Minutes

Attendees:

Adam Healey, LSI
Ali Ghiasi, Broadcom
Pete Anslow, Ciena
Mike Dudek QLogic Corporation
Rick Rabinovich Alcatel Lucent
Richard Mellitz Intel
Charles Moore Avago Technologies
Dan Dove, APM
Adee Ran, Intel
John Petrilla Avago
David Chalupsky Intel
CK Wong, FCI
Beth Kochuparambil, Cisco
Ryan Latchman, Mindspeed

Minutes:

Call for patents , Approval of 081313 minutes

Reviewed ghiasi_01_081313_caui

- Proposal on transmitter FFE requirements
- Post and pre range along with measurement methodology by capturing waveforms
- Discussed simulation results which highlight inner eye opening

COM discussion: COM looks at ratio between available signal and total noise (see next slide)

- What is an appropriate metric for CAUI-4: available signal to noise ratio vs inner eye measurement
- Care should be taken with calculation of total noise for COM since deterministic sources may have significant rms penalty but still allow for open inner eyes

Reviewed moore_01_081313_caui

- concern on Tx ISI jitter contribution will consume significant portion of the 0.28UI TJ at Tx
- 0.28UIpp is consistent with previous generations (although UI is now shorter) as well as other industry documents
- Additional analysis required to establish expected TJ including RJ and other non-package contributors

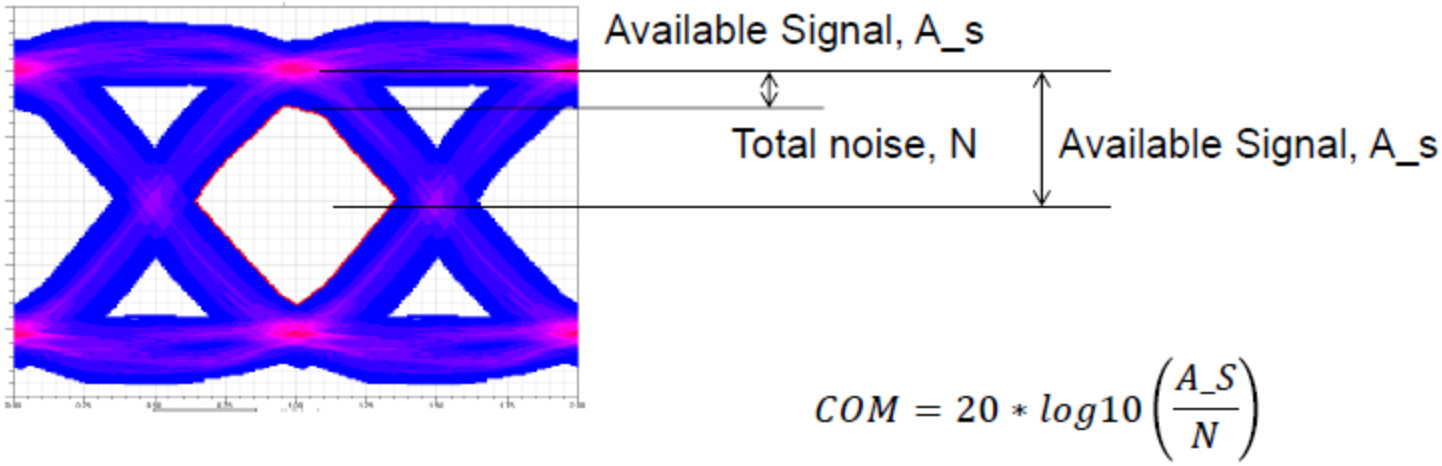
Reviewed ran_01_081313

- proposed Rx settings for COM which include Rx package and 1 tap DFE
- limit DFE tap value to 0.75 max
- proposed use of annex 93 and 93A with the exception of BER1E-15 and 1 tap DFE with maximum value of 0.75

Relation Between COM and Simulated EYE

Figure of merit (FOM) used to determine equalization.

- Best ratio of signal at sample point to rms of all appropriate cursors using single bit response (SBR)



$$COM = 20 * log10\left(\frac{A\_S}{N}\right)$$