PM1
FIDU-DOT - small

PM2
FIDU-DOT - small

PM3
FIDU-DOT - small

PM4
FIDU-DOT - small

PM6
FIDU-DOT - small

PM5
FIDU-DOT - small

Mount.Hole 3.2mm für Unterlegscheibe

GND

Ethernet

DisplayPort

USB

Mount.Hole 3.2mm für Unterlegscheibe

GND

SSD

POWER

Clock

VGA

XCZU2CG

LPDDR4

PMODs

FTDI

LEDs

GND

Switches_Buttons

SD

GND

Mount.Hole 3.2mm für Unterlegscheibe

Mount.Hole 3.2mm für Unterlegscheibe

KK1

ATS-CPX025025015-138-C2-R0

MECH2

ATS-HK127-R0

Serial1
Serial
Serialnumber 6,3 x 6.3mm

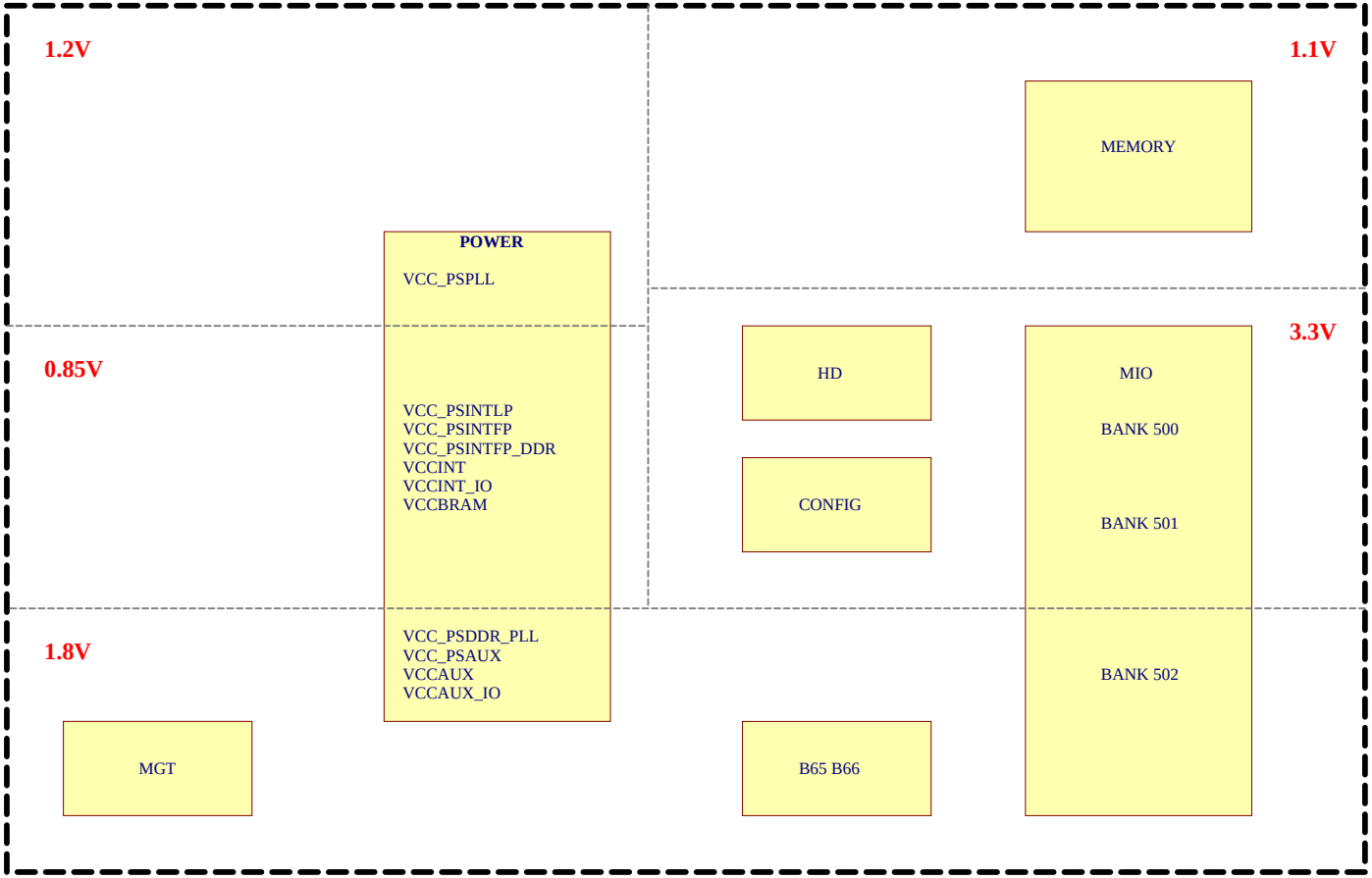
LOGO1
TE Logo PRINT Layer
LOGO PRINT

MISC1
Digilent Serialnumber
Digilent_SN

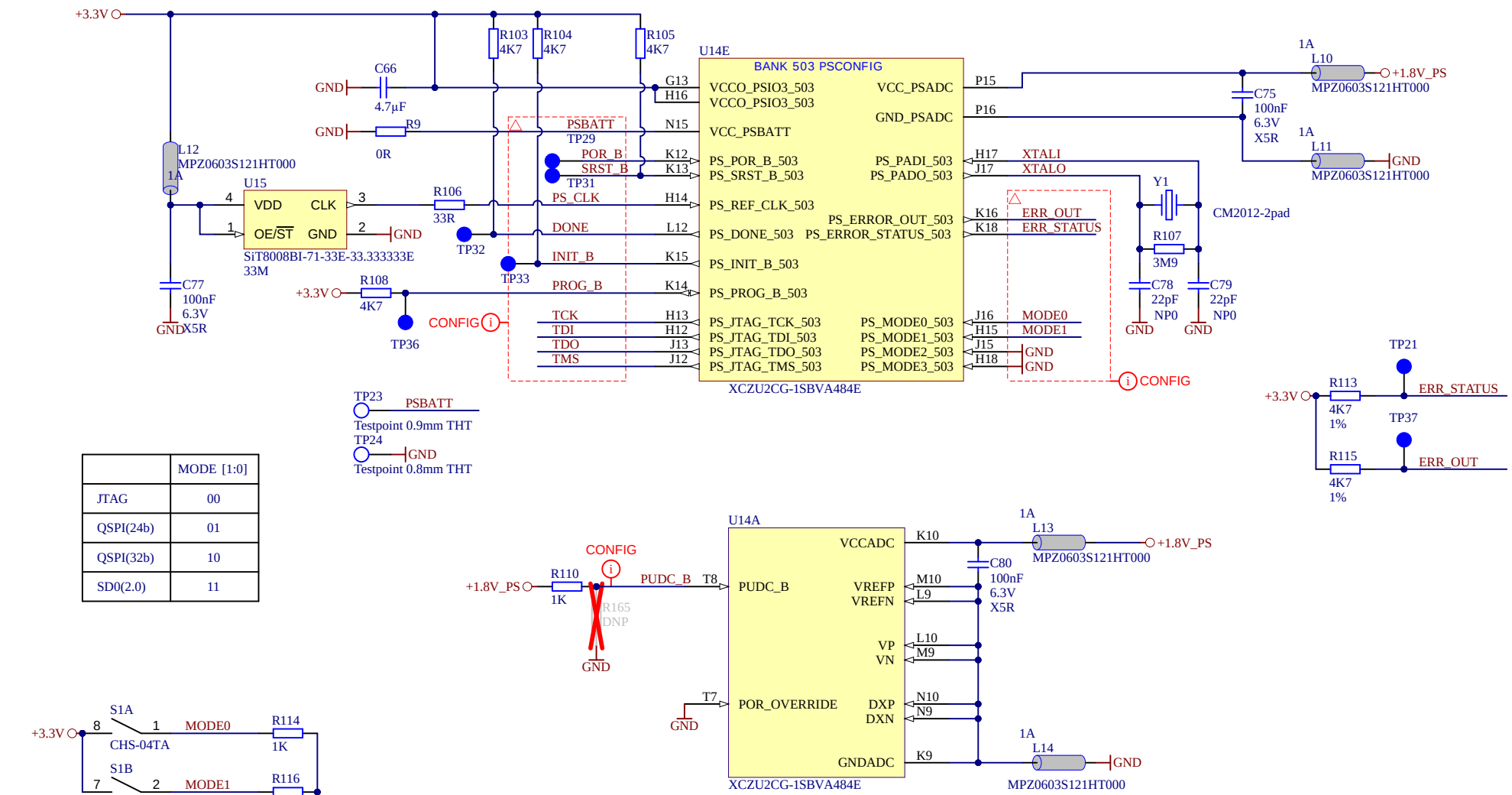
Assembly variant	2AEU2-A
Created by	VY
Modified by	VT
Modified at	2019-08-02
SVN Revision	12614

trenz electronic

Title: TE0802		
A4	Number: TE0802-02 2AEU2-A	Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH	Page 1 of 25
Drawn by: IG	Filename: TE0802.schdoc	



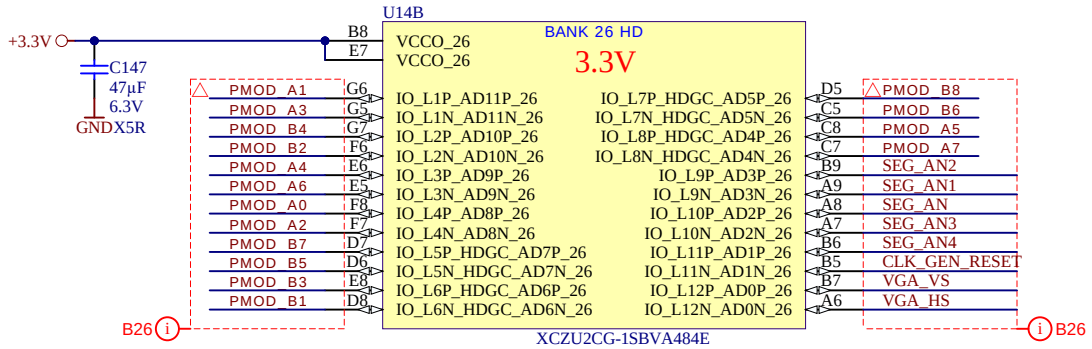
trenz electronic	Title: XCZU2CG		
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 2 of 25
Drawn by: IG	Filename: XCZU2CG.SchDoc		



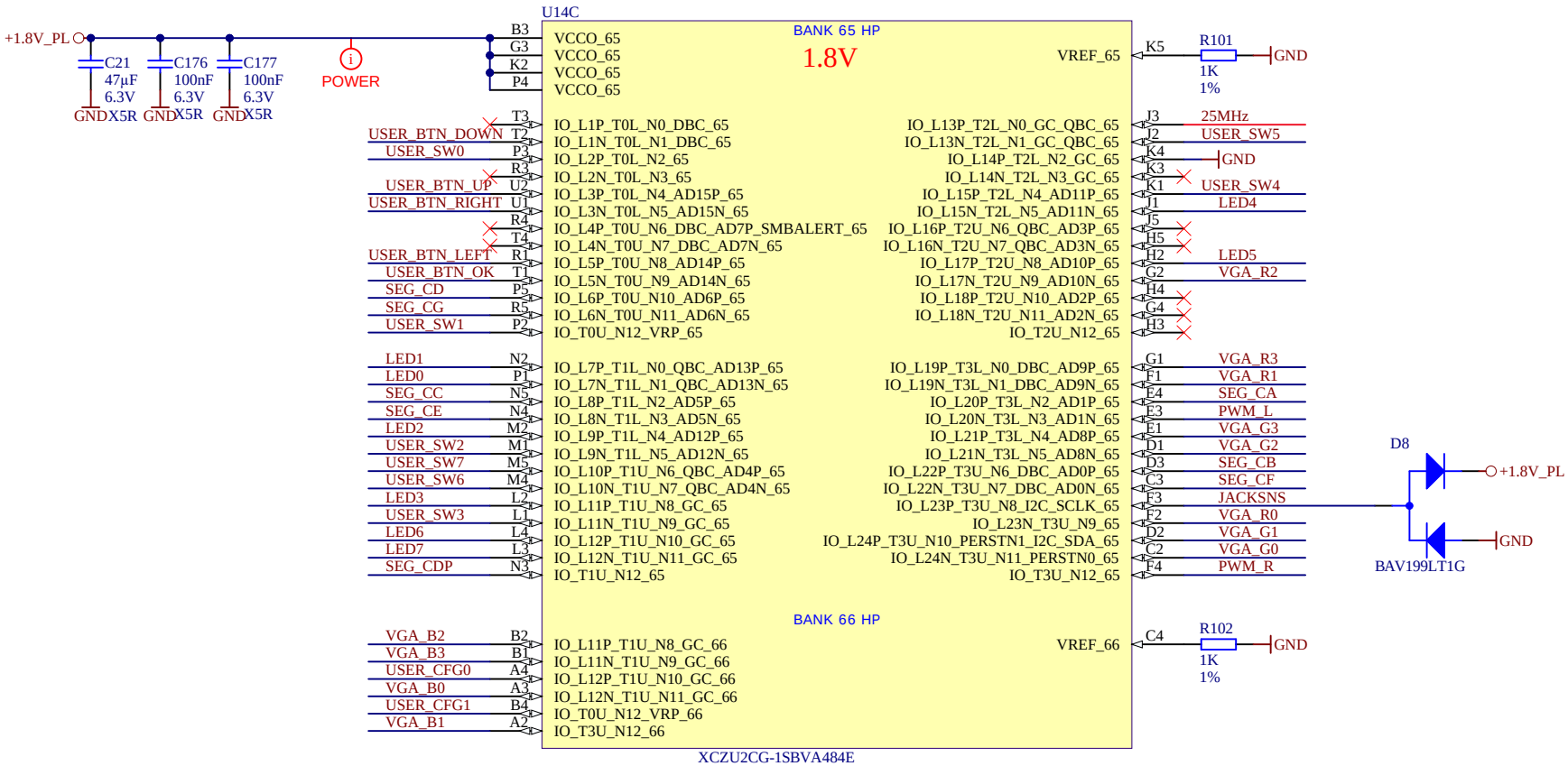
	MODE [1:0]
JTAG	00
QSPI(24b)	01
QSPI(32b)	10
SD0(2.0)	11

trenz electronic

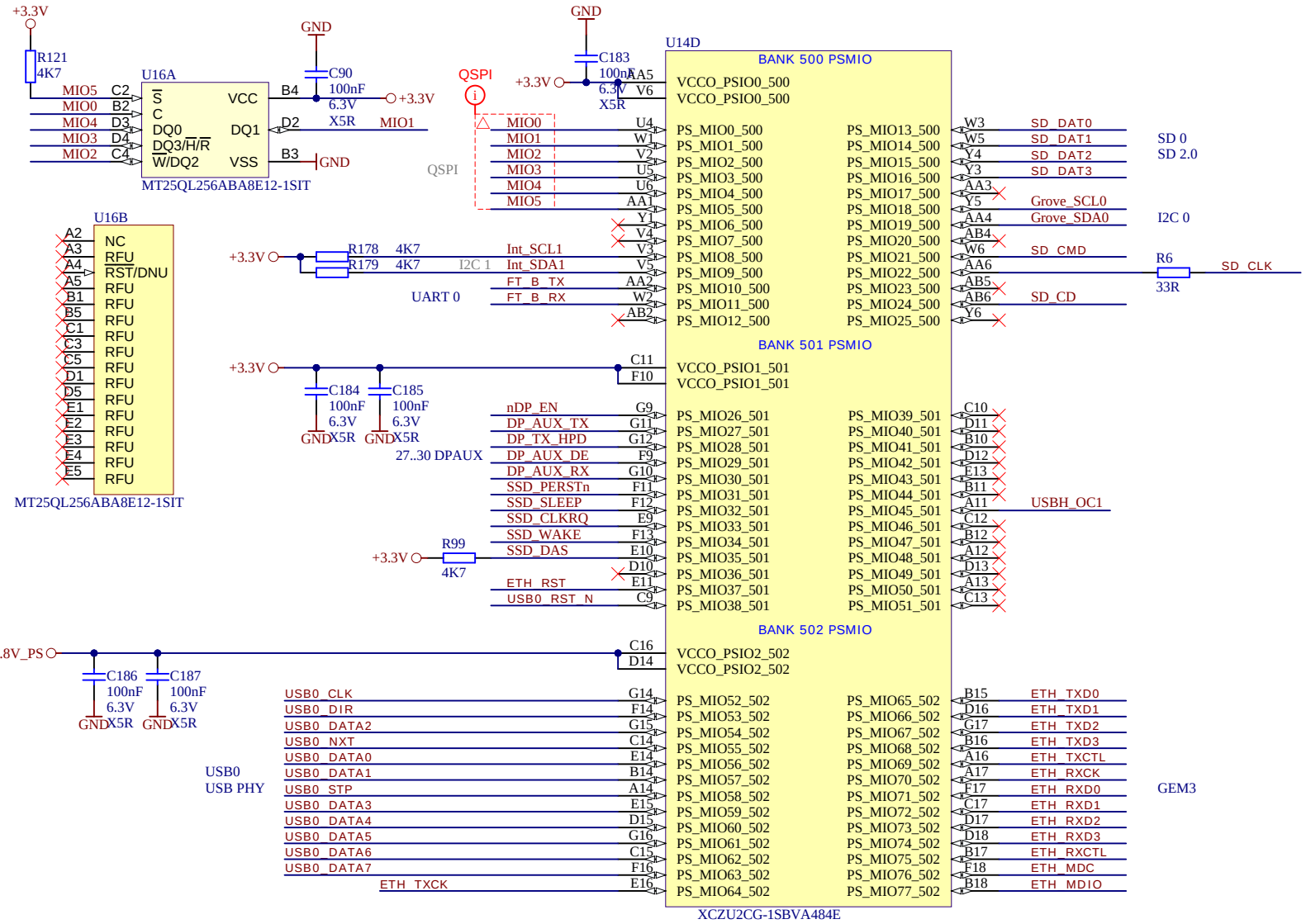
Title: XCZU2CG_Config		
A4	Number: TE0802-02 2AEU2-A	Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH	Page 3 of 25
Drawn by: IG	Filename: XCZU2CG_Config.SchDoc	



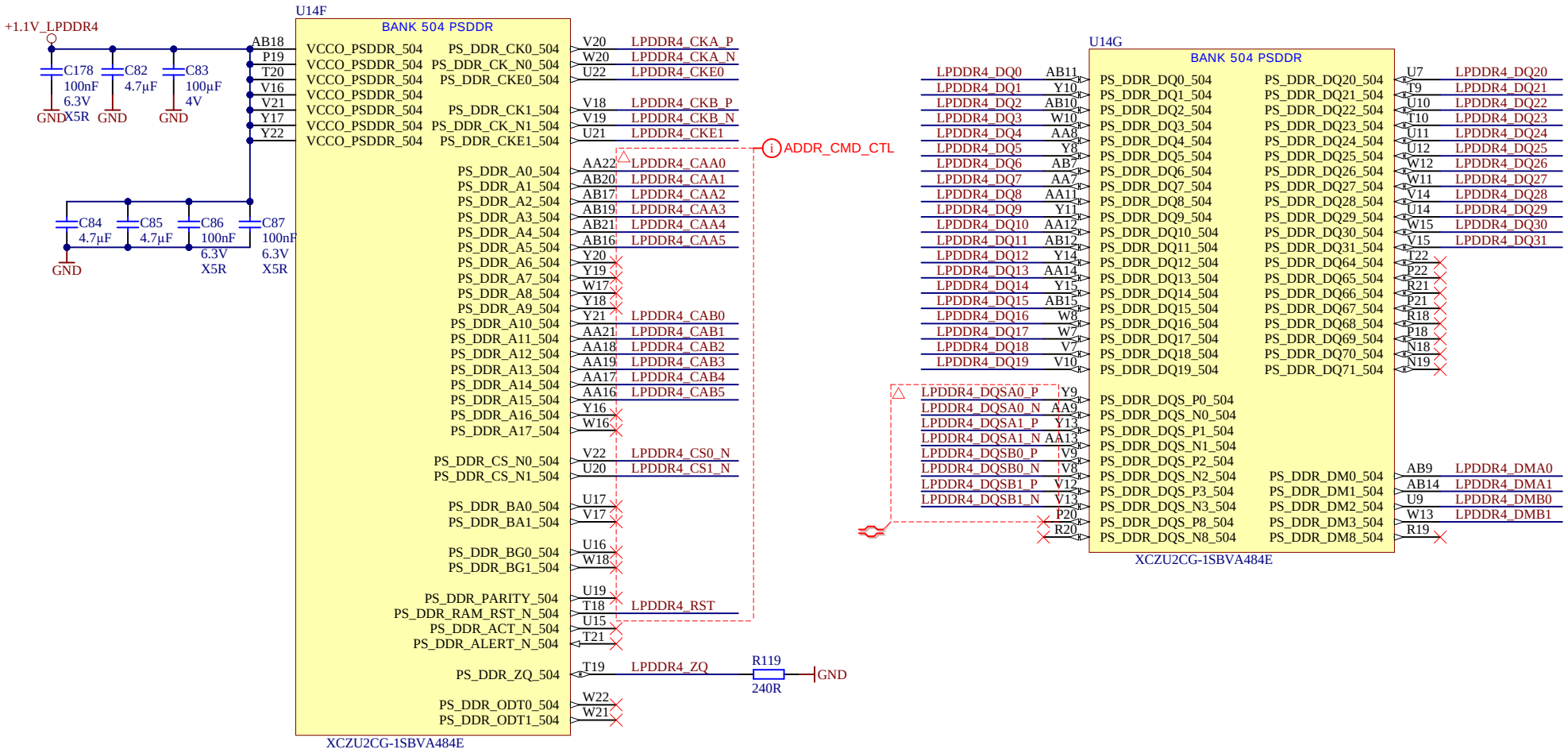
trenz electronic	Title: XCZU2CG_HD		
	A4	Number: TE0802-02 2AEU2-A	Rev. 02
	Date: 2019-05-20	Copyright: Trenz Electronic GmbH	Page 4 of 25
	Drawn by: IG	Filename: XCZU2CG_HD.SchDoc	



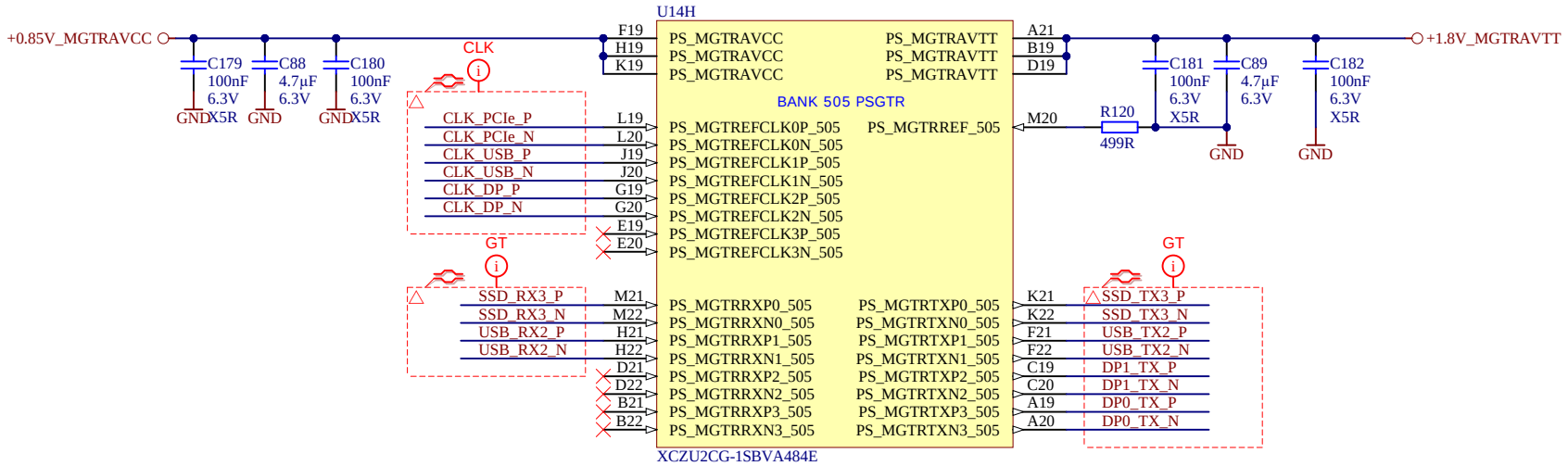
Title: XCZU2CG_B65_B66			
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 5 of 25
Drawn by: IG	Filename: XCZU2CG_B65_B66.SchDoc		



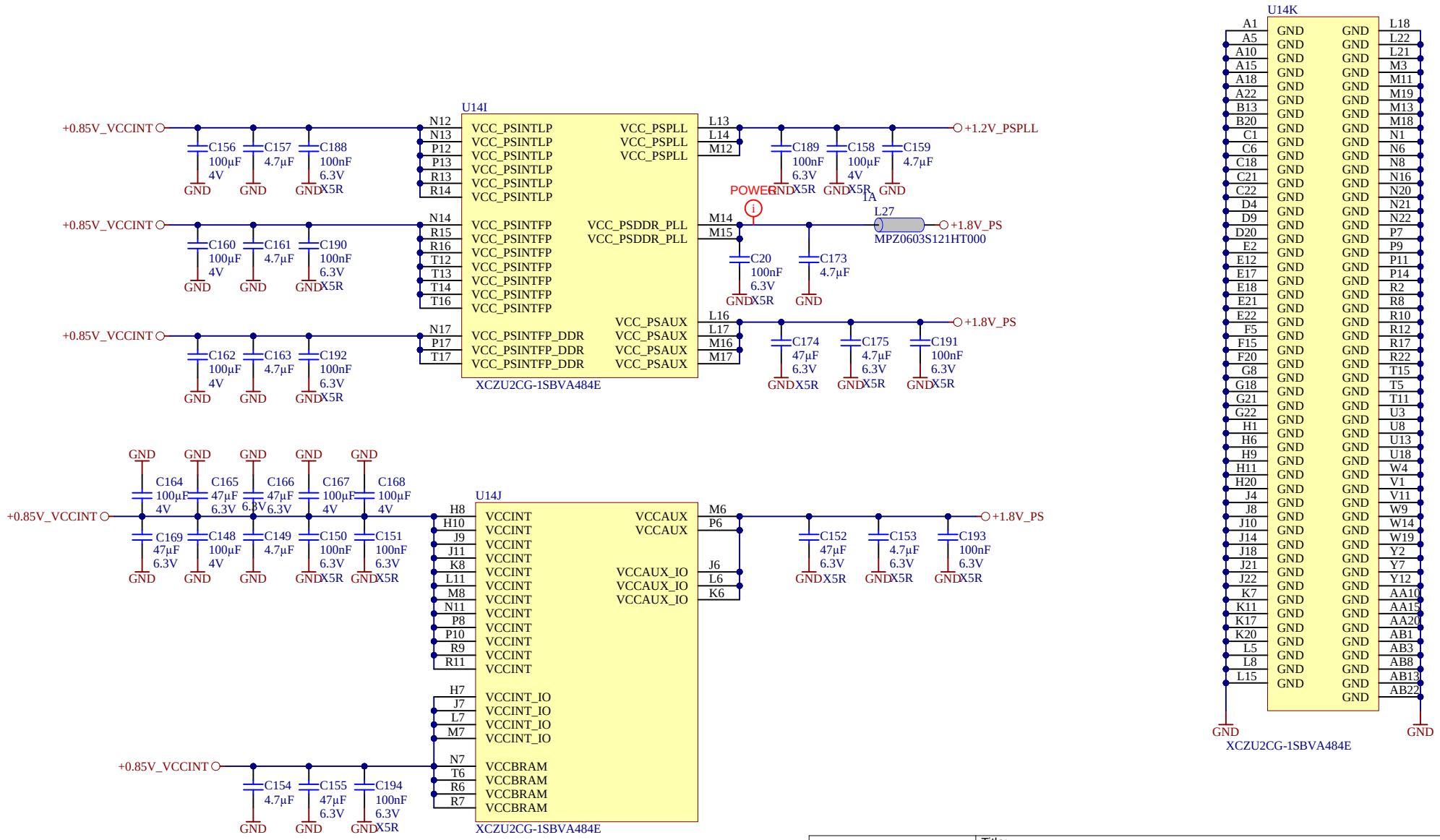
Title: XCZU2CG_MIO			
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 6 of 25
Drawn by: IG	Filename: XCZU2CG_MIO.SchDoc		



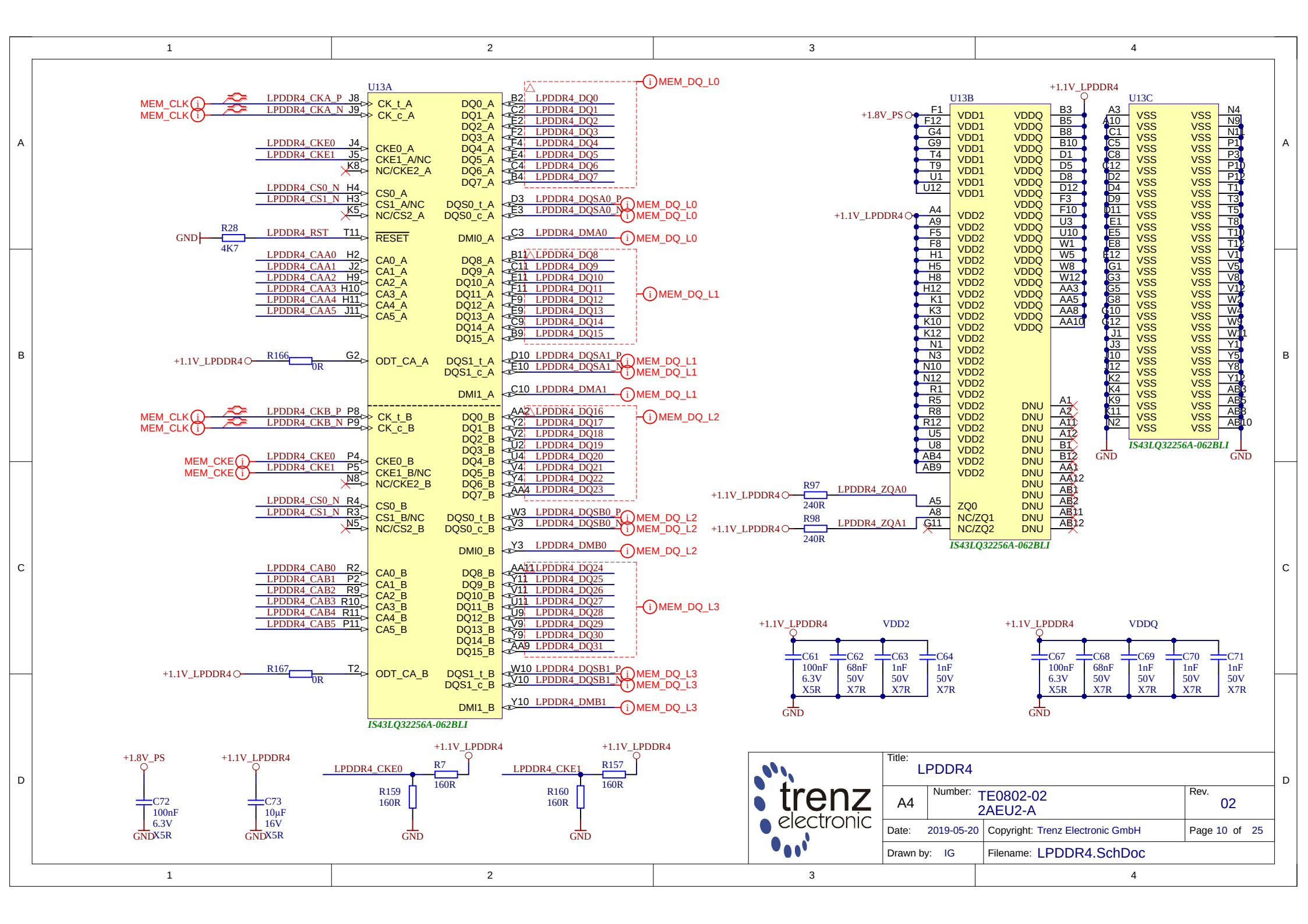
trenz electronic	Title: XCZU2CG_Memory		
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 7 of 25
Drawn by: IG	Filename: XCZU2CG_Memory.SchDoc		

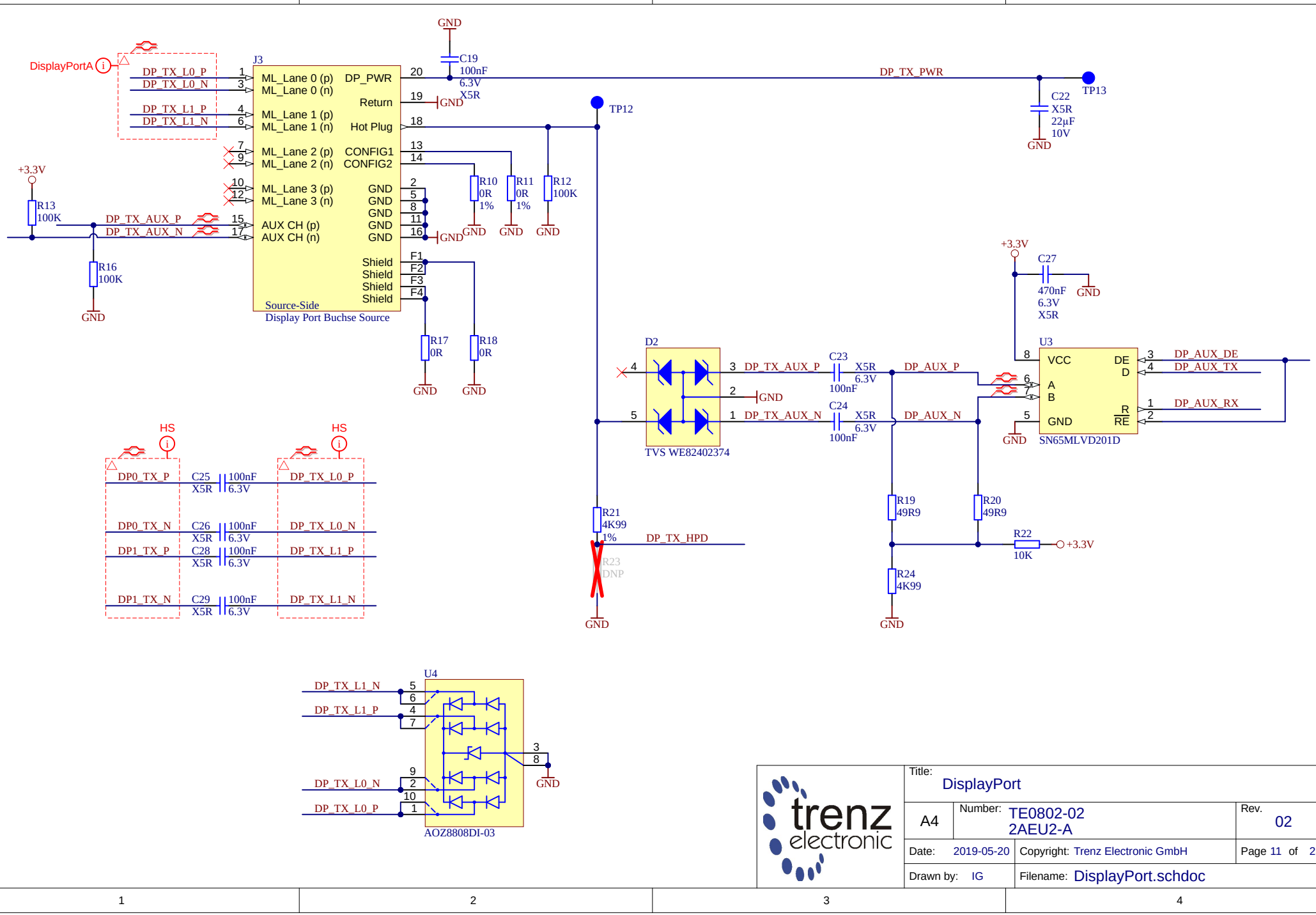


trenz electronic	Title: XCZU2CG_MGT		
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 8 of 25
Drawn by: IG	Filename: XCZU2CG_MGT.SchDoc		

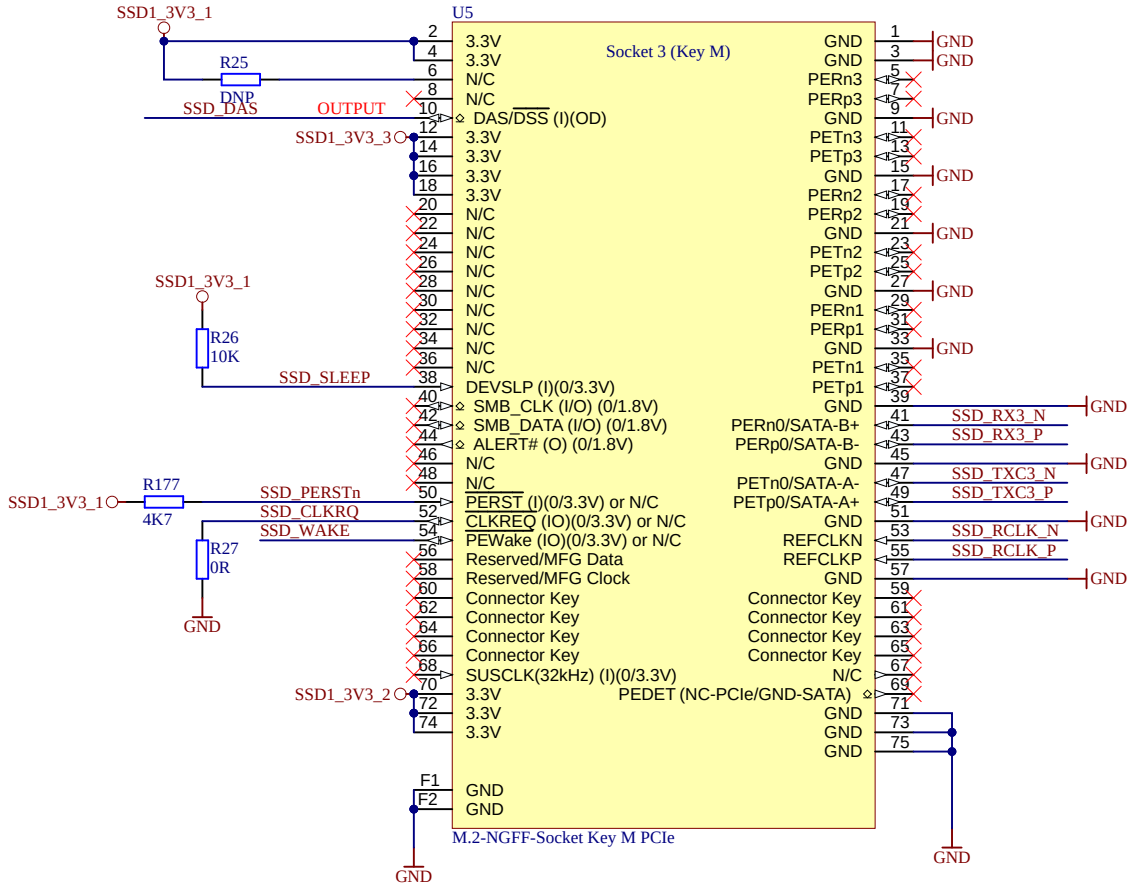


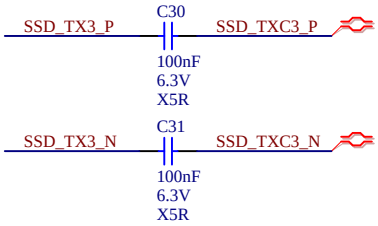
trenz electronic	Title: XCZU2CG_Power		
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 9 of 25
Drawn by: IG	Filename: XCZU2CG_Power.SchDoc		

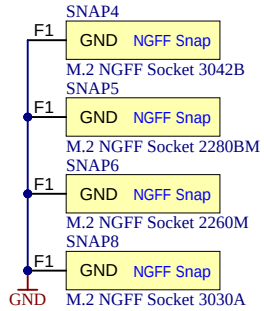

U13A
IS43LQ32256A-062BLI
U13B
IS43LQ32256A-062BLI
U13C
IS43LQ32256A-062BLI
+1.1V_LPDDR4
+1.8V_PS
VDD2
VDDQ
Title: LPDDR4
A4
Number: TE0802-02 2AEU2-A
Rev. 02
Date: 2019-05-20
Copyright: Trenz Electronic GmbH
Page 10 of 25
Drawn by: IG
Filename: LPDDR4.SchDoc

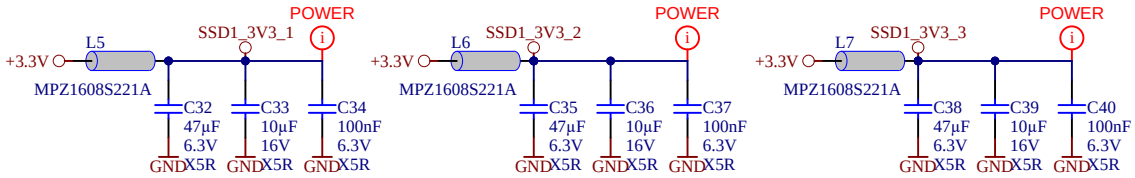


Title: DisplayPort			
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 11 of 25
Drawn by: IG	Filename: DisplayPort.schdoc		



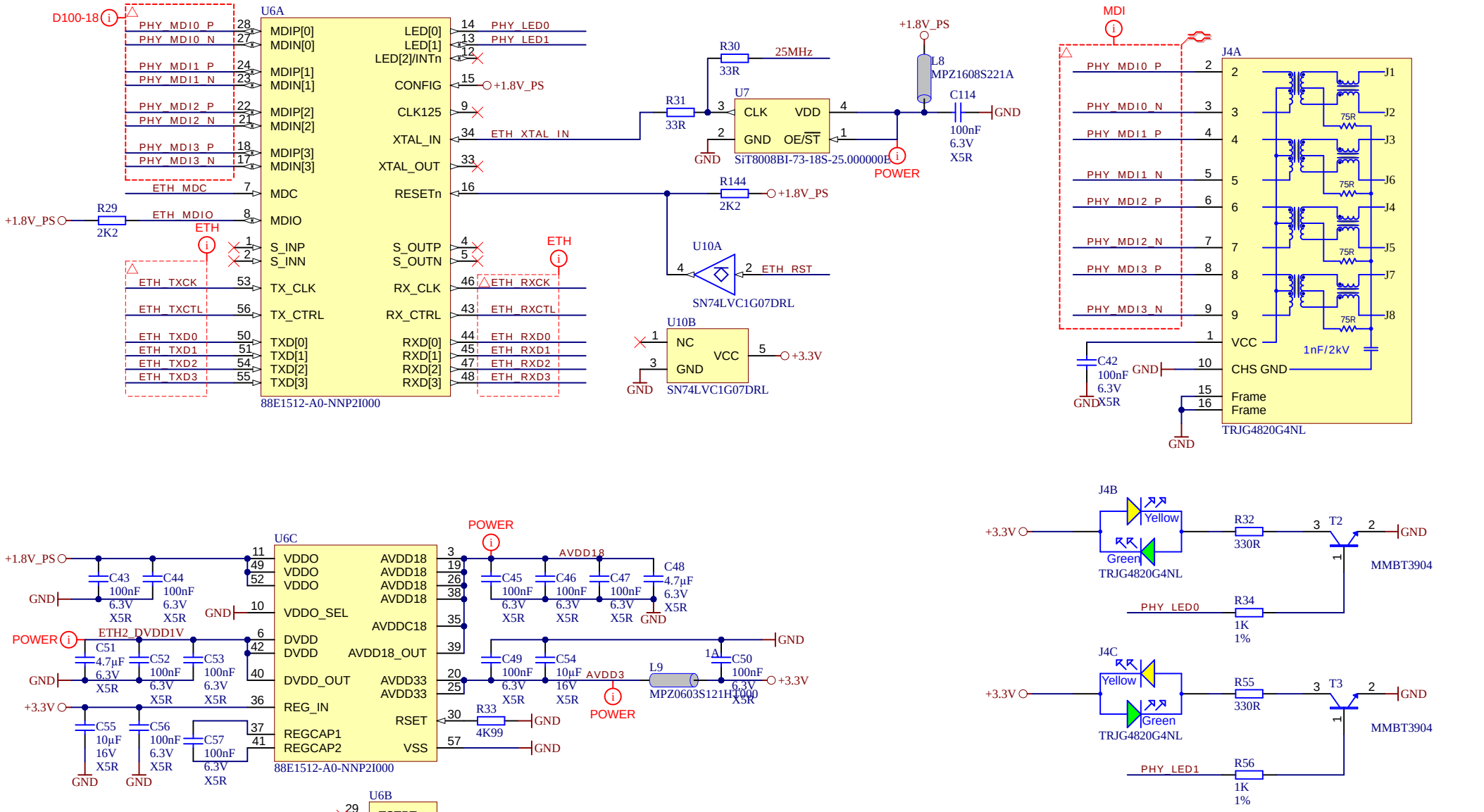




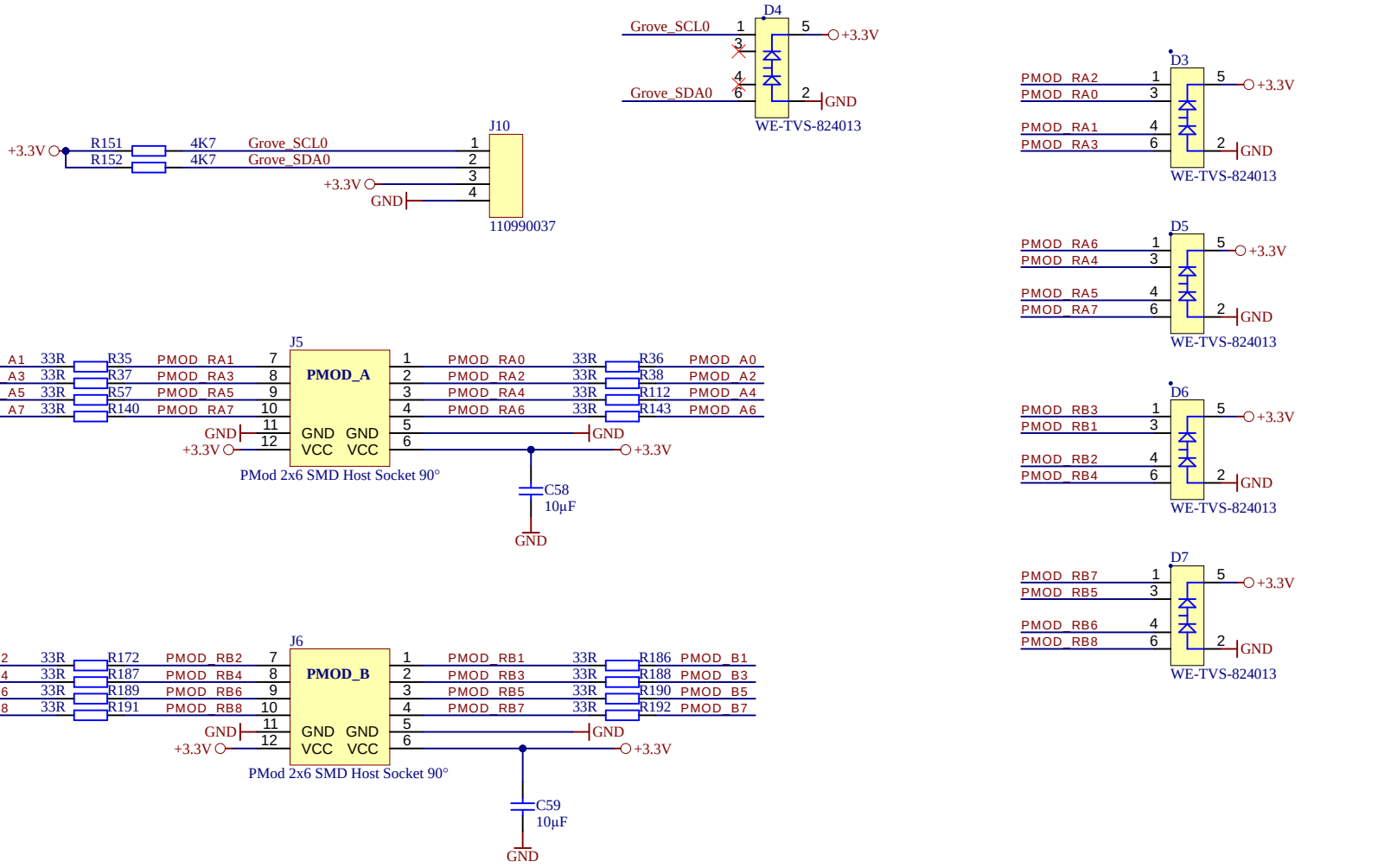


trenz electronic

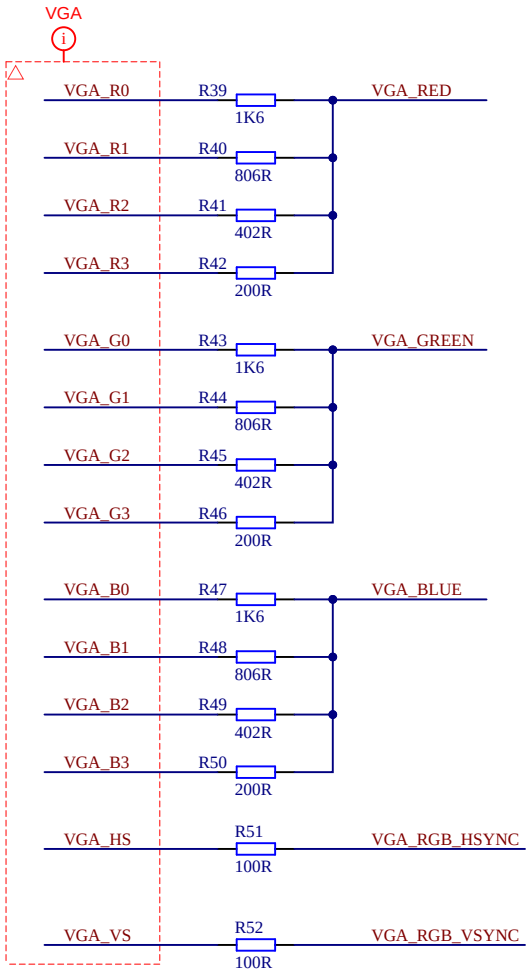
Title: SSD			
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 12 of 25
Drawn by: IG	Filename: SSD.SchDoc		

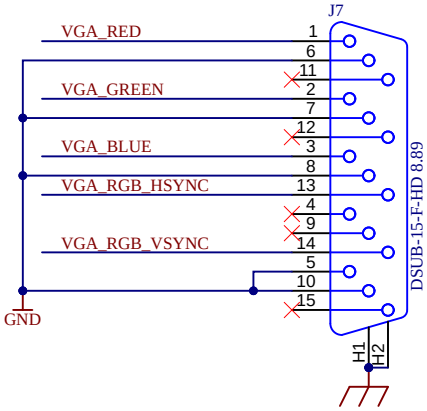


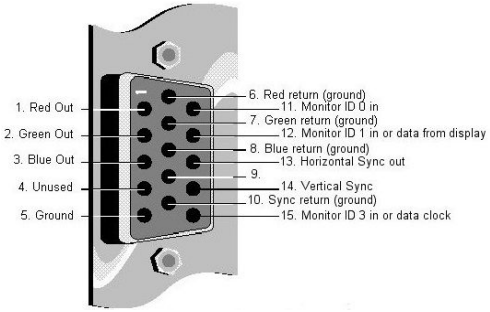
Title: Ethernet			
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 13 of 25
Drawn by: IG	Filename: Ethernet.SchDoc		

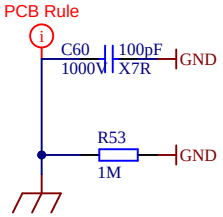


Title: PMODs			
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 14 of 25
Drawn by: IG	Filename: PMODs.SchDoc		

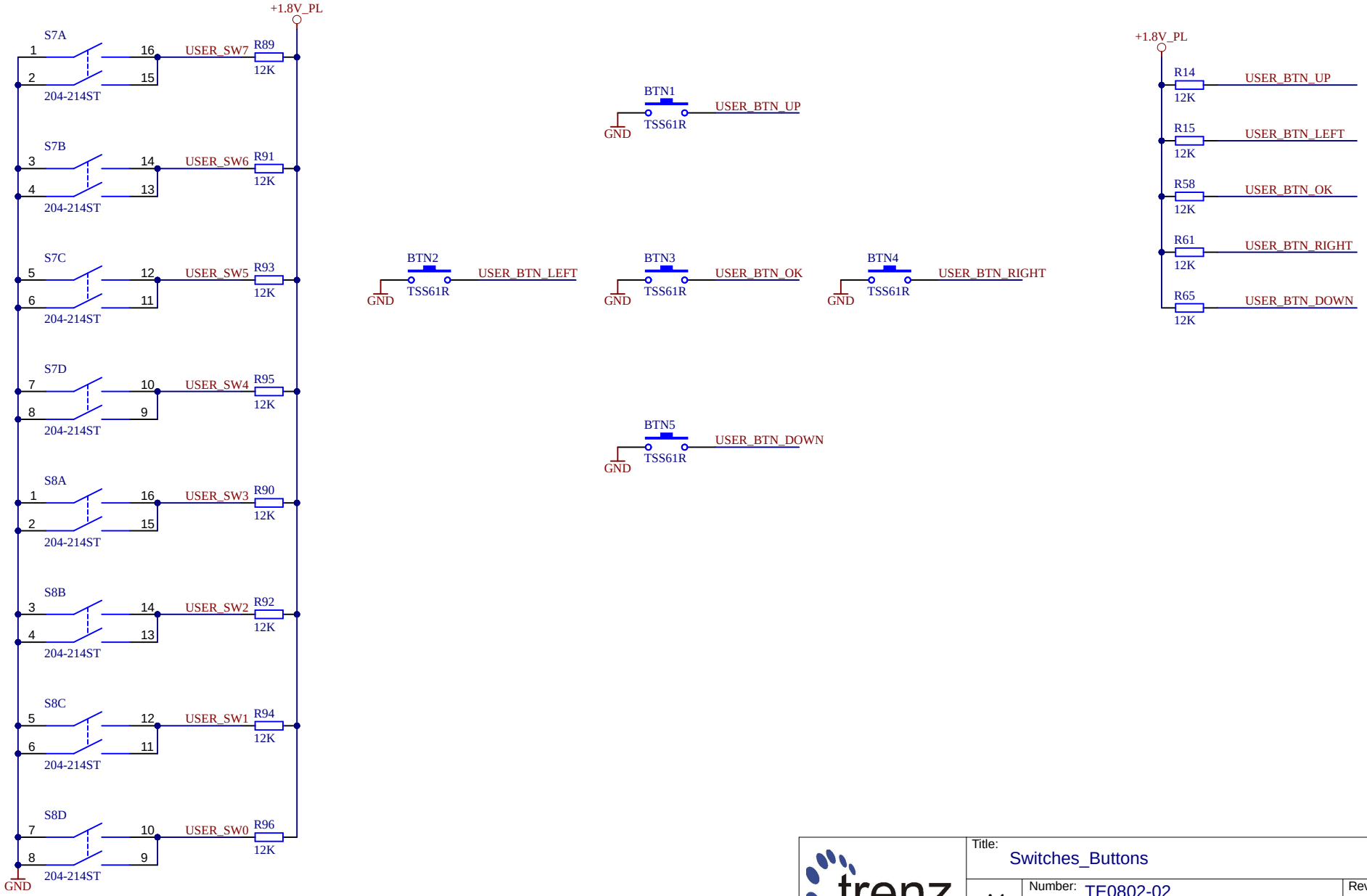




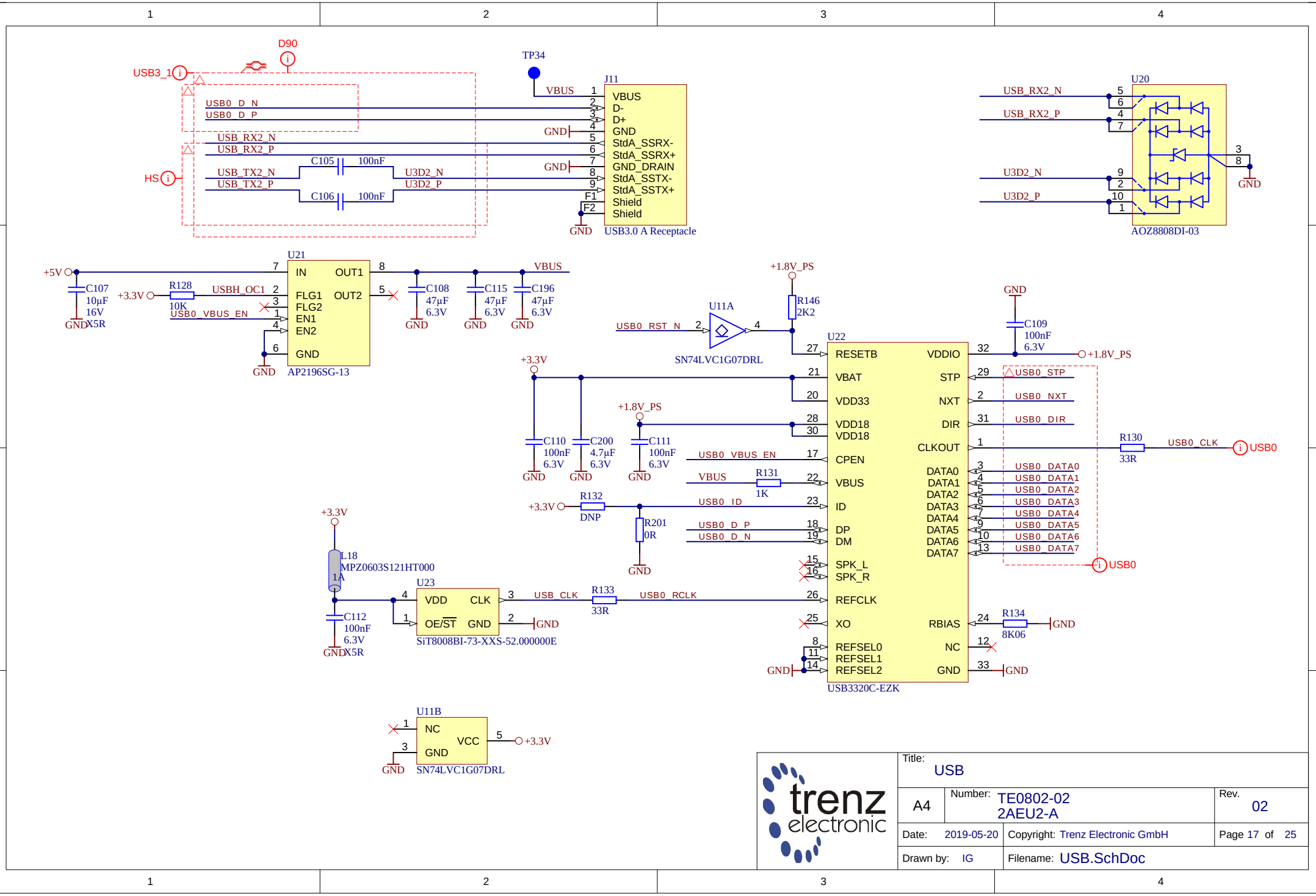




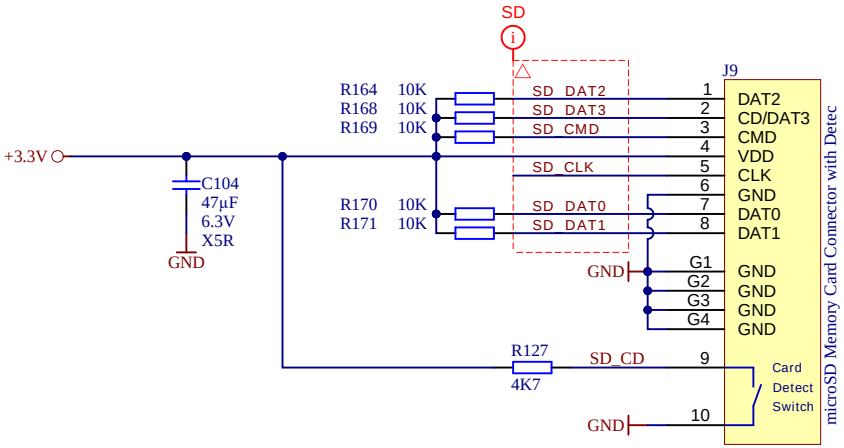
trenz electronic	Title: VGA_OUT		
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 15 of 25
Drawn by: IG	Filename: VGA_OUT.SchDoc		



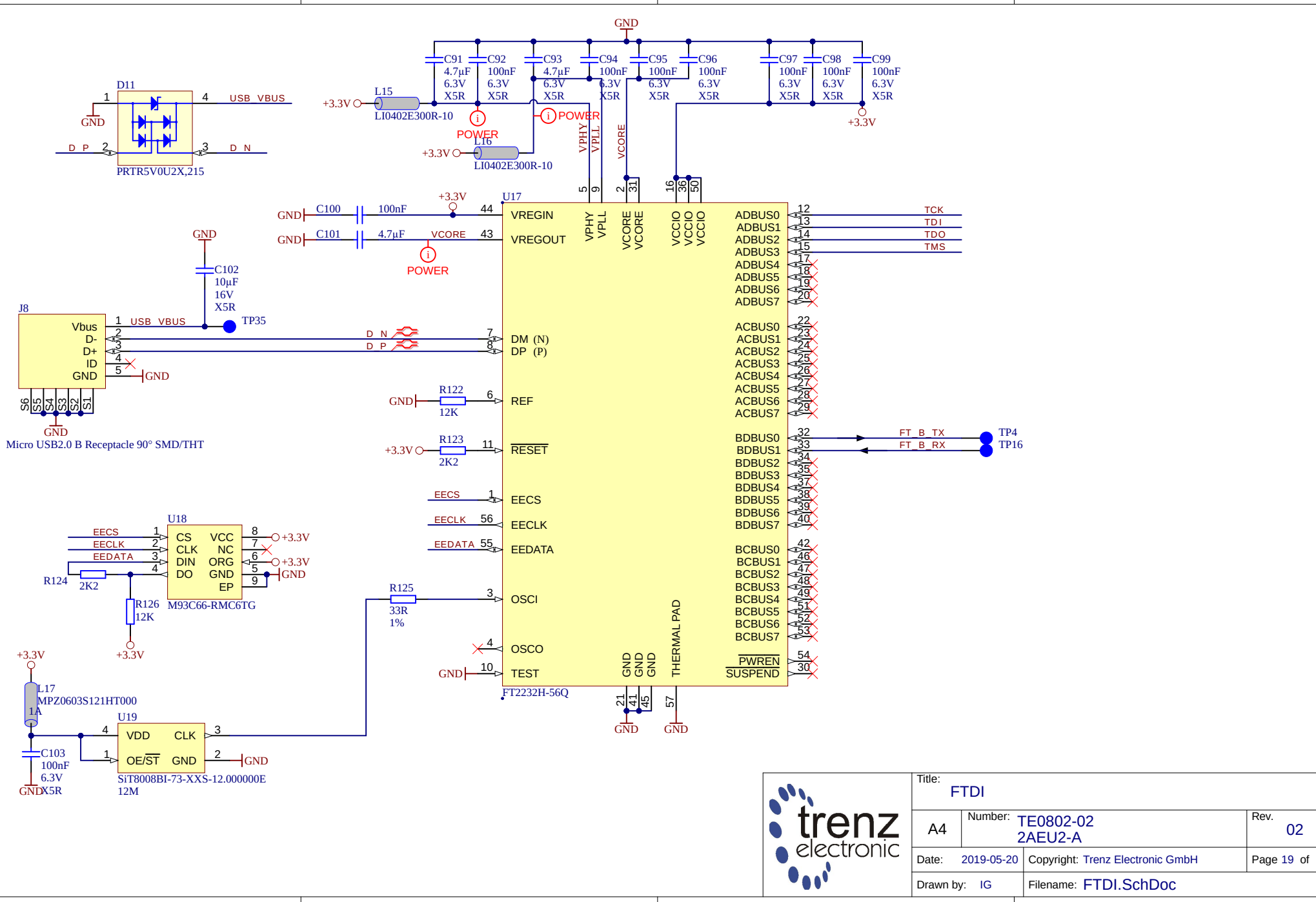
trenz electronic	Title: Switches_Buttons		
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 16 of 25
Drawn by: IG	Filename: Switches_Buttons.SchDoc		

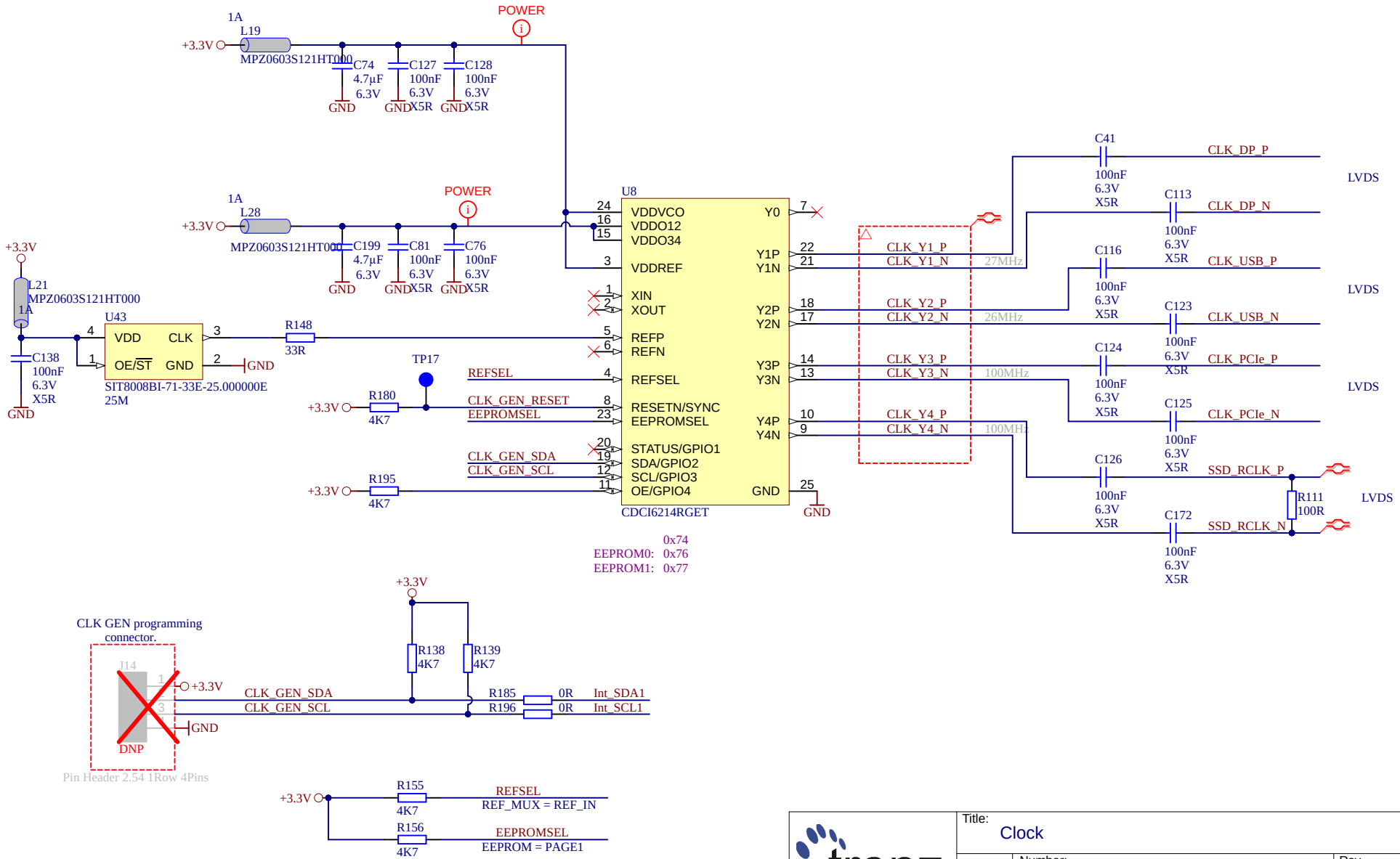


trenz electronic	Title: USB		
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 17 of 25
Drawn by: IG	Filename: USB.SchDoc		

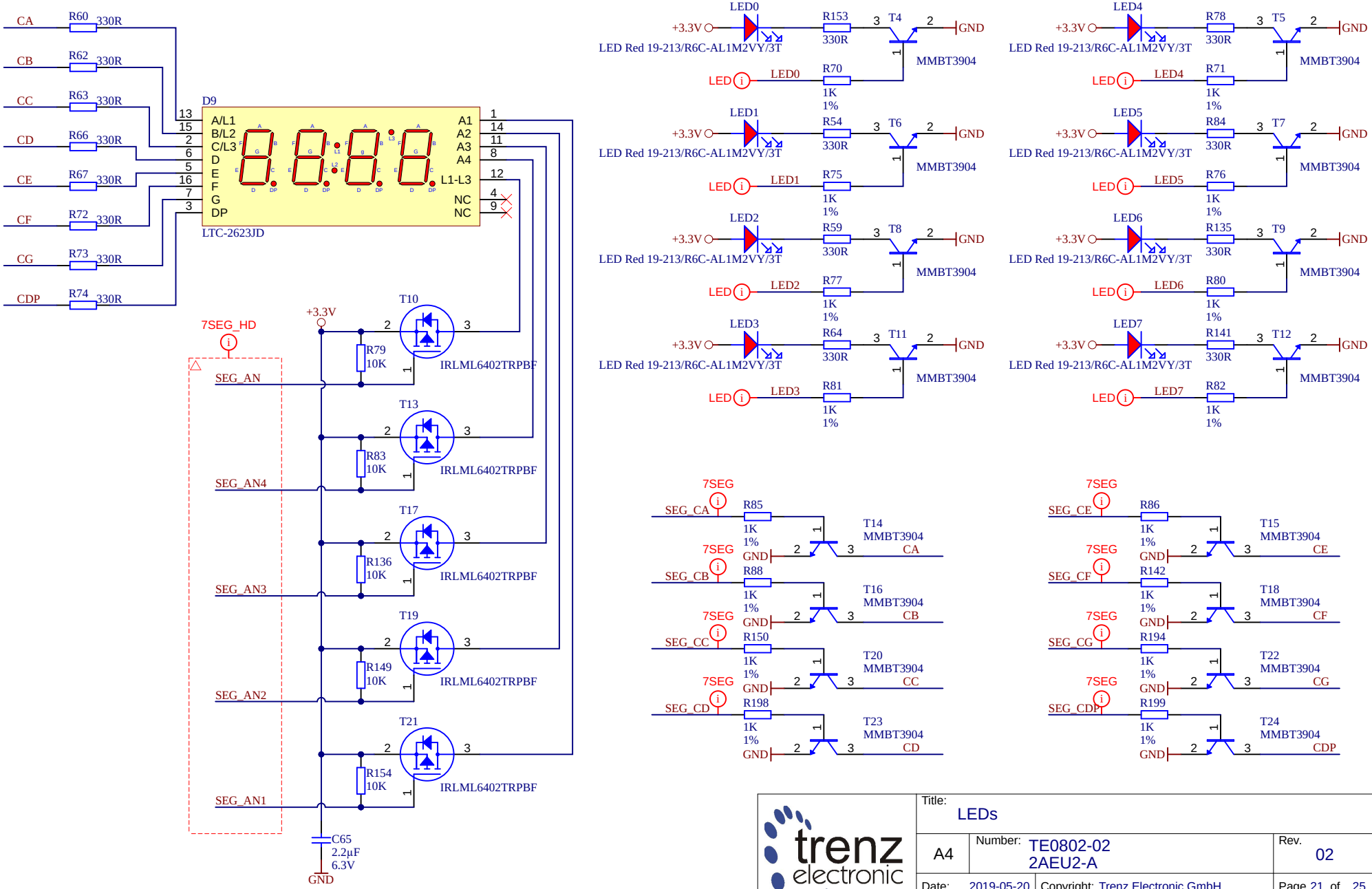


trenz electronic	Title: SD		
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 18 of 25
Drawn by: IG	Filename: SD.SchDoc		

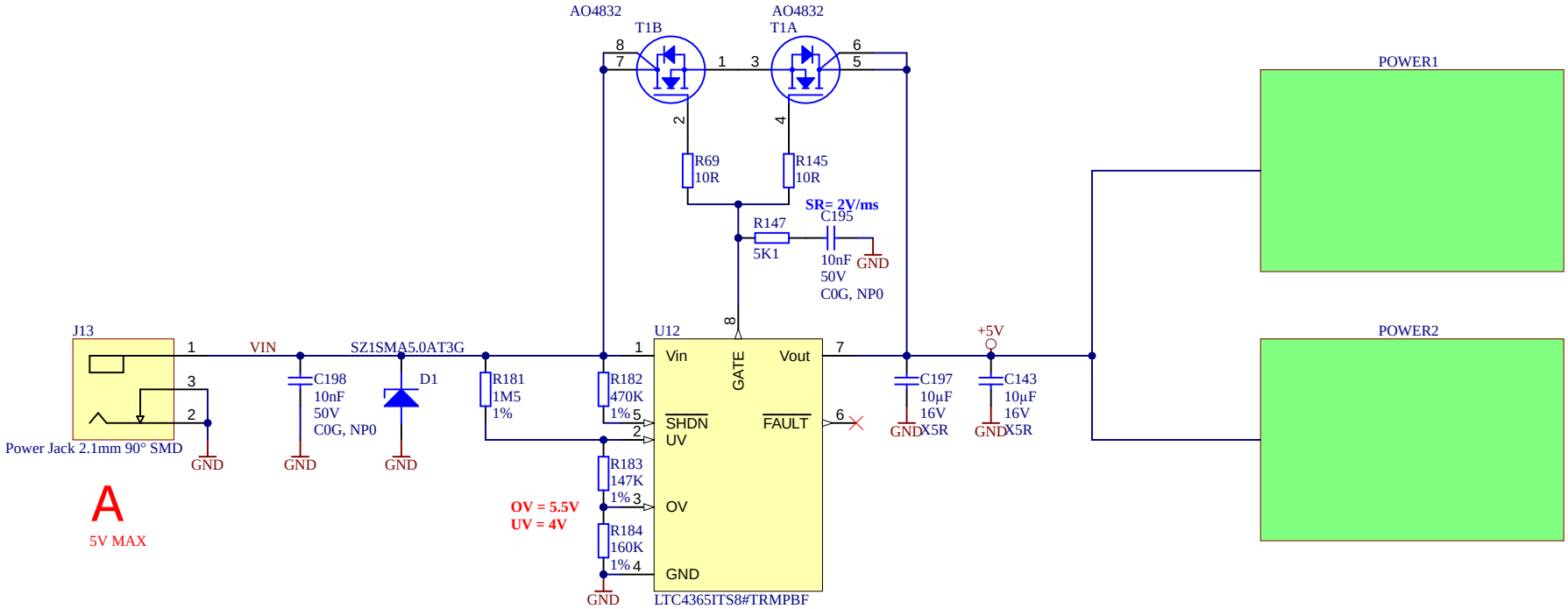

GND
C91 4.7µF 6.3V X5R
C92 100nF 6.3V X5R
C93 4.7µF 6.3V X5R
C94 100nF 6.3V X5R
C95 100nF 6.3V X5R
C96 100nF 6.3V X5R
C97 100nF 6.3V X5R
C98 100nF 6.3V X5R
C99 100nF 6.3V X5R
+3.3V
L15
LI0402E300R-10
L16
LI0402E300R-10
POWER
VPHY
VPLL
VCORE
D11
USB_VBUS
D_P
D_N
PRTR5V0U2X,215
U17
VREGIN
VREGOUT
C100 100nF
C101 4.7µF
VCCIO
ADBUS0
ADBUS1
ADBUS2
ADBUS3
ADBUS4
ADBUS5
ADBUS6
ADBUS7
TCK
TDI
TDO
TMS
ACBUS0
ACBUS1
ACBUS2
ACBUS3
ACBUS4
ACBUS5
ACBUS6
ACBUS7
DM (N)
DP (P)
REF
R122 12K
RESET
R123 2K2
BDBUS0
BDBUS1
BDBUS2
BDBUS3
BDBUS4
BDBUS5
BDBUS6
BDBUS7
FT_B_TX
FT_B_RX
TP4
TP16
EECS
EECLK
EEDATA
BCBUS0
BCBUS1
BCBUS2
BCBUS3
BCBUS4
BCBUS5
BCBUS6
BCBUS7
OSCI
R125 33R 1%
OSCO
TEST
PWREN
SUSPEND
THERMAL PAD
FT2232H-56Q
J8
Vbus
D-
D+
ID
GND
USB_VBUS
TP35
C102 10µF 16V X5R
S1
S2
S3
S4
S5
S6
Micro USB2.0 B Receptacle 90° SMD/THT
U18
CS
CLK
DIN
DO
VCC
NC
ORG
GND
EP
R124 2K2
R126 12K
M93C66-RMC6TG
L17
MPZ0603S121HT000
1A
U19
VDD
CLK
OE/ST
GND
C103 100nF 6.3V X5R
SiT8008BI-73-XXS-12.000000E
12M
trenz electronic
Title: FTDI
A4
Number: TE0802-02 2AEU2-A
Rev. 02
Date: 2019-05-20
Copyright: Trenz Electronic GmbH
Page 19 of 25
Drawn by: IG
Filename: FTDI.SchDoc



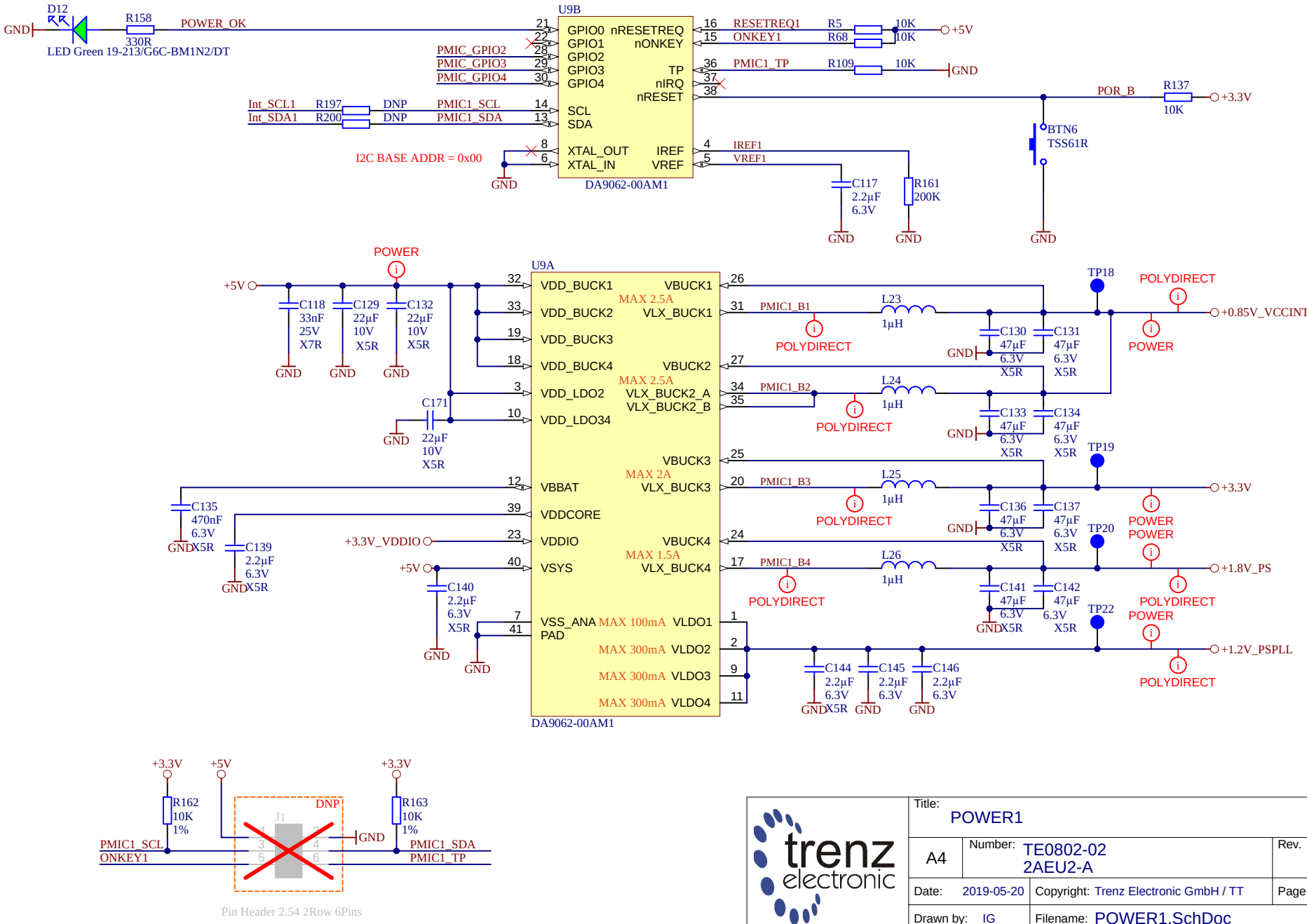
trenz electronic	Title: Clock		
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH / TT		Page 20 of 25
Drawn by: IG	Filename: Clock.SchDoc		



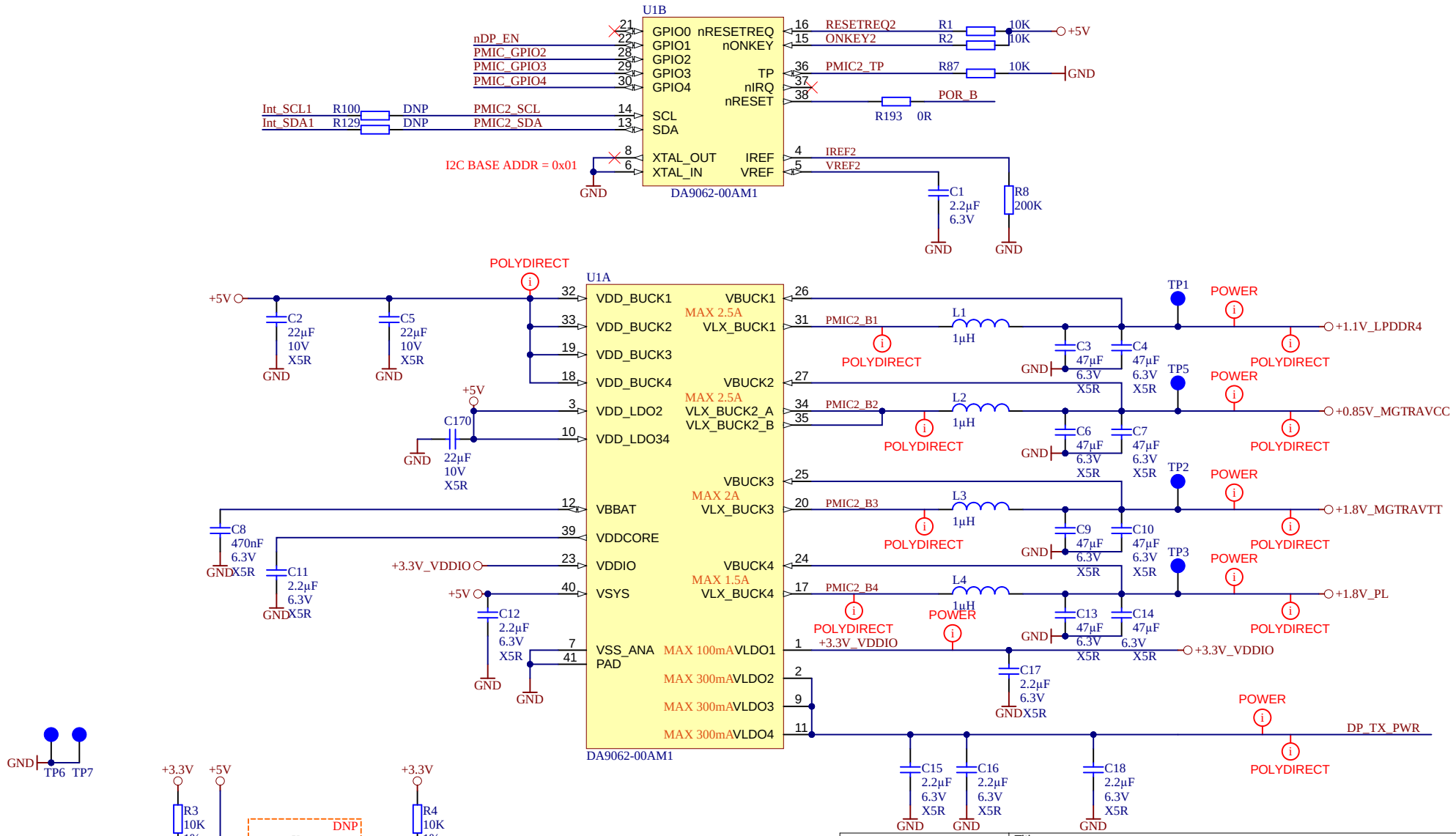
Title: LEDs			
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH		Page 21 of 25
Drawn by: IG	Filename: LEDs.SchDoc		



trenz electronic	Title: POWER		
	A4	Number: TE0802-02 2AEU2-A	Rev. 02
	Date: 2019-05-20	Copyright: Trenz Electronic GmbH / TT	Page 22 of 25
	Drawn by: IG	Filename: POWER.SchDoc	



Title: POWER1			
A4	Number: TE0802-02 2AEU2-A		Rev. 02
Date: 2019-05-20	Copyright: Trenz Electronic GmbH / TT		Page 23 of 25
Drawn by: IG	Filename: POWER1.SchDoc		


U1B
DA9062-00AM1
I2C BASE ADDR = 0x01
U1A
DA9062-00AM1
POLYDIRECT
POWER
DNP
Pin Header 2.54 2Row 6Pins
Title: POWER2
A4
Number: TE0802-02 2AEU2-A
Rev. 02
Date: 2019-05-20
Copyright: Trenz Electronic GmbH / TT
Page 24 of 25
Drawn by: IG
Filename: POWER2.SchDoc

REV.00

PCB hasn't been assembled;

REV.01

1. LED display has been moved from BANK 26 on BANK 65.
2. Added overvolatge protection on "Power" sheet;
3. Headphones moved on BANK 65;
4. Added buffers with OD output on USB0_RST and ETH_RST;
5. BOM has been corrected;

REV.02

1. Added suppressor 1SMA5.0AT3G on Power input;
2. Changed OV and UV protection range;
3. Changed VGA schematic:
4. USB page: VBUS resistor changed on 1K;
5. The revision has been renamed as TE0802-02-2AEV2-A
6. Added Digilent SN MISC1.
7. Resistors R185 and R196 changed on 0 Ohms.
8. Resistor R23 changed on DNP.
9. S/N1 is removed.
10. LPDDR4 is changed
    2021-10-14.
11. Changed microUSB connector. 105017-0001 -> 10118194-0001LF.
12. Changed MEMS Oszillator SiT8008AI-73-XXS-12.000000E -> SiT8008BI-73-XXS-12.000000E
13. Changed MEMS Oszillator SiT8008AI-73-XXS-52.000000E -> SiT8008BI-73-XXS-52.000000E
14. Changed Ferrits BKP0603HS121-T to MPZ0603S121HT000

trenz electronic	Title: Revision_Changes		
	A4	Number: TE0802-02 2AEU2-A	Rev. 02
	Date: 2019-05-20	Copyright: Trenz Electronic GmbH	Page 25 of 25
	Drawn by: IG	Filename: Revision_Changes.SchDoc	