

# IBIS Report

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IBIS Summit Meeting

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# Meeting Today

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- 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

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- 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

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- 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

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- 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

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- 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

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- 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!!

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- 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