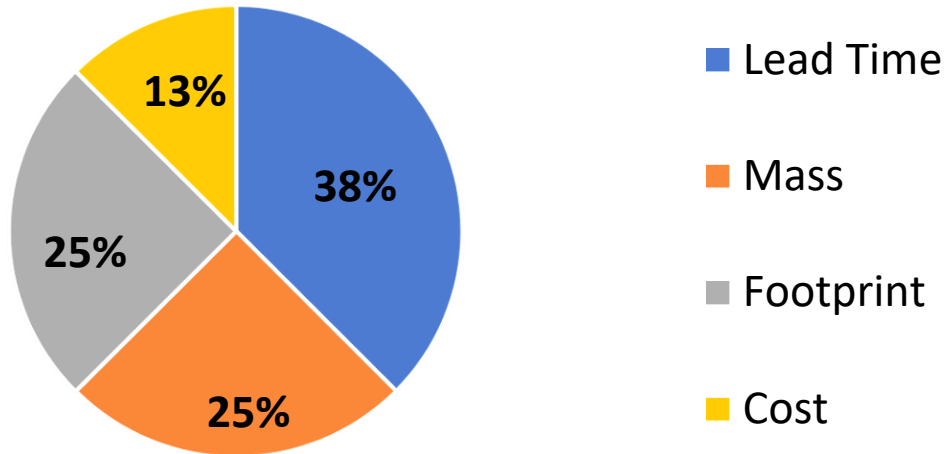


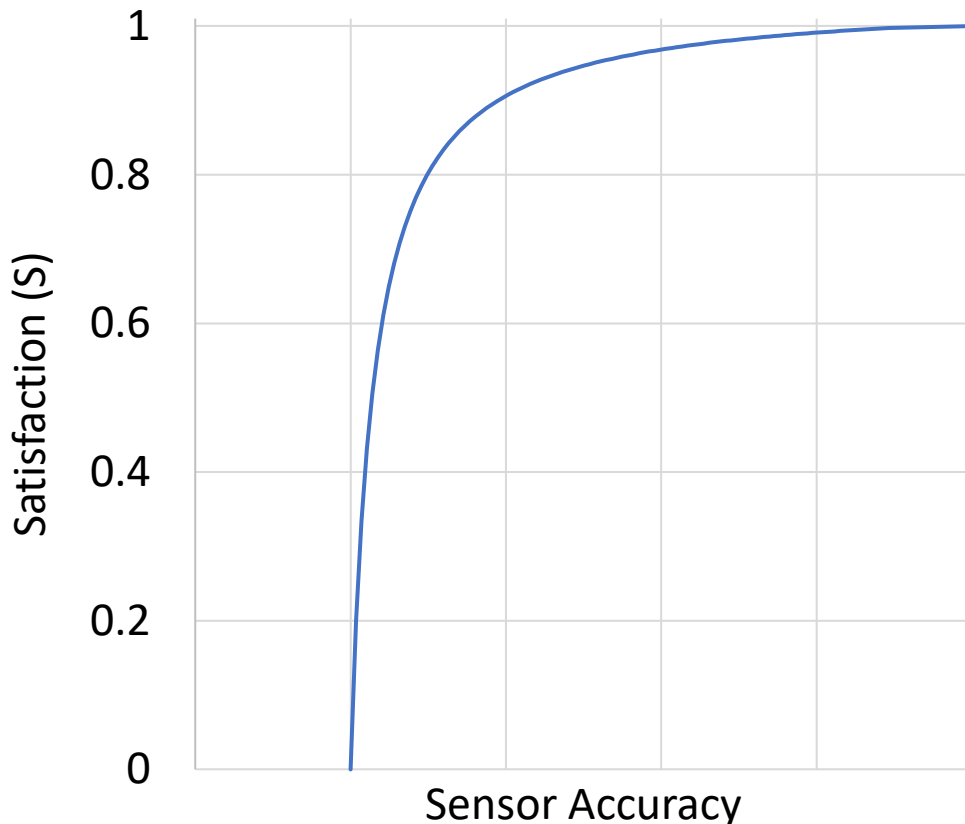
Evaluation Criteria:

Evaluation Criteria Sum Weightings

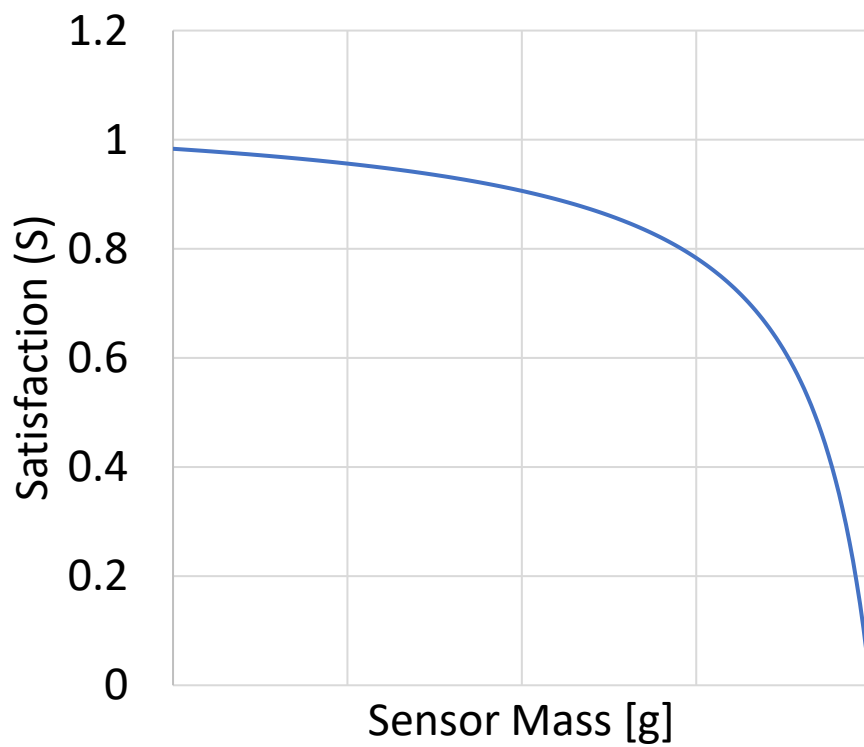
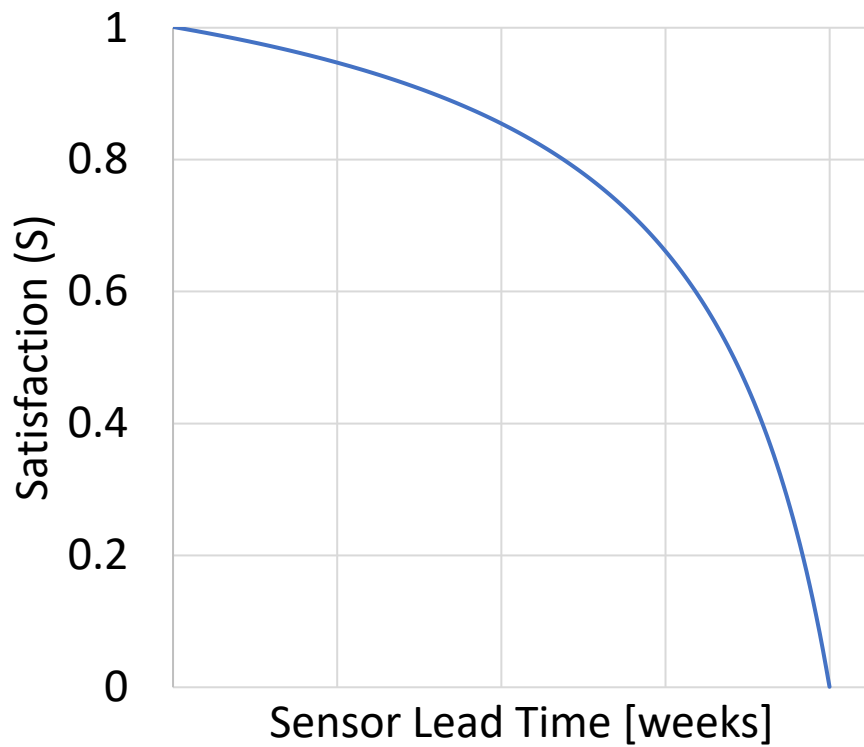


$$S = S_A(0.38S_{LT} + 0.25S_M + 0.25S_{FT} + 0.13S_C)$$

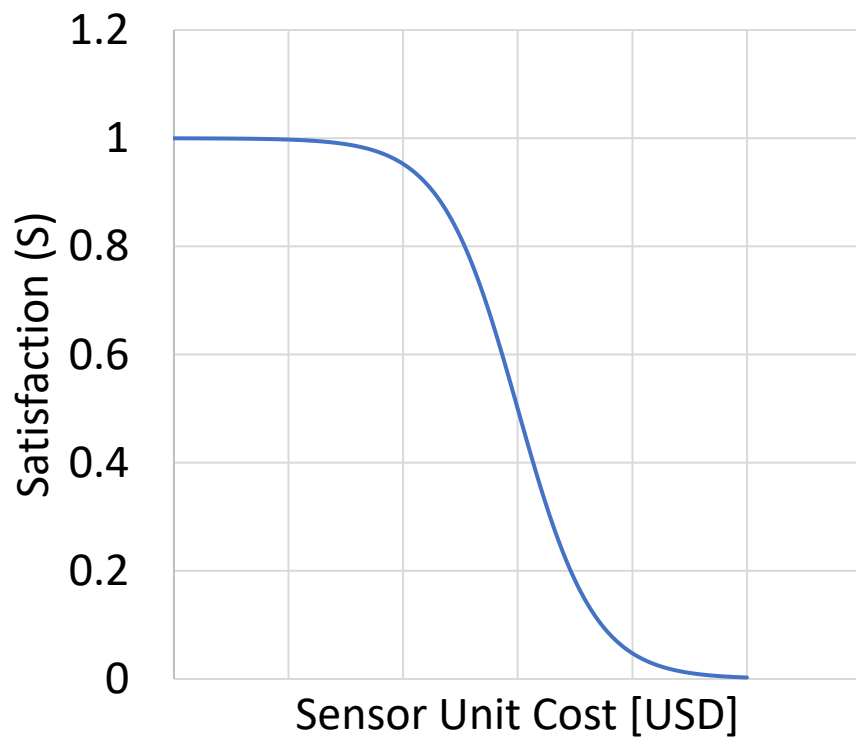
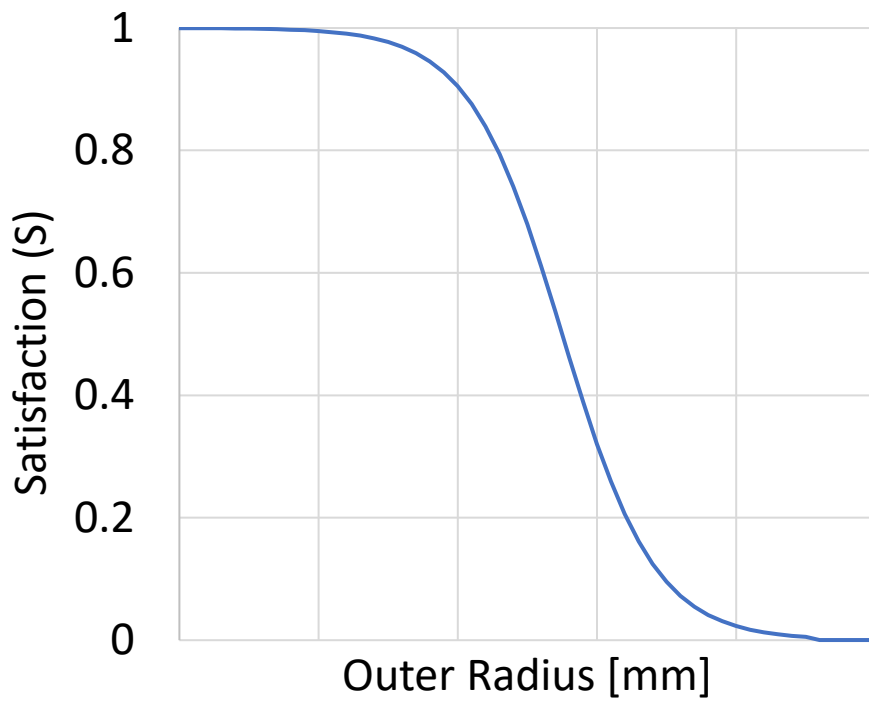
Satisfaction Curve Shapes:



Satisfaction Curve Shapes:



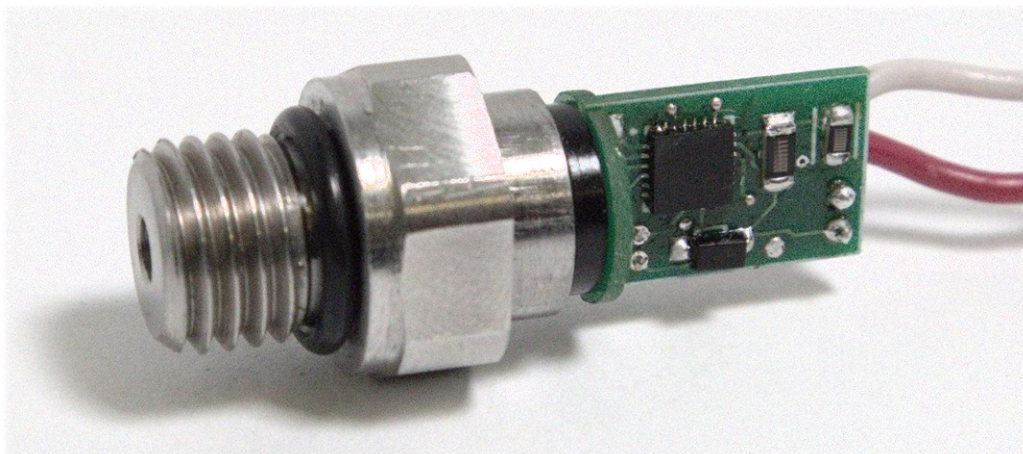
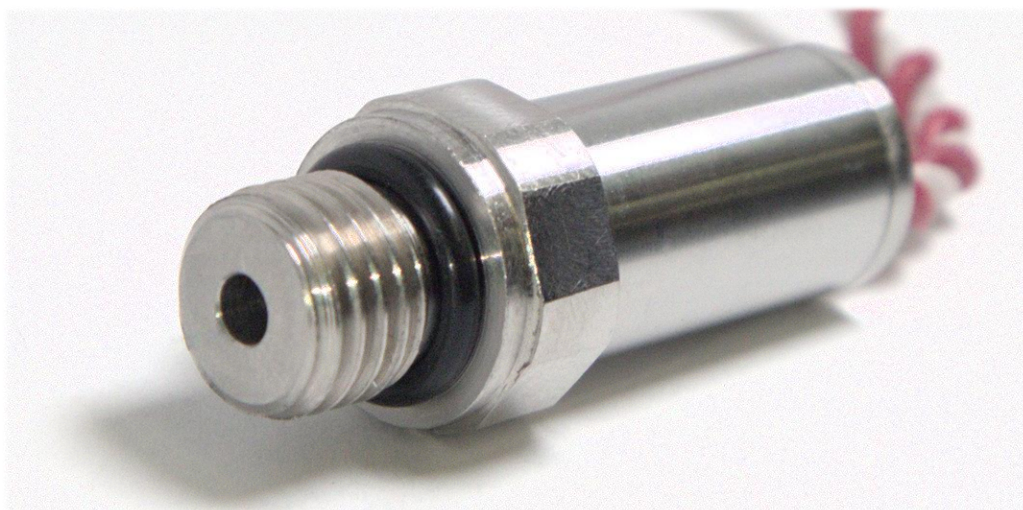
Satisfaction Curve Shapes:



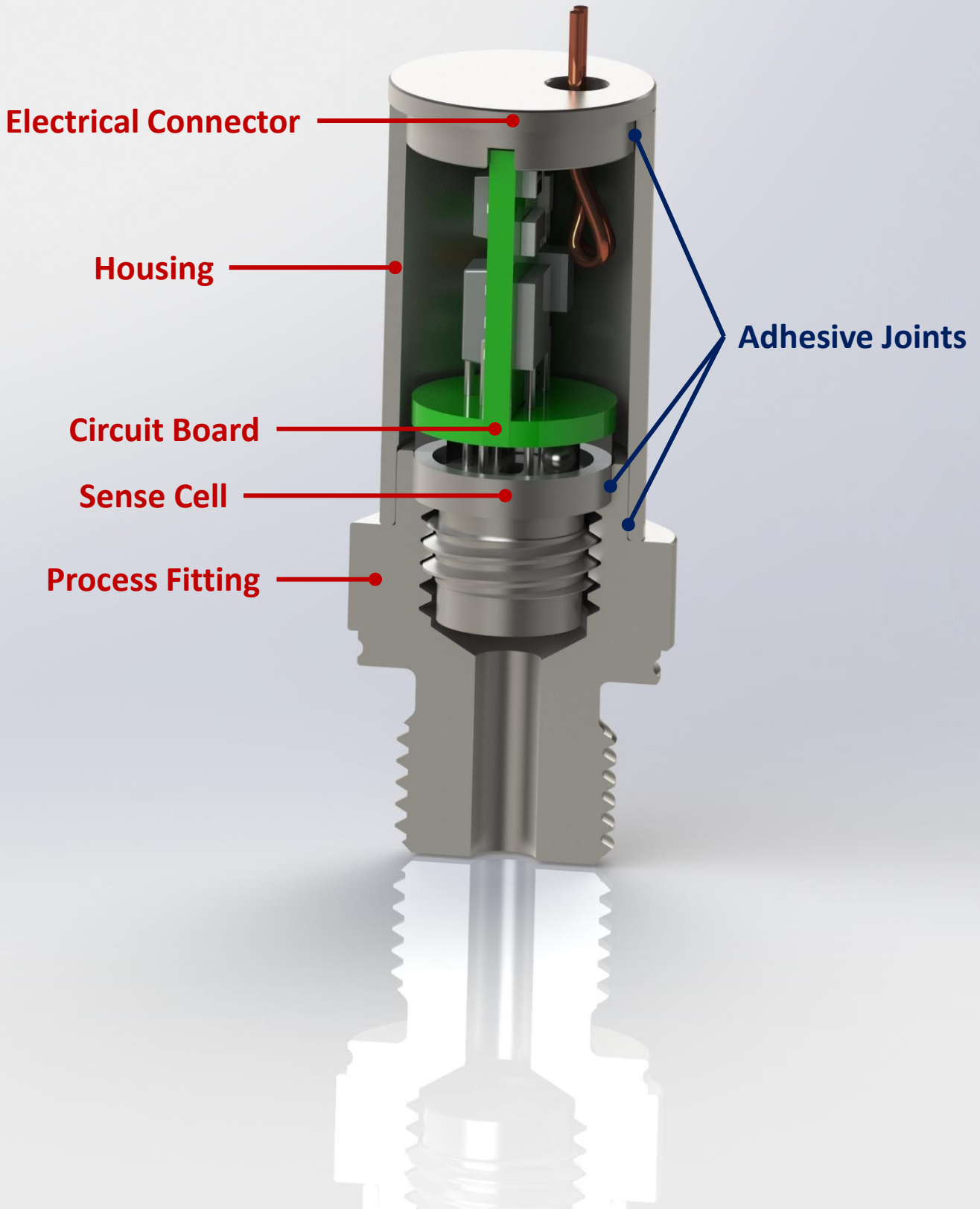
Sealing Prototypes:



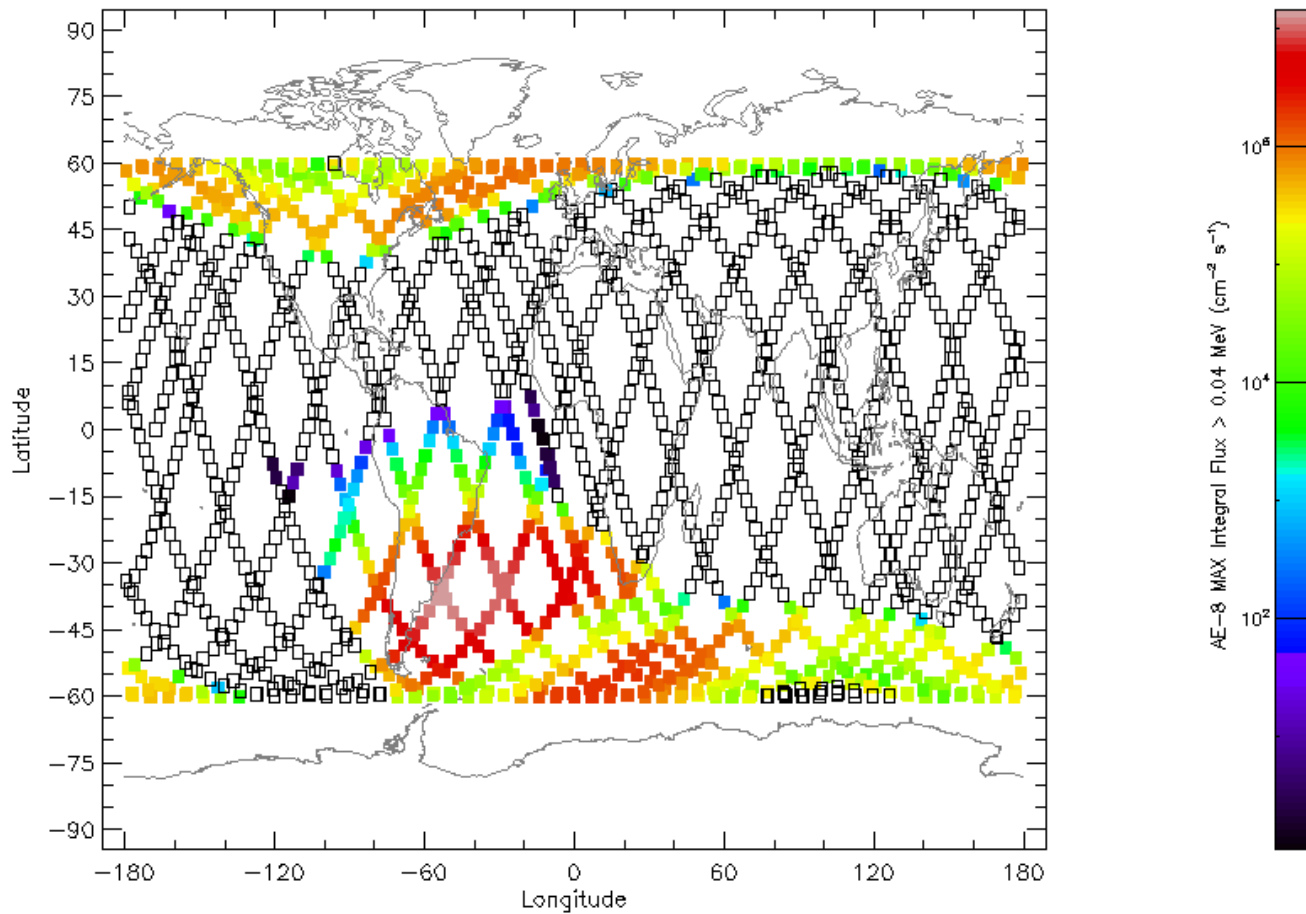
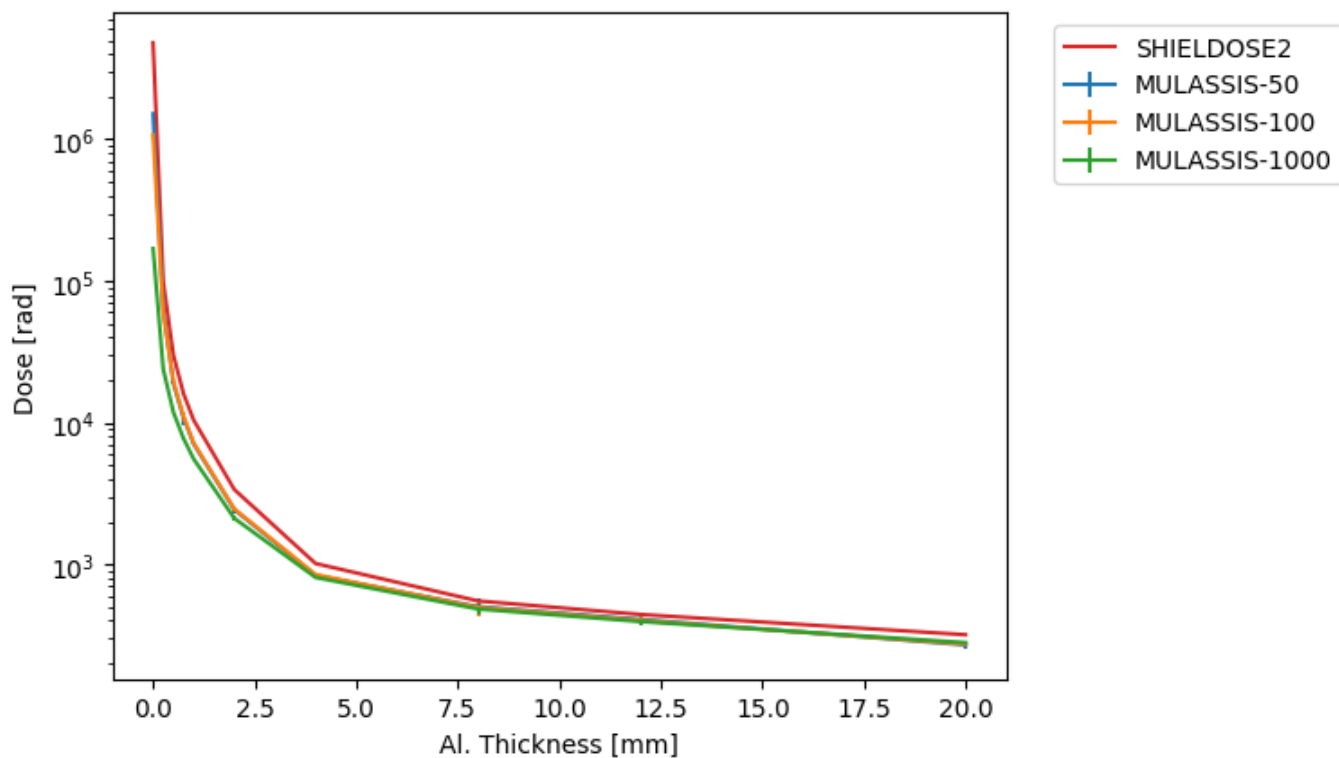
Final Prototype:



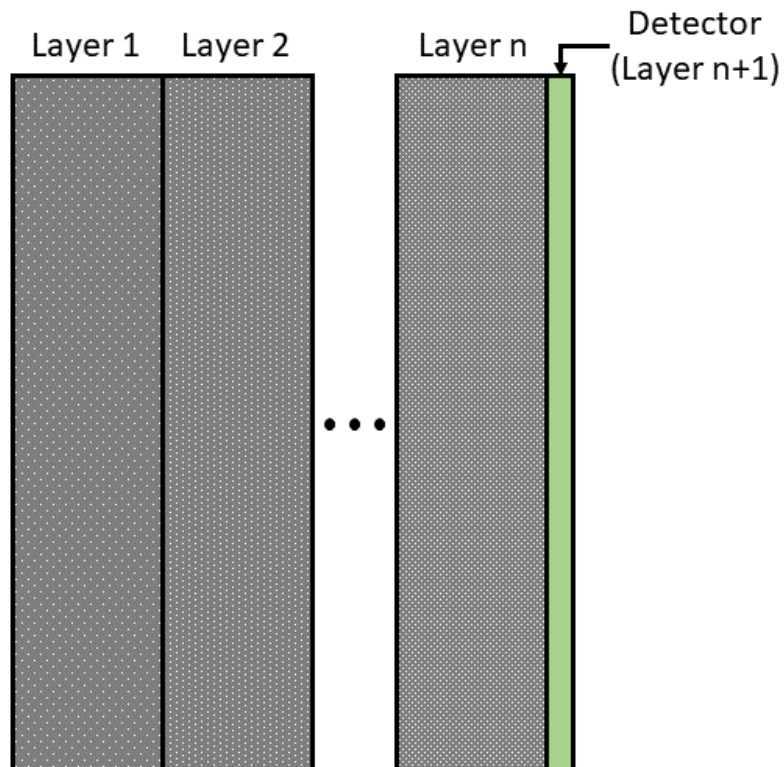
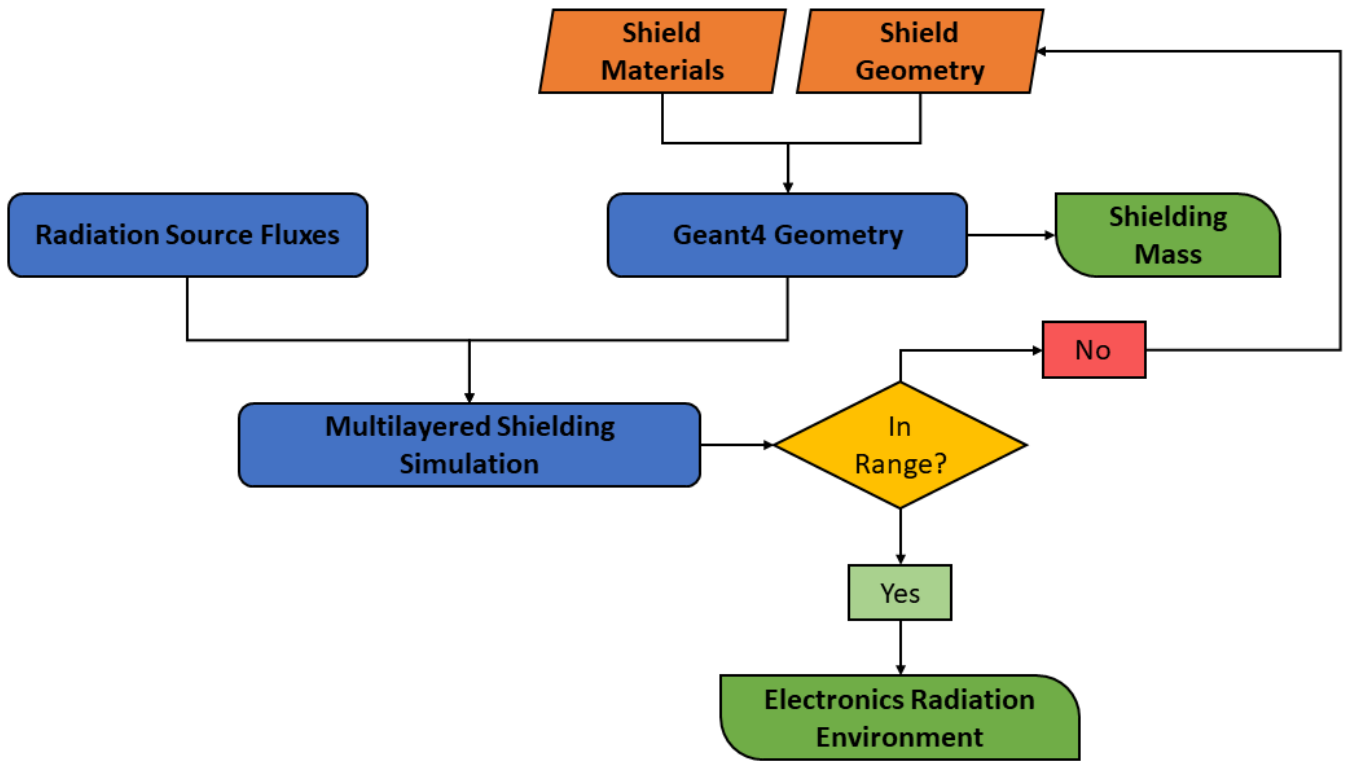
Final Prototype:



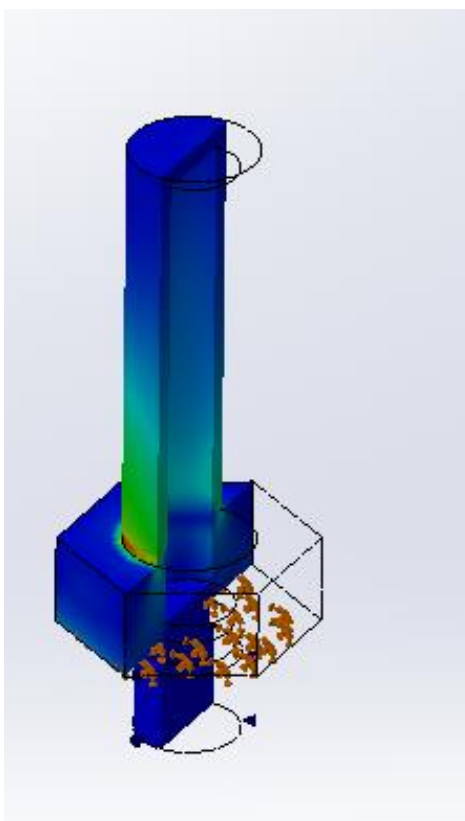
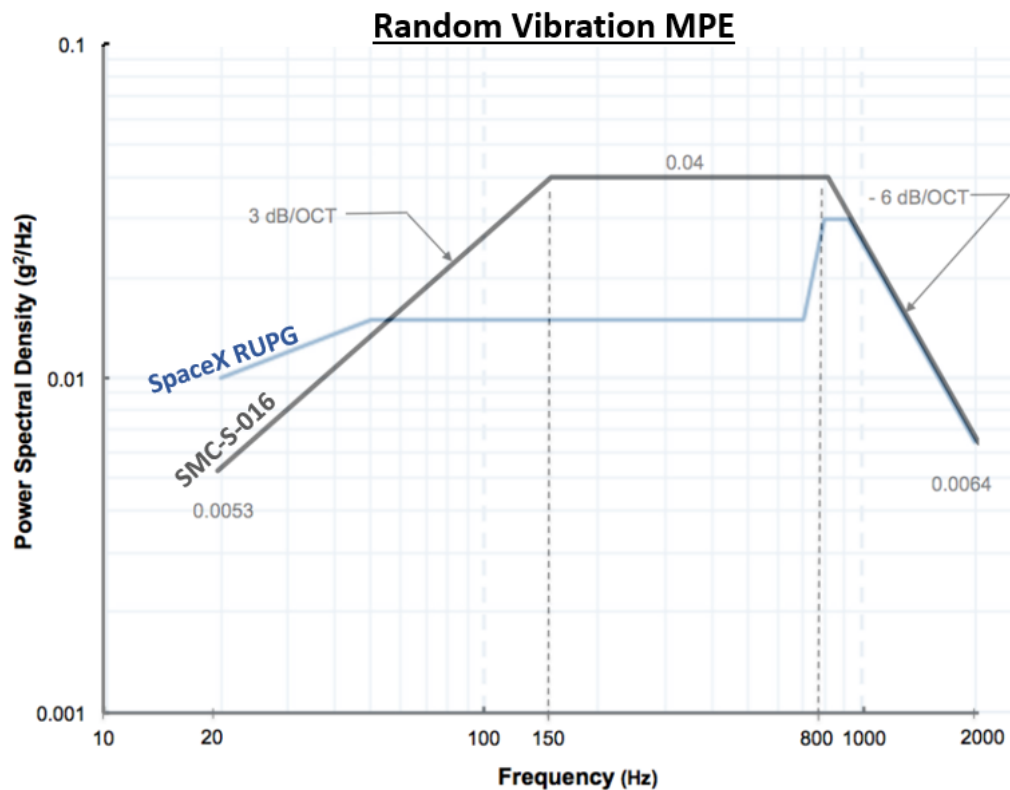
Radiation Background:



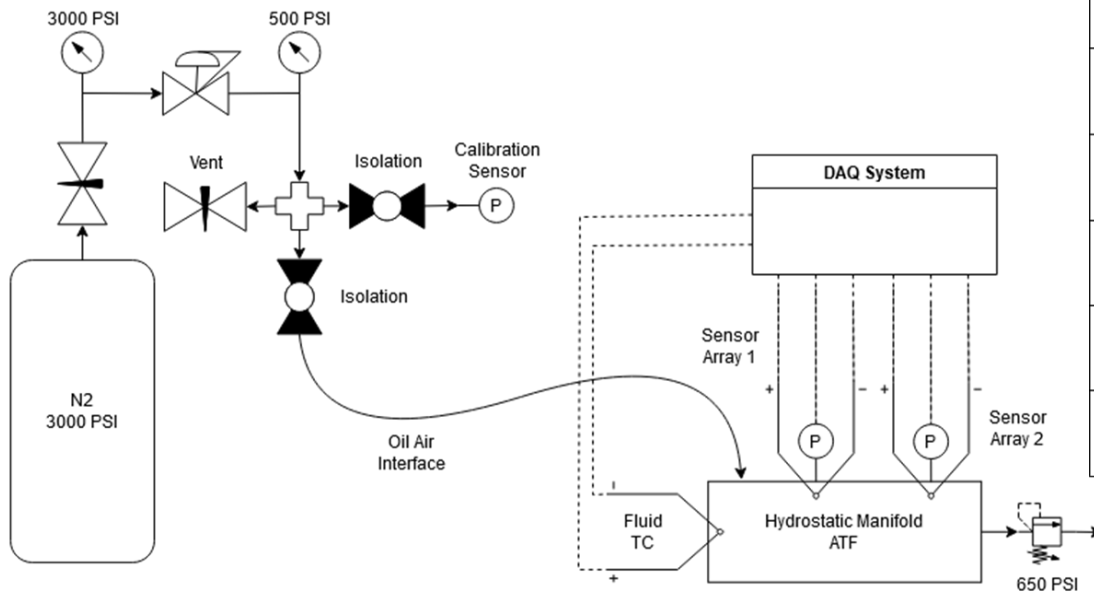
Radiation Background:



Vibration Background:

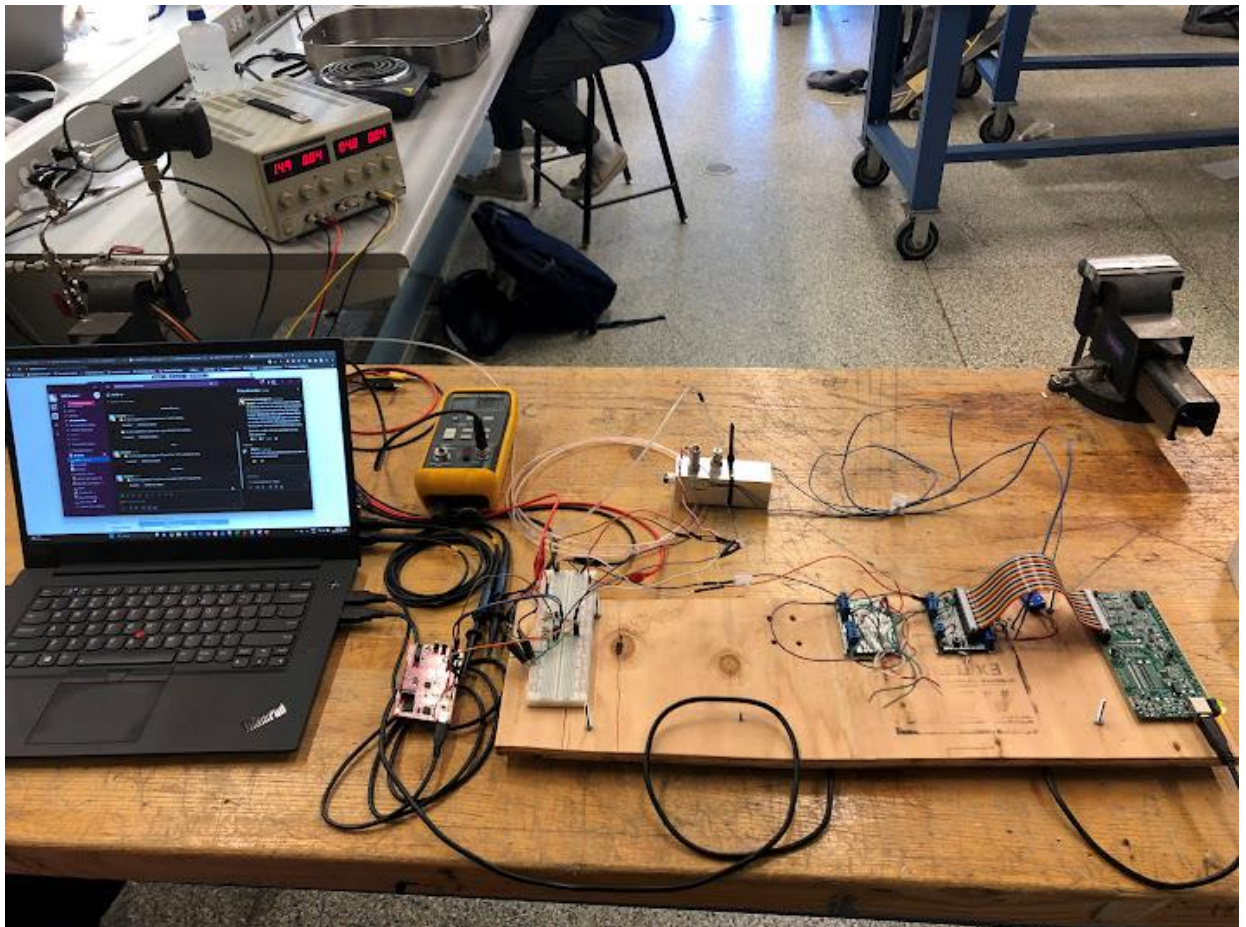


Test Bench:

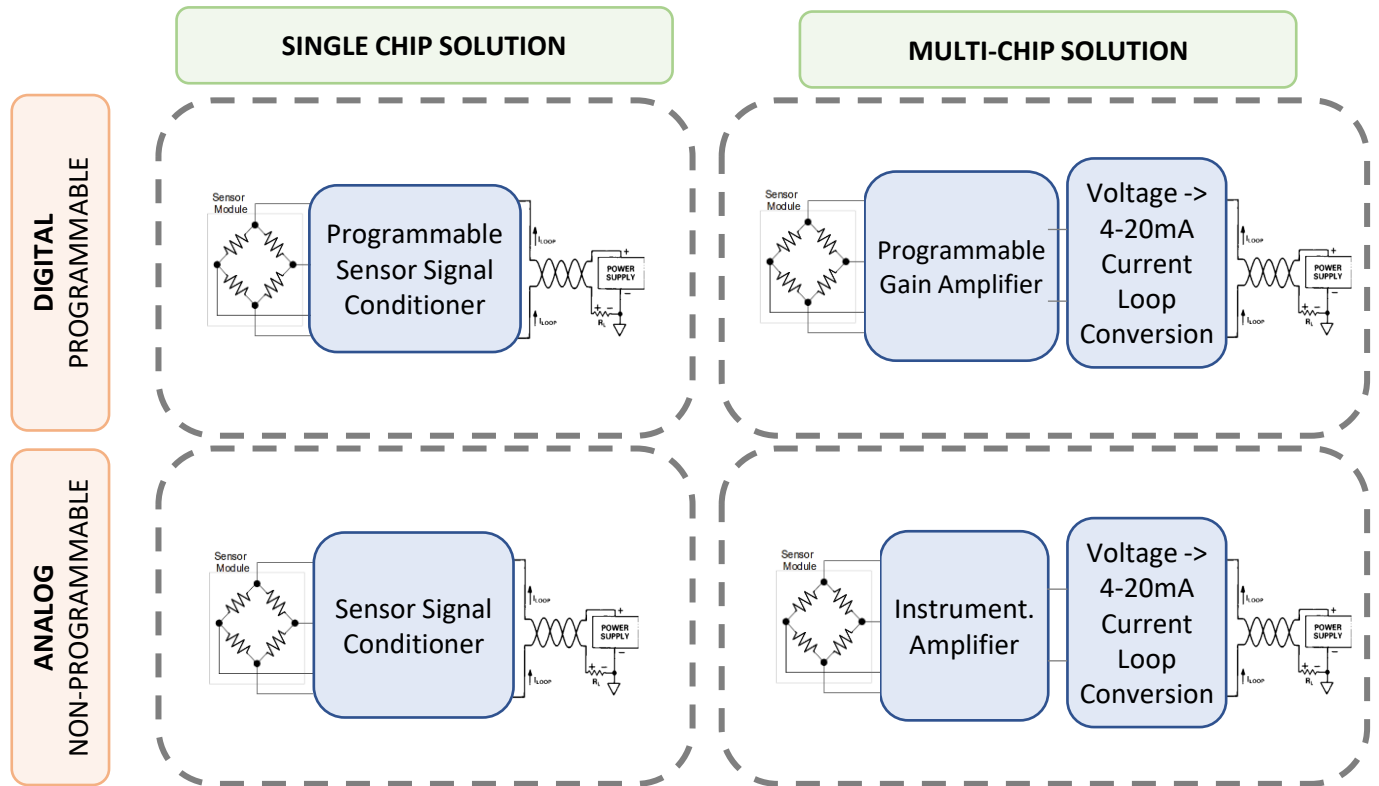


Legend	
	Needle Valve
	Downstream Regulator
	Manual Ball Valve
	Relief Valve
	Pressure Gauge
	Pressure Sensor
	Thermocouple

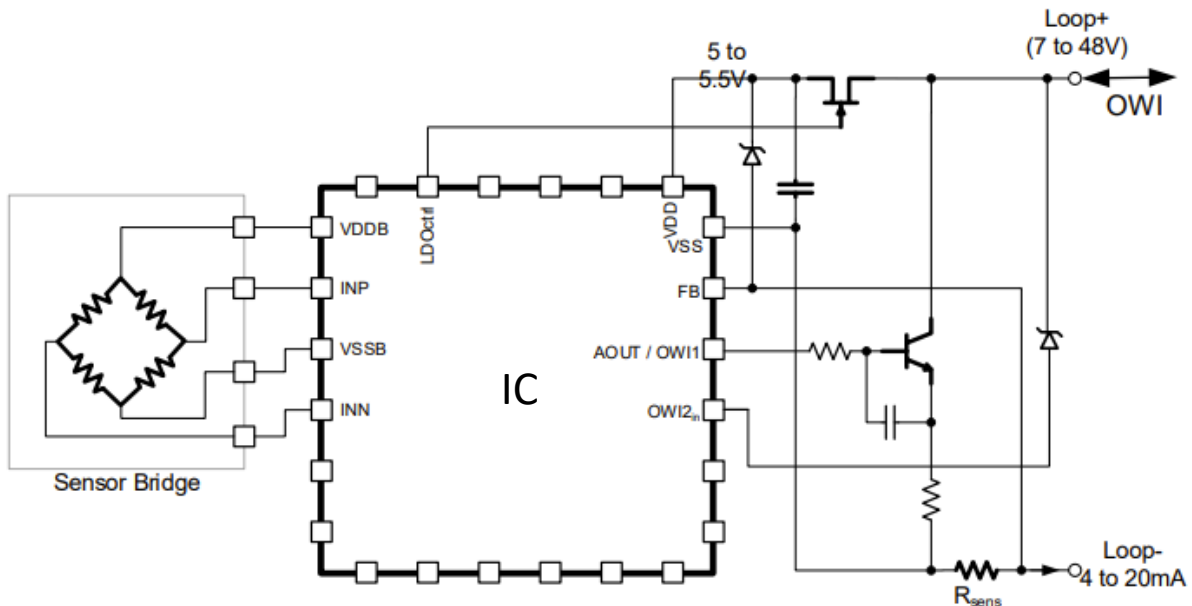
Manifold Designed per, CSA B51 and ASME B31.1



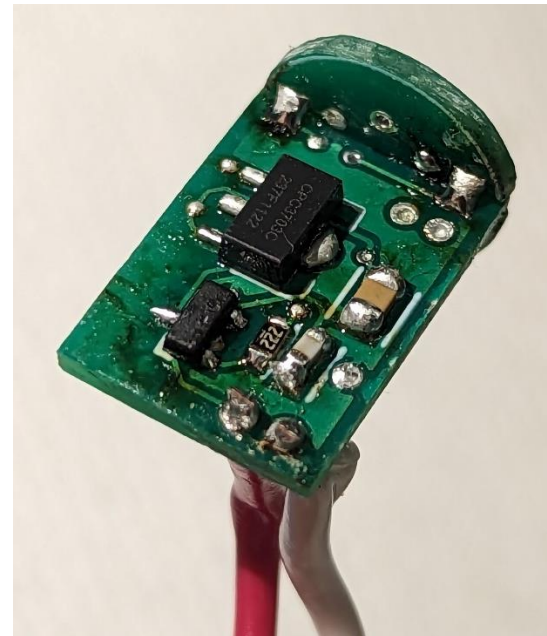
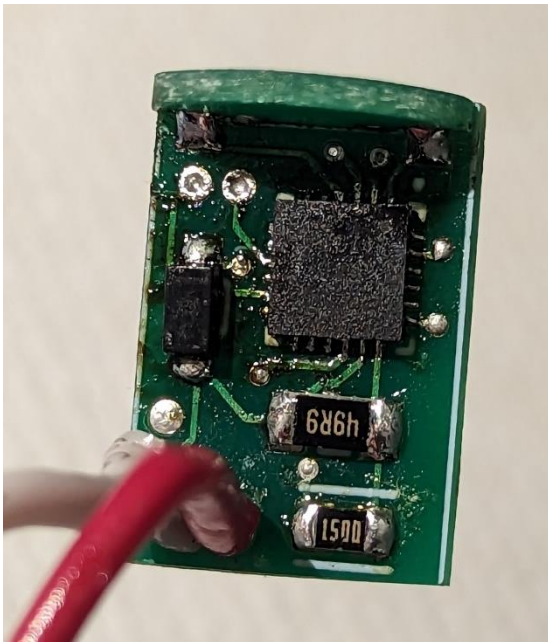
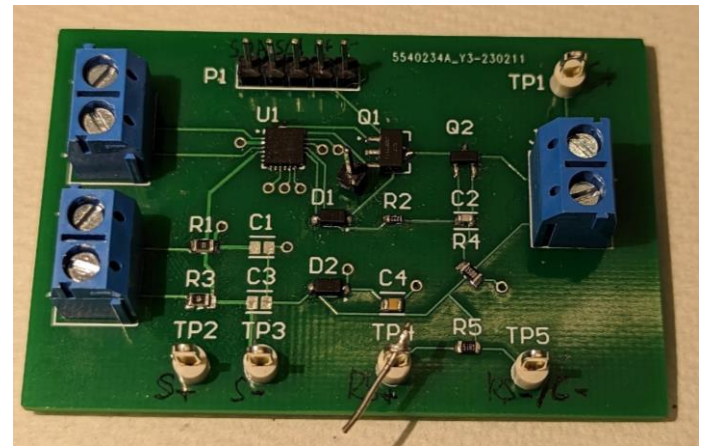
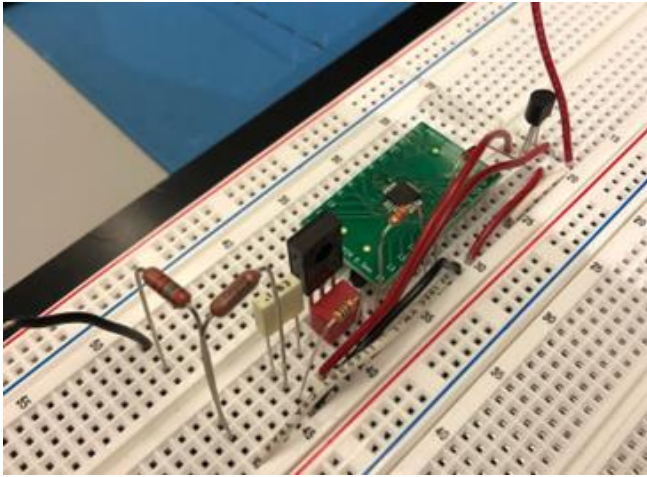
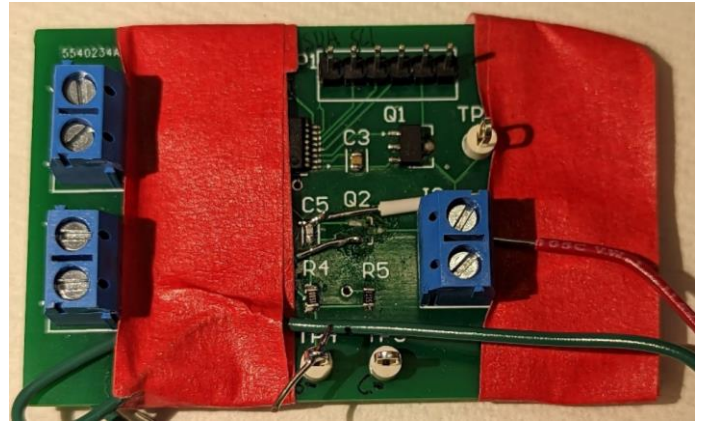
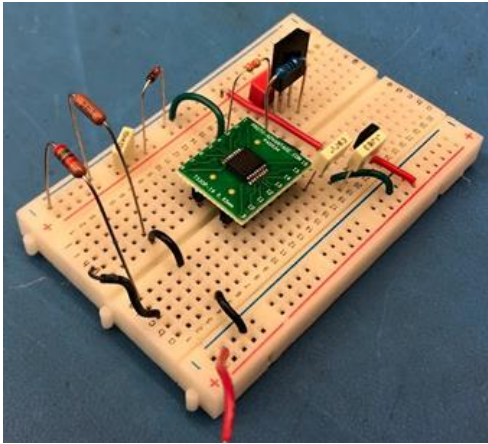
Electronic Circuit Architecture:



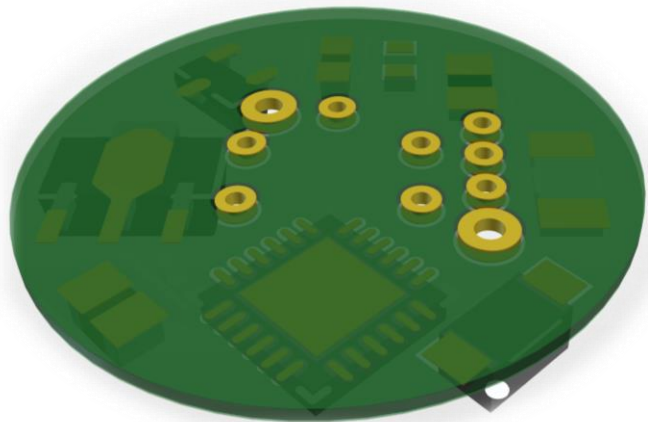
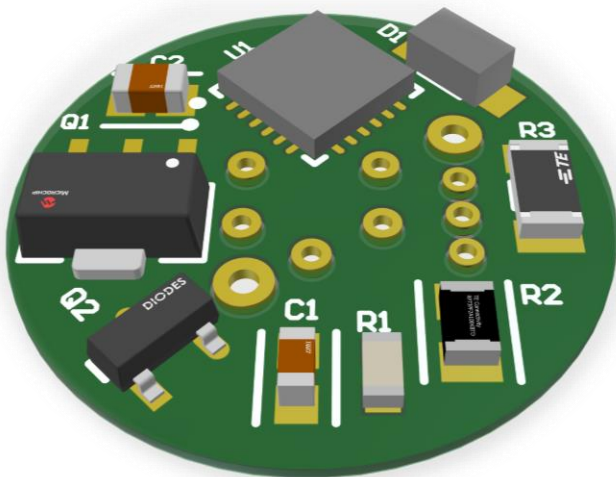
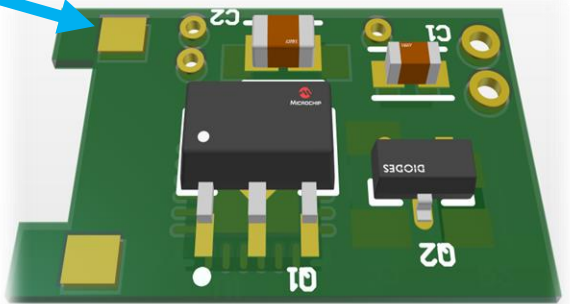
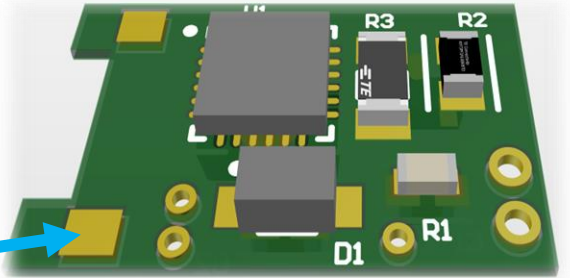
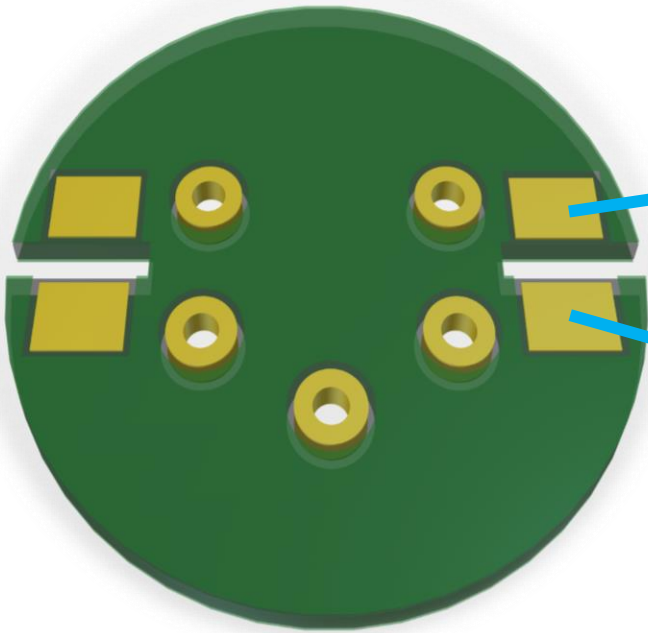
Analog Sensor with Current Loop Output, OWI, and External JFET



Circuit Evolution:



Circuit Layout:



Electronic Circuit Validation:

