

1

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A

A

U\_B2B\_Connectors  
B2B\_Connectors.SchDoc



Ethernet  
Ethernet.SchDoc



U\_LED\_SW\_BUT  
LED\_SW\_BUT.SchDoc



U\_POWER  
POWER.SchDoc



U\_VG\_CONN  
VG\_CONN.SchDoc



U\_USB  
USB.SchDoc



SDCard  
SDCard.SchDoc



U\_ETH-PHY  
ETH-PHY.SchDoc

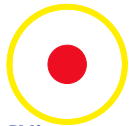


B

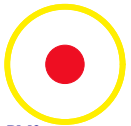
B



PM1



PM2



PM3



PM4



PM5

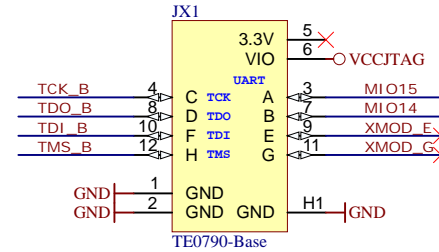


PM6

Serial  
Serial  
Serialnumber 6,3 x 6.3mm



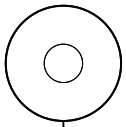
XMOD-FT2232H header: JTAG and UART



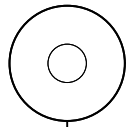
C

C

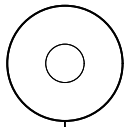
Mount.Hole 3.2mm Mount.Hole 3.2mm Mount.Hole 3.2mm Mount.Hole 3.2mm



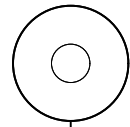
GND



GND



GND



GND

LOGO1

TE Logo PRINT Layer

LOGO PRINT

D

D



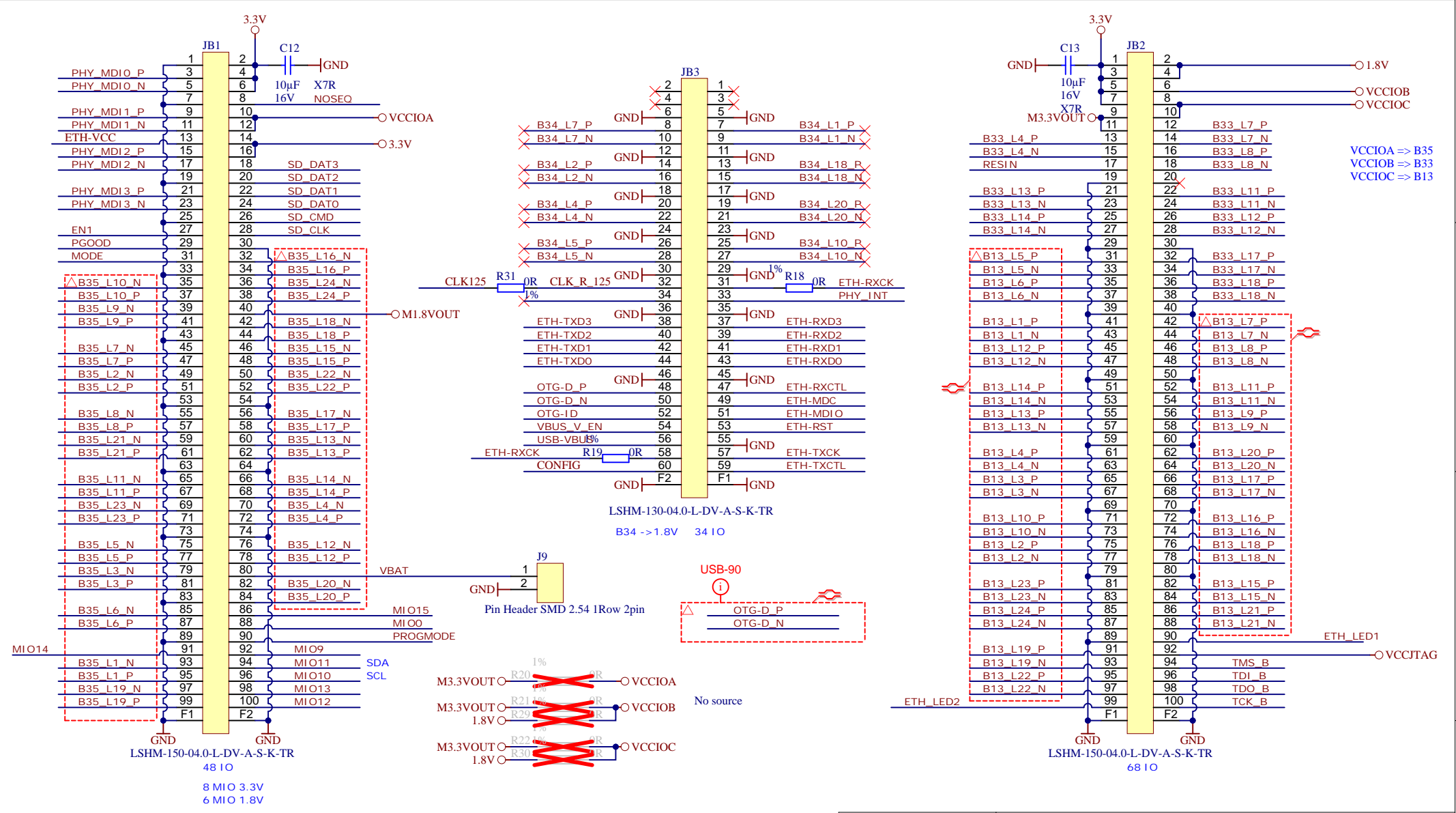
Title: <b>Overview</b>		
A4	Number: <b>TE0706 D</b>	Rev. <b>03</b>
Date: <b>2018-12-27</b>	Copyright: <b>Trenz Electronic GmbH</b>	Page1 of 10
Filename: <b>TE0706.SchDoc</b>		

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VCCIOA => B35  
VCCIOB => B33  
VCCIOC => B13

LSHM-130-04.0-L-DV-A-S-K-TR  
B34 -> 1.8V 34 IO

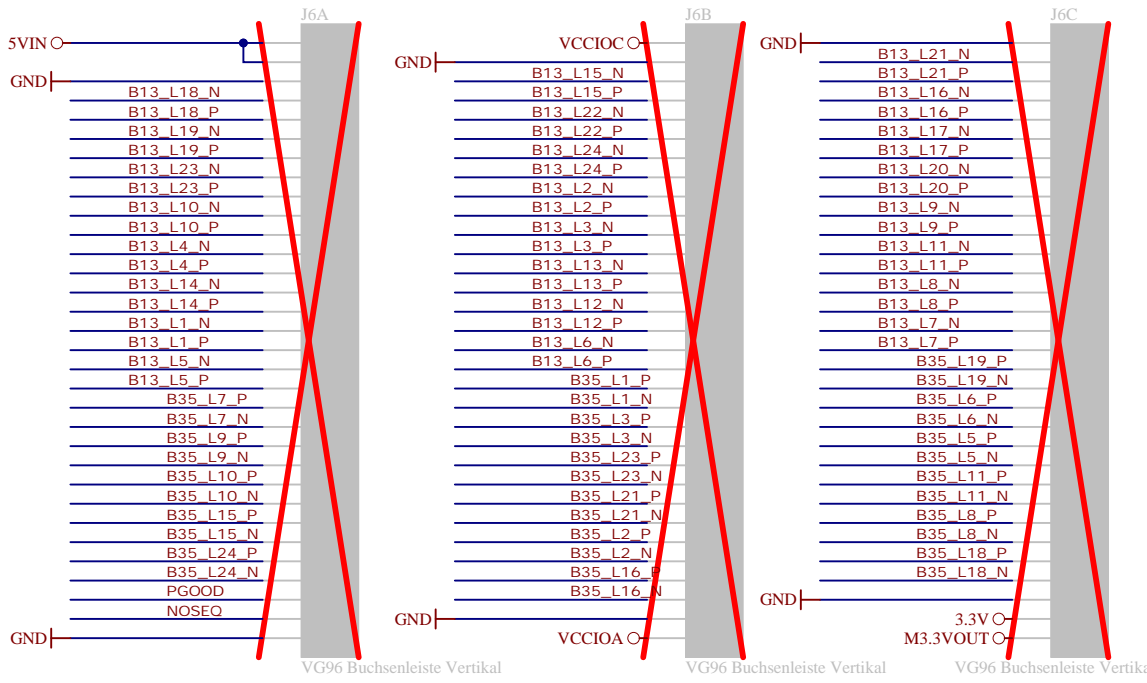
LSHM-150-04.0-L-DV-A-S-K-TR  
68 IO

LSHM-150-04.0-L-DV-A-S-K-TR  
48 IO  
8 MIO 3.3V  
6 MIO 1.8V

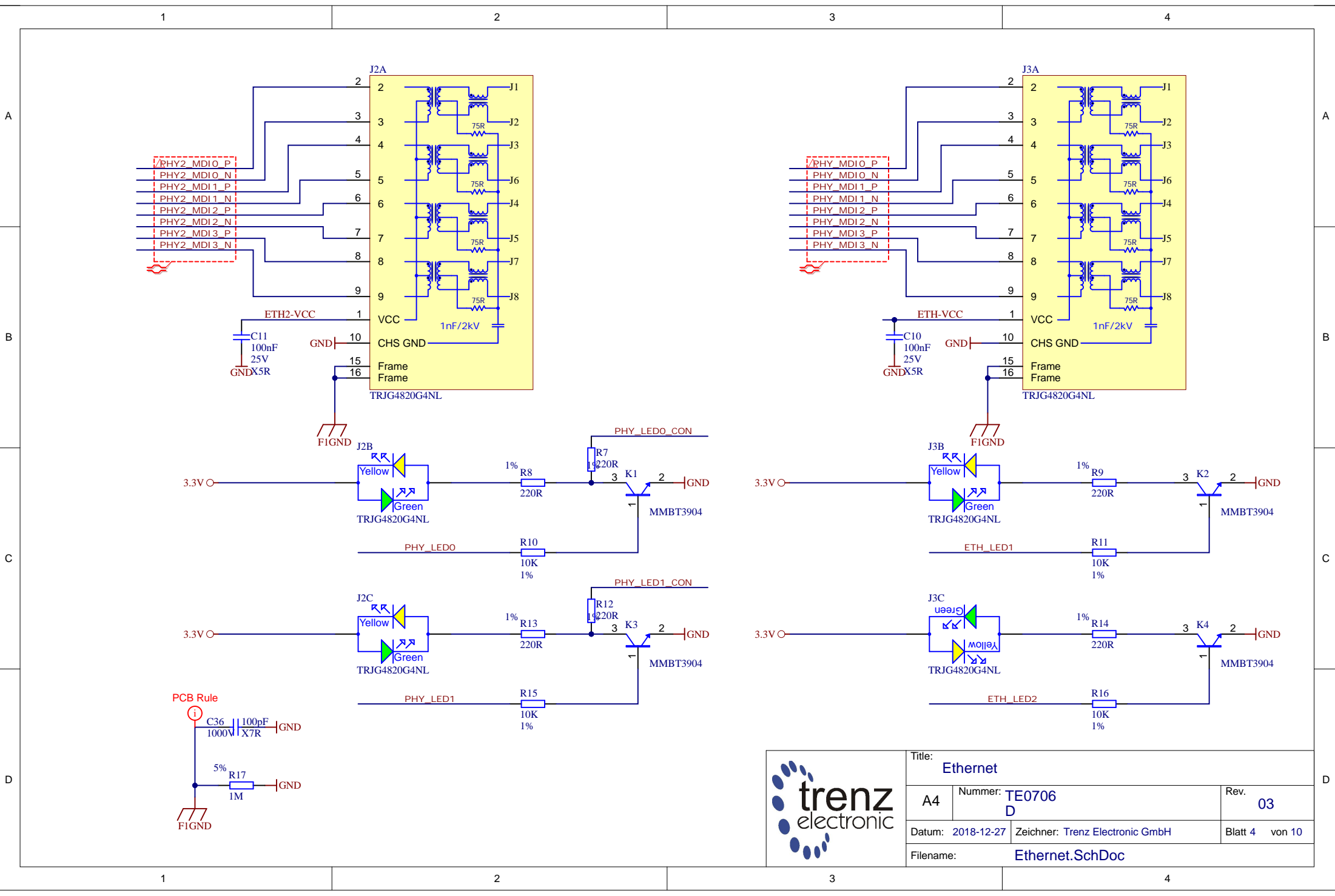


Title: <b>B2B Connector</b>		
A4	Number: <b>TE0706 D</b>	Rev. <b>03</b>
Date: 2018-12-27	Copyright: Trenz Electronic GmbH	Page2 of 10
Filename: <b>B2B_Connectors.SchDoc</b>		

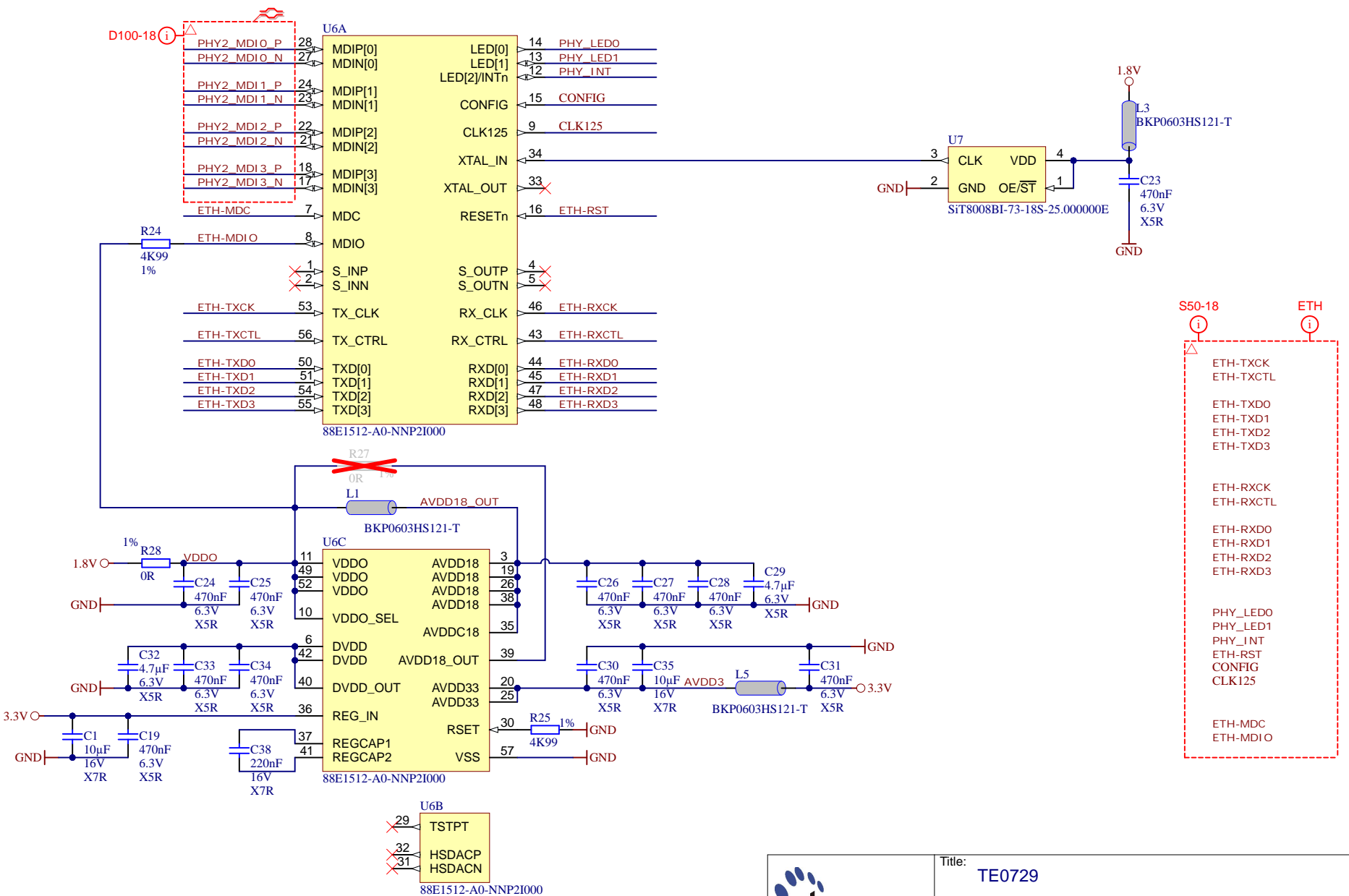
B33_L14_N	GND	1	2	GND	B33_L14_P
		3	4		
B33_L13_N	M3.3VOUT	5	6	3.3V	B33_L13_P
B33_L4_N		7	8		
B33_L18_N		9	10		B33_L4_P
B33_L17_N		11	12		B33_L18_P
B33_L12_N		13	14		B33_L17_P
B33_L11_N		15	16		B33_L12_P
B33_L8_N		17	18		B33_L11_P
B33_L7_N		19	20		B33_L8_P
PHY_LED1_CON		21	22		B33_L7_P
		23	24		PHY_LED0_CON
	MIO13	25	26	MIO12	
	MIO11	27	28	MIO10	
	MIO0	29	30	MIO9	
	MIO15	31	32	MIO14	
B35_L20_N		33	34		B35_L20_P
B35_L12_N		35	36		B35_L12_P
B35_L4_N		37	38		B35_L4_P
B35_L14_N		39	40		B35_L14_P
B35_L13_N		41	42		B35_L13_P
B35_L17_N		43	44		B35_L17_P
	3.3V	45	46	M3.3VOUT	
B35_L22_N		47	48		B35_L22_P
	GND	49	50	GND	




Title: External Connector		
A4	Number: TE0706 D	Rev. 03
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Filename: VG_CONN.SchDoc		



Title: Ethernet		
A4	Number: TE0706 D	Rev. 03
Datum: 2018-12-27	Zeichner: Trenz Electronic GmbH	Blatt 4 von 10
Filename: Ethernet.SchDoc		



		Title: TE0729	
		A4	Number: TE0706 D
Date: 2018-12-27		Copyright: Trenz Electronic GmbH	
Filename: ETH-PHY.SchDoc		Page5 of 10	

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A

A

B

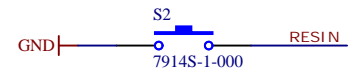
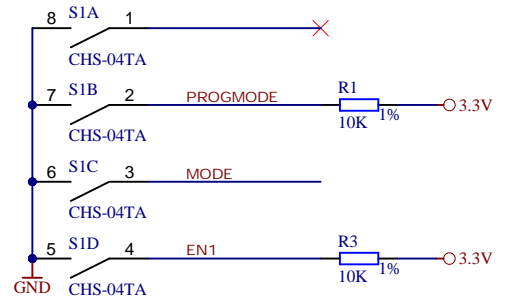
B


C

C

D

D



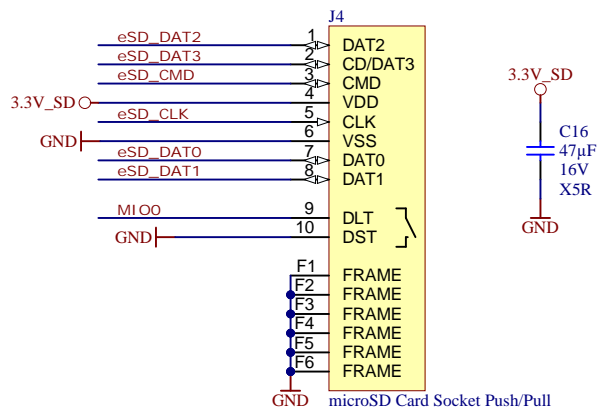
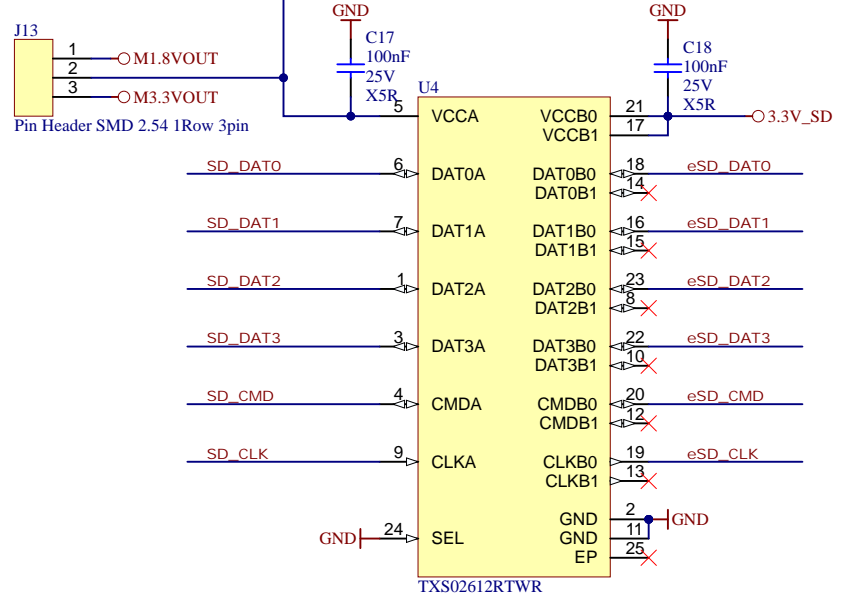
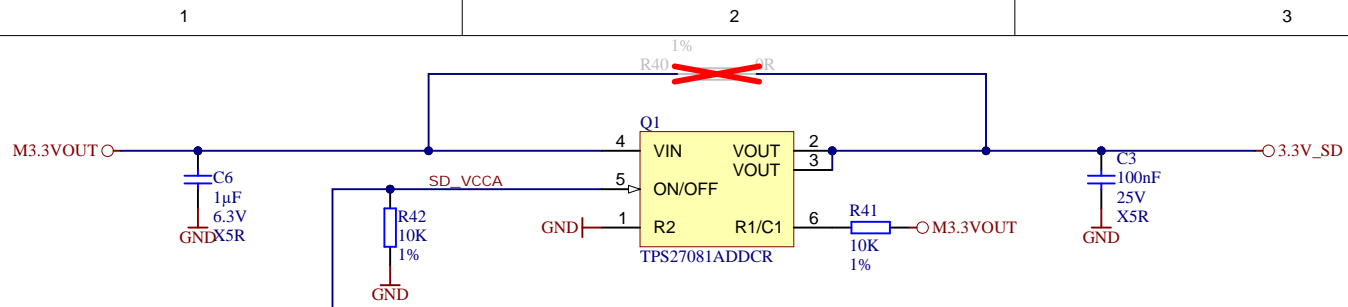
	Title: LED-Switch		
	A4	Number: TE0706 D	Rev. 03
	Date: 2018-12-27	Copyright: Trenz Electronic GmbH	Page 6 of 10
	Filename: LED_SW_BUT.SchDoc		

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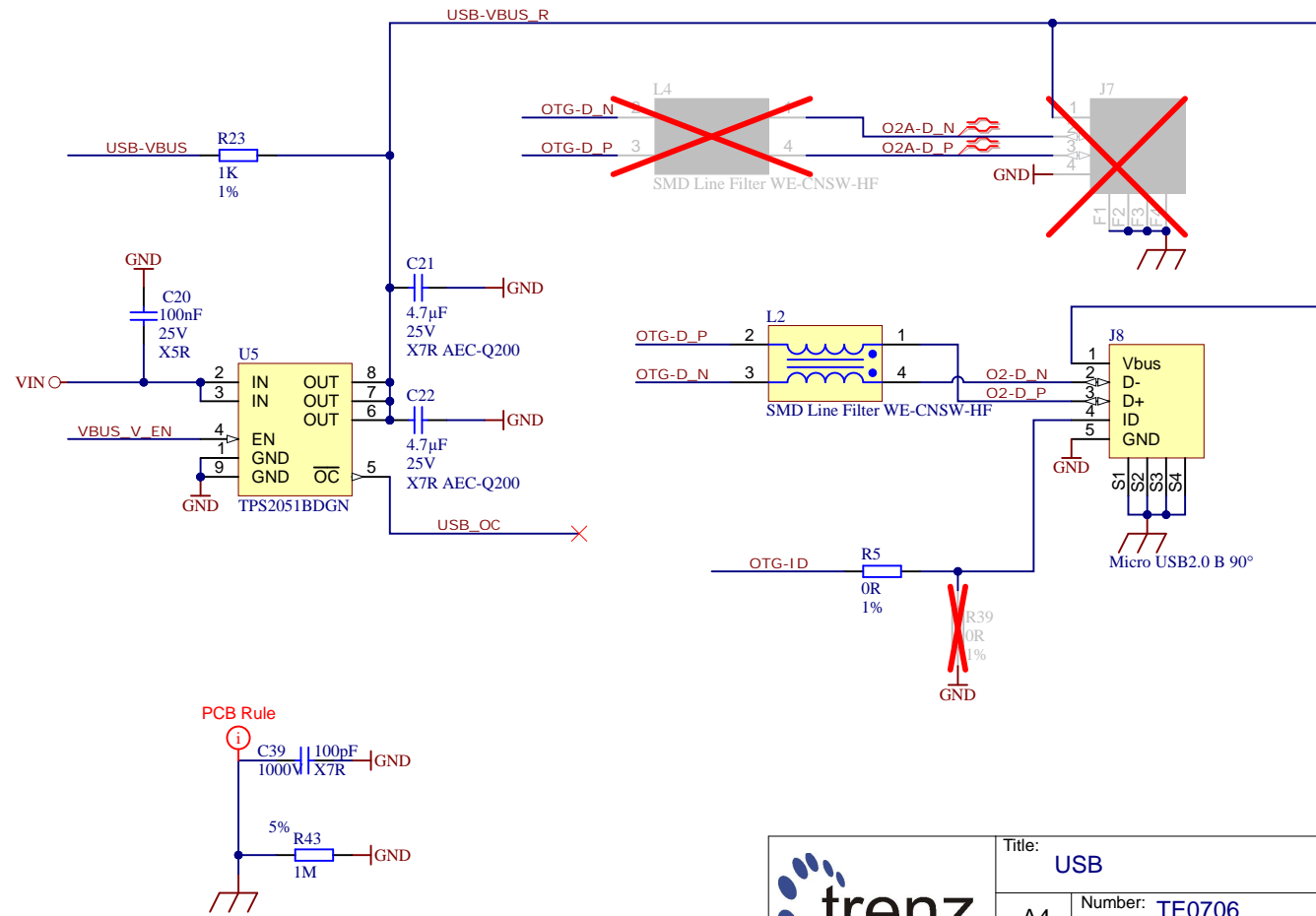
2

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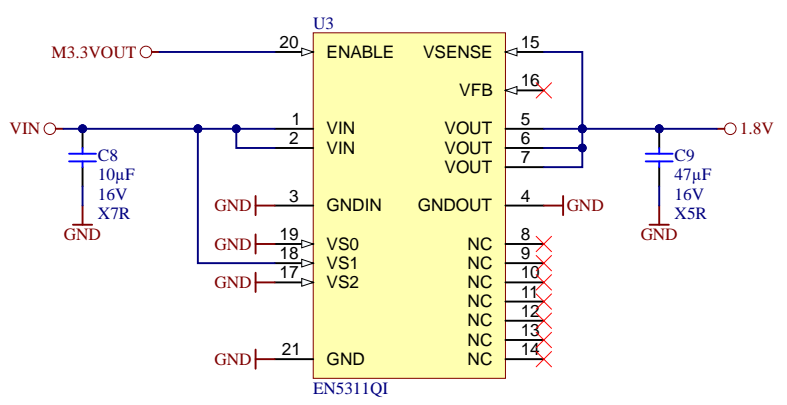
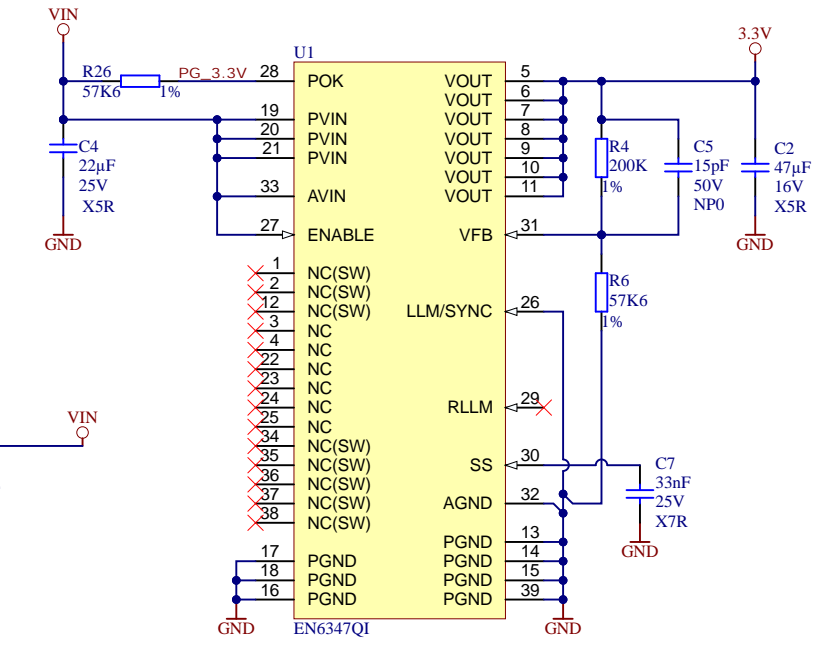
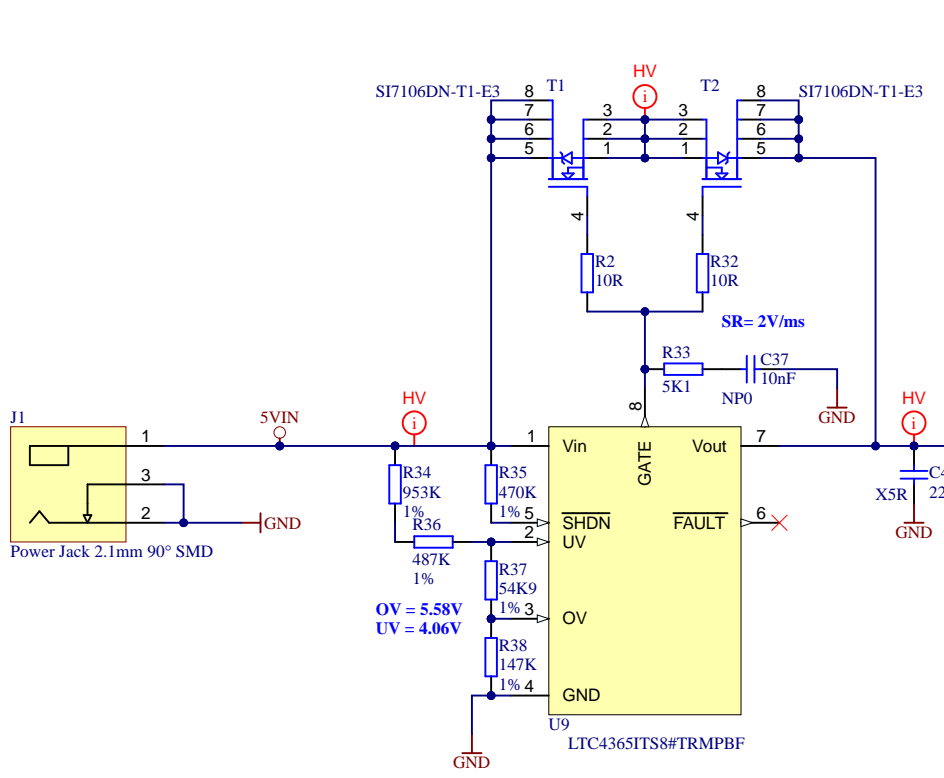



Title: SD Card		
A4	Number: TE0706 D	Rev. 03
Date: 2018-12-27	Copyright: Trenz Electronic GmbH	Page 7 of 10
Filename: SDCard.SchDoc		



	Title: <b>USB</b>	
	A4	Number: <b>TE0706 D</b>
	Date: <b>2018-12-27</b>	Copyright: <b>Trenz Electronic GmbH</b>
	Rev. <b>03</b>	Page <b>8</b> of <b>10</b>
Filename: <b>USB.SchDoc</b>		





	Title: <b>Power</b>		
	A4	Nummer: <b>TE0706 D</b>	Rev. <b>03</b>
	Datum: <b>2018-12-27</b>	Zeichner: <b>Trenz Electronic GmbH</b>	Blatt <b>9</b> von <b>10</b>
	Filename: <b>POWER.SchDoc</b>		

CHANGES REV01 to REV02

- 1) added support for 1.8V IO TE0715-30 (added 3-pin headers for variable voltage banks )
- 2) PWR connector type changed THT->SMD
- 3) swapped xmod RX <->TX
- 4) added 0 ohm to disconnect CLK125 for GT module compatibility
- 5) changed micro-USB
- 6) add ferrite beads L1
- 7) update Razorbeam Connectors, full update lib
- 8) added serial number (traceability pad)
- 9) added thermal vias to mounting holes


23.11.2017:  
 10) U8 MP5010ADQ-LF-Z replaced to MP5010BDQ-LF-Z

CHANGES REV02 to REV03

- 1) microSD card connector (J3) changed to industrial
- 2) changed PB (S2) to industrial
- 3) replaced input power protection
- 4) added jumper (J11) to select SD level shifter voltage on FPGA side
- 5) added power switch for SD level shifter supply voltages to ensure power sequencing of level shifter
- 6) replaced R5 and VBUS capacitors, add 00hm resistors to OTG-ID
- 7) replaced jumpers by SMD versions

2019-08-29  
 8) replaced R34 by 953k and R38 by147k

2022-05-04  
 9) Set S/N Track-it Pad to not fitted (EOL)

	Title: <b>TE0706 - Changes list</b>		
	A4	Number: <b>TE0706 D</b>	Rev. <b>03</b>
	Date: <b>2018-12-27</b>	Copyright: <b>Trenz Electronic GmbH</b>	Page <b>10</b> of <b>10</b>
	Filename: <b>Revision_Changes.SchDoc</b>		