

Connector A

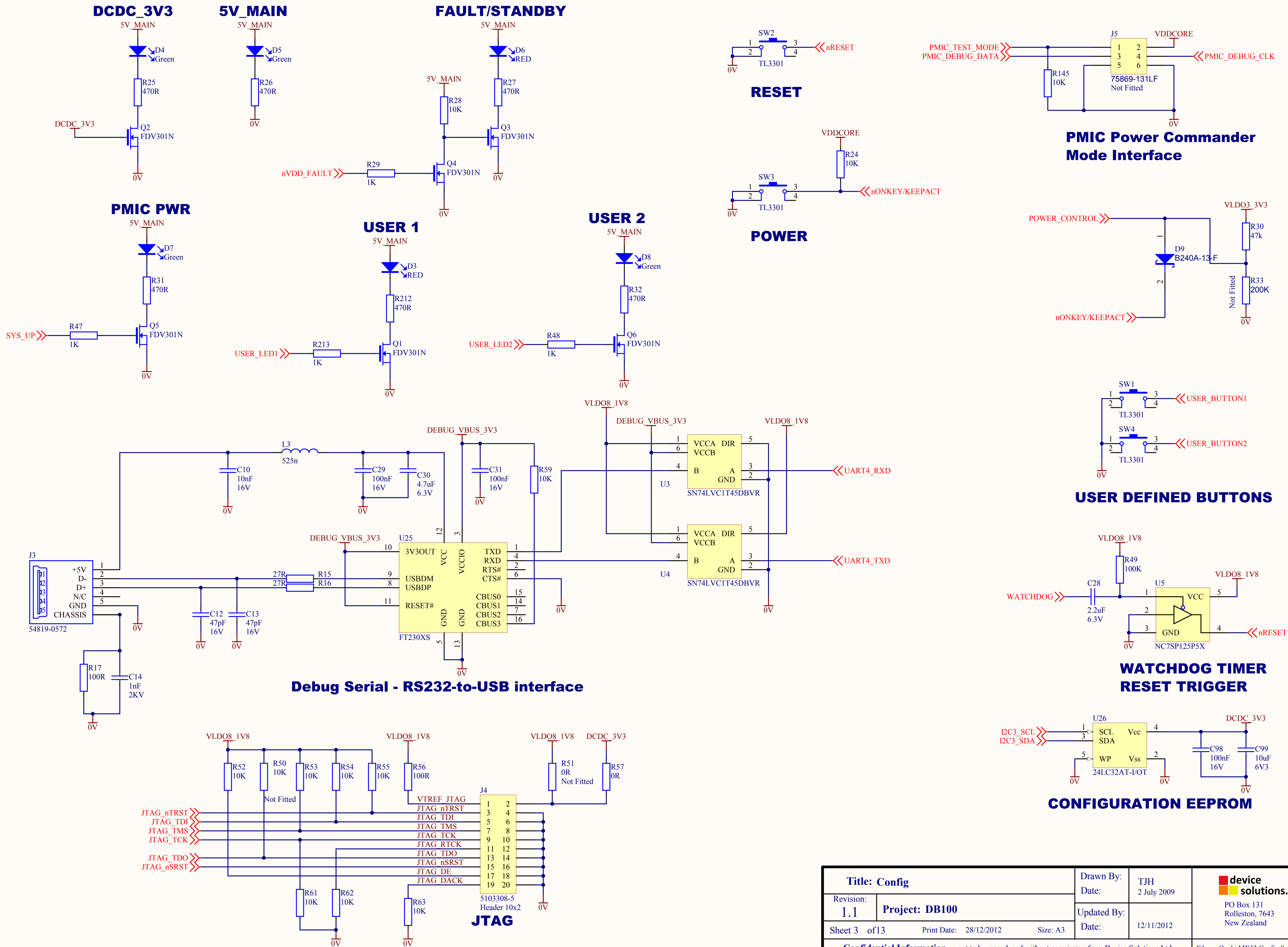
Opal i.MX53 Module part A

Title: Module 1		Drawn By: TJH	 PO Box 131 Rolleston, 7643 New Zealand
Revision: 1.1	Project: DB100	Date: 2 July 2009	
Sheet 1 of 13	Print Date: 28/12/2012	Size: A3	Updated By: *
Date: 12/11/2012			
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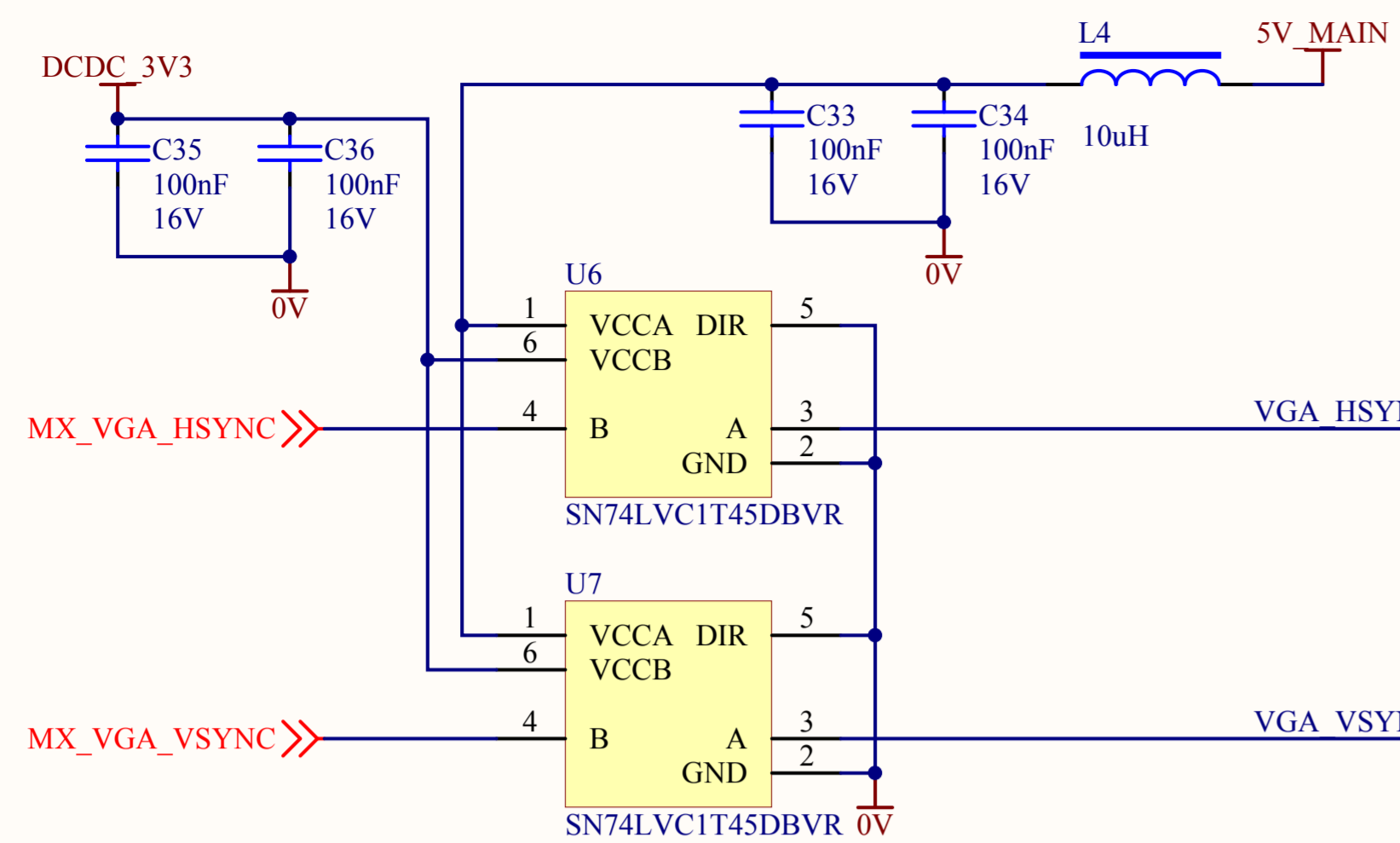


Opal i.MX53 Module part A
Connector B

Title: Module 2		Drawn By: TJH	 PO Box 131 Rolleston, 7643 New Zealand
Revision: 1.1	Project: DB100	Date: 2 July 2009	
Sheet 2 of 13		Updated By: *	File: Opal i.MX53 Module2.SchDoc
Print Date: 28/12/2012		Date: 29/10/2012	
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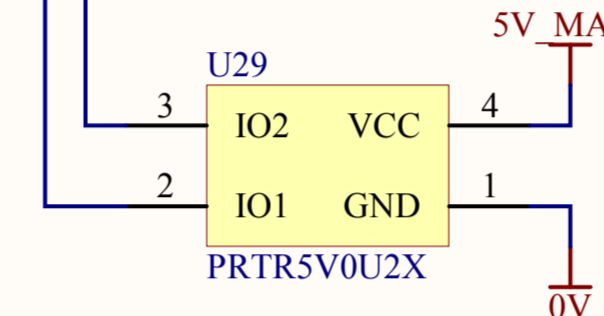
Title: Config		Drawn By:	TJH	 PO Box 131 Rolleston, 7643 New Zealand
Revision:	1.1	Date:	2 July 2009	
Project: DB100		Updated By:		File: Opal i.MX53 Config.SchDoc
Sheet 3 of 13	Print Date: 28/12/2012	Date:	12/11/2012	
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VGA VOLTAGE TRANSLATION

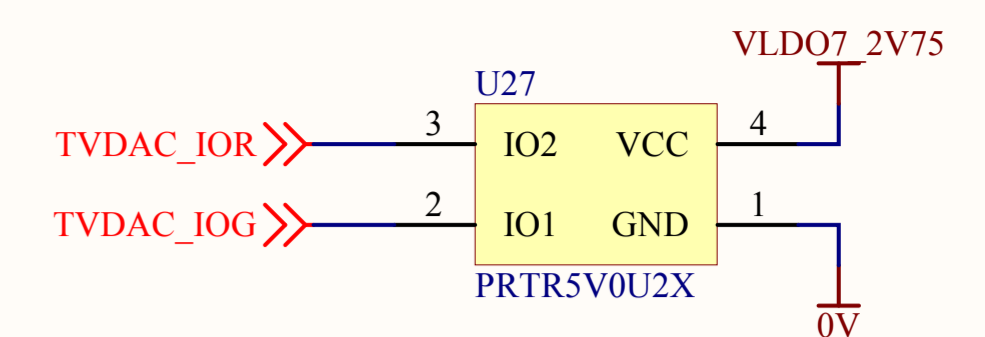
- TVDAC_IOR
- TVCDC_IOR_BACK
- TVDAC_IOG
- TVCDC_IOG_BACK
- TVDAC_IOB
- TVCDC_IOB_BACK

placement notes?



ESD protection
Place close to J6

VGA VIDEO

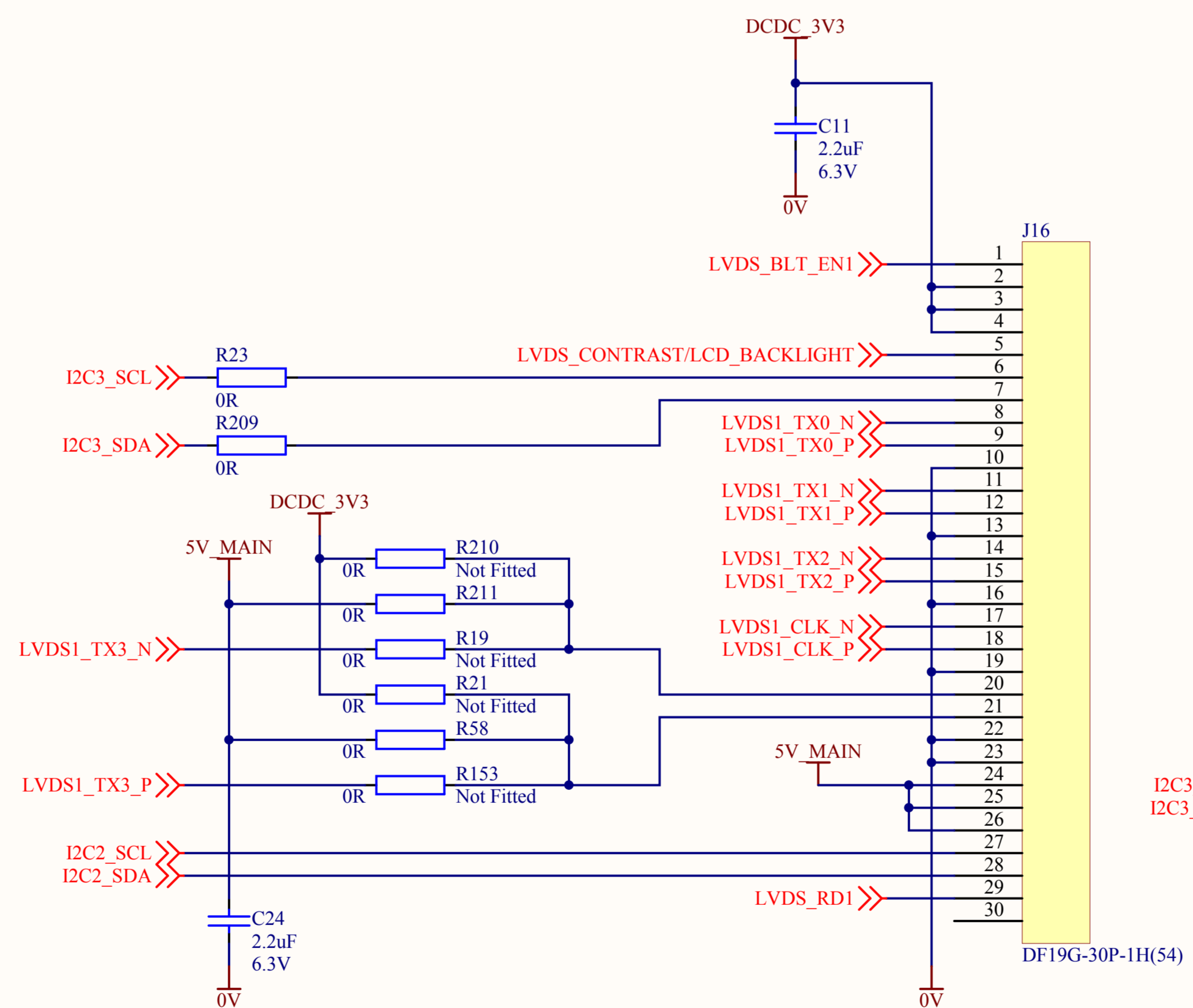
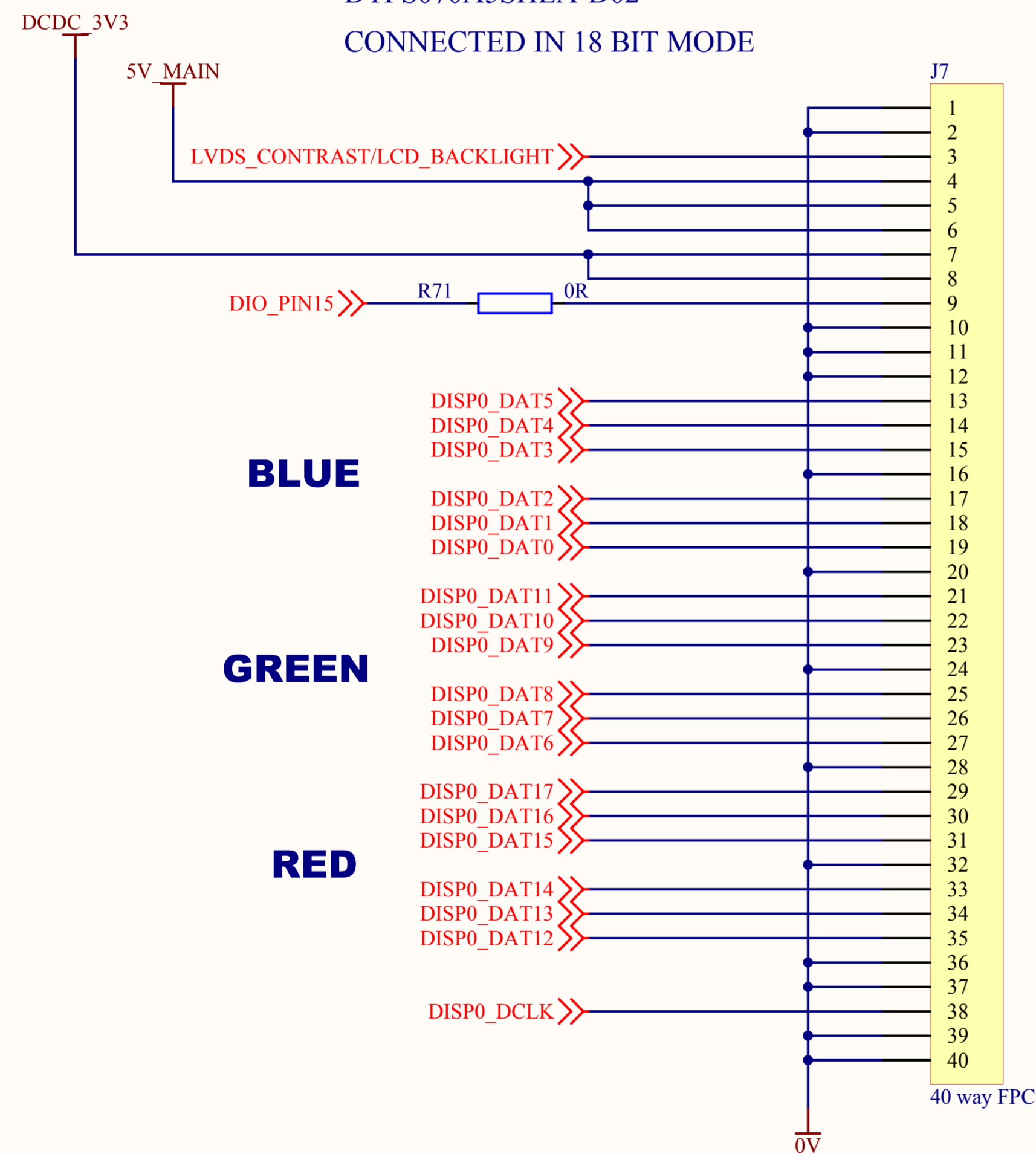


ESD protection
Place close to J6

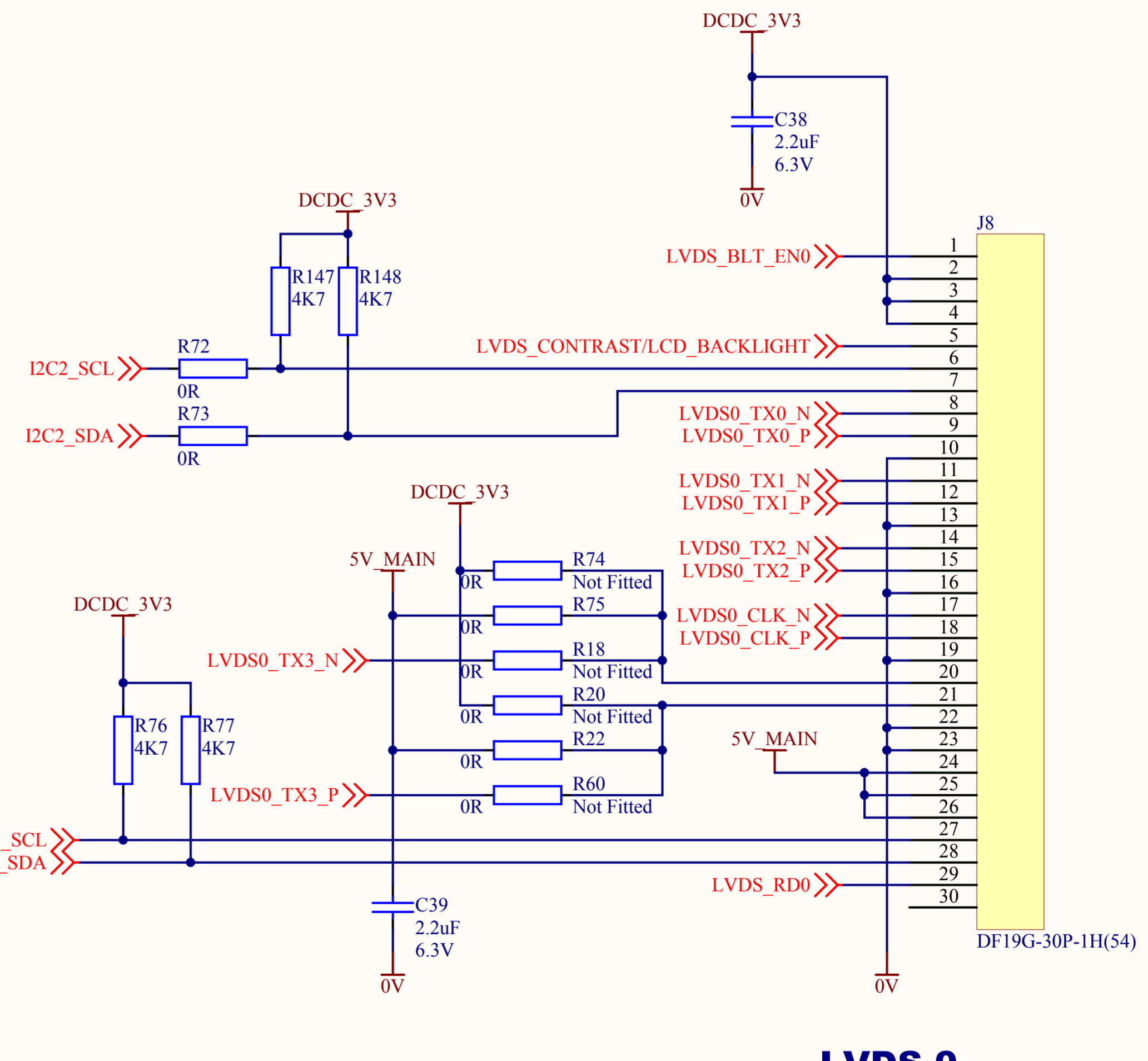
- I2C Notes:
- I2C1 - 1.8V
4k7 pullups on the Opal Module
PMIC: 0x90/0x91
Accelerometer: 0x38
 - I2C2 - 3.3V
4k7 pullups on this page
Audio:
LVDS Connector: TBD
 - I2C3 - 3.3V
4k7 pullups on this page
LVDS Connector: TBD
Config EEPROM: 0x50

7" LCD

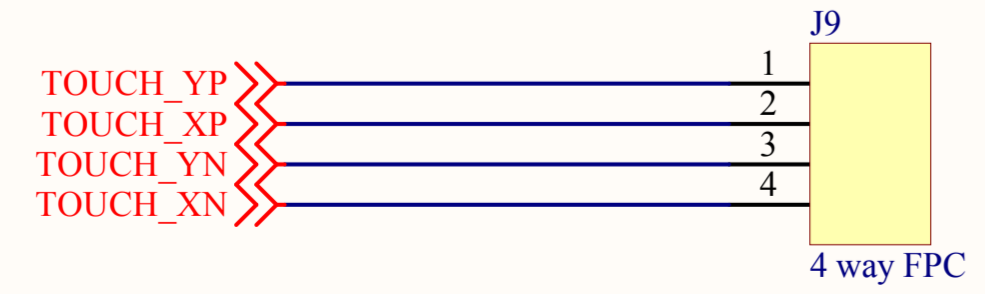
DTFS070A5SHLA-D02
CONNECTED IN 18 BIT MODE



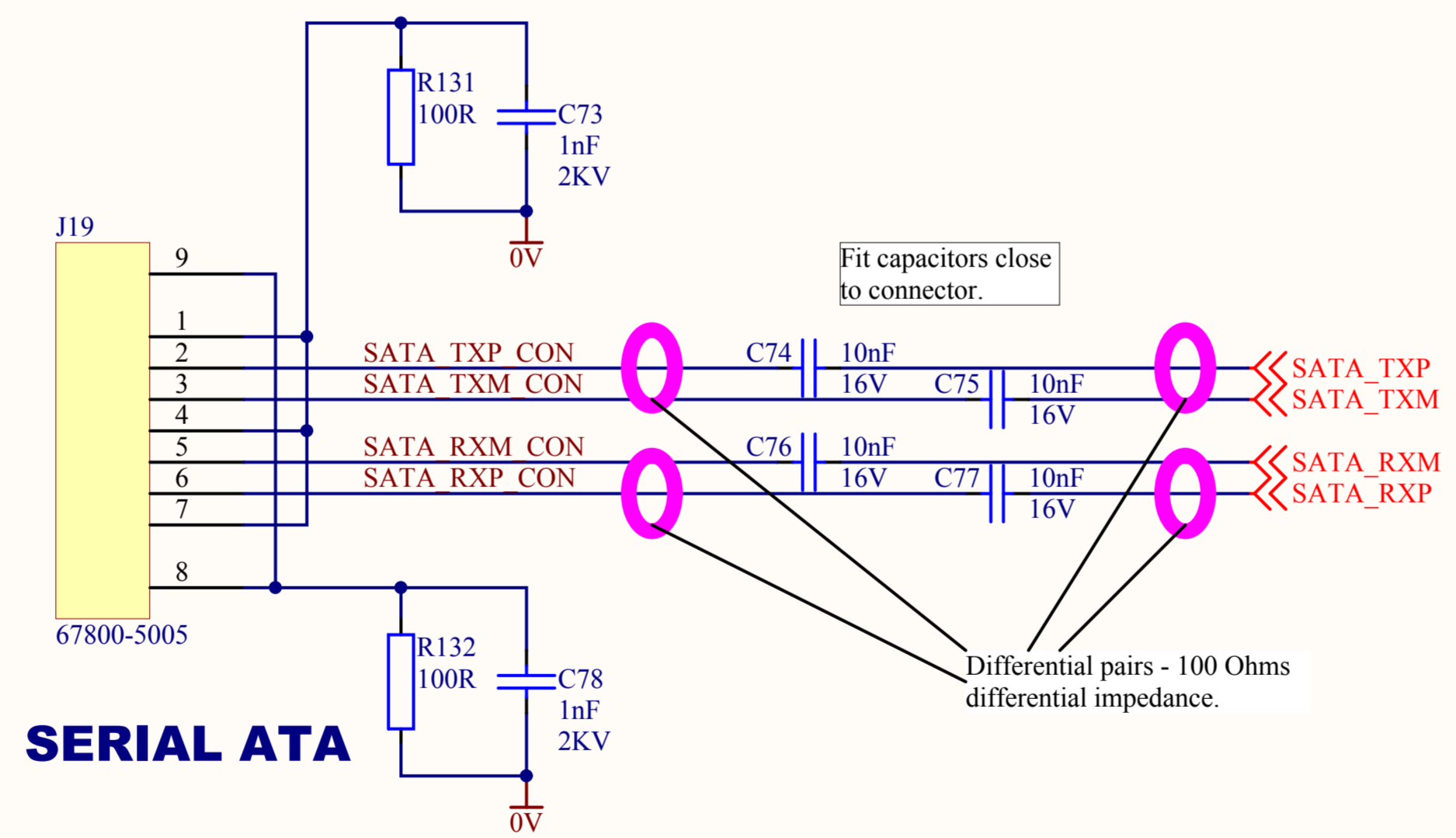
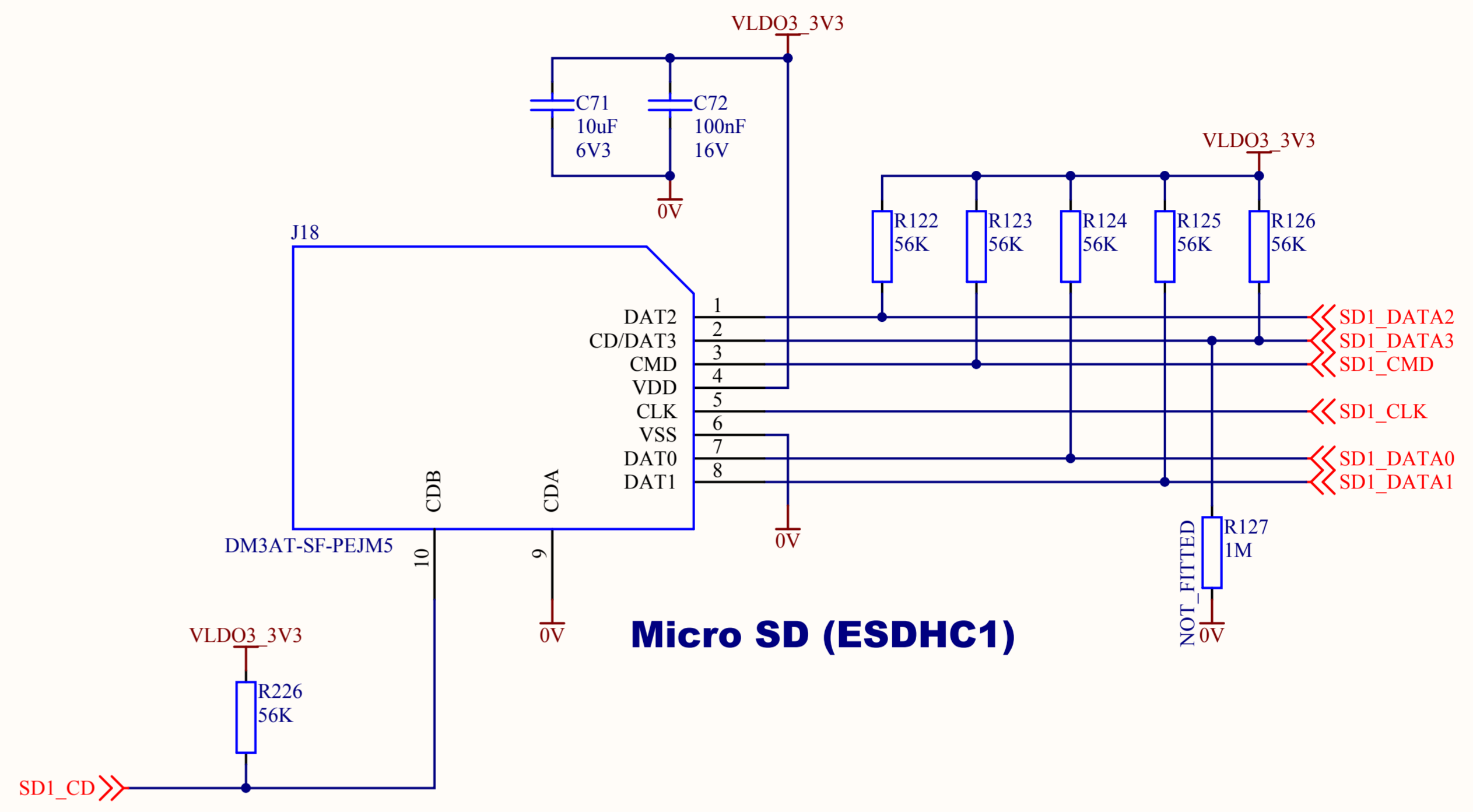
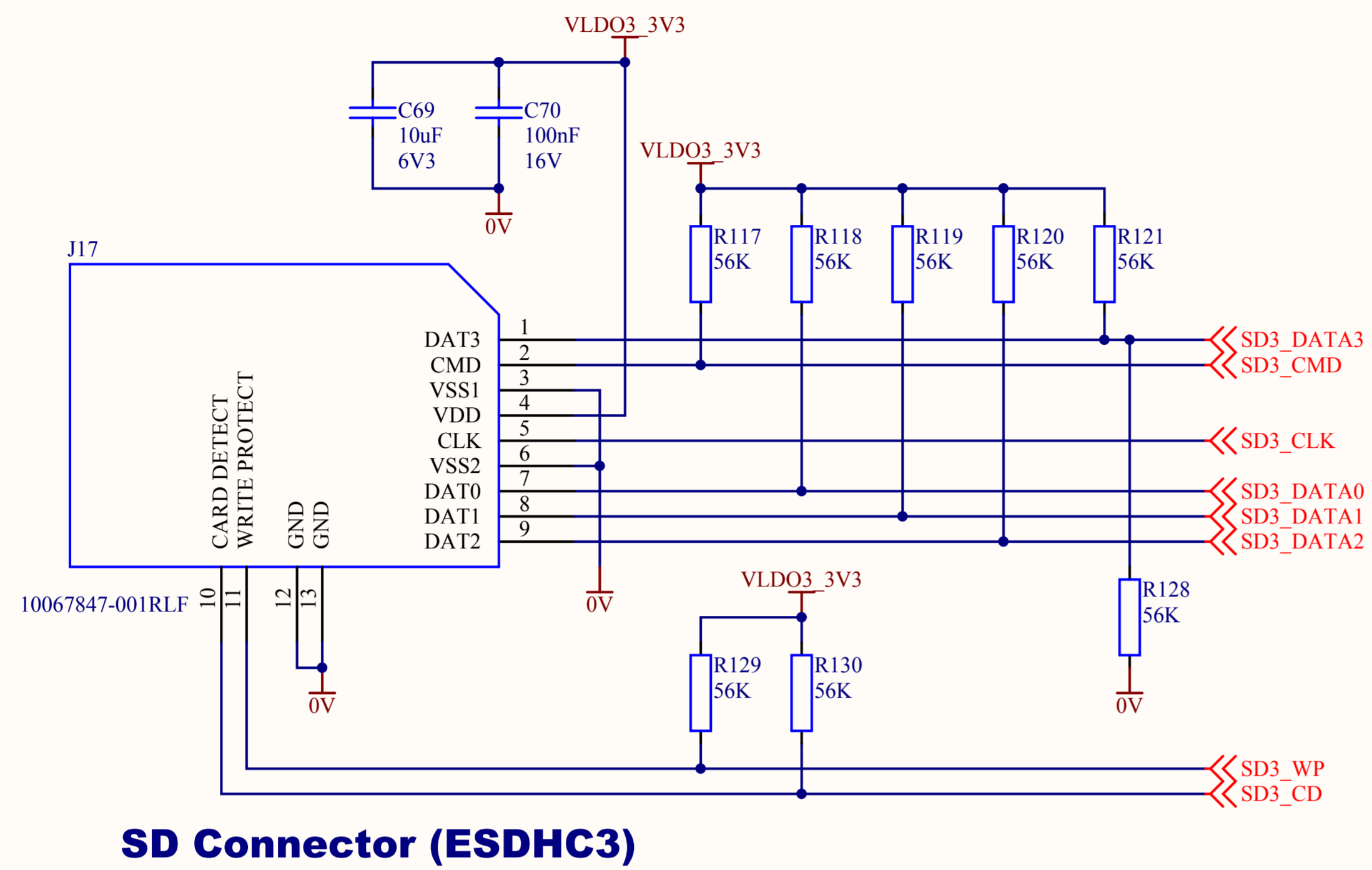
LVDS 1



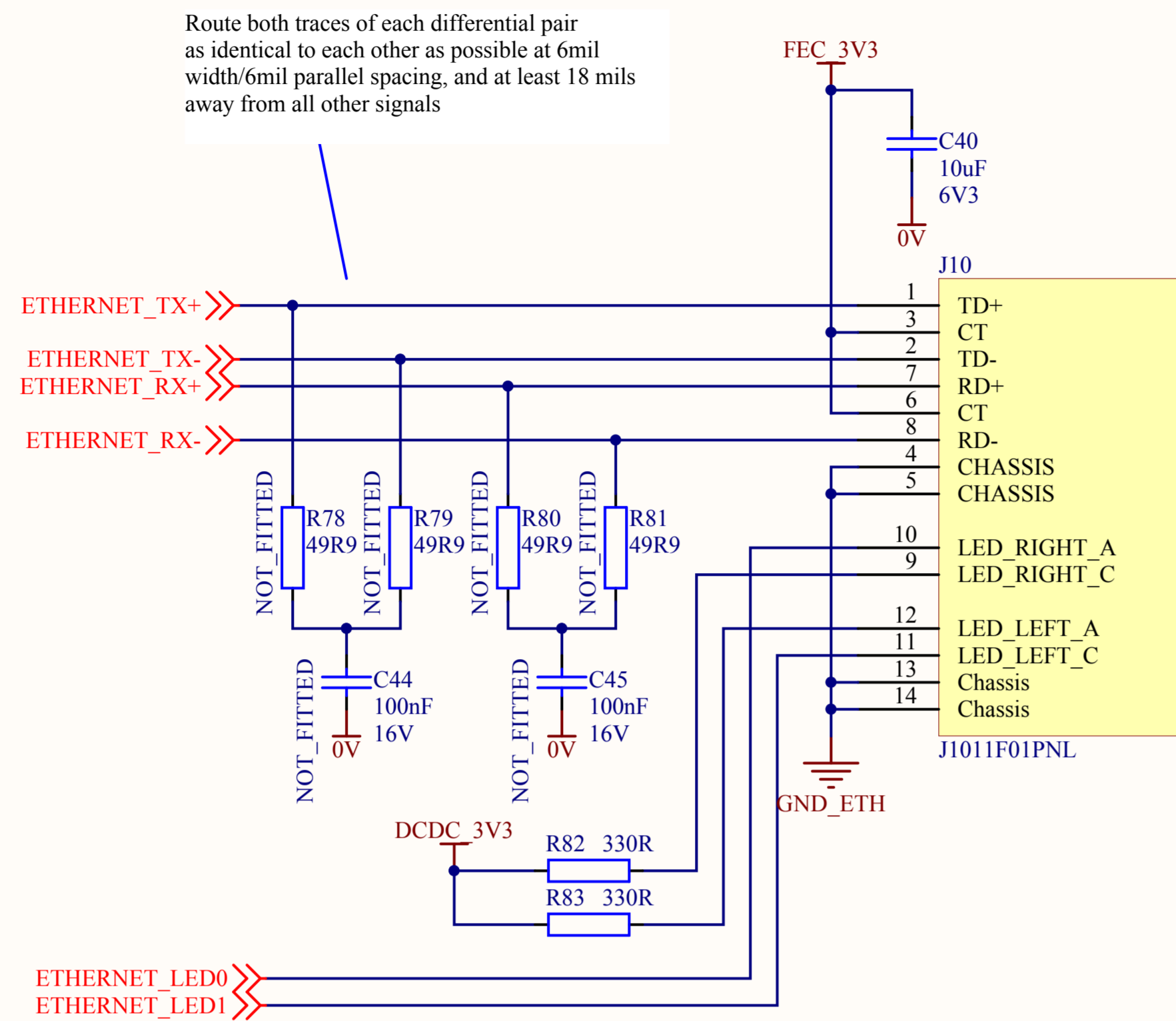
LVDS 0



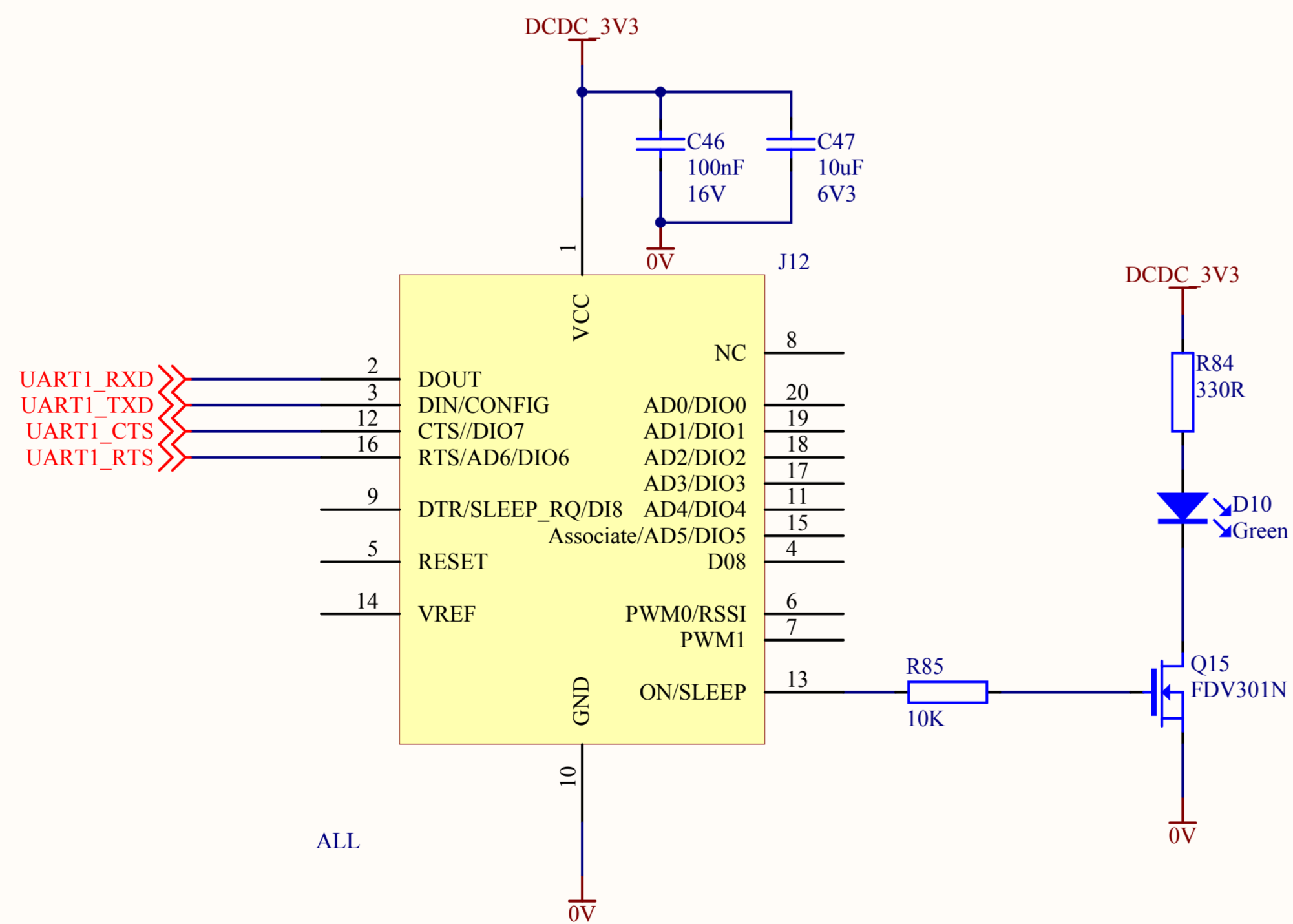
Title: Display		Drawn By: TJH	device solutions.net
Revision: 1.1	Project: DB100	Date: 16 May 2011	
Sheet 4 of 13	Print Date: 28/12/2012	Size: A3	PO Box 131 Rolleston, 7643 New Zealand
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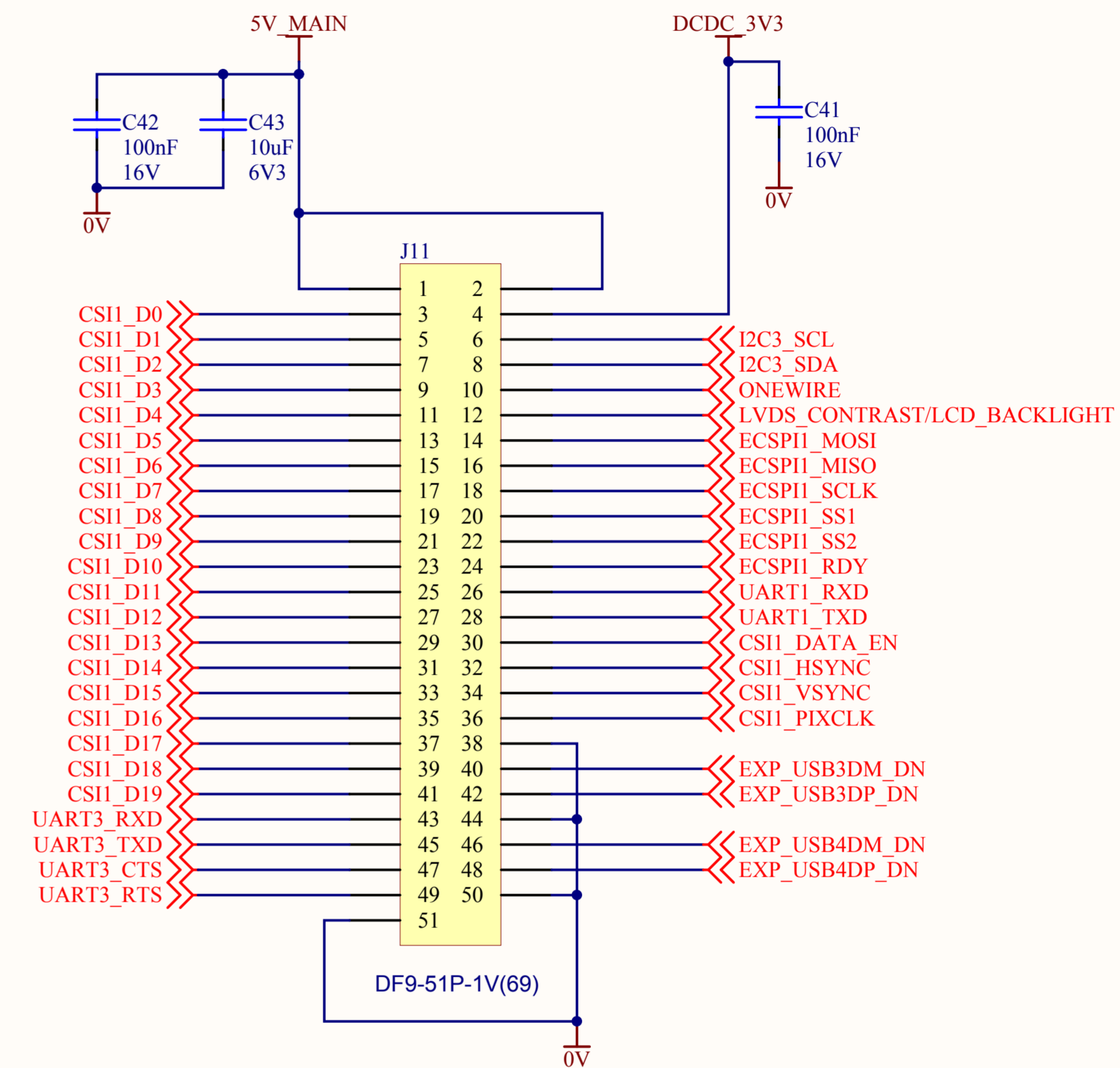
Title: Storage		Drawn By: TJH	 PO Box 131 Rolleston, 7643 New Zealand
Revision: 1.1	Project: DB100	Date: 16 May 2011	
Sheet 5 of 13	Print Date: 28/12/2012	Size: A3	Updated By: *
Date: 29/10/2012			File: Opal i.MX53 Storage.SchDoc
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ETHERNET RJ45

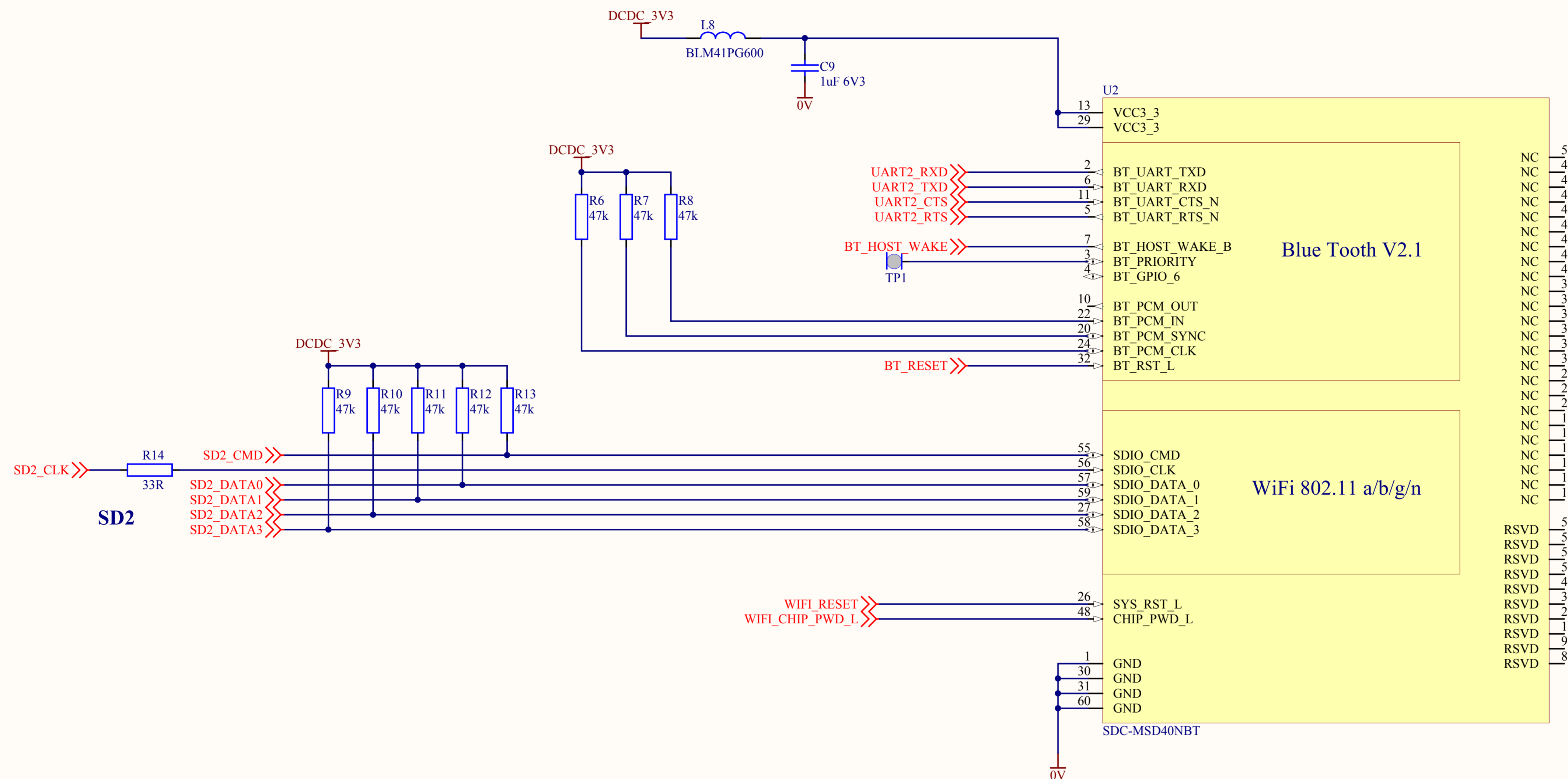


XBEE MODULE

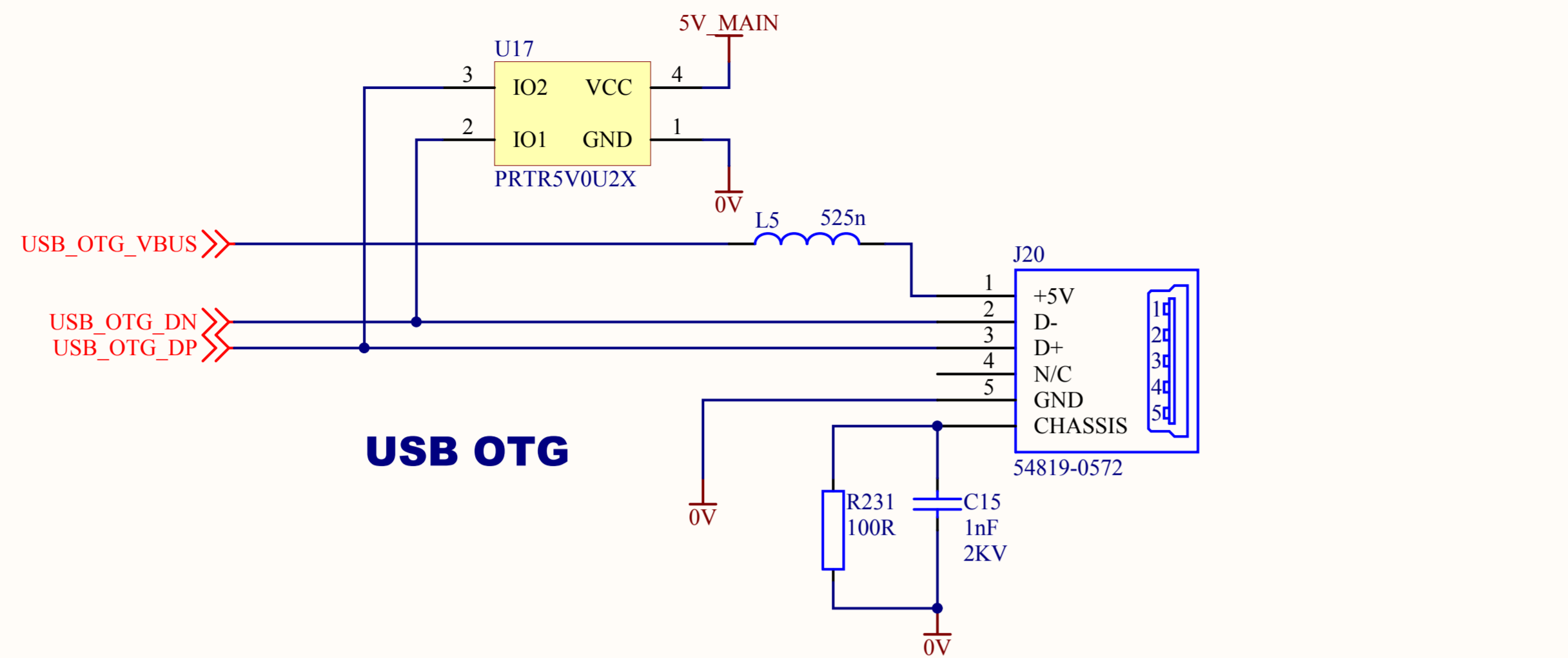


EXPANSION

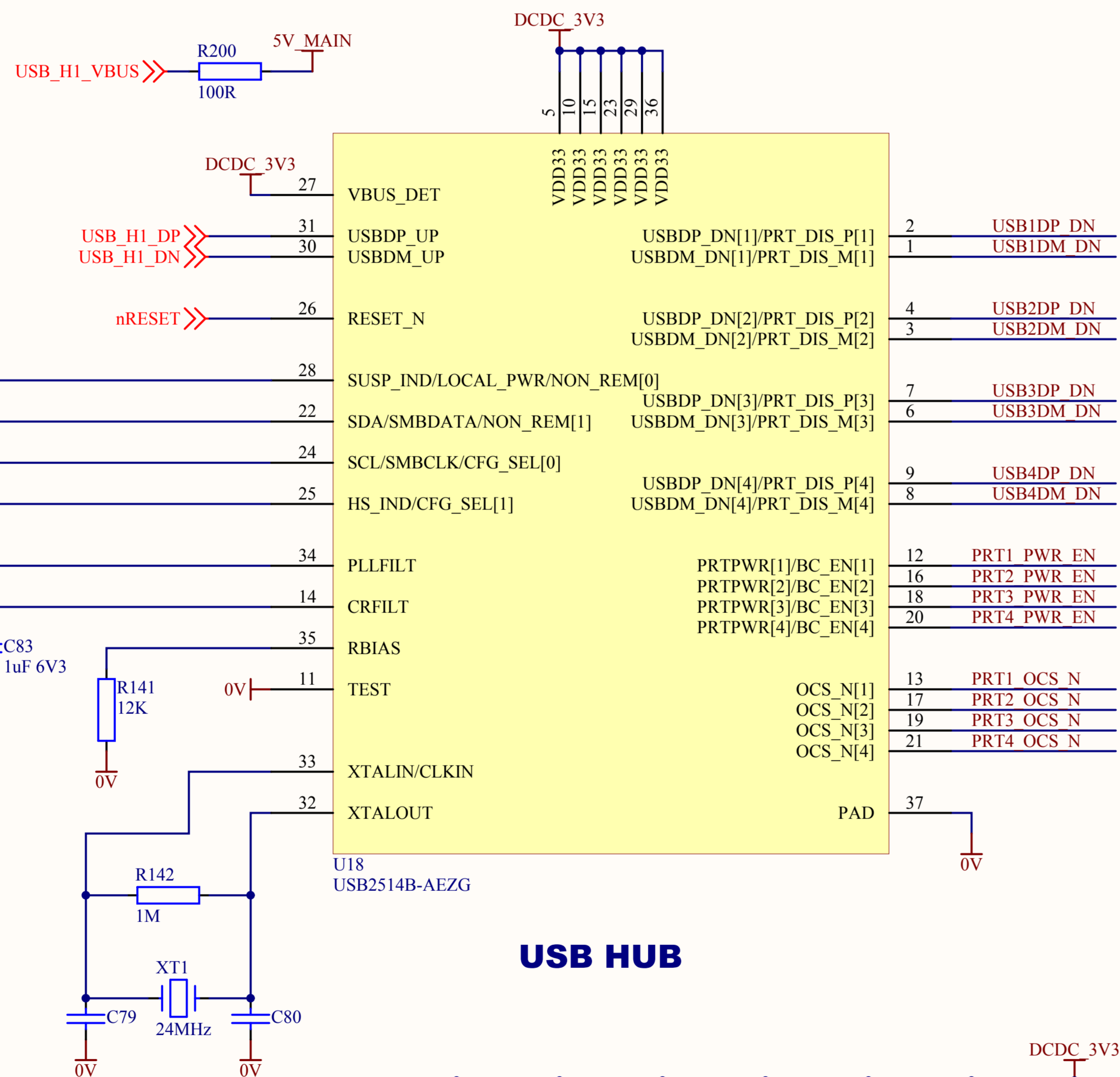
Title: Ethernet & XBEE		Drawn By: TJH	 PO Box 131 Rolleston, 7643 New Zealand
Revision: 1.1	Project: DB100	Date: 16 May 2011	
Sheet 6 of 13	Print Date: 28/12/2012	Size: A3	Updated By: *
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File: Opal i.MX53 Ethernet and XBee.SchDoc			



Title: WiFi & Blue Tooth		Drawn By: MAB	 PO Box 131 Rolleston, 7643 New Zealand
Revision: 1.1	Project: DB100	Date: 1 June 2012	
Sheet 7 of 13	Print Date: 28/12/2012	Size: A3	Updated By: *
Date: 29/10/2012			
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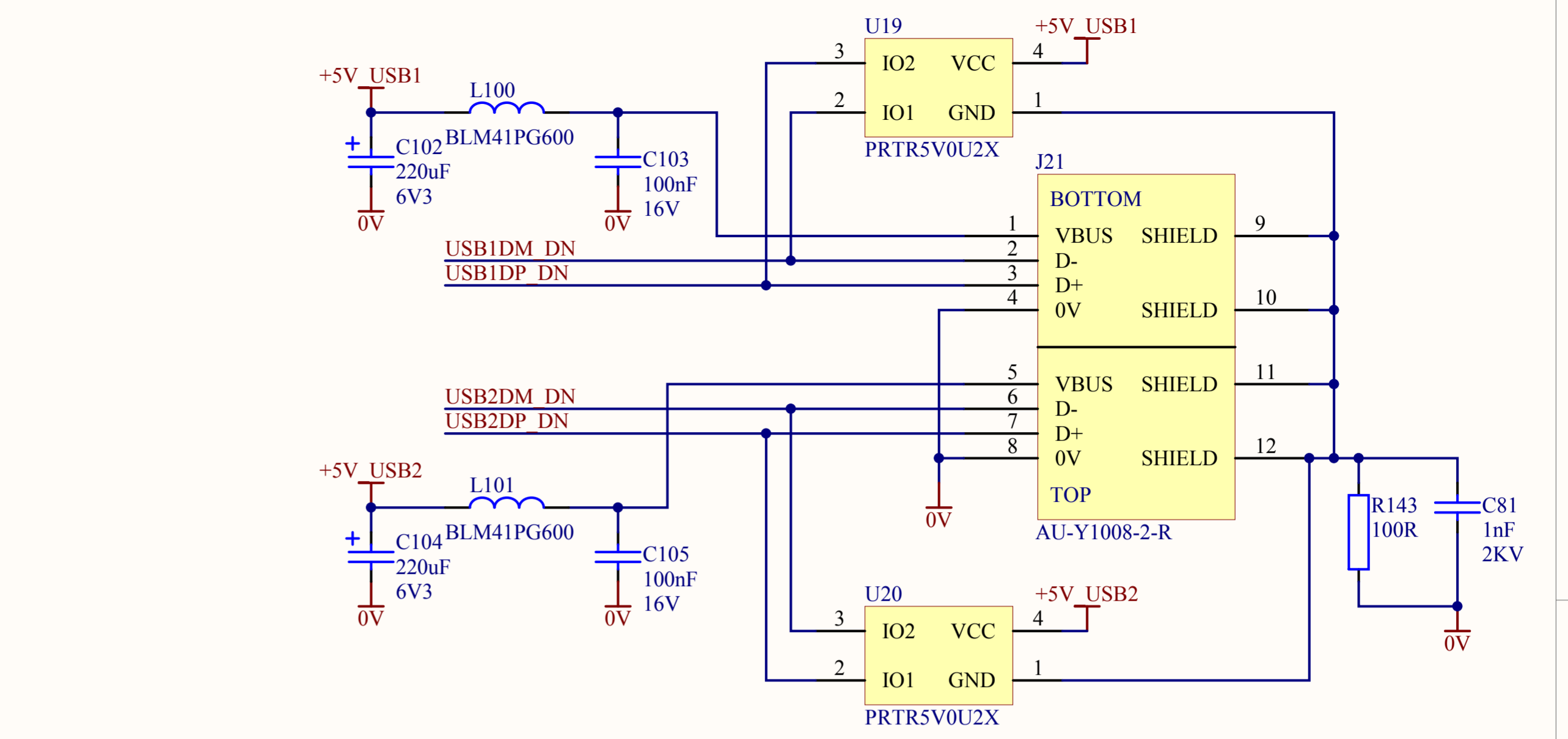


USB OTG



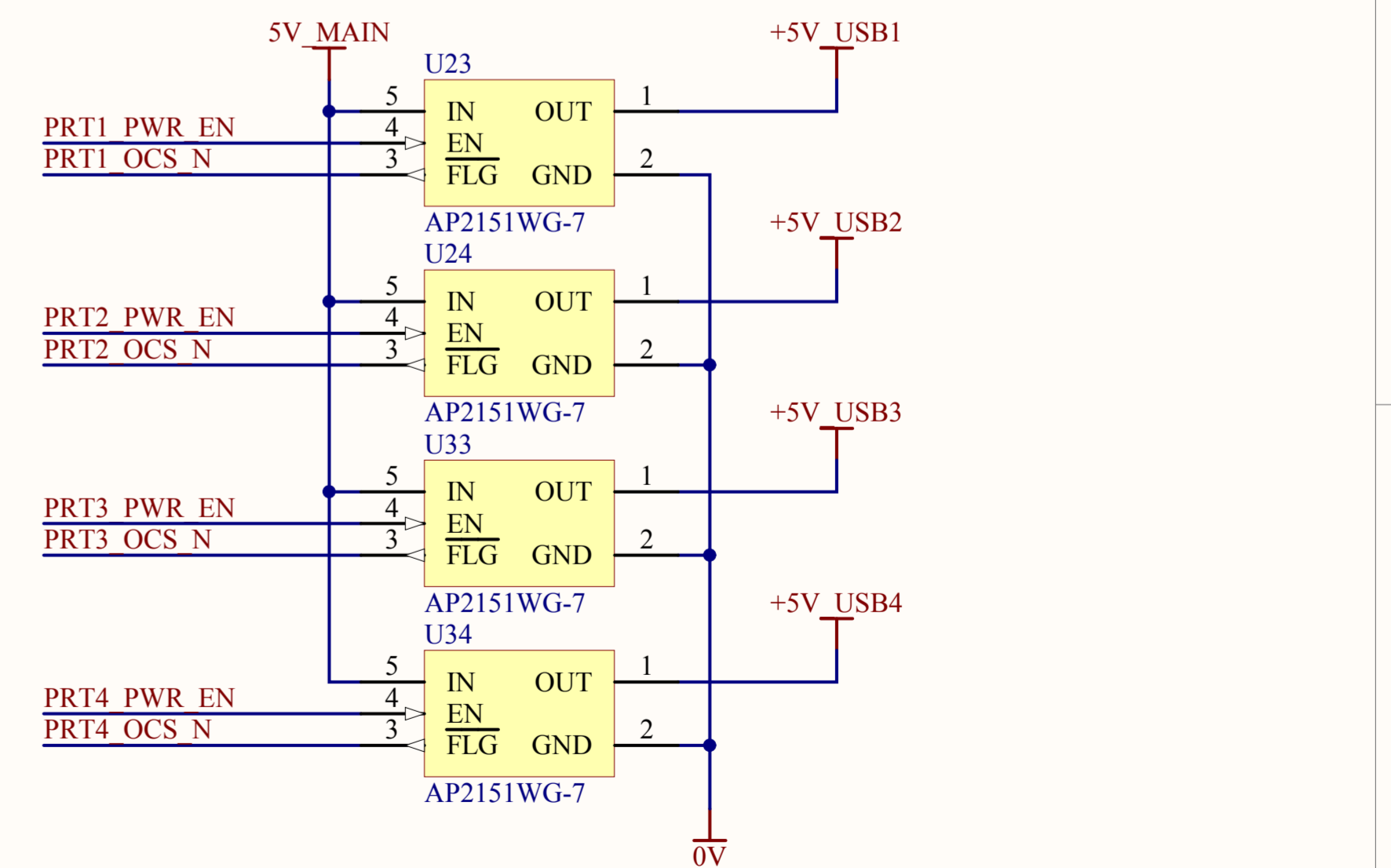
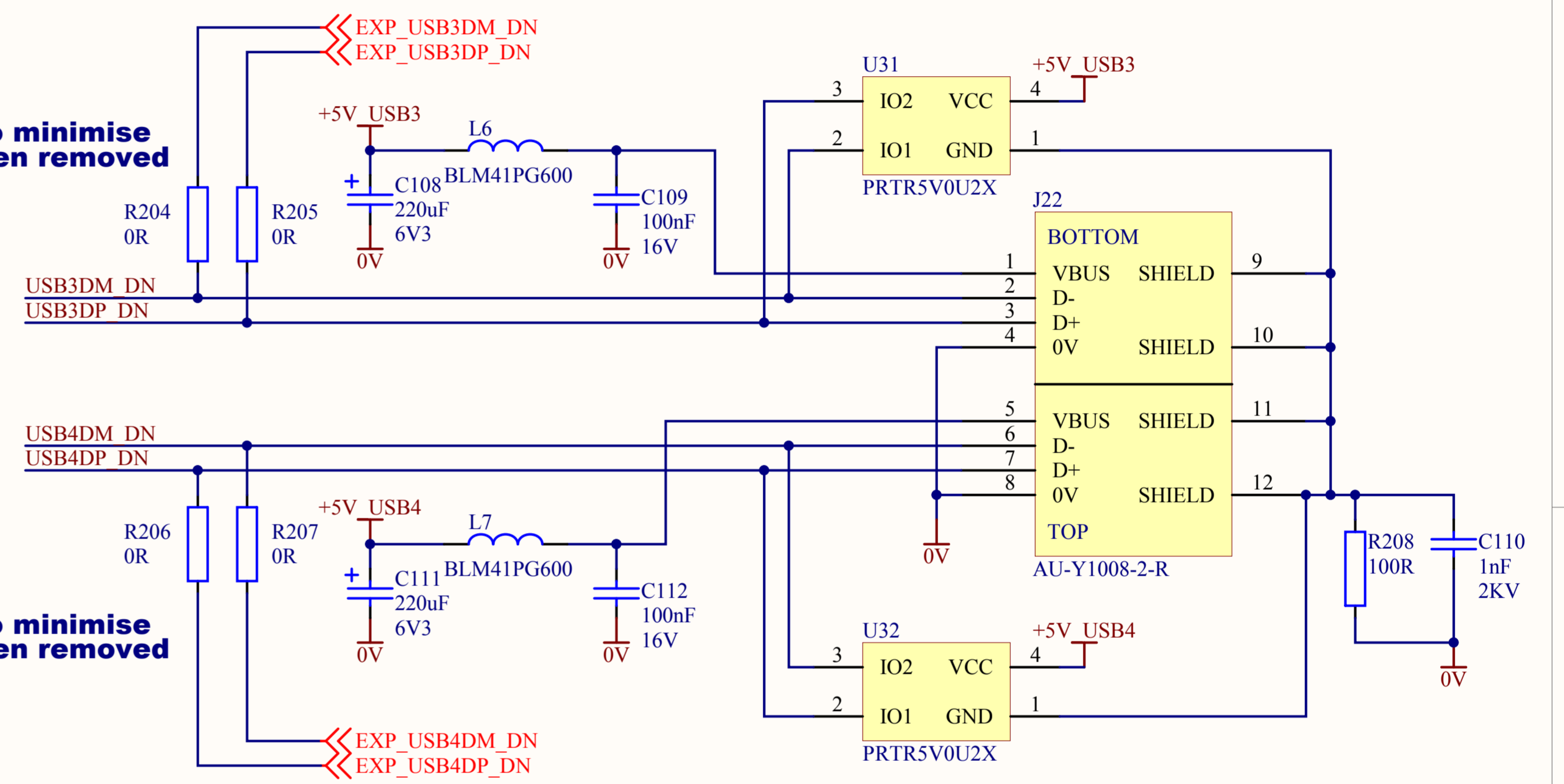
USB HUB

Decoupling for U18

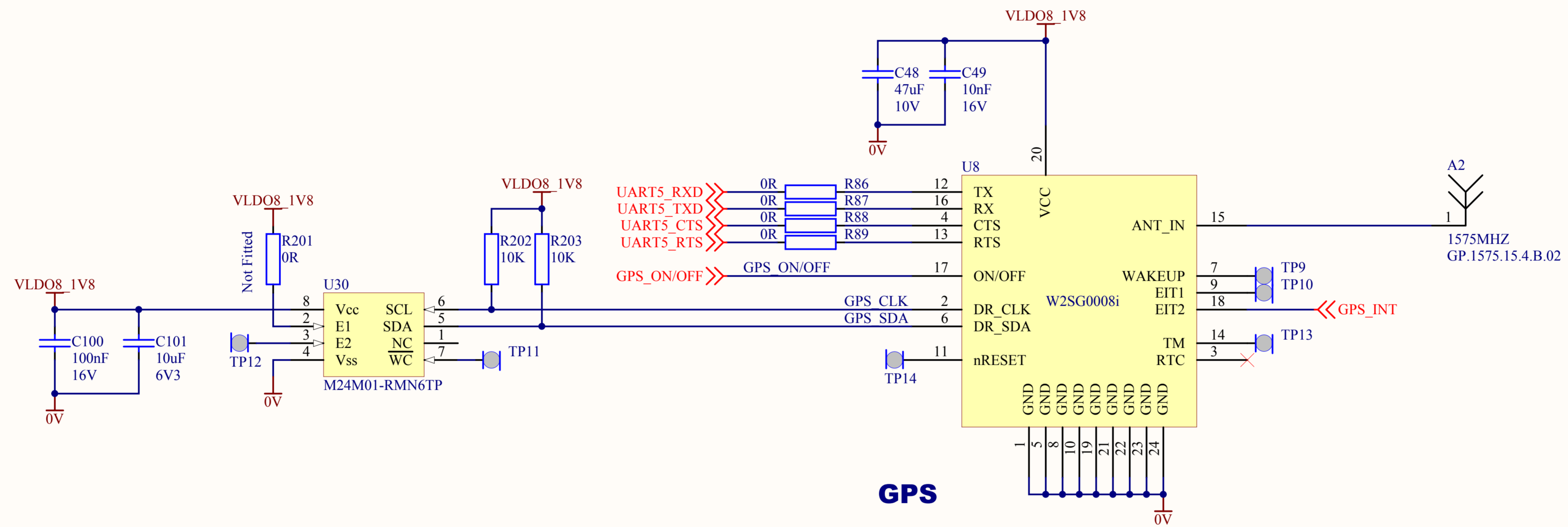



Place to minimise stubs when removed

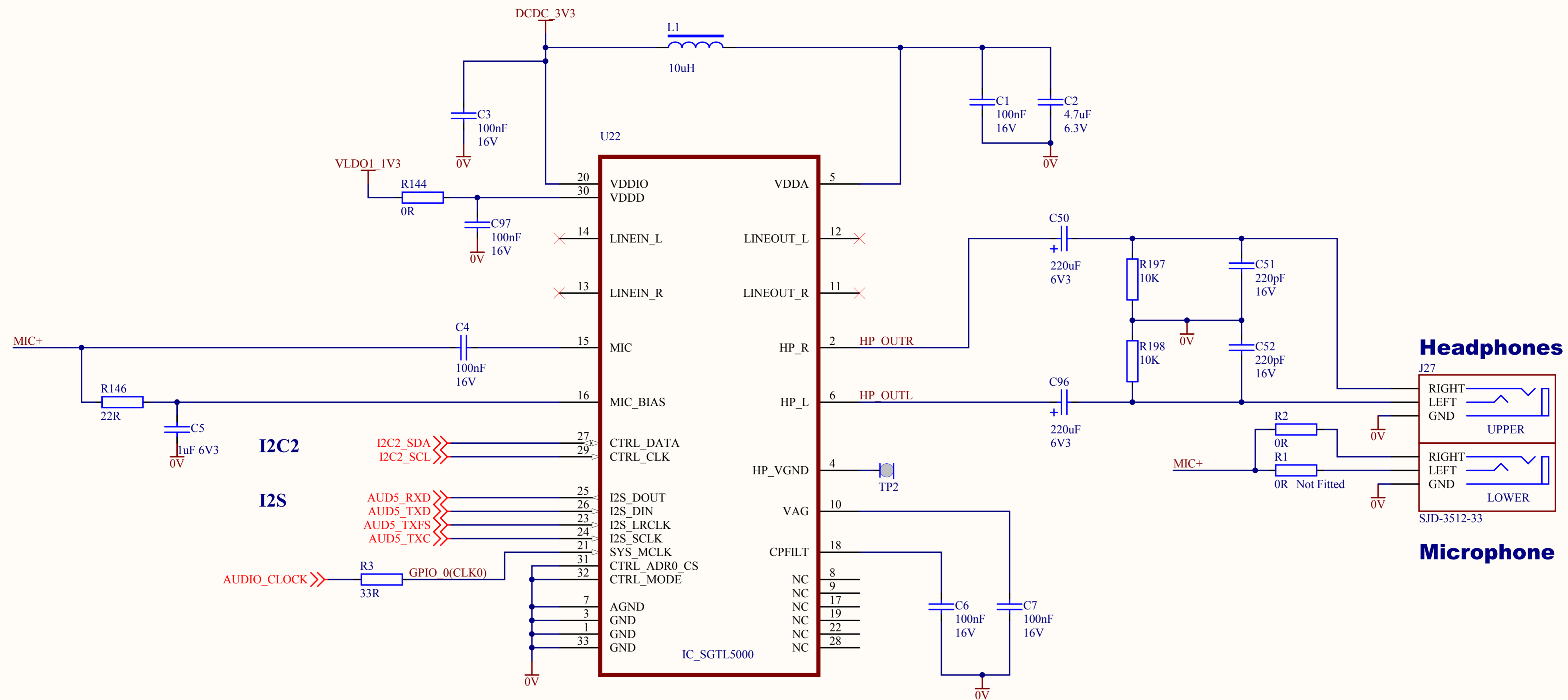
Place to minimise stubs when removed



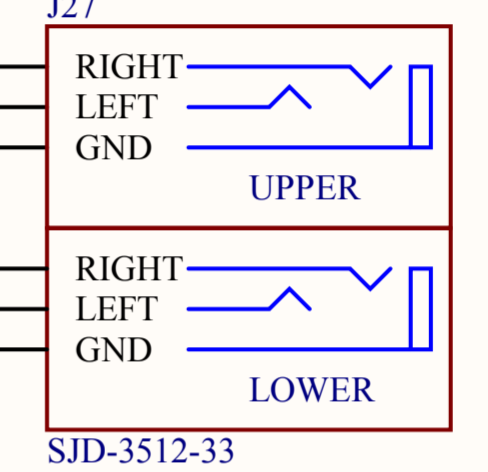
Title: USB		Drawn By: TJH	device solutions.net
Revision: 1.1	Project: DB100	Date: 16 May 2011	
Sheet 8 of 13	Print Date: 28/12/2012	Updated By: *	PO Box 131 Rolleston, 7643 New Zealand
	Size: A3	Date: 29/10/2012	
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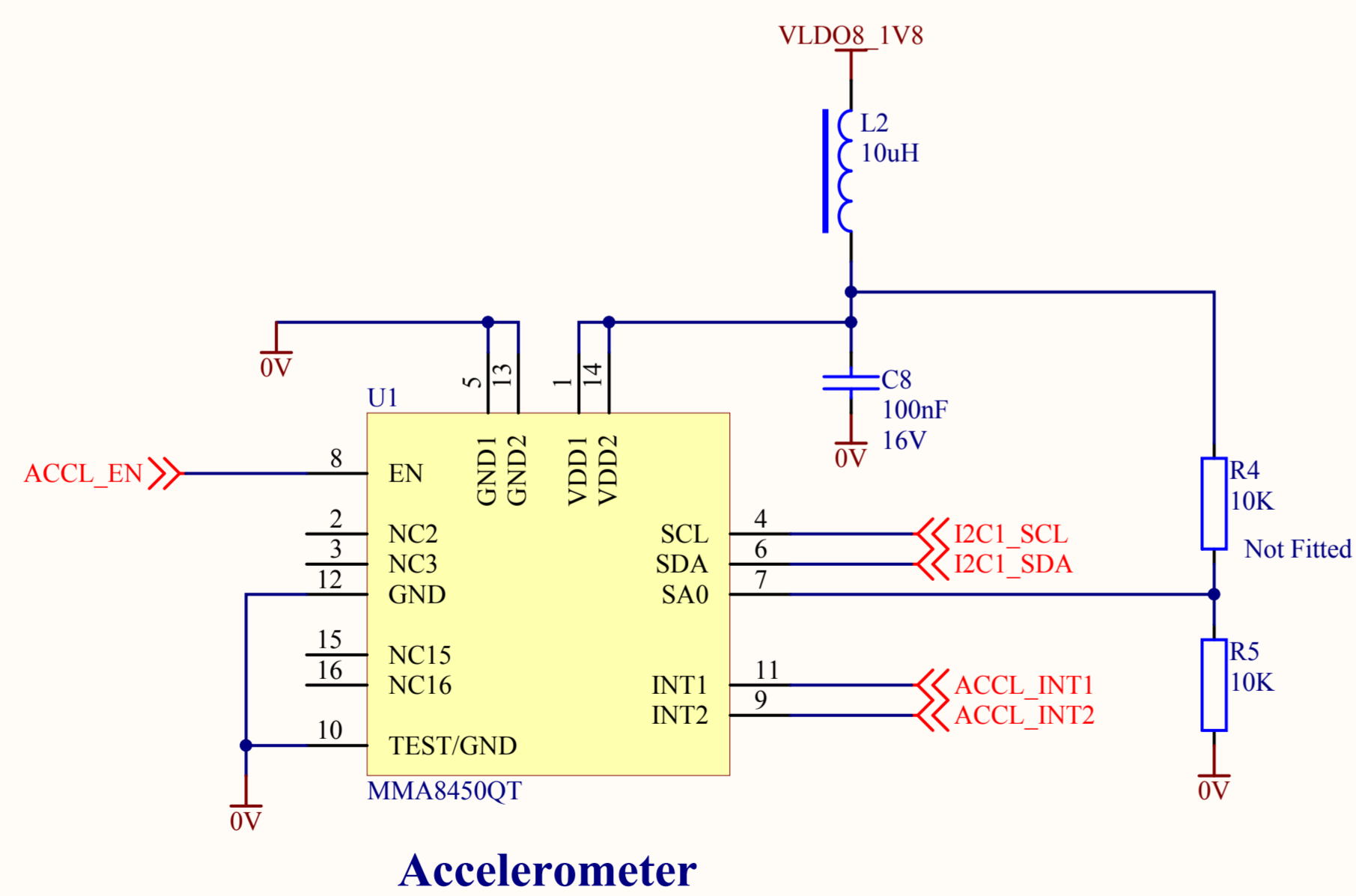
Title: GPS		Drawn By: TJH	 PO Box 131 Rolleston, 7643 New Zealand
Revision: 1.1	Project: DB100	Date: 16 May 2011	
Sheet 9 of 13	Print Date: 28/12/2012	Size: A3	Updated By: * Date: 29/10/2012
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Headphones

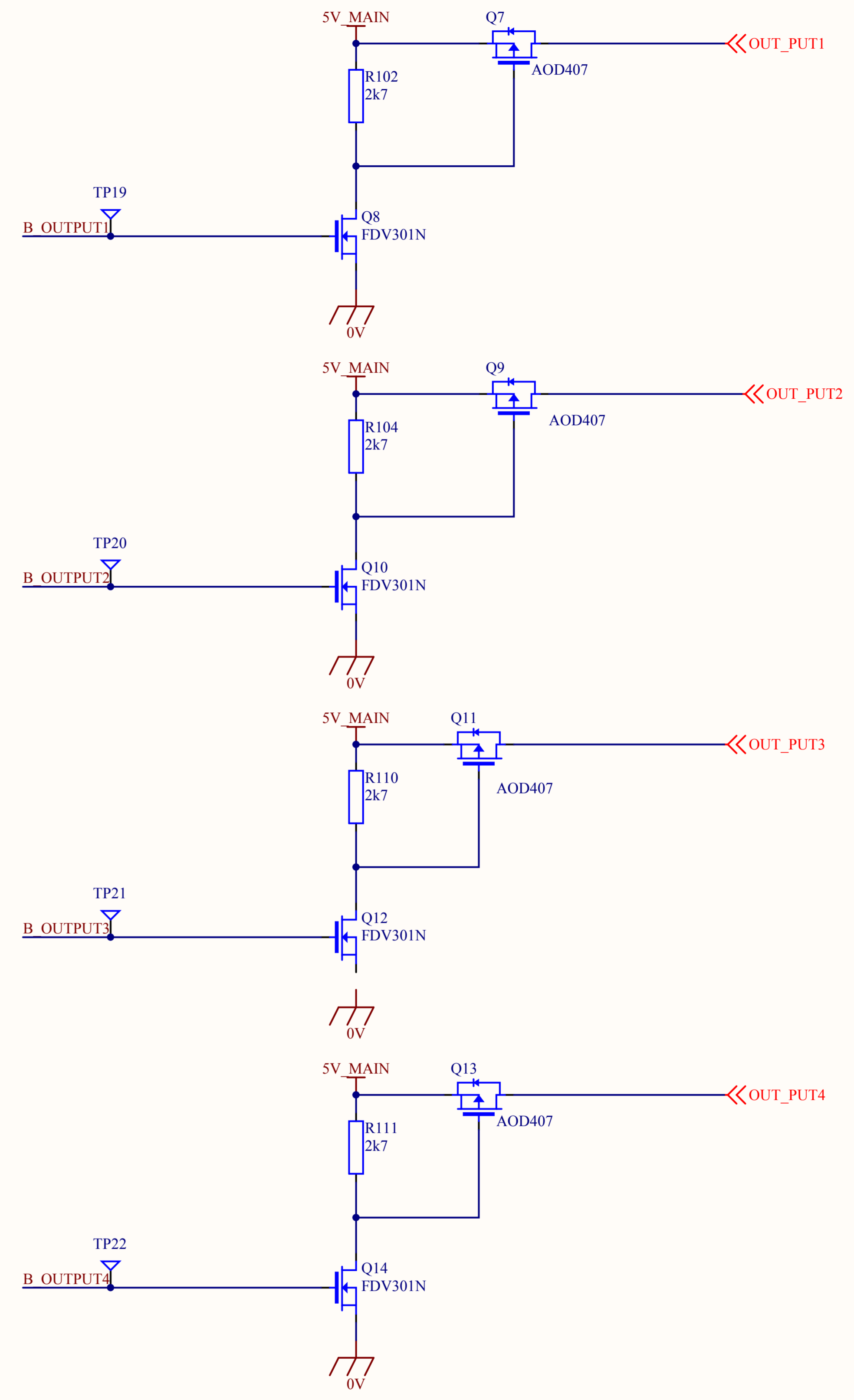
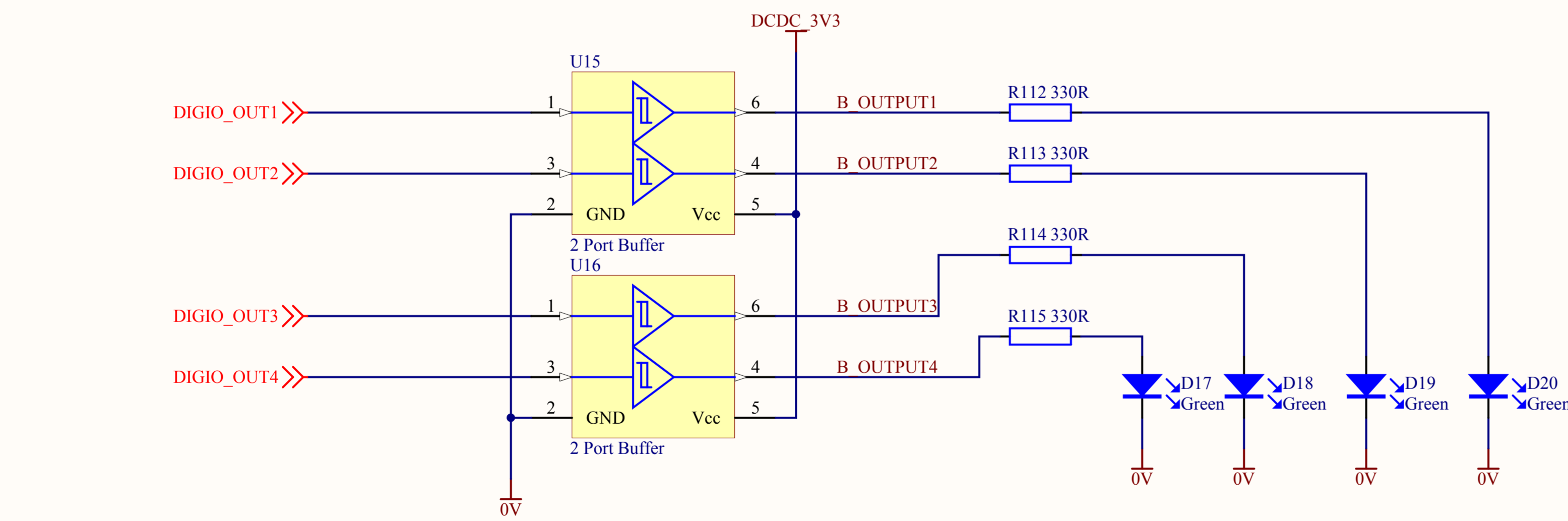
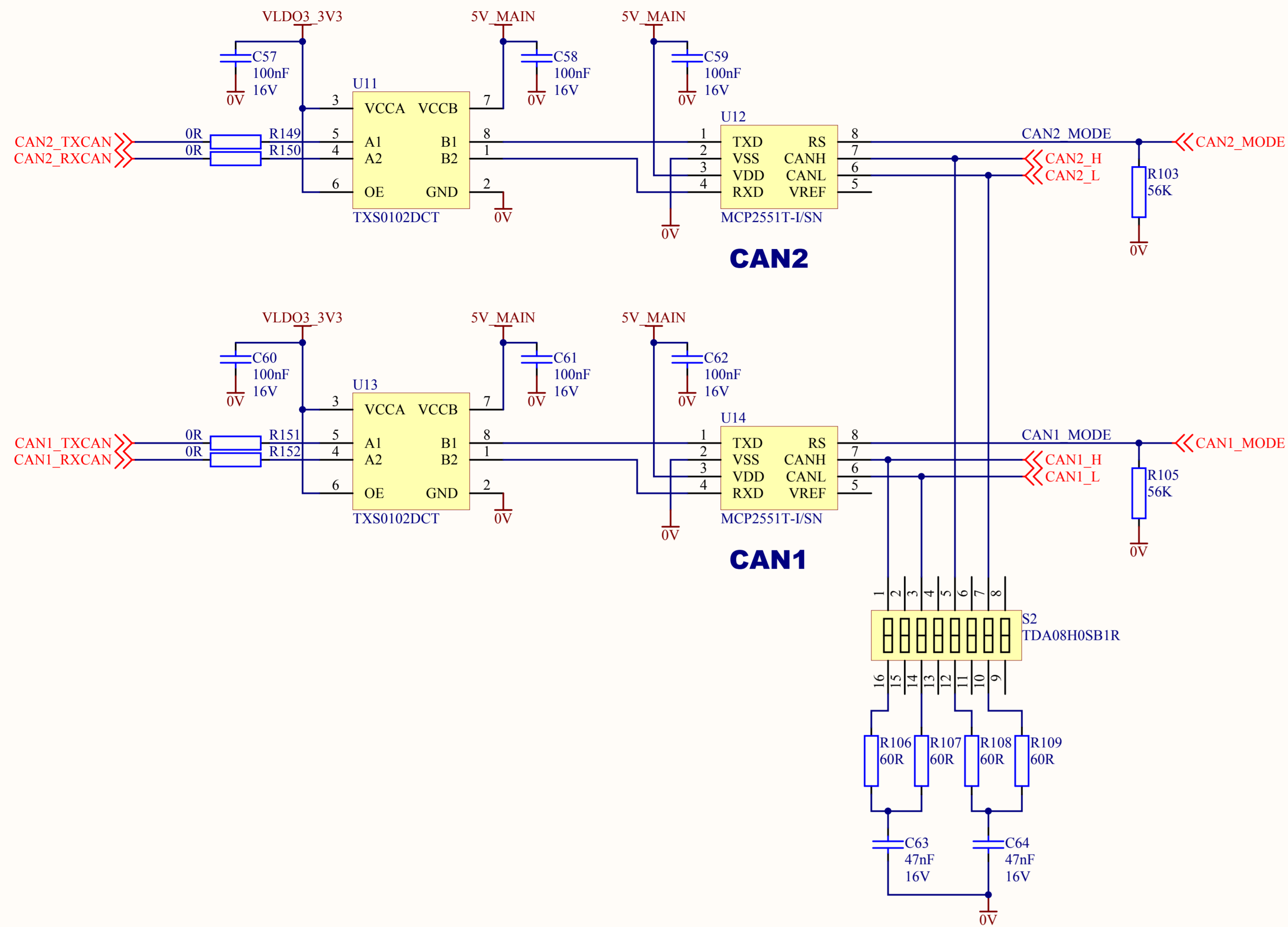



Microphone

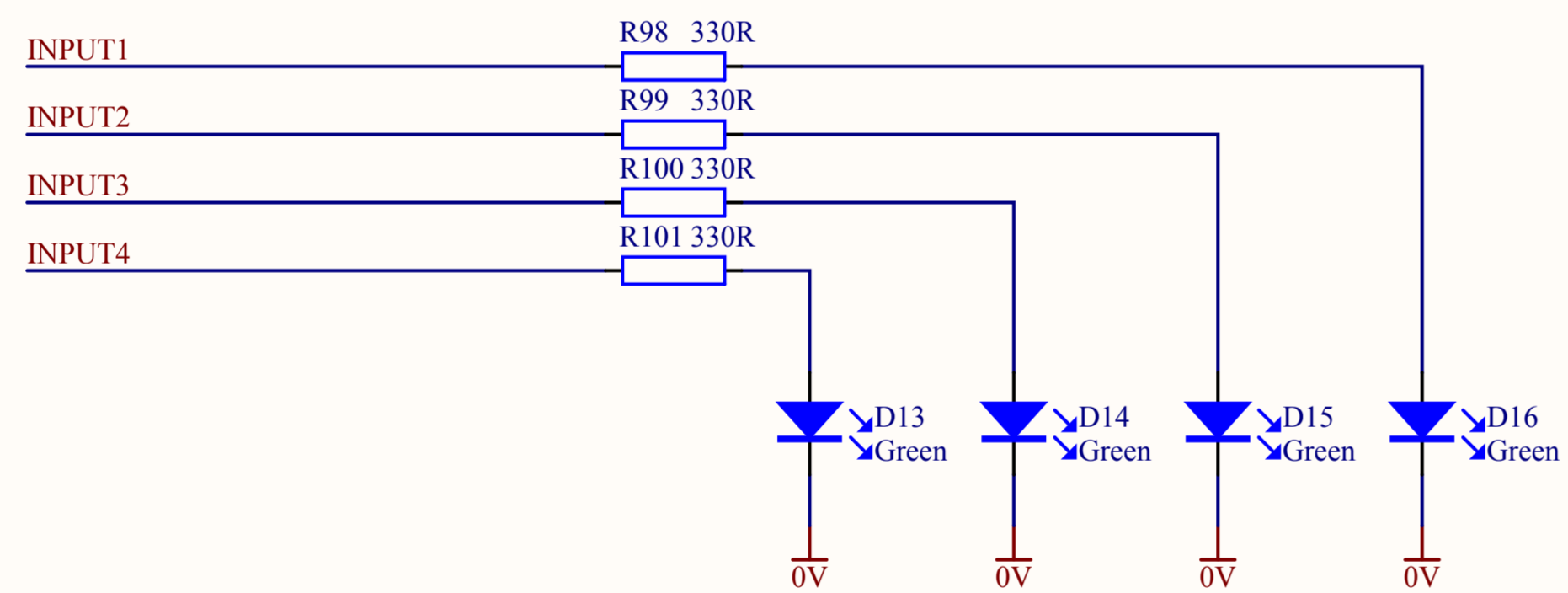
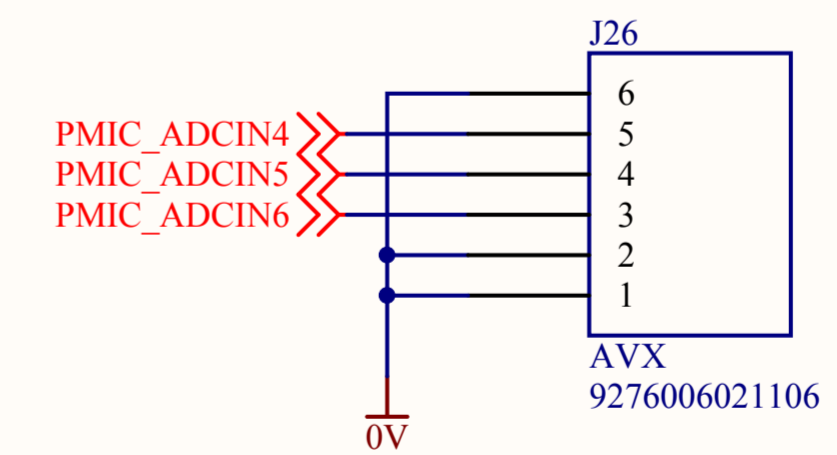
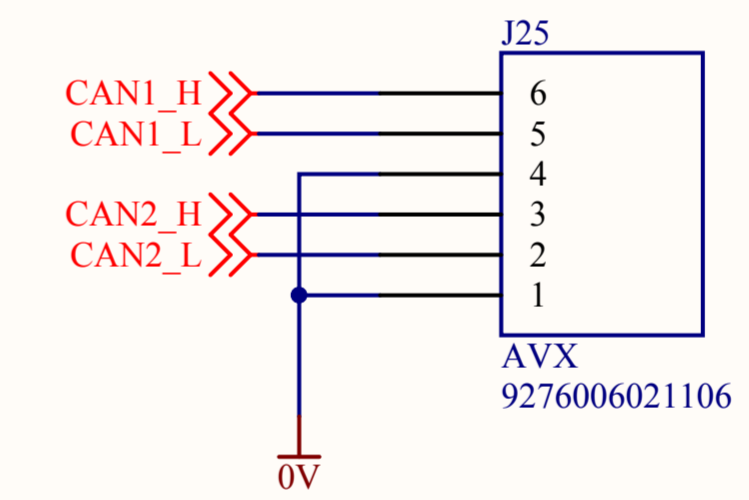
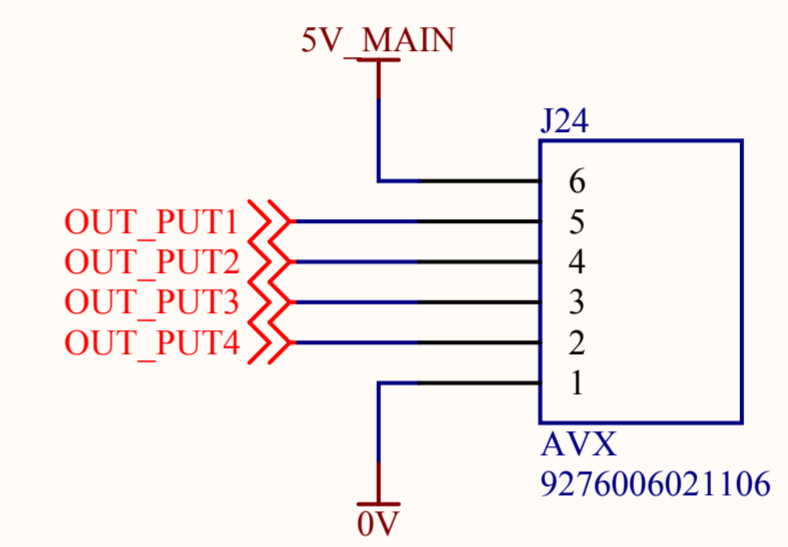
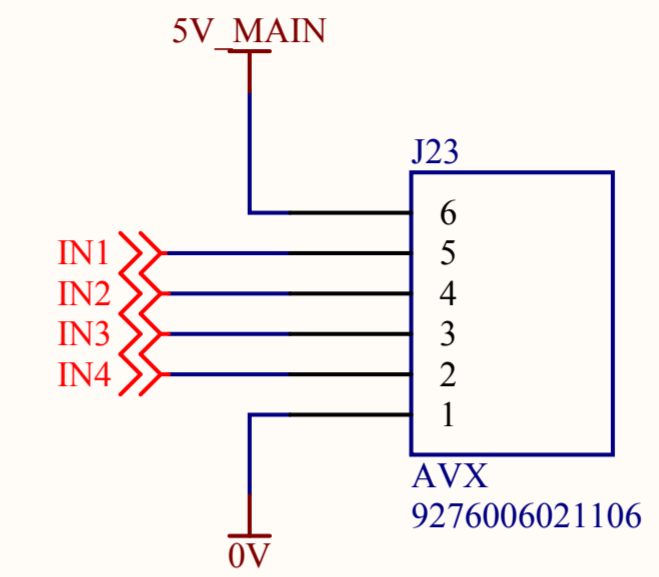
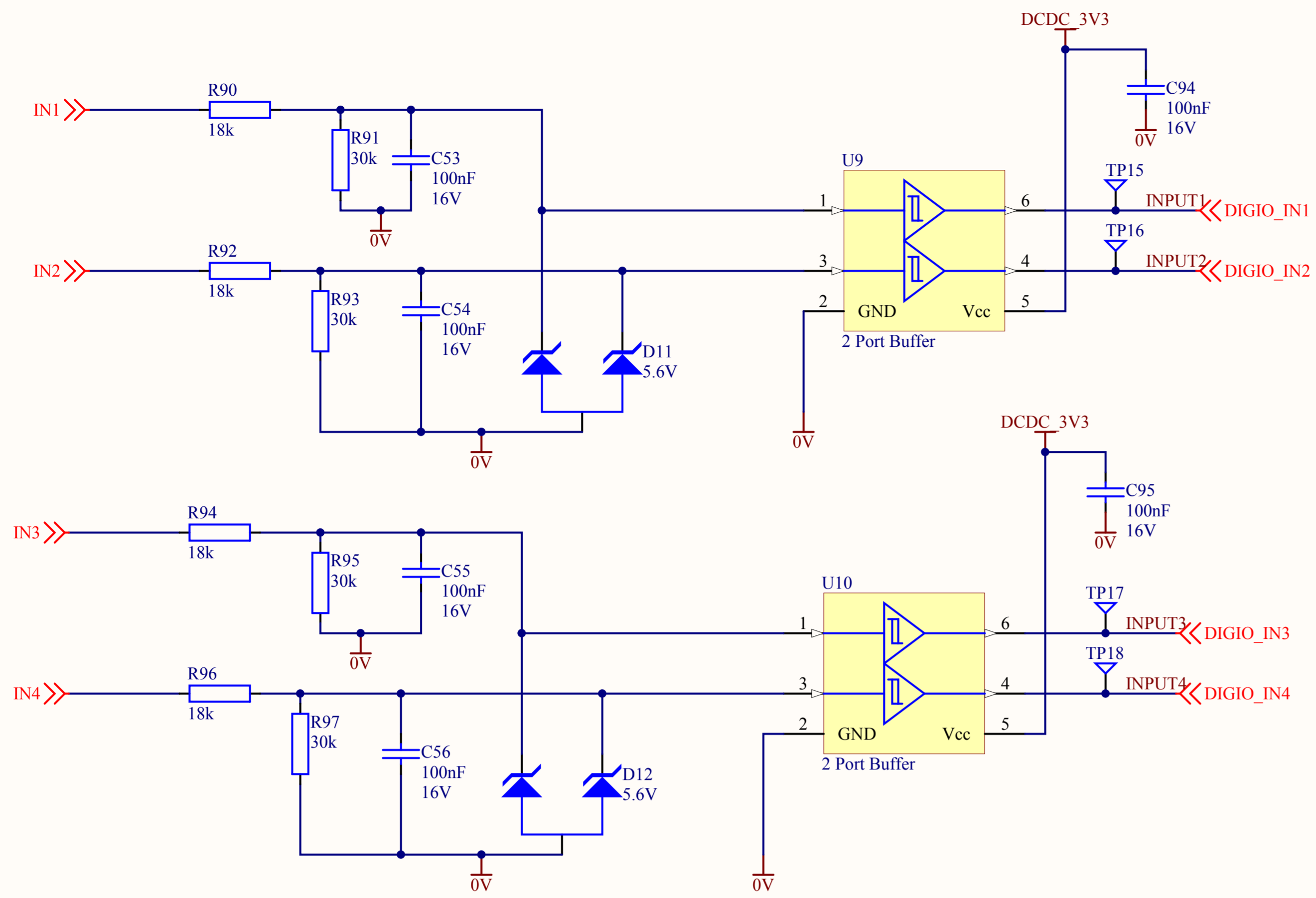



Accelerometer

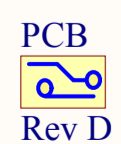
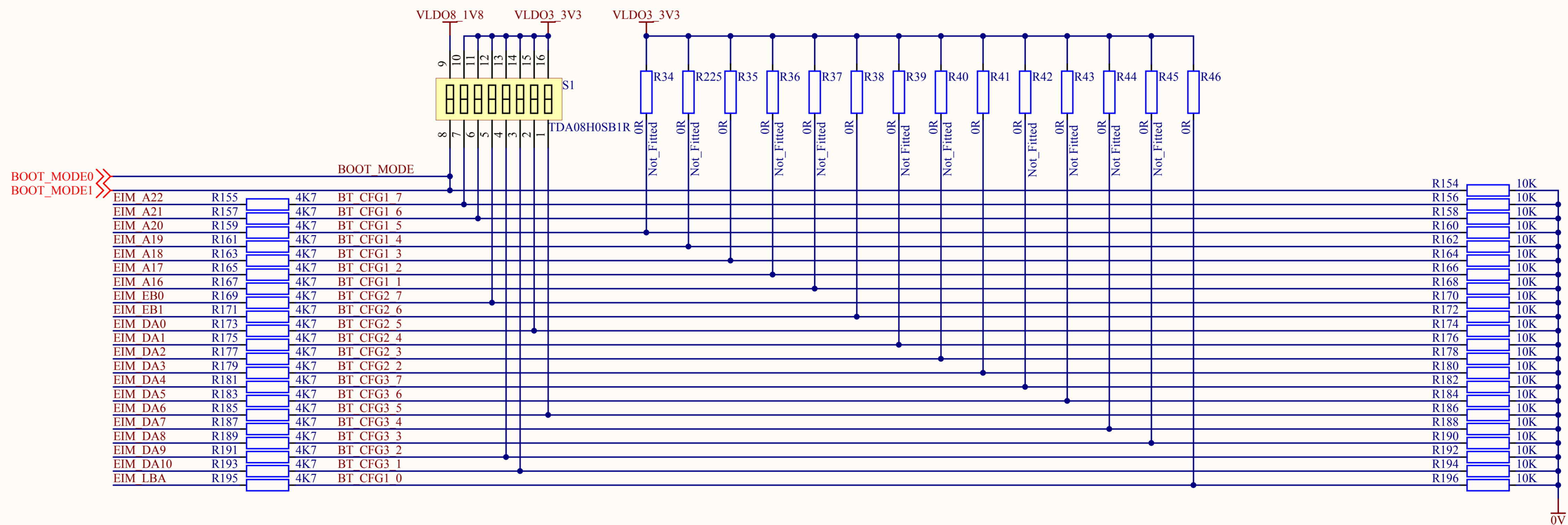
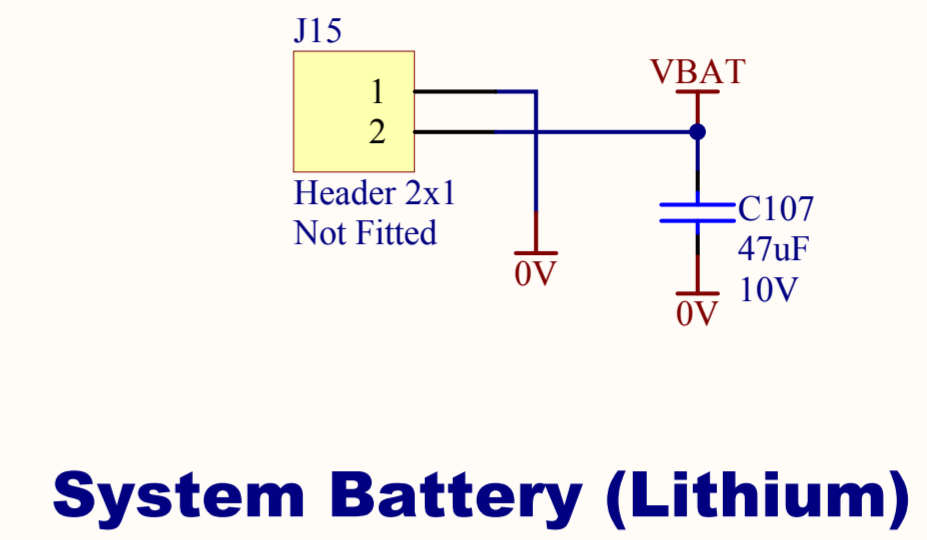
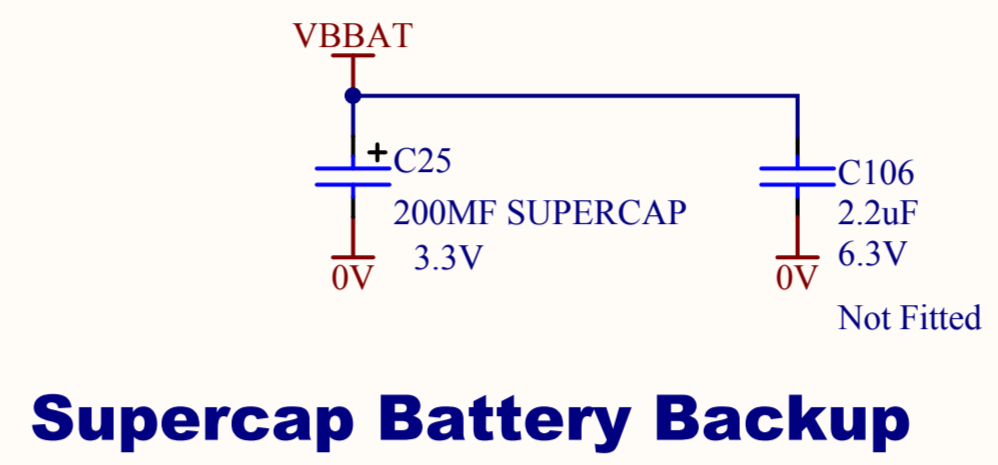
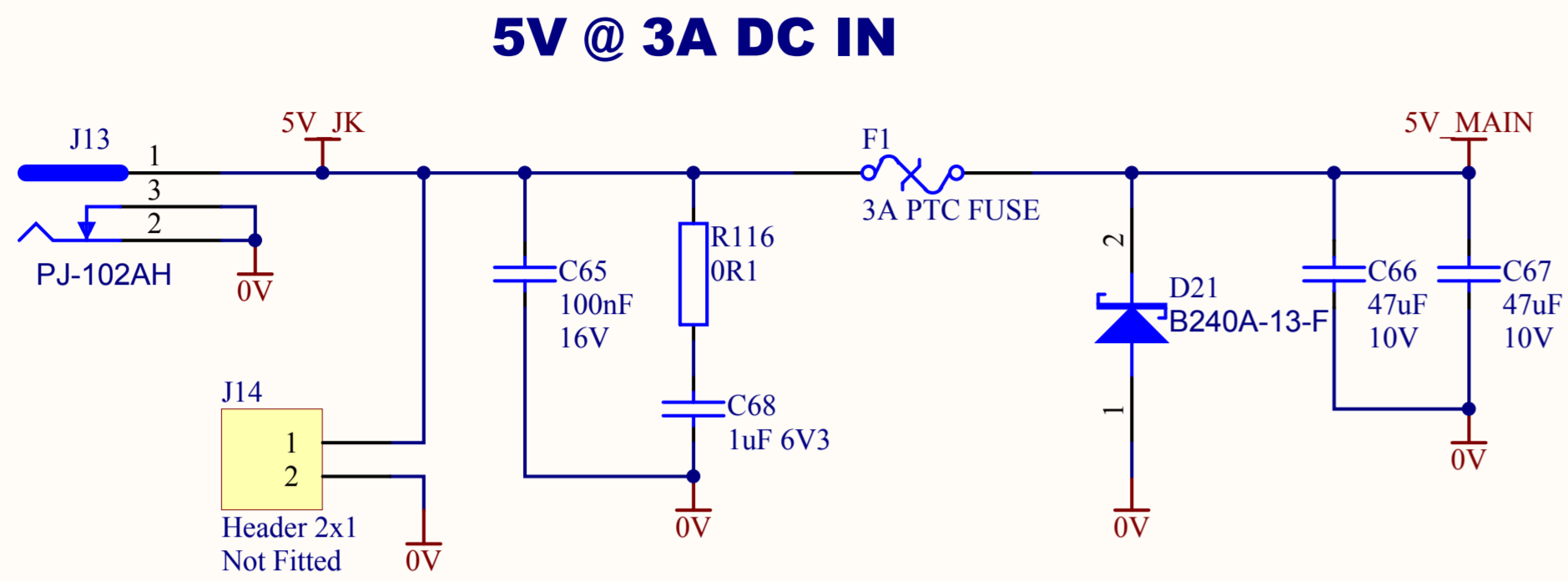
Title: Audio & Accel		Drawn By: TJH	
Revision: 1.1	Project: DB100	Date: 2 July 2009	
Sheet 0 of 13	Print Date: 28/12/2012	Size: A3	Updated By: 29/10/2012
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Title: IO interface		Drawn By: TJH	
Revision: 1.1	Project: DB100	Date: 2 July 2009	
Sheet 1 of 13	Print Date: 28/12/2012	Size: A3	Updated By: *
Date: 21/12/2012			PO Box 131 Rolleston, 7643 New Zealand
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Title: IO interface		Drawn By: TJH	
Revision: 1.1	Project: DB100	Date: 2 July 2009	
Sheet 2 of 13	Print Date: 28/12/2012	Size: A3	Updated By: *
		Date: 5/12/2012	PO Box 131 Rolleston, 7643 New Zealand
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Logo1
Device Solutions Logo
 M_Logo



Title: Power Supply		Drawn By: TJH	 PO Box 131 Rolleston, 7643 New Zealand
Revision: 1.1	Project: DB100	Date: 2 July 2009	
Sheet 3 of 13	Print Date: 28/12/2012	Size: A3	Updated By: *
			Date: 29/10/2012
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