DSG NPS Collaborators' Meeting Update

Aaron Brown and the Detector Support Group

April 29, 2021

Content

- HV Supply Switching Test
- Hardware Interlock System Development
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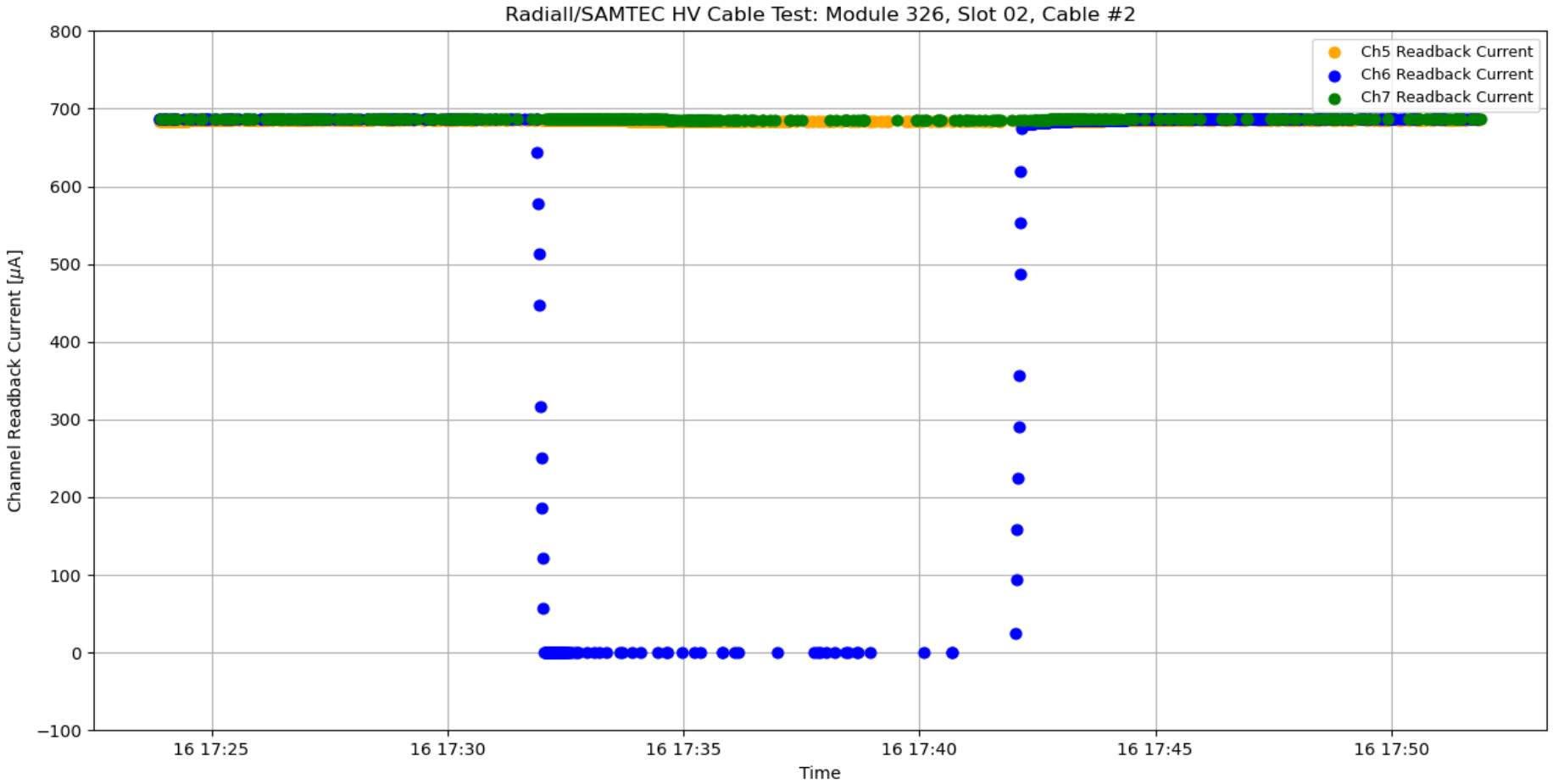
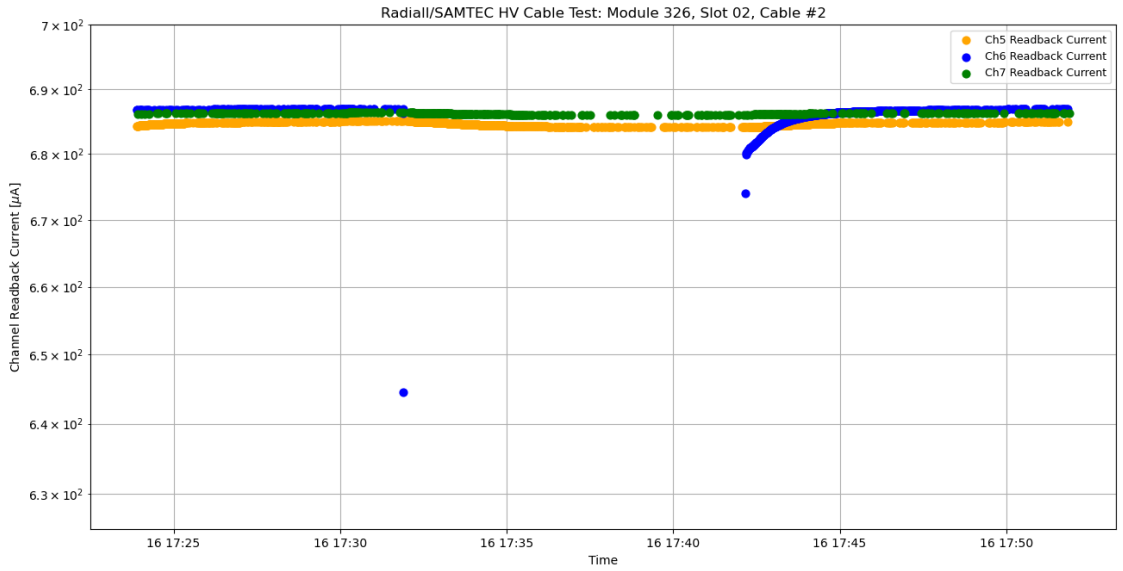
HV Supply Switching Test

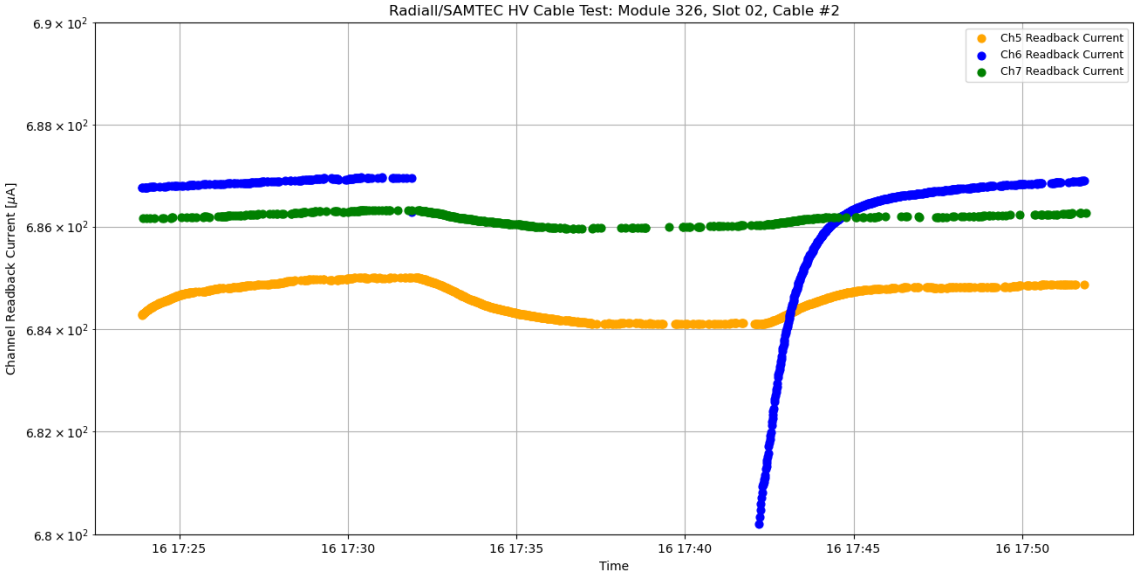


Switching test for cable #2 channel #6 in module #326

- Switching test completed for five cables
  - Tests performed by George Jacobs

HV Supply Cable Testing

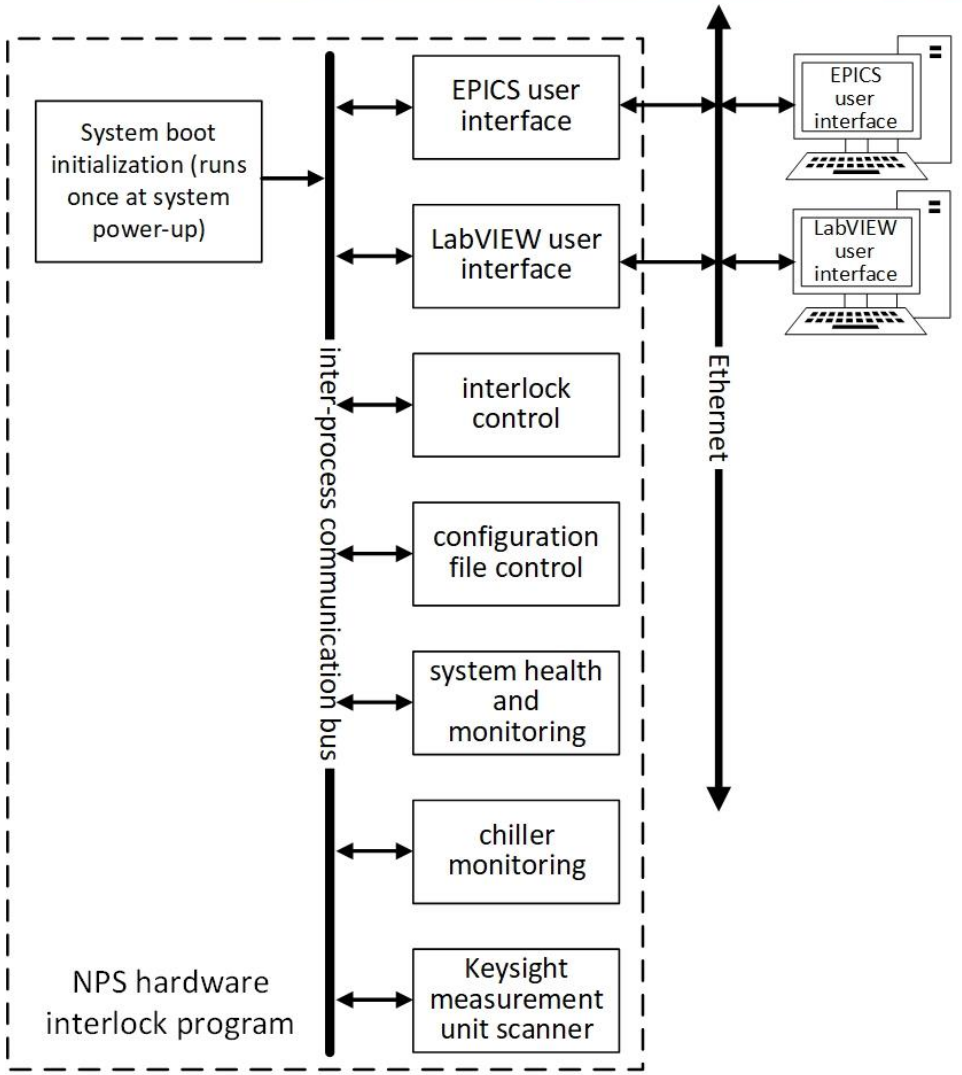




- Current for ch#’s 5 and 7 decreased by ~1 μA while **ch# 6** was off

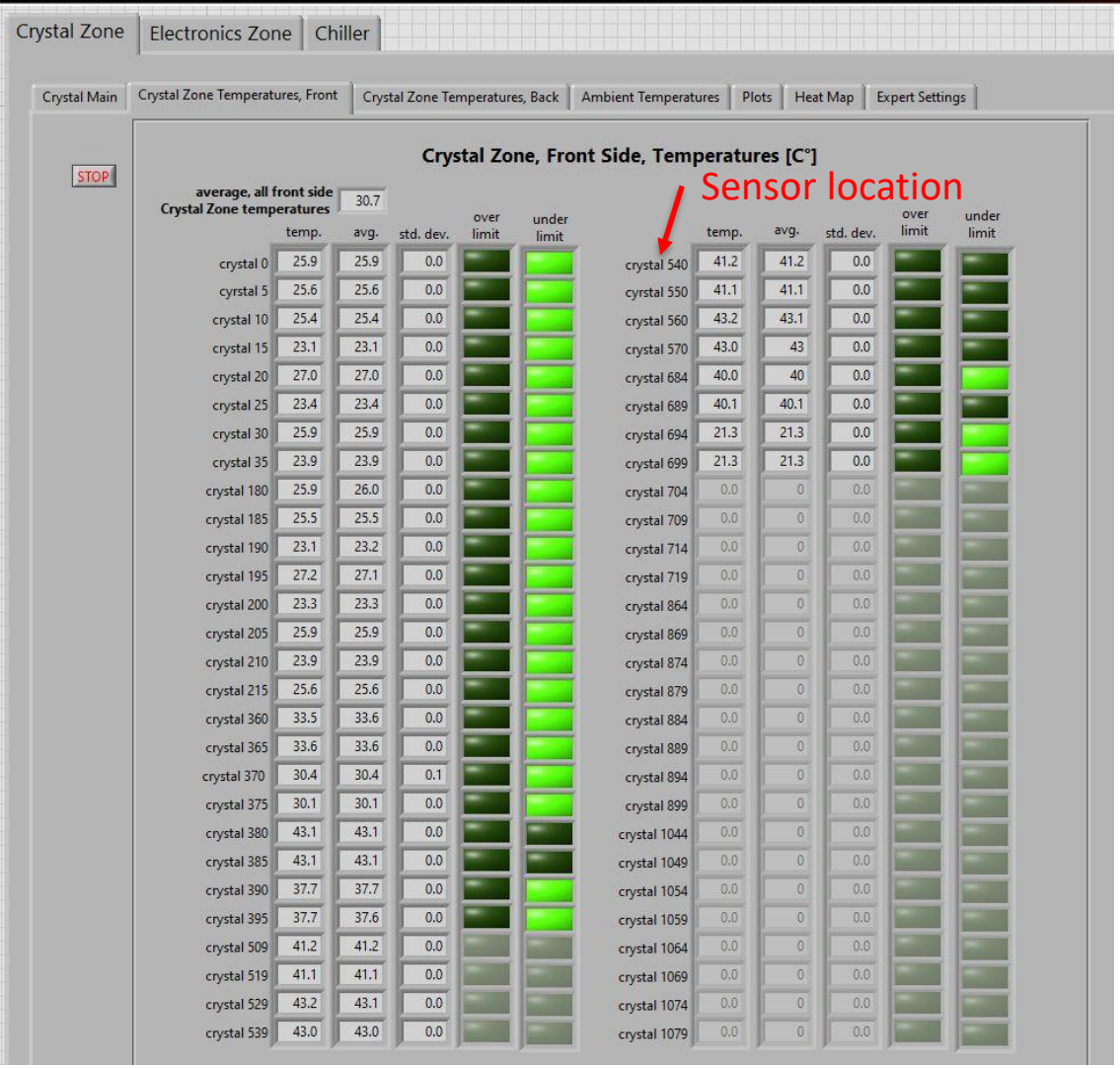
Hardware Interlock System Diagram

- LabVIEW-based hardware interlock program
  - Program provides EPICS and LabVIEW interfaces



NPS Hardware Interlock Program Schematic
3/30/2021
M. A. Antonioli

Hardware Interlock System Development



- Developing LabVIEW front panel
- Crystal zone temperature readings with statistics
- CSS-BOY screen compatible with Hall C's Linux infrastructure will be developed

Keysight scanning subroutine being developed by Peter Bonneau and Aaron Brown; front panel by Mary Ann Antonioli

Conclusion

- HV switching test shows adjacent channels minimally (~1 μA) affected
- Hardware interlock system development well underway
  - LabVIEW program for Keysight temperature sensor scanning and front panel are being developed
- Mary Ann Antonioli, Peter Bonneau, and George Jacobs working on project

THANK YOU!