Informal Minutes

Oct 2019 teleconference

Frank Effenberger

Administrative

- Meeting was called to order 8:00 EDT Oct 10, 2019
- Attendees included:
  - Frank Effenberger, Futurewei
  - Craig Pasek, Cisco
  - Yuanqiu Luo, Futurewei
  - Richard Hsu, Molex
  - Thomas Palkert, Molex
  - Dave Lewis, Lumentum
  - Allan ?, ?
  - Gurpinder Matharu, Cisco
  - Raymond Nering, Cisco
  - Ed Ulrichs, Source Photonics
  - J. Horiuchi, ?
  - Helen Xu, Huawei
  - Xinyuan Wang, Huawei
  - Shan Wey, ZTE
  - (If you attended and are not listed above or your entry is imcomplete, please contact me)
- The various IEEE 802 policies were read
- There were no patent declarations made at the meeting

Quick review of optical tables

- This contribution showed all the PMD optical tables, and gave the rationale for how the new values were derived
  - These were based on the agreed motions at the last meeting
  - The 10G BR40, and BR40+ were based on the use of an APD Rx that is 10dB more sensitive than the PIN Rx used in BR10
  - BR10 loss budget is 6.3 dB
  - BR20 loss budgets are 13 dB
  - BR40 loss budget is 18 dB
  - BR40+ loss budget is 23 dB
- There were several questions on some of the detailed values. All are encouraged to make comments against the draft and help to fix up the mistakes. In particular
  - TDP values as they vary over distances should be checked
  - The minimum link loss, Rx overload, and Tx Max power should be checked

Long and fast wavelength plans

- This concerned the current PoR for the 25G and 50G PMDs operating at distances of 20 km and longer
  - Upstream 1290 +/- 8 nm
  - Downstream 1310 +/- 8 nm
- It is observed that 4 nm guard band is rather small
  - This idea gathered several expressions of agreement
- Another option is the use 1296 +/-2, 1308+/- 2 nm
  - This had the drawback that it excludes uncooled solutions
- Another option is to spread the wavelengths apart
  - 1288 +/- 8 nm, 1312 nm +/- 8 nm
  - This makes the guard band larger, but does use non-standard wavelengths
- It was mentioned that the downstream facing PMD might have a smaller band, since it is typically located in controlled environments

Alternative wavelength proposal

- This suggested the wavelength plan
  - Upstream 1270 +/- 10 nm
  - Downstream 1310 +/- 10 nm
- This has the advantages
  - Standard wavelengths
  - Guard band is an ample 20 nm
- Disadvantage
  - It is unclear if this plan supports 50G operation (the contributor left it TBD, as it requires more modeling and experimental work to verify
- Closing suggestion from chair: People with opinions on the wavelengths should start discussions on the exploder and see if they can form joint positions with others. It would be better if the comments are coordinated, so we don' have 10 comments on the same number