

# ACCEL LLRF Firmware Update

Project: DARPA ACCEL

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U.S. DEPARTMENT OF  
**ENERGY**

Stanford  
University

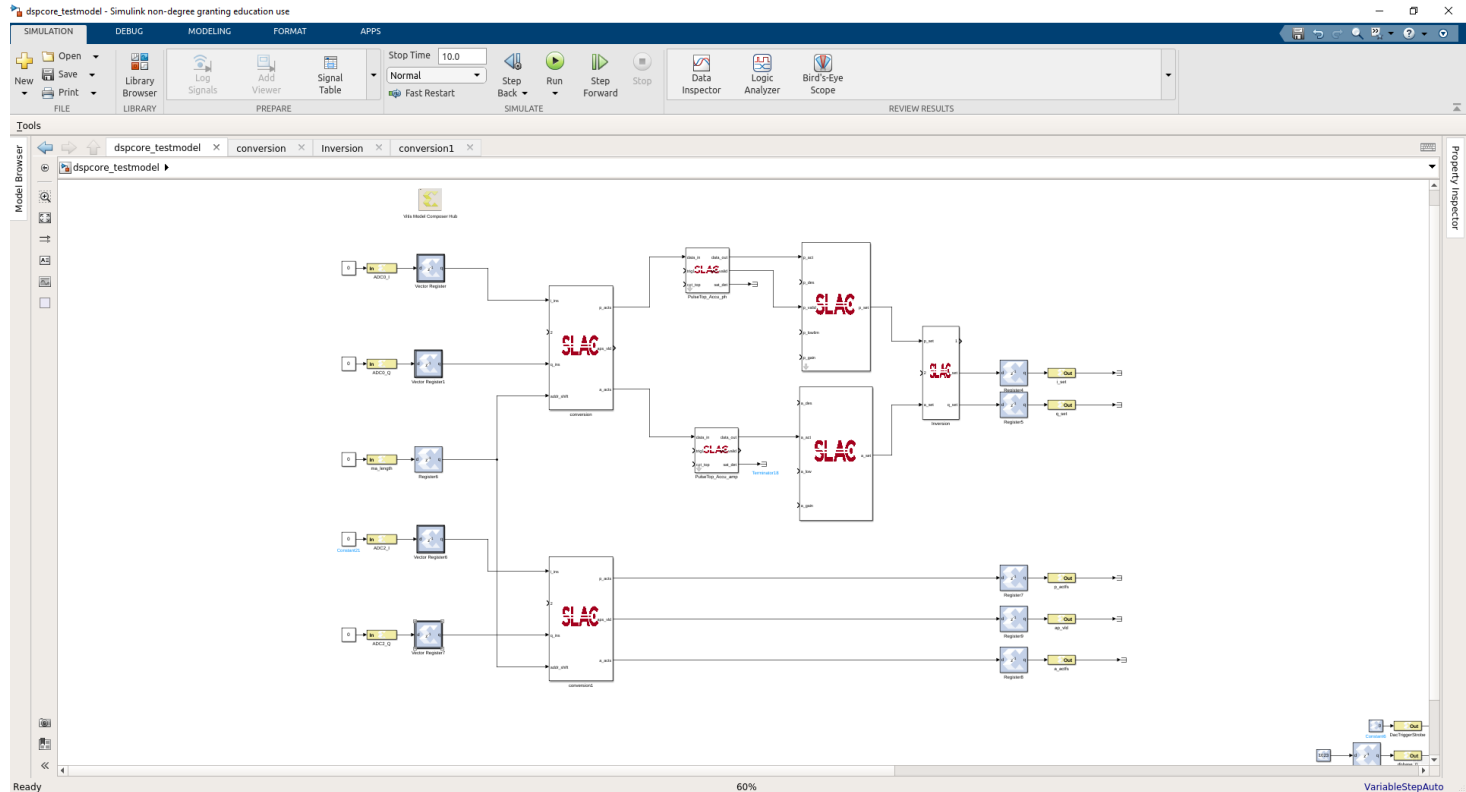
**SLAC** NATIONAL  
ACCELERATOR  
LABORATORY

# SLAC LLRF IPs, Test Models and Test Scripts

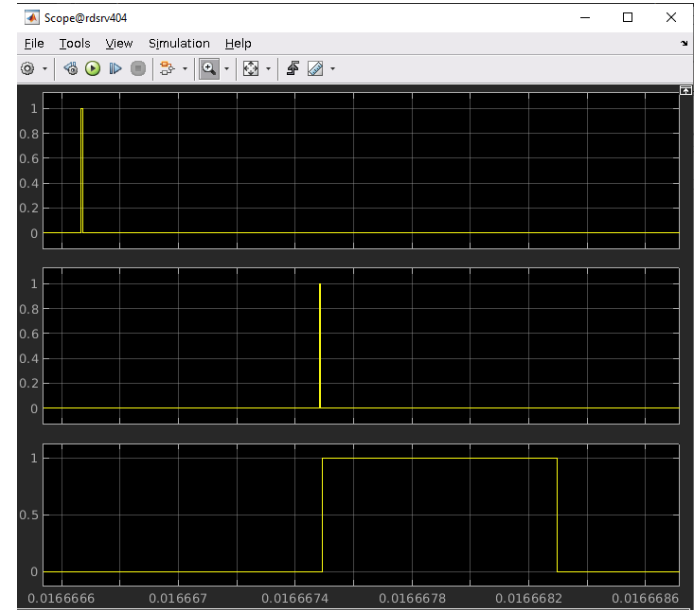
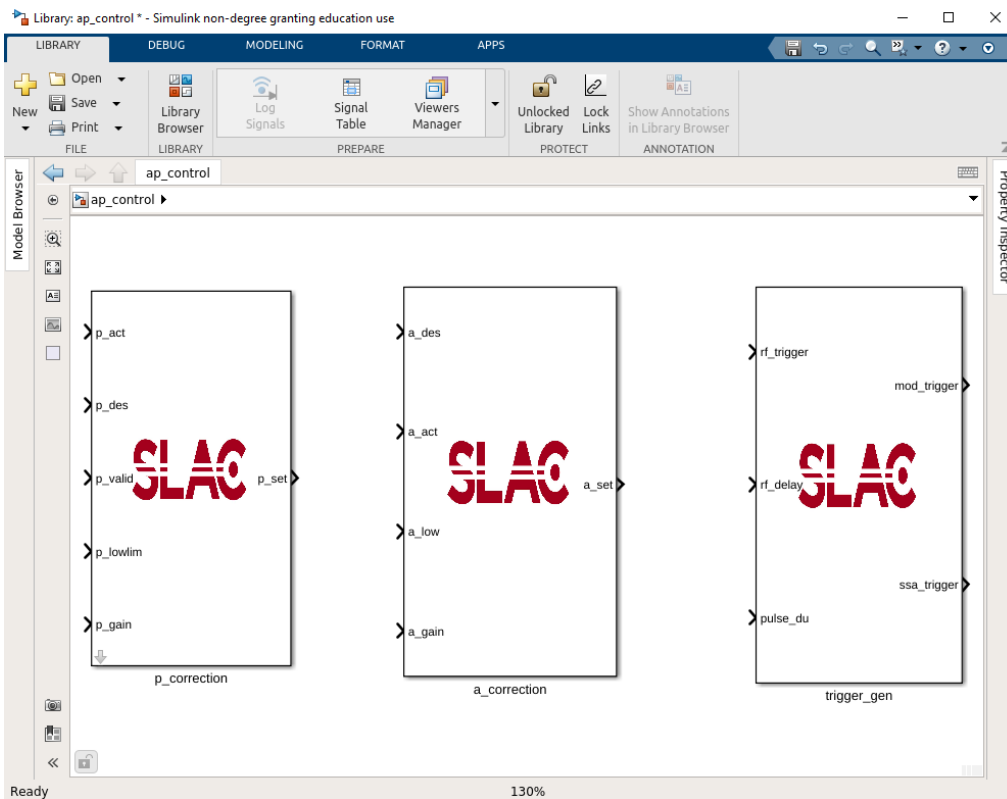
chaoliuerdos LLRF IP updates	
..	
slprj/sim/varcache	LLRF IP updates
amp_corr.slx	LLRF IP updates
amp_corr_testbench.m	LLRF IP updates
amp_corr_testmodel.slx	LLRF IP updates
amp_corr_testmodel_sysgen.log	LLRF IP updates
ap_control.slx	LLRF IP updates
dspcore_testmodel.slx	LLRF IP updates
dspcore_testmodel.slx.original	LLRF IP updates
phase_corr_testbench.m	LLRF IP updates
phase_corr_testmodel.slx	LLRF IP updates
phase_corr_testmodel_sysgen.log	LLRF IP updates
slblocks.m	LLRF IP updates

- Custom block in Library Browser
- Testbench Simulink model
- Testbench Script
- Phase correction as an example
  - Set the desire phase value
  - Set the lower limit of the phase correction
  - Set the correction gain
  - Get the current phase value
  - Output the new set values for phase

# High Level Modelling – Phase 1.5 Demonstration



# Trigger Generator Block



# Tigger Blocks in dspcore.slx

