

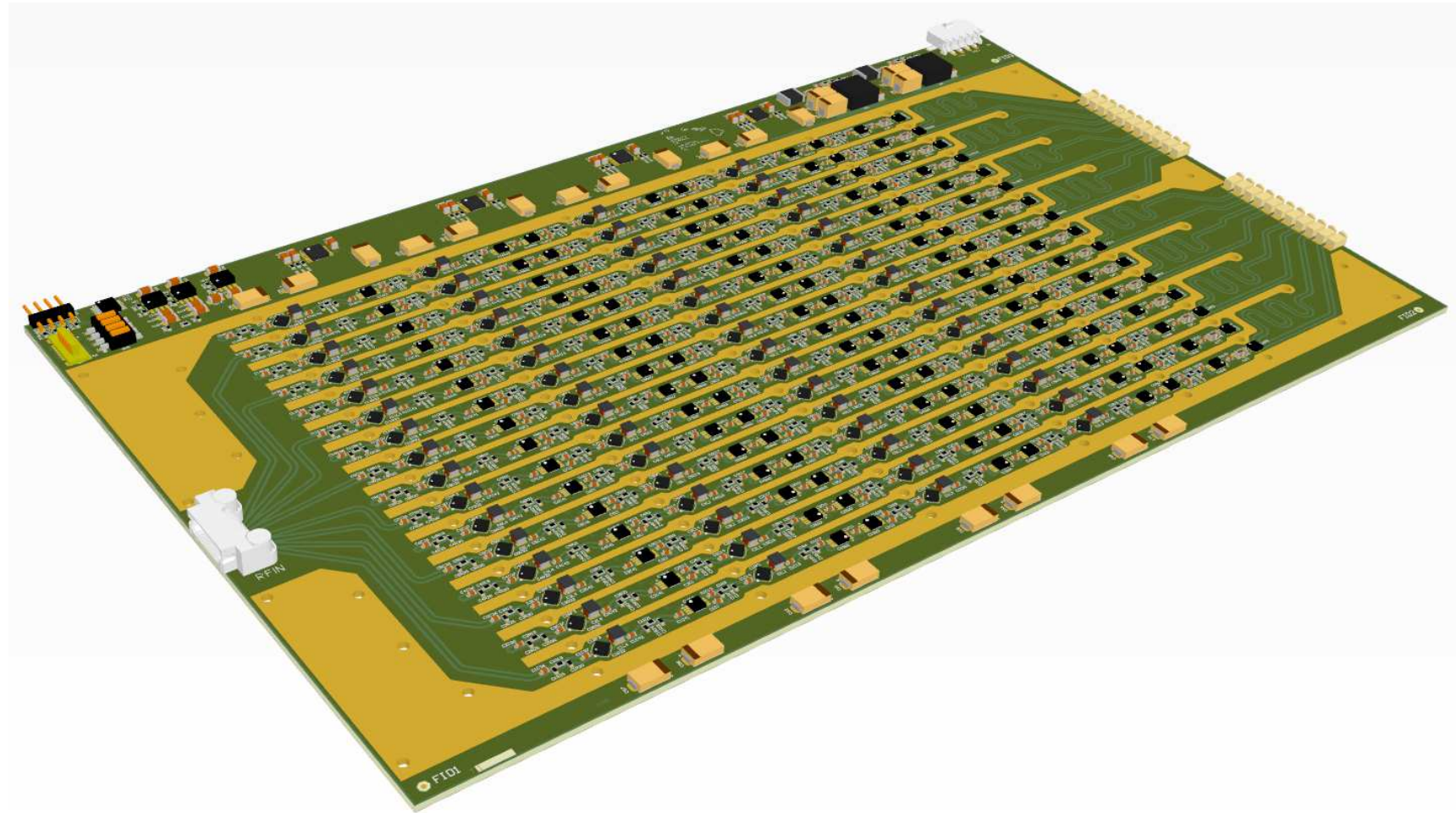
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High Energy Physics Group
Instrumentation Development Laboratory
2505 Correa Road, Honolulu, HI 96822

Production Documentation for:

Project Name: XRM
Board Name: XRM_MainAMP
IDL num: IDL_15_38
Revision: A
Variant: Master

Designer: PO
Drawn by: PO
Approved by: Gary S. Varner

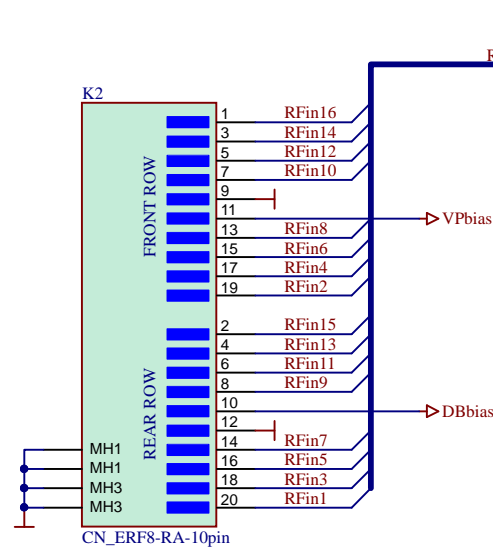


High Energy Physics Group, Instrumentation Development Lab	Designer: PO	IDLAB design #: IDL_15_38
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		Modif. Date: 1. nov 2015
		Sheet 1 of 5

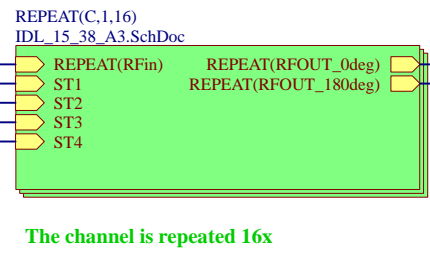


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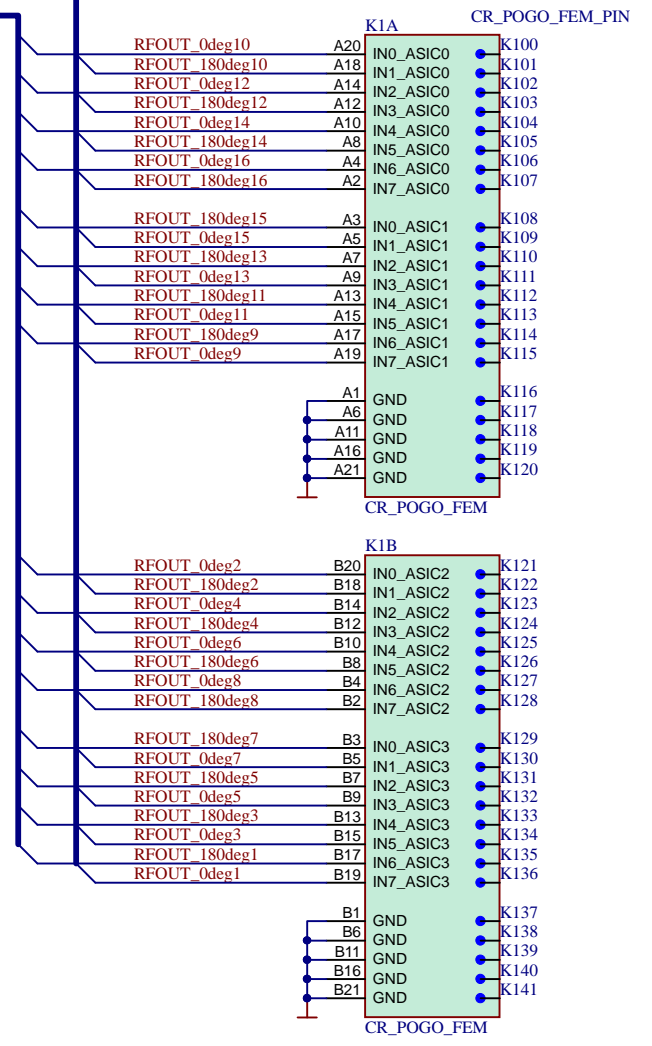
RF Input



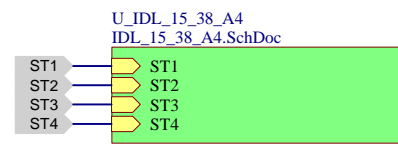
Main RF channel



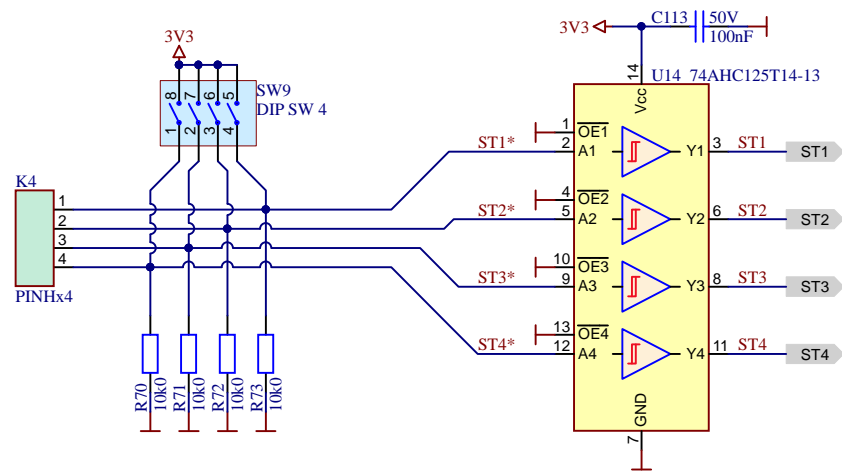
RF Output



Power Supply Sub-circuit



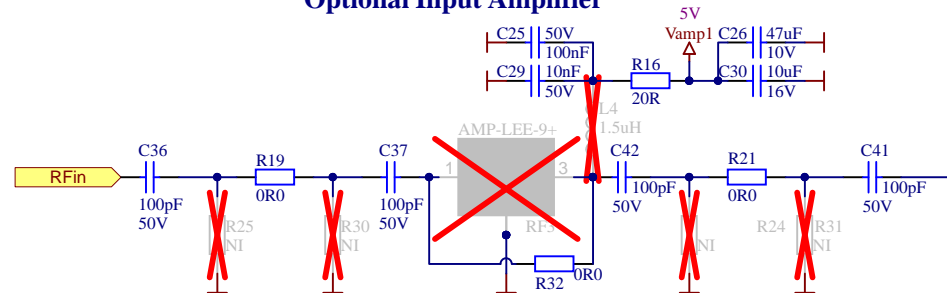
RF Stage Drivig Logic



Stage 1	Stage 2	Stage 3	Stage 4	Gain [dB]
0	0	0	1	2
0	0	0	0	5
0	0	1	1	15
0	0	1	0	18
0	1	0	1	23
1	0	0	1	23
0	1	0	0	26
1	0	0	0	26
0	1	1	1	35
1	0	1	1	35
0	1	1	0	38
1	0	1	0	38
1	1	1	1	44
1	1	1	0	47
1	1	1	1	55
1	1	1	0	58

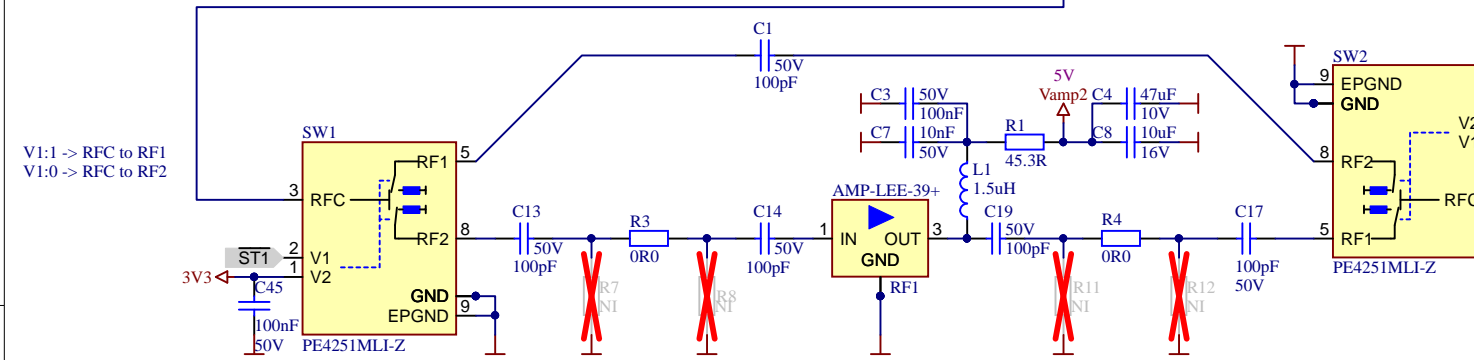
- FID1 PCB-FIDRTB
- FID2 PCB-FIDRTB
- FID3 PCB-FIDRTB

Optional Input Amplifier

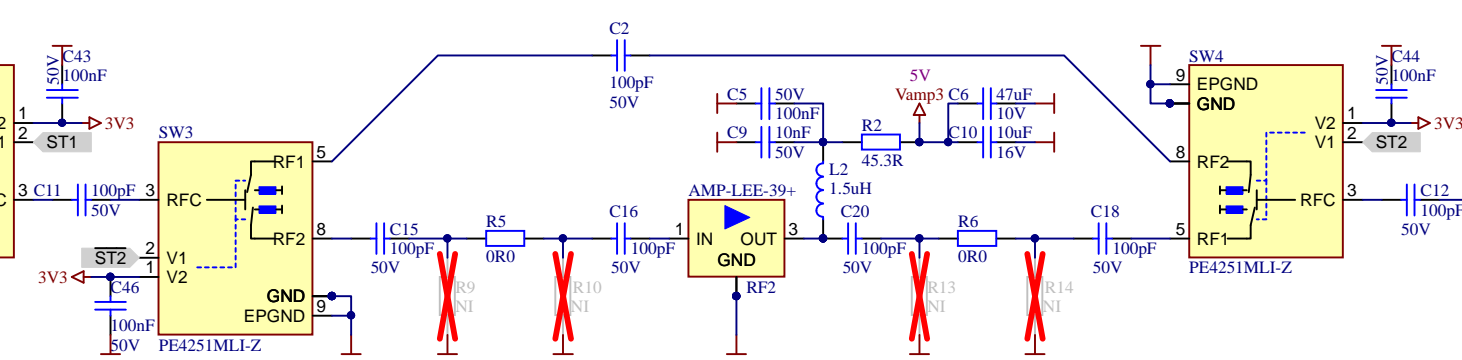


Main Amplifier Chain

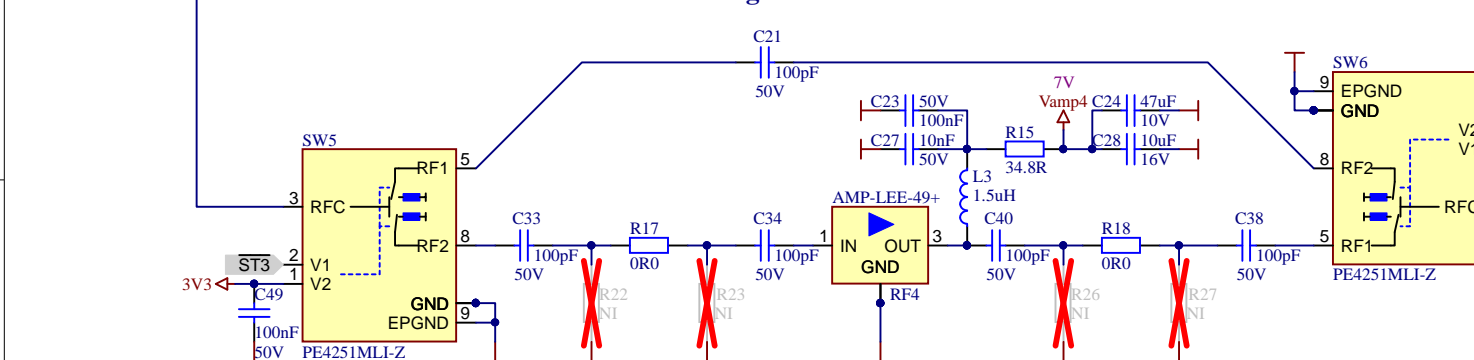
Stage 1



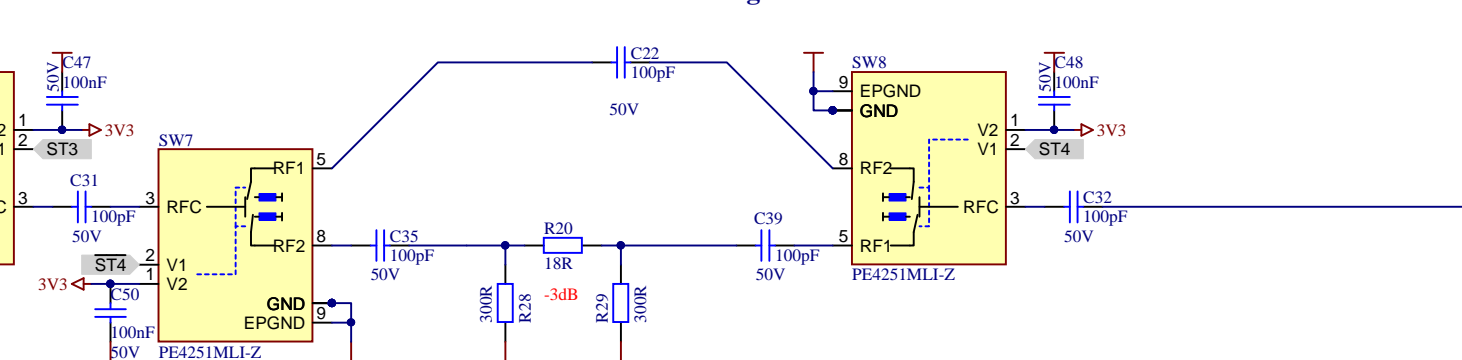
Stage 2



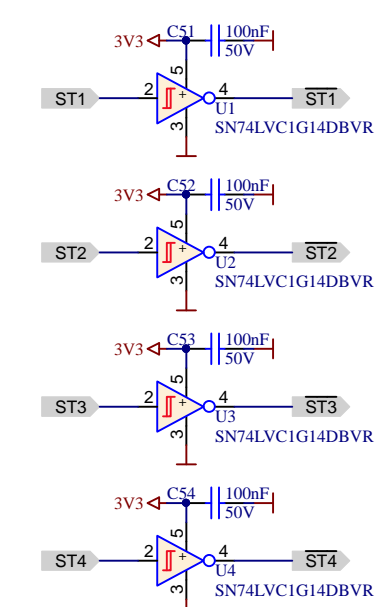
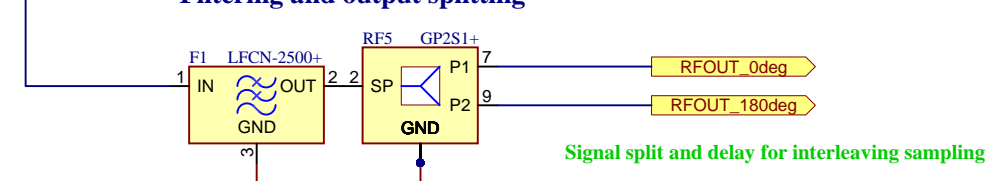
Stage 3



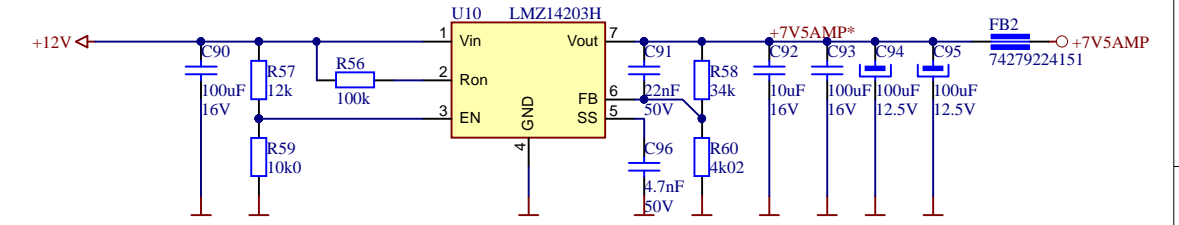
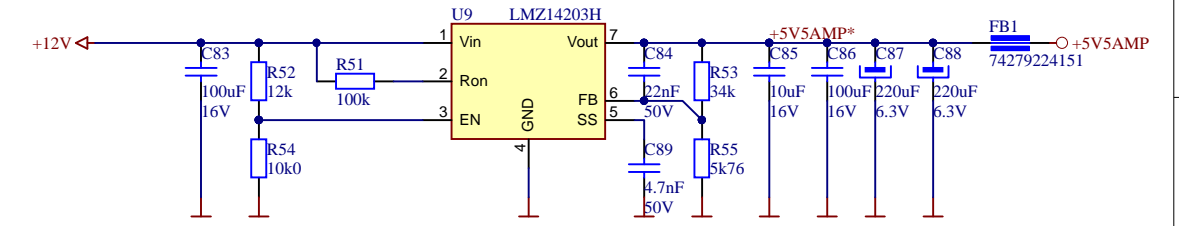
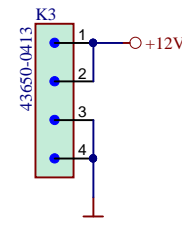
Stage 4



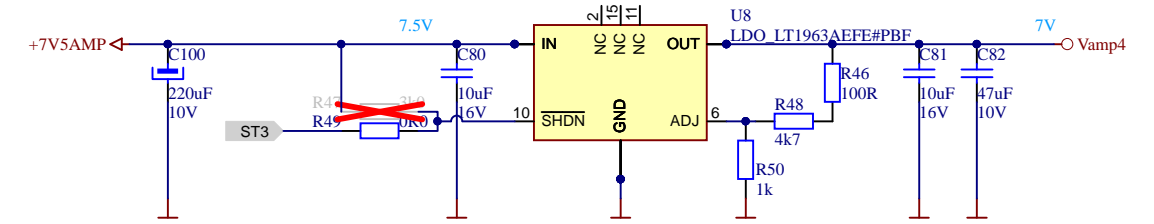
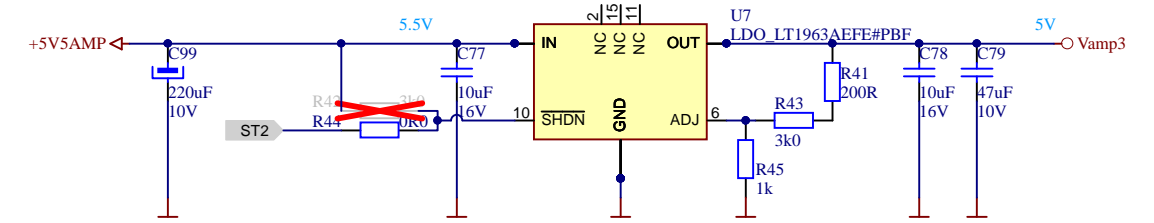
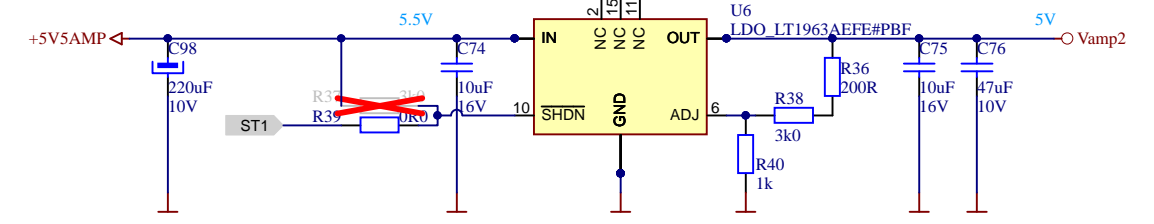
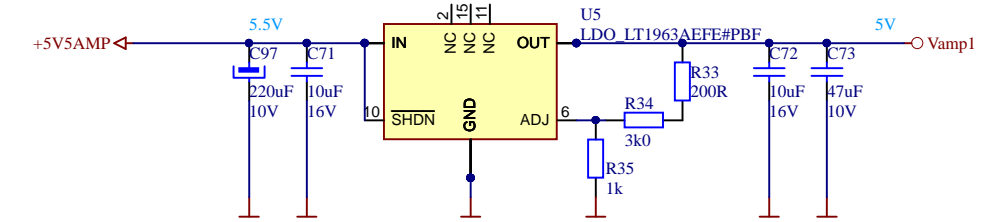
Filtering and output splitting



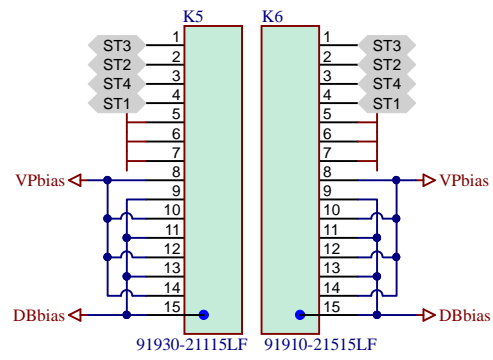
Main Power Supply Input



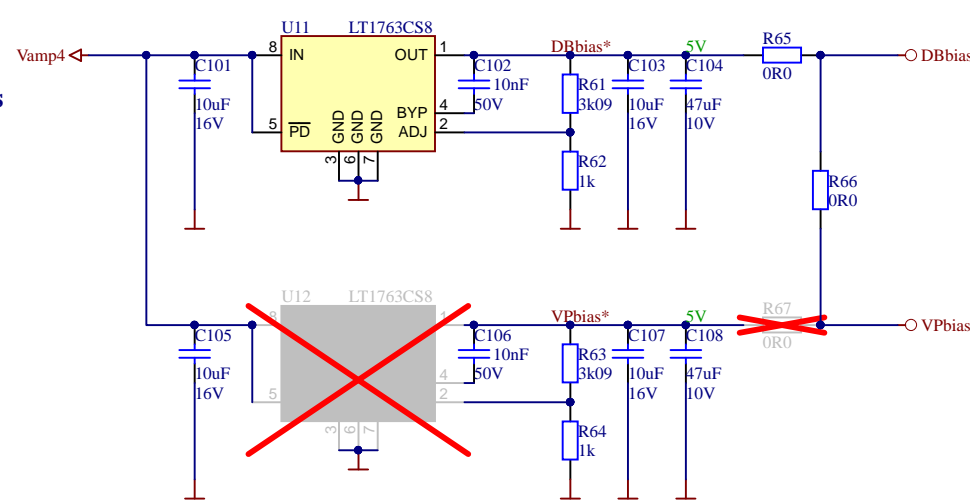
Main Power Supply for RF stages



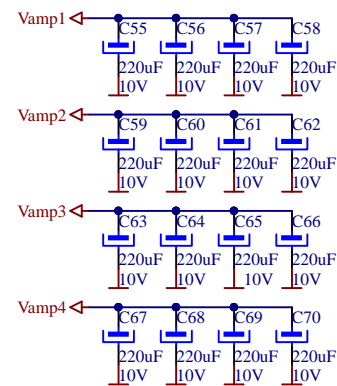
Inter-Board Connection



BIAS Power Supply



Main Power Supply Decoupling for RF stages



Peripheral Power Supply

