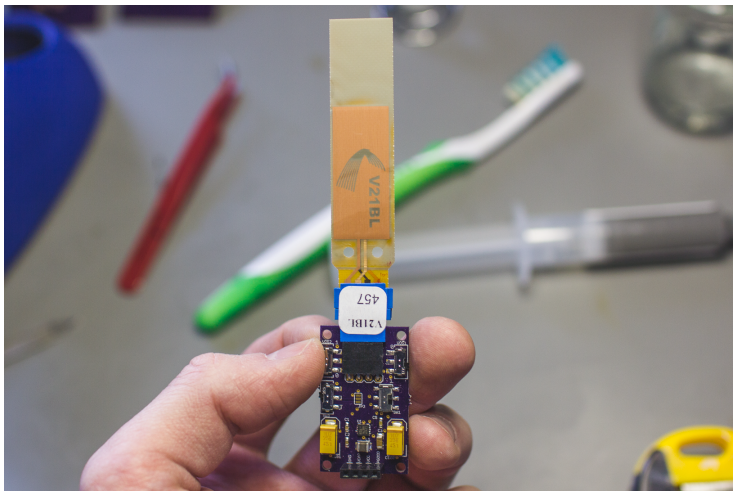
Piezo Energy Harvester

Linear Tech. LTC3588 Demo Board



VOS1 and VOS2: Selectable switches to change the output voltage of the device(VCC) - the voltage selection chart is printed on the back of the board for easy reference.

VOS1	VOS2	VOUT
0	0	1.8V
0	1	2.5V
1	0	3.3V
1	1	3.6V

VCAP: Pre-regulated voltage capacitor. This stores the energy from the input voltage and is what runs the LTC3588 when it has reach a desired voltage(see datasheet). You may increase this storage and ultimately allow for longer run times by added a capacitor to ground off of this pin. However, charging times will be affected. This pin is capable of outputting up to 20V so use a suitable spec. capacitor.

VCC: Regulated Output voltage, a selectable voltage from the chart mentioned above.

PGOOD: Pin to determine when VCC is active and pin will go HIGH when active. Very low current output.

SW3(F - H): If using the Mide piezo element this will break the element from full bridge to half bridge. On half bridge half of the element will be to ground and only one of outputs will oscillate.

SW1(P-S): This will select the pins in the Piezo input to either be parallel or series. This is specific in the case of the Mide Piezo element, but will apply to all connections. If only using a 2 wire Piezo then set the switch to Parallel to only need two of the pins in the header to be occupied.