

PoDL – 1000BASE-T1 Liason Response

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May Liason Activity

- Xiaofeng Wang on behalf of 1000BASE-T1 presented wang_3bu_1_0514.pdf to the PoDL group
- Questions were raised and discussed about common mode and broadband noise and the location of noise sources
- A list of additional questions was generated to present to the 1000BASE-T1 group (attached)

Questions to 1000BASE-T1

- There are two noise sources to be considered in PoDL – one in the PSE and one in the PD, located at either end of the cable. Does the 1000BASE-T1 group anticipate additional effects due to this?
- The effects of common mode noise and broadband noise generated by PoDL on data integrity should be considered and specified by 1000BASE-T1
- The PHY transmitter droop time and the HPF specification don't seem to agree. Additionally, the droop time spec doesn't seem to include insertion loss or return loss specs. Can we resolve this apparent discrepancy or modify or eliminate the droop time spec?

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- PoDL may affect the DC offset at the PHY receiver. PoDL would like to ignore this effect. Presumably the PHY transmitter can correct for this. Can we assume that DC correction will be handled in the 1000BASE-T1 PHY?
 - What is a reasonable limit on DC correction?
- What is the tolerance of the PHY receiver to dV_{phy}/dt as a result of PoDL noise?
- Is 7dBmV stationary noise limit (from gardner_3bu_1_0514.pdf) a reasonable assumption?