XLAUI / CAUI Measured Results

Ryan Latchman ryan.latchman@gennum.com



Agenda

gennum

- 1. Show Measured Results using XLAUI CDR
 - 1. Compare output with Tx Eye Mask
 - 2. Compare output + 15" Trace with Rx Eye Mask
- 2. Measurement Setup:
 - 1. Data: 10.3125Gb/s PRBS31



Measurement Setup

gennum



FR4 Trace Loss

gennum



ryan.latchman@gennum.com

Eye Mask Measurements: No De-emphasis



- 10G Channels are running asynchronously
 - Unused Outputs Terminated on Evaluation Board



Eye Mask Measurements: De-emphasis



- 10G Channels are running asynchronously
 - Unused Outputs Terminated on Evaluation Board



Conclusions

- Preliminary measurements indicate XLAUI / CAUI limits have adequate margin for dedicated silicon
 - Verified using XLAUI CDR
- Input from ASIC & System vendors also needed
- Recommend implementation flexibility for specification:
 - XAUI Example: "The driver shall satisfy either the near-end eye template and jitter requirements, or the far-end eye template and jitter requirements."

gennum