

DSG-NPS R&D Meeting Minutes

Date: December 07, 2021

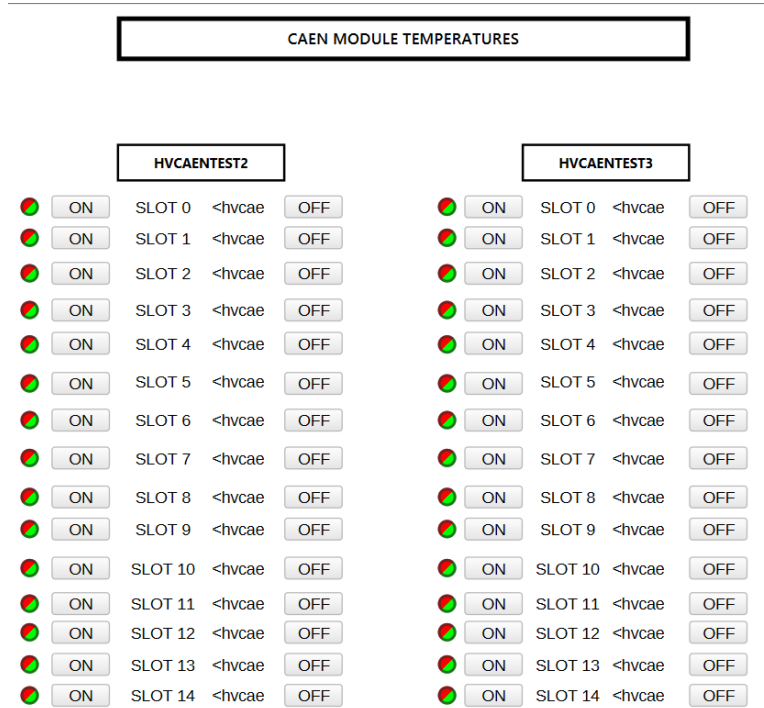
Time: 11:00 AM – 11:45 AM

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

1. Hardware Interlock System Development

Mary Ann Antonioli, Peter Bonneau, Aaron Brown

1. Reviewed *CAEN Module Temperatures* Phoebus screen
 - Screen provides readback for internal temperature for each module and has action buttons to turn ON or OFF all channels of a module
 - Mary Ann Antonioli will add embedded Javascripts to each action button to turn ON or OFF each module
 - Discussed code for changing LED ON and OFF colors; Aaron Brown will review the code and check the logic to ensure proper function



Screenshot of CAEN Module Temperatures EPICS CSS Phoebus screen

2. Ansys Thermal Analysis

Aaron Brown

1. Reviewed addition of one of two heat exchangers to model
 - Will research information on how Lytron 6320 heat exchangers operate before continuing with simulations

3. ESR Pre-shaping Progress

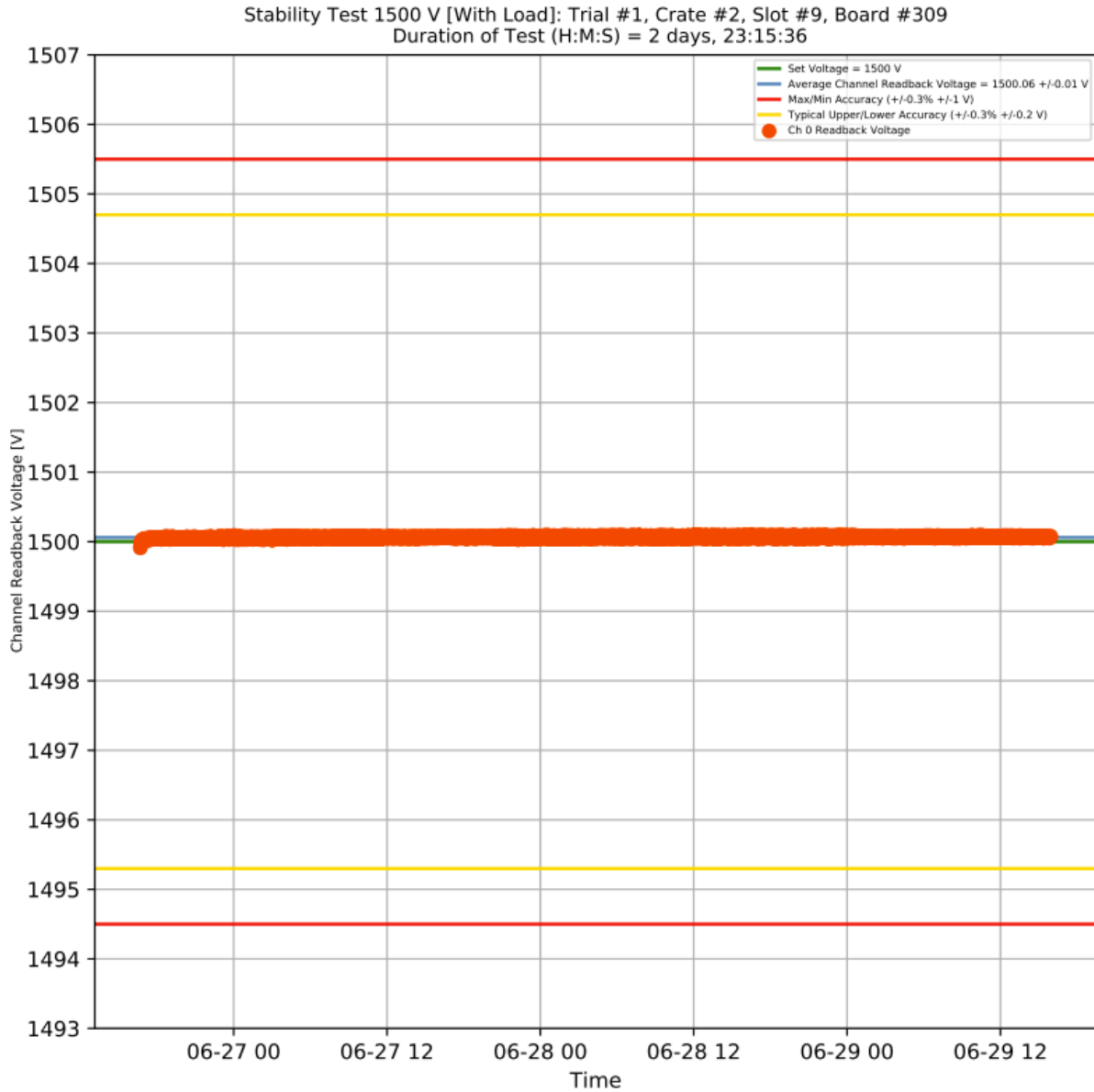
George Jacobs and Mindy Leffel

1. 420 of 600 foils completed (~70%)

4. MariaDB Database Development

Aaron Brown, Pablo Campero, Brian Eng, George Jacobs

1. Discussed Python program to generate voltage stability plots by channel for each module
 - Reviewed automatically saved pdf of plot
 - Legend placement is good; yellow lines will be changed to blue for better visibility



Voltage stability plot for module 309 channel 0

5. High Voltage Supply Cable Testing

Aaron Brown, George Jacobs, Mindy Leffel, Marc McMullen

1. George Jacobs has completed voltage drop testing for short cable; no issues
2. Mindy Leffel is fabricating a box to test the 140' cable test; Marc McMullen will bring a long cable to the lab