DSG-RICH R&D Meeting

Date: November 8, 2021 Time: 11:00 AM – 12:00 PM

<u>Attendees</u>: Mary Ann Antonioli, Aaron Brown, Peter Bonneau, Pablo Campero, Brian Eng, George Jacobs, Mindy Leffel, Tyler Lemon, Marc McMullen, and Amrit Yegneswaran

1. <u>Cleanroom floor repair schedule</u>

Aaron Brown, Brian Eng, Tyler Lemon, and Marc McMullen

- 1. First half of floor repairs complete
- 2. DSG will move all items in cleanroom to completed half so rest of floor can be refurbished

2. Backplane PCBs received from fabricator

Mindy Leffel, Tyler Lemon, and Marc McMullen

- 1. Marc McMullen verified routing with multimeter
- 2. Marc McMullen has ordered all parts for PCB
 - All parts but inverters (for I²C communication traffic indication) and headers (for connecting PCB to RMC) received
- 3. Mindy Leffel will populate one PCB and Tyler Lemon will perform full functionality test
 - After successful test, Mindy will populate additional boards for spares

3. <u>RMC's PCB fabrication complete, population underway</u>

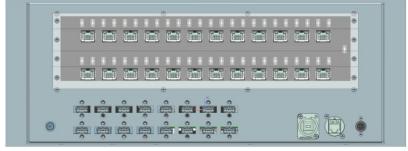
Marc McMullen

- 1. Marc McMullen verified bare PCB routing with multimeter
- 2. Marc McMullen ordered PCA9600 buffer drivers and will ship them to Advanced Circuits
 - Expected date of delivery at JLab for buffer drivers is November 10, 2021
 - Marc will ship them to Advanced Circuits after checking whether parts received are correct

4. Hardware interlock chassis status

Tyler Lemon

- 1. Par-Metals will be used for procurement and fabrication of chassis
 - Goal is to have all PRs and documents submitted for fabrication by November 19, 2021
- 2. 16 USB ports added to back panel for connections to gas system expansion cRIO
 - Maximum number of isolated analog inputs that expansion cRIO can handle is 16
 - Ports have terminal blocks on back so channels can be reconfigured between voltage and current readback as needed
 - Mating connector selected has spring-tensioned arms to latch connectors onto ports



Rear panel of chassis with USB feedthroughs