Stateye Status

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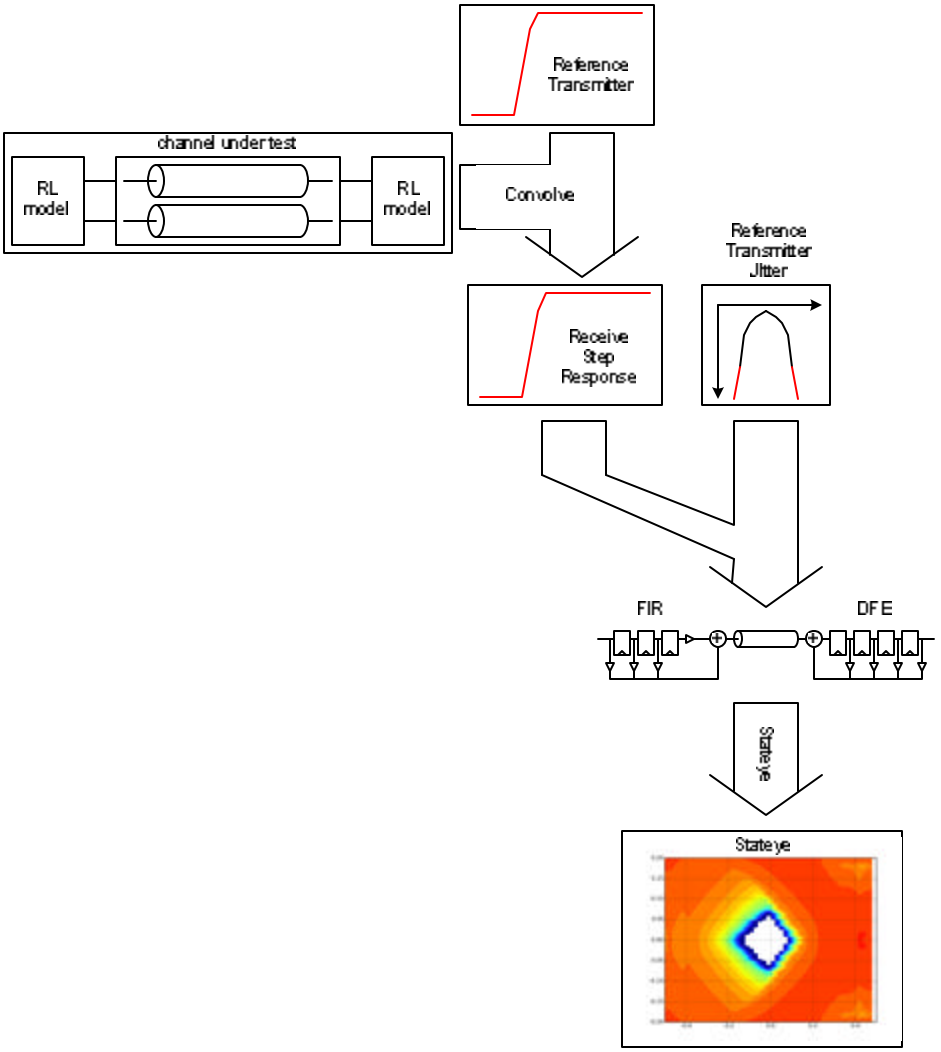
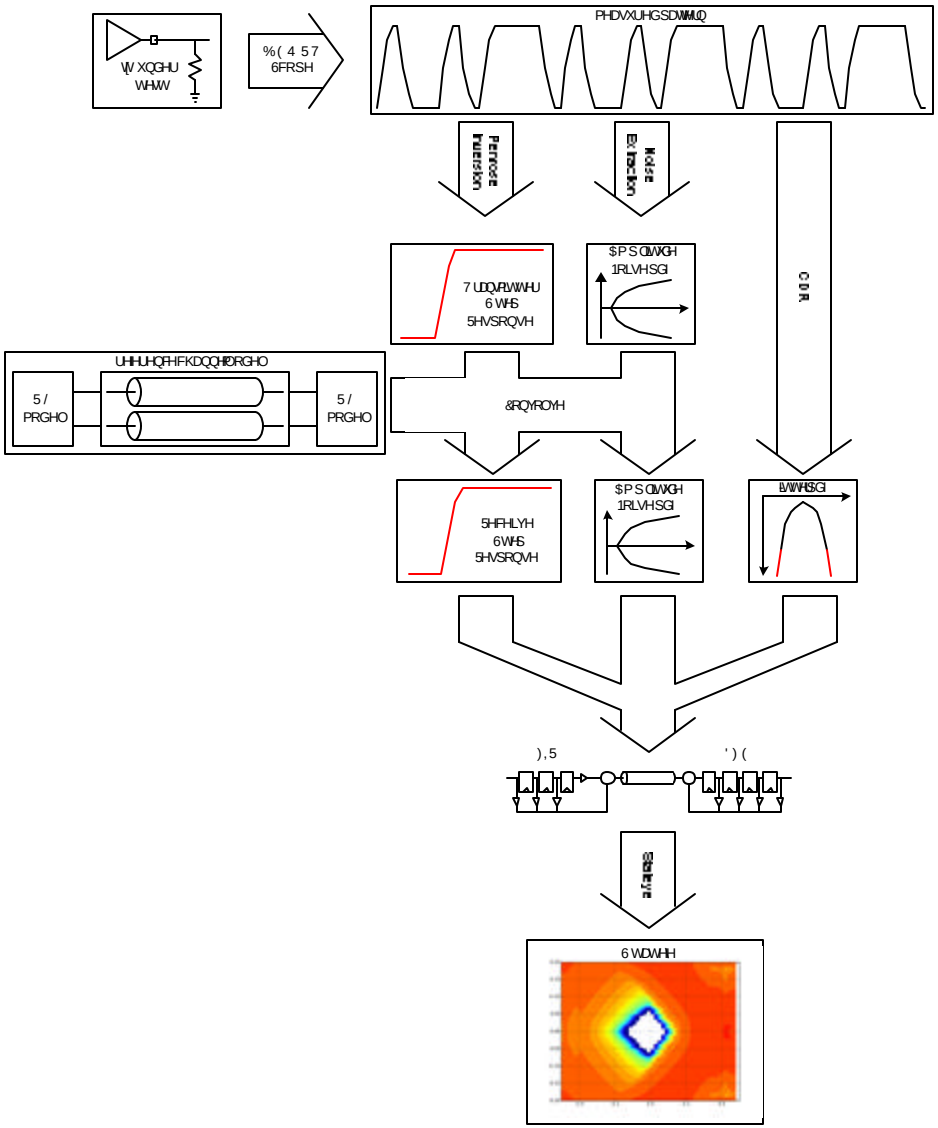
Never stop thinking

Use Model
Channel Compliance



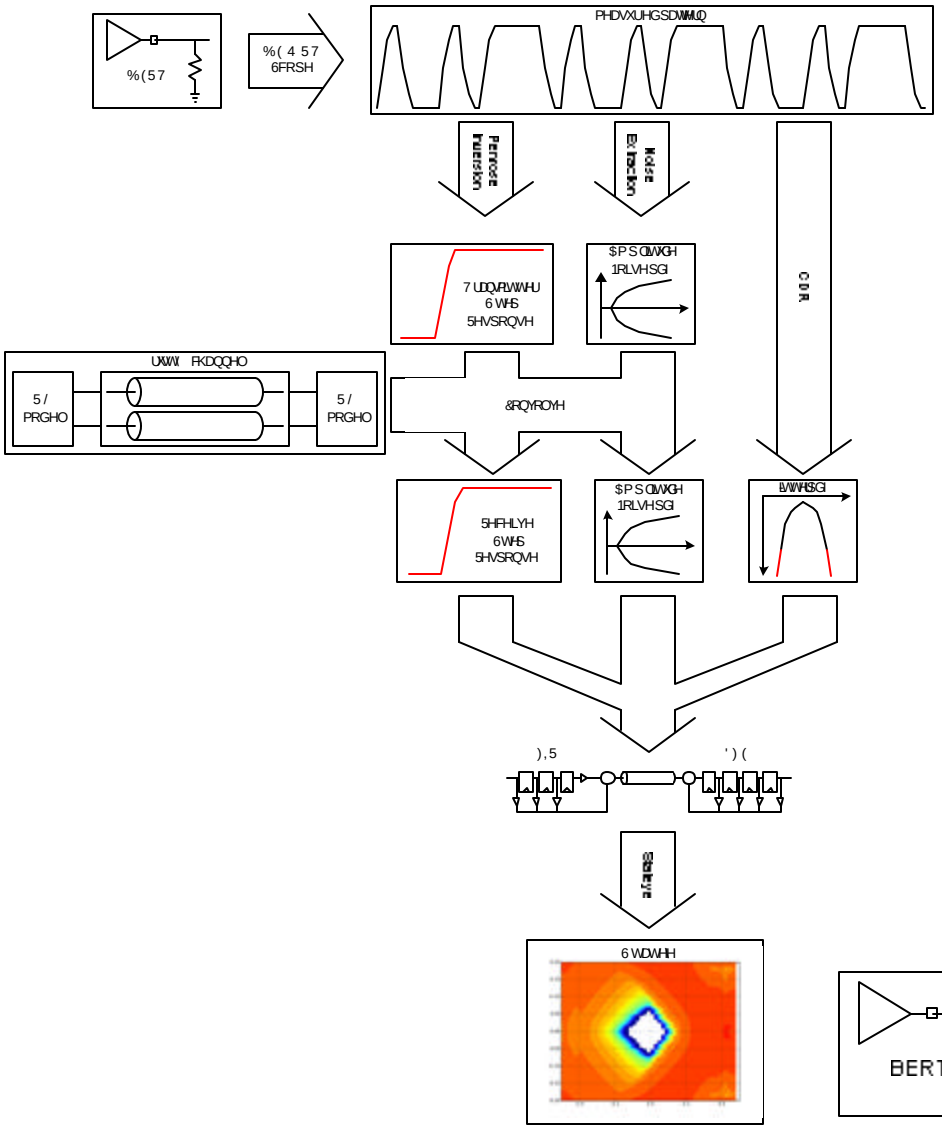
- Channel Under Test is VNA'ed
- CUT is cascaded with reference model for receiver and transmitter
- Reference transmitter step and reference transmit jitter is entered into Stateye
- Fixed FIR and optimised n-tap DFE is selected
- Output Stateye must be better than worst case receiver eye requirements

Use Model
Transmitter Compliance



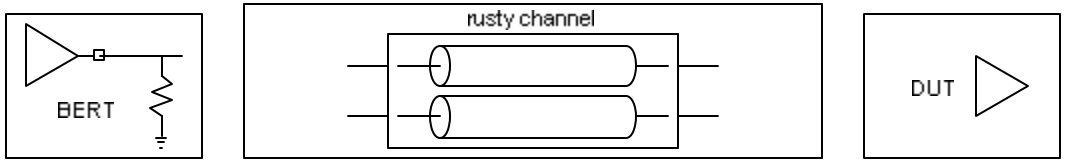
- De-emphasized transmitter under test is measured using B/EQ/RT/Scope using CJTPAT
- Extracted step response and amplitude noise is convolved with reference channel
- Jitter is extracted using defined CDR
- Optimized n-tap DFE is selected
- Output StatEye must be better than worst case receiver eye requirements

Use Model
Receiver Compliance



- BERT is measured using B/EQ/RT/Scope using CJTPAT
- Extracted step response and amplitude noise is convolved with rusty channel
- Jitter is extracted using defined CDR
- Optimized n-tap DFE is selected
- Output StatEye must be better than worst case receiver eye requirements
- Sum of DFE coefficients must be greater than 50% of maximum specified tap settings
- BERT and Rusty Channel are cascaded and connected to receiver under test
- RUT must achieved target BER

Methodology adopted by OIF CEI-6GLR



Status

- Stateye for
  - Channel compliancy : READY
    - scripts available from www.stateye.org
    - doesn't include crosstalk (is currently being integrated)
    - regression testing of scripts started (>5000 testcases)
  - Transmitter compliance : PROVED FEASABLE
    - API for all known scope types defined
    - working with all known Real Time, Equivalent Time, BERT Scopes
    - Penrose inversion algorithm being optimized for improved accuracy
  - Receiver compliance : ACCEPTED BY OIF
    - Stateye scripts same as for transmitter compliance