ITAA IBIS Open Forum

Meeting Date: January 30, 2009

VOTING MEMBERS AND 2009 PARTICIPANTS

Actel (Prabhu Mohan) Agilent Technologies (Sanjeev Gupta) AMD (Jonathan Dowling) Ansoft Corporation (Eldon Staggs) Apple Computer (Matt Herndon) Applied Simulation Technology (Fred Balistreri) ARM (Nirav Patel) Cadence Design Systems (Terry Jernberg) **Cisco Systems** Syed Huq*, Mike LaBonte Ericsson (Anders Ekholm) Freescale (Jon Burnett) **Green Streak Programs** (Lynne Green) Hitachi ULSI Systems (Kazuyoshi Shoji) Huawei Technologies (Jiang XiangZhong) IBM Adge Hawes* Infineon Technologies AG (Christian Sporrer) Michael Mirmak* Intel Corporation LSI **Brian Burdick*** Marvell Semiconductor (Itzik Peleg) Mentor Graphics Arpad Muranyi* Randy Wolff* Micron Technology Nokia Siemens Networks GmbH Eckhard Lenski* Samtec (Corey Kimble) Walter Katz* Signal Integrity Software Sigrity Sam Chitwood* Synopsys (Andy Tai) Teraspeed Consulting Group Bob Ross* **Texas Instruments** Pavani Jella Toshiba (I.S. Corporation) (Yasumasa Kondo) Xilinx **David Banas*** Zuken (Michael Schaeder) ZTE (Ying Xiong)

OTHER PARTICIPANTS IN 2009

GEIA	(Chris Denham)		
IO Methodology	Lance Wang*		

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:

DateTelephone NumberMeeting IDFebruary 5, 2009-- IBIS Summit at DesignCon; no teleconference --February 20, 20091-866-432-9903121836136

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 members.

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 we closed out last year with 32 paid members. Let the board know if you have not received a notification for renewals for 2009. All the items approved at the last meeting for spending did get paid by GEIA. We should get November and December updates from GEIA in the next few weeks.

REVIEW OF MINUTES AND ARS

Michael Mirmak called for comments regarding the minutes of the January 9, 2009 IBIS Open Forum teleconference. The minutes were approved without changes.

WEB PAGE UPDATES

Syed Huq reported that the Infineon logo was updated on the poster page. Syed will check if ST Microelectronics is listed with member status as they should not be.

MAILING LIST ADMINISTRATION

Bob Ross reported that everything is working normally.

MODEL LIBRARY UPDATE

Lance Wang reported that he plans to do a scan of the library soon. Let him know if you see any broken links or additions.

PRESS UPDATE

None.

MISCELLANY/ANNOUNCEMENTS

No update.

OPENS FOR NEW ISSUES

Bob Ross asked that DATE summit planning be added to the agenda.

INTERNATIONAL/EXTERNAL PROGRESS

- DASC

Michael Mirmak reported that there was a meeting on December 18, 2008. There were no issues discussed of relevance to IBIS.

The DASC file and e-mail archive may be found at:

http://www.dasc.org/

- P1735 Encryption No update. The IEEE DASC Study Group on Encryption web reflector archives are found at:

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

- GEIA/ITAA Issues

There have been no merger updates. We are expecting an update from Chris Denham at the DAC meeting.

Bob Ross reported about logo issues. We need to narrow down our selection before the logo developer proceeds. He wanted to wait to see what the new AeA/ITAA logos will be. We will need to see if there are any new logo rules after the merger.

Bob Ross noted that there are two upcoming conferences that include Signal Integrity and Power Integrity topics. Information on these is below.

The 13th IEEE Workshop on Signals Propagation on Interconnects is May 12-15, 2009 in Strasbourg, France. The call for papers deadline is February 7, 2009.

http://spi.univ-brest.fr

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

IEC APPROVAL ACTIVITIES

Randy Wolff reported that the IEC approval discussion will be set back by a couple of months until Chris Denham returns to work. Michael Mirmak wondered if anything changes with our standards accreditation status after the merger.

SUMMIT STATUS

- DesignCon Planning

The DesignCon event is scheduled for February 2-5, 2009 at the Santa Clara Convention Center in Santa Clara, California. Thursday, February 5, 2009 is scheduled for the summit. The meeting room is in the main convention center in rooms 209-210. Syed Huq is the main contact for the event. Register if you plan to attend. The final announcement went out on the reflectors yesterday. The deadline for presentation submittals has passed. Michael Mirmak thanked Cisco for helping with arrangements and the luncheon. We have cancelled the IBIS booth due to logistics.

-DATE Planning

Ralf Bruening of Zuken has been organizing the event. It is scheduled for Thursday morning, April 23, 2009. Agilent, Sigrity and Zuken are the current sponsors. Several paper presentations are already planned.

-DAC Planning

DAC is scheduled for July 26-31, 2009 in San Francisco. We plan to have representation from GEIA at the event to explain the new parent organization.

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

David Banas reported that the group is reviewing section 5.4 and is also reviewing sections 6 and 7. Section 5.4 discusses requirements of having a minimum number of V-t tables in a model. They are discussing how to include cautionary statements to help with improving quality while also not preventing a model from reaching a certain quality level of the specification. Section 7 is the correlation section. Roy Leventhal and David have both contributed to writing

this section, and it will be discussed 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

No update.

ADVANCED TECHNOLOGY MODELING TASK GROUP

Arpad Muranyi reported that the group got approval from Synopsys to use elements from their documentation to help develop an IBIS Interconnect SPICE language. The group is developing this document now but will not have a meeting next week.

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 finishing the Touchstone 2 draft and is on draft 15, making editorial changes. There is no meeting next week. They are only planning for one more draft before submitting it to this committee for approval.

Task group material can be found at:

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

NEW ISSUES

None.

BIRD111.1: EXTENDED USAGE OF EXTERNAL SERIES COMPONENTS IN EBDS

Bob Ross reported that he has not made any further progress on reviewing the BIRD yet, but he plans to spend more time on this BIRD after DesignCon.

IBISCHK5 PARSER STATUS

Michael Mirmak showed a draft bid packet. This scopes out individual portions of the development. It splits the job into two parts, one to address the BIRDs, the second to address AMI parameter files. Randy Wolff mentioned adding to the bid packet an item for error and warning numbers to be added to the parser. We should add this as a separate bid item and determine later if we will have funds to support it. Bob Ross noted that there has been

discussion of modularizing the code – cleaning it up and updating it. Bob felt that we do not have time to have this be part of the current parser, as the project needs to get started right away. Michael suggested we have the bid process finished by March 1. The bid packet will be released with the suggested changes very soon.

TOUCHSTONE 2.0 DISCUSSION (TENTATIVE)

This item will be discussed during the next teleconference meeting in three weeks.

IBISCHK4 BUG STATUS

Michael Mirmak reported that two BUGs are open right now and there is a potential one related to BIRD106. 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. The executables can be downloaded. Licensees can get the source code. Michael Mirmak thanked John Angulo for his help in the development and Kelly Green for his assistance. ICM BUG4 is now considered closed with the parser update.

NEW ISSUES

None.

NEXT MEETING

The next IBIS Open Forum Summit will be held February 5, 2009 at DesignCon in Santa Clara, California. The next IBIS Open Forum teleconference will be held February 20, 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 (<u>ibis@eda.org</u>) IBIS Users' Group Reflector (<u>ibis-users@eda.org</u>) 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.

GEIA STANDARDS BALLOT VOTING STATUS

Standards								
	Interest	Ballot Voting	November	December	January 9,	January		
Organization	Category	Status	21, 2008	12, 2008	2009	30, 2009		
Actel	Producer	Inactive						
Advanced Micro Devices	Producer	Inactive	\checkmark	\checkmark				
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	\checkmark	\checkmark	\checkmark	\checkmark		
Ericsson	Producer	Inactive	\checkmark	\checkmark				
Freescale	Producer	Inactive						
Green Streak Programs	General Interest	Inactive						
Hitachi ULSI Systems	Producer	Inactive						
Huawei	User	Inactive	\checkmark	\checkmark				
IBM	Producer	Active	\checkmark	\checkmark		\checkmark		
Infineon Technologies AG	Producer	Inactive						
Intel Corp.	Producer	Active	\checkmark	\checkmark	\checkmark	\checkmark		
LSI	Producer	Active	\checkmark	\checkmark	\checkmark	\checkmark		
Marvell Semiconductor	Producer	Inactive						
Mentor Graphics	User	Active	\checkmark	\checkmark	\checkmark	\checkmark		
Micron Technology	Producer	Active	\checkmark	\checkmark	\checkmark	\checkmark		
Nokia Siemens Networks	Producer	Active	\checkmark		\checkmark	\checkmark		
Samtec	Producer	Inactive						
Signal Integrity Software	User	Active	\checkmark	\checkmark		\checkmark		
Sigrity	User	Active			\checkmark	\checkmark		
Synopsys	User	Inactive						
Teraspeed Consulting	General Interest	Active	\checkmark	\checkmark	\checkmark	\checkmark		
Texas Instruments	Producer	Active		\checkmark	\checkmark			
Toshiba	Producer	Inactive			·			
Xilinx	Producer	Active	\checkmark	\checkmark	1	\checkmark		
ZTE	User	Inactive	•	•	·	•		
Zuken	User	Inactive						

I/O Buffer Information Specification Committee (IBIS)

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.