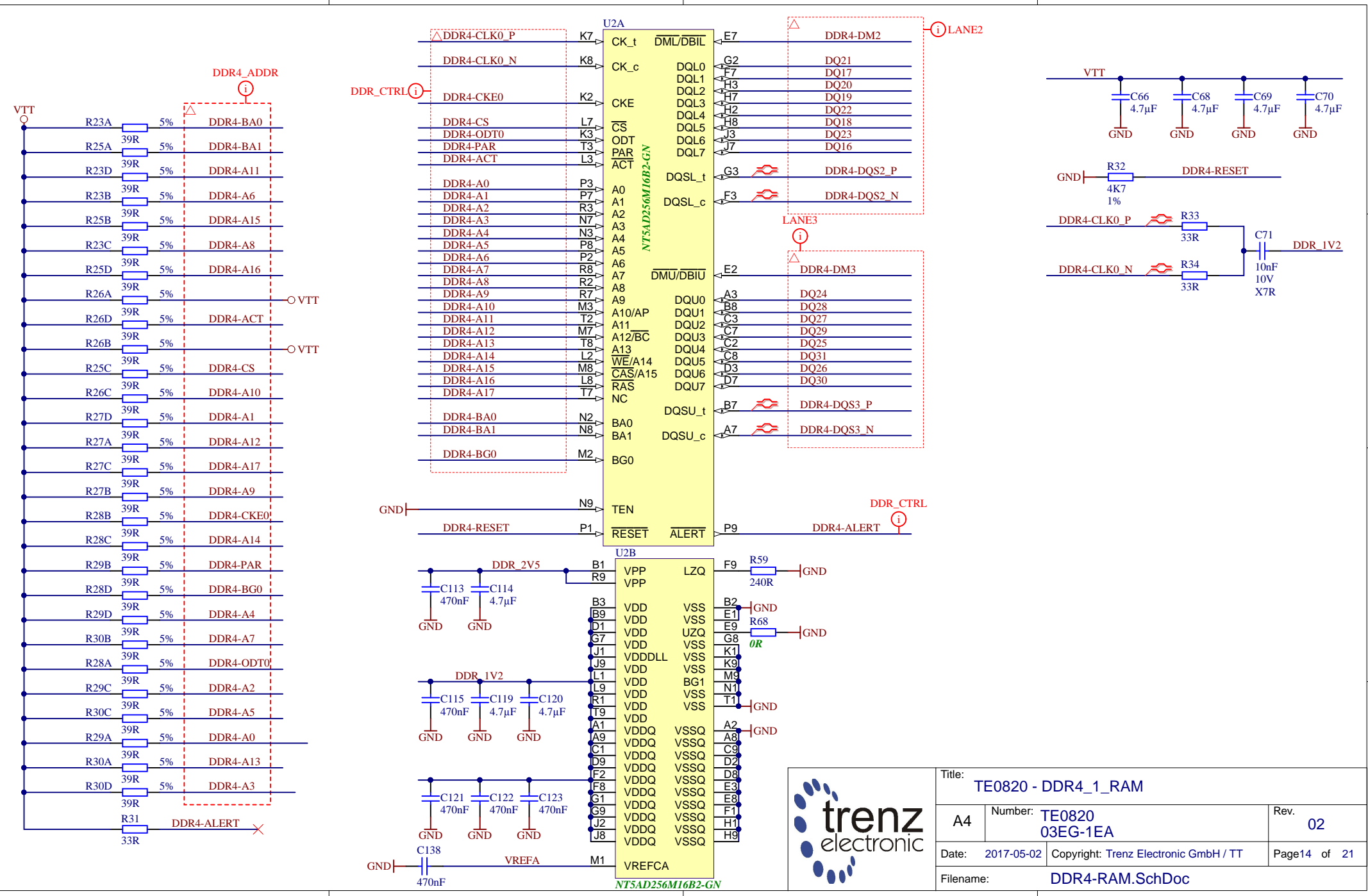
D

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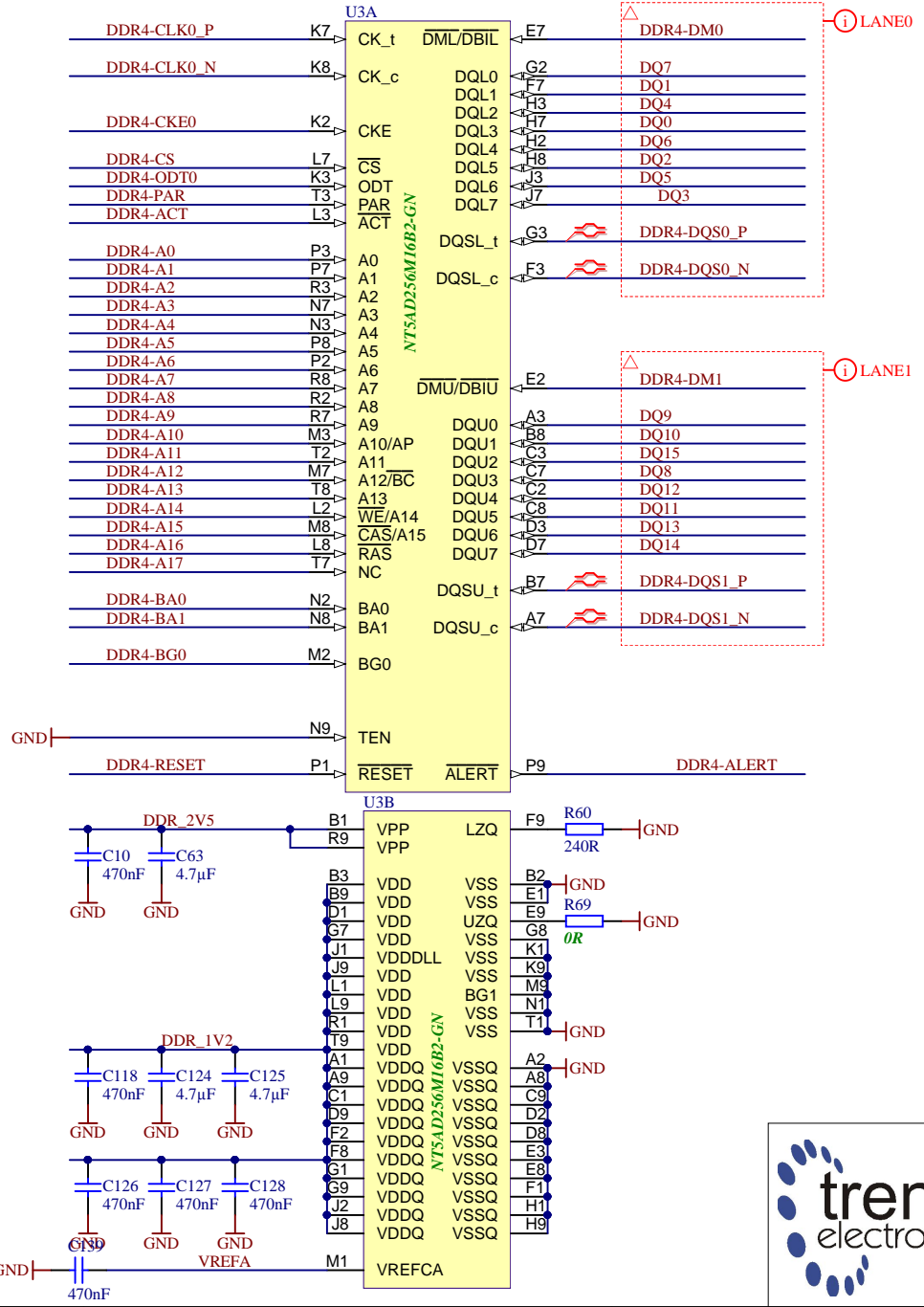

B

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D



Title: TE0820 - DDR4_1_RAM		
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Date: 2017-05-02	Copyright: Trenz Electronic GmbH / TT	Page 14 of 21
Filename: DDR4-RAM.SchDoc		

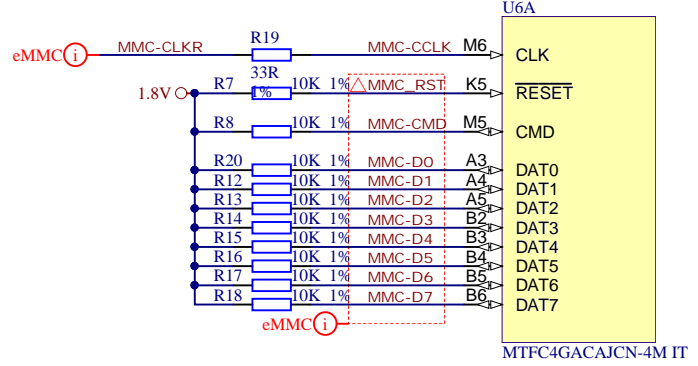



Title: TE0820 - DDR4_2_RAM		
A4	Number: TE0820 03EG-1EA	Rev. 02
Date: 2017-05-02	Copyright: Trenz Electronic GmbH / TT	Page 15 of 21
Filename: DDR4-RAM_2.SchDoc		

U6D

A1	NC	NC	H2
A2	NC	NC	H3
A8	NC	NC	H12
A9	NC	NC	H13
A10	NC	NC	H14
A11	NC	NC	J1
A12	NC	NC	J2
A13	NC	NC	J3
A14	NC	NC	J12
B1	NC	NC	J13
B7	NC	NC	J14
B8	NC	NC	K1
B9	NC	NC	K2
B10	NC	NC	K3
B11	NC	NC	K12
B12	NC	NC	K13
B13	NC	NC	K14
B14	NC	NC	L1
C1	NC	NC	L2
C3	NC	NC	L3
C7	NC	NC	L12
C8	NC	NC	L13
C9	NC	NC	L14
C10	NC	NC	M4
C11	NC	NC	M2
C12	NC	NC	M3
C13	NC	NC	M7
C14	NC	NC	M8
D1	NC	NC	M9
D2	NC	NC	M10
D3	NC	NC	M11
D4	NC	NC	M12
D12	NC	NC	M13
D13	NC	NC	M14
D14	NC	NC	N1
E1	NC	NC	N3
E2	NC	NC	N6
E3	NC	NC	N7
E12	NC	NC	N8
E13	NC	NC	N9
E14	NC	NC	N10
F1	NC	NC	N11
F2	NC	NC	N12
F3	NC	NC	N13
F12	NC	NC	N14
F13	NC	NC	P1
F14	NC	NC	P2
G1	NC	NC	P8
G2	NC	NC	P9
G12	NC	NC	P11
G13	NC	NC	P12
G14	NC	NC	P13
H1	NC	NC	P14

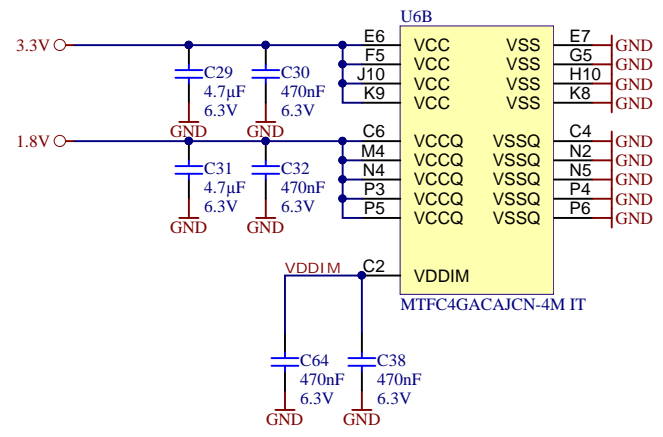
MTFC4GACAJCN-4M IT



U6C

A6	RFU/VSS
A7	RFU
C5	RFU/NC
E5	RFU
E8	RFU
E9	RFU
E10	RFU
F10	RFU
G3	RFU/NC
G10	RFU
H5	RFU/DS
J5	RFU/VSS
K6	RFU
K7	RFU
K10	RFU
P7	RFU/NC
P10	RFU

MTFC4GACAJCN-4M IT



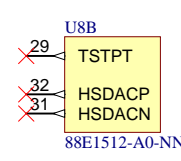
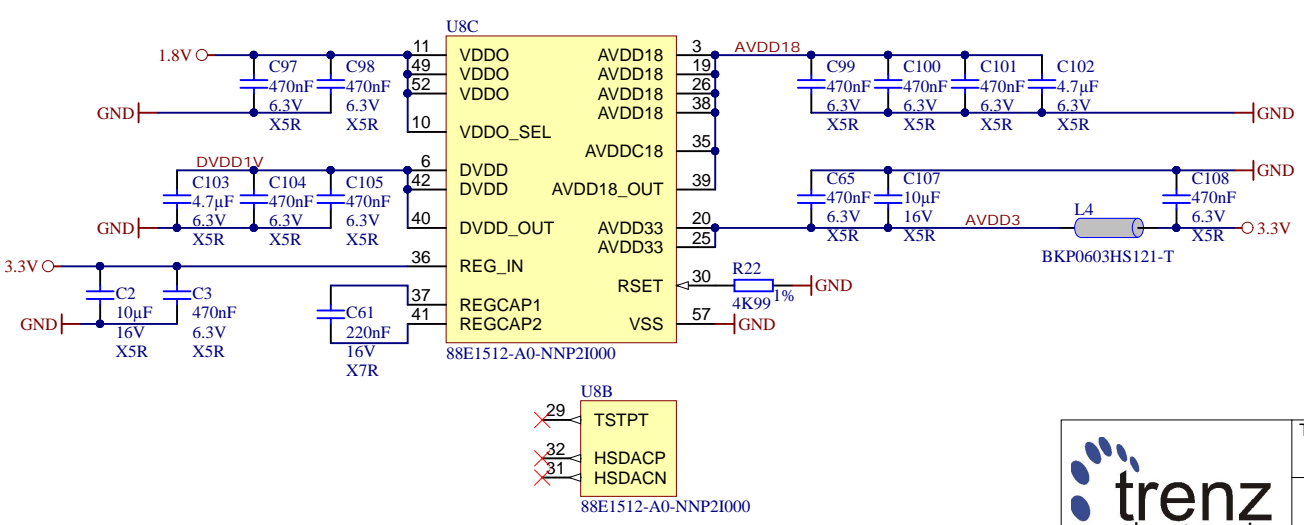
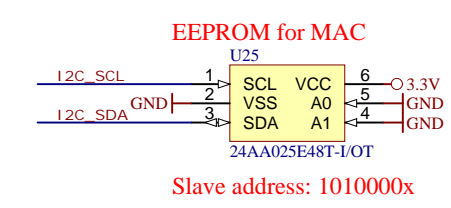
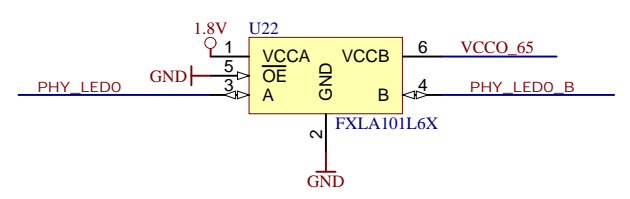
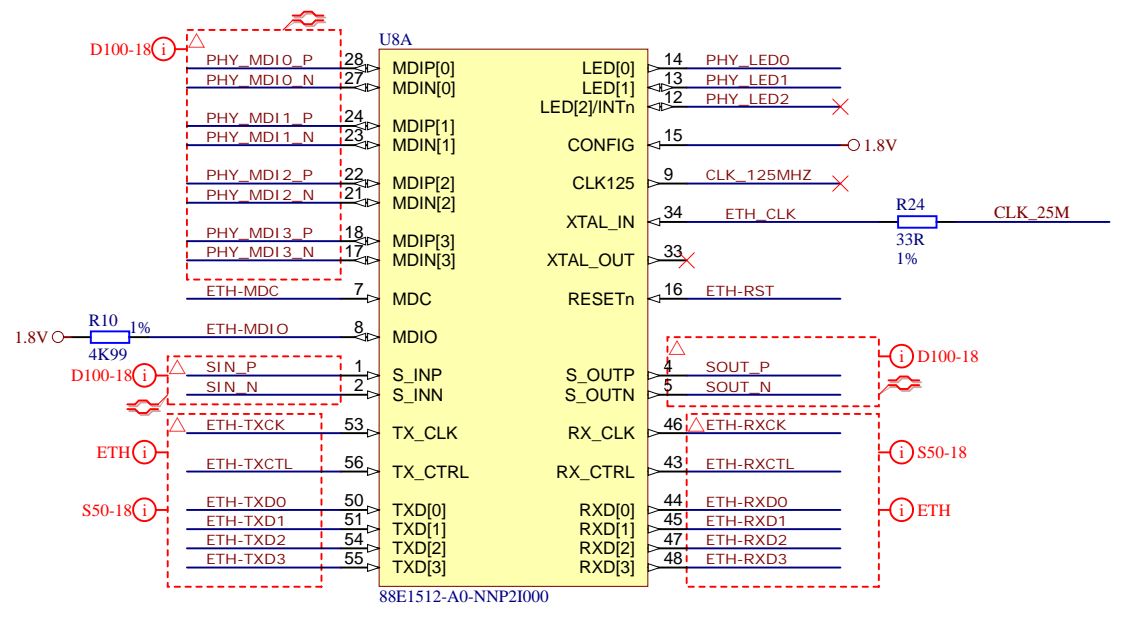
Title: TE0820 - eMMC		
A4	Number: TE0820 03EG-1EA	Rev. 02
Date: 2017-05-02	Copyright: Trenz Electronic GmbH / TT	Page 16 of 21
Filename: eMMC.SchDoc		

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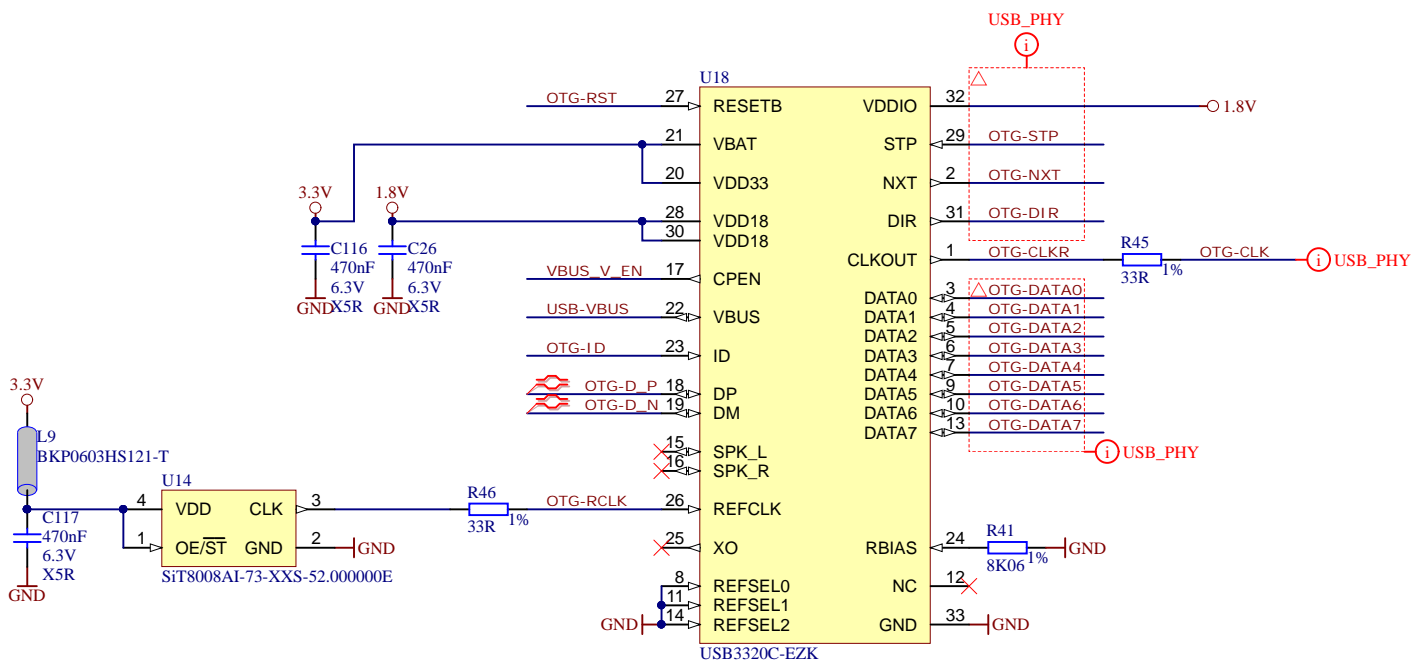
B


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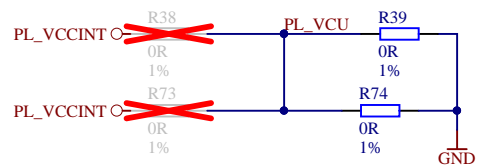
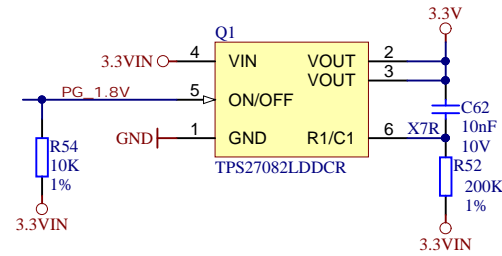
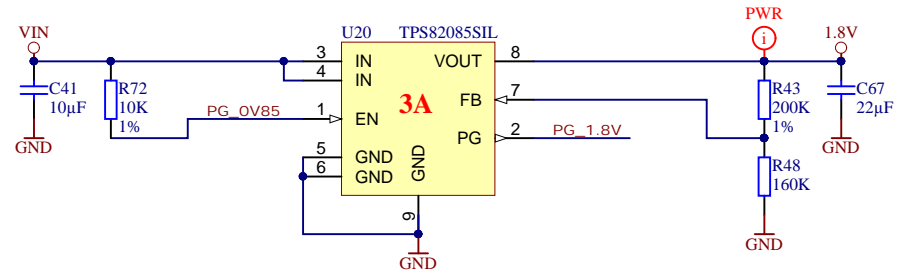
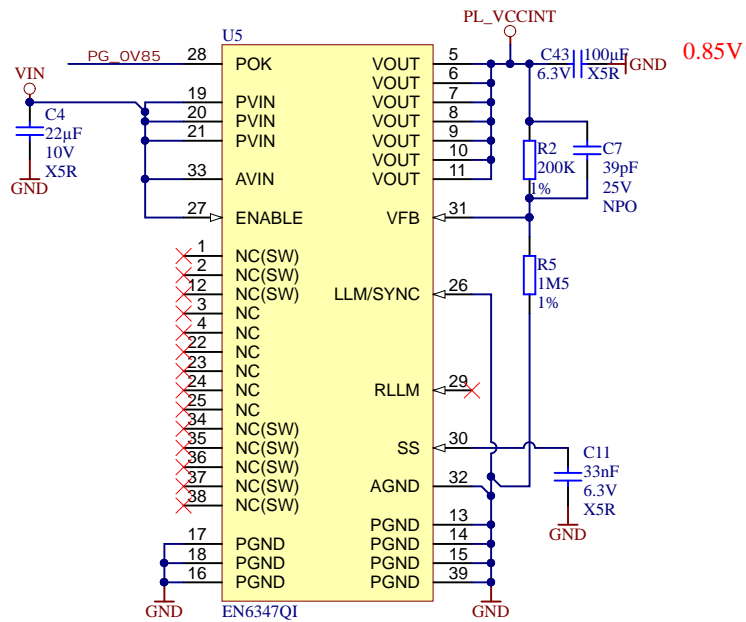
D



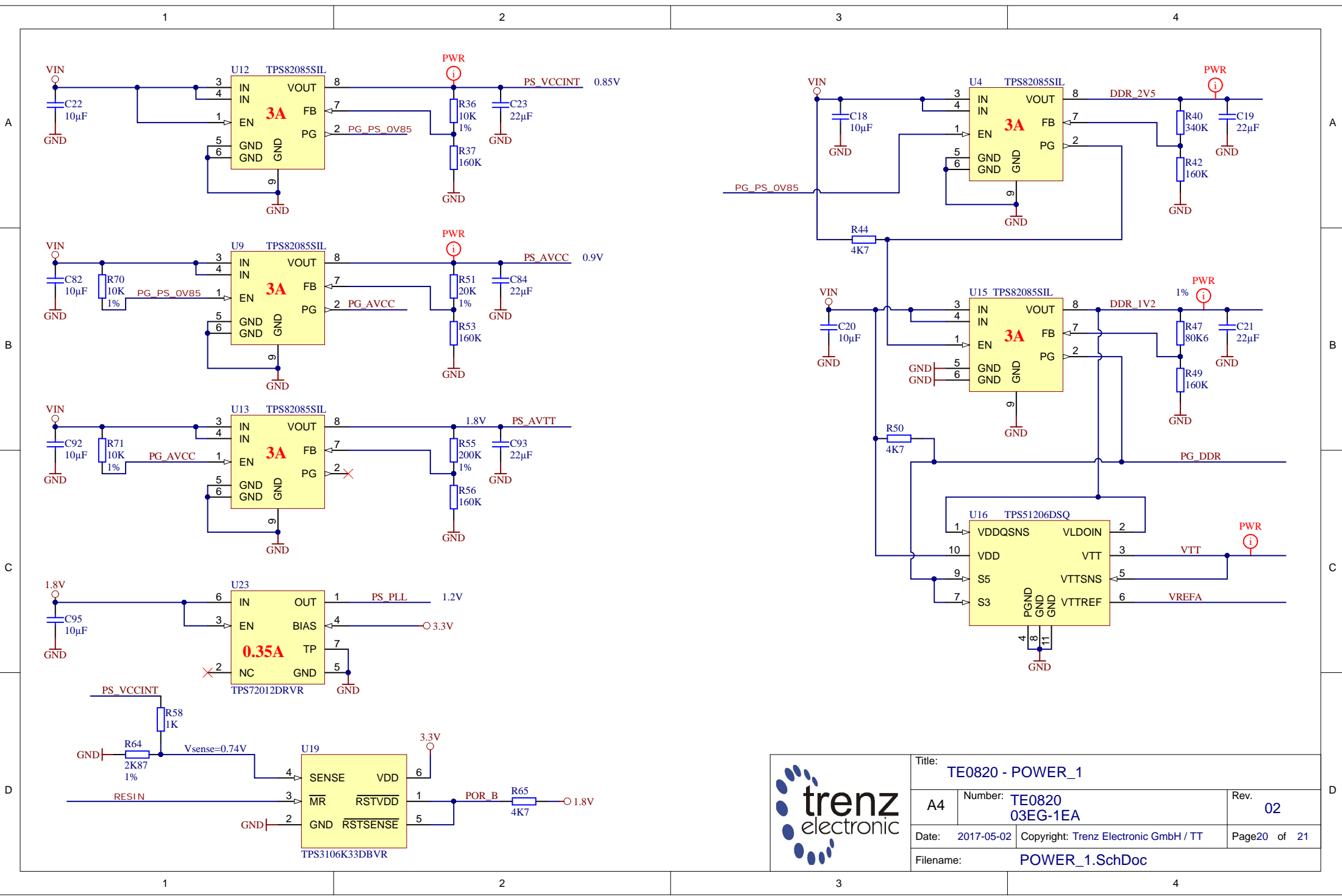
Title: TE0820 - Eth_PHY		
A4	Number: TE0820 03EG-1EA	Rev. 02
Date: 2017-05-02	Copyright: 2015 Trenz Electronic GmbH	Page 17 of 21
Filename: ETH-PHY.SchDoc		




		Title: TE0820 - USB_PHY	
		A4	Number: TE0820 03EG-1EA
Date: 2017-05-02		Copyright: 2015 Trenz Electronic GmbH	
Filename: USB-PHY.SchDoc		Page 18 of 21	



Title: TE0820 - POWER		
A4	Number: TE0820 03EG-1EA	Rev. 02
Date: 2017-05-02	Copyright: Trenz Electronic GmbH / TT	Page 19 of 21
Filename: POWER.SchDoc		



			Title: TE0820 - POWER_1	
			A4	Number: TE0820 03EG-1EA
Date: 2017-05-02		Copyright: Trenz Electronic GmbH / TT		Page20 of 21
Filename: POWER_1.SchDoc				

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CHANGES REV01 to REV02

- 1) Added MAC EEPROM (slave address:)
- 2) LIB components update
- 3) Fixed SD Card connection
- 4) Fixed sense connection from DCDC
- 5) Made correct power connection for VCU (removed DCDC, added resistors and caps like as Xilinx recommended)
- 6) Added resistors for variants (ZU+ with/without VCU)
- 7) Added termination resistors (240R) to VRP pins fro all HP-banks

A

A

B


B

C

C

D

D

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