



# Channel Model Ad Hoc: Agenda and General Information

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



# Schedule of Events

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- Teleconference: Wednesday, December 15 (10am PST)
  - Review frequency-domain specification methodology.
- Teleconference: Tuesday, January 11 (10am PST)
  - Frequency-domain methodology follow-up.
- Tuesday, January 18 (midnight PST)
  - Comment period for Draft 0.7 closes.
- Wednesday, January 19 (midnight EST)
  - Deadline for requests for presentation time.
- Monday, January 24 – Wednesday, January 26
  - IEEE P802.3ap Task Force Meeting
  - Hyatt Regency, Vancouver, BC, Canada

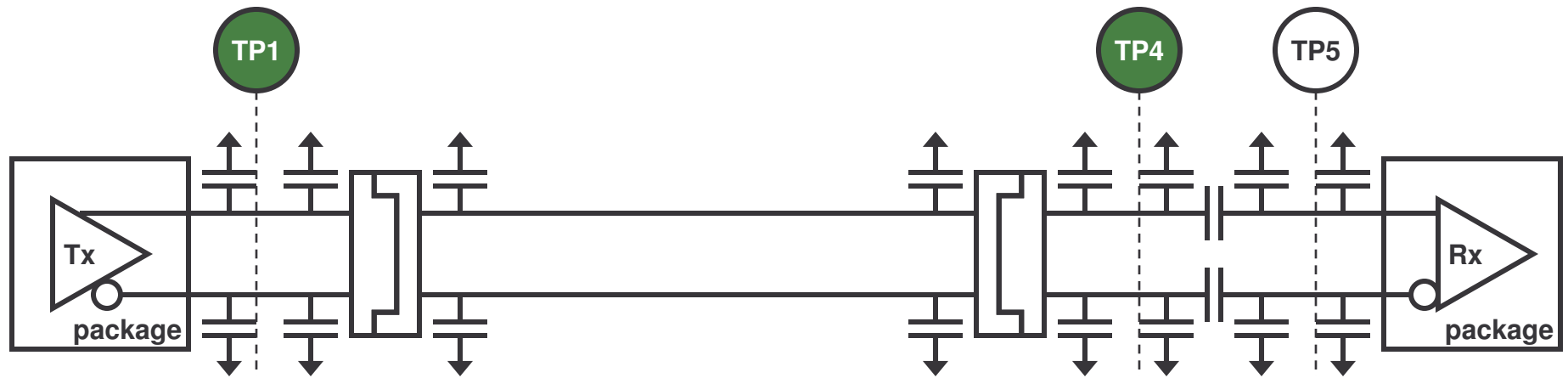


# Going forward...

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- Close on frequency-domain methodology.
  - Informative or normative?
- Populate template with specification values, eliminate TBDs.
  - Use signaling ad hoc output for guidance?
- Identify normative specification methodology.
  - If frequency-domain methodology is only informative, then what shall be normative?
  - Candidates: Pulse Response, Statistical Eye
- Proposals to address any of the above are strongly encouraged for the upcoming interim meeting.
  - Look for consensus.
  - Proposals with consensus support are the means by which we make progress.

# IEEE P802.3ap Link Model



- ⓧ = Normative
- Ⓨ = Informative

Note 1: This definition is consistent with conventions adopted in XAUI, OIF TFI-5 and CEI, and PICMG 3.1

Note 2: While only two connectors are shown, a three connector topology may also reside between TP1 and TP4, so long as the channel requirements are met.

Definition adopted via TF Motion  
July 2004 (32/2/21)

# Frequency-Domain: Status

## ■ “Thru” Parameters (TP1 to TP4)

### ■ SDD21 Magnitude

#### ■ Loss

#### ■ “Ripple”

### ■ SDD21 Group Delay

### ■ SDD11/SDD22 Magnitude

Based on 1m “improved FR-4” and represents focus of work through September 2004.

Bound in-band ripple due to impedance discontinuities (problematic even on low-loss channels)

[http://iee802.org/3/ap/public/nov04/mellitz\\_02\\_1104.pdf](http://iee802.org/3/ap/public/nov04/mellitz_02_1104.pdf)

## ■ “Noise” Parameters (at TP4)

### ■ Single-Aggressor NEXT

### ■ Single-Aggressor FEXT

### ■ MDNEXT

### ■ MDFEXT

### ■ Attenuation-Crosstalk Ratio (ACR)

Introduced December 2004 to limit correlated noise.

Enable trade-off between loss and noise.

[http://iee802.org/3/ap/public/sep04/dambrosia\\_03\\_0904.pdf](http://iee802.org/3/ap/public/sep04/dambrosia_03_0904.pdf)



# Meeting Agenda

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- Continue review of frequency-domain specification methodology.
- Presentation (Mellitz, Hendrick, D'Ambrosia)
  - [http://ieee802.org/3/ap/public/channel\\_adhoc/dambrosia\\_c1\\_0105.pdf](http://ieee802.org/3/ap/public/channel_adhoc/dambrosia_c1_0105.pdf)
- Impact of TP4-to-TP5 segment and package on channel behavior.
- Presentation (Sawyer)
  - [http://ieee802.org/3/ap/public/channel\\_adhoc/sawyer\\_c1\\_0105.pdf](http://ieee802.org/3/ap/public/channel_adhoc/sawyer_c1_0105.pdf)
- Walk-in items.