

## Hall C-CAEN-A7030TN Issues

**Date:** January 21, 2020

**Time:** 14:00 – 14:30

*Attendees: Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Greg Kibilko, and Tyler Lemon*

### *1. Discussion of previous latency issue solution.*

- 1.1. The new firmware revision 1.06 solved latency issues noticed back in August.
- 1.2. The DSG has received an additional 17 model A7030TN boards for testing and all were shipped with the new firmware, so no new latency issues have been noticed.

### *2. Discussion with Greg Kibilko about “No Load” testing preliminary results.*

- 2.1. Noticed that when using only GECO 2020 for control, monitoring, and data logging there have been none of the previously noticed issues with random parameters changing.
  - 2.1.1. EPICS Service was disabled in the CAEN SY4527 crate for all of these tests.
  - 2.1.2. None of these tests were conducted with a load connected to any of the modules.

### *3. Discussion about “With Load” testing issues.*

- 3.1. Informed Greg about Slot Connection Loss issue noticed when an A7030TN module was connected to a load.
  - 3.1.1. Showed GECO 2020 screenshots indicating that there was no board connected to the crate when in fact there was.
- 3.2. This problem seems to occur randomly and not just with the module that is connected to the load.
- 3.3. The crate has to be power cycled in order to restore connection to the board.
- 3.4. This issue has only arisen when board is connected to a load and GECO 2020 is used for control, monitoring, and data logging.

### *4. Discussion of issues with EPICS Service.*

- 4.1. Using EPICS to control and monitor the modules, we immediately notice random parameters changing.
  - 4.1.1. Showed GECO2020 screenshots indicating the changes for *RDWn* and *V0Set* parameters during the test.
- 4.2. Asked Greg Kibilko if it would be possible for DSG to obtain and use the same EPICS client that is used by CAEN Tech Support in order to rule out any issues with our EPICS client here at JLab.

### *5. Discussion of pin issue.*

- 5.1. The problem with the pins on the A7030TN modules occasionally getting pushed back into their housing was raised.
  - 5.1.1. There is an application note (AN-6224) on the CAEN website that instructs users on how to “pot” the pins, but it does not specify what material to use for this.
  - 5.1.2. Asked Greg if he could find out if there were any plans by CAEN to fix this issue.