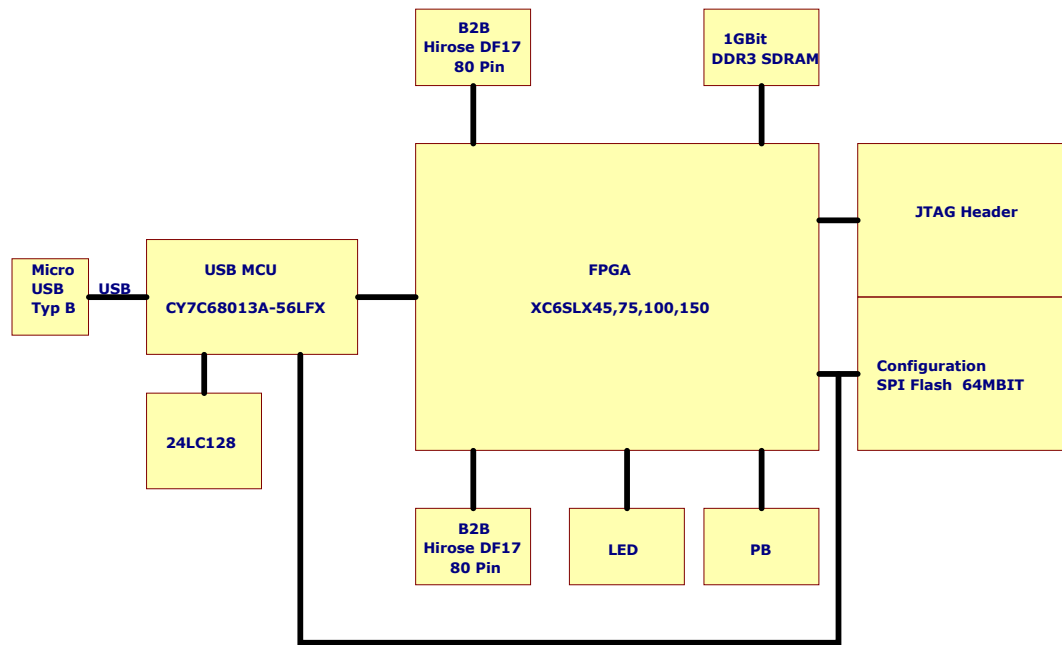
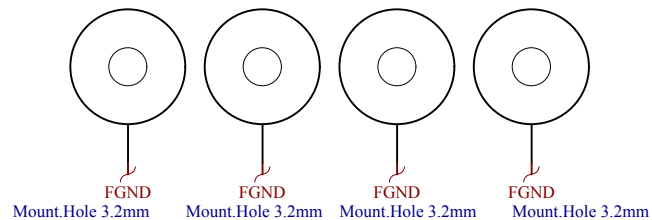
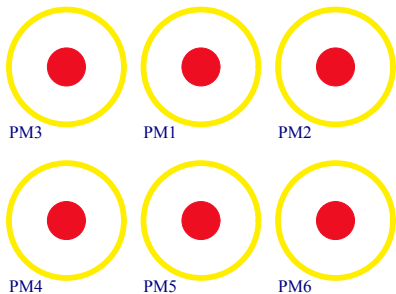



- U_Power
Power.SchDoc
- U_FPGA_PWR
FPGA_PWR.SchDoc
- U_DDR3_RAM
DDR3_RAM.SchDoc
- U_FPGA_CFG_CLK
FPGA_CFG_CLK.SchDoc
- U_FPGA_B3
FPGA_B3.SchDoc
- U_FPGA_DDR3
FPGA_DDR3.SchDoc
- U_FPGA_B2
FPGA_B2.SchDoc
- U_FPGA_B0
FPGA_B0.SchDoc
- U_USB
USB.SchDoc
- U_B2B_Connectors
B2B_Connectors.SchDoc



Serial
Serial
Serialnumber 6,3 x 6,3mm

LOGO1
TE Logo PRINT Layer
LOGO PRINT



		Title: TE0630	
		A4	Number: TE630 TE0630-01
Date: 2015-10-01		Copyright: Trenz Electronic GmbH / TT	
Filename: TE0630.SchDoc		Page1 of 11	

1

2

3

4

A

A

B

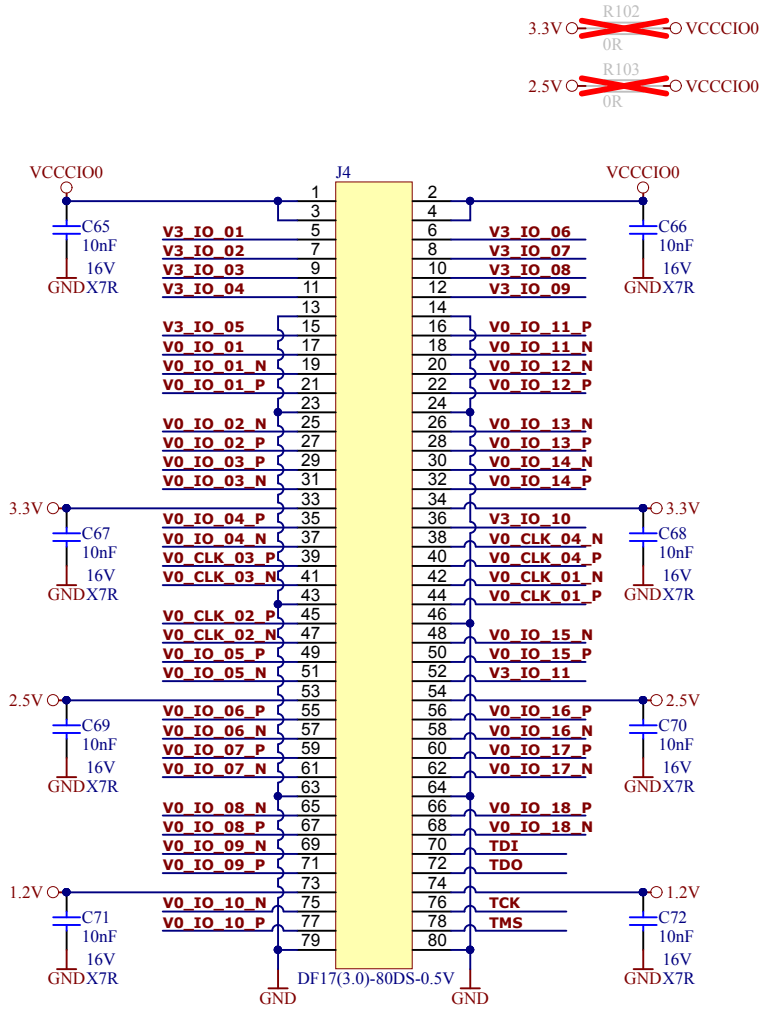
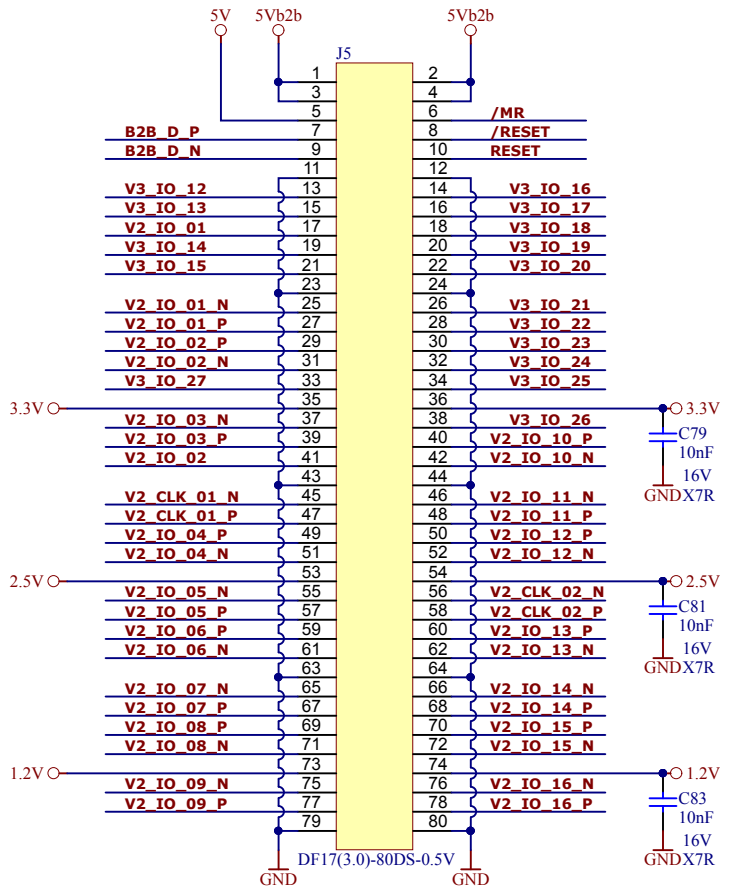
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C

C

D

D



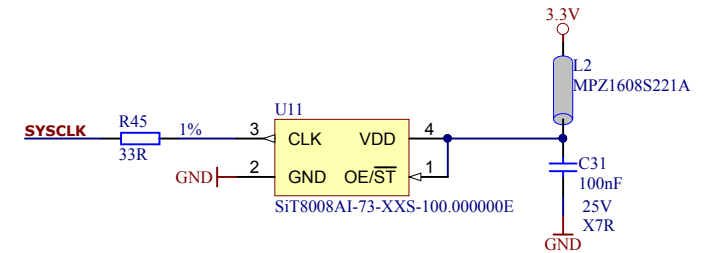
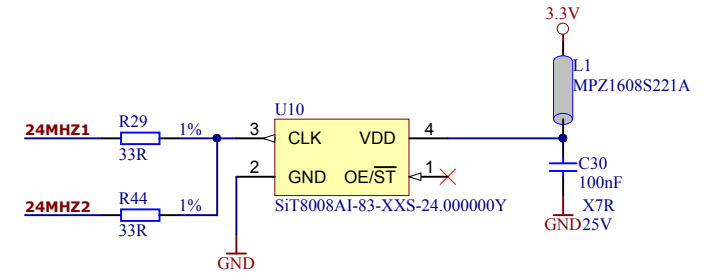
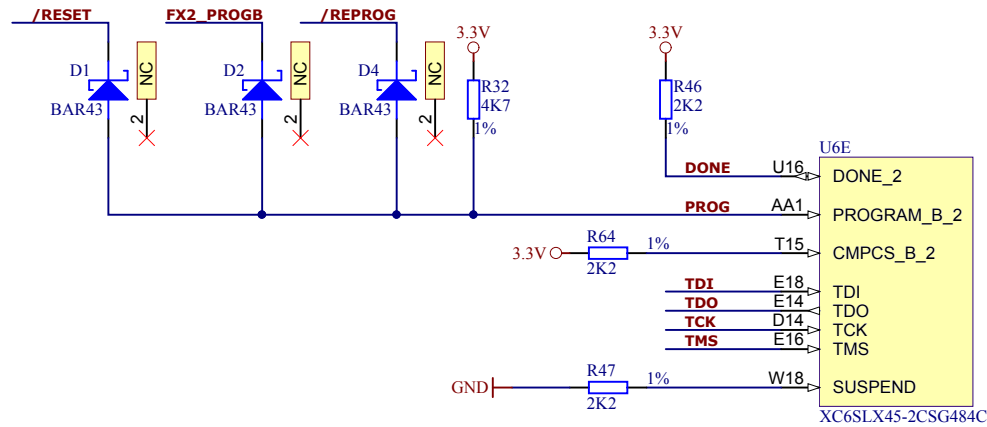
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A4	Number: TE630 TE0630-01	Rev. 01
Date: 2015-10-01	Copyright: Trenz Electronic GmbH / TT	Page2 of 11
Filename: B2B_Connectors.SchDoc		

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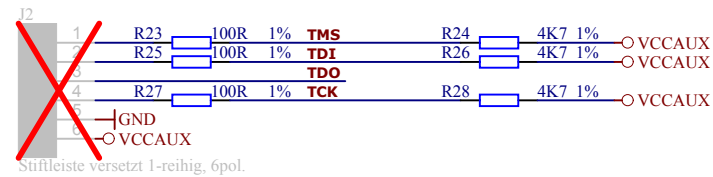
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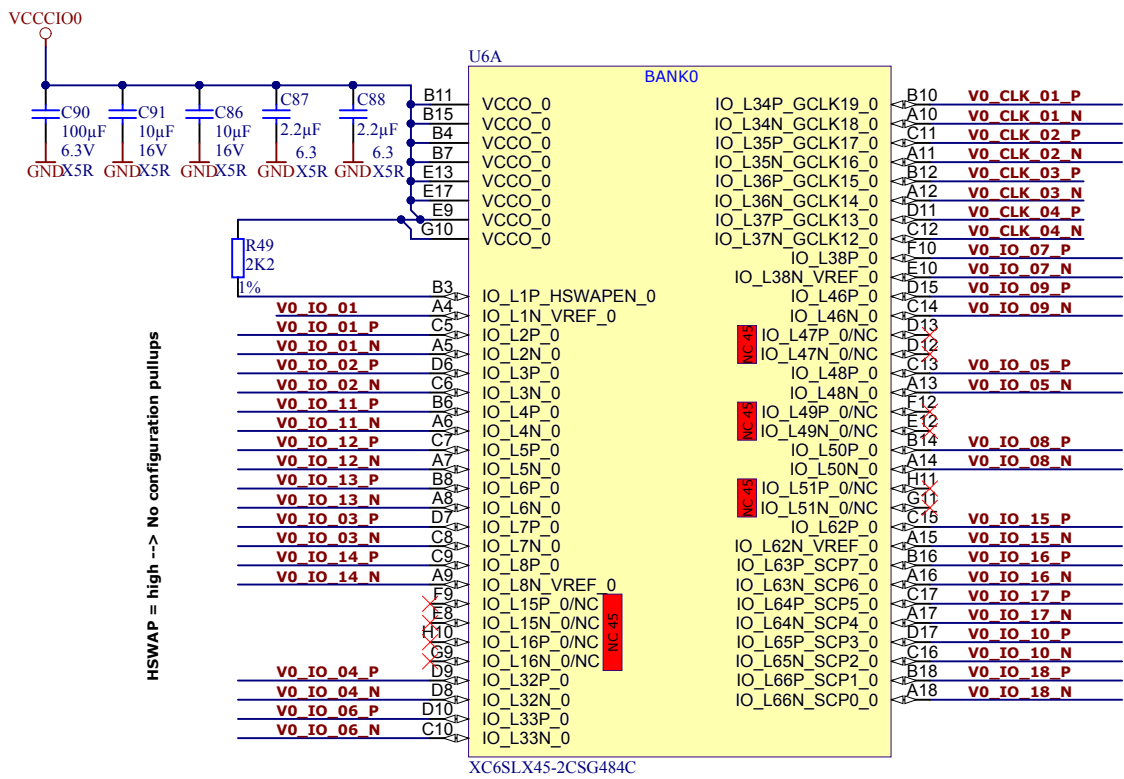
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- 24MHZ1** TP22 ● Testpoint 0.8mm
- 24MHZ2** TP23 ● Testpoint 0.8mm
- SYSCLK** TP24 ● Testpoint 0.8mm
- PROG** TP29 ● Testpoint 0.8mm



		Title: TE0630 - FPGA_CFG_CLK	
		A4	Number: TE630 TE0630-01
Date: 2015-10-01		Copyright: Trenz Electronic GmbH / TT	
Filename: FPGA_CFG_CLK.SchDoc		Page 3 of 11	



V0_CLK_01_P	V0_IO_01_P
V0_CLK_01_N	V0_IO_01_N
V0_CLK_02_P	V0_IO_02_P
V0_CLK_02_N	V0_IO_02_N
V0_CLK_03_P	V0_IO_03_P
V0_CLK_03_N	V0_IO_03_N
V0_CLK_04_P	V0_IO_04_P
V0_CLK_04_N	V0_IO_04_N
V0_IO_07_P	V0_IO_07_P
V0_IO_07_N	V0_IO_07_N
V0_IO_09_P	V0_IO_09_P
V0_IO_09_N	V0_IO_09_N
V0_IO_05_P	V0_IO_05_P
V0_IO_05_N	V0_IO_05_N
V0_IO_08_P	V0_IO_08_P
V0_IO_08_N	V0_IO_08_N
V0_IO_15_P	V0_IO_15_P
V0_IO_15_N	V0_IO_15_N
V0_IO_16_P	V0_IO_16_P
V0_IO_16_N	V0_IO_16_N
V0_IO_17_P	V0_IO_17_P
V0_IO_17_N	V0_IO_17_N



Title: TE0630 - FPGA_B0			
A4	Number: TE630 TE0630-01	Rev. 01	
Date: 2015-10-01	Copyright: Trenz Electronic GmbH / TT	Page4 of 11	
Filename: FPGA_B0.SchDoc			

A

B

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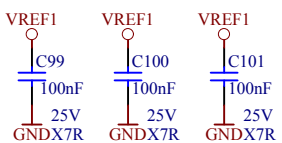
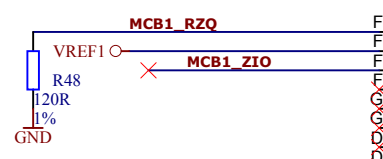
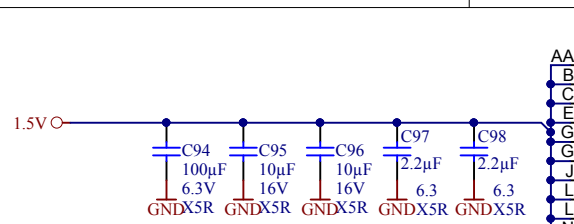
D

A

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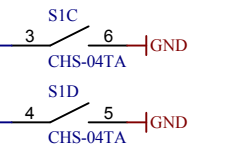
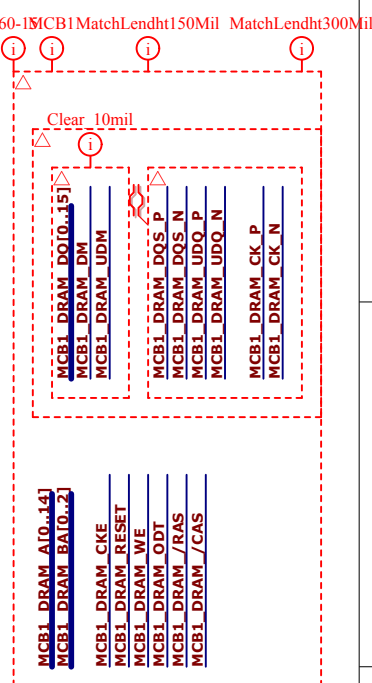
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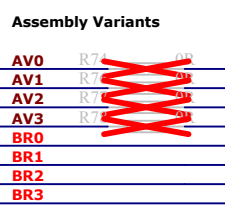
MCB1_DRAM_A13	R31D	33R	1%	MCB1R_DRAM_A13	F21
MCB1_DRAM_A14	R31C	33R	1%	MCB1R_DRAM_A14	F22
MCB1_DRAM_RESET				MCB1R_DRAM_RESET	H19
MCB1_DRAM_A11	R33B	33R	1%	MCB1R_DRAM_A11	H20
MCB1_DRAM_CKE	R35B	33R	1%	MCB1R_DRAM_CKE	E20
MCB1_DRAM_A12	R35A	33R	1%	MCB1R_DRAM_A12	E22
MCB1_DRAM_A8	R31B	33R	1%	MCB1R_DRAM_A8	G20
MCB1_DRAM_A9	R31A	33R	1%	MCB1R_DRAM_A9	G22
MCB1_DRAM_A10	R35D	33R	1%	MCB1R_DRAM_A10	D21
MCB1_DRAM_A4	R35C	33R	1%	MCB1R_DRAM_A4	D22
MCB1_DRAM_WE	R33D	33R	1%	MCB1R_DRAM_WE	H21
MCB1_DRAM_BA2	R33C	33R	1%	MCB1R_DRAM_BA2	H22
MCB1_DRAM_A7	R30B	33R	1%	MCB1R_DRAM_A7	C20
MCB1_DRAM_A2	R30A	33R	1%	MCB1R_DRAM_A2	C22
MCB1_DRAM_BA0	R34B	33R	1%	MCB1R_DRAM_BA0	K18
MCB1_DRAM_BA1	R34C	33R	1%	MCB1R_DRAM_BA1	K19
MCB1_DRAM_A0	R30D	33R	1%	MCB1R_DRAM_A0	B21
MCB1_DRAM_A1	R30C	33R	1%	MCB1R_DRAM_A1	B22
MCB1_DRAM_CK_P				MCB1_DRAM_CK_P	J17
MCB1_DRAM_CK_N				MCB1_DRAM_CK_N	J19

U6B		BANK1	
AA19	VCCO_1	IO_L39P_M1A3_1	IO_L39P_M1A3_1
B19	VCCO_1	IO_L39N_M1ODT_1	IO_L39N_M1ODT_1
C21	VCCO_1	IO_L40P_GCLK11_M1A5_1	IO_L40P_GCLK11_M1A5_1
E19	VCCO_1	IO_L40N_GCLK10_M1A6_1	IO_L40N_GCLK10_M1A6_1
G14	VCCO_1	IO_L41P_GCLK9_IRDY1_M1FRASN_1	IO_L41P_GCLK9_IRDY1_M1FRASN_1
G21	VCCO_1	IO_L41N_GCLK8_M1CASN_1	IO_L41N_GCLK8_M1CASN_1
J18	VCCO_1	IO_L42P_GCLK7_M1UDM_1	IO_L42P_GCLK7_M1UDM_1
L16	VCCO_1	IO_L42N_GCLK6_TRDY1_M1LDM_1	IO_L42N_GCLK6_TRDY1_M1LDM_1
L21	VCCO_1	IO_L43P_GCLK5_M1DQ4_1	IO_L43P_GCLK5_M1DQ4_1
N18	VCCO_1	IO_L43N_GCLK4_M1DQ5_1	IO_L43N_GCLK4_M1DQ5_1
R21	VCCO_1	IO_L44P_A3_M1DQ6_1	IO_L44P_A3_M1DQ6_1
U18	VCCO_1	IO_L44N_A2_M1DQ7_1	IO_L44N_A2_M1DQ7_1
W21	VCCO_1	IO_L45P_A1_M1LDQS_1	IO_L45P_A1_M1LDQS_1
		IO_L45N_A0_M1LDQSN_1	IO_L45N_A0_M1LDQSN_1
		IO_L46P_FCS_B_M1DQ2_1	IO_L46P_FCS_B_M1DQ2_1
		IO_L46N_FOE_B_M1DQ3_1	IO_L46N_FOE_B_M1DQ3_1
		IO_L47P_FWE_B_M1DQ0_1	IO_L47P_FWE_B_M1DQ0_1
		IO_L47N_LDC_M1DQ1_1	IO_L47N_LDC_M1DQ1_1
		IO_L48P_HDC_M1DQ8_1	IO_L48P_HDC_M1DQ8_1
		IO_L48N_M1DQ9_1	IO_L48N_M1DQ9_1
		IO_L49P_M1DQ10_1	IO_L49P_M1DQ10_1
		IO_L49N_M1DQ11_1	IO_L49N_M1DQ11_1
		IO_L50P_M1UDQS_1	IO_L50P_M1UDQS_1
		IO_L50N_M1UDQSN_1	IO_L50N_M1UDQSN_1
		IO_L51P_M1DQ12_1	IO_L51P_M1DQ12_1
		IO_L51N_M1DQ13_1	IO_L51N_M1DQ13_1
		IO_L52P_M1DQ14_1	IO_L52P_M1DQ14_1
		IO_L52N_M1DQ15_1	IO_L52N_M1DQ15_1
		IO_L53P_1	IO_L53P_1
		IO_L53N_VREF_1	IO_L53N_VREF_1
		IO_L58P_1	IO_L58P_1
		IO_L58N_1	IO_L58N_1
		IO_L59P_1	IO_L59P_1
		IO_L59N_1	IO_L59N_1
		IO_L60P_1	IO_L60P_1
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		IO_L61P_1	IO_L61P_1
		IO_L61N_1	IO_L61N_1
		IO_L62P_1	IO_L62P_1
		IO_L62N_1	IO_L62N_1
		IO_L63P_1	IO_L63P_1
		IO_L63N_1	IO_L63N_1
		IO_L64P_1	IO_L64P_1
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		IO_L66N_1	IO_L66N_1
		IO_L67P_1	IO_L67P_1
		IO_L67N_1	IO_L67N_1
		IO_L68P_1	IO_L68P_1
		IO_L68N_1	IO_L68N_1
		IO_L70P_1	IO_L70P_1
		IO_L70N_1	IO_L70N_1
		IO_L71P_1	IO_L71P_1
		IO_L71N_1	IO_L71N_1
		IO_L72P_1	IO_L72P_1
		IO_L72N_1	IO_L72N_1
		IO_L73P_1	IO_L73P_1
		IO_L73N_1	IO_L73N_1
		IO_L74P_AWAKE_1	IO_L74P_AWAKE_1
		IO_L74N_DOUT_BUSY_1	IO_L74N_DOUT_BUSY_1

R Ram S60-15		MCB1 DRAM	
J21	MCB1R_DRAM_A3	R34D	33R 1% MCB1_DRAM_A3
J22	MCB1R_DRAM_ODT	R33A	33R 1% MCB1_DRAM_ODT
L17	MCB1R_DRAM_A5	R37D	33R 1% MCB1_DRAM_A5
K17	MCB1R_DRAM_A6	R37B	33R 1% MCB1_DRAM_A6
M18	MCB1R_DRAM /RAS	R37C	33R 1% MCB1_DRAM /RAS
M19	MCB1R_DRAM /CAS	R34A	33R 1% MCB1_DRAM /CAS
L19	MCB1_DRAM_UDM		
K20	MCB1_DRAM_DM		
L20	MCB1_DRAM_DQ4		
L22	MCB1_DRAM_DQ5		
K21	MCB1_DRAM_DQ6		
K22	MCB1_DRAM_DQ7		
M21	MCB1_DRAM_DQS_P		
M22	MCB1_DRAM_DQS_N		
N19	MCB1_DRAM_DQ2		
M20	MCB1_DRAM_DQ3		
N20	MCB1_DRAM_DQ0		
N22	MCB1_DRAM_DQ1		
P21	MCB1_DRAM_DQ8		
P22	MCB1_DRAM_DQ9		
R20	MCB1_DRAM_DQ10		
R22	MCB1_DRAM_DQ11		
T21	MCB1_DRAM_UDQ_P		
T22	MCB1_DRAM_UDQ_N		
U20	MCB1_DRAM_DQ12		
U22	MCB1_DRAM_DQ13		
V21	MCB1_DRAM_DQ14		
V22	MCB1_DRAM_DQ15		
W20			
W22			
M16			
M17			
V21			
V22			
N15			
N16			
AA20			
AB21			
P15			
P16			
AA21			
AA22			
P19			
P20			
AB19			
AB20			
P17			
P18			
Y19			
Z20			
R15			
R16			
R17			
R19			
V19			
V20			
T17			
T18			
V17			
V18			
T19			
T20			



AV0	AV1	AV2	AV3	
1	1	1	1	TE0630-00
0	1	1	1	TE0630-00I
1	0	1	1	TE0630-00IBF
0	0	1	1	TE0630-00IV
1	1	0	1	TE0630-00B-DWS

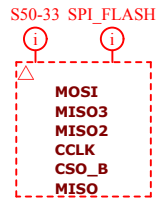
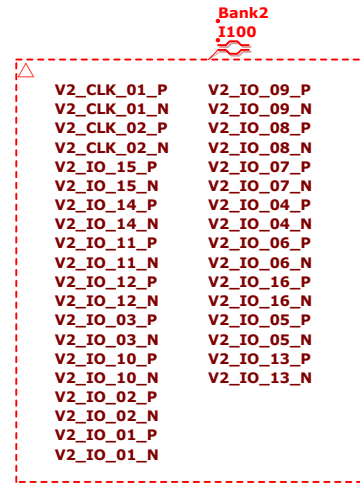
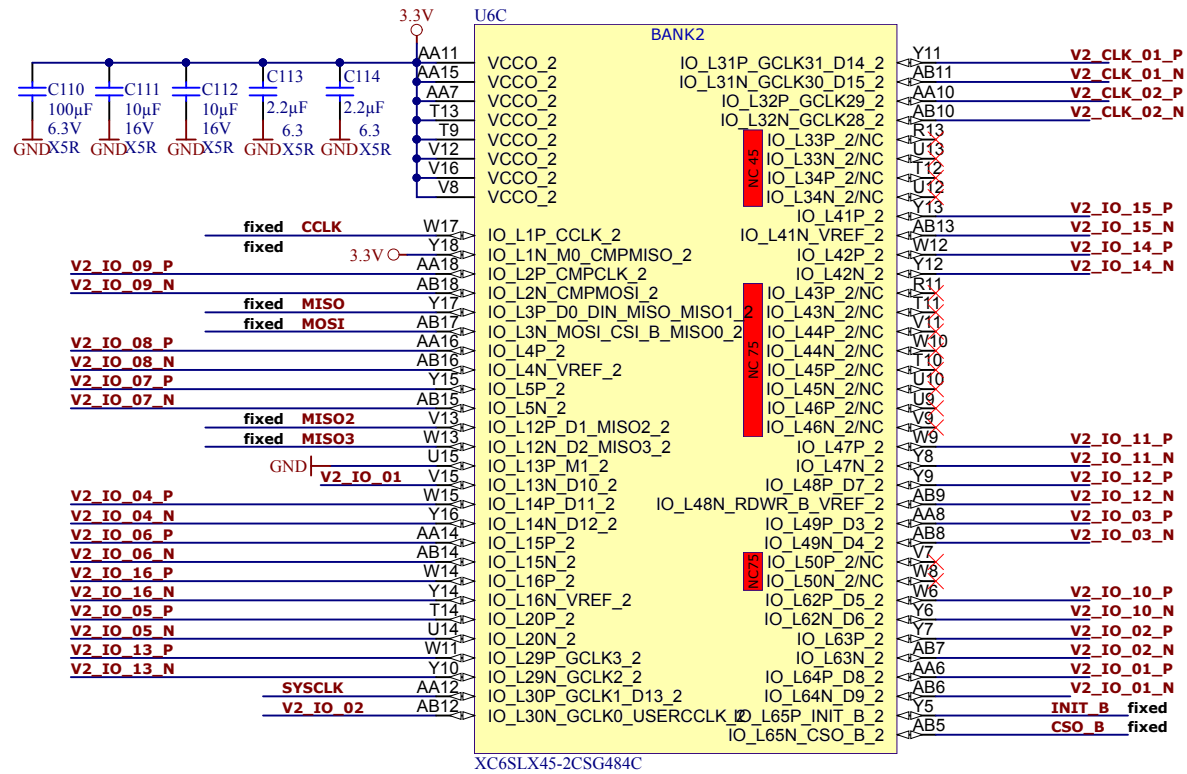


BR0	BR1	BR2	BR3	
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1	0	0	0	-01

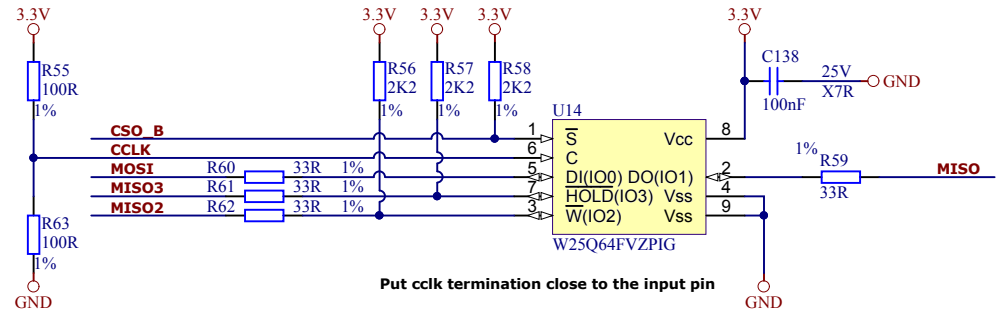
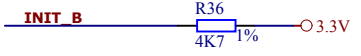
Board Revisions Enable pullups in FPGA



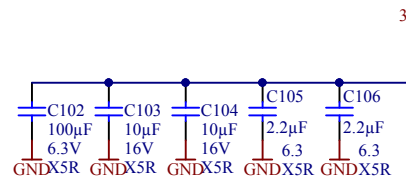
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A4	Number: TE630 TE0630-01	Rev. 01
Date: 2015-10-01	Copyright: Trenz Electronic GmbH / TT	Page5 of 11
Filename: FPGA_DDR3.SchDoc		



- CSO_B TP16 ● Testpoint 0.8mm
- CCLK TP17 ● Testpoint 0.8mm
- MOSI TP18 ● Testpoint 0.8mm
- MISO3 TP19 ● Testpoint 0.8mm
- MISO2 TP20 ● Testpoint 0.8mm
- MISO TP21 ● Testpoint 0.8mm



Title: TE0630 - FPGA_B2		
A4	Number: TE630 TE0630-01	Rev. 01
Date: 2015-10-01	Copyright: Trenz Electronic GmbH / TT	Page6 of 11
Filename: FPGA_B2.SchDoc		

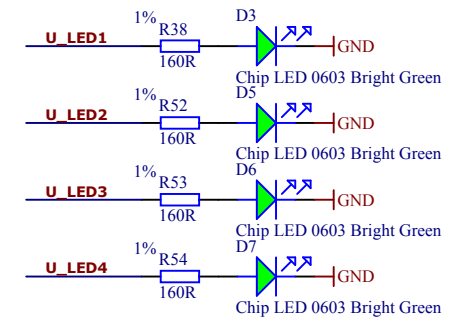


Pin	Signal	Pin	Signal
AA3	VCCO_3	N3	IO_L37P_M3DQ0_3
C2	VCCO_3	N1	IO_L37N_M3DQ1_3
F4	VCCO_3	M2	IO_L38P_M3DQ2_3
F6	VCCO_3	M1	IO_L38N_M3DQ3_3
G2	VCCO_3	L3	IO_L39P_M3LDQ3_3
J5	VCCO_3	L1	IO_L39N_M3LDQSN_3
L2	VCCO_3	K2	IO_L40P_M3DQ6_3
L7	VCCO_3	K1	IO_L40N_M3DQ7_3
N5	VCCO_3	J3	IO_L41P_GCLK27_M3DQ4_3
R2	VCCO_3	H2	IO_L41N_GCLK26_M3DQ5_3
U5	VCCO_3	H1	IO_L42P_GCLK25_TRDY2_M3UDM_3
W2	VCCO_3	H1	IO_L42N_GCLK24_M3LDM_3
W5	VCCO_3	N4	IO_L43P_GCLK23_M3RASN_3
AA2	IO_L1P_3	P3	IO_L43N_GCLK22_IRDY2_M3CASN_3
AB2	IO_L1N_VREF_3	G3	IO_L44P_GCLK21_M3A5_3
Y2	IO_L2P_3	G1	IO_L44N_GCLK20_M3A6_3
Y1	IO_L2N_3	M4	IO_L45P_M3A3_3
W4	IO_L7P_3	M3	IO_L45N_M3ODT_3
Y4	IO_L7N_3	F2	IO_L46P_M3CLK_3
Y3	IO_L8P_3	F1	IO_L46N_M3CLKN_3
AB3	IO_L8N_3	M5	IO_L47P_M3A0_3
W3	IO_L9P_3	L4	IO_L47N_M3A1_3
W1	IO_L9N_3	E3	IO_L48P_M3BA0_3
U8	IO_L10P_3	E1	IO_L48N_M3BA1_3
I7	IO_L10N_3	K4	IO_L49P_M3A7_3
R7	IO_L11P_3	K3	IO_L49N_M3A2_3
AA4	IO_L11N_3	D2	IO_L50P_M3WE_3
AB4	IO_L12P_3	D1	IO_L50N_M3BA2_3
U6	IO_L12N_3	K6	IO_L51P_M3A10_3
V5	IO_L13P_3	K5	IO_L51N_M3A4_3
U4	IO_L13N_3	C3	IO_L52P_M3A8_3
V3	IO_L18P_3	C1	IO_L52N_M3A9_3
V2	IO_L18N_3	J6	IO_L53P_M3CKE_3
R9	IO_L19P_3/NC	I4	IO_L53N_M3A12_3
R8	IO_L19N_3/NC	B2	IO_L54P_M3RESET_3
T6	IO_L20P_3/NC	B1	IO_L54N_M3A11_3
T5	IO_L20N_3/NC	H4	IO_L55P_M3A13_3
P2	IO_L21P_3	H3	IO_L55N_M3A14_3
R4	IO_L21N_3	H6	IO_L57P_3
P6	IO_L22P_3	H5	IO_L57N_VREF_3
P5	IO_L22N_3	H8	IO_L58P_3
P8	IO_L23P_3	J7	IO_L58N_3
P7	IO_L23N_3	K7	IO_L59P_3
N7	IO_L24P_3	K7	IO_L59N_3
N6	IO_L24N_3	E4	IO_L60P_3
M8	IO_L24N_3	F3	IO_L60N_3
M7	IO_L25P_3	G8	IO_L73P_3
M7	IO_L25N_3	G7	IO_L73N_3
T4	IO_L26P_3	G6	IO_L74P_3
T3	IO_L26N_3	G4	IO_L74N_3
M6	IO_L31P_3	F5	IO_L75P_3
V2	IO_L31N_VREF_3	F8	IO_L75N_3
V1	IO_L32P_M3DQ14_3	F7	IO_L80P_3
U3	IO_L32N_M3DQ15_3	F7	IO_L80N_3
U1	IO_L33P_M3DQ12_3	C4	IO_L81P_3
T2	IO_L33N_M3DQ13_3	D3	IO_L81N_3
T1	IO_L34P_M3UDQS_3	E6	IO_L82P_3
R3	IO_L34N_M3UDQSN_3	D5	IO_L82N_3
R1	IO_L35P_M3DQ10_3	A3	IO_L83P_3
P2	IO_L35N_M3DQ11_3	A2	IO_L83N_VREF_3
P1	IO_L36P_M3DQ8_3		
P1	IO_L36N_M3DQ9_3		

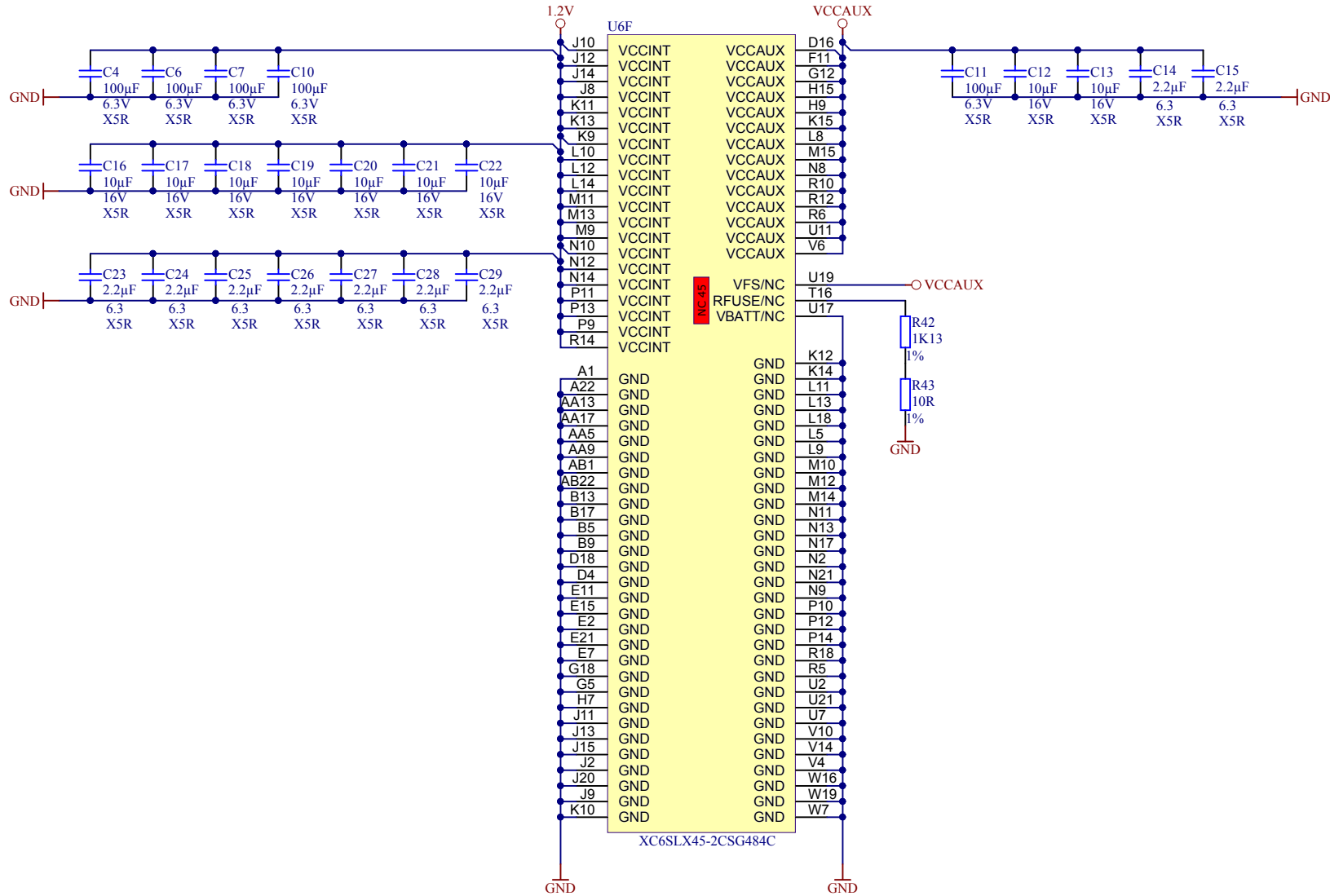
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3Bank2Half

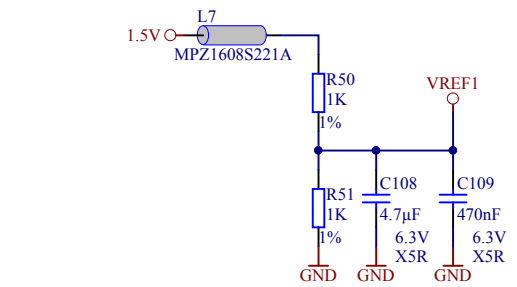
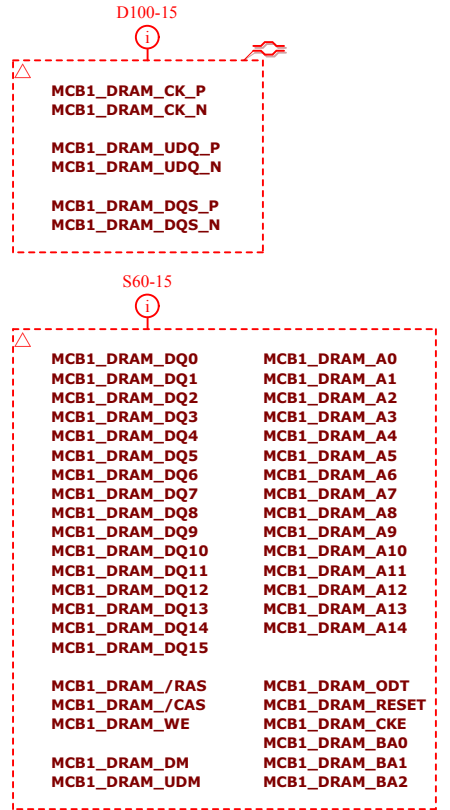
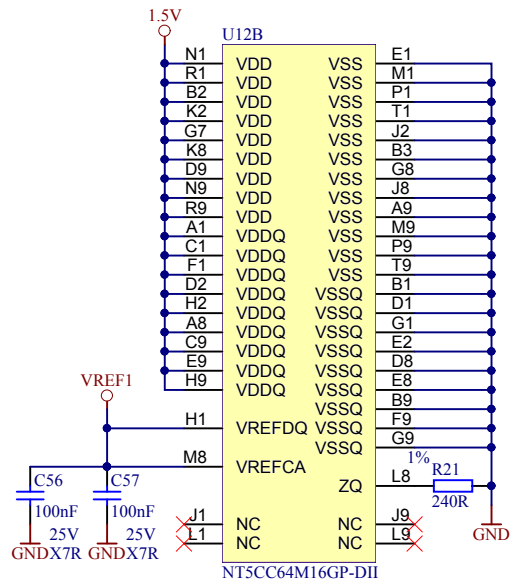
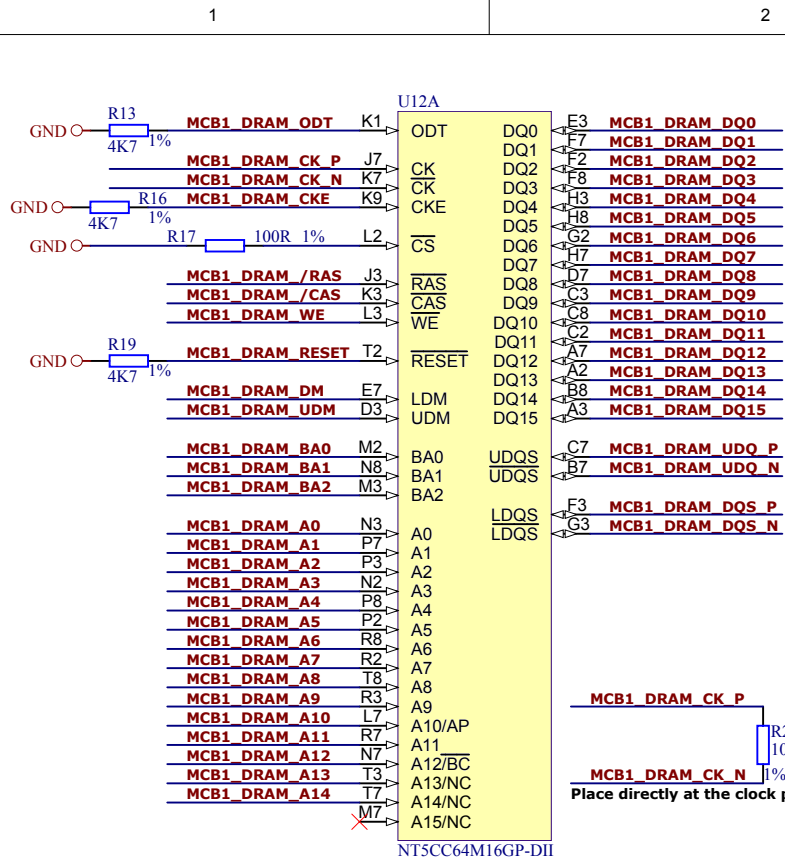
IFCLK	PA0/INT0	V3_IO_01
24MHZ1	PA1/INT1	V3_IO_02
RDY0/SLRD	PA2/SLOE	V3_IO_03
RDY1/SLWR	PA4/FIFOADR0	V3_IO_04
U_LED1	PA5/FIFOADR1	V3_IO_05
U_LED2	PA6/PKTEND	V3_IO_06
U_LED3	SDA	V3_IO_07
U_LED4	SCL	V3_IO_08
CTL0/FLAGA		V3_IO_09
CTL1/FLAGB		V3_IO_10
CTL2/FLAGC		V3_IO_11
FD0		V3_IO_12
FD1		V3_IO_13
FD2		V3_IO_14
FD3		V3_IO_15
FD4		V3_IO_16
FD5		V3_IO_17
FD6		V3_IO_18
FD7		V3_IO_19
/REPROG		V3_IO_20
PA3/WU		V3_IO_21
PB		V3_IO_22
		V3_IO_23
		V3_IO_24
		V3_IO_25
		V3_IO_26



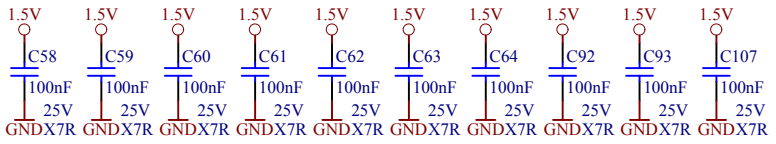
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A4	Number: TE630 TE0630-01	Rev. 01
Date: 2015-10-01	Copyright: Trenz Electronic GmbH / TT	Page7 of 11
Filename: FPGA_B3.SchDoc		



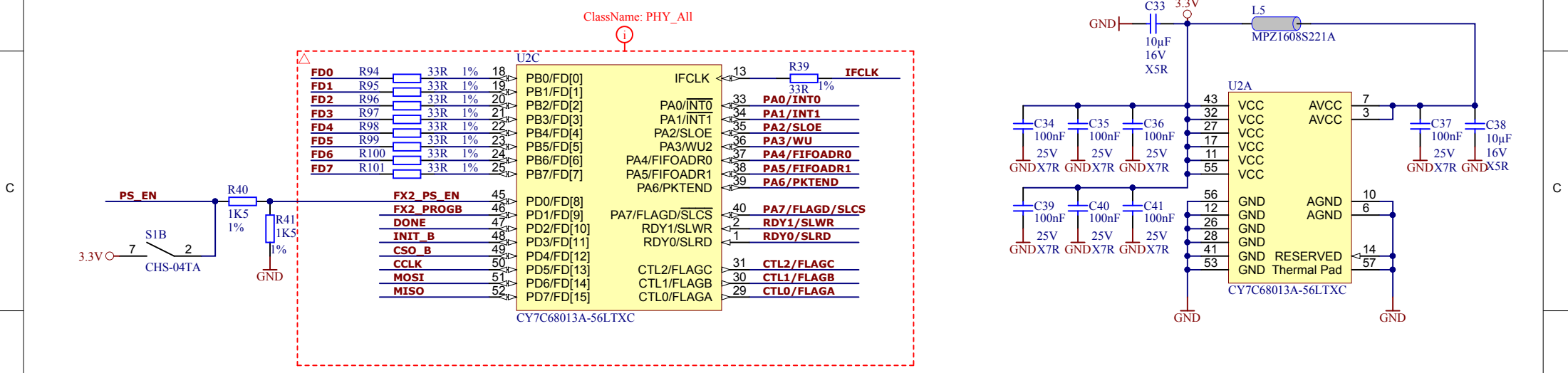
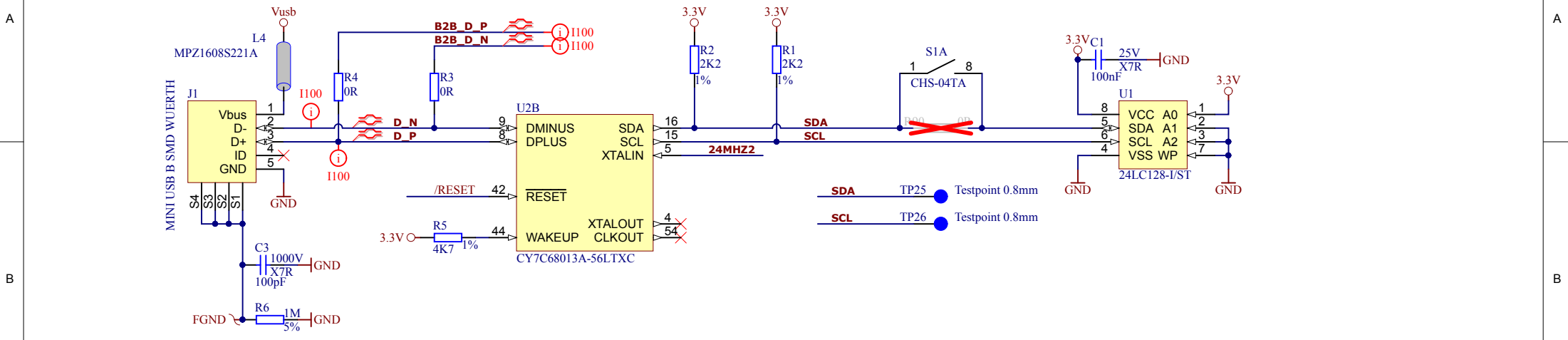
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	Filename: FPGA_PWR.SchDoc		




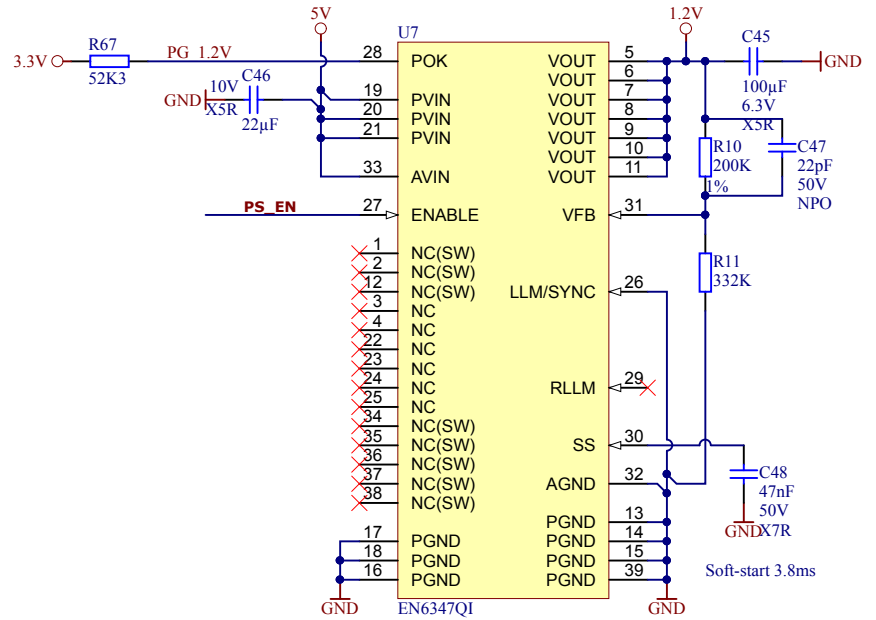
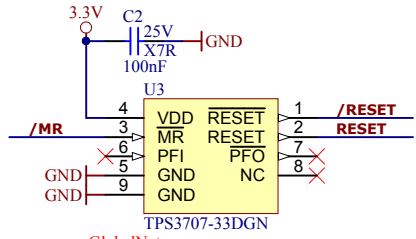
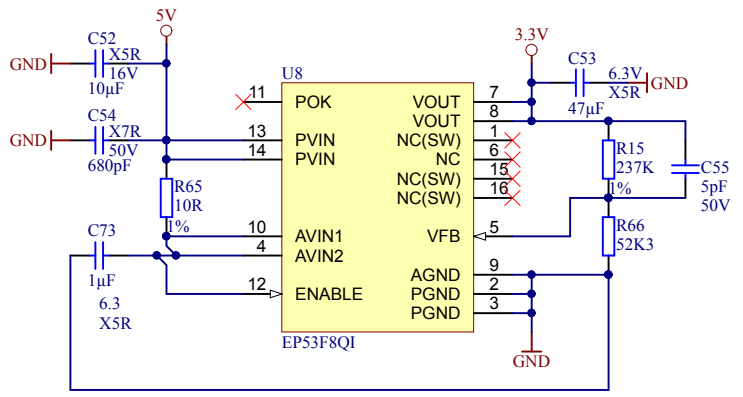
Bulk for 1. memory bank



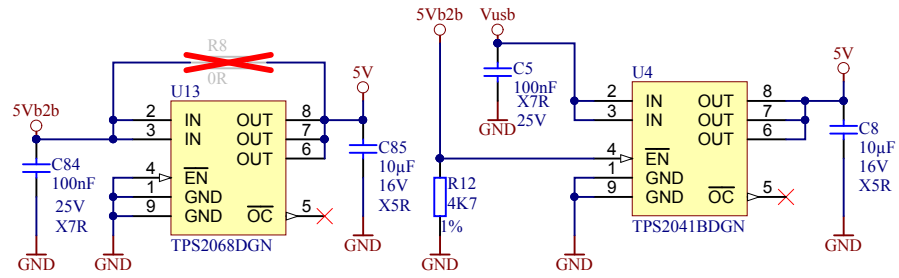
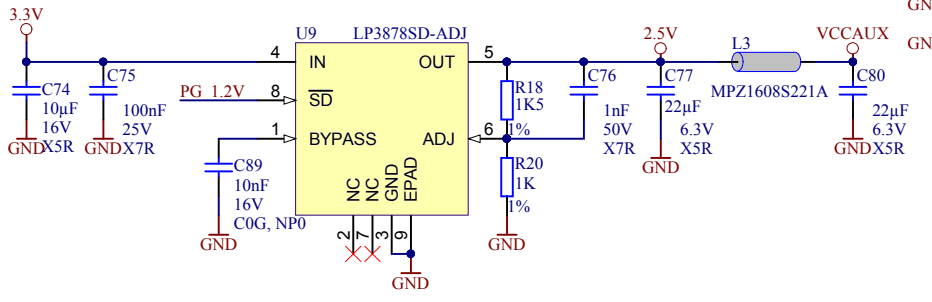
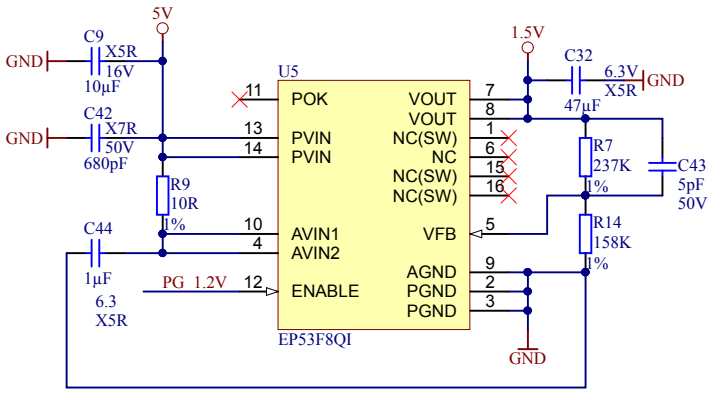
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A4	Number: TE630 TE0630-01	Rev. 01
Date: 2015-10-01	Copyright: Trenz Electronic GmbH / TT	Page9 of 11
Filename: DDR3_RAM.SchDoc		




		Title: TE0630 - USB	
		A4	Number: TE630 TE0630-01
Date: 2015-10-01		Copyright: Trenz Electronic GmbH / TT	
Filename: USB.SchDoc		Page 10 of 11	



- GlobalNet
- Vusb ○ TP1 Testpoint 0.8mm
 - 5Vb2b ○ TP2 Testpoint 0.8mm
 - 5V ○ TP3 Testpoint 0.8mm
 - 1.5V ○ TP4 Testpoint 0.8mm
 - 2.5V ○ TP5 Testpoint 0.8mm
 - VCCAUX ○ TP6 Testpoint 0.8mm
 - 1.2V ○ TP7 Testpoint 0.8mm
 - 3.3V ○ TP8 Testpoint 0.8mm
 - VREF1 ○ TP9 Testpoint 0.8mm
 - VCCCI00 ○ TP10 Testpoint 0.8mm
 - GND ○ TP11 Testpoint 0.8mm
 - GND ○ TP12 Testpoint 0.8mm
 - GND ○ TP13 Testpoint 0.8mm
 - GND ○ TP14 Testpoint 0.8mm
 - GND ○ TP15 Testpoint 0.8mm
 - GND ○ TP27 Testpoint 0.8mm
 - GND ○ TP28 Testpoint 0.8mm
 - GND ○ TP30 Testpoint 0.8mm
 - GND ○ TP31 Testpoint 0.8mm
 - GND ○ TP32 Testpoint 0.8mm



			Title: TE0630 - POWER	
			A4	Number: TE630 TE0630-01
Date: 2015-10-01		Copyright: Trenz Electronic GmbH / TT		Page 11 of 11
Filename: Power.SchDoc				