IEEE 802.3ap
Signaling Ad Hoc Report Out

IEEE 802.3ap Task Force

Mar'05

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Summary

- **Signaling ad hoc work item review**
  - **Established August'04**
  - **To work toward a simulation and evaluation model for 10Gb serial BP signaling solutions**
- **Work Items for ad hoc to address**
  - **Channel elements for simulation**
    - Channel ad hoc defines link between TP1 and TP4
    - Define component edge to TP1, TP4 to component edge
    - Incorporation of channel loss, reflections, NEXT & FEXT
  - **Solution Comparison Metrics**
    - Power consumption
    - BER and Reach performance
    - Complexity & relative cost
    - Robustness
  - **Treatment & modeling of aggressors**
    - NEXT, FEXT
    - Noise

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Conf Calls

- **The Signaling ad hoc held 1 conference call**
  - Attendance 12

- **Conf Call Overview**
  - 4 Feb'05
    - Key discussions were on the TP4-5 link and package model inclusion for simulations
    - Joe (Abler) presented the effects of both the inductive and capacitive pkg models as presented by Rich Mellitz in *mellitz_m1_0105.pdf*.
    - General preference for the capacitive model as the cap was viewed as potentially containing part of the ESD and driver cap.
    - There was a general lack of enthusiasm on the use of a TP4-5 model. A straw poll on the topic decided against using a TP4-5 model for simulation.

Straw Polls

- ## Some straw polls were held to clarify the preferences of the ad hoc group.

4 Feb'05 Conf Call

#1: For our sim in March, should our sim use a package model?
passed by acclamation: (12 people on the call)

#2: From Joe's presentation, which package model should we use?
Cap-like: 11   Inductor-like: 0   Both: 0   Abstain: 1

#3: Should we use a model for TP4-Tp5 for the purpose of presenting results for the March Plenary? As noted by Joe Abler, this includes cascading with all the crosstalk channels (up to 8).
Yes: 4   No: 7   Abstain: 1

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