

Regarding the usage of our schematics and alike documentation for Trenz baseboard TEB2000.

Baseboard is Open Source Hardware and therefore free to use, adapt and can be modified to suit your needs as described in the "The MIT License".

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Schematics and other handouts serve for informational purposes only!

Drawn by	ED
Checked by	MT
Assembly variant	T001
Created by	OT
Modified by	OT
Modified at	2024-05-31



Title: <b>TEB2000 – Legal Notices</b>		
A4	Number: <b>TEB2000 T001</b>	Rev. <b>01</b>
Date: <b>12.12.2023</b>	Copyright: <b>Trenz Electronic GmbH</b>	Page <b>1</b> of <b>14</b>
Filename: <b>Legal Notices Baseboards.SchDoc</b>		

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A

A

REV	DATE	Description	
-01	2023-10-01	Initial Revision	ED

B


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		Title: <b>TEB2000 – Revision History</b>	
		A4	Number: <b>TEB2000 T001</b>
Date: <b>12.12.2023</b>		Copyright: <b>Trenz Electronic GmbH</b>	
Filename: <b>Revision_Changes.SchDoc</b>			

1

2

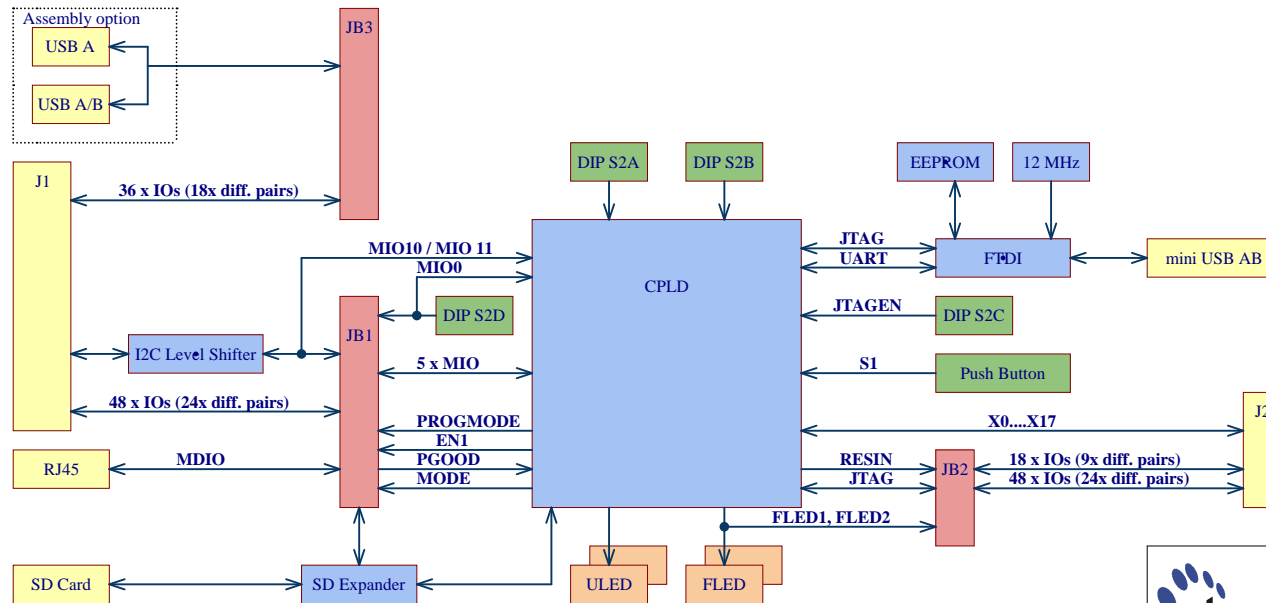
3

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# Supported Voltage Ranges:

Power Rail	Direction*	Range	Tolerance	Description	Note
5VIN	IN/OUT	5.0 V	+/- 5 %	Baseboard Power	Baseboard Power Supply.
VCCIOA	IN/OUT	-	-	Micromodule Power	Dependent on baseboard/module combination, on baseboard settings and VG96 requirements.
VCCIOB	IN/OUT	-	-	Micromodule Power	Dependent on baseboard/module combination, on baseboard settings and VG96 requirements.
VCCIOC	IN/OUT	1.2 V - 3.3V	-	Micromodule Power	Range based on baseboard. Dependent on baseboard/module combination, on baseboard settings and VG96 requirements.
VCCIOD	IN/OUT	-	-	Micromodule Power	Dependent on baseboard/module combination, on baseboard settings and VG96 requirements.
VCCJTAG	IN	1.2 V - 3.3V	-	JTAG Reference	JTAG Reference Voltage from module. Consult module documentation.
M1.8VOUT	IN	1.8 V	+/- 3 %	Baseboard Power	Range based on baseboard. Consult module requirements.
M3.3VOUT	IN	3.3 V	+/- 3 %	Baseboard Power	Range based on baseboard. Consult module and VG96 requirements.
ETH-VCC	IN	-	-	RJ45 Power	Consult module requirements.
3.3V	OUT	3.3 V	+/- 3 %	Power for System	Range based on baseboard. Consult module and VG96 requirements.
VBAT	OUT	-	-	Power for Module.	Consult module requirements.

\* IN/OUT dependent on usage mode.



## I2C Address:

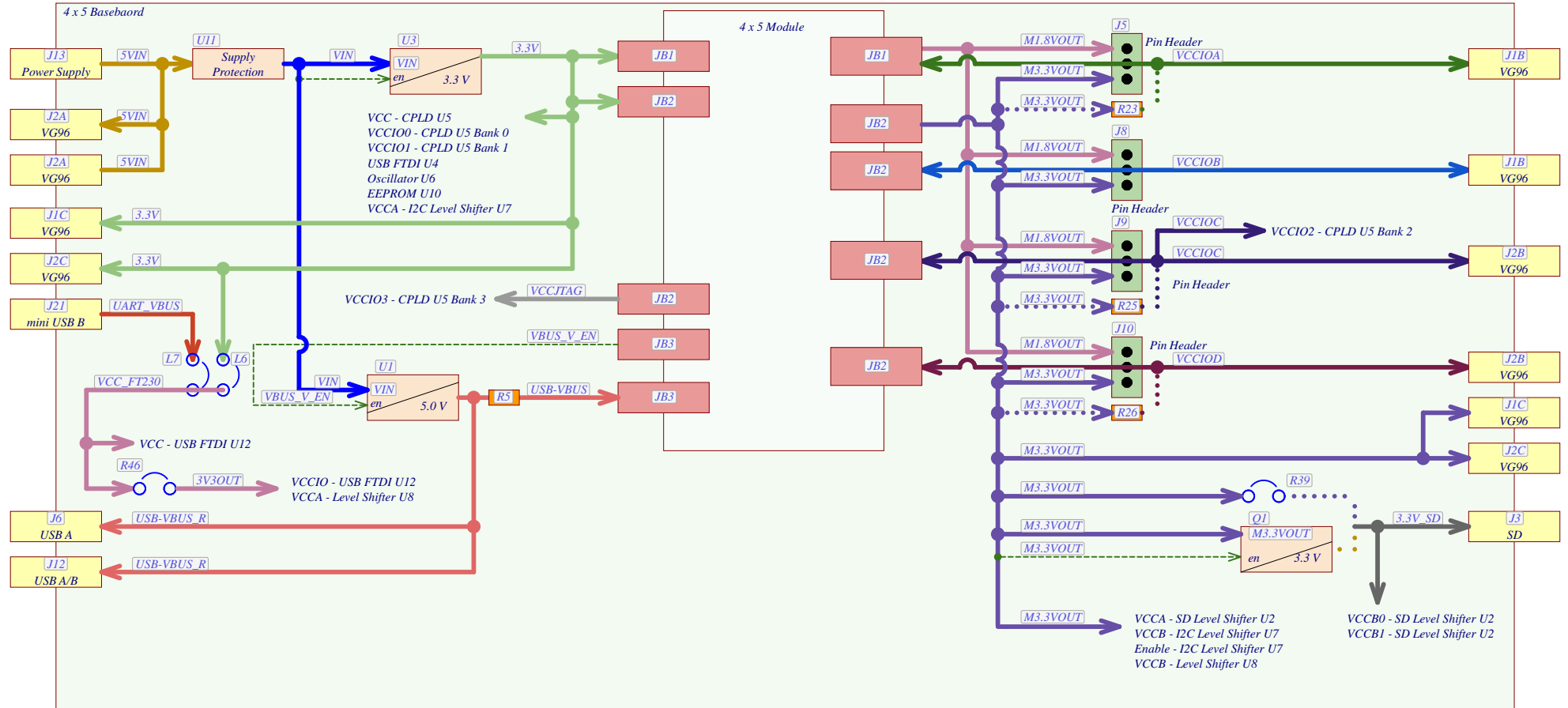
Device	I2C ADDR	Note
CPLD	USB	Firmware dependent.
VG96	JIA	Depends on connection.

## Legend:

- B2B Connector
- Connector
- LED Interface
- Switchable Interface
- On-board Components



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### Legend:

- 5VIN Net name
- Power bus
- Control signal
- B2B Connector
- Connector
- Pin Header
- Assembly Option
- On-Board Power Supply Device

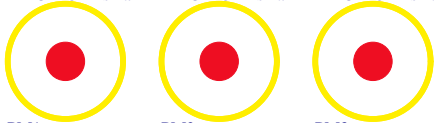


Title: TEB2000 – Power Overview		
A4	Number: TEB2000 T001	Rev. 01
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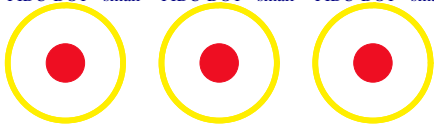
Special notes:

•  
•

FIDU-DOT - small FIDU-DOT - small FIDU-DOT - small



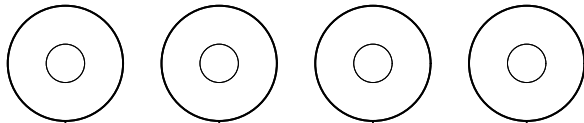
PM1 FIDU-DOT - small PM2 FIDU-DOT - small PM3 FIDU-DOT - small



PM4 PM5 PM6

Serial  
Serial  
Serialnumber 6,3 x 6.3mm  
MISC1  
Digilent Serialnumber  
Digilent\_SN

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



GND GND GND GND

UKCA1

UKCA Logo on Top Overlay

UKCA-TOPOVERLAY

CE1

CE Logo on Top Overlay

CE-TOPOVERLAY

MECH10

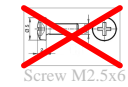
TE Address Overlay

LOGO ADDRESS

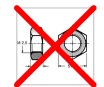
LOGO1

TE Logo PRINT Layer

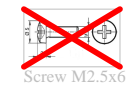
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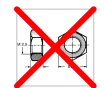
Screw M2.5x6



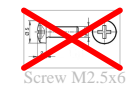
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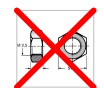
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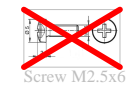
Nut M2.5 DIN934



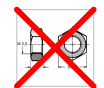
Screw M2.5x6



Nut M2.5 DIN934



Screw M2.5x6



Nut M2.5 DIN934



Title: TEB2000 – Overview

A4

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T001

Rev. 01

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A

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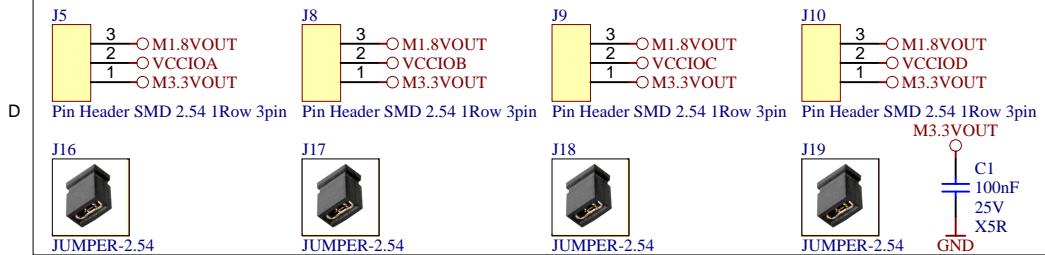
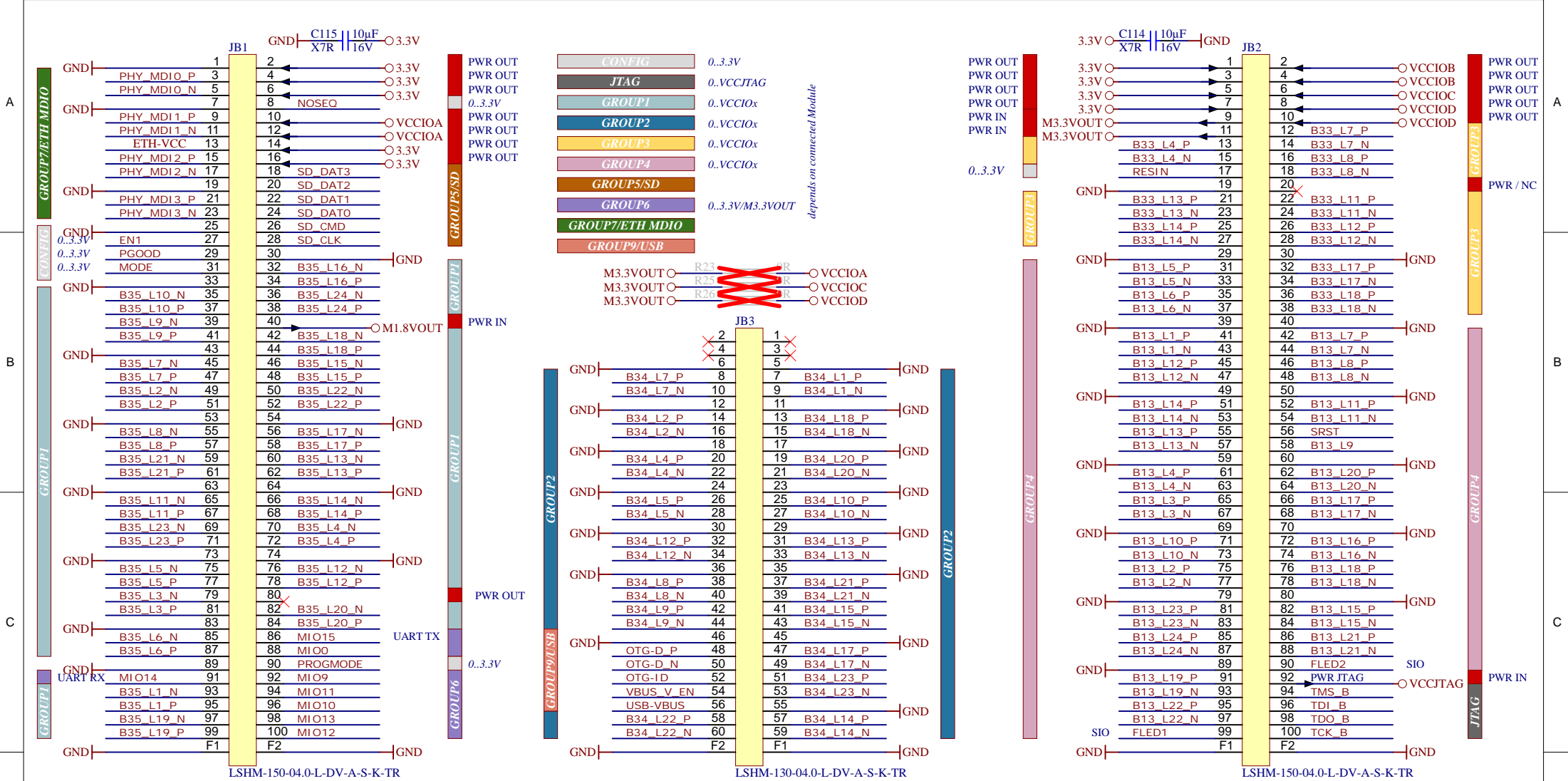
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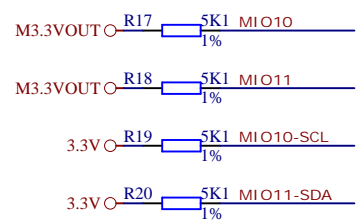
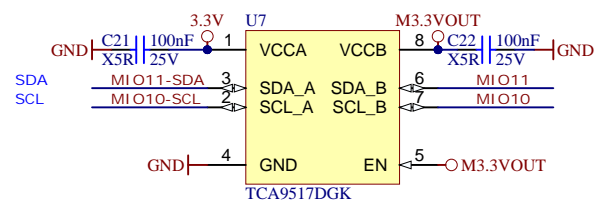
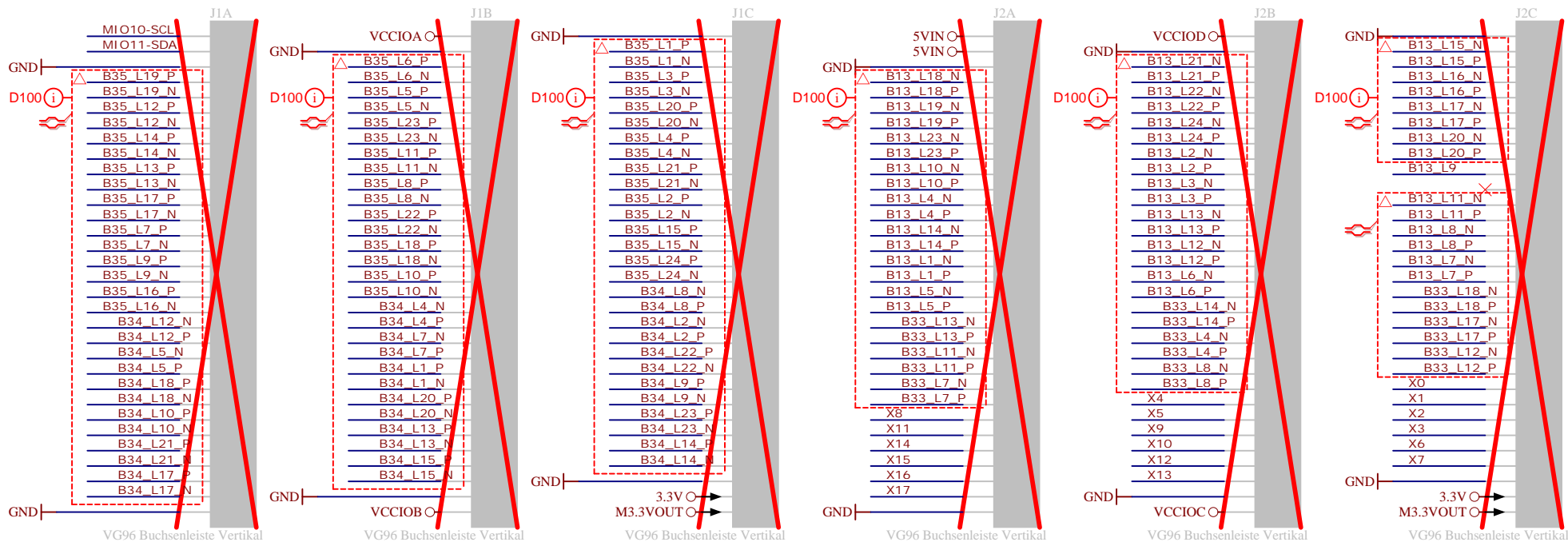
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Title: <b>TEB2000 – B2B Connector</b>		
A4	Number: <b>TEB2000 T001</b>	Rev. <b>01</b>
Date: <b>19.08.2024</b>	Copyright: <b>Trenz Electronic GmbH</b>	Page <b>6</b> of <b>14</b>
Filename: <b>B2B_Connectors.SchDoc</b>		



Title: TEB2000 – External (VG96) Connector		
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Filename: VG_CONN.SchDoc		



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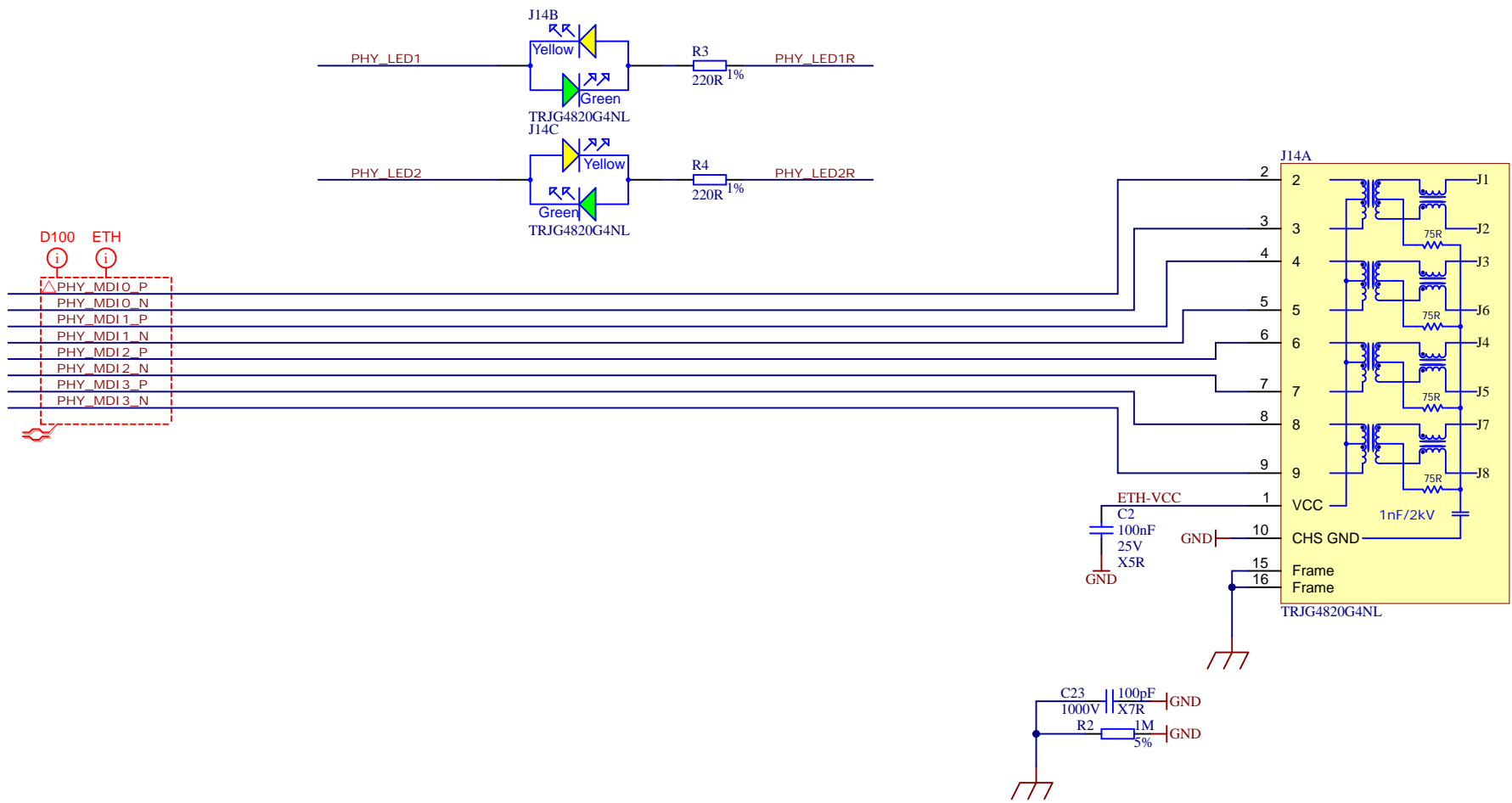
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Title: TEB2000 – Ethernet		
A4	Number: TEB2000 T001	Rev. 01
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Filename: Ethernet.SchDoc		

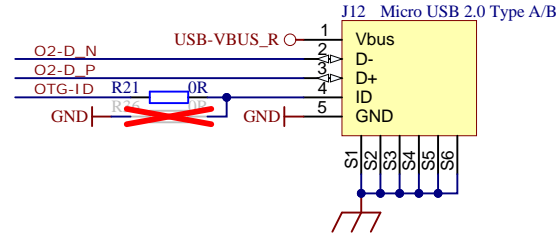
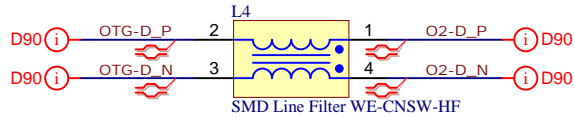
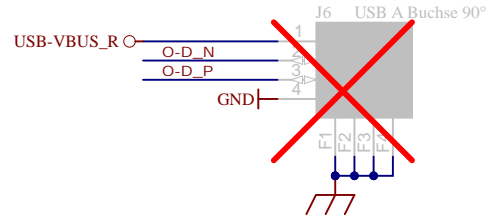
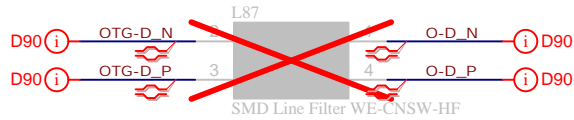
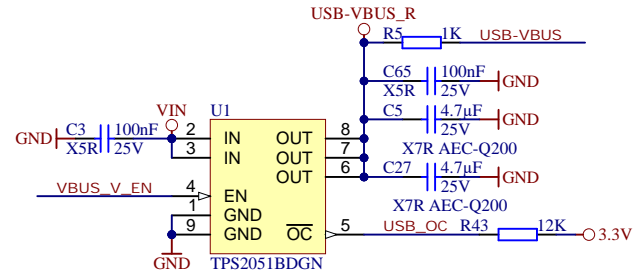
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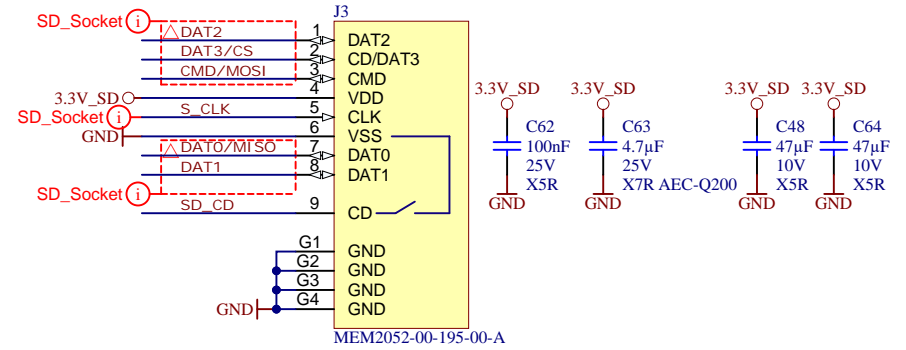
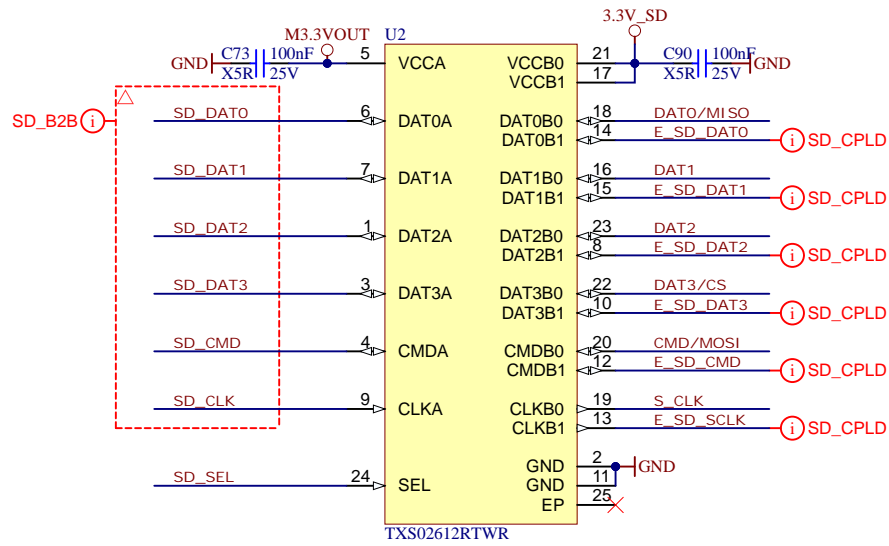
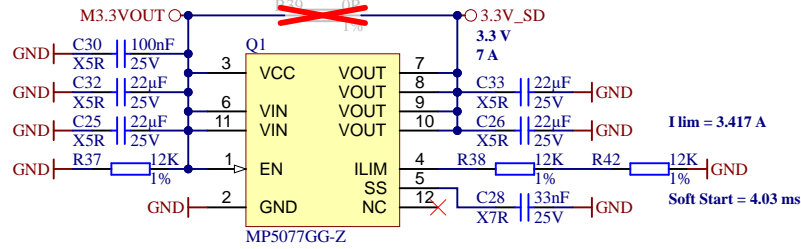
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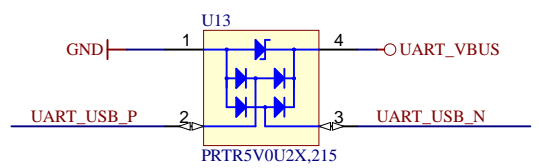
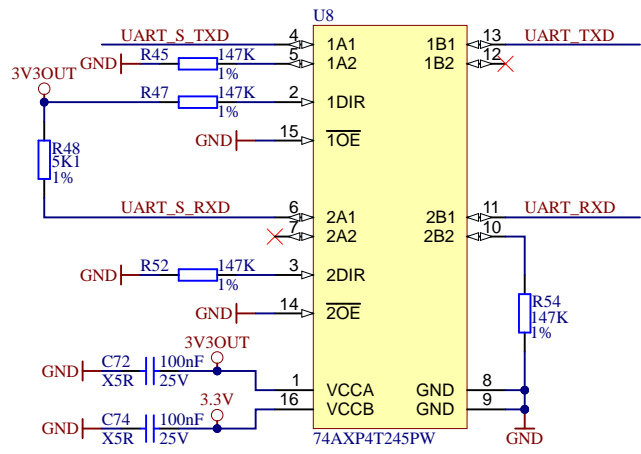
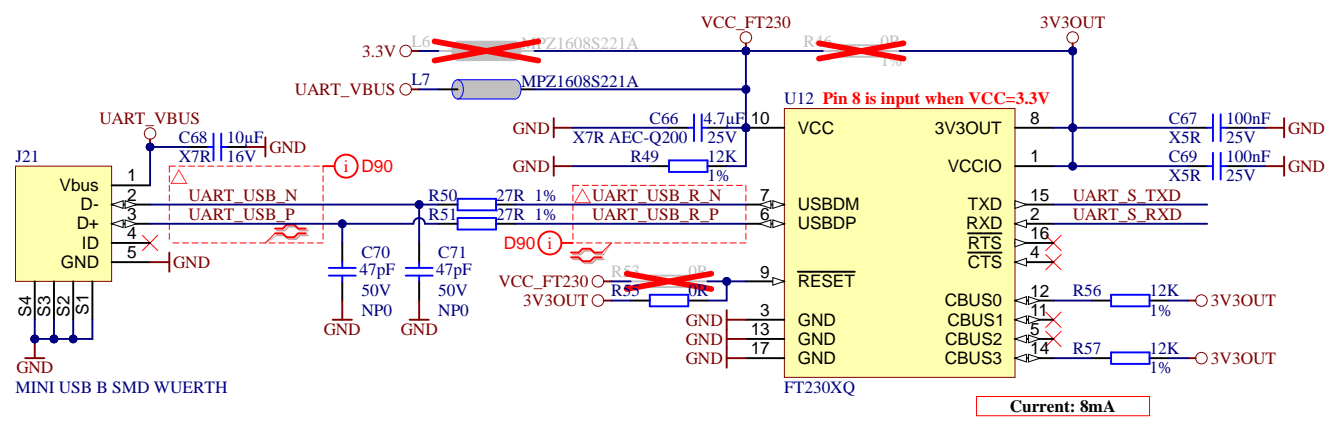
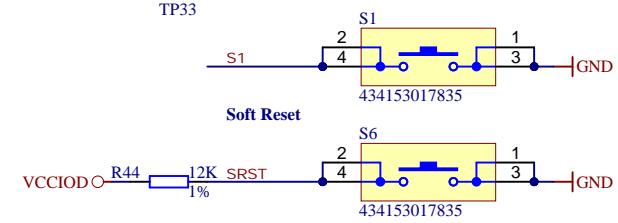
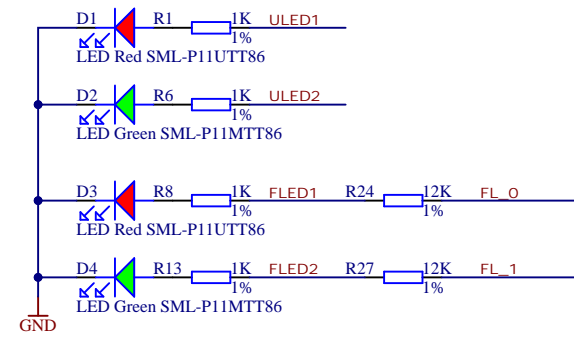
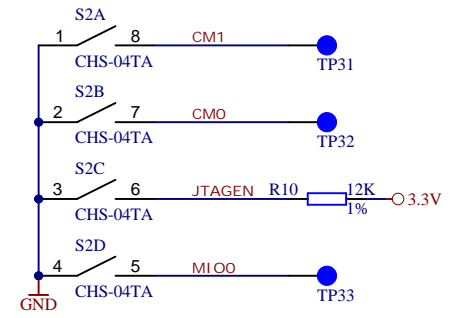




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		A4	Number: TEB2000 T001
Date: 09.07.2024		Copyright: Trenz Electronic GmbH	
Filename: USB.SchDoc		Page 9 of 14	



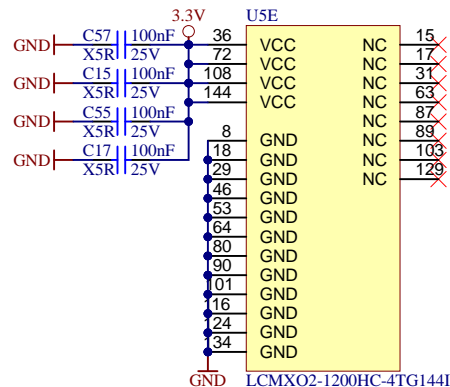
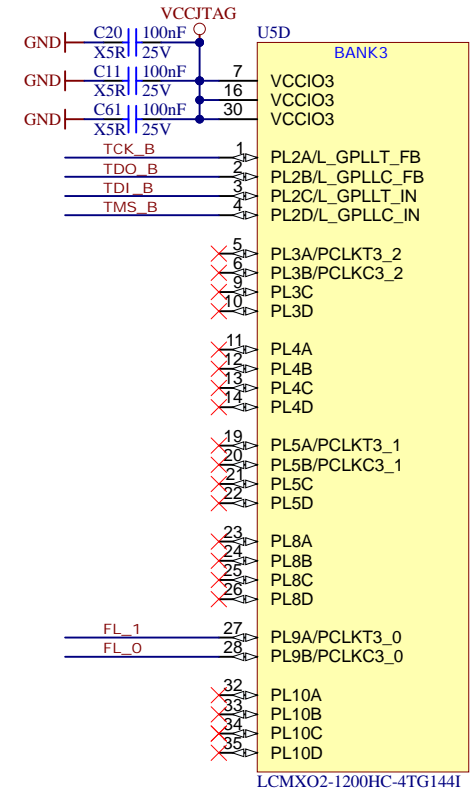
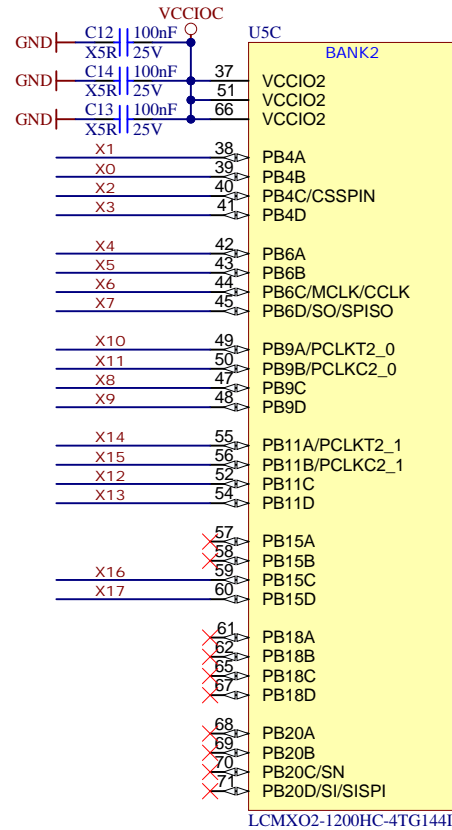
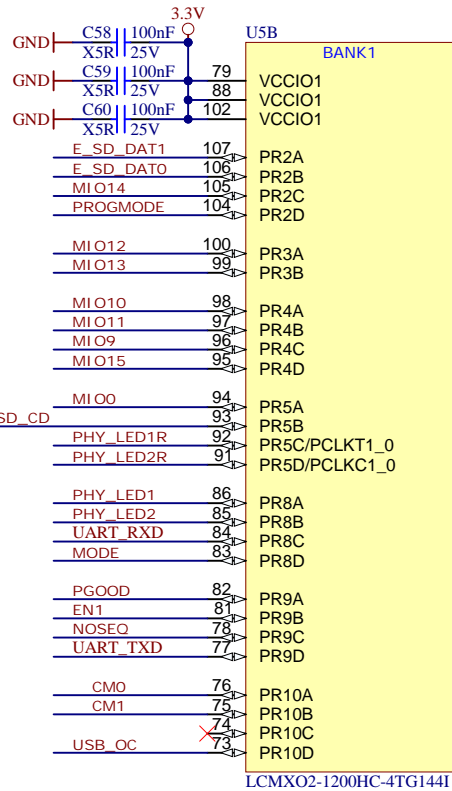
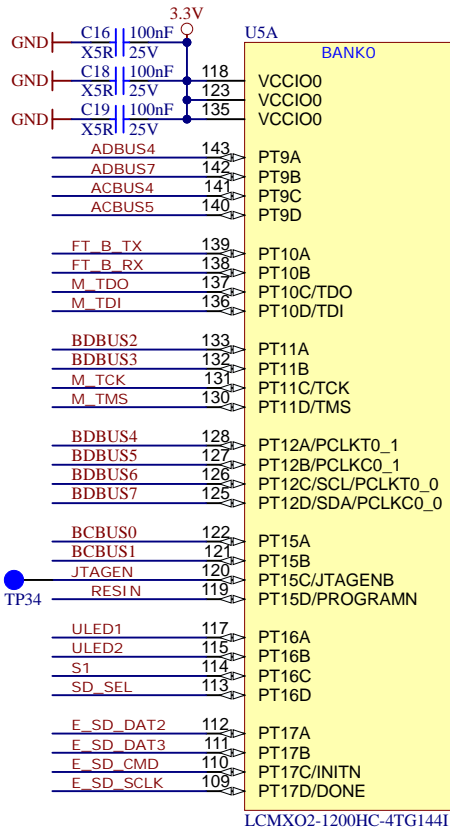
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Date: 12.12.2023		Copyright: Trenz Electronic GmbH	
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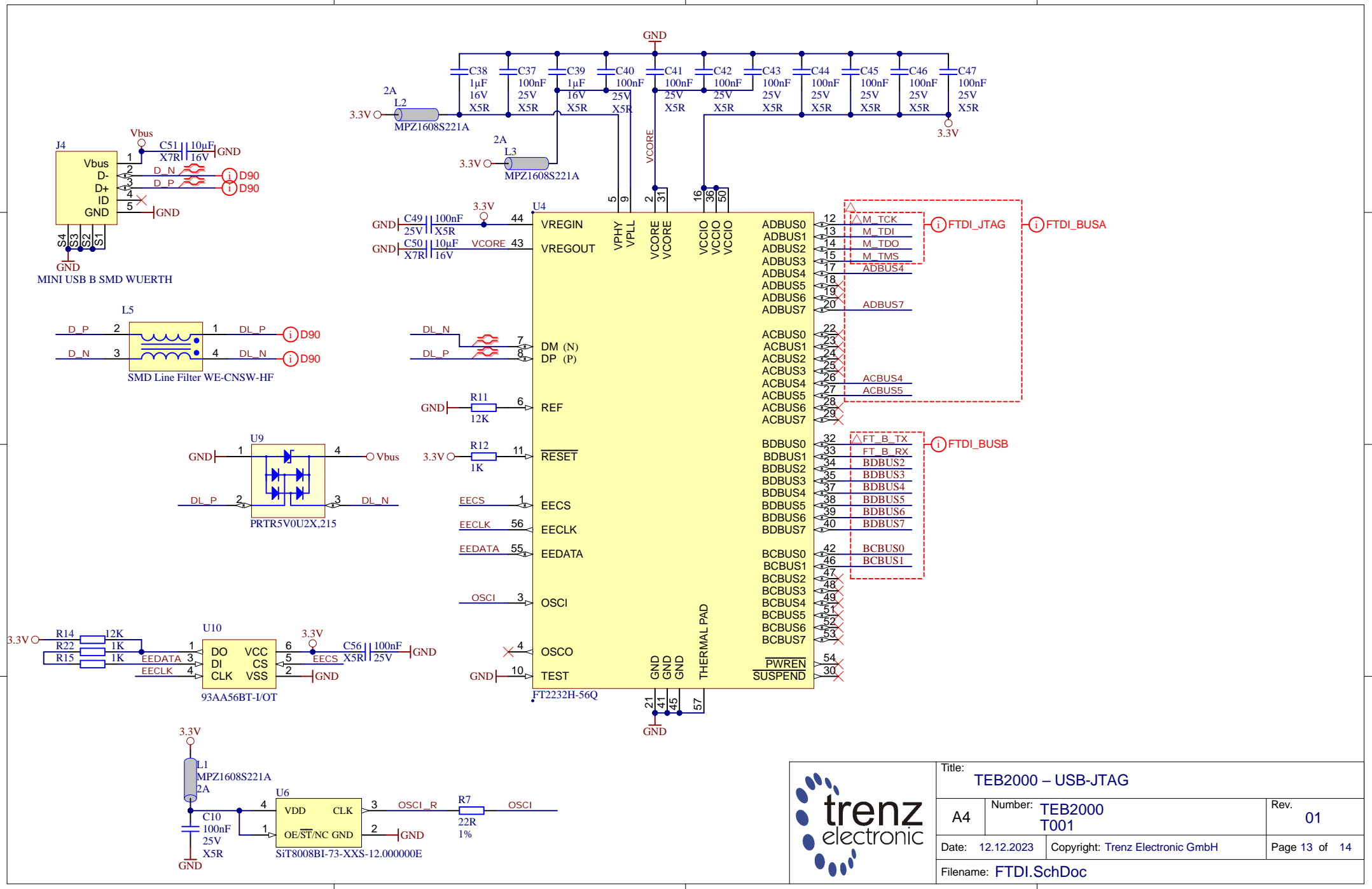
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A4	Number: <b>TEB2000 T001</b>	Rev. <b>01</b>
Date: 12.12.2023	Copyright: Trenz Electronic GmbH	
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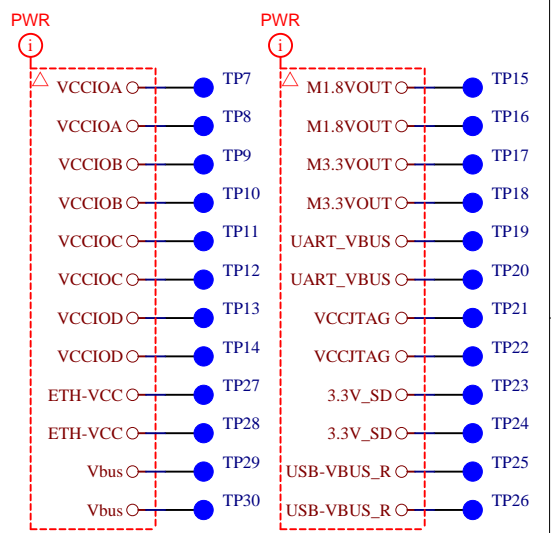
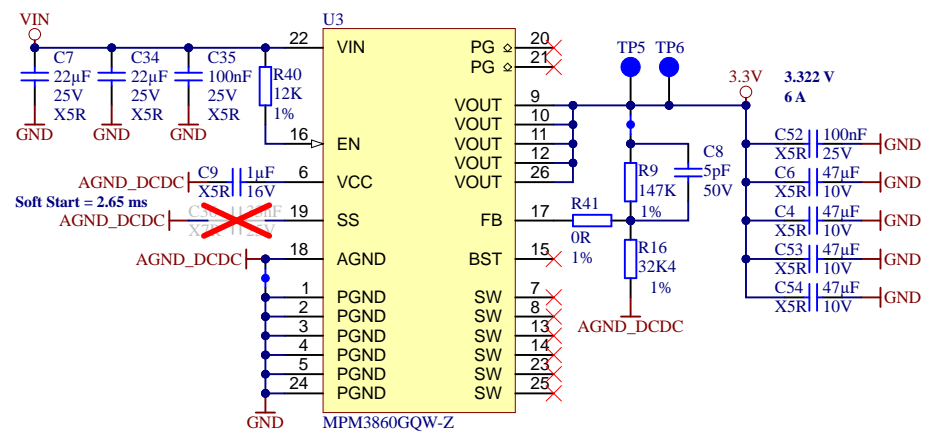
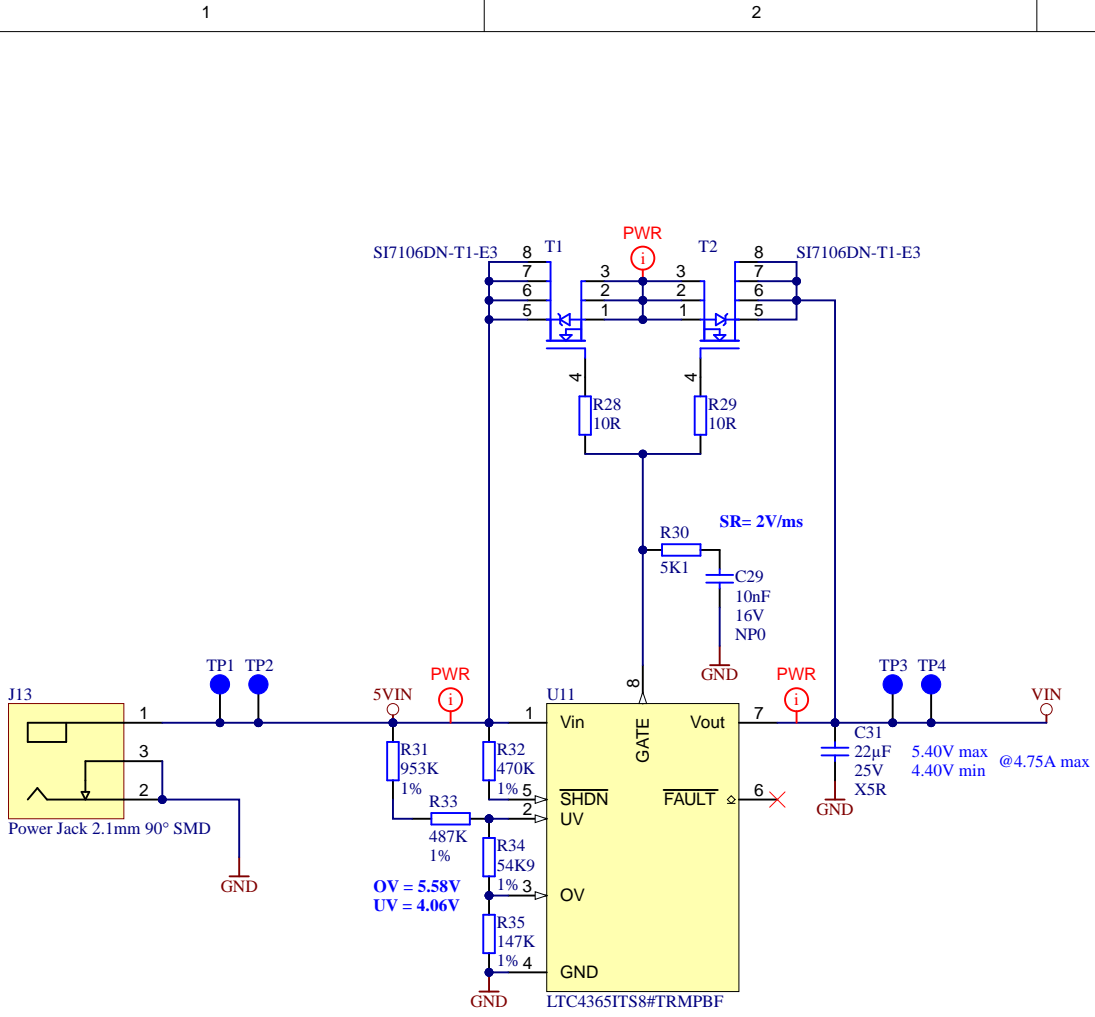
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Title: TEB2000 – System Controller		
A4	Number: TEB2000 T001	Rev. 01
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Title: TEB2000 – USB-JTAG		
A4	Number: TEB2000 T001	Rev. 01
Date: 12.12.2023	Copyright: Trenz Electronic GmbH	Page 13 of 14
Filename: FTDI.SchDoc		



	Title: <b>TEB2000 – Power</b>	
	A4	Number: <b>TEB2000 T001</b>
	Date: <b>12.12.2023</b>	Copyright: <b>Trenz Electronic GmbH</b>
	Filename: <b>POWER.SchDoc</b>	
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