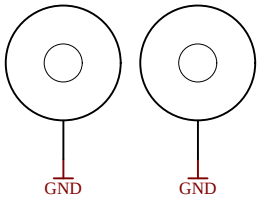
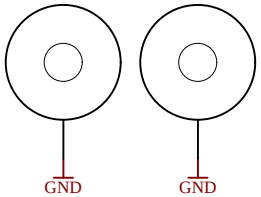
FPGA-MISC
FPGA-MISC.SchDoc
B13
B13.SchDoc
B34
B34.SchDoc
B35
B35.SchDoc
MIO-BANKS
MIO-BANKS.SchDoc
MGT
MGT.SchDoc
DDR-BANK
DDR-BANK.SchDoc

FPGA-POWER
FGPA-POWER.SchDoc
DDR3-RAM
DDR3-RAM.SchDoc
B2B_Connector
B2B_Connector.SchDoc
Clock
Clock.SchDoc
ETH-PHY
ETH-PHY.SchDoc
USB-PHY
USB-PHY.SchDoc
POWER
POWER.SchDoc
POWER_2
POWER_2.SchDoc

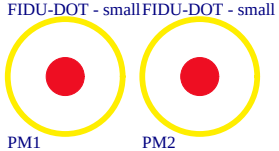
Mount.Hole 3.2mm Mount.Hole 3.2mm



Mount.Hole 3.2mm Mount.Hole 3.2mm

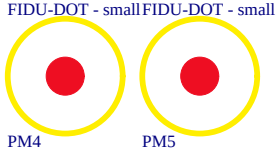


FIDU-DOT - small FIDU-DOT - small



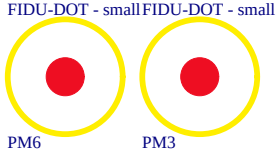
PM1 PM2

FIDU-DOT - small FIDU-DOT - small



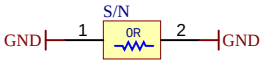
PM4 PM5

FIDU-DOT - small FIDU-DOT - small



PM6 PM3

Serial
Serial
Serialnumber 6,3 x 6.3mm



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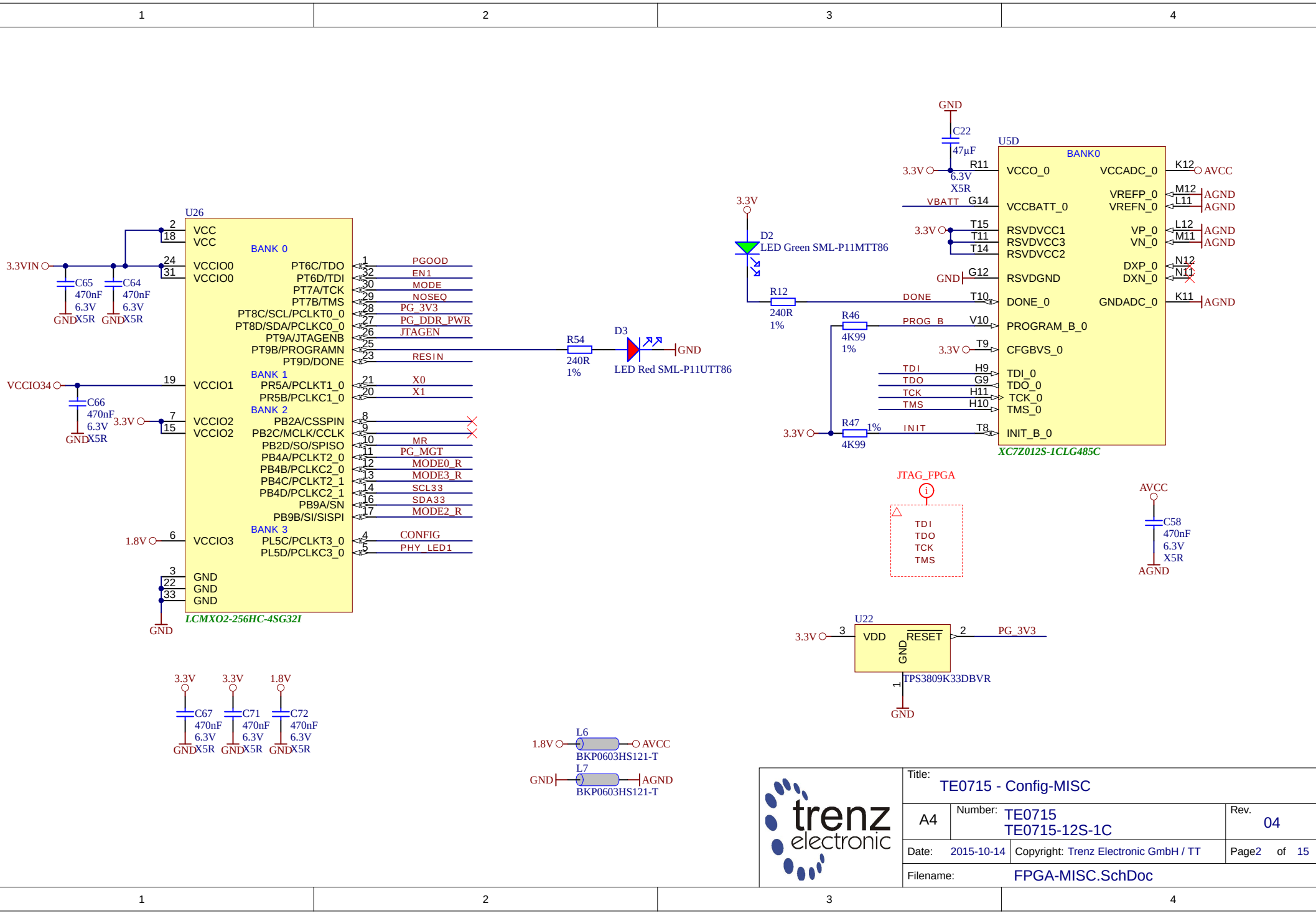
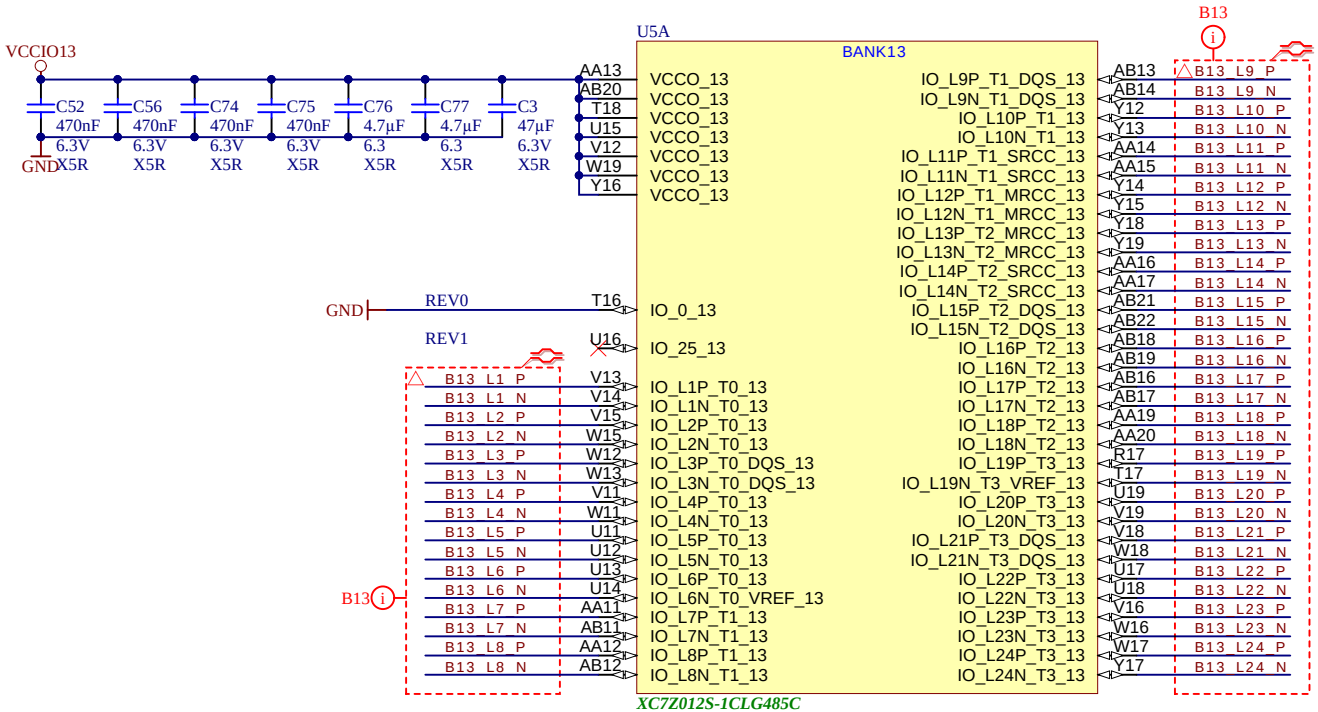
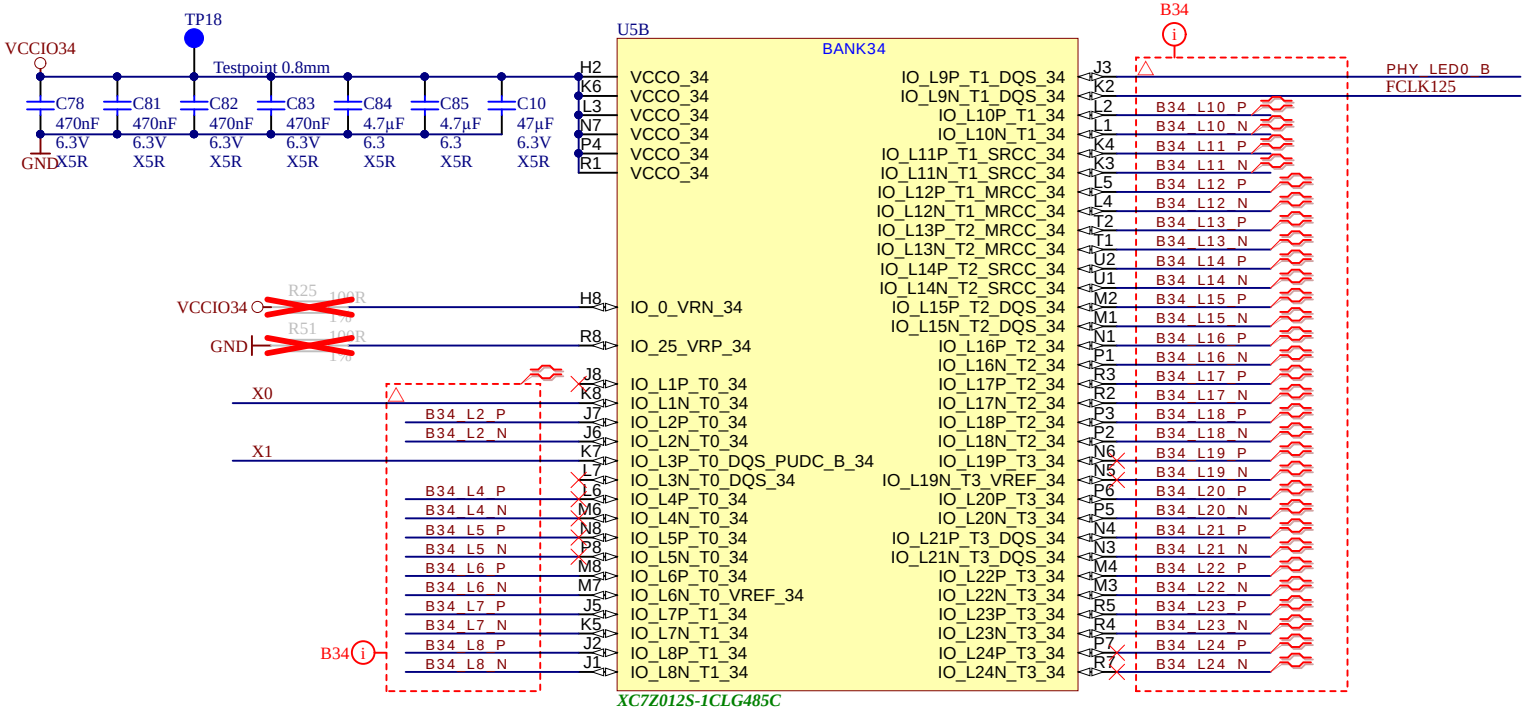
Title: TE0715 - Overview			
A4	Number: TE0715 TE0715-12S-1C		Rev. 04
Date: 2015-10-14	Copyright: Trenz Electronic GmbH / TT		Page1 of 15
Filename: TE0715.SchDoc			



Title: TE0715 - Config-MISC			
A4	Number: TE0715 TE0715-12S-1C		Rev. 04
Date: 2015-10-14	Copyright: Trenz Electronic GmbH / TT		Page2 of 15
Filename: FPGA-MISC.SchDoc			



trenz electronic	Title: TE0715 - FPGA_B12		
A4	Number: TE0715 TE0715-12S-1C		Rev. 04
Date: 2015-10-14	Copyright: Trenz Electronic GmbH / TT		Page3 of 15
Filename: B13.SchDoc			



Title: TE0715 - FPGA_B34			
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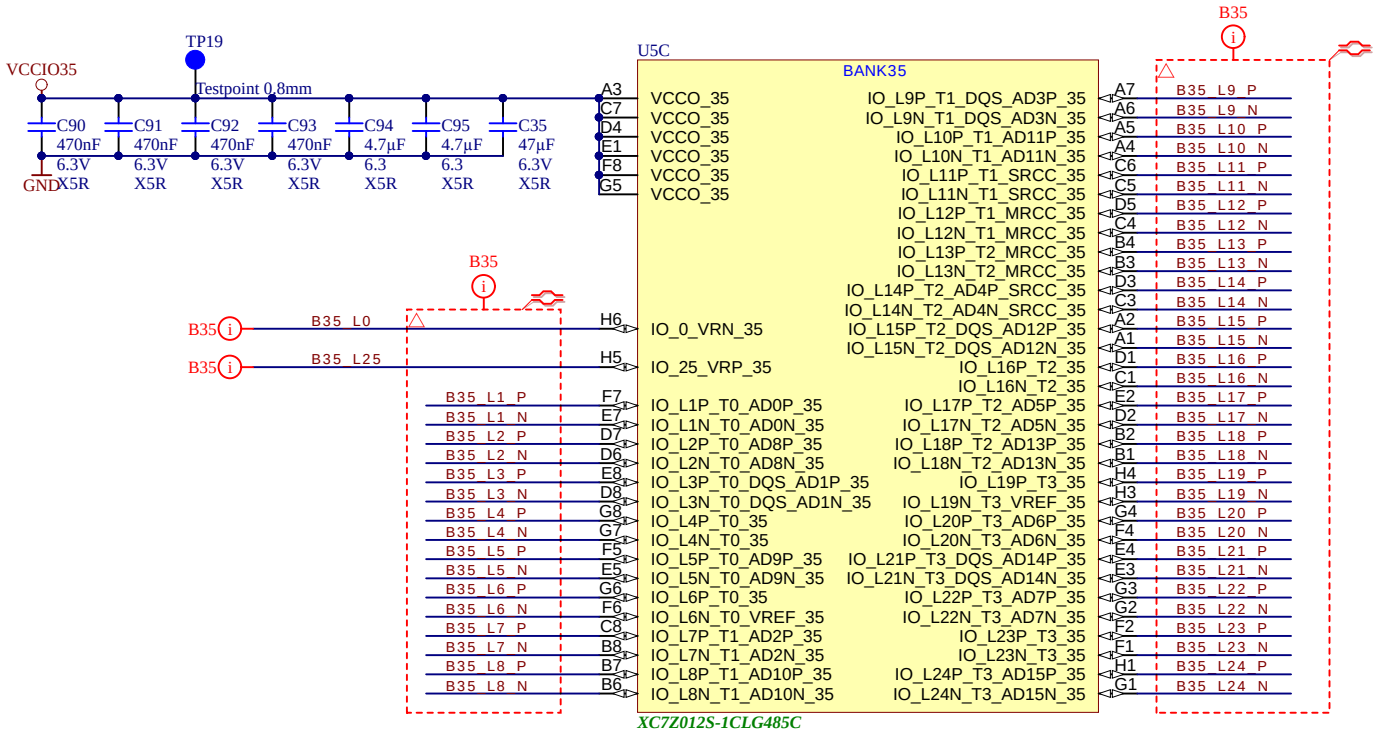
Date: 2015-10-14	Copyright: Trenz Electronic GmbH / TT		Page4 of 15
Filename: B34.SchDoc			



trenz electronic	Title: TE0715 - FPGA_B35		
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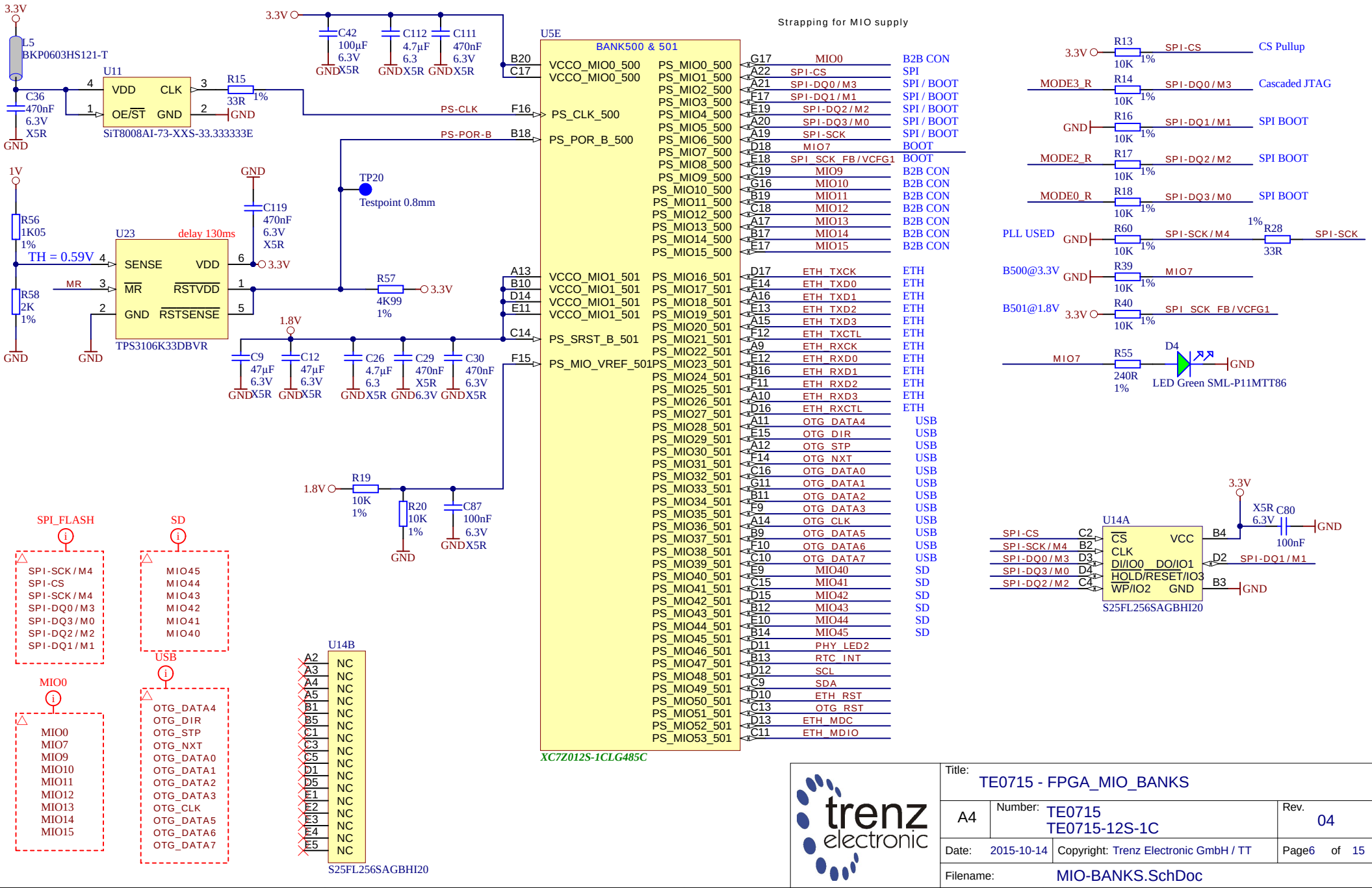
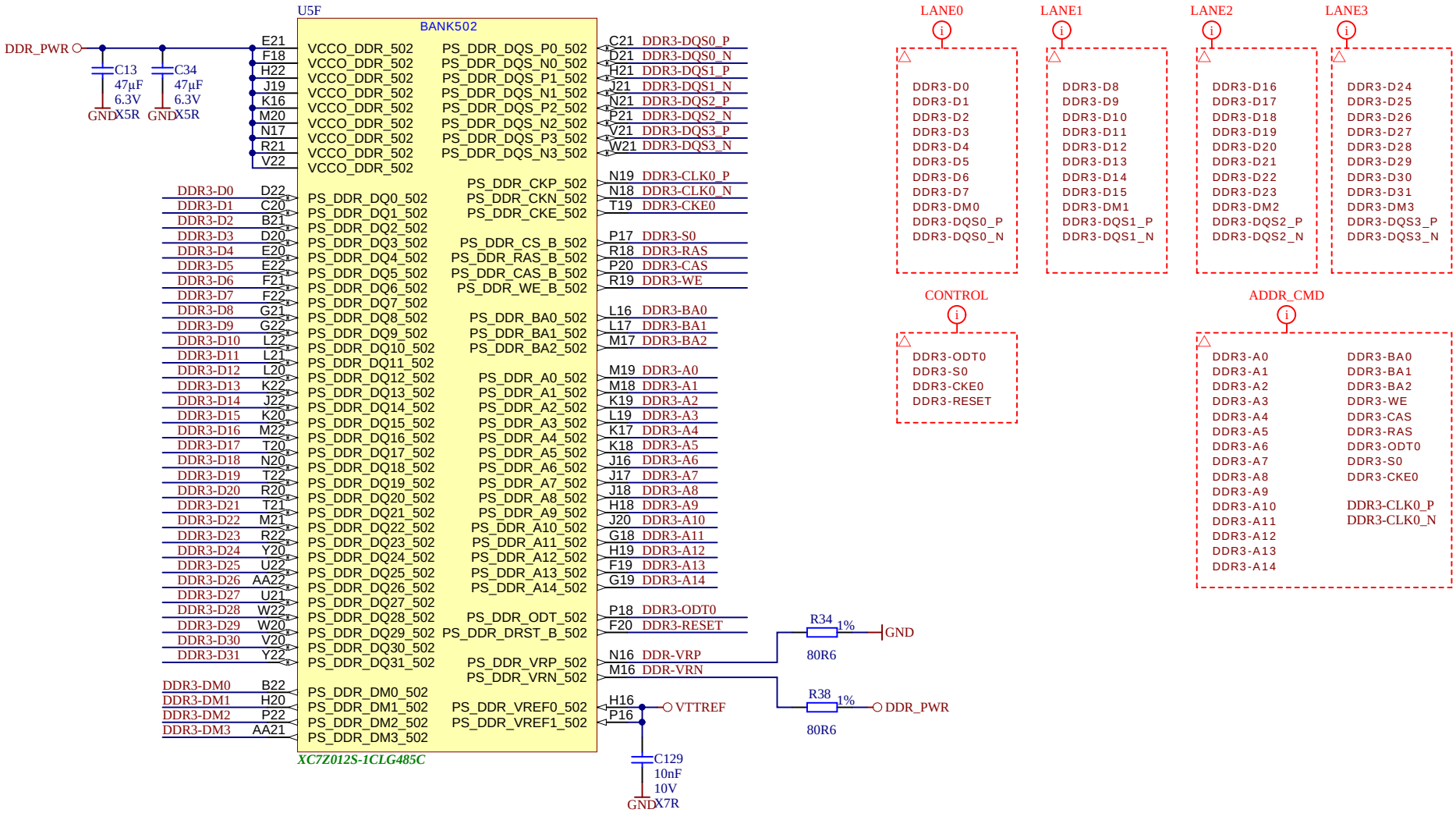
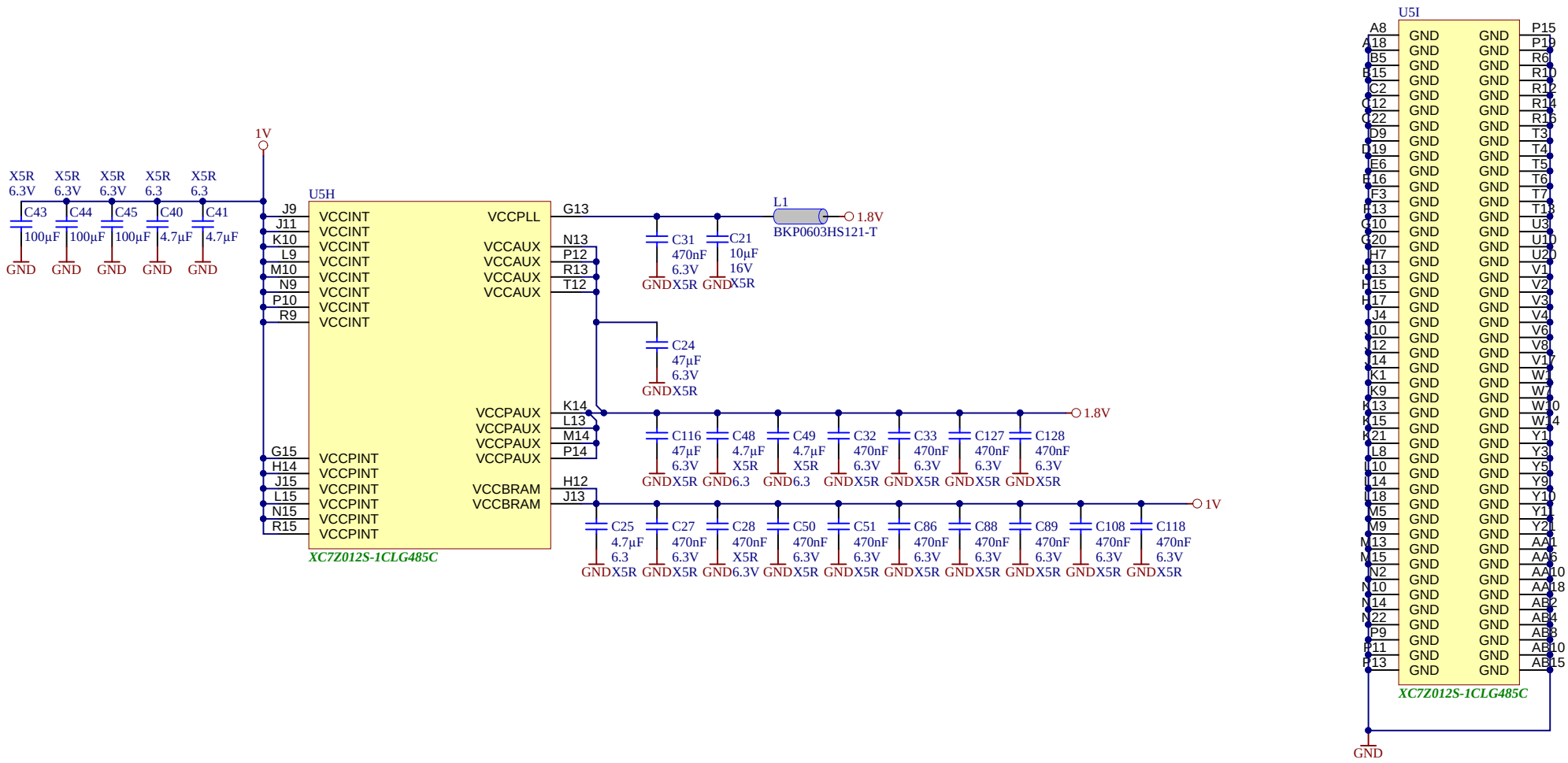
Date: 2015-10-14	Copyright: Trenz Electronic GmbH / TT		Page5 of 15
Filename: B35.SchDoc			


Strapping for MIO supply
U5E
BANK500 & 501
XC7Z012S-1CLG485C
U11
SiT8008AI-73-XXS-33.333333E
U23
delay 130ms
TPS3106K33DBVR
TP20
Testpoint 0.8mm
U14A
S25FL256SAGBHI20
U14B
S25FL256SAGBHI20
SPI_FLASH
SD
USB
MIO0
LED Green SML-P11MTT86
PLL USED
B500@3.3V
B501@1.8V
CS Pullup
Cascaded JTAG
SPI BOOT
Title: TE0715 - FPGA_MIO_BANKS
A4
Number: TE0715
TE0715-12S-1C
Rev. 04
Date: 2015-10-14
Copyright: Trenz Electronic GmbH / TT
Page6 of 15
Filename: MIO-BANKS.SchDoc



Title:	TE0715 - FPGA_PS-DDR		
A4	Number: TE0715 TE0715-12S-1C		Rev. 04
Date: 2015-10-14	Copyright: Trenz Electronic GmbH / TT		Page7 of 15
Filename:	DDR-BANK.SchDoc		



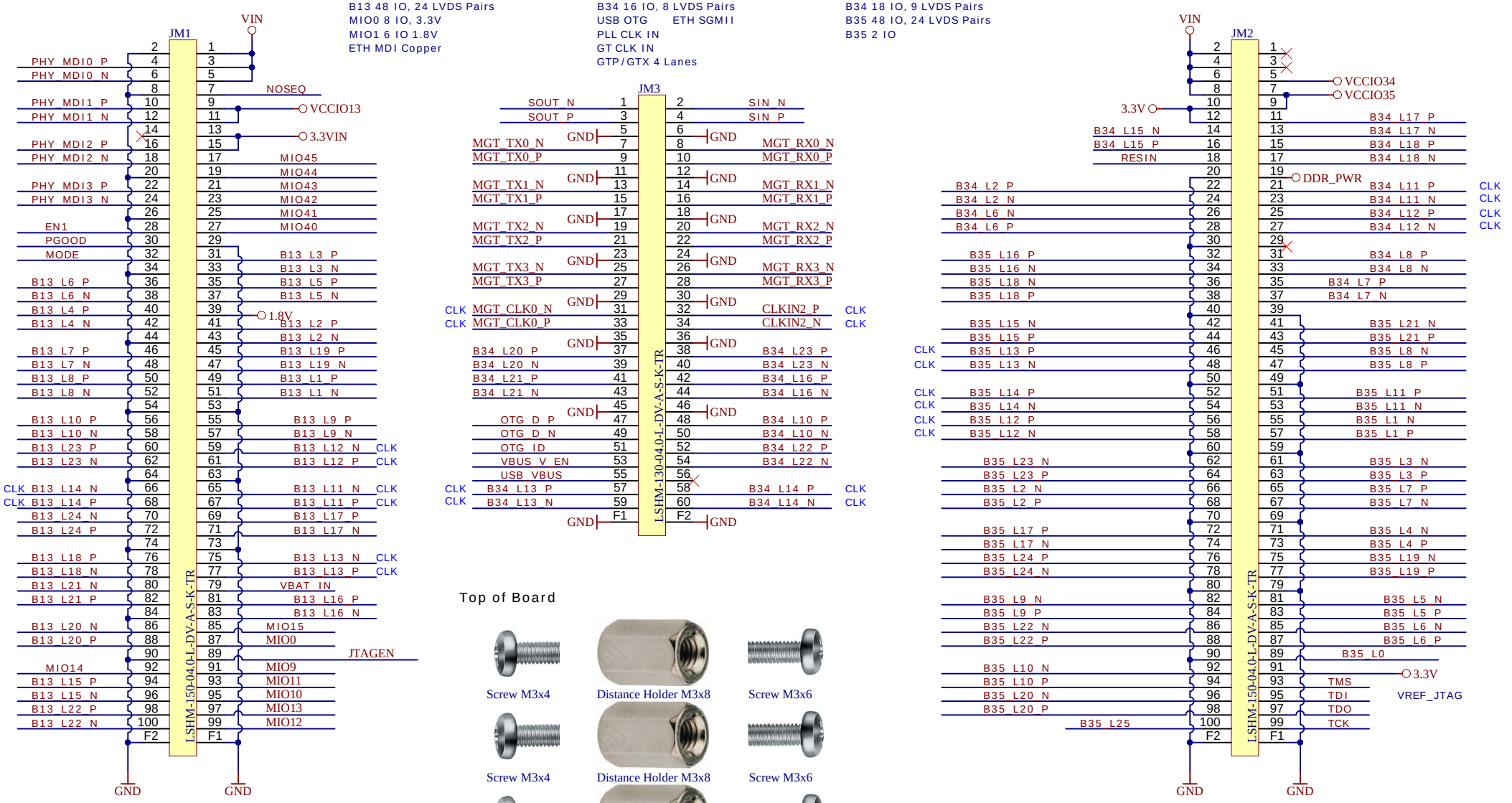
Title: TE0715 - FPGA_Power			
A4	Number: TE0715 TE0715-12S-1C		Rev. 04
Date: 2015-10-14	Copyright: Trenz Electronic GmbH / TT		Page8 of 15
Filename: FGPA-POWER.SchDoc			

NOTE: B34 and B35 are HP Banks in 7030 Assembly with max 1.8V I/O Voltage

B13 48 IO, 24 LVDS Pairs
MIO0 8 IO, 3.3V
MIO1 6 IO 1.8V
ETH MDI Copper

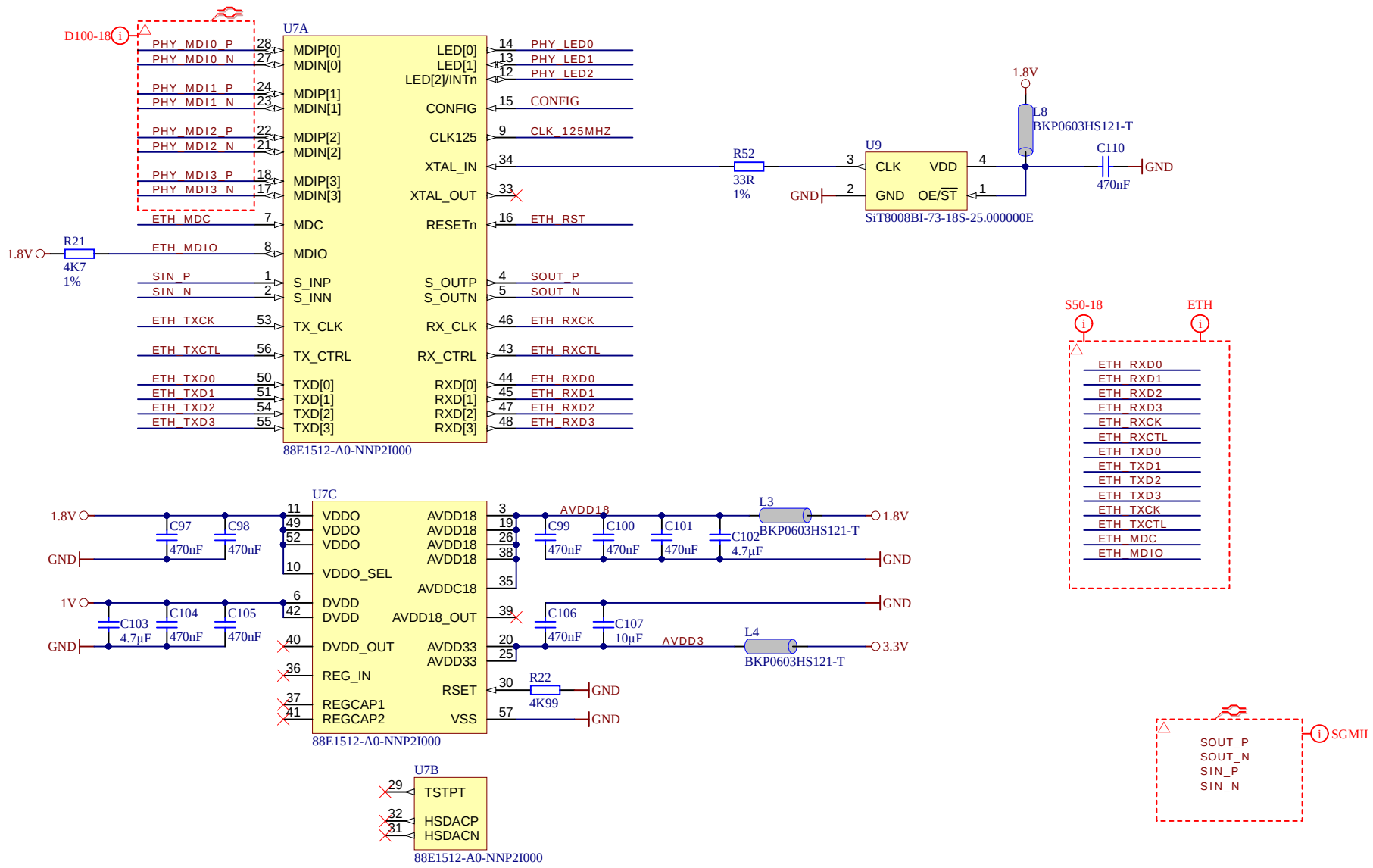
B34 16 IO, 8 LVDS Pairs
USB OTG ETH SGMII
PLL CLK IN
GT CLK IN
GTP/GTX 4 Lanes

B34 18 IO, 9 LVDS Pairs
B35 48 IO, 24 LVDS Pairs
B35 2 IO

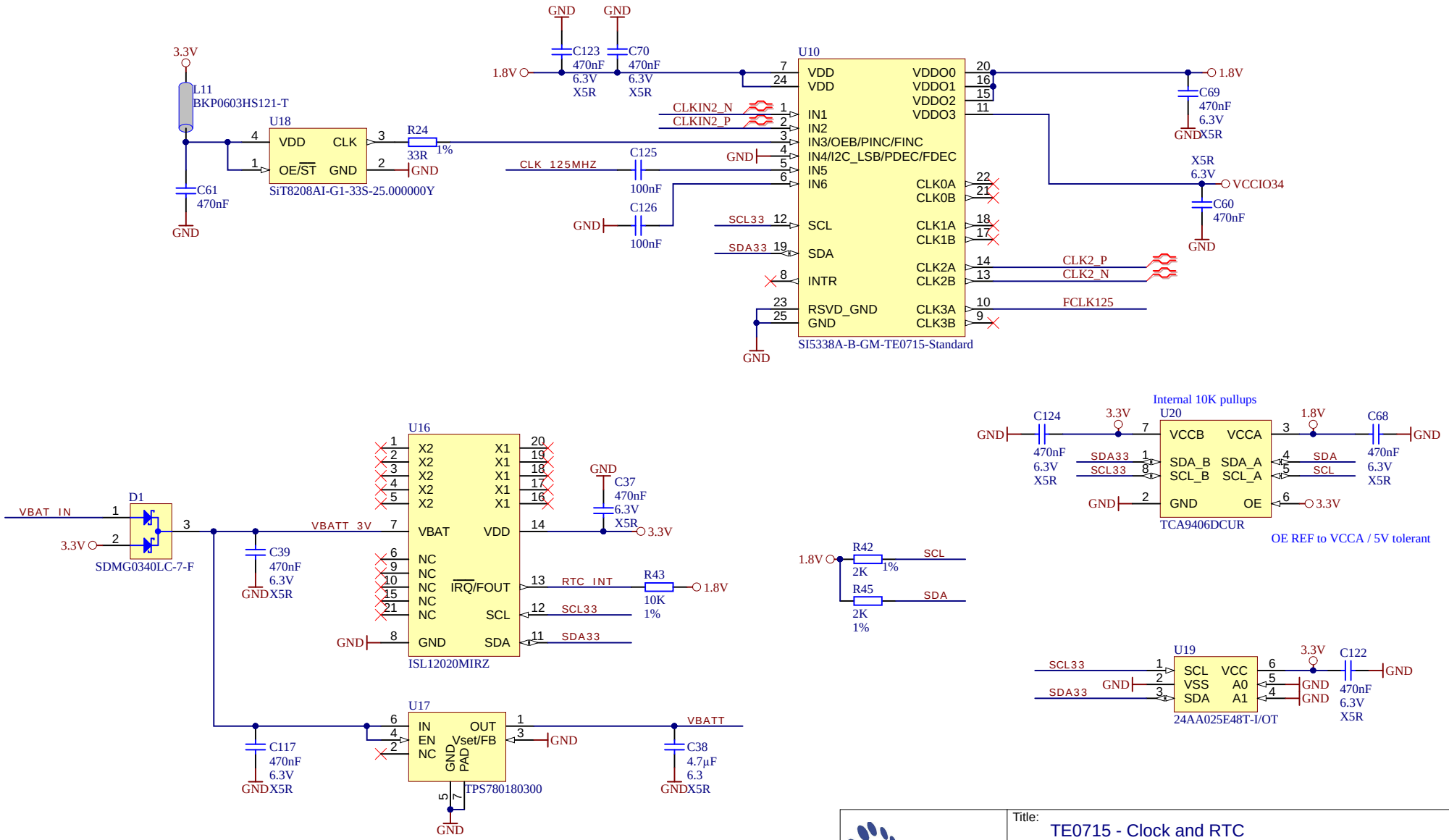


Top of Board

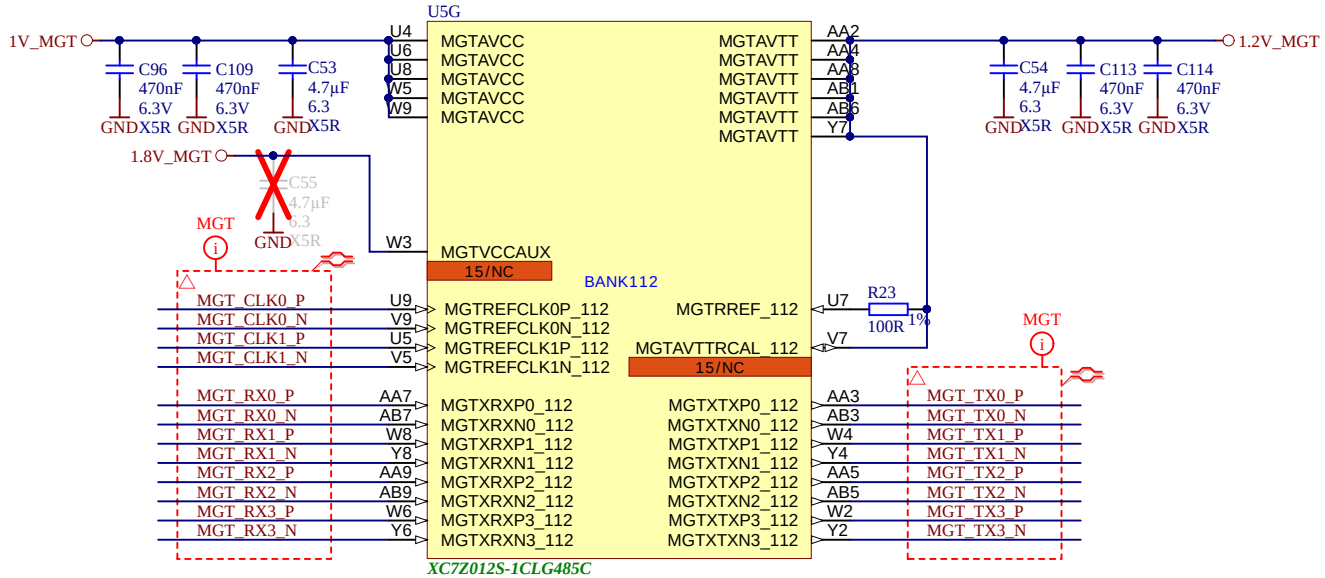
Title: TE0715 - B2B_Connectors			
A4	Number: TE0715 TE0715-12S-1C		Rev. 04
Date: 2015-10-14	Copyright: Trenz Electronic GmbH / TT		Page9 of 15
Filename: B2B_Connector.SchDoc			

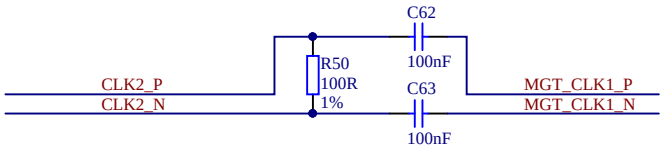


Title: TE0715 - ETH_PHY		
A4	Number: TE0715 TE0715-12S-1C	Rev. 04
Date: 2015-10-14	Copyright: 2013 Trenz Electronic GmbH	Page10 of 15
Filename: ETH-PHY.SchDoc		

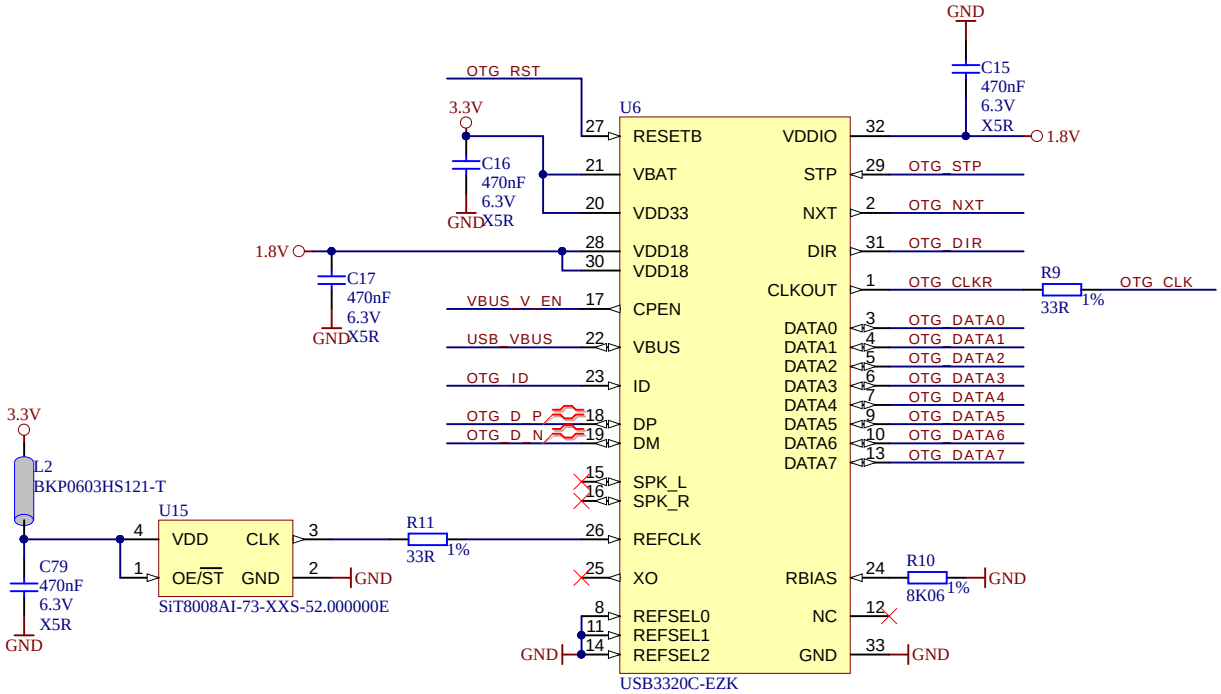


Title: TE0715 - Clock and RTC			
A4	Number: TE0715 TE0715-12S-1C		Rev. 04
Date: 2015-10-14	Copyright: Trenz Electronic GmbH		Page11 of 15
Filename: Clock.SchDoc			

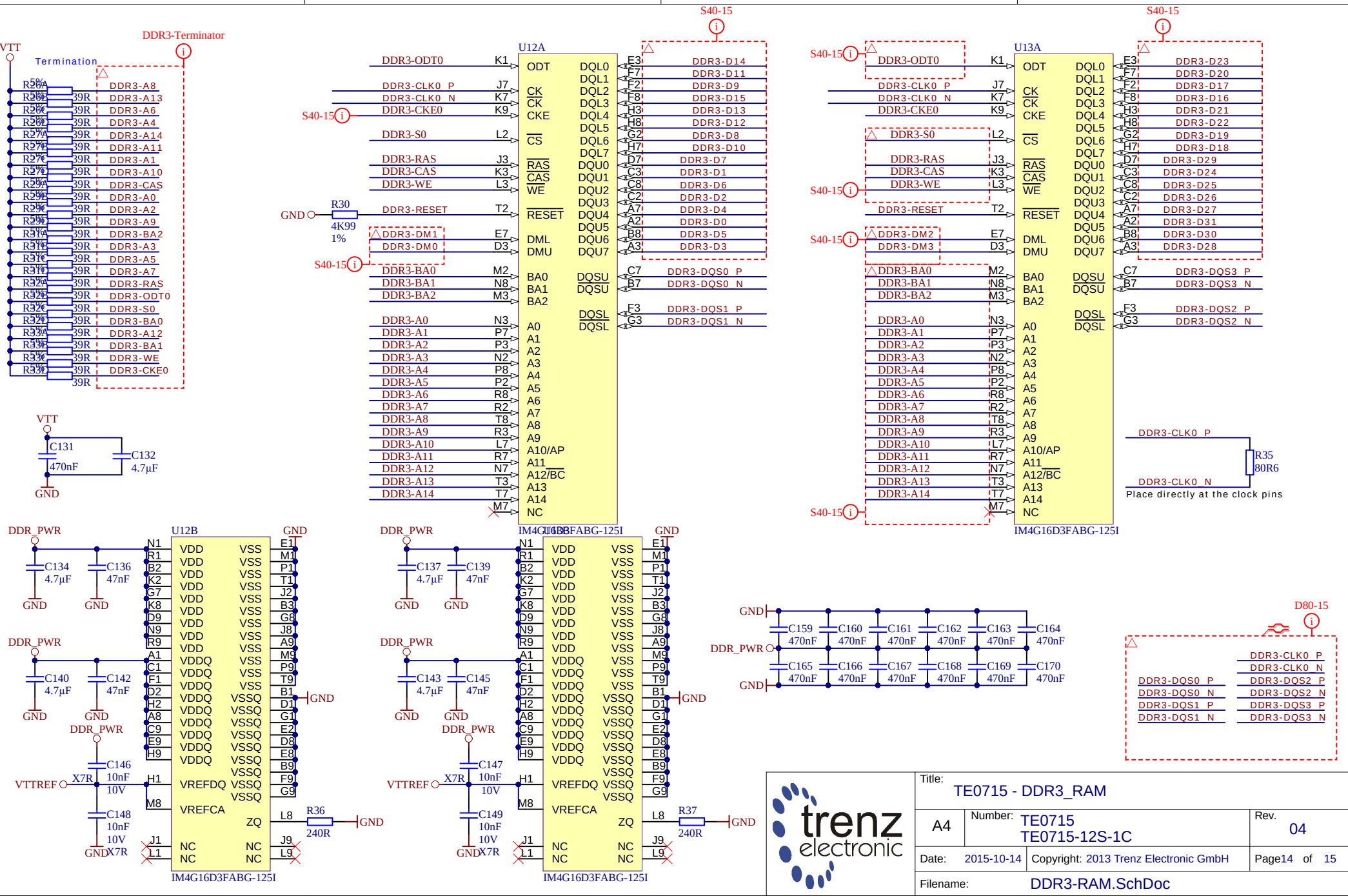




Title: TE0715 - FPGA_MGT			
A4	Number: TE0715 TE0715-12S-1C		Rev. 04
Date: 2015-10-14	Copyright: Trenz Electronic GmbH / TT		Page12 of 15
Filename: MGT.SchDoc			



Title: TE0715 - USB_PHY			
A4	Number: TE0715 TE0715-12S-1C		Rev. 04
Date: 2015-10-14	Copyright: 2013 Trenz Electronic GmbH		Page13 of 15
Filename: USB-PHY.SchDoc			


DDR3-Terminator
Termination
VTT
DDR3-A8
DDR3-A13
DDR3-A6
DDR3-A4
DDR3-A14
DDR3-A11
DDR3-A1
DDR3-A10
DDR3-CAS
DDR3-A0
DDR3-A2
DDR3-A9
DDR3-BA2
DDR3-A3
DDR3-A5
DDR3-A7
DDR3-RAS
DDR3-ODT0
DDR3-S0
DDR3-BA0
DDR3-A12
DDR3-BA1
DDR3-WE
DDR3-CKE0
39R
C131
470nF
C132
4.7µF
GND
S40-15
U12A
DDR3-ODT0
DDR3-CLK0_P
DDR3-CLK0_N
DDR3-CKE0
DDR3-S0
DDR3-RAS
DDR3-CAS
DDR3-WE
DDR3-RESET
DDR3-DM1
DDR3-DM0
DDR3-BA0
DDR3-BA1
DDR3-BA2
DDR3-A0
DDR3-A1
DDR3-A2
DDR3-A3
DDR3-A4
DDR3-A5
DDR3-A6
DDR3-A7
DDR3-A8
DDR3-A9
DDR3-A10
DDR3-A11
DDR3-A12
DDR3-A13
DDR3-A14
ODT
CK
CKE
CS
RAS
CAS
WE
RESET
DML
DMU
BA0
BA1
BA2
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10/AP
A11
A12/BC
A13
A14
NC
DQL0
DQL1
DQL2
DQL3
DQL4
DQL5
DQL6
DQL7
DQU0
DQU1
DQU2
DQU3
DQU4
DQU5
DQU6
DQU7
DQSU
DQSU
DQSL
DQSL
DDR3-D14
DDR3-D11
DDR3-D9
DDR3-D15
DDR3-D13
DDR3-D12
DDR3-D8
DDR3-D10
DDR3-D7
DDR3-D1
DDR3-D6
DDR3-D2
DDR3-D4
DDR3-D0
DDR3-D5
DDR3-D3
DDR3-DQS0_P
DDR3-DQS0_N
DDR3-DQS1_P
DDR3-DQS1_N
R30
4K99
1%
IM4G16D3FABG-125I
U13A
DDR3-D23
DDR3-D20
DDR3-D17
DDR3-D16
DDR3-D21
DDR3-D22
DDR3-D19
DDR3-D18
DDR3-D29
DDR3-D24
DDR3-D25
DDR3-D26
DDR3-D27
DDR3-D31
DDR3-D30
DDR3-D28
DDR3-DQS3_P
DDR3-DQS3_N
DDR3-DQS2_P
DDR3-DQS2_N
R35
80R6
Place directly at the clock pins
DDR_PWR
U12B
VDD
VSS
VDDQ
VSSQ
VREFDQ
VREFCA
ZQ
NC
C134
4.7µF
C136
47nF
C140
4.7µF
C142
47nF
C146
10nF
10V
X7R
C148
10nF
10V
X7R
VTTREF
R36
240R
C137
4.7µF
C139
47nF
C143
4.7µF
C145
47nF
C147
10nF
10V
X7R
C149
10nF
10V
X7R
R37
240R
C159
C160
C161
C162
C163
C164
C165
C166
C167
C168
C169
C170
470nF
D80-15
DDR3-CLK0_P
DDR3-CLK0_N
DDR3-DQS0_P
DDR3-DQS0_N
DDR3-DQS1_P
DDR3-DQS1_N
DDR3-DQS2_P
DDR3-DQS2_N
DDR3-DQS3_P
DDR3-DQS3_N
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Title: TE0715 - DDR3_RAM
A4
Number: TE0715
TE0715-12S-1C
Rev. 04
Date: 2015-10-14
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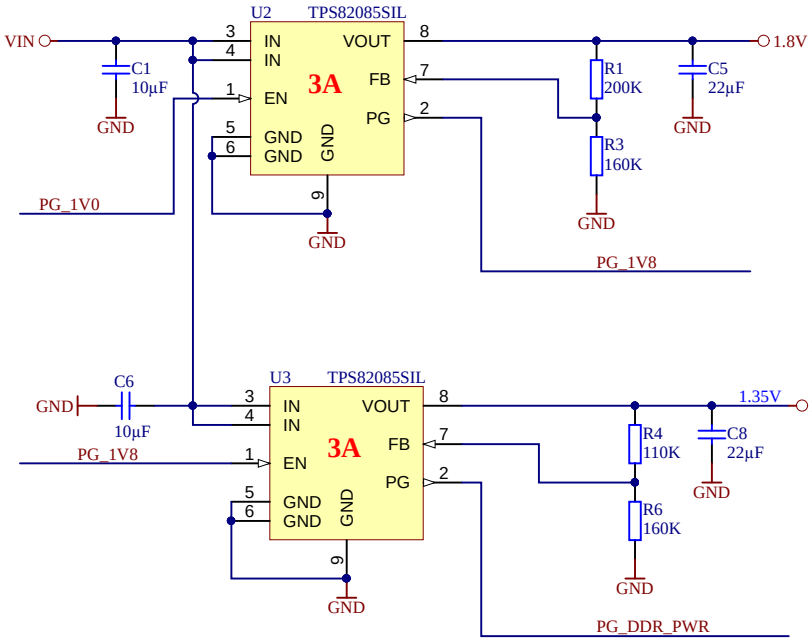
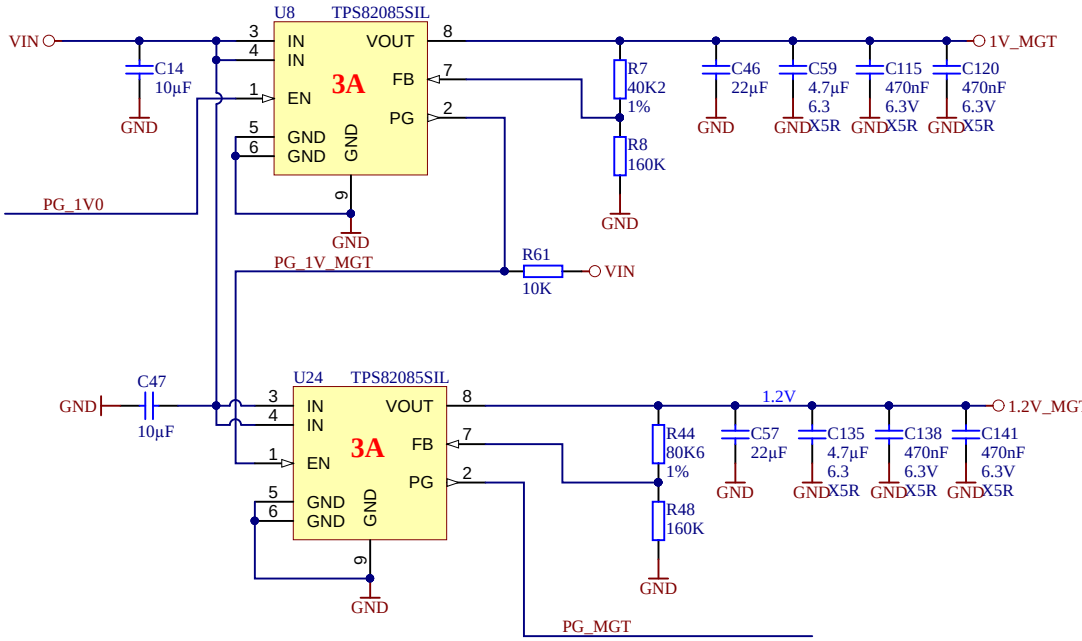
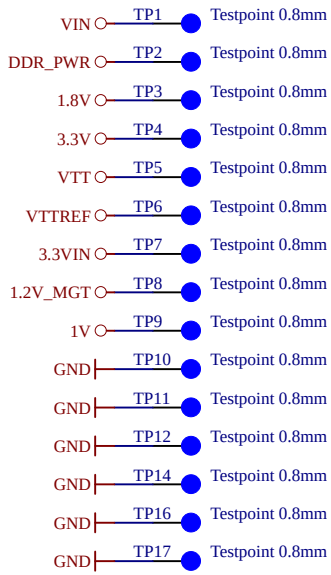
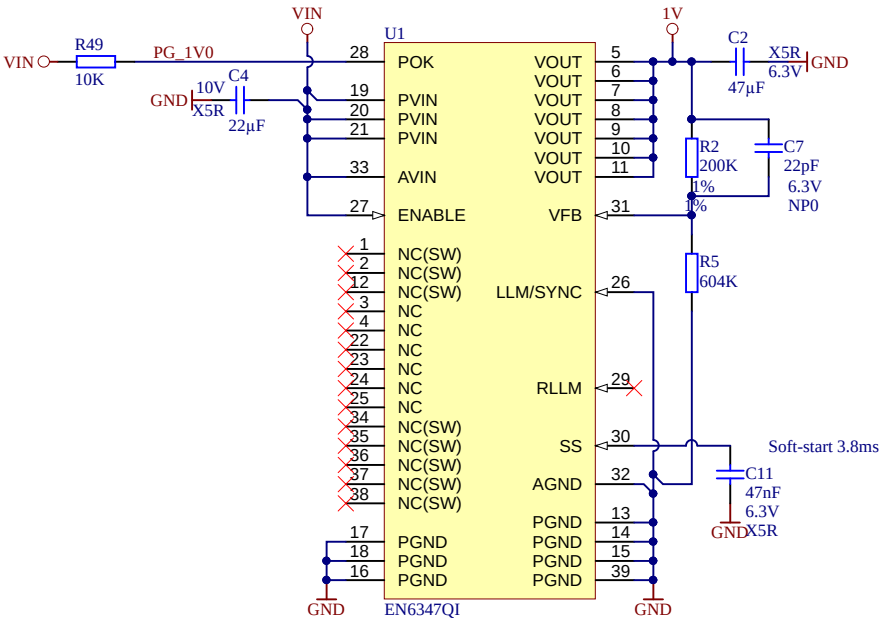
Page14 of 15
Filename: DDR3-RAM.SchDoc

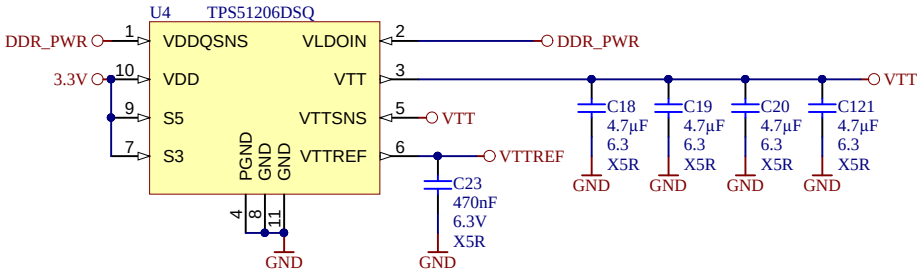


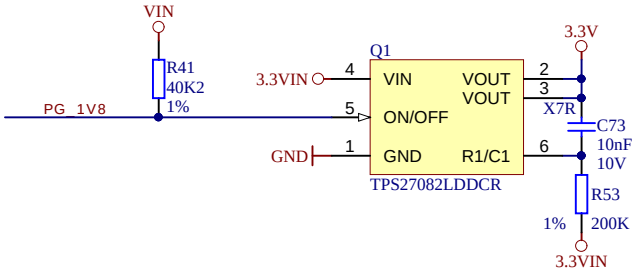


trenz electronic	Title: TE0715 - Power		
A4	Number: TE0715 TE0715-12S-1C		Rev. 04
Date: 2015-10-14	Copyright: Trenz Electronic GmbH / TT		Page15 of 15
Filename: POWER_2.SchDoc			









trenz electronic	Title: TE0715 - Power		
A4	Number: TE0715 TE0715-12S-1C		Rev. 04
Date: 2015-10-14	Copyright: Trenz Electronic GmbH / TT		Page15 of 15
Filename: POWER.SchDoc			