



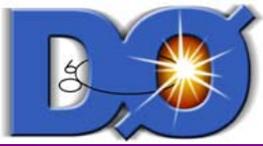
# Run2b Silicon 1% Teststand

- Hardware Status
  - Bagby, Buchholz, Mendoza, Utes et. al
- Software Status
  - PC based-Angstadt, Buchholz, et. al
  - VME based-Fox, Przybycien et. al

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# Hardware

## VME crate

- Processors PPC- VxWorks, SBC- Linux based
- Bit3 interface to PC
- VRB and VRBC

## Sequencer crate

- Sequencer and controller

Purple Card and svx4 hybrid

Missing- Interface Board and adapter card



# Readout

- Data from svx4
  - Control from PC spreadsheet -Excel- works
  - Used to debug hardware before using "real" system
  - 3 modes of operation (take pedestals, cal inject)
    - VRBC- works
    - 1553 - works
    - SCL - partially works
      - **Trigger framework on a card, for L1 and L2 signals**
      - **Pulser for triggers**



# Readout

## ➤ Data tests

- Firmware similar to that in SASEQ but now in VRBC, sequencer controller, and sequencer
- Problems solved in SASEQ firmware
  - Incomplete readout (not all 128 channels)
  - Zeroes in data
  - Reliable cal injects
- These problems have re-appeared
  - Mystery being investigated -Utes, Mendoza, et. al
  - Working on firmware
  - Detailed logic analyzer traces at
    - [www.nuhep.nwu.edu/~dave/d0](http://www.nuhep.nwu.edu/~dave/d0)



# VxWorks and Linux Based

- 1% test stand connected to local Linux computer which is NFS mounted to DO online system, so use current DO online software
- Controls - EPICS
  - Need to fix problem with connection to database
- Database for hardware
  - New DB for svx4, goal to make compatible with old DB
  - Contains VRB/SEQ/IB/HDI
  - Status - almost ready for test



# VxWorks and Linux Based

- Monitoring- local PPC based with web interface
  - Major problem - work by Maciek Przybycien delayed for 3 months (and ?) by lack of visa
  - Will need updates to decoding routines for svx4
- Data- no data, no progress
  - Expectation- as soon as SCL hardware solved and computer connections solved, data should be written to a disk file on local computer
  - Will soon need people to look at this data



# Conclusions

- PC based
  - Hardware and software in place and working
  - Little more work on SCL mode
  - Firmware for svx4 control puzzle
- Controls
  - Now starting
  - New DB exists, need to solve connection problems next
- Monitoring
  - Major delay until visa problem solved
- Data
  - Not there yet