IBIS Open Forum Minutes

Meeting Date: **September 18, 2009**

VOTING MEMBERS AND 2009 PARTICIPANTS

Actel	(Prabhu Mohan)
Agilent	Brian Andresen, Radek Biernacki, Saliou Dieye, Yutao Hu, Fangyi Rao
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*
Green Streak Programs	Lynne Green
Hitachi ULSI Systems	(Kazuyoshi Shoji)
IBM	Adge Hawes
Infineon Technologies AG	(Christian Sporrer)
Intel Corporation	Myoung J. Choi, Michael Mirmak*, Vishram Pandit, Jon Powell, Sirisha Prayaga
IO Methodology	Li (Kathy) Chen, Lance Wang*, Zhi (Benny) Yan
LSI	Brian Burdick*
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	Brad Brim, Sam Chitwood
Synopsys	Ted Mido
Teraspeed Consulting Group	Bob Ross*
Toshiba	(Yasumasa Kondo)
Xilinx	[David Banas]
ZTE	(Ying Xiong)
Zuken	Michael Schaeder, Ralf Bruening

OTHER PARTICIPANTS IN 2009

AET	Mikio Kiyono
Altera	Hui Fu
Apache	Yu Lin

ATE	Nob Tanak, Kenny Suga
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
Freescale	Jon Burnett, Om Mandhama
Huawei Technologies	Xiaoqing Dong, Chunxing Huang, Guan Tao
ICT Solutions	Steven Wong
IdemWorks	Michelangelo Bandinu
Juniper	Kevin Ko
Kineret Design	Ricardo Teliuteuesh
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
TechAmerica (GEIA)	(Chris Denham)
Texas Instruments	Pavani Jella
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	Meeting Number	Meeting Password
October 9, 2009	204 084 885	IBIS

For teleconference dial-in information, use the password at the following website:
https://cisco.webex.com/cisco/j.php?J=204084885

All teleconference 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 3 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

Bob Ross called for any patents or pending patents related to the IBIS 3.2, IBIS 4.2, IBIS 5.0 or ICM 1.1 specifications. No patents were declared.

MEMBERSHIP UPDATE AND TREASURER'S REPORT

Bob Ross reported that we have 29 paid members with two additional memberships pending.

REVIEW OF MINUTES AND ARS

Bob Ross called for comments regarding the minutes of the August 28, 2009 IBIS Open Forum teleconference. The minutes were approved without any changes.

WEB PAGE UPDATES

Syed Huq reported that the new logo has been added to the website. He also made some text updates to add new standards on the front page.

MAILING LIST ADMINISTRATION

Mike LaBonte reported that two people were added to the mailing list. There are no issues to report.

MODEL LIBRARY UPDATE

Anders Ekholm reported that he is in the process of updating the library web page. He has changed the logo and checked/corrected about half the links. The changes are not uploaded yet.   Anders inquired about putting a contact person for models on the library page. He also would like to ask company contacts to verify their own links and actively update them if they change. Then he could put a notice that the company is an active library participant on the page. Anders will pursue the idea and see if there is interest from companies in putting contact information on the site.

PRESS UPDATE

Bob Ross reported finding the following two articles with mentions of IBIS:

“Power Integrity: Controlling the Noise” by Brad Brim of Sigrity, Printed Circuit Design & Fab, September 2009. The article can be viewed at:

http://www.pcdandf.com/cms/magazine/171/6614-power-integrity-controlling-the-noise

“Tips on Building a Signal Integrity Team” by Hal Katircioglu of Intel, Printed Circuit Design & Fab, September 2009. The article can be viewed at:

http://pcdandf.com/cms/component/content/article/171/6615-tips-on-building-a-signal-integrity-team

MISCELLANY/ANNOUNCEMENTS

Bob Ross noted that the logo is officially updated. The new logo can be downloaded from:

http://www.vhdl.org/pub/ibis/logos/

OPENS FOR NEW ISSUES

Bob noted that he is adding time to discuss a Touchstone parser license fee.

INTERNATIONAL/EXTERNAL ACTIVITIES

- DASC

Michael Mirmak reported that the next meeting is October 15. The last meeting was yesterday, with no topics of interest to IBIS. The DASC file and e-mail archive may be found at:

http://www.dasc.org/

- P1735 Encryption

No update. The IEEE Study Group on Encryption web reflector archives are found at:

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

-Conferences

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.

http://www.emccompo.org

TECHAMERICA STATUS

No update.

IEC APPROVAL ACTIVITIES

Randy Wolff reported that he received word from Victor Berman that the IEC meeting is September 28-30, 2009. Victor said he has received everything he needs to present the Maintenance Cycle Report (MCR) form to the committee to begin the approval process of the IBIS 4.2 specification.

SUMMIT STATUS

-China Summit Planning

Bob Ross noted that the meeting is scheduled for Wednesday, November 4 at the Four Points Hotel in Shanghai in the Pudong district. The third and fourth announcements have gone out. The meeting is fully sponsored and paid for at this point. Some funds have been moved into Lance Wang's special bank account in China used to make summit payments more easily. 11 presentations are penciled in now, but most are not official yet. October 7 is the deadline for submitting presentations. This deadline may be moved slightly for companies in China due to holidays. Co-sponsors include Huawei Technologies, Agilent Technologies, Ansoft, Cadence Design, Cybernet Systems, Intel, Mentor Graphics, SiSoft, Sigrity, Synopsys, ZTE Corporation and others to be determined.

-Japan Summit Planning

Bob Ross stated that the meeting is scheduled for Friday, November 6. This event will be held at the JEITA headquarters. The meeting will run from 2:00 PM to 6:00 PM to reduce costs by skipping the lunch. Another announcement will go out shortly. Co-sponsors include Japan Electronics and Information Technology Industries Association (JEITA), ATE (Sigrity Distributor), Cadence, Zuken and others to be determined.

-Other Events

Bob Ross noted that we will have a meeting at DesignCon in 2010. No planning is in progress yet. Anders Ekholm asked if there are any plans for a summit meeting at DATE or any other conferences in Europe. Eckhard Lenski noted that there has been discussion of having a summit meeting in conjunction with the 14th IEEE Workshop on Signal Propagation on Interconnects (SPI) in May.

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 discussion of static overshoot resulted in a small change to the quality document. Lynne Green joined and discussed future activities of the committee.

Vdiff_dc and Vdiff_ac are topics for future discussion. Mike noted that Randy Wolff emailed comments related to the quality specification, and those will be discussed at the next meeting.

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

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

IBIS QUALITY SPECIFICATION VERSION 2.0 REVIEW

Bob Ross asked for any comments. He noted that the October 30 IBIS Open Forum meeting is targeted for an approval vote. Randy Wolff briefly mentioned some of the comments he made in an email to the Quality committee. The document can be downloaded from:

http://www.eda-stds.org/ibis/quality_wip/iq_ver_2_0.pdf

IBIS MODEL REVIEW TASK GROUP

No update.

ADVANCED TECHNOLOGY MODELING TASK GROUP

Arpad Muranyi reported that the group has been answering questions of the parser developer related to AMI. They are making proposals for the IBIS 5.1 specification to fix issues with the AMI portion of the specification. They will eventually come back to discussing the IBIS ISS document. This needs more thorough review by the committee.

Task group material can be found at:

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

AD HOC TASK GROUPS (INTERCONNECT)

Michael Mirmak reported that discussion continued on sparse matrix mapping and related keywords. Draft text is being edited. The group will move to discussion of node-to-port mapping after the sparse matrix discussion is complete.

Task group material can be found at:

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

NEW ISSUES

None.

IBISCHK5 PARSER STATUS

Michael Mirmak reported that based on the parser developer's last communications, he is expecting parser code for review in the next couple of days. The developer has accepted changes related to the ISSO keywords and the AMI clarifications. Bob Ross noted that the Parser Review committee will briefly review the code to check for any obvious issues before releasing it. Ibischk5 will have error code numbers as an option. There will be a new –ami flag to test syntax of .ami models. There are four paid licensees so far. Licenses will need to be sold in the future to pay for further development.

IBISCHK4 BUG STATUS

Bob Ross introduced BUG106. The use of S_overshoot_high and S_overshoot_low within [Model Spec] for 3-state, Output or Terminator models reports a warning. There is no description in the IBIS specification to indicate that these parameters are not valid for these model types. The BUG was classified with Annoying severity, Medium priority, and Open status.

The BUG report list is available at the link below:

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

TOUCHSTONE 2.0 STATUS

Bob Ross reported that the final contract for the tschk2 parser has been signed. Agilent Technologies is the parser developer, and they are doing the development in exchange for a parser license. In the contract, the parser license value was listed as $1000 US. Bob opened discussion on setting the price for the source code parser license. He proposed $1000 as the price for a license. Mike LaBonte agreed that the price should be less than that of ibischk. Bob noted that the ICM license price is also $1000. There will be a vote at the next meeting on setting the price of a tschk2 source code parser license to be $1000.

TSCHK2 PARSER STATUS

Michael Mirmak reported that the developer submitted a long list of questions, including asking about valid units. All the questions have been answered. He is expecting some code for testing in a couple of weeks.

ICMCHK1 BUG STATUS

All BUGs have been closed. No new BUGs have been filed.

NEW ISSUES

Michael Mirmak asked about model user's expectations of [Test Load] and [Test Data]. If this data is present in a model, do people expect the data to be automatically compared to simulation in EDA software? Mike LaBonte responded that he expects this to happen automatically. Bob Ross agreed with this. He noted there is a BUG related to the use of this data. Michael concluded that there is probably a reason for a BIRD, as there are issues to clarify such as having no specified bit pattern. Walter Katz noted that there could simply be a statement in the model pointing to a separate document detailing the correlation of the model to simulation or measurement. He thinks the model provider needs to be in the business of qualifying models. Bob noted that he is seeing some model vendors doing this already. Walter added there could be a keyword in a model that points to a correlation document. This would force model developers to think about generating and including a correlation report.

NEXT MEETING

The next IBIS Open Forum teleconference will be held October 9, 2009 from 8:00 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

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IBIS CURRENT MEMBER VOTING STATUS

I/O Buffer Information Specification Committee (IBIS)

Organization	Interest Category	Standards Ballot Voting Status	July 28, 2009	August 7, 2009	August 28, 2009	September 18, 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	√	√	√	√
Green Streak Programs	General Interest	Inactive	√			
Hitachi ULSI Systems	Producer	Inactive				
IBM	Producer	Inactive		√		
Infineon Technologies AG	Producer	Inactive				
Intel Corp.	Producer	Active	√		√	√
IO Methodology	User	Active	√	√	√	√
LSI	Producer	Active		√		√
Mentor Graphics	User	Active	√	√	√	√
Micron Technology	Producer	Active		√	√	√
Nokia Siemens Networks	Producer	Active		√	√	√
Samtec	Producer	Inactive				
Signal Integrity Software	User	Active	√	√	√	√
Sigrity	User	Inactive	√			
Synopsys	User	Inactive				
Teraspeed Consulting	General Interest	Active	√	√	√	√
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.