Cable/Backplane Characterization Proposal

SCSI PIP Working Group Meeting

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Cable and Backplane Characterization/Modeling

- Characterization measurements can be made by:
  - Vector network analysis (frequency domain)
    - Cables
    - Backplanes
  - Time Domain Reflectometry (TDR)
    - Cables

SCSI T10/00-XXXr1 2
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Backplanes

- Need to dissect into component parts

- Measure component parts and model

- Construct consolidated model

- Measure complete backplane and compare with model

- TDR method probably will not work due to attenuation of pulse before reaching extremity of backplane

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Resources

- If we want timely answers we need to contract some of the detailed work out
    - Committee members are busy with other work
    - Everyone wants to obtain results and models
    - The company/person who does the work is reluctant to share (why should I work hard and give the results to others who do nothing?)

SCSI T10/00-XXXr1 4
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Proposal

- We have found a firm who has all the necessary equipment and expertise
  - TDR, VNA, Probe stations, probes, etc.
  - Agilent value added reseller (VAR)
  - Training courses
  - Been in the Signal Integrity Market Since 1989
  - High Performance Models of Interconnect

Welcome to GigaTest Labs (gigatest.com)

Signal Integrity Engineering and Training

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Proposal (cont.)

- Will deliver models for 10+ different cables as defined by the committee ($15,000-$20,000)
    - 10 committee members @ $2k each or
    - 5 members @ $4k each
- Will offer training course an how they performed measurements and acquired models ($1,000 per pupil for 2 day class including lab)

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Conclusion

- Need to select cables for which we want models

- Ready to start characterization and modeling program

- Will develop and document methodology

- We can all get trained