HV-EPICS Test Station Status Report

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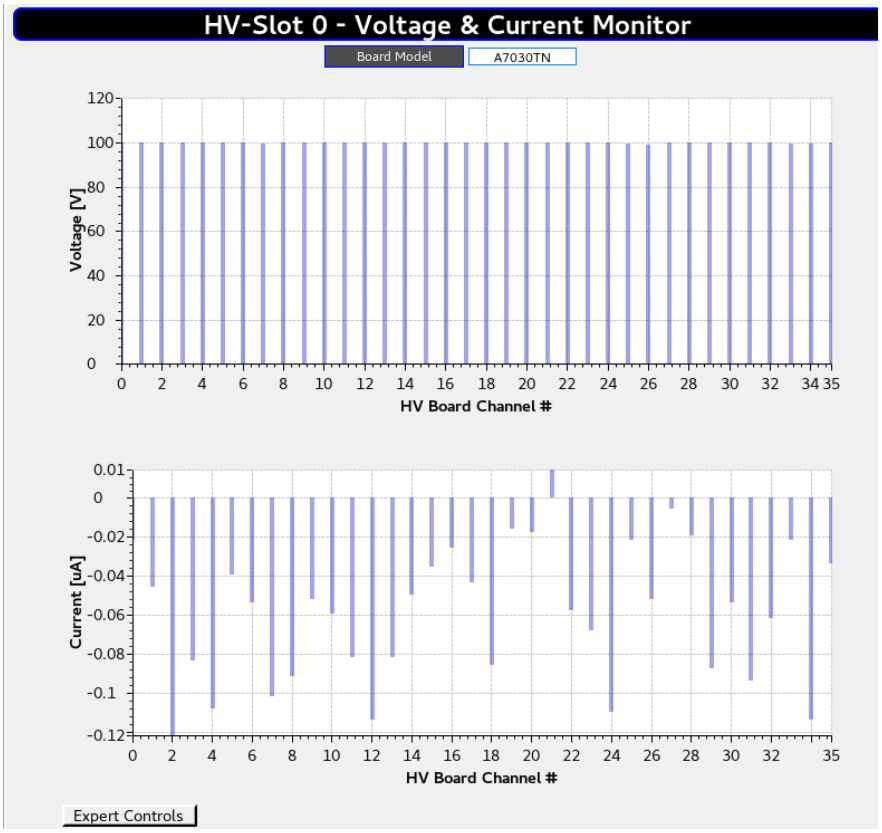
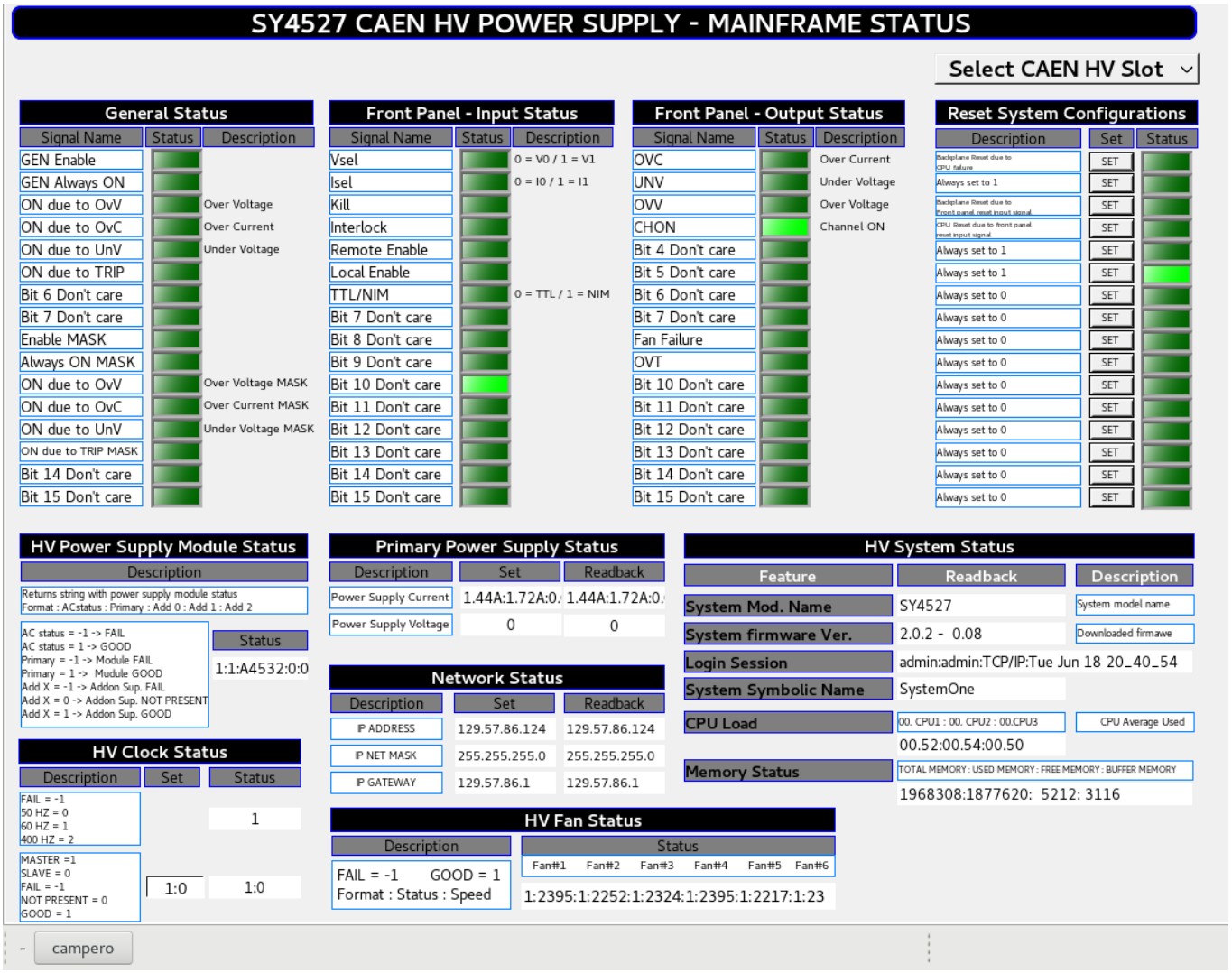
1. Inspected and installed new SY4527 CAEN system
    1.1. Received and installed seven HV modules model: A7030TN, 36 channel, 3 KV.
    1.2. In total eleven A7030TN HV modules installed in the new SY4527 HV system.
    1.3. Installed SY4527 system on DSG clean room.
2. Connected and configured SY4527 system to the network.
    2.1. Verified IP (129.57.86.124) and hostname (hvcaentest2) to connect SY4527 CAEN system via Ethernet.
    2.2. Configured and enabled EPICS Server on SY4527 CAEN systems.
    2.3. Modified EPICS base environment variables (.cshrc file) to add new IP address of SY4527 CAEN system.
    2.4. Used developed CSS-BOY screens and EPICS base running on dsg-b-linux1 PC to test communications and proper data transfer.
3. Started test on A7030N module located at slot 0.
    3.1. Set channels 0-36 to 100 V and readout outputs with no issues.
    3.2. Used same CSS-BOY screen previously developed 7435 HV module; only added the additional twelve channel in new model A7030TN HV module.



HV Voltage and Current Monitor CSS-BOY screen show bar graph for all channels in A7030TN HV module

4. Modified and developed SY4527 HV CAEN Mainframe Status CSS-BOY screen to monitor and control main parameters of SY4527 CAEN system.
    4.1. Added indicators and controls for HV Clock Status, Reset System Configurations and HV Fan Status.
    4.2. Added detail descriptions for each signal; description are based on user manual from CAEN.

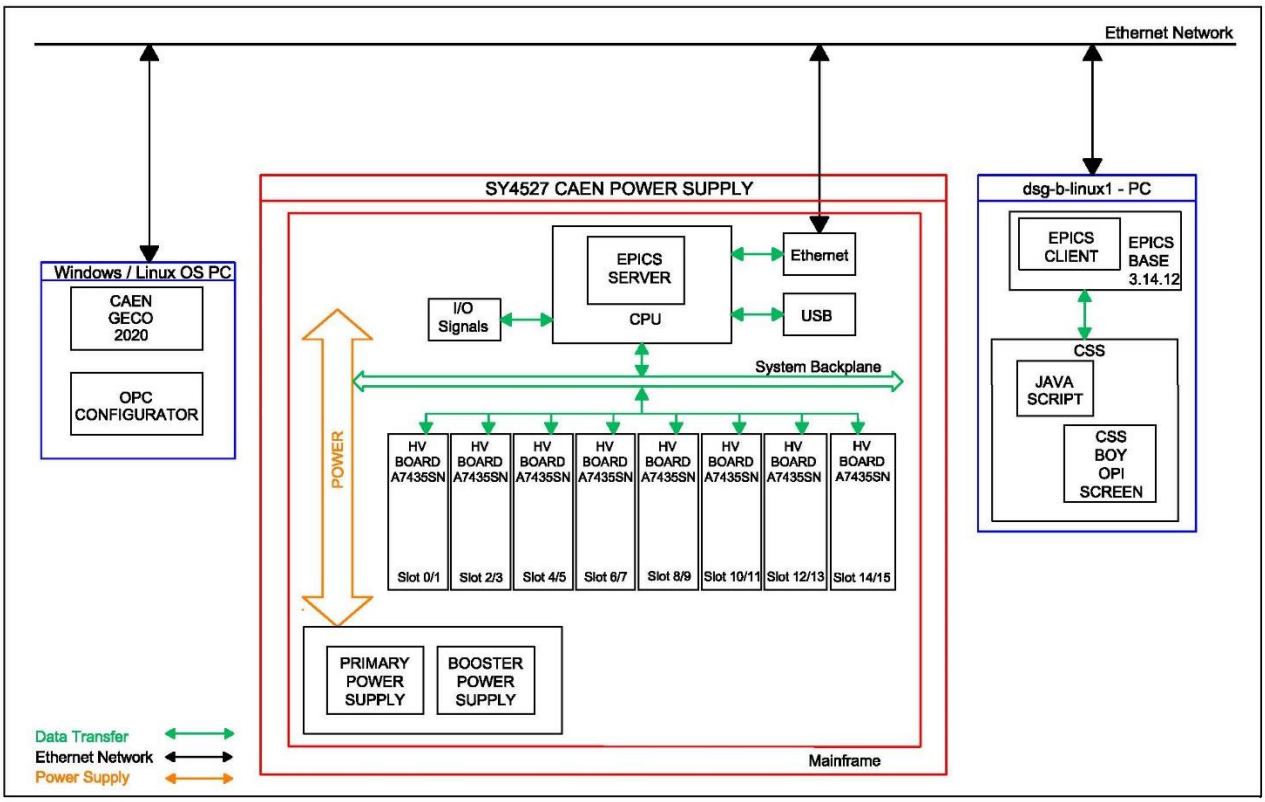


SY4527 CAEN System Mainframe Status CSS-BOY screen

5. Developing of EPICS database to control and monitor HV CAEN SY4527 power supply in progress.

6. Generated diagram to show HV-EPICS test station setup.

6.1. Diagram shows main hardware and software components needed for HV-EPICS test station.



HV-EPICS test station setup diagram