

DSG-GEM R&D Meeting Minutes

Date: October 12, 2020

Time: 11:00 – 12:00

Attendees: Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Tyler Lemon, Marc McMullen, Amrit Yegneswaran

1. Procurement status for the prototype gas flow distribution system

1.1. I²C pressure transducers ordered, due 10/16/20

1.2. Multiplexer revision ordered, due 10/16/20

GEM Prototype Gas Distribution System		
Parts	Needed for prototype	In-hand
Gas Flow Sensor/Multiplexer Chassis		
chassis	1	Y
400-sccm sensor board	4	Y
750-sccm sensor board	4	Y
multiplexer	1	N
1/4" gas line	10'	Y
push-lock connections	16	Y
panel mount RJ-11 Connectors	2	Y
4-conductor cable	10'	Y
6p4c connectors	20	Y
standoffs	36	Y
Regulator Panel		
2u panel	1	Y
0–15 psi regulator	1	Y
I ² C pressure transducer	2	N
4-channel manifold	2	Y
orifice	1	Y
relief valve	1	Y
Flow Meter Panel		
2u panel	1	Y
100–1000 sccm rotameters	4	Y
50–500 sccm rotameters	4	Y
Data Acquisition		
Raspberry Pi 4 kit	1	Y
level shifter	1	Y

2. Marc started assembly of the prototype gas flow sensor chassis



Figure 1 Front panel

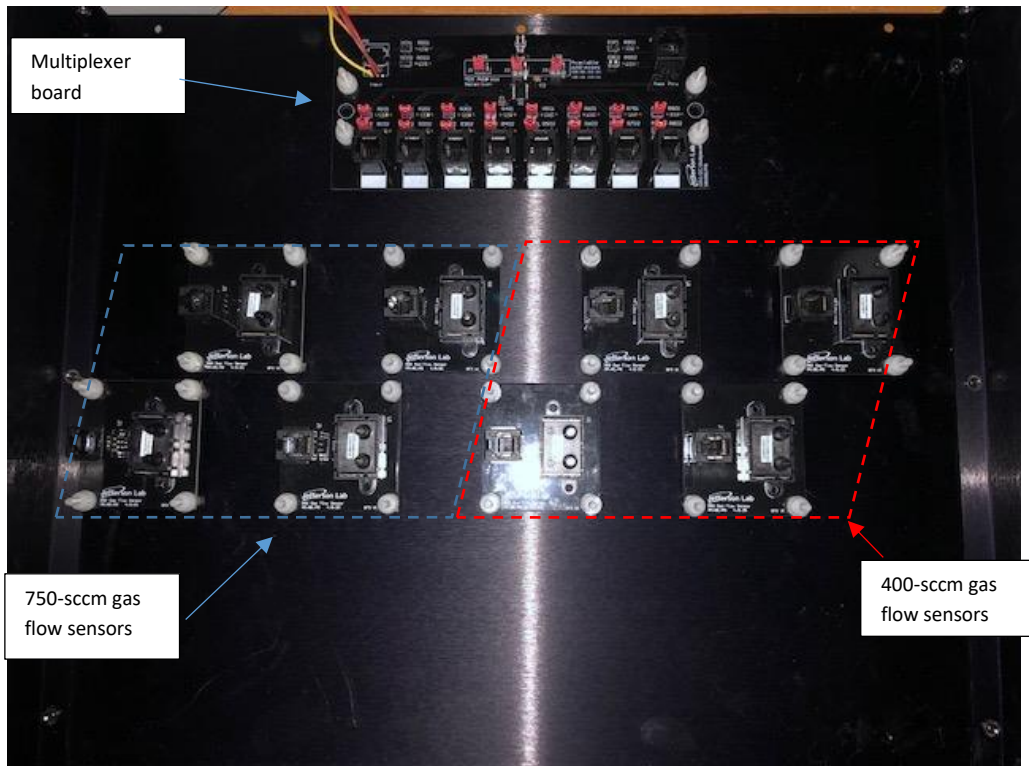


Figure 2 Gas flow sensor boards and multiplexer installed on bottom panel



Figure 3 Rear panel

3. Prototype exhaust system

- 3.1. Tyler completed designs for the prototype gas flow sensor and multiplexer boxes for the exhaust system
- 3.2. Marc will contact a local fabricator to get a quote