SPI-2 - LVDS Meetings

Meetings
Oct 13 Denver SPI-2/LVDS
Oct 16 Milpitas Marketing
Nov 6 Palm Springs
SPI-2 LVDS Specifications

- Oct 13 Meeting
  - Adjustment of the drive and thresholds because of the 1/2 current issues of a multipoint busthat was missed in the Bedford, NH Meeting.
    - Drive current 4.4 to 6 mA
    - Receiver threshold 70 mV
    - Terminator bias reduced 100-130 mV
  - Symbios Logic Presentation, Hybrid does not work, crosstalk data shows this clearly.
  - Bill Ham’s Testing
    - 100 Megatransfer good at 27 Meters point to point.
    - 200 Megatransfer the distance will have to be reduced 15 meters?
Oct 16 SPI-2 Marketing Meeting

• Marketing committee will be formed.
  – Companies that will be key members: IBM, Digital, Adaptec, Symbios, Qlogic, Quantum, Seagate, Unitrode, Dallas Semi

• Function
  – Functions
  – Dues
  – Meetings
  – FAX-Back / BBS / Webpage
  – Email Reflector / 800#
  – Trade Shows
  – Publications
  – Training
  – Press Releases
SCSI Parallel Marketing

• Mission Statement
  – Promote increased usage of parallel SCSI
  – Educate customers on when to use SCSI
  – Reduce confusion concerning SCSI
  – Provide focal point for press, industry, and customer communications regarding SCSI
  – Advance and promote product interoperability
  – Advance and promote storage as a focal point for system differentiation
  – Shape the evolution of SCSI technology
  – Evangelize SCSI as a flexible and powerful connectivity solution for many applications
  – Orchestrate a convergence on a common interconnect
Nov 6 SPI-2 Meeting

• Limiting pin count
  Hybrid discussion came up again, hybrid does not work, this will push some of the controllers to 244 BGA packages. **Crosstalk, Common Mode**

• Definition of the test circuits
  – Terminators, Drivers and Device Capacitance

• Margin issues
  – Suggestion to increase the minimum current to 5 mA
  – Reduce the termination impedance to better match the loaded cable, which will guarantee incident wave switching.
  – Reduction of Common mode from +/- 1 Volt to +/- 500 mV
  – Step getting off the bus, Negate, 1/2 Current, off
Future Meetings

- SPI-2 LVDS
  - Dec 15th Holiday Inn Milpitas
  - Jan 8th Dallas
  - Feb 5th?
- SCSI Marketing
  - Dec 14th Holiday Inn Milpitas
LVDS - 6 mA Power

- Transceiver Power Calculations
- Maximum number of drivers active 23, on 27 line interface.
- 4 Receivers Active
- Driver Control current 1 mA * 3.6 mW * 23 lines = 97.2 mW
- Driver power 6 mA * (3.6-0.36) Volts, 19.44 mW/Line * 23 Lines = 447.1 mW
- Receiver Power 2.5 mA * 3.6 Volts, 9 mW/Line * 4 Lines = 36 mW
- Total Transceiver power = 580 mW

9-Nov-95 Correction