Loop testing - Yuma2 Rev 4.0
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See http://bnordgren.org/seismo/FBV/Loop_Test_Board-2.pdf

Loop test board
Sig gen
Oscope
Probe calibration: Vout channel is reading 3.2% low. Use Vout (corrected) column
Loop phase measured two ways. Directly by measuring phase shift between Vout and Vin with scope, and calculated using voltages.

Osc Freq (Hz)	Vosc (pp)	Vin (pp)	Vout (pp)	Phase shift (s)	Vout (corrected)	Loop gain (dB)	Loop phase (deg)	Loop phase (deg)	Comments
1	6.40	0.066	6.24	0.224	6.45	39.8	80.6	45.7	vin accuracy low
2	5.00	0.17	4.92	0.11	5.08	29.5	79.2	60.2	
5	2.04	0.18	2	4.40E-02	2.07	21.2	79.2	79.2	
10	2.04	0.36	2.02	2.20E-02	2.09	15.3	79.2	77.6	
20	2.04	0.74	2.08	1.00E-02	2.15	9.3	72.0	71.6	
30	2.04	1.1	2.2	6.40E-03	2.27	6.3	69.1	63.7	
40	2.04	1.6	2.3	4.40E-03	2.38	3.4	63.4	57.9	
50	2.04	2.12	2.46	3.00E-03	2.54	1.6	54.0	50.9	
57.57	**2.04**	**2.6**	**2.6**	**2.30E-03**	**2.69**	**0.3**	**47.7**	**45.4**	
60	2.04	2.76	2.62	2.10E-03	2.71	-0.2	45.4	43.8	
70	2.04	3.44	2.76	1.60E-03	2.85	-1.6	40.3	36.3	
80	2.04	4.04	2.74	1.04E-03	2.83	-3.1	30.0	28.1	
90	2.04	4.44	2.62	7.60E-04	2.71	-4.3	24.6	17.8	
100	2.04	3.96	1.84	1.20E-04	1.90	-6.4	4.3	#NUM!	

Results:
Crossover freq = 57.6 Hz
Phase margin = 47.7 deg