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# To-Do List



# To-Do List: Channel Model

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- **Verify known channels meeting 'Improved FR-4' material guidelines to SDD21, SDD11, and SDD22 proposed masks.**
- **Verify NEXT and FEXT masks.**
- **Verify Group Delay Variation mask and gather data to support it. Null of -25dBm followed by +25dBm within 300Mhz is suspect data.**
  - Group delay and phase effected only ... VNA phase detector loses lock.
  - SDD11, SDD22, SDD21, FEXT and NEXT magnitude are okay.
  - Data to support the mask.
- **Devote at least one call to the effects temperature and humidity have on 'Improved FR-4' and the proposed six masks.**
- **Devote at least one call to the effects packaging will have on the proposed six masks.**
- **Devote time to DC-Blocking, and location in model.**
- **Develop and distribute a test and measurement board that meets close to the worst case of each mask, as well as the best cases possible. The intent is to establish confidence in presented data across presenters and various measurement equipment / techniques.**
- **We need to make clear that all limit lines are hard. Dropping below them is considered a failed channel.**



# To-Do List: PHY

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- 1Gb/s Serial PHY
- 10Gb/s 4-lane PHY
  - Need to address issue with Distinct Identity
  - We will tackle this as the first order of business tomorrow.
- 10Gb/s Serial PHY
  - NRZ, PAM-4, duobinary identified as candidates
  - Specific and complete proposals required for the September interim.
    - Identify specific mechanisms (equalization strategy, training mechanism – if required).
    - Recall that the PHY consists of the PCS, PMA, and PMD.
  - Need to establish basis of comparison.



# AN: From the May Interim...

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- **Straw Poll #3:** Use Clause 45 Registers to manage backplane PHY's (1G, 10G 1 lane, 10G 4 lane)  
(Y/N/A) – 21 / 0 / 10
  
- **Straw Poll #4:** Define feature / capability negotiation for:
  - 1G / 10G speeds (1G, 10G 1 lane, 10G over 4 lanes)
  - Allow negotiation of new technology capabilities for Backplane Ethernet
  - Define arbitration for capability resolution(Y/N/A) – 18 / 0 / 13
  
- **Straw Poll #6:** Should exchange of negotiation parameters be in-band?  
(Y/N/A) – 19 / 3 / 12



# To-Do List: AN

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- Build on any points of agreement from this week.
- Again, complete proposals (including functional models) are required at the September interim meeting.