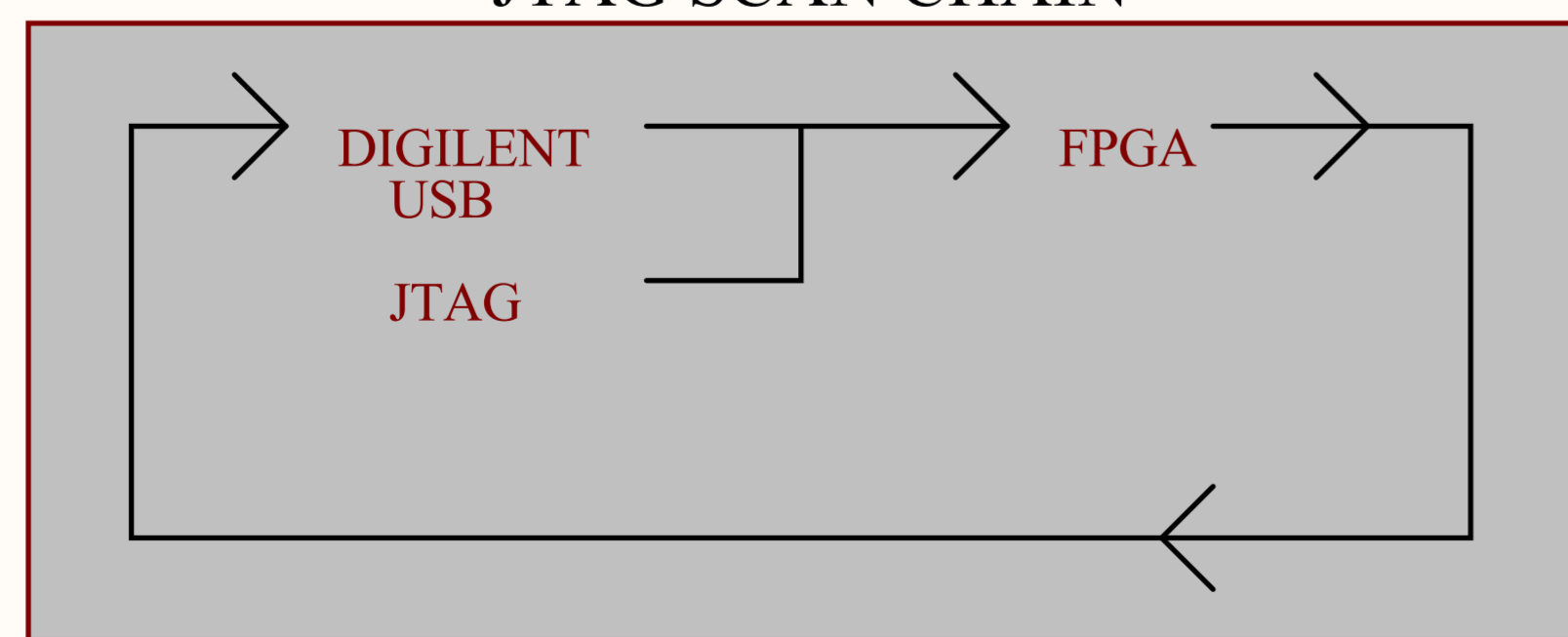


JTAG SCAN CHAIN

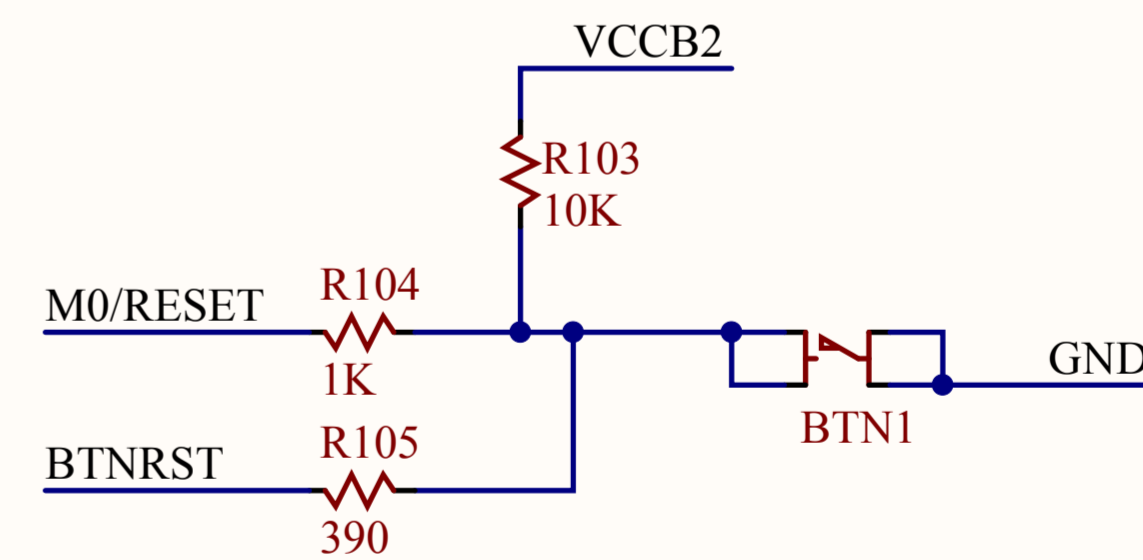
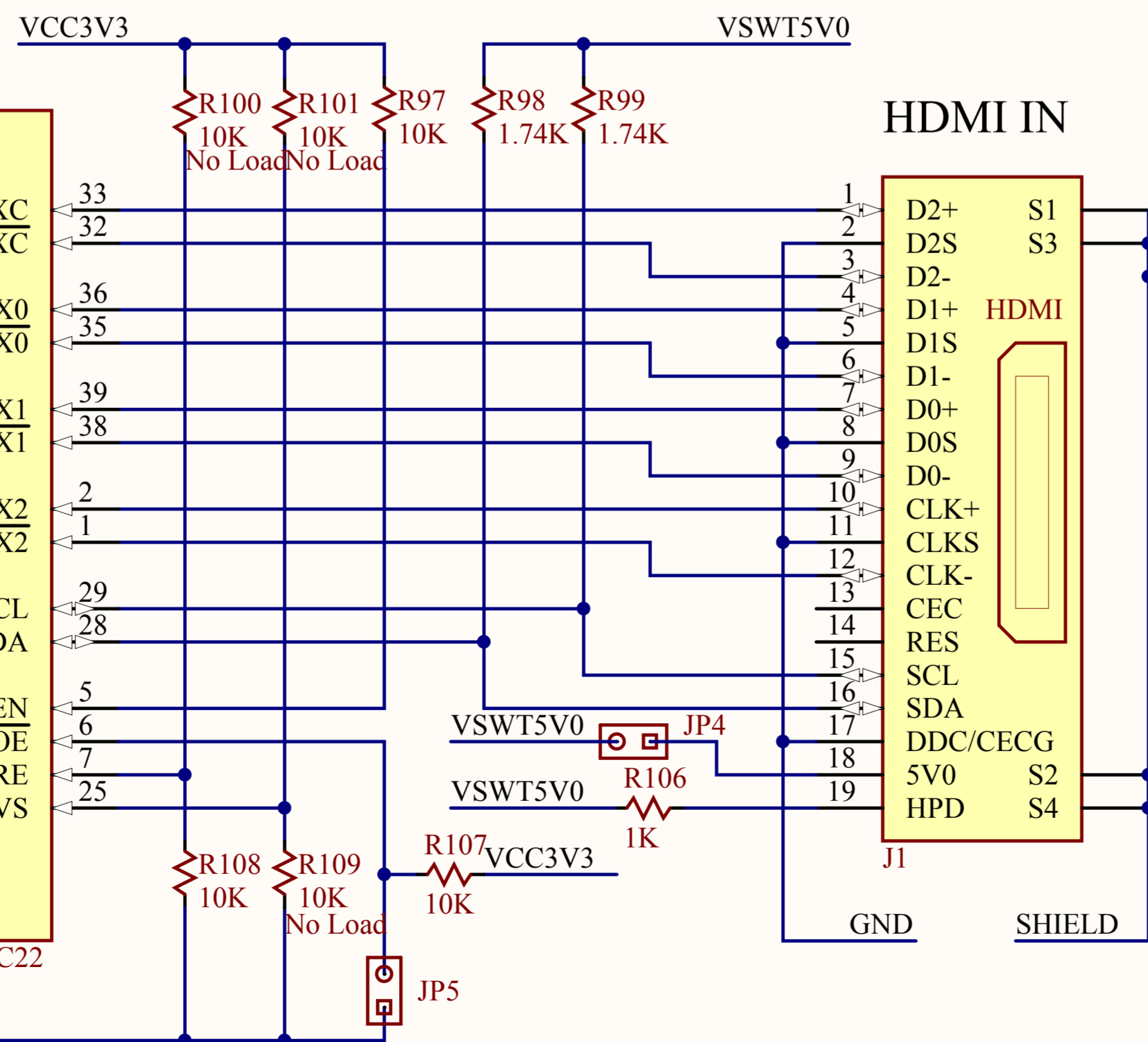
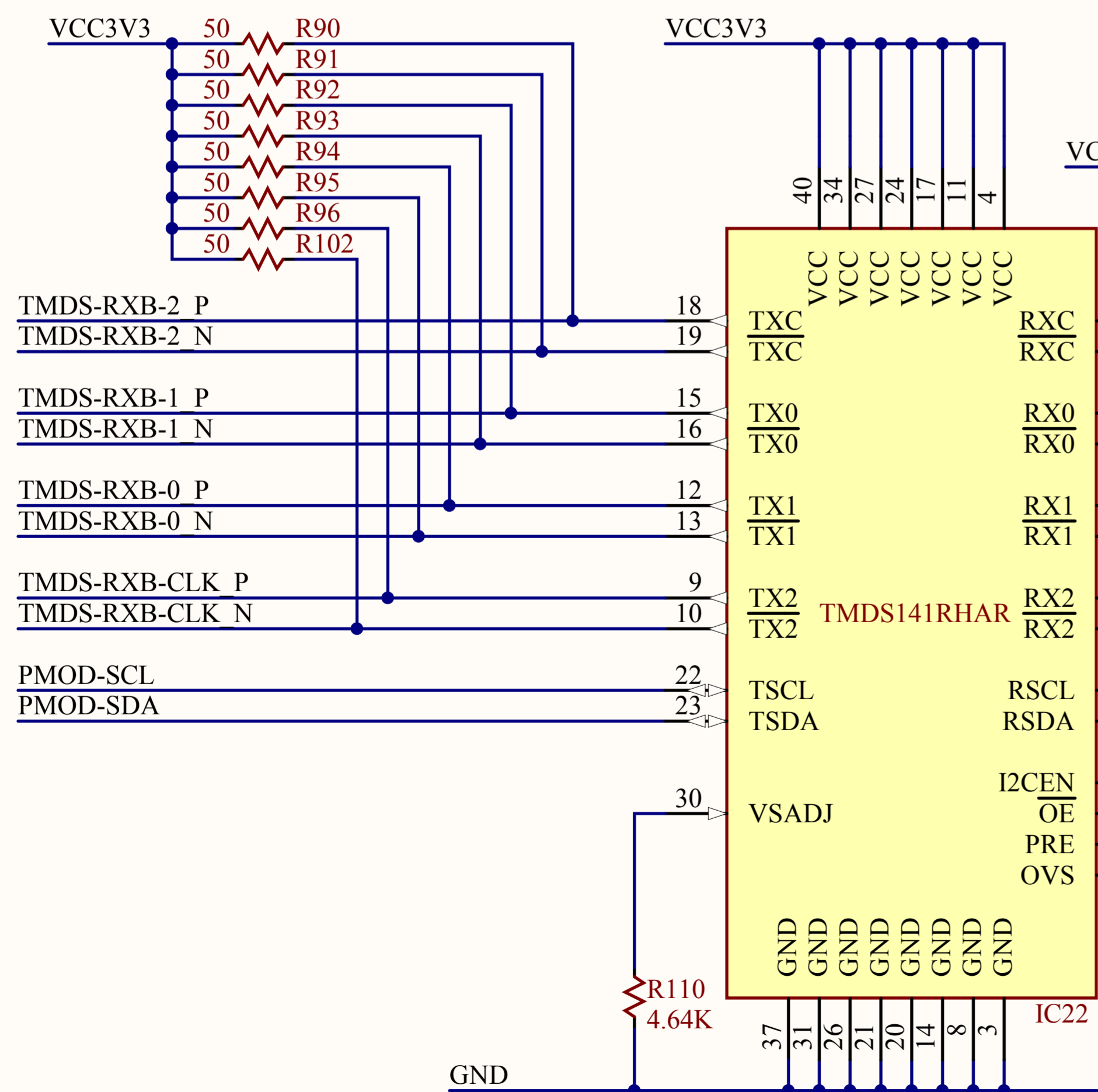
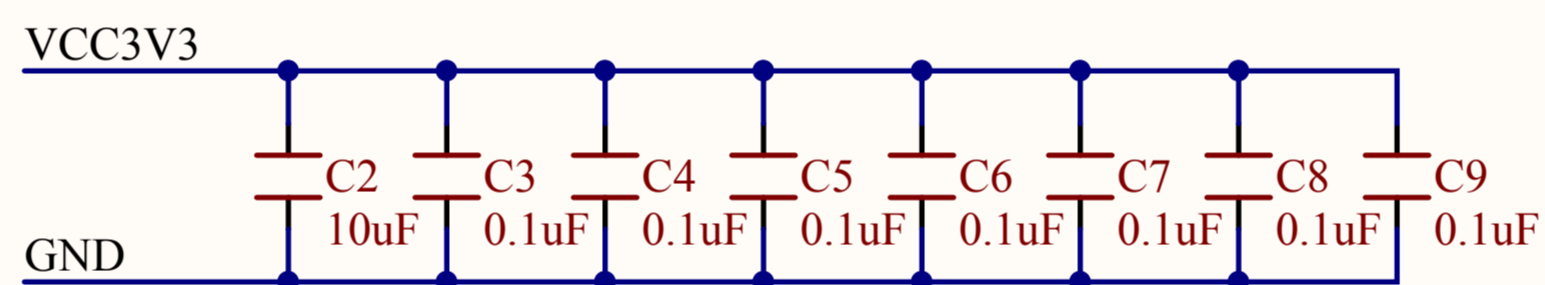
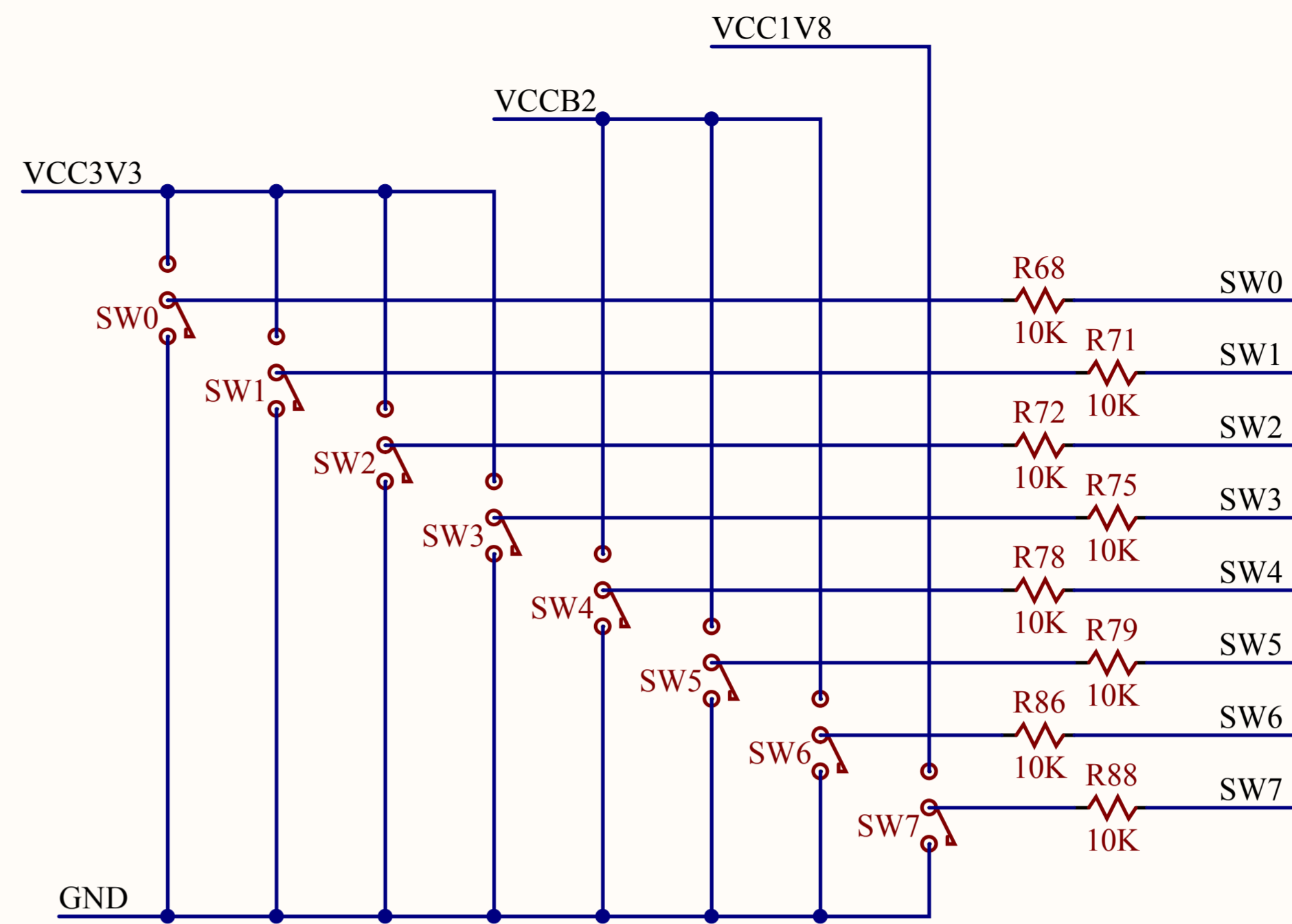
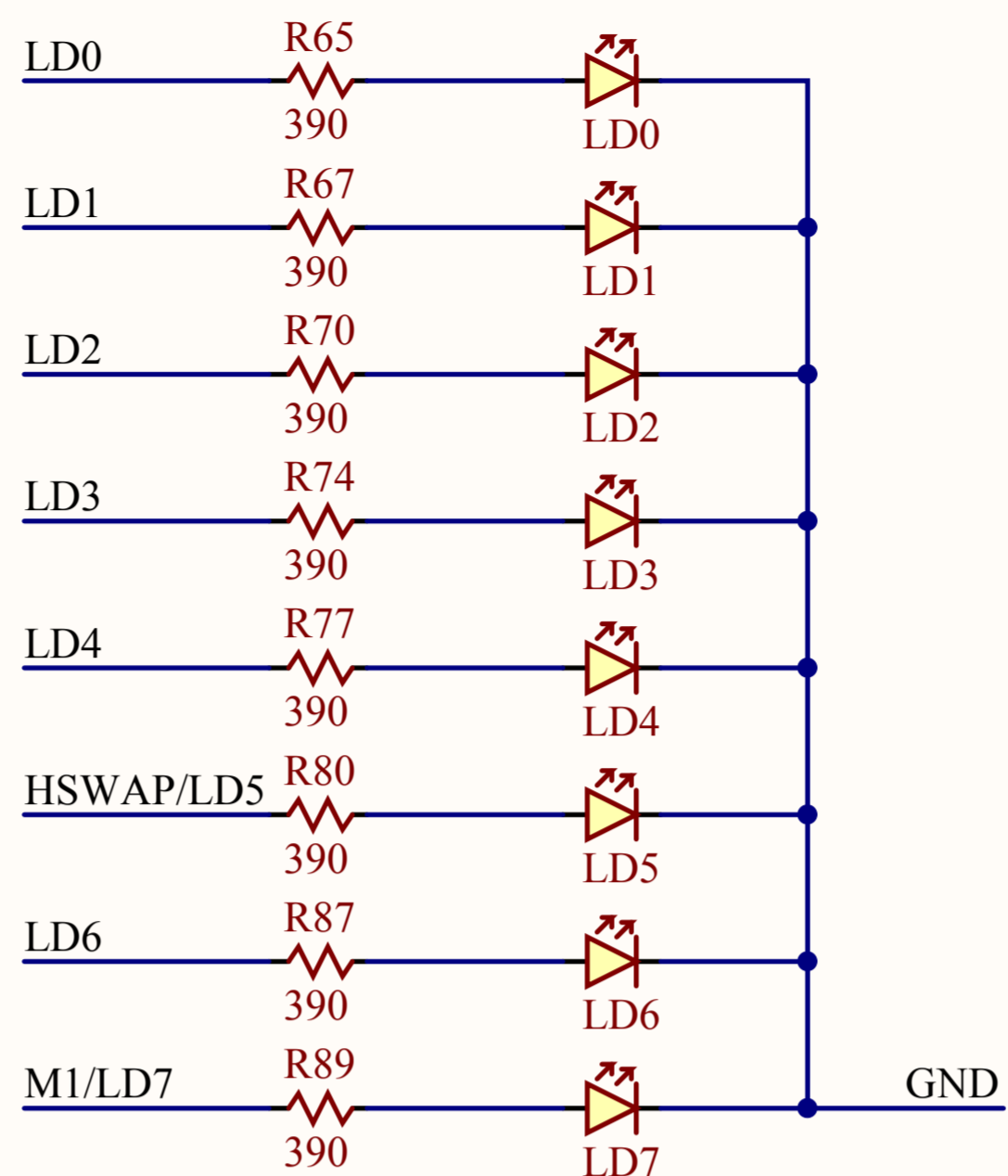
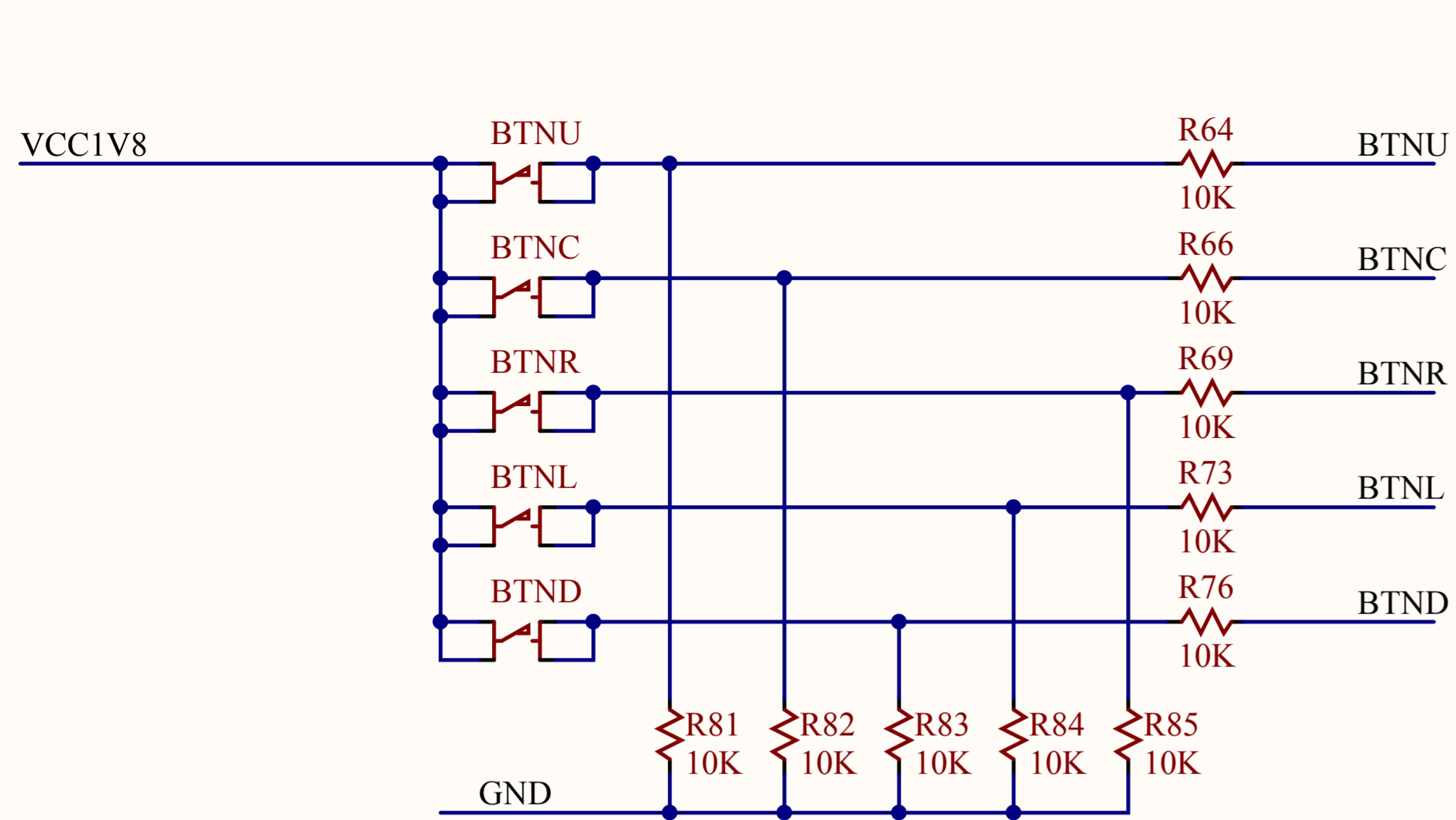


- Foot
- F1
- Foot
- F2
- Foot
- F3
- Foot
- F4

Title		Rev
<h1>Atlys</h1>		<h2>C.2</h2>
Circuit		Copyright 2010
Expansion Headers		
Doc#	500-178	
Engineer	CC	
Author	GMA	
Date	6/11/2010	
Sheet#	1 out of 12	



DIGILENT
www.digilentinc.com



Title		Rev	
<h1>Atlys</h1>		C.2	
		Copyright 2010	
Circuit	General I/O		
Doc#	500-178		
Engineer	CC		
Author	GMA	www.digilentinc.com	
Date	6/11/2010		
Sheet#	2 out of 12		

A

A

B

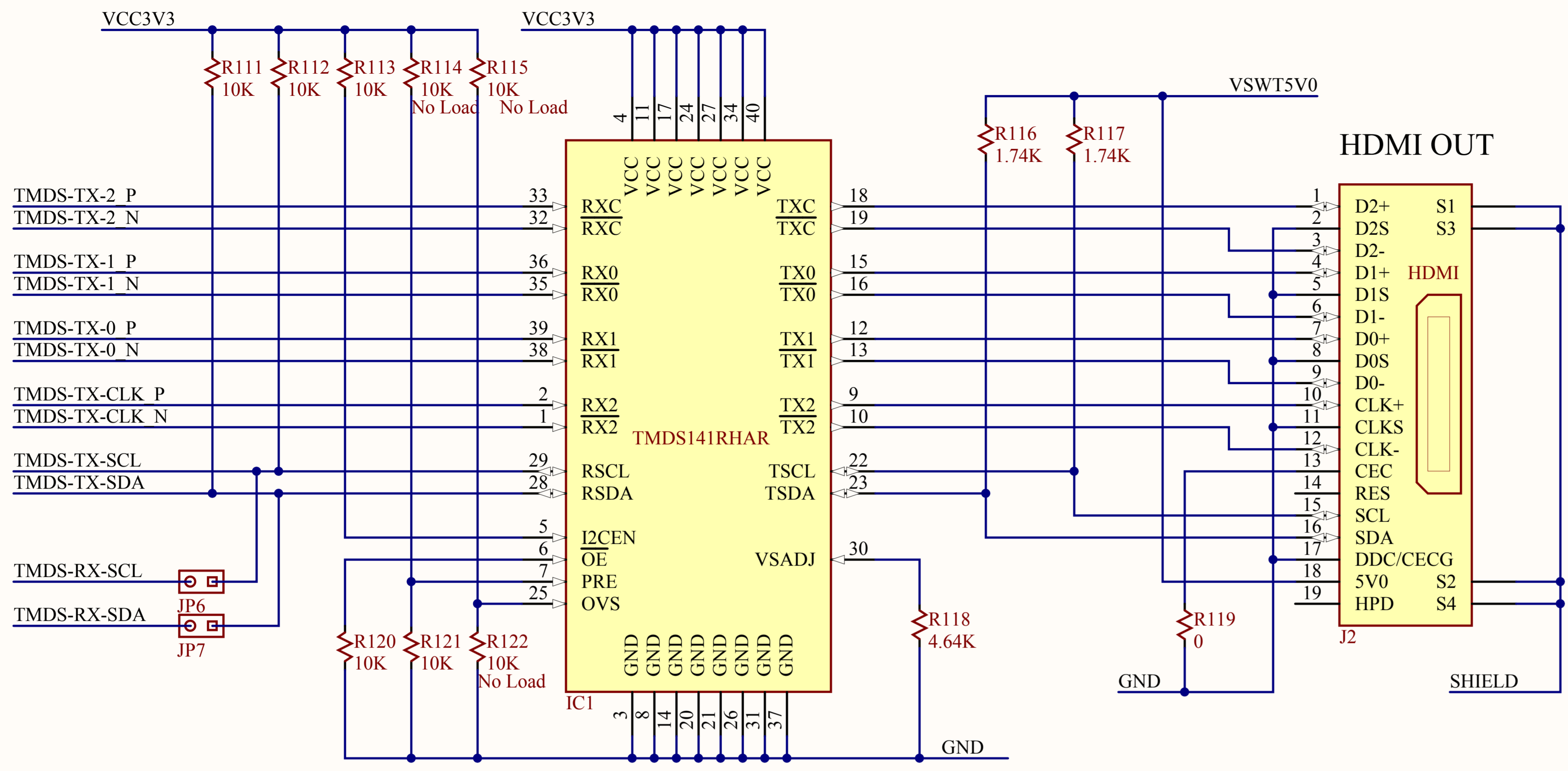
B

C

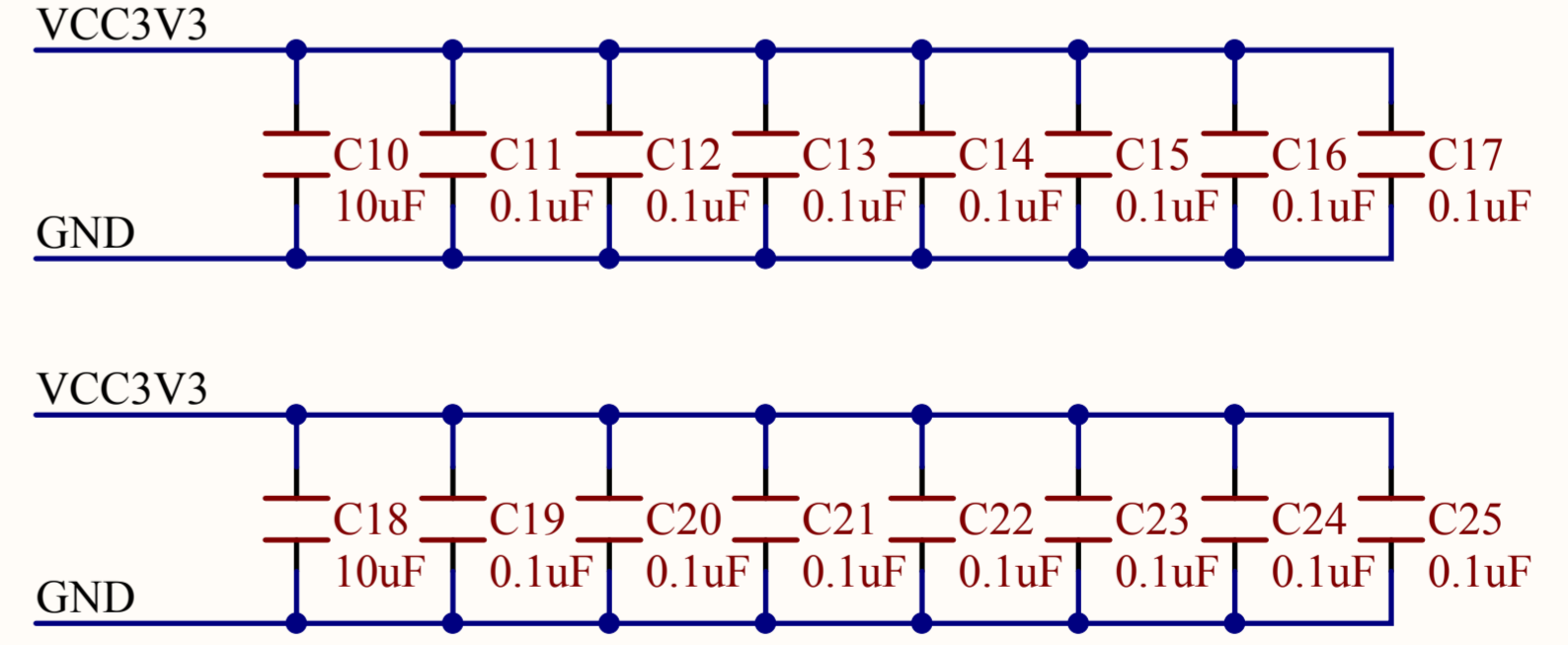
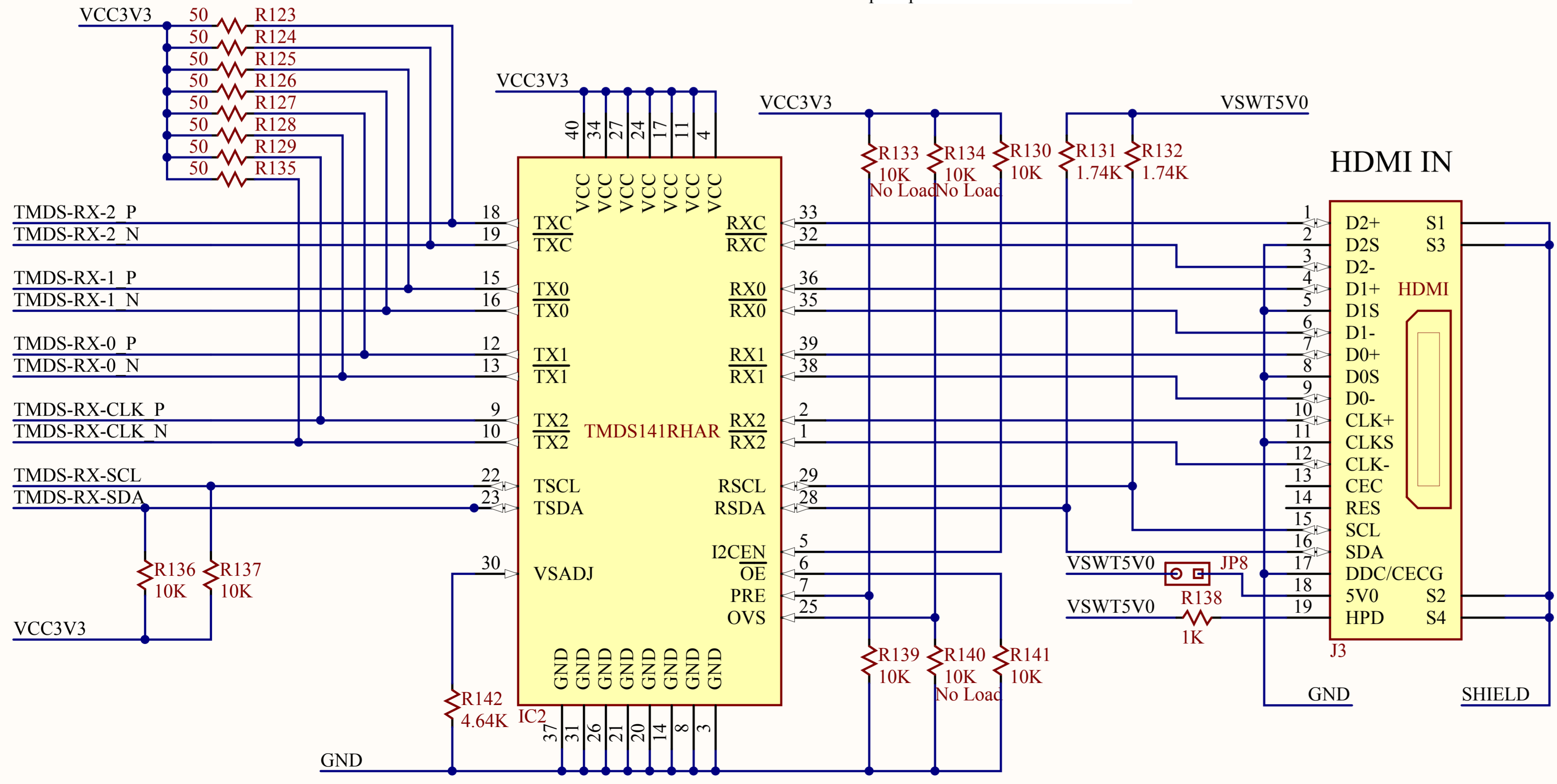
C

D

D



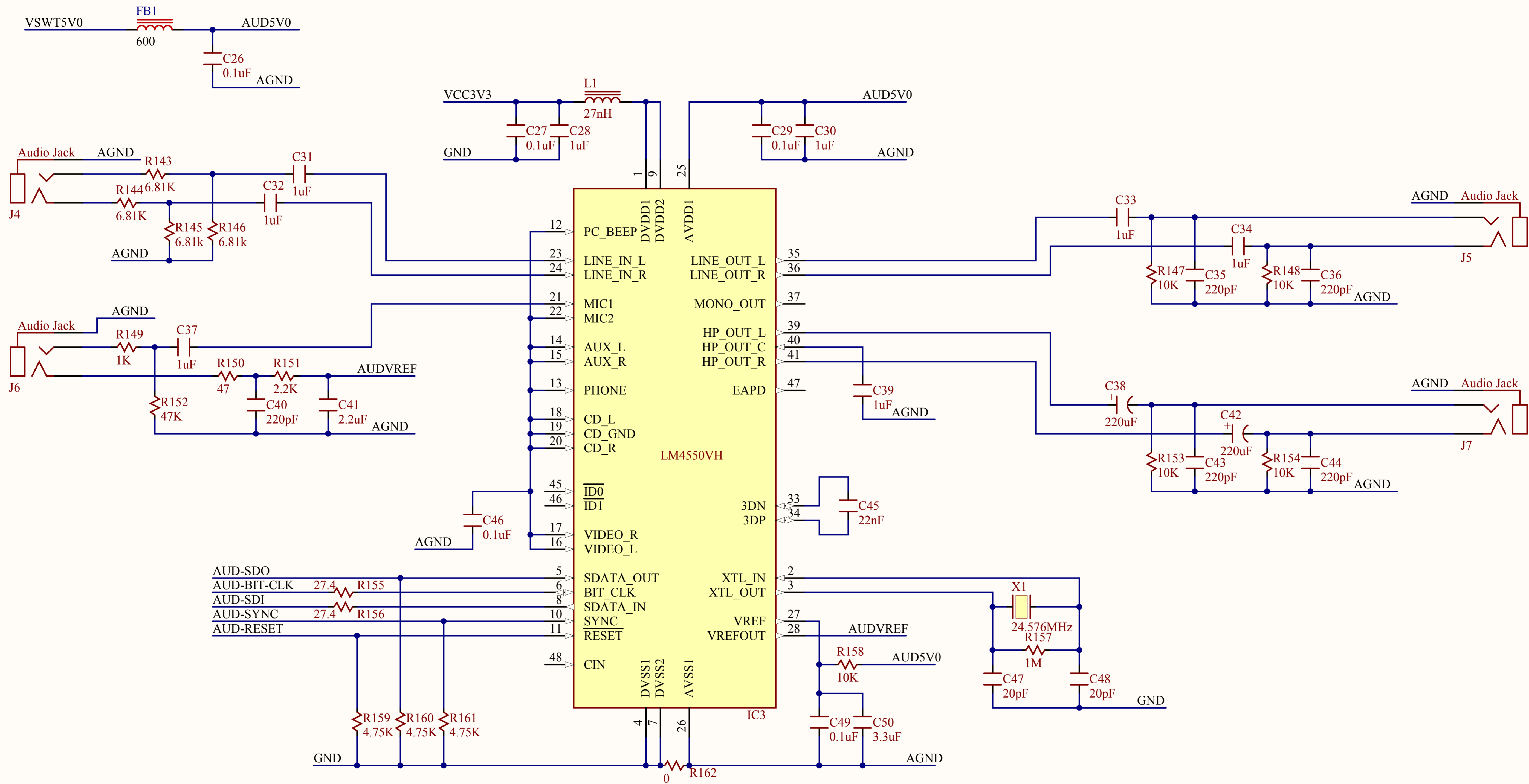
NOTE: OVS and PRE signal pullup/down is TBD



Title		Rev	
<h1>Atlys</h1>		<h1>C.2</h1>	
Circuit		Copyright 2010	
HDMI Ports			
Doc#	500-178		
Engineer	CC		
Author	GMA		
Date	6/11/2010		
Sheet#	3 out of 12		



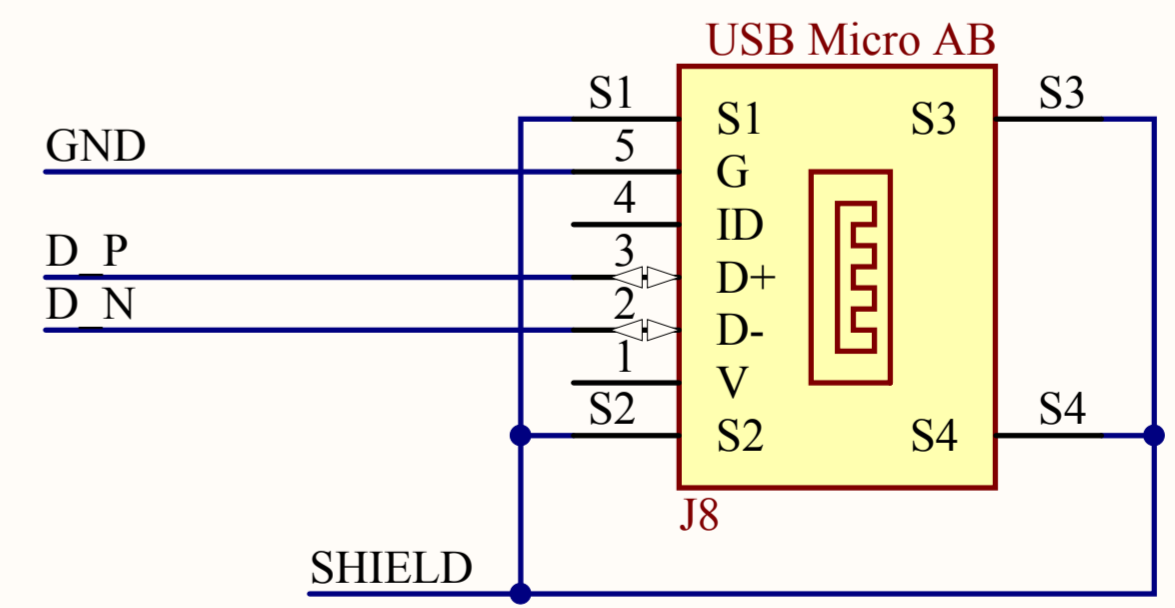
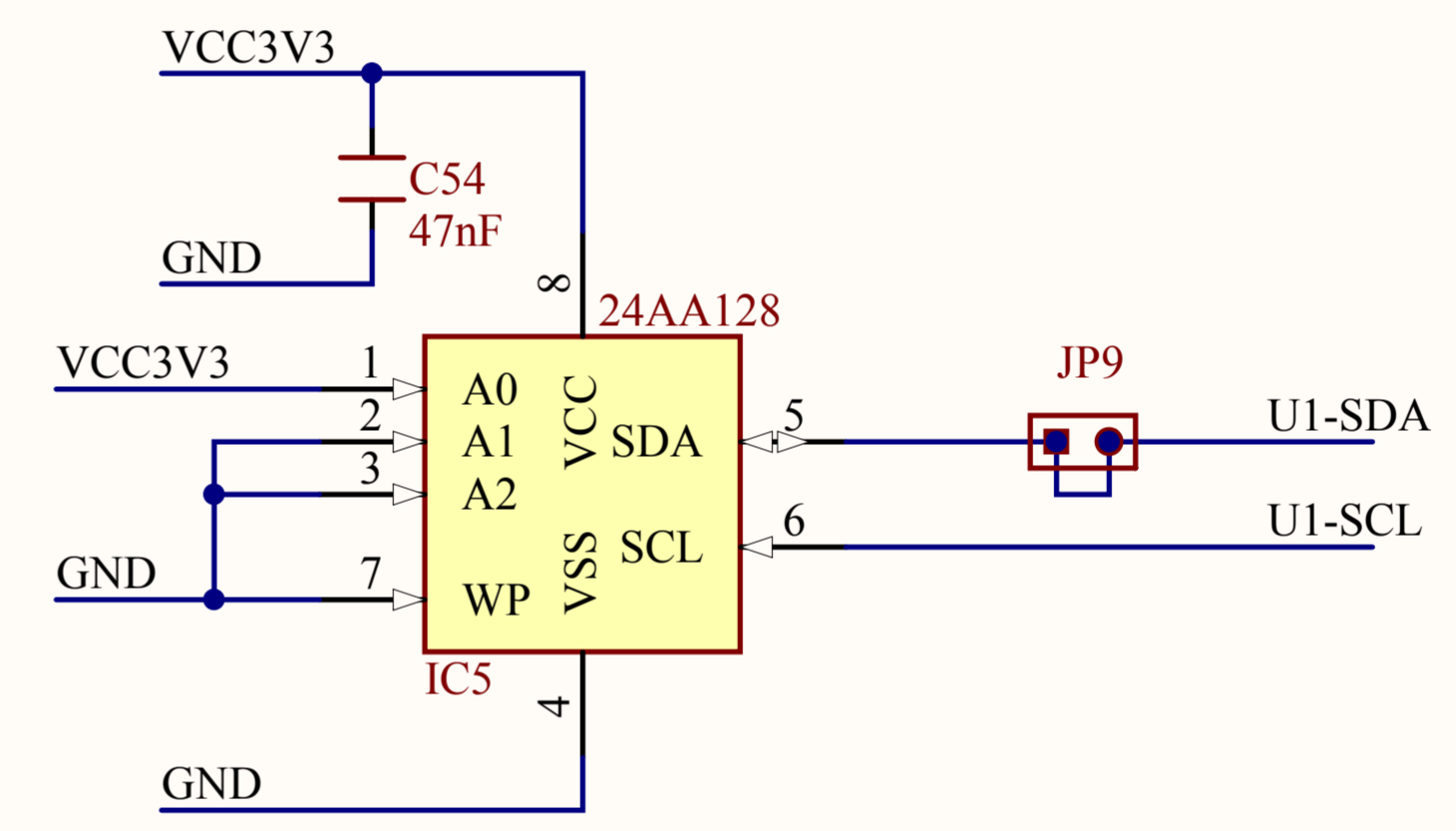
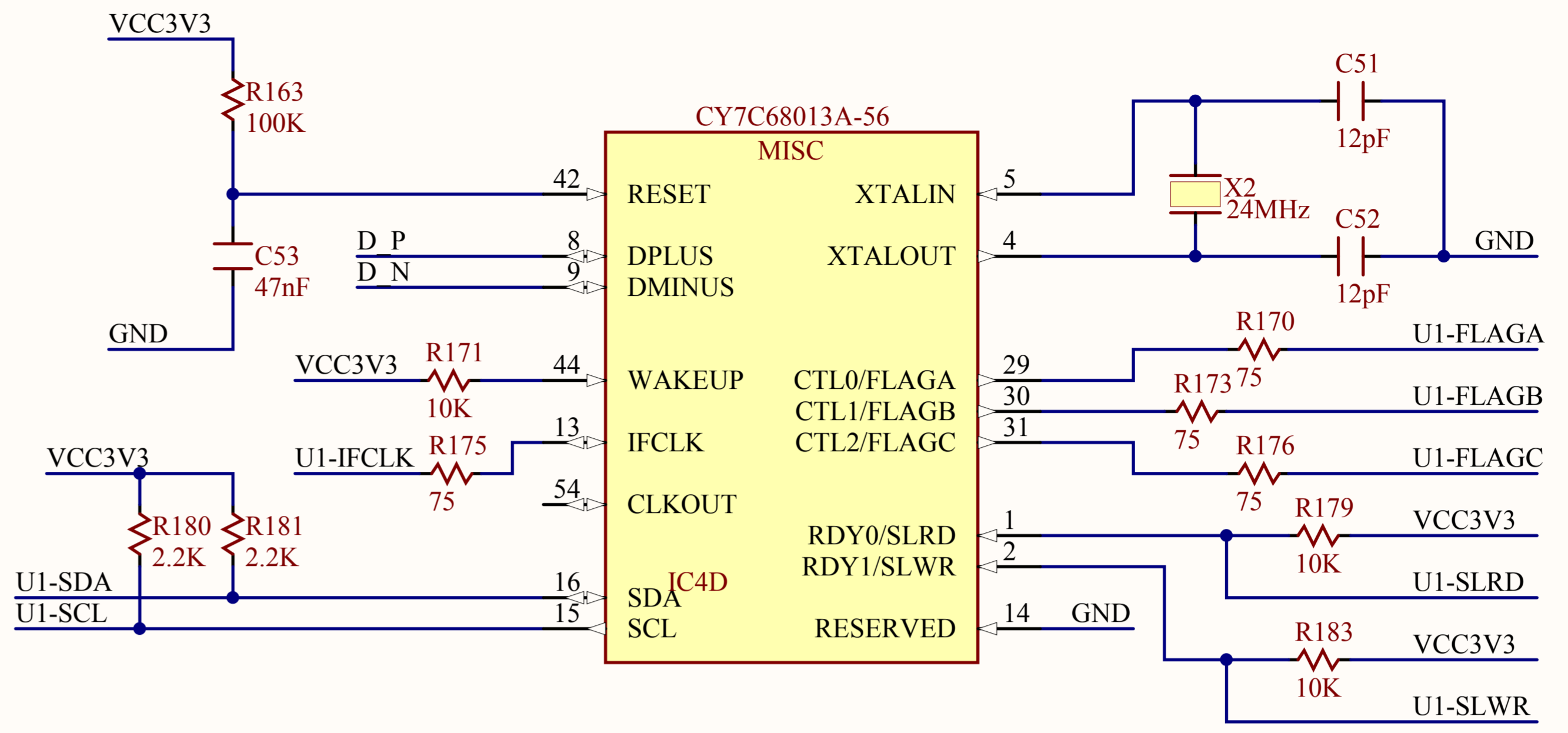
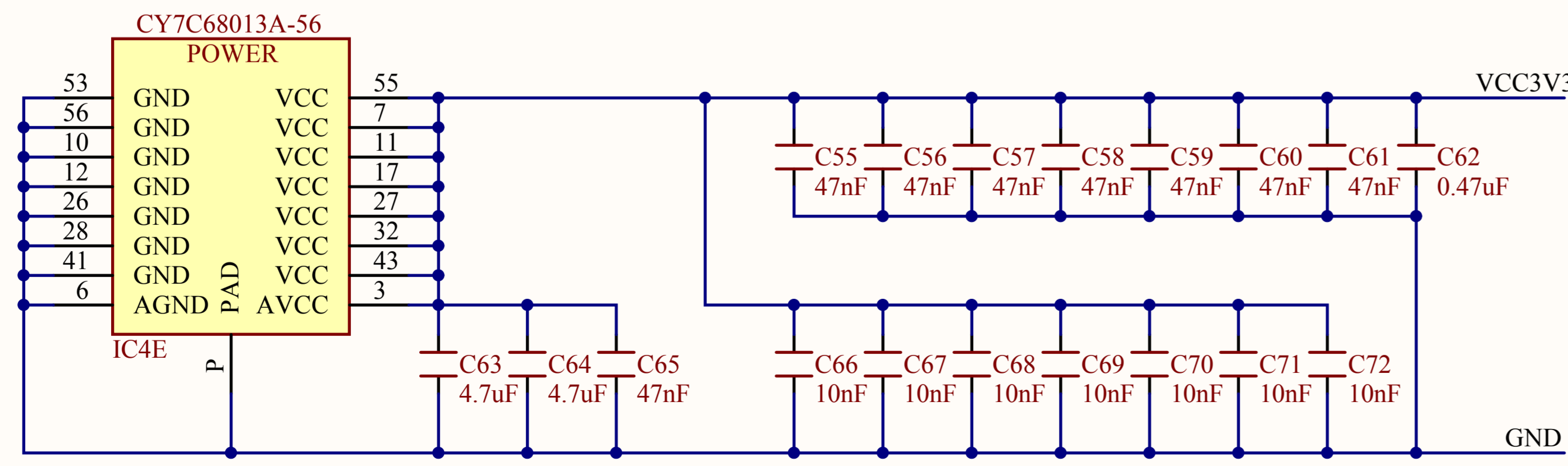
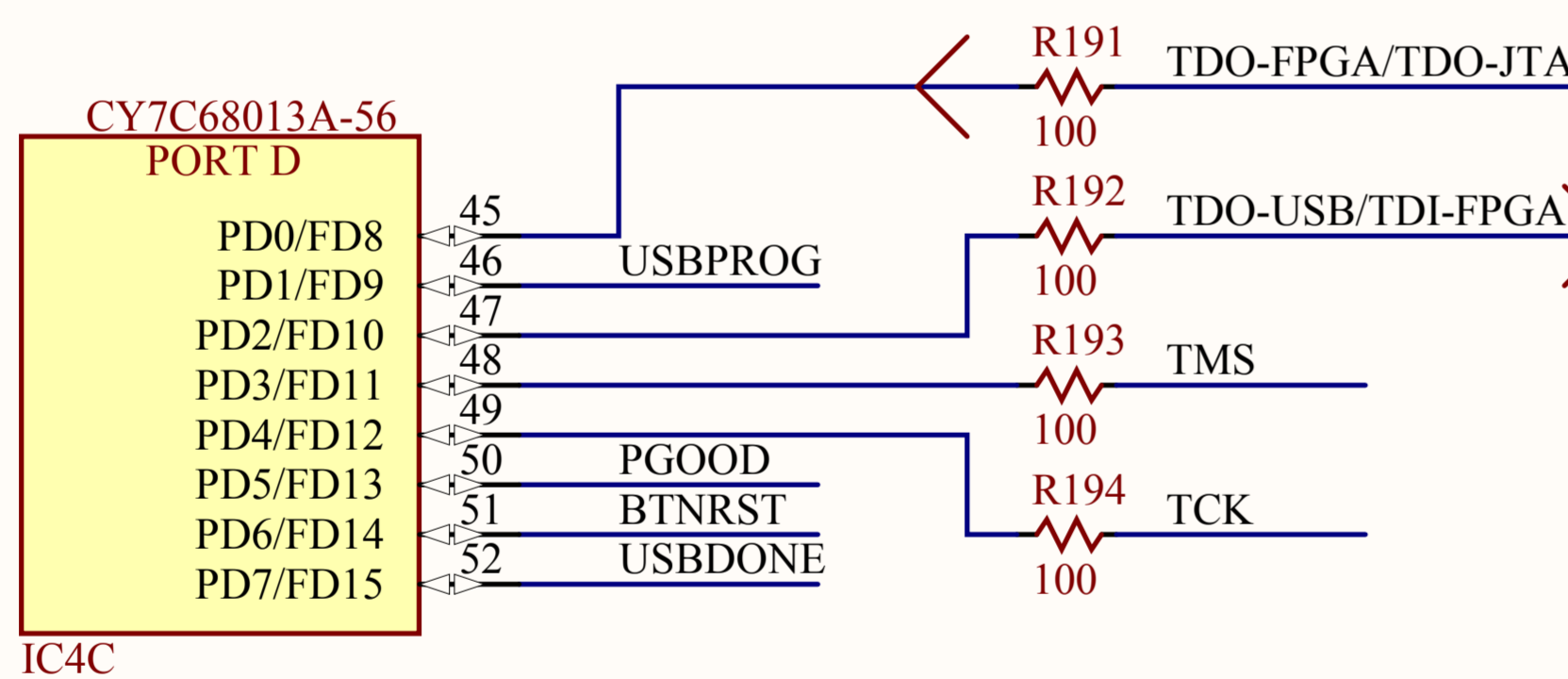
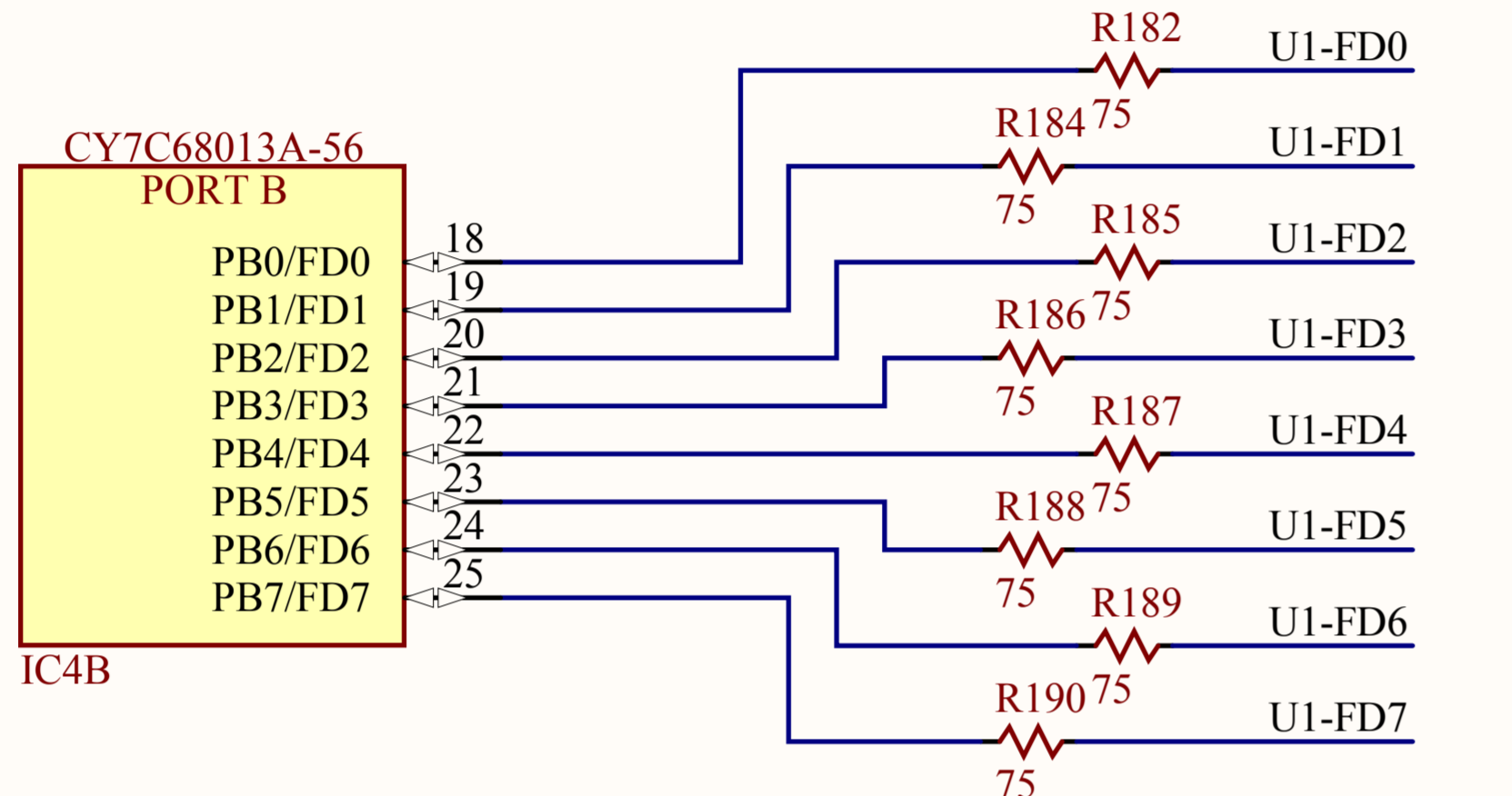
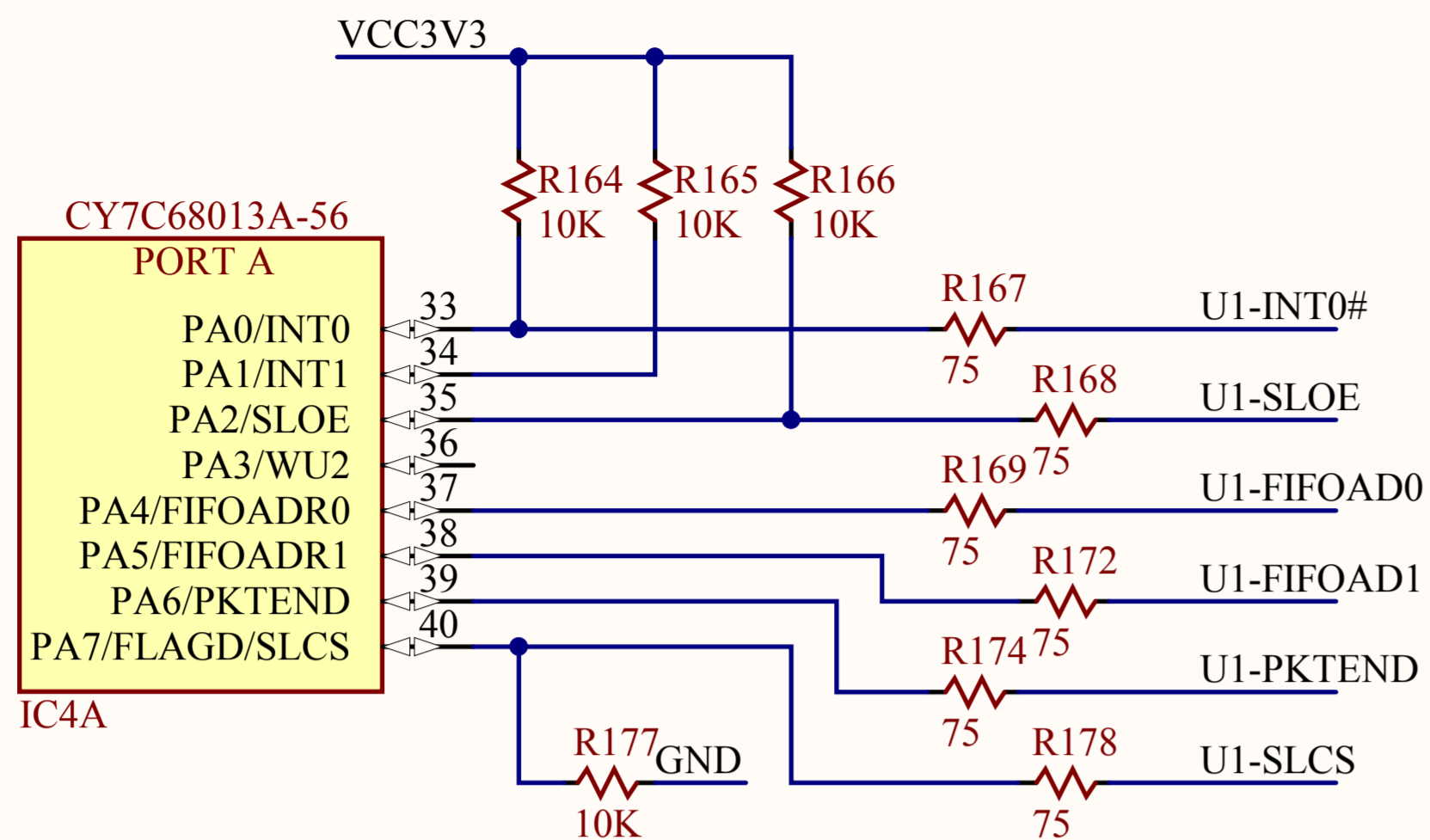
DIGILENT
www.digilentinc.com



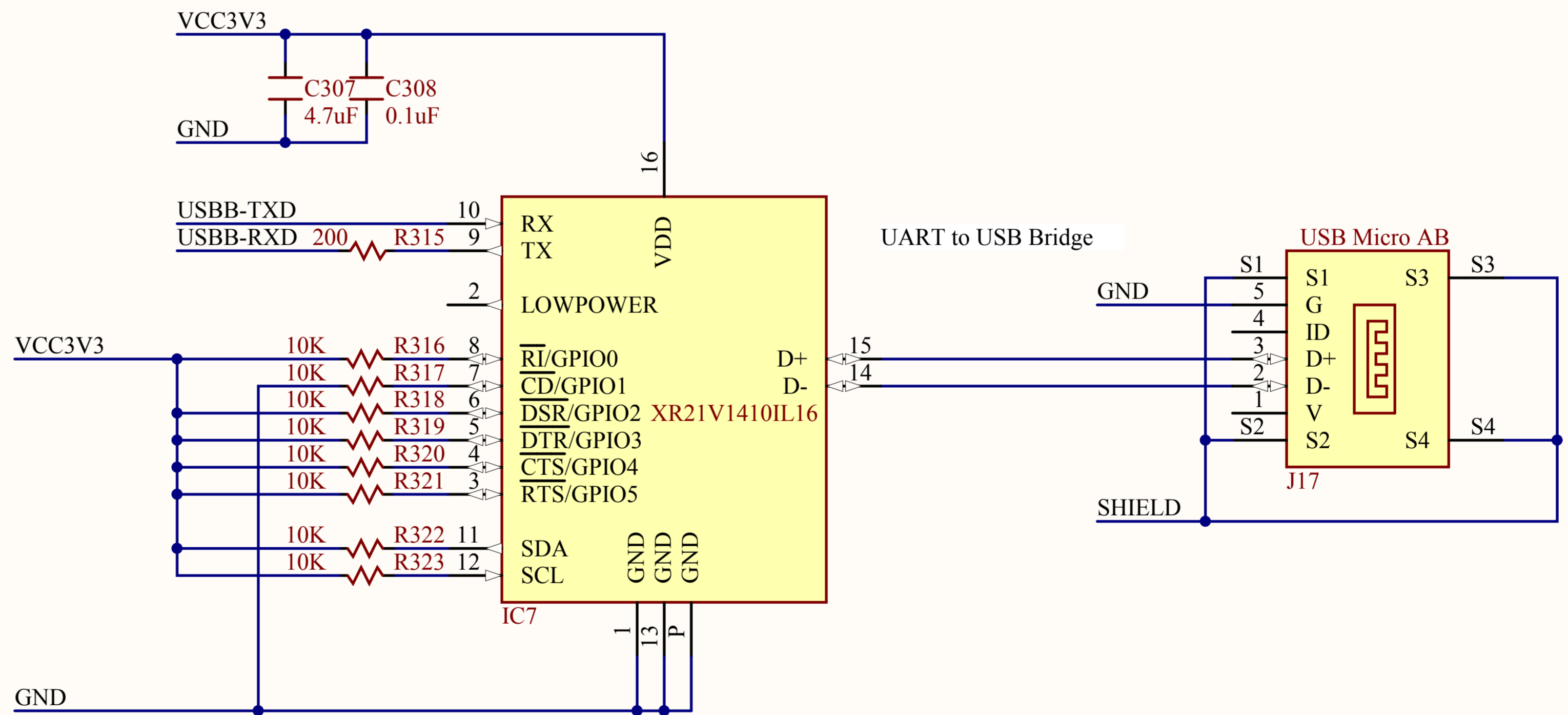
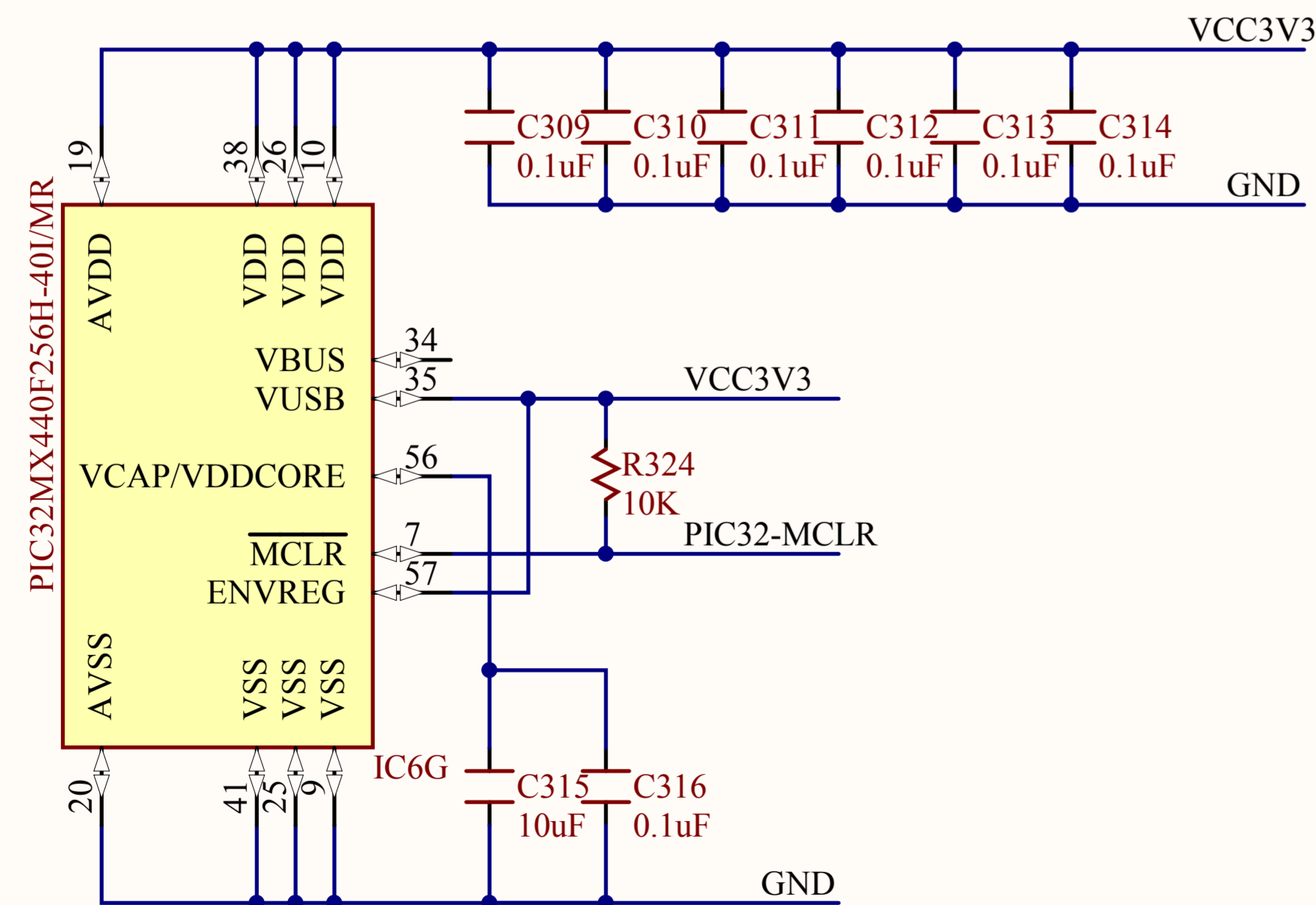
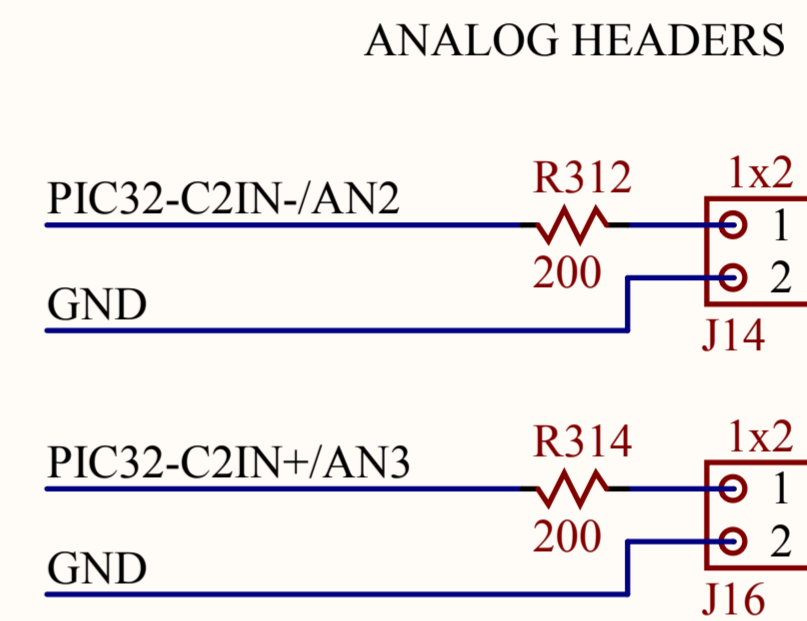
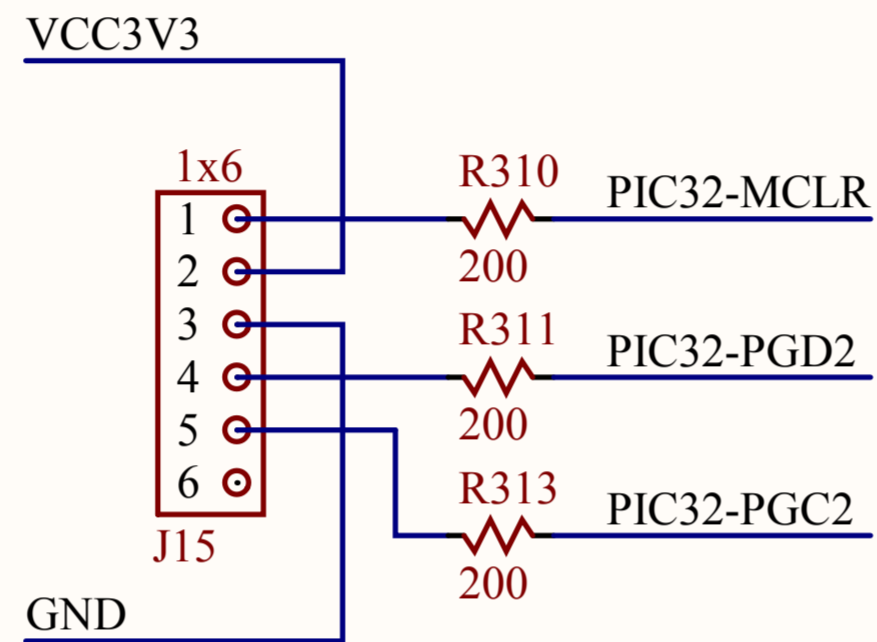
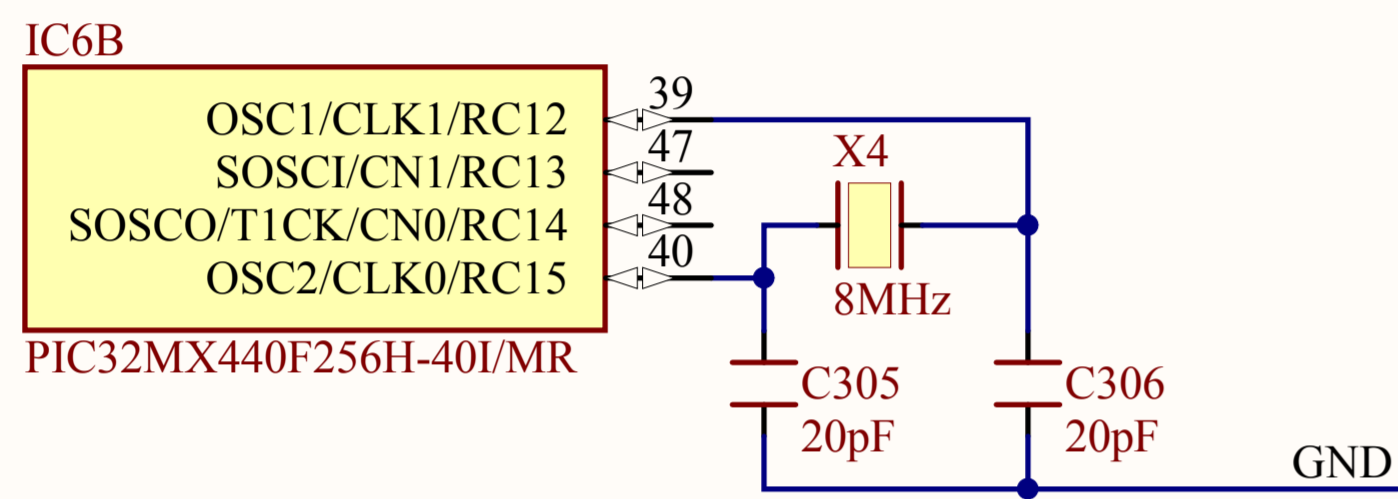
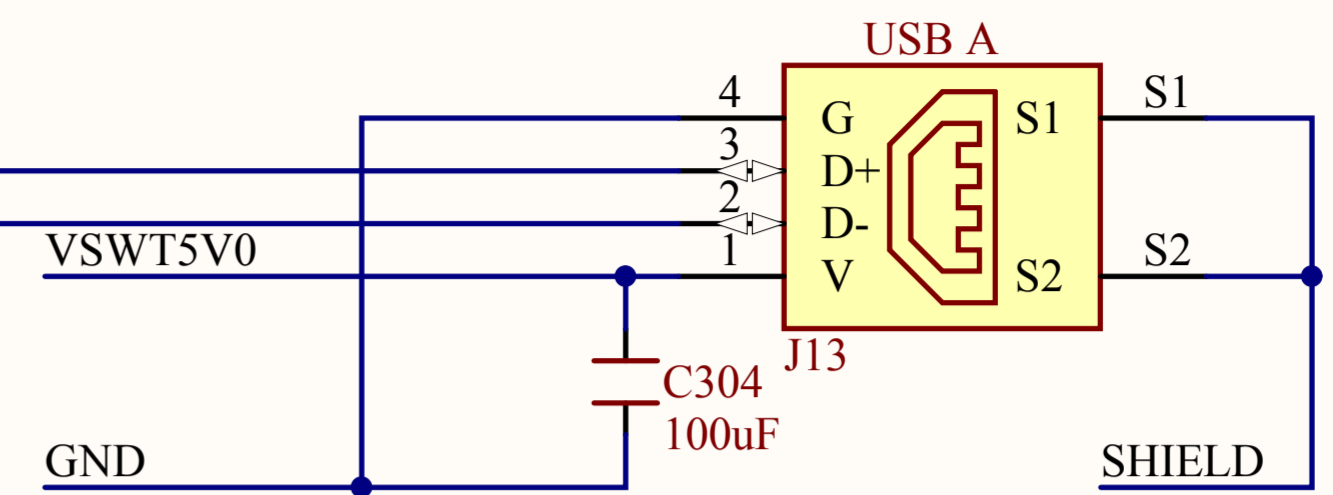
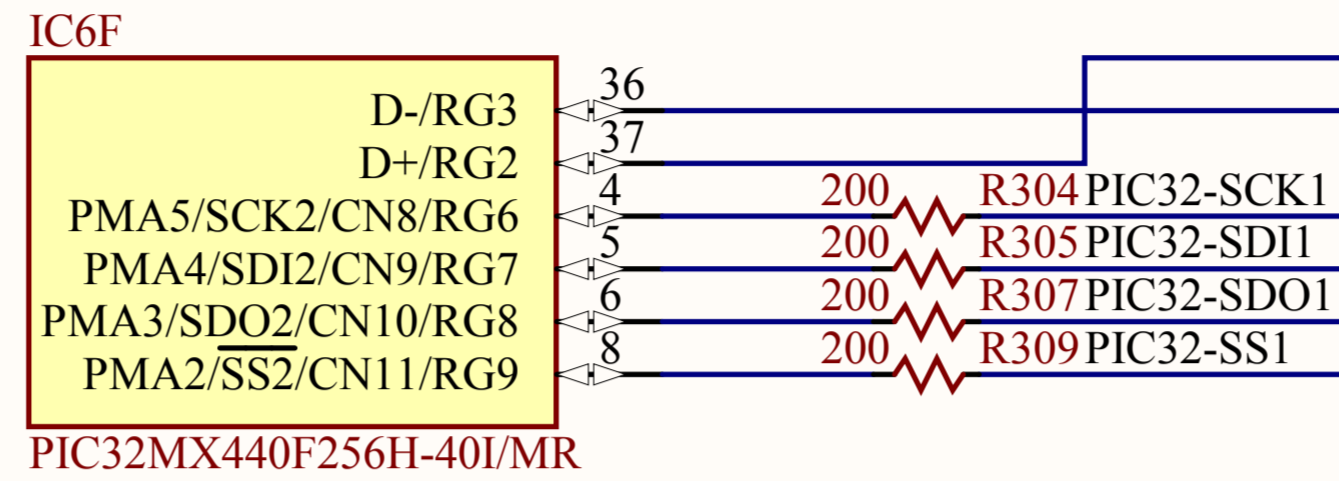
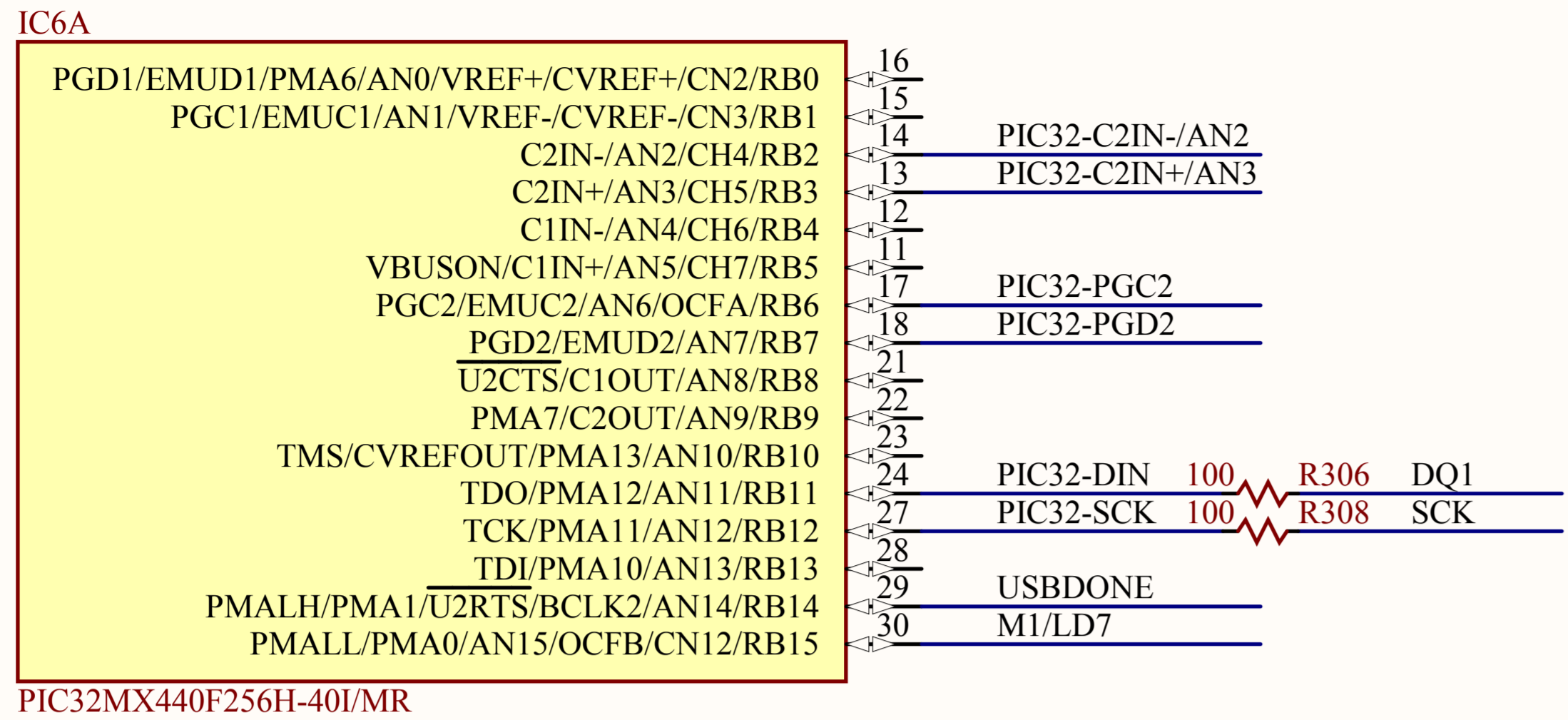
Title		Rev	
<h1>Atlys</h1>		<h1>C.2</h1>	
		Copyright 2010	
Circuit	AUDIO		
Doc#	500-178		
Engineer	CC		
Author	GMA		
Date	6/11/2010		
Sheet#	4 out of 12		



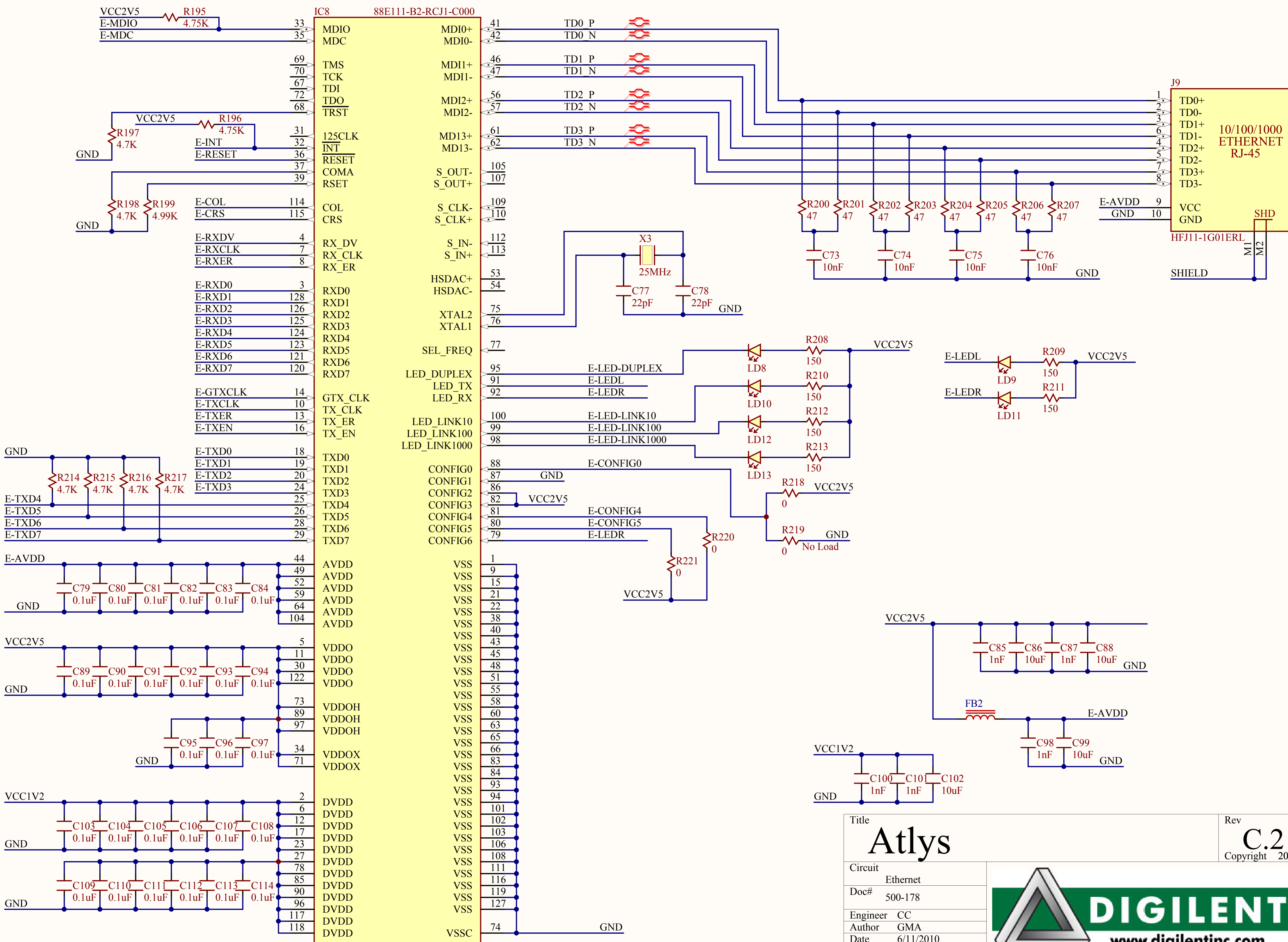
DIGILENT
www.digilentinc.com



Title		Rev
<h1>Atlys</h1>		C.2
		Copyright 2010
Circuit	Digilent USB	
Doc#	500-178	
Engineer	CC	
Author	GMA	
Date	6/11/2010	
Sheet#	5 out of 12	



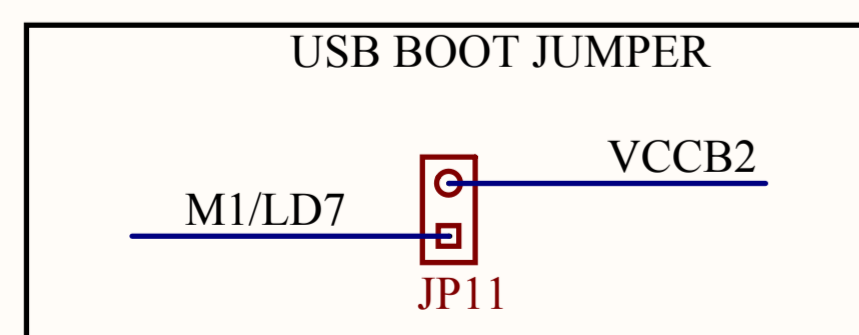
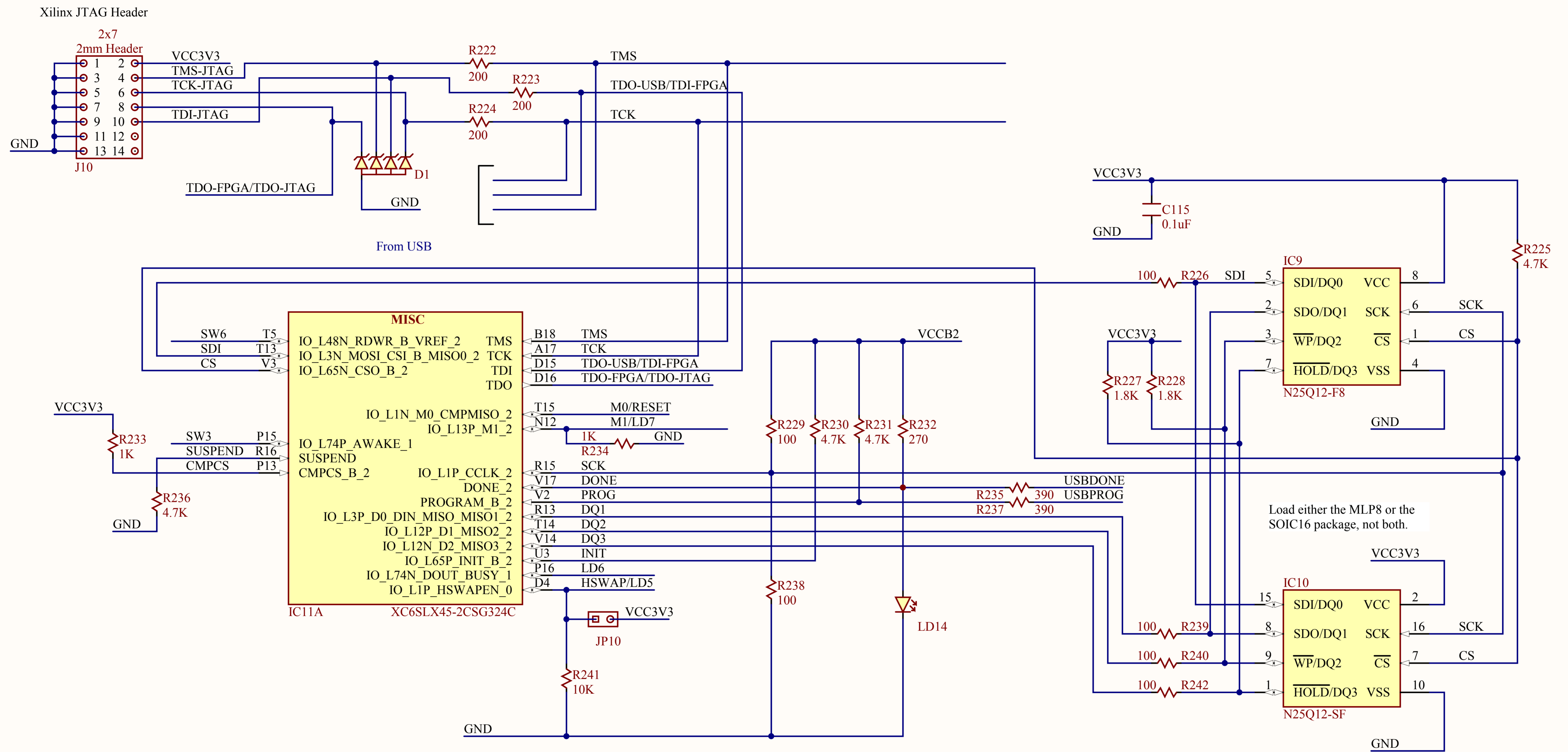
Title		Rev	
Atlys		C.2	
Circuit		Copyright 2010	
USB Host			
Doc#	500-178		
Engineer	CC		
Author	GMA		
Date	6/11/2010		
Sheet#	6 out of 12		



Title		Rev
<h1>Atlys</h1>		<h1>C.2</h1>
Circuit		Copyright 2010
Ethernet		
Doc#	500-178	
Engineer	CC	
Author	GMA	
Date	6/11/2010	
Sheet#	7 out of 12	



DIGILENT
www.digilentinc.com



Title		Rev	
Atlys		C.2	
Circuit CONFIGURATION		Copyright 2010	
Doc#	500-178		
Engineer	CC		
Author	GMA		
Date	6/11/2010		
Sheet#	8 out of 12		



BANK0		
IO_L1N_VREF	C4	U1-PKTEND
IO_L2P	B2	U1-SLCS
IO_L2N	A2	U1-FD0
IO_L3P	D6	U1-FD1
IO_L3N	C6	U1-FD2
IO_L4P	B3	U1-FD3
IO_L4N	A3	U1-FD4
IO_L5P	B4	U1-FD5
IO_L5N	A4	U1-FD6
IO_L6P	C5	U1-FD7
IO_L6N	A5	U1-INT0#
IO_L8P	B6	TMDS-TX-CLK P
IO_L8N_VREF	A6	TMDS-TX-CLK N
IO_L10P	C7	TMDS-TX-1 P
IO_L10N	D8	TMDS-TX-0 P
IO_L11P	C8	TMDS-TX-0 N
IO_L11N	B8	TMDS-TX-2 P
IO_L33P	A8	TMDS-TX-2 N
IO_L33N	D9	TMDS-TX-SCL
IO_L34P_GCLK19	C9	TMDS-TX-SDA
IO_L34N_GCLK18	B9	U1-FLAGA
IO_L35P_GCLK17	A9	U1-FLAGB
IO_L35N_GCLK16	D11	TMDS-RXB-CLK P
IO_L36P_GCLK15	C11	TMDS-RXB-CLK N
IO_L36N_GCLK14	C10	U1-IFCLK
IO_L37P_GCLK13	A10	SW0
IO_L37N_GCLK12	G9	TMDS-RXB-0 P
IO_L38P	F9	TMDS-RXB-0 N
IO_L38N_VREF	B11	TMDS-RXB-1 P
IO_L39P	A11	TMDS-RXB-1 N
IO_L39N	B12	TMDS-RXB-2 P
IO_L41P	A12	TMDS-RXB-2 N
IO_L41N	C13	JA-SCL
IO_L50P	A13	JA-SDA
IO_L50N	B14	U1-FIFOAD1
IO_L62P	A14	U1-FIFOAD0
IO_L62N_VREF	F13	U1-SLWR
IO_L63P_SCP7	E13	U1-SLWR
IO_L63N_SCP6	C15	U1-FLAGC
IO_L64P_SCP5	A15	U1-SLOE
IO_L64N_SCP4	D14	SW1
IO_L65P_SCP3	C14	SW2
IO_L65N_SCP2	B16	USBB-TXD
IO_L66P_SCP1	A16	USBB-RXD
IO_L66N_SCP0		

IC11B XC6SLX45-2CSG324C

BANK1		
IO_L1P_A25	F15	E-RXD3
IO_L1N_A24_VREF	F16	E-MDC
IO_L29P_A23_M1A13	C17	E-COL
IO_L29N_A22_M1A14	C18	E-CRS
IO_L30P_A21_M1RESET	F14	E-RXD4
IO_L30N_A20_M1A11	G14	E-TXD5
IO_L31P_A19_M1CKE	D17	E-RXD7
IO_L31N_A18_M1A12	D18	E-RXD6
IO_L32P_A17_M1A8	H12	E-TXD6
IO_L32N_A16_M1A9	G13	E-RESET
IO_L33P_A15_M1A10	E16	E-RXD2
IO_L33N_A14_M1A4	E18	E-RXD5
IO_L34P_A13_M1WE	K12	E-TXD7
IO_L34N_A12_M1BA2	K13	E-TXD3
IO_L35P_A11_M1A7	F17	E-RXDV
IO_L35N_A10_M1A2	F18	E-RXER
IO_L36P_A9_M1BA0	H13	E-TXD1
IO_L36N_A8_M1BA1	H14	E-RXD1
IO_L37P_A7_M1A0	H15	E-TXEN
IO_L37N_A6_M1A1	H16	E-TXD0
IO_L38P_A5_M1CLK	G16	E-RXD0
IO_L38N_A4_M1CLKN	G18	E-TXER
IO_L39P_M1A3	J13	E-TXD4
IO_L39N_M1ODT	K14	E-TXD2
IO_L40P_GCLK11_M1A5	L12	E-GTXCLK
IO_L40N_GCLK10_M1A6	L13	AUD-BIT-CLK
IO_L41P_GCLK9_IRDY1_M1RASN	K15	E-RXCLK
IO_L41N_GCLK8_M1CASN	K16	E-TXCLK
IO_L42P_GCLK7_M1UDM	L15	GCLK
IO_L42N_GCLK6_TRDY1_M1LDM	L16	E-INT
IO_L43P_GCLK5_M1DQ4	H17	TMDS-RX-CLK P
IO_L43N_GCLK4_M1DQ5	H18	TMDS-RX-CLK N
IO_L44P_A3_M1DQ6	J16	TMDS-RX-2 P
IO_L44N_A2_M1DQ7	J18	TMDS-RX-2 N
IO_L45P_A1_M1LDQS	K17	TMDS-RX-0 P
IO_L45N_A0_M1LDQSN	K18	TMDS-RX-0 N
IO_L46P_FCS_B_M1DQ2	L17	TMDS-RX-1 P
IO_L46N_FOE_B_M1DQ3	L18	TMDS-RX-1 N
IO_L47P_FWE_B_M1DQ0	M16	TMDS-RX-SCL
IO_L47N_LDC_M1DQ1	M18	TMDS-RX-SDA
IO_L48P_HDC_M1DQ8	N17	E-MDIO
IO_L48N_M1DQ9	N18	PIC32-SDO1
IO_L49P_M1DQ10	P17	PIC32-SCK1
IO_L49N_M1DQ11	P18	PIC32-SS1
IO_L50P_M1UDQS	N15	PIC32-SDI1
IO_L50N_M1UDQSN	N16	AUD-SDO
IO_L51P_M1DQ12	T17	AUD-RESET
IO_L51N_M1DQ13	T18	AUD-SDI
IO_L52P_M1DQ14	U17	AUD-SYNC
IO_L52N_M1DQ15	U18	LD0
IO_L53P	M14	LD1
IO_L53N_VREF	N14	LD2
IO_L61P	L14	LD3
IO_L61N	M13	LD4

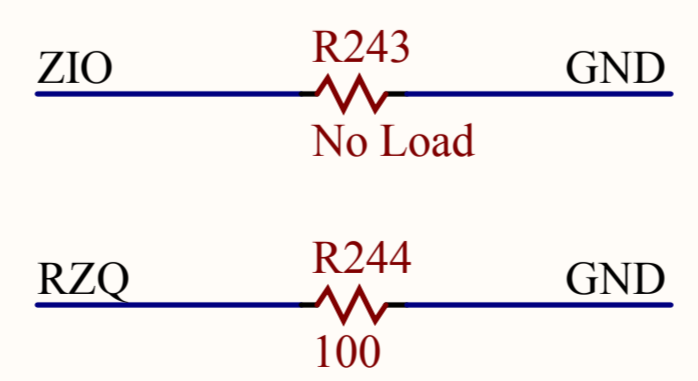
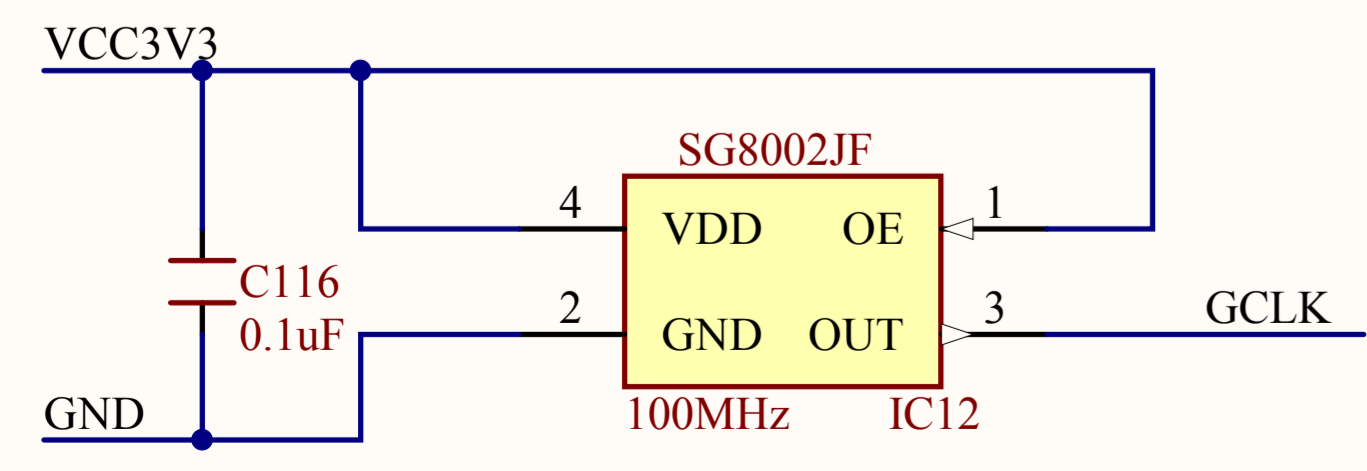
IC11C XC6SLX45-2CSG324C

BANK2		
IO_L2P_CMPCLK	U16	EXP-IO1 P
IO_L2N_CMPMOSI	V16	EXP-IO1 N
*IO_L5P	U15	EXP-IO2 P
*IO_L5N	V15	EXP-IO2 N
IO_L13N_D10	P12	SW4
IO_L14P_D11	U13	EXP-IO3 P
IO_L14N_D12	V13	EXP-IO3 N
*IO_L15P	M11	EXP-IO4 P
*IO_L15N	N11	EXP-IO4 N
IO_L16P	R11	EXP-IO5 P
IO_L16N_VREF	T11	EXP-IO5 N
*IO_L19P	T12	EXP-IO6 P
*IO_L19N	V12	EXP-IO6 N
*IO_L20P	N10	EXP-IO7 P
*IO_L20N	M10	EXP-IO7 N
*IO_L22P	N9	EXP-IO8 N
*IO_L22N	M10	EXP-IO8 P
IO_L23P	U11	EXP-IO9 P
IO_L23N	V11	EXP-IO9 N
IO_L29P_GCLK3	R10	EXP-IO10 P
IO_L29N_GCLK2	T10	EXP-IO10 N
IO_L30P_GCLK1_D13	U10	EXP-IO11 P
IO_L30N_GCLK0_USERCCLK	V10	EXP-IO11 N
IO_L31P_GCLK31_D14	R8	EXP-IO12 P
IO_L31N_GCLK30_D15	T8	EXP-IO12 N
IO_L32P_GCLK29	T9	JA-CLK P
IO_L32N_GCLK28	V9	JA-CLK N
*IO_L40P	M8	EXP-IO13 P
*IO_L40N	N8	EXP-IO13 N
IO_L41P	U8	EXP-IO14 P
IO_L41N_VREF	V8	EXP-IO14 N
IO_L43P	U7	EXP-IO15 P
IO_L43N	V7	EXP-IO15 N
*IO_L44P	N7	EXP-IO16 P
*IO_L44N	P8	EXP-IO16 N
IO_L45P	T6	EXP-IO17 P
IO_L45N	V6	EXP-IO17 N
IO_L46P	R7	EXP-IO18 P
IO_L46N	T7	EXP-IO18 N
*IO_L47P	N6	EXP-IO19 P
*IO_L47N	P7	EXP-IO19 N
IO_L48P_D7	R5	SW5
IO_49P_D3	U5	EXP-IO20 P
IO_49N_D4	V5	EXP-IO20 N
IO_L62P_D5	R3	JA-D0 P
IO_L62N_D6	T3	JA-D0 N
IO_L63P	T4	JA-D1 P
IO_L63N	V4	JA-D1 N
IO_L64P_D8	N5	JA-D2 P
IO_L64N_D9	P6	JA-D2 N

IC11D XC6SLX45-2CSG324C

BANK3		
IO_L1P	N4	BTNU
IO_L1N_VREF	N3	DDR0V9
IO_L2P	P4	BTNL
IO_L2N	P3	BTND
IO_L31P	L6	RZQ
IO_L31N_VREF	M5	DDR0V9
IO_L32P_M3DQ14	U2	DDR-DQ14
IO_L32N_M3DQ15	U1	DDR-DQ15
IO_L33P_M3DQ12	T2	DDR-DQ12
IO_L33N_M3DQ13	T1	DDR-DQ13
IO_L34P_M3UDQS	P2	DDR-UDQS P
IO_L34N_M3UDQSN	P1	DDR-UDQS N
IO_L35P_M3DQ10	N2	DDR-DQ10
IO_L35N_M3DQ11	N1	DDR-DQ11
IO_L36P_M3DQ8	M3	DDR-DQ8
IO_L36N_M3DQ9	M1	DDR-DQ9
IO_L37P_M3DQ0	L2	DDR-DQ0
IO_L37N_M3DQ1	L1	DDR-DQ1
IO_L38P_M3DQ2	K2	DDR-DQ2
IO_L38N_M3DQ3	K1	DDR-DQ3
IO_L39P_M3LDQS	L4	DDR-LDQS P
IO_L39N_M3LDQSN	L3	DDR-LDQS N
IO_L40P_M3DQ6	J3	DDR-DQ6
IO_L40N_M3DQ7	J1	DDR-DQ7
IO_L41P_GCLK27_M3DQ4	H2	DDR-DQ4
IO_L41N_GCLK26_M3DQ5	H1	DDR-DQ5
IO_L42P_GCLK25_TRDY2_M3UDM	K4	DDR-UDM
IO_L42N_GCLK24_M3LDM	K3	DDR-LDM
IO_L43P_GCLK23_M3RASN	L5	DDR-RAS
IO_L43N_GCLK22_IRDY2_M3CASN	K5	DDR-CAS
IO_L44P_GCLK21_M3A5	H4	DDR-A5
IO_L44N_GCLK20_M3A6	H3	DDR-A6
IO_L45P_M3A3	L7	DDR-A3
IO_L45N_M3ODT	K6	DDR-ODT
IO_L46P_M3CLK	G3	DDR-CK P
IO_L46N_M3CLKN	G1	DDR-CK N
IO_L47P_M3A0	J7	DDR-A0
IO_L47N_M3A1	J6	DDR-A1
IO_L48P_M3BA0	F2	DDR-BA0
IO_L48N_M3BA1	F1	DDR-BA1
IO_L49P_M3A7	H6	DDR-A7
IO_L49N_M3A2	H5	DDR-A2
IO_L50P_M3WE	E3	DDR-WE
IO_L50N_M3BA2	E1	DDR-BA2
IO_L51P_M3A10	F4	DDR-A10
IO_L51N_M3A4	F3	DDR-A4
IO_L52P_M3A8	D2	DDR-A8
IO_L52N_M3A9	D1	DDR-A9
IO_L53P_M3CKE	H7	DDR-CKE
IO_L53N_M3A12	G6	DDR-A12
IO_L54P_M3RESET	E4	SW7
IO_L54N_M3A11	D3	DDR-A11
IO_L55P_M3A13	F6	BTNR
IO_L55N_M3A14	F5	BTNC
IO_L83P	C2	ZIO
IO_L83N_VREF	C1	DDR0V9

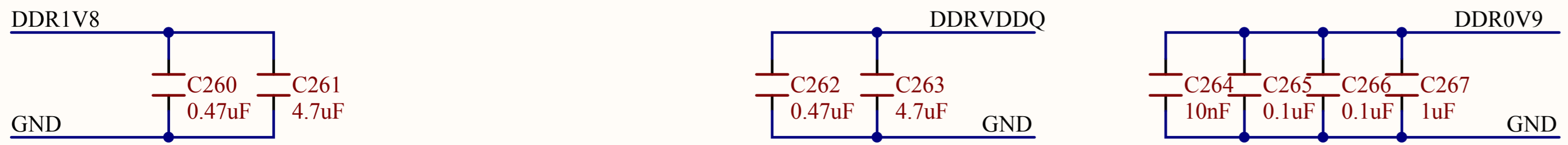
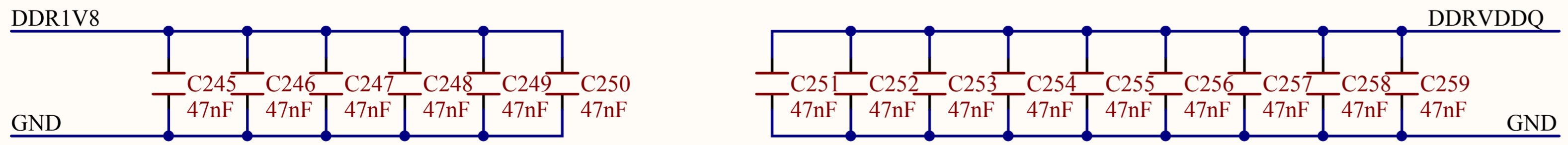
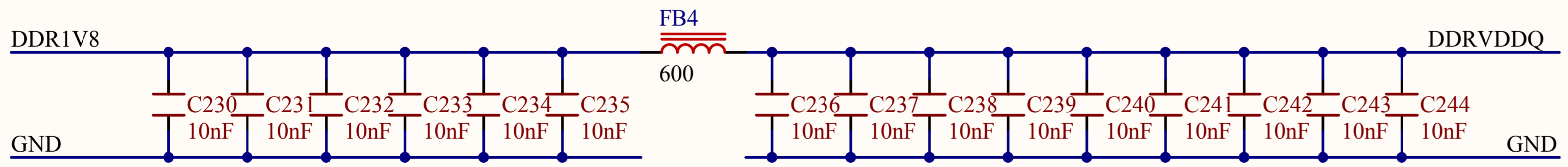
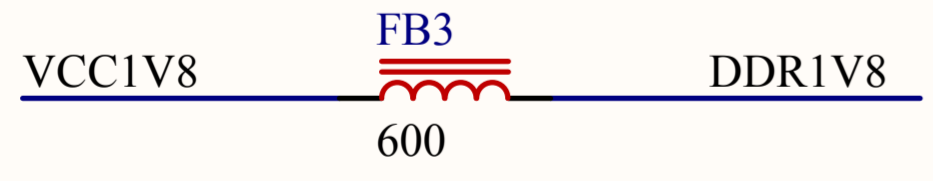
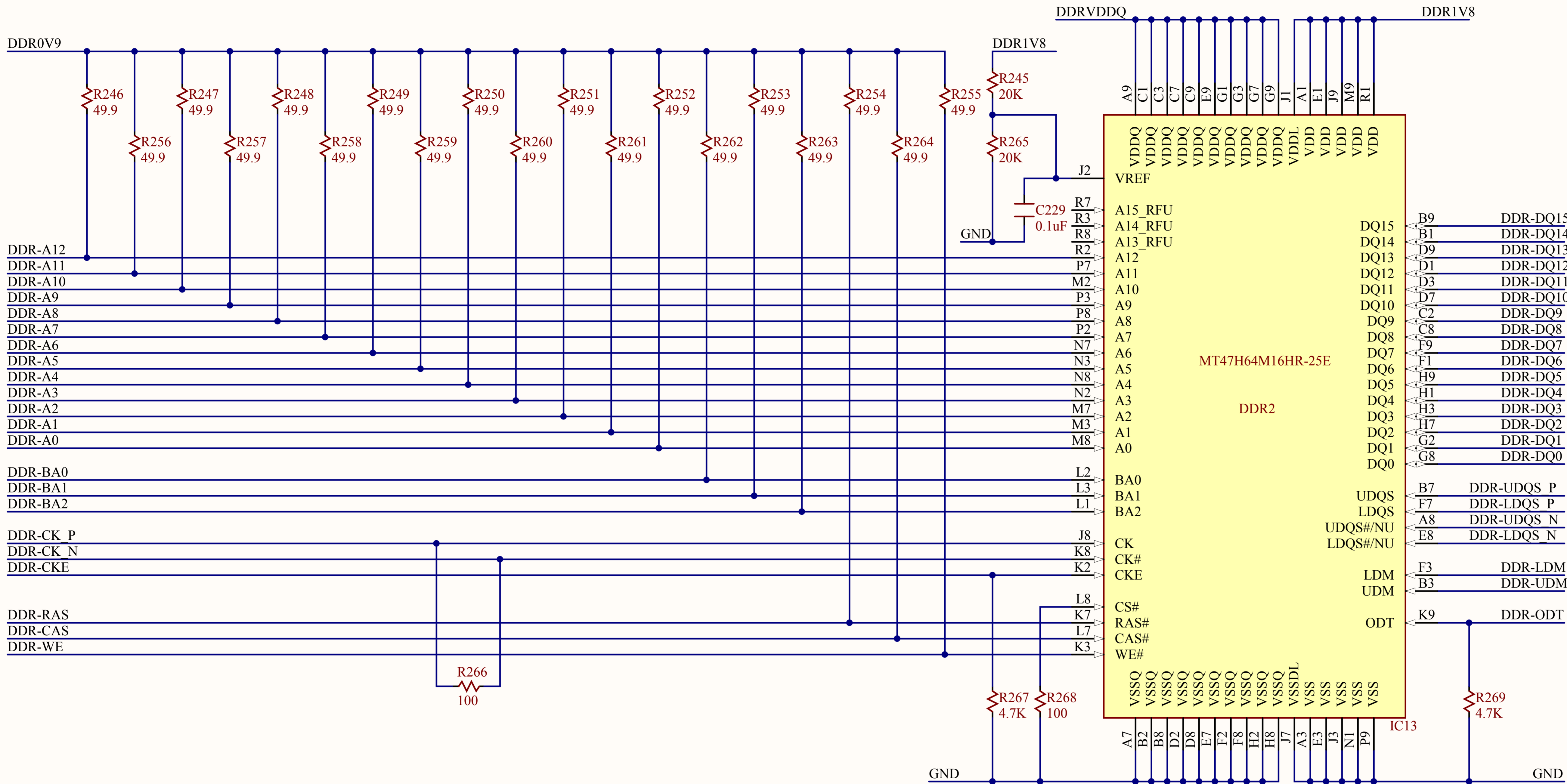
IC11E XC6SLX45-2CSG324C



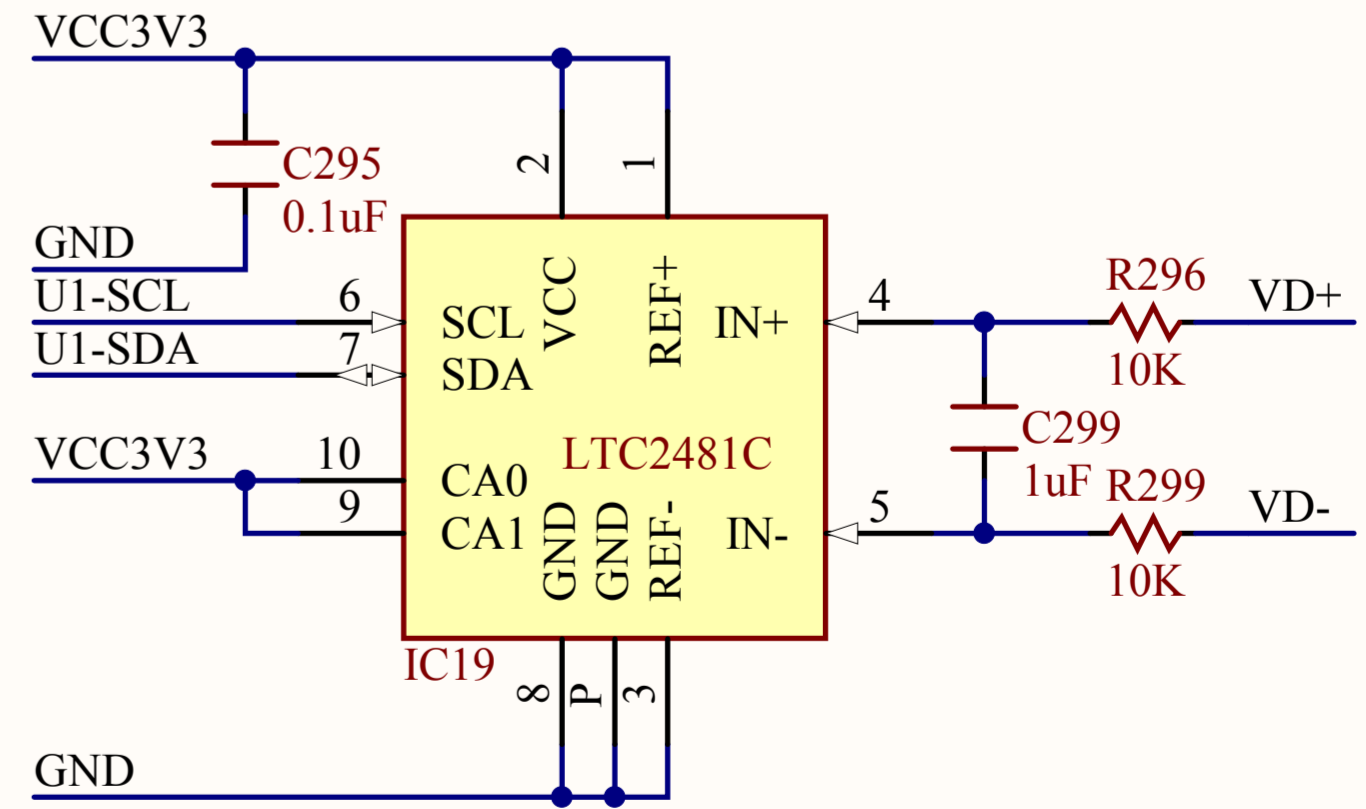
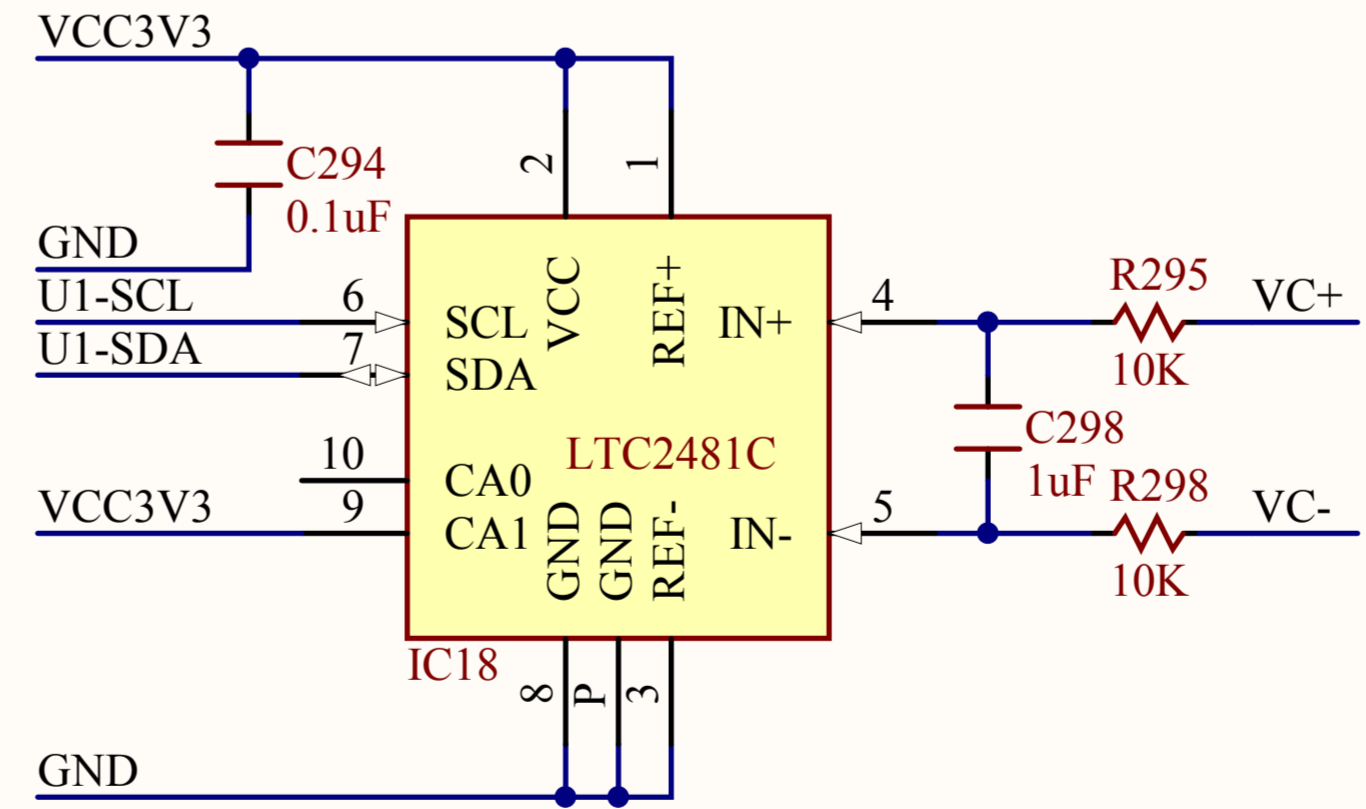
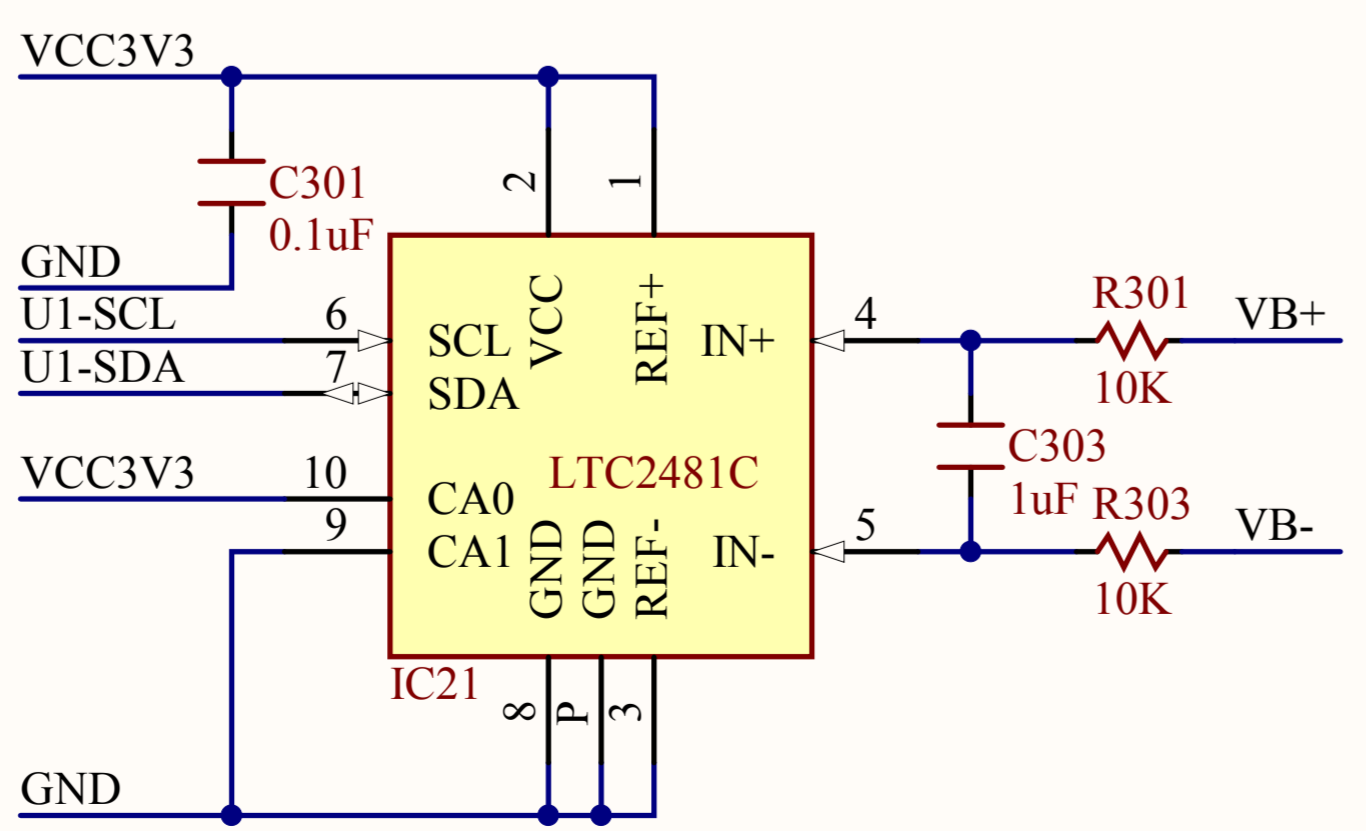
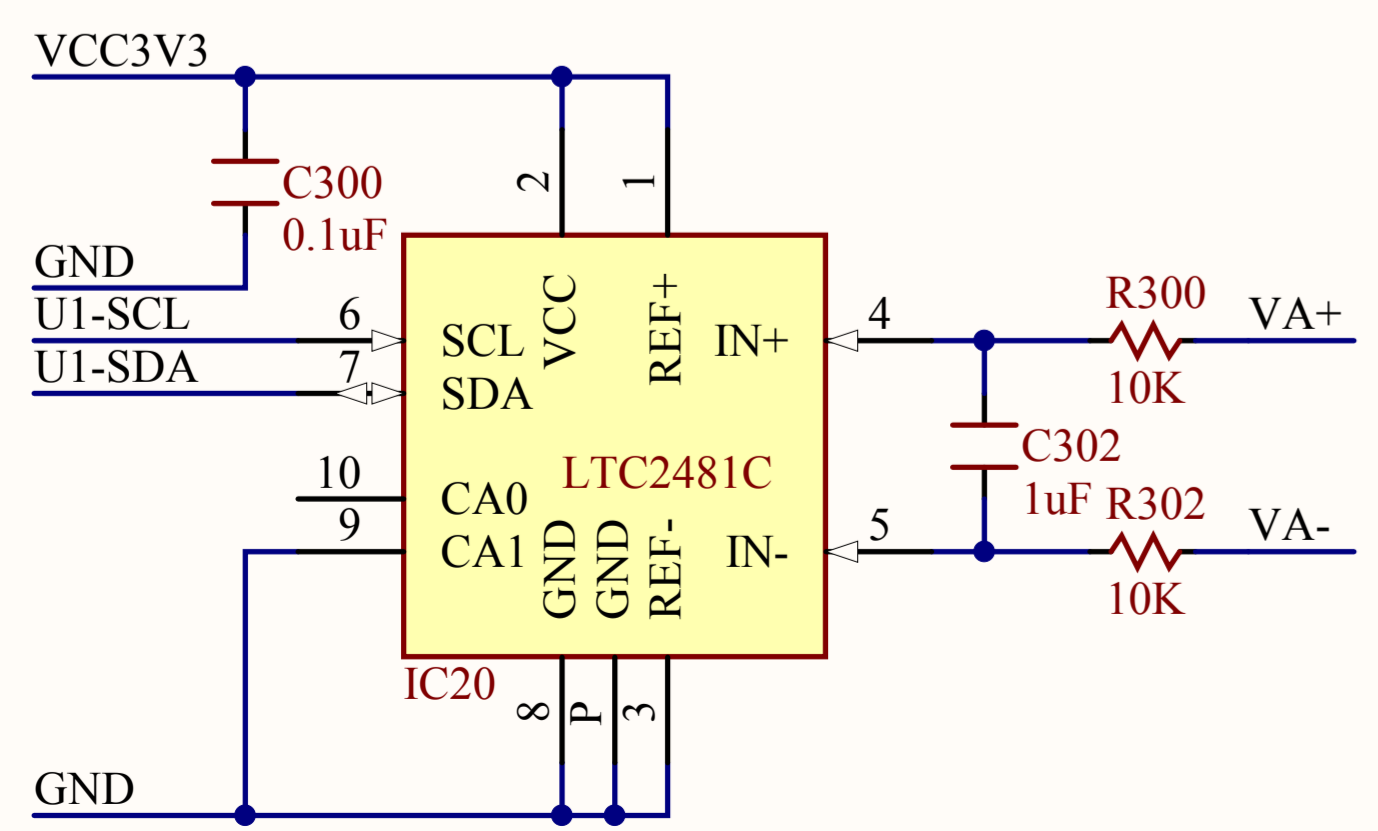
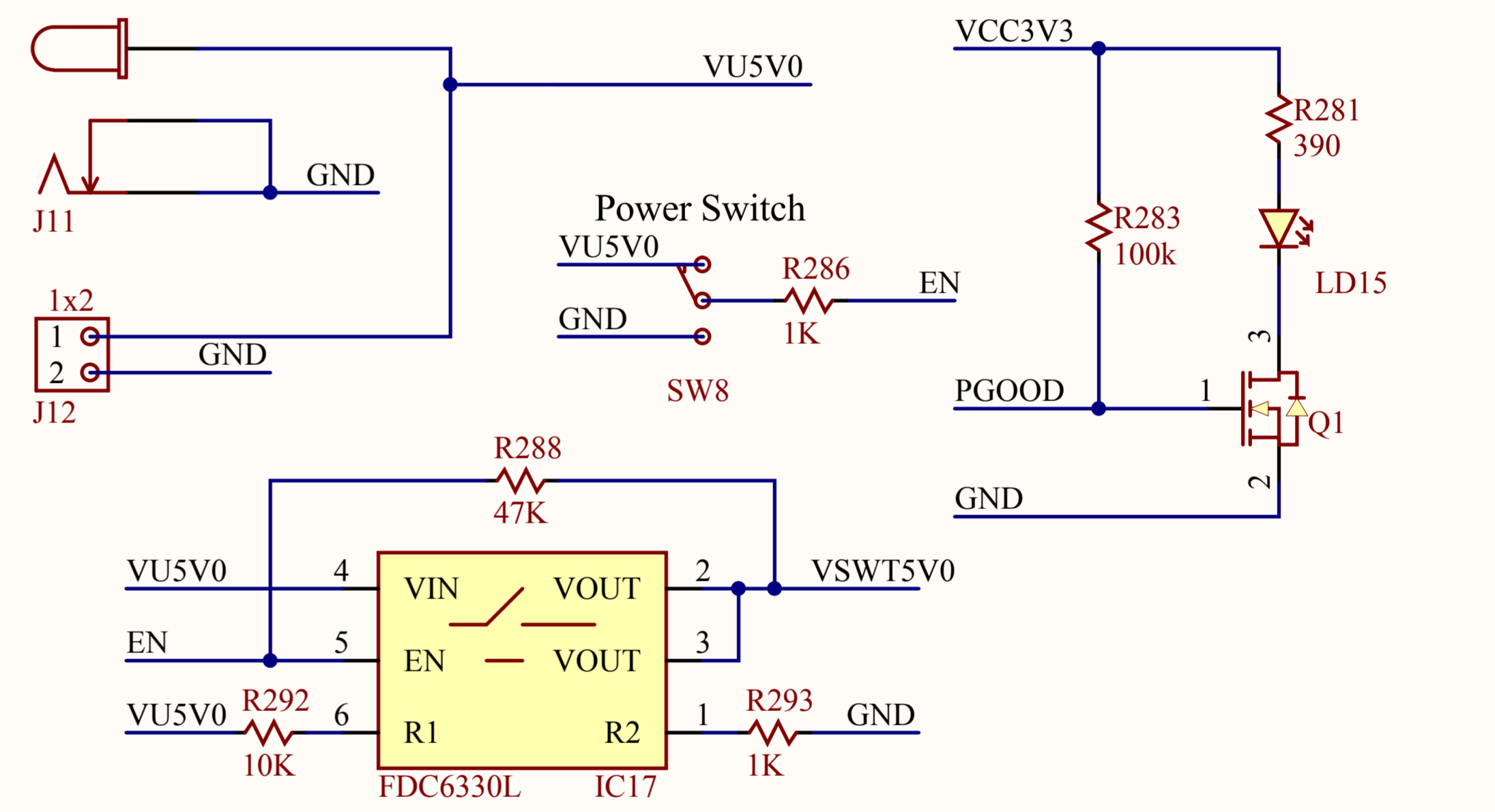
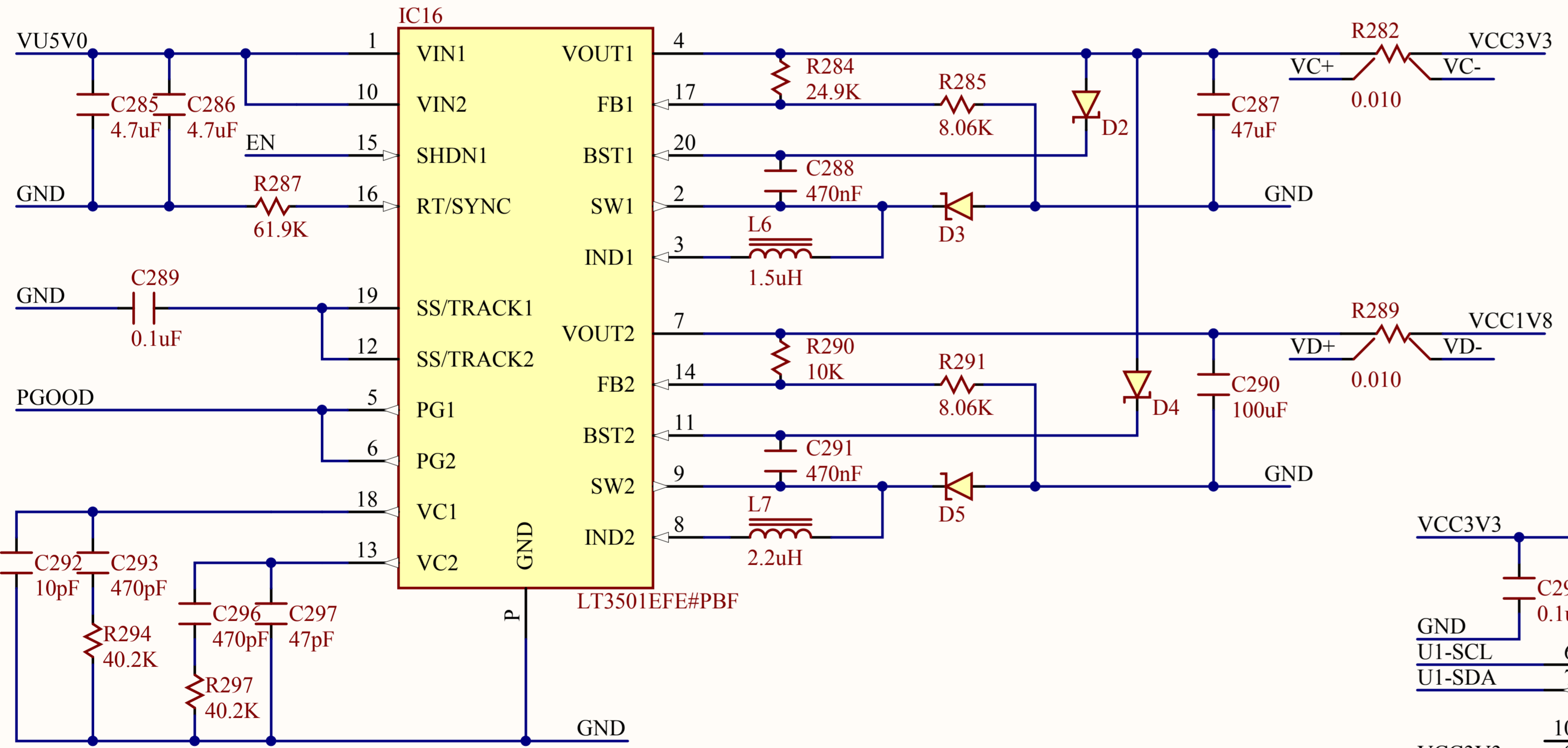
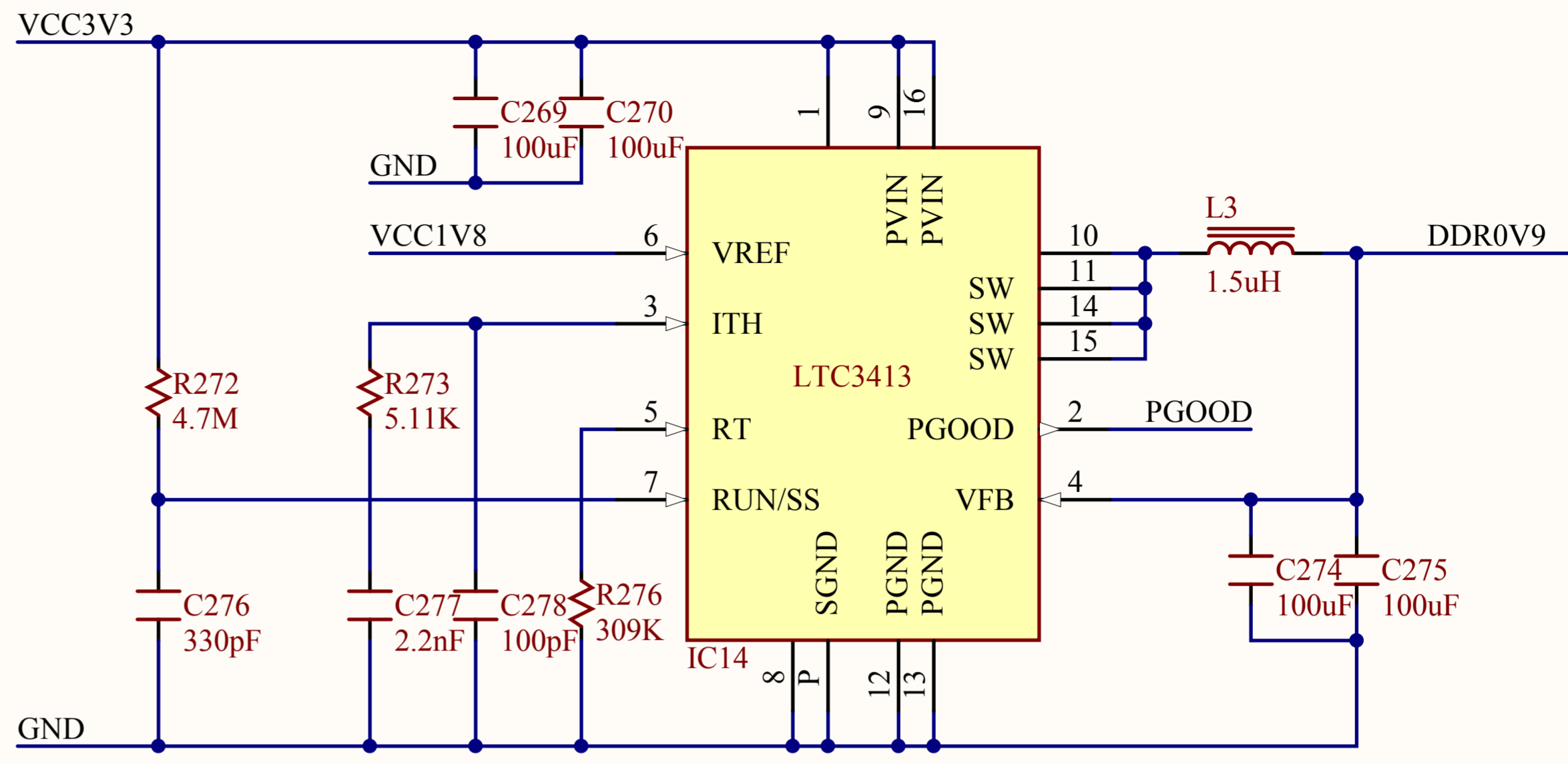
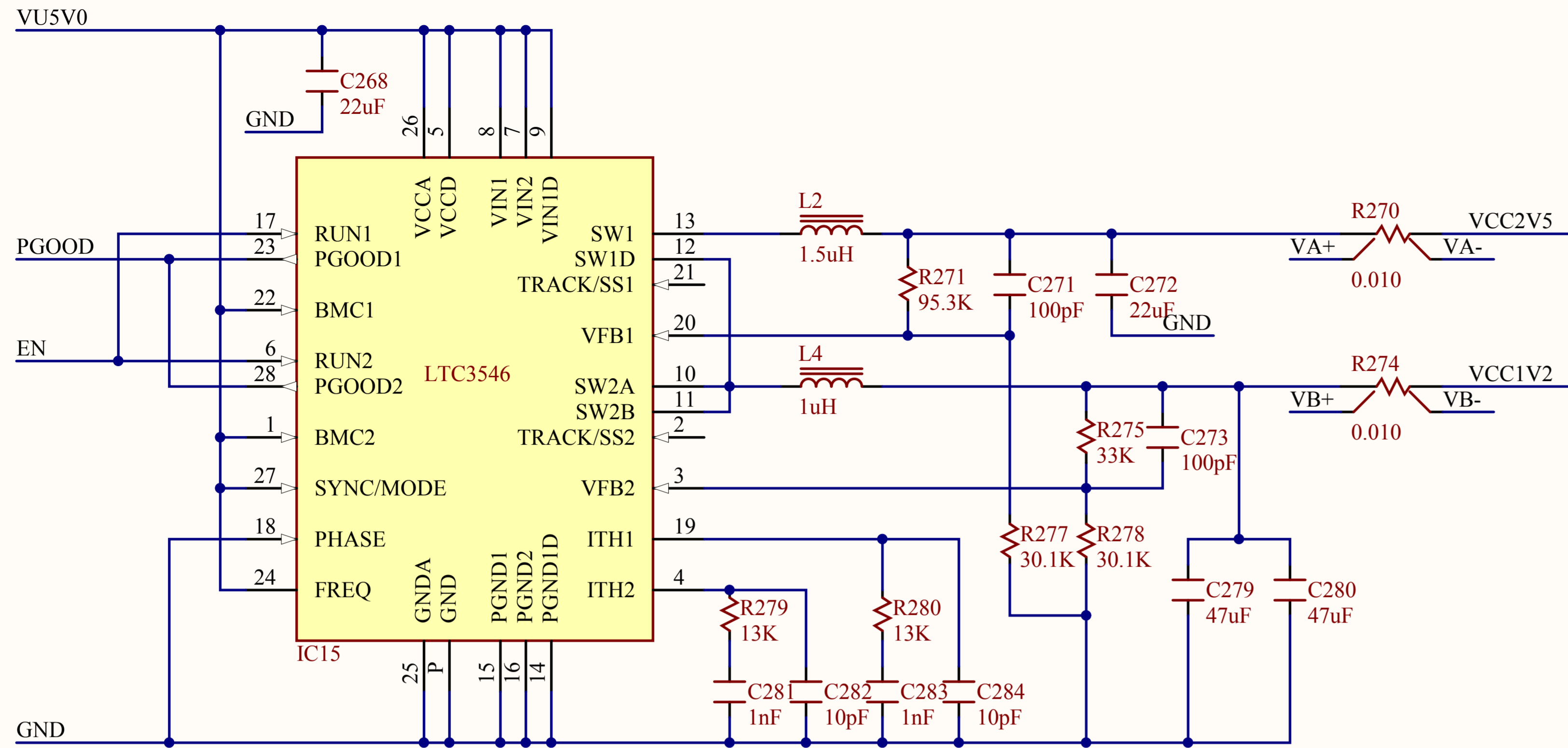
Title		Rev	
<h1>Atlys</h1>		<h2>C.2</h2>	
Circuit		SPARTAN 6	
Doc#		500-178	
Engineer		CC	
Author		GMA	
Date		6/11/2010	
Sheet#		9 out of 12	



www.digilentinc.com



Title		Rev	
<h1>Atlys</h1>		<h1>C.2</h1>	
		Copyright 2010	
Circuit	DDR2	 www.digilentinc.com	
Doc#	500-178		
Engineer	CC		
Author	GMA		
Date	6/11/2010		
Sheet#	11 out of 12		



Title		Rev	
<h1>Atlys</h1>		<h1>C.2</h1>	
Circuit		Copyright 2010	
POWER			
Doc#	500-178		
Engineer	CC		
Author	GMA		
Date	6/11/2010		
Sheet#	12 out of 12		



DIGILENT
www.digilentinc.com