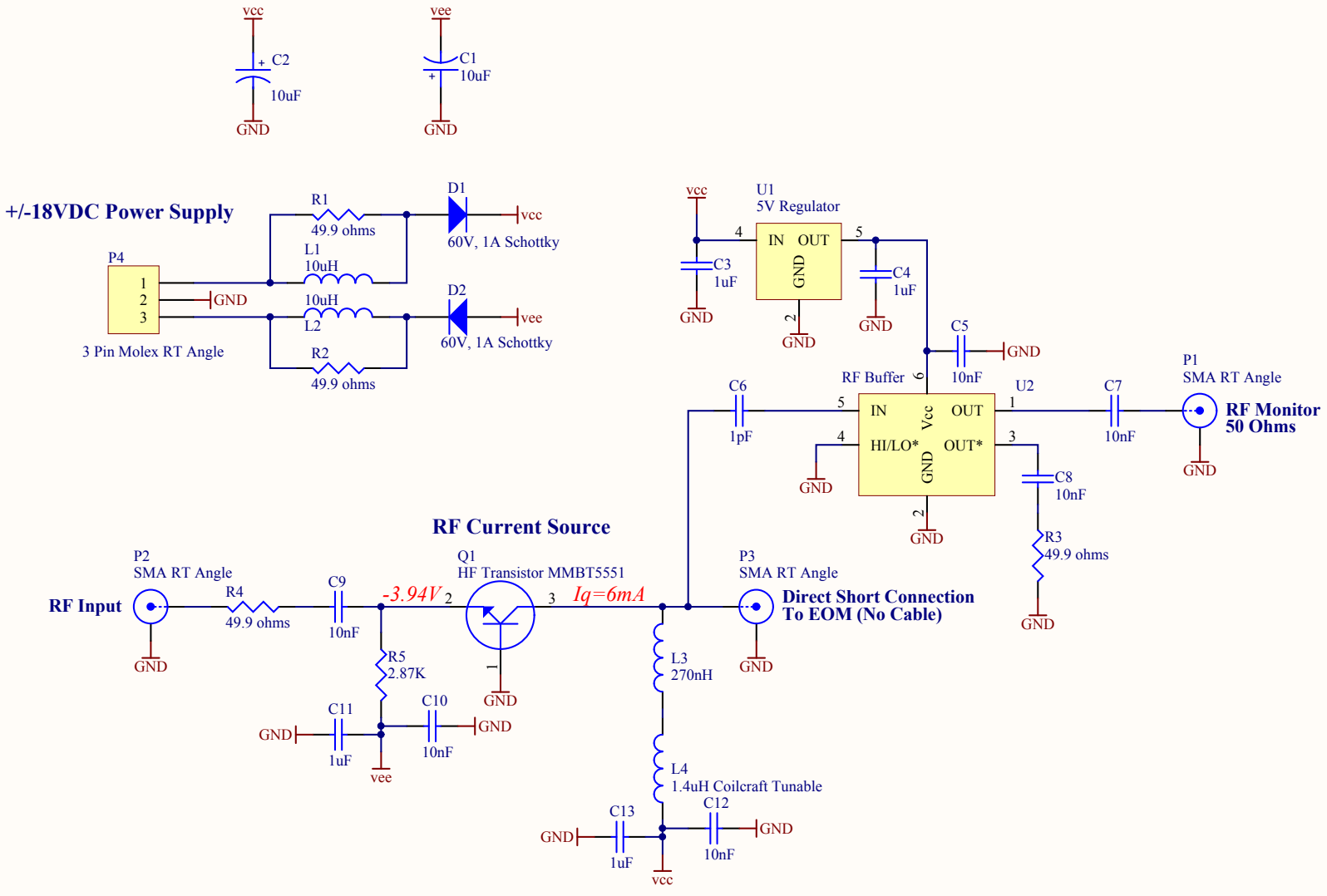
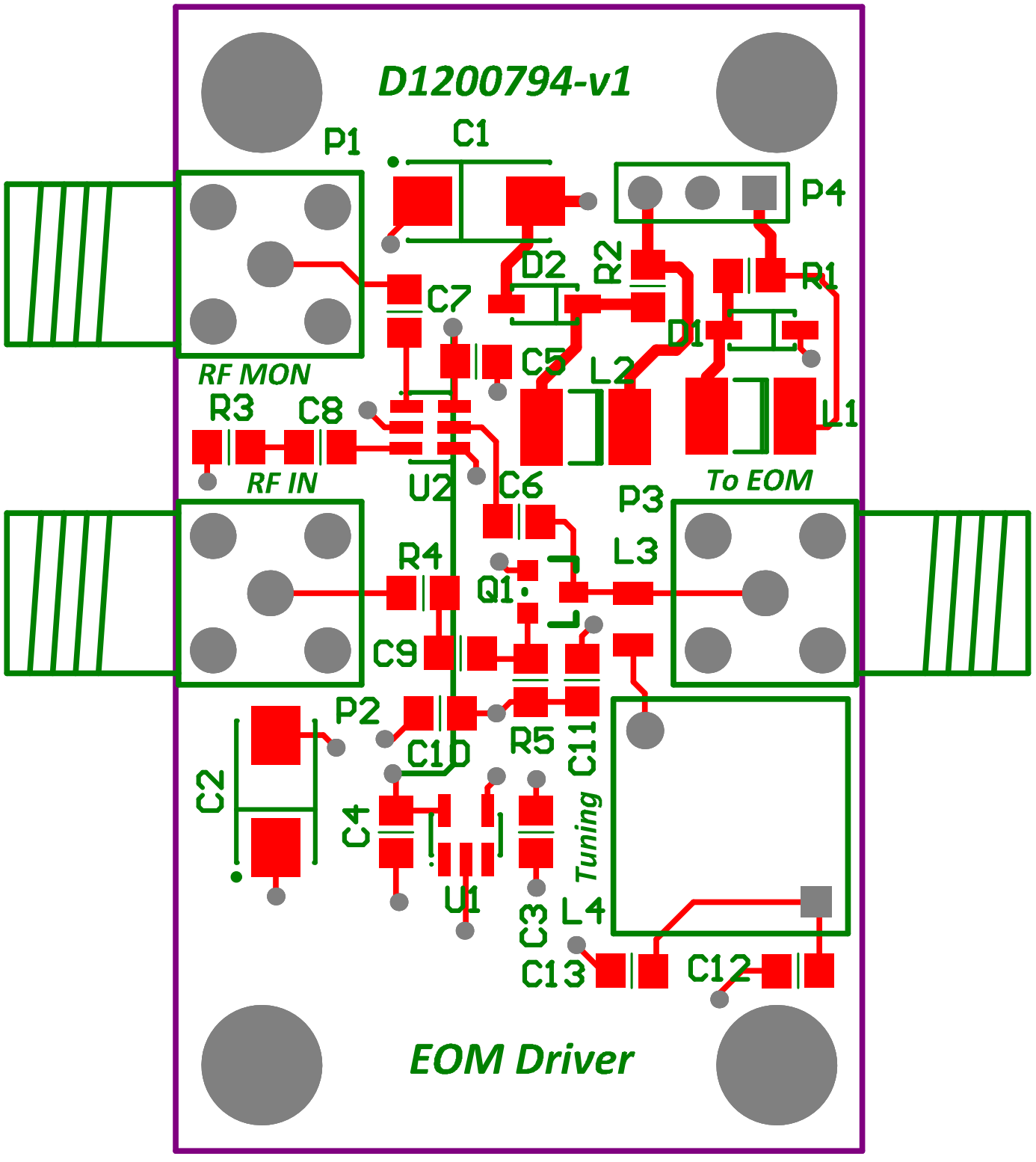


Tested prototype to have gain of:
30 volts peak to peak out for 0.15 volts peak to peak in at 20 something MHz

L3 should be adjusted in value to be within the tuning range of L4 at the desired operating frequency. The connection between P1 and the target EOM must be short and the reactance of this transmission line becomes part of the tuned circuit

Title: *EOM Driver*			*LIGO Laboratory* *California Institute of Technology* *Massachusetts Institute of Technology*	LIGO
Size: A	DCC Number: D1200794	Revision: v1	Engineer: *R. Abbott*	Last Edited: *31 May 2012* Date: 5/31/2012 Time: 11:07:23 AM
File: C:\Rich's Files\Mycadfiles\Misc\EOM_Driver\EOM.SchDoc				Sheet 1 of 1


D1200794-v1
P1
C1
P4
D2
R2
R1
C7
D1
C5
L2
L1
RF MON
R3
C8
RF IN
U2
C6
P3
To EOM
R4
Q1
L3
C9
P2
C10
R5
C11
C2
C4
U1
C3
Tuning
L4
C13
C12
EOM Driver

Comment	Designator	Digikey Part Number	Footprint	Quantity	Supplier Part Number 1
10uF	C1, C2	478-1701-1-ND	TC6032-2412	2	
1uF	C3, C4, C11, C13	PCC102CGCT-ND	2012[0805]	4	
10nF	C5, C7, C8, C9, C10, C12	490-1664-1-ND	2012[0805]	6	
1pF	C6	399-1104-1-ND	2012[0805]	1	
60V, 1A Schottky	D1, D2	RB160M-60CT-ND	sod123	2	
10uH	L1, L2	495-1754-1-ND	1812	2	
270nH	L3		2520	1	1008CS-271XJ
1.4uH Coilcraft Tunable	L4		Coilcraft 10mm Tunable	1	143-20J12L
SMA RT Angle	P1, P2, P3	J569-ND	MY_SMA4	3	
3 Pin Molex RT Angle	P4	WM5236-ND	HDR1X3	1	
HF Transistor MMBT5551	Q1	MMBT5551-FDICT-ND	SOT-23	1	
49.9 ohms	R1, R2, R3, R4	311-49.9BCT-ND	2012[0805]	4	
2.87K	R5	P2.87KDACT-ND	2012[0805]	1	
5V Regulator	U1	296-18037-1-ND	SOT23-5	1	
RF Buffer	U2	MAX2470EUT+TCT-ND	SOT23-6	1	