IBIS Open Forum Minutes

Meeting Date: **June 26, 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
July 17, 2009	1-866-432-9903, Option #3	205 328 749

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 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

Michael Mirmak 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

Michael Mirmak reported that we are still sorting through invoices for memberships. We need 28-32 memberships to meet our budgetary goals for TechAmerica. We are shy of this number still, but we are sending out new invoices. Please contact the board if you have any troubles with renewals. The membership roles will be cleaned after the DAC summit meeting. Bob Ross noted that we are having problems getting updated financial information from TechAmerica. Our last update was in March.

REVIEW OF MINUTES AND ARS

Michael Mirmak called for comments regarding the minutes of the June 5, 2009 IBIS Open Forum teleconference. The minutes were approved without changes.

WEB PAGE UPDATES

Syed Huq reported that an update for Lance Wang on the s2ibis3 support email link will be submitted today.

MAILING LIST ADMINISTRATION

Bob Ross reported that everything is working normally, except that we had trouble sending out the DAC IBIS summit invitation. This was due to a new spam rule that is now fixed.

MODEL LIBRARY UPDATE

No update.

PRESS UPDATE

None.

MISCELLANY/ANNOUNCEMENTS

None.

OPENS FOR NEW ISSUES

None.

INTERNATIONAL/EXTERNAL PROGRESS

- DASC

Michael Mirmak reported that there was a meeting yesterday. The group made minor changes regarding voting privileges. Also, Accellera and The SPIRIT Consortium announced plans to merge. DASC may be holding a meeting at DAC. The DASC file and e-mail archive may be found at:

http://www.dasc.org/

- P1735 Encryption

Syed Huq reported that group found differences between the P1800 and P1076 LRM language and is investigating. They are also looking at key language control. The IEEE DASC 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

Michael Mirmak reported they are still sorting out their accounting system. The TechAmerica website is fairly complete now, but they are still migrating over some GEIA websites. We will not have a TechAmerica update at DAC due to budgetary reasons. We will plan on this for the DesignCon summit early next year.

IEC APPROVAL ACTIVITIES

Randy Wolff reported that he has asked for but not yet received any updates from Chris Denham or Victor Berman since the May 7 phone call. Victor and Chris are supposed to collaborate on a dual logo process of approval between TechAmerica and IEC as well as the copyright issue. Victor also is supposed to let Randy know what steps are needed to advance the IBIS specification through the IEC approval process.

Bob Ross asked Randy if he had contacted Chris Denham about copyright requirements for the new IBIS logo. Randy has contacted Chris twice with no response yet.

SUMMIT STATUS

-DAC Planning

DAC is scheduled for July 26-31, 2009 in San Francisco. The IBIS summit is scheduled for Tuesday, July 28 in the Westin San Francisco Market Street. Sponsorship is welcome. Elections are also held at this meeting. Let the board know if you are interested in an officer position. The second call for papers went out. John Angulo and Mentor Graphics have helped with the room arrangements and have confirmed that we still have a room reserved. The actual room is to be determined. Send a note to Syed Huq if you are planning to attend or would like to give a presentation. The membership roles will be purged after this meeting.

-China Summit Planning

Bob Ross reported that he asked Coco Xu to reserve Wednesday, November 4 at the Four Points Hotel in the Pudong district. 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

This event will be held at the JEITA headquarters. The meeting will be held either the Friday before or the Friday after the Shanghai meeting. Co-sponsors include Japan Electronics and Information Technology Industries Association (JEITA) and others to be determined.

It is unlikely we will host any other Asian events this year, such as in Taiwan.

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 continuing editorial review of the IBIS 1.1 Quality specification. They are 2/3 of the way through the review. Bob Ross noted they have some consistency items to address. Mike thinks the specification will be released sometime in August. The group is continuing weekly meetings at 8:00 AM PST.

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 reported that the group has received six files this year. One was from an EDA vendor and was not distributed. Others have been reviewed by the full group. One issue found is model makers confusing ambient temperature with junction temperature. One model had V-t curves with oscillation after the transition, and the actual device did this. This was a new phenomenon.

Michael Mirmak asked if the Model Review group is willing to review Touchstone models. Lynne replied that they are, and the reviewers are also willing to review AMS models.

ADVANCED TECHNOLOGY MODELING TASK GROUP

Arpad Muranyi reported that the group is making progress preparing the IBIS Interconnect SPICE document. They are preparing a presentation to introduce it at the DAC IBIS summit. They have also discussed a clarification BIRD regarding the AMS specification. There is a potential issue with clock tick calculations that could cause problems with eye diagram plotting. They might want to add language to the IBIS specification to clarify it.

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 reviewing proposals regarding treatment of sparse matrices and port and node mapping for inclusion in a future revision of Touchstone. The group needs to write up their ideas more formally now.

Task group material can be found at:

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

NEW ISSUES

None.

IBISCHK5 PARSER STATUS

Michael Mirmak reported that there have been many comments from the developer. We are expecting a code drop covering the errors/warnings numbering soon. Questions were about how to number messages. For instance, do you give separate numbers for typ/min/max messages related to the same tables? Arpad Muranyi asked if you could add in numbers with sub-numbers. Michael said that was one possibility, but we are trying to preserve as many messages as possible that are already in the parser.

Michael noted that there are also questions from the parser developer about parsing an AMI file. For instance, are there limits to line lengths, comment characters and file name lengths? Do all the general syntax rules found in IBIS apply to an AMI file? This may need to be clarified in the AMI section of the IBIS specification. The comment character in AMI is meant to be only the '|' character, but this is not clear in the specification, as the comment character in IBIS can be changed from the default. Walter Katz noted that the line lengths within AMI files should not be limited to 120 characters. Mike LaBonte confirmed that the first line in the tree structure of the AMI file does not have to be the filename.

The parser developer comments will be passed to the ATM group for discussion, and the ATM group can then write any necessary BIRDs to address clarifications to the specification.

IBISCHK4 BUG STATUS

Michael Mirmak plans to work with Tim Coyle to write a BIRD and a BUG related to [Test Data]. This will clarify how [Test Data], [Test Load], [Model], and [Driver Schedule] are supposed to interact.

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

Michael Mirmak noted that a parser call for bids has been out for some time and closes on June 30, 2009.

NEW ISSUES

Bob Ross asked that we disclose the IBISCHK5 parser bid price. The licensee price remains $2500. The parser development price was $7000. Arpad Muranyi asked if the parser will check AMI files. It will do this, and the parser should include a flag option to parse only an AMI file. This is similar to parsing of .pkg and .ebd files.

NEXT MEETING

The next IBIS Open Forum teleconference will be held July 17, 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	April 24, 2009	May 15, 2009	June 5, 2009	June 26, 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	Active	√	√	√	
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	Active	√	√		√
Infineon Technologies AG	Producer	Inactive				
Intel Corp.	Producer	Active	√	√	√	√
LSI	Producer	Active	√	√	√	√
Marvell Semiconductor	Producer	Inactive				
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	√	√	√	√
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.