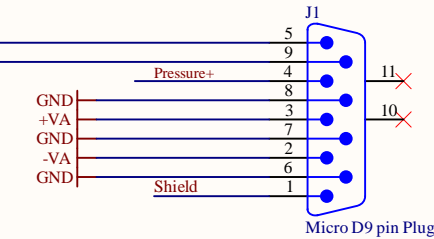
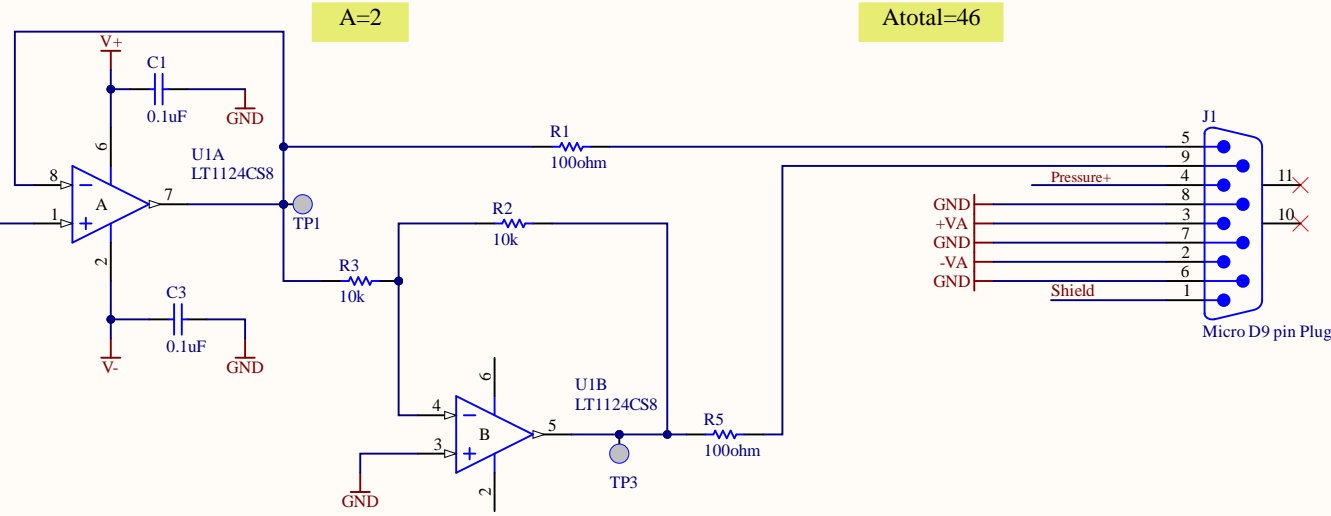
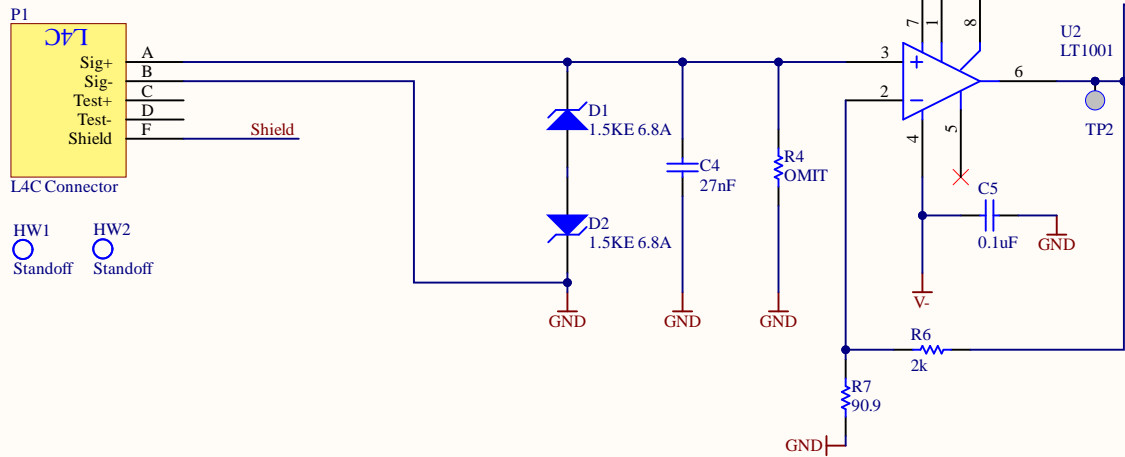
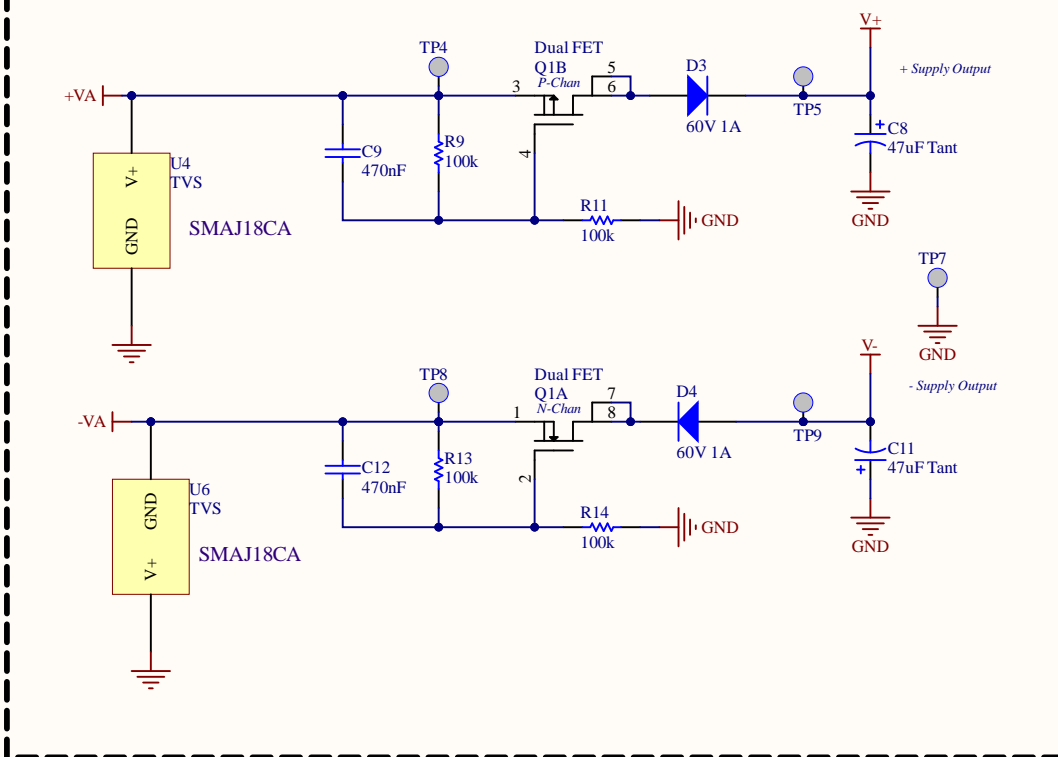


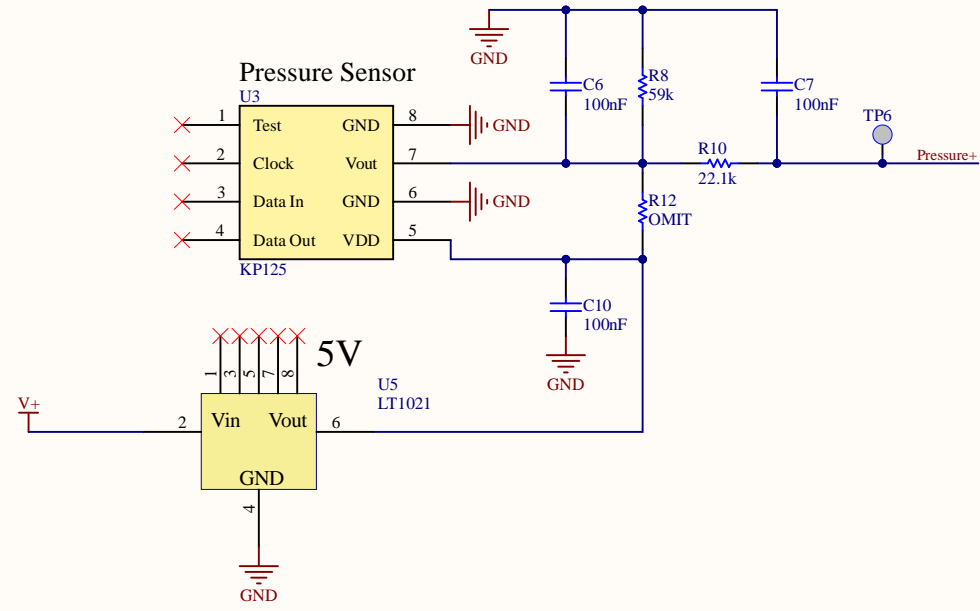
Pin A--- Coil +  
 Pin B--- Coil -  
 Pin C--- Cal Coil +  
 Pin D--- Cal Coil -  
 Pin F-- Case GND/Shield

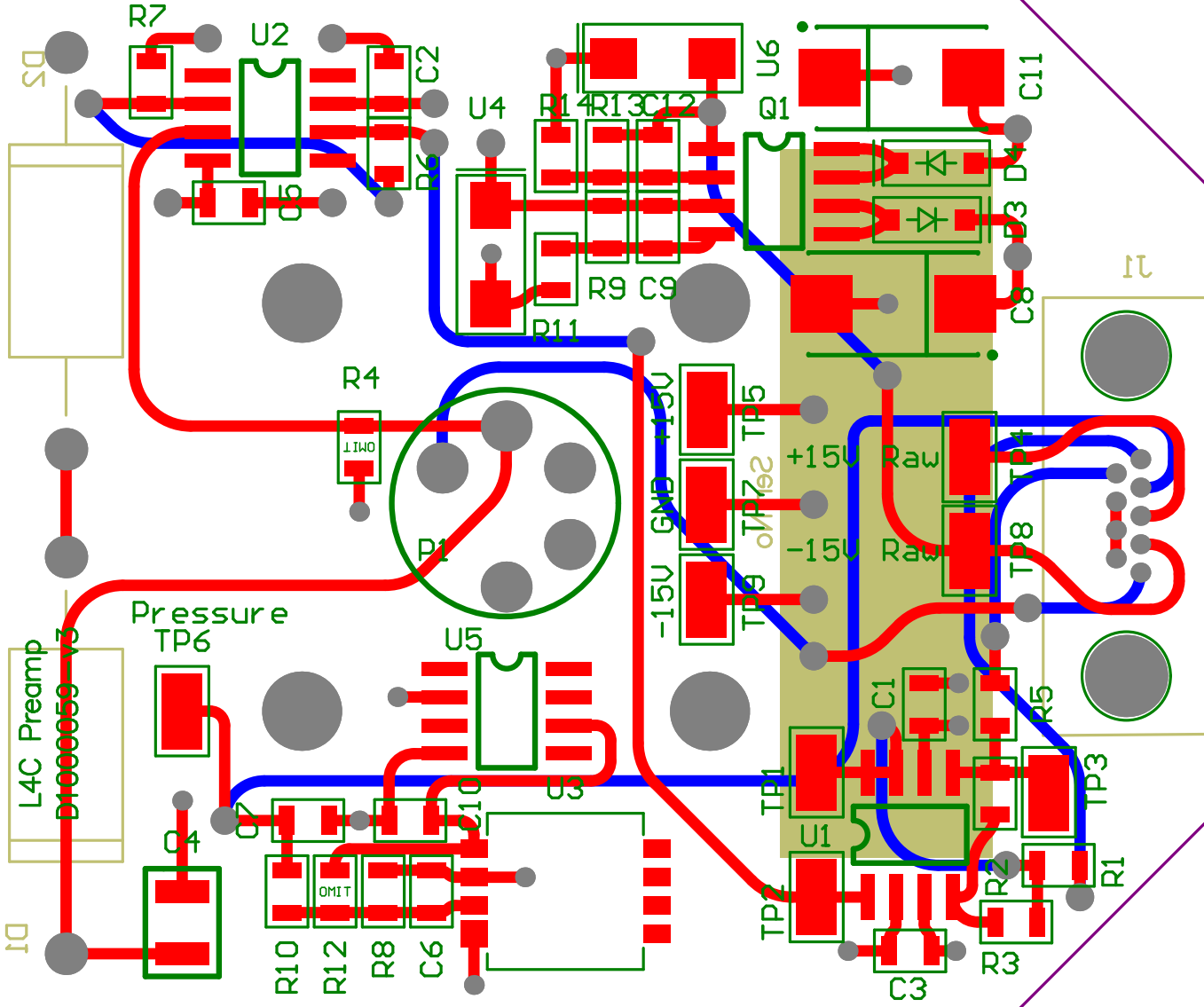


**Inrush Current Limiter, Transient spike, and reverse Voltage protection.**



All parts were updated to equivalent currently available stock for A+





Bill of Materials

LIGO Project

D1000059

Revision v3

Project: D1000059-v3 L4C\_PreamprjPCB  
 Author: Sam Abbott

Number of boards	1
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Report Date: 3/4/2021 7:03 AM  
 Print Date: 04-Mar-21 7:03:08 AM

Quantity	Distributor	Part Number	Comment	Description	Designator	Footprint	Asse m l T	Ext	Exces	Ad	Quantity to Order	
4		0.1uF		0.1µF ±5% 50V Ceramic Capacitor X7R 0805 (2012 Metric)	C1, C2, C3, C5	0805 CAP			5	0%	5	10
1		27nF		Capacitor	C4	surfacemountpolycap			5	0%	5	10
3		100nF		0.1µF ±5% 50V Ceramic Capacitor X7R 0805 (2012 Metric)	C6, C7, C10	0805 CAP			5	0%	5	10
2		47uF Tant		Solid Tantalum Chip Capacitor, Standard T491 Series - Industrial Grade	C8, C11	X			5	0%	5	10
2		470nF		0.47µF ±10% 50V Ceramic Capacitor X7R 0805 (2012 Metric)	C9, C12	0805 CAP			5	0%	5	10
2		1.5KE 6.8A		10.5V Clamp 144.8A Ipp Tvs Diode Through Hole DO-201	D1, D2	DO-201 DIODE			5	0%	5	7
2		60V 1A		Diode Schottky 60V 1A Surface Mount SOD-123FL	D3, D4	SOD123 Diode			5	0%	5	7
2		Standoff		Round Standoff Threaded #2-56 Brass 0.125" (3.18mm) 1/8"	HW1, HW2	StandOff 2-56 1/8"			5	0%	5	7
1		Micro D9 pin Plug		9 Position D-Type, Micro-D Plug, Male Pins Connector	J1	throughholemicrod9(m)			5	0%	5	6
1		L4C Connector		L4C Connector	P1	L4C			5	0%	5	6
1		Dual FET		Mosfet Array N and P-Channel 55V 4.7A, 3.4A 2W Surface Mount 8-SO	Q1	SO-8			5	0%	5	6
2		100ohm		100 Ohms ±0.1% 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Anti-Sulfur, Automotive AEC-Q200 Thin Film	R1, R5	0805 Resistor			5	0%	5	10
2		10k		10 kOhms ±0.1% 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Anti-Sulfur, Automotive AEC-Q200 Thin Film	R2, R3	0805 Resistor			5	0%	5	10
1		2k		2 kOhms ±0.1% 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Anti-Sulfur, Automotive AEC-Q200 Thin Film	R6	0805 Resistor			5	0%	5	10
1		90.9		90.9 Ohms ±0.1% 0.25W, 1/4W Chip Resistor 0805 (2012 Metric) Thin Film	R7	0805 Resistor			5	0%	5	10
1		59k		59 kOhms ±0.1% 0.25W, 1/4W Chip Resistor 0805 (2012 Metric) Thin Film	R8	0805 Resistor			5	0%	5	10
4		100k		100 kOhms ±0.1% 0.125W, 1/8W Chip Resistor 0805 (2012 Metric) Anti-Sulfur, Automotive AEC-Q200 Thin Film	R9, R11, R13, R14	0805 Resistor			5	0%	5	10
1		22.1k		22.1 kOhms ±0.1% 0.25W, 1/4W Chip Resistor 0805 (2012 Metric) Thin Film	R10	0805 Resistor			5	0%	5	10
9		TESTPT		PCB Testpoint	TP1, TP2, TP3, TP4, TP5, TP6, TP7, TP8, TP9	Test Point - 5015			5	0%	5	14
1		LT1124CS8		General Purpose Amplifier 2 Circuit 8-SO	U1	So-8			5	0%	5	6
1		LT1001		General Purpose Amplifier 1 Circuit 8-SO	U2	SO-8			5	0%	5	6
1		KP125		Pressure Sensor 5.8PSI - 16.68PSI (40kPa ~ 115kPa) Absolute 0.5 V - 4.5 V 8-SMD Module	U3	KP125			5	0%	5	6
2		TVS		29.2V Clamp 13.7A Ipp Tvs Diode Surface Mount DO-214AC (SMA)	U4, U6	DO-214AC			5	0%	5	7
1		LT1021		Series, Buried Zener Voltage Reference IC ±1% 8-SOIC	U5	SO-8			5	0%	5	6
48	Total pieces											

Summary per Board	
Total # of unique parts	24
SMT Placements per board	48
Thru-Hole placement per board	0
Fine pitch placement per board	0
BGA placement per board	0
Mechanical placement per board	0