

Ultra320 SCSI Summary and Recommendations

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SCSI Physical Working Group Meeting

09 Feb 2000

Huntington Beach, CA

- **We must have a common solution for Ultra320**
 - A device implementing only precomp might work well when transmitting to a device implementing only equalization -- but ...
 - This would be a disaster when a device that implemented only equalization was transmitting to a device implementing only precomp.
- **The solution must work for Ultra640, as well, so that we have an evolutionary transition**

- **Transmitter precomp is difficult to design**
- **Common mode effects will be significant and are not yet quantified**
- **Capacitance increases are not acceptable**
- **Increased power and resulting thermal issues are significant and not yet quantified**
- **Increased slew rate will cause serious problems**
- **Crosstalk will increase**
- **Boost is inefficient**
- **Transmitter precomp certainly won't be sufficient for Ultra640**

- **Empirical data verifies that a receiver equalization scheme will make Ultra320 work:**
 - With all of today's cable plant configurations
 - By itself without transmitter precomp
- **Theoretical data lead us to believe that receiver equalization is required for Ultra640**
- **Therefore, Quantum advocates the use of a receiver equalization scheme for Ultra320**