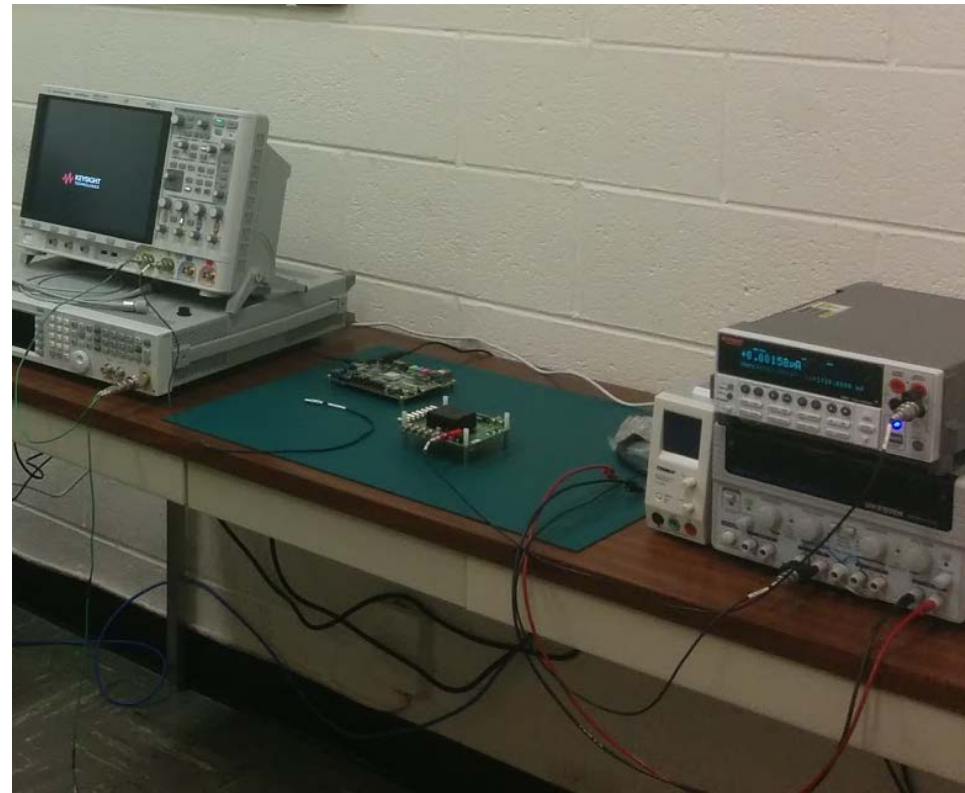
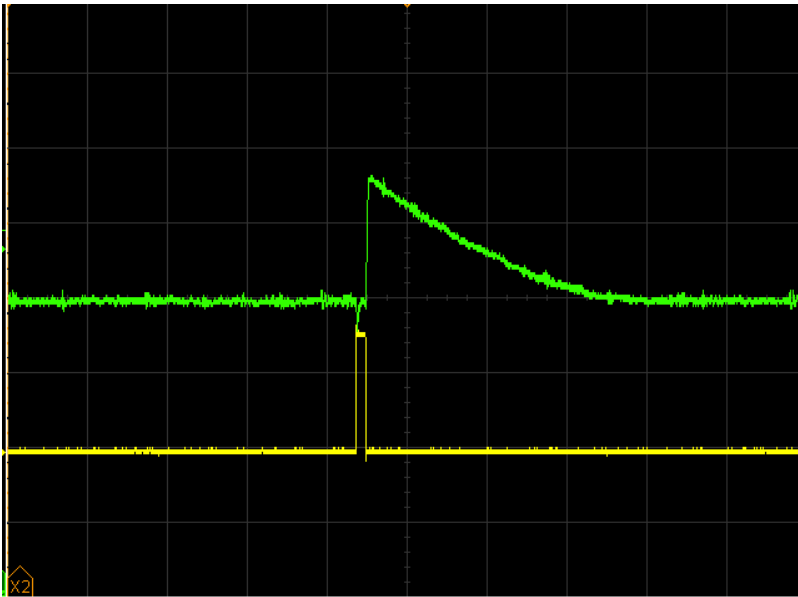


HVStripV1 testing

*Jinlong Zhang, Doug Benjamin, Rui Wang
March 17th, 2015*

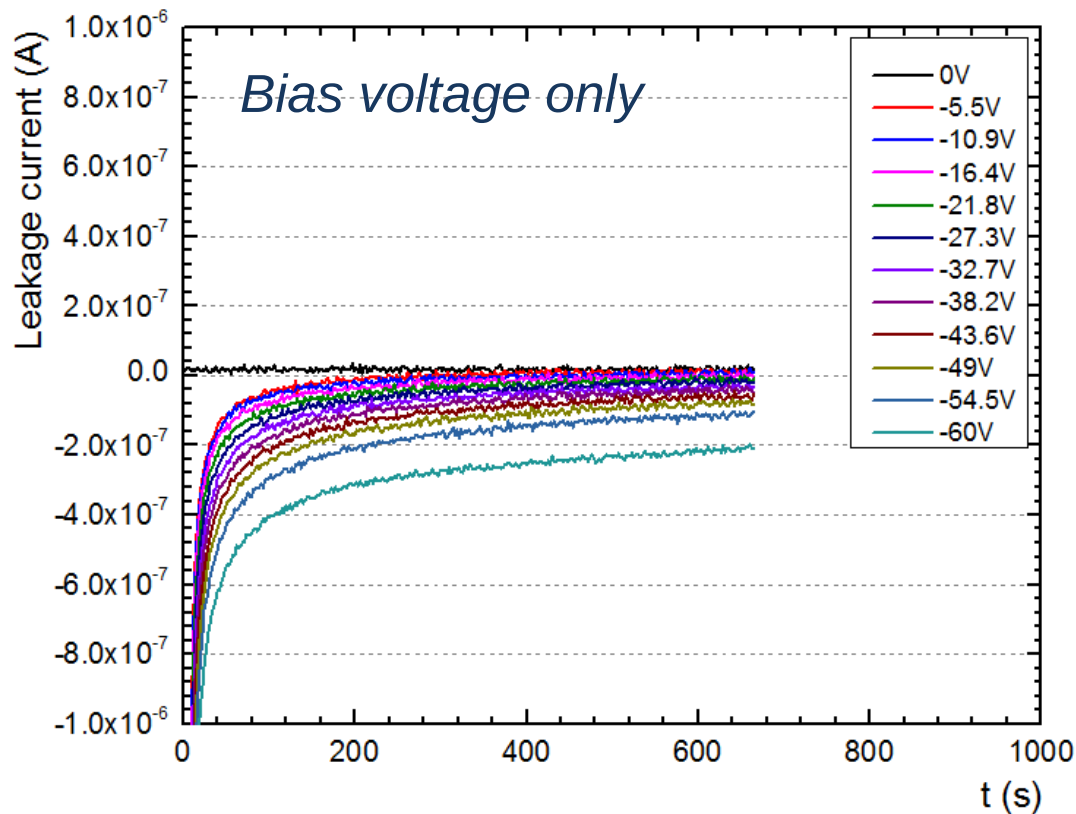
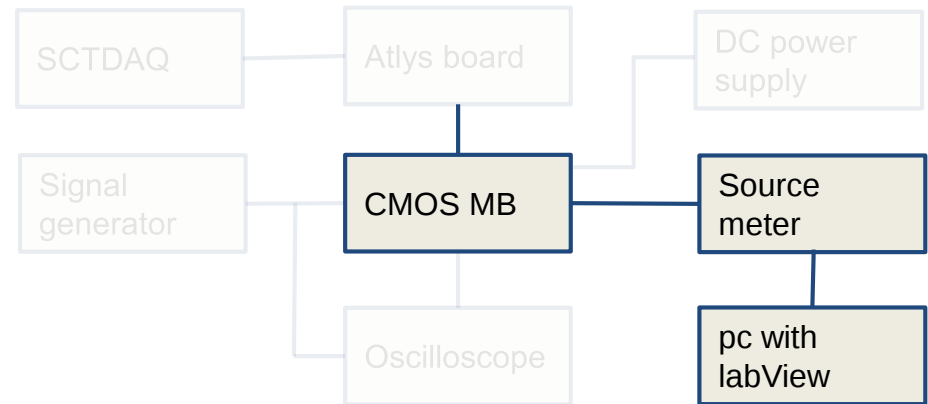
Setup

- Get needed equipment
 - Apply bias voltage
 - Inject pules
 - Read output from amplifier



IV scan

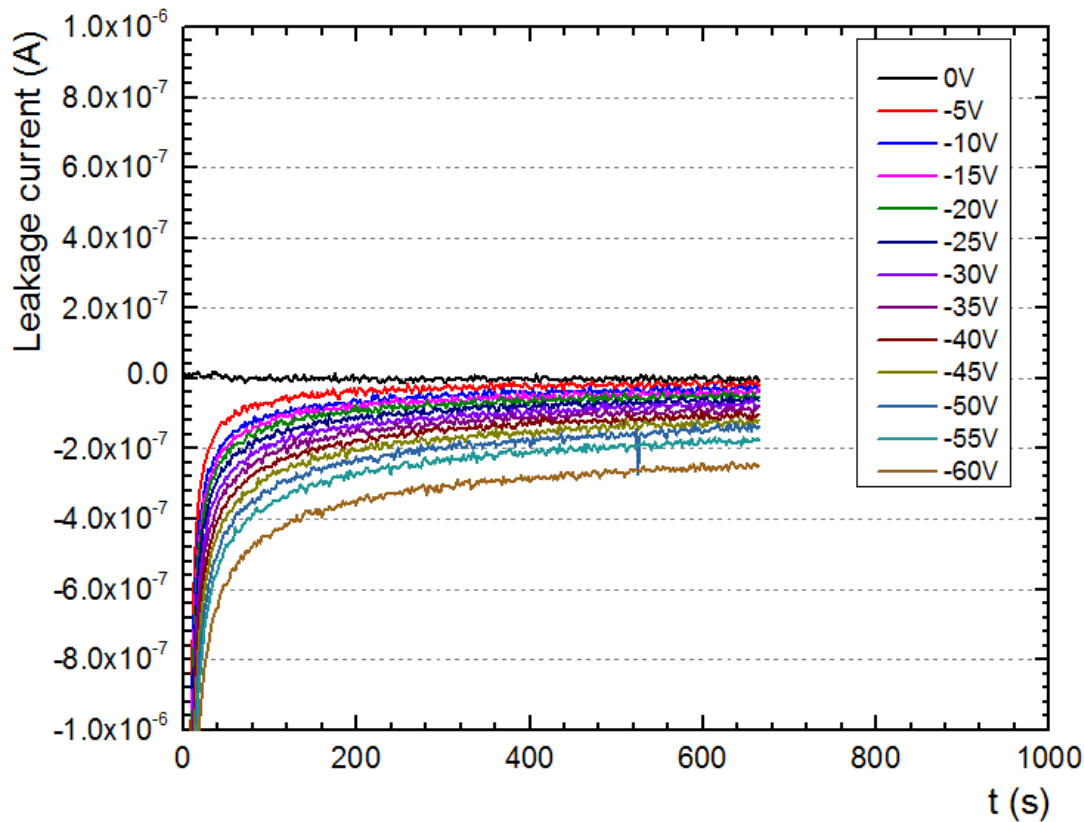
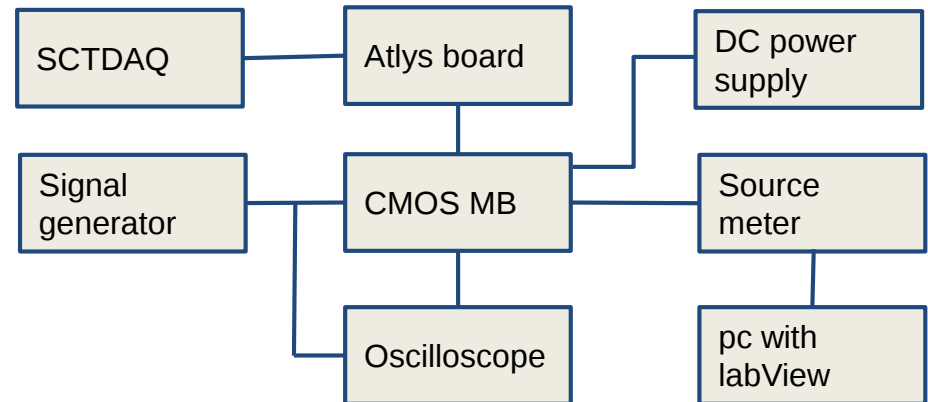
Overall leakage current
read back from the source
meter



Take >10 min to become
stable

IV scan

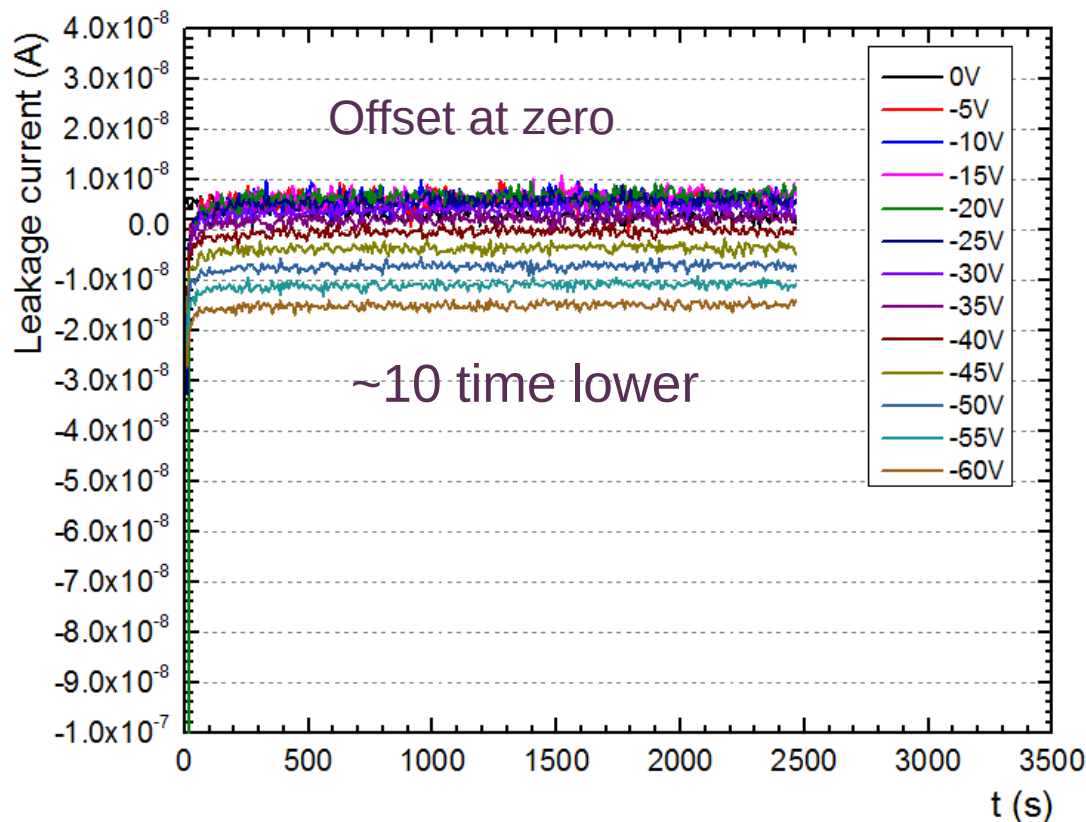
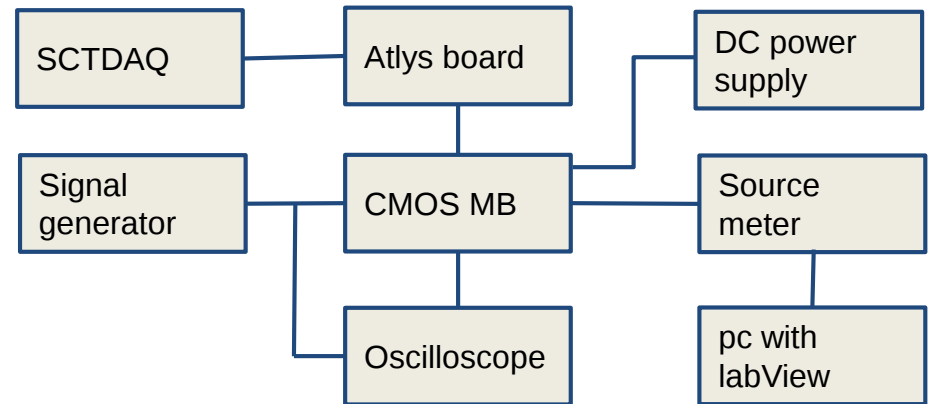
Overall leakage current
read back from the source
meter



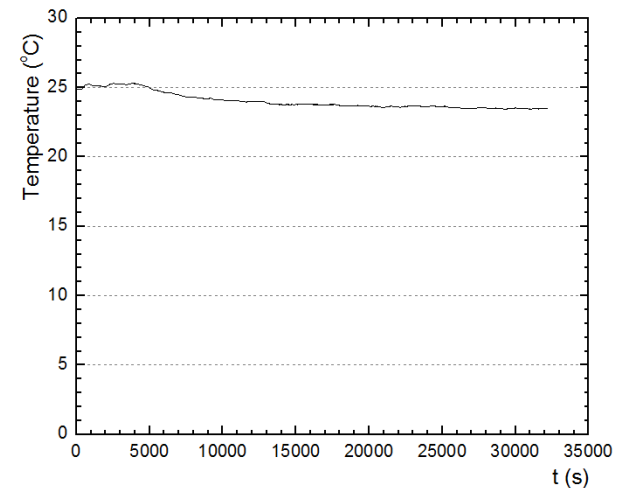
Take >10 min to become
stable

IV scan

Overall leakage current
read back from the source
meter



After everything on
for a few hours



Setup

■ DAQ

— Atlys board

- *Can not compile itsdaq firmware*
 - ERROR:Compplib - COMPLIB[sim]: Unable to automatically find executables for simulator 'mti_se' from the following paths. (Error log in backup)
- Using already compiled one (from Matt's site)

— SCTDAQ

- Follow the Twiki page (need /afs access when setting up things from /cvfm)
- Configure the registers in the HV CMOS chip --- **done**
- Read output --- **working on...**



Summary

- Test setup almost ready
- Overall leakage current
 - Take ~hour to become stable
 - $\sim 1.5e^{-8}$ A at -60°C (?)
- Need some time to working on SCTDAQ
- Will produce gain map to verify

Backup



Firmware compiling error

```
Processing command line ...
Reading the compxlib configuration file - 'compxlib.cfg' ...
ERROR:Compxlib:387 - COMXMLIB[option]: Invalid directory '/unix/local/mentor/fpgadv/Modeltech/bin' specified for -p.
Library Source Paths => '/opt/Xilinx/14.7/ISE_DS/ISE'
Current Working Directory => '/tmp/warren/ise/atlys_itsdaq'
Compilation Mode = FAST
Execute Mode = ON
Scheduling library installation & compilation for architectures: spartan6
```

Scheduling library installation & compilation for libraries: simprim unisim xilinxcorelib

Signature:-

```
-----
/opt/Xilinx/14.7/ISE_DS/ISE/bin/lin64/unwrapped/compxlib -s mti_se -l all -p /unix/local/mentor/fpgadv/Modeltech/bin -w -arch spartan6 -lib unisim -lib simprim -lib xilinxcorelib -intstyle ise
-----
```

ERROR:Compxlib - COMXMLIB[sim]: Unable to automatically find executables for simulator 'mti_se' from the following paths:

```
/opt/Xilinx/14.7/ISE_DS/ISE/bin/lin64
/opt/Xilinx/DocNav/
/opt/Xilinx/14.7/ISE_DS/ISE/bin/lin64
/opt/Xilinx/14.7/ISE_DS/ISE/sysgen/util
/opt/Xilinx/14.7/ISE_DS/ISE/sysgen/bin
/opt/Xilinx/14.7/ISE_DS/ISE/../../DocNav
/opt/Xilinx/14.7/ISE_DS/PlanAhead/bin
/opt/Xilinx/14.7/ISE_DS/EDK/bin/lin64
/opt/Xilinx/14.7/ISE_DS/EDK/gnu/microblaze/lin/bin
/opt/Xilinx/14.7/ISE_DS/EDK/gnu/powerpc-eabi/lin/bin
/opt/Xilinx/14.7/ISE_DS/EDK/gnu/arm/lin/bin
/opt/Xilinx/14.7/ISE_DS/EDK/gnu/microblaze/linux_toolchain/lin64_be/bin
/opt/Xilinx/14.7/ISE_DS/EDK/gnu/microblaze/linux_toolchain/lin64_le/bin
/opt/Xilinx/14.7/ISE_DS/common/bin/lin64
/cvmfs/atlas.cern.ch/repo/ATLASLocalRootBase/x86_64/xrootd/3.2.7-x86_64-slc6/v3.2.7/bin
/cvmfs/atlas.cern.ch/repo/ATLASLocalRootBase/x86_64/root/5.34.13-x86_64-slc6-gcc4.7/bin
/cvmfs/atlas.cern.ch/repo/ATLASLocalRootBase/x86_64/gccxml/0.9.0_20120309p2-x86_64-slc6-gcc47-opt/sw/lcg/external/gccxml/0.9.0_20120309p2/x86_64-slc6-gcc47-opt/bin
/cvmfs/atlas.cern.ch/repo/ATLASLocalRootBase/x86_64/python/2.7.3-x86_64-slc6-gcc47/sw/lcg/external/Python/2.7.3/x86_64-slc6-gcc47-opt/bin
/cvmfs/atlas.cern.ch/repo/ATLASLocalRootBase/x86_64/Gcc/gcc472_x86_64_slc6/slc6/gcc47/bin
/share/sl6/root/bin
/users/rwang/bin/
/usr/local/bin
/bin
/usr/bin
/usr/X11R6/bin.
```

Simulator 'mti_se' is ignored.

