

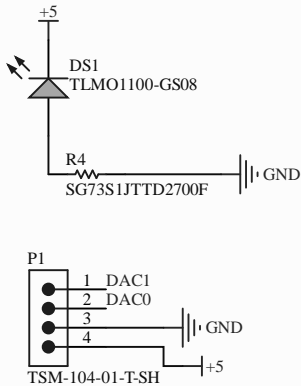
A

B

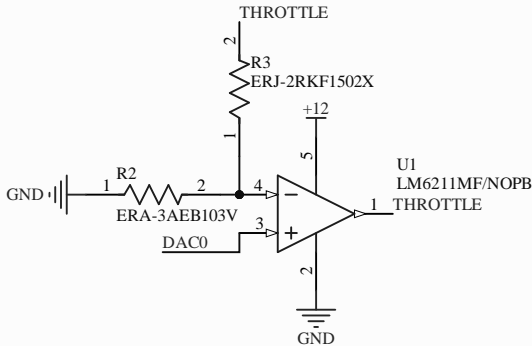
A

B

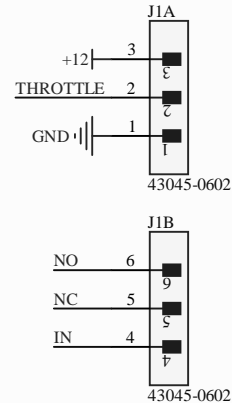
LabJack Input



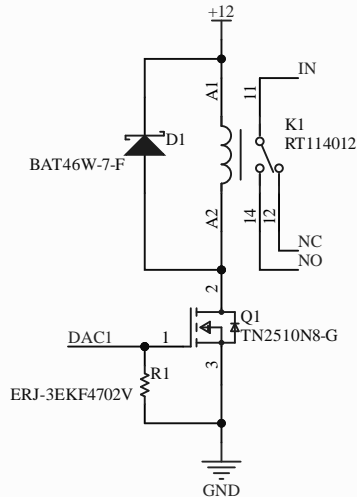
Amplifier Circuit



Vehicle Connection



Relay Circuit



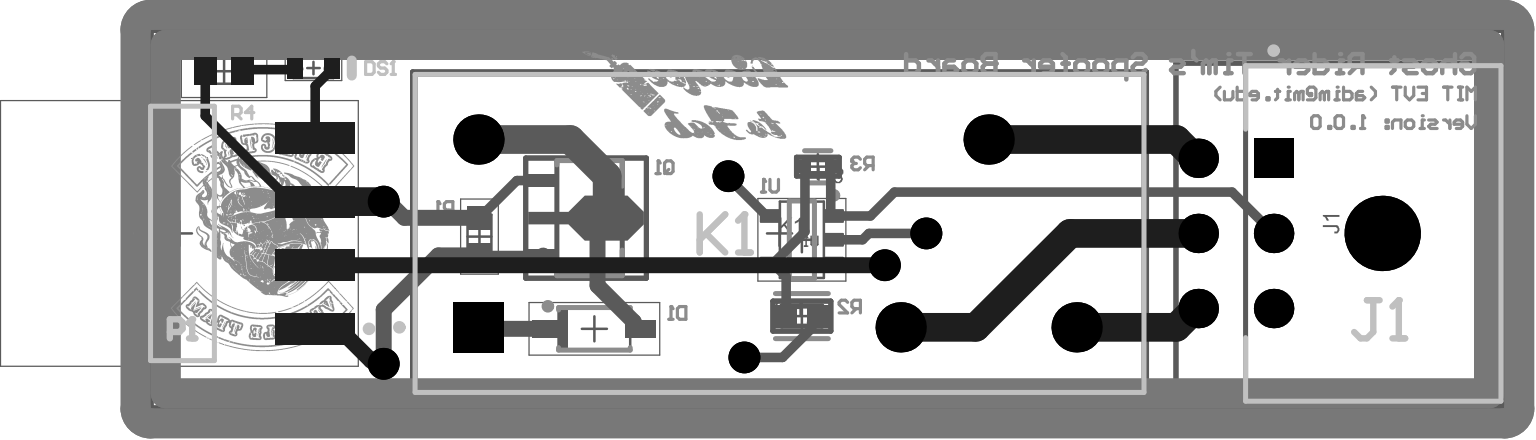
Spoofers Board Info

The Spoofers Board was designed to allow users to control the SEVCON motor controller from a Python script using a LabJack connected to a computer. The board adapts the LabJack's two DAC outputs to control the FS1 switch and throttle potentiometer of the SEVCON.

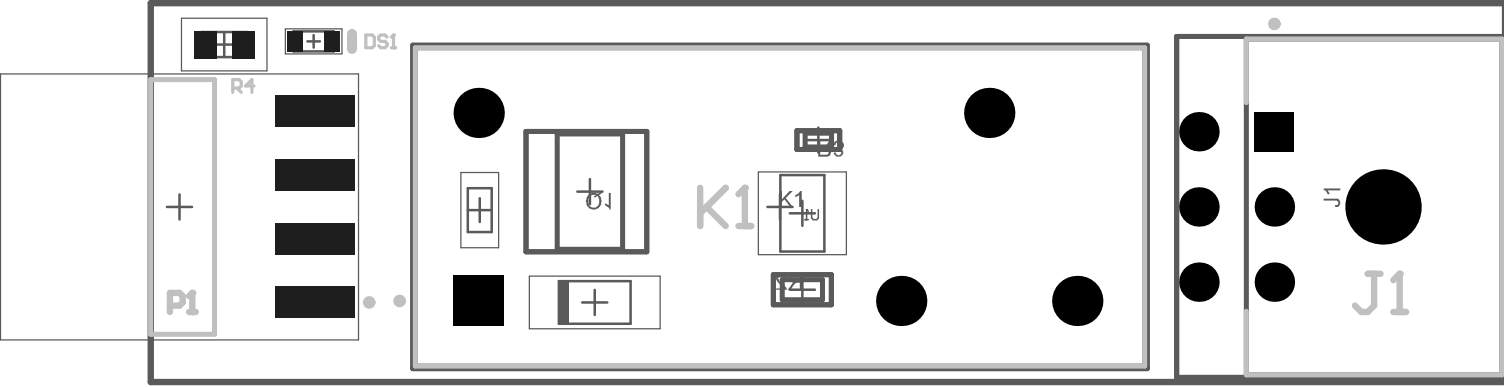
C

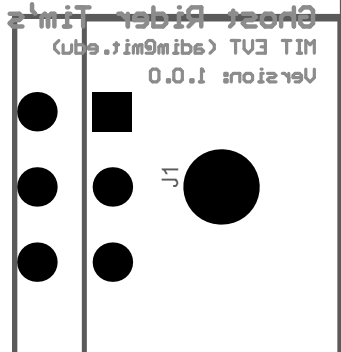
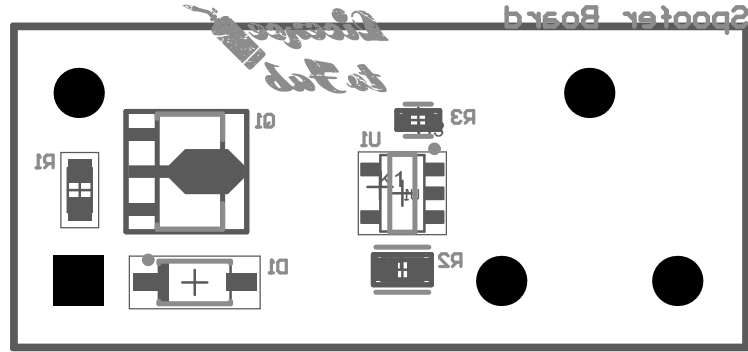
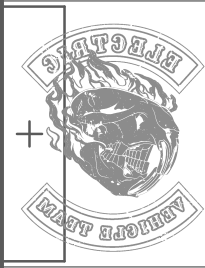
D

Title Spoofers Board ༄(ཐ་ཐ་ཐ་)		
Size A	Number MIT EVT Dyno Project	Revision A
Date:	11/13/2023	Sheet 1 of 1
File:	C:\Users\...\spoofers.SchDoc	Drawn By: adim@mit.edu




















Board Stack Report

Stack Up		Layer Stack			
Layer	Board Layer Stack	Name	Material	Thickness	Constant
1		Top Paste			
2		Top Overlay			
3		Top Solder	Solder Resist	0.40mil	3.5
4		Top Layer	Copper	1.40mil	
5		Dielectric 2	PP-006	2.80mil	4.1
6		Layer 1	Copper	1.38mil	
7		Dielectric 1	FR-4	12.60mil	4.8
8		Layer 2	Copper	1.38mil	
9		Dielectric 3	PP-006	2.80mil	4.1
10		Bottom Layer	Copper	1.40mil	
11		Bottom Solder	Solder Resist	0.40mil	3.5
12		Bottom Overlay			
13		Bottom Paste			
	Height : 24.56mil				

Comment	Description	Designator	Footprint	LibRef	Quantity
BAT46W-7-F	Surface Mount Schottky Barrier Diode, 100 V, -55 to 125 degC, 2-Pin SOD123, RoHS, Tape and Reel	D1	DIOD-SOD-123-2_V	CMP-0303-00004-1	1
TLMO1100-GS08	Orange LED, 20 mA, 2.1 V, -40 to 100 degC, 2-Pin SMD (0603), RoHS, Tape and Reel	DS1	VISH-TLMX1100-2_V	CMP-1666-00029-1	1
43045-0602	CONN HEADER R/A 6POS 3MM	J1	FP-43045-0602-MFG	CMP-04776-000581-1	1
RT114012	RELAY GEN PURPOSE SPDT 12A 12V	K1	FP-RT114012-MFG	CMP-03395-000068-1	1
TSM-104-01-T-SH	0.025" SQ Post Header, Surface Mount, Horizontal, -55 to 105 degC, 2.54 mm Pitch, 4-Pin, Male, RoHS	P1	SMTC-TSM-104-01-X-SH	CMP-1024-00223-1	1
TN2510N8-G	MOSFET N-CH 100V 730MA TO243AA	Q1	FP-TN2510N8-G-IPC_C	CMP-06369-000016-1	1
ERJ-3EKF4702V	Chip Resistor, 47 KOhm, +/- 1%, 0.1 W, -55 to 155 degC, 0603 (1608 Metric), RoHS, Tape and Reel	R1	RESC1608X55X30NL15T15	CMP-2000-00523-2	1
ERA-3AEB103V	RES SMD 10K OHM 0.1% 1/10W 0603	R2	FP-ERA3A-IPC_C	CMP-2000-00874-2	1
ERJ-2RKF1502X	RES SMD 15K OHM 1% 1/10W 0402	R3	FP-ERJ2R-MFG	CMP-2002-00694-4	1
SG73S1JTDD2700F		R4	RESC1608X55X30ML20T10	CMP-2000-01816-1	1
LM6211MF/NOPB	Low Noise, RRO Operational Amplifier with CMOS Input and 24V Operation, 5-pin SOT-23, Pb-Free	U1	DBV0005A_L	CMP-0055-01295-3	1