Channel Model Ad Hoc:
Agenda and General Information

Channel Model Ad Hoc Teleconference

2005 April 20

Charles Moore

Agilent Technologies

charles_moore@agilent.com

If you are present on today's call, please send me an e-mail indicating your attendance.

Schedule of Events

- <u>Teleconference:</u> Wednesday, April 20 (10am PST)
- <u>Teleconference:</u> Wednesday, May 4 (10am PST)
- <u>Teleconference:</u> Wednesday, May 11 (10am PST)
- Wednesday, May 18 (midnight EST)
  - Deadline for requests for presentation time.
- Monday May 16 – Wednesday May 18
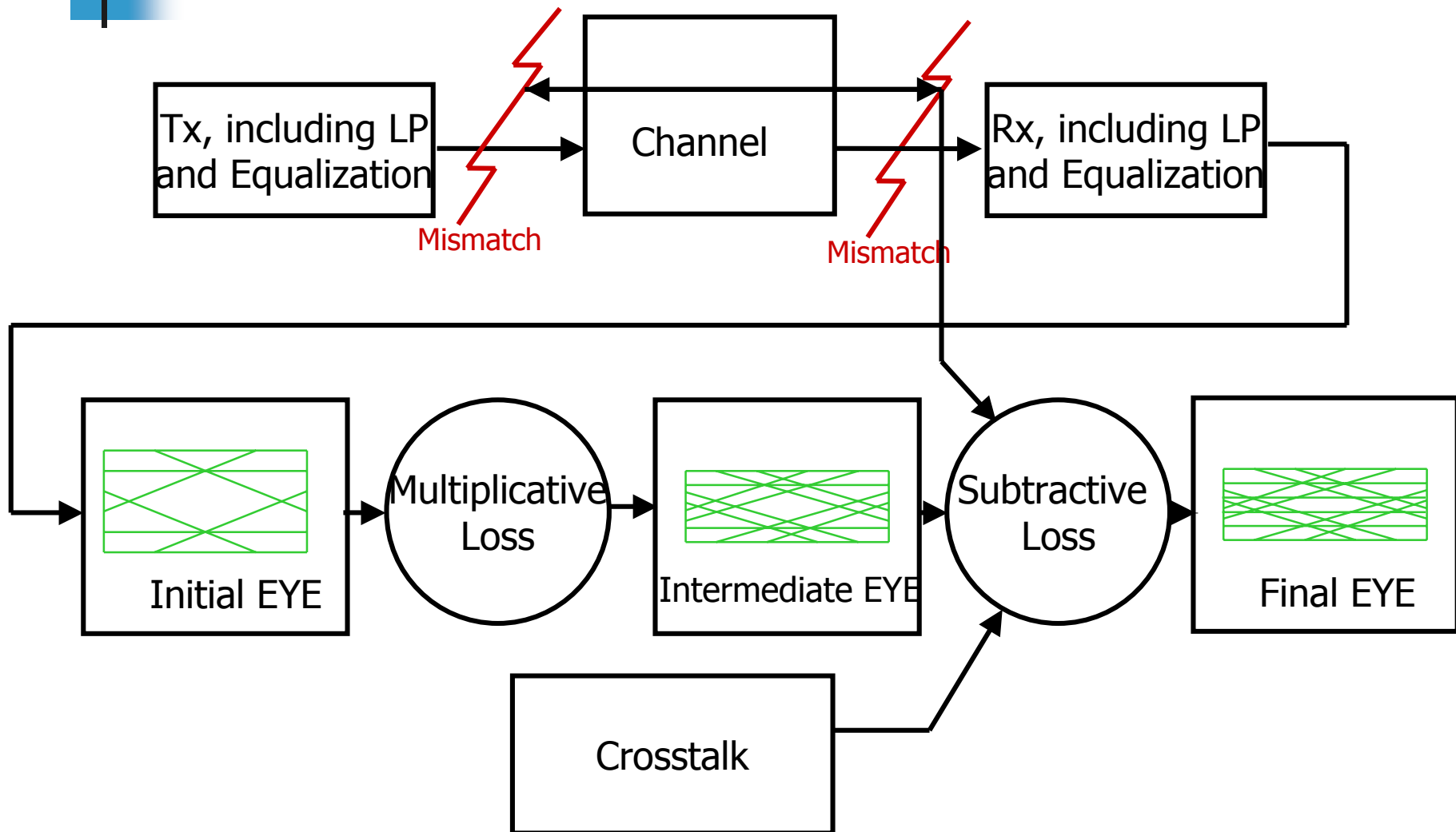 - IEEE P802.3ap Task Force Meeting
  - Austin TX

Meeting Agenda

- Carry-over items
- New business
    - **Link Budget model**
    - **Mellitz: Informative Model, suggestions for spec numbers**
    - **Mellitz: Normative Pulse Response, Report Out**
- Walk-in items
- Straw polls

Link Budget model

Link Budget Continued

- Initial EYE Show primary Channel Loss, partially corrected by Tx and Rx Equalization

- Initial EYE will not be complete and may only be represented by (some) of:

  1. Amplitude (channel gain)
  2. ISI dependent Jitter
  3. Slopes

- Moore et al (moore_01_1104), Popescu, (popescu_c1_0205), and Mellitz et al (mellitz_c1_0405), have all suggested ways of finding the Intitial EYE but the job is far from finished.

Link Budget Continued

- The intermediate EYE comes from the initial EYE after it is reduced in amplitude by various attenuating effects like:

  1. Reflection loss, if not included in Initial EYE
  2. Tx and Rx jitter penalty
  3. Other

- What effects go in the initial EYE and which in the "Multiplicative Loss" is part of the "Hybrid model" trade off.

Link Budget Continued

- The Final EYE is the intermediate EYE further reduced in opening by directly subtracting (all or some of):

  1. Cross talk

  2. Intersymbol interference not covered in the initial EYE calculation

  3. Rx noise

  4. Rx slicer margin

  5. Duty Cycle Distortion penalty