## **DSG-RICH R&D Meeting**

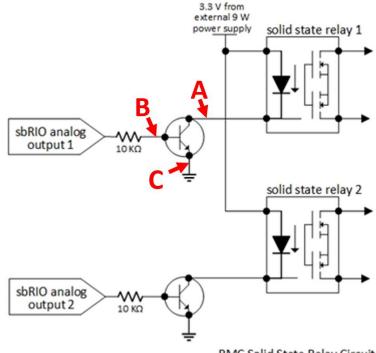
Date: September 13, 2021 Time: 11:00 AM – 12:00 PM

<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. RMC

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

- 1. Net list check complete
- 2. Verification of relay circuit and its current draw
  - NPN transistor switch circuit controlled by sbRIO analog output set to 3.3 V during test.
  - Circuit prototyped using parts specified in design BOM
    - Previous prototype used generic parts



RMC Solid State Relay Circuit M. A. Antonioli 9/9/21

Location	NPN Transistor and Relay from Present RMC Design Components	NPN Transistor and Relay from Prototype Components
A	42 mA	70 mA
В	0.17 mA	0.99 mA
С	39.6 mA	65 mA

2. Tyler Lemon will ship sensors to Advanced Circuits for SHT35 sensor PCB fabrication
Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, Tyler Lemon, and Marc McMullen

## 3. Backplane PCB

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

- 1. Main 3.3 V power fuse moved to be in line with top rows of sensor fuses
  - Simplifies hardware interlock chassis's acrylic back panel

## 4. Hardware interlock system chassis design in NX12

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

1. Model of a four-section acrylic back panel redesigned since main 3.3 V power fuse on backplane PCB was moved