IBIS Report

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IBIS Summit Meeting
Las Vegas, Nevada
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Meeting Today

- IBIS Report and Status
- Business and Election of Officers 2001-2002
- Pre-emphasis Modeling and Driver Schedule
- SCSI and Fiber Channel Report
- Frequency Response and EMC
- IBIS-X and IBIS Macro Language
- Other Discussions and Ad Hoc Presentations
Status Update

● Committee Overview
  » Since 1993, Version 1.1, 2.1 (ANSI/EIA-656) & 3.2 (ANSI/EIA-656-A)
  » 30 Members, 350 - 400 on reflectors
  » Regular Meetings and Web Site
  » Financially in the black by about $14K

● Update on Standards and Activities
  » ibischk3 Version 3.2.7 and more
  » IEC 62014-1 (IBIS Ver 3.2 & ANSI/EIA-656-A) - ratified April 2001, awaiting publication
Activities & Issues

- Connector Specification
  - http://www.eda.org/pub/ibis/connector/
- IBIS Version 4.0 Additions
- IBIS-X and IBIS Macro Language
  - http://www.eda.org/pub/ibis/futures/
- Other
  - Following European TC93 WG6 EMC/EMI activity
  - Following EIAJ IMIC activity
  - Following JEDEC activity
  - Following T10 & T11 SCSI & Fiber Channel activity
  - IBIS Accuracy Report
Connector Features

- **IBIS Connector Specification - some highlights**
  - Single Line and Multi-line models
  - Cascaded models
  - Swath matrices
  - Connector model autogeneration for a given size
  - Mated, unmated variations, multiple configurations

- **Activities and Plans**
  - Syntax review being done - taking more time than anticipated to reconcile with IBIS-X work
  - Formal review
  - Ratify Version 1.0 in 2001 - Delayed
  - Initiate connector parser project
IBIS Version 4.0

- **Features**
  - BIRD62.6 - Receiver Thresholds
  - BIRD64.4 - Alternate Package Models
  - BIRD65.2 - C_comp Refinements
  - BIRD66 - Vref Addition
  - BIRD67.1 - V-T Table 1000 Point Limit
  - BIRD68.1 - V-T Clarification
  - Pending
    - BIRD70 - Golden Waveforms
    - BIRD71 - PCI Timing Test Loads
    - SSN - Dr. Unger’s proposal
    - Fallback Submodel BIRD

- **Goal** - Ratify in 2001 - Delayed
- **Initiate ibischk4 project**
- **May be implemented in IBIS-X**
IBIS Impact

● **Support**
  » About 50 semiconductor vendors with Web site links & several others without links - about 2,500 IBIS models
  » 10-12 commercial & EDA IBIS vendors - 12,000 models
  » Customers produced libraries (& internal IBIS specs)
  » Produced from Spice, measurement, translation & data sheet
  » About 5 EDA “behavioral” vendors, 5 “Spice” vendors
  » Commercial and free IBIS model generation tools

● **Publicity**
  » Magazine articles & references in books and magazines
  » Sponsorship of DesignCon

● **Common, non-proprietary format - Well Accepted!!**
Thank You - It take a Team!!

- Thanks to the Officers!!
  - Cecilia Fleming for general EIA administrative support, invoicing, and following national/international standards activities
  - Roy Leventhal for maintaining the IBIS Models page
  - Syed Huq for maintaining the Web pages, Roster and translating presentations to Acrobat and dealing with s2ibis2 issues
  - John Angulo for maintaining the IBIS mailing list, the IBIS Futures page and issuing minutes and coordinating the IBIS model review
  - Guy de Burgh for maintaining the official membership list and helping in the annual IBIS summit meetings and DesignCon booth
  - Stephen Peters for taking the leadership role in chairing the IBIS Futures and IBIS Connector Working Group Meetings and generating the IBIS Futures documents

- Thanks to many others for their contributions
  - Al Davis, Greg Edlund, Matthew Flora, Gus Panella, Kathy Breda, Milt Schwartz, Karine Loudet, and many others