

EIA IBIS Open Forum Minutes

Meeting Date: **January 11, 2008**

GEIA STANDARDS BALLOT VOTING STATUS

See last page of the minutes for the voting status of all member companies.

VOTING MEMBERS AND 2008 PARTICIPANTS

Agilent	(Sanjeev Gupta)
AMD	(Nam Nguyen)
Ansoft Corporation	(Michael Brenneman)
Apple Computer	(Bill Cornelius)
Applied Simulation Technology	(Fred Balistreri)
ARM	(Nirav Patel)
Cadence Design Systems	Terry Jernberg*, Hemant Shah*, Ambrish Varma*
Cisco Systems	Syed Huq*, Mike LaBonte*
Ericsson	Anders Ekholm*
Freescale	(Jon Burnett)
Green Streak Programs	(Lynne Green)
Hitachi ULSI Systems	(Kazuyoshi Shoji)
Huawei Technologies	(Xiangzhong Jiang)
IBM	Adge Hawes*
Intel Corporation	Michael Mirmak*
IO Methodology	Lance Wang*
LSI	Frank Gasparik*, Brian Burdick*
Mentor Graphics	Arpad Muranyi*
Micron Technology	Randy Wolff*
Nokia Siemens Networks GmbH	(Eckhard Lenski)
Panasonic	(Atsuji Ito)
Samtec	(Corey Kimble)
Signal Integrity Software	Todd Westerhoff*
Sigrity	(Raymond Chen)
STMicroelectronics	(Anil Kalra)
Synopsys	(Andy Tai)
Teraspeed Consulting Group	Bob Ross*
Texas Instruments	(Stephen Spencer)
Toshiba	(Yasumasa Kondo)
Xilinx	(Raymond Anderson)
ZTE	(Ying Xiong)
Zuken	(Michael Schaefer)

OTHER PARTICIPANTS IN 2008

GEIA	(Chris Denham)
------	----------------

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
February 1, 2008	1-866-432-9903	121223194

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 participants.

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 noted that there are issues with correctly identifying membership renewals when done by credit card. The invoices this year will include more information to help identify the payee. Bob Ross noted that we show a profit for 2007 currently, and this needs to be closed out with GEIA. We plan to apply extra funds to a DesignCon prepayment. Bob noted that he is proposing a budget for 2008 including the following items:

Income	
Membership	\$25,200 (based on 28 members at \$900 each)
1 Parser	\$ 2,500

Total Income	\$27,700

Expenses	
Trade Shows	\$ 2,500
Misc.	\$ 180
GEIA STTC Allocation	\$25,020

Total Expense	\$27,700

Michael noted that we are closing the year with 32 members.

REVIEW OF MINUTES AND ARS

Michael Mirmak called for comment regarding the minutes of the December 21, 2007 IBIS Open Forum teleconference. The minutes were approved without changes.

WEB PAGE UPDATES

Syed Huq reported that there were several updates to the roster page including adding a secondary contact for ZTE and removing "*" from some companies indicating that their membership status has lapsed. Hemant Shah noted that he had an update to the roster page he would send to Syed.

Michael Mirmak also noted that Matsushita is changing its name to Panasonic. This might affect roster entries.

MAILING LIST ADMINISTRATION

Bob Ross reported that everything is running normally. Lance Wang noted that he receives email from the list, but he is unable to send to it. Bob took the AR to check into this further.

MODEL LIBRARY UPDATE

No update.

PRESS UPDATE

No update.

MISCELLANY/ANNOUNCEMENTS

None.

OPENS FOR NEW ISSUES

Michael Mirmak requested to add a discussion on S2IBIS3 status. Bob Ross asked to discuss financial transactions at the end of the meeting.

INTERNATIONAL/EXTERNAL PROGRESS

- DASC

No update. The DASC website may be found at:

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

- P1735 Encryption

No update. The IEEE DASC Study Group on Encryption web site is found at:

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

Bob Ross noted that the call for participation went out for the IEEE Workshop on Signal Propagation on Interconnects (SPI). The conference is in Avignon, France, May 12-15, 2008. IBIS material is sometimes discussed at this conference. More information can be found at:

<http://spi.univ-brest.fr>

IEC APPROVAL ACTIVITIES

Michael Mirmak noted that he contacted John Messina at NIST, who agreed to talk over IEC approval with Michael. Michael plans to setup a call with him soon and will include Randy Wolff on the call as well.

SUMMIT STATUS

- Design Con Planning

DesignCon 2008 will be held February 4-7, 2008 at the Santa Clara convention center. The IBIS Summit is scheduled for Thursday, February 7, 2008. Michael Mirmak asked Syed Huq to update the webpage to reflect the correct meeting location and link for registration. Free exhibition passes and a 30% discount are available for anyone signing up for the IBIS meeting. Also, please register directly through Syed to make sure you are registered for lunch. The summit is being held in the Great America ballroom of the convention center. The IBIS booth is #857. Bob Ross noted that there are eight official papers so far, but there is still room for more paper submissions. There are 21 signups so far, but we are looking at 50 or more attendees in total. Booth logistics are handled through Mentor. There is still time to submit a company logo plaque to display in the booth. Michael is bringing a projector. We are still handling A/V logistics for the meeting room. The food vendor is finalized. Cisco is officially sponsoring this summit, though other sponsors are encouraged.

- DATE Planning

The DATE conference will be in Munich, Germany March 10-14, 2008. The Summit is scheduled for Thursday, March 13. Contact Bob Ross for information. He is working on some logistics issues.

- Asian Summits Planning

Bob Ross noted that planning is in progress for events in China and Japan. Five companies are

interested so far for a conference in Taipei, Taiwan.

Sponsorship opportunities for the DesignCon and DATE 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 discussed [Receiver Thresholds] and receiver models in general at the last meeting. The next meeting on January 15 will continue on that subject.

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 first meeting of the year was on January 8. The group is discussing differential keyword improvements. Also, SiSoft released an updated version of the AMI toolkit. Cadence will be releasing an update to their kit soon. A guide to using the toolkits will be released soon as well.

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 first meeting of the year will be on January 23. The group will discuss IBIS to ICM linking issues. Task group material can be found at:

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

NEW ISSUES

Lance Wang reported that IO Methodology is taking over support and enhancement of the S2IBIS3 program. The tool will continue to be free. Lance plans to talk about this more in a DesignCon summit presentation. Ambrish Varma noted that he will send Lance a list of enhancements that users have submitted. Michael Mirmak asked Lance to change support email messages in the software right away so users will know to contact Lance for support.

TOUCHSTONE 2.0

Michael Mirmak noted that this was the second call for comment. Bob Ross noted that we should discuss the unusual ordering for S12 and S21 in 2-port networks. This can create issues in certain tools if S21 and S12 are not equivalent. Some suggestions were a keyword to indicate the ordering used or creating a parser that checks for this ordering. Bob and Michael agreed that we should find out the opinion on this issue of several tool vendors. Adge Hawes noted that IBM has an internal tool that uses the natural ordering, and this does conflict with the Touchstone format. He felt that a keyword noting the ordering would be useful. He noted that not including a keyword would default to the original ordering. Bob took the AR to write-up a keyword addition proposal.

IBISCHK4 BUG STATUS

No new BUGs have been filed.

ICMCHK1 BUG STATUS

Michael Mirmak reported that there is one BUG, but it will not be fixed until the next version of the parser. The next release of the parser will come out once IIRD9 is closed.

NEW TECHNICAL ISSUES

-[Node Declarations] and digital nodes

Arpad Muranyi reported that he created a model with nodes declared with only single connections. The IBIS parser reported a message indicating an error with analog and digital nodes conflicting. In the IBIS specification, Figure 12 shows internal nodes could be digital or analog, but it is not clearly written in the specification if this is really possible. It appears one could have both digital and analog nodes declared by the [Node Declarations] keyword. The parser is misleading in its message. He suggests we revisit the parser message. Michael Mirmak suggested we talk with the IBISCHK 4.1 parser developer and also to have Arpad write up a BUG report. Michael noted that there are two issues, Arpad's specific example and the digital to digital port connection in Figure 12.

NEXT MEETING

The next IBIS Open Forum teleconference will be held February 1, 2008 from 8:00 AM to 10:00 AM US Pacific Time.

=====

NOTES

IBIS CHAIR: Michael Mirmak (916) 356-4261, Fax: (916) 377-3788

michael.mirmak@intel.com

Server Platform Technical Marketing Engineer, Intel Corporation

FM5-239

1900 Prairie City Rd.

Folsom, CA 95630

VICE CHAIR: Syed Huq (408) 525-3399, Fax: (408) 526-5504

shuq@cisco.com

Manager, Hardware Engineering, Cisco Systems
170 West Tasman Drive
San Jose, CA 95134-1706

SECRETARY: Randy Wolff (208) 363-1764, Fax: (208) 368-3475

rrwolff@micron.com

SI Modeling Manager, Micron Technology, Inc.
8000 S. Federal Way
Mail Stop: 01-711
Boise, ID 83707-0006

LIBRARIAN: Lance Wang (978) 633-3388

lwang@iometh.com

President / CEO, IO Methodology, Inc.
PO Box 2099
Acton, MA 01720

WEBMASTER: Syed Huq (408) 525-3399, Fax: (408) 526-5504

shuq@cisco.com

Manager, Hardware Engineering, Cisco Systems
170 West Tasman Drive
San Jose, CA 95134-1706

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

bob@teraspeed.com

Staff Scientist, Teraspeed Consulting Group
10238 SW Lancaster Road
Portland, OR 97219

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-stds.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-stds.org

To join, change, or drop from either or both:
IBIS Open Forum Reflector (ibis@eda-stds.org)
IBIS Users' Group Reflector (ibis-users@eda-stds.org)
State your request.

ibis-info@eda-stds.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-stds.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-stds.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-stds.org

To report ibischk parser BUGs. The BUG Report Form resides along with reported BUGs at:

<http://www.eda-stds.org/ibis/bugs/ibischk/>
<http://www.eda-stds.org/ibis/bugs/ibischk/bugform.txt>

icm-bug@eda-stds.org

To report icmchk1 parser BUGs. The BUG Report Form resides along with reported BUGs at:

http://www.eda-stds.org/ibis/icm_bugs/
http://www.eda-stds.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-stds.org/ibis/bugs/s2ibis/bugs2i.txt>
<http://www.eda-stds.org/ibis/bugs/s2ibis2/bugs2i2.txt>
<http://www.eda-stds.org/ibis/bugs/s2iplt/bugspl.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-stds.org/ibis/directory.html>

All eda.org documents can be accessed using a mirror:

<http://www.ibis-information.org>

Note that the "/ibis" text should be removed from directory names when this URL mirror is used.

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

GEIA STANDARDS BALLOT VOTING STATUS

I/O Buffer Information Specification Committee (IBIS)

Organization	Interest Category	Standards Ballot Voting Status	November 2, 2007	November 30, 2007	December 21, 2007	January 11, 2008
Advanced Micro Devices	Producer	Active	√	√	√	
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 Technologies	User	Inactive			√	
IBM	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		√	√	
Panasonic	Producer	Inactive				
Samtec	Producer	Inactive				
Signal Integrity Software	User	Active	√	√	√	√
Sigrity	User	Inactive		√		
STMicroelectronics	Producer	Inactive	√	√		
Synopsys	User	Inactive				
Teraspeed Consulting	General Interest	Active	√	√	√	√
Texas Instruments	Producer	Inactive				
Toshiba	Producer	Inactive				
Xilinx	Producer	Inactive	√	√		
ZTE	User	Inactive				
Zuken GmbH	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.