StatEye Release Update

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Never stop thinking

Feature Updates

- Crosstalk, Mode Conversion
  - As Rob, correctly pointed out there is mode conversion in the channel and StatEye is capable of taking this term and convolving into the main signal. In fact the capability of dealing with mode conversion is nothing more than the same calculation as for crosstalk. The next script version will allow multiple channel transfer functions to be identified as being signal degradation component for mode conversion and crosstalk.
- 8b10b coding
  - Current StatEye v5 implements only the standard D control words. This was an overlook on my behalf and the next release will also include K28.5, K28.3 control words
  - The 8b10b coding should be toggling between the two parity possibilities. This is being double checked and fixed, if necessary, for this release

Feature Updates

- SSC Support
  - The StatEye CDR, when using a real time scope for measurement is supported. For EQScopes and BERTs, an external CDR is necessary as with every other measurement using these scopes.
  - For channel compliance i.e. reference transmitter/receiver and measured channel, a residual SSC should be defined, i.e. the amount of non-tracked SSC at the receiver. This should then be added to the jitter applied during the analysis
- Fixed extrapolation error which caused analysis to crash when zero jitter defined
- User interface updated from Rob have been added to the control scripts
  - Thanks again to Rob for all these ideas

Feature Updates

- Transmit compliance Measurement
  - The Penrose algorithm for extracting the transmitter characteristic has been rewritten to allow all possible scope formats to be utilised
- Receiver Tolerance measurement
  - Based on the additional measurement files from Kevin Witt, and Mahbubul Bari, major progress has been made concerning the use of StatEye to predict link performance, using measurements made at the output of the channel. This will be supported in the next release
- Next release is April 18th from the StatEye website