IBIS Open Forum Minutes

Meeting Date: **April 24, 2009**

VOTING MEMBERS AND 2009 PARTICIPANTS

Actel	(Prabhu Mohan)
Agilent Technologies	Yutao Hu, Fangyi Rao, Saliou Dieye
AMD	Nam Nguyen*
Ansoft Corporation	Steve Pytel
Apple Computer	(Matt Herndon)
Applied Simulation Technology	(Fred Balistreri)
ARM	V. Muniswara Reddy
Cadence Design Systems	Terry Jernberg*, Ambrish Varma
Cisco Systems	Luis Boluna, Tram Bui, Bill Chen, Syed Huq*, Mike LaBonte*, Pedo Miran Huyen Pham, AbdulRahman (Abbey) Rafiq, Ashwin Vasudevan, Zhiping Yang
Ericsson	Anders Ekholm*
Freescale	Jon Burnett, Om Mandhama
Green Streak Programs	Lynne Green
Hitachi ULSI Systems	(Kazuyoshi Shoji)
Huawei Technologies	Xiaoqing Dong, Chunxing Huang, Guan Tao
IBM	Adge Hawes*
Infineon Technologies AG	(Christian Sporrer)
Intel Corporation	Michael Mirmak*, Jon Powell, Sirisha Prayaga
LSI	Brian Burdick*
Marvell Semiconductor	(Itzik Peleg)
Mentor Graphics	Weston Beal, Vladimir Dmitriev-Zdorov, Zhen Mu, Arpad Muranyi*
Micron Technology	Randy Wolff*
Nokia Siemens Networks GmbH	Eckhard Lenski
Samtec	(Corey Kimble)
Signal Integrity Software	Barry Katz, Walter Katz, Todd Westerhoff
Sigrity	Sam Chitwood
Synopsys	Ted Mido
Teraspeed Consulting Group	Bob Ross*
Texas Instruments	Pavani Jella
Toshiba (I.S. Corporation)	(Yasumasa Kondo)
Xilinx	David Banas
ZTE	(Ying Xiong)
Zuken	Michael Schaeder, Ralf Bruening

OTHER PARTICIPANTS IN 2009

AET	Mikio Kiyono
Bayside Design	Stephen Coe, Elliot Nahas

Circuit Spectrum	Zaven Tashjian
CST	Antonio Ciccomancini, Martin Schauem
Curtiss-Wright Embedded Computing	J. Phillips
EM Integrity	Guy de Burgh
Exar	Helen Nguyen
GEIA	(Chris Denham)
ICT Solutions	Steven Wong
IdemWorks	Michelangelo Bandinu
IO Methodology	Li (Kathy) Chen, Lance Wang, Zhi (Benny) Yan
Juniper	Kevin Ko
Leventhal Design & Communications	Roy Leventhal
Maxim Integrated Products	Ron Olisar
Mindspeed Technologies	Bobby Alkay
NetLogic Microsystems	Eric Hsu
Politecnico di Torino	Igor Stievano
Sanmina SCI	Vladimir Drivanenko
Sedona International	Joe Socha
Siemens	Manfred Maurer
Signal Consulting Group	Timothy Coyle, Nicole Mitchell
Simberian	Yuriy Shlepnev
Xsigo Systems	Robert Badel
Independent	Ian Dodd

In the list above, attendees at the meeting are indicated by *. Principal members or other active members who have not attended are in parentheses. Participants who no longer are in the organization are in square brackets.

UPCOMING MEETINGS

The bridge numbers for future IBIS teleconferences are as follows:

Date	Telephone Number	Meeting ID
May 15, 2009	1-866-432-9903	121506305

All meetings are 8:00 AM to 9:55 AM US Pacific Time. Meeting agendas are typically distributed seven days before each Open Forum. Minutes are typically distributed within seven days of the corresponding meeting. When calling into the meeting, press 1 to attend the meeting, then follow the prompts to enter the meeting ID. For new, local international dial-in numbers, please reference the bridge numbers provided by Cisco Systems at the following link:

http://www.cisco.com/web/about/doing_business/conferencing/index.html

NOTE: "AR" = Action Required.

INTRODUCTIONS AND MEETING QUORUM

No new participants.

CALL FOR PATENTS

Michael Mirmak called for any patents or pending patents related to the IBIS Version 3.2, 4.0, 4.1, 4.2, or ICM 1.1 specifications. No patents were declared.

MEMBERSHIP UPDATE AND TREASURER'S REPORT

Michael Mirmak reported that anyone that has paid their membership just received a thank you note. We have only had 14 membership payments officially so far. If you have not received an invoice, please let the board know.

It was asked if we could post a list of members that have renewed. This would be different from the voting member list that is not cleaned up until after DAC.

REVIEW OF MINUTES AND ARS

Michael Mirmak called for comments regarding the minutes of the April 3, 2009 IBIS Open Forum teleconference. The minutes were approved without changes.

WEB PAGE UPDATES

Syed Huq reported that he updated the events page with DAC hotel information. He is also working on roster updates.

MAILING LIST ADMINISTRATION

Bob Ross reported that everything is working normally. The mailing list maintains consistently 425-450 people.

MODEL LIBRARY UPDATE

Lance Wang reported by email that he has completed an update but has been unable to get the web pages updated by TechAmerica due to email issues.

Mike LaBonte asked if the web page has to be hosted by the TechAmerica server. Michael Mirmak hopes that TechAmerica is coming up with a standard web template to allow us to transfer our page to their web server. Syed Huq noted that there should be more detailed discussion of this topic at the DAC summit with Chris Denham in attendance.

PRESS UPDATE

Bob Ross noted that an EDN article from April 9, 2009 has an incidental reference to IBIS in the last paragraph. The article is “Online tools home in on analog design” by Paul Rako. The article can be found at:

http://www.edn.com/article/CA6648779.html

MISCELLANY/ANNOUNCEMENTS

None.

OPENS FOR NEW ISSUES

Bob Ross would like to discuss the prototype IBIS logos at the end of the meeting.

INTERNATIONAL/EXTERNAL PROGRESS

- DASC

Michael Mirmak reported that DASC is meeting every month, and the last meeting was yesterday. There was discussion on changes to membership rules. The DASC file and e-mail archive may be found at:

http://www.dasc.org/

- P1735 Encryption

Syed Huq noted that the group meets Mondays at 8:00am PST. They are signing up EDA vendors that would like to take part in interoperability testing. The IEEE DASC Study Group on Encryption web reflector archives are found at:

http://www.eda-stds.org/ip-encrypt/hm/

- TechAmerica Status

Michael Mirmak noted that the transition is still in flux. We will have an opportunity to ask questions at DAC. The new website is:

http://www.techamerica.org/

-Conferences

The 13th IEEE Workshop on Signals Propagation on Interconnects (SPI) is May 12-15, 2009 in Strasbourg, France. The keynote speech is on the importance of Signal Integrity, including mention of IBIS…

http://spi.univ-brest.fr

The Electrical Performance of Electronic Packaging and Systems (EPEPS 2009) is October 19-21, 2009 at the Embassy Suites in Portland, OR. This is a major meeting for SI people from universities and industry.

http://www.epep.org/

The 7th International Workshop on Electromagnetic Compatibility of Integrated Circuits (EMC COMPO 2009) is November 17-20, 2009 in Toulouse, France. The call for papers deadline is May 30, 2009.

http://www.emccompo.org

The 2009 International Microwave Symposium is June 7-12, 2009 in Boston, MA. The conference may have some IBIS and interconnect related material.

http://www.ims2009.org

IEC APPROVAL ACTIVITIES

Randy Wolff reported that he has set up a meeting between himself, Chris Denham and Victor Berman on May 6. The meeting will allow Chris and Victor to discuss copyright ownership of the IBIS specification document as it would apply to TechAmerica and IEC if IBIS becomes an IEC approved specification. Randy also plans to discuss further steps in the IEC approval process with Victor.

SUMMIT STATUS

-DATE Summary

Anders Ekholm reported that there were 8 people in attendance. There were many informal discussions, including some discussion on where to hold the meeting next year due to decreasing attendance at DATE. Six presentations were given. Meeting minutes were taken by Eckhard Lenski.

The event was held Thursday morning, April 23, 2009 in Nice, France. Agilent, Sigrity and Zuken were the sponsors.

-DAC Planning

DAC is scheduled for July 26-31, 2009 in San Francisco. The IBIS summit is scheduled for Tuesday, July 28. Sponsorship is welcome. Elections are also held at this meeting. Let the board know if you are interested in an officer position. The first call for papers should go out in mid-May. Mentor Graphics is a co-sponsor of this event and is arranging for a room in the Westin San Francisco Market Street.

-China Summit Planning

Bob Ross noted that he received recent sponsorship promises. There is a lot of interest in Shanghai during the week of November 9-13. Bob is ready to start the full planning.

-Japan Summit Planning

We are waiting for confirmation on this event, but all indications are that this event will happen this year as well.

Michael Mirmak asked if there is still interest in an event in Taipei, Taiwan following the China/Japan summits. He needs to gauge interest in this event and see if there are any barriers. Bob noted that is has been difficult to get any sponsorship money for the event so far.

Sponsorship opportunities for all upcoming IBIS summits are available, with sponsors receiving free mentions in the minutes, agenda, and other announcements. Contact the IBIS Board for further details.

IBIS QUALITY TASK GROUP

Mike LaBonte reported that the group is finishing final editing to the 1.1 specification. They may file a BUG report to cross check ramp dV values against I-V curves. The group meets weekly on Tuesdays at 8:00AM PST. The group plans to discuss the I/O Buffer Accuracy Handbook next.

The Quality Task Group checklist and other documentation can be found at:

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

IBIS MODEL REVIEW TASK GROUP

Lynne Green submitted a report by email. The group has received 3 requests this year so far. Two models have been distributed to reviewers. The third model was not permitted for review and was declined.

ADVANCED TECHNOLOGY MODELING TASK GROUP

Arpad Muranyi was approached by Samuel Marten from the Compact Modeling Council (CMC). This group is working on a SPICE standardization effort. Samuel gave a presentation on that effort to the ATM group. The group has started editing and reviewing edits on the documents from Synopsys for the IBIS Interconnect Spice. They also discussed a schedule and plan to have the document ready for wider review at the DAC summit meeting. Bob asked if someone is going to monitor the CMC activity. It was decided that CMC activities are more in the future than our SPICE activities, so we will go ahead with our efforts as planned. Longer term we will look for opportunities to work with CMC. CMC plans to follow formal syntax rules, so their standard may look more similar to Verilog-A in syntax. They are leaning towards active device modeling, but the language should be extendable to modeling transmission lines.

Task group material can be found at:

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

AD HOC TASK GROUPS (INTERCONNECT)

Michael Mirmak reported that the group is not meeting currently while Touchstone 2.0 is being reviewed by the IBIS Open Forum.

Task group material can be found at:

http://www.eda.org/ibis/adhoc/interconnect/

NEW ISSUES

None.

BIRD111.3: EXTENDED USAGE OF EXTERNAL SERIES COMPONENTS IN EBDS

Michael Mirmak asked if the [Reference Designator] syntax remained the same. Bob Ross replied yes. Bob noted that there is no parser change associated with this BIRD. It actually eliminates the need to change the parser to be stricter.

A motion was made for a vote to include BIRD111.3 in a future release of IBIS. The vote passed unanimously with the following vote tally:

AMD	yes
Cadence	yes
Cisco	yes
Ericsson	yes
IBM	yes
Intel	yes
LSI	yes
Mentor	yes
Micron	yes
Teraspeed	yes

TOUCHSTONE 2.0 REVIEW

Michael Mirmak made the fourth call for comments on the Touchstone 2.0 document. There were no comments.

A motion was made to approve Touchstone 2.0 as an IBIS specification. The vote passed unanimously with the following vote tally:

AMD	yes
Cadence	yes
Cisco	yes
Ericsson	yes
IBM	yes
Intel	yes
LSI	yes
Mentor	yes
Micron	yes
Teraspeed	yes

The draft Touchstone 2.0 document is found at:

http://www.eda-stds.org/ibis/touchstone_ver2.0_wip/touchstone2_draft_b.pdf

Michael noted that the “DRAFT” markings need to be removed from the final document. We will wait for further editorial cleanup and other changes before submitting Touchstone for TechAmerica/ANSI/IEC approval. Bob Ross also mentioned that we may want to develop a syntax parser as well. Arpad Muranyi felt that this would be useful. Bob said we will need to decide if the parser checks only Touchstone 2.0 or original Touchstone as well. We should solicit bids for parser development to see how much it would cost. Anders Ekholm suggested that the parser should include error and warning numbers too. Michael suggested that the Quality Committee make recommendations on how to make a good parser. Bob suggested that we create a parser committee for further discussion.

IBISCHK5 PARSER STATUS

Michael Mirmak noted that due to invoicing rules, the parser developer cannot sign a contract unless all the development can be finished and paid for within 60 days. A work around has been proposed to sign partial contracts for development of pieces of the code. Bob Ross suggested that we sign the contracts and issue an invoice at a later time. We have enough parser payment commitments at this time to go ahead with the work. We are soliciting purchase orders for the code if you would like to receive code as it is developed.

IBISCHK4 BUG STATUS

Michael Mirmak reported that two BUGs are open right now. There are no plans to fix these in the near term, as they are not included in the IBISCHK5 parser development.

The BUG report list is available at the link below:

http://www.eda.org/ibis/bugs/ibischk/

ICMCHK1 BUG STATUS

ICMCHK1 version 1.1.3 has been released, and the executables can be downloaded. All BUGs have been closed at this point.

NEW ISSUES

Bob Ross displayed the logo choices that were discussed in the last meeting. Members were polled, and logos C, F, and D had the most interest, in that order. Bob will provide some feedback to the logo designer to modify some of the logos. The logo options can be found at:

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

NEXT MEETING

The next IBIS Open Forum teleconference will be held May 15, 2009 from 8:00 AM to 10:00 AM

US Pacific Standard Time.

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NOTES

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This meeting was conducted in accordance with the GEIA Legal Guides and GEIA Manual of Organization and Procedure.

The following e-mail addresses are used:

majordomo@eda.org
In the body, for the IBIS Open Forum Reflector:
subscribe ibis <your e-mail address>

In the body, for the IBIS Users' Group Reflector:
subscribe ibis-users <your e-mail address>

Help and other commands:
help

ibis-request@eda.org
To join, change, or drop from either or both:
IBIS Open Forum Reflector (ibis@eda.org)
IBIS Users' Group Reflector (ibis-users@eda.org)
State your request.

ibis-info@eda.org
To obtain general information about IBIS, to ask specific questions for individual response, and to inquire about joining the EIA-IBIS Open Forum as a full Member.

ibis@eda.org
To send a message to the general IBIS Open Forum Reflector. This is used mostly for IBIS Standardization business and future IBIS technical enhancements. Job posting information is not permitted.

ibis-users@eda.org
To send a message to the IBIS Users' Group Reflector. This is used mostly for IBIS clarification, current modeling issues, and general user concerns. Job posting information is not permitted.

ibis-bug@eda.org
To report ibischk parser BUGs. The BUG Report Form resides along with reported BUGs at:

http://www.eda.org/ibis/bugs/ibischk/
http://www.eda.org/ibis/bugs/ibischk/bugform.txt

icm-bug@eda.org
To report icmchk1 parser BUGs. The BUG Report Form resides along with reported BUGs at:

http://www.eda.org/ibis/icm_bugs/

http://www.eda.org/ibis/icm_bugs/icm_bugform.txt

To report s2ibis, s2ibis2 and s2iplt bugs, use the Bug Report Forms which reside at:

http://www.eda.org/ibis/bugs/s2ibis/bugs2i.txt
http://www.eda.org/ibis/bugs/s2ibis2/bugs2i2.txt
http://www.eda.org/ibis/bugs/s2iplt/bugsplt.txt

Information on IBIS technical contents, IBIS participants and actual IBIS models are available on the IBIS Home page:

http://www.eigroup.org/ibis/ibis.htm

Check the IBIS file directory on eda.org for more information on previous discussions and results:

http://www.eda.org/ibis/directory.html

IBIS CURRENT MEMBER VOTING STATUS

I/O Buffer Information Specification Committee (IBIS)

Organization	Interest Category	Standards Ballot Voting Status	March 13, 2009	April 3, 2009	April 23, 2009	April 24, 2009
Actel	Producer	Inactive				
Advanced Micro Devices	Producer	Inactive		√		√
Agilent Technologies	User	Inactive			√	
Ansoft	User	Inactive				
Apple Computer	User	Inactive				
Applied Simulation Technology	User	Inactive				
ARM	Producer	Inactive				
Cadence Design Systems	User	Inactive		√		√
Cisco Systems	User	Active	√	√		√
Ericsson	Producer	Active		√	√	√
Freescale	Producer	Inactive				
Green Streak Programs	General Interest	Inactive				
Hitachi ULSI Systems	Producer	Inactive				
Huawei	User	Inactive	√			
IBM	Producer	Inactive	√			√
Infineon Technologies AG	Producer	Inactive				
Intel Corp.	Producer	Inactive	√			√
LSI	Producer	Active	√	√		√
Marvell Semiconductor	Producer	Inactive				
Mentor Graphics	User	Inactive	√			√
Micron Technology	Producer	Active	√	√		√
Nokia Siemens Networks	Producer	Active		√	√	
Samtec	Producer	Inactive				
Signal Integrity Software	User	Inactive	√	√		
Sigrity	User	Inactive				
Synopsys	User	Inactive				
Teraspeed Consulting	General Interest	Active	√	√		√
Texas Instruments	Producer	Inactive				
Toshiba	Producer	Inactive				
Xilinx	Producer	Inactive		√		
ZTE	User	Inactive				
Zuken	User	Inactive			√	

Criteria for Member in good standing:

- Must attend two consecutive meetings to establish voting membership
- Membership dues current
- Must not miss two consecutive Meetings

Interest categories associated with GEIA ballot voting are:

- Users - Members that utilize electronic equipment to provide services to an end user.
- Producers - Members that supply electronic equipment.
- General Interest - Members are neither producers nor users. This category includes, but is not limited to, Government, regulatory agencies (state and federal), researchers, other organizations and associations, and/or consumers.