

DSG-GEM R&D Meeting Minutes

Date: October 5, 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. Thirty two of the 40 standoffs ordered have been delivered
- 1.2. I²C pressure transducers ordered
- 1.3. Multiplexer revision ordered

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
I²C 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 has picked up from the lab components to build the prototype gas distribution system and will distribute components to DSG team members

- 2.1. Mindy will receive one prototype multiplexer for chip replacement and two spools of four-conductor cable and connectors to fabricate the prototype flow sensor chassis cables
- 2.2. George will receive panels to fabricate the gas distribution panels

3. Prototype exhaust system

- 3.1. Tyler has developed two designs for the dual gas flow sensor enclosure to be prototyped

- 3.2. Tyler will produce fabrication drawings based on his designs for the flow sensor and multiplexer enclosures
- 3.3. Marc will send the purchased blank enclosures to a local shop for fabrication