Liaison from PoDL to 1000BASE-T1

June 2015

Noise and Ripple

- We received a liason letter from the 1000BASE-T1 group at the May 2014 interim meeting
  (wang_3bu_1_0514.pdf, followup xiaofeng_3bp_02_0714.pdf)
- We would like to confirm that these numbers are still accurate as we finalize the PoDL limits

Request

- Would the 1000BASE-T1 group confirm the noise limits shown in wang_3bu_1_0514.pdf page 9, or propose new limits if they have changed?
- These numbers will be added to Tables 104-3 (PSE) and 104-6 (PD) in 802.3bu Draft 1.1 and reviewed at the 802.3bu Task Force meeting during the July 2015 Plenary in Hawaii.

DC Offset Cause

- One effect that may not be modeled in the PHY calculations is receiver offset caused by DC slew rate due to PoDL turn-on/turn-off
- This offset is caused by a sustained dv/dt at the input to the PHY receiver coupling capacitors (expected to be on the order of 5V/us)
- Does the 1000BASE-T1 group anticipate any problems in the PHY due to this affect?
- If yes, can 1000BASE-T1 recommend a maximum dv/dt that the PHY will tolerate?

Thank You