

IBIS Open Forum Minutes

Meeting Date: **June 5, 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*, Pado 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 Schaefer, 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
June 26, 2009	1-866-432-9903, Option #3	209 393 934

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 sorting through records. The latest information shows 17 members paid officially. Unofficially, several other members have paid. Discrepancies need to be worked out with TechAmerica. Three IBIS parser payments are in progress. We will be cleaning the membership records after the DAC conference. There is a link available for making credit card payments online. Michael and Bob Ross will discuss member status offline to determine which companies might need to get re-contacted. The link for making credit card payments for membership renewals is:

<http://www.geia.org/IBIS---Committee>

REVIEW OF MINUTES AND ARS

Michael Mirmak called for comments regarding the minutes of the May 15, 2009 IBIS Open Forum teleconference. The minutes were approved without changes.

WEB PAGE UPDATES

Syed Huq reported that the roster page was updated with a new Nokia contact.

MAILING LIST ADMINISTRATION

Bob Ross reported that everything is working normally.

MODEL LIBRARY UPDATE

No update.

PRESS UPDATE

None.

MISCELLANY/ANNOUNCEMENTS

Michael Mirmak mentioned that Cisco is shifting to use of the WebEx service. This has been tested by several members and there will be new login instructions for the next meeting. Bob

Ross mentioned the need to dial 3 when dialing in before entering the meeting number. Randy Wolff noted that it works better to login online using the Cisco WebEx meeting link before dialing in to the teleconference bridge.

OPENS FOR NEW ISSUES

None.

INTERNATIONAL/EXTERNAL PROGRESS

- DASC

No update. The DASC file and e-mail archive may be found at:

<http://www.dasc.org/>

- P1735 Encryption

Syed Huq reported that the group is working with subgroups including P1800, the System-Verilog group. Key areas the group is working on include interoperability, license management and key management. A VSIA document about public and private key sharing is posted on the P1735 TWiki page. A P509 standard is also being leveraged for public key sharing. This group is looking into certificate management. The meeting on June 15th will have an update on progress on interoperability testing. The IEEE DASC Study Group on Encryption web reflector archives are found at:

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

-Conferences

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>

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>

TECHAMERICA STATUS

Michael Mirmak noted that the TechAmerica folks are at a conference this week. The ability to phone TechAmerica for membership renewals will be available next week. There is a possibility

that we may not have a TechAmerica representative at the DAC IBIS summit due to financial concerns.

IEC APPROVAL ACTIVITIES

Randy Wolff reported that he has not 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. Randy plans to email Chris and Victor for updates.

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 first call for papers went out this week. Syed Huq is the main contact for the event for signing up. Bob Ross noted that the trade show exhibition now costs \$50. Mentor Graphics is a co-sponsor of this event and is arranging for a room.

-China Summit Planning

Bob Ross reported that Lance Wang is helping with Shanghai planning. They are looking at hosting the meeting at Shanghai Mart or the Rainbow Hotel. Tuesday, November 3 or Tuesday, November 10 are possible dates. Co-sponsors include Huawei Technologies, Agilent Technologies, Ansoft, Cadence Design, Cybernet Systems, Intel, Mentor Graphics, SiSoft, Signity, 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. Cosponsors 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 in the editorial phase of finishing up the Version 1.1 specification. They will be releasing it soon. 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

No update.

ADVANCED TECHNOLOGY MODELING TASK GROUP

Arpad Muranyi reported that the group has been reviewing the IBIS Interconnect SPICE draft document. They got more documents from Synopsys, so these have been added to the draft and the group is editing them. They are hoping to complete an initial draft to introduce at the DAC IBIS summit.

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 concluded discussions of the Touchstone 2.0 parser. They are reviewing proposals regarding treatment of sparse matrices and port and node mapping for inclusion in a future revision of Touchstone.

Task group material can be found at:

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

NEW ISSUES

None.

IBISCHK5 PARSER STATUS

Michael Mirmak reported that the parser is in development. The developer is finishing up adding numbering to errors/warnings/cautions/notes from the previous parser.

IBISCHK4 BUG STATUS

Michael Mirmak reported that a new BUG has been distributed. The BUG is reported by Bob Ross, found in IBISCHK4, v4.2.2. BUG102 is needed to formally describe the message numbering change within the archive for the evolution of the IBISCHK parser. This documents the changes being made to the IBISCHK5 parser to add a numbering system to the error, warning, caution and note messages. The BUG was classified as an enhancement, medium priority, and open.

Michael also noted discussion of other possible BUGs related to [Test Data]. Can [Test Data] be included when only a receiver is in the circuit and no driver? The specification is not clear on this. The hierarchy of [Test Data] versus the [Model] keyword is not clear. Is it under [Model] or

at same level as [Model]? This can cause issues with [Driver Schedule]. Also, [Test Data] must have unique names, and this could be cumbersome.

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 the parser announcement has gone out to the email lists. June 30 is the deadline for bid submittal. There has been discussion on restrictions in the bid packet related to languages. The bid packet has been updated to allow for C++ language usage.

LOGO DISCUSSION

Bob Ross displayed two logo options as seen in the document found at:

http://www.eda-stds.org/ibis/logos_wip/ibis_logo_new_2.pdf

One included a shadow on the text and one did not. Bob proposed a vote on the question of shall the IBIS logo have a shadow.

The vote tally was:

Cadence	yes
Cisco	yes
Ericsson	yes
Intel	yes
LSI	yes
Mentor	yes
Micron	yes
Nokia	yes
SiSoft	yes
Teraspeed	yes

The new IBIS logo will have a shadow on the IBIS text. Bob will work with the graphic designer to complete all the color and black and white formats and get the new logo posted on the website and sent to TechAmerica and DesignCon.

Lance Wang asked if we should add a copyright symbol to the logo. Randy Wolff took the AR to contact TechAmerica to find out what they require.

NEW ISSUES

None.

NEXT MEETING

The next IBIS Open Forum teleconference will be held June 26, 2009 from 8:00 AM to 10:00 AM US Pacific Standard Time.

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>

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

IBIS CURRENT MEMBER VOTING STATUS

I/O Buffer Information Specification Committee (IBIS)

Organization	Interest Category	Standards Ballot Voting Status	April 23, 2009	April 24, 2009	May 15, 2009	June 5, 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	Inactive		√		√
Micron Technology	Producer	Active		√	√	√
Nokia Siemens Networks	Producer	Inactive	√			√
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.