IBIS Open Forum Minutes

Meeting Date: **January 8, 2010**Meeting Location: **Teleconference**

VOTING MEMBERS AND 2010 PARTICIPANTS

Actel (Prabhu Mohan) Agilent (Sanjeev Gupta) AMD Nam Nguyen* **Ansoft Corporation** (Steve Pytel) 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)
Green Streak Programs (Lynne Green)
Hitachi ULSI Systems (Kazuyoshi Shoji)

Huawei Technologies (Jinjun Li)
IBM Adge Hawes*

Infineon Technologies AG (Christian Sporrer) Intel Corporation (Michael Mirmak) IO Methodology Lance Wang* LSI Brian Burdick* Mentor Graphics Arpad Muranyi* Randy Wolff* Micron Technology Nokia Siemens Networks GmbH Eckhard Lenski Samtec (Corey Kimble) Signal Integrity Software Walter Katz* Sigrity (Raymond Chen)

Synopsys (Andy Tai)
Teraspeed Consulting Group Bob Ross*

Toshiba (Yasumasa Kondo) Xilinx (Raymond Anderson)

ZTE (Huang Min)

Zuken (Michael Schaeder)

OTHER PARTICIPANTS IN 2010

TechAmerica (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 Meeting Number Meeting Password

January 29, 2010 207 062 201 IBIS

For teleconference dial-in information, use the password at the following website:

https://cisco.webex.com/cisco/j.php?J=207062201

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, 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

Bob Ross called for any patents or pending patents related to the IBIS 3.2, IBIS 4.2, IBIS 5.0, Touchstone 2.0 or ICM 1.1 specifications. No patents were declared.

MEMBERSHIP UPDATE AND TREASURER'S REPORT

Bob Ross reported that we finished the year with 30 paid members. We are now working with the smaller amount of \$1279 of fiscal year 2009 money to spend. He was told that we can move \$5000 of the 2009 parser income into the 2010 account. We will likely pre-pay DesignCon expenses with 2009 funds. We also sold another ibischk5 parser license. This makes 8 parser licenses total. There is a pending tschk2 parser license sale. Bob mentioned that most members should have received their 2010 membership invoice last month. We have received 7 renewals already.

REVIEW OF MINUTES AND ARS

Bob Ross called for comments regarding the minutes of the December 11, 2009 IBIS Open Forum teleconference. The minutes were approved with no changes.

WEB PAGE UPDATES

Syed Huq reported that he has some requests pending to make changes to the roster and other pages. Bob Ross asked Syed to clean up the roster page before archiving the 2009 version. Bob also requested a change to the events page to list Cisco as a sponsor of the DesignCon IBIS summit.

MAILING LIST ADMINISTRATION

Mike LaBonte reported that we are having some issues with the mail server. Emails may not be going out to the members. Mike noted that he receives about 50 administrative emails per day and he has to review them to determine which emails are spam and which are legitimate emails from non-list members. This activity has ceased, so this is an indication of potential problems. Bob Ross noted that two emails he has attempted to send out to the mailing lists have not gone out. Mike also sent a test email to the ibis-info list, and he has not seen it go through. Bob and Mike will ping the system administrators for help.

MODEL LIBRARY UPDATE

No update.

PRESS UPDATE

None.

MISCELLANY/ANNOUNCEMENTS

None.

OPENS FOR NEW ISSUES

Bob Ross noted that he plans to discuss a new BUG for the ibischk5 parser, BUG111, during the ibischk5 bug status discussion.

INTERNATIONAL/EXTERNAL ACTIVITIES

- DASC

No update. 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

None.

TECHAMERICA STATUS

Bob Ross reported that he is following up with some business with TechAmerica including getting signatures on parser licenses and keeping track of new memberships for 2010.

IEC APPROVAL ACTIVITIES

Randy Wolff reported that he needs to contact Stan Krolikoski, the new DASC chairperson. He has been unable to contact Victor Berman, and Michael Mirmak recommended that Randy try contacting Stan.

SUMMIT STATUS

-DesignCon Summit Planning

The meeting is scheduled for Thursday, February 4, 2010. Bob Ross noted that Cisco is an official sponsor of the meeting. Syed Huq reported that room 203 in the main conference center is reserved. The meeting will be in the same area as most other DesignCon meetings. There is a size limit of 65 for the seating arrangement, but more chairs can be brought in if needed. Syed is arranging food, A/V equipment, etc. He asked if we needed a sign pointing to the room. Bob suggested that we create at least one sign. Syed encouraged everyone planning to attend to register with Lance Wang. Bob is expecting about 50 attendees.

Walter Katz asked Bob if the larger IBIS group should discuss the direction of IBIS for 2010 that will be reported on by Bob at DesignCon. Bob suggested we discuss this at the end of the meeting.

-European Summit Planning

No update. The European organizers are still favoring holding the meeting at the SPI conference in May in Hildesheim, Germany.

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 has been discussing correlation and how it relates to the IBIS Accuracy handbook. Moshiul Haque of Micron drafted a new version of the Quality checklist spreadsheet to be used along with the new IBIS Quality Specification 2.0. This is being reviewed.

The Quality Task Group checklist and other documentation can be found at:

http://www.eda.org/ibis/quality_ver2.0/quality_ver2_0.pdf

IBIS MODEL REVIEW TASK GROUP

Randy Wolff gave a summary for Lynne Green of activities of the committee in 2009. Ten IBIS models were received. One model used external circuit features. One model was submitted by an EDA company, and so it was not eligible for distribution. Lynne did a review and provided feedback. No Touchstone, package or ICM files were received. Lynne plans to do a presentation at the DesignCon IBIS summit providing more details.

ADVANCED TECHNOLOGY MODELING TASK GROUP

Arpad Muranyi reported that the group met last Tuesday. They are reviewing the draft BIRD from Walter Katz that will update the AMI portion of the IBIS specification. This will be ongoing for a few weeks. Bob Ross noted that the BIRD is very large, so it requires a lot of review time. Walter added that many experts are required during the review process.

Task group material can be found at:

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

AD HOC TASK GROUPS (INTERCONNECT)

Bob Ross reported that he is hosting the meeting while Michael Mirmak is in Taiwan for the next three months. SiSoft is now hosting the LiveMeeting meeting. Walter Katz reported that all of the issues with adding sparse matrix data to the next Touchstone revision are resolved pending a final review. IBM is presenting data about a binary Touchstone file format. The binary format significantly reduces the size of Touchstone files and speeds up the processing of the files. Walter is working with Brad Brim on a way to wrap subcircuits to expose information about the ports used. This work stems from a presentation made by Brad at several IBIS events last year, and it defines a model connection protocol.

Task group material can be found at:

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

PROJECT CONCLUSIONS

Bob Ross reported that the parser for IBIS 5.0, ibischk5, has been completed. However, we have not officially closed the project. This requires a vote by the IBIS Committee. We also need to vote to close the Touchstone 2.0 parser, tschk2.

Bob called for a vote to close the ibischk5 parser project and accept the source code as completed. The vote passed with the following vote tally:

AMD: yes Cisco: yes IBM: yes

IO Methodology: yes

Mentor: yes

Micron: yes SiSoft: yes Teraspeed: yes

Bob called for a vote to close the tschk2 parser project and accept the source code as completed. The vote passed with the following vote tally:

AMD: yes Cisco: yes IBM: yes

IO Methodology: yes

Mentor: yes Micron: yes SiSoft: yes Teraspeed: yes

TOUCHSTONE 2.0 TSIRD PROCESS DIRECTORY

Bob Ross setup a directory on eda.org for documenting Touchstone Issue Resolution Documents, TSIRDs. He showed a sample TSIRD. The directory is found at:

http://www.eda.org/pub/ibis/tsirds/

NEW ISSUES

None.

TSCHK2 BUG STATUS PROCESS

Randy Wolff asked if there was a need for an email alias to submit BUGs. Bob Ross said to use the ibis-bug@eda.org alias for now, although we may create a separate email alias later. Randy will add links to the information section at the end of the minutes to document the BUG process. The process is documented in the following directory:

http://www.eda.org/pub/ibis/tschk bugs/

IBISCHK5 BUG STATUS

Bob Ross reported that BUG109 found that the parser is not accepting a type "String" as a value for Model_Specific parameters. It also applies for List. The BUG was expanded for type Boolean as well. Code changes have already been made and will include the Boolean type for Corner. String and Boolean are now added as valid types for Corner and List.

BUG 110 was submitted by Prabhat Ranjan of ST Microelectronics. The parser rejects legally correct syntax for the D_overshoot_ampl_I and D_overshoot_ampl_h parameters. The parser is expecting to see D_overshoot_amp_I and D_overshoot_amp_h (missing the "I"). The BUG was classified as Severe severity, High priority and Open status.

BUG111 was submitted by Bob Ross. This BUG was found in reviewing the fix for BUG109. The BUG found that CR/LF could not be used within the parentheses of a parameter description. This is legal in the specification. Walter noted that you can put a CR/LF before and after any field. These should be ignored and treated as spaces by the parser. Walter felt that this was a serious error. He requested that Bob contact the parser developer to determine how difficult this will be to fix. The BUG was classified as Moderate severity, High priority, and Open status.

IBISCHK5 PARTIAL BUG FIX RELEASE

Bob Ross reported that there are many open BUGs. There was an emergency fix for BUG108, release 5.0.1. Bob thinks that BUG110 warrants an immediate release that will also cover BUG109. Bob would like to fix BUG111 at the same time, but he needs to consult with the developer to find out how much time a BUG111 fix will take.

He noted that there is more work to do before starting a larger project to fix other open BUGs. We will pay the parser developer for further BUG fixes.

ICMCHK1 BUG STATUS

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

NEW ISSUES

Walter Katz requested we talk about future directions of IBIS for 2010. Arpad Muranyi asked specifically about addressing package modeling. Walter noted that he is looking into the model connection protocol instead of EMD to improve package modeling. Walter added that IBIS Interconnect Spice (IBIS-ISS) is also an item to discuss more in 2010. Bob Ross plans to mention that IBIS is focusing in 2010 on a Touchstone 2.1 release, model connection protocol, and binary format in the Interconnect task group, the AMI BIRD and IBIS-ISS in the ATM committee, and Quality issues. Walter added that this is all short term and maintenance work, so he wondered if there should be a longer term vision. Bob will plan on having a discussion topic at DesignCon for this.

NEXT MEETING

The next IBIS Open Forum teleconference will be held January 29, 2010 from 8:00 to 10:00 AM US Pacific Standard Time. The next Open Forum summit will be held at DesignCon on February 4, 2010. No teleconference will be available.

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 as well as tschk2 parser BUGs. The BUG Report Form for ibischk resides along with reported BUGs at:

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

The BUG Report Form for tschk2 resides along with reported BUGs at:

http://www.eda.org/ibis/tschk_bugs/
http://www.eda.org/ibis/tschk_bugs/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

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IBIS CURRENT MEMBER VOTING STATUS

I/O Buffer Information Specification Committee (IBIS)

		Standards Ballot Voting	November	November	December	January 8,
	Interest					
Organization	Category	Status	6, 2009	20, 2009	11, 2009	2010
Actel	Producer	Inactive				
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	Inactive	√			
Cisco Systems	User	Active		√	√	√
Ericsson	Producer	Active	√	√	√	
Green Streak Programs	General Interest	Inactive				
Huawei Technologies	Producer	Inactive	√			
Hitachi ULSI Systems	Producer	Inactive				
IBM	Producer	Inactive		√		√
Infineon Technologies AG	Producer	Inactive				
Intel Corp.	Producer	Inactive			√	
IO Methodology	User	Active	√	√	√	√
LSI	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	√	√	√	√
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.
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- 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.