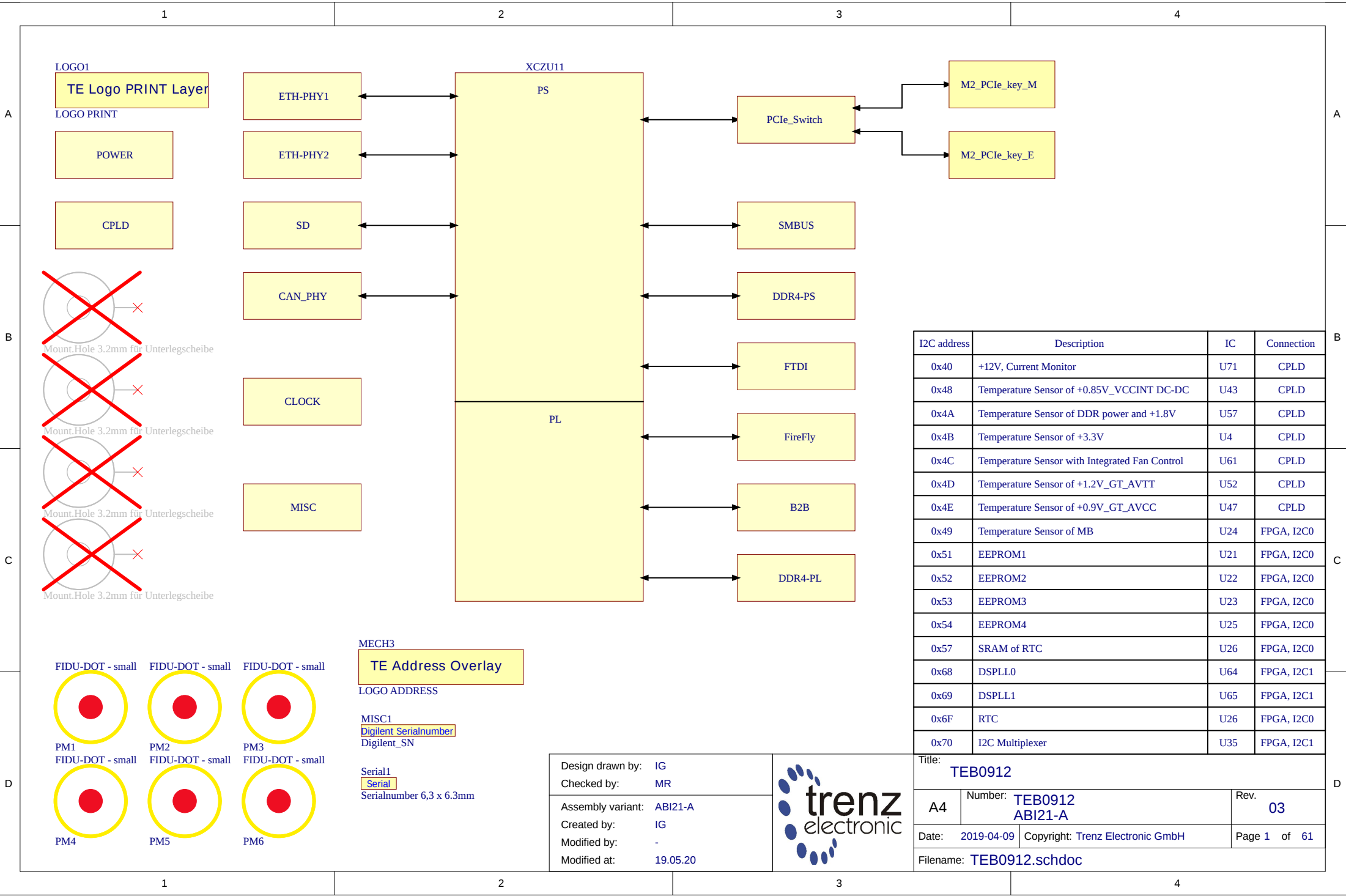




I2C address	Description	IC	Connection
0x40	+12V, Current Monitor	U71	CPLD
0x48	Temperature Sensor of +0.85V_VCCINT DC-DC	U43	CPLD
0x4A	Temperature Sensor of DDR power and +1.8V	U57	CPLD
0x4B	Temperature Sensor of +3.3V	U4	CPLD
0x4C	Temperature Sensor with Integrated Fan Control	U61	CPLD
0x4D	Temperature Sensor of +1.2V_GT_AVTT	U52	CPLD
0x4E	Temperature Sensor of +0.9V_GT_AVCC	U47	CPLD
0x49	Temperature Sensor of MB	U24	FPGA, I2C0
0x51	EEPROM1	U21	FPGA, I2C0
0x52	EEPROM2	U22	FPGA, I2C0
0x53	EEPROM3	U23	FPGA, I2C0
0x54	EEPROM4	U25	FPGA, I2C0
0x57	SRAM of RTC	U26	FPGA, I2C0
0x68	DSPLL0	U64	FPGA, I2C1
0x69	DSPLL1	U65	FPGA, I2C1
0x6F	RTC	U26	FPGA, I2C0
0x70	I2C Multiplexer	U35	FPGA, I2C1

Design drawn by: IG
Checked by: MR

Assembly variant: ABI21-A
Created by: IG
Modified by: -
Modified at: 19.05.20



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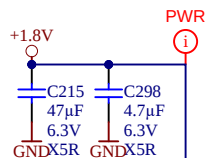
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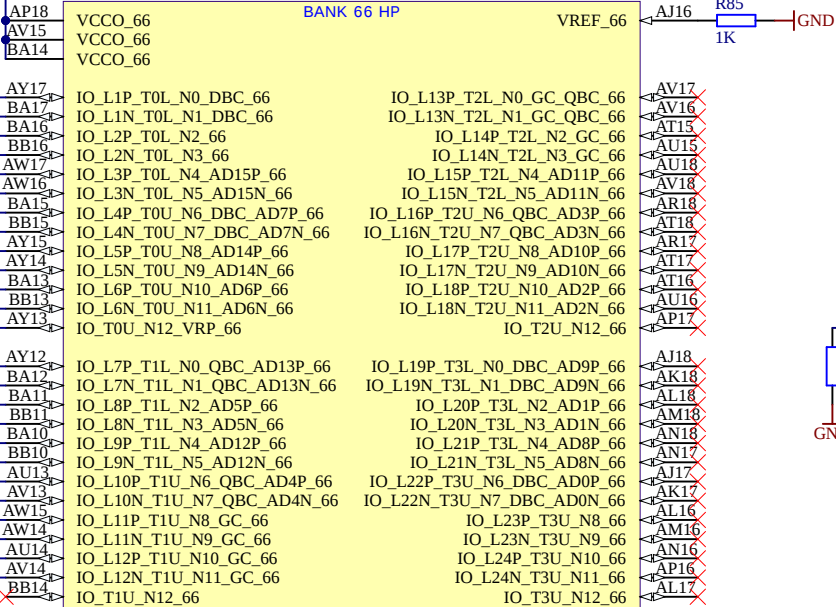
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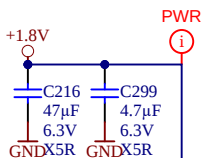
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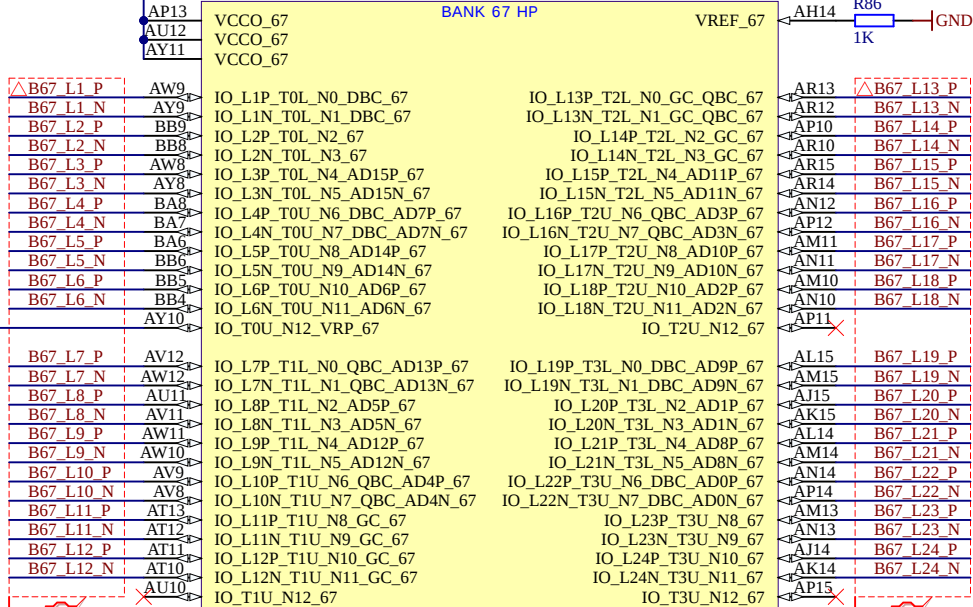
U30D



XZCU11EG-1FFVC1760I



U30E



XZCU11EG-1FFVC1760I



Title: XCU11_66_67_HP			
A4	Number: TEB0912 ABI21-A		Rev. 03
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Filename: XCU11_66_67_HP.schdoc			

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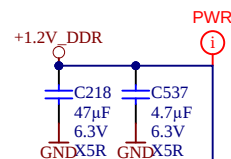
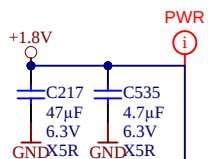
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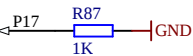
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U30F

BANK 68 HP

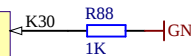
VREF_68



U30G

BANK 69 HP

VREF_69



DDR4-PL-DM4

DDR4-PL-DQ34

DDR4-PL-DQ38

DDR4-PL-DQ32

DDR4-PL-DQ36

DDR4-PL-DQS4 P

DDR4-PL-DQS4 N

DDR4-PL-DQ37

DDR4-PL-DQ39

DDR4-PL-DQ33

DDR4-PL-DQ35

GND

DDR4-PL-DM5

DDR4-PL-DQ45

DDR4-PL-DQ43

DDR4-PL-DQ47

DDR4-PL-DQ46

DDR4-PL-DQS5 P

DDR4-PL-DQS5 N

DDR4-PL-DQ40

DDR4-PL-DQ44

DDR4-PL-DQ41

DDR4-PL-DQ42

IO_L1P_T0L_N0_DBC_69
IO_L1N_T0L_N1_DBC_69
IO_L2P_T0L_N2_69
IO_L2N_T0L_N3_69
IO_L3P_T0L_N4_AD15P_69
IO_L3N_T0L_N5_AD15N_69
IO_L4P_T0U_N6_DBC_AD7P_69
IO_L4N_T0U_N7_DBC_AD7N_69
IO_L5P_T0U_N8_AD14P_69
IO_L5N_T0U_N9_AD14N_69
IO_L6P_T0U_N10_AD6P_69
IO_L6N_T0U_N11_AD6N_69
IO_T0U_N12_VRP_69
IO_L7P_T1L_N0_QBC_AD13P_69
IO_L7N_T1L_N1_QBC_AD13N_69
IO_L8P_T1L_N2_AD5P_69
IO_L8N_T1L_N3_AD5N_69
IO_L9P_T1L_N4_AD12P_69
IO_L9N_T1L_N5_AD12N_69
IO_L10P_T1U_N6_QBC_AD4P_69
IO_L10N_T1U_N7_QBC_AD4N_69
IO_L11P_T1U_N8_GC_69
IO_L11N_T1U_N9_GC_69
IO_L12P_T1U_N10_GC_69
IO_L12N_T1U_N11_GC_69
IO_T1U_N12_69

IO_L13P_T2L_N0_GC_QBC_69
IO_L13N_T2L_N1_GC_QBC_69
IO_L14P_T2L_N2_GC_69
IO_L14N_T2L_N3_GC_69
IO_L15P_T2L_N4_AD11P_69
IO_L15N_T2L_N5_AD11N_69
IO_L16P_T2U_N6_QBC_AD3P_69
IO_L16N_T2U_N7_QBC_AD3N_69
IO_L17P_T2U_N8_AD10P_69
IO_L17N_T2U_N9_AD10N_69
IO_L18P_T2U_N10_AD2P_69
IO_L18N_T2U_N11_AD2N_69
IO_T2U_N12_69
IO_L19P_T3L_N0_DBC_AD9P_69
IO_L19N_T3L_N1_DBC_AD9N_69
IO_L20P_T3L_N2_AD1P_69
IO_L20N_T3L_N3_AD1N_69
IO_L21P_T3L_N4_AD8P_69
IO_L21N_T3L_N5_AD8N_69
IO_L22P_T3U_N6_DBC_AD0P_69
IO_L22N_T3U_N7_DBC_AD0N_69
IO_L23P_T3U_N8_69
IO_L23N_T3U_N9_69
IO_L24P_T3U_N10_69
IO_L24N_T3U_N11_69
IO_T3U_N12_69

DDR4-PL-DM7
DDR4-PL-DQ57
DDR4-PL-DQ63
DDR4-PL-DQ59
DDR4-PL-DQ62
DDR4-PL-DQS7 P
DDR4-PL-DQS7 N
DDR4-PL-DQ56
DDR4-PL-DQ60
DDR4-PL-DQ58
DDR4-PL-DQ61
DDR4-PL-DM6
DDR4-PL-DQ49
DDR4-PL-DQ51
DDR4-PL-DQ53
DDR4-PL-DQ55
DDR4-PL-DQS6 P
DDR4-PL-DQS6 N
DDR4-PL-DQ50
DDR4-PL-DQ54
DDR4-PL-DQ48
DDR4-PL-DQ52

XCZU11EG-1FFVC17601

XCZU11EG-1FFVC17601



Title: XCZU11_68_69_HP		
A4	Number: TEB0912 ABI21-A	Rev. 03
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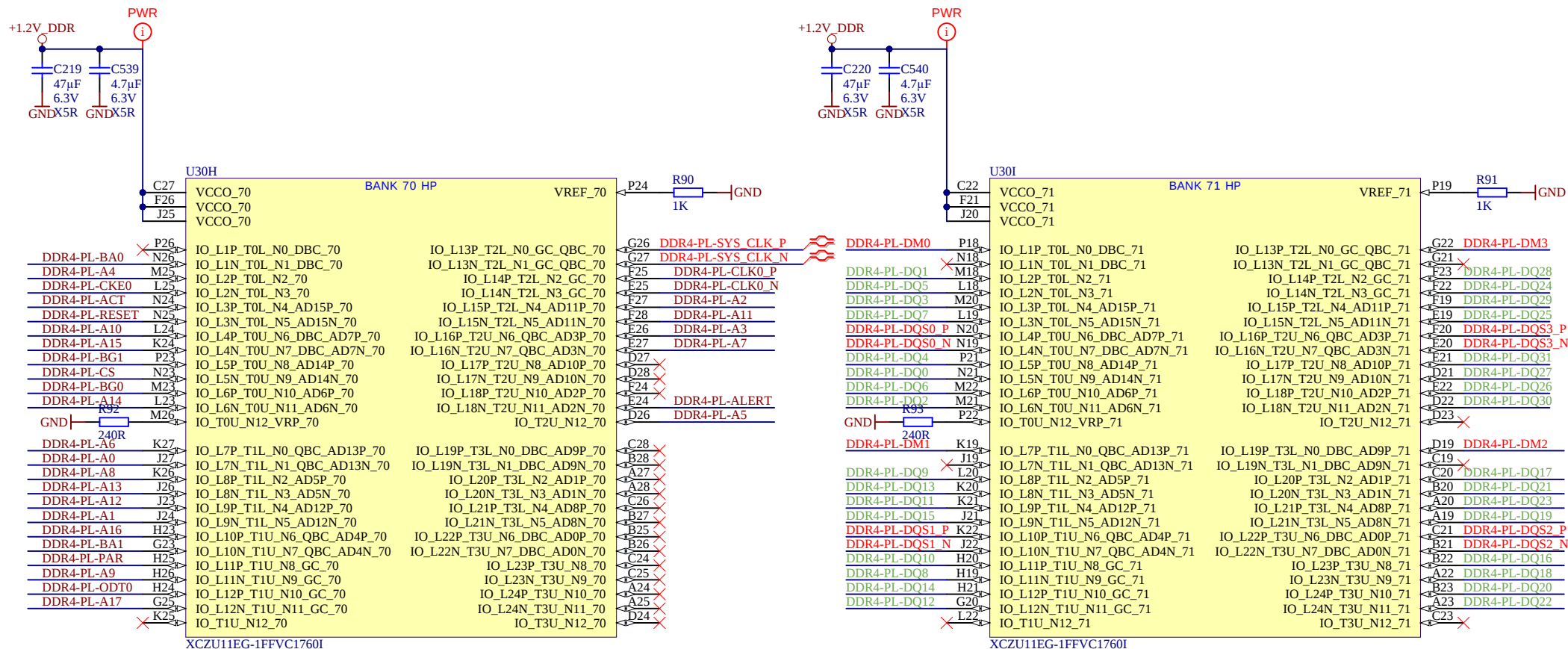
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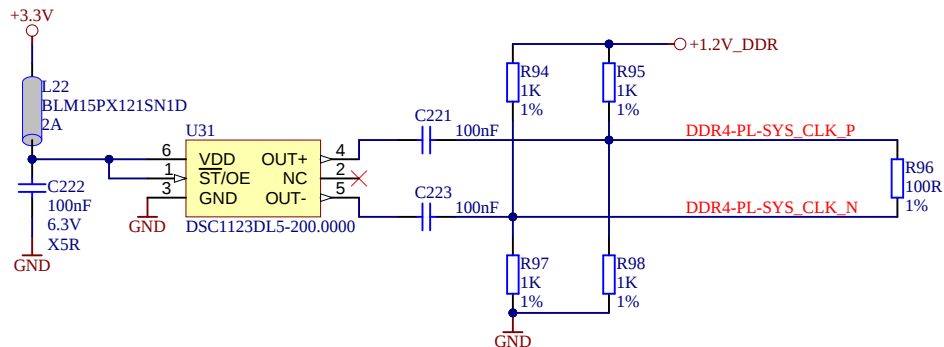
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XCZU11EG-1FFVC1760I

XCZU11EG-1FFVC1760I



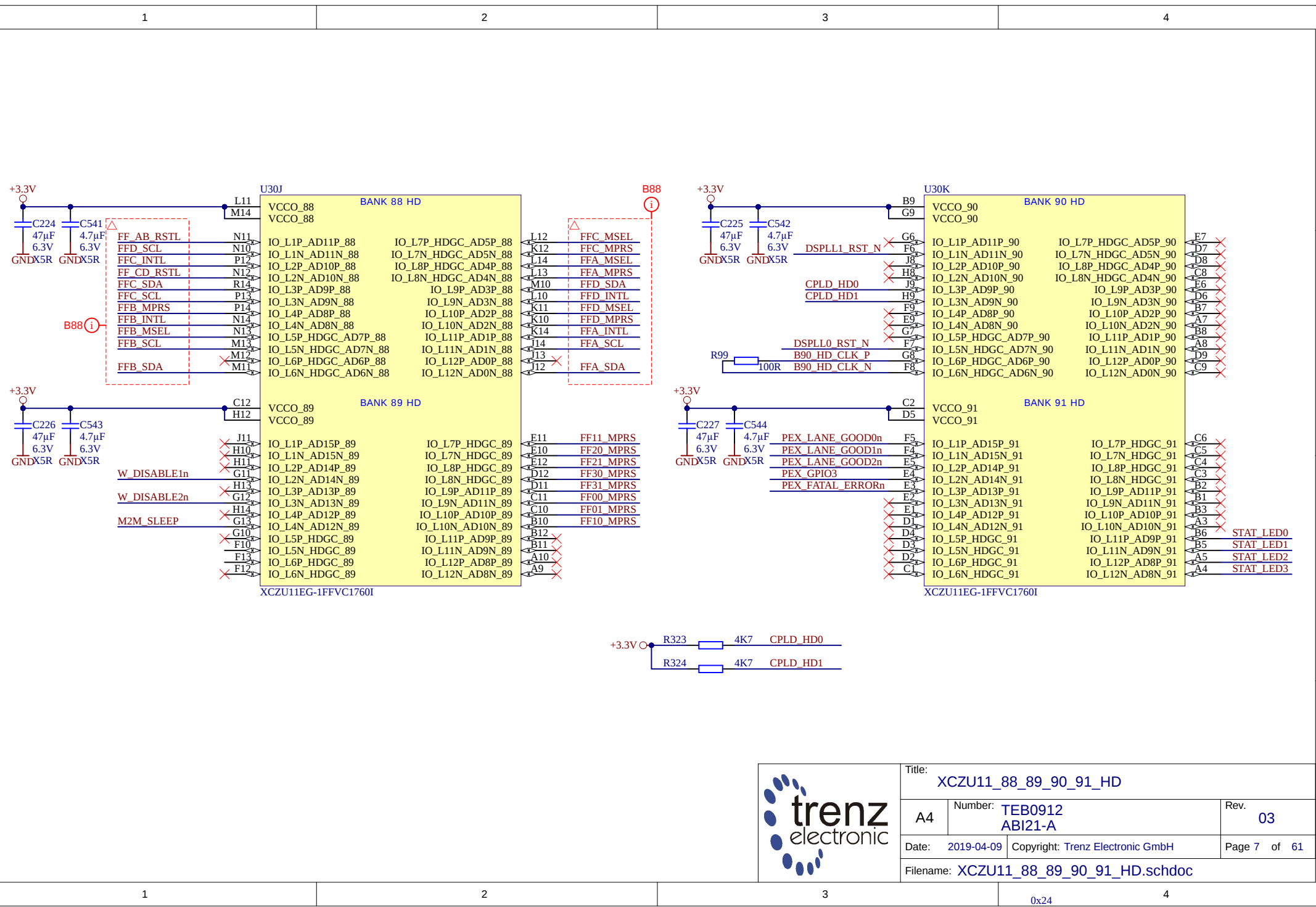
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A4	Number: TEB0912 ABI21-A	Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 6 of 61
Filename: XCZU11_70_71_HP.schdoc		

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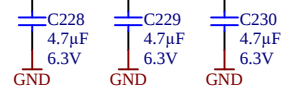
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+0.9V_GT_AVCC



+1.8V_GT_AUX



U30L

MGTAVCC_L
MGTAVCC_L
MGTAVCC_L
MGTAVCC_L
MGTAVCC_L
MGTAVCC_L

MGTAVTT_L
MGTAVTT_L
MGTAVTT_L
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MGTAVTT_L

MGTAVTTRCAL_L
MGTREF_L

BANK 128 GTY

MGT_128_CLK_P AB34
MGT_128_CLK_N AB35
MGTREFCLK0P_128
MGTREFCLK0N_128
MGTREFCLK1P_128
MGTREFCLK1N_128

MGT_128_RX0_P	W41	MGTYRXP0_128	MGTYTXP0_128
MGT_128_RX0_N	W42	MGTYRXN0_128	MGTYTXN0_128
MGT_128_RX1_P	V39	MGTYRXP1_128	MGTYTXP1_128
MGT_128_RX1_N	V40	MGTYRXN1_128	MGTYTXN1_128
MGT_128_RX2_P	U41	MGTYRXP2_128	MGTYTXP2_128
MGT_128_RX2_N	U42	MGTYRXN2_128	MGTYTXN2_128
MGT_128_RX3_P	T39	MGTYRXP3_128	MGTYTXP3_128
MGT_128_RX3_N	T40	MGTYRXN3_128	MGTYTXN3_128

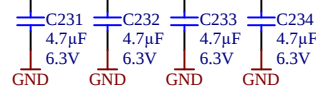
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MGT_129_CLK_N W33
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MGTREFCLK0N_129
MGTREFCLK1P_129
MGTREFCLK1N_129

MGT_129_RX0_P	R41	MGTYRXP0_129	MGTYTXP0_129
MGT_129_RX0_N	R42	MGTYRXN0_129	MGTYTXN0_129
MGT_129_RX1_P	P39	MGTYRXP1_129	MGTYTXP1_129
MGT_129_RX1_N	P40	MGTYRXN1_129	MGTYTXN1_129
MGT_129_RX2_P	N41	MGTYRXP2_129	MGTYTXP2_129
MGT_129_RX2_N	N42	MGTYRXN2_129	MGTYTXN2_129
MGT_129_RX3_P	M39	MGTYRXP3_129	MGTYTXP3_129
MGT_129_RX3_N	M40	MGTYRXN3_129	MGTYTXN3_129

XCZU11EG-1FFVC1760I

+1.2V_GT_AVTT



F36
G34
H36
J34
K36
L34
M36
N34
P36
R34
T36
U34
V36

T33
T32
R100
100R

U30M

BANK 130 GTY

MGT_130_CLK_P R32
MGT_130_CLK_N R33
MGTREFCLK0P_130
MGTREFCLK0N_130
MGTREFCLK1P_130
MGTREFCLK1N_130

MGT_130_RX0_P	L41	MGTYRXP0_130	MGTYTXP0_130
MGT_130_RX0_N	L42	MGTYRXN0_130	MGTYTXN0_130
MGT_130_RX1_P	K39	MGTYRXP1_130	MGTYTXP1_130
MGT_130_RX1_N	K40	MGTYRXN1_130	MGTYTXN1_130
MGT_130_RX2_P	J41	MGTYRXP2_130	MGTYTXP2_130
MGT_130_RX2_N	J42	MGTYRXN2_130	MGTYTXN2_130
MGT_130_RX3_P	H39	MGTYRXP3_130	MGTYTXP3_130
MGT_130_RX3_N	H40	MGTYRXN3_130	MGTYTXN3_130

BANK 131 GTY

MGT_131_CLK_P L32
MGT_131_CLK_N L33
MGTREFCLK0P_131
MGTREFCLK0N_131
MGTREFCLK1P_131
MGTREFCLK1N_131

MGT_131_RX0_P	G41	MGTYRXP0_131	MGTYTXP0_131
MGT_131_RX0_N	G42	MGTYRXN0_131	MGTYTXN0_131
MGT_131_RX1_P	F39	MGTYRXP1_131	MGTYTXP1_131
MGT_131_RX1_N	F40	MGTYRXN1_131	MGTYTXN1_131
MGT_131_RX2_P	E41	MGTYRXP2_131	MGTYTXP2_131
MGT_131_RX2_N	E42	MGTYRXN2_131	MGTYTXN2_131
MGT_131_RX3_P	D39	MGTYRXP3_131	MGTYTXP3_131
MGT_131_RX3_N	D40	MGTYRXN3_131	MGTYTXN3_131

XCZU11EG-1FFVC1760I



Title: XCZU11_128_129_130_131_MGT		
A4	Number: TEB0912 ABI21-A	Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 8 of 61
Filename: XCZU11_128_129_130_131_MGT.schdoc		

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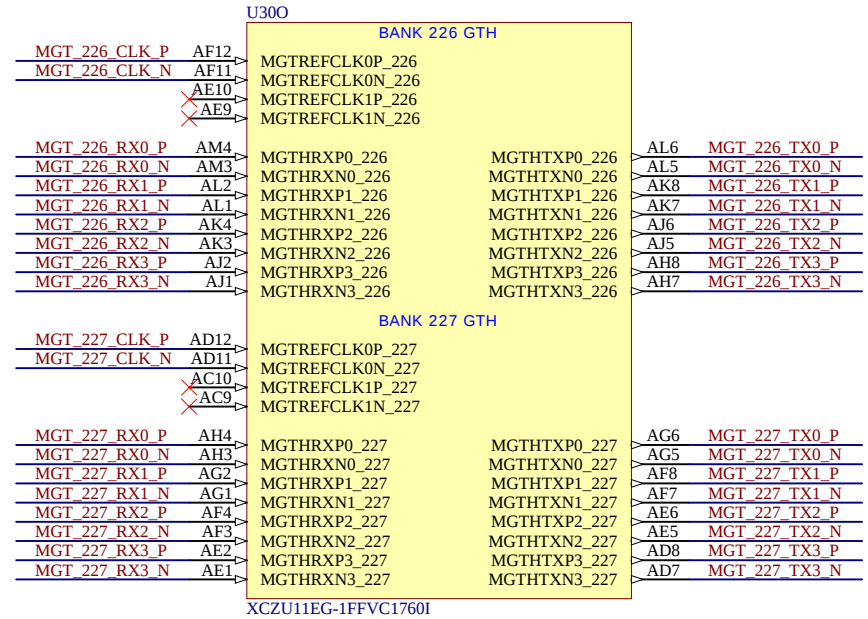
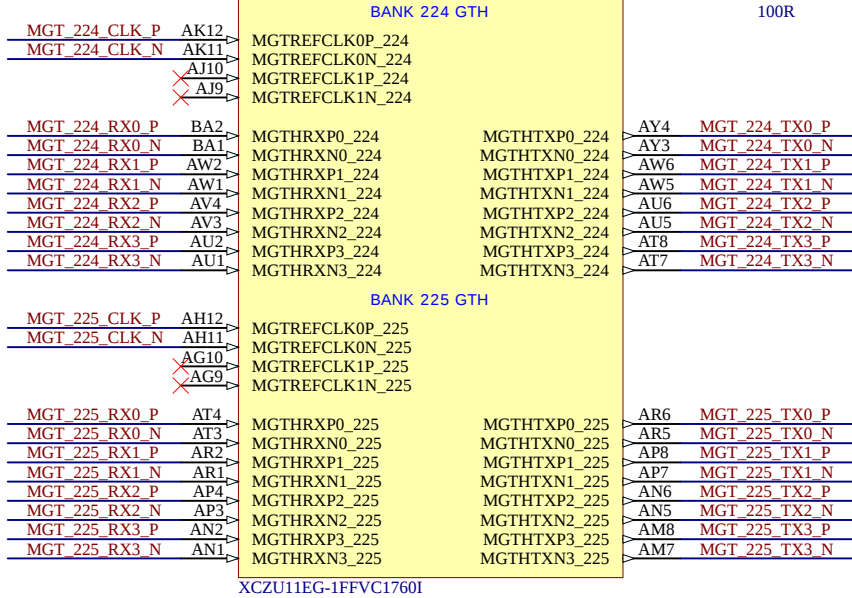
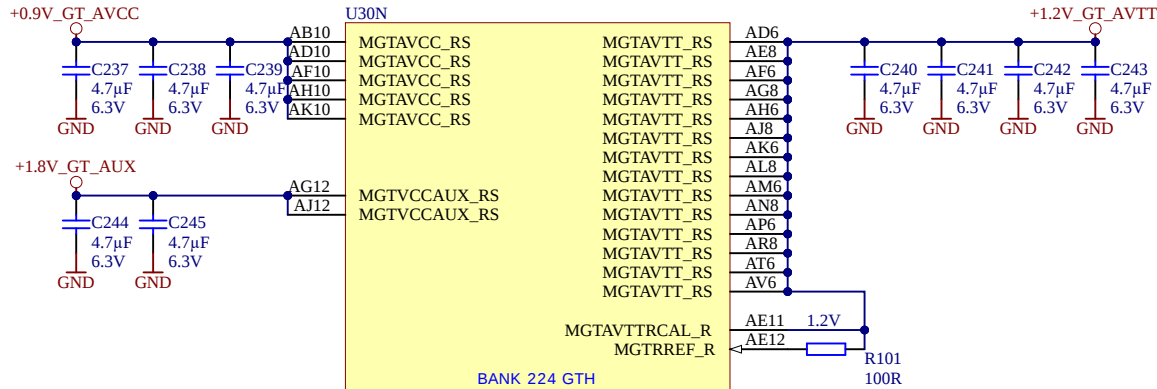
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Title: XCZU11_224_225_226_227_MGT			
A4	Number: TEB0912 ABI21-A		Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH		Page 9 of 61
Filename: XCZU11_224_225_226_227_MGT.schdoc			

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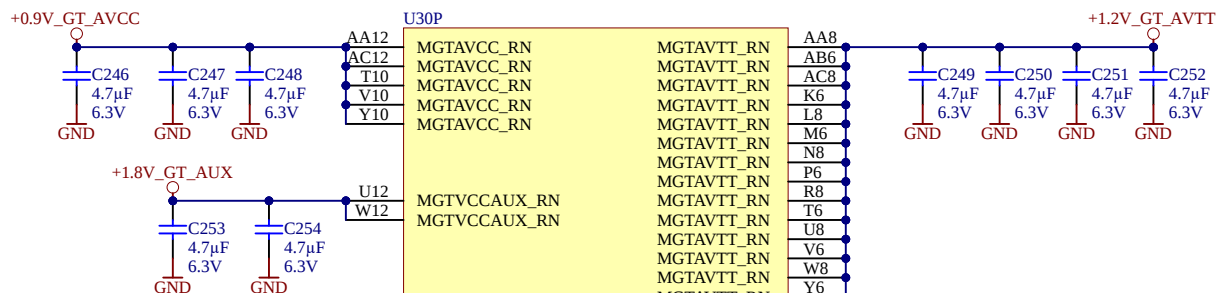
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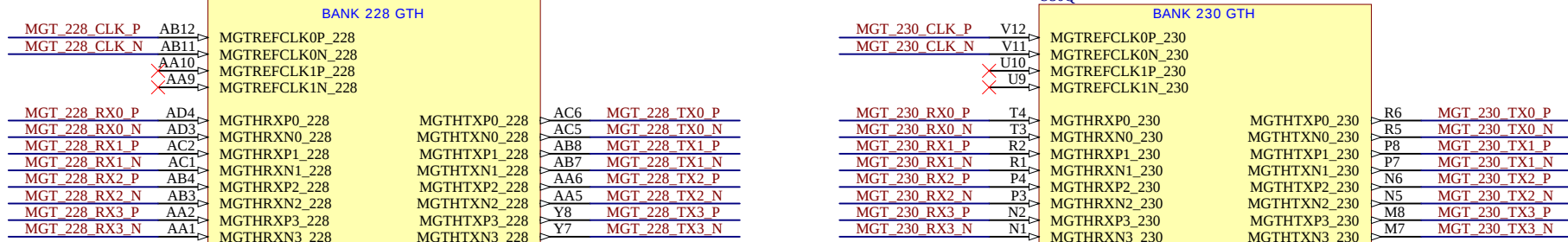
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XCZU11EG-1FFVC1760I

XCZU11EG-1FFVC1760I

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		Title: XCZU11_228_229_230_231_MGT	
		A4	Number: TEB0912 ABI21-A
Date: 2019-04-09		Copyright: Trenz Electronic GmbH	
Filename: XCZU11_228_229_230_231_MGT.schdoc		Page 10 of 61	
		Rev. 03	

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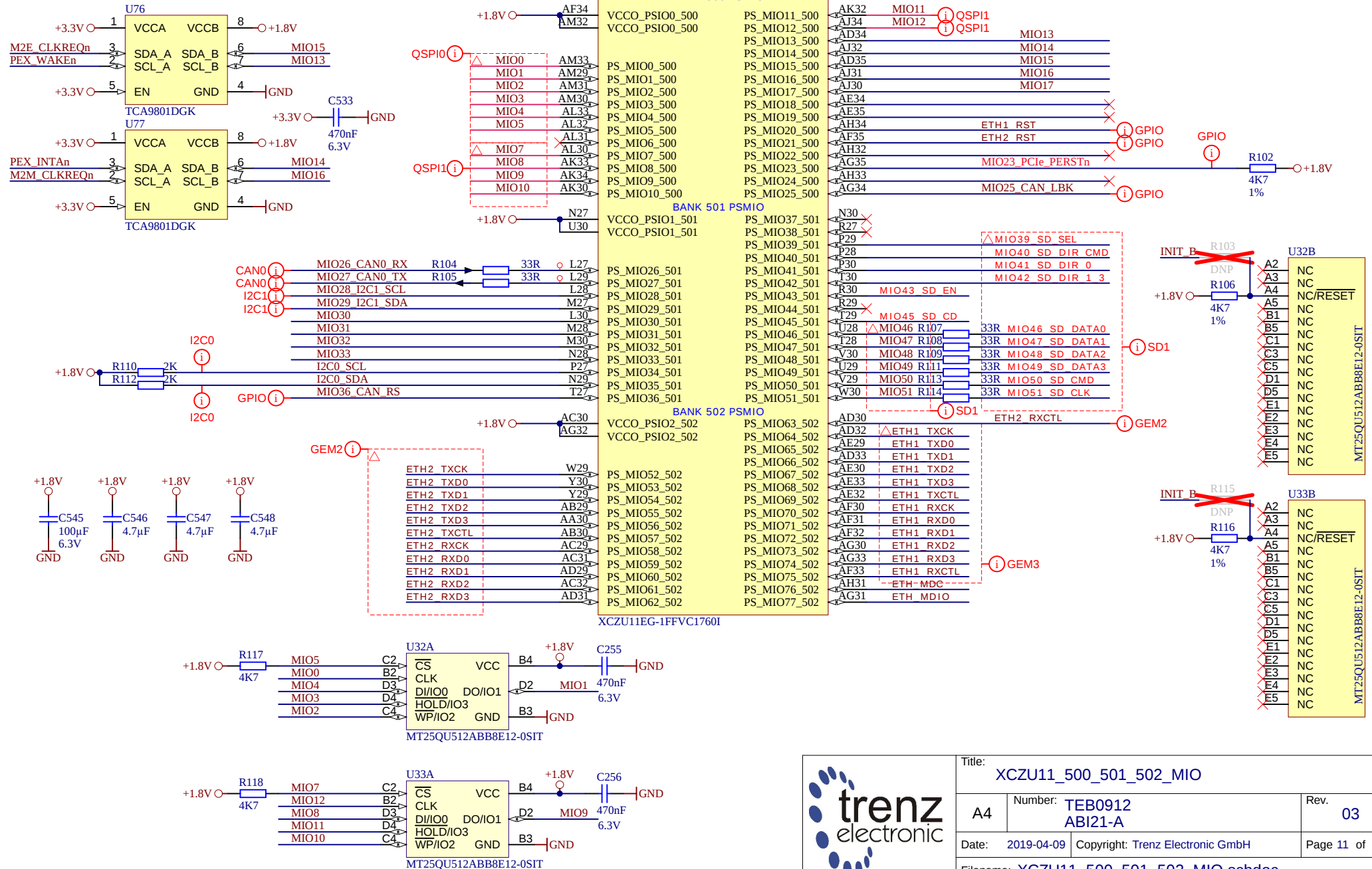
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Title: XCZU11_500_501_502_MIO			
A4	Number: TEB0912 ABI21-A	Rev. 03	
	Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 11 of 61
Filename: XCZU11_500_501_502_MIO.schdoc			

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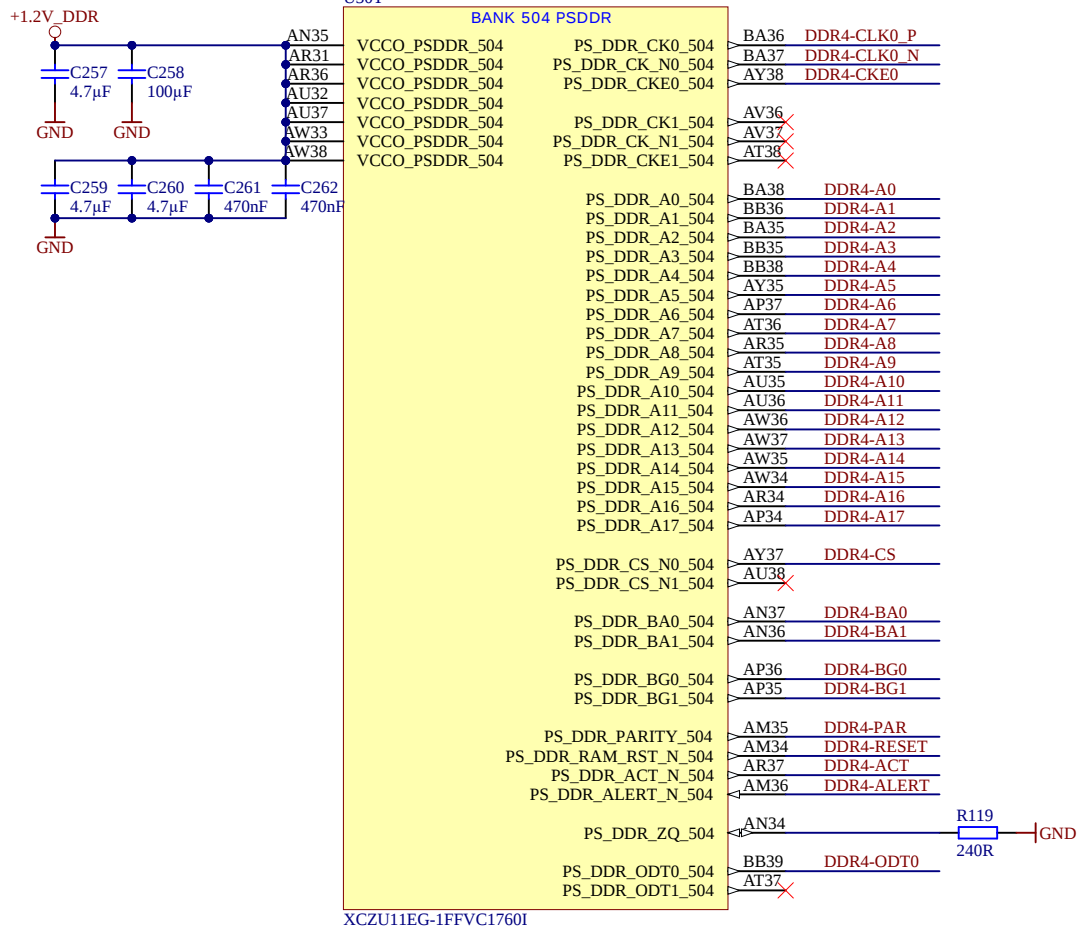
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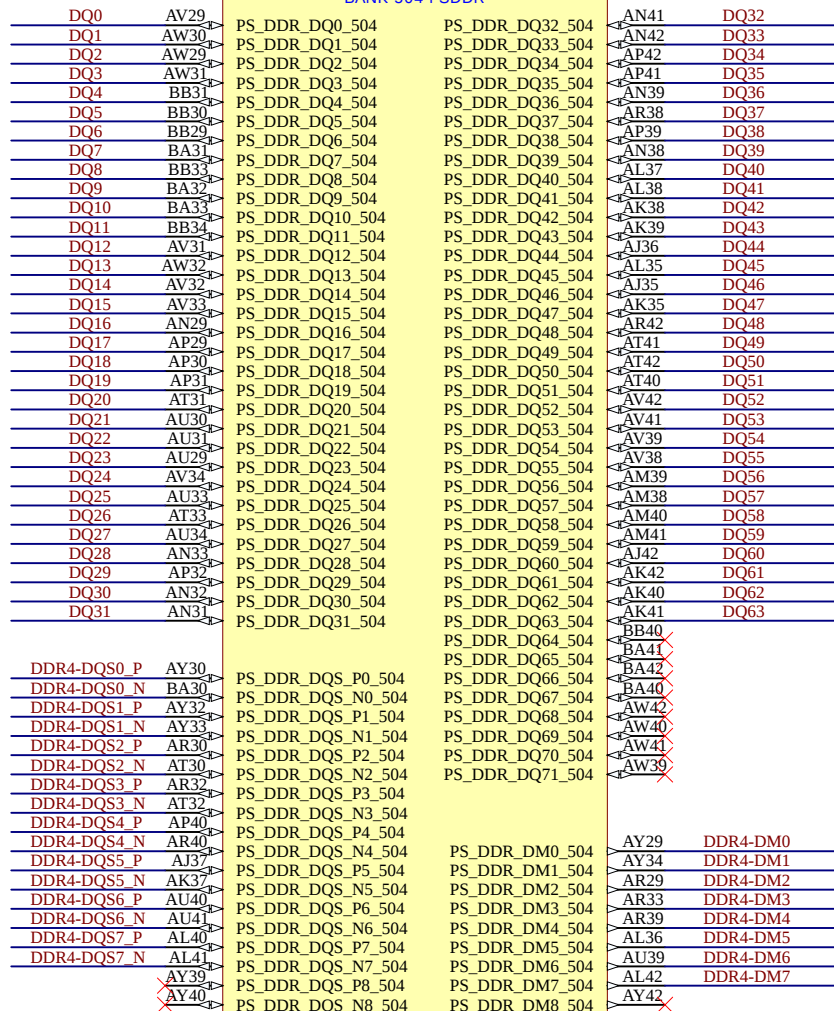


U30T

BANK 504 PSDDR

U30U

BANK 504 PSDDR



XCZU11EG-1FFVC1760I



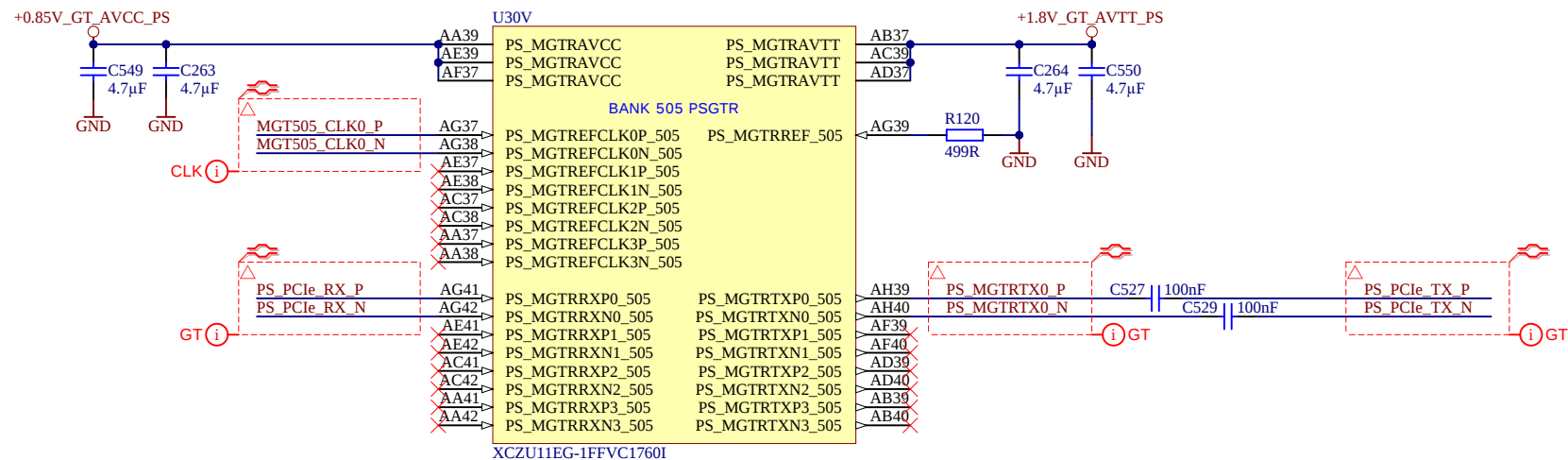
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A4	Number: TEB0912 ABI21-A		Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH		Page 12 of 61
Filename: XCZU11_504_PSDDR.schdoc			

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		Title: XCU11_505_MGT	
		A4 Number: TEB0912 ABI21-A	Rev. 03
Date: 2019-04-09		Copyright: Trenz Electronic GmbH	
Filename: XCU11_505_MGT.schdoc		Page 13 of 61	



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U30Y

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U30AA

U30AB

U30Z

B14	GND	GND	G33
B19	GND	GND	G35
B24	GND	GND	G38
B29	GND	GND	G39
B39	GND	GND	G40
BA3	GND	GND	H1
BA4	GND	GND	H2
BA5	GND	GND	H5
BA9	GND	GND	H6
BA29	GND	GND	H7
BA34	GND	GND	H17
BA39	GND	GND	H22
BB2	GND	GND	H27
BB3	GND	GND	H31
BB7	GND	GND	H33
BB12	GND	GND	H37
BB17	GND	GND	H38
BB22	GND	GND	H41
BB27	GND	GND	H42
BB32	GND	GND	J3
BB37	GND	GND	J4
BB41	GND	GND	J7
C7	GND	GND	J10
C32	GND	GND	J31
C38	GND	GND	J35
C39	GND	GND	J38
C40	GND	GND	J39
C41	GND	GND	J40
D10	GND	GND	K1
D15	GND	GND	K2
D20	GND	GND	K5
D25	GND	GND	K7
D35	GND	GND	K8
D36	GND	GND	K9
D37	GND	GND	K13
D38	GND	GND	K18
D41	GND	GND	K23
D42	GND	GND	K28
E8	GND	GND	K31
E13	GND	GND	K33
E18	GND	GND	K37
E23	GND	GND	K38
E28	GND	GND	K41
E33	GND	GND	K42
E34	GND	GND	L3
E35	GND	GND	L4
E38	GND	GND	L7
E39	GND	GND	L9
E40	GND	GND	L16
F1	GND	GND	L21
F2	GND	GND	L26
F3	GND	GND	L31
F11	GND	GND	L35
F33	GND	GND	L38
F37	GND	GND	L39
F38	GND	GND	L40
F41	GND	GND	M1
F42	GND	GND	M2
G3	GND	GND	M5
G4	GND	GND	M9
G5	GND	GND	M19
G14	GND	GND	M24
G19	GND	GND	M29
G24	GND	GND	M31
G31	GND	GND	M33
G32	GND	GND	M37

GND XCZU11EG-1FFVC1760I GND

M38	GND	GND	U11
M41	GND	GND	U13
M42	GND	GND	U16
N3	GND	GND	U18
N4	GND	GND	U20
N7	GND	GND	U22
N9	GND	GND	U24
N17	GND	GND	U26
N22	GND	GND	U31
N31	GND	GND	U35
N35	GND	GND	U38
N38	GND	GND	U39
N39	GND	GND	U40
N40	GND	GND	V1
P1	GND	GND	V2
P2	GND	GND	V5
P5	GND	GND	V9
P9	GND	GND	V13
P10	GND	GND	V15
P11	GND	GND	V17
P20	GND	GND	V19
P25	GND	GND	V21
P31	GND	GND	V23
P33	GND	GND	V25
P37	GND	GND	V31
P38	GND	GND	V33
P41	GND	GND	V37
P42	GND	GND	V38
R3	GND	GND	V41
R4	GND	GND	V42
R7	GND	GND	W3
R11	GND	GND	W4
R12	GND	GND	W7
R13	GND	GND	W11
R16	GND	GND	W13
R18	GND	GND	W14
R20	GND	GND	W16
R22	GND	GND	W18
R24	GND	GND	W20
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R31	GND	GND	W26
R35	GND	GND	W31
R38	GND	GND	W35
R39	GND	GND	W38
R40	GND	GND	W39
T1	GND	GND	W40
T2	GND	GND	Y1
T5	GND	GND	Y2
T9	GND	GND	Y5
T13	GND	GND	Y9
T15	GND	GND	Y13
T17	GND	GND	Y17
T19	GND	GND	Y19
T21	GND	GND	Y23
T23	GND	GND	Y25
T25	GND	GND	Y31
T31	GND	GND	Y33
T37	GND	GND	Y36
T38	GND	GND	Y37
T41	GND	GND	Y38
T42	GND	GND	Y39
U3	GND	GND	Y40
U4	GND	GND	Y41
U7	GND	GND	Y42

GND XCZU11EG-1FFVC1760I GND

A2	GND	GND	AD9
A6	GND	GND	AD13
A11	GND	GND	AD15
A16	GND	GND	AD17
A21	GND	GND	AD19
A26	GND	GND	AD21
A31	GND	GND	AD23
A36	GND	GND	AD36
A41	GND	GND	AD38
AA3	GND	GND	AD41
AA4	GND	GND	AD42
AA7	GND	GND	AE3
AA11	GND	GND	AE4
AA13	GND	GND	AE7
AA14	GND	GND	AE13
AA16	GND	GND	AE16
AA18	GND	GND	AE18
AA22	GND	GND	AE20
AA24	GND	GND	AE22
AA26	GND	GND	AE24
AA29	GND	GND	AE26
AA31	GND	GND	AE31
AA35	GND	GND	AE36
AA36	GND	GND	AE40
AA40	GND	GND	AF1
AB1	GND	GND	AF2
AB2	GND	GND	AF5
AB5	GND	GND	AF9
AB9	GND	GND	AF13
AB13	GND	GND	AF17
AB15	GND	GND	AF19
AB17	GND	GND	AF21
AB19	GND	GND	AF23
AB23	GND	GND	AF29
AB25	GND	GND	AF36
AB31	GND	GND	AF38
AB32	GND	GND	AF41
AB33	GND	GND	AF42
AB36	GND	GND	AG3
AB38	GND	GND	AG4
AB41	GND	GND	AG7
AB42	GND	GND	AG11
AC3	GND	GND	AG13
AC4	GND	GND	AG14
AC7	GND	GND	AG16
AC11	GND	GND	AG18
AC13	GND	GND	AG20
AC14	GND	GND	AG22
AC16	GND	GND	AG24
AC18	GND	GND	AG36
AC22	GND	GND	AG40
AC24	GND	GND	AH1
AC33	GND	GND	AH2
AC34	GND	GND	AH5
AC35	GND	GND	AH9
AC36	GND	GND	AH13
AC40	GND	GND	AH15
AD1	GND	GND	AH19
AD2	GND	GND	AH21
AD5	GND	GND	AH23

GND XCZU11EG-1FFVC1760I GND

AH30	GND	GND	AP2
AH35	GND	GND	AP5
AH36	GND	GND	AP9
AH37	GND	GND	AP23
AH38	GND	GND	AP28
AH41	GND	GND	AP33
AH42	GND	GND	AP38
AJ3	GND	GND	AR3
AJ4	GND	GND	AR4
AJ7	GND	GND	AR7
AJ11	GND	GND	AR9
AJ13	GND	GND	AR11
AJ33	GND	GND	AR16
AJ38	GND	GND	AR41
AJ39	GND	GND	AT1
AJ40	GND	GND	AT2
AJ41	GND	GND	AT5
AK1	GND	GND	AT9
AK2	GND	GND	AT14
AK5	GND	GND	AT19
AK9	GND	GND	AT24
AK13	GND	GND	AT29
AK16	GND	GND	AT34
AK21	GND	GND	AT39
AK26	GND	GND	AU3
AK31	GND	GND	AU4
AK36	GND	GND	AU7
AL3	GND	GND	AU8
AL4	GND	GND	AU9
AL7	GND	GND	AU17
AL9	GND	GND	AU22
AL10	GND	GND	AU27
AL11	GND	GND	AU42
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AL13	GND	GND	AV2
AL19	GND	GND	AV5
AL24	GND	GND	AV7
AL29	GND	GND	AV10
AL34	GND	GND	AV30
AL39	GND	GND	AV35
AM1	GND	GND	AV40
AM2	GND	GND	AW3
AM5	GND	GND	AW4
AM9	GND	GND	AW7
AM12	GND	GND	AW13
AM17	GND	GND	AW18
AM22	GND	GND	AW22
AM27	GND	GND	AW28
AM37	GND	GND	AY1
AM42	GND	GND	AY2
AN3	GND	GND	AY5
AN4	GND	GND	AY6
AN7	GND	GND	AY7
AN9	GND	GND	AY16
AN15	GND	GND	AY21
AN20	GND	GND	AY26
AN25	GND	GND	AY31
AN30	GND	GND	AY36
AN40	GND	GND	AY41
AP1	GND	GND	B4

GND XCZU11EG-1FFVC1760I GND



Title:

XCZU11_GND

A4

Number: TEB0912
ABI21-A

Rev.

03

Date: 2019-04-09

Copyright: Trenz Electronic GmbH

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Filename: XCZU11_GND.schdoc

1

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A

A

Designator
FireFly0.SchDoc



Designator
FireFly1.SchDoc



Designator
FireFly2.SchDoc



Designator
FireFly3.SchDoc



FireFly_AB



FireFly_CD



B

B

C

C

D

D



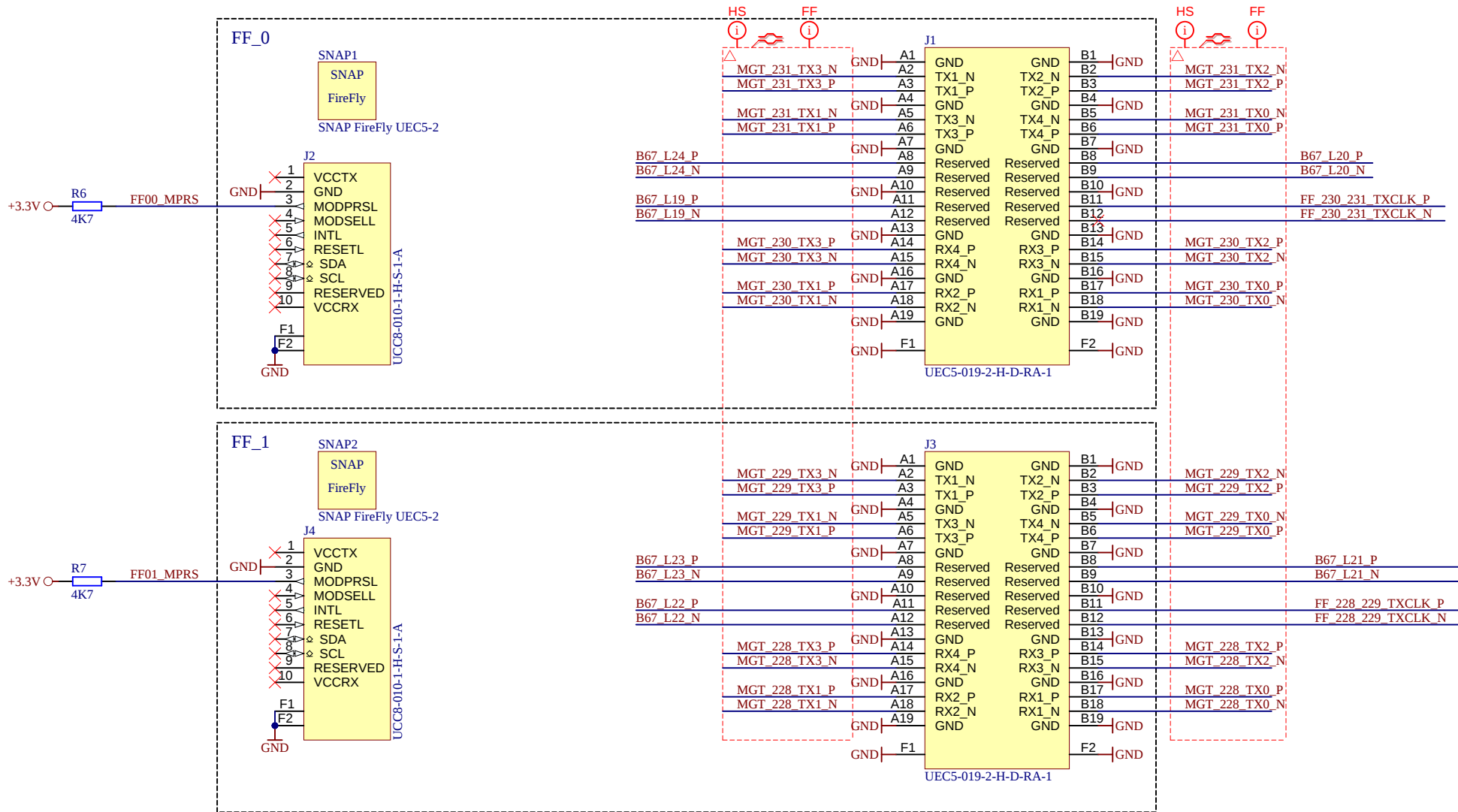
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A4	Number: TEB0912 ABI21-A	Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 17 of 61
Filename: FireFly.SchDoc		

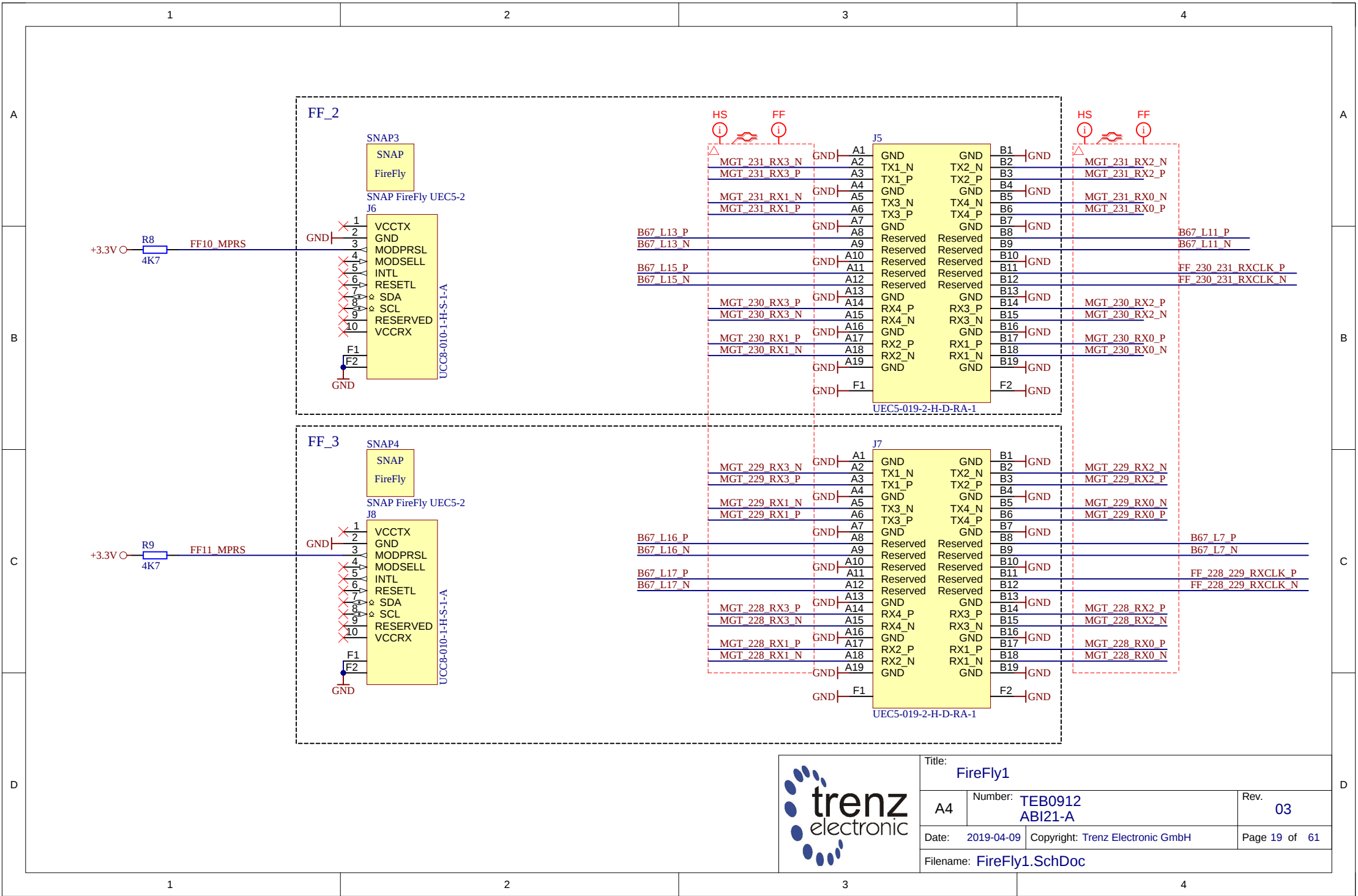
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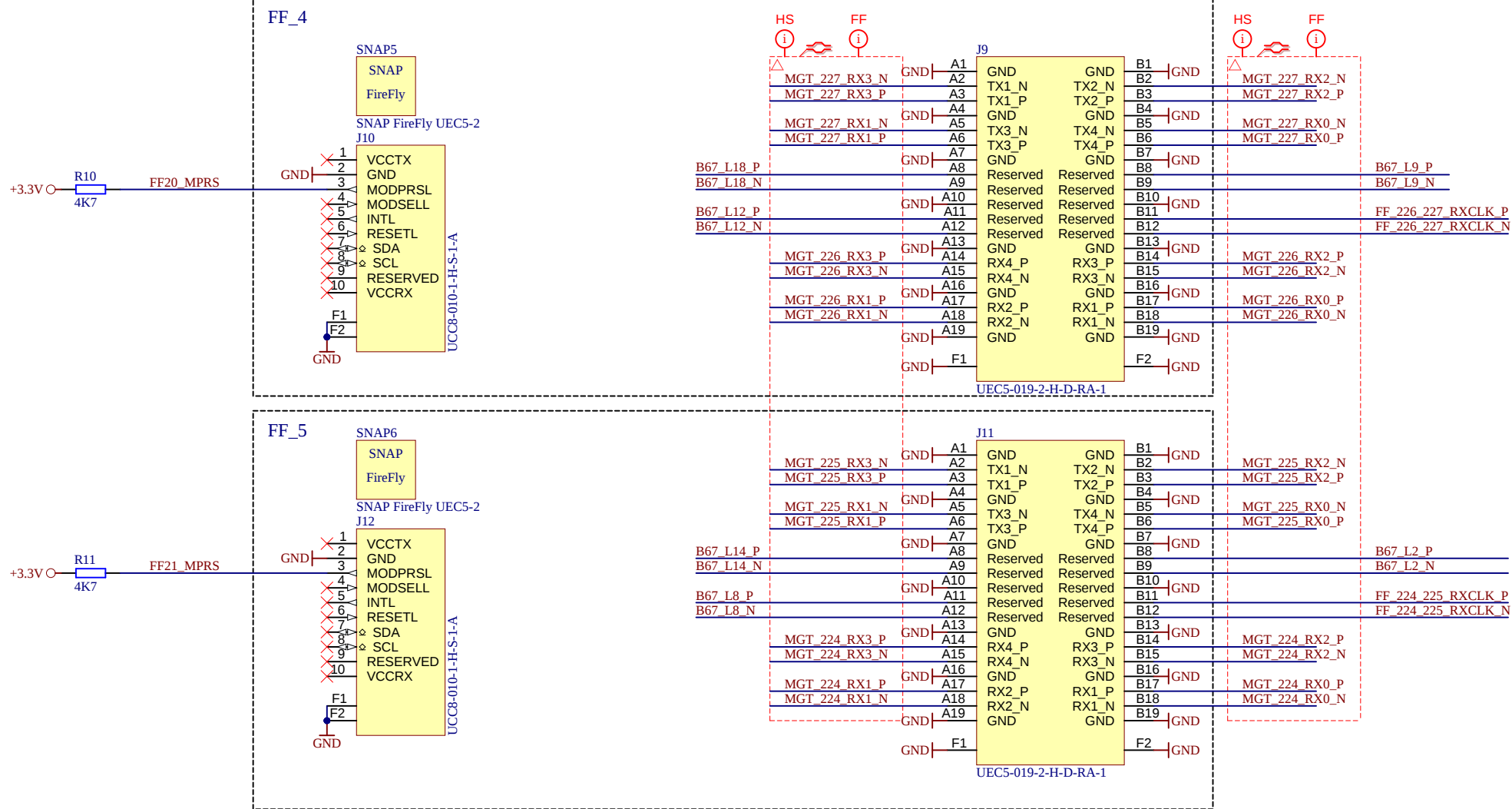
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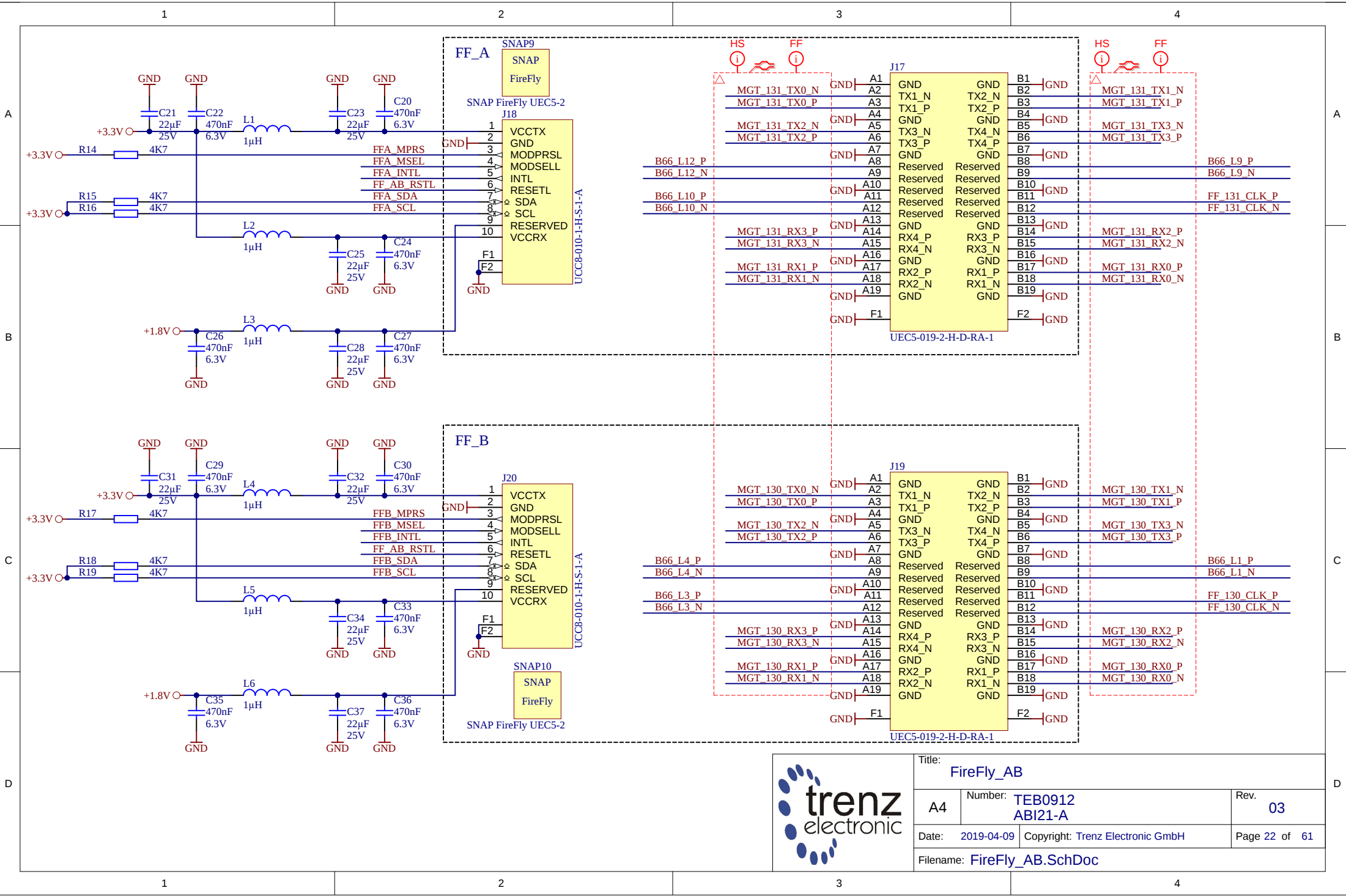
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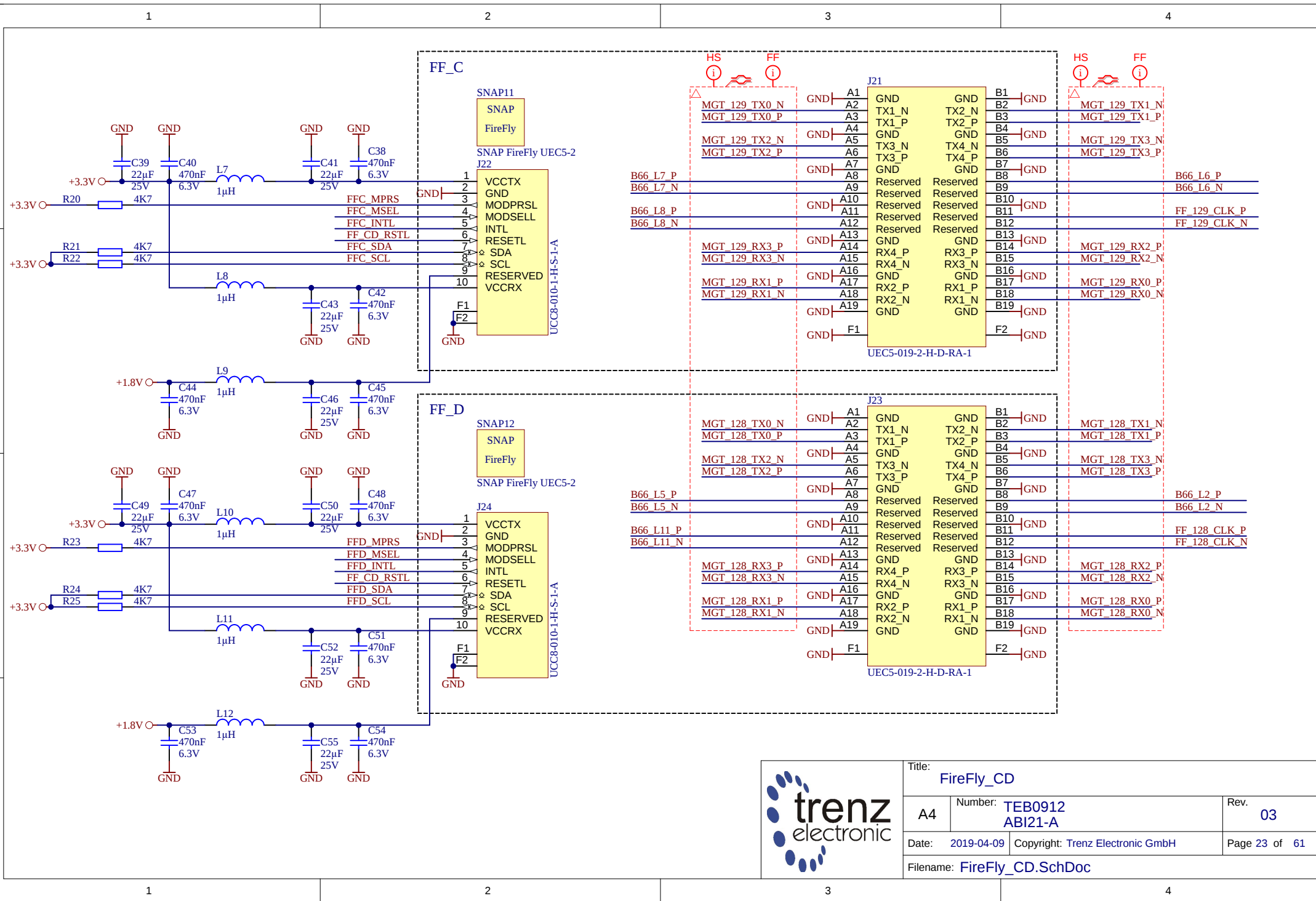
4











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DDR4-PS-RAM_1

DDR4-PS-RAM_2

DDR4-PS-RAM_3

DDR4-PS-RAM_4

DDR4-PS-TERM



Title: DDR4-PS			
A4	Number: TEB0912 ABI21-A		Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH		Page 24 of 61
Filename: DDR4-PS.SchDoc			

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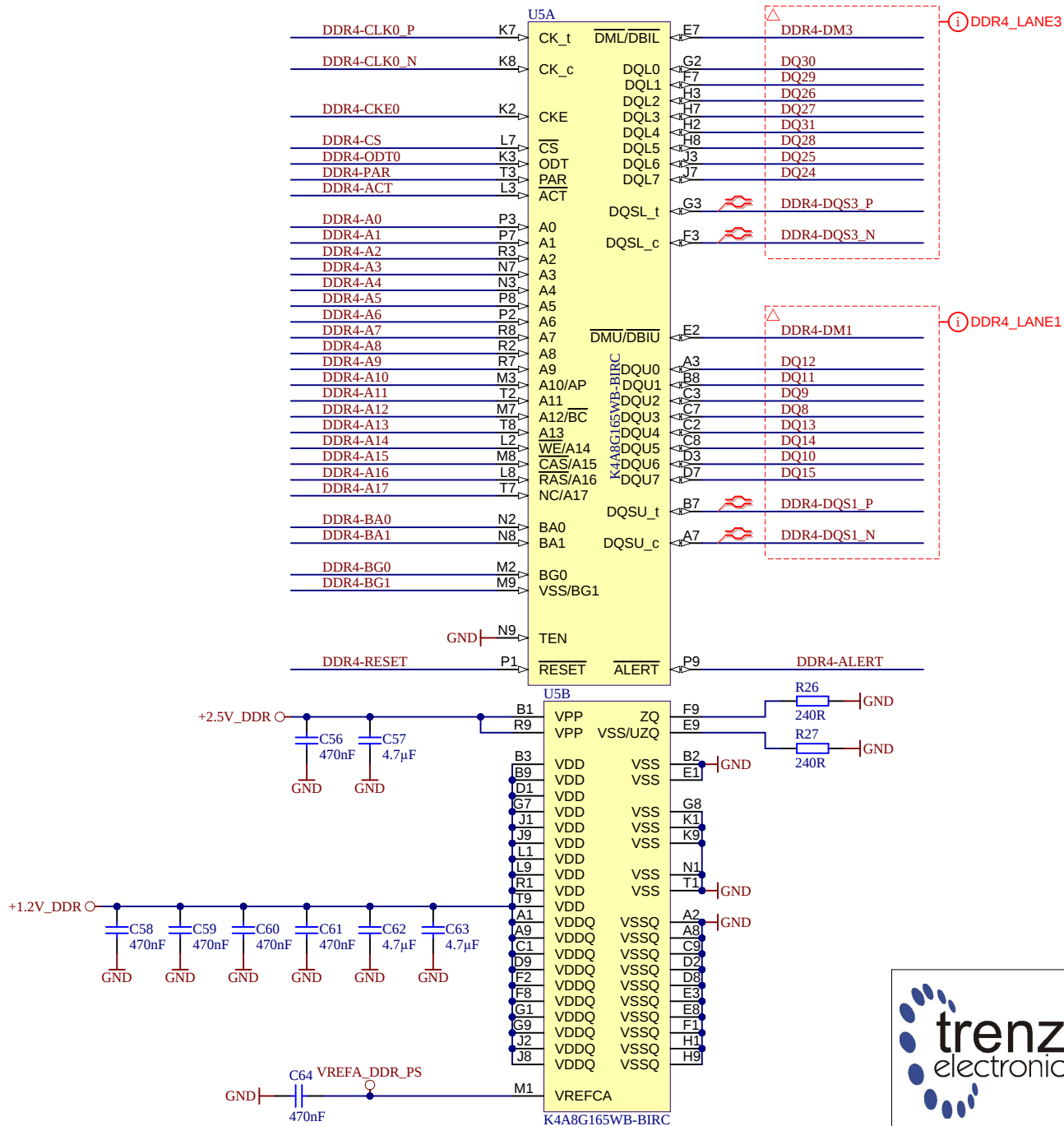
4

A

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Title: DDR4-RAM_1		
A4	Number: TEB0912 ABI21-A	Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 25 of 61
Filename: DDR4-RAM_1.SchDoc		

1

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A

A

B

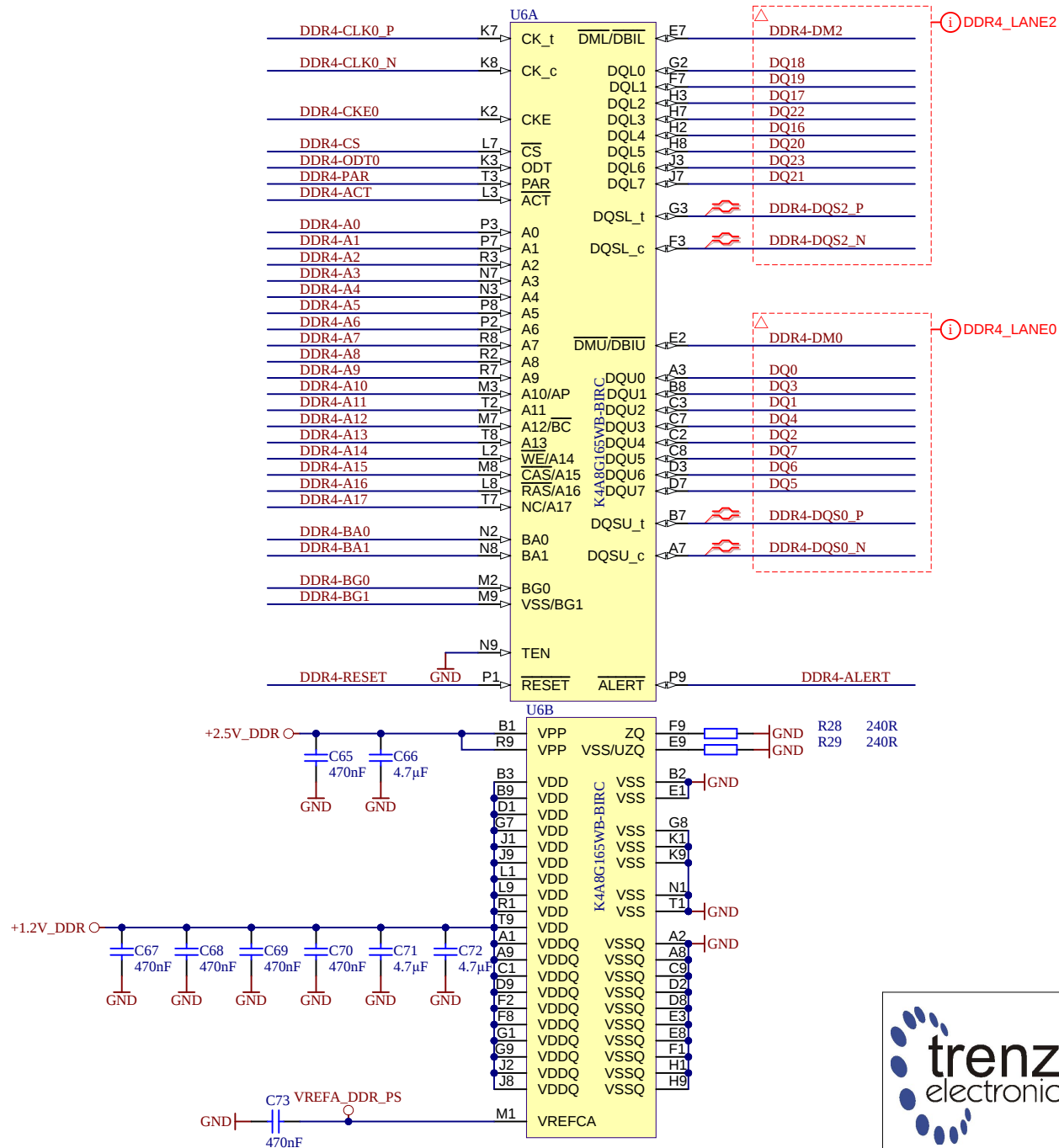
B

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D



Title: DDR4-RAM_2			
A4	Number: TEB0912 ABI21-A		Rev. 03
	Date: 2019-04-09		Page 26 of 61
Copyright: Trenz Electronic GmbH			
Filename: DDR4-RAM_2.SchDoc			

1

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A

A

B

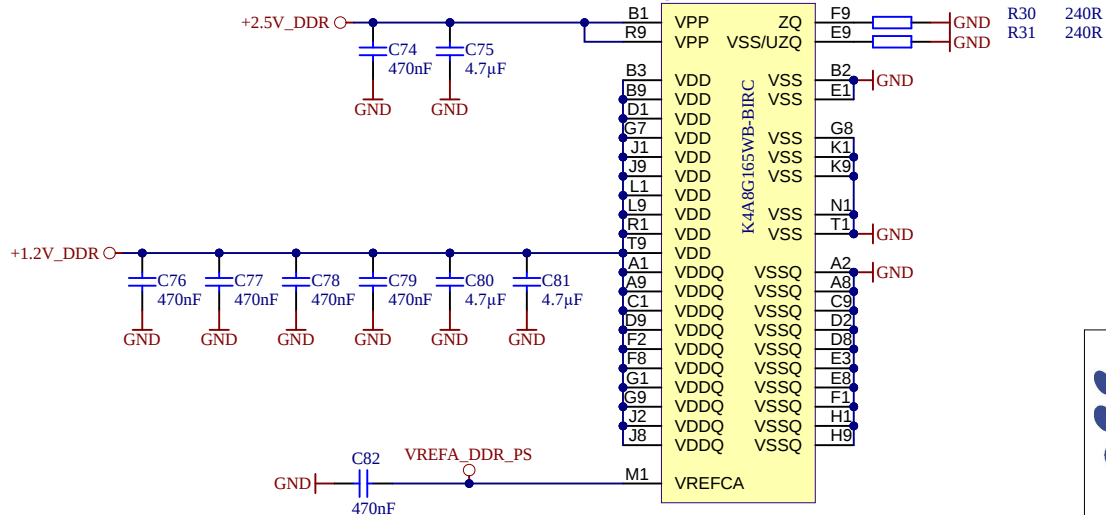
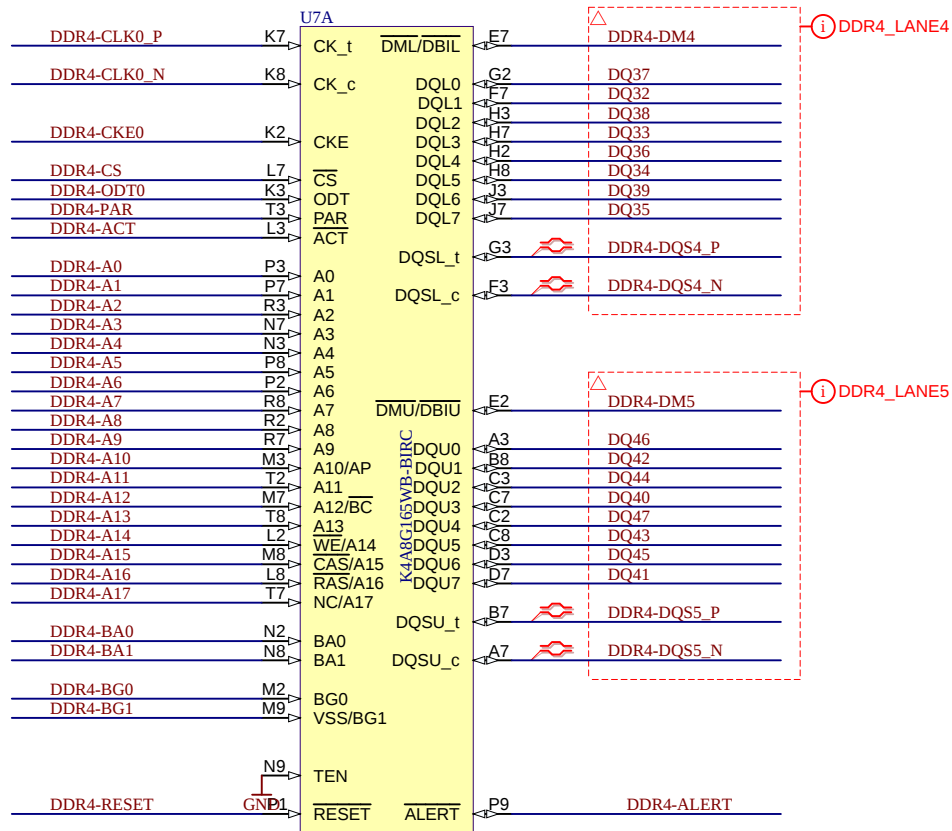
B

C

C

D

D



Title: DDR4-RAM_3		
A4	Number: TEB0912 ABI21-A	Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 27 of 61
Filename: DDR4-RAM_3.SchDoc		

1

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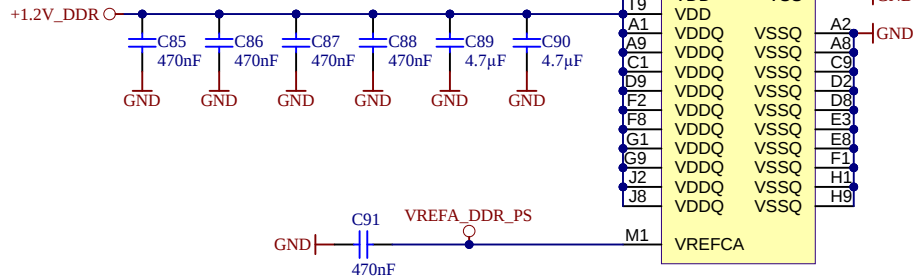
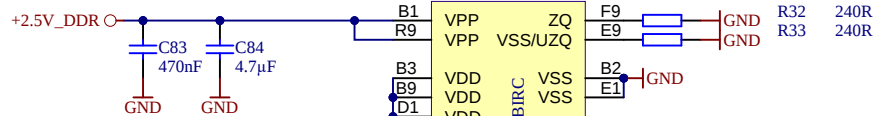
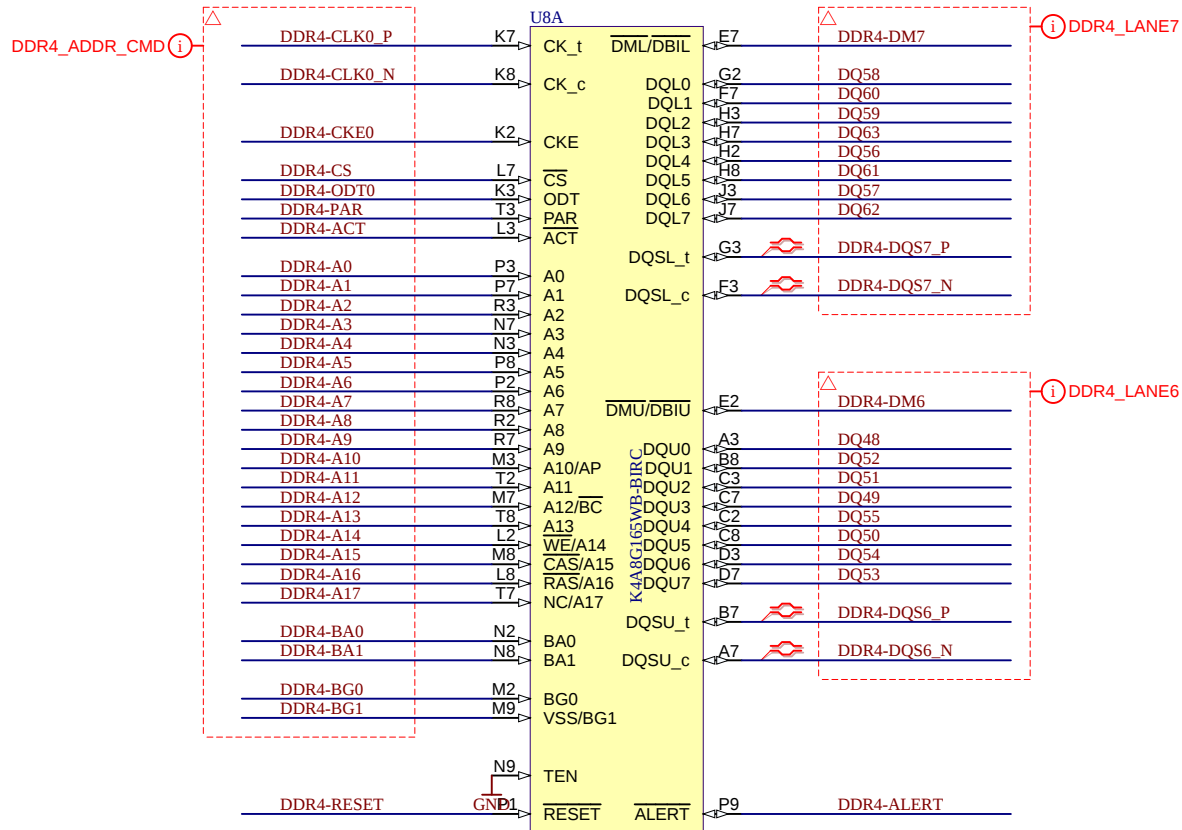
4

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Title: DDR4-RAM_4		
A4	Number: TEB0912 ABI21-A	Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 28 of 61
Filename: DDR4-RAM_4.SchDoc		

1

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A

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B

B

C

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D

DDR4-PL-RAM_1

DDR4-PL-RAM_2

DDR4-PL-RAM_3

DDR4-PL-RAM_4

DDR4-PL-TERM



Title: DDR4-PL			
A4	Number: TEB0912 ABI21-A		Rev. 03
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Filename: DDR4-PL.SchDoc			

1

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A

A

B

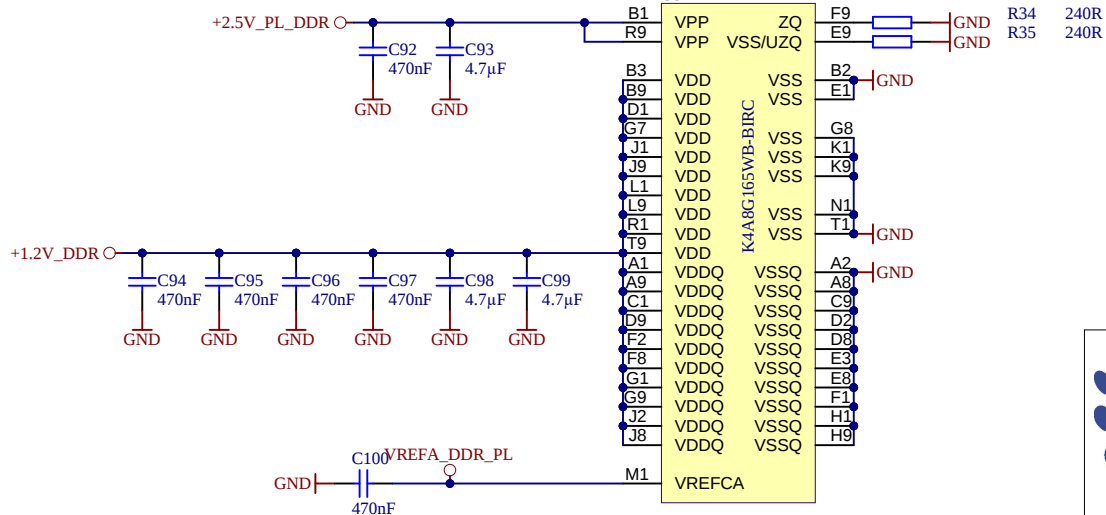
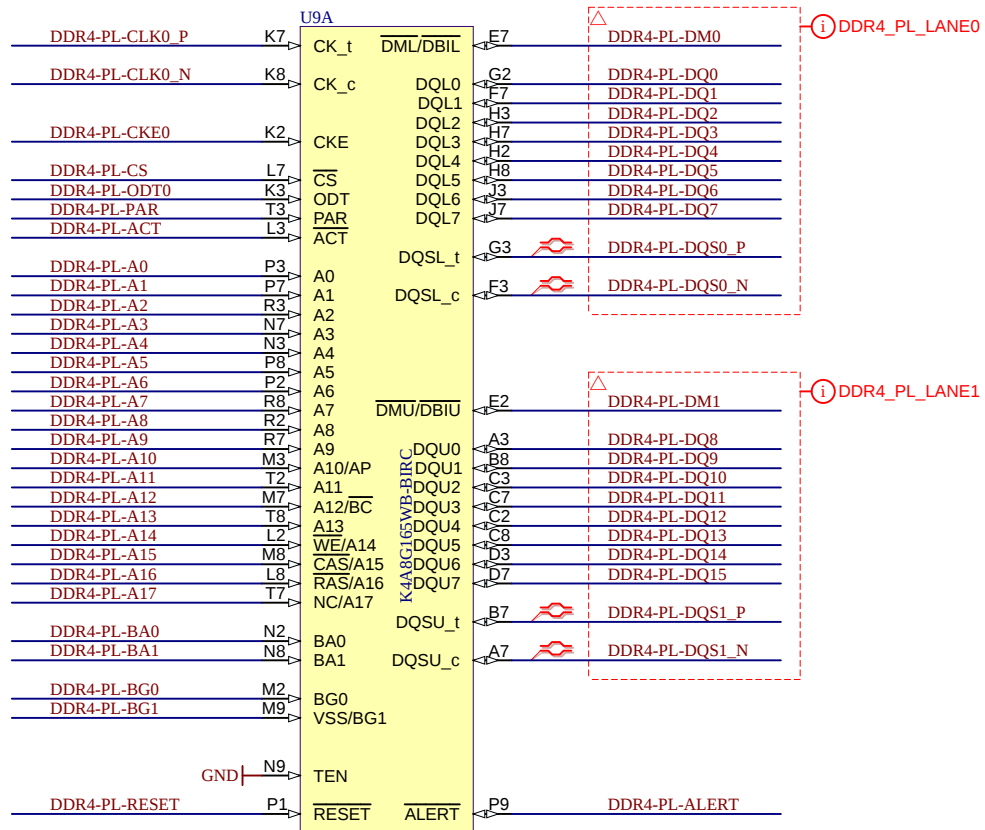
B

C

C

D

D



Title: DDR4-PL-RAM_1			
A4	Number: TEB0912 ABI21-A	Rev. 03	
	Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 31 of 61
Filename: DDR4-PL-RAM_1.SchDoc			

1

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A

A

B

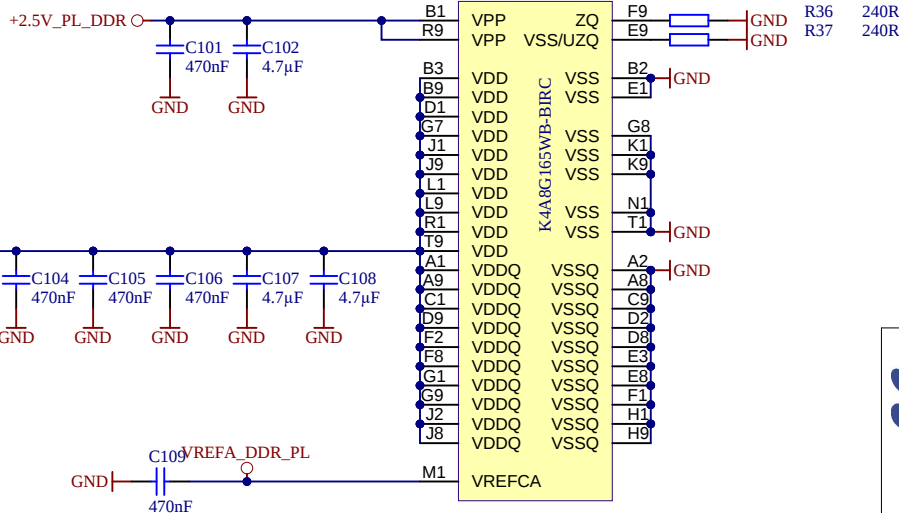
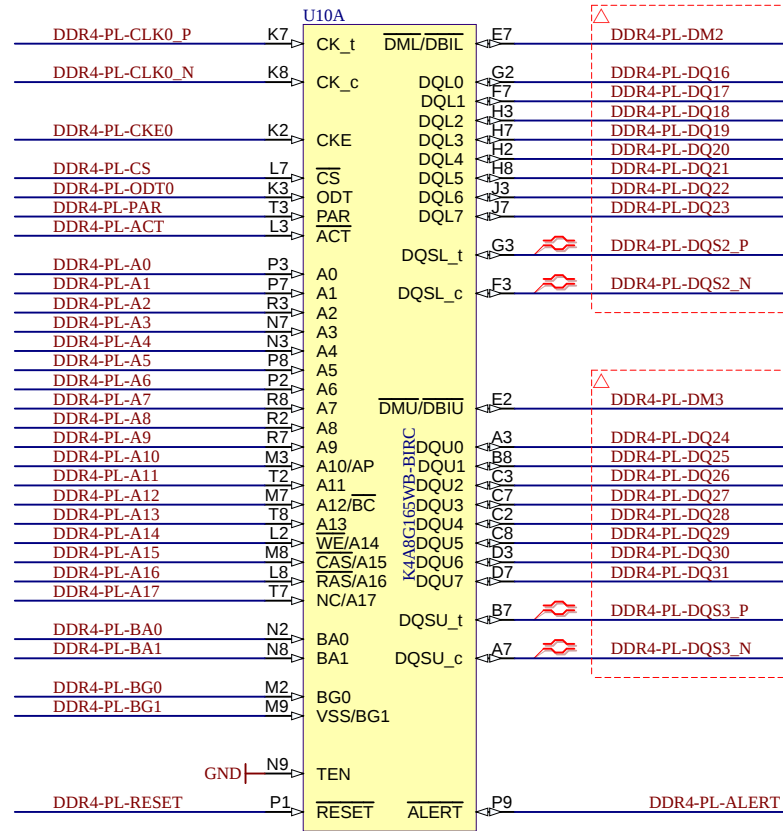
B

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D



Title: DDR4-PL-RAM_2		
A4	Number: TEB0912 ABI21-A	Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 32 of 61
Filename: DDR4-PL-RAM_2.SchDoc		

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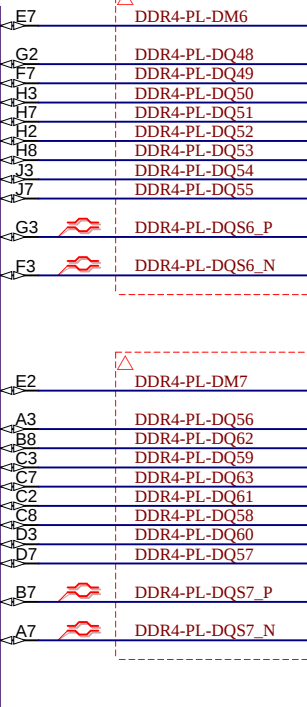
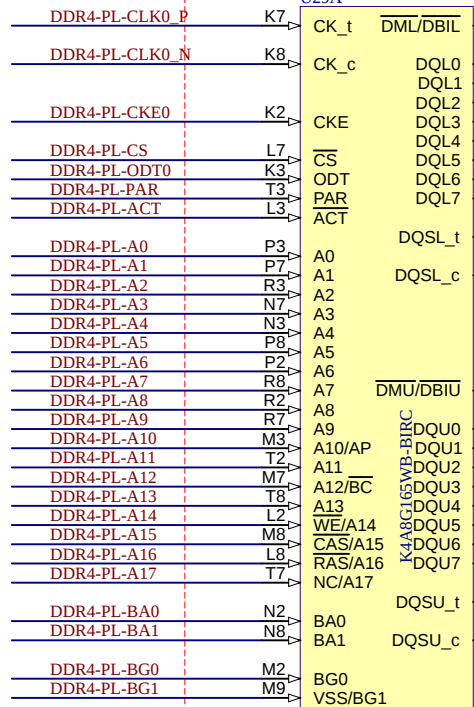
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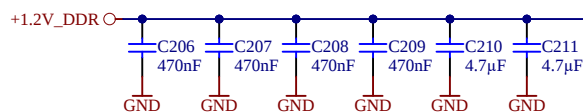
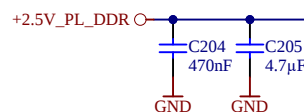
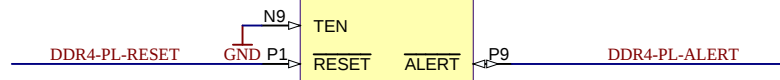
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DDR4_PL_ADDR_CMD



DDR4_PL_LANE6

DDR4_PL_LANE7



Title: DDR4-PL-RAM_4			
A4	Number: TEB0912	Rev. 03	
	ABI21-A		
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Filename: DDR4-PL-RAM_4.SchDoc			

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A

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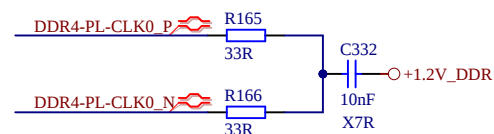
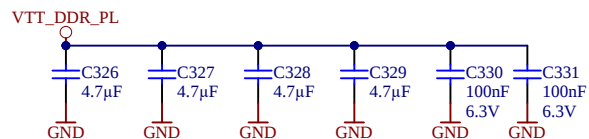
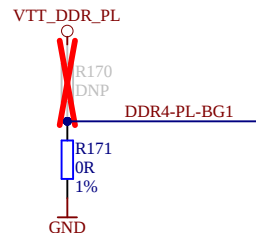
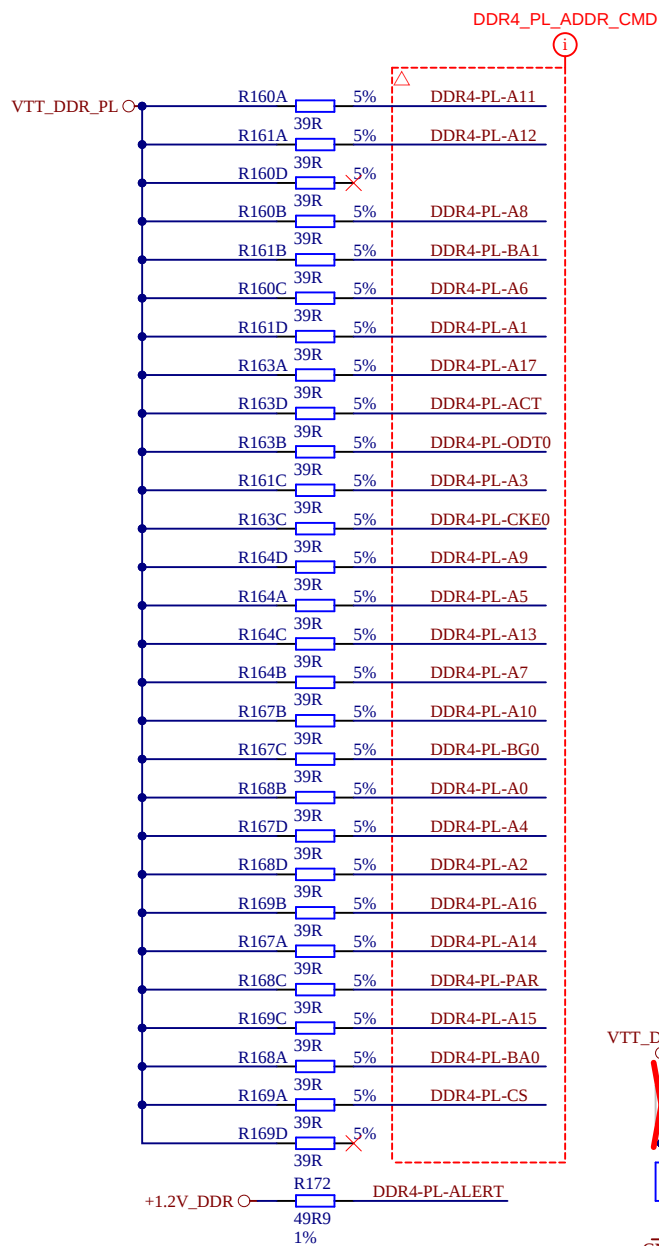
D

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Title: DDR4-PL-TERM		
A4	Number: TEB0912 ABI21-A	Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 35 of 61
Filename: DDR4-PL-TERM.SchDoc		

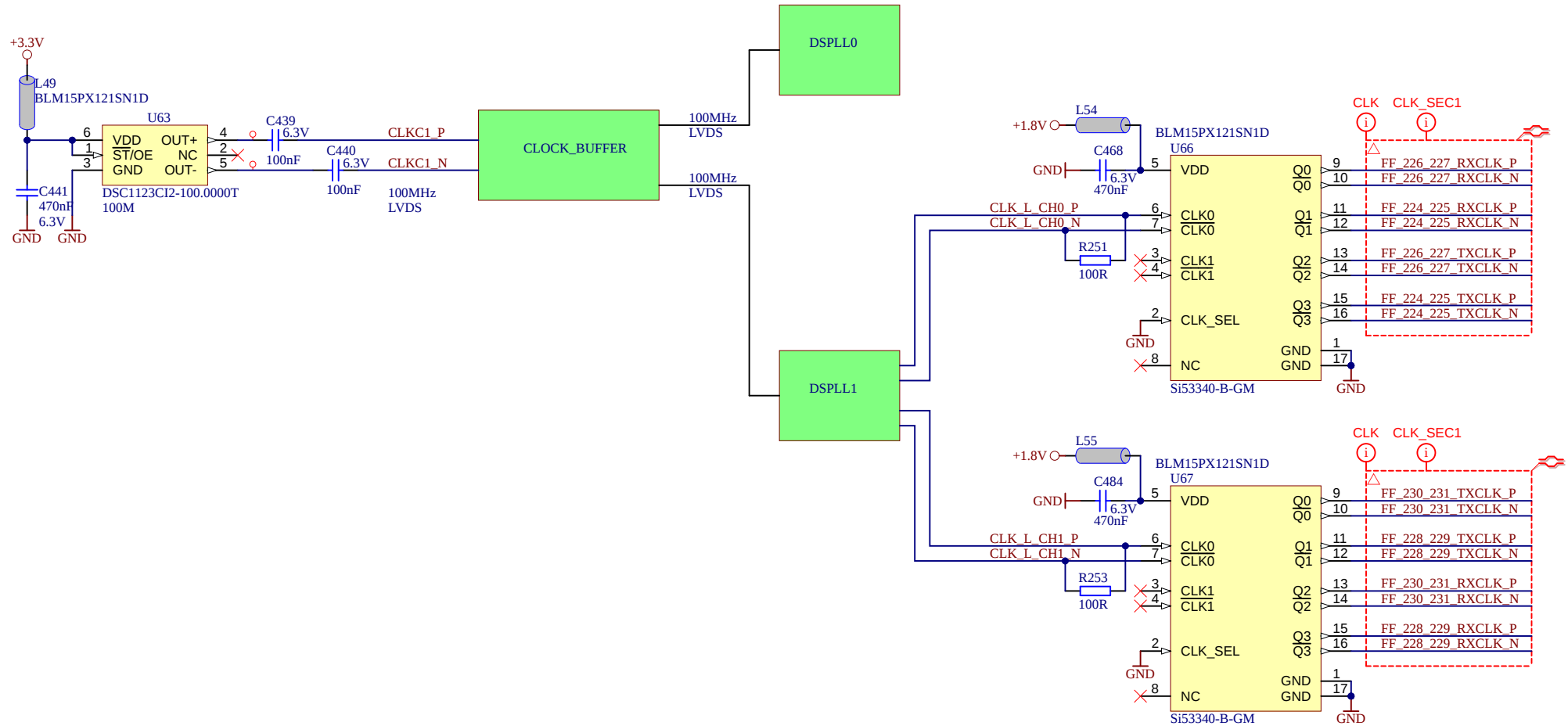
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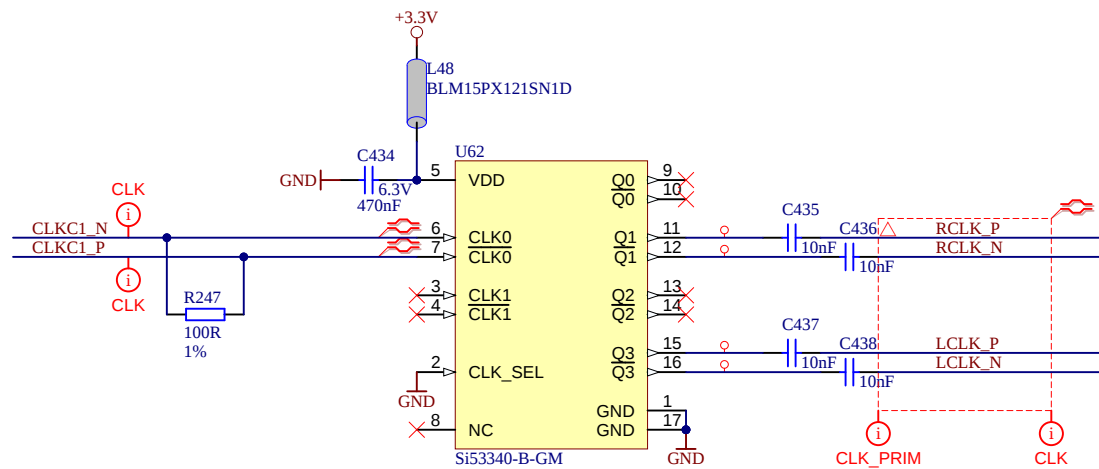
3

4

CLOCK DIAGRAM



	Title: CLOCK		
	A4	Number: TEB0912 ABI21-A	Rev. 03
	Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 36 of 61
	Filename: CLOCK.schdoc		



	Title: CLOCK		
	A4	Number: TEB0912 ABI21-A	Rev. 03
	Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 37 of 61
	Filename: CLOCK_BUFFER.schdoc		

1

2

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4

A

A

B

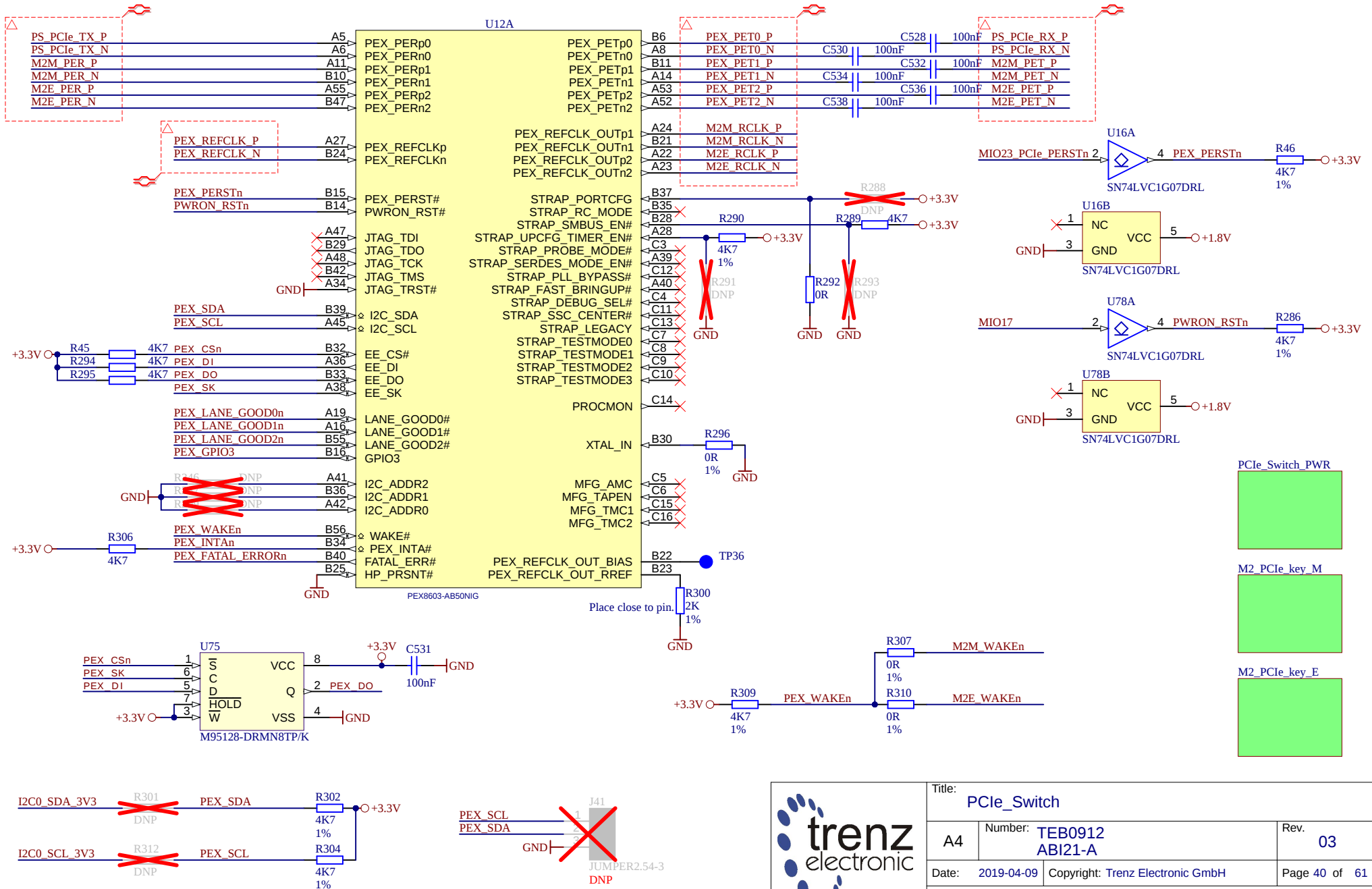
B

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C

D

D



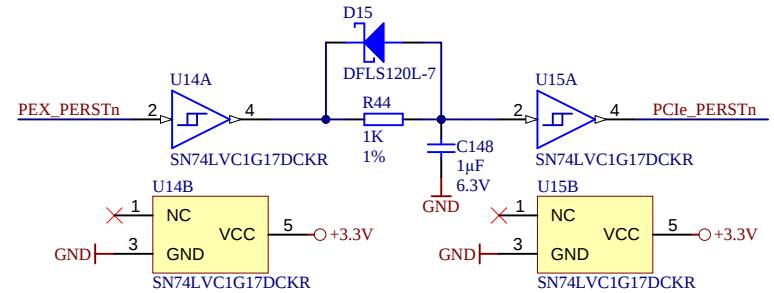
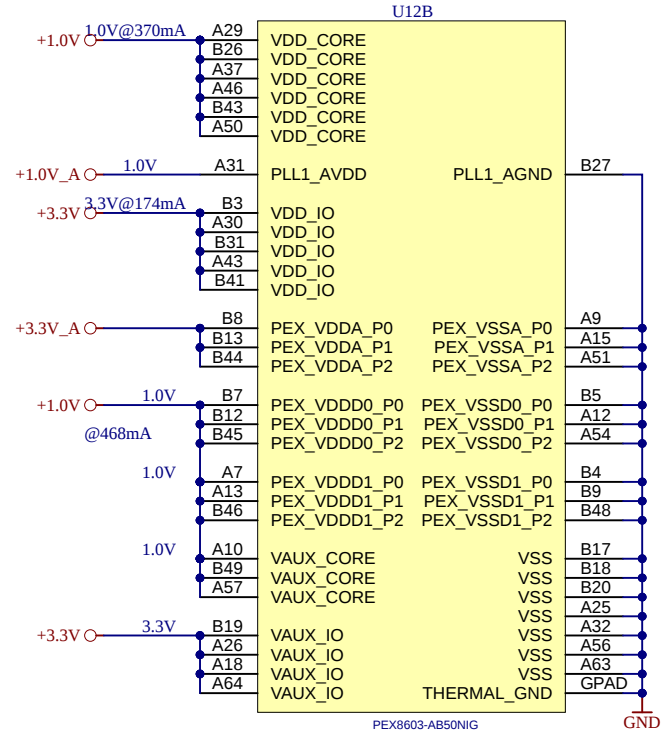
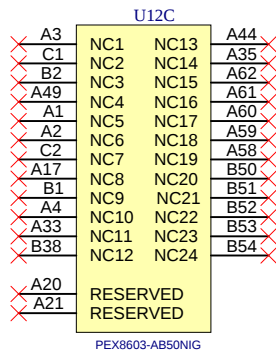
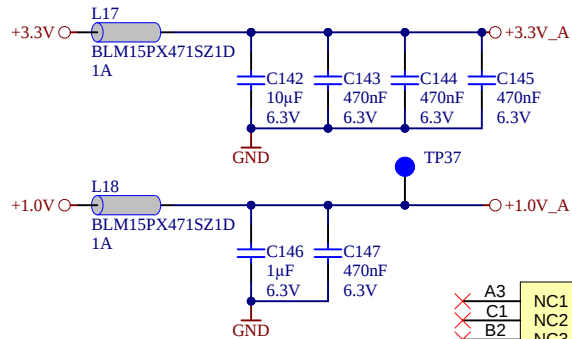
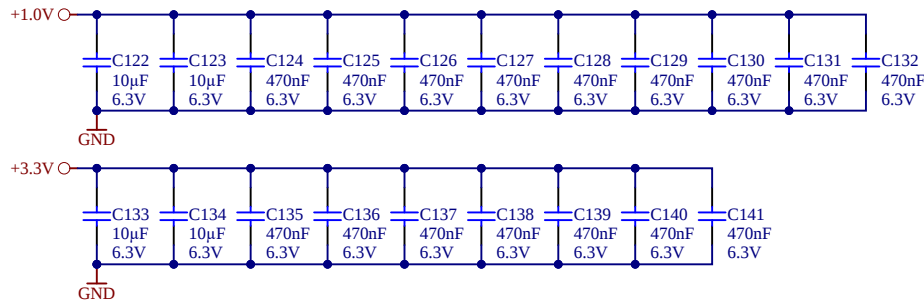
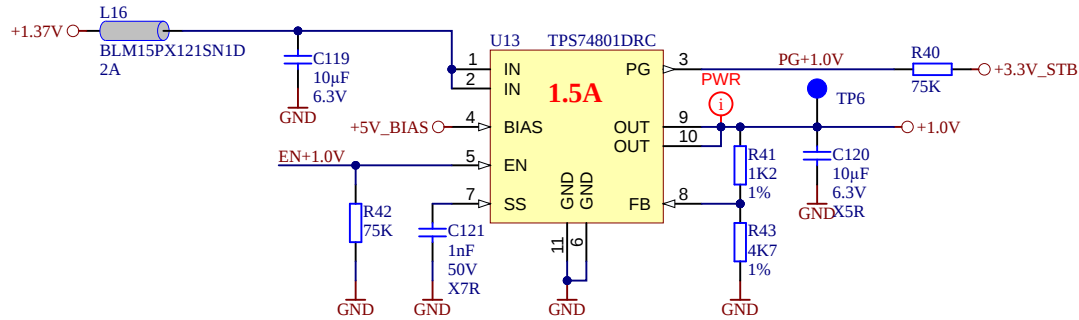
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A4	Number: TEB0912 ABI21-A	Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 40 of 61
Filename: PCIe_Switch.SchDoc		

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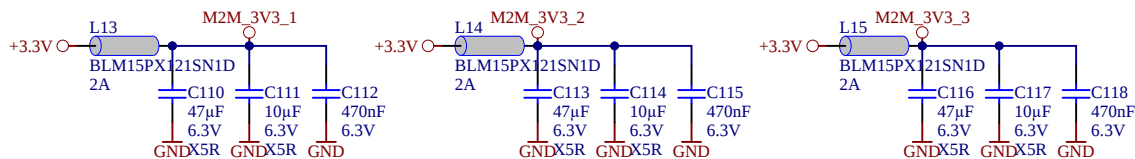
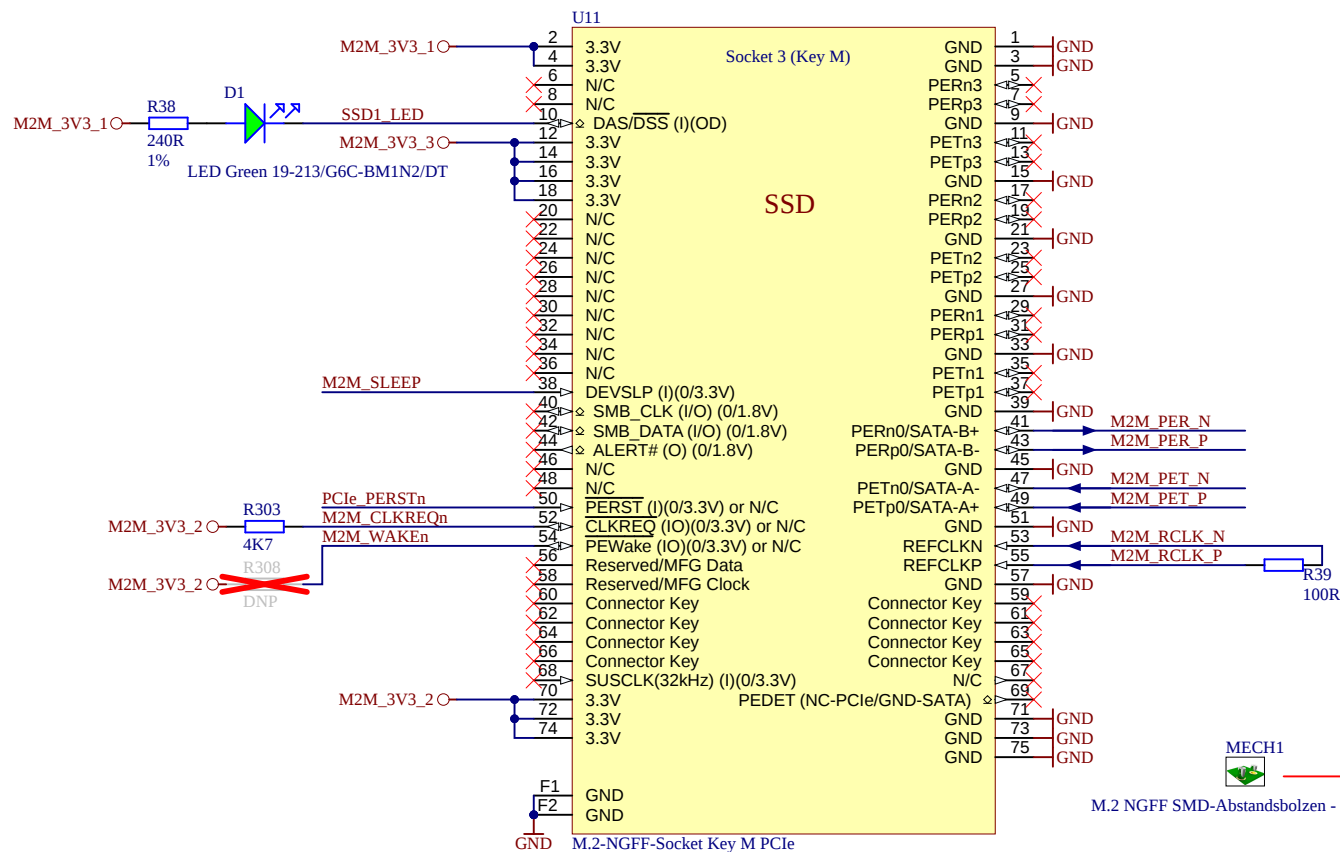
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		A4	Number: TEB0912 ABI21-A	Rev. 03
		Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 41 of 61
		Filename: PCIe_Switch_PWR.SchDoc		

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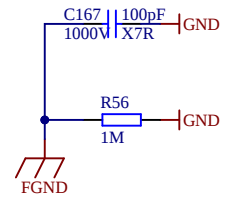
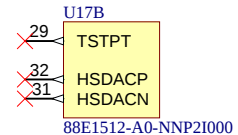
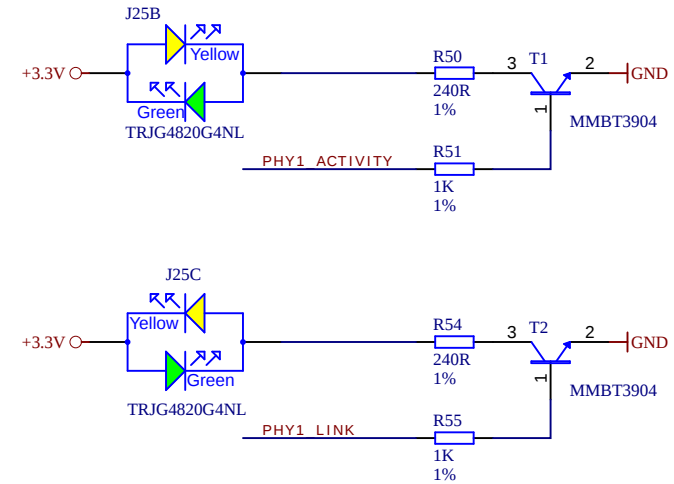
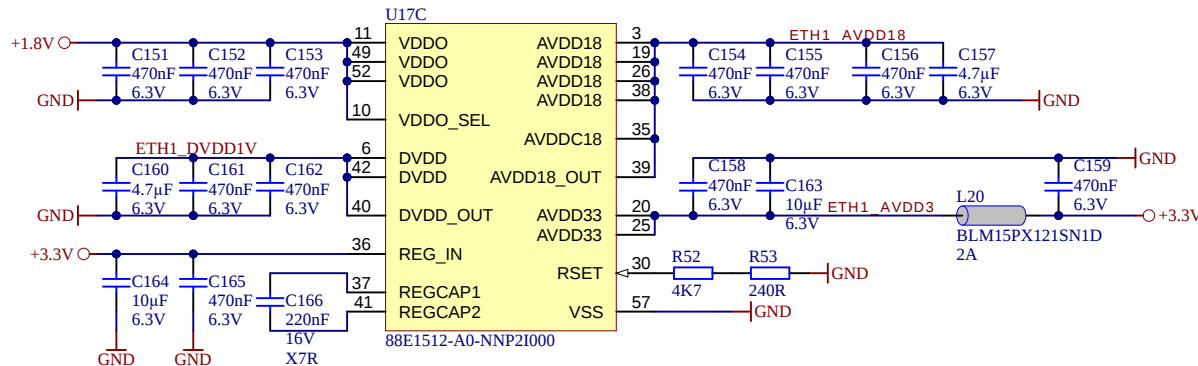
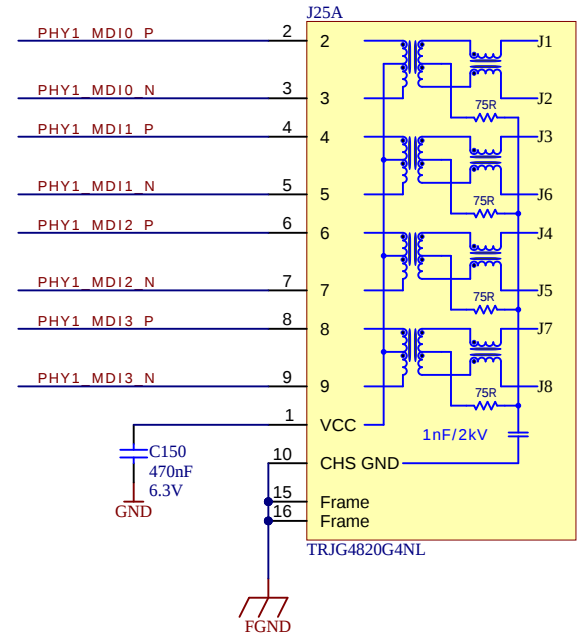
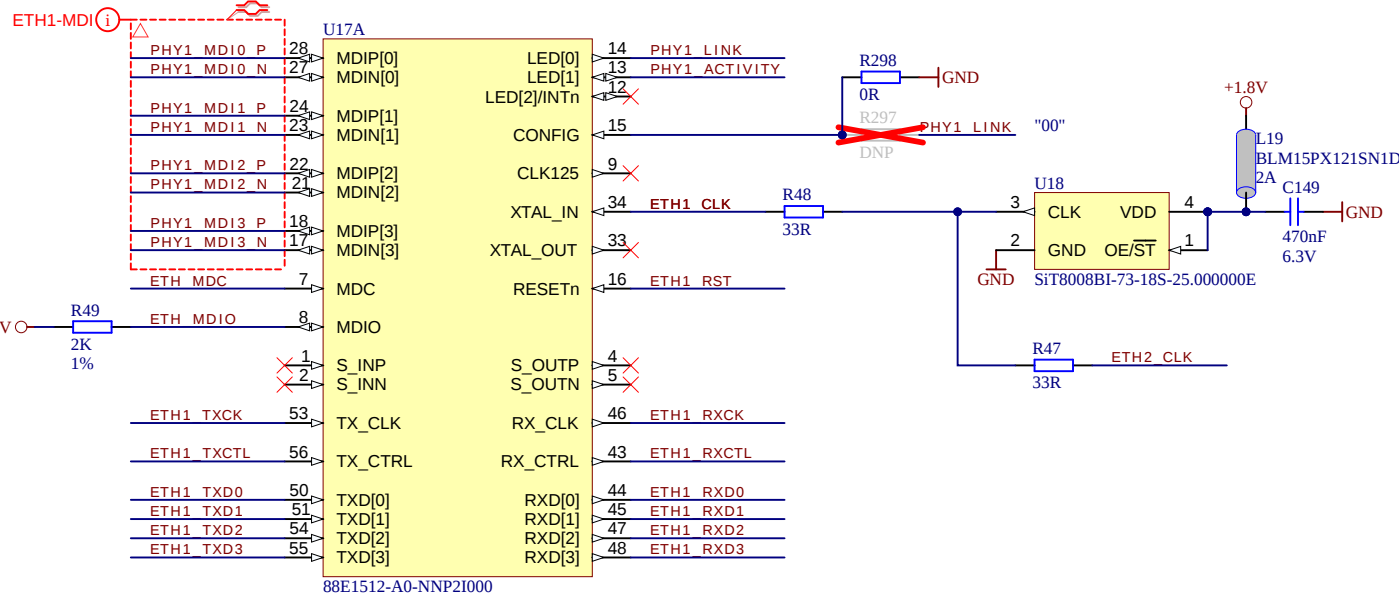
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A4	Number: TEB0912 ABI21-A	Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 42 of 61
Filename: M2_PcLe_key_M.SchDoc		

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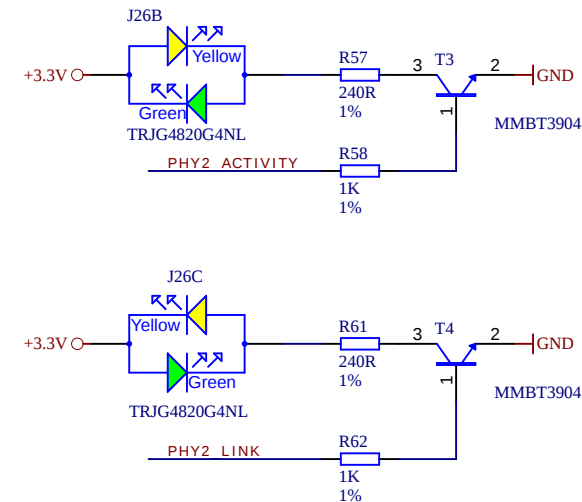
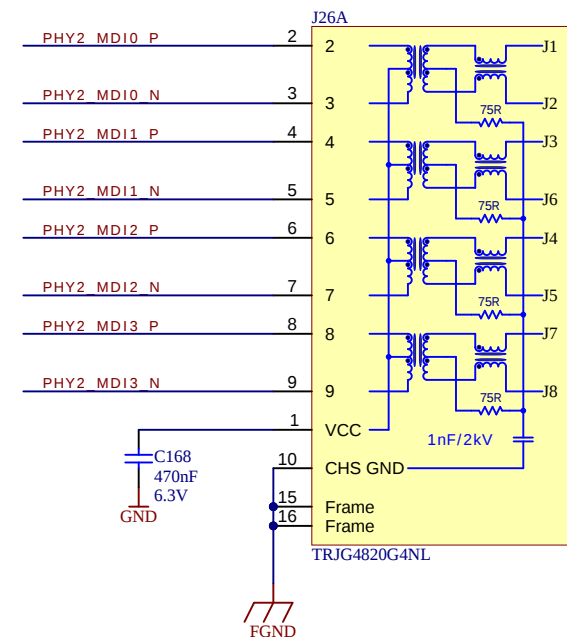
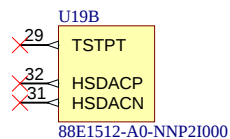
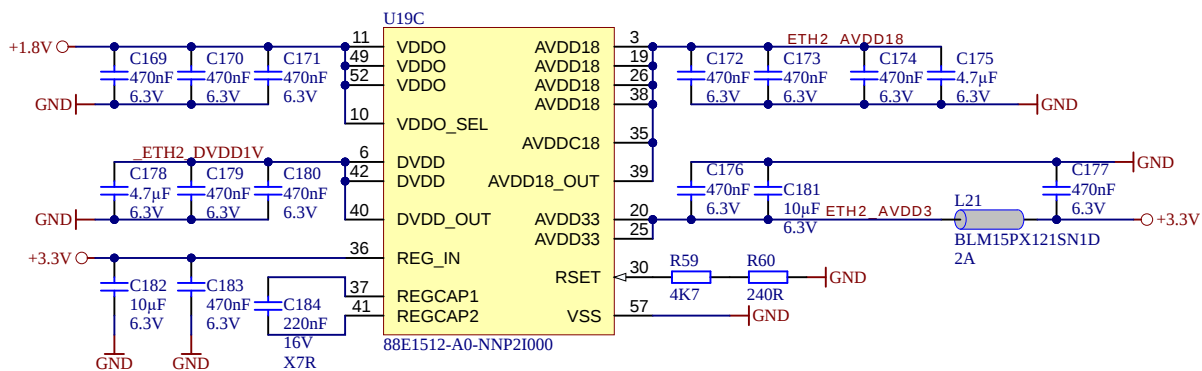
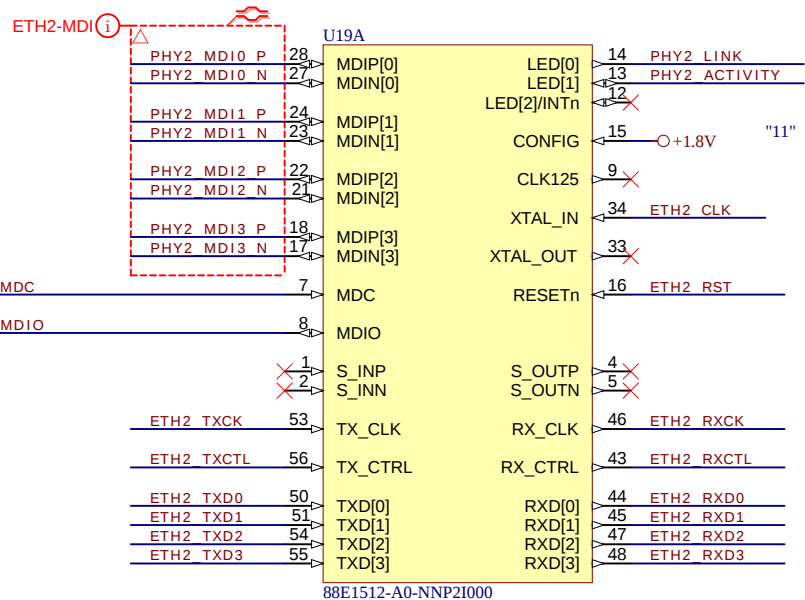
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Date: 2019-04-09	Copyright: Trenz Electronic GmbH	
Page 44 of 61		
Filename: ETH-PHY1.SchDoc		

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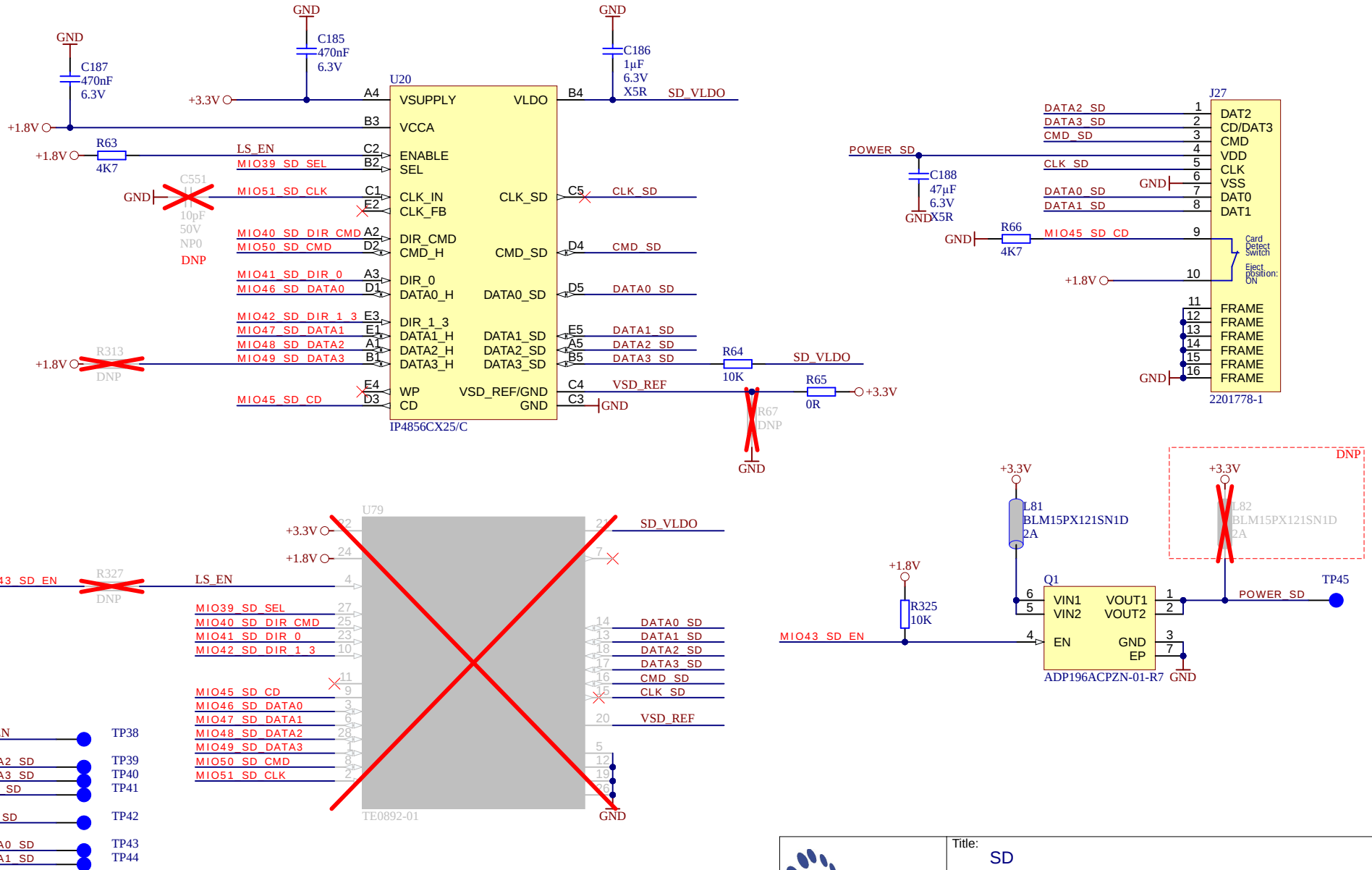
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A4	Number: TEB0912 ABI21-A	Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 45 of 61
Filename: ETH-PHY2.SchDoc		

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Title: SD		
A4	Number: TEB0912 ABI21-A	Rev. 03
Date: 2019-04-09	Copyright: Trenz Electronic GmbH	Page 46 of 61
Filename: SD.schdoc		

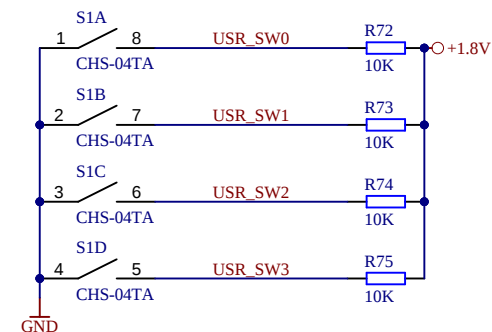
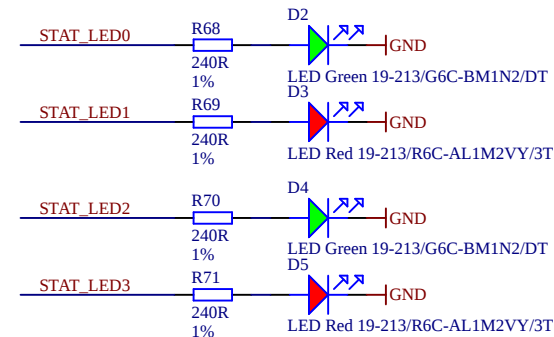
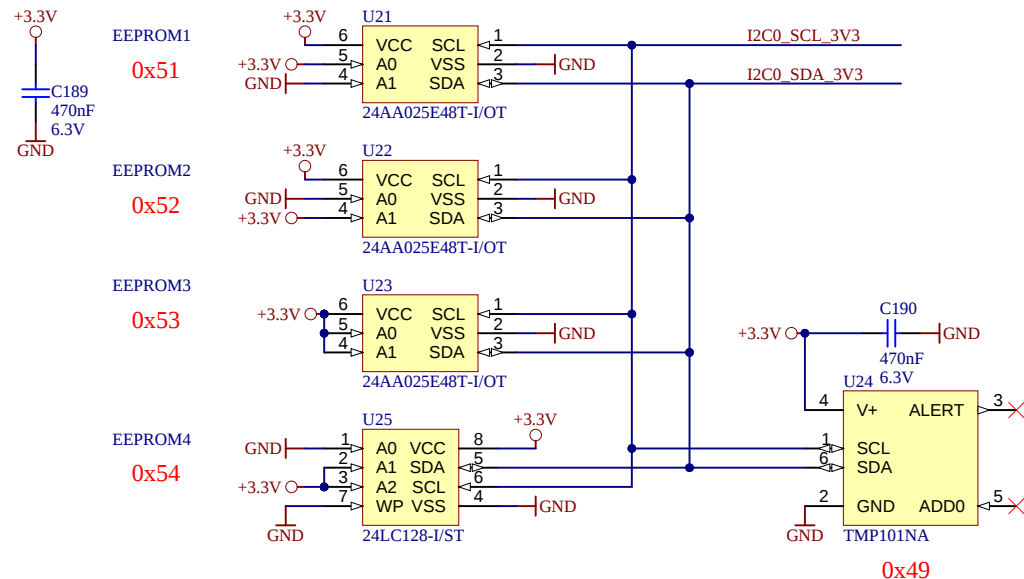
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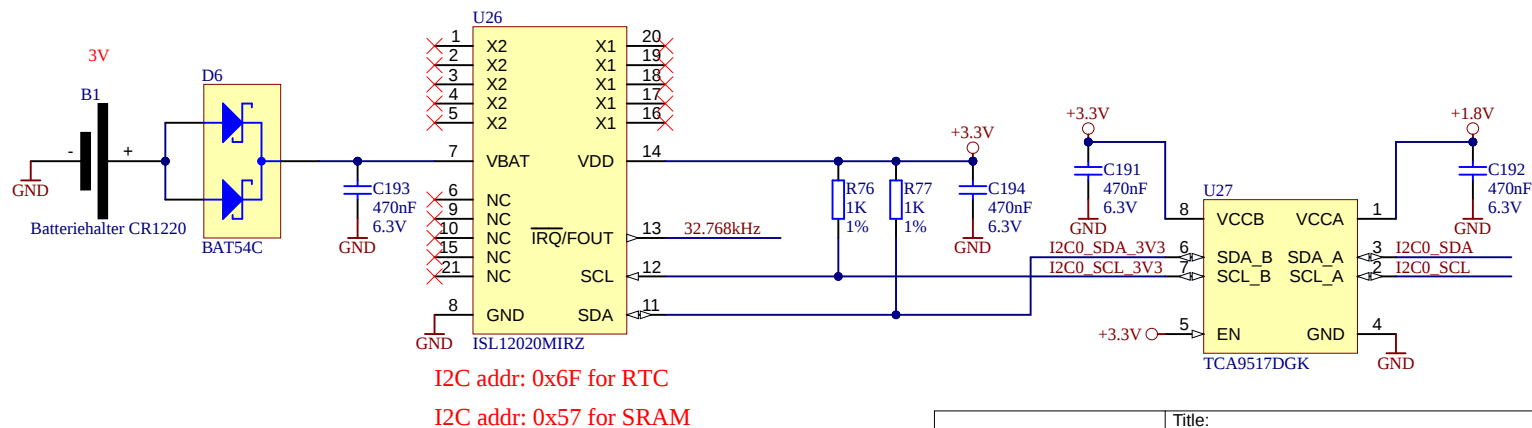
3

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A



C



I2C addr: 0x6F for RTC
I2C addr: 0x57 for SRAM



Title: MISC		
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Filename: MISC.schdoc		

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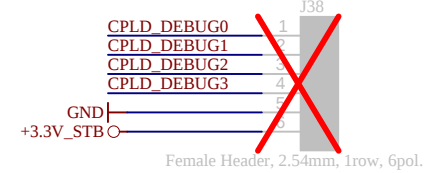
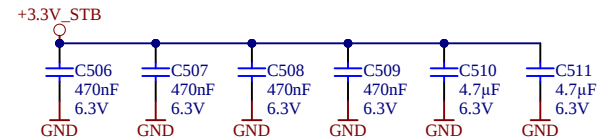
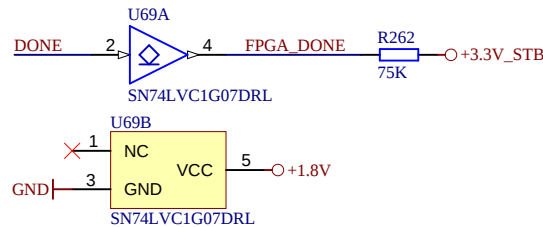
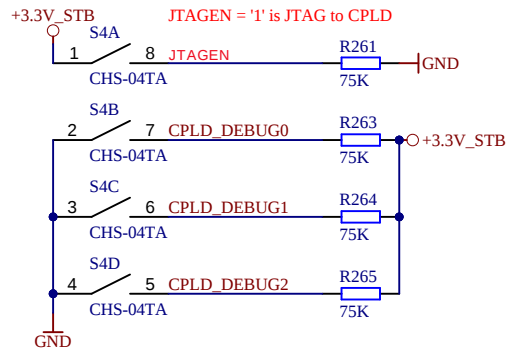
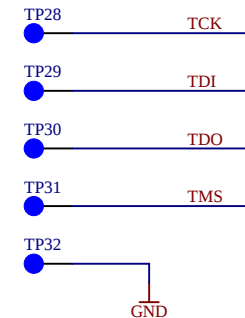
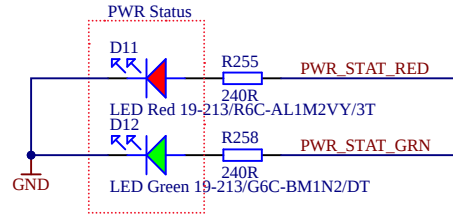
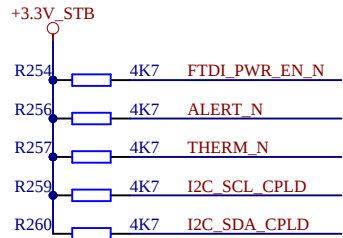
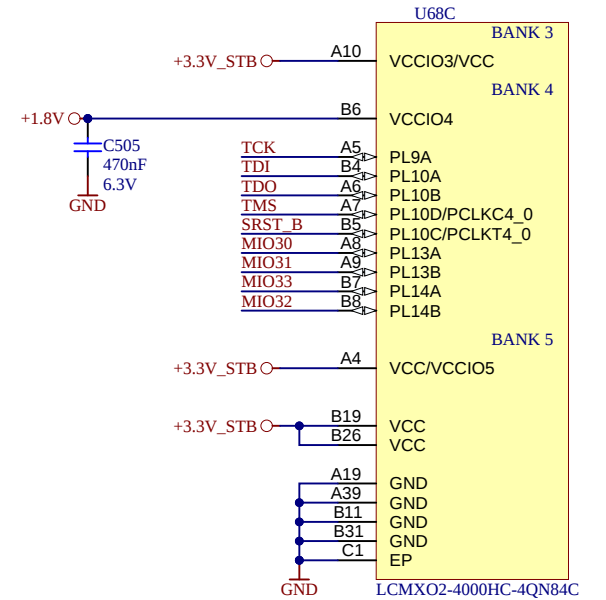
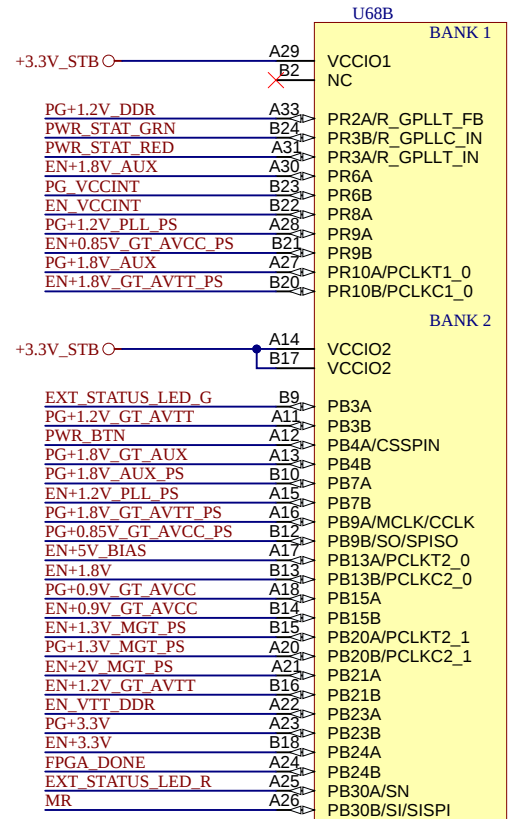
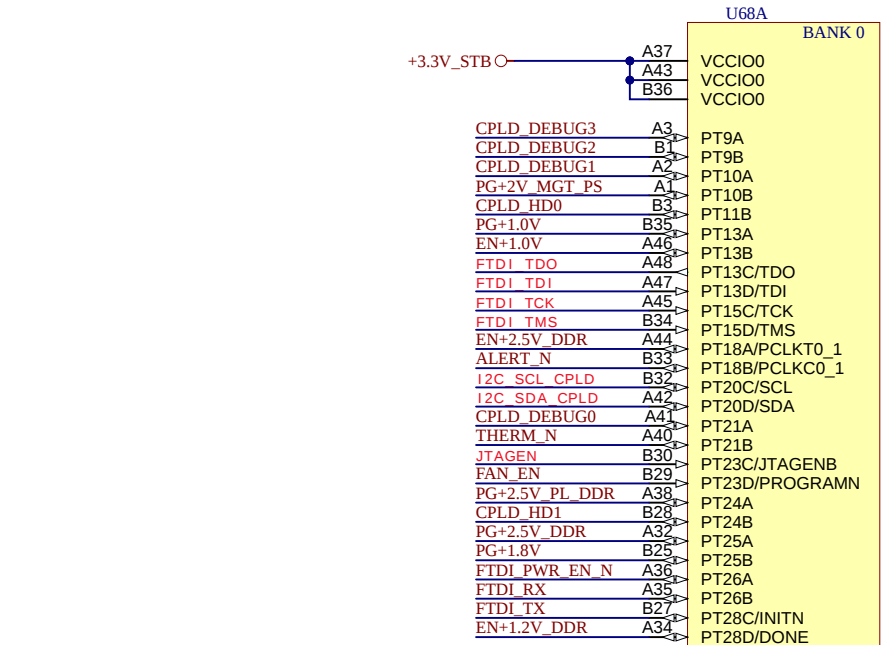
D

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Title: CPLD			
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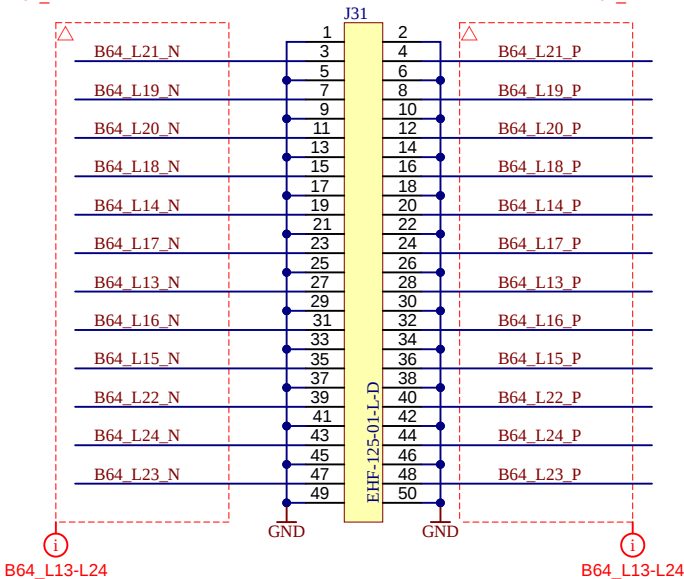
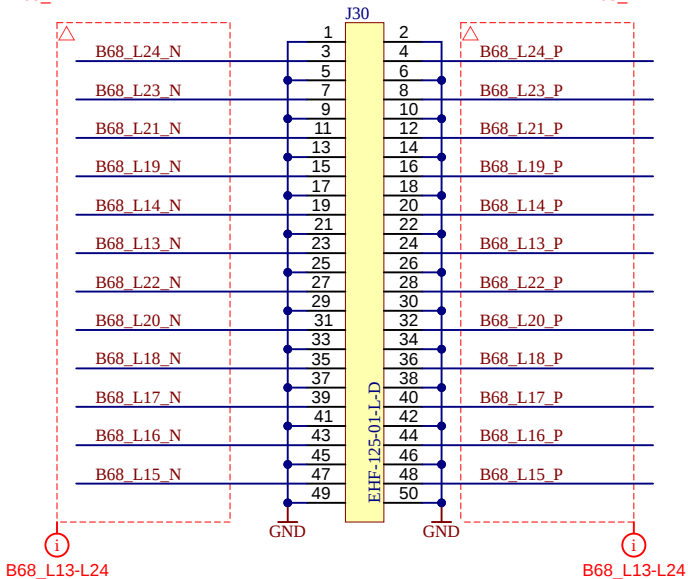
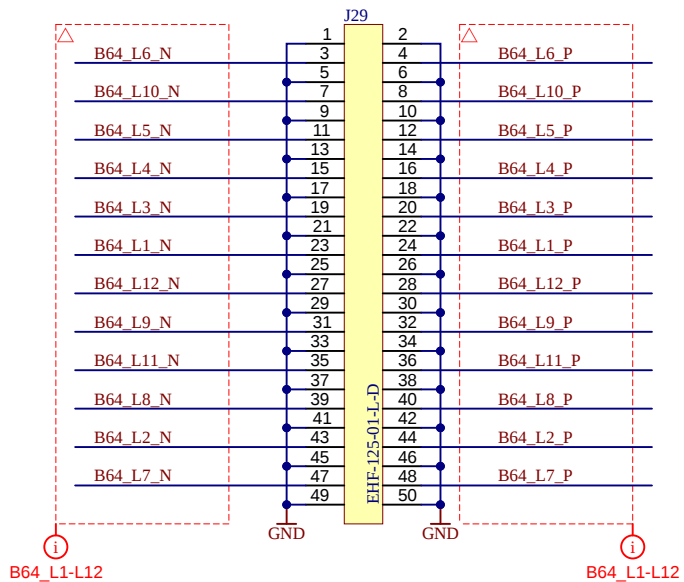
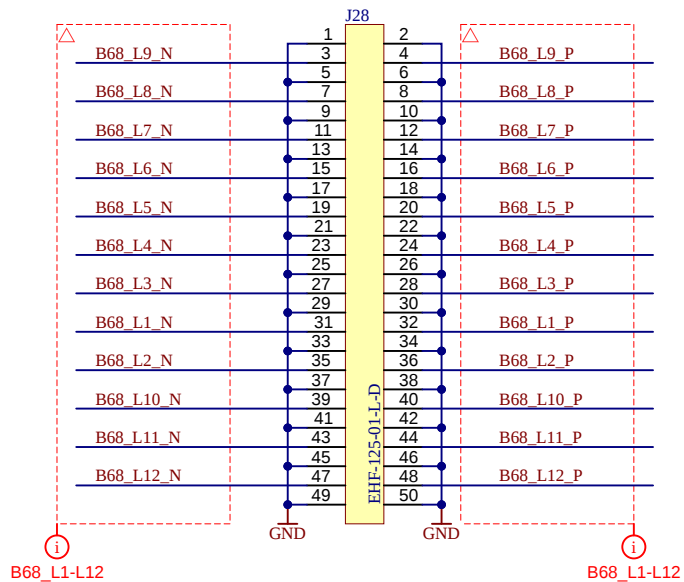
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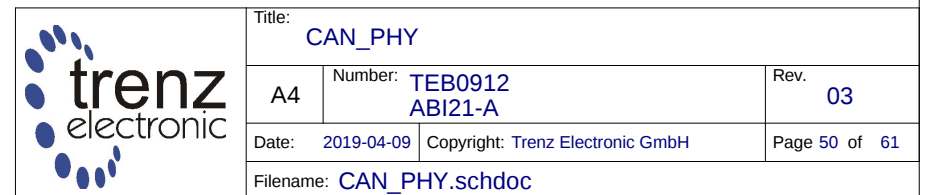
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Filename: B2B.schdoc		

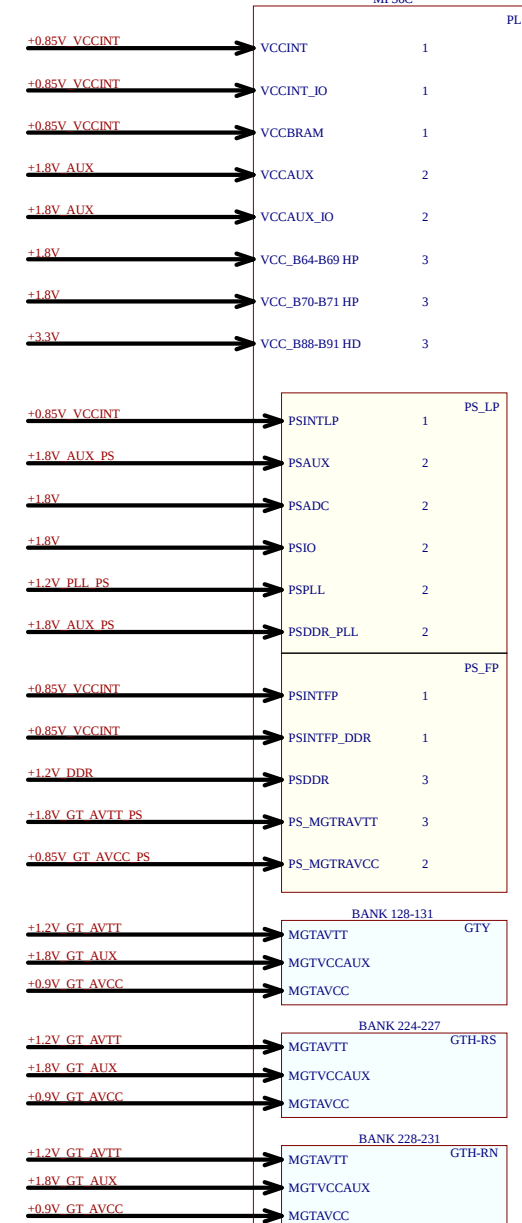
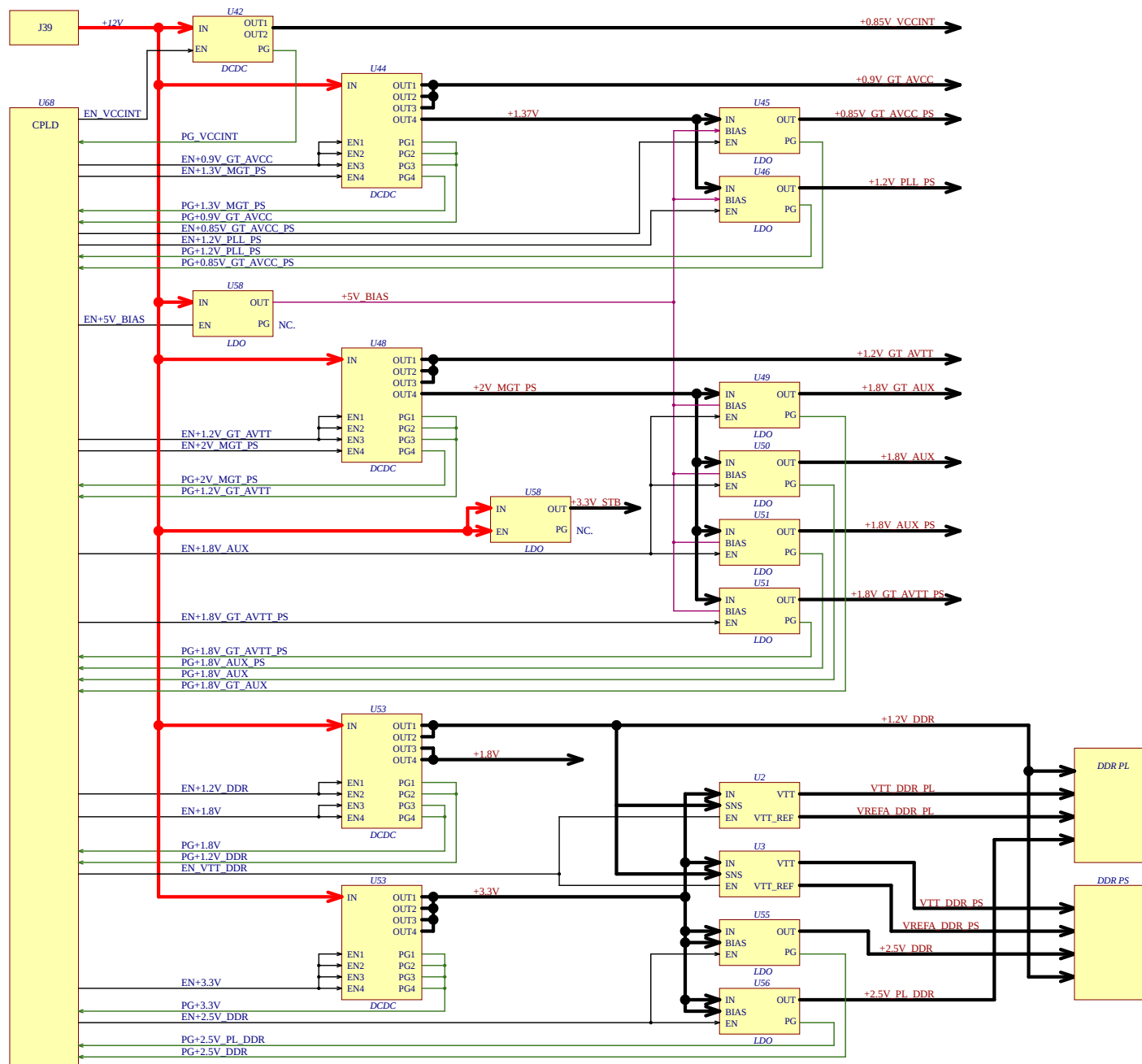
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Title:

POWER1

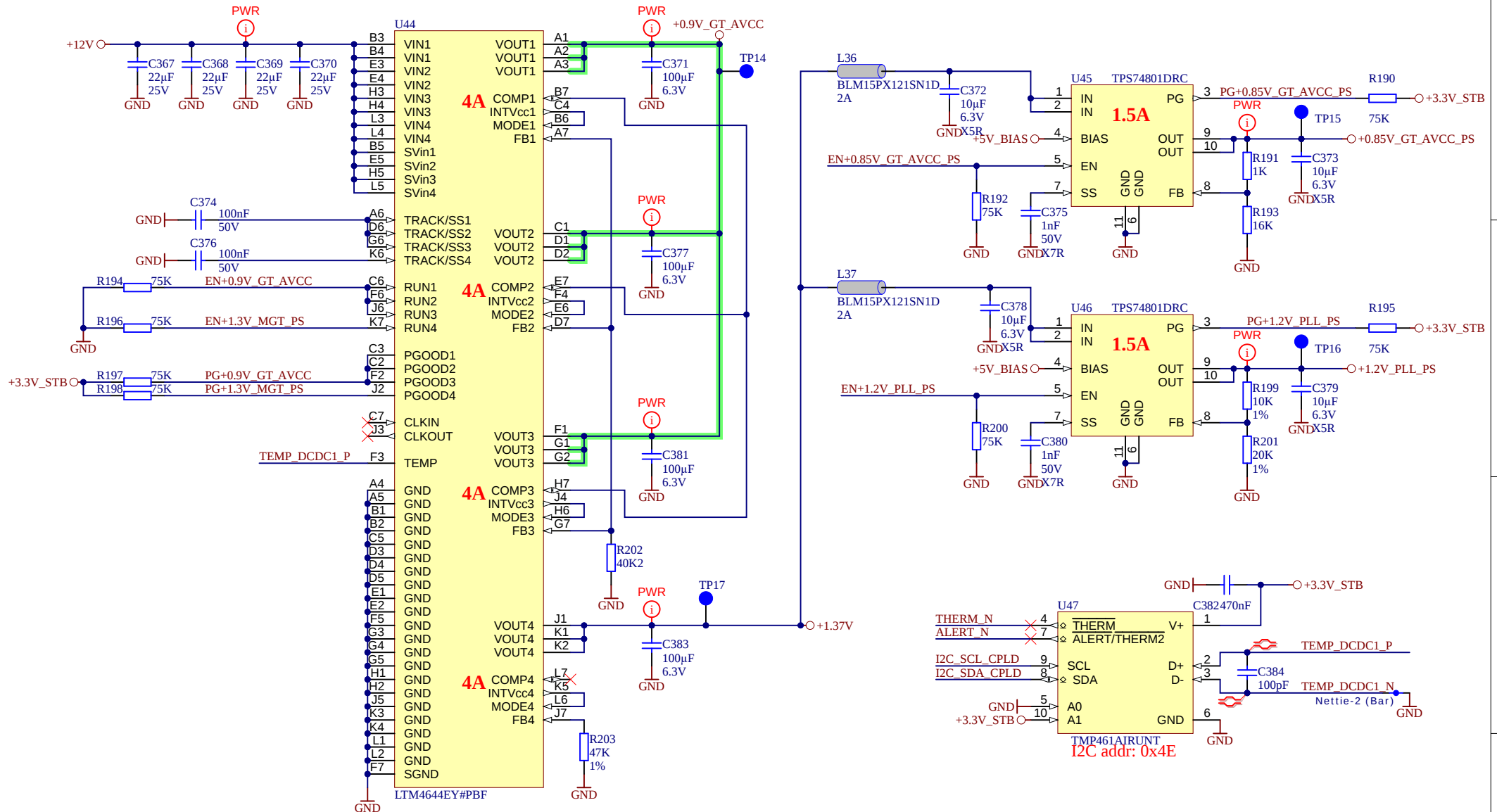
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Number:	TEB0912 ABI21-A
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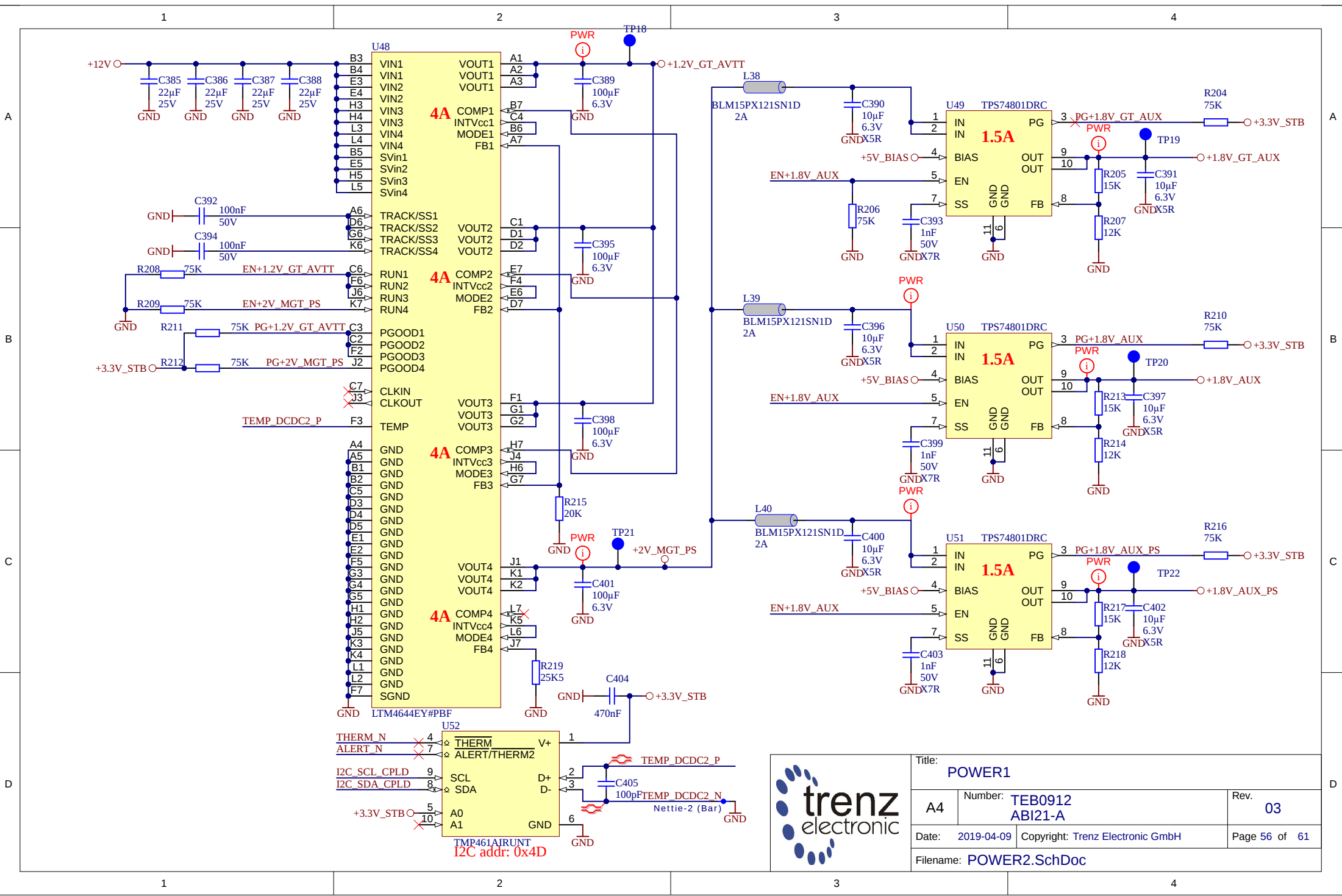
Rev. 03

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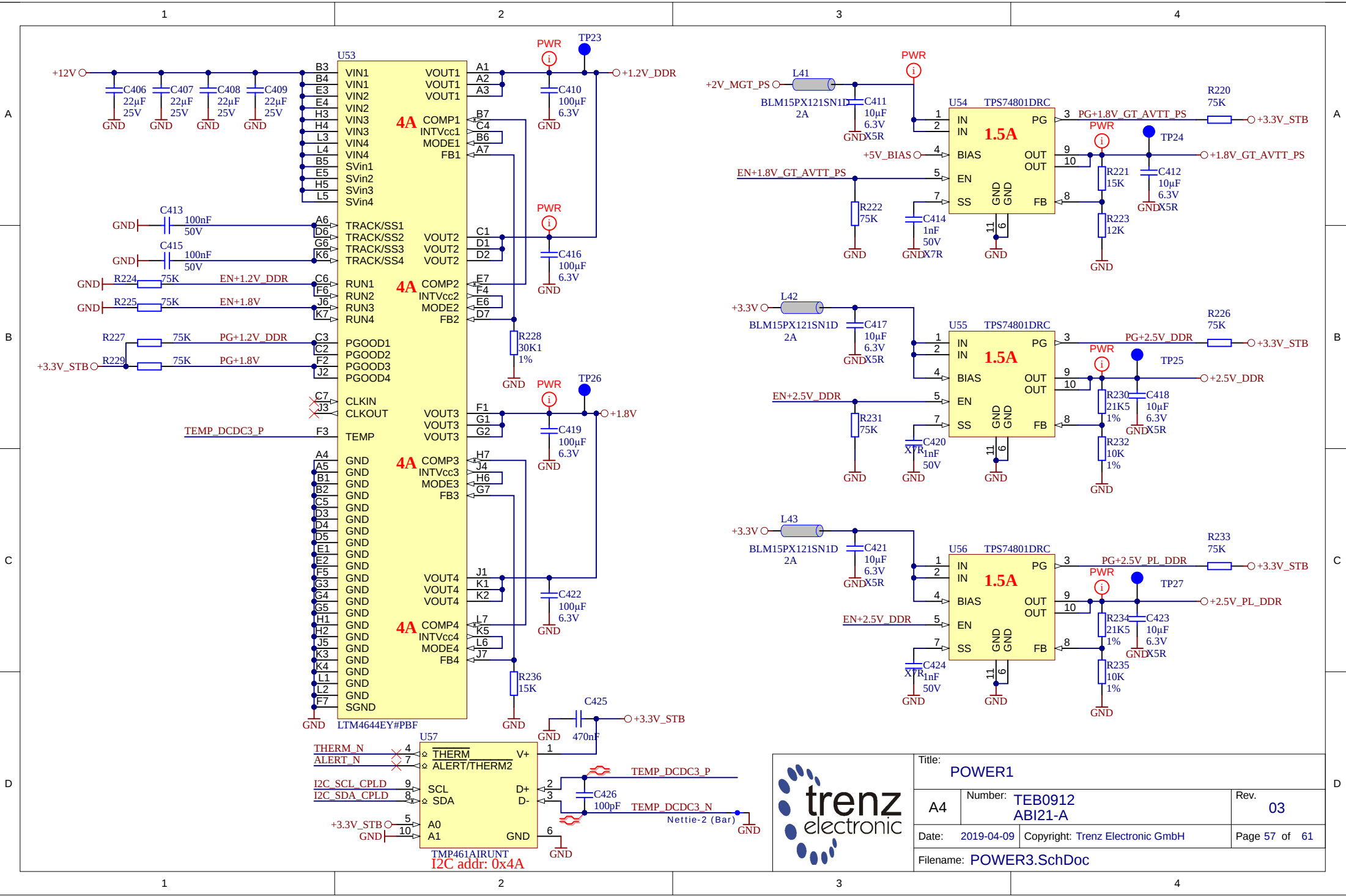
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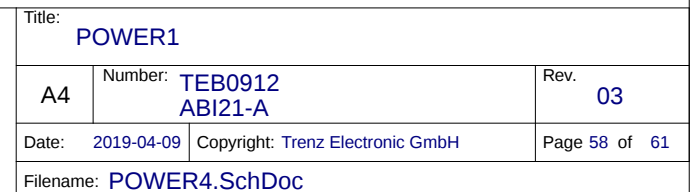
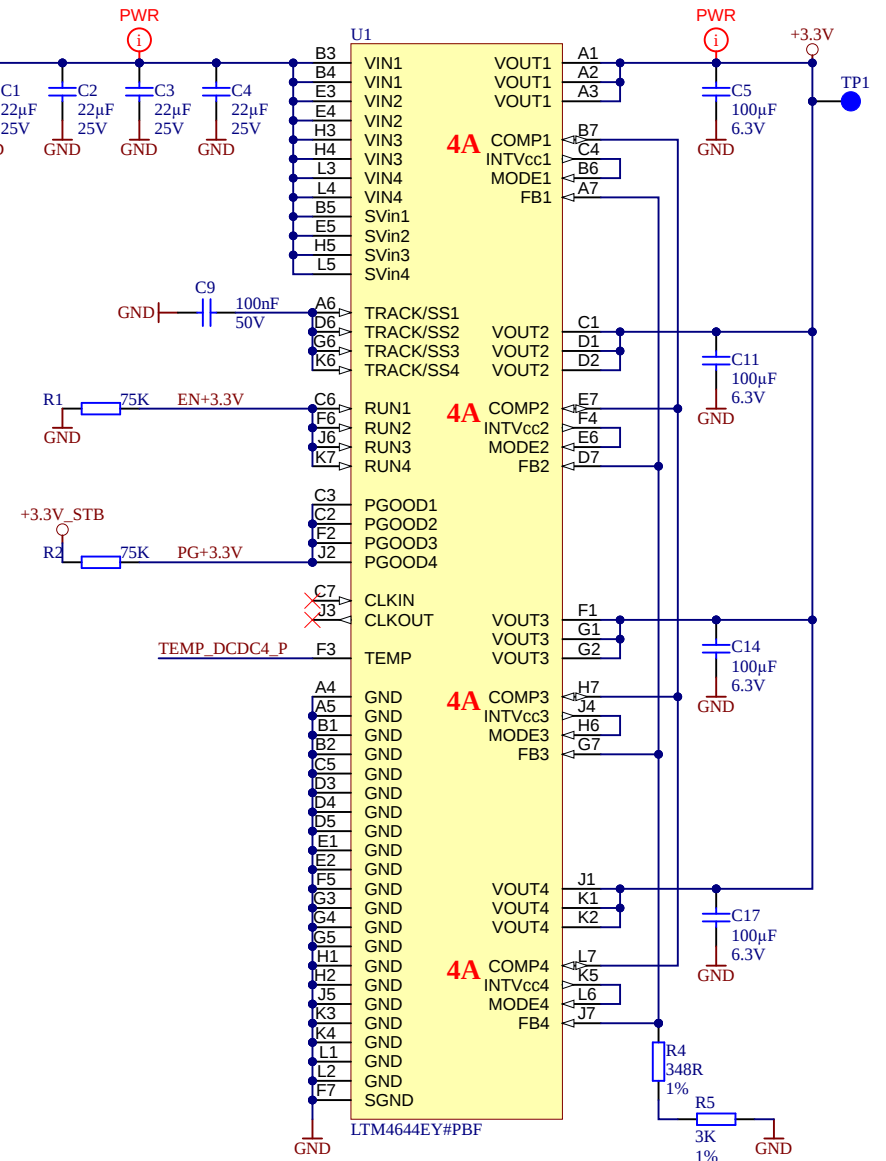
Title: POWER1		
A4	Number: TEB0912 ABI21-A	Rev. 03
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Filename: POWER1.SchDoc		Page 55 of 61

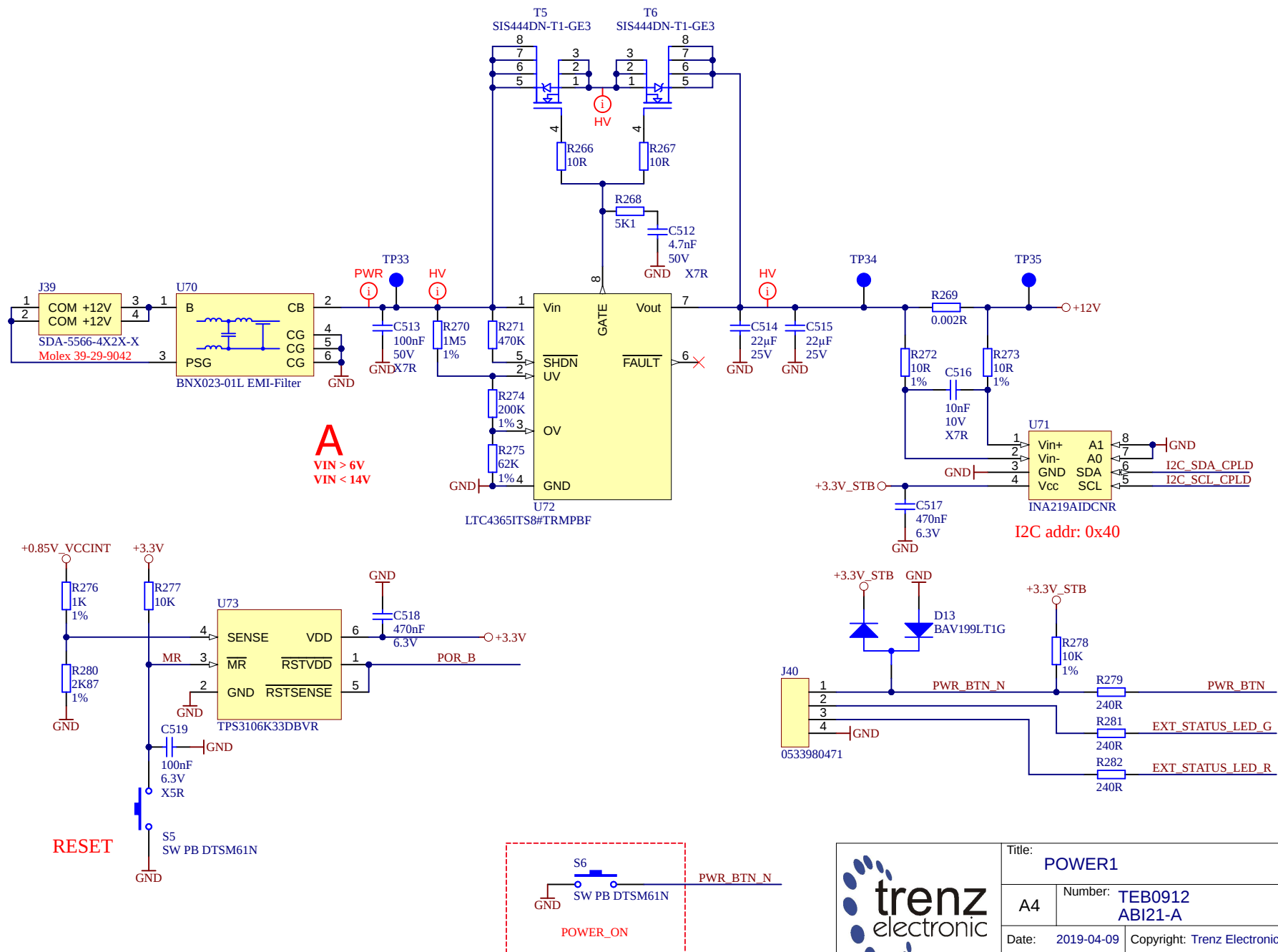


Title: POWER1		
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Filename: POWER2.SchDoc		

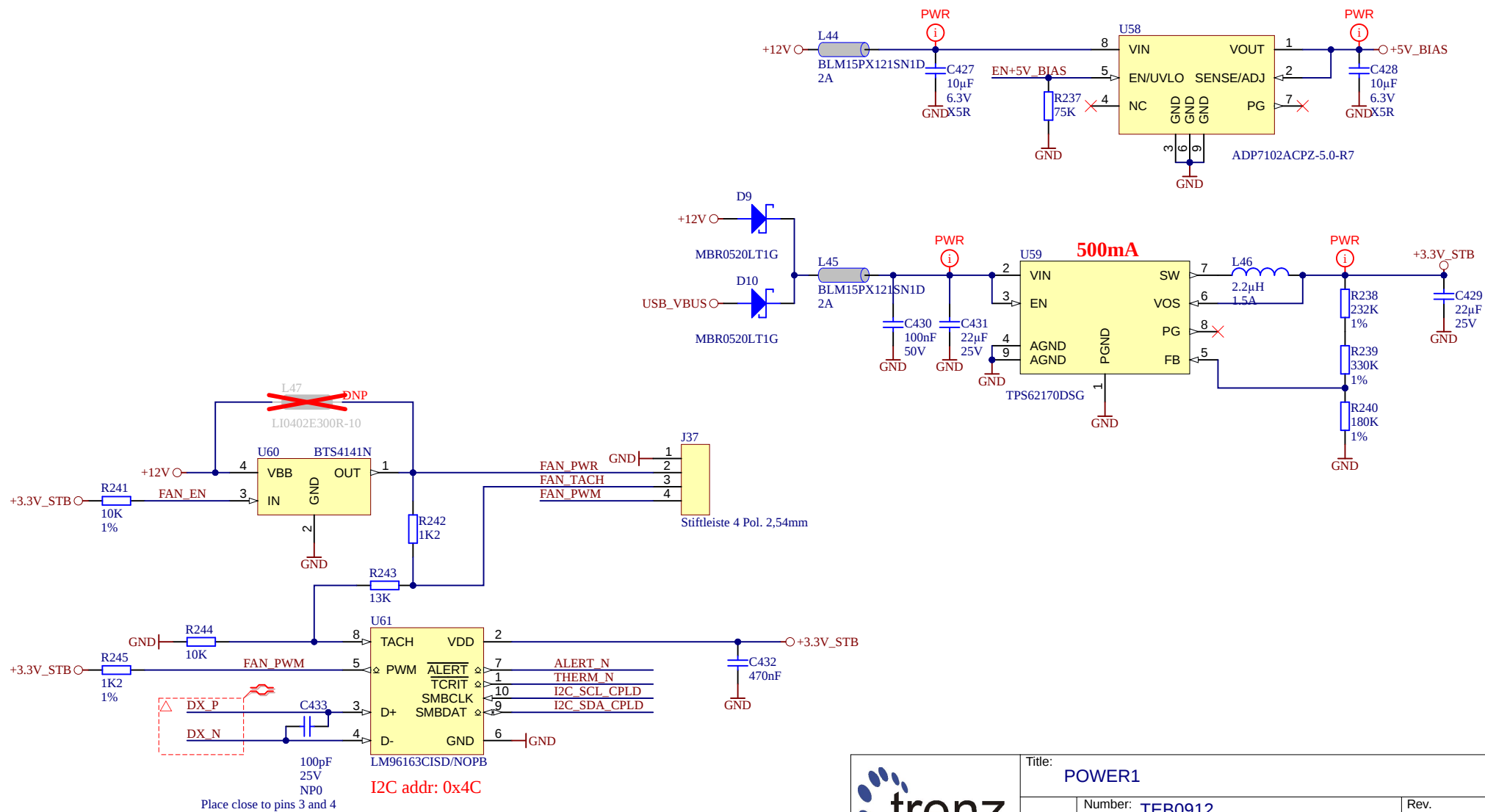


Title: POWER1		
A4	Number: TEB0912 ABI21-A	Rev. 03
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	Title: POWER1		
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		Title: POWER1	
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REVISION HISTORY

REV	Description	
-01	Initial revision	IG/VT
-02	1. SD_Card moved on MIO39-51 2. MIO6 disconnected 3. USB0 has been removed 4. Added Digilent SN MISC1. 5. U17: Two-Bit Mapping configuration was changed on 01. 6. Added PCIe switch. 7. SD card type was changed on 2201778-1. 8. Added FAN controller and FAN connector. 9. Additional capacitors were added to MPSoC according Xilinx document (UG583) 10. Page_POWER6. Switches M2_Key_E and Ethernet_PHY were removed.	IG
-03	1. Was added a capacitor C551. 2. SD3.0 level shifter board U79 is added. 3. J27 was updated. MIO45_SD_CD is active LOW. 4. Added component MECH3 LOGO Address. 5. FIDU-DOT PM5 is moved on bottom side. 6. ETH_PHY1 hardware address is changed to '0'. R298 = 0, R297 = DNP. 7. Added testpoints on SD card's signals. 8. Added VRP resistors on 64-68 HP bank. 9. Schematic of PLL inputs termination is changed. 10. Capacitors on thermal sensors inputs are changed on 100pF. 11. Pull-up resistors R144-R147 changed on 2KOhms. 12. Added pull-up resistors on CPLD_HD0 and CPLD_HD1. 12. Power SD switch is added. 13. For control SD switch is added signal MIO43_SD_EN. 14. Internal thread nut for wifi-card (U74 Key-E) moved at position for 2230 form-factor. 15. Resistors R76, R77 are changed on 1KOhm (28112). 16. Power diagram is updated.	IG

			Title: Revision_Changes	
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			Filename: Revision_Changes.SchDoc	

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