

## DSG-RICH R&D Meeting

**Date: July 12, 2021**

**Time: 11:00 AM – 12:00 PM**

*Attendees: Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Brian Eng, George Jacobs, Mindy Leffel, Tyler Lemon, and Marc McMullen*

### 1. Backplane PCB

*Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, Tyler Lemon, and Marc McMullen*

1. Layout in progress
  - Goal is to make PCB ~14" x ~3" so it can be mounted in a 3U chassis and allow for additional connections on back panel of chassis

### 2. RMC

*Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, Tyler Lemon, and Marc McMullen*

1. Received cost estimate for PCB fabrication and population
  - With 1-week fabrication and 2-day population (fastest available), total cost for five RMCs is ~\$9,400
2. Will give each relay its own output from RMC
3. Changed NPN resistor from through-hole to surface-mount component

### 3. RICH-II interlock chassis model in NX12

*Tyler Lemon*

1. Interlock connectors for cable from chassis to CAEN will be BNC
2. Will add labels to define key positions of override switch
3. Will investigate make-before-break (or shorting) keylock switches for interlock override switch.
  - Keylock switch procured for prototyping is break-before-make (non-shorting)