

DSG-NPS R&D Meeting Minutes

Date: March 09, 2021

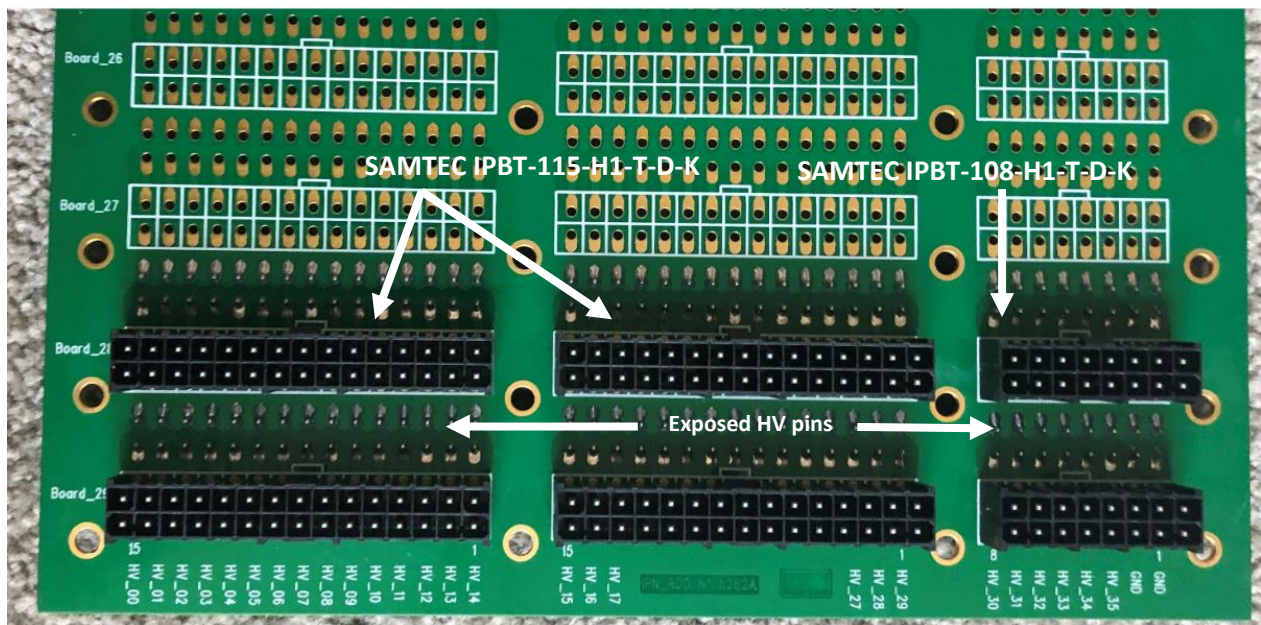
Time: 11:00AM – 12:30 PM

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

1. HV Supply Cable fabrication and testing

Peter Bonneau, Aaron Brown, Brian Eng, George Jacobs, Mindy Leffel, and Marc McMullen

1. Will add a jumper between pins 1 and 8 of SAMTEC connector #3 (16-pin) to enable destructive testing of the HV Supply cable
2. Discussed features of spare HV PCB that arrived from IPN Orsay



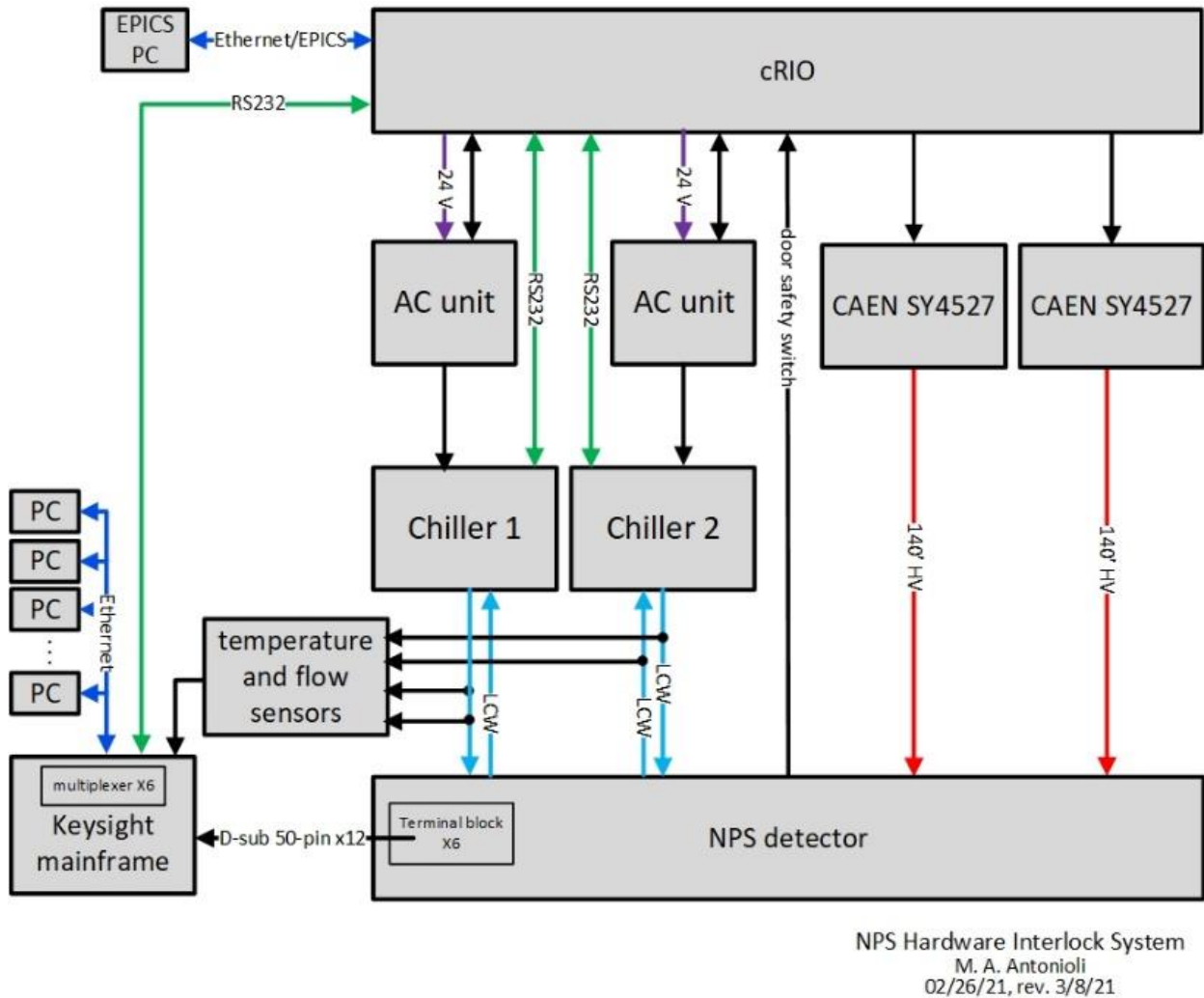
Spare NPS HV PCB from IPN Orsay populated with four 15-pin and two 8-pin SAMTEC connectors

- Board does not match schematic posted on Hall C NPS wiki page
 - Exposed HV pins on board will need to be insulated
 - Check with Carlos Munoz if the board received is the latest version and if protective measures have been considered
3. HV Supply cable test chassis PCB is being reviewed

2. Hardware Interlock System development

Mary Ann Antonioli, Peter Bonneau, and Aaron Brown

1. Reviewed latest version of system block diagram



Block diagram of the NPS Hardware Interlock System

2. Discussed fault event spreadsheet that details what actions will be taken for each fault condition

3. Reviewed NPS Collaboration Task List

DSG

1. Will generate a spreadsheet of all DSG tasks

4. Module Testing

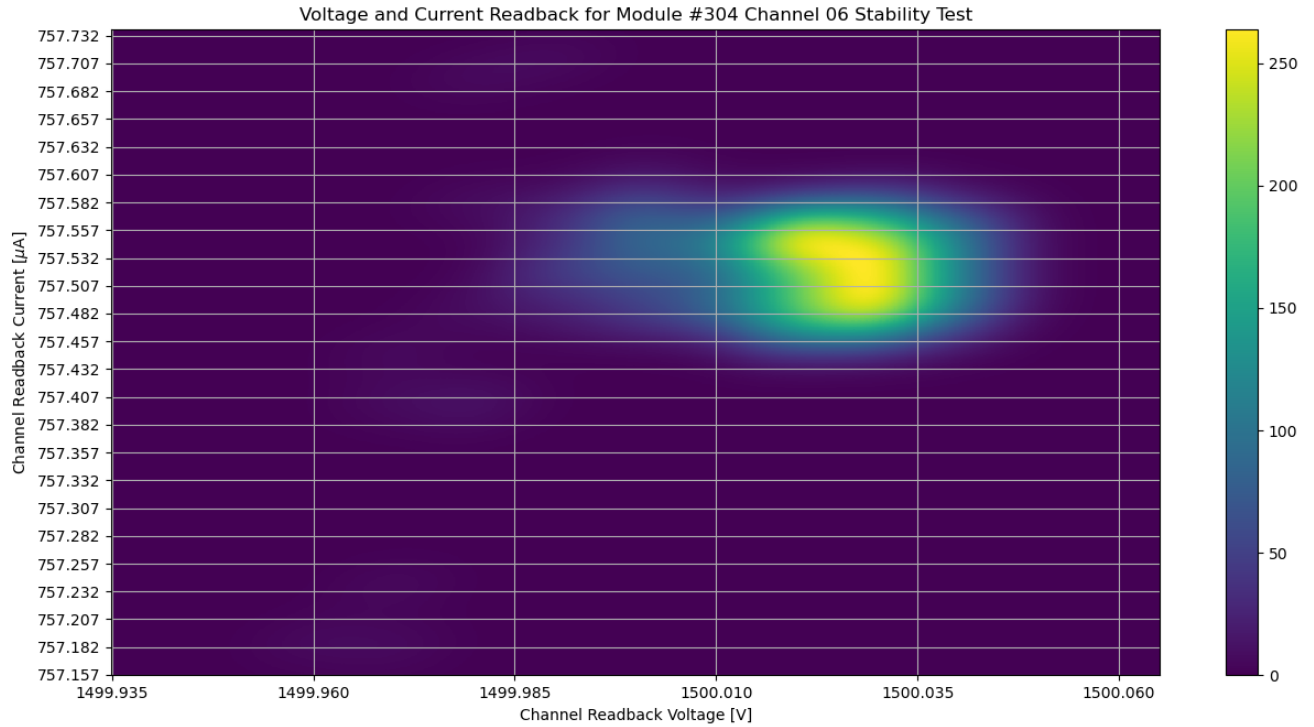
Mary Ann Antonioli, Aaron Brown, and George Jacobs,

1. All A1535 and A7435 module tests completed; will generate voltage and current stability plots
2. Will post all testing analysis plots and the testing analysis summary on the DSG Hall C Technical Documentation webpage

5. V and I density plots

Aaron Brown and Brian Eng

1. Developing a Python program to generate density plots using raw voltage and current stability testing data for each channel of the CAEN A7030TN HV modules



Density plot of voltage and current for CAEN A7030TN module #304 Channel 06

2. Debugging in progress as program execution takes too long (+12 hours); will review the program