C2M Small Group Update

October 16, 2019

Kent Lusted, Intel

C2M Small Group Participants

- Adam Healey, Broadcom
- Adee Ran, Intel
- Ali Ghiasi, Ghiasi-Quantum/Inphi
- Phil Sun, Credo
- Jane Lim, Cisco
- Karthik Gopalakrishnan, Inphi
- Mike Dudek, Marvell
- Mike Li, Intel
- Ed Frlan, Semtech
- Matt Brown, Independent
- Mau-Lin Wu, MediaTek
- Margaret Johnston, Cadence
- Athos Kasapi, Cadence
- Vipul Bhatt, Finisar
- Tom Palkert, MACOM
- Piers Dawe, Mellanox
- Mark Kimber, Semtech
- Nathan Tracy, TE
- Matt Schumacher, TE
- Hsinho Wu, Intel
- Masashi Simanouchi, Intel
- Bruce Champion, TE
- Clint Walker, AlphaWave
- Rich Mellitz, Samtec
- Inho Kim, Marvell
- Frank Chang, Source Photonics
- Liav Ben-Artsi, Marvell
- Kapil Shrikhande, Innovium

Please let me know if you want to join the offline consensus calls

3ck Next Steps Outlined in September

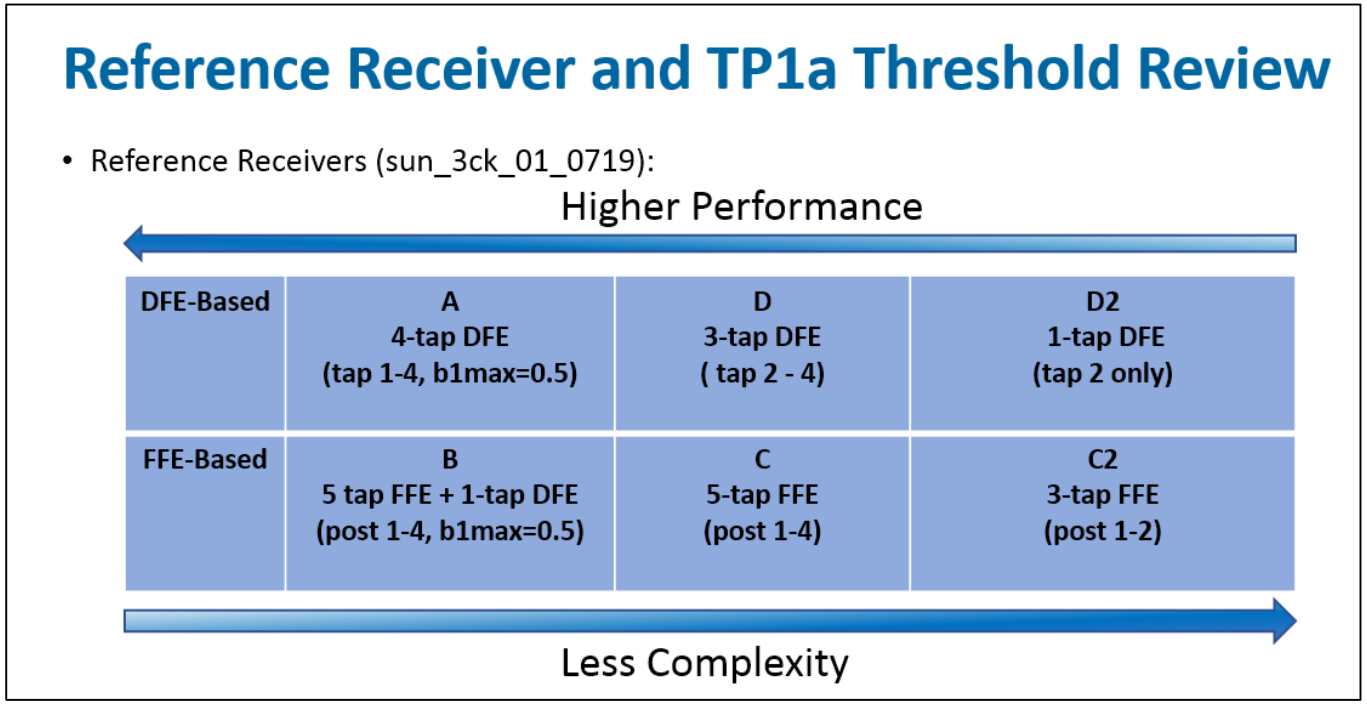
C2M Next Steps for November

- Explore concept of increasing VEC when VEO is large @ TP1a
- Identify solution(s) for short channel issue
- Develop and build consensus around reference receiver candidate(s) and TP1a specifications
- Develop and build consensus around Module-to-host specifications

Small Group Progress Since September Interim

- Two small group meetings
- Reviewed the status and current roadblocks (on slide 3)
- Looked at C2M VEC & VEO vs. whole link performance
- Studied the difference in short channel results from the submitted channels
  - Marginal progress on identifying solution(s) to short channel performance
- Discussed which TP1a reference RX architectures to consider for baseline candidates
  - Targeting Oct 30 TF ad hoc for previewing to Task Force. Identify missing items, not debate which proposal is better

For reference



http://www.ieee802.org/3/ck/public/19_09/sun_3ck_01b_0919.pdf

TP1a Ref RX Architectures Under Consideration

In development:

- DFE4 (similar to Phil Sun “A”, tap 1-4) – Mike Li, Phil Sun
- RXFFE5 (similar to Phil Sun “C”, post 1-4) – Ali Ghiasi, Tom Palkert, Ed Frlan

On Hold:

- DFE5 (i.e. Mau-Lin Wu, 3-fixed + 2-float) – maybe for whole link analysis?

Off the table:

- 3tap FFE (“C2”, post 1-2)
- 1tap DFE (“D2”, tap 2 only)

Backup