

1		2		3		4							
A	REV	Description				REV	Description						
	-05	1) Q1, Q2 and Q3 changed to MP5077GG (previous Load Switch is EOL), and their external components added. 2) U2 changed to SDINBDG4-8G-XI2 (previous eMMC is EOL). 3) R14 changed to 2KΩ. 4) Testpoints added to PGoods of U18, U22, U26 and U29. 5) D8 and D10 updated (previous LEDs are EOL). 6) FAN MP1 changed to MF40060V2-1000U-A99 (previous FAN is EOL). 7) U54 alternative-FAN Controller LM96163CISD/NOPB and its external components added and default set as not fitted. 8) Hardware (screws and nuts) for new FMC FAN updated. 9) J19 Connector changed to 4 Position type 2,54mm pitch. 10) Module orientation mark placed in Silkscreen Top Side. 11) R164 pull-up resistor on PGood of U19 added. 12) R41 changed to 200K and made it fitted in Default variant. Also R40 changed to 0R. 13) C93/C94 Capacitors changed to 0R Resistors (now R263/R264). 14) U56 (new) Differential 1:2 LVDS to HCSL Buffer NB3L202KMN and its peripheral components added. 15) One U56 Buffered PCIe REFCLK Output connected to PS-GT BANK input MGTCLKREF in modules, as the U6 Oscillator was eliminated. 16) C179, C182, C185, C221, C222 and C223 Multipurpose MGT CLKs capacitors changed to 10nF. 17) C69 and C70 changed to 220nF. 18) T12 added as a Temperature Sensor and connected to U54 and default set as not fitted.. 19) L25 added. 20) U55 added and default set as not fitted.. 21) C207, C39 and C82 changed to 10µF and 10V Voltage Rating. 22) U8 (FMC_VADJ) changed to MPM3650CGQW-Z (previous Regulator is EOL). 23) U19 (1.8V) changed to MPM3650CGQW-Z (previous Regulator is EOL). 24) U28 (1.2V) changed to MP2164GG (previous Regulator is EOL). 25) U43 (3V3SB) changed to MP2164GG (previous Regulator is EOL). 26) VID circuit for U8 (FMC_VADJ) implemented for 1.2V, 1.5V and 1.8V selection only. 27) Differential Pair Impedance Directive D90 set in PCIe RX and TX signal paths. 28) C121, C122, C123 and C124 FMC MGT CLKs capacitors changed to 10nF. 29) C197, C200, C202 and C203 SATA Capacitors changed to 10nF. 30) C72 and C73 changed to capacitors with a minimum of 10V Voltage Rating. 31) C263 capacitor added. 32) Fuses F1 and F2 added to inputs: 12V_input_A and 12V_input_B. 33) R65 set to 1KOhm in all existing variants. 34) Power overview added. 35) I2C net (SC_SDA, SC_SCL) for FMC FAN Controller connected to U27 and its slave address label added. 36) L8, L9, L11 and L12 changed to 4.7uH. 37) C47, C48, C50, C52, C57, C58, C60 and C62 changed to 100nF. 38) C49, C51, C59 and C61 changed to 22uF. 39) J14 SFP+ connectors and R18, R21, R87, R115, R121, R122 (now 7K5) sourced from 3.3V_PER. Also, R86, R114 and R113, R123 (now 7K5) sourced from VCCT and VCCR respectively. All others pull-ups eliminated from J14. 40) Differential Pair Impedance Directive D100 set where applicable. 41) CAN Bus Differential Pair Impedance Directive set to 120Ohms (H and L netnames modified to match). 42) Differential Signal IN2_P/N renamed to IN2_CLK_P/N. 43) C16 and C17 set as not fitted in all variants. 44) J6 pin connections updated 1-to-1 as follows: RX1P/N >> B128_RX0_P/N, RX2P/N >> B128_RX1_P/N RX3P/N >> B128_RX2_P/N, RX4P/N >> B128_RX3_P/N, TX1P/N >> B128_TX0_P/N, TX2P/N >> B128_TX1_P/N TX3P/N >> B128_TX2_P/N, TX4P/N >> B128_TX3_P/N. 45) J21 pin connections updated 1-to-1 as follows: FF_L1_TX to FF_L1_RX, FF_L2_TX to FF_L2_RX, FF_L3_TX to FF_L3_RX, FF_L4_TX to FF_L4_RX. 46) Signals PWROK and PSON in connector J20 renamed to PWR_OK and PS_ON_N accordingly 47) T7, T8, T9 and corresponding resistors added. 48) Shield of all J7 connectors (USB and ETH) tied together to FGND net. 49) Shield of J13 connected to FGND2 net. 50) Cage of J14 connected to FGND3 net. 51) PCB Rules updated. 52) Signals layout updated. 53) LayerStack improved. 54) Polygons updated. 55) UKCA marking added. 56) U18 (5V) changed to MPM3683GMN-10 (previous Regulator is unavailable for order). 57) U22 (VCC_MOD) changed to MPM3650CGQW-Z (previous Regulator is unavailable for order). 58) U26 (3V3_PCI) changed to MPM3650CGQW-Z (previous Regulator is unavailable for order). 59) U29 (3V3_PER) changed to MPM3650CGQW-Z (previous Regulator is unavailable for order). 60) PSBATT circuit updated and U37 changed to 1.2V LDO. 61) D16 (VBATT) changed to BAS70-05W. 62) TVS diode D19 added and D11 relocated and both changed to SMBJ20CA for inputs: 12V_input_A and 12V_input_B.			GHC, MR, VY			-05 cont.	63) VCC capacitor added to U32/U33/U34/U38/U44. 64) R293 pull-up resistor added to RESET pin in U16. 65) Table of I2C addresses and Power Voltage Ranges added. 66) Variant "A" eliminated. 67) Schematic Sheets Template updated. 68) Block Design updated. 69) R27 and R196 changed to 100R. 70) R98 and R198 set as not fitted in all variants. 71) R235-C211 and R236-C213 Debounce Circuits added to S1 and S2 accordingly. 72) Signal 5VSBIN renamed to 5VSB. 73) Signal 3.3V_MOD renamed to VCC_MOD. 74) Pull-up resistors R228, R229, R230, R231, R232, R233, R234 added to signals PRSNT1, PRSNT, WAKE, PRSNT2, PRSNT3, PRSNT4 and PRSNT5 in PCIe J11			GHC, VY, MR	
B	REV	Description				REV	Description						
	-01	Initial revision				VT							
C	-03	REV03 1) Added 2.5V option for clock source U45 2) Net B64_T0 terminared via 240 Ohm resistor to GND. 3) Nets B64_T1..T3 connected to CPLD 4) Nets SFP#_LOS and SFP#TX_DIS connected to CPLD (# = 1..2) 5) Added 4-pin connector for FAN2 (12V). Added high side switch like option for FAN without control signals. 6) Added net SC_IO8 between CPLD1 and CPLD2 (Bank 3V3_SB) 7) Deleted USB3.0 port (J18) 8) Port USB2.0 replaced to USB3.0 (J8, front panel) 9) Replaced USB HUB USB5537B to CYUSB3324 (U4)						VT, VY					
	-04	REV04: 1) P and N lanes swapped in FMC clock signal pairs B228_CLK0 and B229_CLK0 2) Added additional FAN connector (J35) 3) New control circuit for external beeper 4) Layout and routing improvements -- 10.08.2018: 5) Resistors R130-131, R173-174 replaced from 4.99k to 2k -- 26.03.2019 6) VY: Resistor R65 replaced from 8.06k to 1k (assambly variant "A") 7) VY: Page 21: EEPROM I2C address correction 8) VY: Clock source U6 (100Mhz) polulated (assambly variant "A") -- 20.05.2020 9) VY: PCB: updated company address at silkscreen overlay -- 13.07.2020 10) VY: Replaced ESD protection U11, U20, U49..51 to CPDA10R3V3U-HF (was: ESD3V3U4ULCE6327XTSA1) -- 24.11.2021 11) Added screws on B2B and FMC pages 12) Set Track it pad to not fitted (EOL)						VT, VY					
D													
1		2		3		4							

trenz

electronic

Title:TEBF0808 - Revision history

A4

Number:TEBF0808Default

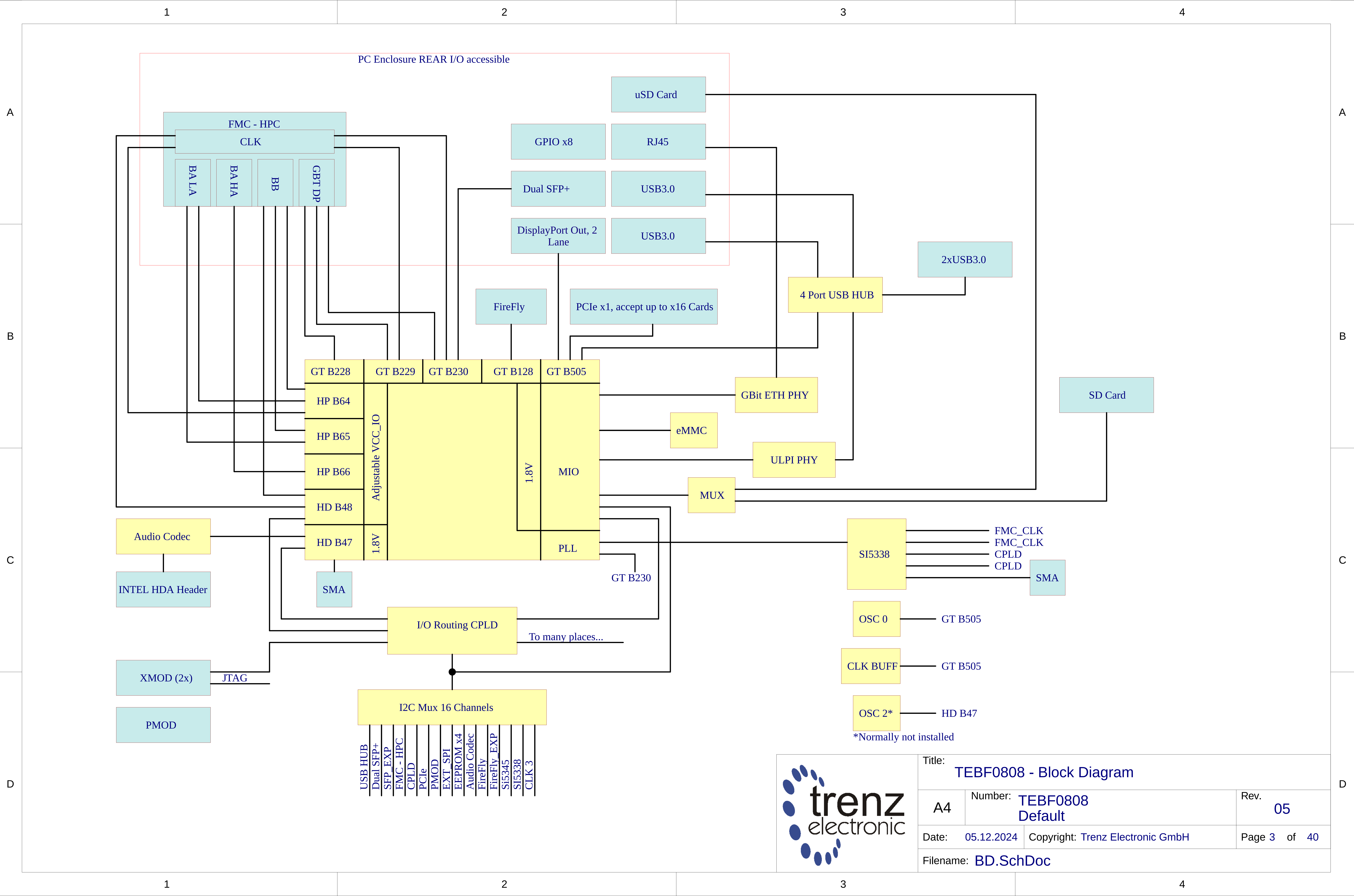
Rev.05

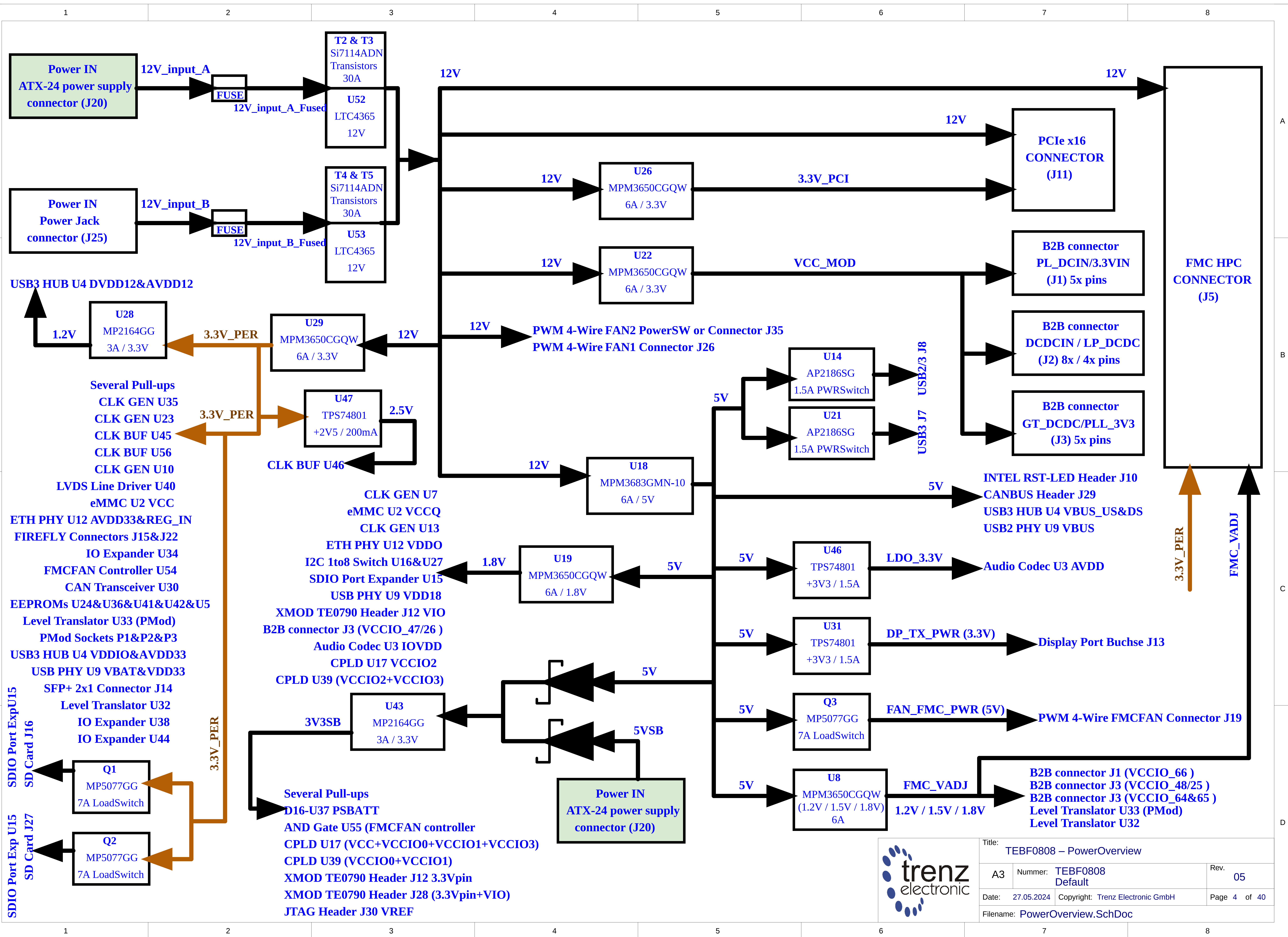
Date:27.05.2024

Copyright: Trenz Electronic GmbH

Page 2 of 40

Filename: Revision_Changes.SchDoc





Supported Voltage Ranges:

Power Rail	Direction	Range	Tolerance	Description	Note
12V_input_A	INPUT	12.0V	+/- 5%	Board Power Input from ATX Connector	See connector J20
12V_input_B	INPUT	12.0V	+/- 5%	Board Power Input from Power Jack	See connector J25
5VSB	INPUT	5.0V	+/- 10%	Alternative input for U43	U43 is the DC-DC converter to generate 3V3SB
12V	OUTPUT	12.0V	+/- 5%	FMC, PCIe, FPGA FAN 1 and 2	Derived from 12V_IN after input protection. Shared with onboard peripherals.
3.3V_PER	OUTPUT	3.3V	+/- 3%	FMC, SD Cards, Firefly, SFP, PMOD	Shared with onboard peripherals.
5V	OUTPUT	5.0V	+/- 3%	USB, FMC_FAN, INTEL J10 Header, CAN	Shared with onboard peripherals.
VCC_MOD	OUTPUT	3.3V	+/- 3%	B2B FPGA module main PWR J1, J2, J3	Fixed Voltage. Do not try any other setting!. Only used for FPGA main PWR.
3.3V_PCI	OUTPUT	3.3V	+/- 3%	PCIe connector 3.3V and 3.3VAUX	Only used for PCIe connector.
FMC_VADJ	OUTPUT	1.2V-1.8V	+/- 3%	FMC VADJ selectable voltage[1.2V,1.5V,1.8V]	Shared with B2B connections to FPGA VCCIO_66, VCCIO_48/25, VCCIO_64&65.
3V3SB	OUTPUT	3.3V	+/- 3%	AutoEN Standby PWR, XMODs, J30 JTAG	Derived from 5V or 5VSB. Shared with onboard peripherals.
DP_TX_PWR	OUTPUT	3.3V	+/- 3%	DP_PWR Display Port connector	Only used for Display Port connector. Derived from 5V.
PSBATT	OUTPUT	3.0V	+/- 3%	FPGA PSBATT	Only used for PSBATT in J2 B2B FPGA connector.
1.8V	OUTPUT	1.8V	+/- 3%	FPGA VCCIO_47/26, XMOD VIO J12	Shared with onboard peripherals.

I2C Addresses:

Device	Bus	Address	Note
U35	MCLK_I2C	0x70	SI5338A Clock Generator
U45	MCLK_I2C	0x55	SI570 Opt. Programmable XO
On Module PLL/EEPROM	PLL_I2C	See Module specs	On Module Clock Generator and MAC address EEPROM
U16	I2C	0x73	Bus switch (U39 as master)
U27	I2C	0x77	Bus switch (U39 as master)
On PCIeCard I2C device	PCIe_I2C	See PCIeCard spec	SMCLK/SMDAT J11
U44	SFP_I2C	0x26	IO expander (SFP)
U5	USBH_I2C	0x51	EEPROM related to U4
On FMCCard I2C device	FMC_I2C	See FMCCard spec	I2C Bus in J5
U54	SC_I2C	0x4C	FMC optional-FAN Controller
U3	A_I2C	0x38	ADAU1761 Audio Codec
J15	FFA_I2C	See FireFly specs	FireFly Connector J15 Config
J22	FFB_I2C	See FireFly specs	FireFly Connector J22 Config
U34	FF_E_I2C	0x24	IO expander (FireFly)
P1	PMOD_I2C	See P1 PMOD spec	PMOD Socket P1
P2	EXT_I2C	See P2 PMOD spec	PMOD Socket P2
U38	MEM_I2C	0x27	IO expander (PCIe-FMC)
U24	MEM_I2C	0x54	24LC128 EEPROM 128Kb
U36	MEM_I2C	0x52	24AA025E48 EEPROM 2Kb
U41	MEM_I2C	0x51	24AA025E48 EEPROM 2Kb
U42	MEM_I2C	0x50	24AA025E48 EEPROM 2Kb



Title:TEBF0808 - I2C Addresses and Supported Voltage

A4

Number:TEBF0808Default

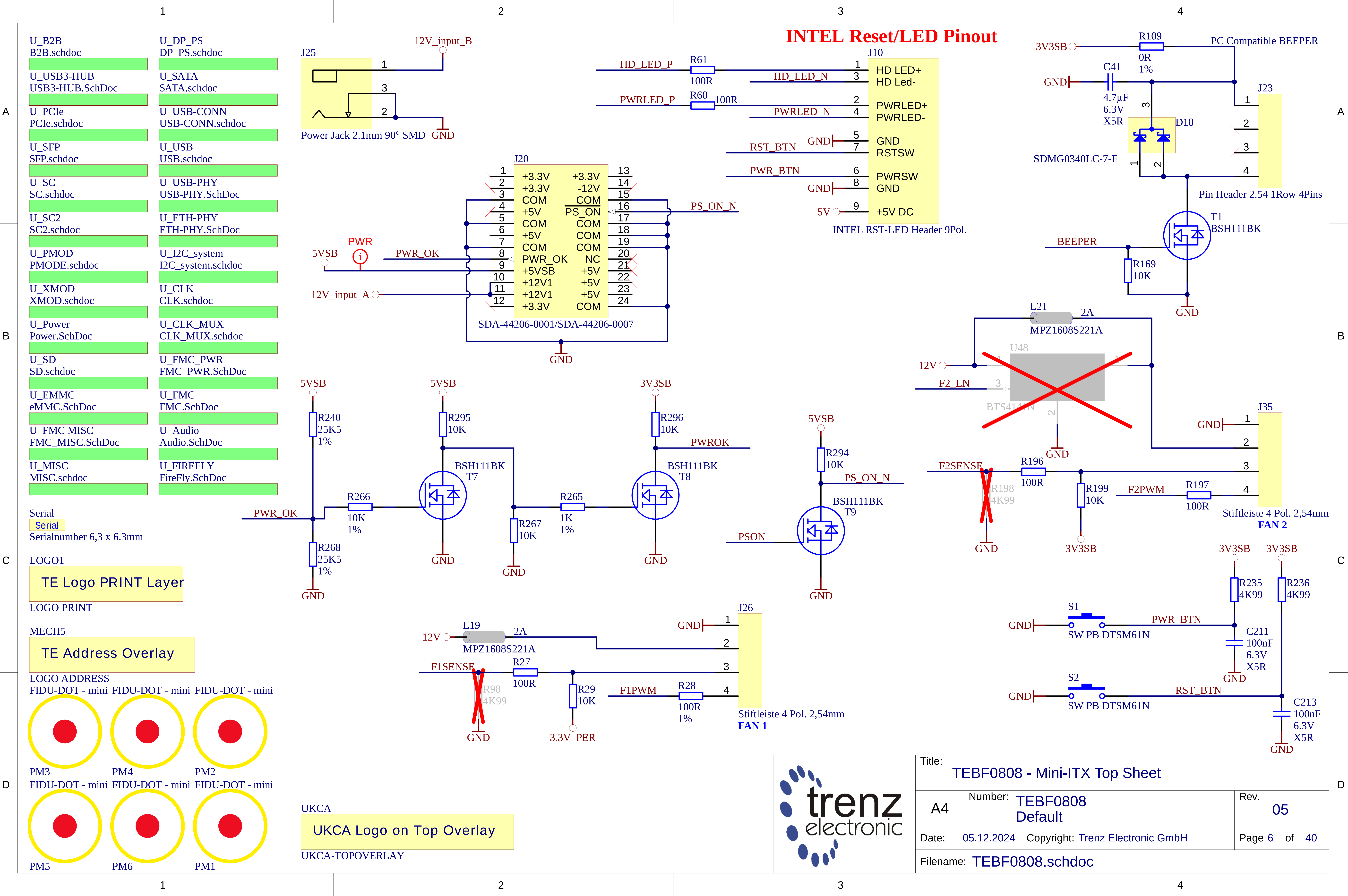
Rev.05

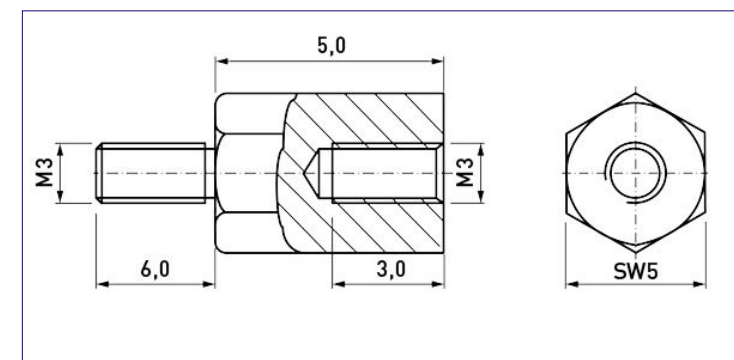
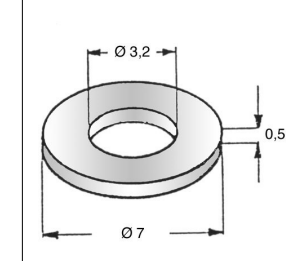
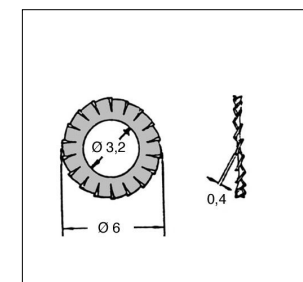
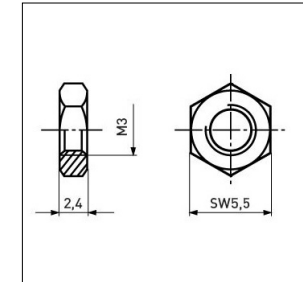
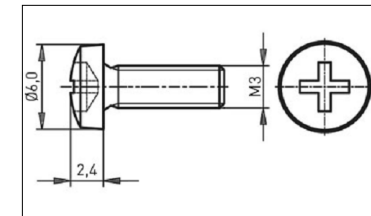
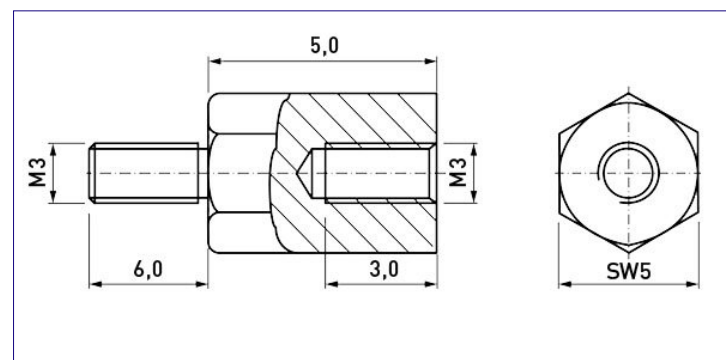
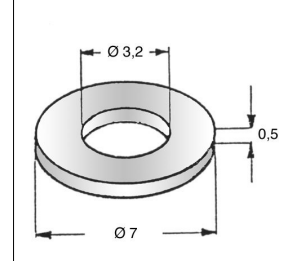
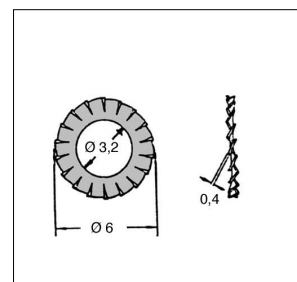
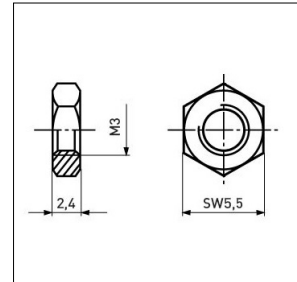
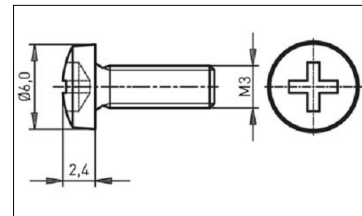
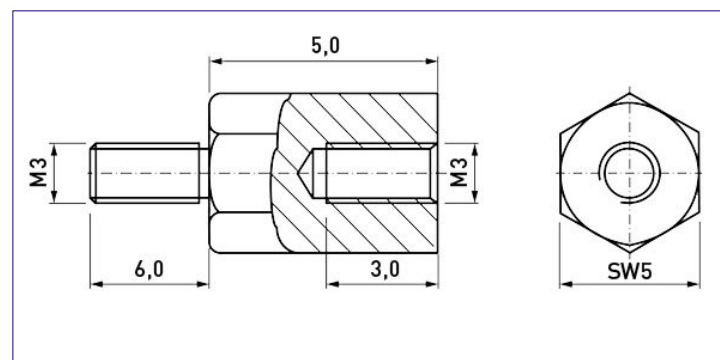
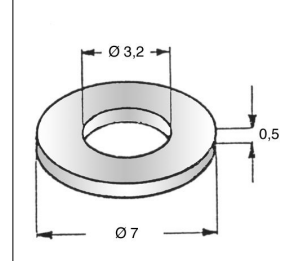
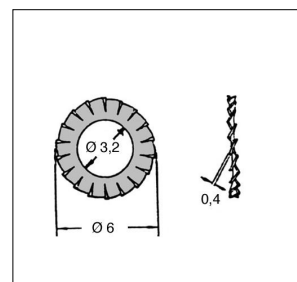
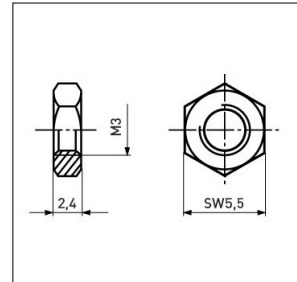
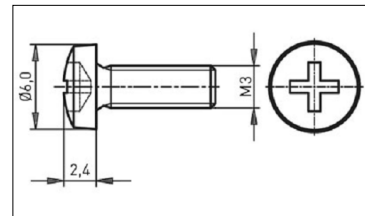
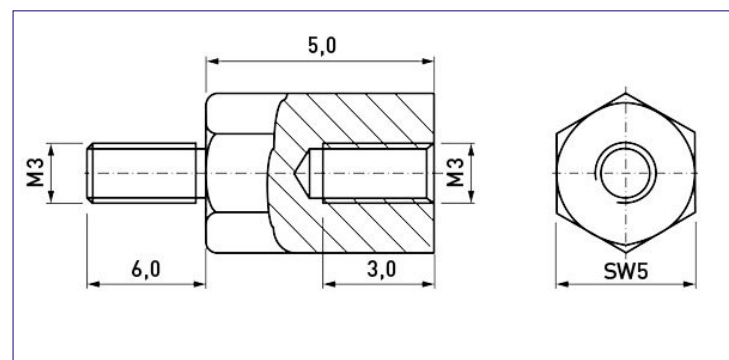
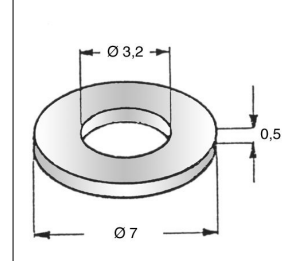
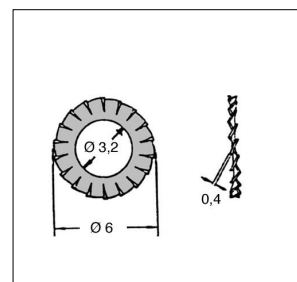
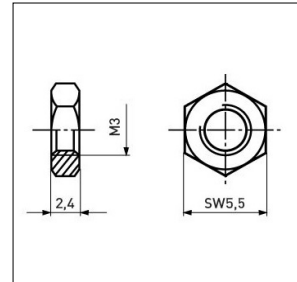
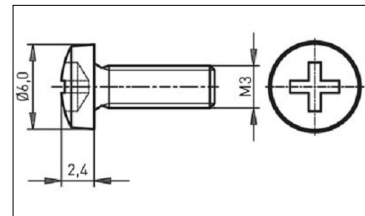
Date:*

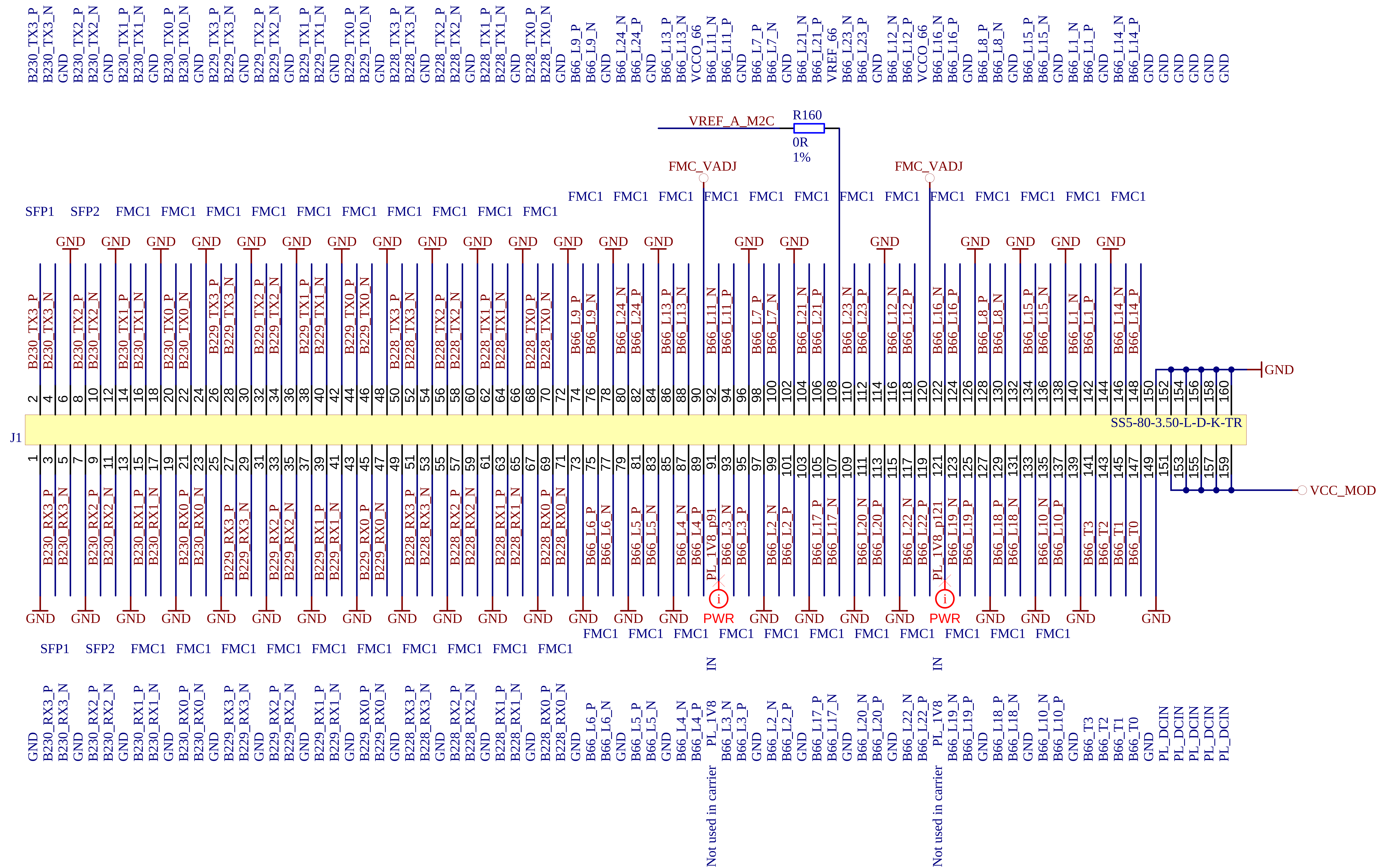
Copyright: Trenz Electronic GmbH / TT

Page 5 of 40

Filename:TEBF0808_I2C_Voltages_Table.schdoc



1		2		3		4					
A	U_J1 J1.schdoc U_J2 J2.schdoc U_J3 J3.schdoc U_J4 J4.schdoc		 Distance Holder M3x5 Male/Female  Washer M3  Serrated Washer M3  Nut M3  Screw M3x4		 Distance Holder M3x5 Male/Female  Washer M3  Serrated Washer M3  Nut M3  Screw M3x4		 Distance Holder M3x5 Male/Female  Washer M3  Serrated Washer M3  Nut M3  Screw M3x4		 Distance Holder M3x5 Male/Female  Washer M3  Serrated Washer M3  Nut M3  Screw M3x4		A
B	GND 1 PAD1 GND 2 PAD2 GND 3 PAD3 GND 4 PAD4 SNAP1 TE_76x52mm_3N_Snap								B		
C									C		
D					Title: TEBF0808 - B2B-connectors A4 Number: TEBF0808 Default Rev. 05 Date: 05.12.2024 Copyright: Trenz Electronic GmbH Page 7 of 40 Filename: B2B.schdoc				D		
1		2		3		4					





A

B

C

D

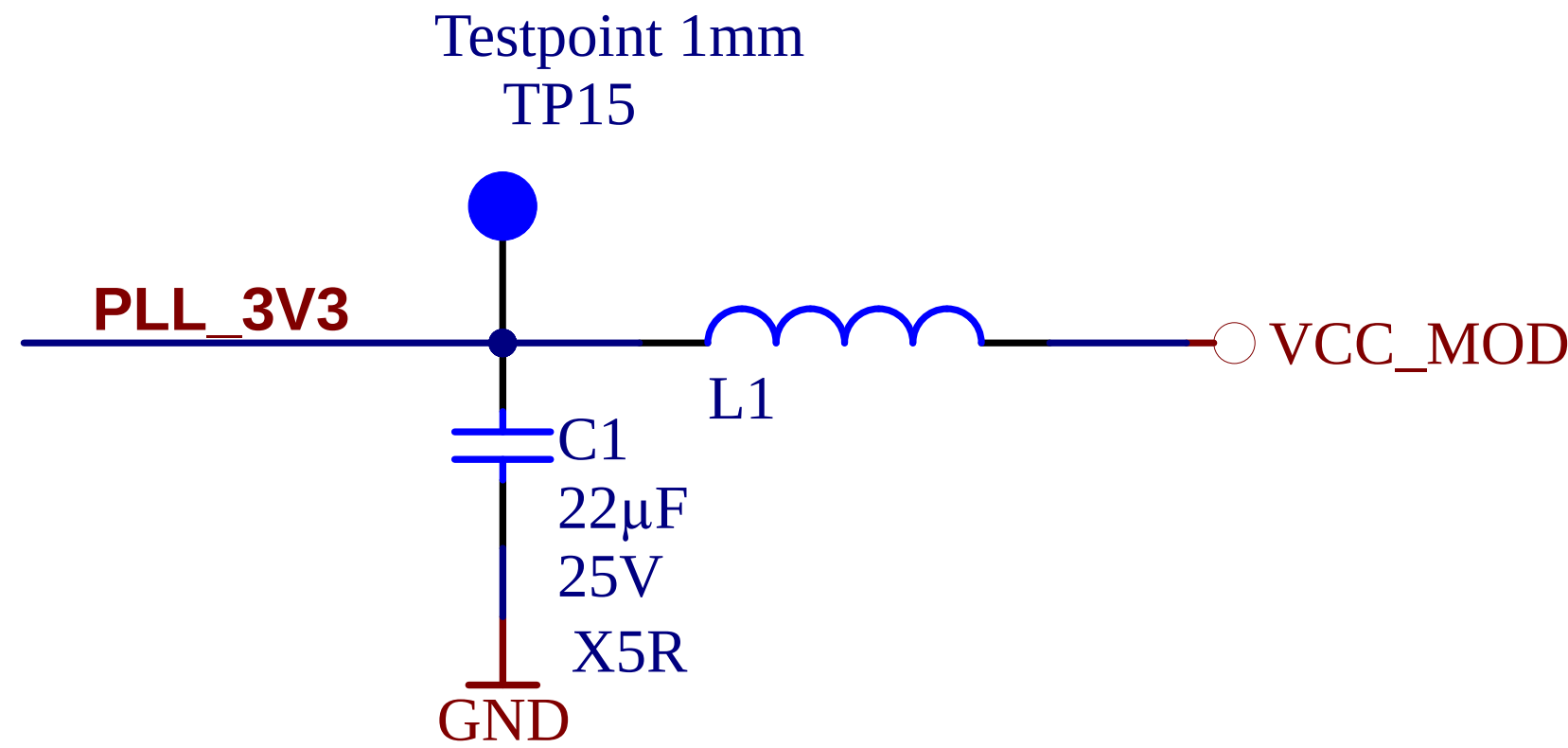
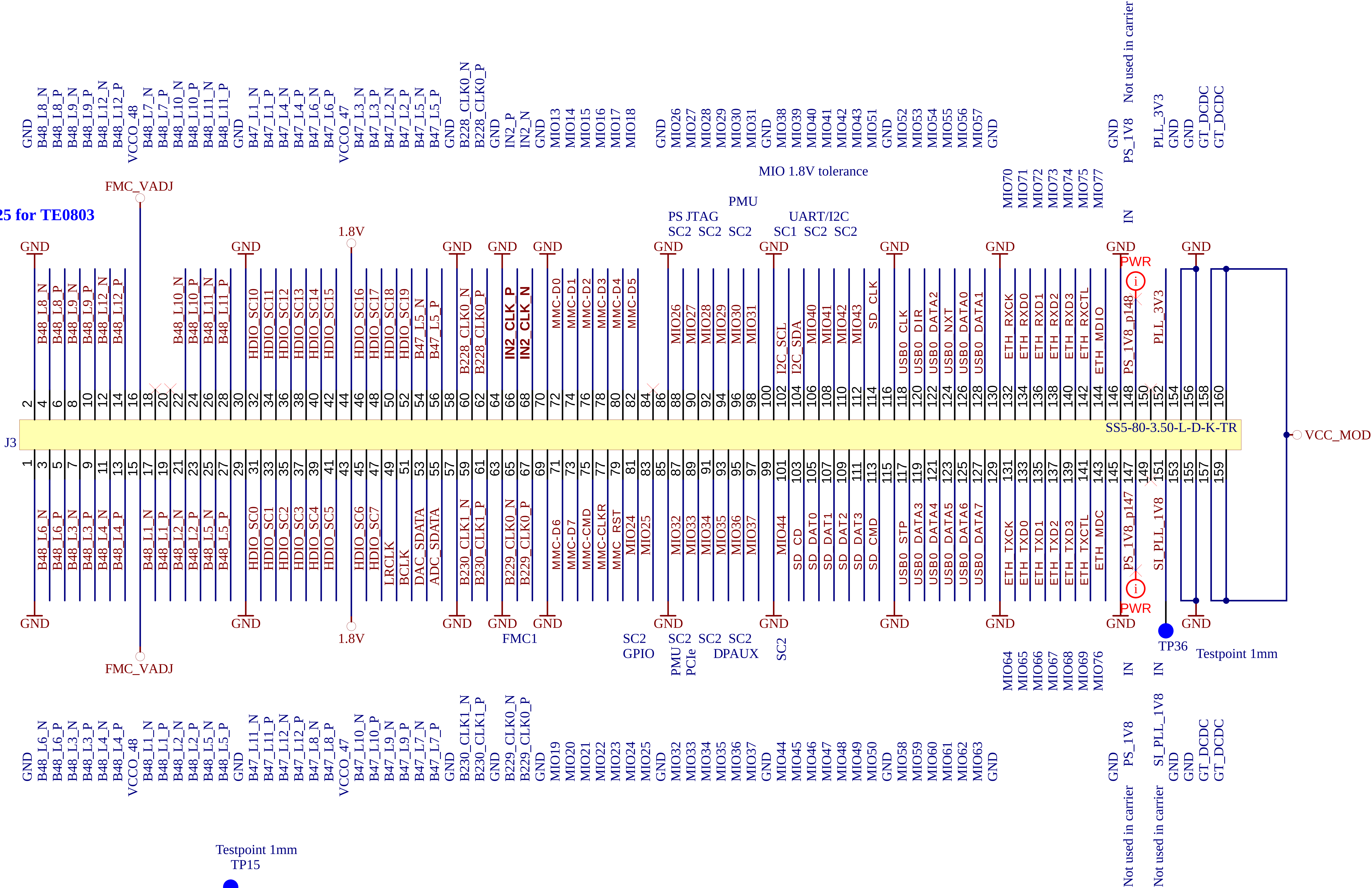
A

B

C

D

B48 --> B25 for TE0803



- Testpoint 1mm
- TP28
- Testpoint 1mm
- TP29
- Testpoint 1mm
- TP30
- Testpoint 1mm
- TP31
- Testpoint 1mm
- TP32

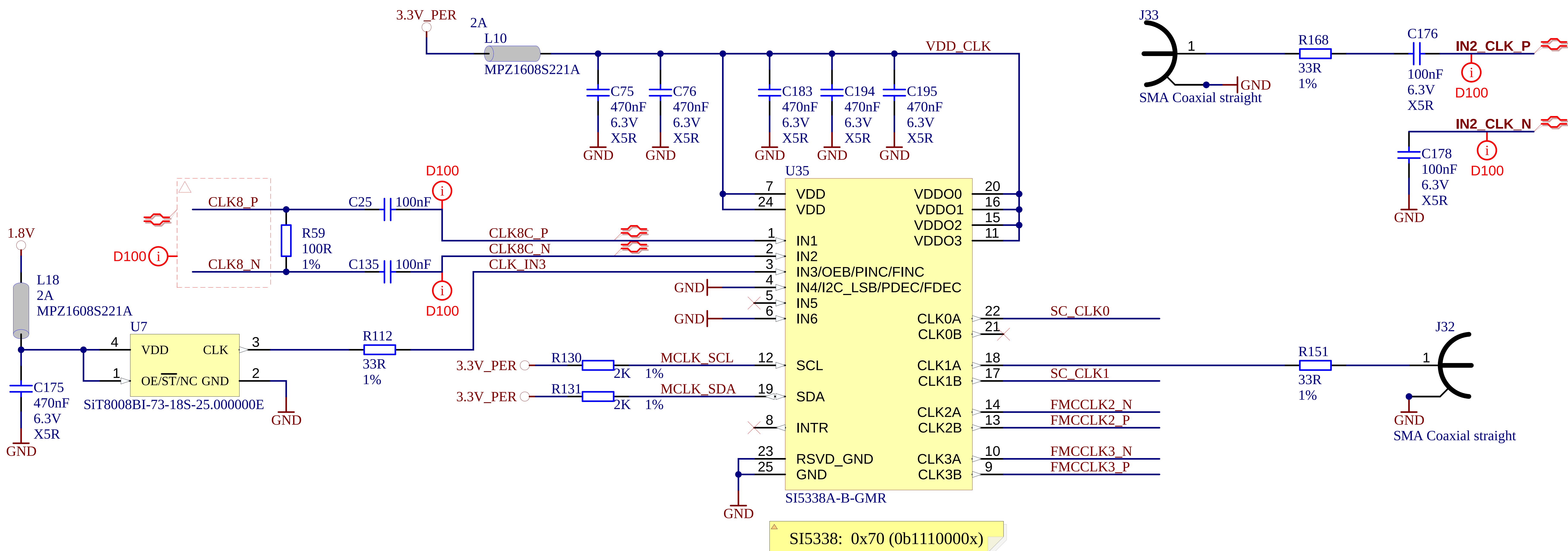


Title:

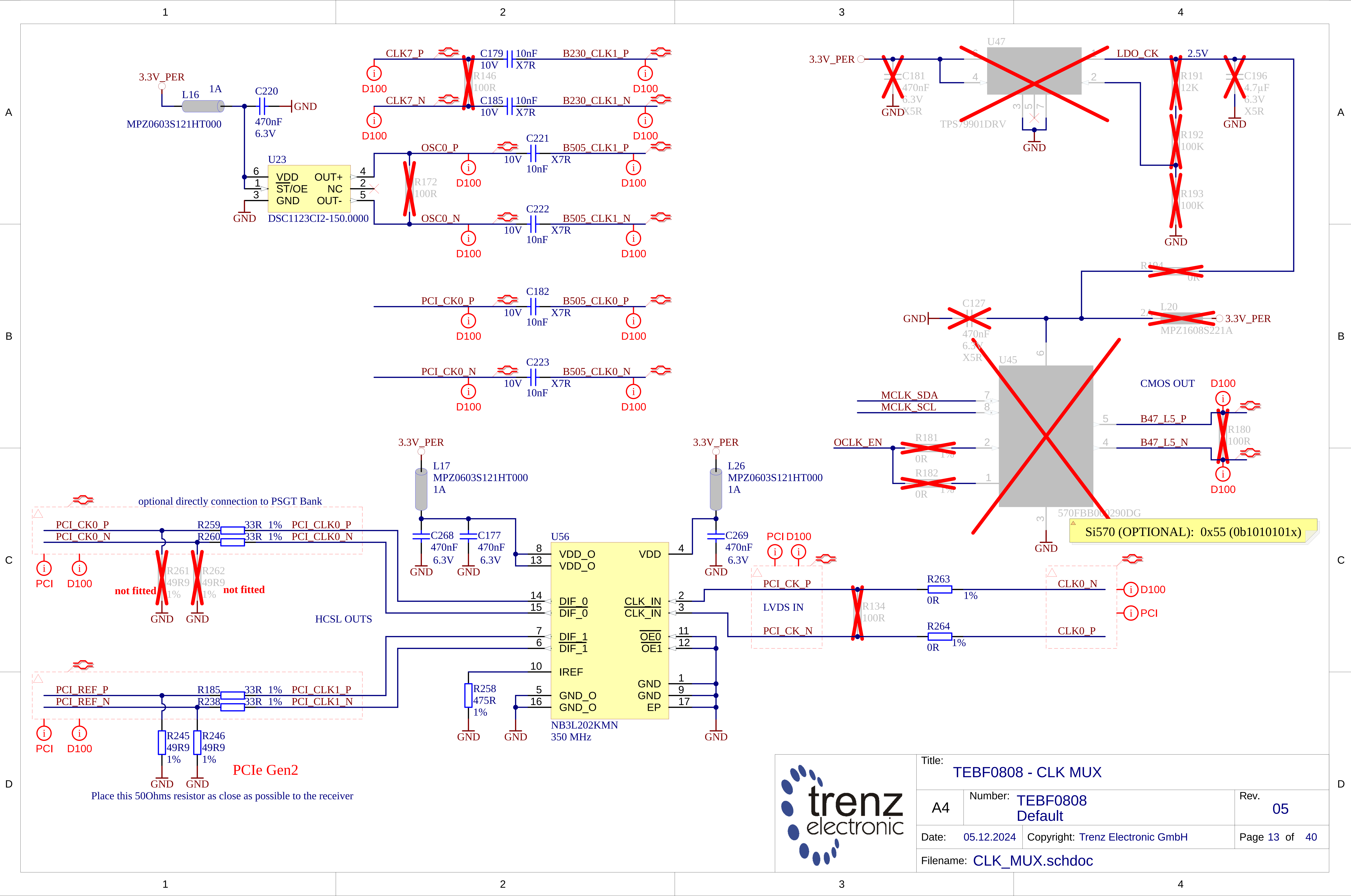
TEBF0808 - B2B-connector J3

A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 10 of 40

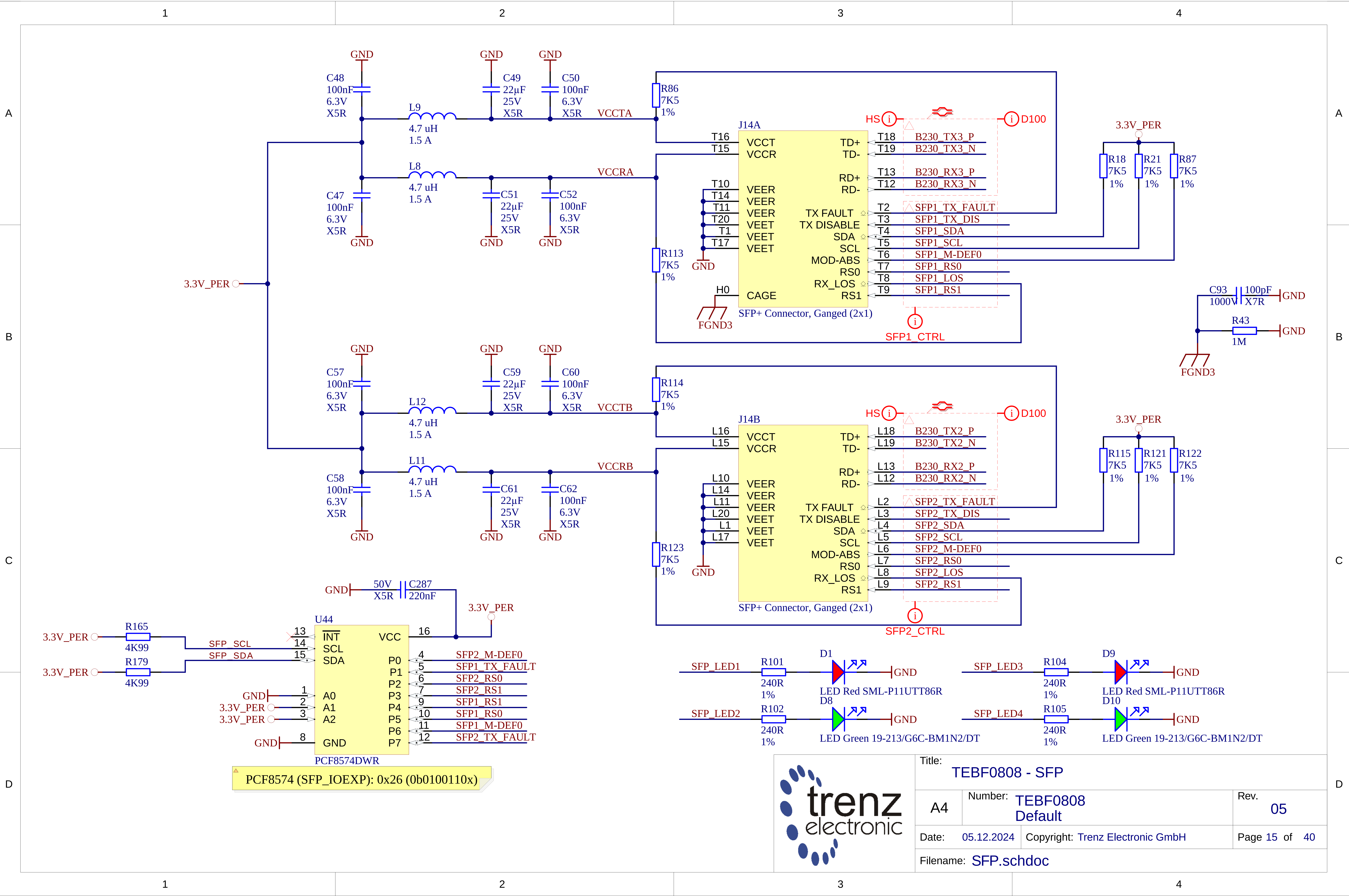
Filename: J3.schdoc



Title: TEBF0808 - CLK			
A4	Number: TEBF0808 Default		Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH		Page 12 of 40
Filename: CLK.schdoc			



Title: TEBF0808 - CLK MUX		
A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 13 of 40
Filename: CLK_MUX.schdoc		

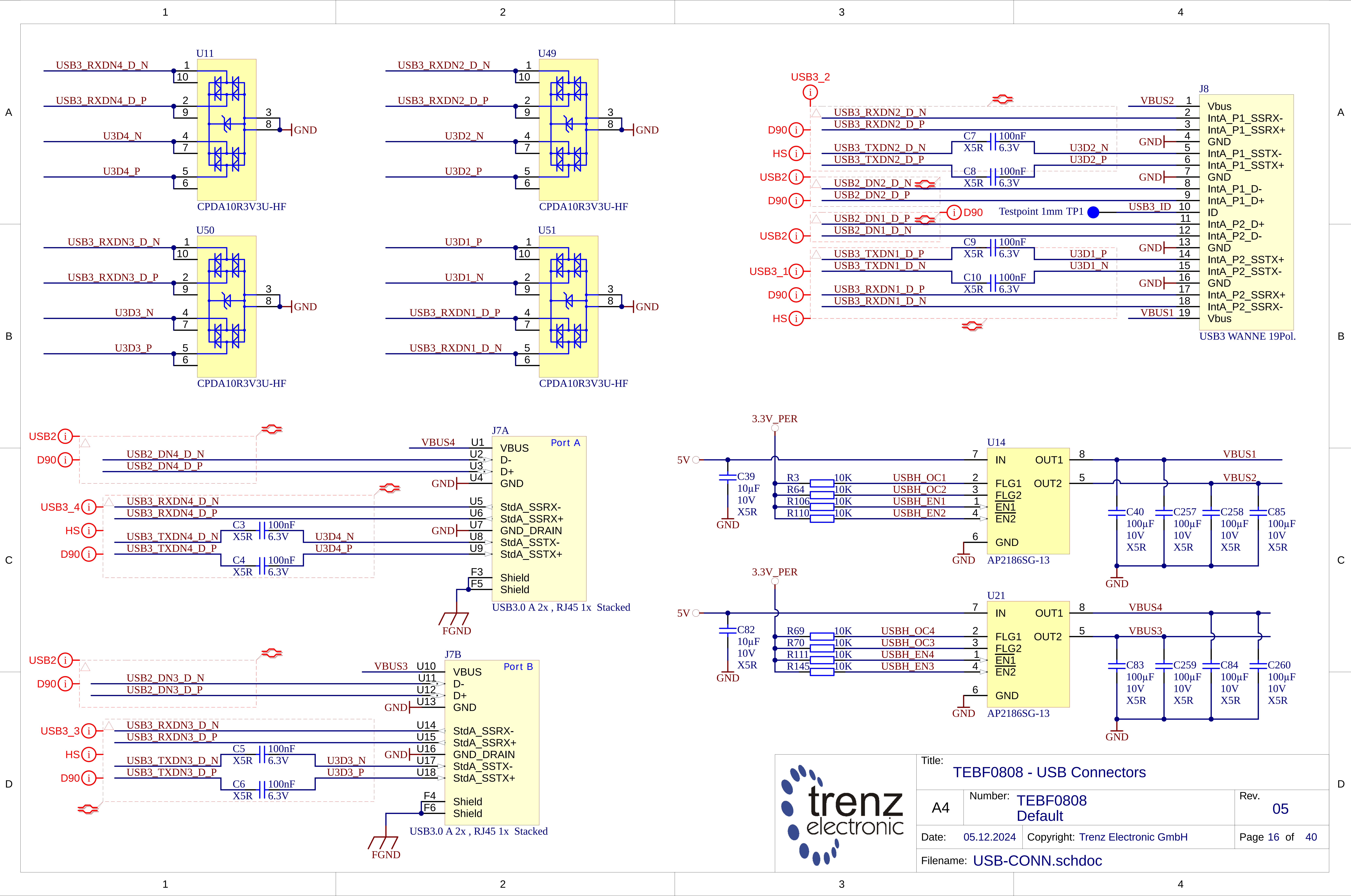


Title:

TEBF0808 - SFP

A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 15 of 40

Filename: SFP.schdoc



Title: TEBF0808 - USB Connectors		
A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 16 of 40
Filename: USB-CONN.schdoc		

A

B

C

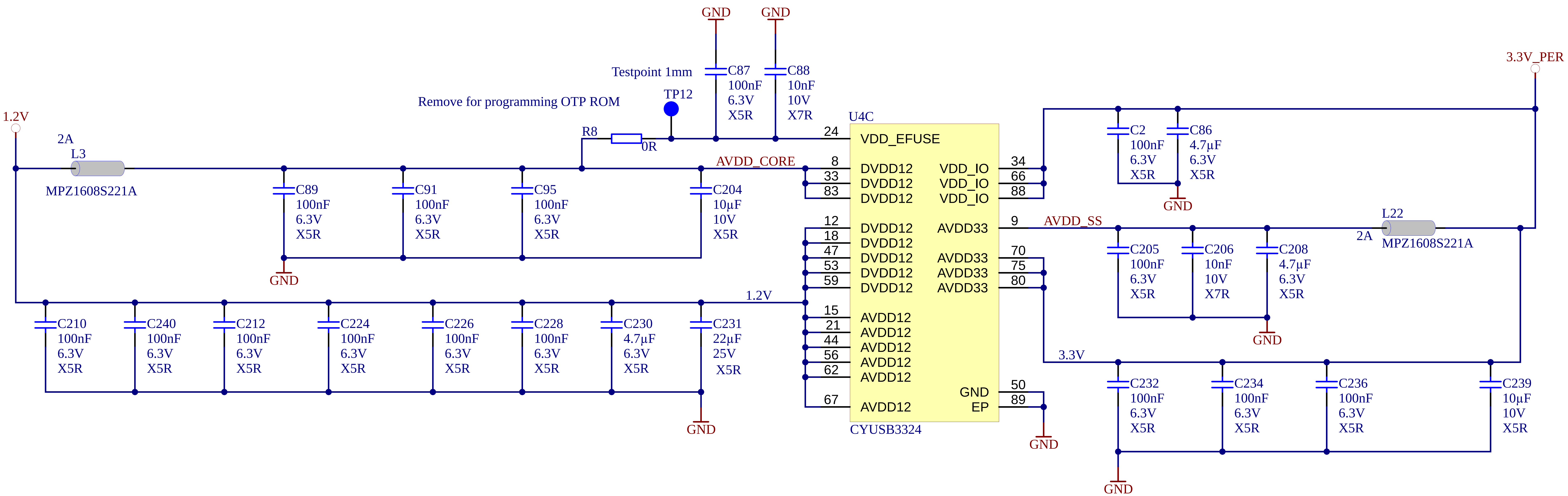
D

A

B

C

D



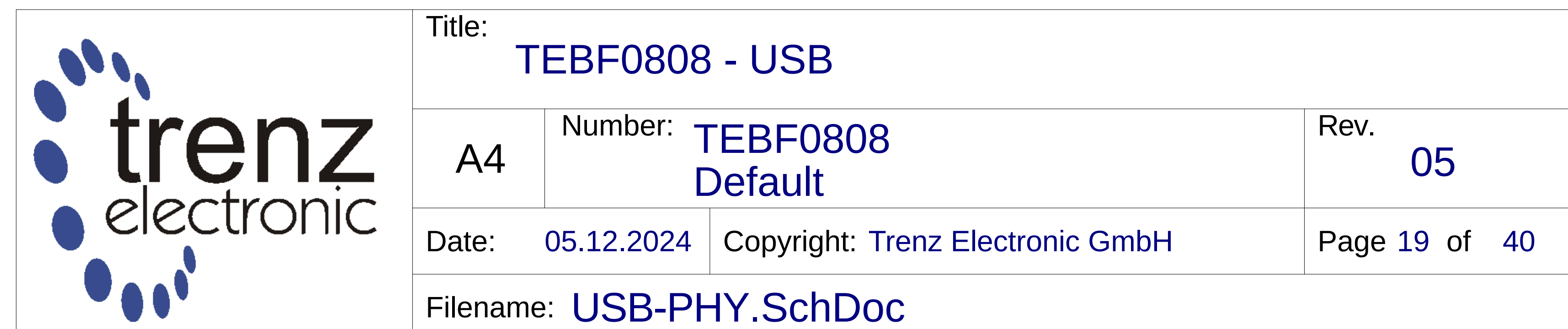
Title: TEBF0808 - USB		
A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 17 of 40
Filename: USB.schdoc		

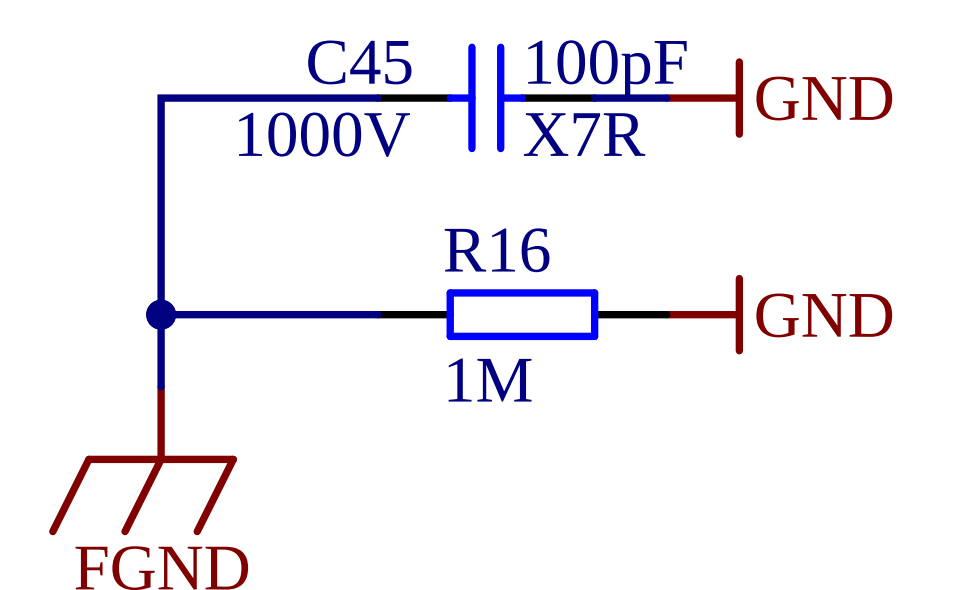
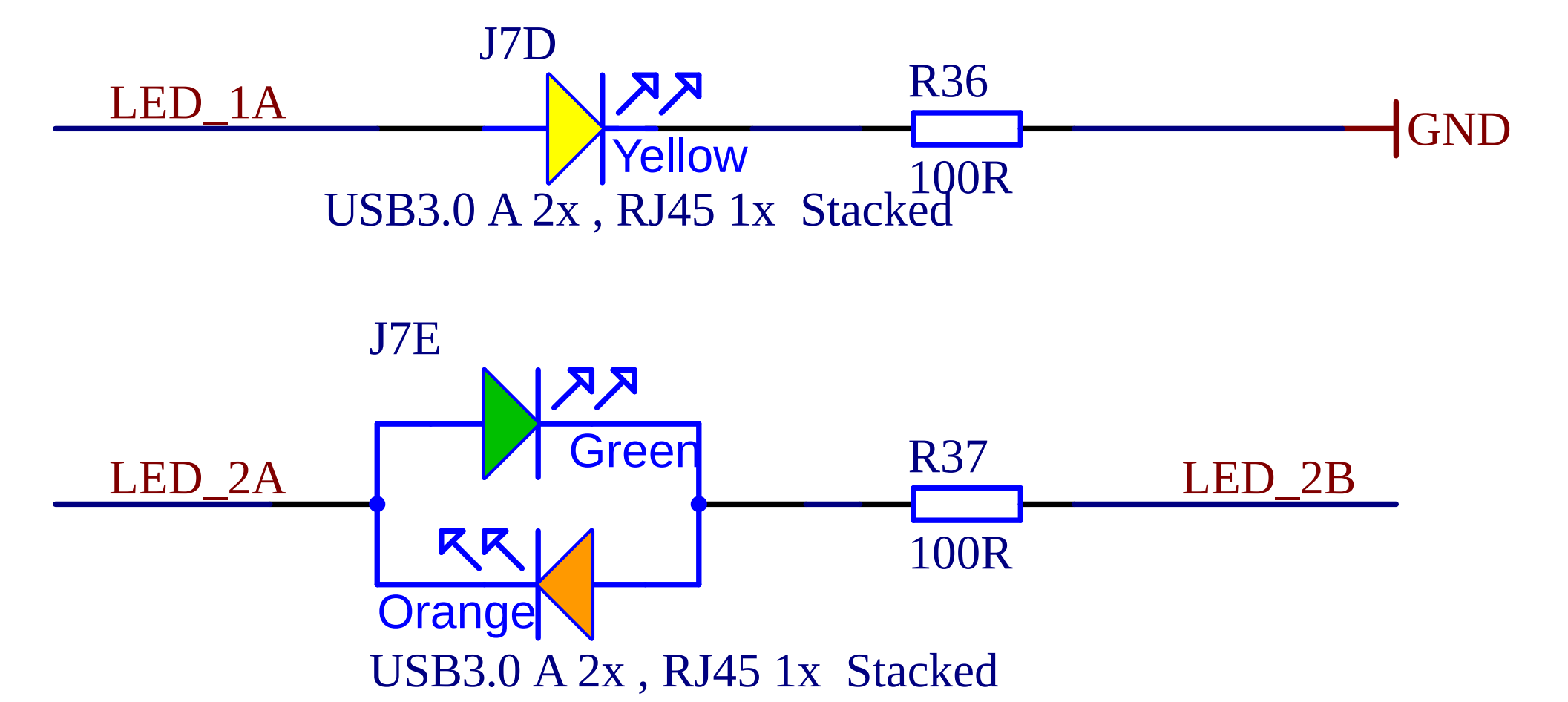
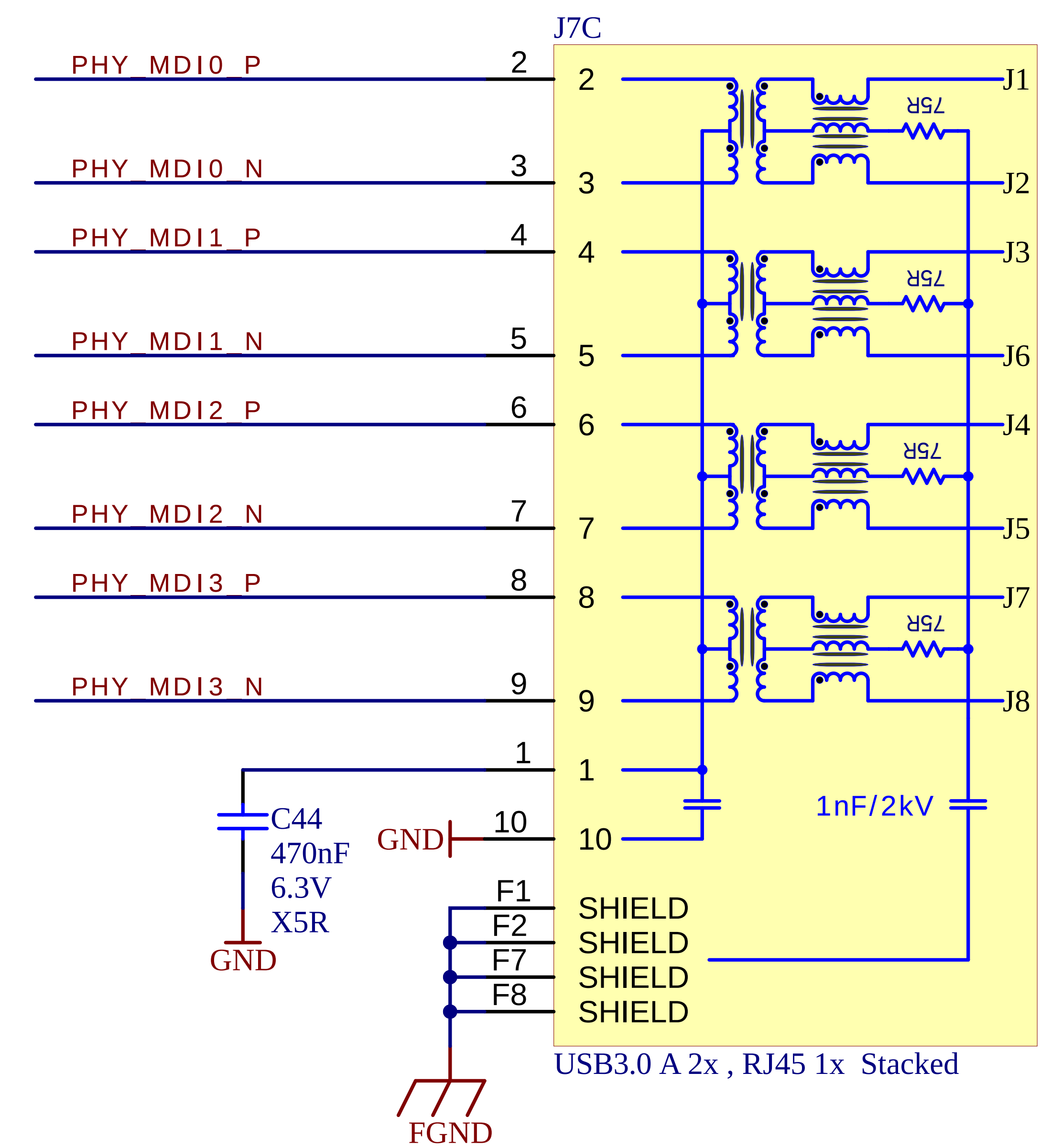
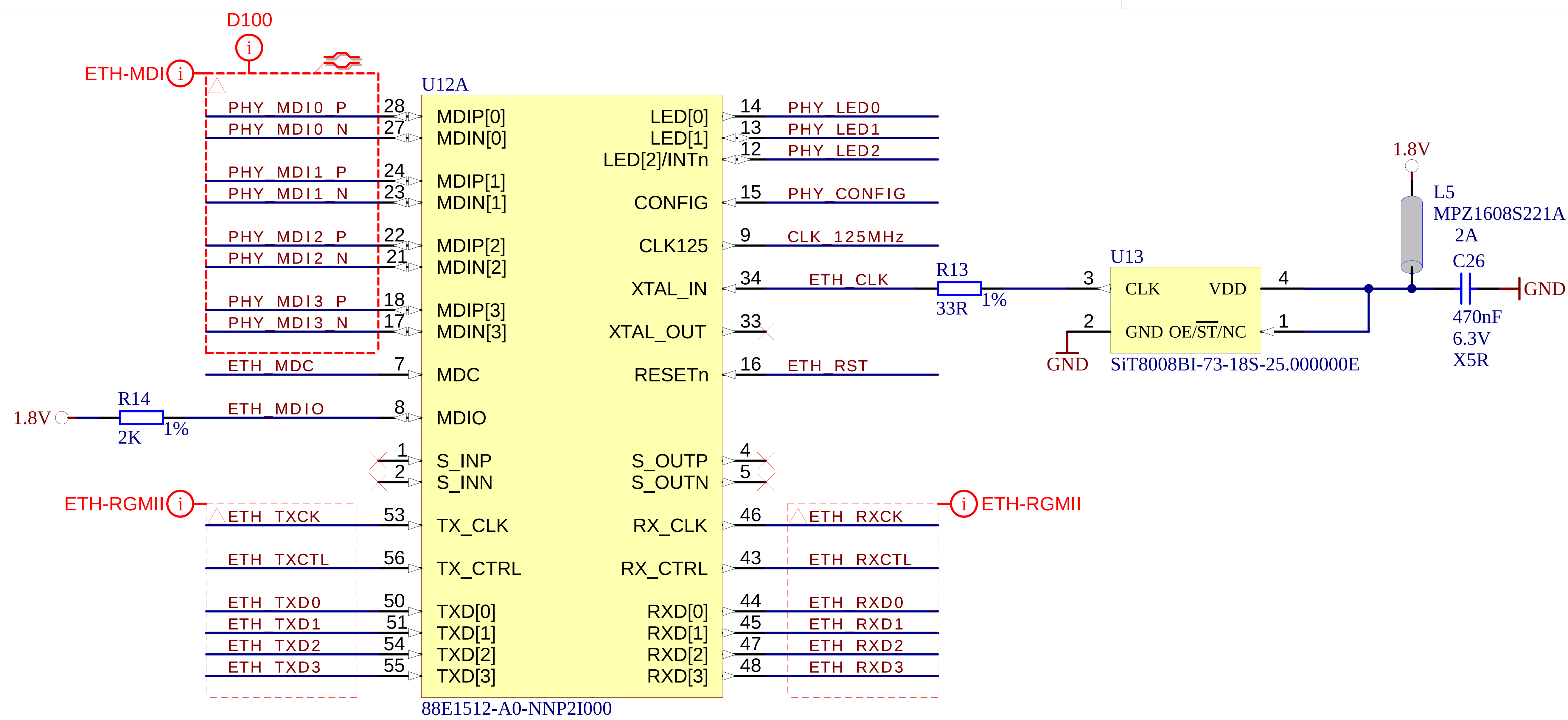
1

2

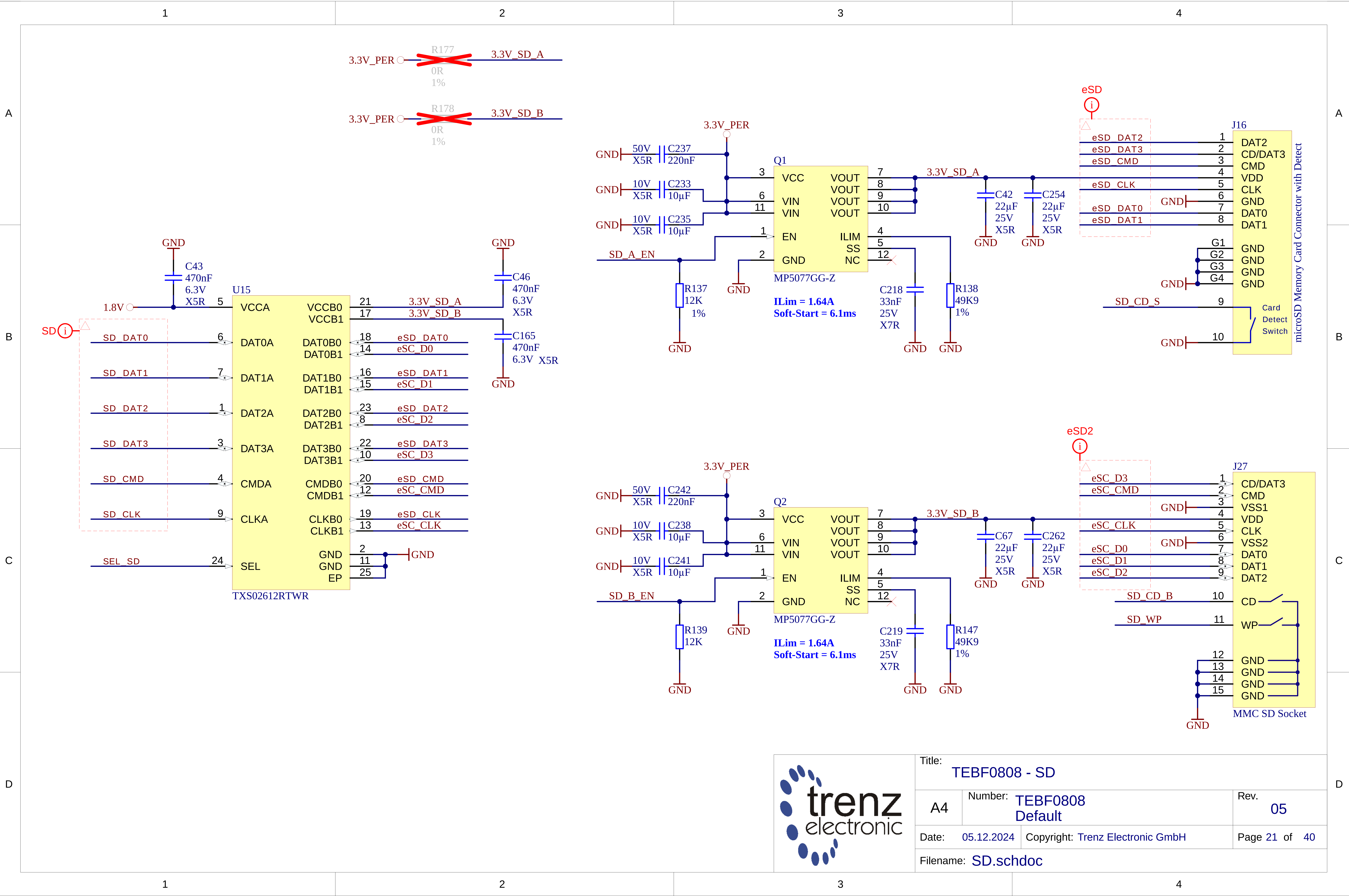
3

4

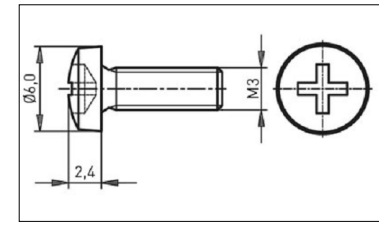
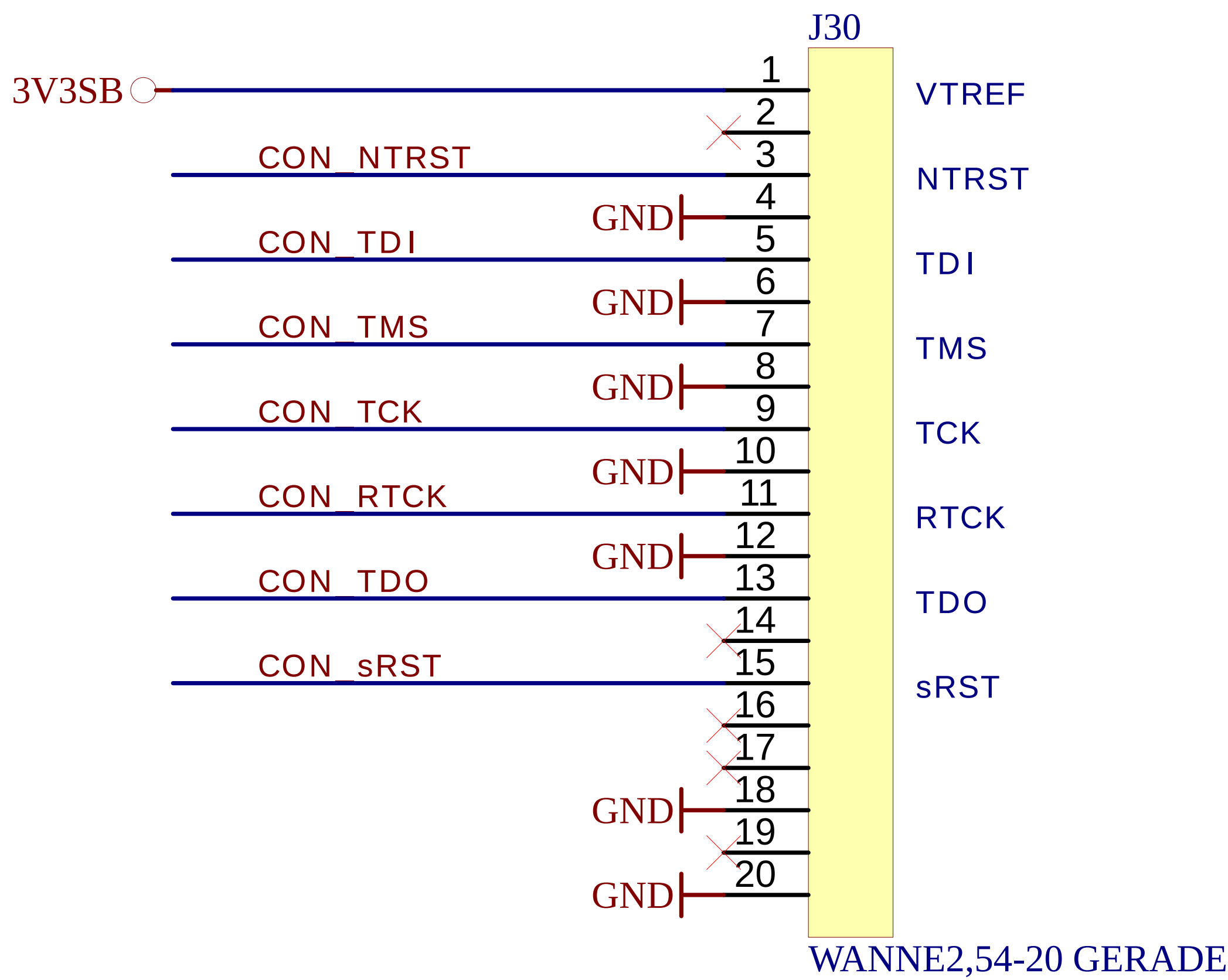
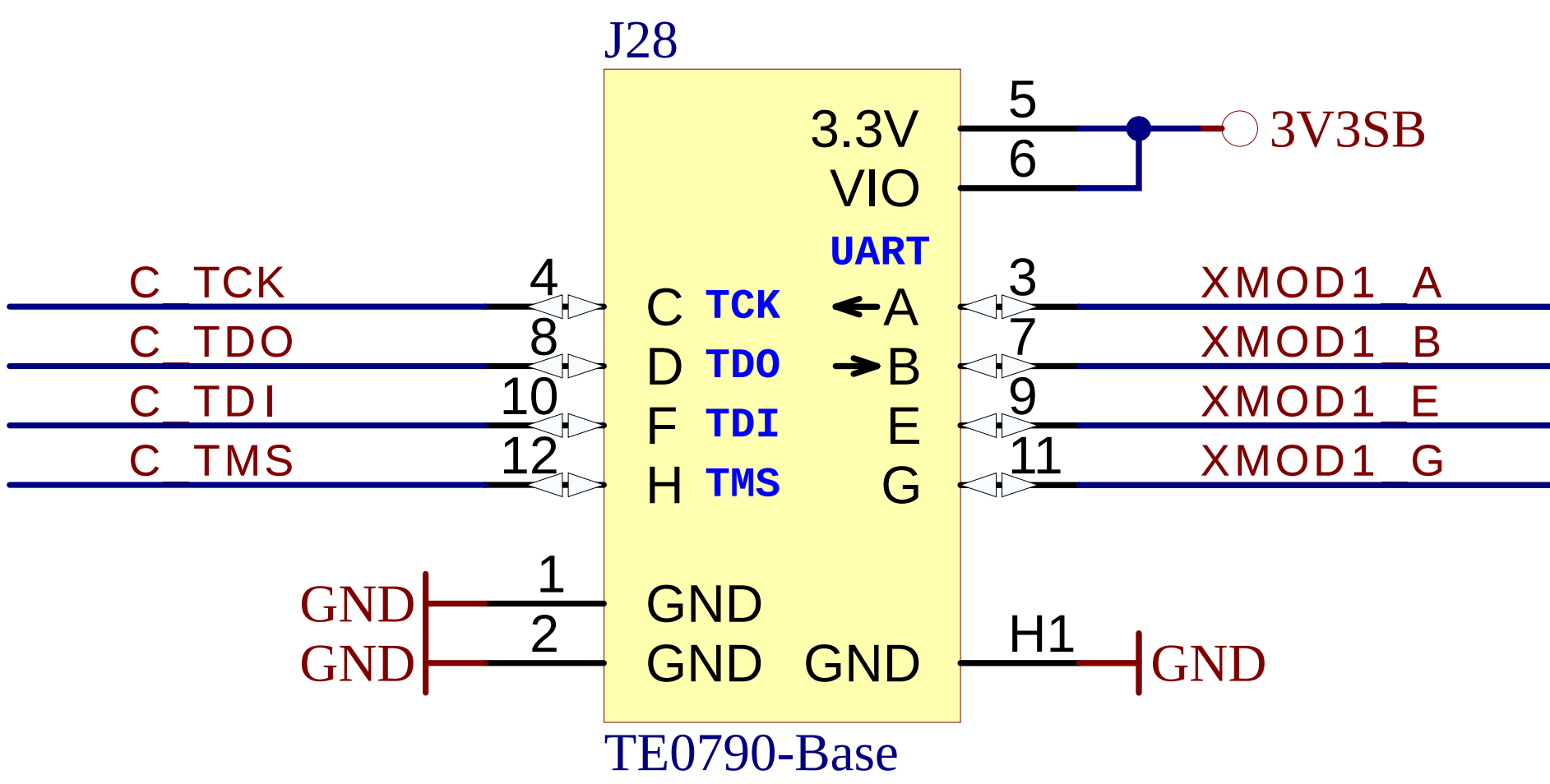
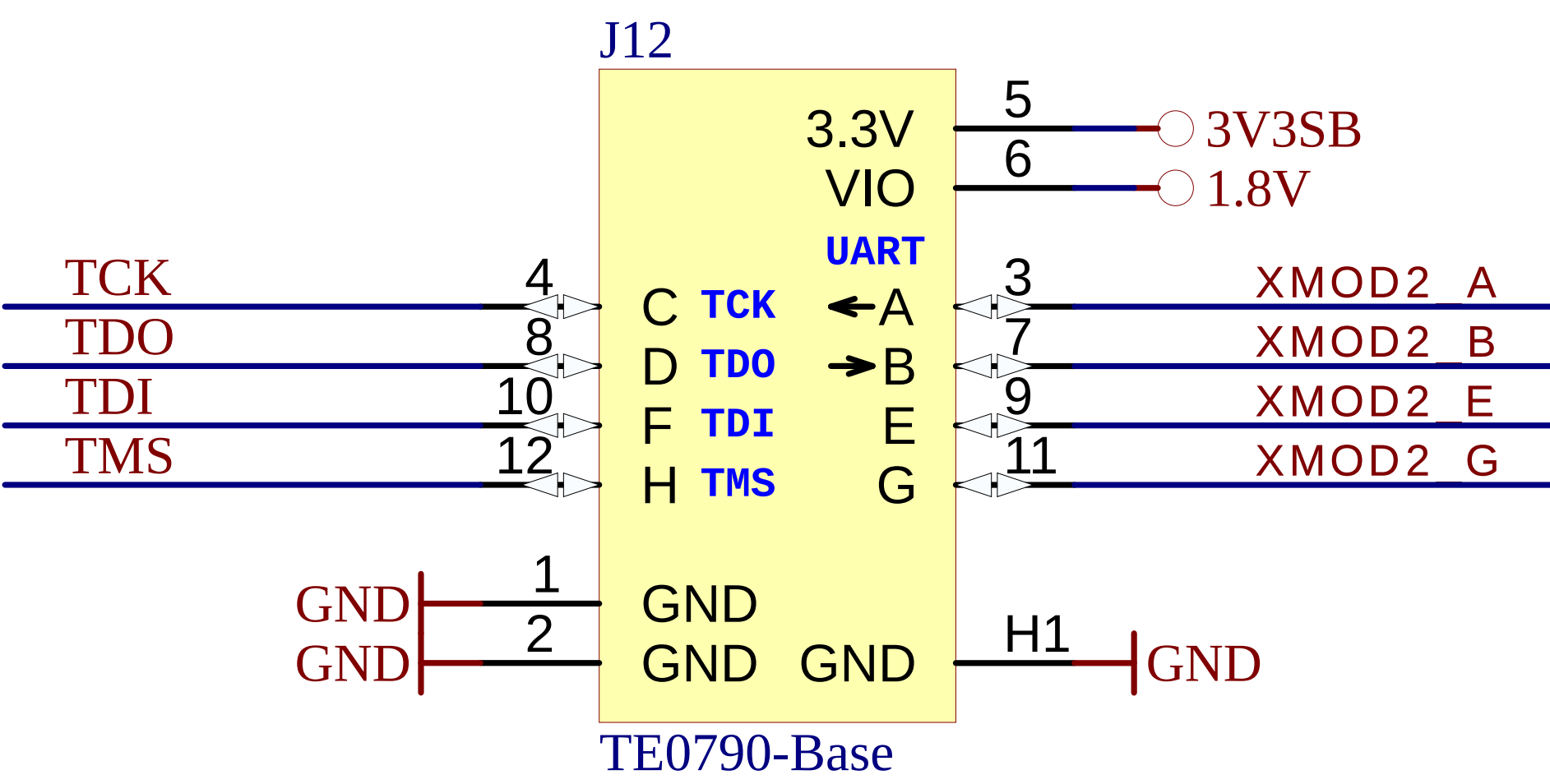




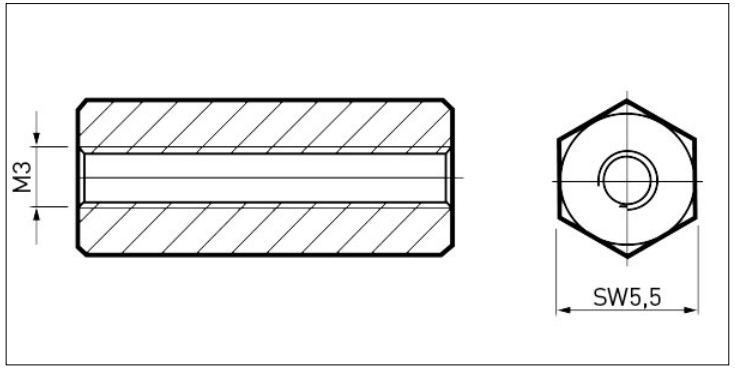
Title: TEBF0808 - ETHERNET			
A4	Number: TEBF0808 Default	Rev. 05	
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 20 of 40	
Filename: ETH-PHY.SchDoc			



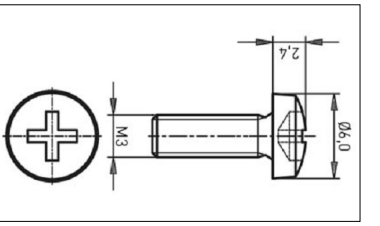
Title: TEBF0808 - SD		
A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 21 of 40
Filename: SD.schdoc		



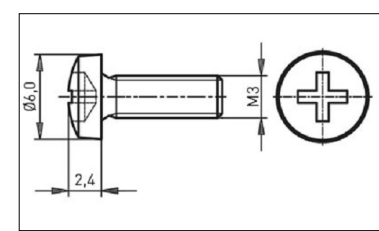
Screw M3x6



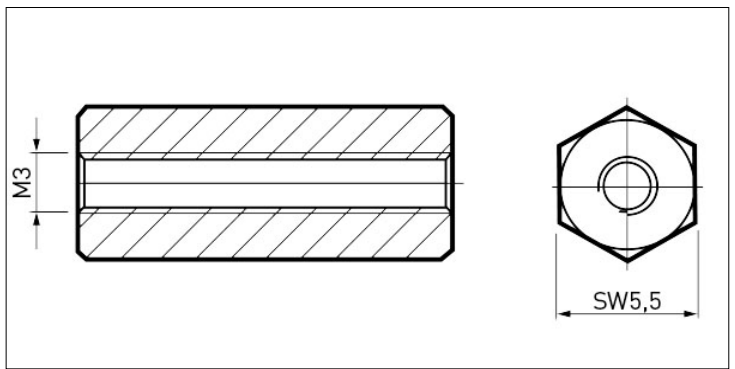
Standoff M3x10 II



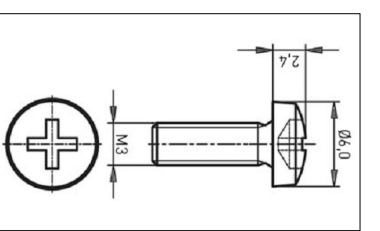
Screw M3x6



Screw M3x6



Standoff M3x10 II



Screw M3x6



Title: TEBF0808 - XMOD JTAG		
A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 22 of 40
Filename: XMOD.schdoc		

1

2

3

4

A

A

B

B

C

C

D

D

FMC_DP D100

B228_TX0_P	C2
B228_TX0_N	C3
B228_TX1_P	A22
B228_TX1_N	A23
B228_TX2_P	A26
B228_TX2_N	A27
B228_TX3_P	A30
B228_TX3_N	A31
B229_TX0_P	A34
B229_TX0_N	A35
B229_TX1_P	A38
B229_TX1_N	A39
B229_TX2_P	B36
B229_TX2_N	B37
B229_TX3_P	B32
B229_TX3_N	B33
B230_TX0_P	B28
B230_TX0_N	B29
B230_TX1_P	B24
B230_TX1_N	B25

J5A

DP0_C2M_P	DP0_M2C_P
DP0_C2M_N	DP0_M2C_N
DP1_C2M_P	DP1_M2C_P
DP1_C2M_N	DP1_M2C_N
DP2_C2M_P	DP2_M2C_P
DP2_C2M_N	DP2_M2C_N
DP3_C2M_P	DP3_M2C_P
DP3_C2M_N	DP3_M2C_N
DP4_C2M_P	DP4_M2C_P
DP4_C2M_N	DP4_M2C_N
DP5_C2M_P	DP5_M2C_P
DP5_C2M_N	DP5_M2C_N
DP6_C2M_P	DP6_M2C_P
DP6_C2M_N	DP6_M2C_N
DP7_C2M_P	DP7_M2C_P
DP7_C2M_N	DP7_M2C_N
DP8_C2M_P	DP8_M2C_P
DP8_C2M_N	DP8_M2C_N
DP9_C2M_P	DP9_M2C_P
DP9_C2M_N	DP9_M2C_N

FMC_DP D100

B228_RX0_P	C6
B228_RX0_N	C7
B228_RX1_P	A2
B228_RX1_N	A3
B228_RX2_P	A6
B228_RX2_N	A7
B228_RX3_P	A10
B228_RX3_N	A11
B229_RX0_P	A14
B229_RX0_N	A15
B229_RX1_P	A18
B229_RX1_N	A19
B229_RX2_P	B16
B229_RX2_N	B17
B229_RX3_P	B12
B229_RX3_N	B13
B230_RX0_P	B8
B230_RX0_N	B9
B230_RX1_P	B4
B230_RX1_N	B5

ASP-134486-01, CC-HPC-10

LA D100

LA D100

CLK1
CLK1
CLK1
CLK1

B64_L12_P	G6
B64_L12_N	G7
B64_L11_P	D8
B64_L11_N	D9
B64_L7_N	H7
B64_L7_P	H8
B64_L8_P	G9
B64_L8_N	G10
B64_L2_P	H10
B64_L2_N	H11
B64_L3_P	D11
B64_L3_N	D12
B64_L1_P	C10
B64_L1_N	C11
B64_L9_P	H13
B64_L9_N	H14
B64_L4_N	G12
B64_L4_P	G13
B64_L6_P	D14
B64_L6_N	D15
B64_L5_N	C14
B64_L5_P	C15
B64_L10_P	H16
B64_L10_N	H17
B64_L16_P	G15
B64_L16_N	G16
B64_L18_N	D17
B64_L18_P	D18
B64_L17_N	C18
B64_L17_P	C19
B64_L15_N	H19
B64_L15_P	H20
B64_L19_P	G18
B64_L19_N	G19
B65_L13_P	D20
B65_L13_N	D21
B65_L12_P	C22
B65_L12_N	C23

J5B Bank A

LA00_P_CC	LA19_P
LA00_N_CC	LA19_N
LA01_P_CC	LA20_P
LA01_N_CC	LA20_N
LA02_P	LA21_P
LA02_N	LA21_N
LA03_P	LA22_P
LA03_N	LA22_N
LA04_P	LA23_P
LA04_N	LA23_N
LA05_P	LA24_P
LA05_N	LA24_N
LA06_P	LA25_P
LA06_N	LA25_N
LA07_P	LA26_P
LA07_N	LA26_N
LA08_P	LA27_P
LA08_N	LA27_N
LA09_P	LA28_P
LA09_N	LA28_N
LA10_P	LA29_P
LA10_N	LA29_N
LA11_P	LA30_P
LA11_N	LA30_N
LA12_P	LA31_P
LA12_N	LA31_N
LA13_P	LA32_P
LA13_N	LA32_N
LA14_P	LA33_P
LA14_N	LA33_N
LA15_P	
LA15_N	
LA16_P	
LA16_N	
LA17_P_CC	
LA17_N_CC	
LA18_P_CC	
LA18_N_CC	

ASP-134486-01, CC-HPC-10

HA D100

B66_L11_P	F4
B66_L11_N	F5
B66_L13_P	E2
B66_L13_N	E3
B66_L5_P	K7
B66_L5_N	K8
B66_L6_P	J6
B66_L6_N	J7
B66_L7_P	F7
B66_L7_N	F8
B66_L9_P	E6
B66_L9_N	E7
B66_L3_N	K10
B66_L3_P	K11
B66_L4_N	J9
B66_L4_P	J10
B66_L23_N	F10
B66_L23_P	F11
B66_L21_N	E9
B66_L21_P	E10
B66_L17_P	K13
B66_L17_N	K14
B66_L2_N	J12
B66_L2_P	J13
B66_L16_N	F13
B66_L16_P	F14

J5C Bank A

HA00_P_CC	HA13_P
HA00_N_CC	HA13_N
HA01_P_CC	HA14_P
HA01_N_CC	HA14_N
HA02_P	HA15_P
HA02_N	HA15_N
HA03_P	HA16_P
HA03_N	HA16_N
HA04_P	HA17_P_CC
HA04_N	HA17_N_CC
HA05_P	HA18_P
HA05_N	HA18_N
HA06_P	HA19_P
HA06_N	HA19_N
HA07_P	HA20_P
HA07_N	HA20_N
HA08_P	HA21_P
HA08_N	HA21_N
HA09_P	HA22_P
HA09_N	HA22_N
HA10_P	HA23_P
HA10_N	HA23_N
HA11_P	
HA11_N	
HA12_P	
HA12_N	

HB D100

B64_L13_P	K25
B64_L13_N	K26
B64_L23_P	J24
B64_L23_N	J25
B64_L22_N	F22
B64_L22_P	F23
B64_L20_P	E21
B64_L20_N	E22
B64_L24_P	F25
B64_L24_N	F26
B64_L21_N	E24
B64_L21_P	E25
B65_L11_P	K28
B65_L11_N	K29
B65_L21_N	J27
B65_L21_P	J28
B65_L20_P	F28
B65_L20_N	F29
B65_L23_P	E27
B65_L23_N	E28
B65_L24_N	K31
B65_L24_P	K32
B65_L22_N	J30
B65_L22_P	J31
B48_L1_N	F31
B48_L1_P	F32

J5D Bank B

HB00_P_CC	HB13_P
HB00_N_CC	HB13_N
HB01_P	HB14_P
HB01_N	HB14_N
HB02_P	HB15_P
HB02_N	HB15_N
HB03_P	HB16_P
HB03_N	HB16_N
HB04_P	HB17_P_CC
HB04_N	HB17_N_CC
HB05_P	HB18_P
HB05_N	HB18_N
HB06_P_CC	HB19_P
HB06_N_CC	HB19_N
HB07_P	HB20_P
HB07_N	HB20_N
HB08_P	HB21_P
HB08_N	HB21_N
HB09_P	
HB09_N	
HB10_P	
HB10_N	
HB11_P	
HB11_N	
HB12_P	
HB12_N	

ASP-134486-01, CC-HPC-10



Title: TEBF0808 - FMC		
A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 23 of 40
Filename: FMC.SchDoc		

1

2

3

4

A

B

C

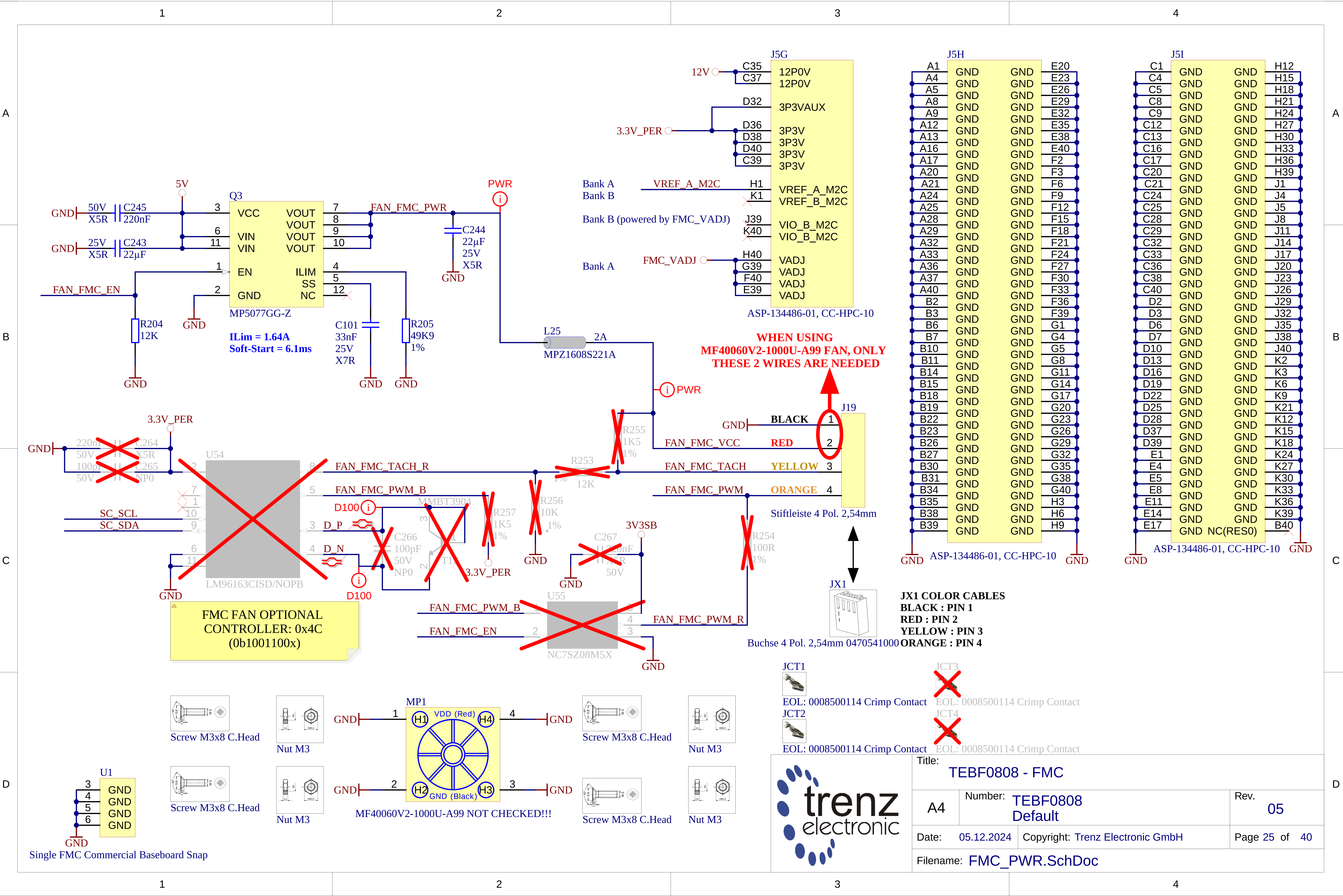
D

A

B

C

D



Title: TEBF0808 - FMC		
A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 25 of 40
Filename: FMC_PWR.SchDoc		

A

B

C

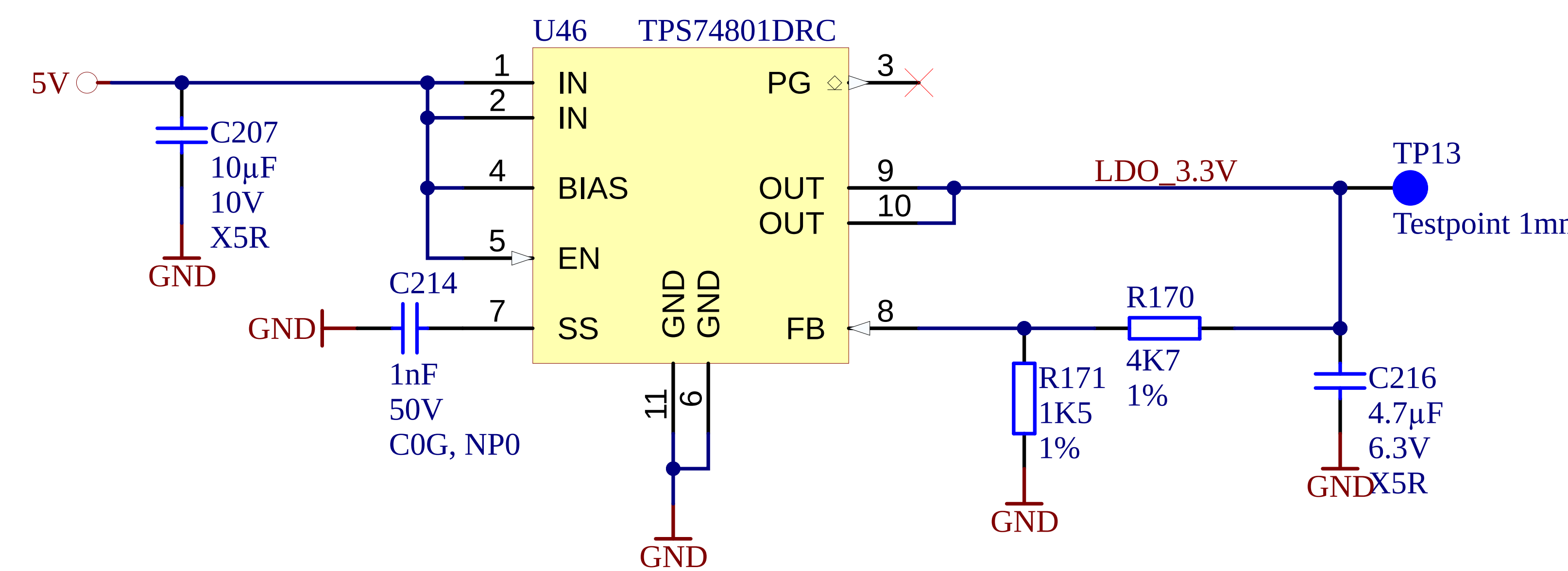
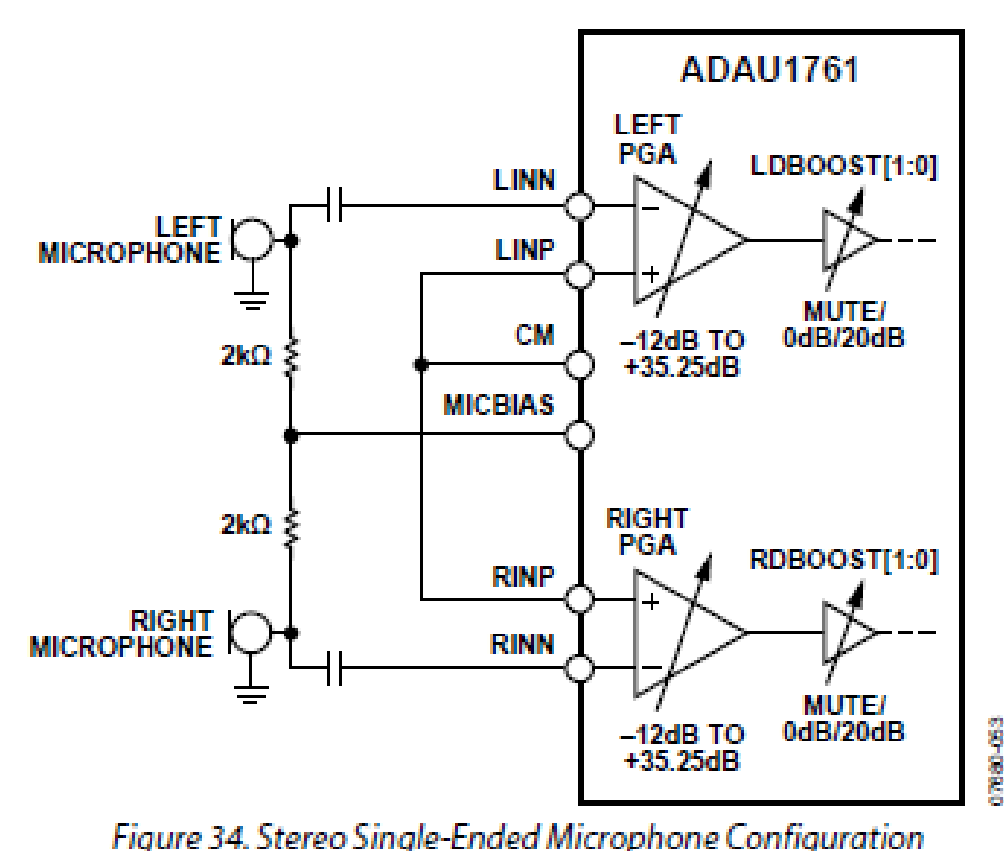
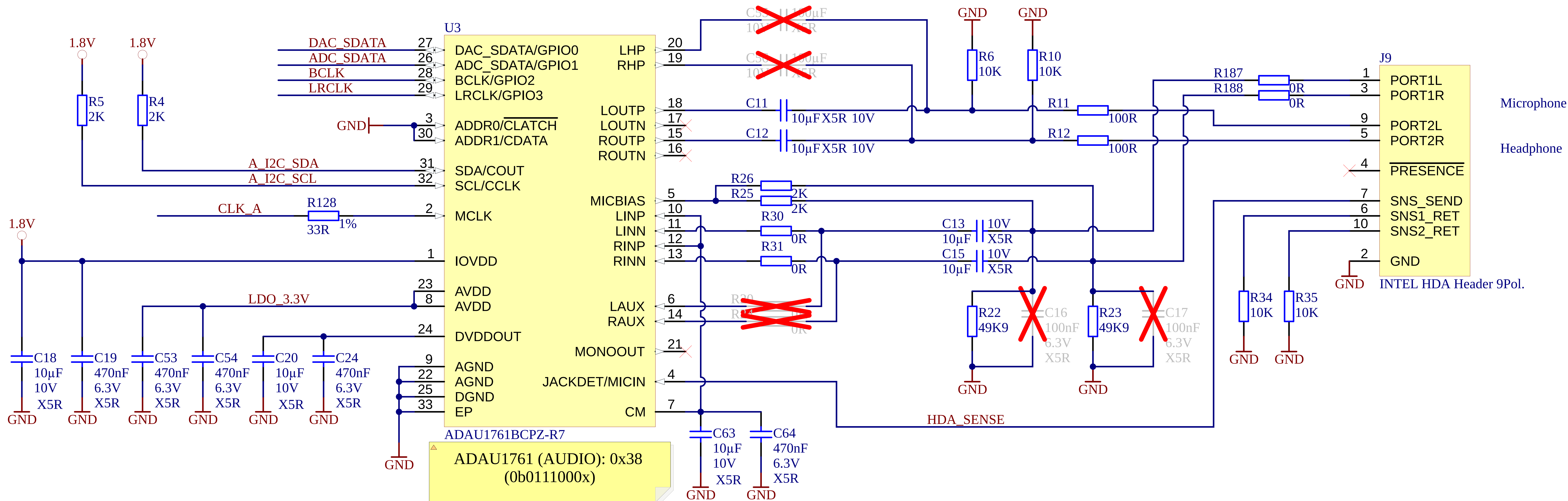
D

A

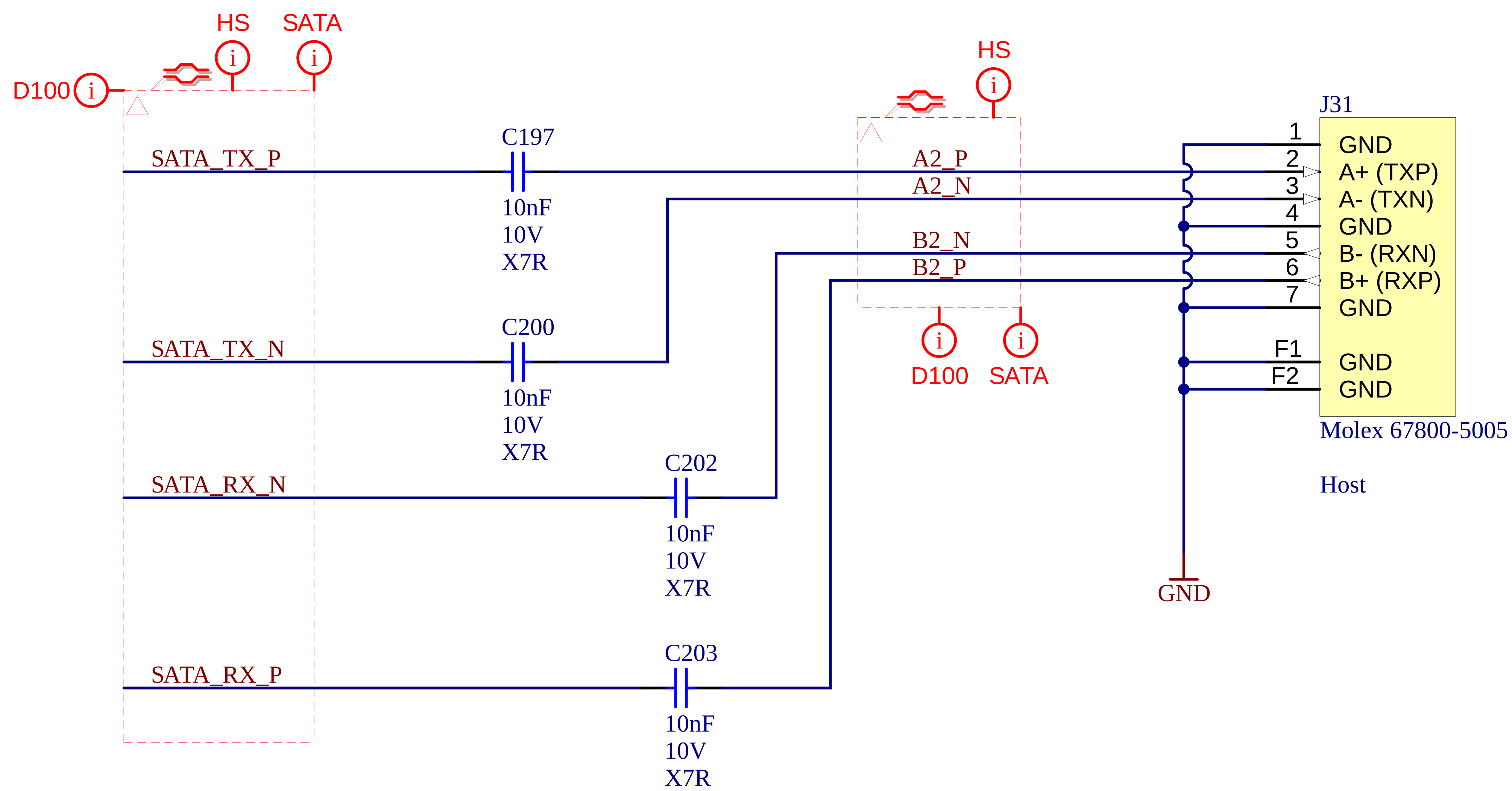
B

C

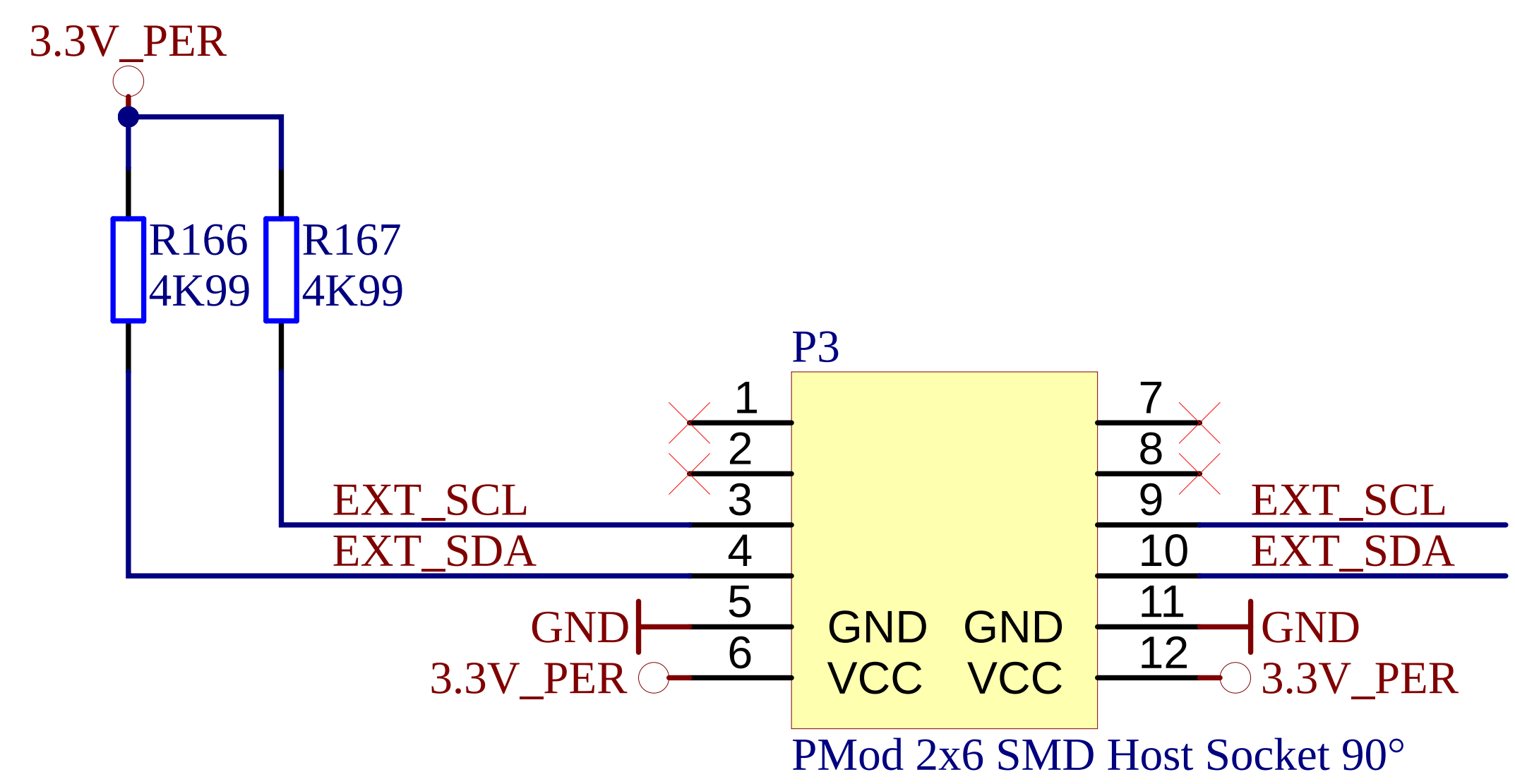
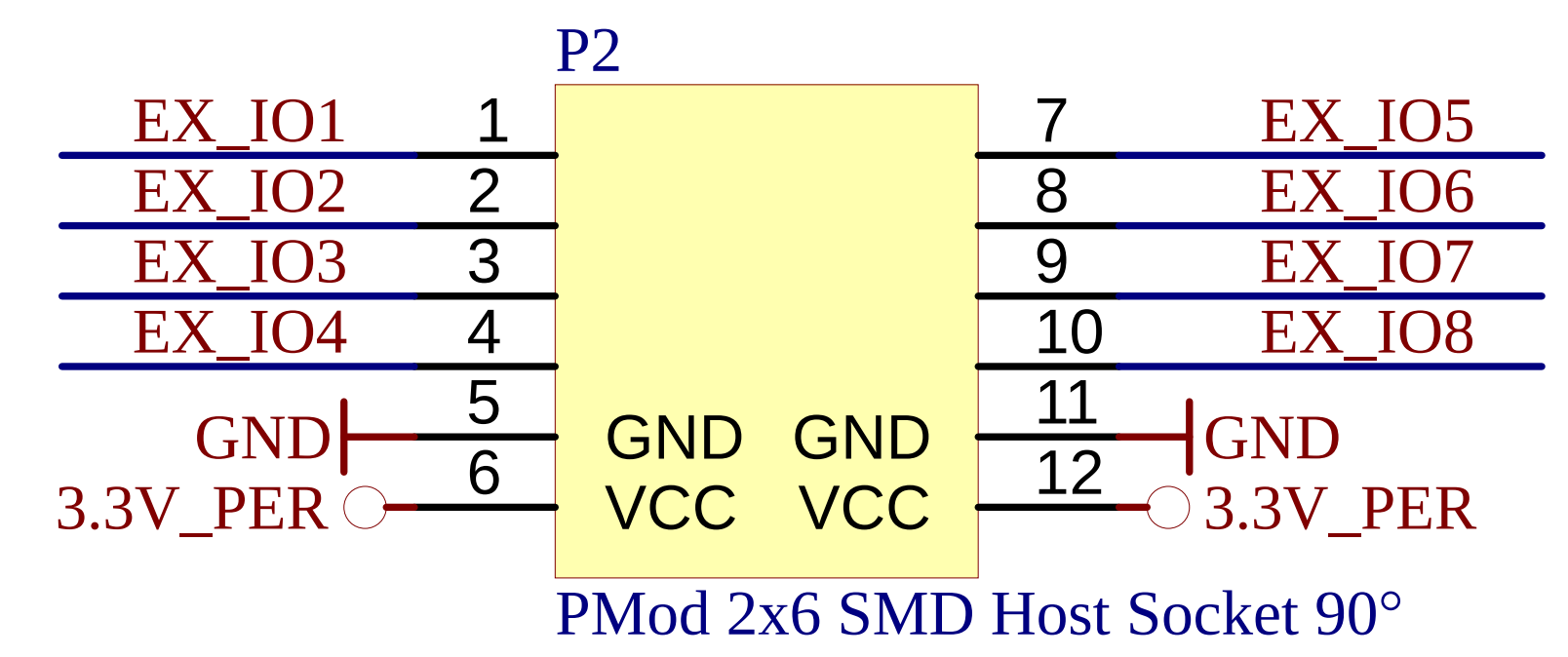
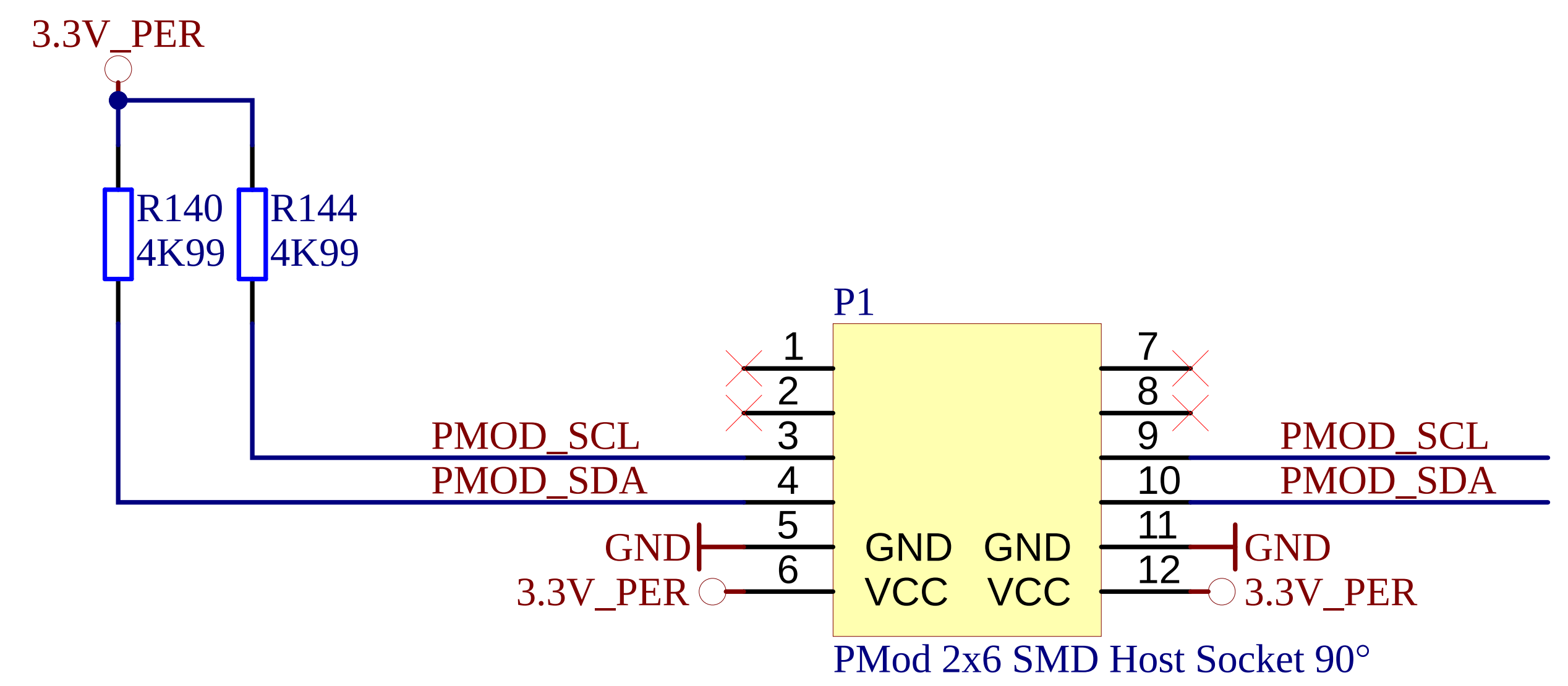
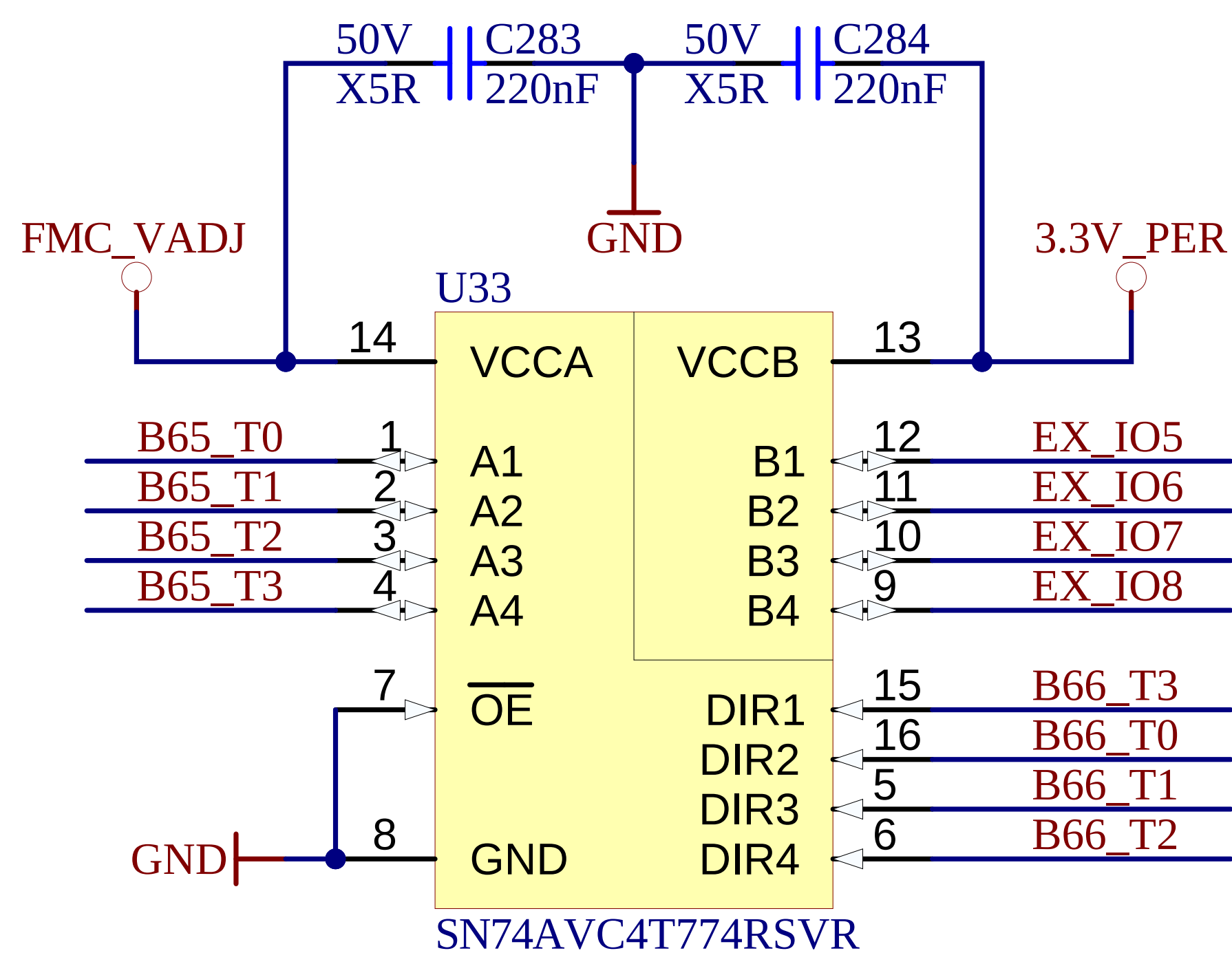
D

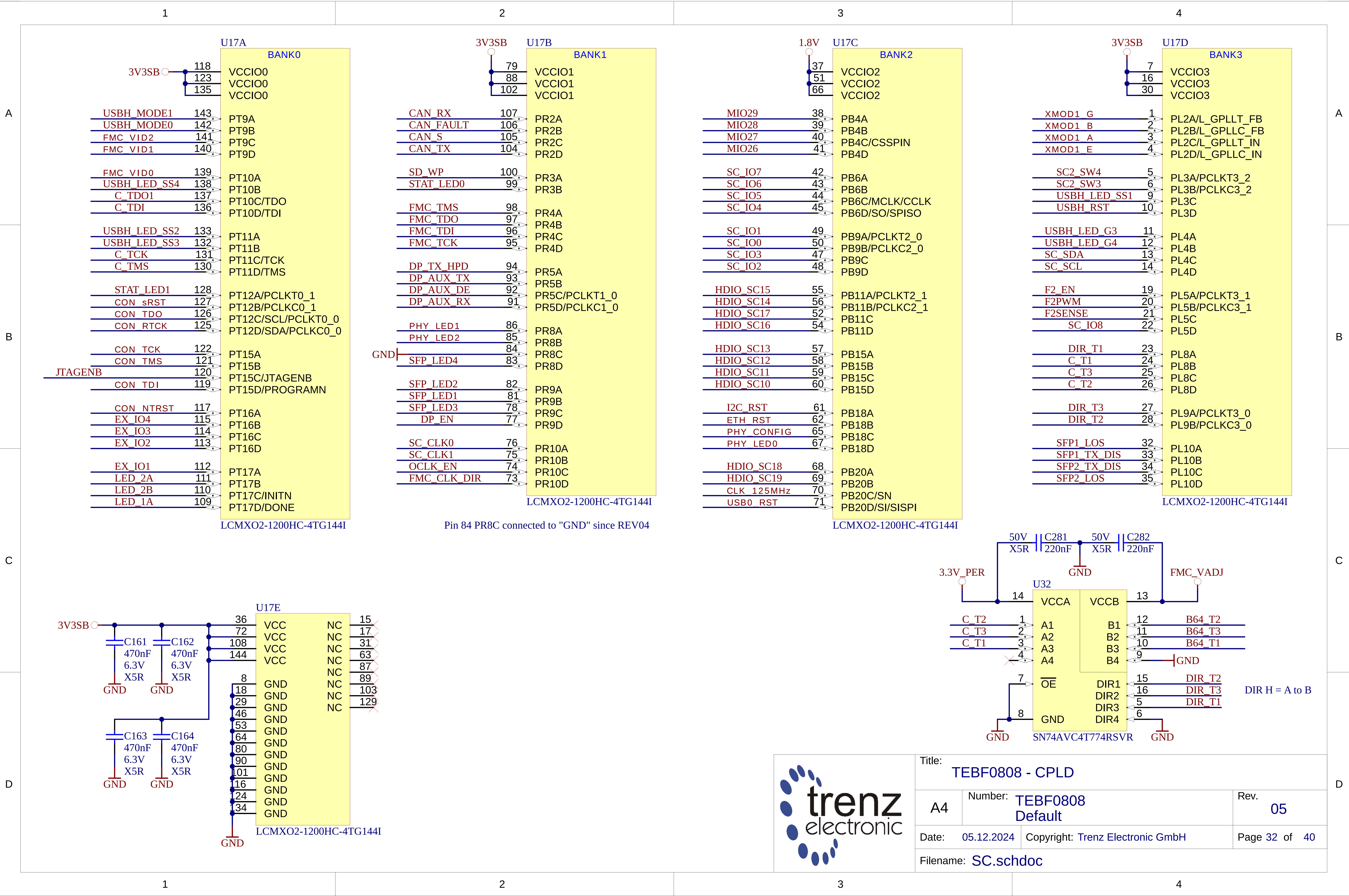


Title: TEBF0808 - Audio		
A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 26 of 40
Filename: Audio.SchDoc		



Title: TEBF0808 - SATA			
A4	Number: TEBF0808 Default		Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH		Page 30 of 40
Filename: SATA.schdoc			

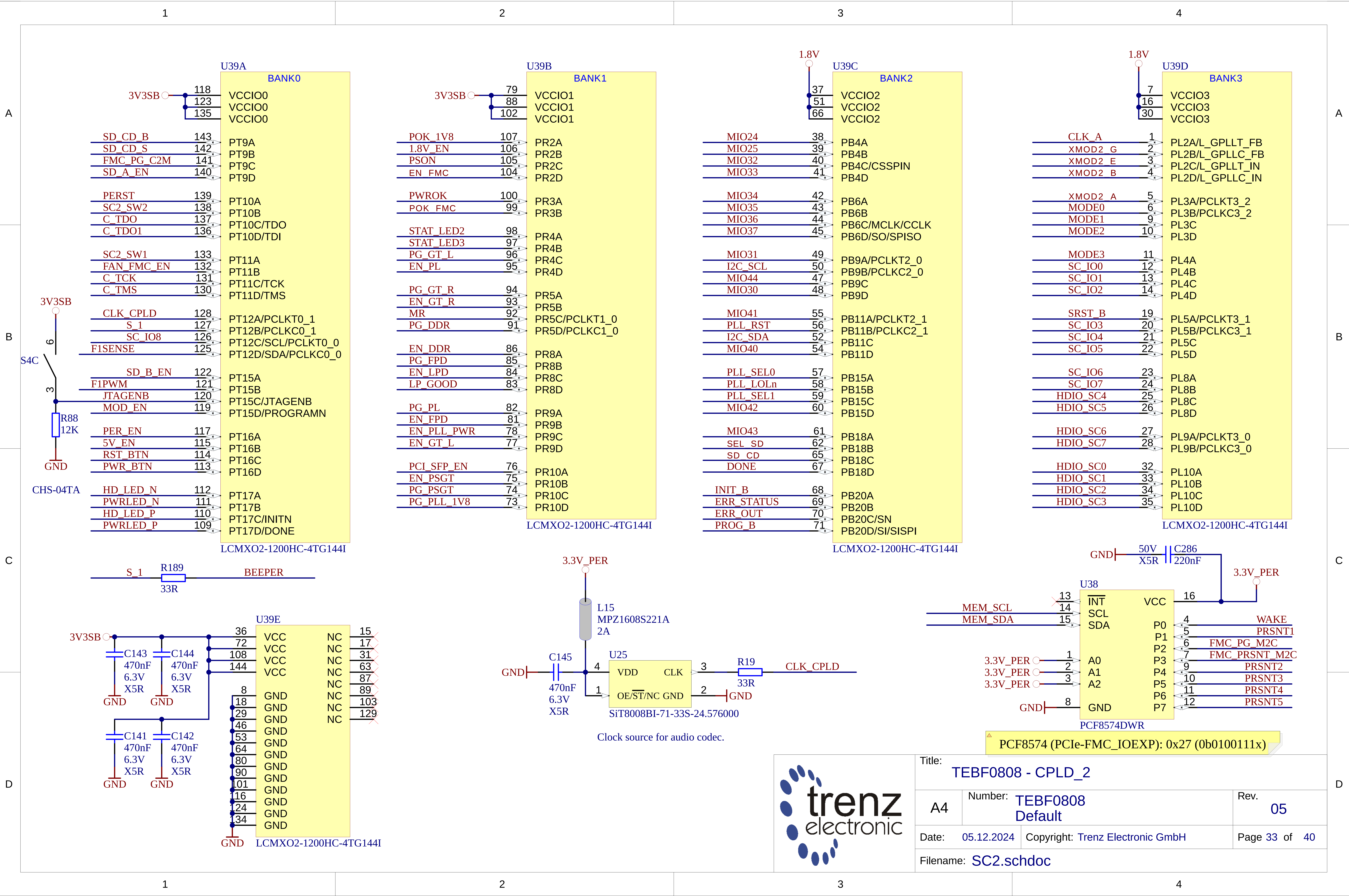




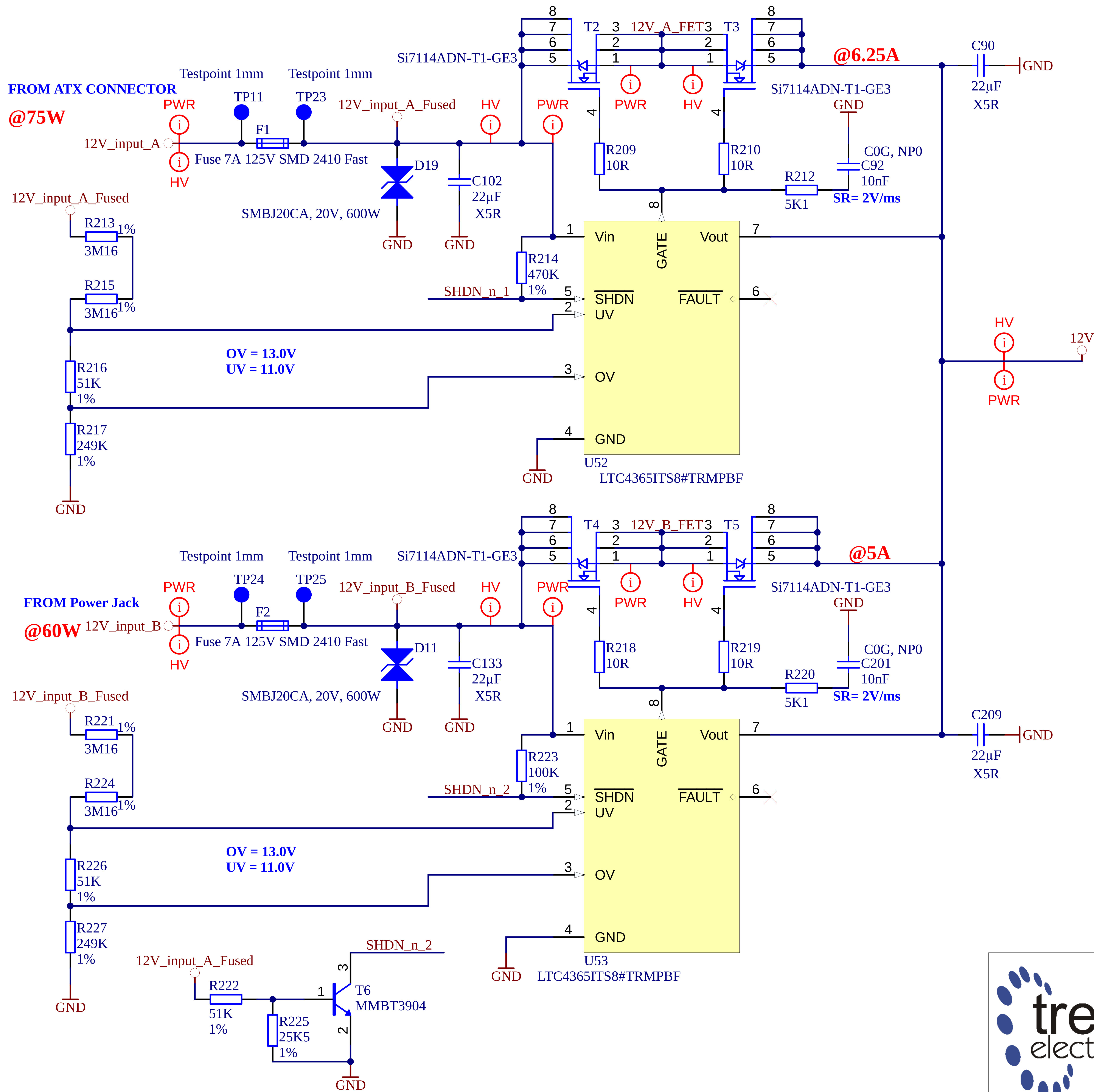
Title:

TEBF0808 - CPLD

A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 32 of 40
Filename: SC.schdoc		



Title: TEBF0808 - CPLD_2		
A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 33 of 40
Filename: SC2.schdoc		



- U_Power1
Power_1.schdoc
- U_Power2
Power_2.schdoc
- U_Power3
Power_3.schdoc
- U_Power4
Power_4.schdoc

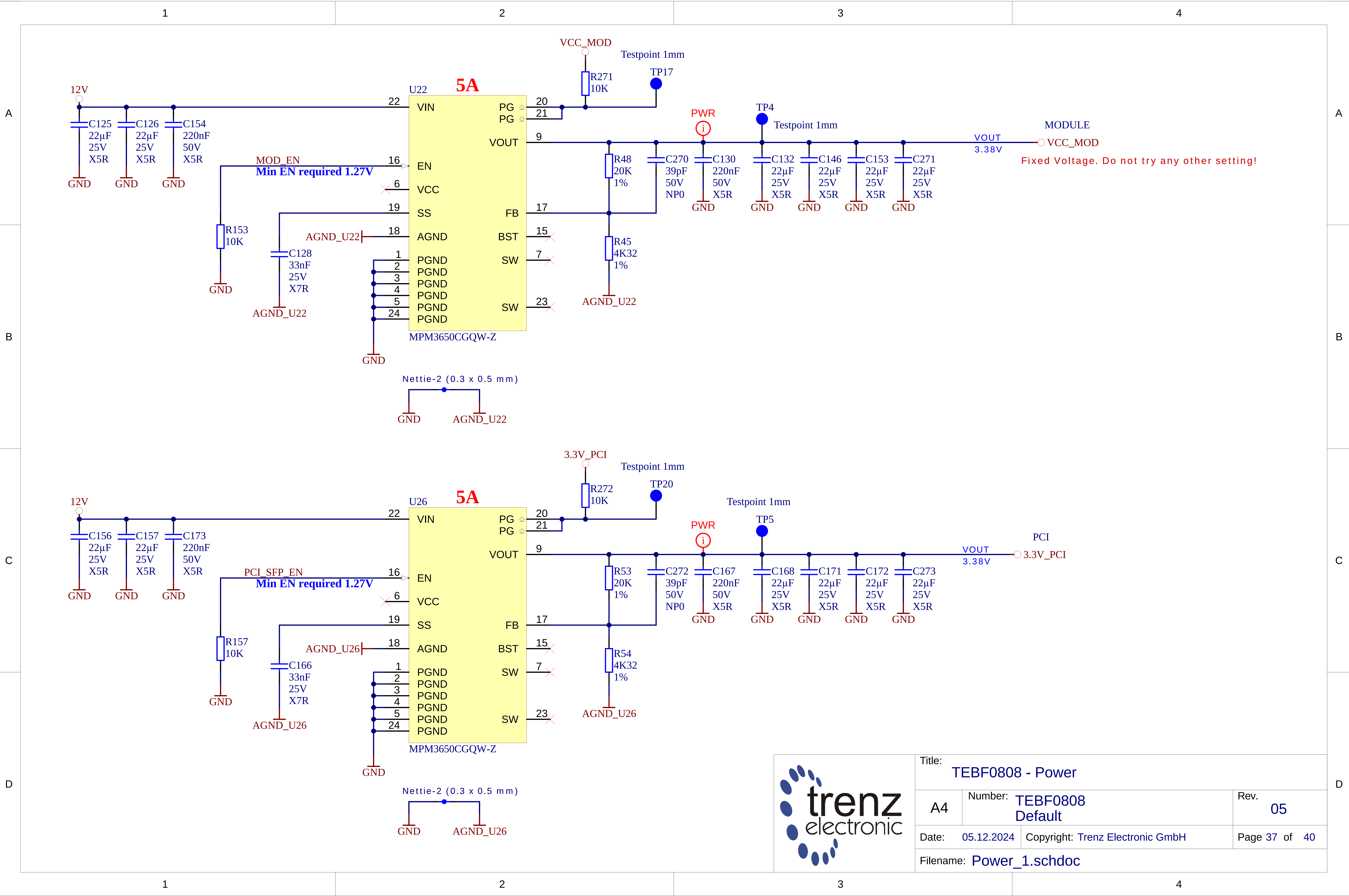


Title:

TEBF0808 - POWER

A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 36 of 40

Filename: Power.SchDoc

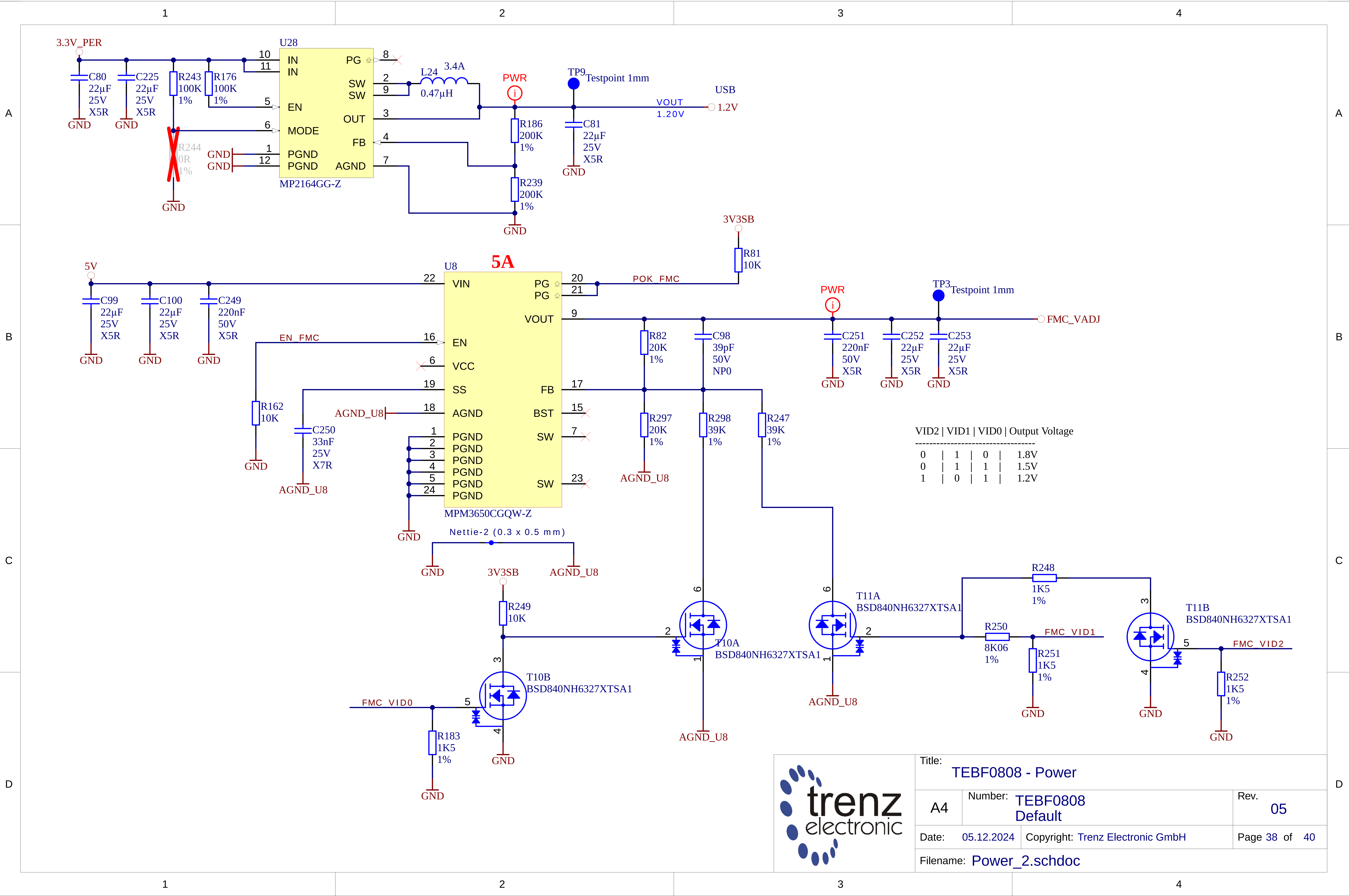


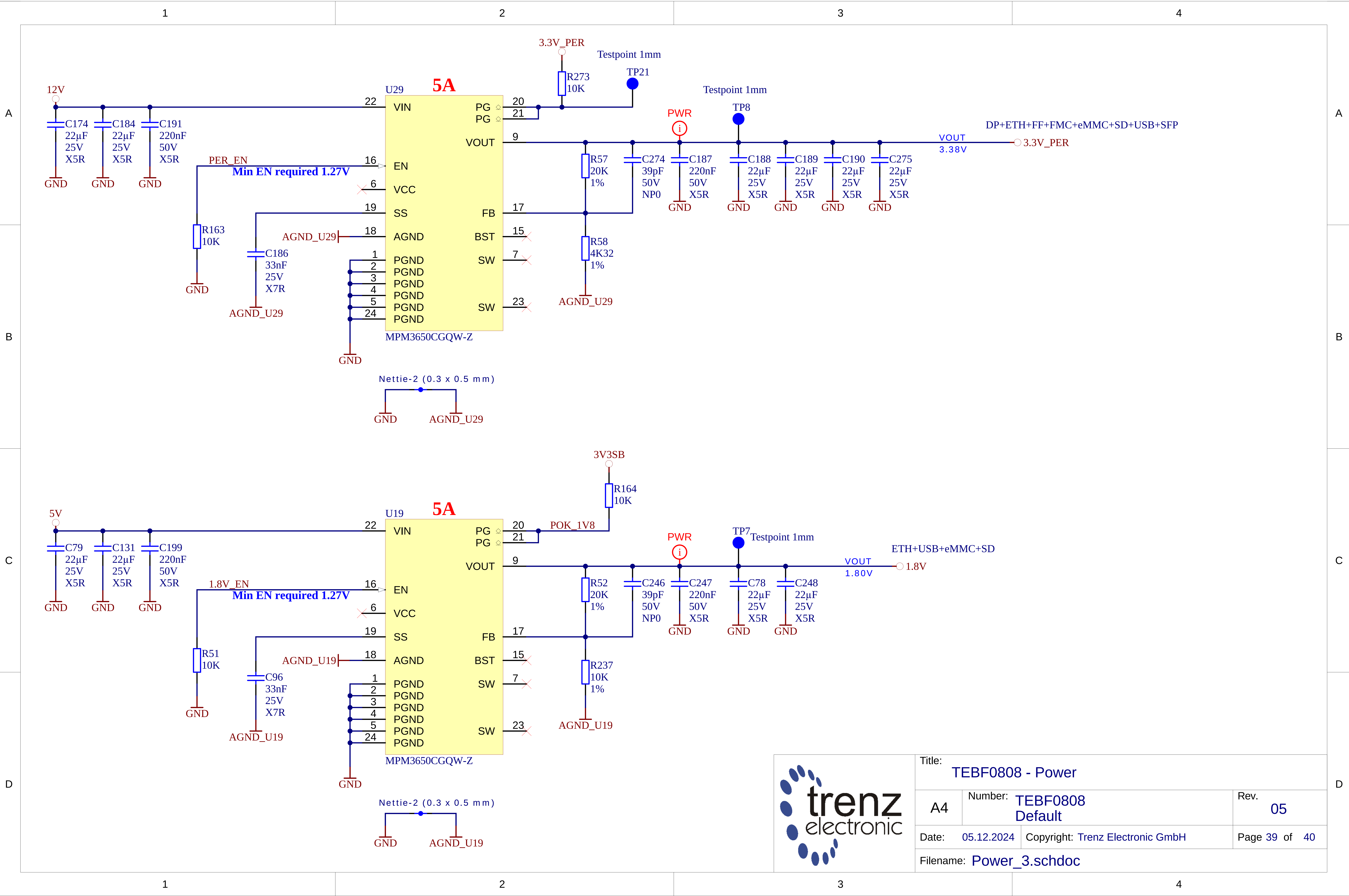
Title:

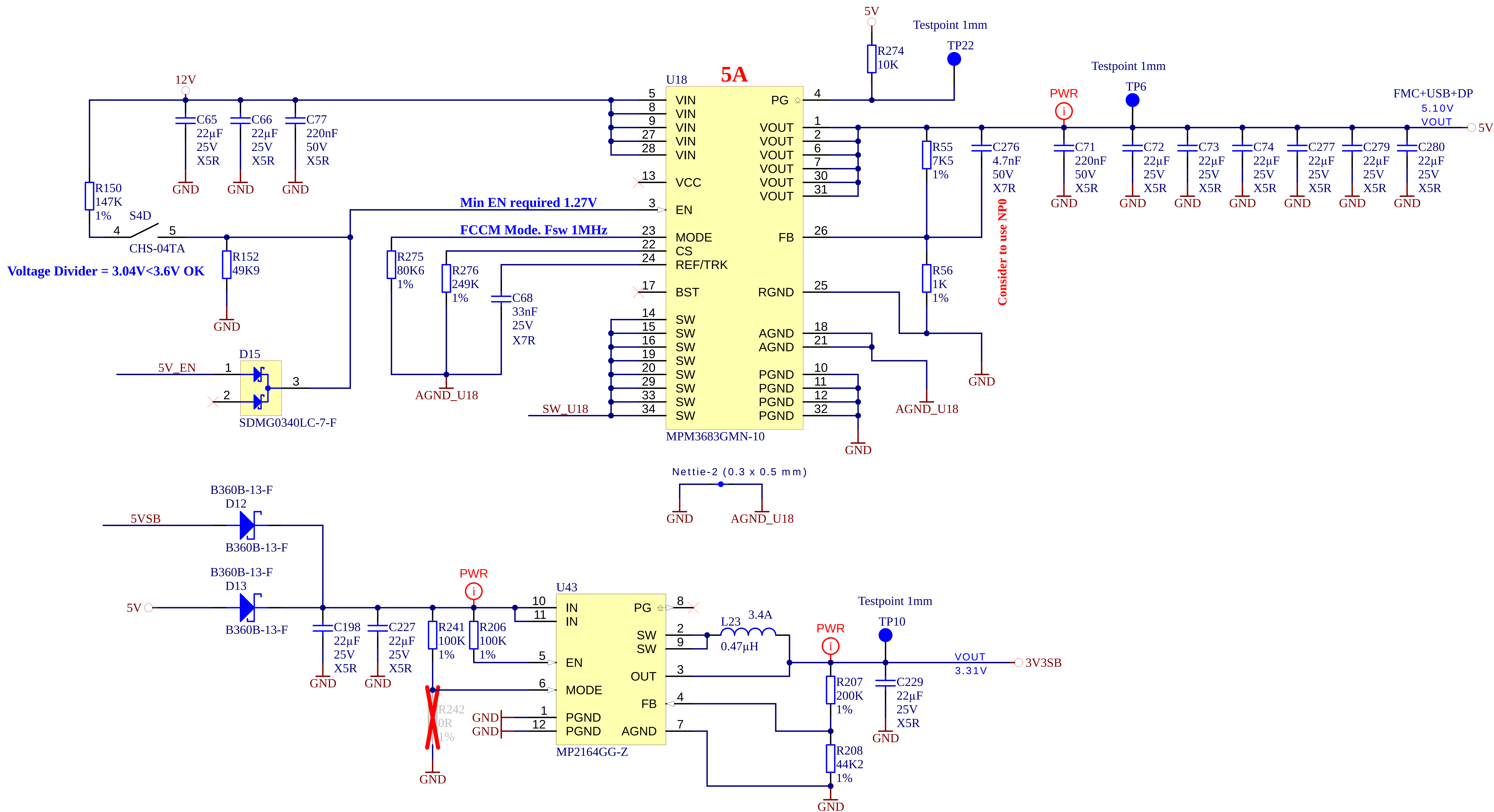
TEBF0808 - Power

A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 37 of 40

Filename: Power_1.schdoc







Title:

TEBF0808 - Power

A4	Number: TEBF0808 Default	Rev. 05
Date: 05.12.2024	Copyright: Trenz Electronic GmbH	Page 40 of 40

Filename: Power_4.schdoc