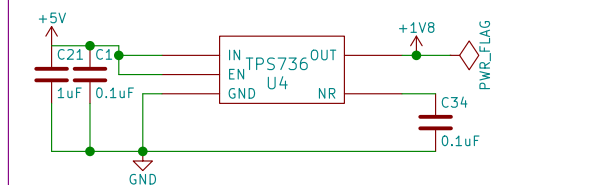


1V8 Power Regulator

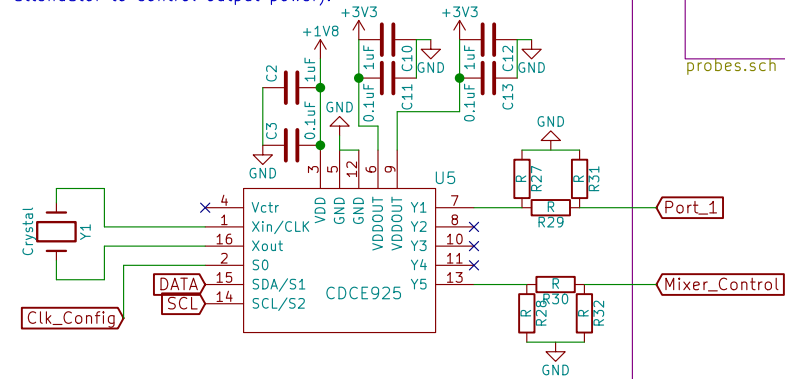
Used to serve as a 1V8 power source for some of the devices



1V8_power.sch

System Clock and Crystal

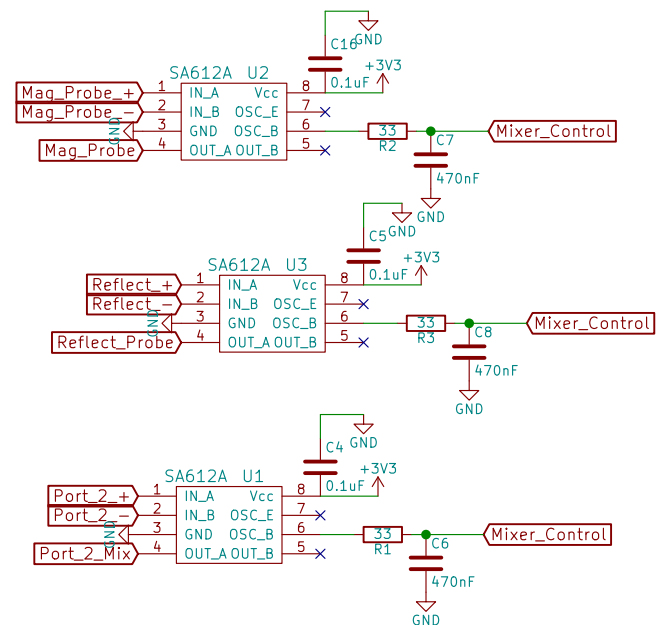
Used to generate two clock signals with a frequency offset between them (with unlabeled attenuator to control output power).



system_clock.sch

Input Signal Mixers

Using SA612 for differential input mixer and to power filter

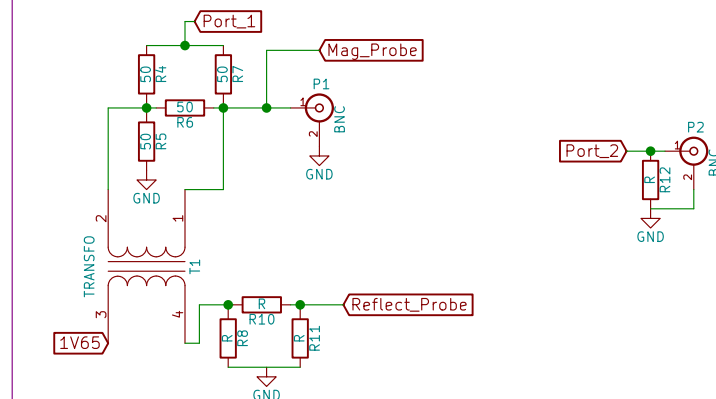


input_mixers.sch

Current setup does not have the components in the separate schematic files

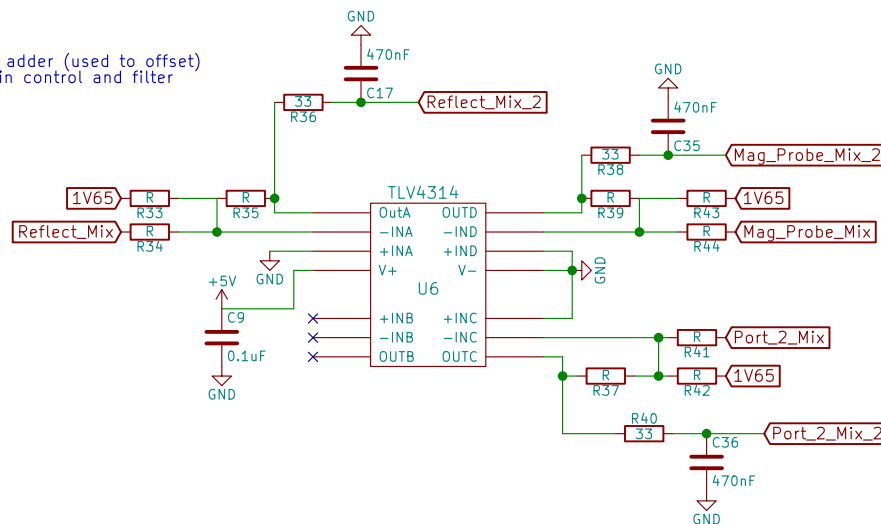
Probes for measurements

Sensor probes, used to measure the reflection coefficients.



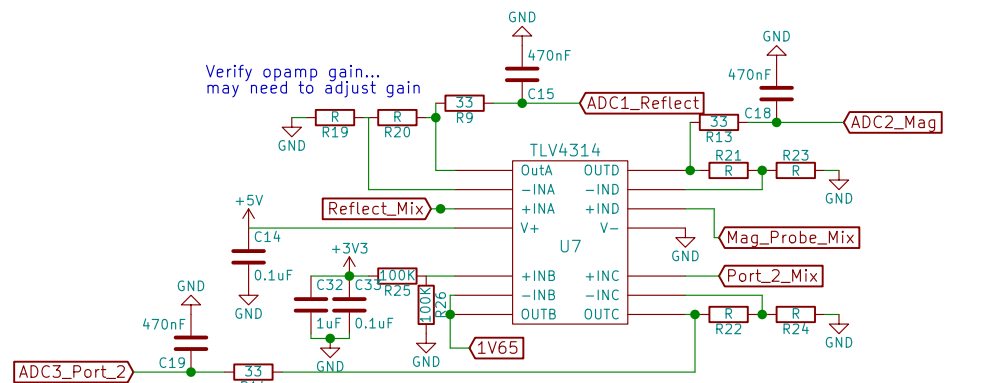
probes.sch

Voltage adder (used to offset) with gain control and filter

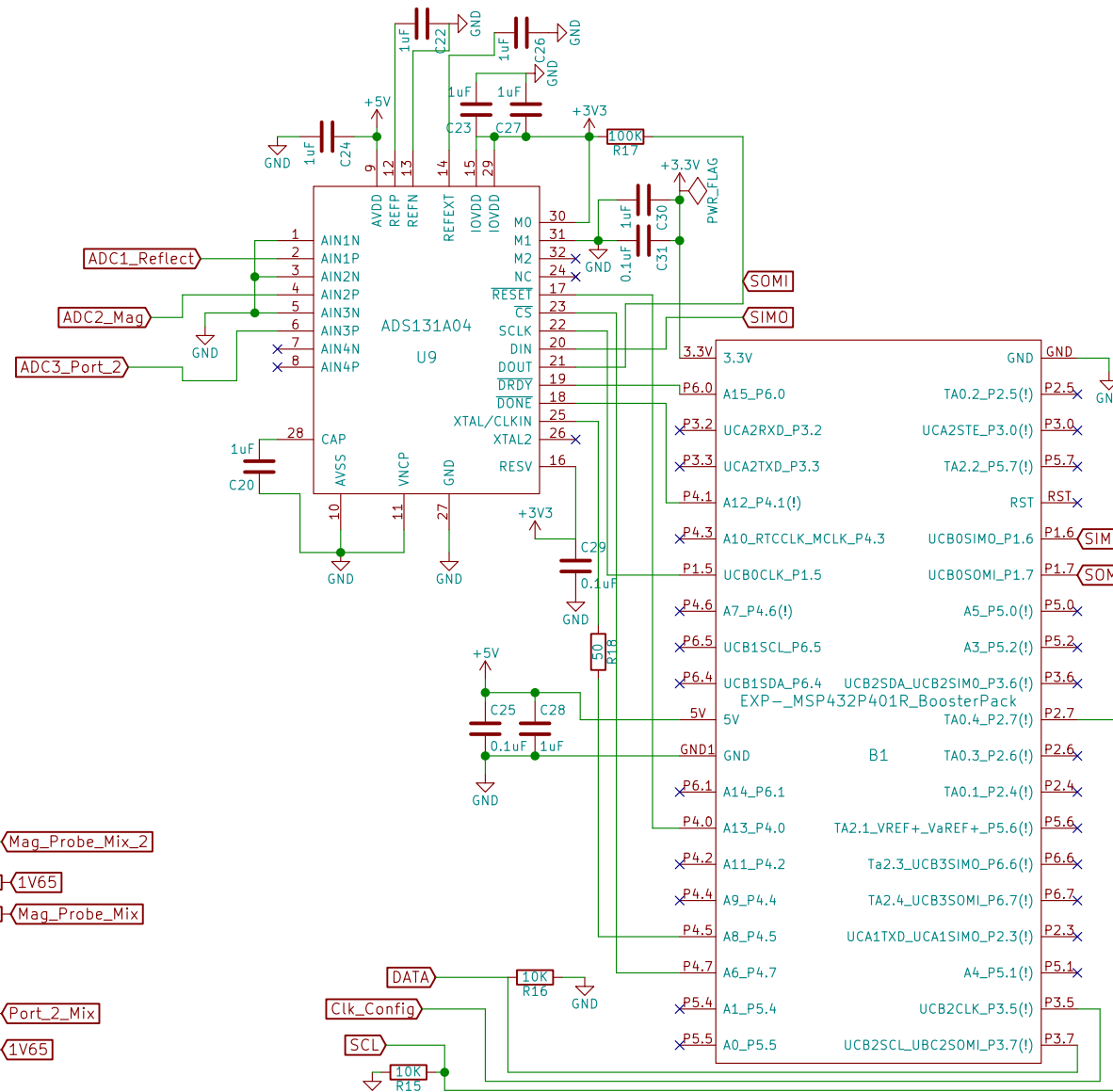


Buffer and voltage regulator

Verify opamp gain... may need to adjust gain



opamp_and_filter.sch



Covrig Wang Solutions

Sheet: /
File: revised_engr_357.sch

Title: Superheterodyne VNA

Size: A3 Date: 2016-05-01

KiCad E.D.A. kicad 4.0.1-stable

Rev:

Id: 1/7

1	2	3	4	5	6
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B					B
C					C
D					D
1	2	3	4	5	6

Sheet: /1V8 Power Regulator/ File: 1V8_power.sch		
Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad 4.0.1-stable		Id: 2/7

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A						
B						
C						
D						
	1	2	3	4	5	6

Sheet: /System Clock and Crystal/ File: system_clock.sch		
Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad 4.0.1-stable		Id: 3/7

1	2	3	4	5	6
A					A
B					B
C					C
D					D
1	2	3	4	5	6

Sheet: /Input Signal Mixers/ File: input_mixers.sch				
Title:				
Size: A4	Date:			Rev:
KiCad E.D.A. kicad 4.0.1–stable				Id: 4/7

	1	2	3	4	5	6
A						
B						
C						
D						
	1	2	3	4	5	6

Sheet: /Buffer and voltage regulator/ File: opamp_and_filter.sch		
Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad 4.0.1–stable		Id: 5/7

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A						
B						
C						
D						
	1	2	3	4	5	6

Sheet: /Differential OP–Amp and filter/ File: diff_amp_and_filter.sch		
Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad 4.0.1–stable		Id: 6/7

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A						
B						
C						
D						
	1	2	3	4	5	6

Sheet: /Probes for measurements/ File: probes.sch		
Title:		
Size: A4	Date:	Rev:
KiCad E.D.A. kicad 4.0.1–stable		Id: 7/7