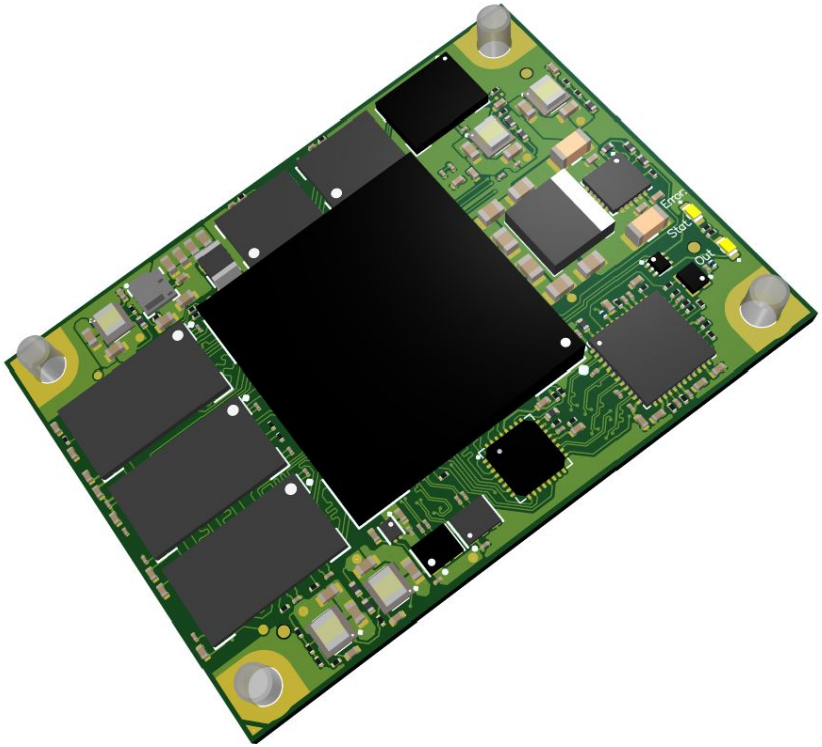

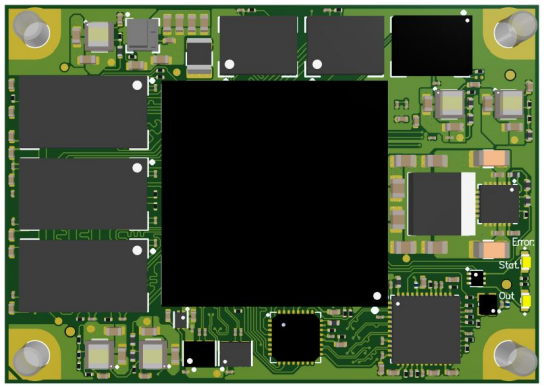

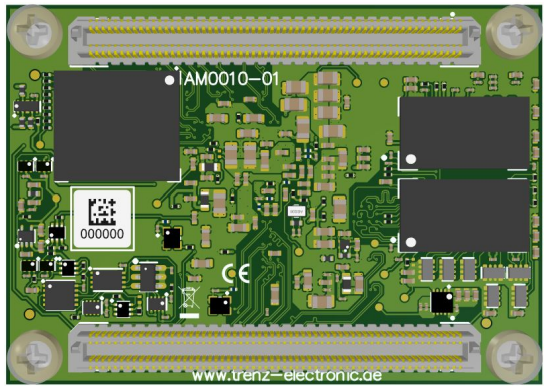

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Project is protected under copyright and we strongly and strictly prohibit the reverse engineering or recreation, even if the design is just adapted or modified. AM0010is protected under such right and in case of plagiarism we will have to do anything necessary in order to protect our assets.

Schematics and other handouts serve for informational purposes only!

trenz electronic	Title: AM0010 – Legal Notices Modules		
	A4	Number: Legal Notices Modules [No Variations]	Rev. 01
	Date: 04.10.2021	Copyright: Trenz Electronic GmbH	Page 1 of 30
	Filename: Legal Notices Modules.SchDoc		

U_B2B_Connector_1
B2B_Connector_1.SchDoc

U_B2B_Connector_2
B2B_Connector_2.SchDoc

U_MPSoC
MPSoC.SchDoc

U_DDR4-RAM
DDR4-RAM.SchDoc

U_DDR4-RAM_2
DDR4-RAM_2.SchDoc

U_DDR4-RAM_3
DDR4-RAM_3.SchDoc

U_DDR4-RAM_4
DDR4-RAM_4.SchDoc

U_DDR4-RAM_5
DDR4-RAM_5.SchDoc

U_DDR4-CAPS
DDR4-CAPS.SchDoc

U_DDR4-TERM
DDR4-TERM.SchDoc

U_ETHPHY
ETHPHY.SchDoc

U_USBPHY
USBPHY.SchDoc

U_eMMC
eMMC.SchDoc

U_MISC
MISC.SchDoc

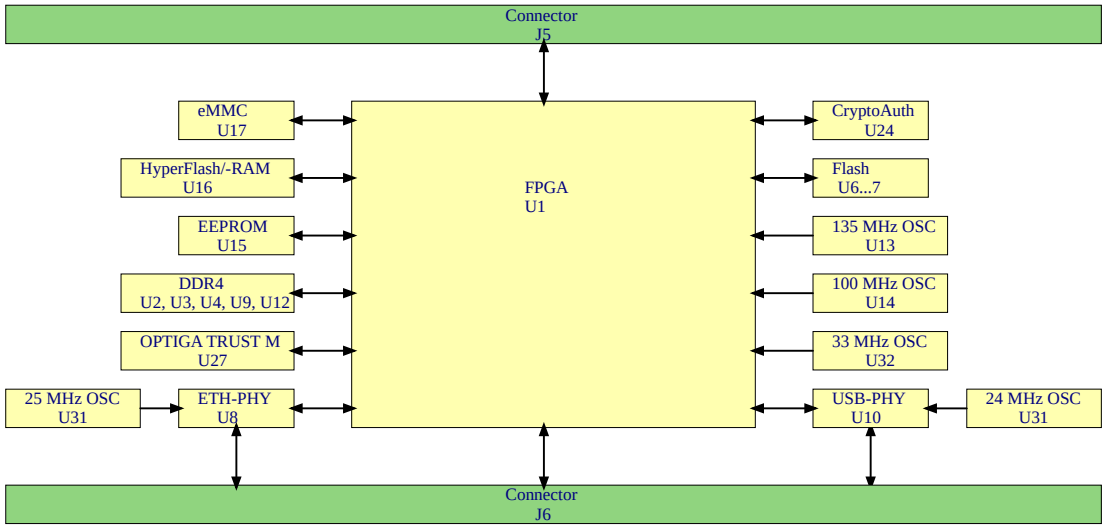
U_POWER_1
POWER_1.SchDoc

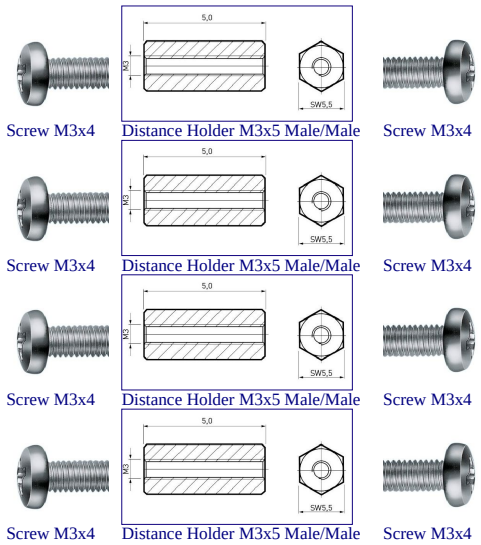
U_POWER_2
POWER_2.SchDoc

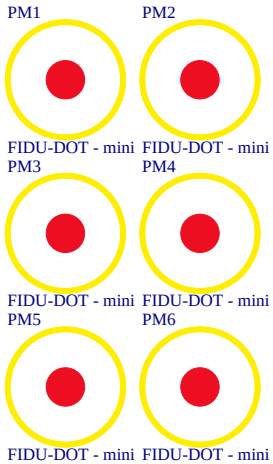
U_REV_CH
Revision_Changes.SchDoc

U_Legal_Notices_Modules
Legal Notices Modules.SchDoc

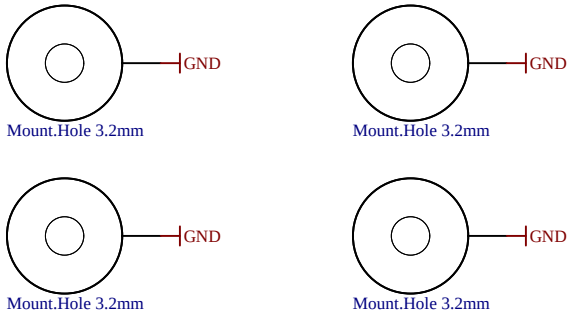
Special notes:







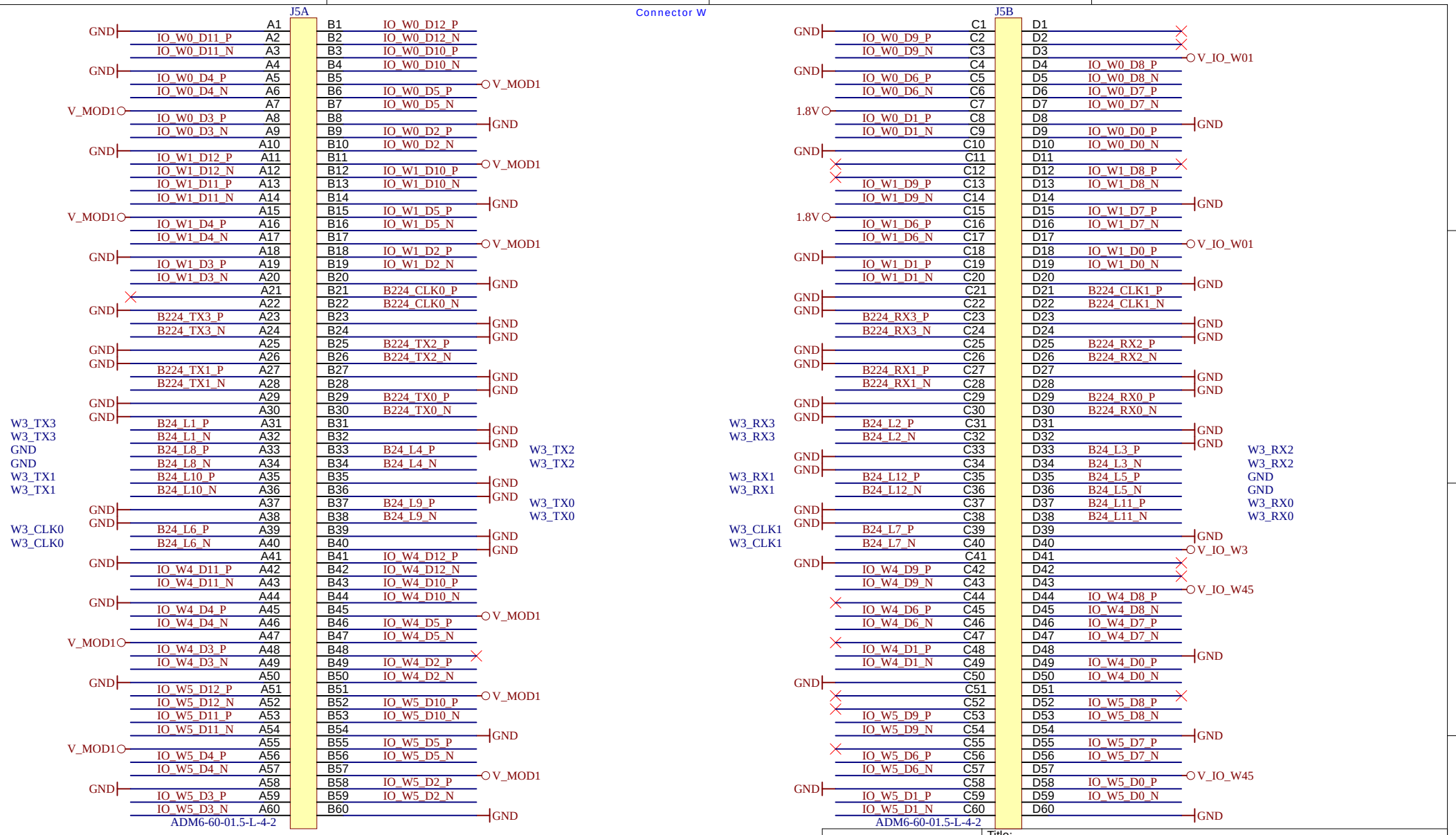
Serial
Serial
Serialnumber 6,3 x 6.3mm



Assembly variant	[No Variations]
Created by	
Modified by	
Modified at	
SVN Revision	457

trenz electronic

Title: AM0010		
A4	Number: AM0010 [No Variations]	Rev. 01
Date: 04.10.2021	Copyright: Trenz Electronic GmbH	Page 2 of 30
Filename: AM0010.SchDoc		



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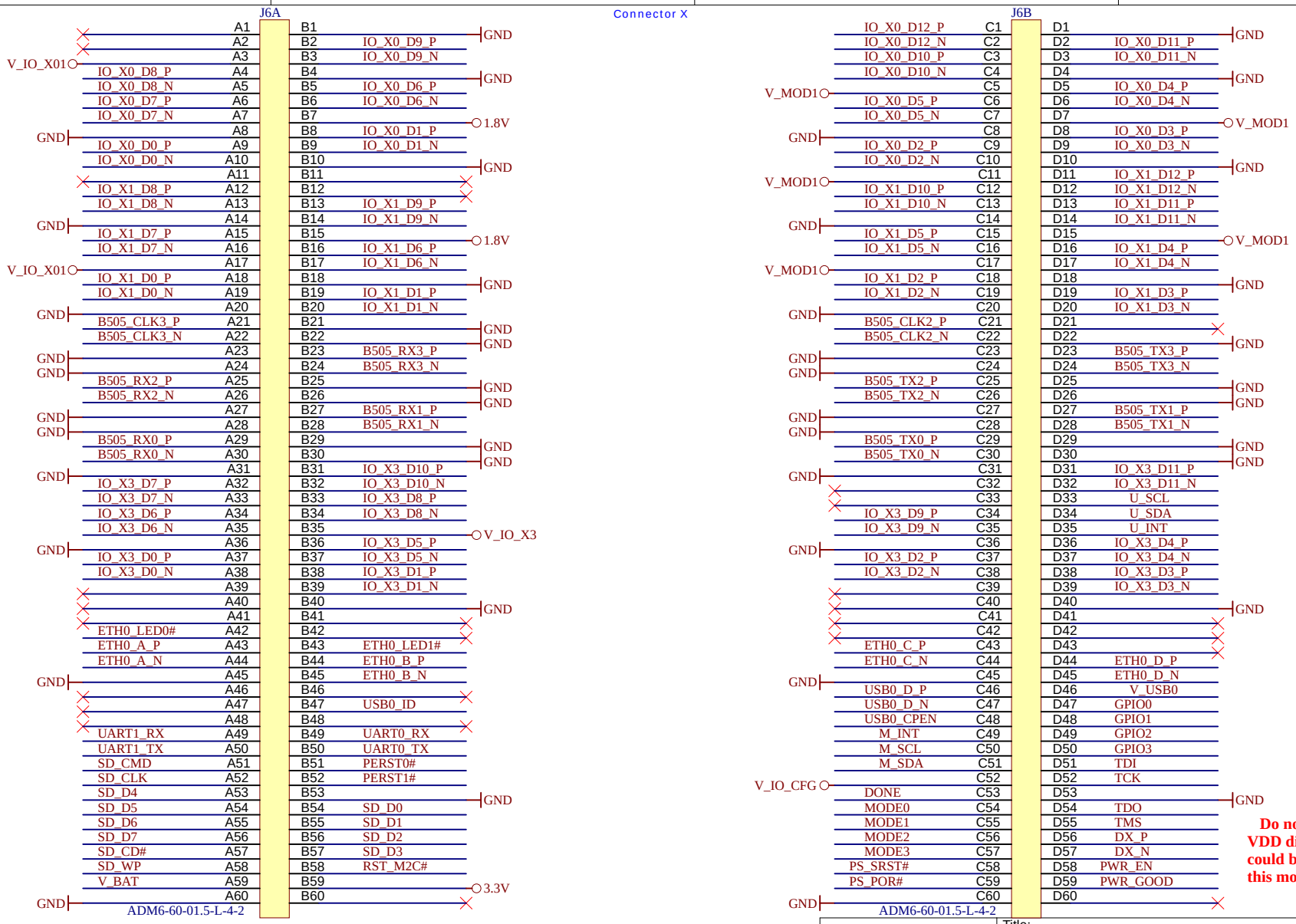
Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 3 of 30
Filename: B2B_Connector_1.SchDoc			



trenz electronic

Title: AM0010 – B2B_Connector_2		
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Date: 04.10.2021	Copyright: Trenz Electronic GmbH	Page 4 of 30
Filename: B2B_Connector_2.SchDoc		

U_B64
B64.SchDoc

U_B65
B65.SchDoc

U_B66
B66.SchDoc

U_B_HD
B_HD.SchDoc

U_B_MIO
B_MIO.SchDoc

U_PS_DDR
PS_DDR.SchDoc

U_B_PS_GT
B_PS_GT.SchDoc

U_B_GT
B_GT.SchDoc

U_CONFIG
CONFIG.SchDoc

U_ZU_POWER
ZU_POWER.SchDoc

U_ZU_PS_POWER
ZU_PS_POWER.SchDoc

trenz electronic

Title: AM0010 – MPSoC		
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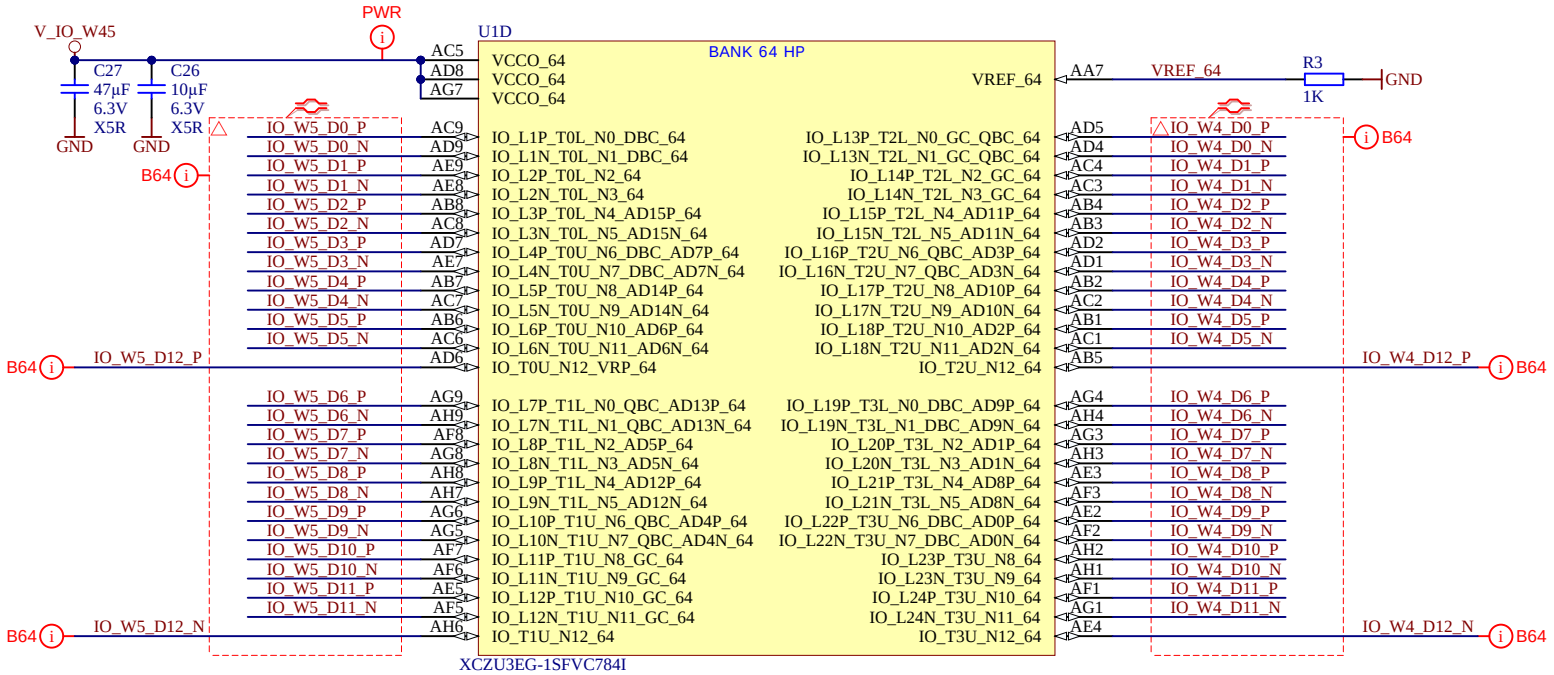
Date: 04.10.2021	Copyright: Trenz Electronic GmbH	Page 5 of 30
Filename: MPSoC.SchDoc		



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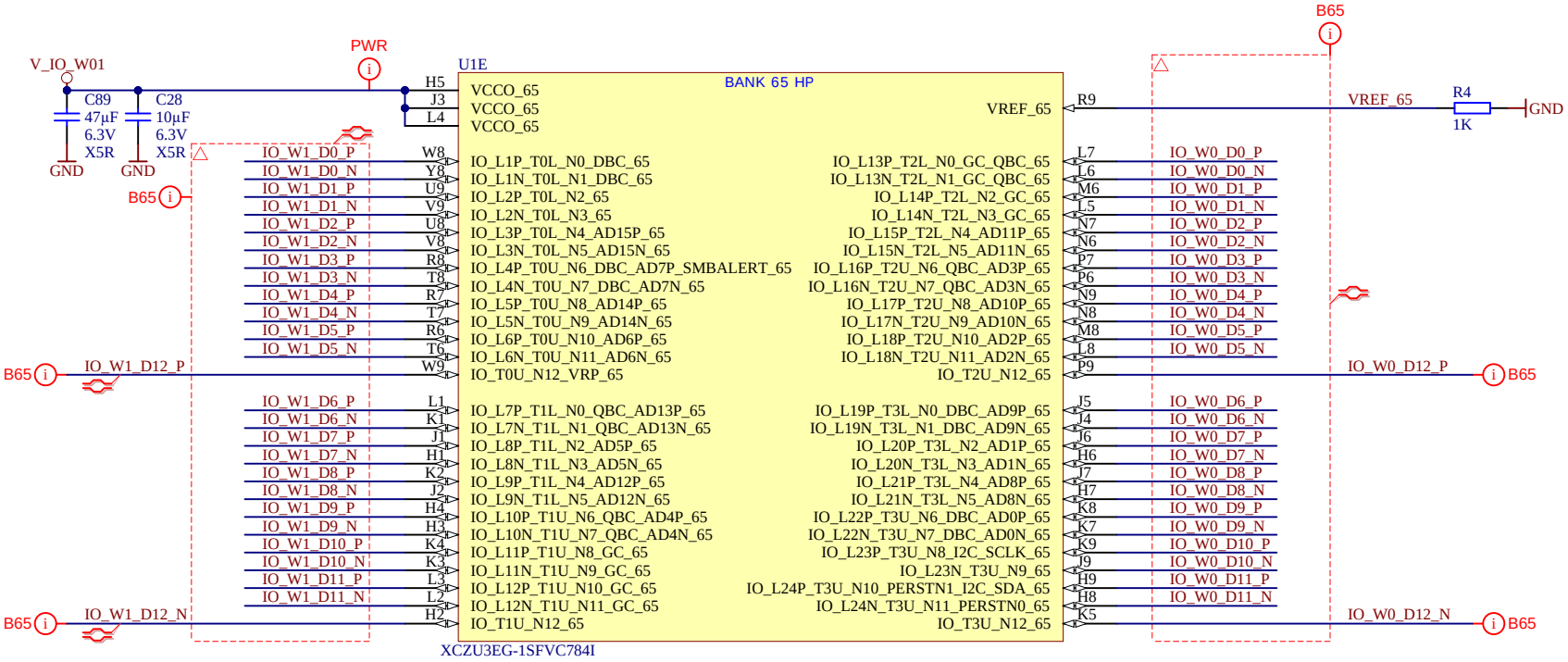
Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 6 of 30
Filename: B64.SchDoc			



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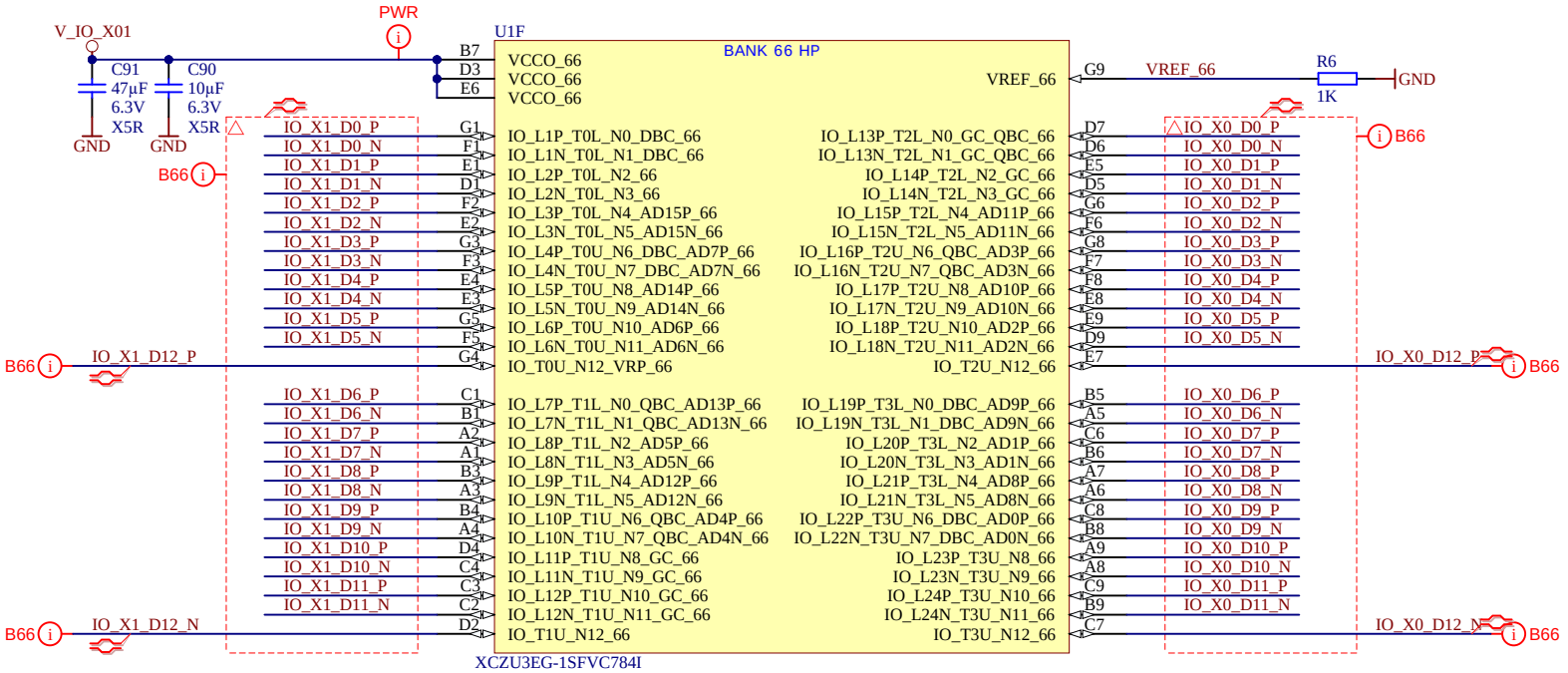
Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 7 of 30
Filename: B65.SchDoc			



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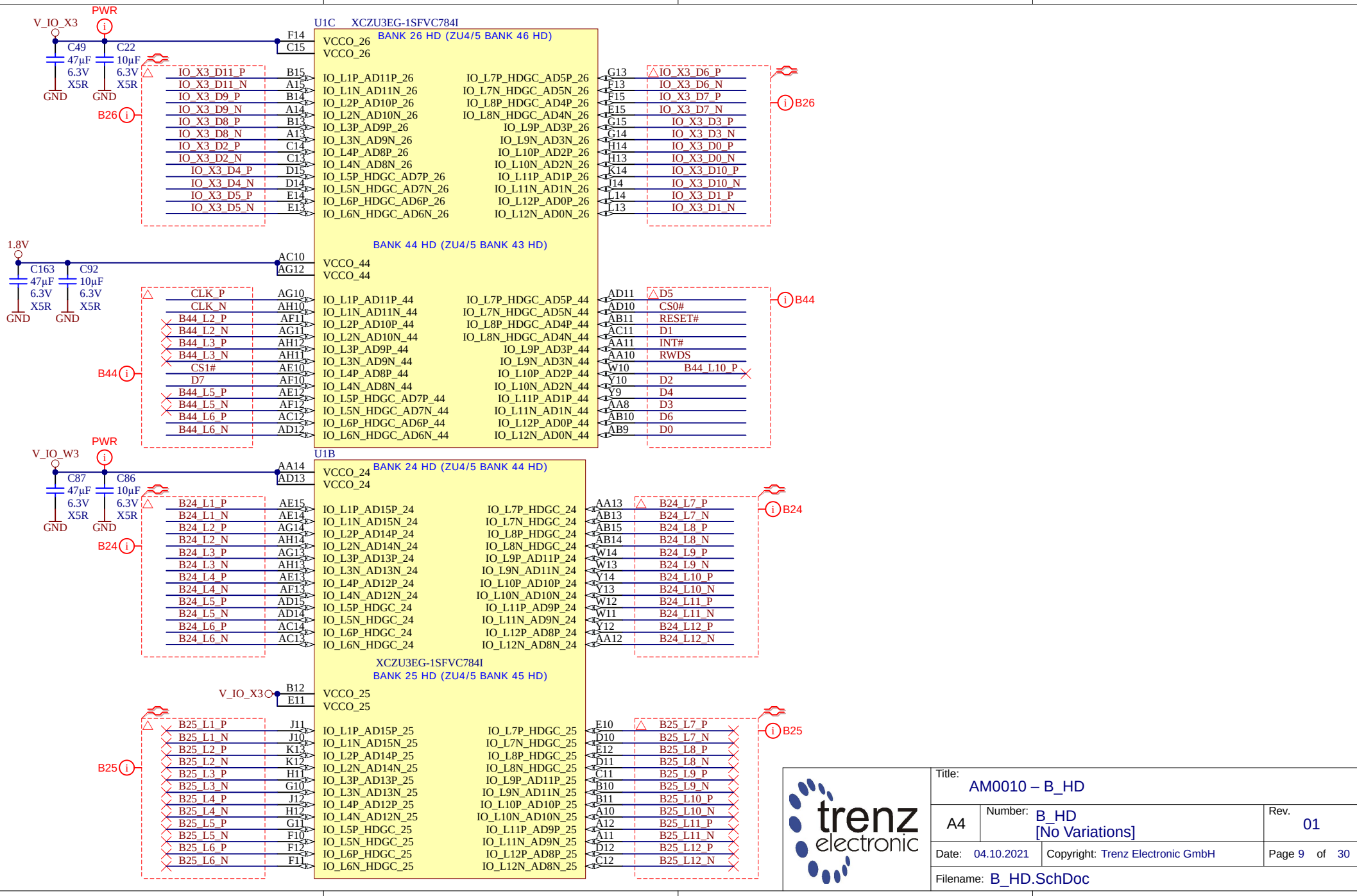
Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 8 of 30
Filename: B66.SchDoc			



trenz electronic	Title: AM0010 – B_HD		
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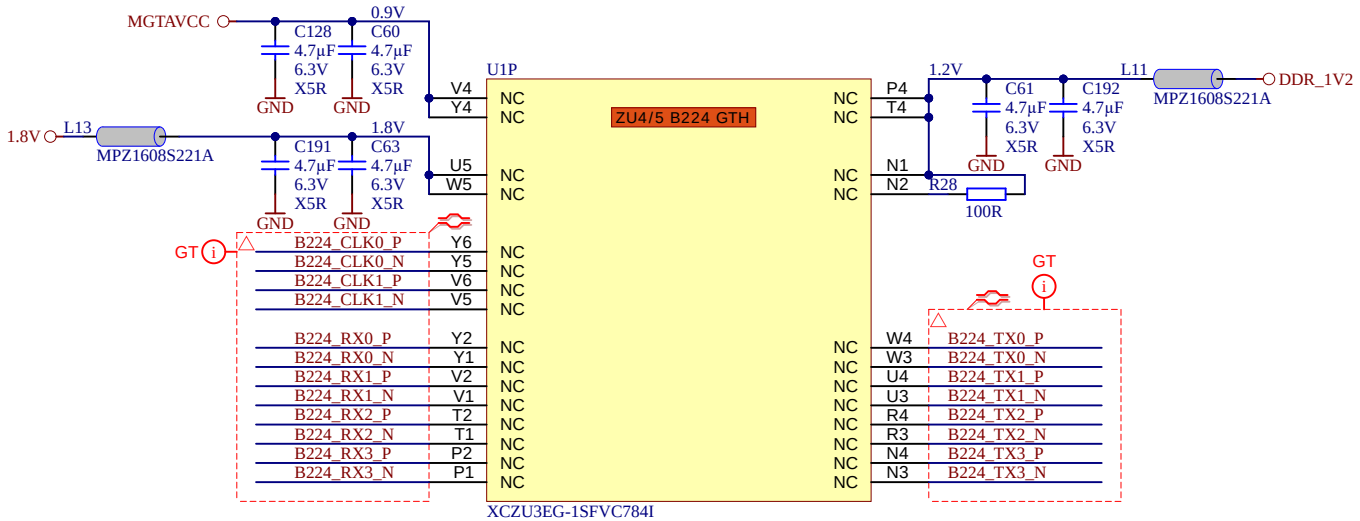
Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 9 of 30
Filename: B_HD.SchDoc			



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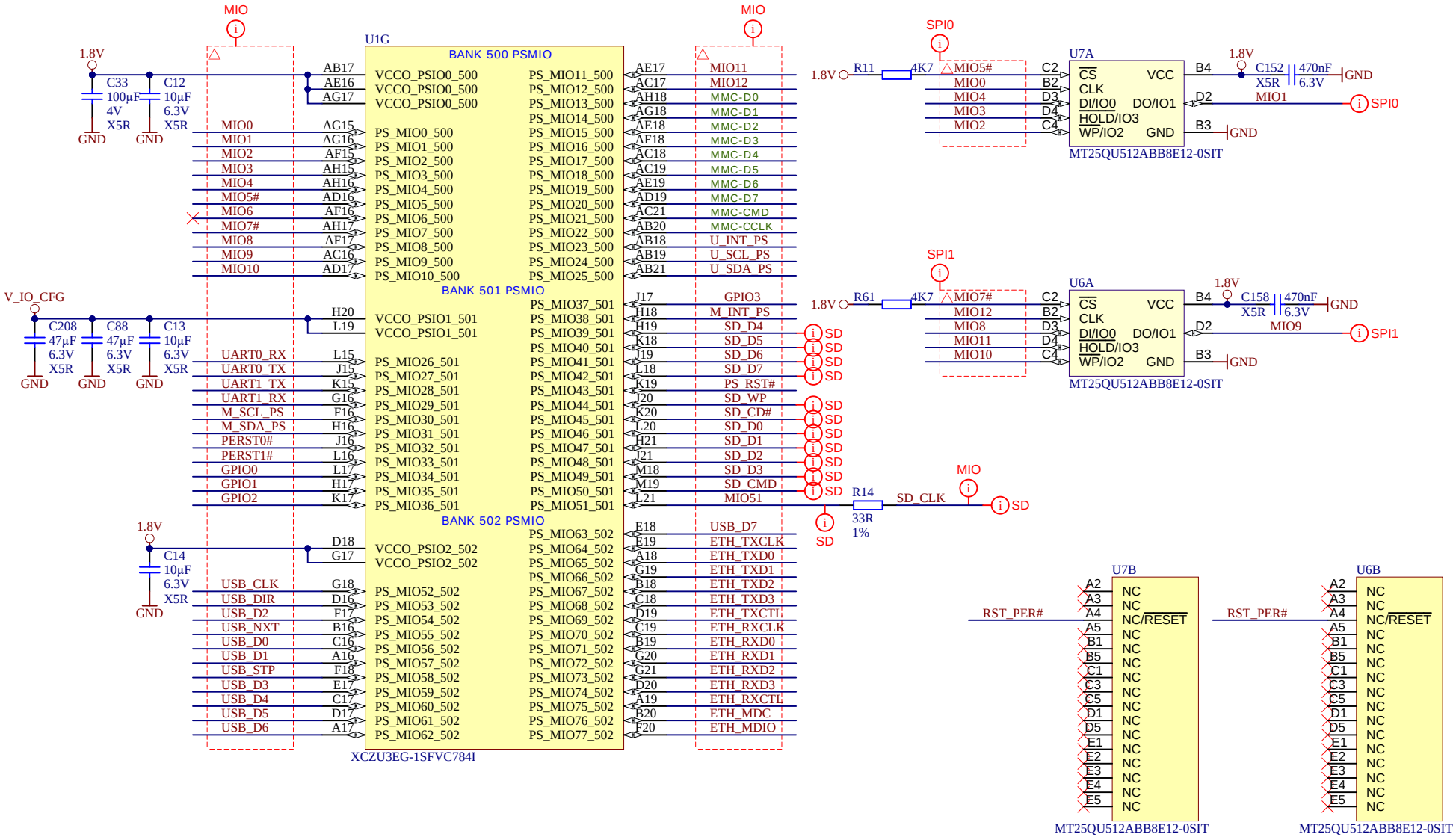
Date: 04.10.2021	Copyright: Trenz Electronic GmbH	Page 10 of 30
Filename: B_GT.SchDoc		



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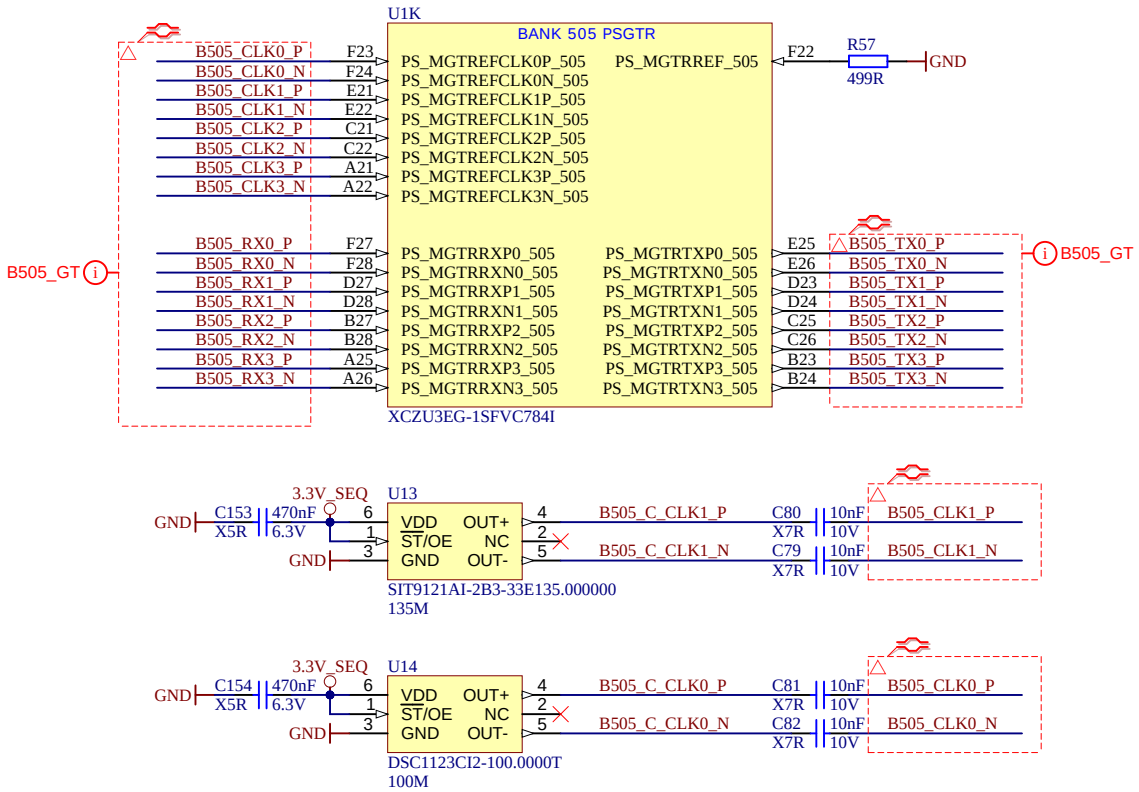
Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 11 of 30
Filename: B_MIO.SchDoc			



trenz electronic	Title: AM0010 – B_PS_GT		
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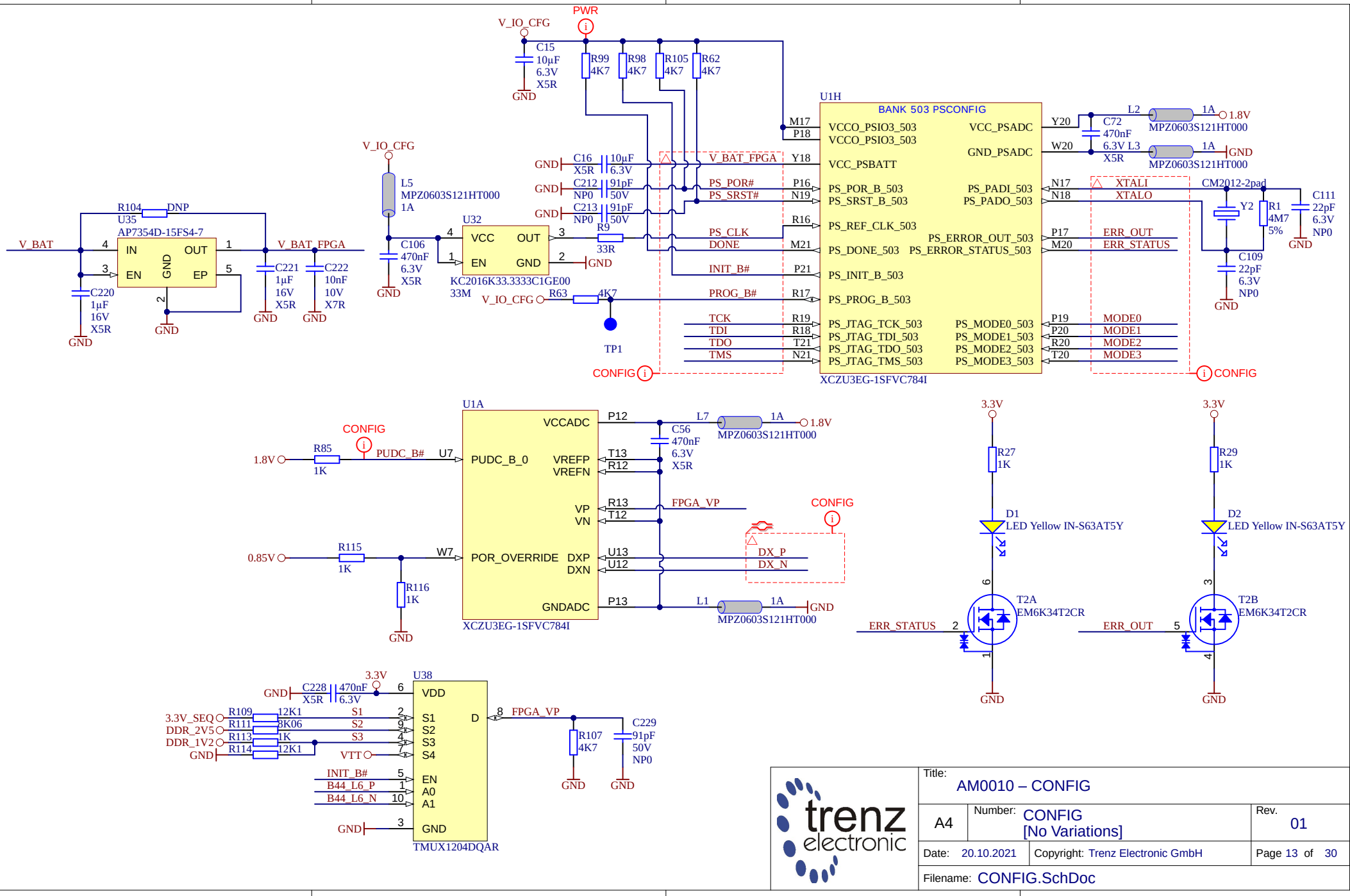
Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 12 of 30
Filename: B_PS_GT.SchDoc			



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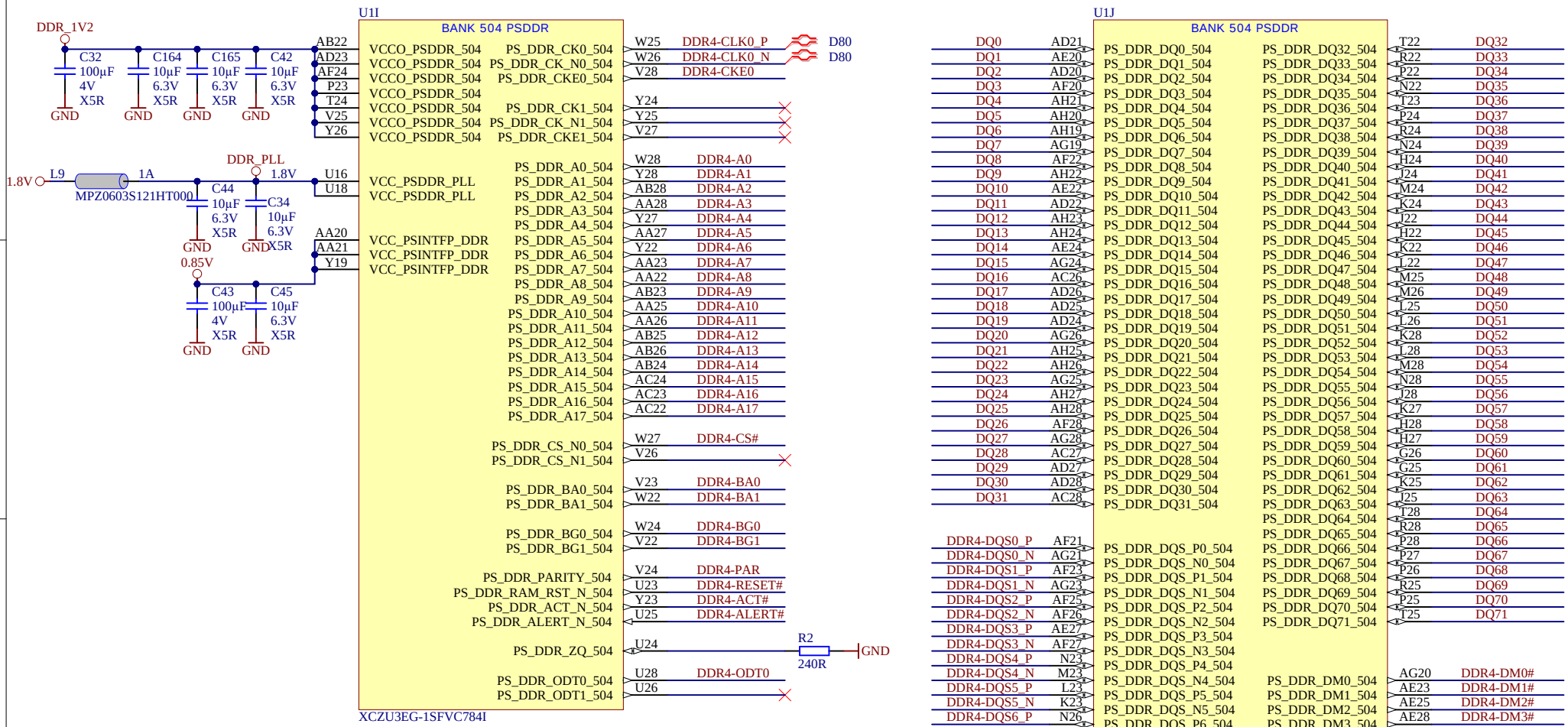
	Date: 20.10.2021	Copyright: Trenz Electronic GmbH	Page 13 of 30
	Filename: CONFIG.SchDoc		



trenz electronic	Title: AM0010 – PS_DDR		
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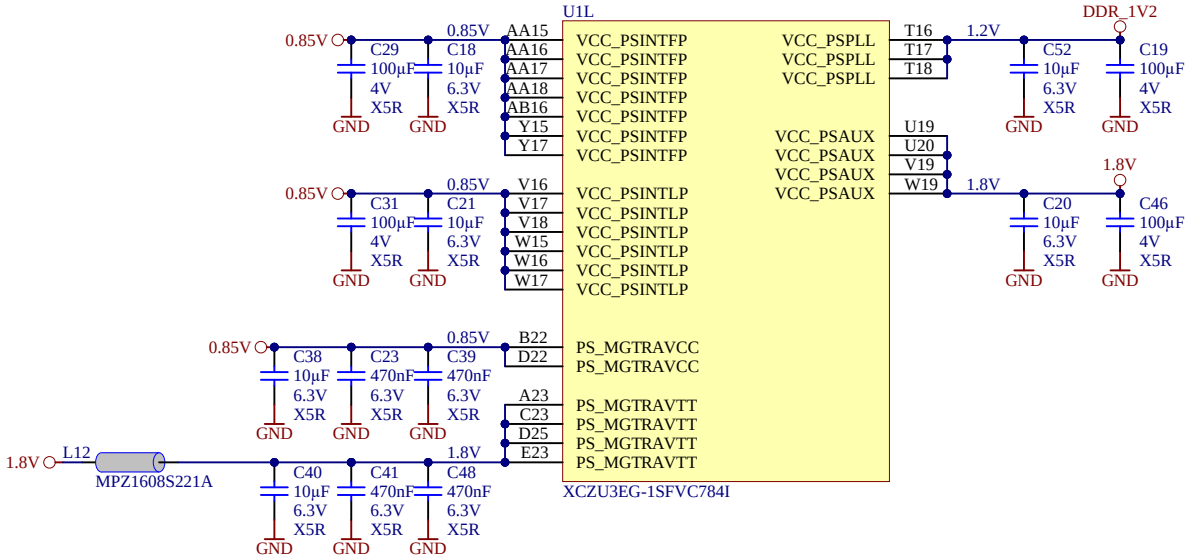
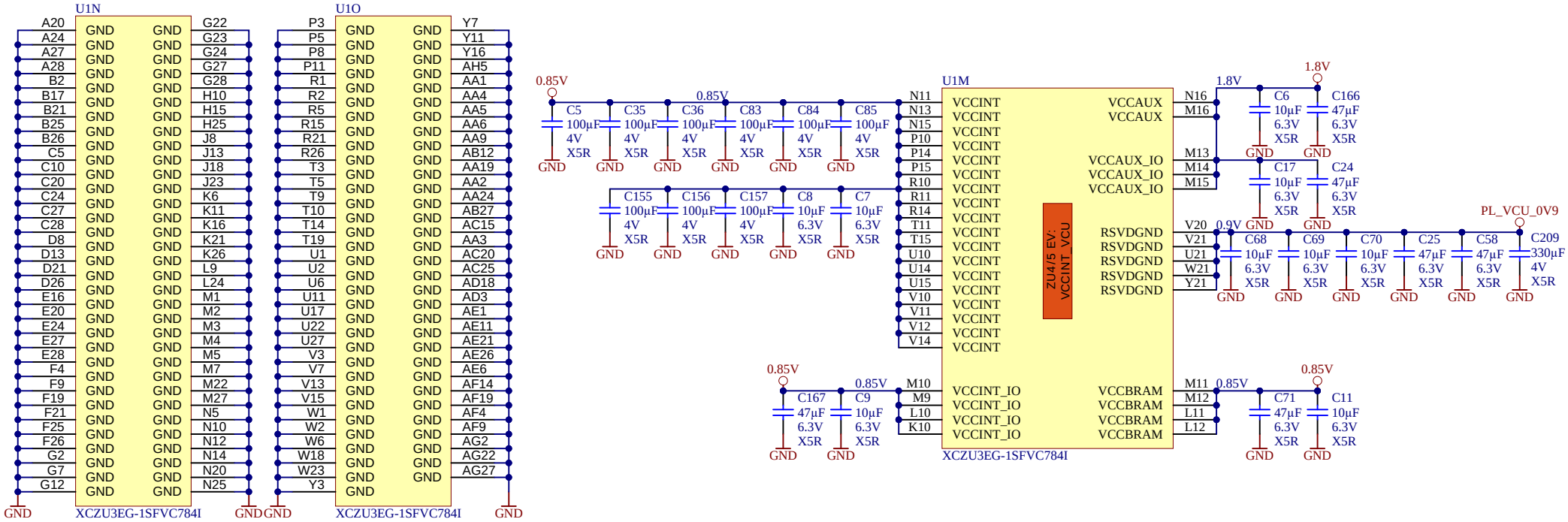
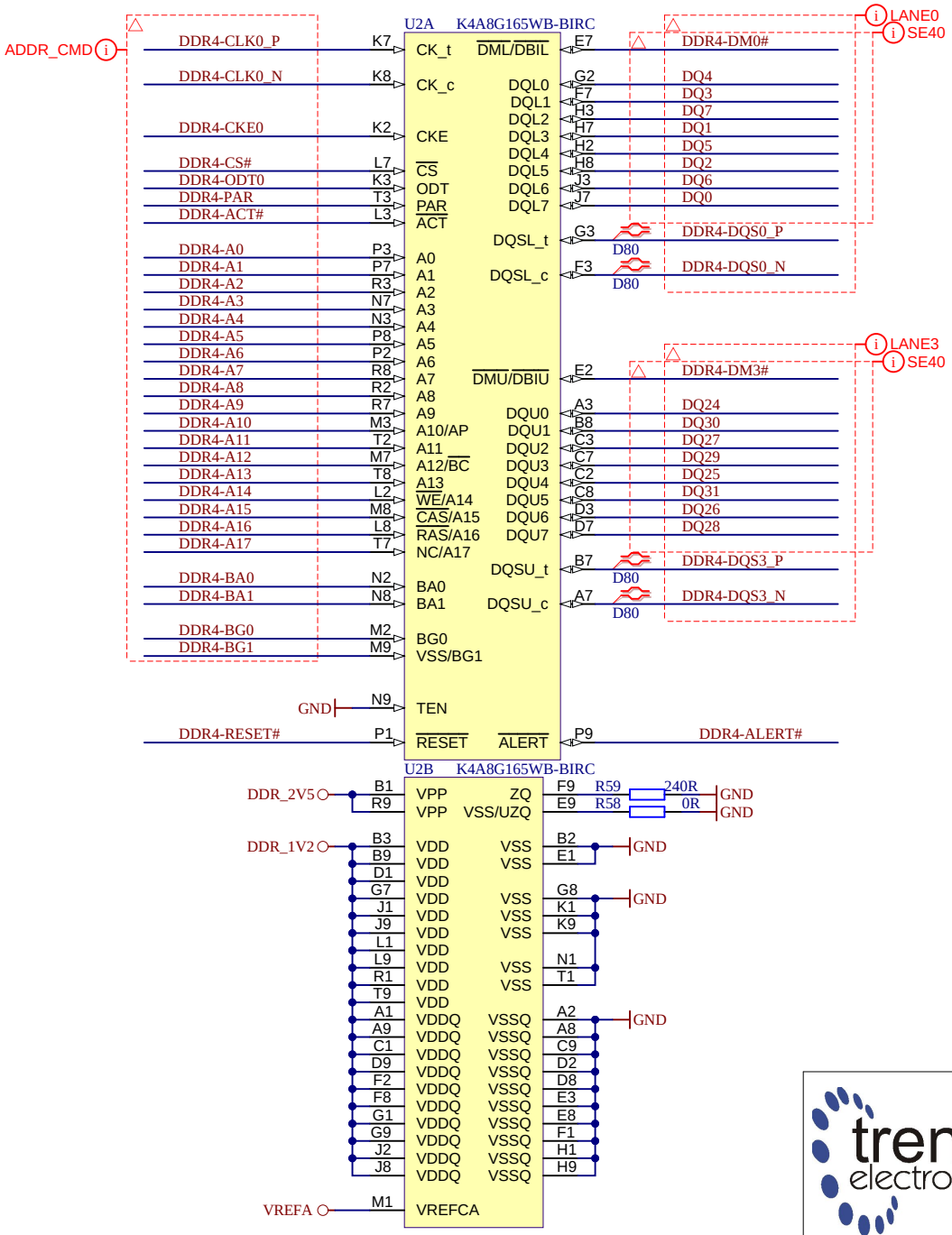
Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 14 of 30
Filename: PS_DDR.SchDoc			



Title: AM0010 – ZU_PS_POWER		
A4	Number: ZU_PS_POWER [No Variations]	Rev. 01
Date: 04.10.2021	Copyright: Trenz Electronic GmbH	Page 15 of 30
Filename: ZU_PS_POWER.SchDoc		



trenz electronic	Title: AM0010 – ZU_POWER		
	A4	Number: ZU_POWER [No Variations]	Rev. 01
	Date: 04.10.2021	Copyright: Trenz Electronic GmbH	Page 16 of 30
	Filename: ZU_POWER.SchDoc		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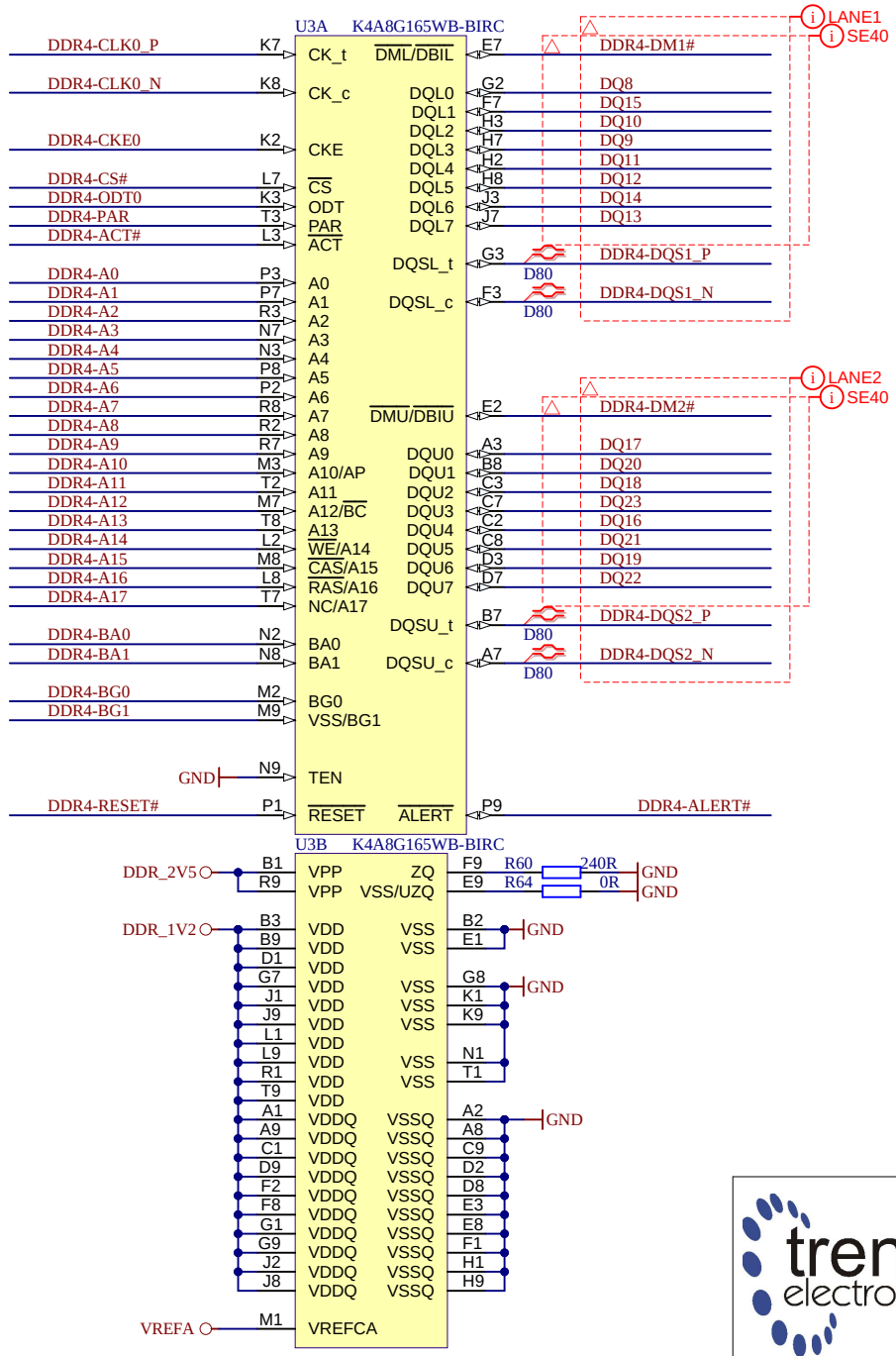
DDR4-CLK0_N K8 CK_c
DDR4-CKE0 K2 CKE
DDR4-CS# L7 CS
DDR4-ODT0 K3 ODT
DDR4-PAR T3 PAR
DDR4-ACT# L3 ACT
DDR4-A0 P3 A0
DDR4-A1 P7 A1
DDR4-A2 R3 A2
DDR4-A3 N7 A3
DDR4-A4 N3 A4
DDR4-A5 P8 A5
DDR4-A6 P2 A6
DDR4-A7 R8 A7
DDR4-A8 R2 A8
DDR4-A9 R7 A9
DDR4-A10 M3 A10/AP
DDR4-A11 T2 A11
DDR4-A12 M7 A12/BC
DDR4-A13 T8 A13
DDR4-A14 L2 WE/A14
DDR4-A15 M8 CAS/A15
DDR4-A16 L8 RAS/A16
DDR4-A17 T7 NC/A17
DDR4-BA0 N2 BA0
DDR4-BA1 N8 BA1
DDR4-BG0 M2 BG0
DDR4-BG1 M9 VSS/BG1
GND N9 TEN
DDR4-RESET# P1 RESET
DML/DBIL E7 DDR4-DM0#
DQL0 G2 DQ4
DQL1 F7 DQ3
DQL2 H3 DQ7
DQL3 H7 DQ1
DQL4 H2 DQ5
DQL5 H8 DQ2
DQL6 J3 DQ6
DQL7 J7 DQ0
DQSL_t G3 DDR4-DQS0_P
DQSL_c F3 DDR4-DQS0_N
D80
D80
LANE0
SE40
DMU/DBIU E2 DDR4-DM3#
DQU0 A3 DQ24
DQU1 B8 DQ30
DQU2 C3 DQ27
DQU3 C7 DQ29
DQU4 C2 DQ25
DQU5 C8 DQ31
DQU6 D3 DQ26
DQU7 D7 DQ28
DQSU_t B7 DDR4-DQS3_P
DQSU_c A7 DDR4-DQS3_N
D80
D80
LANE3
SE40
ALERT P9 DDR4-ALERT#
U2B K4A8G165WB-BIRC
DDR_2V5 B1 R9 VPP
VPP
ZQ F9 R59 240R GND
VSS/UZQ E9 R58 0R GND
DDR_1V2 B3 B9 D1 G7 J1 J9 L1 L9 R1 T9 VDD
VSS B2 E1 GND
G8 K1 K9 N1 T1 GND
A2 A8 C9 D2 D8 E3 E8 F1 H1 H9 GND
A1 A9 C1 D9 F2 F8 G1 G9 J2 J8 VDDQ
VSSQ
VREFA M1 VREFCA
trenz electronic
Title: AM0010 – DDR4-RAM
A4
Number: DDR4-RAM [No Variations]
Rev. 01
Date: 04.10.2021
Copyright: Trenz Electronic GmbH
Page 17 of 30
Filename: DDR4-RAM.SchDoc



trenz electronic	Title: AM0010 – DDR4-RAM_2	
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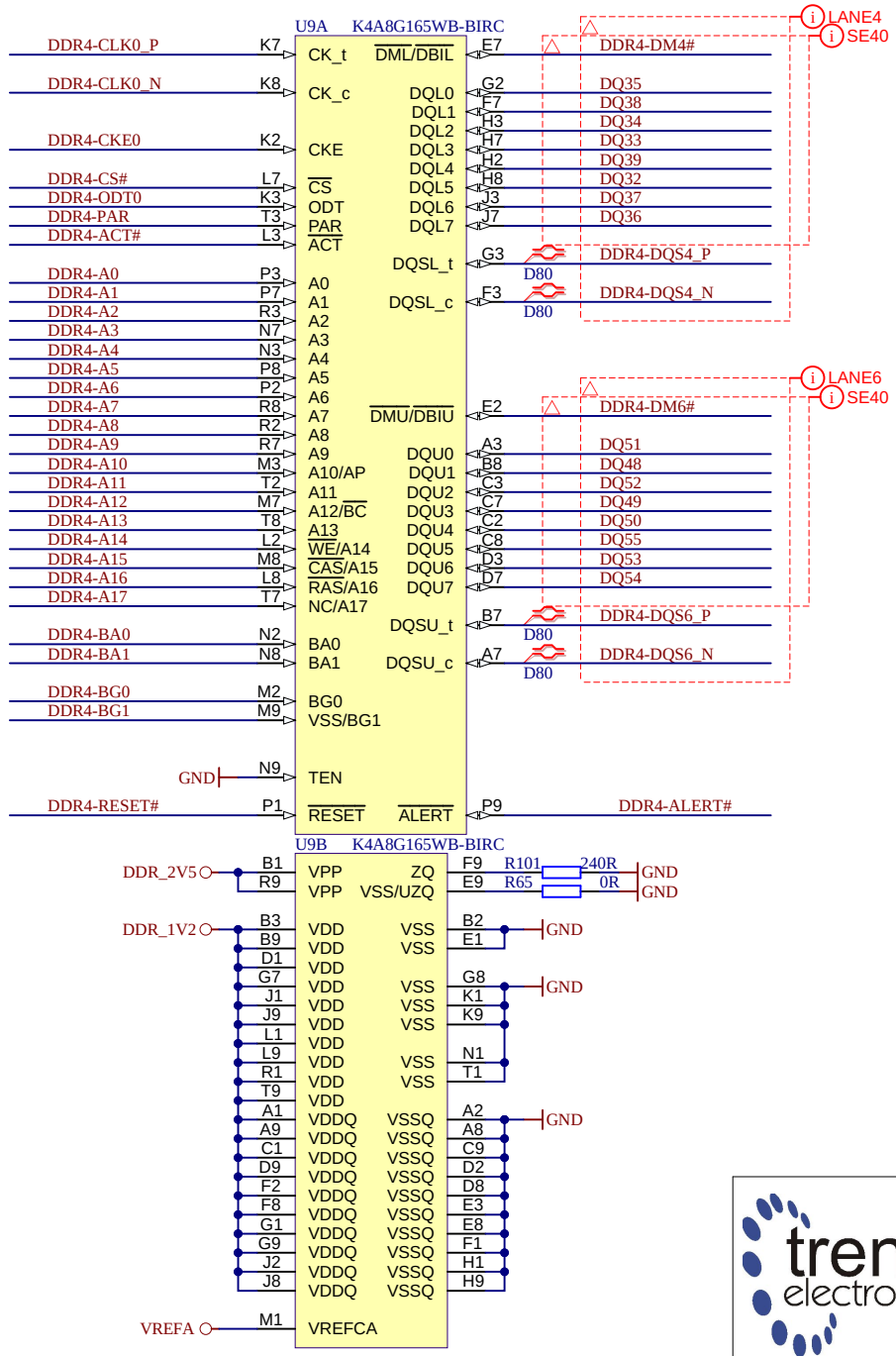
Date: 04.10.2021	Copyright: Trenz Electronic GmbH	Page 18 of 30
Filename: DDR4-RAM_2.SchDoc		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DDR4-CLK0_P K7 CK_t
DDR4-CLK0_N K8 CK_c
DDR4-CKE0 K2 CKE
DDR4-CS# L7 CS
DDR4-ODT0 K3 ODT
DDR4-PAR T3 PAR
DDR4-ACT# L3 ACT
DDR4-A0 P3 A0
DDR4-A1 P7 A1
DDR4-A2 R3 A2
DDR4-A3 N7 A3
DDR4-A4 N3 A4
DDR4-A5 P8 A5
DDR4-A6 P2 A6
DDR4-A7 R8 A7
DDR4-A8 R2 A8
DDR4-A9 R7 A9
DDR4-A10 M3 A10/AP
DDR4-A11 T2 A11
DDR4-A12 M7 A12/BC
DDR4-A13 T8 A13
DDR4-A14 L2 WE/A14
DDR4-A15 M8 CAS/A15
DDR4-A16 L8 RAS/A16
DDR4-A17 T7 NC/A17
DDR4-BA0 N2 BA0
DDR4-BA1 N8 BA1
DDR4-BG0 M2 BG0
DDR4-BG1 M9 VSS/BG1
GND N9 TEN
DDR4-RESET# P1 RESET
DML/DBIL E7 DDR4-DM4#
DQL0 G2 DQ35
DQL1 F7 DQ38
DQL2 H3 DQ34
DQL3 H7 DQ33
DQL4 H2 DQ39
DQL5 H8 DQ32
DQL6 J3 DQ37
DQL7 J7 DQ36
DQSL_t G3 DDR4-DQS4_P
DQSL_c F3 DDR4-DQS4_N
D80
D80
LANE4
SE40
DMU/DBIU E2 DDR4-DM6#
DQU0 A3 DQ51
DQU1 B8 DQ48
DQU2 C3 DQ52
DQU3 C7 DQ49
DQU4 C2 DQ50
DQU5 C8 DQ55
DQU6 D3 DQ53
DQU7 D7 DQ54
DQSU_t B7 DDR4-DQS6_P
DQSU_c A7 DDR4-DQS6_N
D80
D80
LANE6
SE40
ALERT P9 DDR4-ALERT#
U9B K4A8G165WB-BIRC
DDR_2V5 B1 R9 VPP
VPP
ZQ F9 R101 240R GND
VSS/UZQ E9 R65 0R GND
DDR_1V2 B3 B9 D1 G7 J1 J9 L1 L9 R1 T9 VDD
VDD
VSS B2 E1 GND
VSS G8 K1 K9 GND
VSS N1 T1
VSS
A1 A9 C1 D9 F2 F8 G1 G9 J2 J8 VDDQ
VSSQ A2 A8 C9 D2 D8 E3 E8 F1 H1 H9 GND
VREFA M1 VREFCA
trenz electronic
Title: AM0010 – DDR4-RAM_3
A4
Number: DDR4-RAM_3 [No Variations]
Rev. 01
Date: 04.10.2021
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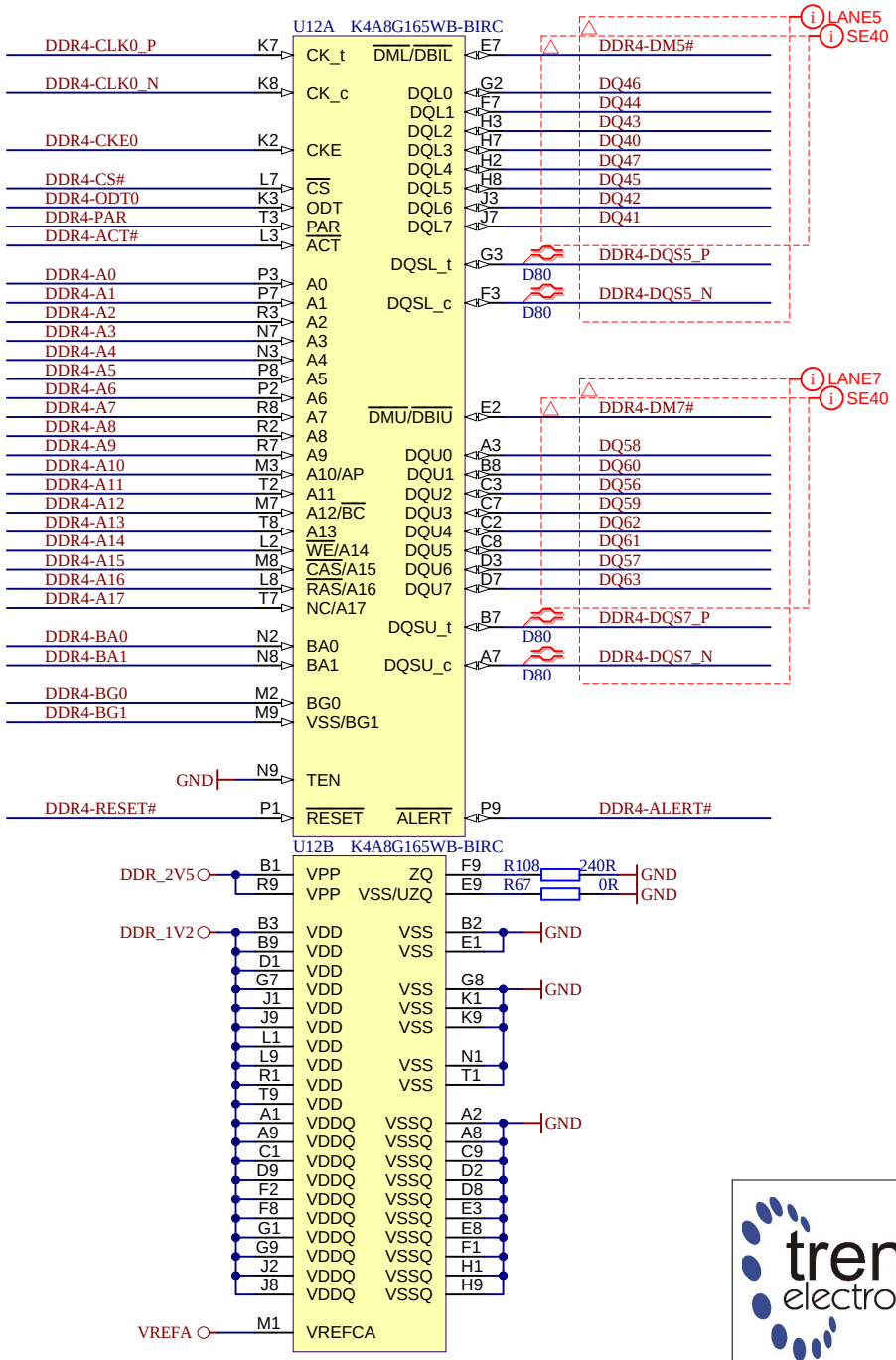
Page 19 of 30
Filename: DDR4-RAM_3.SchDoc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DDR4-CLK0_N K8 CK_c
DDR4-CKE0 K2 CKE
DDR4-CS# L7 CS
DDR4-ODT0 K3 ODT
DDR4-PAR T3 PAR
DDR4-ACT# L3 ACT
DDR4-A0 P3 A0
DDR4-A1 P7 A1
DDR4-A2 R3 A2
DDR4-A3 N7 A3
DDR4-A4 N3 A4
DDR4-A5 P8 A5
DDR4-A6 P2 A6
DDR4-A7 R8 A7
DDR4-A8 R2 A8
DDR4-A9 R7 A9
DDR4-A10 M3 A10/AP
DDR4-A11 T2 A11
DDR4-A12 M7 A12/BC
DDR4-A13 T8 A13
DDR4-A14 L2 WE/A14
DDR4-A15 M8 CAS/A15
DDR4-A16 L8 RAS/A16
DDR4-A17 T7 NC/A17
DDR4-BA0 N2 BA0
DDR4-BA1 N8 BA1
DDR4-BG0 M2 BG0
DDR4-BG1 M9 VSS/BG1
GND N9 TEN
DDR4-RESET# P1 RESET
DML/DBIL E7 DDR4-DM5#
DQL0 G2 DQ46
DQL1 F7 DQ44
DQL2 H3 DQ43
DQL3 H7 DQ40
DQL4 H2 DQ47
DQL5 H8 DQ45
DQL6 J3 DQ42
DQL7 J7 DQ41
DQSL_t G3 DDR4-DQS5_P
DQSL_c F3 DDR4-DQS5_N
D80
D80
LANE5
SE40
DMU/DBIU E2 DDR4-DM7#
DQU0 A3 DQ58
DQU1 B8 DQ60
DQU2 C3 DQ56
DQU3 C7 DQ59
DQU4 C2 DQ62
DQU5 C8 DQ61
DQU6 D3 DQ57
DQU7 D7 DQ63
DQSU_t B7 DDR4-DQS7_P
DQSU_c A7 DDR4-DQS7_N
D80
D80
LANE7
SE40
ALERT P9 DDR4-ALERT#
U12B K4A8G165WB-BIRC
DDR_2V5 B1 R9 VPP
VPP
ZQ F9 R108 240R GND
VSS/UZQ E9 R67 0R GND
DDR_1V2 B3 B9 D1 G7 J1 J9 L1 L9 R1 T9 VDD
VDD
VSS B2 E1 GND
G8 K1 K9 N1 T1 GND
A1 A9 C1 D9 F2 F8 G1 G9 J2 J8 VDDQ
VSSQ A2 A8 C9 D2 D8 E3 E8 F1 H1 H9 GND
VREFA M1 VREFCA
trenz electronic
Title: AM0010 – DDR4-RAM_4
A4
Number: DDR4-RAM_4 [No Variations]
Rev. 01
Date: 04.10.2021
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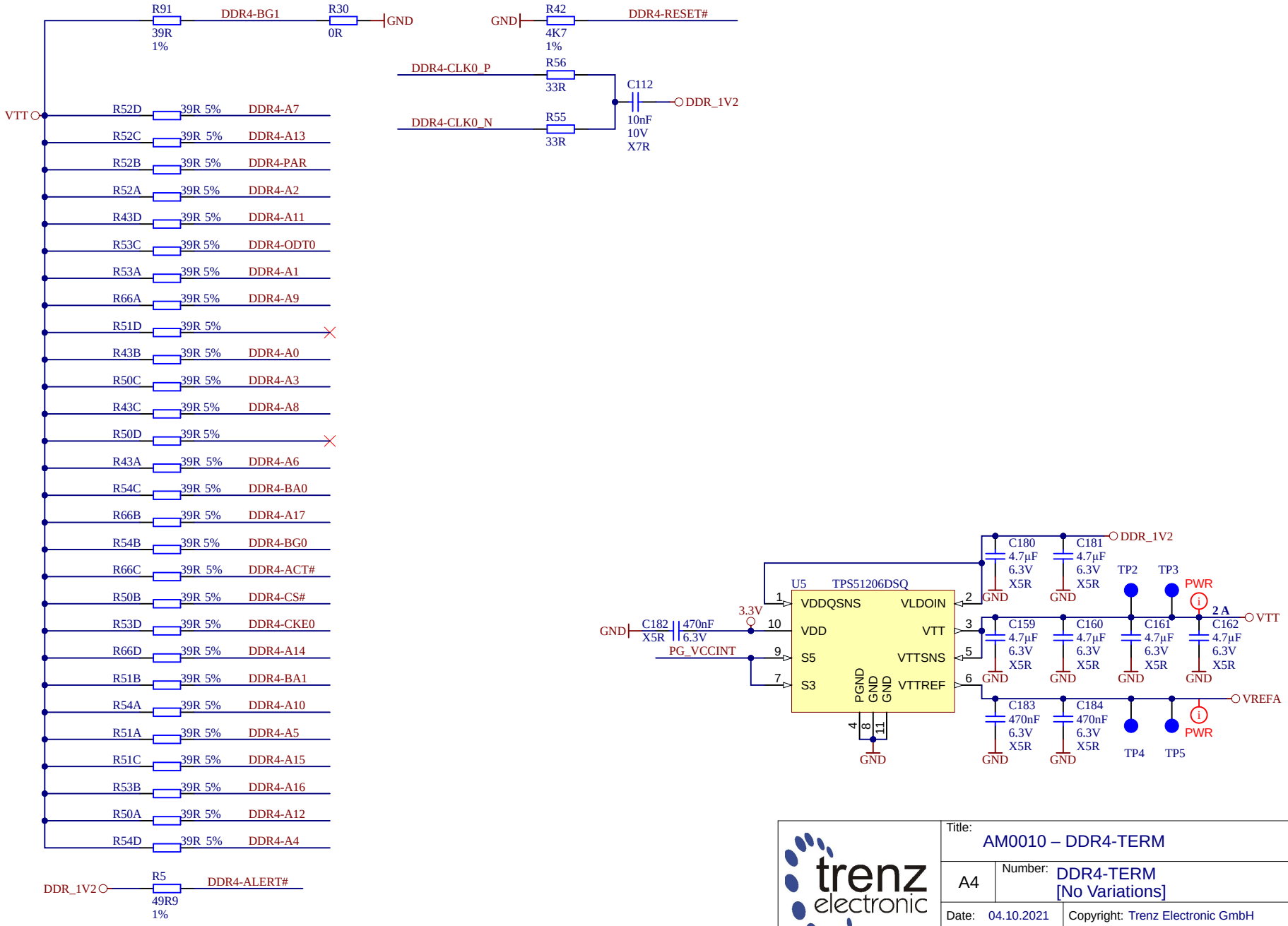
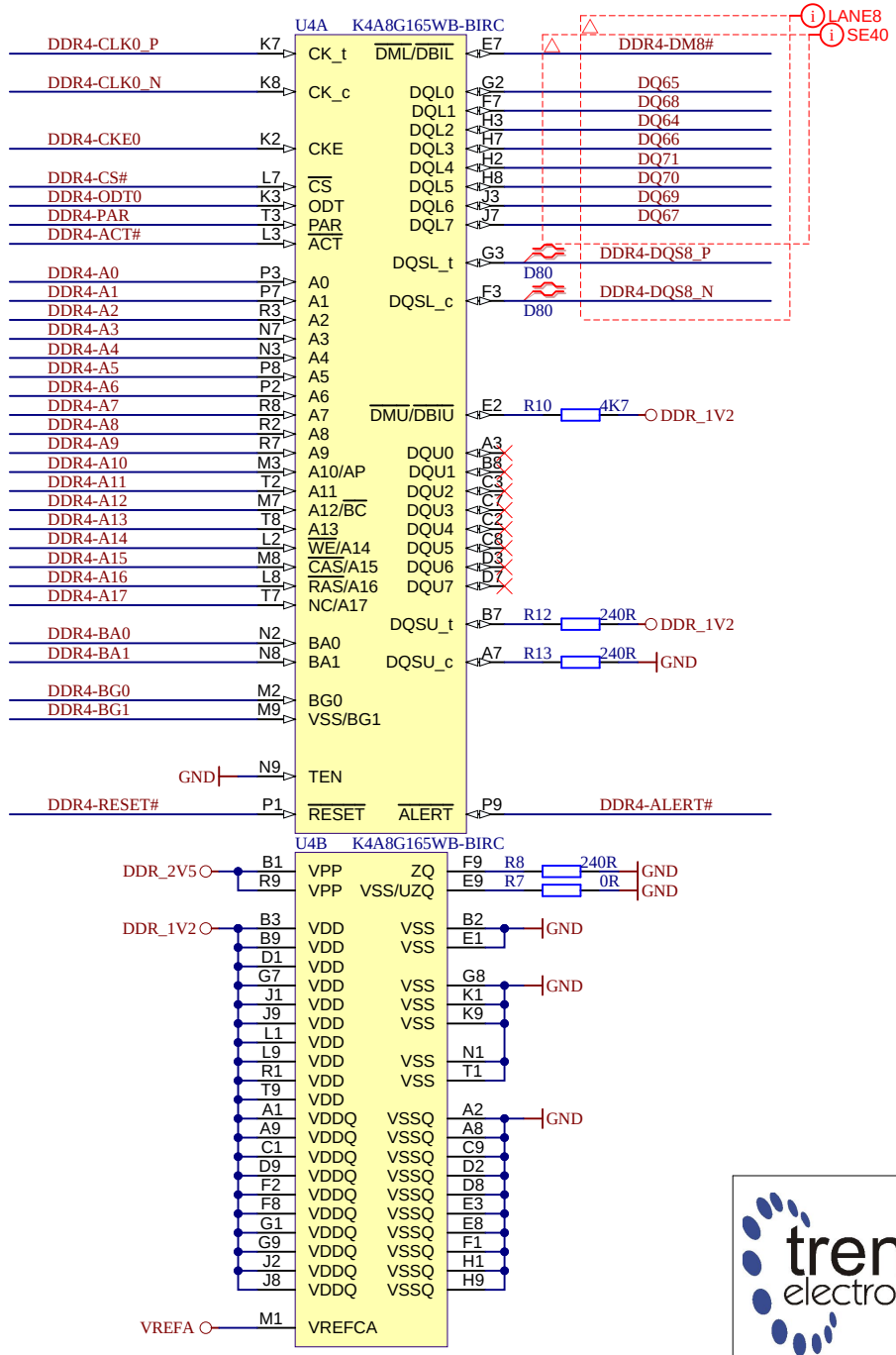
Page 20 of 30
Filename: DDR4-RAM_4.SchDoc



Title: AM0010 – DDR4-TERM			
A4	Number: DDR4-TERM [No Variations]		Rev. 01
Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 21 of 30
Filename: DDR4-TERM.SchDoc			



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Title: AM0010 – DDR4-RAM_5		
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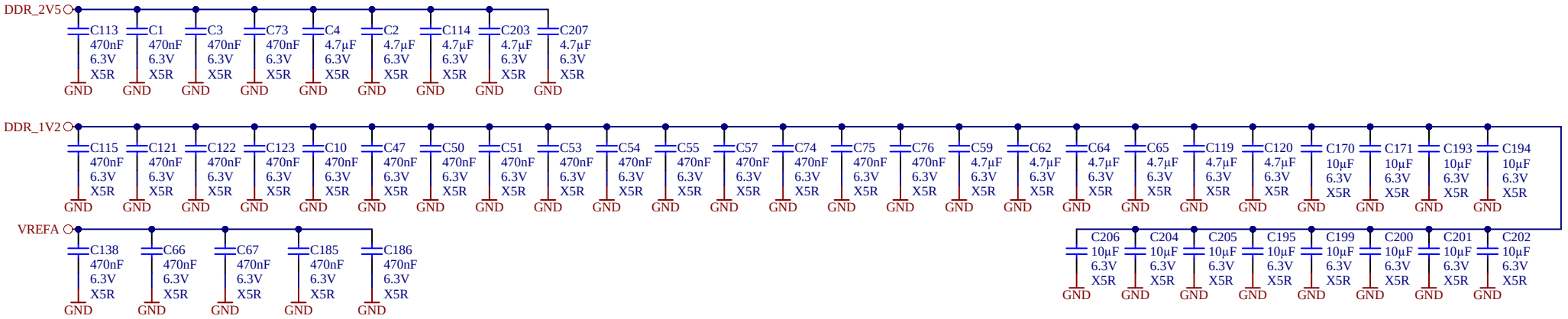
Date: 04.10.2021	Copyright: Trenz Electronic GmbH	Page 22 of 30
Filename: DDR4-RAM_5.SchDoc		



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Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 23 of 30
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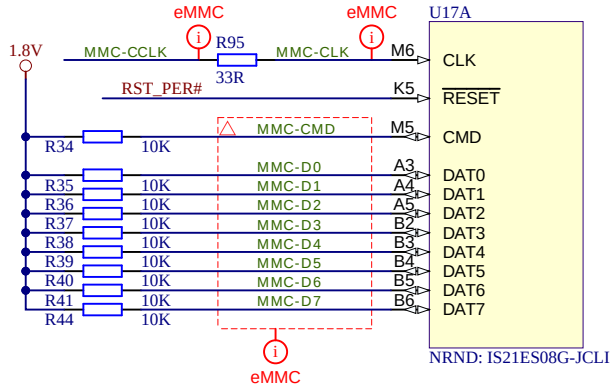
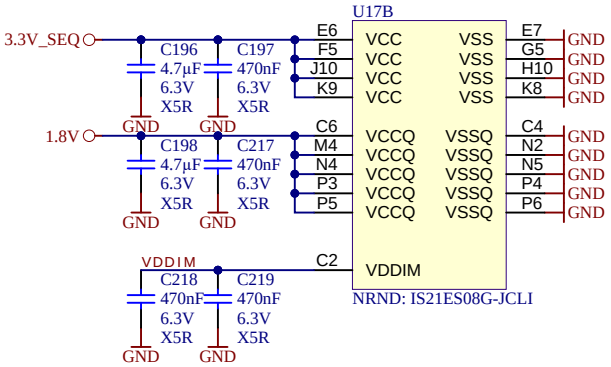
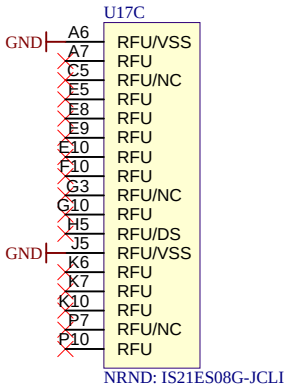
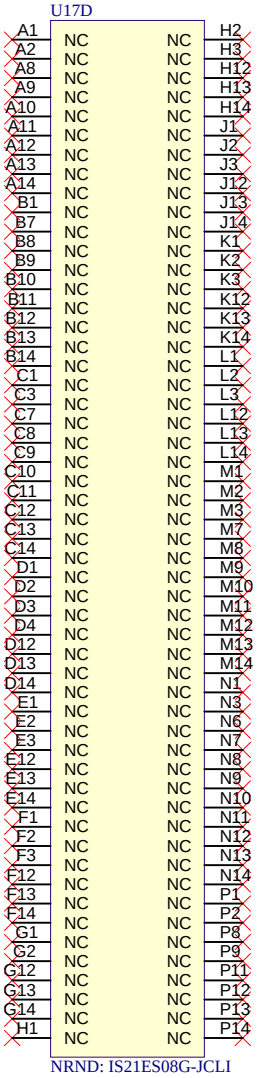
8GB eMMC









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Title: AM0010 – eMMC		
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Date: 04.10.2021	Copyright: Trenz Electronic GmbH	Page 24 of 30
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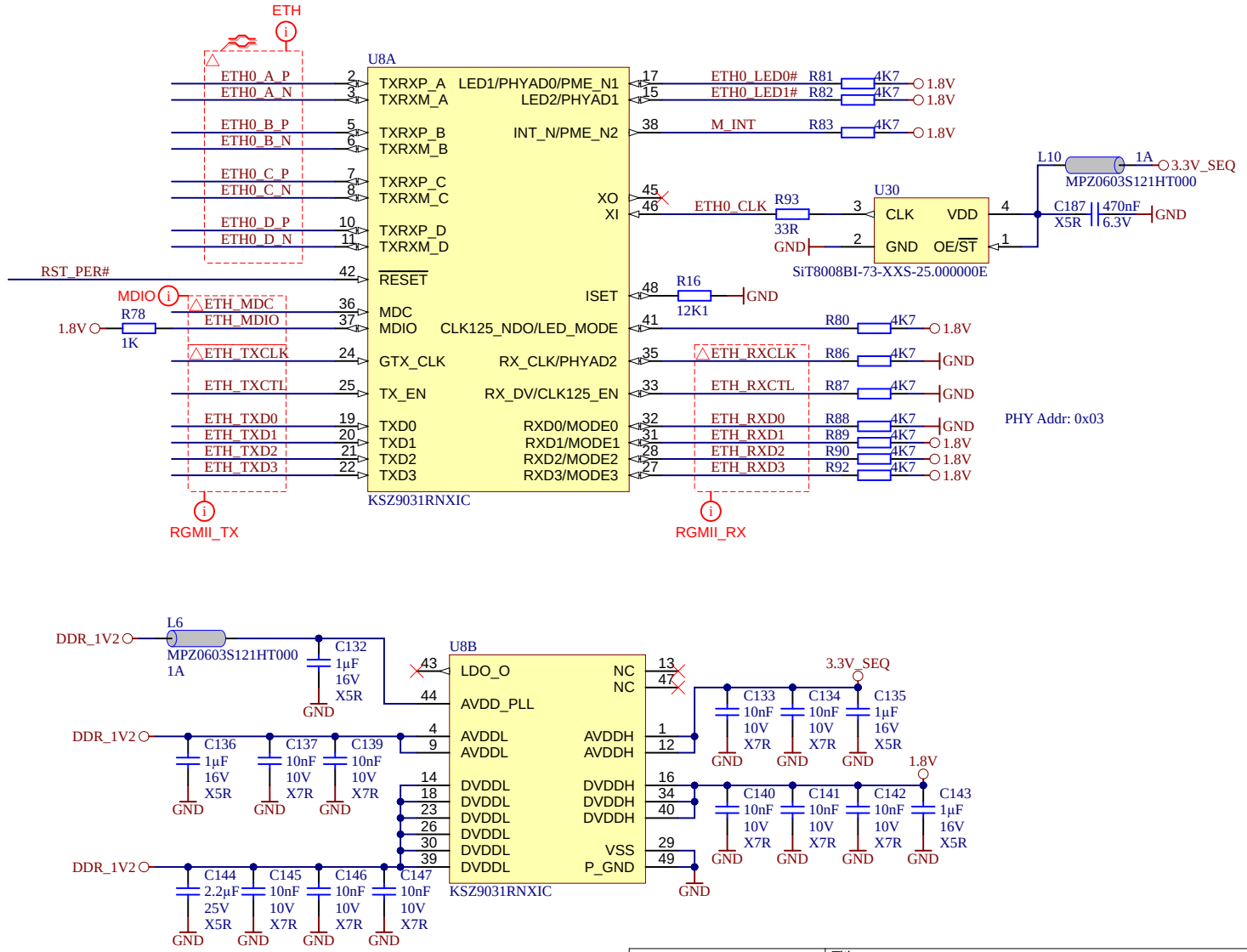

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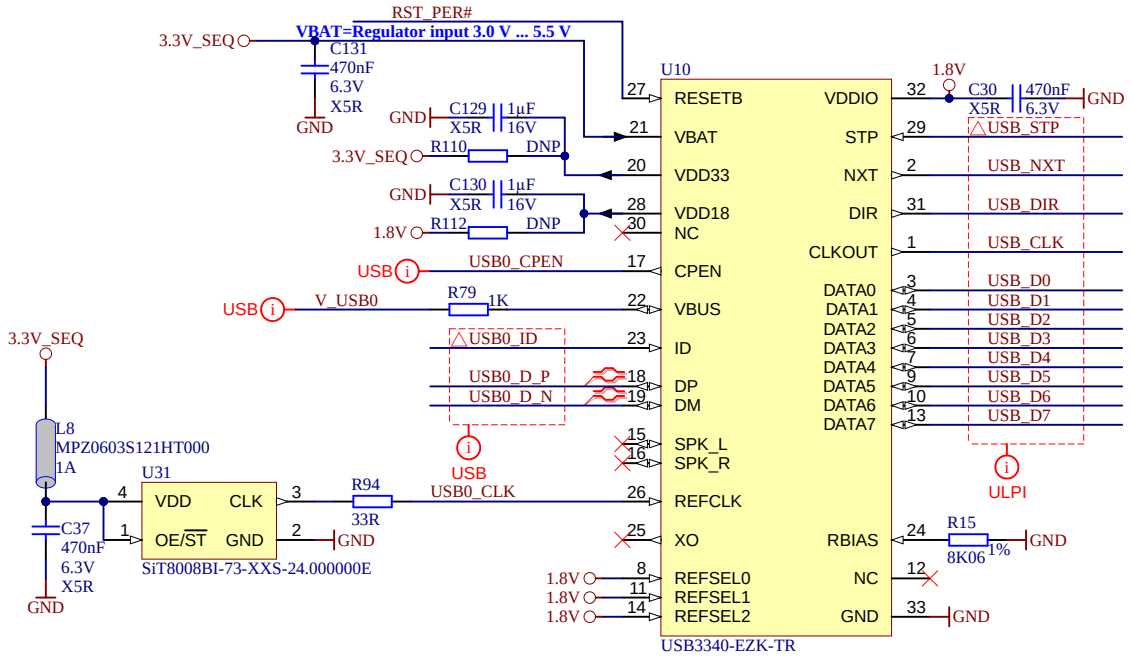
Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 25 of 30
Filename: ETHPHY.SchDoc			



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Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 26 of 30
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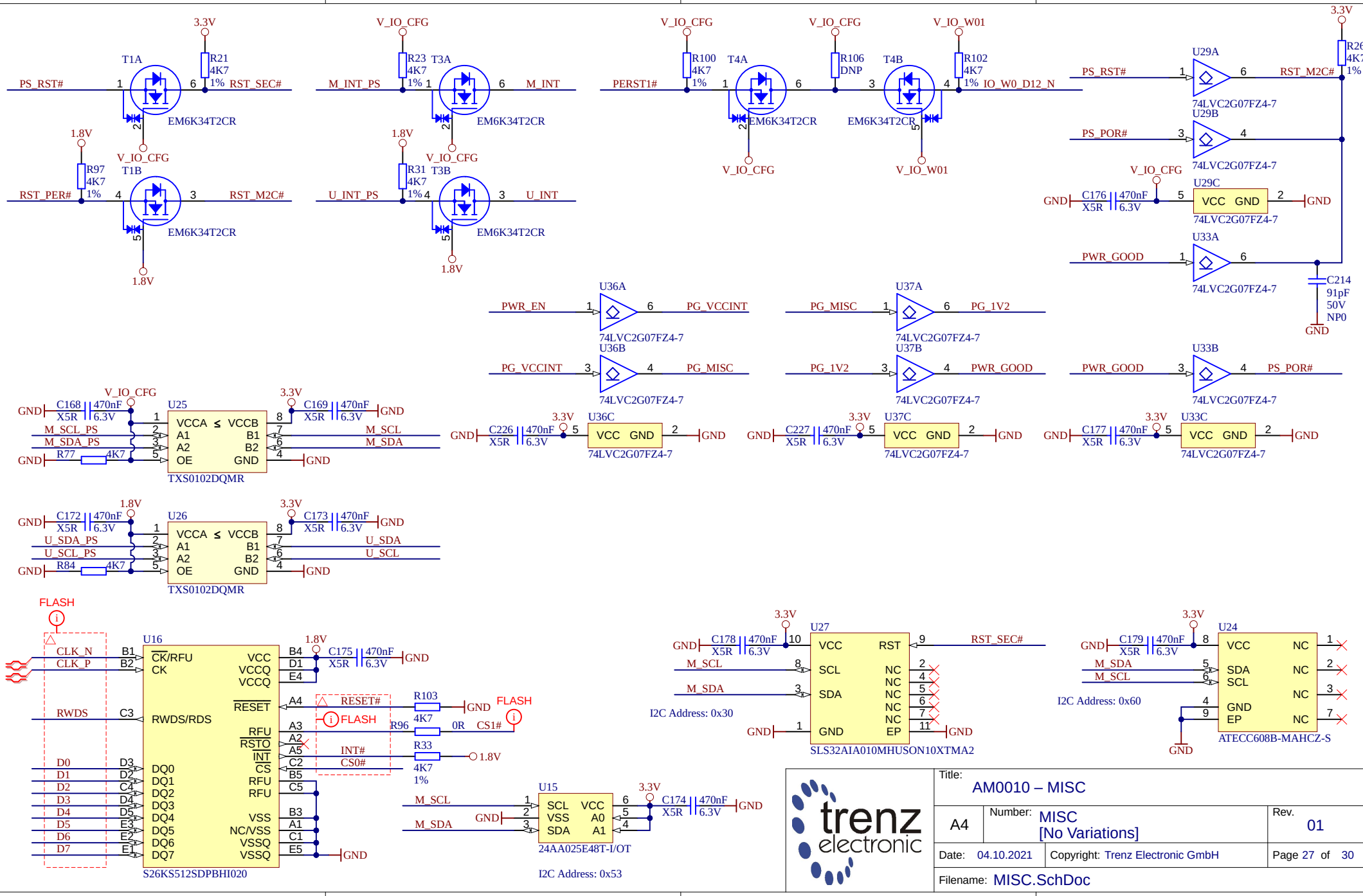

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Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 27 of 30
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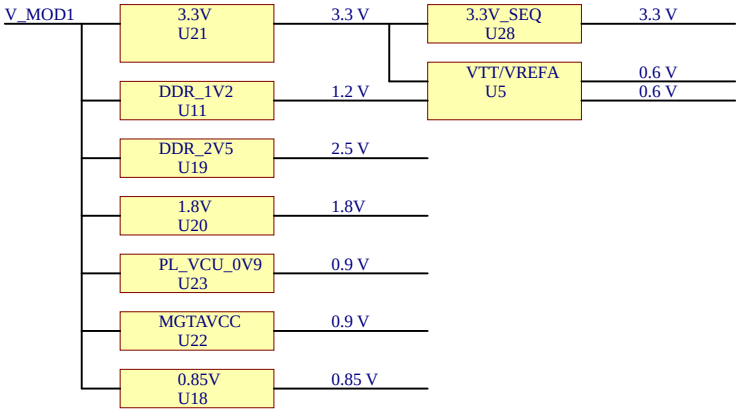
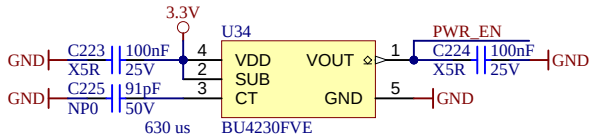
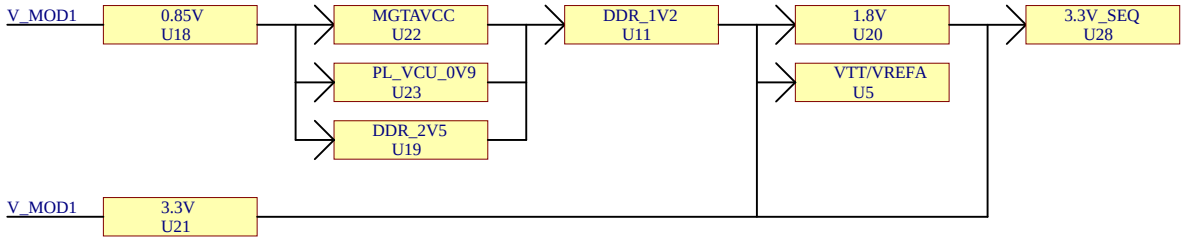
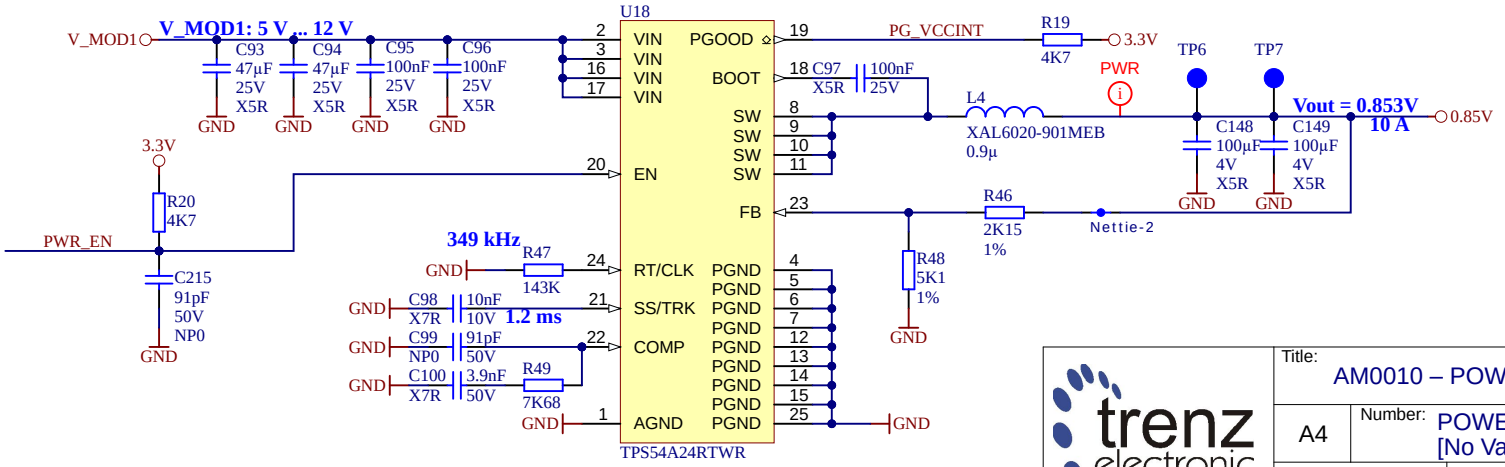
Power Supply Structure





Power Supply Sequencing





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Title: AM0010 – POWER_1			
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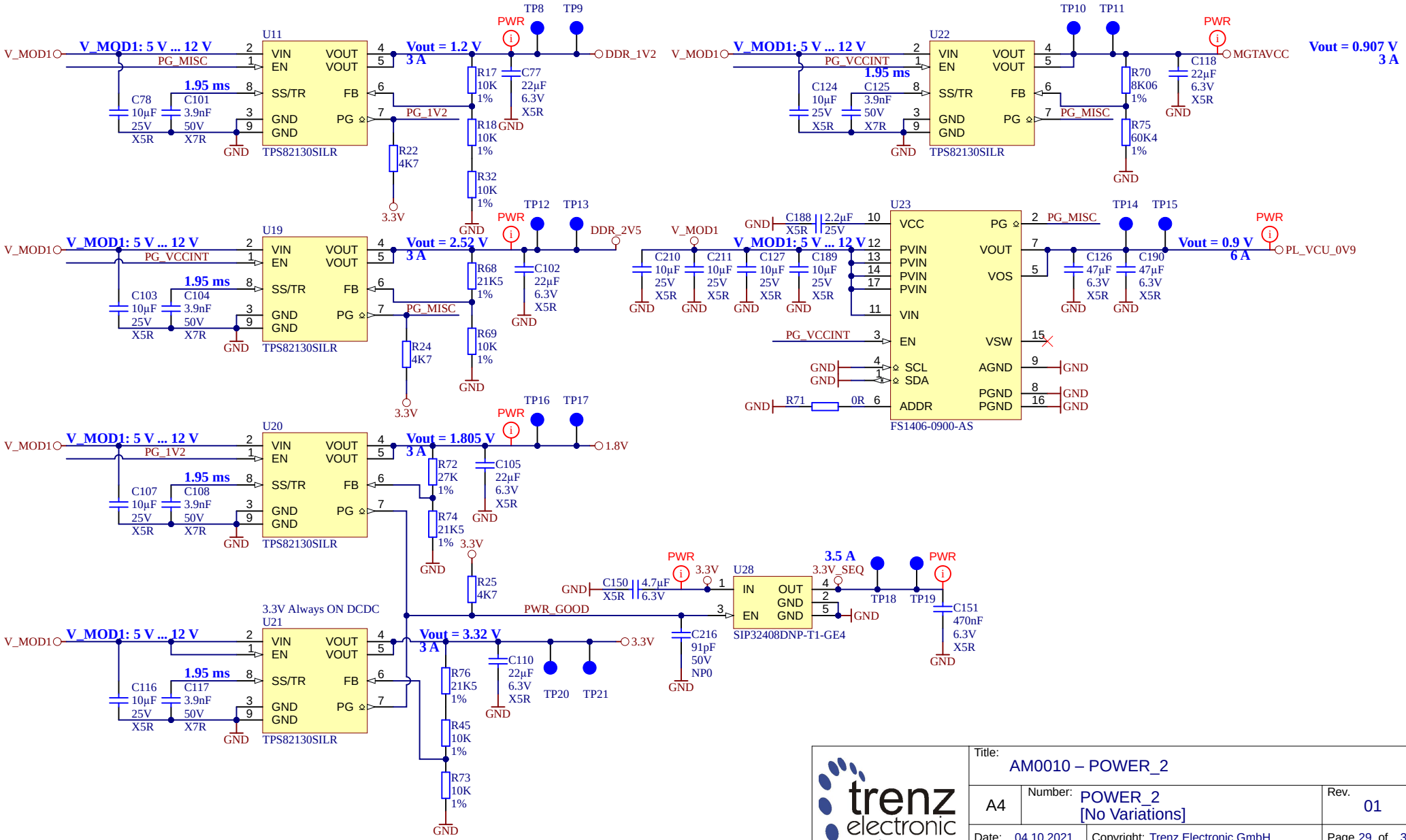
Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 28 of 30
Filename: POWER_1.SchDoc			



trenz electronic	Title: AM0010 – POWER_2		
A4	Number: POWER_2 [No Variations]		Rev. 01
Date: 04.10.2021	Copyright: Trenz Electronic GmbH		Page 29 of 30
Filename: POWER_2.SchDoc			

REV	Description	
-01	Initial revision	AL/ED

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Title: AM0010 – Revision_Changes		
A4	Number: Revision_Changes [No Variations]	Rev. 01
Date: 04.10.2021	Copyright: Trenz Electronic GmbH	Page 30 of 30
Filename: Revision_Changes.SchDoc		