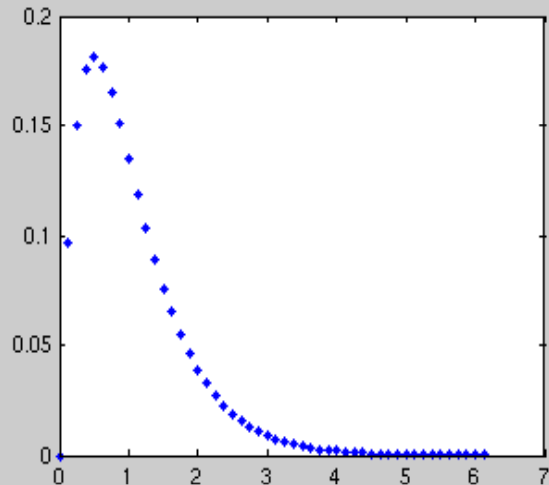


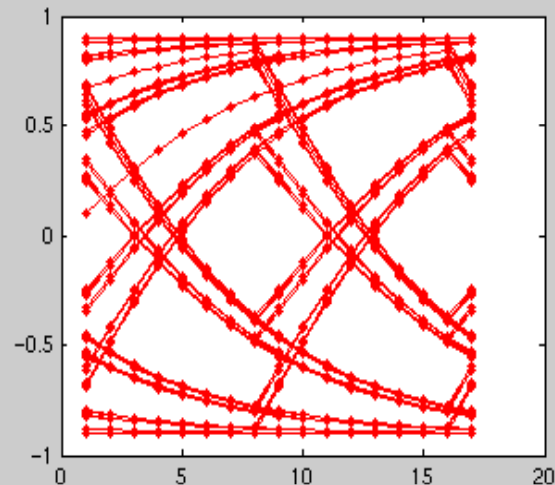
# High-speed Equalizer Using Eye-Opening Monitoring

- Equalizer adaptation algorithm for delay-tap-based equalizing filters (FIR or DFE) using EOM
- Applications:
  - Band-limited metal-wire or optical communications
- Features:
  - On-chip measurement of channel impulse response
  - Flexibility: Adaptation algorithm implemented in digital
  - Low complexity: Mixed-mode circuits not using ADC

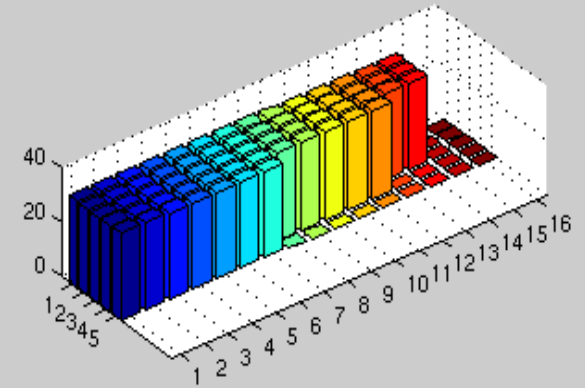
# Behavioral Simulation



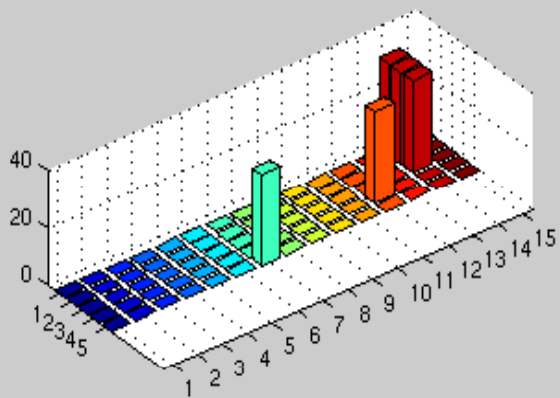
Channel impulse response



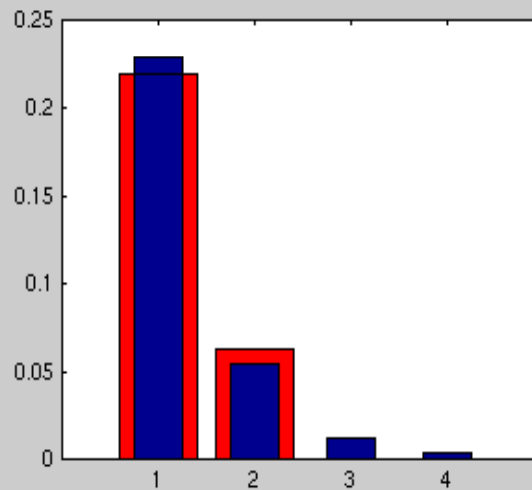
Before DFE



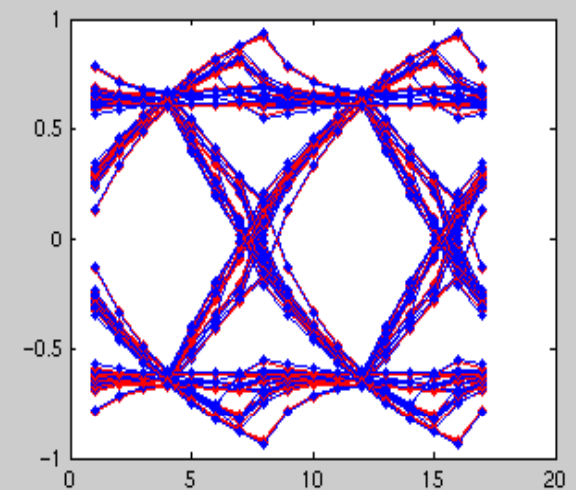
Measured CDF



PDF

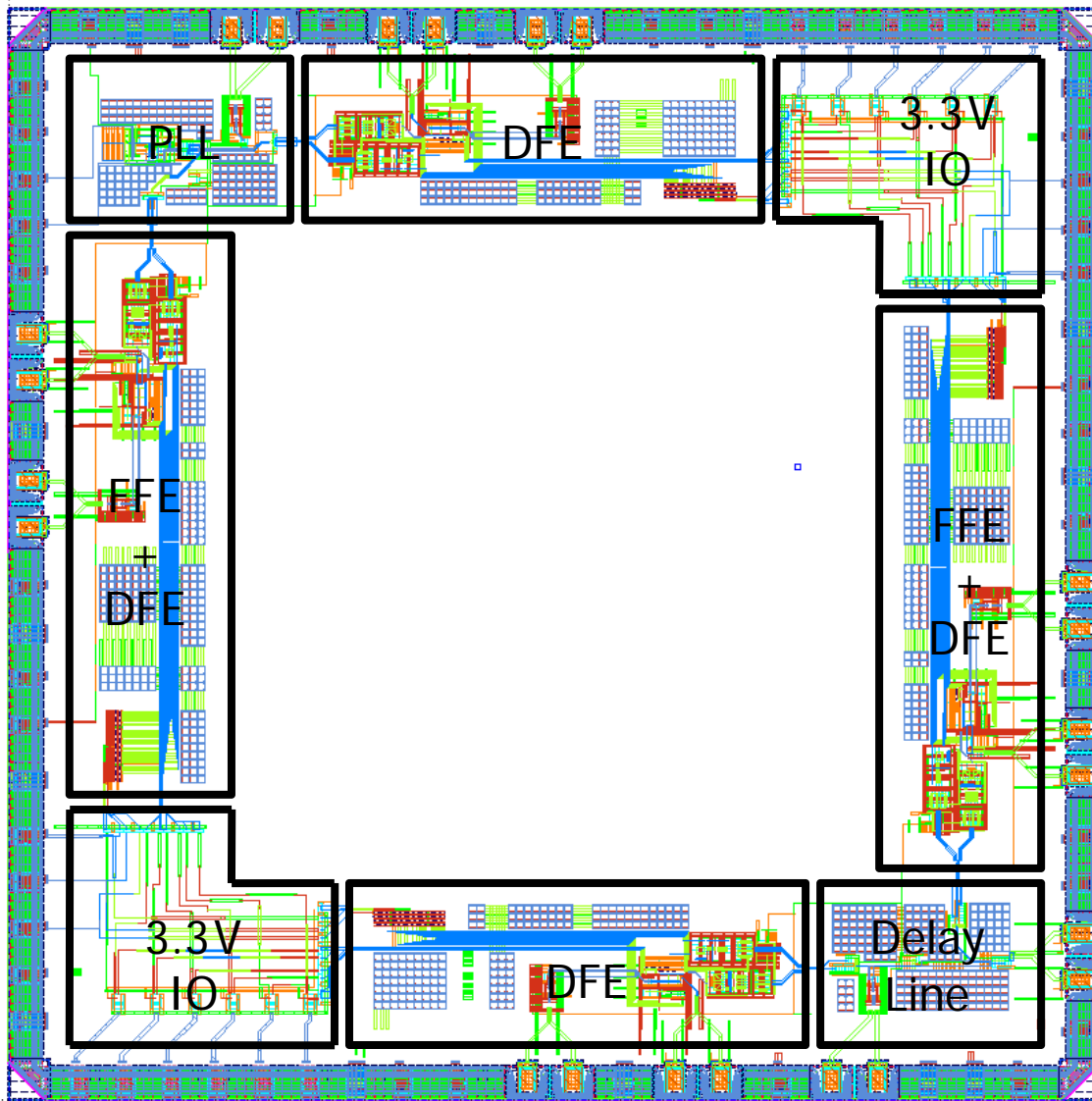


ISI (Math and Simulation)



After DFE (Math and Simulation)

# Chip Layout



- Chip name: Uriel
- Process: SEC 65nm CMOS
- Size: 4.5mmX4.5mm
- Now in fabrication