IBIS Open Forum Minutes

Meeting Date: August 7, 2009

VOTING MEMBERS AND 2009 PARTICIPANTS

Actel (Prabhu Mohan)

Agilent Brian Andresen, Radek Biernacki, Saliou Dieye,

Yutao Hu, Fangyi Rao

AMD Nam Nguyen
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
Ansoft Corporation Steve Pytel
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 J. Phillips

Computing

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 & Roy Leventhal

Communications

Maxim Integrated ProductsRon OlisarMindspeed TechnologiesBobby AlkayNetLogic MicrosystemsEric HsuPolitecnico di TorinoIgor 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

August 28, 2009 206 289 325 IBIS

For teleconference dial-in information, use the password at the following website: https://cisco.webex.com/cisco/j.php?J=206289325

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. Bob Ross noted that the new officers for 2009-2010 are:

Chair: Bob Ross, Teraspeed Consulting Group Vice-Chair: Lance Wang, IO Methodology, Inc.
Secretary: Randy Wolff, Micron Technology Anders Ekholm, Ericsson AB Syed Huq, Cisco Systems
Postmaster: Mike LaBonte, Cisco Systems

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 28 paid members. We are working on renewals for four other members. The membership roll has been cleared of non-paid members as of the DAC IBIS summit. We are on target for our budget for the year.

REVIEW OF MINUTES AND ARS

Bob Ross called for comments regarding the minutes of the July 17, 2009 IBIS Open Forum teleconference. Bob noted that IO Methodology should have been noted as a new member. The minutes were approved with the noted change.

WEB PAGE UPDATES

Bob Ross reported for Syed Huq that the upcoming events page was updated to add a link to the China summit.

MAILING LIST ADMINISTRATION

Mike LaBonte reported that he is in transition and now has permission as administrator on majordomo. He is waiting for Accellera to change their email alias before updating Accellera

addresses on the mailing list.

MODEL LIBRARY UPDATE

Anders Ekholm found some broken links and is working on fixing them.

PRESS UPDATE

None.

MISCELLANY/ANNOUNCEMENTS

None.

OPENS FOR NEW ISSUES

Bob Ross requested time to discuss the processing of BUG105 and creation of a new IBIS librarian email address.

INTERNATIONAL/EXTERNAL ACTIVITIES

- DASC

Bob Ross noted that a DASC teleconference meeting was held June 30. There was a presentation by an IEEE member on a new dues structure that IEEE is adopting for DASC and other groups. This is a four tiered membership system. Pricing includes \$1250-\$5000 per member with non-voting rights and \$2500-\$10000 per company for voting rights. Bob also noted that DASC is voting on restarting the VHDL-AMS 1076.1 project. 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

Randy Wolff reported that he received notice from Chris Denham that we can begin using the new IBIS logo without any copyright symbol additions. Chris suggested that we put notice on our website of our trademark and copyright policies.

IEC APPROVAL ACTIVITIES

Randy Wolff reported that he recently received an email from Victor Berman. Victor has been in discussion with the IEC about the possibility of a dual logo agreement with TechAmerica, but he has not been able to get a definitive answer. He also sent a Maintenance Cycle Report (MCR) form to be filled out. The MCR form will be circulated for approval of the update to the IBIS specification. IEC approval of IBIS 4.2 will be on the agenda at the next IEC meeting in September.

Bob Ross noted that IBIS 3.2 is currently standardized as IEC 62014-1. We should describe the project in the MCR as a re-issue as an upgraded standard.

SUMMIT STATUS

-DAC Summit Review

The DAC IBIS summit was held Tuesday, July 28 at the Westin San Francisco Market Street. Bob Ross noted that the meeting went well. There were 10 presentations. Walter Katz commented that Lance Wang gave a nice presentation about running a model through multiple simulators that was well done. There were four presentations about interconnect and the need for EDA tools to use good interconnect models. There was a nice summary of Michael Mirmak's accomplishments during his leadership of IBIS.

-China Summit Planning

Bob Ross noted that the meeting is scheduled for Wednesday, November 4 at the Four Points Hotel in the Pudong district. The first announcement has gone out. 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 Friday, November 6 had been requested from JEITA as the date for the event. This event will be held at the JEITA headquarters. Co-sponsors include Japan Electronics and Information Technology Industries Association (JEITA) and others to be determined.

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 voted and decided to issue the new IBIS Quality

Specification as revision 2.0 instead of 1.1 due to it being such a major revision. Mike was hopeful that the official release will happen this month. Mike is also making some changes are to the website to remove frames.

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

No update.

ADVANCED TECHNOLOGY MODELING TASK GROUP

Arpad Muranyi reported that the group is making editorial changes to the IBIS-ISS document. They received permission from Synopsys to release it publically. Arpad requested that the document be added as an official review topic in the Open Forum meeting. The group is going back to discussing IBIS-AMI specification clarifications.

Task group material can be found at:

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

AD HOC TASK GROUPS (INTERCONNECT)

Bob Ross reported that the group is discussing sparse matrix proposals and possible reformatting issues of Touchstone. These relate to how to expand Touchstone to include other formats – pole zero, impulse response, etc. There is no meeting next week. Walter Katz added that there will be important decisions made in the short term, so any companies generating Sparameter models for connectors and packages would provide valuable input.

Task group material can be found at:

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

NEW ISSUES

Bob Ross noted that Anders Ekholm would like a separate email address as a contact for the IBIS librarian so that he doesn't lose any requests. This would make it so email addresses would remain constant even when officers change. We currently don't have our own domain for IBIS. Arpad Muranyi suggested ibis-models.org for a domain. Mike LaBonte mentioned that we'd need to look for an ISP to host the domain and will need a reasonable amount of storage. Mike had a quick solution for setting up an email alias for Anders as ibis-librarian@eda.org.

IBISCHK5 PARSER STATUS

Bob Ross reported that an executable has been released to the parser committee for review.

Mike LaBonte ran several hundred files through the parser, but he has not analyzed all the output yet. We will have a process in place soon for releasing it to a wider community for review. It was noted that table format checking may not be done for AMI models.

IBISCHK4 BUG STATUS

BUG104 suggested that [Test Data] and [Test Load] were hierarchically scoped within [Model] by the specification but were incorrectly treated as top-level keywords by the parser, which prohibits duplicated names for these keywords. It was found that the hierarchy shown in the specification is incorrect, and a BIRD needs to be filed to address the top-level hierarchy move. Bob Ross would like to keep the BUG open until either a BIRD or another BUG is filed. The BUG was classified as Annoying, Low and Open.

BUG105 has just been filed by Prabhat Ranjan of ST Microelectronics. A [Model Selector] line including a model name and description is checked for an 80 character line length instead of a 120 character line length. The BUG was classified as Moderate severity, Medium priority and Open.

The BUG report list is available at the link below:

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

ICMCHK1 BUG STATUS

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

TOUCHSTONE 2.0 STATUS

Bob Ross reported that the tschk parser selection committee is in the process of selecting a contractor for the parser development. More details will hopefully be available at the next teleconference call in three weeks.

NEW ISSUES

None.

NEXT MEETING

The next IBIS Open Forum teleconference will be held August 28, 2009 from 8:00 to 10:00 AM US Pacific Standard Time.

NOTES

IBIS CHAIR: Bob Ross (503) 246-8048, Fax: (503) 239-4400

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Staff Scientist, Teraspeed Consulting Group

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VICE CHAIR: Lance Wang (978) 633-3388

lwang@iometh.com

President / CEO, IO Methodology, Inc.

PO Box 2099 Acton, MA 01720

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POSTMASTER: Mike LaBonte (503) 246-8048, Fax: (503) 239-4400

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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

Other trademarks, brands and names are the property of their respective owners.

IBIS CURRENT MEMBER VOTING STATUS

I/O Buffer Information Specification Committee (IBIS)

		Standards				
Organization	Interest Category	Ballot Voting Status	June 26, 2009	July 17, 2009	July 28, 2009	August 7, 2009
Actel	Producer	Inactive				
Advanced Micro Devices	Producer	Inactive				
Agilent Technologies	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	Inactive	√			√
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				

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.