

# 09July04 Adhoc Conference Call

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- Adjustments to Frequency Range
- Adjustments to VNA Measurements
- Group Delay Mask changes:
  - ◆ +10ns to 50ns @ 12.5Ghz positive slope
    - Adjust slope out to 15Ghz
  - ◆ 0ns to -50ns @ 12.5Ghz negative slope
    - Adjust slope out to 15Ghz
- Discuss Channel Model Test Card
  - ◆ Delivery 9July04

# Frequency Range

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- 50Mhz to 15000Mhz????
- 50Mhz to 12500Mhz????

# Adjustments to VNA Measurements

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- IF BW = 300Hz
- Leveled Output Power = -5dBm
  - ◆ Is there a difference in NEXT/FEXT at 0dBm?
- Averaging = 16
  - ◆ This takes a long time! We need to cut this back to 4 or 8max.
- Step Size = 10Mhz
  - ◆  $F=15000\text{Mhz}$ , Step = 10Mhz, # points =  $(F_{\text{end}}-F_{\text{start}})/\text{step}+1 < 1600$
  - ◆ Value chosen as  $N_{\text{whole}} = F_{\text{start}}/\text{step}$  to ease invFFT conversion
- Frequency Range = 50Mhz to 15000Mhz
  - ◆ Do we need this range? 12500 seems to cover enough.
- 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.

# Proposed Group Delay Equation Change

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- Top Slope =  $1000 * (\text{EXP}(0.3 * f / 1000000) - 0.988)$ ; in ns
- Bottom Slope =  $1000 * (\text{EXP}(-0.4 * f / 1000000) - 1.002)$ ; in ns

# Proposed Group Delay Mask

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