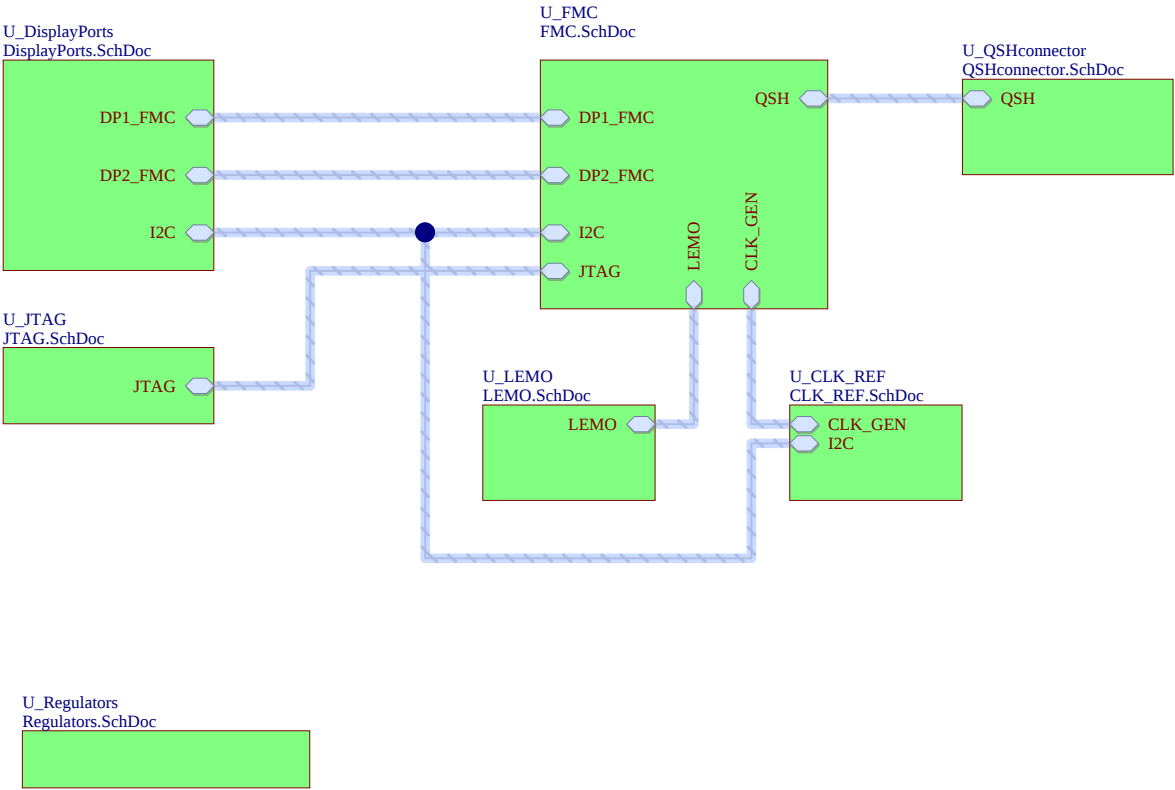




Fiducial Target



Project/Equipment		RD53A FMC Adapter		
Document		Designer L. M. Jara		
EP/ESE 	R53A FMC sadapter card		Drawn by L. M. Jara	18/10/2017
			Check.by B. Recordon	14/11/2017
			Last Mod. L. M. Jara	14/11/2017
			File Top_FMCadapater.SchDoc	
			Print Date 14/11/2017 15:11:22	Sheet 1 of 11
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				Rev

A

B

C

D

E

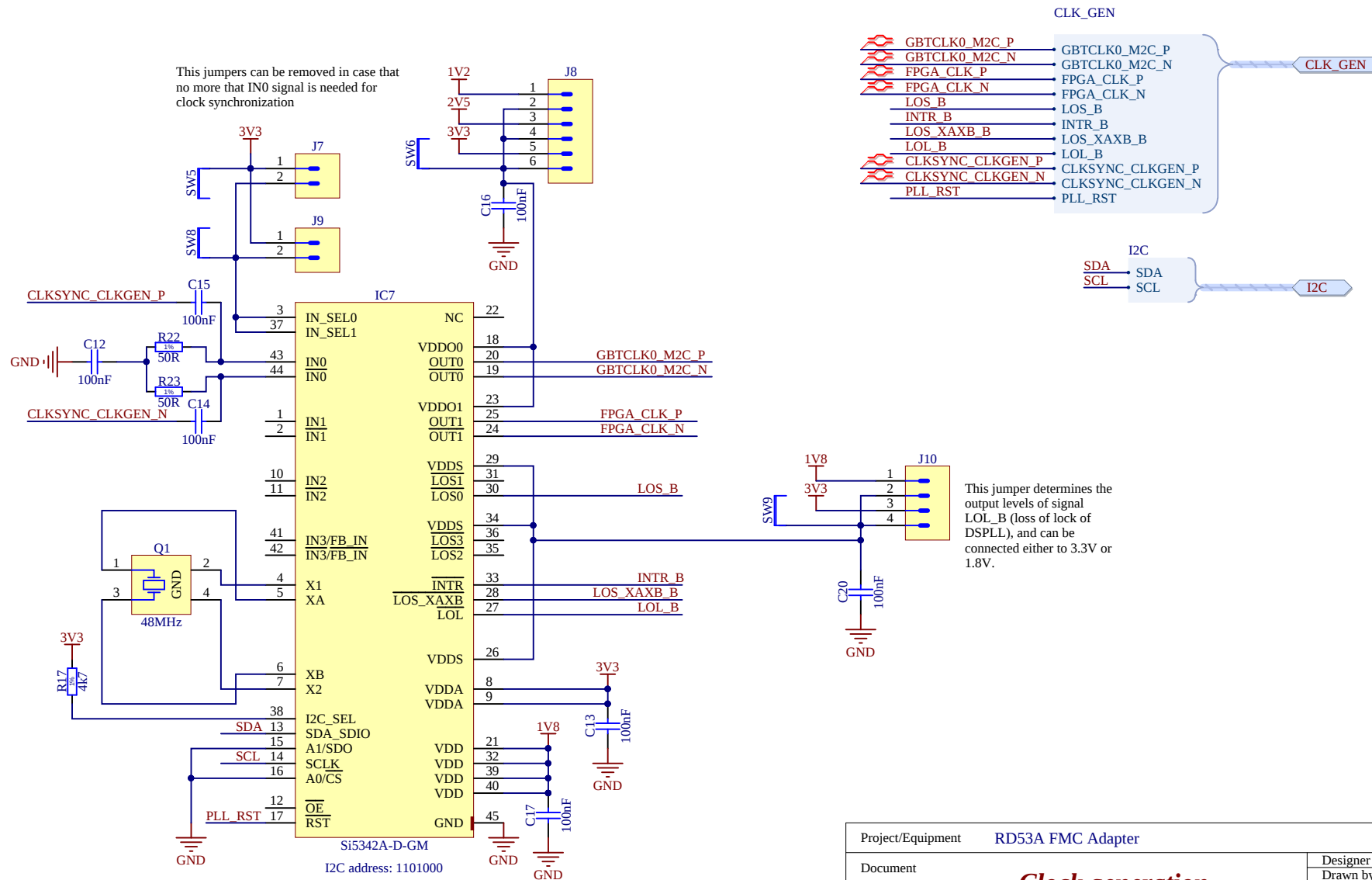
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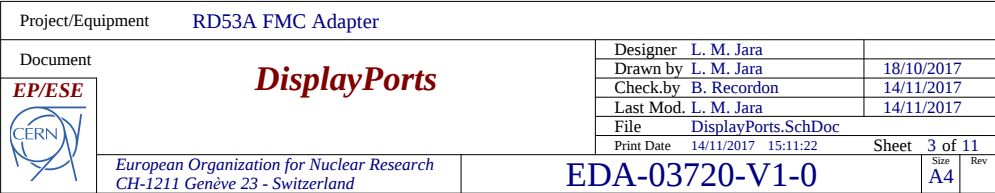
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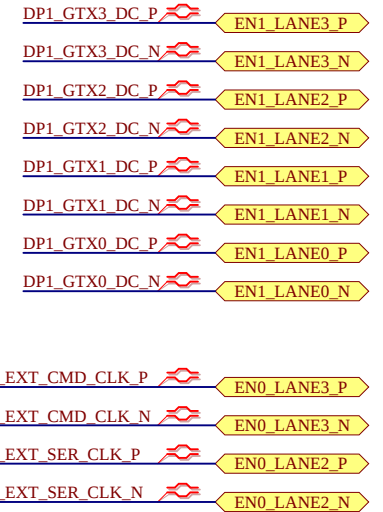
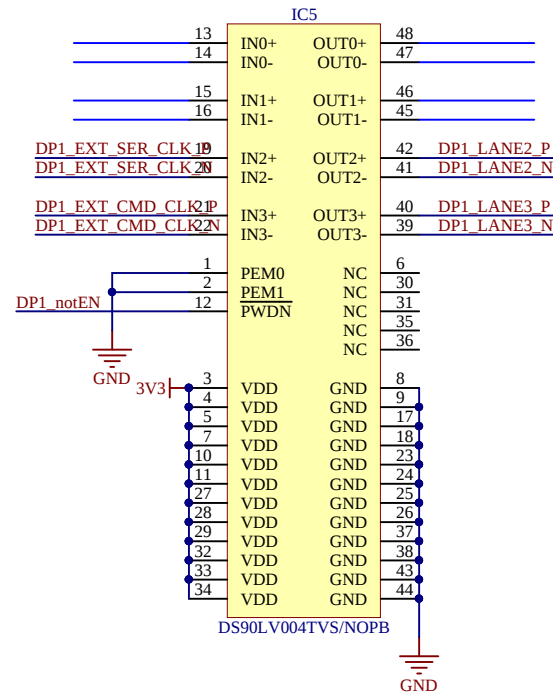
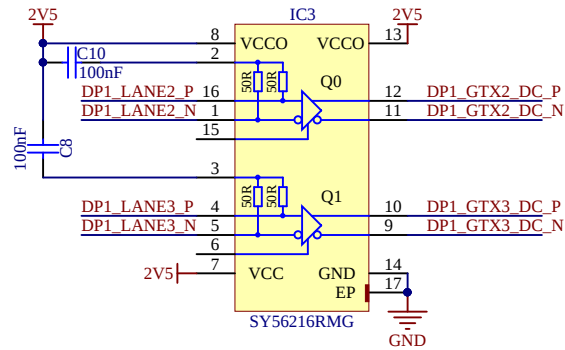
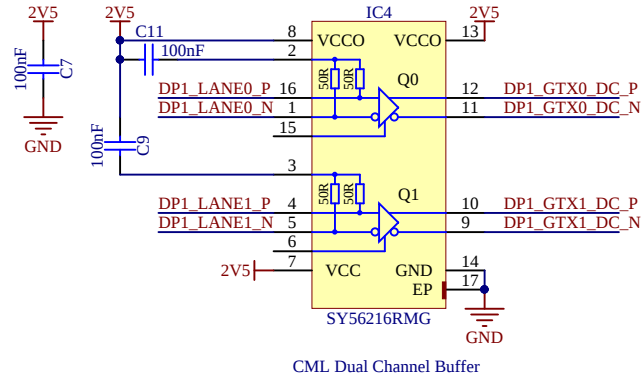
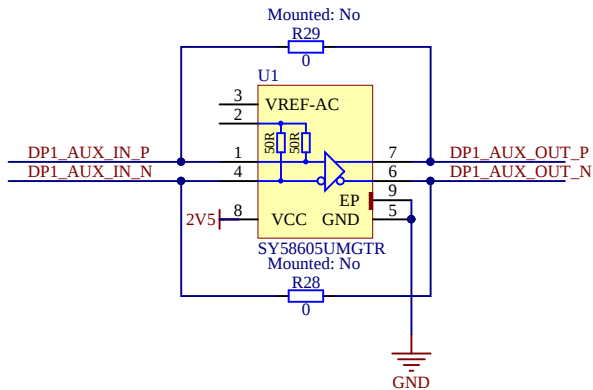
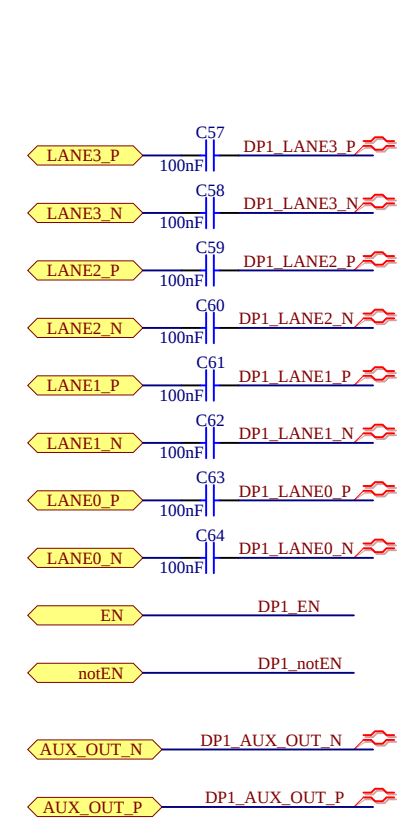
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E



Project/Equipment		RD53A FMC Adapter	
Document		Clock generation	
EP/ESE			
			
European Organization for Nuclear Research CH-1211 Genève 23 - Switzerland			
EDA-03720-V1-0			
Designer		L. M. Jara	18/10/2017
Drawn by		L. M. Jara	14/11/2017
Check by		B. Recordon	14/11/2017
Last Mod.		L. M. Jara	14/11/2017
File		CLK_REF.SchDoc	
Print Date		14/11/2017 15:11:22	Sheet 2 of 11
		Size	Rev
		A4	





Project/Equipment		RD53A FMC Adapter	
Document		Designer L. M. Jara Drawn by L. M. Jara Check by B. Recordon Last Mod. L. M. Jara File DP1_multiplexing.SchDoc Print Date 14/11/2017 15:11:22 Sheet 4 of 11	
EP/ESE			
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European Organization for Nuclear Research			
CH-1211 Genève 23 - Switzerland			
EDA-03720-V1-0		A4	Rev

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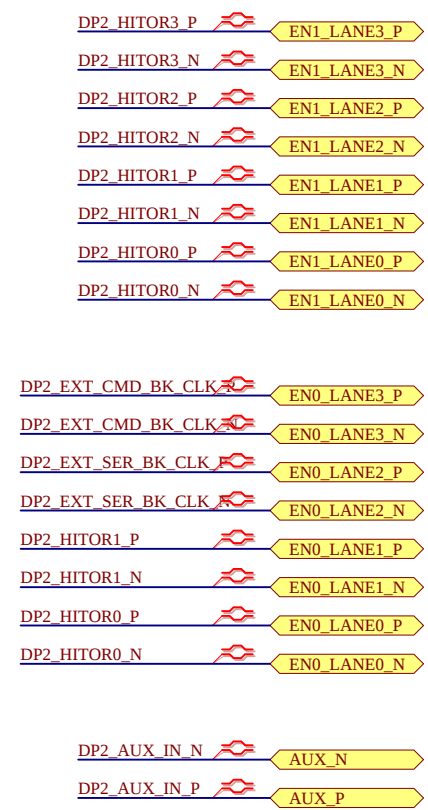
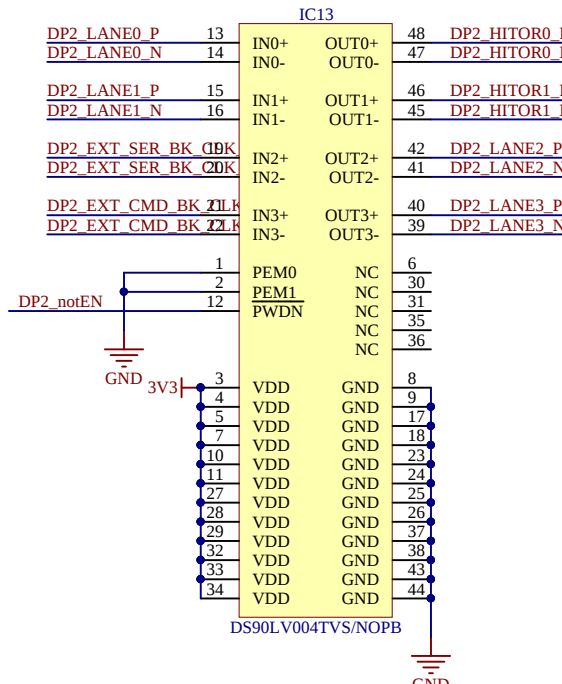
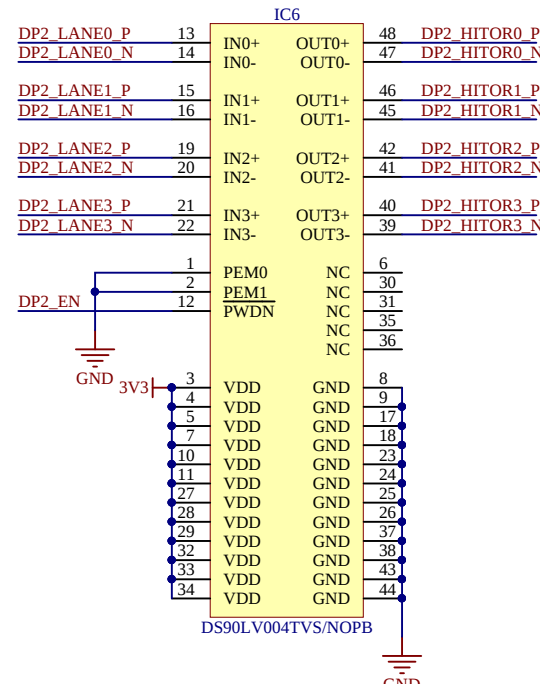
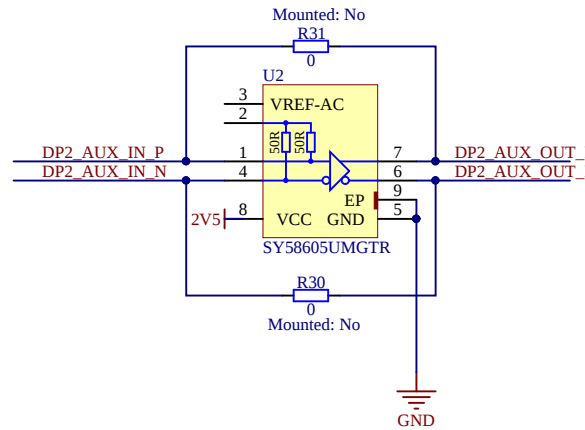
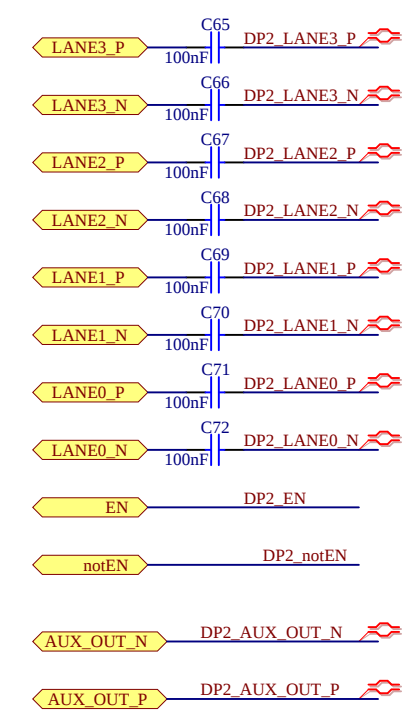
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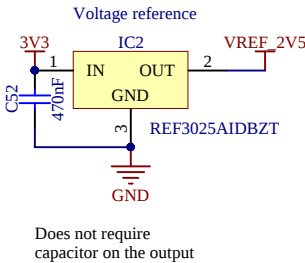
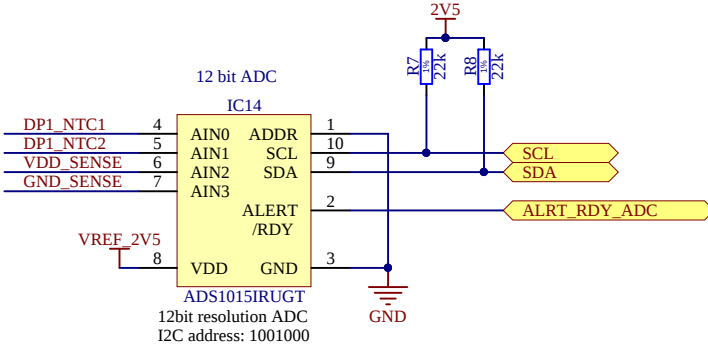
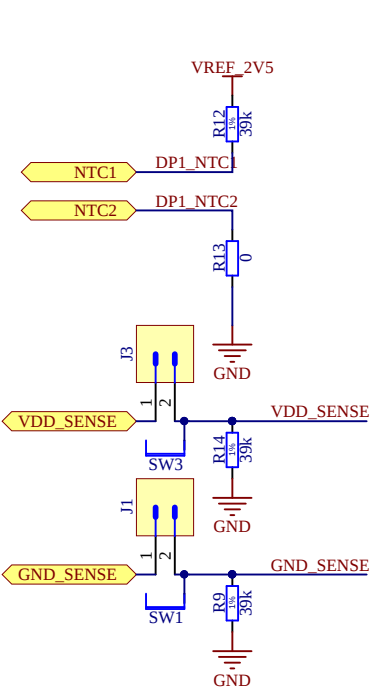
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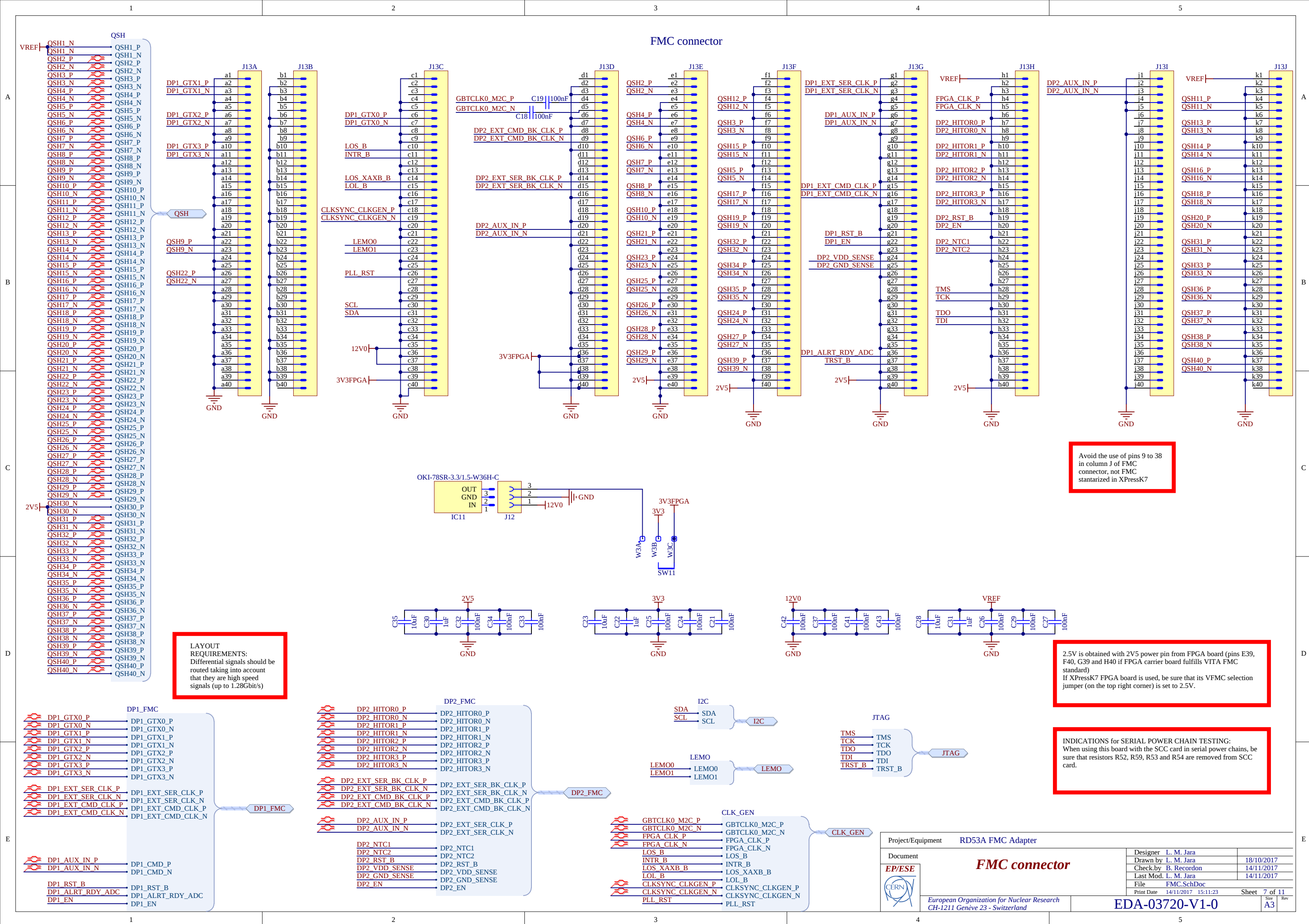
Project/Equipment		RD53A FMC Adapter	
Document		Designer L. M. Jara Drawn by L. M. Jara 18/10/2017 Check.by B. Recordon 14/11/2017 Last Mod. L. M. Jara 14/11/2017 File DP2_multiplexing.SchDoc Print Date 14/11/2017 15:11:22 Sheet 5 of 11	
EP/ESE  European Organization for Nuclear Research CH-1211 Genève 23 - Switzerland			
		EDA-03720-V1-0 Size A4 Rev	

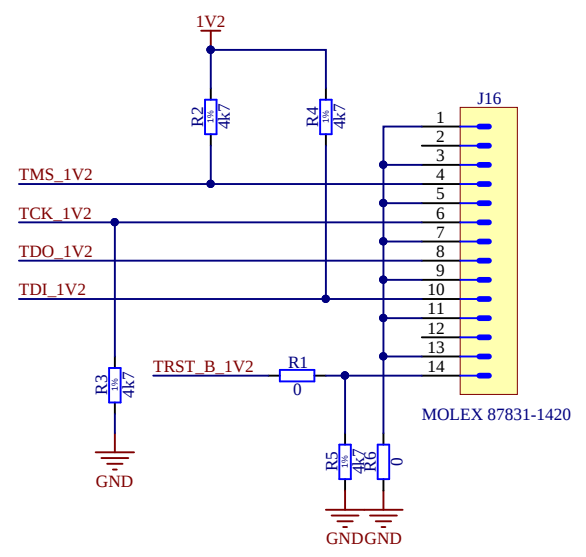
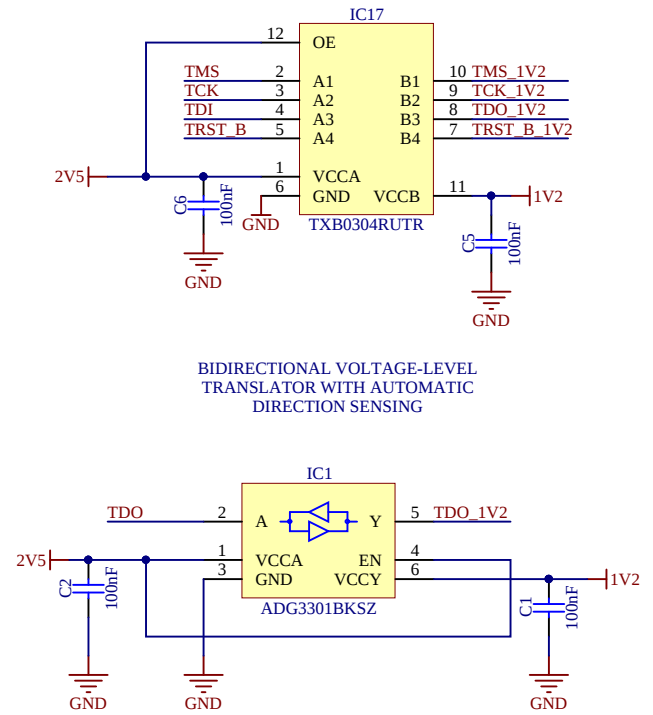
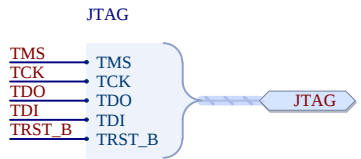
NTC used in SCC card: 103KT1608 (to be checked)

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PCB FMC to
Displayport\NTC\Capture.
PNG



Project/Equipment		RD53A FMC Adapter	
Document		NTC	
	Designer	L. M. Jara	
	Drawn by	L. M. Jara	18/10/2017
	Check by	B. Recordon	14/11/2017
	Last Mod.	L. M. Jara	14/11/2017
	File	NTC.SchDoc	
Print Date		14/11/2017 15:11:22	Sheet 6 of 11
European Organization for Nuclear Research CH-1211 Genève 23 - Switzerland		EDA-03720-V1-0	Size A4 Rev





TO CHECK:
JTAG signals connected to
selectIO pins, not to the
JTAG oriented pins in the
FMC adapter (as they are
routed to the configuration
pins of the FPGA).

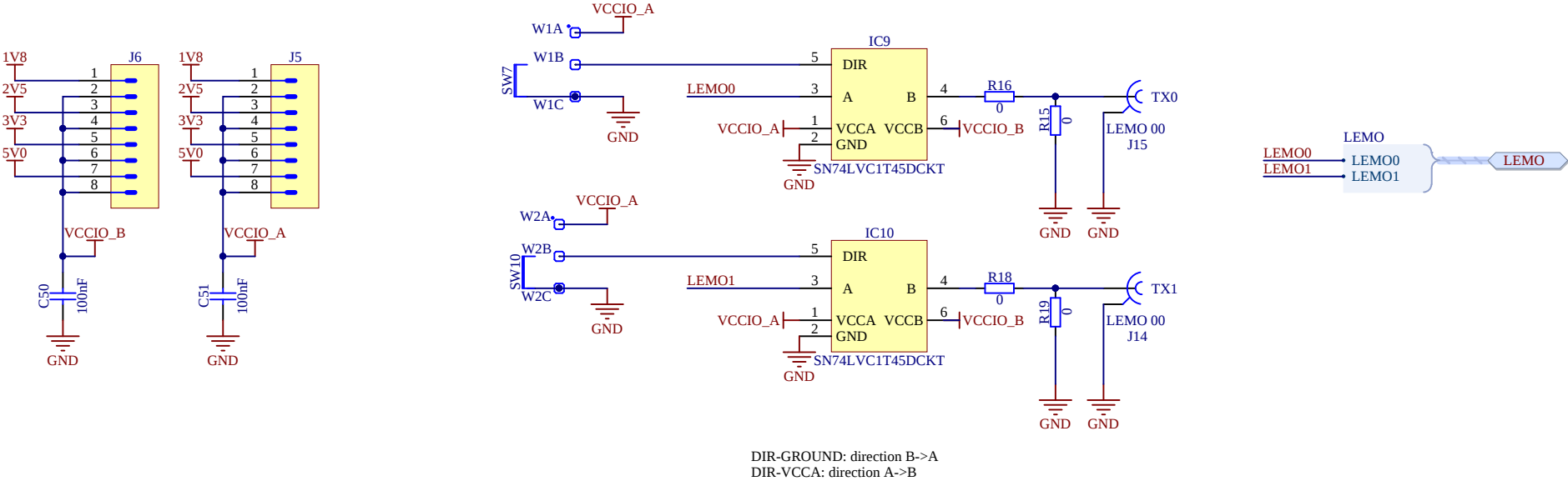
Any kind of redriver/buffer

Project/Equipment		RD53A FMC Adapter	
Document		JTAG	
	Designer	L. M. Jara	
	Drawn by	L. M. Jara	18/10/2017
	Check by	B. Recordon	14/11/2017
	Last Mod.	L. M. Jara	14/11/2017
	File	JTAG.SchDoc	
European Organization for Nuclear Research CH-1211 Genève 23 - Switzerland		Print Date	14/11/2017 15:11:23
		Sheet	8 of 11
		Size	A4
		Rev	

EDA-03720-V1-0

Lemo Connectors

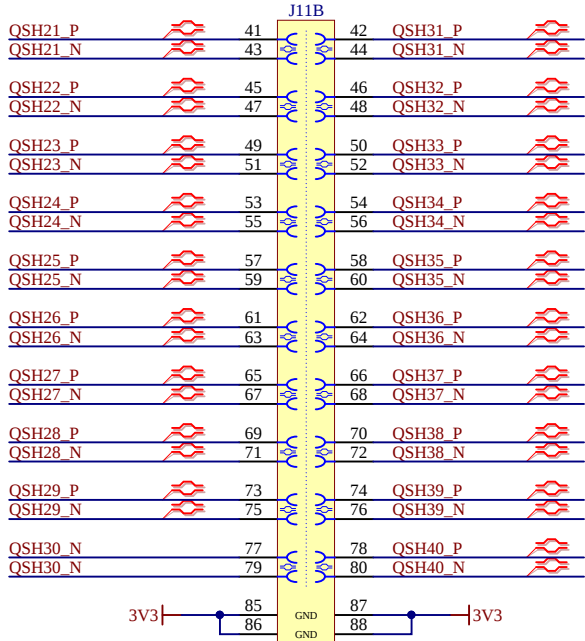
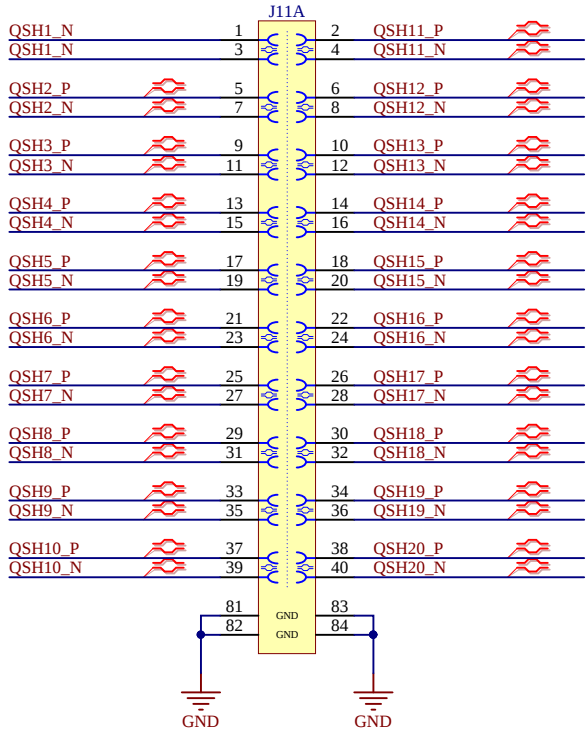
SINGLE-BIT DUAL-SUPPLY BUS TRANSCEIVER



Project/Equipment		RD53A FMC Adapter	
Document		Lemos	
	Designer	L. M. Jara	
	Drawn by	L. M. Jara	18/10/2017
	Check by	B. Recordon	14/11/2017
	Last Mod.	L. M. Jara	14/11/2017
	File	LEMO.SchDoc	
Print Date		14/11/2017 15:11:23	Sheet 9 of 11
European Organization for Nuclear Research CH-1211 Genève 23 - Switzerland		EDA-03720-V1-0	Size A4 Rev

QSH	
QSH1_N	QSH1_P
QSH1_N	QSH1_N
QSH2_P	QSH2_P
QSH2_N	QSH2_N
QSH3_P	QSH3_P
QSH3_N	QSH3_N
QSH4_P	QSH4_P
QSH4_N	QSH4_N
QSH5_P	QSH5_P
QSH5_N	QSH5_N
QSH6_P	QSH6_P
QSH6_N	QSH6_N
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QSH8_N	QSH8_N
QSH9_P	QSH9_P
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QSH10_P	QSH10_P
QSH10_N	QSH10_N
QSH11_P	QSH11_P
QSH11_N	QSH11_N
QSH12_P	QSH12_P
QSH12_N	QSH12_N
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QSH39_N	QSH39_N
QSH40_P	QSH40_P
QSH40_N	QSH40_N

QSH



Project/Equipment RD53A FMC Adapter

Document

EP/ESE



QSH connector

European Organization for Nuclear Research
CH-1211 Genève 23 - Switzerland

Designer L. M. Jara

Drawn by L. M. Jara

Check by B. Recordon

Last Mod. L. M. Jara

File QSHconnector.SchDoc

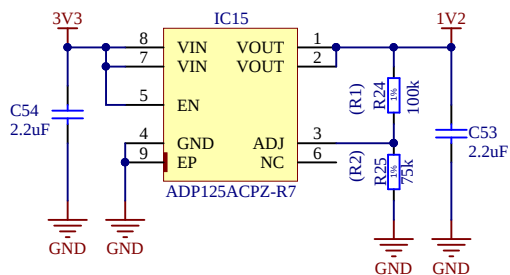
Print Date 14/11/2017 15:11:24

Sheet 10 of 11

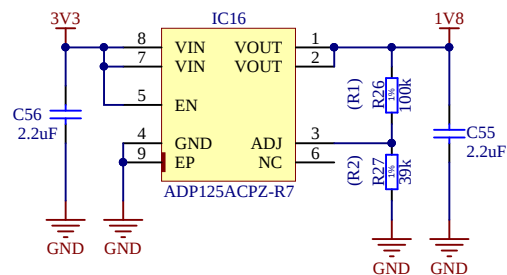
Size A4

Rev

EDA-03720-V1-0

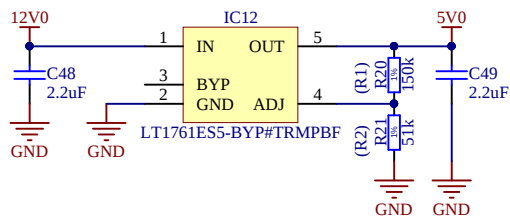


$V_{out} = 0.5 (R1/R2 + 1) + 15nA * R1$
R1 must be less than 200kohm to minimize errors in the output

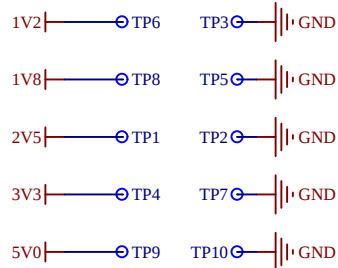


$V_{out} = 0.5 (R1/R2 + 1) + 15nA * R1$
R1 must be less than 200kohm to minimize errors in the output

Cannot open file
C:\Users\ljaracas\Downloads\Capture2.PNG



Cannot open file C:\Users\ljaracas\Downloads\Capture.PNG



The value of R1 should be no greater than 250k to minimize errors in the output voltage caused by the ADJ pin bias current.

Project/Equipment		RD53A FMC Adapter		
Document		Designer L. M. Jara		
EP/ESE 	Regulators European Organization for Nuclear Research CH-1211 Genève 23 - Switzerland		Drawn by L. M. Jara	18/10/2017
			Check by B. Recordon	14/11/2017
			Last Mod. L. M. Jara	14/11/2017
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			Print Date 14/11/2017 15:11:24	Sheet 11 of 11
				Size A4
				Rev
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