IBIS Chair's Report and Issues Summary



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Intel Corp.
Chair, EIA IBIS Open Forum

IBIS Summit
DesignCon 2007
February 1, 2007

http://www.eigroup.org/ibis/
http://www.eda-stds.org/ibis/

This presentation is best viewed in "build" mode

Agenda

- Organizational Status
- * Membership
- * Task Groups
- * BIRD Queue
- * IBIS Efforts and the Industry
- * Discussion
- * Backup

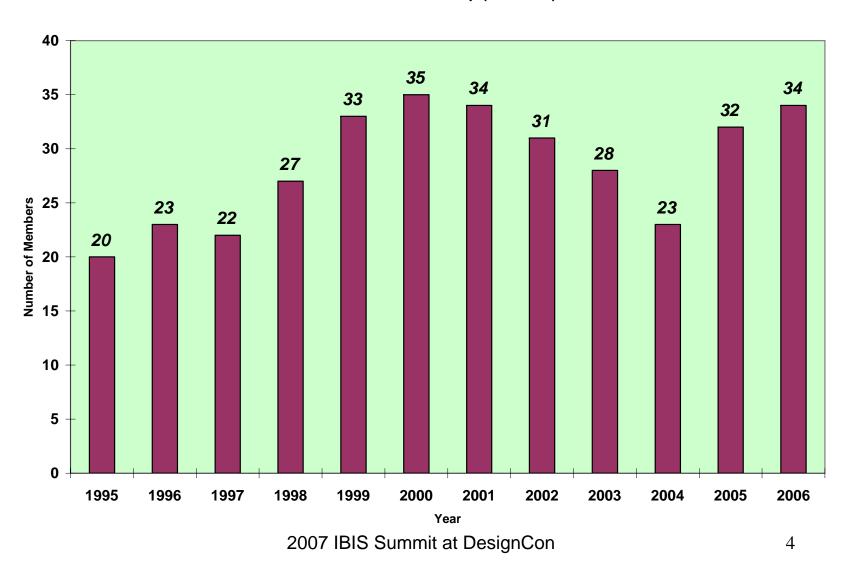
Organizational Status

- * Events
 - Closed 2006 with two successful summits in Shanghai and Tokyo
 - Planning a Fall 2007 event in Beijing
- Parser and Specification Development
 - IBIS 4.2 being standardized through ANSI
 - IBISCHK4 improvements underway
 - * Addresses BUGs 83, 84 and 90-94
 - Expect announcements on both in Q2'07
- * Finances
 - Closed 2006 with revenues significantly over expenses

Expecting healthy budget and membership numbers in 2007

Membership Trends

Annual IBIS Membership (Year End)



IBIS Task Groups

IBIS Committee

("IBIS Open Forum")

Ad Hoc - Interconnect Michael Mirmak, Intel

Advanced Technology Modeling Group Arpad Muranyi, Intel Model Review
Lynne Green,
Green Streak Programs

Quality
Mike LaBonte, Cisco

Task Groups

- Activity Updates
 - You will hear details about ATM and Quality later today
 - Model Review already receiving requests in 2007
 - Ad Hoc Interconnect is now completing...
 - * Improved S-parameter links to ICM
 - * Proposal for upgrades to Touchstone®

Your participation is encouraged!

BIRD Queue

* BIRDs for IBIS 5.0

- BIRD74.6 EMI Parameters
- BIRD95.6 Power Integrity Analysis using IBIS
- BIRD103.1 [Model Spec] DDR2 Over/Undershoot
- BIRD97.2/98 Gate Modulation Effect
 - * Updates expected after Jan. 26 presentation
- BIRD1xx [External Model] under [Circuit Call]
- BIRD1xx ICM-IBIS Linking
- BIRD1xx User-Defined Measurements
- BIRD1xx SPICE Parameter Passing
- BIRD1xx
 Algorithmic Modeling (C API)

New!

Are we making progress?
Are we missing something?

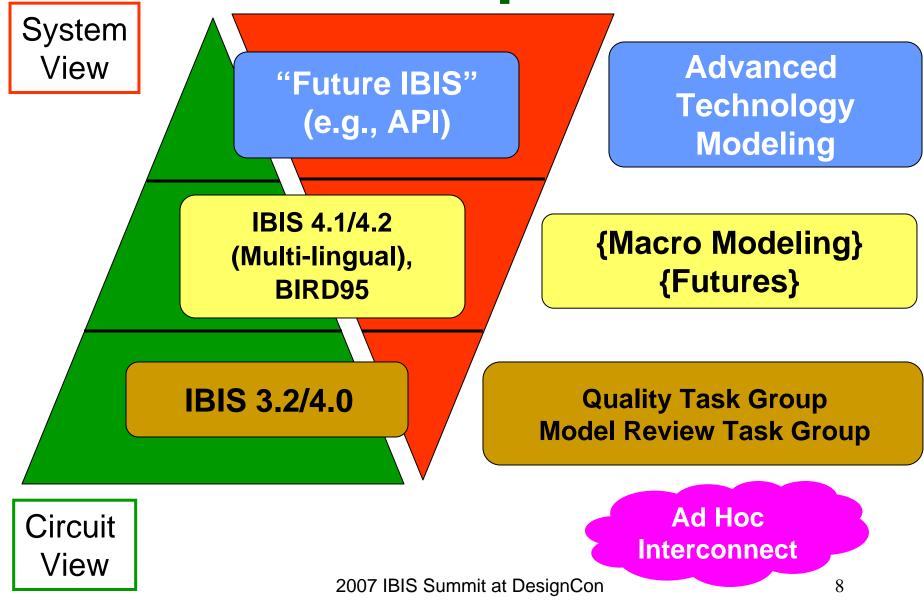


Shifting Balance

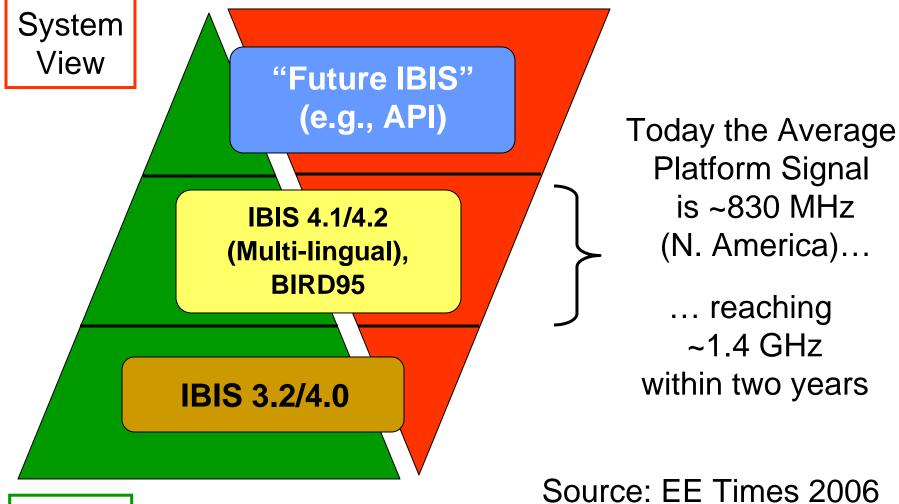
System **Equalization** View "Future IBIS" Signal & Data Processing Multi-GHz (e.g., API) **LTI SerDes Systems** Data & Freq. Dependence IBIS 4.1/4.2 **Adjustable Buffers** (Multi-lingual), **True Differential Buffers** BIRD95 **Power Delivery** IBIS 3.2/4.0 **Simple Timing Analysis Impedance Matching** Circuit

View

Where We Expend Effort



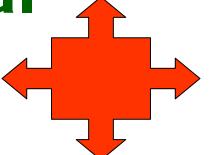
Where Is The Industry?



Circuit View Source: EE Times 2006 EDA Tool User Survey (PCB)

Direction and Proposal

* In 2006, 60% of North American users were satisfied with schematic capture tools, "but only 35% said they were satisfied with signal integrity... Results from Europe and Asia were similar."



- North American concern about EDA increased in 2006 regarding "signal integrity, thermal/EMI and IC package parasitics."
- * In North America: "40% use signal integrity analysis, and an additional 24% expect to use it in two years."
- * "Satisfaction was lowest in all geographies with cost of ownership, cost of purchase, interoperability and automation."

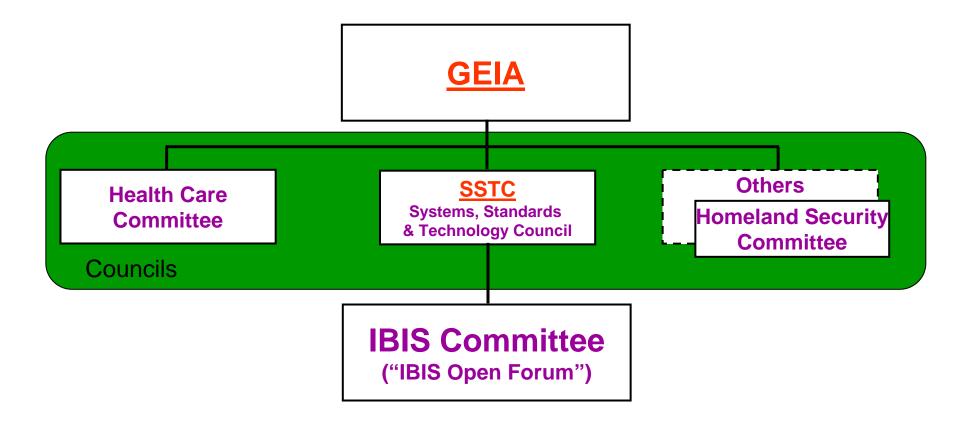
The audience for SI models is expanding! We should increase our focus on cookbooks, templates and tools for the "middle group" of builders and users.

Source: EE Times 2006 EDA Tool User Survey (PCB)

http://www.eetimes.com/news/design/showArticle.jhtml?articleID=190900760

BACKUP

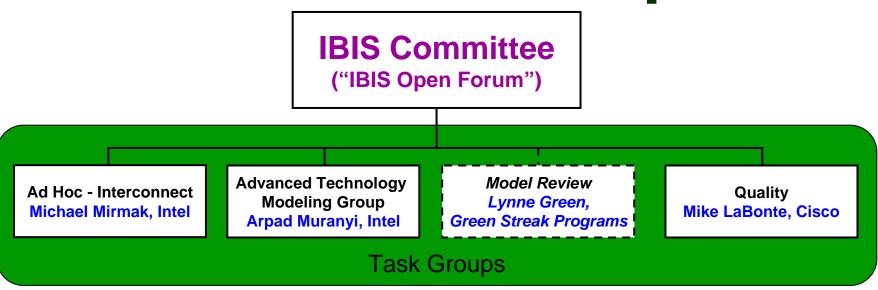
IBIS Structure



Notes

GEIA is an ANSI-accredited standards body

IBIS Task Groups



Notes

- The Cookbook Task Group has been suspended until critical mass of needed changes is achieved
- The Futures and Macromodeling Library groups have been combined into the Advanced Technology Modeling Group
- EDA vendors comprise Model Review, independently reviewing received models and providing feedback to model authors; no specification changes are recommended by this group and it does not hold meetings
- Participation in the IBIS Task Groups is open to IBIS members and the general public alike
- Task Groups are created and Chairs appointed by the IBIS Chair
- Some issues are handled by Ad Hoc teams for BIRD development

IBIS Board

Chair

Vice-Chair

Secretary

Webmaster

Postmaster

Model Librarian

- Is final approver of specification ballots
- Appoints Task Groups
- Tracks Finances
- Manages meetings and summits
- Manages meetings and summits in Chair's absence
- Usually acts as US summit registration contact
- Tracks balloting, membership and GEIA relations
- Responsible for meeting and summit minutes
- Responsible for all web content
- Primary focus on events, specifications, roster and tools
- Responsible for IBIS reflectors (IBIS, IBIS-Users)
- Usually "first responder" to questions from non-list participants

• Maintains on-line model reference library