Detector Support Group

We choose to do these things "not because they are easy, but because they are hard".

**Weekly Report, 2021-05-19**

Summary

Hall A – SoLID
Mary Ann Antonioli, Pablo Campero, Mindy Leffel, Marc McMullen
- Completed four electrical drawings
- Generated spreadsheet of required cables for voltage taps and temperature sensors
  - ✦ Spreadsheet shows detailed information about the cable specs and ordering status

Hall B – RICH-II
Mary Ann Antonioli, Peter Bonneau, Pablo Campero, Tyler Lemon
- Developing sbRIO software for hardware interlock system
  - ✦ Software reads data from one sensor, lets users enable or disable the sensor's heater, read and clear the sensor's status register, and initiates a software reset of the sensors
- Developing LabVIEW front panel for the hardware interlock system
- Assembled and configured new sbRIO-9629 for hardware interlock system
- Developed timing diagram of I^2C communication signals for one temperature and humidity measurement from an SHT35 sensor
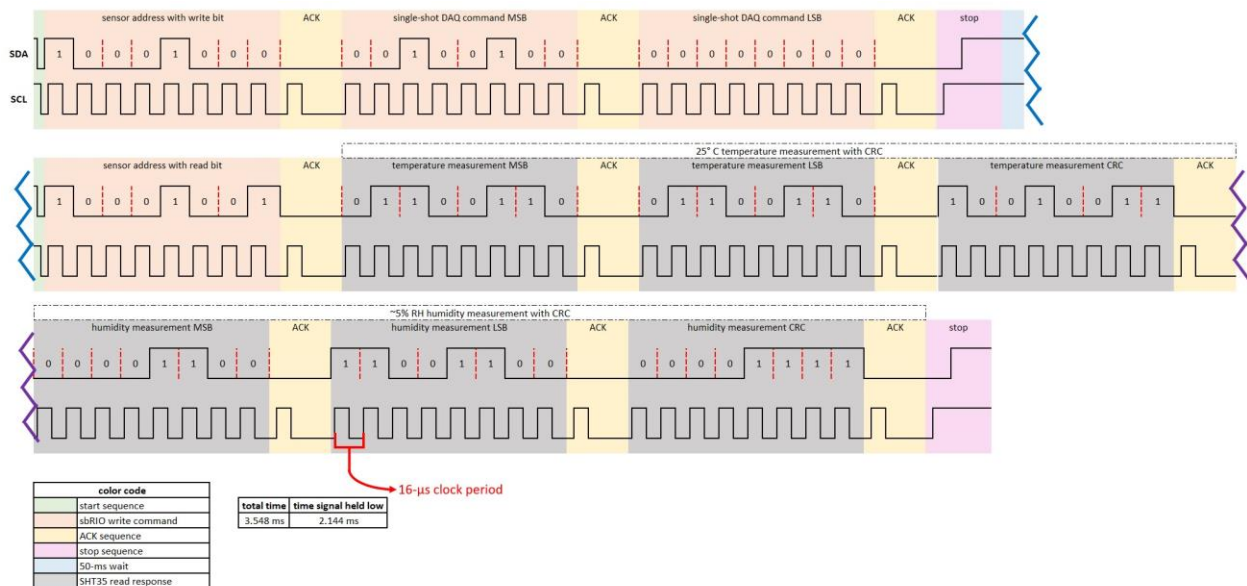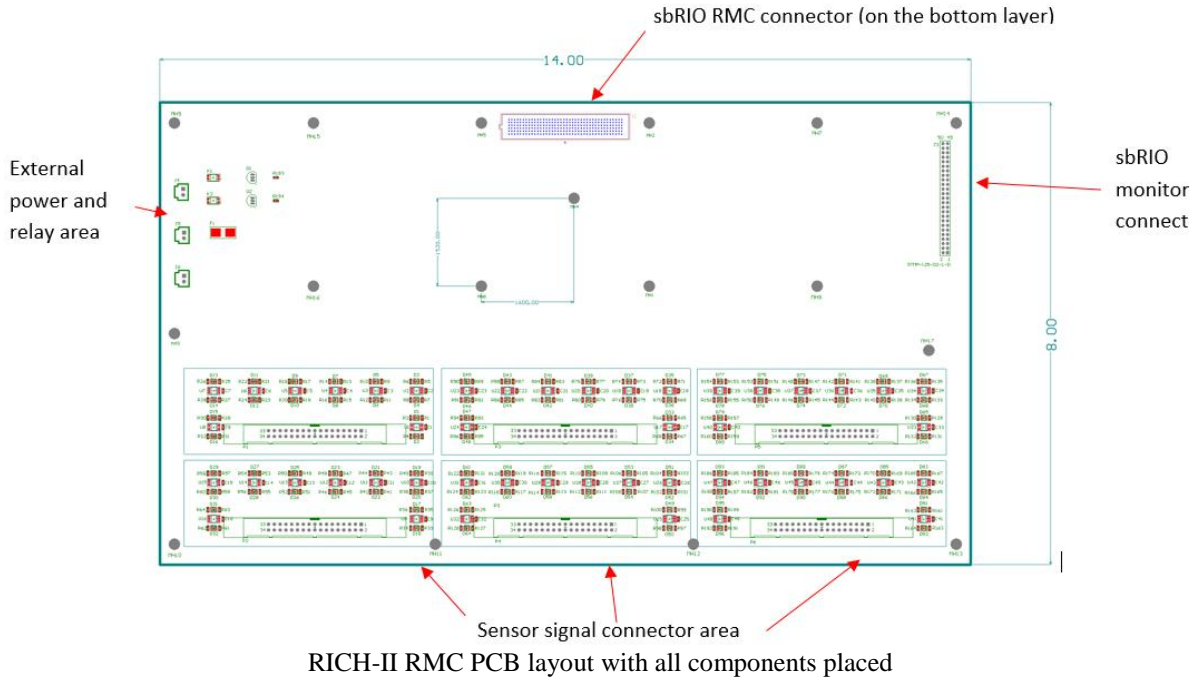

Timing diagram for one temperature and humidity measurement

- Testing cable assemblies with flat CAT7 cable and Molex Pico-Clasp or Harwin M40 connectors
- Completed initial PCB layout of RMC PCB

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DSG Weekly Report, 2021-05-19

RICH-II RMC PCB layout with all components placed
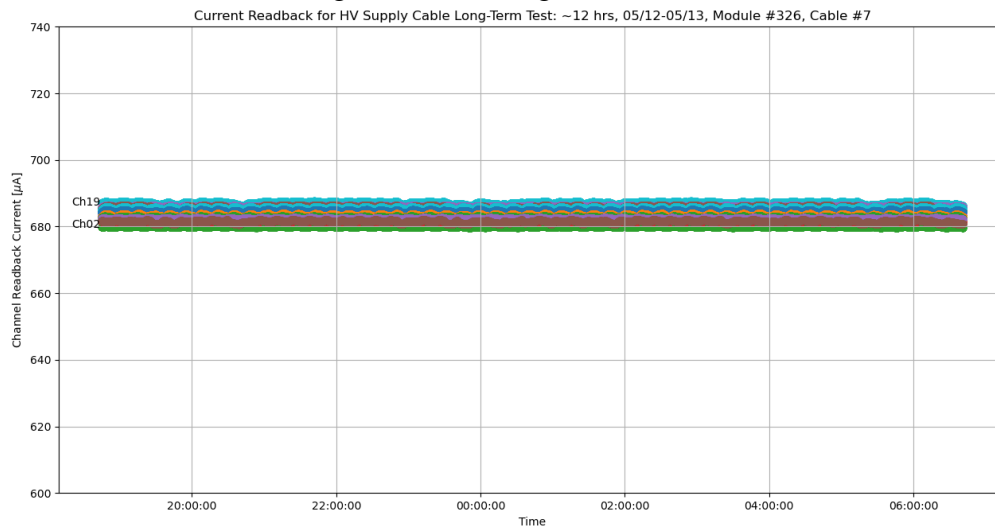
Hall C – NPS

Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Mindy Leffel, Tyler Lemon, Marc McMullen

- Generated plots for long-term load test of cables #7, #8, and #9 using module #326
  - ✦ Plots look the same as those of cables tested using module #184
  - ✦ Will continue testing all cables using module #326

Plot of long-term test of cable #7 using module #326

- Fabrication of HV supply cables: 25 of 40 complete
- Long-term load testing of HV supply cables: 11 of 40 complete

EIC

Brian Eng

- Developing three-dimensional visualizations of detectors with various potential collaborations (ECCE, CORE) plus CAMs
- Need to come up with a parameterized way of generating SVT locations to make it more useful in SketchUp

Safety – POAM 10

Marc McMullen

- Reviewed application process diagram
  - ✦ Diagram will be presented to the software development group to be used as the framework for the equipment review and registration application