X13
PJ-063BH
Shield

F1
10A/24V, Fast

VCC_12V0
GND

Power.SchDoc
VCC_12V0
VCC_5V0
VCC_3V8
VCC_3V3
VCC_2V5
VCC_1V8
VCC_1V5
VCC_1V25
VCC_1V20
VCC_1V0
PGOOD_LTC3370
PGOOD12_LTC3853
PGOOD3_LTC3853

External_Fan_Connector.SchDoc

I2C_IO-Expander.SchDoc
I2C2_1V8
RESET_IO_N
TPM_INT
INT
GPIO
LED
SGMII_INT
RGMII_INT

96boards_Expansion_Connector.SchDoc
GPIO
SPI
I2C1_1V8
I2C2_1V8
CON_RST_BTN_N
UART2

User_LEDs_and_Button.SchDoc
LED
RST_BTN_N

USB3.0_Power.SchDoc
USB_PWRFAULT
USB_DRVVBUS
PWR_USB_A
OCS_USB_A
VBUS_unten
PWR_USB_B
OCS_USB_B
VBUS_oben

USB3.0_Connector.SchDoc
VBUS_unten
VBUS_oben
USB_A
USB_B

USB3.0_Hub.SchDoc
PWR_USB_A
OCS_USB_A
PWR_USB_B
OCS_USB_B
USB_Hub
RESET_IO_N
PGOOD3_LTC3853
USB_A
USB_B
I2C1_3V3

PCI_Express.SchDoc
mPCIE_USB
I2C1_3V3
PCIe
RESET_IO_N

SATA.SchDoc
SATA

I2C_LevelShifter_1V8_3V3.SchDoc
I2C1_3V3
I2C1_1V8

VCC_5V0
VCC_3V8

SoM_Connector.SchDoc
USB_Hub
USB_DRVVBUS
USB_VBUS
USB_PWRFAULT
ETH_RGMII
ETH
ETH_SGMII
PCIe
SATA
I2C1_1V8
I2C2_1V8
VCC_3V8
CLK_RGMII
CLK_SGMII
UART2_RTS_B/TDI
UART2_SIN/TCK
UART2_CTS_B/TMS
UART2_SOUT/TDO
TJTAG_EN
LSJTAG_TRST_N
VCC_3V3_SD
SOM_RESET_IO_N
INT
TPM_INT
SDHC1
SPI
DBG_UART
RESET_SOM_N

JTAG_UART_Switch.SchDoc
UART2_RTS_B/TDI
UART2_SIN/TCK
UART2_CTS_B/TMS
UART2_SOUT/TDO
TJTAG_EN
UART2
LSJTAG

JTAG.SchDoc
LSJTAG
JTAG_RST_LS1012A
CSMIS-JTAG
KS20_GND_DETECT
VCC_1V8_Kinetis

Reset.SchDoc
RST_BTN_N
CON_RST_BTN_N
JTAG_RST_LS1012A
K20_RST_LS1012A
RESET_SOM_N
RESET_IO_N
SOM_RESET_IO_N
PGOOD12_LTC3853
K20_LSJTAG_TRST_N
LSJTAG_TRST_N

CMSIS-DAP_Interface.SchDoc
VCC_1V8_Kinetis
KS20_GND_DETECT
CSMIS-JTAG
DBG_UART
K20_RST_LS1012A
K20_LSJTAG_TRST_N

MicroSD-Card.SchDoc
SDHC1
RESET_IO_N
VCC_3V3_SD

Ethernet_Connector.SchDoc
ETH_RGMII_CON
ETH_SGMII_CON

Ethernet_PHY_RGMII.SchDoc
ETH_RGMII_CON
ETH
ETH_RGMII
CLK_RGMII
Reset_RGMII
RGMII_INT

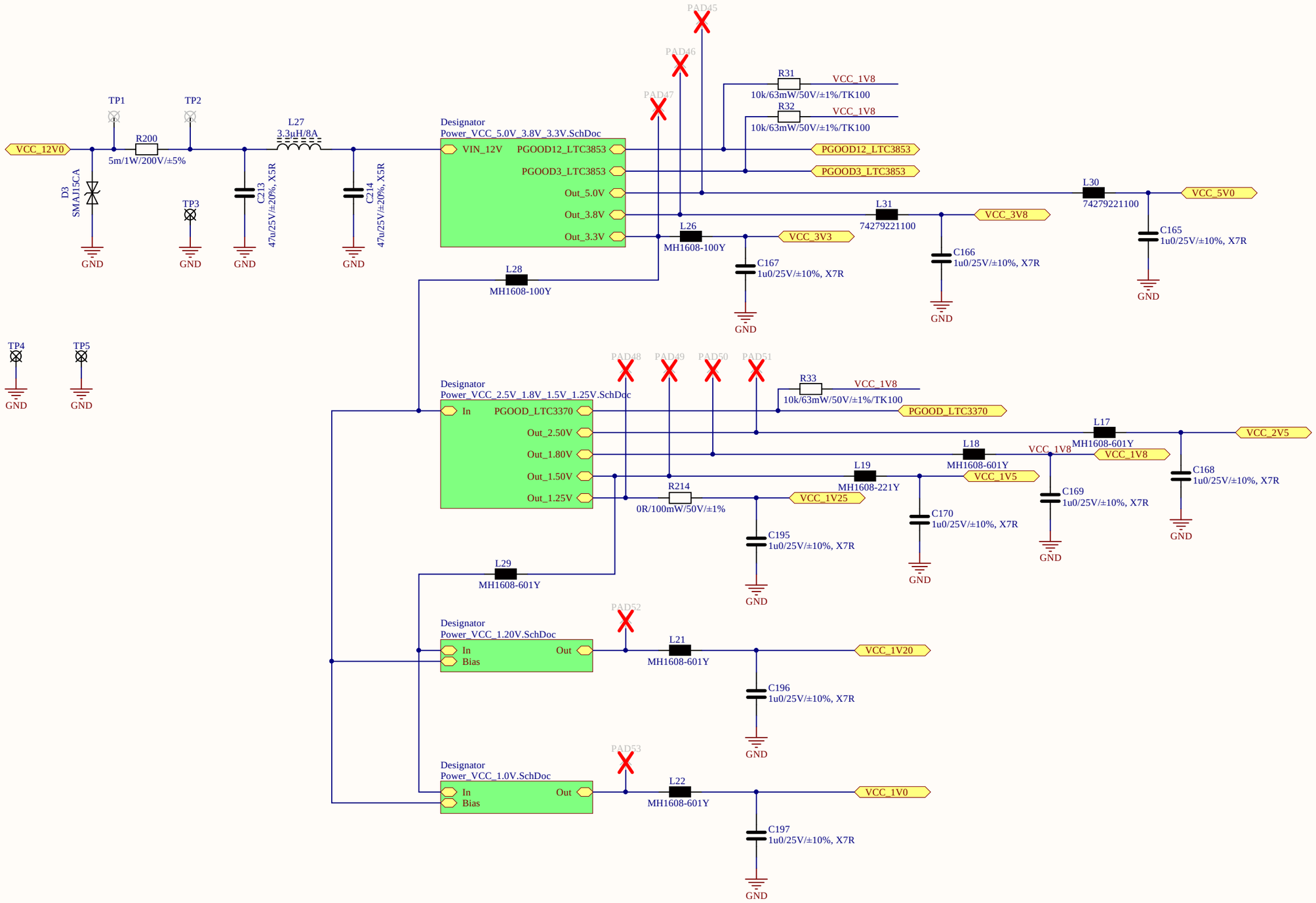
Ethernet_PHY_SGMII.SchDoc
ETH_SGMII_CON
ETH
ETH_SGMII
CLK_SGMII
RESET_IO_N
SGMII_INT

Reset_Duplexer.SchDoc
RESET_IO_N
Reset_RGMII

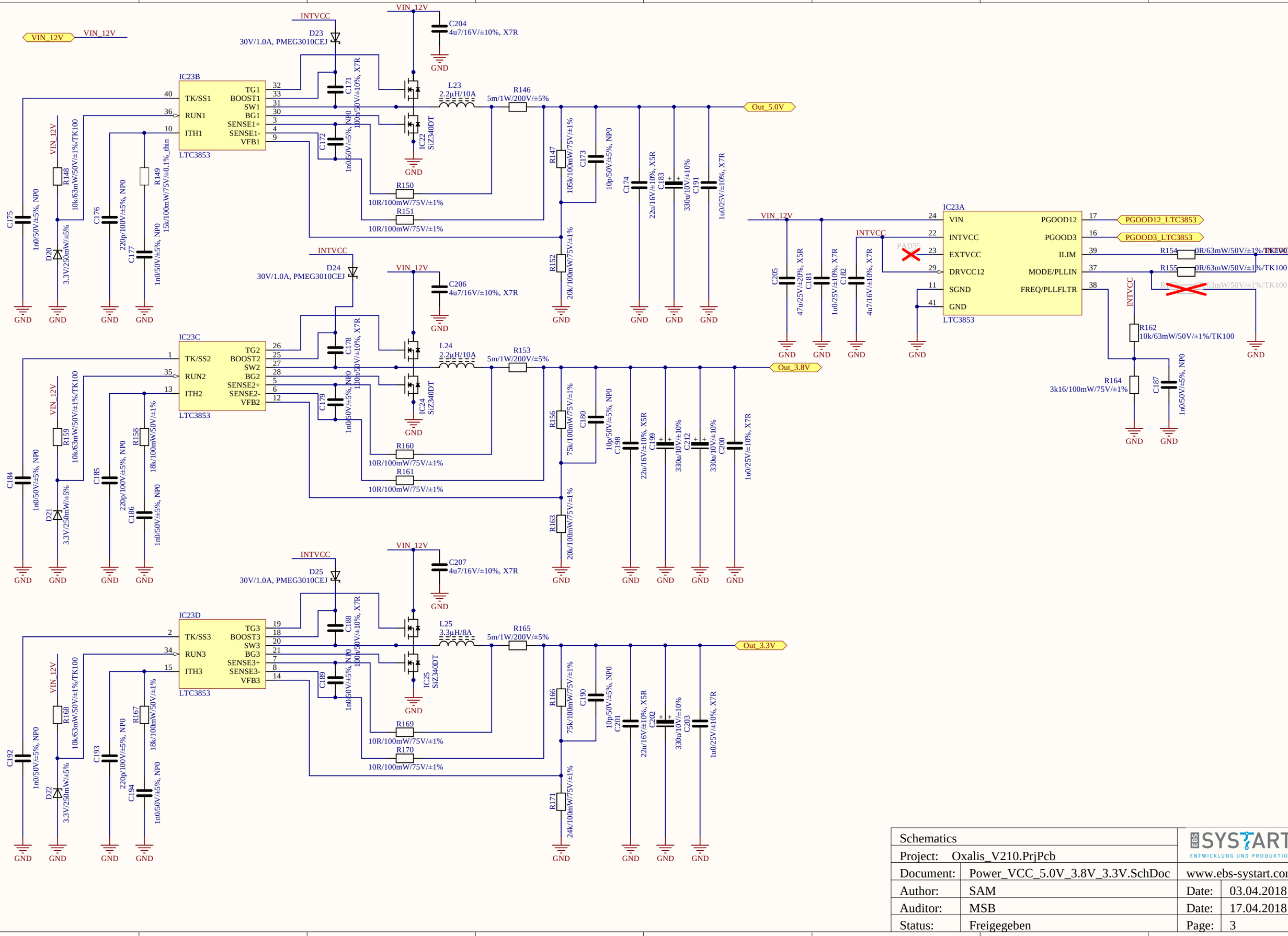
CLK-Leitungen mit 100mm Länge routen, damit die Länge mit der Leitung auf dem SaM-Board übereinstimmt

FID1 FID2 FID3 FID4

Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	TOPSHEET.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	1



Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	Power.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	2



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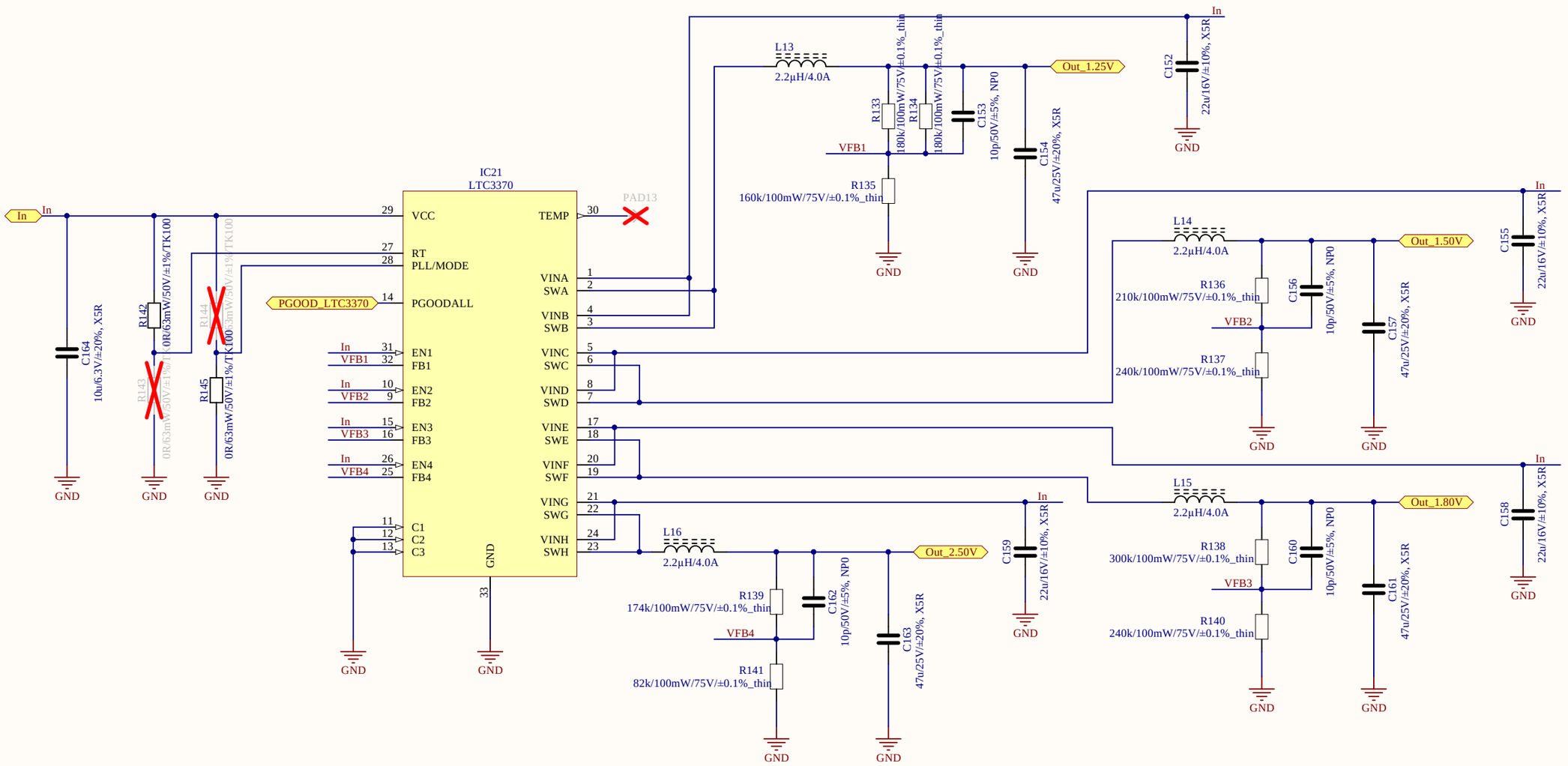
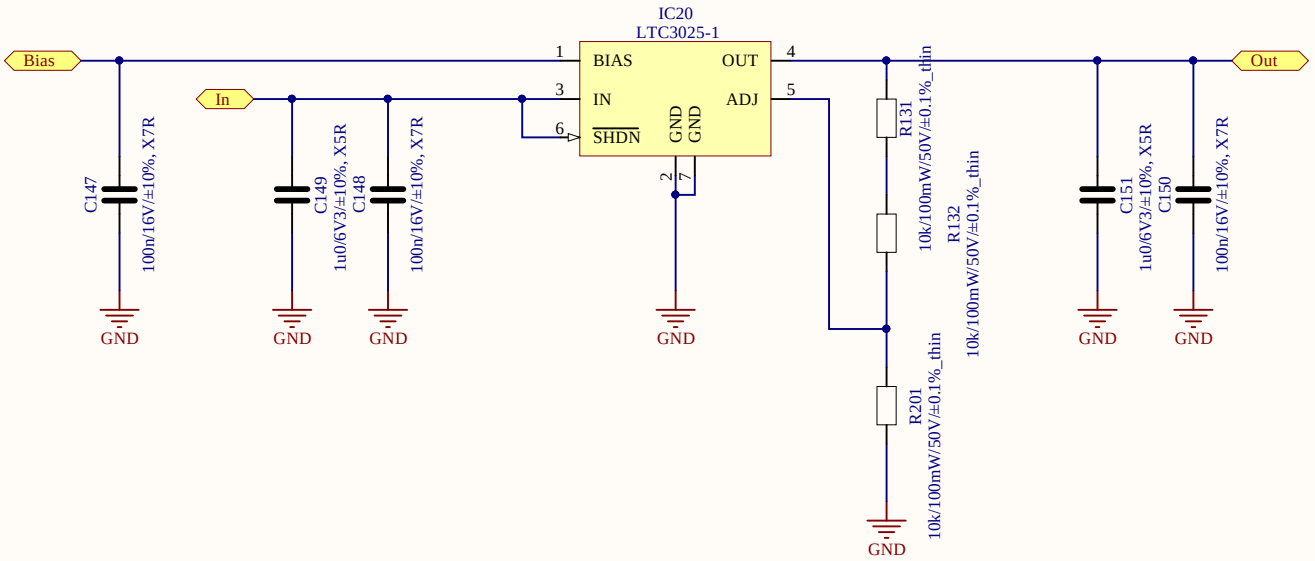
Project:	Oxalis_V210.PrjPcb		
Document:	Power_VCC_5.0V_3.8V_3.3V.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	3



Schematics			
Project:	Oxalis_V210.PrjPcb		
Document:	Power_VCC_2.5V_1.8V_1.5V_1.25V.SchDoc		
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	4

SYSTART ENTWICKLUNG UND PRODUKTION
www.ebs-systart.com



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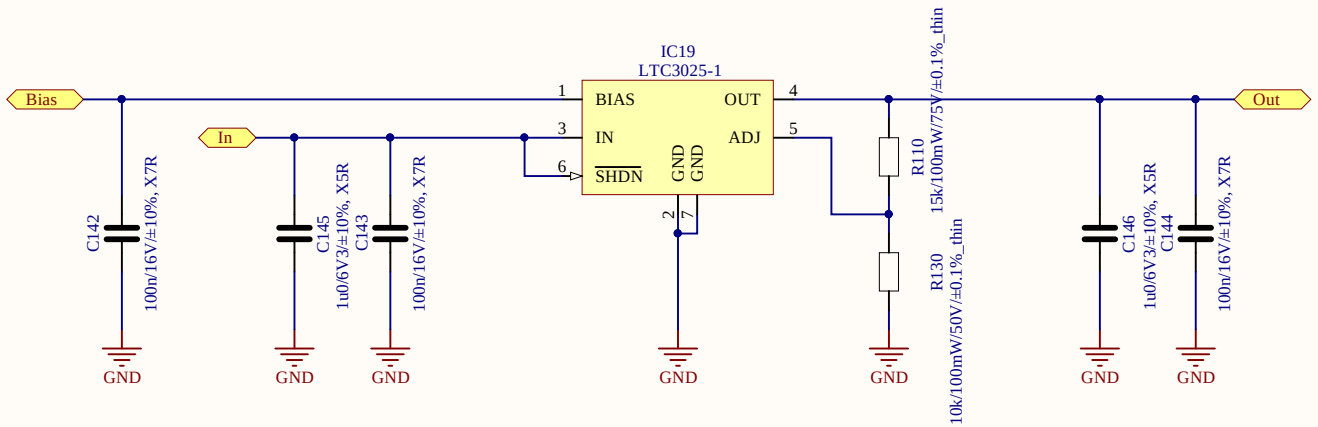
Document:	Power_VCC_1.20V.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	5



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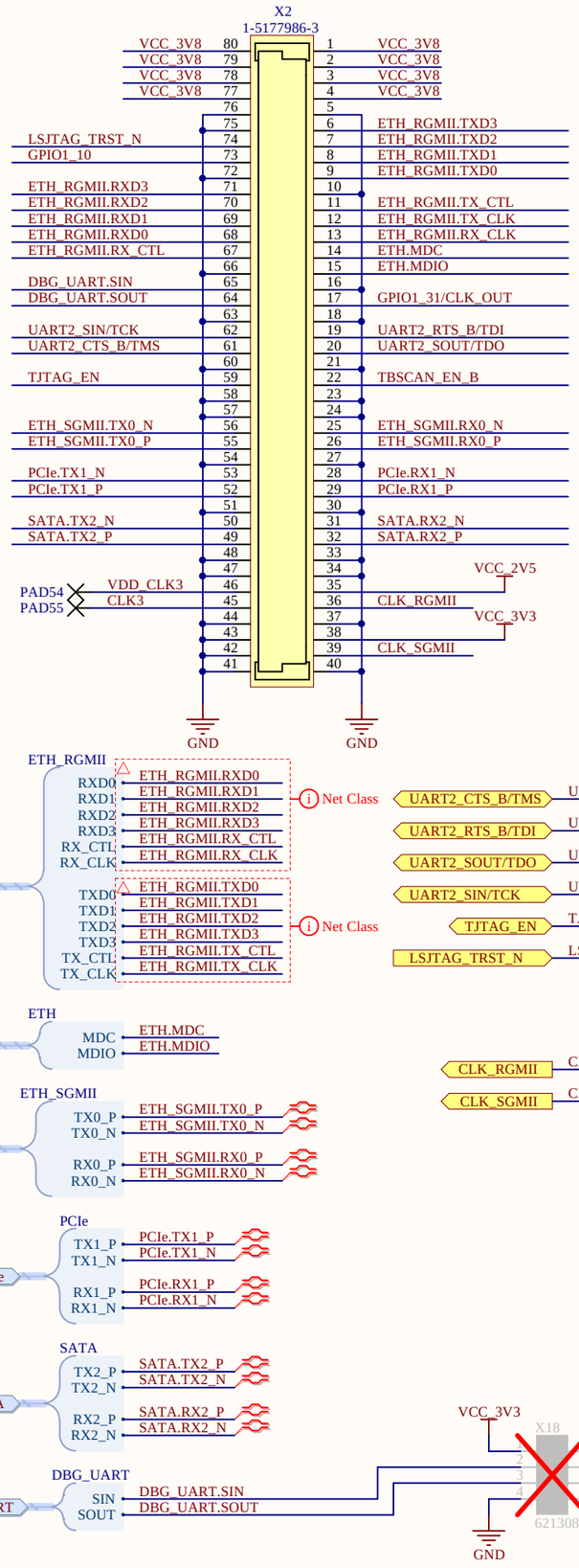
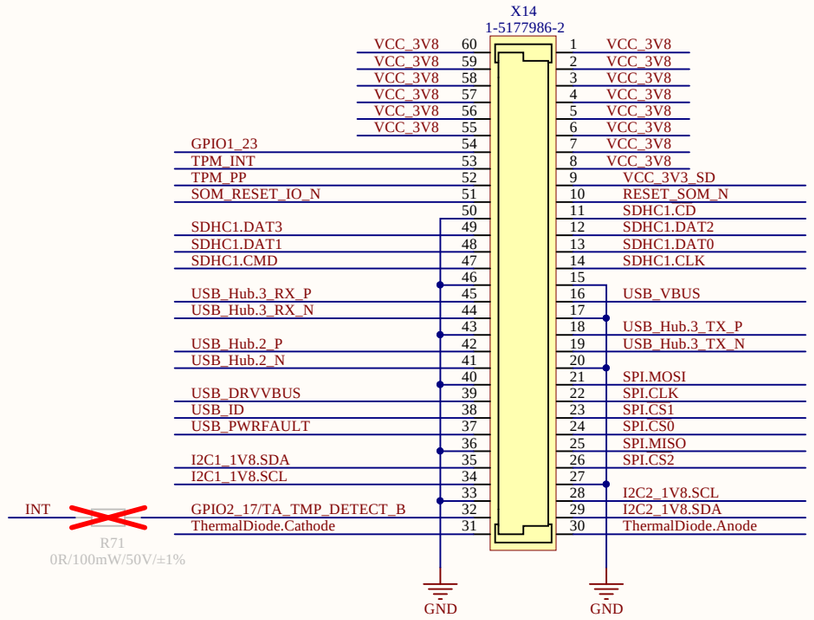
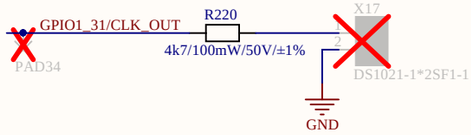
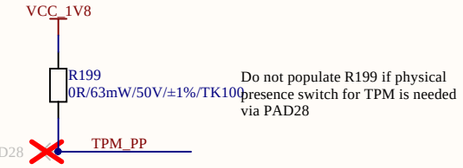
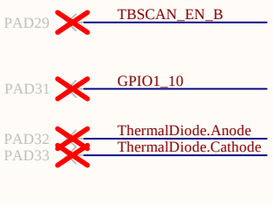
Project: Oxalis_V210.PrjPcb			
Document:	Power_VCC_1.0V.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	6

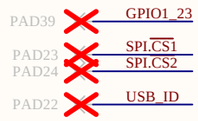


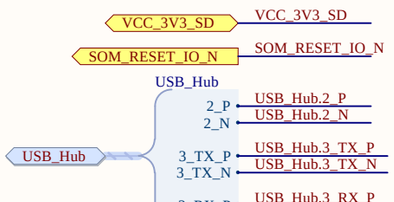


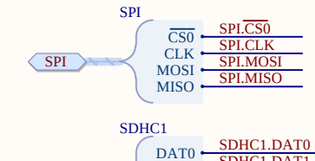


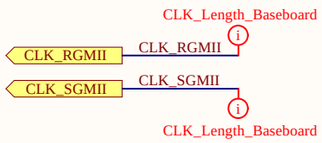




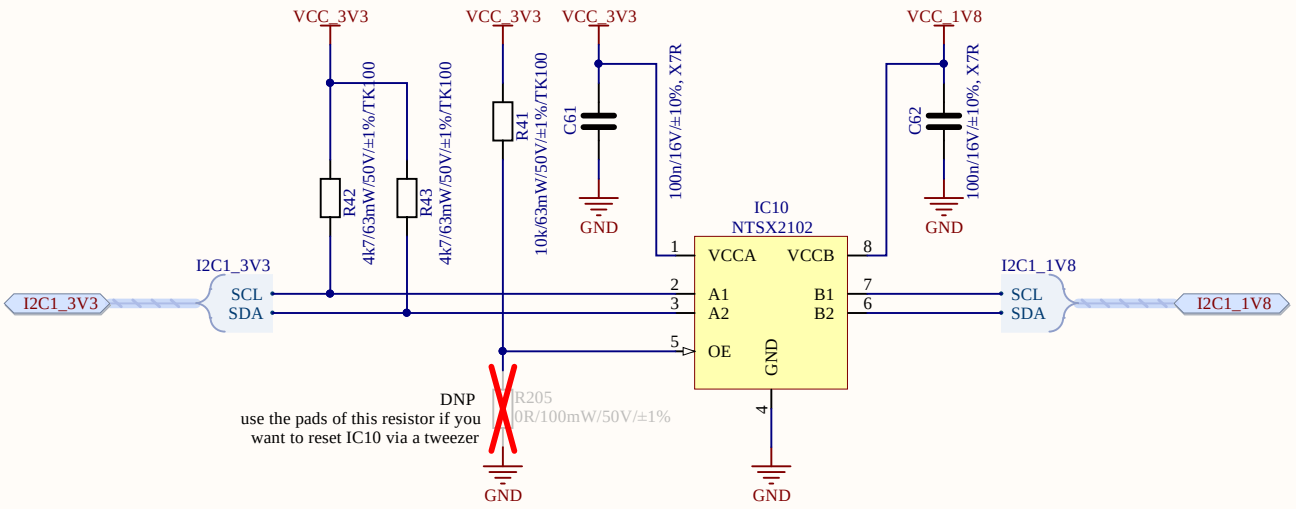




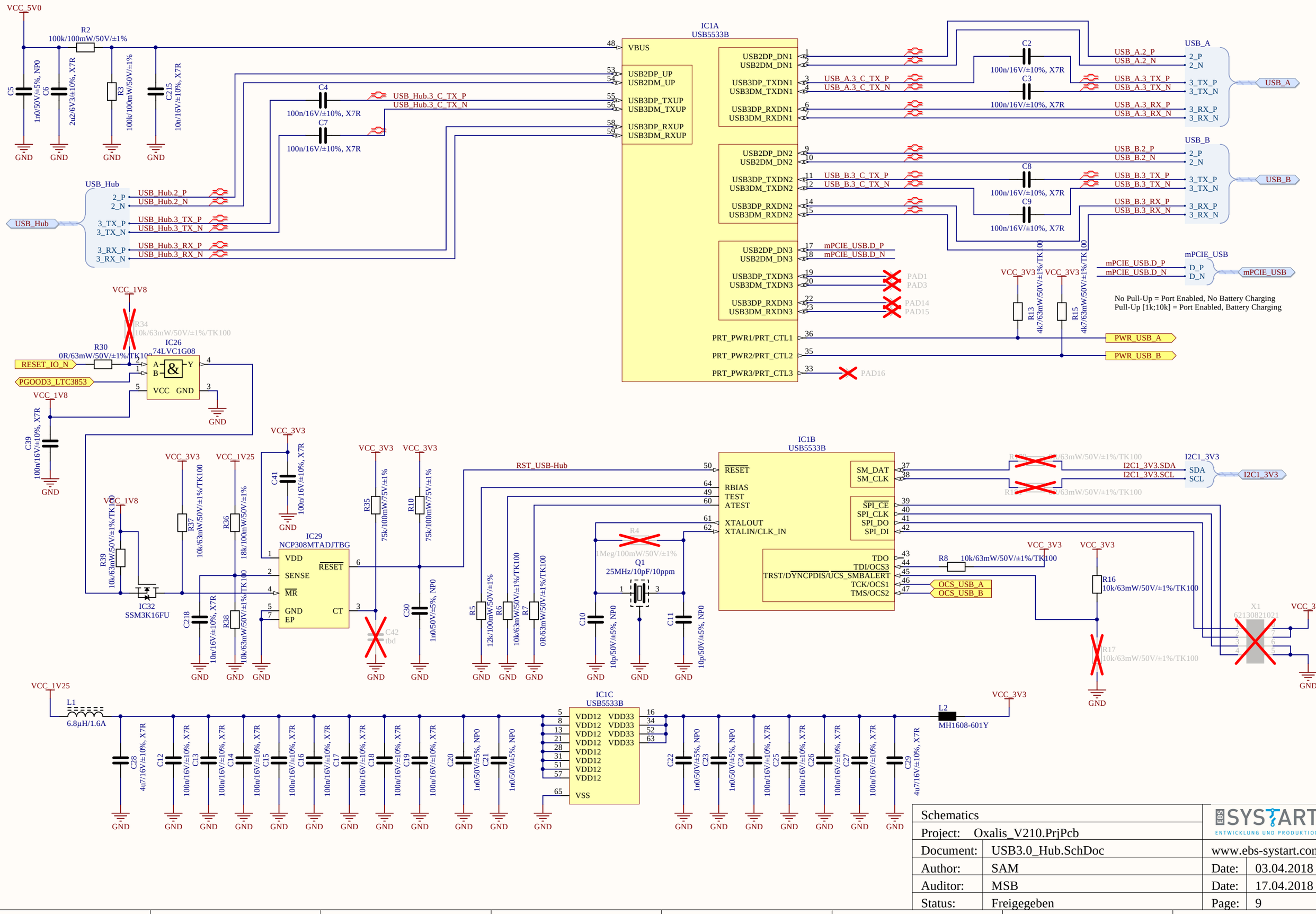




Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	SoM_Connector.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	7



Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	I2C_LevelShifter_1V8_3V3.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	8



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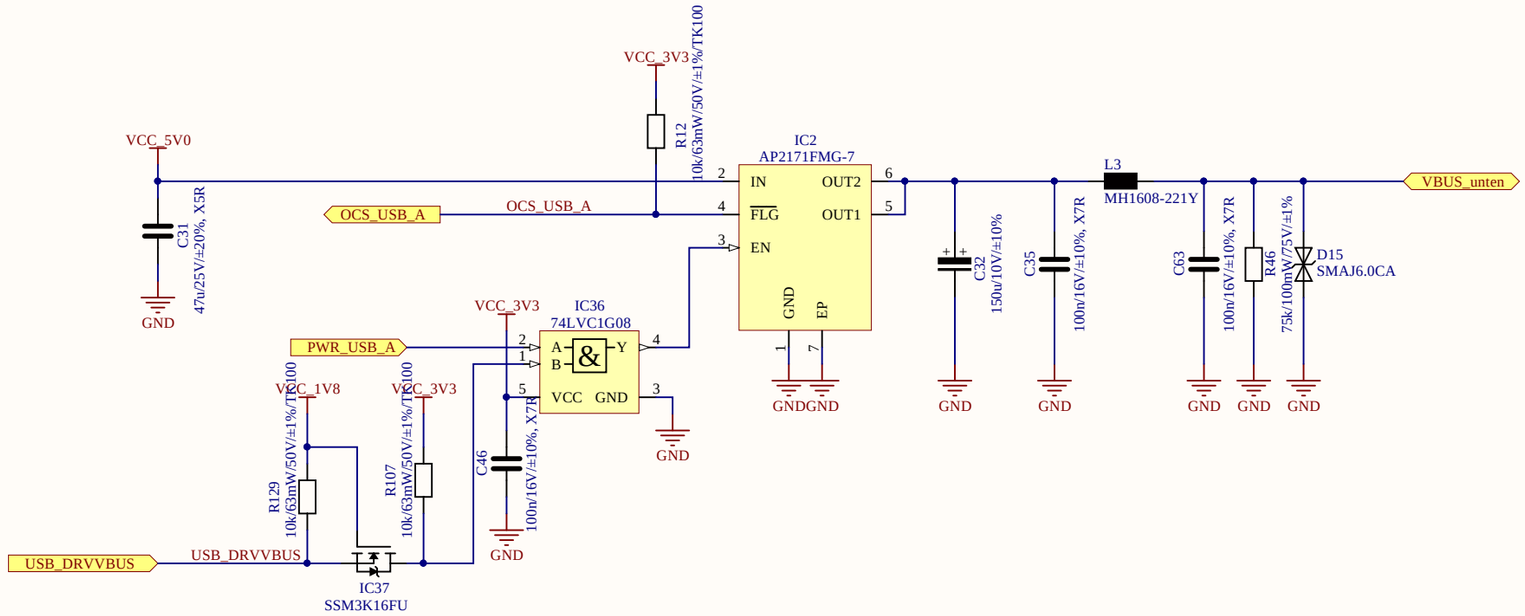
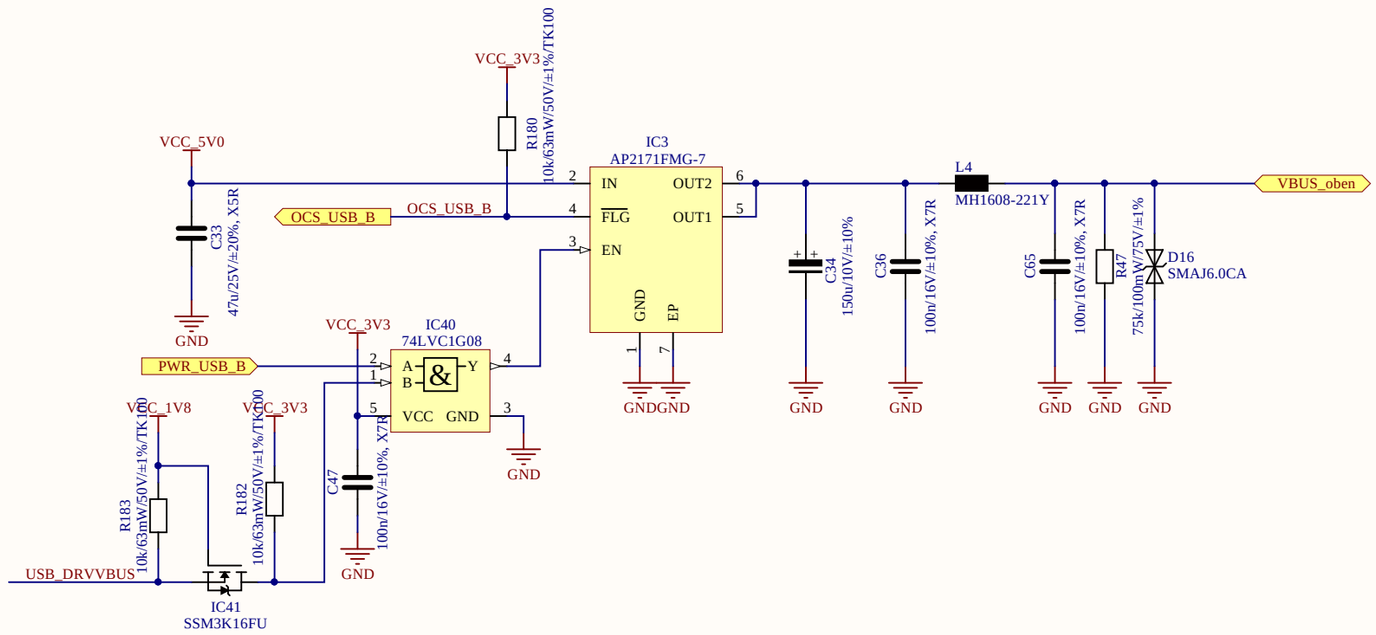
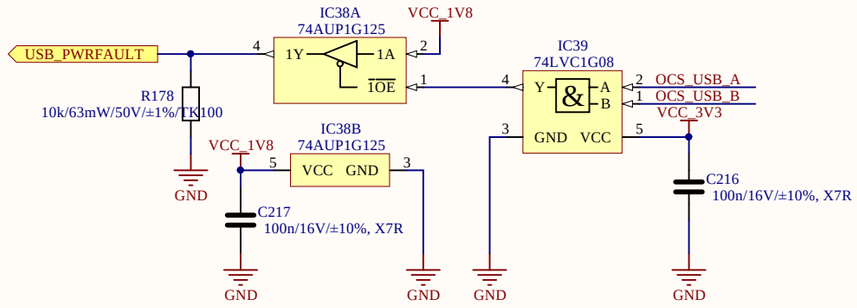
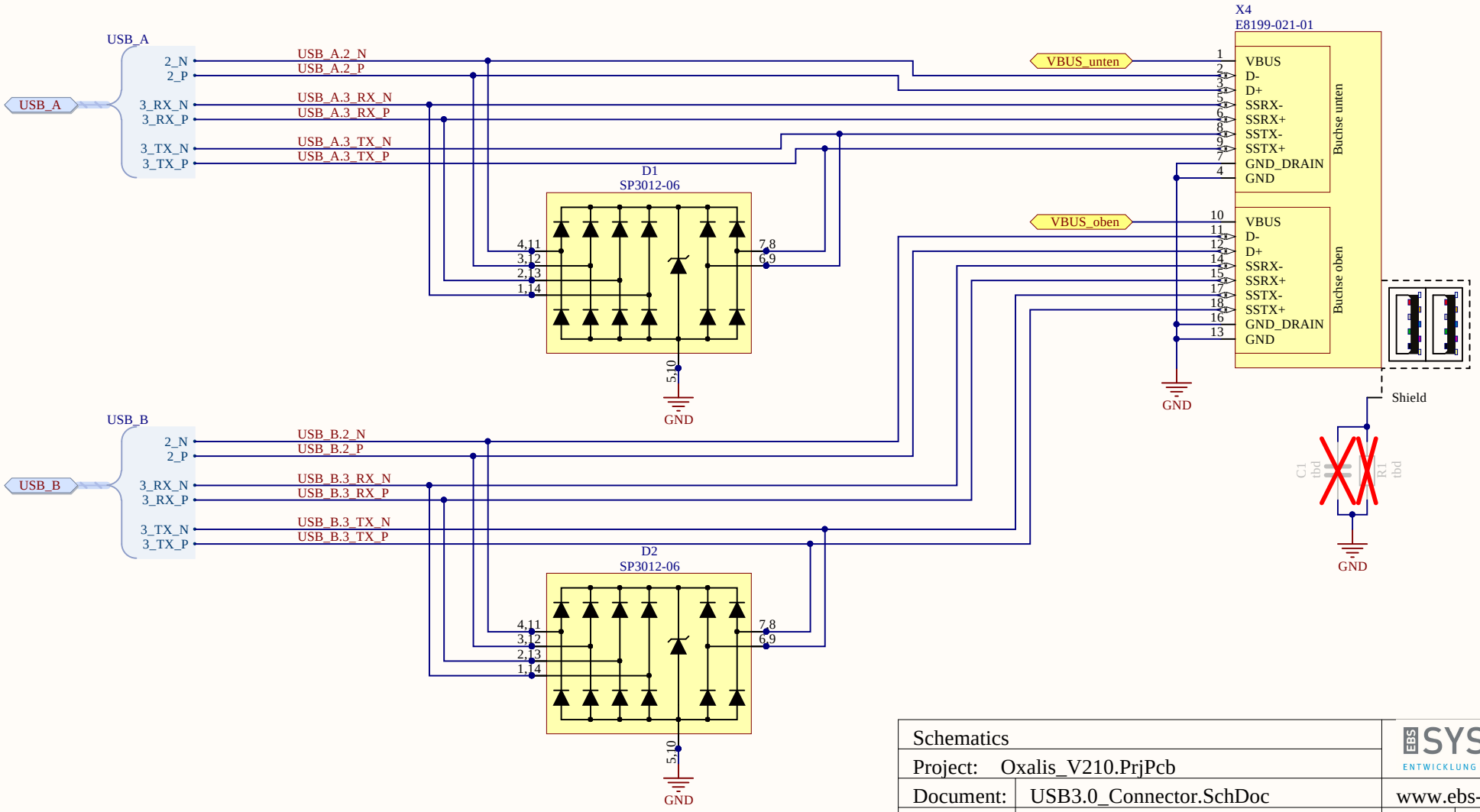
Project:	Oxalis_V210.PrjPcb		
Document:	USB3.0_Hub.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	9



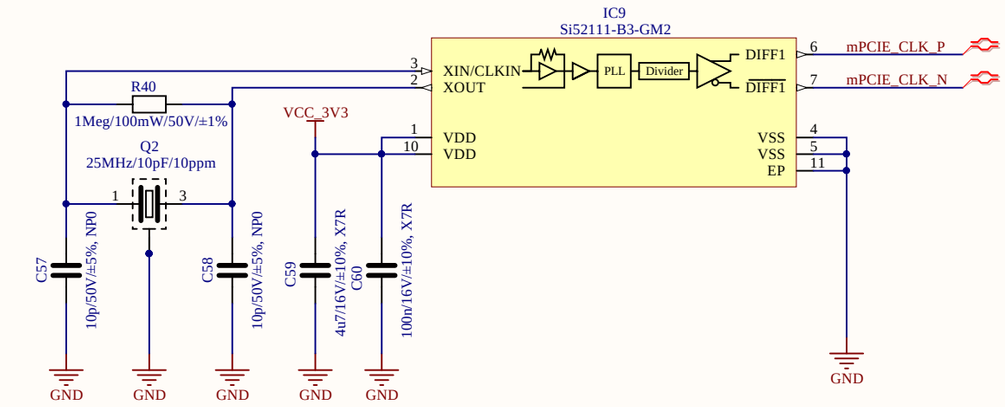


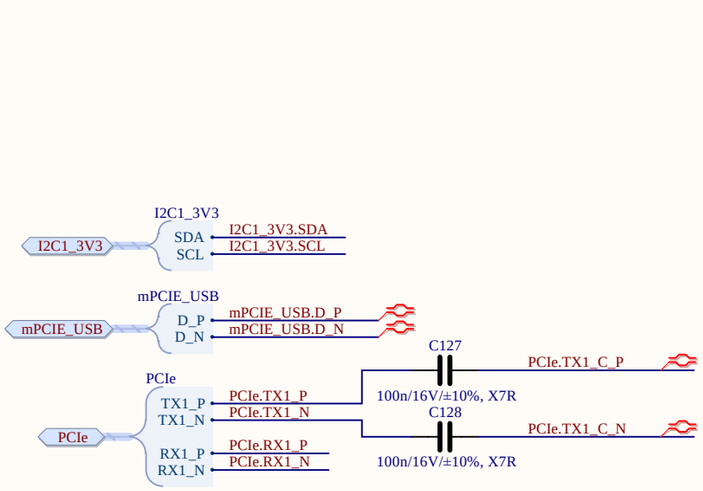


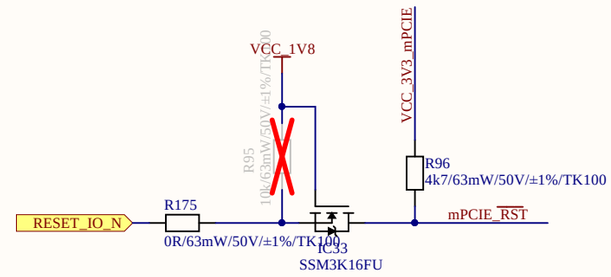
Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	USB3.0_Power.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	10

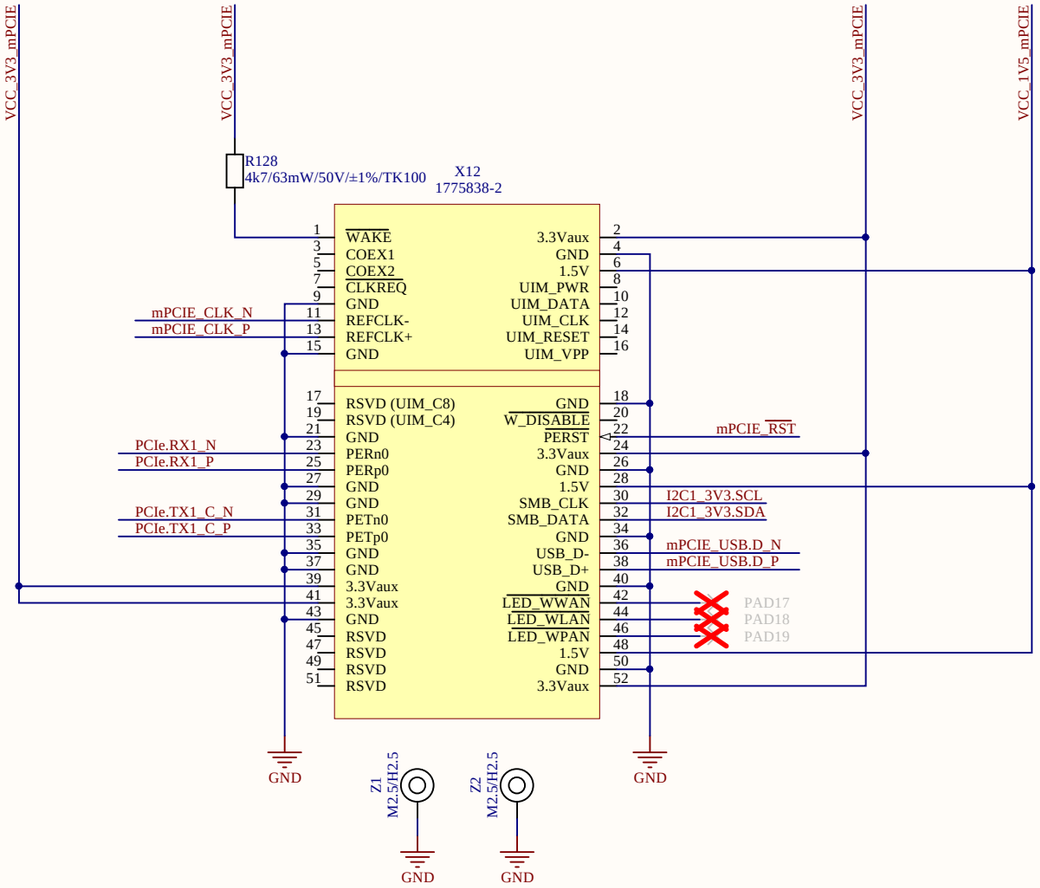


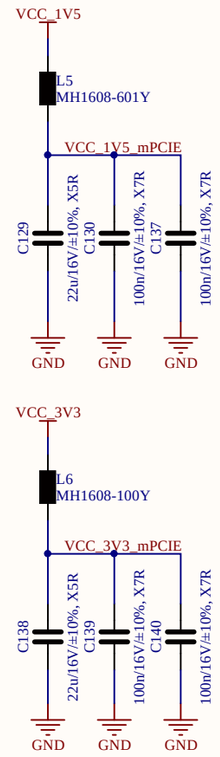
Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	USB3.0_Connector.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	11











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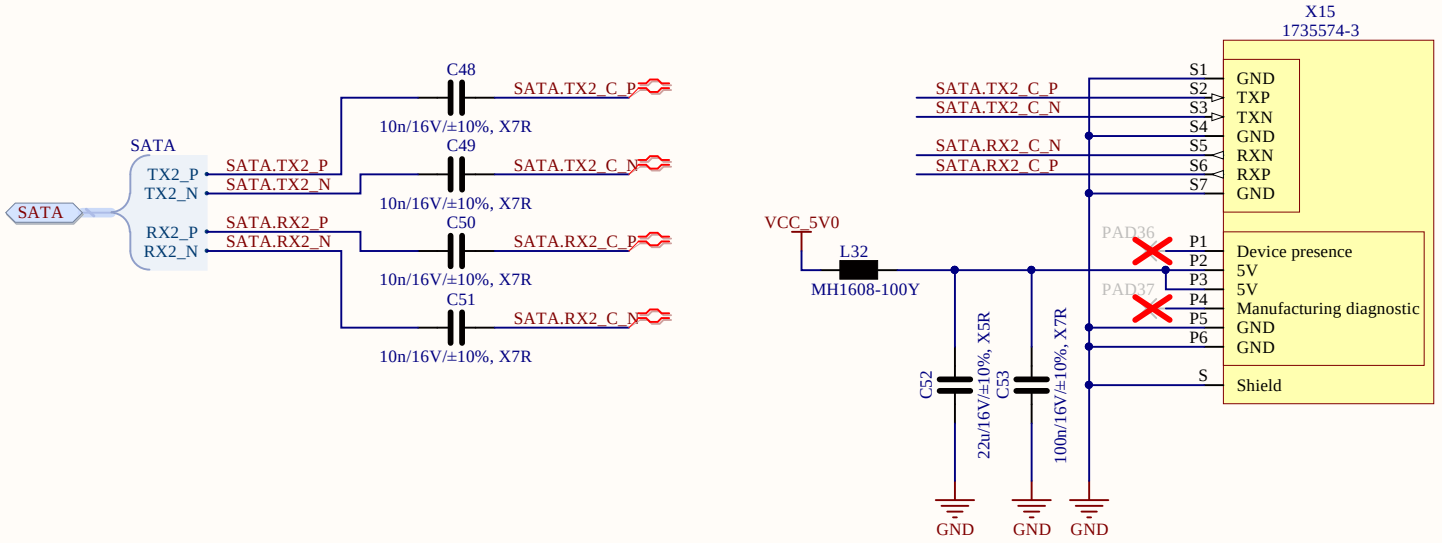
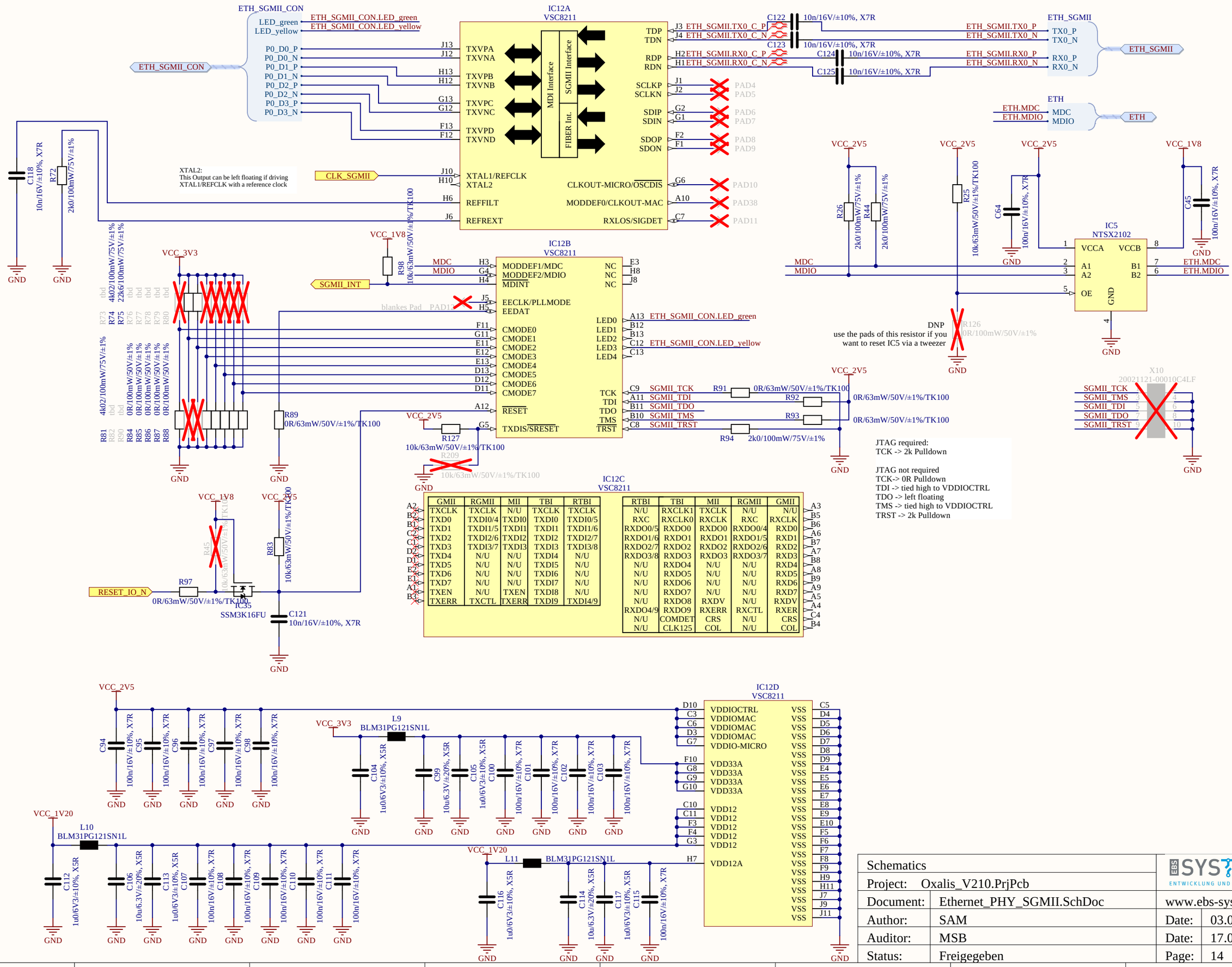
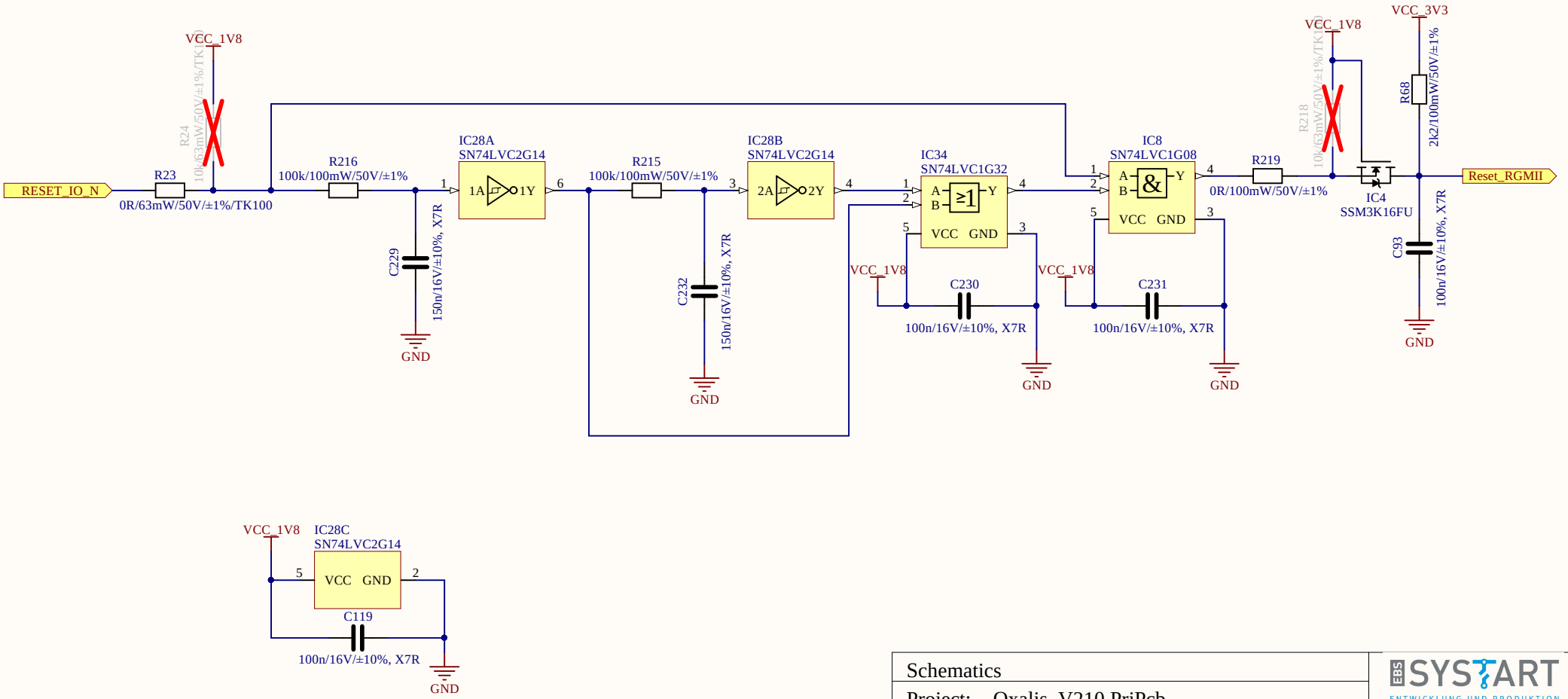
Project:	Oxalis_V210.PrjPcb		
Document:	PCI_Express.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	12



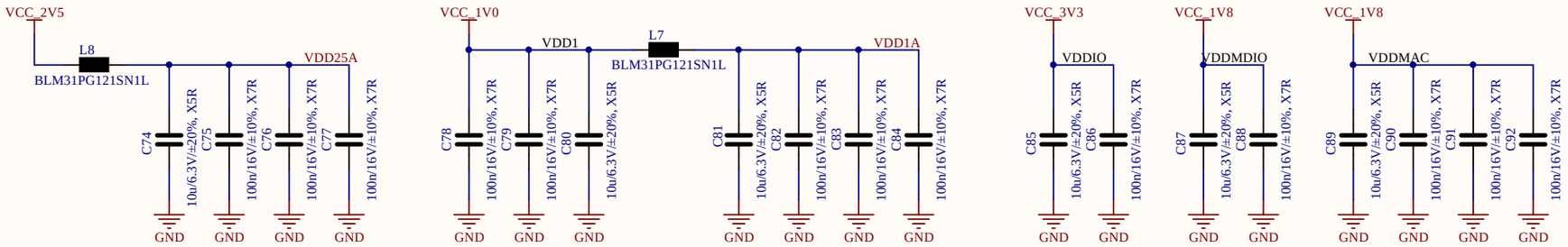
Schematics			
Project:	Oxalis_V210.PrjPcb		
Document:	SATA.SchDoc		www.ebs-systart.com
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	13

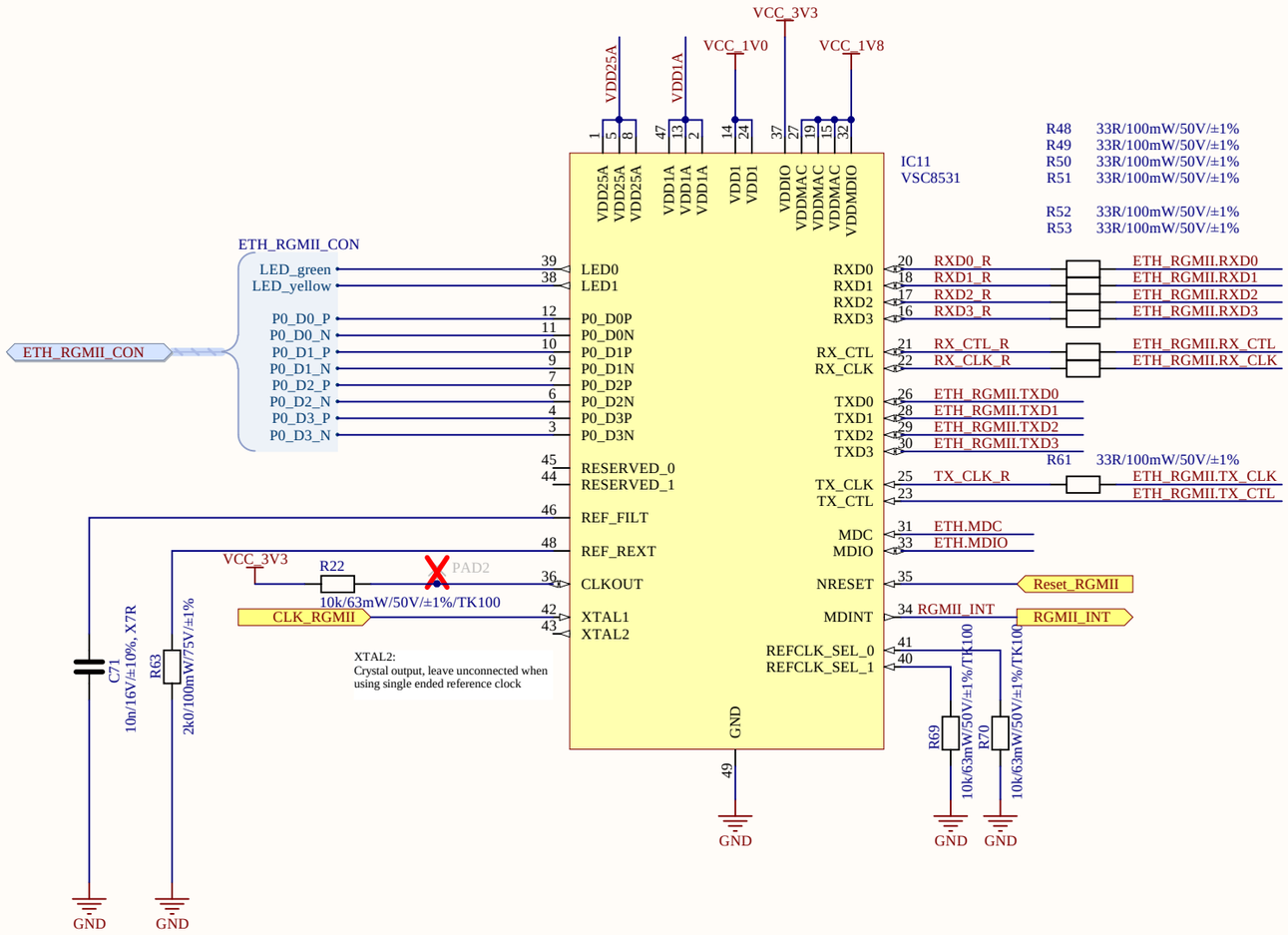


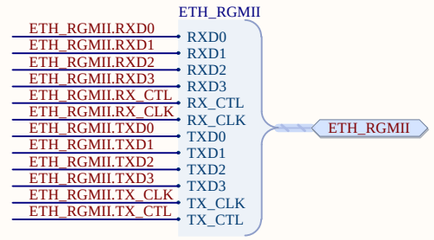
Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project:	Oxalis_V210.PrjPcb		
Document:	Ethernet_PHY_SGMII.SchDoc		www.ebs-systart.com
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	14

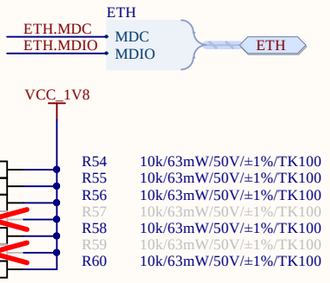


Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	Reset_Duplexer.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	15

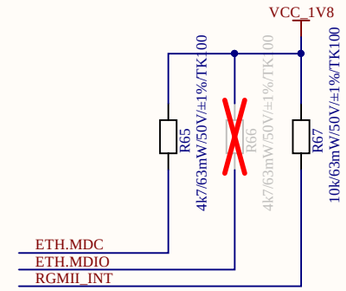






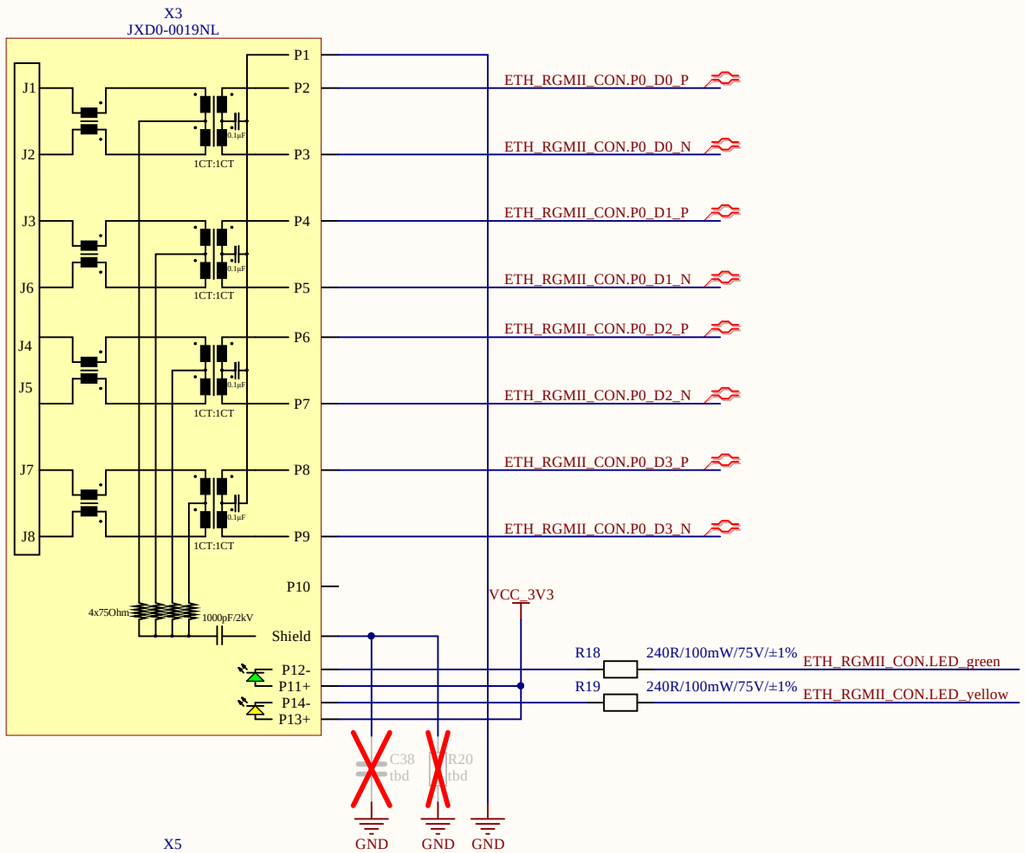


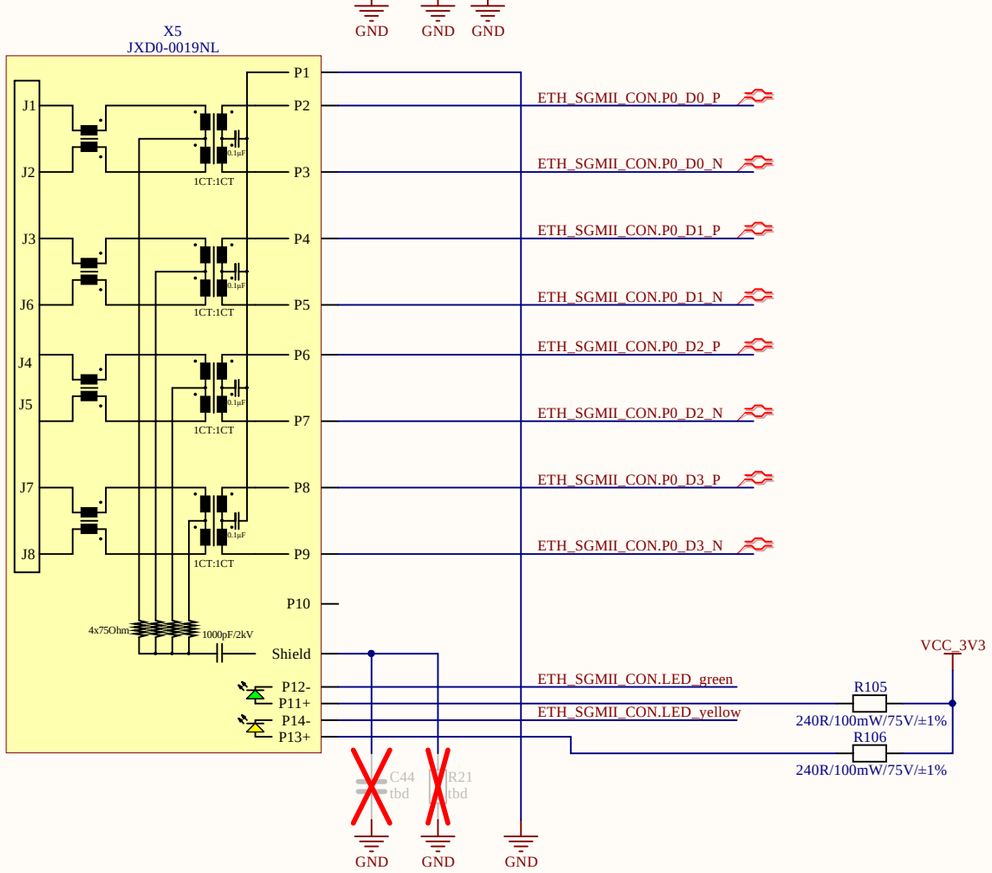
RX_CLK: No Pullup -> Managed Mode
RXD0-RXD3 + RX_CTL -> Phy Address 0b10111

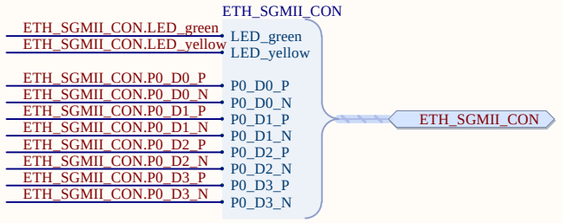


MDIO Pull-Up is fitted at SoM

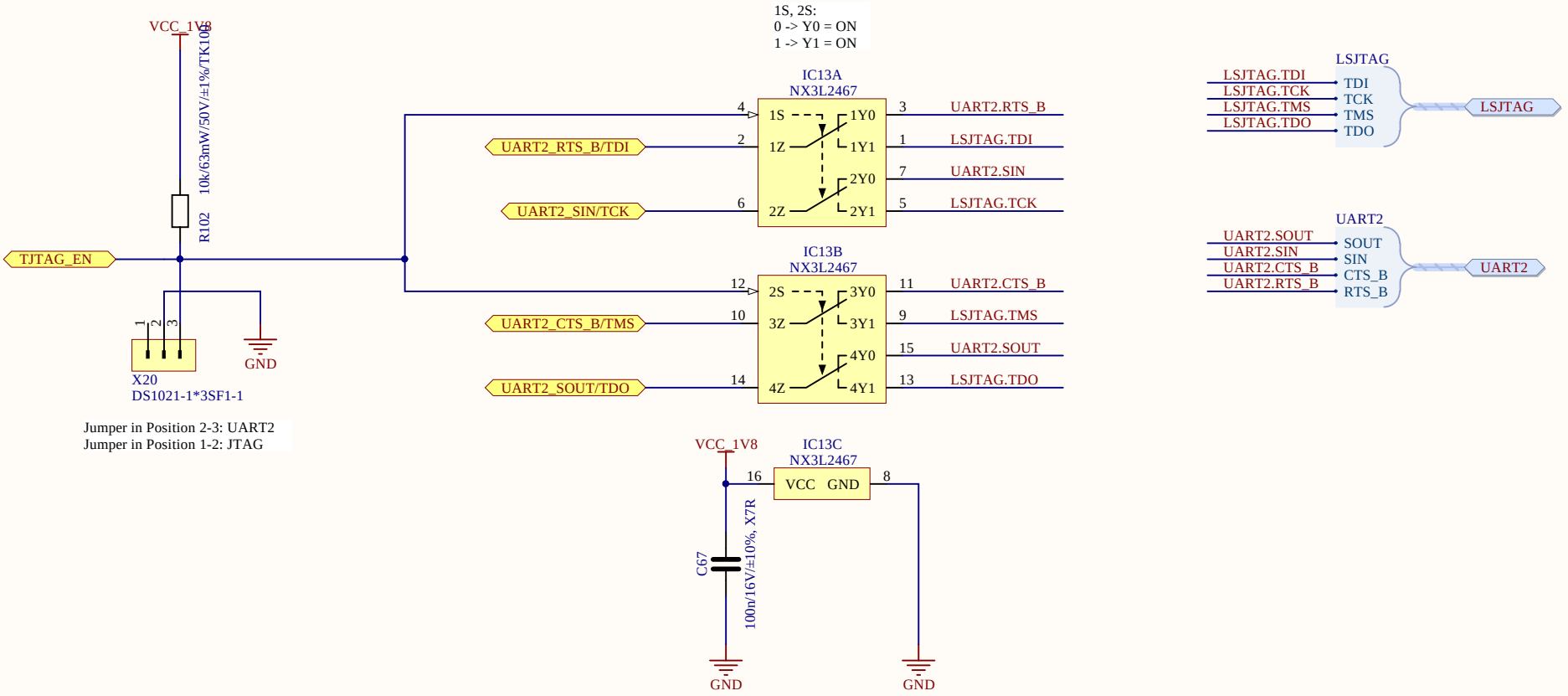
Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	Ethernet_PHY_RGMII.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	16







Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project:	Oxalis_V210.PrjPcb		
Document:	Ethernet_Connector.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	17



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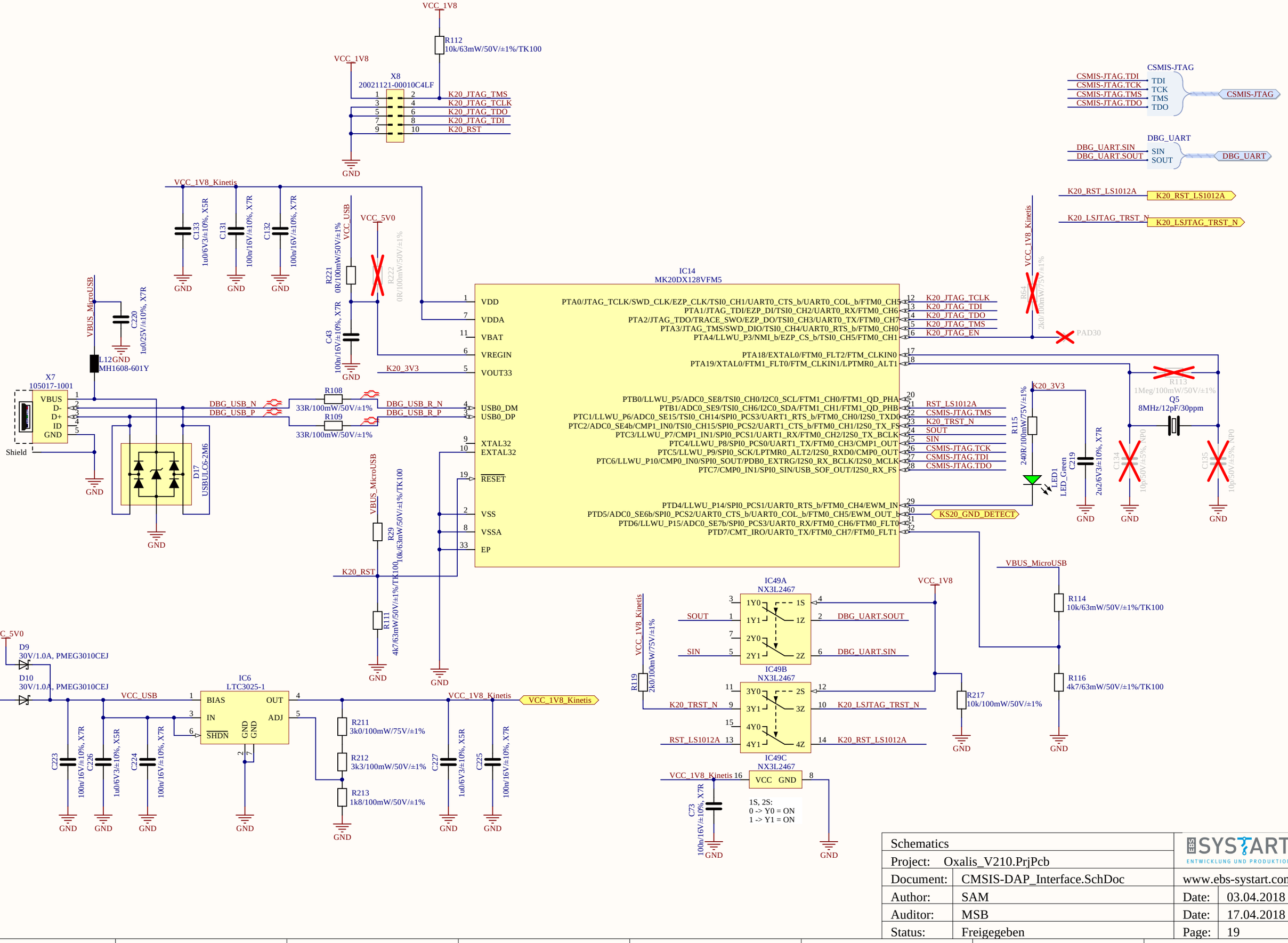
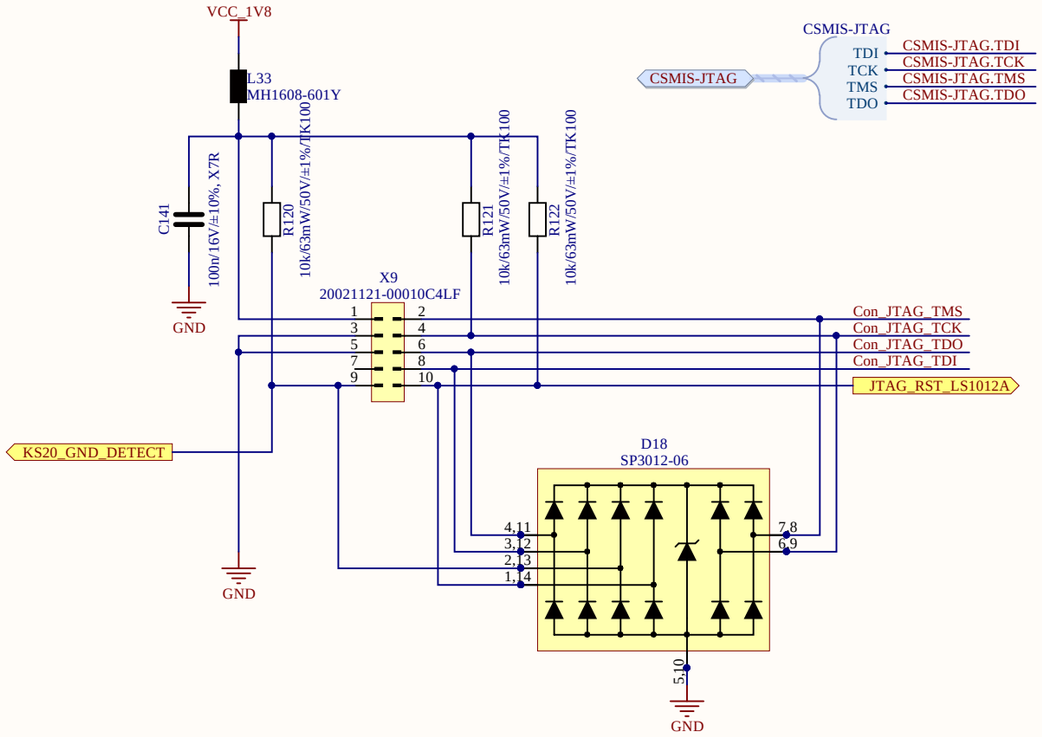
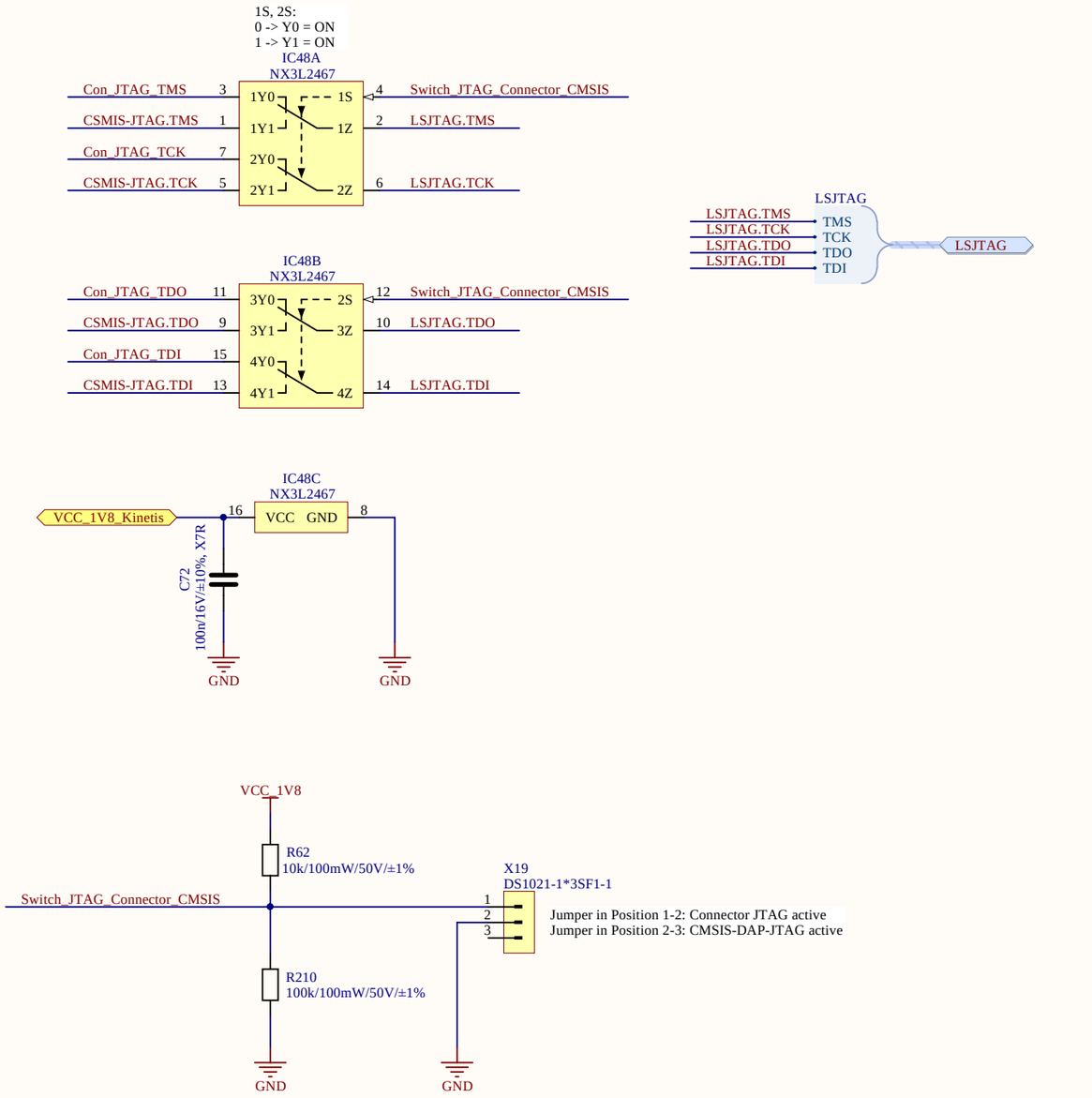
Project: Oxalis_V210.PrjPcb			
Document:	JTAG_UART_Switch.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	18

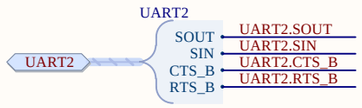


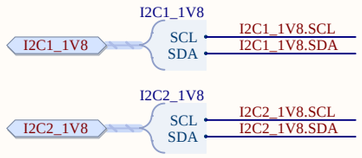
Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project:	Oxalis_V210.PrjPcb		
Document:	CMSIS-DAP_Interface.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	19

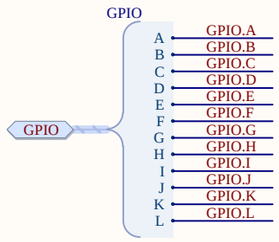


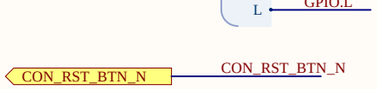


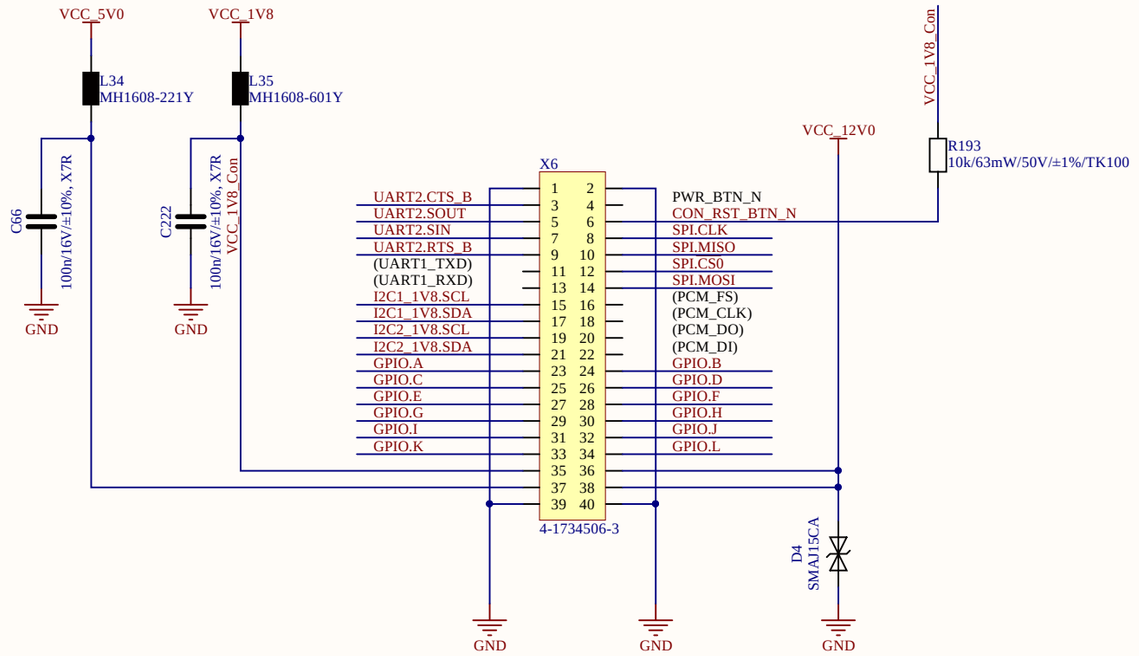
Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	JTAG.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	20

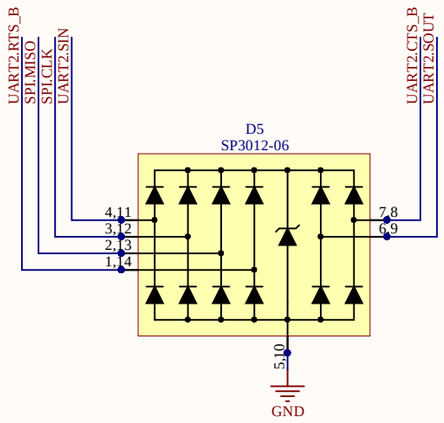


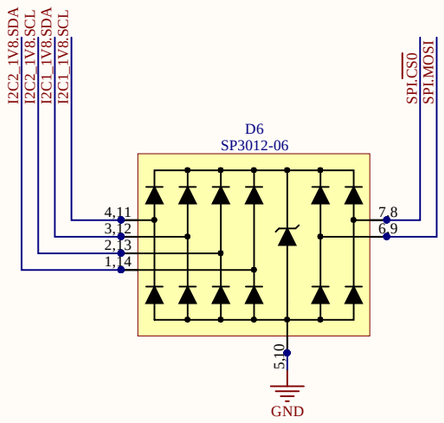


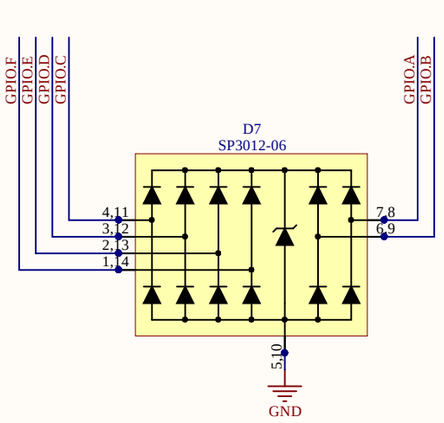


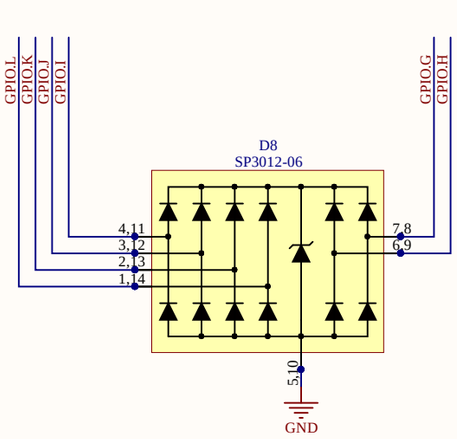




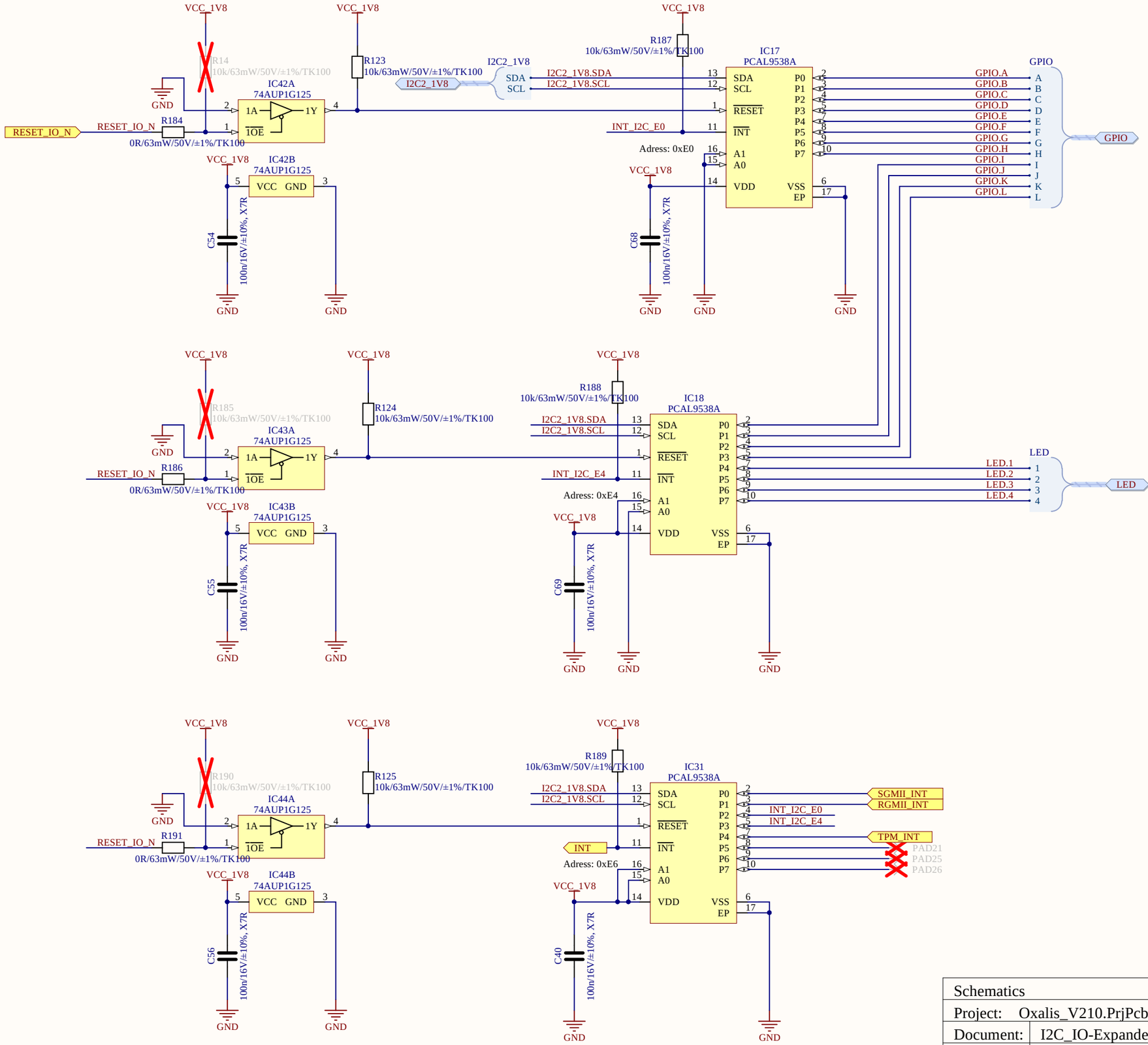




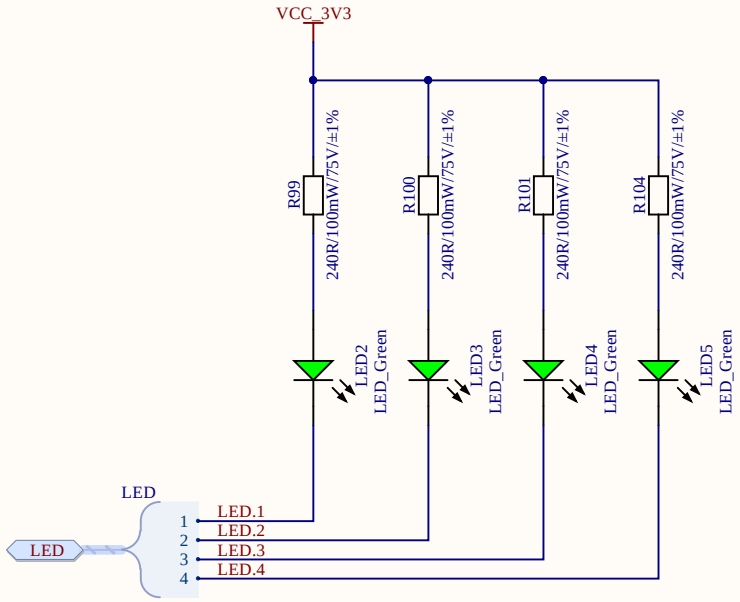


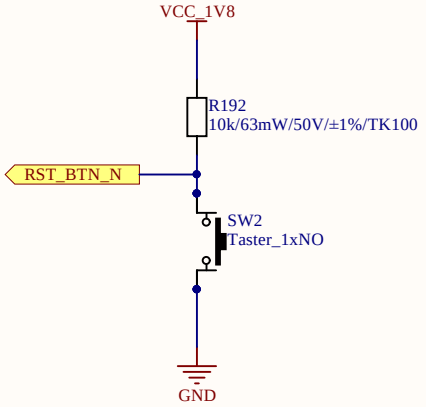


Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	96boards_Expansion_Connector.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	21

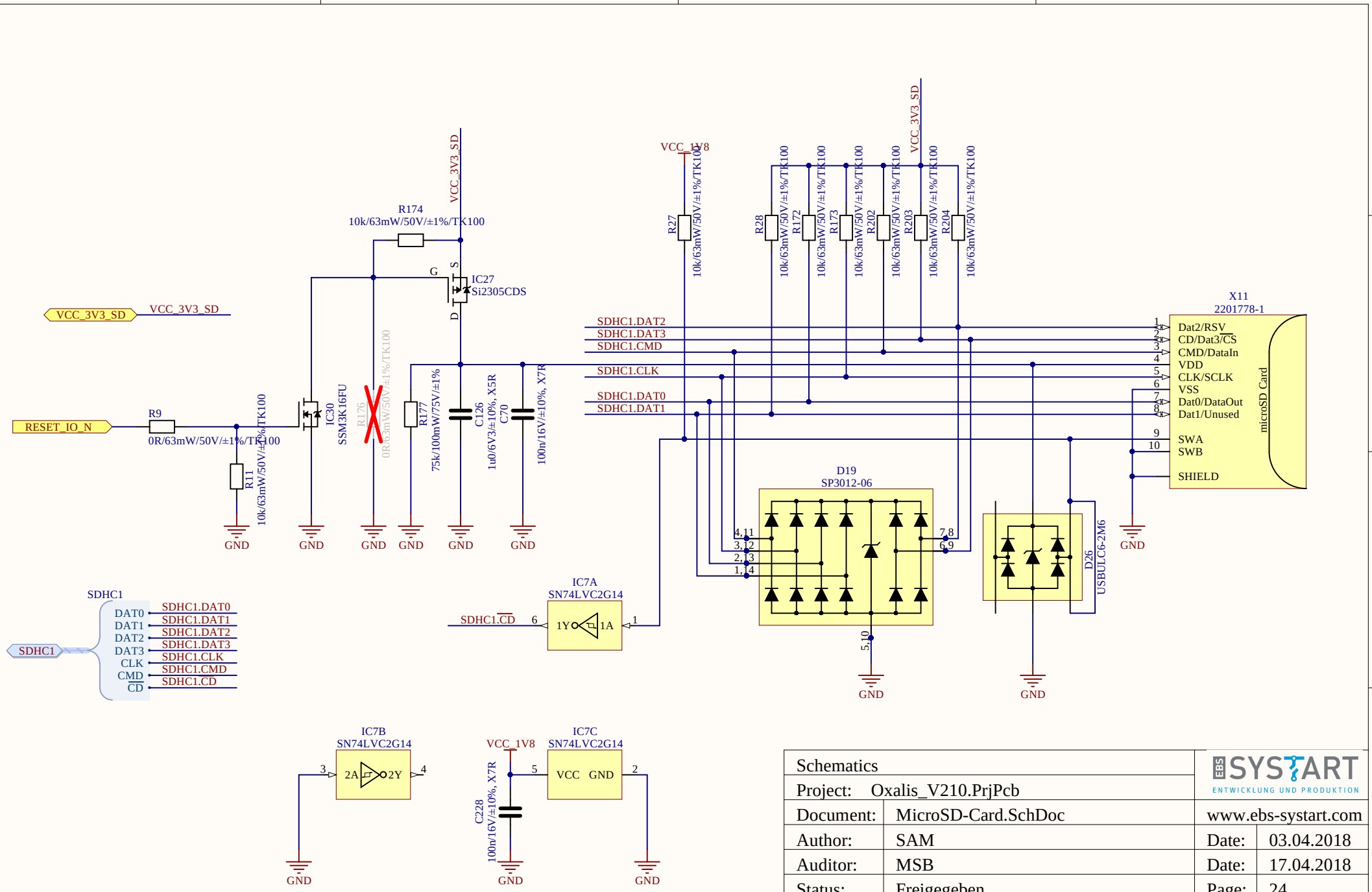


Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	I2C_IO-Expander.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	22

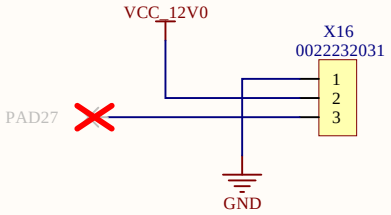




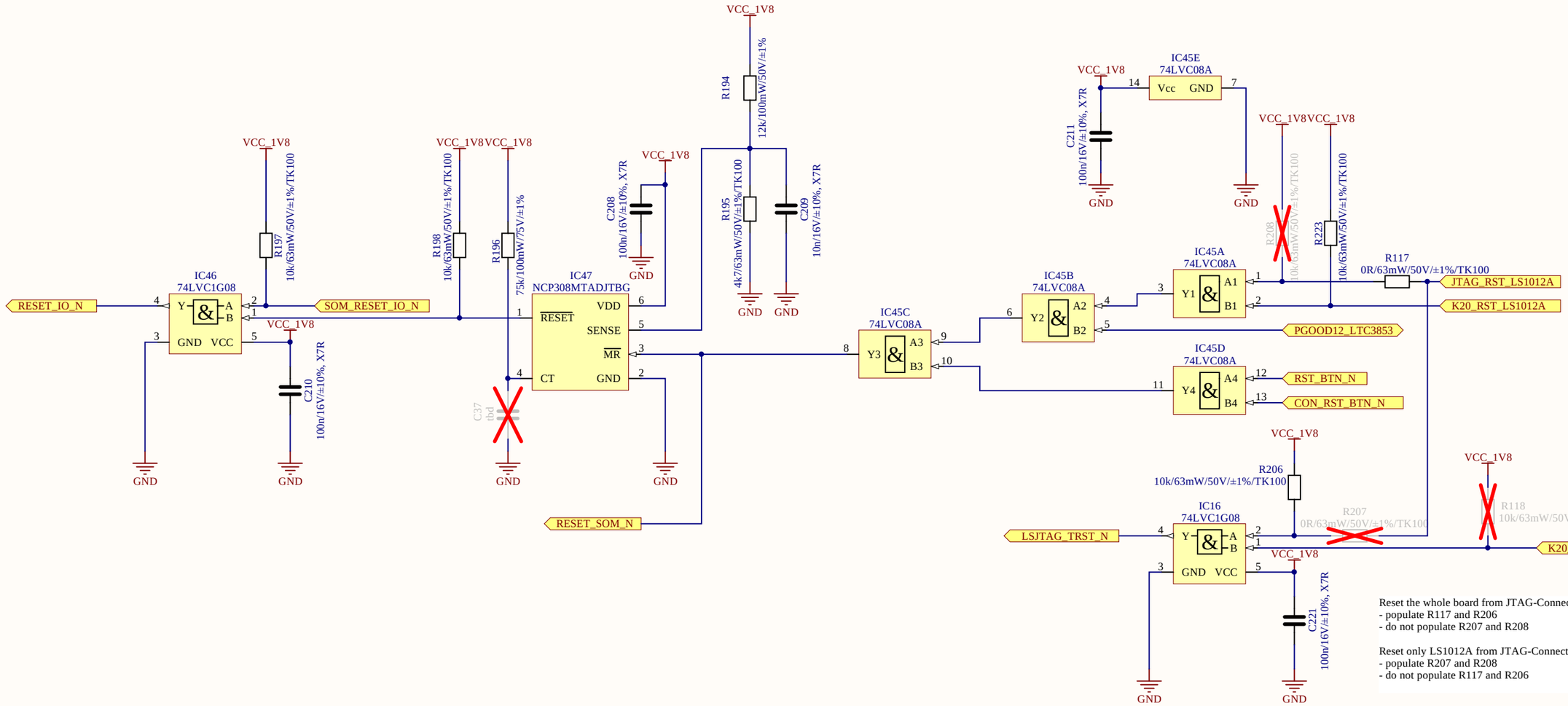
Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	User_LEDs_and_Button.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	23



Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project:	Oxalis_V210.PrjPcb		
Document:	MicroSD-Card.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	24



Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	External_Fan_Connector.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	25



Schematics		EBS SYSTART ENTWICKLUNG UND PRODUKTION	
Project: Oxalis_V210.PrjPcb			
Document:	Reset.SchDoc	www.ebs-systart.com	
Author:	SAM	Date:	03.04.2018
Auditor:	MSB	Date:	17.04.2018
Status:	Freigegeben	Page:	26